

**The Interaction between
Personal and Company Environmental Values
and Their Influence on Pro-Environmental Behaviours
in Hospitality Sector Workplace:
A Case Study of An International Hotel Company**

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DECLARATION

I, Van Thi Nguyen, hereby declare that the work in this thesis is my own. This thesis does not contain written or published materials prepared by others, except where acknowledged in the text and has not been submitted to any other university or institution as a part or whole requirement for any higher degree.

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Date: 04 January 2022

ABSTRACT

Most international hotel companies have adopted initiatives to reduce their impacts on the environment. When seeking to deliver against these, most depend on a combination of resource reduction technologies and initiatives designed to change employee behaviours. For many, the latter is particularly challenging and thus there is a growing interest in pro-environmental behaviours. Thus, this has become an increasingly important topic for academics and practitioners in the hospitality sector.

Over recent years, theoretical pro-environmental behaviour models have been tested in domestic, public and workplace settings, although in practice few of these have focused on hospitality workplaces. The limited focus on pro-environmental behaviour in hospitality workplace settings means that many areas of application of pro-environmental behaviour remain under-researched; in particular, the role of values (for example, personal environmental values in the personal sphere, and company environmental values in the corporate sphere) and their influence on pro-environmental behaviours. Furthermore, none of the current models that have been tested in hospitality sector workplaces incorporated real-life working environments where the actual behaviours of employees are accounted for. Thus, there is a need for existing pro-environmental behaviour models to be adapted for application in real hospitality workplaces.

This study evaluated the interaction between personal and company environmental values, and their influence on the pro-environmental behaviours of employees in the environment of an international hotel company. It also explored a framework that supports the adaptation of the current pro-environmental behaviour framework that is applicable for real-world hospitality workplaces and makes practical recommendations on how to engage employees in positive pro-environmental behaviours. In particular, the study investigated levels of employee engagement in energy efficiency via investigating the communication of environmental initiatives in the real working environment of an international hospitality business. Sources of evidence used in this case study research were forty-five semi-structured interviews with hotel managers and operational employees, a mix of non-participant and participant observations, documentation, and a short survey questionnaire, all conducted at two five-star hotels (one in the UK and one in Vietnam).

The primary data revealed that the interplay between personal and company environmental values influenced pro-environmental behaviours of the employees to some extent. It highlighted the significance of work-related influencers such as different types of actors, non-linear environmental communication, informal work practices, workload pressures, and environmental visibility that explained the contexts of the

engagement of these employees in positive pro-environmental behaviours in a hospitality workplace. The study also stressed the impact of the less visible signals of energy consumption behaviours - in comparison to other sustainable behaviours such as food waste and recycling - on the positive pro-environmental behaviour of the individual employees.

The study creates new knowledge in the area of employees' engagement in pro-environmental behaviour in hospitality workplace settings by providing in-depth knowledge of the interplay between personal and company environmental values of the individual employees. They are integral parts of the positive pro-environmental behaviour framework in the hospitality sector workplace. The findings of this investigation also produce new insights in the existing value-action gaps and new emerging works factors such as types of actors, informal work practices and pressure of workload (or productivity). Finally, the study provides managerial implications and practical recommendations for the hotel managers and green practitioners to improve the employee engagement in positive pro-environmental behaviour.

Key words: *pro-environmental behaviours, employee engagement, personal environmental values, company environmental values, international hospitality workplace, pressure of workload, informal work practices, environmental communication, energy efficiency behaviour.*

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ABBREVIATIONS

BOH	Back of House
C	Citations
Case A	Short name of the embedded Case A. It is a hotel based in the UK of the hotel company
Case B	Short name of the embedded Case B. It is a hotel based in Vietnam of the hotel company
Case C	Short name of the embedded Case C. It is a hotel based in Vietnam of the hotel company
C&E	Conference and Events
CEV	Corporate environmental values
CR	Corporate responsibility
CSR	Corporate Social Responsibility
E	Energy
EE	Energy efficiency, energy efficient
EEB	Energy efficiency behaviour
EMS	Environmental management systems
EV	Environmental values
E.U.	The European Union countries
F	Female
FOH	Front of House
FO	Front Office
GM	General manager
GVA	Gross Value Added
HK	Housekeeping
HO	Head Offices
HR	Human Resources
H&S	Health and Safety
I	Interview
Ir	Influencer(s)
IP-BLIS	Internet Protocol for Building & Lighting Standards
IPBAS	Internet-protocol based building automation system
LED	Light-emitting diode
LEED	Leadership in Energy and Environmental Design
M	Male
iM	Internal Messenger(s) or Green Communicator(s)
N	Sample size
NA	Not available
NAM	Norm-activation model
NCV	National-cultural values
NEP	New environmental paradigm
O	Observation
OCBE	Organisational citizenship behaviour for the environment

EnE	Environmental efficiency
OpE	Operational efficiency
PA	Personal assistant
PEB	Pro-environmental behaviour(s)
PEV	Personal environmental value(s)
PR	Public Relations
PV	Personal values
RD	Receiver-Doer(s)
SS	Security and Safety
TPB	Theory of planned behaviour
UK	The United Kingdom
VAG	Value-action gap
VIT	Value Initiator-Teller(s)
VBN	Value belief norm
VP	Vice President
VN	Vietnam
VQ	Values questionnaires
U.S.	United States of America
&	And

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1 INTRODUCTION

1.1 Research Rationale: Why Changing Behaviours Matters?

Since the 1980s, governments, scientists, academics, and businesses have been interested in finding mechanisms to minimise global environmental degradation. With the belief that human behaviour is a significant cause, the mechanism to encourage the adoption of positive environmental or social actions – known as pro-environmental behaviour (PEB) – has become an increasing focus (Stern, 1992; De Groot and Steg, 2009; Stern, 2011; Chawla, 2019; Chawla, Lugosi and Hawkins, 2021; Wu, Font and Liu, 2021).

For some years, major international hotel chains have been seeking ways of changing behaviours to reduce environmental impacts (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Zientara and Zamojska, 2018; Chawla, 2019; Fatoki, 2019; Han, Moon and Hyun, 2019; Zhang and Huang, 2019; Budovska, Torres Delgado and Øgaard, 2020). This is because they recognise the increasing negative impacts of the accommodation sector on the environment with it accounting for 6.4% of CO₂ emissions of total tourism sector in 2013 (Dunne, 2018; Lenzen *et al.*, 2018) (also see Table 8-7. Carbon Footprint by purchased commodity related to Tourism sector in Appendix S). In particular, hotels are among the most energy-intensive buildings in many countries (Becken and McLennan, 2017). In addition, the international hotel companies have responded to these increases, partly because of a fear of a backlash from consumers, but also because they recognise the potential resource consumption savings that can come from the actions to reduce pollution (around 27.5% according to (RPA, 2015)). Most hotel companies recognise that the most effective way to reduce pollution and benefit from resource savings is to invest in technologies that automate the tasks that humans are poor at performing (e.g., switch equipment off in rooms that are vacant). Several studies show that more energy can be saved by acting in 5-stars hotels than in hotels with rating of 0-4 stars, suggesting their motivations for engaging with proper energy reduction measures in place (Gössling and Lund-Durlacher, 2021). However, many of these companies have divested of their assets to adopt what have become known as asset-light business models (Roper, 2017). The shift to asset-light models has divorced hotel ownership from delivery of hospitality services. Within this asset-light model, hospitality companies have found themselves responsible for paying the costs of energy and water use within the hotels they manage, but few own the physical hotel and thus are not incentivised nor empowered to install costly technologies to cut

resource costs. As a result, many of them place significant emphasis on human behavioural changes as means to deliver resource and cost savings.

In spite of this current trend for introducing new technologies, the application of PEB to reduce environmental impacts in the hospitality sector has been little explored from an analysis of the 150 academic hospitality papers (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Zientara and Zamojska, 2018; Chawla, Lugosi and Hawkins, 2021). The concept of PEB is thought to be useful if it is measured in relation with its influencers as outcomes (Gatersleben, 2018) which can be viewed in two main ways.

In the first way, the PEB are measured by “intended outcomes” with the assumptions that individuals care about the environment therefore they intend to act to save the environment, but they do not necessarily act (Chan and Lam, 2001; Kollmuss and Agyeman, 2002; Ture and Ganesh, 2014; Potocan et al., 2016). PEB as intended outcomes are used by the majority of researchers. In the second way, the PEB are measured as “actual outcomes” with the assumption that individuals care about the environment therefore they act. The majority of the researchers do not measure actual outcomes or actual behaviours (Blake, 1999). Based on current observations, many individuals seem to have positive pro-environmental values, but they do not act upon their values (Chawla, Lugosi and Hawkins, 2021). As such, in essence, hospitality companies are interested in understanding whether they can successfully engage employees with positive environmental values to deliver positive environmental behaviours in the real working hospitality workplace and what other work drivers to promote positive PEB.

When considering the workplace setting like the hospitality sector, the interaction between individual pro-environmental values (PEV), company environmental values (CEV) and PEB – despite their importance – has not yet been studied as revealed by a review of 242 papers on general environmental topics published between 1977 and 2021. In total, 58 of these papers focussed on PEB and its influencers. Furthermore, it finds that the relationship between PEB and values in particular in the context of the hotel workplace has been little studied (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Potocan *et al.*, 2016; Chan *et al.*, 2017; Zhang and Huang, 2019; Budovska, Torres Delgado and Øgaard, 2020).

Additionally, importantly, the 242 papers reveal several theoretical PEB models have been tested in domestic and public or workplace settings. However, most models have been tested in domestic and public settings (Dunlap, Grieneeks and Rokeach, 1983; Neuman, 1986; Cialdina, Reno and Kallgren, 1990; Stern, Dietz and Kalof, 1993; Karp, 1996; Soyez et al., 2009; Pensini, Slugoski and Caltabiano, 2012; Soyez, 2012; Mikhailovich and Fitzgerald, 2014; Mohd Suki and Mohd Suki, 2015; Bailey, Mishra and

Tiamiyu, 2016; Karp, McCauley and Byrne, 2016; Onel and Mukherjee, 2016); and few of these in the workplace setting (Daamen *et al.*, 2001; Zhang, Wang and Zhou, 2013; Chou, 2014; Faye, 2014; Paillé and Mejía-Morelos, 2014; Ture and Ganesh, 2014; Gkorezis, 2015; Young *et al.*, 2015; Raineri *et al.*, 2016; Zhang and Huang, 2019; Budovska, Torres Delgado and Øgaard, 2020; Chawla, Lugosi and Hawkins, 2021). The limited focus on PEB in workplace settings means that many areas of application of PEB and values – in particular, the role of different values including company environmental values and their interaction in PEB – remain under-researched.

A number of researchers have demonstrated a clear link between strong individual pro-environmental values (PEV) and an intention to implement their PEB (Dunlap, Grieneeks and Rokeach, 1983; Neuman, 1986; Stern, Dietz and Guagnano, 1995b; Karp, 1996; Potocan *et al.*, 2016; Groot and Thøgersen, 2018). Other scholars, for example, Young *et al.* (2015) sought to address this gap to some extent by developing a PEB workplace model. However, this is only conceptual and has not been empirically tested. There are no studies looking at the interaction of different values like CEV with PEB in the hospitality workplace setting as found in the review of 242 papers.

Thus, this study proposes that positive PEB mechanisms must be based on a detailed understanding of the formation of PEV and CEV. Furthermore, they must be based on the detailed understanding of the interactions between the personal sphere and corporate sphere, in particular the interaction between PEV and the formation of CEV in the workplace context for the hospitality sector and of how that outcome influences PEB. Hence, it is necessary to have a detailed understanding of the ways in which CEV is formed and communicated to individuals in the workplace in order to provide insights into how these CEV interact with PEV and how the outcome of these interactions influence employee perspectives on corporate and personal environmental behaviours (Chang and Wu, 2015; Zientara and Zamojska, 2018).

Furthermore, the outcomes of the interaction also need to consider the influences of the contextual factors (Steg *et al.*, 2014; Steg, 2016; Steg, Lindenberg and Keizer, 2016) that are relevant to the international hospitality sector (Chawla, 2019; Chawla, Lugosi and Hawkins, 2021) since hospitality products, whilst sharing similarities with physical and other service products, also possess very unique characteristics and contexts that only apply to this sector. The conceptual models of Young *et al.* (2015) and other authors provide a number of work-related factors that are relevant the workplace, for instance, company environmental values and philosophy (Ruepert, Keizer and Steg, 2017), institutional support and leadership behaviour (Wesselink, Blok and Ringersma, 2017), environmental visibility (Brick, Sherman and Kim, 2017a), training, and incentives (Young *et al.*, 2015) etc. However, most of the work-related factors that are

actually required for a real-life hospitality workplace setting are not yet included in their conceptual model or tested empirically for this adaptation.

This study is one of the few empirical qualitative ones that evaluates PEB in the real-life hospitality workplace that investigates the work-related factors of the corporate sphere that are specific to the hospitality sector. It contributes emerging knowledge to the field of PEB change by including the further detailed analysis of the pre-requisites to driving pro-environmental behaviour change in a hospitality context, the refinement of knowledge about the extent to which PEV and CEV interact and engage employees in implementing PEB, and the detailed analysis of communications from Corporate Green Teams and the way they influence employee perspectives on corporate and personal environmental behaviours. In practice, it will provide practical recommendations for international hotel companies on the design of employee engagement programmes focused on PEB changes.

1.2 Aim and Objectives

This study aims to evaluate the interaction between personal and company environmental values and pro-environmental behaviours of employees in the hospitality sector workplace.

The objectives are to:

1. Critically review the literature about PEB and its antecedents in general and in hospitality in particular.
2. Critically review the literature about individual and company values and their relationship with PEB.
3. Develop a conceptual framework as a lens through which to view the relationships between PEV, CEV and PEB among individuals in the hospitality workplace.
4. Investigate and evaluate this framework, using an embedded case study.
5. Create a framework that supports the adaptation of PEB for application in hospitality workplaces and make practical recommendations on how to engage employees in positive PEB in the hospitality workplace.

1.3 Contribution to Knowledge

This study will be expected to contribute to knowledge in the following areas. These expected contributions are based on the literature review:

1. Create new knowledge about the interface between PEV and CEV in personal and corporate spheres.

2. Add evidence to the existing body of knowledge about the values-action gap at different operational and managerial levels of a hospitality business.
3. Provide new insights into the relationship between PEB and the visible signals that PEB are being implemented in the workplace.
4. Provide a cultural dimension to understanding about how employees receive and respond to information about CEV.

1.4 Study Context

1.4.1 The Hospitality Sector and Environmental Management in the UK for Hotel Case A

Total tourism plays an important sector in the UK, with a total GDP contribution of 10.1% or £237.6bn in 2019 (WTTC, 2021a). In particular, the UK hospitality sector contributed £72bn of GVA to the UK economy in 2018 (IgniteEconomics, October 2018). However, the hospitality sector has a significant environmental impact through consumption of water, energy, consumable, and durable goods, and solid or hazardous waste collection.

Environmental management (EM), especially energy, has recently become a focus for hospitality operators, with annual energy costs of £457m per year for the sector and on average 10% of hotel operators' total operating revenue is spent on energy use (Edie, April 2019). The overall sector has historically lagged behind other sectors in terms of their progress and participation in contributing to a sustainably built environment, partly due to a perception that making hotels greener might negatively impact the guest experience (Edie, April 2019) and business profitability, and partly due to a lack of regulations for the sector, with voluntary participation (rather than compulsory regulations) in environmental initiatives compared to other sectors. For example, the transport sector is heavily regulated in terms of its environmental performance while there are no specific environmental laws for the hospitality sector. There is overall compulsory legislation in the UK, such as building regulations, that stipulate minimum standards for new and existing buildings (Rotimi *et al.*, 2017) which are relevant to hotel operators.

Recently, more people are increasingly looking into staying at ecological hotels. These hotel operators are increasingly finding opportunities to take advantage of the latest innovations in sustainable design and incorporate them into their newly built hotels. Sustainable construction in the hospitality sector increased by 50% from 2011 to 2013 and today represents 25% of all new construction in the industry (Bernstein *et al.*, 2013). Several hotel operators are adopting the LEED standard in their design to show how they have addressed issues such as water and energy efficiency (EE), materials

and resources, and indoor environmental quality, according to a chief engineer at the Case study A in the UK.

Some hospitality firms have taken the benefits of integrating energy infrastructure, with data on user preferences and occupancy levels. The case study hotel company used as the basis for this new research, for instance uses its in-house platform to measure the energy and environmental impact of its hotels globally. Others have focused on EE measures. Colton House in Staffordshire has improved its EE through the installation of high-efficiency condensing boilers, a heat exchange unit, LED lighting and increased roof and wool insulation (Coltonhouse, 2018).

1.4.2 The Hospitality Sector and Environmental Management in Vietnam for Hotel Case B

As tourism continues to be a growing and important sector in Vietnam, with a total GDP contribution of 7.0% in 2019 (WTTC, 2021b), the government will keep promoting the growth of this sector. There are three contextual stages to the implementation of EM in the tourism and hospitality industry in Vietnam: 1960-1985, 1986-1990, and 1991-present. Prior to 1986, with Vietnam's limited tourism activity¹, no environmental laws applicable to business activities existed. Since 1986, Vietnam shifted to "doi moi"², which provided an important economic and social kick-off for the accommodation sector, however, environmental laws and policies were still absent in the country (VGP, 2016).

The transition of EM in Vietnam occurred in the period 1991-2020 when Vietnam's tourism and hospitality industry has experienced unparalleled growth and development³ which has also imposed serious environmental pollution and degradation (Sadi & Henderson, 2001; Pham, 2014). The Vietnamese accommodation sector has been under pressure to comply with EM standards formulated in the environmental protection laws 2005 (52/2005/QH11). The Green Lotus hotel programme, founded by the Ministry of Culture, Sport and Tourism of Vietnam in 2012, set out detailed criteria for certifying EM practices for the accommodation sector. The Vietnamese government was increasingly concerned with regulating EM, coupled by the additional laws on environmental protection in No. 55/2014/QH13 on 23/7/2014, and its membership to the Trans-Pacific Partnership Agreement (TPP) signed on 4

¹ The number of international arrivals to North Vietnam was only 6,130 in 1960 and reached 50,830 in 1985 (Ministry of Internal Affairs of Vietnam).

² The reforms from a Soviet-style economy into a market-oriented economy

³ Huge foreign investment inflows from international hotel chains (Sadi & Henderson, 2001) to meet the explosive demand in international arrivals from 300,000 in 1991 to almost 8 million in 2015 (VNAT, 2015). Moreover, many hospitality facilities have been rapidly built in both natural and non-natural areas to meet this unparalleled increase in demand. For example, the number of accommodations climbed from 3,267 in 2000 to 18,800 in 2015 (a 475 percent increase).

February 2016 in New Zealand. The accommodation sector's awareness and interest in EM was coupled with increased support of tourists for environment-friendly products (Lindsey & Homes, 2002). Nevertheless, participation in environmental protection activities by individual accommodation providers has remained voluntary. The adoption rate of full EM in Vietnam is still low⁴ and challenging for international hotel chains.

"It's fair to say that like many countries in Southeast Asia, Vietnam has difficulties in implementing changes and environmental changes, which we find challenging at times. For example, the practice of separating waste plastics from general and food waste is not something that is encouraged in a way that there are benefits to do it. Our waste here is collected as one and people come along, collect, and take it away. They sort and do what they want to do themselves. Whereas we are looking to move to do all of our separation here on site. Obviously, there's a cost implication to that." (ANDY)

Such above EM situations in Vietnam and the UK set out the contexts and needs for the investigations of implementing PEB at the hotels of the case study, given its importance, in this research project.

1.5 Thesis Structure

This thesis is structured as follows:

Table 1-1. Thesis structure

Chapter	Content
1. Introduction	The chapter outlines the research rationale; the aim and objectives of the thesis; the potential contribution to knowledge and the study context and the thesis structure.
2. PEB and its antecedents	This chapter provides a critical review of the concept of PEB and antecedents which is the rationale for the development of the conceptual framework to use values and key factors to explain PEB in the hospitality sector workplace.
3. The role of the PEV-CEV	This chapter aims to critically review the PEV-CEV-PEB interaction in general and specifically for the hospitality sector

⁴ Among 18,800 hotels listed in 2015 (VNAT, 2015), very few hotels obtained EM certifications. At the same time, few international hotel chains practise their own EMS at the global level. For example, International Hotel Group (IHG) has its own Green Engage program which InterContinental Asiana Saigon Hotel in Vietnam promotes on its website. For many other independent accommodation providers, their EM implementation programs are unknown.

Chapter	Content
interplay and work-related factors to PEB	as well as workplace drivers to PEB as the foundation to the conceptual development of the proposed PEB framework for the hospitality sector workplace.
4. Methodology	This chapter provides the methodological basis of this research; the rationale of the adoption of the case study research approach in detail and the design of the case study (i.e., embedded cases and data collection strategies); the details of the data collection; the data analysis; and the presentations of the research findings.
5. Background to the hotel case studies	This chapter supplies the background, business, and operational contexts of the international hotel company and its two hotels (embedded cases A & B) in which PEB of employees occurred, as well as types of informants operating at the case study and two hotels.
6. Findings & Analysis	This chapter presents the findings and analysis that have emerged from the study of Case A and B
7. Discussion	This chapter discusses four significant mega-themes that emerged from the theme analysis of the study results. In addition, a cross-category theme of roles of environmental communication is incorporated within the discussions of these mega themes.
8. Conclusions	This chapter presents the key results of the study, and how each research objective has been met in brief. It also provides theoretical contributions to knowledge and practical recommendations for hotel managers and practitioners. Finally, it gives recommendations for future research.

Having outlined the structure of this thesis and its potential contributions to existing knowledge, the following chapter will provide a critical review of the body of knowledge related to PEB, theory of values and the relationship of work factors that are crucial for a hospitality workplace.

2 PEB AND ITS ANTECEDENTS

2.1 Introduction

This chapter aims to provide a critical review of the concept of PEB and its antecedents including different values which is the rationale for the development of the conceptual PEB framework that explains PEB in the hospitality sector workplace. It starts by examining the concept of PEB by various scholars. It is followed by a synthesis review of the current PEB literature and the importance of PEB studies in the hospitality sector.

2.2 Conceptualising PEB

Environment related behaviours are referred to by different terms such as '*conservation behaviour*' (Dunlap and Van Liere, 1978; Neuman, 1986; Kaiser and Wilson, 2004), '*ecological behaviour*', '*environmental friendly behaviour*' (Thøgersen and Ölander, 2002), '*environmentally significant behaviour*' (Stern, 2000) or '*environmentalism*', '*environmentally responsible behaviour*' (Corbett, 2005), '*environmental behaviour*' (Chou, 2014) and *PEB* (Young *et al.*, 2015; Ruepert, Keizer and Steg, 2017) and OCBE (Zientara and Zamojska, 2018). The studies using these terms are counted as PEB research in the meta-analysis tables to support the literature review chapter and the term PEB is used throughout this research. Gatersleben (2013) refers PEB to "*as all types of behaviour that change the availability of materials or energy from the environment or alter the structure and dynamics of ecosystems or the biosphere*" (p.133). From this perspective, PEB includes behaviours that damage as well as benefit the natural environment. So far, these definitions have been used in both non-workplace and workplace behavioural studies. Thus, in this study, PEB at work can be classified to be positive or negative.

Furthermore, the concept of PEB is thought to be useful if it is measured in relation with their influencers as outcomes (Gatersleben, 2018) which can be viewed in two main contexts. In the first, the PEB are measured by '*intentional outcomes*' with the assumptions that individuals care about the environment therefore they intend to act to save the environment, but they do not necessarily act (Chan and Lam, 2001; Kollmuss and Agyeman, 2002; Ture and Ganesh, 2014; Potocan *et al.*, 2016). And PEB as intentional outcomes is used by the majority of researchers. In the second, the PEB are measured as '*actual outcomes*' with the assumption that individuals care about the environment therefore they act. It is criticised that most PEB studies of both of these

PEB contexts have been generally based on 'self-reported' behaviours whilst several studies show the evidence of the discrepancy between 'self-reported' and 'actual, observed' behaviours due to a number of reasons such as culture, concern of power from management etc. (Chung and Leung, 2007; Zientara and Zamojska, 2018) which is a limitation to understanding the actual PEB accurately. For example, Chung and Leung (2007) studying waste recycling find a discrepancy between verbal commitment and actual behaviour to environmental protection which is largely based on matching the verbal commitment to environmental value through 'self-reported' environmental behavioural data.

To promote the importance of the current adoption of positive actions towards the environmental protection, the current research defines PEB as behaviours which are measured by actual outcomes that harm the environment as little as possible, or even benefit the environment (Steg and Vlek, 2009, p. 309; Ruepert, Keizer and Steg, 2017).

2.3 Synthesis of Major Environmental-Related Research and PEB

242 environmental-related papers with 150 papers in hospitality industry of interest over the period of 1977 to 2021 were reviewed, analysed, synthesized, and outlined in Table 2-1. They were resulted from the search keys '*environmental behaviour*', '*ecological behaviour*', '*environmental management*', '*environmental initiatives*', '*green consumerism*', the keys conceptualising PEB, and its alternatives mentioned above. These search keys were then later combined with '*in workplace*', '*in hospitality*' and '*in tourism*'. These papers were organised and analysed by environment related and PEB research themes, workplace versus non-workplace (domestic and public settings), location, methodology and emerging themes in hospitality.

Table 2-1. Environmental-related research organised by themes: 1977 to 2021

Themes	1900-1999	2000-2009	2000-2021	2010-2019	2020-2021	Total
<i>Total</i>	29	90	1	118	4	242
PEB	13	10		33	2	58
EM	7	9	1	12		29
Environmental initiatives	1	10		14		25
EMS	1	13		6		20
Firm performance		12		8		20
Resource consumption and management		8		9		17
Green consumerism		6		10		16
Sustainability		9		6		15
Environmental attitudes	4	6		3		13
Sustainability marketing		2		5		7
Review on environmental research	1			5		6
PEB intentions				4	1	5
Change/innovation	1			2		3
Environmental reporting		2				2
CSR Communication					1	1
Ecological ethics		1				1
Environmental accounting		1				1
Environmental awareness training		1				1
Environmental commitment				1		1
Environmental visibility	1					1

Source: compiled from the literature review

The most interested theme is 'PEB', (58 papers) done mostly in 2010-2021, which highlights the increased importance of this topic among a wide range of environmentally relevant research interests discussed. Followed by 'EM', (29 papers), (DeFranco and Weatherspoon, 1996; Stipanuk, 1996; Stipanuk and Ninemeier, 1996; Berry and Rondinelli, 1998; Delmas and Toffel, 2004; Singh, 2006; Kasim, 2007b; Kasim, 2007a; Yim King Penny, 2007; Tzschentke, Kirk and Lynch, 2008; El Dief and Font, 2010; Jackson, 2010; Mair and Jago, 2010; Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010; Bonilla Priego, Najera and Font, 2011; Park, Kim and McCleary, 2012; Wang *et al.*, 2013; Orboi, 2015; Teng, Horng and Hu, 2015; Xu and Gursoy, 2015), and 'environmental initiatives', (25 papers), (Knowles *et al.*, 1999; González and León, 2001; Revilla, Dodd and Hoover, 2001; Wolfe and Shanklin, 2001; Bohdanowicz, Simanic and Martinac, 2005; Ayuso, 2006; Mensah, 2006; Erdogan and Baris, 2007; Goldstein, Griskevicius and Cialdini, 2007; Scanlon, 2007; Kasim and Dzakiria, 2009; Hashim *et al.*, 2010; Kim and Yoon, 2010; Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010; Best and Thapa, 2011; Chou, Chen and Wang, 2012; Nicholls and Kang, 2012a; Nicholls and Kang, 2012b; Wang, 2012; Jayawardena *et al.*, 2013; Shairullizan KamalulAriffin, Nabiha Abdul Khalid and Abdul Wahid, 2013; Rosalind Jenkins and Karanikola, 2014; Yusof and Jamaludin,

2015), 'impacts of EM on firm performance' (20 papers), 'green consumerism' (16 papers) and 'resource consumption and management' (17 papers).

Table 2-2 summarises the 58 PEB studies by non-workplace and workplace from 1977 to 2021. Several theoretical PEB models at individual levels have emerged first in non-workplace (domestic and public setting) in the 1970s and then been developed further at organisational levels in workplaces in the 2010s (Chou, 2014; Ruepert, Keizer and Steg, 2017). Most PEB studies have been conducted in non-work places (Ture and Ganesh, 2014), and few have been in the workplace (Faye, 2014; Paillé and Mejía-Morelos, 2014; Young *et al.*, 2015; Ruepert, Keizer and Steg, 2017). Of the 58 PEB papers, 43 are on non-workplace sphere behaviours and mostly on generic behaviour, energy saving and recycling; and only 15 papers on workplace sphere PEB behaviours and mostly on generic behaviour which show that PEB in workplace has been under research.

Table 2-2. PEB research in non-workplace and workplace settings: 1900 to 2021

Specific PEB	1900-1999	2000-2009		2010-2019		2020-2021		1900-2021		
	Non-workplace	Non-workplace	Workplace	Non-workplace	Workplace	Non-workplace	Workplace	Non-workplace	Workplace	Total
<i>Total</i>	13	8	2	21	12	1		43	15	58
General environmental behaviour	10	6	1	17	10	1		34	11	45
Energy conservation	1			1	2			2	2	4
Recycling	1	1		1				3	0	3
Food waste				1				1	1	2
Littering	1							1	0	1
Towel reuse				1				1	0	1
Thermal behaviour		1						1	0	1
Waste conservation			1					0	1	1

Source: compiled from the literature review

In Table 2-3, an analysis of 58 PEB studies by geographical locations shows that a higher number of the studies are concentrated in innovation-driven or developed countries⁵

⁵ *Definitions of innovation-driven countries:* "Finally, as countries move into the innovation-driven stage, wages will have risen by so much that they are able to sustain those higher wages and the associated standard of living only if their businesses are able to compete with new and unique products. At this stage, companies must compete by producing new and different goods using the most sophisticated production processes and by innovating new ones" (GEM Vietnam report 2014, p.30). *Innovation-driven countries* include Asia & Oceania (Australia, Japan, Singapore, Taiwan, Qatar, UAE), Latin America & Caribbean (Puerto Rico, Trinidad, and Tobago), European Union (Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovenia, Slovakia, Spain, Sweden, UK), Non-European Union (Norway, Switzerland), North America (Canada, United States). Lists are provided in GEM 2014 by Singer, Amoros, & Arreola, 2015.

(e.g., the European Union countries – E.U. and the United States of America – U.S.) than developing Asian countries. The current environmental best practices are rooted in and applicable to developed countries (innovation-driven countries) might not be conducive or valid to developing countries or factor-driven countries which are characterized by resource-and unskilled labour-intensive industries (Rogers, 1995).

Table 2-3. PEB research by geographical locations from 1977 to 2021

Location	Number of studies
Grand Total	58
America	1
Canada	1
Asia	9
China	2
Hong Kong	2
India	2
Malaysia	1
Saudi Arabia	1
Taiwan	1
Australia	2
Australia	2
Europe	17
Central Europe	1
Denmark	2
France	1
Germany	1
Greece	1
Hungary	1
Italy	1
Netherlands	2
North Cyprus	1
Norway	1
Poland	1
Slovenia	1
UK	2
Multi-nation	9
>3	5
China, Netherlands	1
Germany, UK	1
Spain, Brazil	1
US, Canada, Australia, Germany, and Russia	1
NA	14
NA	14
North America	9
US	9
South America	1
Mexico	1

Source: compiled from the literature review

In Table 2-4, an analysis of the 150 academic hospitality papers crossed by research theme shows that the most common interest for the hospitality sector falls in EM, environmental initiatives, EMS, firm performance, resource consumption management and environmental attitudes which is supported by a recent hospitality industry report (Edie, April 2019). Whereas only 8 out of 150 based on hospitality sector studied PEB. Hence, environmentally behavioural studies are an area of highly under research in hospitality sector in despite of its growing importance in the hospitality business sector.

Table 2-4. Environmental-related and PEB studies by sector from 1977 to 2021

	Au to m ob ile	Ed uc ati on	E v e n t	Gen eric	Hos pital ity	Ma nuf act uri ng	Ph ar m ac y	R e ta il	So cia l ho usi ng	To uri sm	Tr an sp ort	Wi ne	Total
Total	1	4	5	69	150	1	1	1	1	7	1	1	242
PEB		3		43	8	1			1	1	1		58
EM			1	4	22					1		1	29
Environmental initiatives	1		2		22								25
EMS		1		7	11					1			20
Firm performance			1	1	18								20
Resource consumption management					17								17
Green consumerism					16								16
Sustainability			1	3	9					2			15
Environmental attitudes				3	10								13
Sustainability marketing				2	5								7
Environmental research review				3	2					1			6
PEB intentions				1	2			1		1			5
Change/innovation					3								3
Environmental reporting					2								2
CSR Communication					1								1
Ecological ethics					0		1						1
Environmental accounting					1								1
Environmental awareness training				1	0								1
Environmental commitment					1								1
Environmental visibility				1	0								1

Source: compiled from the literature review

Hence, the next section devotes to a review of current PEB literature in terms of its antecedents and settings of these antecedent studies since PEB has been studied in different spheres (for instance, personal and corporate) over time.

2.4 Antecedents of PEB

Studies on the antecedents of PEB, have focussed almost exclusively on the roles of individual values in the personal sphere (Stern, 2000; Schwartz, 2012; Young *et al.*, 2015; Groot and Thøgersen, 2018) and have not focussed on the roles of corporate antecedents in the work sphere, for example, CEV. In other words, the studies of PEB in non-workplace settings outnumber those in workplace settings. A review of the antecedents of PEB in both personal and corporate spheres will be next.

2.4.1 In the Personal Sphere

Since the 1980s, scholars generally have used personal antecedents such as values, beliefs, traits, norms, and attitudes to explain PEB in instances where human behaviour is believed to be a significant cause of global environmental degradation (Stern, 1992; Stern and Dietz, 1994; Stern, 2011; Gifford and Nilsson, 2014; Young *et al.*, 2015; Chan *et al.*, 2017; Lenzen *et al.*, 2018; Steg, Berg and Groot, 2018; Chawla, 2019; Steg, De Groot and British Psychological, 2019; Wu, Font and Liu, 2021).

Personal antecedents are applied in the view that scholars generally categorise motives for engaging in PEB as 'pro-social' and/or 'self-interest'. Pro-social motives have been most extensively studied and theorised within the personal influence realm, result in some key theories, for example, Schwartz's norm-activation theory (Schwartz, 1992; Vining and Ebreo, 1992; Schwartz, 2012; Zhang, Wang and Zhou, 2013), Stern's value belief norm theory (1993; 1995b; 1999; Andersson, Shivarajan and Blau, 2005), environmental concern-behaviour (Tam and Chan, 2017; Tam and Chan, 2018) and planned behaviour (Harland, Staats and Wilke, 1999; Kollmuss and Agyeman, 2002; Zhou *et al.*, 2013). These models assume that although many people show concerns for environmental protection, they are unwilling to sacrifice their self-interests to act. Hence, their approach to PEB is viewed as balancing their self-interest with concern for other people, the next generation, other species, or whole ecosystems (Bamberg and Möser, 2007). Scholars who study 'self-interest' base their theories predominantly on rational choice models (Turaga, Howarth and Borsuk, 2010; Evans *et al.*, 2012). These assume that an individual will only act if it furthers their own interests. The current personal PEB models are criticised for having gaps such as the concern-behaviour (Tam and Chan, 2018) and value-action gaps (Chung and Leung, 2007; Chaplin and Wyton, 2014) because these have failed to explain holistically and grassroots why PEB has not been activated in practice even people show positive concerns for the environment. It is also reviewed that the relation between PEB and each of these personal antecedents have been studied, separately or combined (Schwartz, 2012) by various authors with the later authors add more variables to the personal models (Hargreaves, 2010). This may contribute to the current gaps of failing to explain actual PEB.

Prior to the 2010s, majority of PEB studies only focused on the personal factors within personal settings while corporate settings were ignored. For example, there is only 2 PEB studies in workplace with one in waste conservation and one in general behaviour.

In terms of settings where the personal antecedents played in, while quantitative researchers solely study the personal antecedents to explain PEB without accounting for the impact of deep and rich settings, qualitative researchers of PEB add to the model with the domestic and public settings to explain further PEB.

2.4.2 In the Work Sphere

Since the 2010s, scholars have recognised the significance of workplace antecedents to ensure the successful embedding of the PEB models in a workplace context. Despite its mentioned importance, PEB in the work sphere is less studied than those in the public and private spheres (Rezapouraghdam, Alipour and Darvishmotevali, 2018). Few PEB models in the workplace setting have incorporated both personal and corporate antecedents. In particular, the corporate antecedents that have been studied include employee workplace spirituality (Rezapouraghdam, Alipour and Darvishmotevali, 2018), incentives, training, and peer support and so on (Young *et al.*, 2015; Maki *et al.*, 2016; Rezapouraghdam, Alipour and Darvishmotevali, 2018). It previously shows there are only 15 studies explaining PEB at work among the 58 PEB papers from 1977 to 2021. Table 2-5 reviews the antecedents used in these studies.

Table 2-5. Key antecedents in the work PEB studies from 1977 to 2021

Author	Year	Personal antecedents	Work antecedents	Nature of study	Environmental behaviour at work	Sector
Chawla et al	2021	Nil	Corporate brand propositions; Operating standard practices	Empirical; qualitative	Food waste	Hotel
Zhang et al	2019	Employees' autonomous motivation, controlled motivation (CM), Environmental concerns	Nil	Empirical; survey	General environmental behaviour	Hotel
Zientara et al	2018	Environmental values	Green organisational climates; Affective organisational commitment	Empirical; survey	General environmental behaviour	Hotel

Author	Year	Personal antecedents	Work antecedents	Nature of study	Environmental behaviour at work	Sector
Rezapouraghdam et al	2018	Connectedness to nature; Environmental awareness	Employee workplace spirituality	Empirical; survey	General environmental behaviour (Organization citizenship for the environment)	Hotel
Chan et al	2017	Environmental Knowledge; Environmental Awareness; Environmental Concern	Nil	Empirical; survey	General environmental behaviour	Hotel
Ruepert et al	2017	Personal values (Biospheric values)	Perceived corporate environmental responsibility	Empirical; survey	Energy conservation ; Wasting handling	Generic
Wesselink et al	2017	Attitudes towards PEB; subjective norms; perceived behaviour control	Institutional support (leadership support; perceived organisational support-environment); leadership behaviour	Empirical; survey	General environmental behaviour	Generic
Maki et al	2016	Nil	Incentives	Empirical; survey	Recycling; Energy conservation ; Travel behaviour	Generic
Gkorezis P	2015	Nil	Supervisor support; Leader-member exchange	Empirical; survey	General environmental behaviour	Generic
Young et al	2015	Environmental awareness; Attitudes; Environmental actions at home	Feedback; Financial incentives; Environmental infrastructure; Management support; Training; Structure; Policies; Culture; Economic context	Conceptual	General environmental behaviour	Generic

Author	Year	Personal antecedents	Work antecedents	Nature of study	Environmental behaviour at work	Sector
Chou & Chia-Jung	2014	Workplace attitudes; employees' personal beliefs; Everyday actions	Organisational climate	Empirical; survey	General environmental behaviour	Hotel
Ture & Ganesh	2014	Individual values; Individual belief; Individual norm	Workplace environmentalism; Workplace norm	Conceptual	General environmental behaviour	Generic
Paillé et al	2014	Job attitudes; Employee commitment	Perceived organisational support; Psychological contract breach	Empirical; survey	General environmental behaviour	Generic
Zhang et al	2012	Awareness of consequences ; Ascription of responsibility; Personal norm	Organisational electricity saving climate	Empirical; survey	Energy conservation	Hotel
Daamen, D.D. et al	2001	Nil	Tailored messages without additions; Non-tailored message with routing	Empirical; survey	Waste conservation	Generic

Source: compiled from the literature review

Although the PEB studies attempt to explain PEB at work, they lack the incorporation of comprehensive work antecedents. Hence, one of the key criticisms to these PEB studies is that they fail to explain actual behaviour, ignoring the fact that individuals work in the real workplace (Chung and Leung, 2007), where their behaviours are influenced by a multitude of corporate and contextual factors outside of those embraced by the current theories (Zey, 1992, p. 2; Hargreaves, 2011). With an attempt to close these gaps, Young et al (2015)'s work PEB model is more comprehensive by incorporating individual, group, organisational and external influencers. However, this model is not empirically tested.

Furthermore, the antecedents have not been tested in a wide range of sectors to demonstrate universal applicability (they have predominantly been tested in health, manufacturing, and public sector settings). In particular, they have not been tested in

workplaces in which employees have a high degree of autonomy/routine and human interactions are rich such as hospitality. The conceptualization of PEB might be enhanced by distinguishing between simple, routine activities and cognitively complex activities in hospitality sector (Kim *et al.*, 2016).

2.5 Chapter Summary

The chapter reviews, synthesises and analyses the antecedents of PEB in both personal and work spheres. There are the key findings from the literature review that are supporting the development of the proposed conceptual PEB framework.

Firstly, most PEB studies have been generally based on 'self-reported' behaviours whilst several studies show the evidence of the discrepancy between 'self-reported' and 'actual, observed' behaviours due to a number of reasons such as culture, concern of power from management etc. (Chung and Leung, 2007; Zientara and Zamojska, 2018) which is a limitation to understanding the actual PEB accurately. Hence, there is a need that this study investigates positive PEB as behaviours which are measured by actual outcomes (Steg and Vlek, 2009, p. 309; Ruepert, Keizer and Steg, 2017).

Secondly, theoretical PEB models have been tested in domestic, public and workplace settings, although in practice few of these have focused on hospitality workplaces. The limited focus on PEB in hospitality workplace settings means that many areas of application of PEB remain under-researched; in particular, the interplay of the relevant personal and work-related antecedents for individual PEB changes. Furthermore, none of the current models that have been tested in hospitality sector workplaces incorporated real-life working environments where the 'actual' behaviours of employees are accounted for. Thus, there is a need for existing PEB models to be adapted for application in real hospitality workplaces.

In conclusion, for hospitality sector, it is necessary to integrate the interplay of the relevant personal and work-related antecedents for individual behavioural changes to deliver positive PEB outcomes within the real-life hospitality workplace which will be reviewed next.

3 THE ROLE OF THE PEV-CEV INTERPLAY AND WORK-RELATED FACTORS TO PEB

3.1 Introduction

This chapter aims to critically review the PEV-CEV-PEB interaction in general and specifically for the hospitality sector as well as work-related drivers to PEB as the foundation to the conceptual development of the proposed PEB framework for the hospitality sector workplace. It begins with conceptualising values, followed by the role values play in PEB in the personal, work, and societal spheres. It then critically reviews the interaction between PEV, CEV and PEB in hospitality sector workplaces. It then reviews workplace factors that drive PEB beyond the personal factors. It finally proposes a conceptual framework to go beyond the current literature to ensure positive PEB outcomes in practices that work for an international hotel chain.

3.2 Conceptualising Values and Environmental-Related Values in Different Spheres

As values are applied in the vast and multi-disciplinary literature (Graeber, 2001), values concept vary in different contexts including the *personal, corporate and societal spheres* as the basis for further defining the concepts of PEV, CEV and environmental-related cultural values (ERCV) in this study. In the personal sphere, values are defined by the Oxford English Dictionary as “*Principles or standards of behaviour; one’s judgement of what is important of life*”. Williams (1968) as a primary sociologist conceptualises values as “*standards of desirability that are more nearly independent of specific situations*” (p.284).

Schwartz (1992) in his Value Survey proposes an exhaustive list of 64 human values items which is claimed to be universal to cross cultures. These 64 values are grouped by ten distinct types of broad personal values underlining by motivations that are recognized similarly across cultures, comprising (i) self-direction, (ii) stimulation, (iii) hedonism, (iv) achievement, (v) power, (vi) security, (vii) conformity, (viii) tradition, (ix) benevolence, and (x) universalism. Each type of value is defined in terms of the broad motivation it expresses. These ten values form a circular structure of four dimensions (1) openness to change, (2) self-transcendence, (3) conservation and (4) self-

enhancement that captures the conflicts and compatibility among them that are culturally universal. The circular structure of values has an important implication for the relations of values to other variables, which show that the whole set of indicated values relates to any other variable (behaviour, attitude, age, etc.) in an integrated manner (Schwartz, 2012).

Schwartz's list of human values has been used as a theoretical ground by many scholars in the area of PEV and PEB of individuals who refined the list to suit. For example, Stern et al. (1993) adopted Schwartz's personal value theory but extend the model into the environmental area in their value belief norm (VBN) model. Stern et al. (1993) suggested the third value orientation (i.e., biosphere value orientation concerned with non-human species or the biosphere) to Schwartz' human values theory which only included the two dimensions of self-interest (egoistic value orientation) and concern for other human beings (social-altruistic value orientation). One perspective of biospheric values (which they call environmental values - EV) was *"EVs are determined by one's position on two orthogonal dimensions, a bio-centric dimension that reflects conservation and the protection of the environment (Preservation or P); and an anthropocentric dimension that reflects the utilisation of natural resources (Utilisation or U)"* (Wiseman and Bogner, 2003) (p. 5).

Stern et al. (1995b; 1999) developed a values measurement in the empirical PEB studies. The environmental-related personal values can be measured in four factors or twenty seven items representing the two prior value orientations of Schwartz and one biosphere value orientation of Stern et al (1993). The four factors that were empirically relevant to PEB included (i) biospheric-altruistic values, (ii) egoistic values, (iii) openness to change, and (iv) conservation (traditional values). The factor one comprised ten items: *'unity with nature', 'protecting the environment, preventing pollution', 'respecting the earth', 'a world at peace', 'equality', 'social justice', 'helpful', 'a world of beauty', 'sense of belonging'*. The factor two comprised four items: *'authority', 'social power', 'wealth', and 'influential'*. The factor three comprised four items: *'an exciting life', 'a varied life', 'curious' and 'enjoying life'*. The factor four comprised nine items: *'honouring parents and elders', 'honest', 'family security', 'self-discipline', 'obedient', 'clean', 'politeness', 'social order', and 'loyal'*.

Kollmuss et al (2002) suggest that a deeper level to explore the formation of PEV is to investigate the life experiences that have built the beliefs and values of individuals who hold active personal values for environmental protection as values are complex.

In the work sphere, corporate values are defined as the ways in which institutions are patterned and justified (Schwartz, 1994). Every successful company has a set of company values to assist their employees in achieving their goals as well as the company's. They are the essence of the company's identity and summarises the

purpose of their existence. Companies generally express their corporate values in their corporate documents such as corporate policies, company reports and company statements. In particular, ecologically sustainable organizations promote values of environmental protection and sustainable organizational performance using a variety of methods, including written communications, environmental-improvement activities, and educational activities, all of which illustrate a strong commitment to ecological sustainability (Starik and Rands, 1995). The literature review shows that measurements of CEV are underdeveloped. Zsoka (2008) suggests that examining organisational culture may give us insights for assessing organisations' environmental values. Rueprt et al (2017) attempt to study CEV via the concept of corporate environmental responsibility (CER) in which they refer CER to pro-environmental goals, strategies and practices of companies want to express.

In the societal sphere, culture-level values reflect the societal issues to monitor human behaviours which are known as national cultural values (Schwartz, 1994). Brislin (1990) defines culture as *"widely shared ideals, values, formation and uses of categories, assumptions about life, and goal-directed activities that become unconsciously or subconsciously accepted as 'right' and 'correct' by people who identify themselves as members of a society"* (p.11). Hofstede and Bond (1988) define culture as the collective programming of the mind that distinguishes the members of one category of people from those of another. By this understanding, culture can be bound to a nation, a region, an organisation or a group (Minkov and Hofstede, 2012). This study is interested in national culture as a unit of analysis.

3.3 The Role of Values in Determining Behaviour and PEB in Different Spheres

Values have no doubt played a central role in any sciences concerned with human behaviour by multiple primary theorists from different disciplines over time. For example, Rokeach (1973) as a primary psychologist considers value as an intervening variable that can unify the diverse interests of all the sciences concerned with human behaviour. It is generally agreed that values are central, stable, and considered as the basis for explaining the behaviours of individuals and organisations as well as used to characterize cultural groups, societies, and individuals. The greater stability of values compared to other variables such as attitudes, means that changes in values can be used as more robust indicators for tracking changes in the behaviours of individuals and organisations (Schwartz, 1992).

Reviewing values-PEB literature, the role values play in PEB has become evident. The relationship comes from a general view that the ecological problems stem largely from the values which encourage environmental exploitation and the absence of values

which preserve the environment (Dunlap, Grieneeks and Rokeach, 1983). Since values is conceptualised and applied in different contexts including the personal, workplace, and societal sphere, the next section will look at the role values play in these different spheres.

3.3.1 The Role of Personal Values

Personal values are behind of shaping much of human intrinsic motivation (Kollmuss and Agyeman, 2002). Various PEB literature generally identifies personal values as an essential pre-requisite to PEB. Shaped by a range of influencers (parental attitudes, cultural and social norms etc.) (Blake, 2001), they are considered as the basis for explaining the behaviours of individuals (Perry, 1926; Hammond, 1928; Rokeach, 1973). Hence, understanding the influencers forming PEV can provide deep understanding of PEB (Dunlap, Grieneeks and Rokeach, 1983).

Studies of personal values and the way in which they influence PEB have taken place in two different contexts. The first uses a theoretical framework of planned behaviour to assess personal values and ‘measures’ the extent to which these influence the intention of that individual to act i.e. they purport that *“individuals care about the environment, therefore, they intend to act”* (Zhou *et al.*, 2013; Tam and Chan, 2018). These studies have found that - whilst values are intricately linked to the intention to act - they do not necessarily result in actual actions. Chawla (2019, p.187) suggests that values are only likely to lead to positive PEB when they are peaked. However, the scholar (2019, p.187) further acknowledges that values are strongly linked to human behaviours in the way *“Values affect the way a person perceives a situation, what information is seen as salient, and how people perceive different aspects of the situation, so that some actions are seen as attractive while other are judged as aversive.”* This phenomenon has also been linked to the personal value-action gap and is explored by a few scholars (Blake, 1999; Chung and Leung, 2007; Chaplin and Wyton, 2014) or the values-behaviour gap (Chou, 2014; Reese, Loew and Steffgen, 2014; Mohd Suki and Mohd Suki, 2015; Chan *et al.*, 2017; Zientara and Zamojska, 2018). In the second context, studies completed seek to measure actual outcomes of PEB that are implemented as a result of individual values. These purport *‘individuals care about the environment and, therefore, they act’*. The weight of opinion from these studies indicates that, whilst many individuals have positive environmental values, few acts upon these values to produce positive environmental outcomes.

On the other hand, scholars acknowledge that individuals who are positively disposed towards PEB generally hold values that broadly recognise importance of a healthy environment for human survival and/or acknowledge a moral imperative for humans to protect that environment (Dunlap, Grieneeks and Rokeach, 1983; Neuman, 1986; Stern, Dietz and Guagnano, 1995b; Potocan *et al.*, 2016). These studies on the

antecedents of values have, however, focussed almost exclusively on the role of individuals rather than the emerging field of CEV.

Furthermore, a small handful of studies that have in some ways considered values provided at best only a preliminary indication of the role values might be playing in the practice of energy conservation. For example, Cottrell (2003) only studied the relationship between values in general and attitudes toward environmental issues. Among these studies, only a few examine specific PEB (such as recycling, littering, energy saving, water saving, food saving etc.) has focused on the relations of values and such specific PEB. For example, Dunlap et al (1983) as the rare case to conclude that values placed an important role in changing recycling behaviour, yet this was limited only in a controlled, small-scale settings of 93 household participants. Neuman (1986) found personal values have a weak impact on environmental commitment (including a wide range of energy-conserving actions). Using Schwartz's measures of values, Karp (1996) examined the influence of values on environmental behaviour. Consistent to Schwartz's universal value theory, values found to have a positive influence on environmental behaviour are self-transcendent/openness to change and universalism/biospheric. Values found to have a negative influence include self-enhancement/conservation. But this study also looks at general values and environmental behaviour.

Stern (2000) developed a value-belief-norm model (VBN) which proposed people's general predisposition to engage in responsible environmental behaviour – a direct consequence of their values, beliefs, norms, attitudes and behaviour. People's values (egoistic, altruistic, or biospheric) contributed to their beliefs (particularly their worldviews, awareness of consequences, and willingness to take responsibility), which in turn activated personal norms or a sense of obligation to take pro-environmental action (Stern, 2000). By this, it assumed that people had a general value orientation toward the welfare of other humans and the environment (non-human) could be motivated to act to prevent harms to the valued objects. Under appropriate conditions, PEB will follow from this altruistic value orientation (Stern, Dietz and Kalof, 1993).

3.3.2 The Role of Company Values

With the importance of sustainability, ecological companies in the hospitality sector have increasingly shown their environmental values and commitments through their own policy statements and corporatized brand propositions and operating standard practices (Chawla, Lugosi and Hawkins, 2021). In particular, each of the twelve largest hospitality chains (Statista, 2018) is found to have expressed their environmental values in their CSR website and company statements.

Only recently, it has been advocated in a few studies that company values have had a strong influence (either positively or negatively) on individual behaviour in organizations, particularly on middle managers and supervisors whose role requires them to disseminate these values to employees throughout the organization (Turnbull, 2001) which in turn influence operational employees' behaviour. The latter influence is evidenced in Chawla's work (2019) that supervisory backing is particularly important to drive positive PEB in the case of food waste prevention in a hospitality workplace where the operational employees lack the skills and knowledge to engage in PEB. There is some emerging evidence that the expression of CEV that require employees to change their behaviours can have a negative impact on actual intention to act among some employees (Sun-Hwa, 2009) when they perceived CEV with otherwise motivations such as profitability focus. Furthermore, Chawla et al (2021) finds that the corporatised value propositions and brand standards can compromise the attempts of the employees in reducing food waste at work. With this light, this study establishes the conceptual link between CEV and PEB (by extension, energy saving behaviour) in the hospitality workplace.

However, there is no study so far in the academic literature that examine the ways in which company and individual values interact and their influence on the positive environmental outcomes in the workplace (Young *et al.*, 2015; Abraham *et al.*, 2016), except for two studies. First, Young et al (2015) sought to address this gap by developing a PEB workplace model. His PEB work model can be considered as the most comprehensive model that include individual, group, and organisational antecedents of PEB. However, the CEV factor is indirectly addressed by organisational culture and policies. The authors suggest that there is a little evidence to show a relationship between organizational culture and sustainability however an organization could influence behaviour through its culture by environmental communication. Furthermore, their model is conceptual and has not been substantially empirically tested and the tests that have taken place have been in the healthcare sector. Second, Ruepert et al (2017) recently conducted a small self-reported survey on the relationship between corporate environmental responsibility, employees' biospheric values, corporate environmental responsibility (CER) and PEB at work. The authors - again - do not define CER clearly, but they infer CER as ambitions that are expressed in the organisation's mission statements. They propose that CER can increase the likelihood that employees engage in PEB at work and perceived mission to maximise profit can discourage employees to engage in PEB. Ruepert et al (2017) find that both biospheric values and perceived corporate environmental responsibility are interacted in showing the relationship between perceived corporate environmental responsibility (refer to pro-environmental goals, strategies and practices of companies want to express) and PEB was stronger among those with moderate to weak biospheric values.

Hargreaves (2010) criticises that the interventions and recommendations of the current PEB studies, although having become more sophisticated, fail to make a significant impact on behavioural patterns or their environmental effects or lead to the worrying value-action and concern-behaviour gaps. One of the reasons to this failure is that current workplace models of PEB do not adequately reference the interaction between PEV and CEV although the interaction should reflect the reality of workplace (Hargreaves, 2010; Hargreaves, 2011; Ruepert, Keizer and Steg, 2017). Furthermore, they have attempted to study PEB in interaction-free models which is argued to be less relevant or inappropriate to social phenomenon (Flyvbjerg, 2001; Hargreaves, 2010) of real workplaces which are characterised by daily complex and contemporary social interactions and subject to context (Blake, 2001).

3.3.3 The Role of Cultural Values

The cultural dimension of environmental values is important as moderating variables in the corporate sphere particularly in the context that hospitality companies quickly expand internationally nowadays where cultural factors are matters for their successful internationalisation.

Values link PEV (egoistic, altruistic and biospheric) to the national level as moderating variables. For example, Triandis (1990) suggests that Hofstede (1984)'s individualism-collectivism dimension of culture accounts for social behaviour as well as environmental behaviour that can be the basis for the differences in egoistic and altruistic values across cultures. For example, altruistic values vary in societies of individualism and collectivism, people from collectivist cultures are likely to care for the welfare of their in-group members than other people outside their in-group whereas people in individualist cultures have less strong relations with their ingroup members so they have some energy left for outgroups. Triandis (1990) also noted that individualism and collectivism exist in every culture, but *"the relative emphasis is toward individualism in the West and toward collectivism in the East and South"* (p. 39).

Biospheric values are reflected via the view of humans as part of the nature and growth limits are necessary to protect the equilibrium of the ecosystem, giving rise to environmental concern (Dunlap and Van Liere, 1978). However, Schwartz (1992) suggests that people from collectivist cultures tend to emphasize benevolence (linked with values including 'helpful', 'responsible', 'forgiving', 'honest', 'loyal', 'mature', 'love', 'true friendship' focuses on concern for the welfare of close others in everyday) more than universalism (linked with environmental values including 'unity with nature', 'protecting the environment', and 'a world of beauty'), whereas those from individualist cultures appreciate universalism and benevolence more or less equally.

Previous studies have demonstrated environmental values differ across ethnicity. Leung and Rice (2002) found cultural differences in New Environmental Paradigm (NEP) scores among two ethnic groups in Australia; Anglo-Australians showed more pro-environmental values than did Chinese Australians. Litina et al (2016) finds culture has a persistent and statistically significant impact on the environmental values of migrants. Soyez (2012) found the influence of a pro-environmental value orientation differs substantially according to natural cultural values. However, these studies are limited to general public and corporate settings emerge as a new interest for research.

3.4 The PEV-CEV Interplay and their Influence on PEB in Hospitality Sector Workplace

The personal and corporate antecedents such as PEV and CEV are only meaningful in explaining PEB when they are interacted via acts of communicating and being contextualised (Hargreaves, 2010; 2011). The Oxford Advanced Learner's Dictionary defines an interaction as, *“the act of communicating with somebody, especially while you work, play or spend time with them”* and *“if one thing has an interaction with another, or if there is an interaction between two things, the two things have an effect on each other”*. With this logic, the interplay of PEV and CEV is necessarily studied in the examination of communicating CEV from the HOs to hotels and how CEV interplays PEV and contextualised work factors in the hospitality workplace.

Studies of how companies develop and communicate their corporate values to their employees are under research in despite of its vital importance to positive PEB implementation. Companies generally express their corporate values or aspirations in various sources include company websites, corporate statements and environmental programs to various audience including general public, employees, investors, and society. Hsieh (2012) analyses the environmental management policies and practices of the top 50 hotel companies as disclosed on their corporate web sites and find that environmental policies and practices are limited to the environmental information featured on the web sites. In recognising the significance of the content of CEV to corporate success in implementing PEB, it highlights that the PEB change process is negotiated between policy makers, green communicators and the employees who implement:

“Until we reach out to the individuals who design and deliver environmental programs, our efforts will remain invisible to those who can most benefit from them.” Mackenzie-Morh 2004, 544 in Hargreaves, 2010).

Despite its importance of the PEV-CEV interplay and the role of environmental communication to the performance of positive PEB within a hospitality workplace, these areas are under research, as revealed from the review of 242 environmental and

PEB related papers from 1977 to 2021 (see Section 2.3). As such, there is a need to investigate a conceptual link between PEV and CEV, between CEV and PEB, between PEV and PEB in the workplace for this study in order to establish the investigation of the PEV-CEV influence on PEB in the proposed conceptual framework.

3.5 Other Factors that Matter to PEB in Hospitality Sector Workplace

Hospitality organisations recognise the significance of environmental issues to corporate success to such an extent that, in 2018, each of the twelve largest hospitality companies (Statista, 2018) have introduced some forms of programme to minimise their negative environmental and social consequences, from the reviews of the websites of these organisations. Most of these programmes rely to some extent on changing staff behaviours to achieve their ambitions (Stipanuk and Ninemeier, 1996; Claver-Cortés *et al.*, 2007; Yim King Penny, 2007; Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Kim and Choi, 2013; Chou, 2014; Teng, Horng and Hu, 2015; Zientara and Zamojska, 2018). Thus, it is no surprise that, major international hotel chains have been seeking ways that change behaviours (Bohdanowicz, 2006; Chen, Cheung and Law, 2011; Teng, Horng and Hu, 2015). Despite this focus, only seven studies are done in hospitality sector with five of general environmental behaviour, and one of reusing towel behaviour (Reese, Loew and Steffgen, 2014), and one of food waste (Chawla, Lugosi and Hawkins, 2021) among the PEB studies from 1977 to 2021 (see Table 3-1).

Table 3-1. Examples of PEB studies in hospitality sector:1977 to 2021

Author	Year	Personal antecedents	Work antecedents	Behaviour
Chawla et al	2021	Nil	Corporate value propositions, standard operating practices	Food Waste
Zhang et al	2019	Employees' autonomous motivation; controlled motivation; environmental concerns	Nil	General environmental behaviour
Zientara P & Zamojska A	2018	Environmental values	Green organisational climate; Affective organisational commitment	General environmental behaviour
Chan et al	2017	Environmental knowledge; Environmental awareness; Environmental concern	Nil	General environmental behaviour
Kim et al	2016	Autonomous motivation; Environmental concern Self-efficacy or individuals' beliefs about their capabilities to produce designated levels of performance	Generation; External motivation (Rewards)	General environmental behaviour
Suki N M & Suki N M	2015	Green attitudes; Perception of social pressure to perform the behaviour (subjective norms); Control over performance of the behaviour (perceived behavioural control); Green hotel knowledge	Nil	Intention to stay at a green hotel
Reese G, Loew K & Steffgen G	2014	Social norms; Environmental messages	Nil	Towel reuse
Chou & Chia-Jung	2014	Workplace attitudes; Personal beliefs; Everyday actions	Organisational climate; Organisational policies	General environmental behaviour
Cottrell S P	1992	Sociodemographic; Environmental attitudes	Nil	General responsible environmental behaviour

Source: compiled from literature review

There is emerging evidence that the particular characteristics of the hospitality workplace require adaptation of existing models of PEB. Factors including workload, incentives (Maki *et al.*, 2016), team-feedback, environmental visibility (Bowen, 2000; Pedersen, 2000; Yu, Lo and Li, 2017), effective development and communication of CEV (Chang and Wu, 2015), management support (Wesselink, Blok and Ringersma, 2017) and cultural values (Soyez *et al.*, 2009; Soyez, 2012) are of particular relevance to the international hospitality workplace. Previous studies (Chan *et al.*, 2017) have demonstrated that, in hospitality in particular, employees express a desire to act in an environmentally sensitive way but fail to translate these desires into actions. The quality expectations of guests as well as concerns about the motivation of the company for green initiatives are critical factors that have emerged as deterrents to action in this sector.

3.5.1 Context Salience

Chawla et al (2021) suggested that employees' work behaviours were deeply embedded within organisational contexts. People are more likely to behave environmentally when contextual factors enable them implement environmental aspects (Steg *et al.*, 2014; Steg, 2016; Steg, Lindenberg and Keizer, 2016). Thus, the personal and corporate antecedents are only meaningful in explaining PEB when they are *context-specific* or *work PEB should be embedded in contextual factors* (Hargreaves, 2010; 2011). Context is defined as "*the situation in which something happens and that helps you to understand it*" according to Oxford Advanced Learner's Dictionary. "*Context is the background, environment, setting, framework, or surroundings of events or occurrences. Simply, context means circumstances forming a background of an event, idea or statement, in such a way as to enable readers to understand the narrative or a literary piece.*" (LiteraryDevicesEditors, 2013). Hence,

The hospitality sector is contextualised with the working settings of intensive product and labour market pressures (Marchington and Suter, 2013) and high interactions of human factors which can create unique working environments for the employees' engagement in their daily routine as well as environmental initiatives. The other factor that adds further context to the working environment of the employees is that the hotel industry's motivation to environmental protection comes from a cost-benefit perspective (Stipanuk and Ninemeier, 1996). The central focus of environmental practices has been on designing new ecological hotels (Hsieh, 2012) and minimizing the consumption of resources of the guests as well as employees within the work process. Zientara et al (2018) finds the green organizational climates of the hotel industry can influence the employees' PEB.

The above logics suggest that PEB needs to be explained by multi-levels of aggregation of antecedents within personal, corporate, and societal spheres (Ruepert, Keizer and Steg, 2017; Tam and Chan, 2018). Firstly, within the personal sphere, it is crucial to investigate the PEV of individual employees and how they interplay and influence PEB in the workplace. Furthermore, it is essential to analyse the interplay of the PEV with other work-related factors (for instance CEV) and how this interplay affects PEB. Secondly, within the work sphere, there is emerging evidence that the particular characteristics of the hospitality workplace require adaptation of the existing models of PEB in the literature. The corporate antecedents that are found to be significant for a hospitality sector business that are integral parts of the proposed conceptual framework, including: *CEV, Communication of CEV, Institutional support and leadership behaviours, Environmental visibility, Incentives and Training*. Thirdly, cultural values of individual influence the interplays of the personal and work factors that affect the PEB.

From the literature, the antecedents, and contextual factors of the self-reported and observed PEB in the framework within this study are further conceptualised in the following way, following the previous suggestion to integrate the knowledge of the PEV-CEV-PEB into the conceptual framework of PEB.

3.5.2 Communication of CEV

First, effective development and communication of CEV is significant to successful engagement of employees in delivering the positive PEB outcomes (Chang and Wu, 2015). Although few studies look at the roles of company values in PEB, communication of CEV in the hospitality workplace is a lacking area in contemporary environmental management research in particular PEB at work. Zientara et al (2018) – among a very few – finds ‘the way how corporate values are developed and communicated’ can influence the employees’ PEB in the hotel sector. As such, deep investigation of how the communication of CEV is effectively occurring will be an important integral factor of the proposed conceptual framework for the fieldwork of this study.

3.5.3 Organisational Commitment towards Environmental Sustainability

Wesselink et al (2017) suggest that perceived organisational support for the environment to act pro-environmentally friendly, are affecting PEB. Perceived lack of support from organisation, top management, direct managers and peers is one of the major hindrances to employees’ engaging in a certain behaviour which is acknowledged in social exchange theory (Blau, 1964). Employees are more likely to engaging in PEB actions that they perceive are valued by their company, as well as they perceive the company values their contributions, cares about their well-being and appreciates their accomplishments and extra efforts of incorporating environmental initiatives on the daily routine job (Eisenberger and Stinglhamber, 2011; Kim, Eisenberger and Baik, 2016). Furthermore, support from direct managers and their ability to articulate why environmental sustainability is helpful to the company is so vital to promoting PEB of employees (Young *et al.*, 2015). Suan (2016) finds that supervisor support positively influences work engagement of hotel employees in Malaysia and this relationship is stronger for male employees than the females. Furthermore, leadership behaviours appear to be exemplary one to employees to copy and directly influence how employees perceive the organisation support positively or passively the environmental initiatives (Wesselink, Blok and Ringersma, 2017). As such, institutional support and leadership behaviours is an important integral factor of the proposed conceptual framework in this study.

3.5.4 Environmental Visibility

Environmental visibility can be a useful tool for enabling the positive PEB at work (Brick, Sherman et al. 2017) in the way that values explain PEB but to which the extent depends on the visibility of PEB of the company and individuals in that workplace.

Visibility is conceptualised in different environmental contexts such as organisational visibility, social visibility, physical visibility, and visibility of an issue. Visibility captures the extent to which phenomena can be seen or noticed. For example, issues are visible when they are easily noticeable by groups inside or outside the organization (Bowen, 2000).

Visibility can both increase and decrease behaviour based on *social identity* (Brick and Lewis, 2016; Brick, Sherman and Kim, 2017a). Several empirical studies have demonstrated that there is a positive relationship between the extent of an organization's visibility and its proactivity in responding to pressure on social or political issues (Bowen, 2000). Individuals generally engage in more pro-social behaviour when their actions are visible to others. Previous work suggest that visibility also increases PEB. For example, being watched leads individuals to prefer eco-friendly over luxury goods and to litter less. However, the claim that visibility leads to pro-social behaviour contains an implicit assumption that the behaviour is signalling desired characteristics and traits.

As such, environmental visibility will be an important integral factor of the proposed conceptual framework for the fieldwork of this study. However, visibility is a lacking area in contemporary environmental management research (Bowen, 2000; Pedersen, 2000; Brick, Sherman and Kim, 2017a; Yu, Lo and Li, 2017) and there is almost absence study in the role of environmental visibility in the employee engagement in the positive PEB in the hospitality sector workplace.

3.5.5 Informal Practices in Hospitality Workplace

Organisational theories such as the network-actor theory (Alcadipani and Hassard, 2010) and practice theory (Hargreaves, 2011) suggest that the employees' behaviours are influenced by practices that are embedded within an organisation. The study adopted the definition of Chawla (2019, p. 86) "A practice refers to shared, context-bound activities that are regularly performed within the social network of human and non-human actors" because this fits the scope of the study to examine the key influencers of PEB exhibited at work of individuals in relation to multiple and interactive factors in the personal, corporate and societal spheres. There is general agreement that practices in organisations can be institutionalised (Warde, 2005). Relating this specifically to hotel companies, this means such companies can develop

institutionalised practices within shared formal standards of performance to bring their ambitions regarding corporate values and management practices into working areas that affect energy consumption and resource efficiency practices in the hotel working environment.

On the other hand, a large number of working practices can be informal and are simply built on shared meanings and commonly accepted norms within the social network of actors (Chawla, 2019). Chan et al (2014) in his hotel study on PEB stressed the high frequency of informal practices in the hospitality industry (Chan *et al.*, 2014) due to the increasing growth of the informal economy of the sector. Marchington and Suter (2013, p. 284) argued that “informality takes centre stage in this [hospitality] organization, driven by managerial and worker preferences for informal EIP [Employee Involvement and Participation] in the context of close working relations at the customer interface. Moreover, customer pressures and flexible working patterns make it difficult to sustain formal EIP in the context of a capability framework that puts a primacy on managers using informal approaches.”

Some studies suggest that the practices in the workplace are often scripted and enforced by managers (Chawla, 2019; Chawla, Lugosi and Hawkins, 2021) which generally stresses the dominance of the informal practices driven by the management in the hospitality sector. However, this informal aspect of practices and their influence on PEB in the hospitality sector is seldom studied (Thomas, Shaw and Page, 2011; Cauffman, 2016; Williams and Horodnic, 2017). Existing studies on informal practices and behavioural changes in generic workplaces focus on the relationship between the use of informal documents and human information behaviour (Trace, 2008), informal learning in the workplace (Khandakar and Pangil, 2020), and informal communication practice and behavioural change in gossip (Fortado, 2011). Most of the hospitality studies looked at how hotel managers used informal and formal practices in managing diversity (Manoharan, Gross and Sardeshmukh, 2014; Manoharan, Sardeshmukh and Gross, 2019), informal recruitment and mentoring of human resource teams (Purcell, 1996). Despite its significance, the informal practices used by the operational staff within the hotel workplace – in particular, whether the informal practice encourage or discourage employees demonstrate PEB, and which informal practice support hotel employees in demonstrating PEB, whilst which hinder their PEB – remains under research.

3.5.6 Incentives

Existing literature generally shows that incentives are found to influence PEB of employees in the workplace. Employees are more engaging in PEB when they are incentivised (Young *et al.*, 2015; Kim *et al.*, 2016; Maki *et al.*, 2016). Moreover, types of financial incentive (e.g. cash, reimbursement/rebate) are more effective at changing

specific PEB than non-financial incentives (e.g. ticket, lottery, coupon, contest) (Maki *et al.*, 2016). These authors also find that financial incentives that can change PEB are particularly effective in certain contexts. However, there is little studies done in the roles of incentives in PEB of employees in the hospitality workplace.

3.5.7 Training

Finally, training is a key component needed to be combined with almost all other antecedents such as PEB awareness so on in order to promote employees' positive PEB engagement (Young *et al.*, 2015) especially in the hospitality sector where the operational employees lack of skills and knowledge of how to engage in PEB (Chawla, Lugosi and Hawkins, 2021). However, there seems to lack academic study on this training-PEB relation although companies and governments acknowledge training is vital in facilitating employees' engagement in PEB (Cox *et al.*, 2012).

3.6 Proposing A Conceptual Framework to Go Beyond the Current Literature

To sum up, a common theoretical basis for the holistic understanding of the antecedents of actual PEB is evidently challenging and under-researched. This is due to that the theoretical grounds to it vary so much across disciplines and the nature of the PEB is complex. Current scholars attempt to explain PEB either by studying personal influencers (e.g. values, traits, beliefs, norms and attitudes) (Stern, Dietz and Guagnano, 1995b; Steg, Dreijerink and Abrahamse, 2005; Gifford and Nilsson, 2014) or workplace influencers (e.g. incentives, supervision, peer support, training) (Paillé and Mejía-Morelos, 2014; Young *et al.*, 2015; Raineri *et al.*, 2016) or country-level influencers (e.g. national cultural values, ethnicity and sustainable development policies) (Kimmelmeier, Krol and Kim, 2002; Leung and Rice, 2002; Johnson, Bowker and Cordell, 2004; Deng, Walker and Swinnerton, 2006; Oreg and Katz-Gerro, 2006; Soyez *et al.*, 2009; Cordano *et al.*, 2011; Soyez, 2012).

However, few authors have examined both personal and work-related influencers (Ruepert, Keizer and Steg, 2017) and the three-level interplay of these influencers within the same study. Moreover, these studies are either conceptual papers or quantitative which lack the in-depth insights in explaining the actual PEB in practice that are relevant to the hospitality sector workplace.

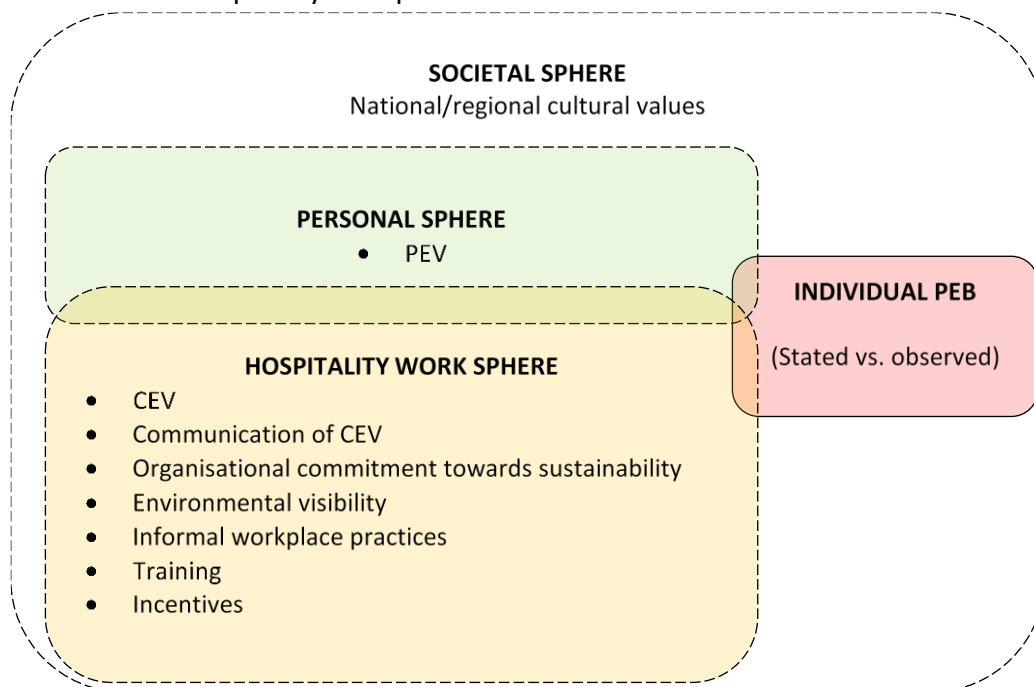
In particular, the study responds to the following key research questions:

1. What is the extent to which personal environmental values of the individual employees interact the company environmental values and their pro-environmental behaviours within the real-life hospitality workplace?

2. How do these interactions happen? And what are the reasons why they interact in such ways?
3. What are the important work-related drivers to the actual positive PEB of the hotel employees within their real-life hospitality setting?
4. How do these drivers influence the actual PEB of the employees? And, why?

With the previous rationale of the personal and work-related factors that matter to PEB at work, this study proposes a conceptual framework for promoting the employee engagement in positive PEB for an international hospitality workplace in Figure 3-1.

Figure 3-1. Proposed conceptual framework of employee engagement in PEB for an international hospitality workplace



Key papers:

- (1) Process framework of macro determinants for employee PEB (e-PEB) of Young et al (2015);
- (2) Workplace PEB framework of Ture and Ganesh (2014).
- (3) Values measurement of Stern et al (1995b).
- (4) Message strategies for eco-friendly accommodation of Zanon & Teichmann (2016);
- (5) Workplace PEB framework of Ruepert et al (2017).
- (6) Multi-level PEB framework of Tam and Chan (2017; 2018).
- (7) PEB framework in hotel industry of Zientara & Zamokska (2018).

In essence, with the holistic and interactive approach for positive PEB implementation in workplace, the following lenses for the current qualitative research are follows:

- (1) PEB needs to be explained by multi-levels of aggregation of antecedents including personal, corporate, and societal sphere (Ruepert, Keizer and Steg, 2017; Tam and Chan, 2018);
- (2) PEB needs to be studied in the interplay with PEV and CEV; and
- (3) PEB needs to be studied with the account of the work sphere factors that are important to the hospitality workplace including contextual factors.
- (4) The hospitality work sphere determinants to PEB will be examined and evaluated in this study are CEV, Communication of CEV, Organisational Commitment towards Environmental Sustainability, Environmental Visibility, Informal Practices, Training, and Incentives.

4 METHODOLOGY

4.1 Introduction

This chapter sets out the methodological basis of this research and outlines the epistemological and ontological positions adopted by the researcher. The chapter then explains the adoption of the case study research approach in detail and the design of the case study (i.e., embedded cases and data collection strategies), providing a detailed explanation of how the sample hotel company and embedded hotels were selected. It further explains how the informants within these hotels were recruited and how the data from these informants were obtained through the different data collection methods. Finally, the chapter explains how these data were analysed and how the research findings are presented.

4.2 The Philosophy

Philosophy is defined as “a system of beliefs and assumptions about the development of knowledge” (Saunders, Lewis and Thornhill, 2015, p. 124). It is essential that researchers understand their own beliefs about the nature of the world around them, what constitutes acceptable and desirable knowledge, and the extent to which they believe it necessary to remain detached from their research data before selecting the appropriate research philosophy for their subject. This process requires researchers to have the skills of reflexivity (Finlay and Gough, 2003; Alvesson and Sköldberg, 2018) from which to understand how their pre-conceptions and assumptions shape the selection of research questions and methods and the interpretation of their findings (Creswell, 2013; Saunders, Lewis and Thornhill, 2015; Altinay, Jang and Paraskevas, 2016). Researchers can refine their adopted research philosophy by defining their epistemology, ontology, and axiology (Saunders, Lewis and Thornhill, 2015).

Epistemology refers to the assumptions that are made about human knowledge. In considering the research epistemology, the researcher is required to consider how they will define which elements of knowledge count and how they are constructed (Hatch and Cunliffe, 2013, p. 11). Hence, the research epistemology defines what the researcher believes to constitute acceptable, valid and legitimate knowledge in her field of study (Saunders, Lewis and Thornhill, 2015) as well as influencing the methodological choices made and the ways in which she communicates the knowledge of her chosen research subjects to others (Saunders, Lewis and Thornhill, 2015). Epistemologies are a key consideration influencing the overarching methodology

selected. It is within this framework that the methods of data collection and analysis are located. For the current study, the researcher views that the aim is to investigate a complex subject at a deep level using mostly textual and verbal data. Hence, interviews and observations were selected in this study in order to enable rich data to be obtained.

Ontology refers to the way in which the researcher perceives or makes “assumptions about existence and definitions of reality” (Hatch and Cunliffe, c2013, p. 11) or, in the words of Saunders, Lewis and Thornhill “the nature of reality” (Saunders, Lewis and Thornhill, 2015, p. 127). When defining the research ontology, the researcher needs to address philosophical questions regarding the objectivity and subjectivity of reality and this in turn requires her to question her own beliefs about the way the social world operates. As the researcher is interested in investigating the detailed interactions between individual environmental values, CEV and actual environmental behaviours in a workplace setting, she believes that there are multiple realities of the PEB observed. This is because they are influenced by individual values, how their values interact with the CEV and the social context of the organisation and other factors such as national culture.

Axiology refers to the set of “*assumptions about the extent and ways the researcher’s own values influence the research process*” (Saunders, Lewis and Thornhill, 2015, p. 124). The researcher constantly asked herself about her own values and beliefs about the research phenomenon of interest alongside the data collected on the informants’ own words and challenged herself whether her beliefs (due to her values and experiences) influenced the data she collected and her interpretations of the collected data. This knowledge helped the researcher deal with potential biases from her own values and those of her research informants.

This research project focusses on creating a detailed understanding of the experiences and behaviours of human beings (Wood, 1999; Altinay, Jang and Paraskevas, 2016; Hatch and Cunliffe, c2013). Two approaches are commonly used when seeking to understand complex phenomenon: positivism and interpretivism. Within the interpretivism approach, phenomenology is perhaps the most commonly used by tourism researchers. There are several key differences between the positivist and interpretivist/phenomenological approaches.

Table 4-1. Key differences between positivism and interpretivism/phenomenology

<i>Key areas</i>	<i>Positivism</i>	<i>Interpretivism/phenomenology</i>
Basic beliefs about researched subjects (Ontology)	<ul style="list-style-type: none"> • Reality (the stance) is objective, external, and independent. • The researcher is independent of knowledge of the reality. • Science is value-free. 	<ul style="list-style-type: none"> • Reality (researched phenomenon) is subject to its social construct and the researcher. • The researcher is part of, and subjective to, what is observed. • Science is driven by human interests and motives.
Method of research	<ul style="list-style-type: none"> • Focus on facts • Look for causality and fundamental laws • Develop valid conceptualization and reliable measurement • Reduce the phenomena to simplest elements • Formulate hypotheses and test them • Deduction from data 	<ul style="list-style-type: none"> • Focus on meanings • Try to understand what is happening • Look at the totality of each situation • Develop ideas through <i>induction</i> of data
Research design	<ul style="list-style-type: none"> • Structured, formal, and specific detailed plans 	<ul style="list-style-type: none"> • Evolving and flexible
Data format (Epistemology)	<ul style="list-style-type: none"> • Numbers, factors 	<ul style="list-style-type: none"> • Rich text, themes
Role of the researcher (Axiology/Roles of values)	<ul style="list-style-type: none"> • The research is external to the researched subjects • Short-term contact 	<ul style="list-style-type: none"> • Value-bound research • Researchers are part of what is researched, subjective • Researcher interpretations key to contribution • Researcher reflexive
Sampling	<ul style="list-style-type: none"> • Large samples 	<ul style="list-style-type: none"> • Small samples investigated in depth or over time
Data collection methods	<ul style="list-style-type: none"> • Experiments, surveys, structured interviews, and observations 	<ul style="list-style-type: none"> • Qualitative methods (Observations, documentation, open-ended and semi-structured interviews) • A range of data can be interpreted
Research instruments	<ul style="list-style-type: none"> • Questionnaires, scales, test scores, and experimentation 	<ul style="list-style-type: none"> • Researcher
Strengths	<ul style="list-style-type: none"> • Provides wide coverage of the range of situations • Greater opportunity for researcher to retain control of research process • Clarity about what is to be investigated; therefore, data collection can be fast and economical. • Helps to generalise previous research findings and test previously developed hypotheses 	<ul style="list-style-type: none"> • Ability to look at change processes over time. • Greater understanding of people's meanings • Adjustment to new issues and ideas as they emerge • Contributes to the evolution of new theories. • Provides a way of gathering data which is natural rather than artificial
Weaknesses	<ul style="list-style-type: none"> • Methods tend to be rather inflexible and artificial. 	<ul style="list-style-type: none"> • Data collection takes a great deal of time and resources

Key areas	Positivism	Interpretivism/phenomenology
	<ul style="list-style-type: none"> • Not effective in understanding processes or the significance that people attach to actions • Not helpful in generating theories 	<ul style="list-style-type: none"> • Difficult to analyse data • Harder for the researcher to control the research process • Reliability of findings not clear

Adapted from (Saunders, Lewis and Thornhill, 2015; Altinay, Jang and Paraskevas, 2016, p. 89; Hatch and Cunliffe, c2013, p. 15)

Interpretivism is the research approach adopted for this project, because of its emphasis on meanings, context, and rich understanding of the phenomena.

“The purpose of interpretivist research is to create new, richer understandings and interpretations of social worlds and contexts. For business and management researchers, this means looking at organisations from the perspectives of different groups of people.” (Saunders, Lewis and Thornhill, 2015, p. 140)

The specific methodology selected is phenomenology. This views reality as a phenomenon that is subject to social construction, whilst also recognising that the phenomena studied can be influenced by the context in which it is observed and by the knowledge and experiences of the researcher (Altinay, Jang and Paraskevas, 2016). That means it is necessary for the researcher to study the subject in detail, including the social context of the subject in order to understand what is really happening or how realities are being experienced. Ontologically, phenomenology uses rich text data obtained from qualitative research methods which focus on asking “Why” and “How” questions. Hence, this allows themes to emerge throughout the research process.

“Methodology comprises both our philosophical assumptions and our methods” (Duberley, Johnson and Cassell, 2012, p. 15).

The previous has considered philosophical assumptions. The next will present the research strategy and methods chosen for this particular enquiry. Three methodological approaches that have influenced social science research are quantitative, qualitative, and mixed (Wood, 1999; Scholz and Tietje, 2002; Creswell, 2013; Altinay, Jang and Paraskevas, 2016; Yin and Campbell, 2018; Hatch and Cunliffe, c2013). A qualitative research approach was adopted for this research because the approach aims to develop a deeper and more detailed understanding of such subjects by analysing rich texts obtained from asking the questions ‘why’, ‘how’ and ‘what’. The qualitative research methods to obtain these rich texts include observations, documentation, open-ended and semi-structured interviews. The analysis of these rich texts allows meaningful themes to emerge from which insightful theories will be created (Altinay, Jang and Paraskevas, 2016). Hence, it allows the researcher to get the

inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables.

4.3 Research Strategy

4.3.1 A Single Case with Embedded Cases

The case study strategy was selected for this study, based on the key evaluation criteria including the nature of the subjects being studied, the extent of existing knowledge in the research topic and the specific research questions (Altinay, Jang and Paraskevas, 2016; Yin and Campbell, 2018).

Values and PEB are complex areas of study (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Potocan *et al.*, 2016; Chan *et al.*, 2017) because they are influenced by many personal (Stern, 2000; Schwartz, 2012; Young *et al.*, 2015; Groot and Thøgersen, 2018) and corporate factors (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Potocan *et al.*, 2016; Chan *et al.*, 2017) as well as the real-world context such as the hotel workplace (Blake, 2001; Olli, Grendstad and Wollebaek, 2001). The case study approach is appropriate because it recognises that “*the boundaries between phenomena and context may not be clearly evident*” (Yin and Campbell, 2018, p. 15) and provides an opportunity to study within a defined context. The collection and integration of multiple sources of evidence and the reflexivity process in the case study approach (Scholz and Tietje, 2002; Yin and Campbell, 2018) allows the detailed investigation of such a complex and contextualised research subject. Hence, the case study approach aims to understand a real-world case and assumes that such understanding is likely to involve important contextual conditions pertinent to the case (Yin and Campbell, 2018).

Furthermore, there is a knowledge gap in the application of PEB in the service workplace and especially in the roles that values played in influencing the implementation of PEB in the hotel workplace (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Young *et al.*, 2015). The case study allows for the development of theoretical insights in instances when existing theories are incomplete (Altinay, 2001; Creswell, 2013).

This study employed a single-case strategy with embedded cases. An embedded design “... *involve(s) more than one unit or object or analysis ... The multiplicity of evidence is investigated at least partly in subunits, which focus on different salient aspects of the case.*” (Scholz and Tietje, 2002, pp. 9-10). This approach and the selected case company were appropriate for this research for the following reasons:

- The selected case is unique (Yin, 2014), partly because of its global scale. It is one of the top 12 global hotel companies when assessed by hotel numbers (Statista, 2018). At the time when the study commenced, the company was also the only global hospitality company to possess corporate-wide certifications for quality (ISO 9001), environmental (ISO 14001) and carbon (ISO 15001) management systems. It was the first hotel company to achieve an Environmental Leader Product and Project Award (Hermes, 2016) for its in-house online environmental management platform. Its in-house online environmental management platform allows it to measure, manage and report its environmental and social impact across its global portfolio of more than 5,600 managed and franchised hotels.
- It has an active Corporate Social Responsibility programme with a published commitment to carbon reduction (the company, 2019). It is interested in PEB change and already delivers a wide range of green team training.
- The researcher was able to gain access to relevant units and departments to deliver the study.

Also, the design of the embedded single-case study approach was appropriate for this research when:

“...the problem is directed toward analysis of a number of interdependent variables in complex structures the natural choice would be to go deeper into one case instead of increasing the number of cases” (Dubois and Gadde, 2002, p. 558).

This is in line with the claim of Dyer, Wilkins and Eisenhardt (1991) that extensive single case descriptions make it possible to take the rich context surrounding the cases into consideration. The embedded cases in this research were two different hotels and two head offices (HOs) based in the UK and Vietnam (one hotel and one regional office in the UK and one hotel in Vietnam and one regional office based in Singapore). This embedded design allowed for investigation of potential differences in the role values play in PEB in different hotels in different countries. Access to communications from different HOs allowed the researcher to access the interpretation of corporate values that may have broader relevance to general international large hotel companies. Reflections on how the corporate values of one company influence the PEB in different cross-cultural hotel units may inform the practices of a broader range of hotel businesses (Scholz and Tietje, 2002).

Such embedded design allowed cross-national comparisons for multiple units of analysis when the researcher compared the similarities and differences of the complexities and dynamics of the interactions among individual, group, organizational and contextual factors (Scholz and Tietje, 2002; Yin, 2014). In this case, the comparison

units included the hotels in the UK and Vietnam, the different groups of individuals (comprising 'value initiator-teller', 'internal messenger', 'influencer' and 'receiver-doer') and the different departments at the hotels (comprising HK, Kitchen including Back of House, F&B including C&E, FO, Health, FO, Engineering, Security, and HR). The possible comparisons provided insights that allowed theories to be developed.

The key criteria for selecting the hotels *as embedded cases* of the company were:

- the hotel cases are physically located in different countries (i.e., the UK and Vietnam).
- the hotels have received similar environmental messages from the HO.
- the hotels are on contract management.
- the hotels have engaged at a medium level with corporate environmental initiatives.

4.3.2 Triangulation of the Selected Data Collection Techniques

Sources of evidence used in this case study research were semi-structured interviews, observations, documentation and a short questionnaire (Yin and Campbell, 2018). Table 4-2 shows that each of these has its own strengths and weaknesses. Hence, triangulation of a range of data sources provided multiple perspectives on the researched subject as well as reduced the issues associated with individual biases or perceptions inherent in personal interviews alone (Scholz and Tietje, 2002; Yin and Campbell, 2018).

Table 4-2. Strengths and weaknesses of different sources of evidence

Sources of evidence	Strengths	Weaknesses
<p>Documentation:</p> <ul style="list-style-type: none"> • <i>'Published documents'</i> comprising company CSR reports and company website. • <i>'Internal documents'</i> comprising auditing report, energy data from in-house online. Environmental management system, CSR communication leaflets and brochures, good practices, work processes guidelines, meeting memos. • <i>'Visual materials'</i> including photographs, timelines, maps, and diagrams. 	<ul style="list-style-type: none"> • Stable - can be reviewed repeatedly. • Unobtrusive - not created because of the case study. • Specific - can contain the exact names, references, and details of an event. • Broad - can cover a long span of time, many events, and many settings. 	<ul style="list-style-type: none"> • Retrievability - can be difficult to find. • Biased selectivity if collection is incomplete. • Reporting bias - reflects (unknown) bias of any given document's author. • Access - may be deliberately withheld.
Interviews	<ul style="list-style-type: none"> • Targeted - focuses directly on case study topics. • Insightful - provides explanations as well as personal interviews (e.g., perceptions, attitudes, and meanings). 	<ul style="list-style-type: none"> • Bias due to poorly articulated questions. • Response bias. • Inaccuracies due to poor recall. • Reflexivity - interviewees state what they think the interviewer wants to hear.
Non-participant observations	<ul style="list-style-type: none"> • Immediacy - covers actions in real time. • Contextual - can cover the case's context. 	<ul style="list-style-type: none"> • Time consuming. • Selectivity - broad coverage difficult without a team of observers. • Reflexibility - actions may proceed differently because they are being observed.
Participant-observation	<ul style="list-style-type: none"> • [Same as above for direct observations]. • Insightful into interpersonal behaviour and motives. 	<ul style="list-style-type: none"> • [Same as above for direct observations]. • Bias due to participant-observer's manipulation of events.

Source: Compiled from (Stewart, Shamdasani and Rook, 2007; Banks, 2018; Yin and Campbell, 2018, p. 114)

Table 4-3 outlines the data collection techniques chosen and developed during February 2018 and April-May 2018.

Table 4-3. Collected Data

UK	Vietnam	Total
11 interviews with GMs, directors, departmental and junior managers.	10 interviews with cluster GM, directors, departmental and junior managers.	<ul style="list-style-type: none"> • 50 interviews (25 for Case A, UK and 20 for Case B, Vietnam and 5 for Case C, Vietnam). • 75 questionnaires. • 3 team briefings. • 6 observations. • Various informal and formal activities.
3 interviews with supervisors.	3 interviews with supervisors.	
11 interviews with operational staff.	7 interviews with operational staff.	
44 personal values questionnaires completed.	31 personal values questionnaires completed.	
2 team briefings.	1 team briefing.	
3 observation sessions.	3 observation sessions.	
Informal activities (meals in the canteen with the staff, taking break with staff in the resting area, changing rooms).	<ul style="list-style-type: none"> • Informal activities (meals in the canteen with the staff, taking break with staff in the resting area, changing rooms). • Formal activity (participated in one monthly award ceremony). 	

Source: compiled from the current study

The justifications and what occurred in the fieldwork for each data collection technique will be presented in next sections.

4.3.2.1 Documentation

Secondary data collected for this research include published documents (comprising company CSR reports and company website) and internal documents (comprising auditing reports, energy data from the in-house EMS, CSR communication leaflets, brochures, good practices, work processes and guidelines) provided by the chief engineers of the hotels. According to Yin (2014), documentary information can be taken from a variety of sources. Each document or several documents together serve a specific purpose for the research, as outlined in Table 4-4.

Table 4-4. Purposes of collected documents

Documents	Purposes
<ul style="list-style-type: none"> • CSR reports. • Company websites. 	<ul style="list-style-type: none"> • Understood the corporate values and ambitions toward environmental protection which is key information to be obtained for the research.
<ul style="list-style-type: none"> • The organisational charts of the hotels. 	<ul style="list-style-type: none"> • Identified the relevant people who are to be interviewed and observed, and their roles that are related to CSR activities.
<ul style="list-style-type: none"> • The energy meter reading data from each hotel over the last 12-36-month period. • Auditing report on energy. • The current energy initiatives and projects from In-house environmental management system. 	<ul style="list-style-type: none"> • Understood the energy consumption situation of each hotel unit which helped to examine the actual PEB against the self-reported PEB. • Identified whether the present changes PEB in the short term or whether there were changes during periods of observations onsite.
<ul style="list-style-type: none"> • CSR communication leaflets and brochures. 	<ul style="list-style-type: none"> • Understood the current communication messages and materials on CSR from the HOs to the hotels and from the management to operational staff. • Used as a part of the materials showed to the informants in the interviews at the hotels.
<ul style="list-style-type: none"> • Good practices. • Work process guidelines. 	<ul style="list-style-type: none"> • Understood the current work process and where in each process energy consuming activities took place.

Source: compiled from the current study

Documentation was necessary for this case study because it let the researcher to corroborate and augment evidence from various sources (Yin, 2014) which allowed the important information collected using other data collection techniques and provided the overall background of the research reporting.

Furthermore, the prior knowledge of the organisation and participants helped the researcher to become familiar with the company and its hotel units and hence to increase the familiarity of the field settings. These activities commenced prior to entering the field and helped the researcher understand the real-world setting of the case without the bias from informants' learned experiences.

The collection and analysis of the documentation have been early and ongoing processes throughout the data collection phase of this research. The researcher collected the in-house data tables (comprising of information on the hotels, the sustainable initiatives and projects, and the raw monthly energy numbers from each hotel) from the gatekeeper from the HO based in the UK before her visit to the hotels.

During her on-site fieldwork, the researcher also collected various pieces of physical evidence (such as photos of relevant equipment and buildings related to energy

consumption activities, the map layout leaflets and sustainability communication leaflets) in order to allow her to reflect and provide evidence on the technical features and operations of the actual energy consuming behaviours that occurred during the fieldwork (Yin and Campbell, 2018).

4.3.2.2 Questionnaire

The main methodological approach of this study is qualitative. However, a short descriptive questionnaire was employed only to assess the status of employees in relation to Stern et al (1995b)'s PEV scale. The purpose of the questionnaire was to provide a baseline background on the current PEV of the employees in two hotels before the researcher arrived at the hotels.

These activities commenced prior to entering the field and helped the researcher understand the real-world setting of the case without the bias from participants' learned experiences. This order of research was believed to limit the chances of researcher bias and give the researcher the opportunity to identify whether her presence impacts upon PEB and to adjust the data accordingly.

The researcher translated the questionnaire into Vietnamese and the questionnaires were independently back translated into English by a Vietnamese academic with excellent proficiency in English. The two English versions were compared so that the accuracy of the translation was maintained.

A questionnaire on the hotel employees' PEV was carried out during January and March 2018. The total number of valid questionnaires for these hotels collected for analysis was 75. In the two weeks prior to her visiting the two hotels, the researcher contacted the gate keepers of the hotels for the relevant documents and the permission to send the online questionnaire to the hotels' employees. The gate keepers of Case A (UK) and Case B (Vietnam) were the chief engineer and the HR director, respectively. After permission was granted from these gatekeepers, an email containing a link to the online questionnaire and the research information (see Appendix A) was emailed to these gatekeepers who then distributed to the mailing list of their employees. However, these informants in the mailing list were only limited to those who had access to the company email system. Less than 66 percent of employees had access to the company email due to the high ratio of casual employment in the hotel industry (according to the key contacts of the two hotel cases).

In order to reach the employees who did not have access to the hotel email system, the researcher distributed the questionnaire directly to all the employees who accepted an invitation to participate in the observations and interviews while she was on the sites. This was important for the data analysis because the triangulation of data

sources (questionnaire, interview, and observation) for each participant in this research could be obtained which allowed the researcher to analyse the data at the individual employee level.

4.3.2.3 A Mix of Non-Participant and Participant Observations

Observations were employed in this research and used to validate the self-reported PEB obtained in interviews, thus recognising the gaps between 'self-reported' and 'observed' behaviours (Blake, 1999; Chung and Leung, 2007; Chaplin and Wyton, 2014)). The rich, detailed, context-specific descriptions from the observations helped explain the underlying 'why' things happened in a certain way and context.

“Observation complements other research methods, helps to generate theories and ideas for further research, and helps to validate existing findings” (Altinay, Jang and Paraskevas, 2016, p. 150)

The researcher adopted a combination of participant and non-participant observations based on a number of considerations including the particular circumstances of the study, the nature of the study environment, the research experience, the nature of the data to be collected, and possible ethical issues that may arise (Altinay, Jang and Paraskevas, 2016, p. 151). Either of non-participant and participant observations alone could not meet the requirements and the 24-hour business context of such a fieldwork environment where the researcher was conducting the observations as well as the interviews. It was because the work contexts of the room attendants, chefs, finance officers and engineers were completely different, in terms of their work processes, productivity standards, physical mobility and social interactions at their workplaces (a detailed description in Chapter 5). Furthermore, the combination of observation types allowed rapport and trust to develop between the researcher and the informants (Creswell, 2013).

The subject of the observations was the actual PEB of employees during their daily work (e.g., the extent to which staff implemented policies to switch off equipment when not in use). Extensive notes of actual PEB and their real-world settings were kept during the observation phases, using a standard data record. Standard logs (to record a full day's work) and critical incident logs (to record behaviours that do not comply with company policies, exceptional behaviour, best practices, and the roots of habits) (see Appendix F).

The researcher recognised that there would be challenges when seeking to record observations that involve all human senses (including the emotions of those who are being observed). This was overcome by starting the observations with broad contextual data before concentrating on the research questions (Creswell, 2013).

Most of the observations were conducted during the working hours of the informants where the hotels were operating 24 hours per day and seven days per week. For example, all the domestic housekeeper/room attendants were observed during their real working shifts where they were cleaning the rooms under the pressure of the productivity per shift (i.e., each room attendant was required to clean 16-21 rooms per seven-hour shift for this hotel brand).

The researcher was able to observe closely the daily work carried out by the housekeepers and chefs within their own workplace environments (and she sometimes participated in the work of the housekeepers as they asked her to help) to see them in their social environment whilst at the same time this process allowed the researcher to maintain an 'outsider's attitude' in order to gain insights into the self-reported and actual behaviours of these staff.

The researcher followed six housekeepers (from the HK department) and chefs (from the kitchens which were part of the back of the HK department) to closely observe their entire working operations during their morning, afternoon and night shifts during February and April-May 2018. To gain the rapport and trust of these housekeepers, the researcher spent a significant amount of time helping the housekeepers since the researcher had worked in a hotel for several years; she made sure her presence did not interrupt the normal routines of these staff.

During her observations, the researcher made notes on her daily observation logs to record which actual tasks were carried out, whether participants followed the work processes (in the case of housekeepers) and critical incidents (which tasks were not complying with the work procedures that were in place for the department such as 10 HK steps for Case A and 13 HK steps for Case B).

Other observations included:

- Counting the guest rooms with the light on at 6pm (at this time, most of the guests were not in their rooms) at the hotels to check the incidence of HK staff forgetting to turn off the lights in guest rooms after completing their shifts. This exercise was conducted with the help of the duty engineer and the front office team.
- Counting the running machines in the gym with the television screens on without the guest using them at several times during the day in the fitness centres.
- Observing the use of the heated swimming pools.

The researcher also participated in three team briefings with the HK department to enhance her understanding of the social dynamics of the workplaces of the case study

company. She also participated in various informal social settings with operational staff including having meals with the staff in the canteens, taking breaks with the staff in the staff rest and recreation areas and formal social functions of the company (e.g., she participated in the award ceremony of a hotel).

4.3.2.4 Semi-Structured Interviews

Semi-structured interviews were employed as a primary data collection method in this study to gain insights into the individual views of staff and managers about the company's environmental initiatives and their own personal values in depth. The semi-structured interviews enabled a balance between broad unstructured interviews and very structured interviews (Altinay, Jang and Paraskevas, 2016). The format of the semi-structured interviews allowed the exploration of open-ended topics that were not predetermined by highly structured questions. The semi-structured interviews also enabled conversations with the participants that were more issue-focused and structured in the sense that the researcher maintained several baseline questions (which were developed from the baseline framework) to start with. Then the researcher followed up with in-depth conversations including 'what does it mean?', 'how' and 'why' questions to clarify and elaborate the depths of the data. Hence, this data collection technique offered both a focus on specific issues and flexibility for in-depth exploration for this study (Flyvbjerg, 2011).

The interview questions covered the key topics on communication of company environmental values, formation process of PEV which provided insights how PEV and CEV interacted, current PEB and factors influenced PEB which is the study aim. A detailed interview schedule was in Appendix B. The questions were guided by the key themes emerging from the literature. For example, the informants were asked to describe their PEV in their own words and the sources forming their PEV which provided a comprehensive understanding of the meanings and interpretations of the informants on their PEV. Another set of open questions asked the informants about their thoughts and attitudes towards the company's environmental communications through asking about the general and specific environmental campaigns. This helped to provide the deep understanding of the informants' perceptions and evaluations on the CEV. Another important set of open questions to the informants were on their thoughts on how CEV associated their PEV at work which helped to understanding the interactions between PEV and CEV at work which emerged as an important but lacking research area of PEB. Another important set of open questions asked the informants on how their PEV and the CEV relate to their current PEB in workplace which supplied the insights into the interplay of PEV, CEV and PEB. The final important set of open questions asked the informants on other work factors relating to their current PEB which helped to add deeper understanding of the practical factors which really related to the actual PEB of the informants in the hospitality workplace.

Selection of interview informants and sampling:

As previously stated, the aim of the study is to evaluate the interaction between PEV, the formation of CEV and PEB from the employees' perspectives in hospitality sector workplaces. Given that the hospitality sector's operational services are complex and related to many transactions among many groups of employees within the workplaces, the views expressed in the interviews had to be collected from *a representative sample of groups of employees from all relevant departments* of the selected hotel cases. This highlighted the importance of the knowledge of the organisational structure and relevant job and hierarchical roles within the organisation.

The actual number of interviews was decided at the 'saturation' point where no new insights from the additional interviews were achieved. Based on this consideration, the interviewed informants had the following demographics and groupings. Table 4-5 shows the demographics of informants who were interviewed on site during their normal working hours.

Table 4-5. Demographics of interviewees during February and April-May 2018

Informant	Gender	Age (Years old)	Nationality	Education	Current role	Department	Hotel	Work length (years)	Interview length (Hour: minute: second)
MICHAEL	M	+55	English	High School	Executive Chef & Environmental team member	Kitchen	A	+20	00:55:39
MATTHEW	M	+55	British	Master's Degree	Director of Engineering	Engineering	A	NA	00:53:09
FAITH	F	30-34	Polish	Bachelor's Degree	Finance Assistant	Finance	A	5	00:36:40
MARK	M	19-24	Indian British	Bachelor's Degree	Finance Assistant	Finance	A	1-3	00:34:43
FIONA	F	+55	British	Secondary School	Day HK Supervisor	HK	A	+5	00:26:44
MORGAN	M	34	Spanish	Master's Degree	FO manager & Environmental team member	FO	A	+5	01:00:58
FREYA	F	25-29	Latvian	High School	Day HK Supervisor	HK	A	0.3	00:36:18
FATIMA	F	NA	Jamaican British	NA	Day HK Supervisor	HK	A	NA	00:40:00
MICAH	M	+55	British	High School	Daytime duty electrician	Engineering	A	+5	00:48:53
CAMILA	F	+55	British	High School	Health and Safety coordinator	C&E	A	+5	00:40:00
FELICITY	F	+55	British	NA	Executive Housekeeper	HK	A	10	00:30:36
FRANCESCA	F	40-44	Chinese	Master's Degree	Deputy Manager	BOH, Kitchen	A	+5	00:41:47
MASON	M	34	British	Islamic study	Night Supervisor	BOH, Kitchen	A	>11	00:36:16
R14AB	M	NA	NA	NA	Junior Chef	Kitchen	A	NA	00:08:21
MARTIN	M	50-54	British	High School	Sous Chef	Kitchen	A	32	00:43:04
MARCUS	M	25-29	Danish	Bachelor's Degree	Acting Manager	F&B	A	+5	00:38:56
MAX	M	40-44	Brazilian	Master's Degree	CE Manager	C&E	A	1-3	00:42:56

Informant	Gender	Age (Years old)	Nationality	Education	Current role	Department	Hotel	Work length (years)	Interview length (Hour: minute: second)
FERNANDA	F	34	Côte d'Ivoire	NA	Day room attendant	HK	A	1.5	00:23:32
MAXWELL	M	50-54	British	High School	Chief Engineer & Environmental Champion	Engineering	A	>5	00:55:13
MITCHELL	M	50-54	Indian British	NA	Executive Chef Deputy	Kitchen	A	>5	00:30:55
MILO	M	40-44	British	Master's Degree	Director of Finance & chairman of Environmental team	Finance	A	1-3	00:30:56
MARIO	M	25-29	British	Bachelor's Degree	Manager & Environmental team member	SS	A	4-5	00:57:33
FRIDA	F	24	British	Bachelor's Degree	Pastry Chef	Kitchen	A	0.9	00:18:52
MARSHALL	M	46-50	British	NA	Director of Operations	All departments	A	20	00:30:23
MANH	M	35-39	Vietnamese	Bachelor's Degree	Assistant Chief Engineer and Environmental champion	Engineering	B	>5	01:33:52
KHUÊ	F	42	Vietnamese	NA	Acting Executive Housekeeper	HK	B	NA	00:33:07
NGỌC	F	35-39	Vietnamese	Associate diploma	Room attendant	HK	B	>5	00:50:19
CHÂU	F	40-44	Vietnamese	Associate diploma	Room attendant	HK	B	>12	00:35:32
HƯƠNG	F	45-49	Vietnamese	Bachelor's Degree	HK supervisor	HK	B	20	00:40:53

Informant	Gender	Age (Years old)	Nationality	Education	Current role	Department	Hotel	Work length (years)	Interview length (Hour: minute: second)
LỄ	F	35-39	Vietnamese	Associate diploma	Room attendant	HK	B	17	00:37:34
MIÊN	M	NA	Vietnamese	NA	Sous Chef	Kitchen	B	NA	00:12:66
MINH	M	30	Vietnamese	NA	Executive Chef Deputy	Kitchen	B	0.2	01:05:00
BÁCH	M	32	Vietnamese	Associate diploma	Cook 1	Kitchen	B	3	00:51:04
CHARLES	M	NA	French	Postgraduate	Director of Operations	All departments	B	0.2	00:51:19
BẢO	M	42	Vietnamese	Associate diploma	Head Chef of Vietnamese cuisines	Kitchen	B	14	00:53:36
NGÂN	F	39	Vietnamese	Bachelor's Degree	Pastry Commis 3	Kitchen	B	1	00:53:67
NHUNG	F	NA	Vietnamese	NA	F&B manager	F&B	B	NA	00:12:03
TIÊN	F	33	Vietnamese	Associate diploma	Banquet supervisor	C&E	B	10	00:27:14
VI	F	40-44	Vietnamese	High School	Room attendant	HK	B	8	00:46:28
BÌNH	M	40	Vietnamese	Bachelor's Degree	Chief Security Manager & Environmental team	SS	B	15	01:19:46
ĐẠT	M	40	Vietnamese	Master's Degree	Cluster Director of HR & chairman of Environmental team	HR	B	8	00:47:00
NHI	F	40-44	Vietnamese	Bachelor's Degree	Assistant Executive Housekeeper & Environmental team	HK	B	15	00:36:26

Informant	Gender	Age (Years old)	Nationality	Education	Current role	Department	Hotel	Work length (years)	Interview length (Hour: minute: second)
DŨNG	M	40	Vietnamese	Diploma	Laundry Supervisor	HK	B	>5	00:42:30
ANDY	M	50-54	British	NA	Cluster General Manager	Management	B	>20	00:47:55

Source: compiled from the current study data

Actual fieldwork:

Overall, forty-five employees, including managers and operational staff in both the UK and Vietnamese hotels of the case study company, were interviewed during their normal working hours. The informants were working in all relevant departments in these hotels with the focus on the HK, kitchen, engineering departments and assigned 'Environmental teams' who initiated and organised sustainability activities at the hotels.

Case A: A total of twenty-five informants in the UK hotel were interviewed. The UK informants were generally a more experienced team with many managers and operational employees having more than five years of experience in their current positions. They were generally aged between thirty to fifty-five years old with a high proportion of international expats. Eleven informants were senior managers including directors and departmental managers; three were supervisors; and eleven were operational staff.

Case B: The informants in the Vietnamese hotel were generally new in their current positions, especially directors and departmental assistant managers. Some departmental manager positions were vacant. Operational employees were generally in the younger age category of twenty to thirty years old. Most of them were local Vietnamese-born staff. A few senior managers were international expats. A total of twenty informants from the Vietnamese hotel were interviewed. The ten most senior informants included a cluster general manager, one director, and four departmental managers; three were supervisors; and seven were operational staff.

To maintain the data comparability between the hotels, the researcher maintained a systematic and consistent approach to all hotels. First, she maintained a number of baseline questions for all hotels (which were developed from the baseline framework) to start with, then depending on the flow of the conversation, followed up with in-

depth conversations including 'what does it mean?', 'how' and 'why' questions to clarify and elaborate on the answers to the baseline questions. Second, the researcher kept a Microsoft Excel record of all informants each day at each hotel to make sure at least one representative informant from all departments from all hotels participated in the interviews. Audio recorders were used to record the interviews with consent forms signed by the informants to allow for this. Also, the researcher took notes of the key points based on the interview guides which helped her identify the emerging and significant insights.

4.4 Gaining and Maintaining Access

Gaining access to organisations is often challenging for researchers (Altinay, 2001; Okumus, Altinay and Roper, 2007; Creswell, 2013). For this study, the access to the international hotel company and hotel units was first gained through the industrial networks of the researcher (who had previously worked for seven years in the hospitality industry) and her Director of Studies (who has worked as a consultant to the sector for more than 20 years) and the research team has had good relationships with five other large international hotel companies to ensure meeting the requirements of this project. The research team first visited the HO of the company based in the UK to present the research project information and request to use the company as a case study for the research. The gatekeeper, who has been the first point of contact of this organisation for all the enquiries the researcher made, then communicated the request to the HOs and the hotels. Once permission was granted, the gatekeeper at each HO introduced the researcher to other gate keepers who were the key contacts of the HO based in Singapore and the hotels in the UK and Vietnam. From there, the researcher discussed her project requirements, and these were compared against the available resources that these sites could offer and arranged her field work for each of these sites.

The researcher maintained the accessibility by regular or sustained access agreements prior to data collection as access restrictions common to management research could limit opportunities for fieldwork research. Once the researcher was on site, she had regular morning meetings with the gatekeepers at each hotel in order to maintain her access to the relevant participants and departments.

The researcher stayed in a guestroom for seven consecutive days in each hotel. This allowed her to access all three operational shifts and departments in each hotel. As the researcher was mostly able to access the managers and staff during their work hours in each workplace, shadowing observations and team briefings took place concurrently with the interviews. The researcher found that a key success factor in completing her fieldwork was her being extremely flexible during the fieldwork as things happened

quite quickly and sometimes in an unplanned manner. Flexibility allowed the researcher to access the informants successfully.

Further to this, since multiple data collection techniques were employed including observations, interviews and requesting relevant documents as well as data, the researcher required a considerable amount of time on site at each hotel to carry out these data collection activities. However, the business setting in which the participants were observed and interviewed was very busy, meaning that the researcher needed to gain and maintain the trust of the informants through regular communications via emails, phone, or direct briefs about the plan for a particular participant. The researcher also gained trust and site familiarity by attending several HK team briefings and CSR meetings before conducting the interviews and observations. The team briefings with the operational teams allowed the researcher to gain written consent from the informants before participating in the study.

4.5 Piloting and Testing the Data Collection Techniques

The researcher conducted two pilots for the research instruments. The first piloting was conducted with the manager and three waitresses at the Brookes restaurant of Oxford Brookes University, in the UK on 7 February 2018. The pilot helped to refine the data collection plan in terms of the content of the questionnaire and interview questions and the procedures to be followed. The report from the pilot cases also provided the lessons learnt about the research design and the field procedures. The second pilot was conducted with the general manager and three operational staff of a luxury serviced hotel in Ho Chi Minh city, Vietnam on 27 March 2018. For the second piloting, revised versions of the questionnaire and the interview questions from the first piloting were piloted. As a result of this piloting, the suitable terminologies, and explanations in Vietnamese for the abstract concepts such as personal values, corporate values and PEB were improved to suit the employees' way of thinking of the Vietnamese hotels.

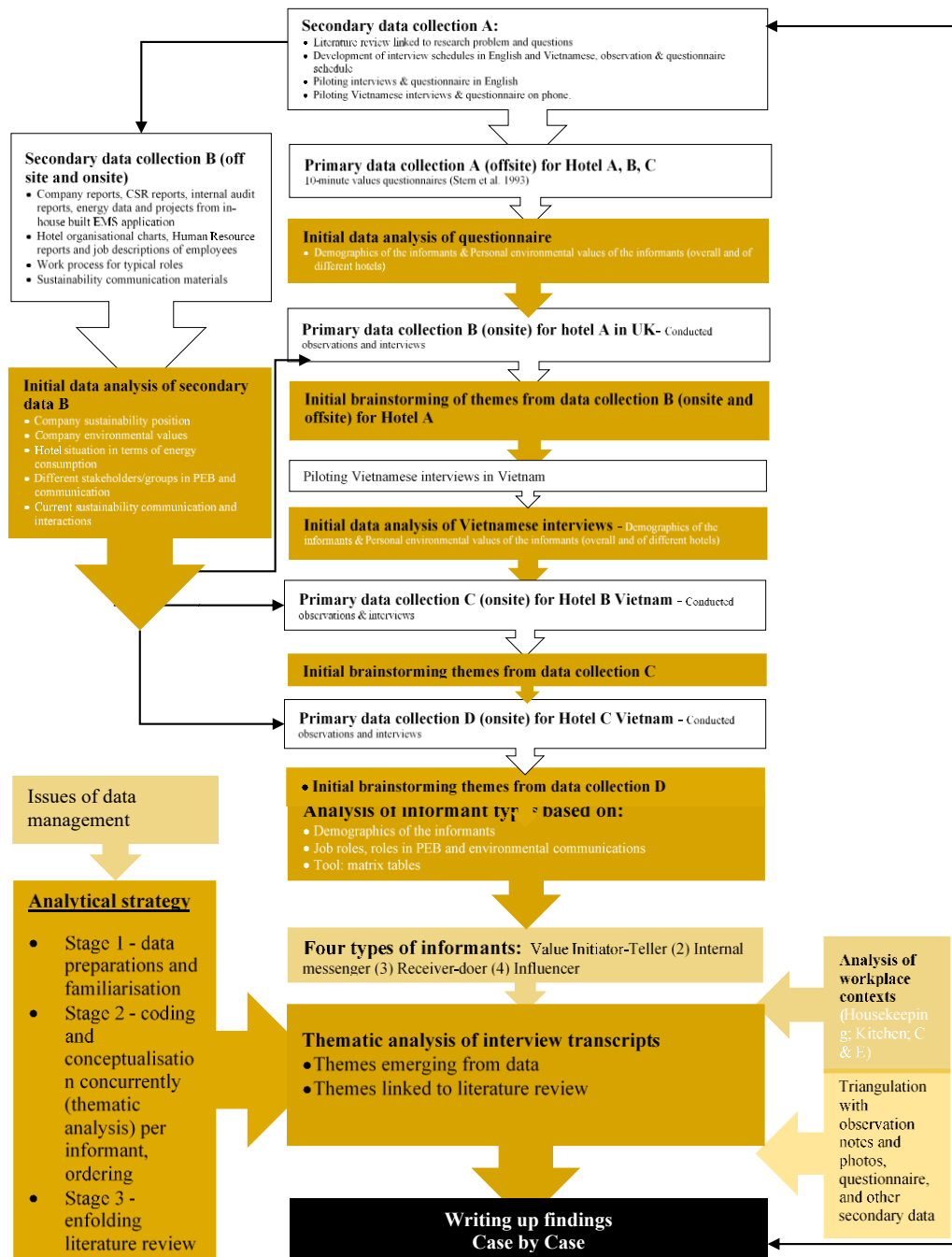
4.6 Data Analysis

A combination of induction and deduction was applied in a paralleling manner throughout the coding process and theme development and analysis (King, 1999). That is, the open coding process was carried out in the reference that the researcher has been aware of the initial conceptual framework developed based on the literature review. The initial conceptual framework implied a number of important factors influencing the pro-environmental behaviour of the employees in the hospitality workplace as presented in the literature review chapter. For example, the first-order concepts were generated and labelled simultaneously with the pre-defined concepts

the researcher looked for. With this awareness, the researcher was hence open and flexible for new codes and themes to merge.

The biggest primary data source in this study was interview transcripts. Other primary data sources were observational and field notes (including notes of demographics of the informants), photos of critical incidents, and questionnaires. The secondary data sources comprised of CSR and internal reports, and data from the company's in-house EMS. Hence, the researcher was confronted with a large amount of data to analyse and made sense of common themes as expected in qualitative study (Saunders, Lewis and Thornhill, 2015). The data analysis process started with an analytical strategy (Mehmetoglu and Altinay, 2006; Yin, 2014) which guided the actual data analysis that took place in the three concurrent stages as defined by Mehmetoglu and Altinay (2006). Figure 4-1 shows the non-linear, interactive, and integrated process of the data collection and analysis. The initial analysis of data began when the data collection began.

Figure 4-1. Detailed process of data collection and data analysis



Source: from the current study

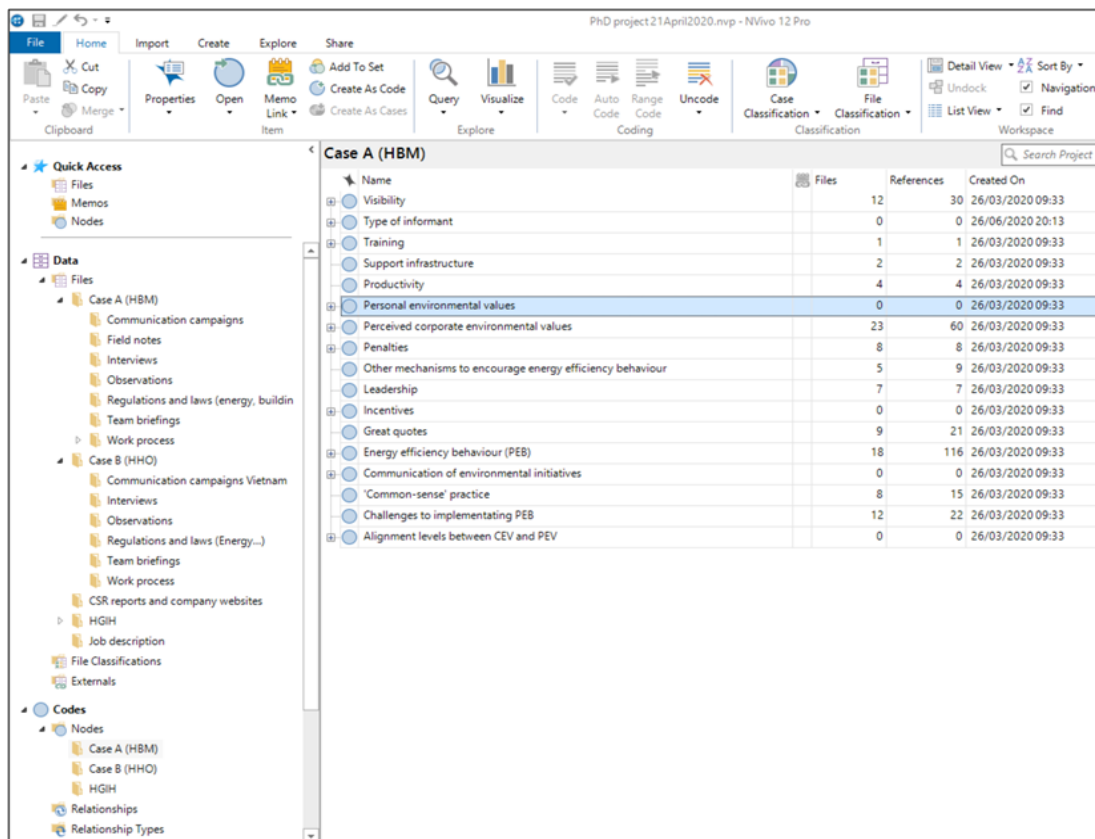
Because this was an embedded case study, the researcher applied the same three analytical stages for each hotel case separately and then combined them in order to build separate cases and gain insights when comparing these cases, as the follows:

4.6.1 Data Preparation and Familiarisation

This stage aimed to prepare the data sources in a good quality format for coding and analysis and helped the researcher familiarise the data, brainstorm some ideas of themes and make sense of the overall.

Data preparations involved putting data into consistently analysable formats (i.e., electronic written format and good quality) which helped save time during coding and analysis and allowed comparison analysis. Firstly, the recorded audios of interviews were transcribed, and all hand-written notes were typed up. Secondly, formatting and labels for the contents of the files were carried out. Data preparations also involved organising and managing all data and evidence conveniently for quick access during the coding and data analysis. Since the amount of case evidence in this study was large, the researcher used computer-assisted tools included in the software package “NVivo” to organise the case evidence. The interview transcripts along with other written evidence sources were inputted into the software “NVivo” for later coding and being organised by relevant embedded hotel cases.

Figure 4-2. Example photo of NVivo organisations and analysis



Source: A photo shot from the researcher’s NVivo application

One key consideration at this stage was to review at first glance which data were collected and how they were used for the study. Thanking to each hotel case providing a set of good and rich data, there was an issue of ‘*too much data*’ collected for the current scope of a PhD study. Based on the consideration of using “enough” data to answer the study aim and objectives and timing required, the data used are the follows.

Table 4-6. Collected data are not used in this study and reasoning

Data collected	Data not used for analysis and reasoning
Case A, UK (25 interviews) Case B, Vietnam (20 interviews) Case C, Vietnam (5 interviews)	Case A, UK (25 interviews) Case B, Vietnam (20 interviews) <i>Not used for analysis</i> <i>Reasoning:</i> <ul style="list-style-type: none"> • Although Case B and C belonged to the same cluster hotel (i.e., managed by the same group of senior managers and key employees) with Case B was a five-star, luxury, managed hotel and Case C was a three-star, economy, managed hotel, Case A and B were comparable in terms of hotel size with similar number of departments (i.e., around 11 departments), contract management style (i.e., both managed) and service levels (i.e. both luxury). • Case C was much smaller in size (with a limited number of departments) and had a different service level (i.e., budget, and self-serviced).
The energy meter reading data from each hotel over the last 12-36-month period.	Not be used in this study. <i>Reasoning:</i> <ul style="list-style-type: none"> • Original purpose: In order to understand the energy consumption situation of each hotel unit which helped (a) to examine the actual PEB against the self-reported PEB and (b) to identify whether the presence changes PEB in the short term or whether there were changes during periods of observations onsite. • The current data of self-reported PEB and observational PEB are enough to understand the PEB of individual employees. • The current aim of the study did not focus the changes in PEB over time but focused on the interaction of PEB, PEV and CEV. • Other secondary data such as internal reports from in-house EMS applications are enough to understand the current energy consumption situation of the hotels.

Source: from the current study

The researcher familiarised herself with these data. The data preparation phase consisted of converting recorded audio interviews, hand-written field, and

observational notes etc. into electronic written and analysable formats and then inputting them into the NVivo software.

One decision was made on how the researcher should carry out the familiarisation given there are many different pieces of evidence. She could read all the interview transcripts and only then move on to reading all the observation notes and so on. Alternatively, she could review all evidence relating to one informant for each hotel case and then move on to review all the evidence for another informant and so on. The researcher found it best to understand the story of each informant by triangulating all the evidence for each informant. The researcher read each interview transcript and wrote *an analytical and narrative memo* for each interview after the reading to search for initial thoughts of the informant and what was going on with the informant. The more memos were completed, the more the researcher became aware of interesting points and emerging concepts from these informants. Where relevant during the writing of the memo, the researcher reviewed the observational notes, field notes and photos that provide additional data of the informants to get the richer understanding of what was going with the informant. An example of the analytical memo is in Appendix K.

The researcher then reviewed all the data sources together several times and added the settings that were important to the case to the memo and other non-verbal evidence that were relevant to the informants at the interview.

The expected outcome of these reviewing activities helped in identifying initial emerging themes, concepts, and the linkages between them which provided a helpful direction for coding process.

4.6.2 Coding, Conceptualisation, and Ordering

Next, all data sources were included in the coded data to isolate the critical incidents. Each case was analysed systematically through the three types of codes: open codes, axial coding and selective coding (Mehmetoglu and Altinay, 2006). The following describes what actually took place in the coding process in this research.

4.6.2.1 Open Coding

The coding started with *open coding* which dealt with identifying *the first-order concepts and labelling the concepts*. Open coding generated a lot of open codes (first-order concepts) for the case study. Under the requirement of open coding, in order to allow the open codes to emerge from the data itself, the data coder might be a different person from the researcher who had in mind a list of pre-defined codes and themes which were known from the literature review to look for prior to the opening coding process. However, time and resources were limited in the PhD project. The

researcher and the coder were the same person. With this awareness, the researcher was hence open and flexible for new codes and themes to merge.

Coding the indirect verbatim/expressions of different groups of informants of their PEV were challenging because the ways of expressions of different socio-economic groups of their PEV were different. For example, grassroots staff (generally in lower socio-economic class) found the concept of PEV difficult to understand or explain in their own words. Perhaps they neither knew the words to use nor had knowledge of this type of value and they did not think of this until the researcher interviewed them. For example, MASON expressed *“I am stuck, I didn't ever answer that... anything up there [the upstairs departments] Basically, starts from trees to plants to even whatever grows in the ground. This is for me is really important”*. He did not know his value towards the environment, but he mentioned everything moving around him was important.

4.6.2.2 Axial Coding

Open codes (or first-order codes) were then interpreted and categorised into broader concepts until the core categories (or second-order themes) emerged which is called *axial coding*. Axial coding allowed for establishing the relationships between the second-order themes and the first-order concepts when the researcher used her own interpretation to the relationships (Corley and Gioia, 2004; Mehmetoglu and Altinay, 2006).

4.6.2.3 Selective Coding

Selective coding integrated the above-mentioned categories from the axial coding into broader, aggregate dimensions (or third-order categories) which formed initial constructs. Table 4-7 show the examples.

Table 4-7. Examples of theme categorization into aggregate dimensions of PEV

Dimensions of PEVs (third order)			
	<i>Biosphere</i>	<i>Egoistic</i>	<i>Social-altruistic</i>
Theme (second order)	Preventing pollution	Not being wasteful	Keeping a good and sustainable environment for long term for next generations (for my grandchildren)
Example	<i>"... doing what we can to prevent pollution I think ultimately." (MARIO)</i>	<i>"I'm more concerned with wastage, not on a personal that it's going to cost me pennies. On the world thing, if everyone ..., ... the world is slightly better off, and why not?" (MICAH)</i>	<i>"I'd like the world to continue in a good state because... I'd love to see my grandchildren enjoy the earth as much as I have." (MICAH)</i>
Theme	Living in a clean world and clean up the world	Maintaining cleanliness	Protecting my family from pollution
Example	<i>"I try to live in the way of having the place where you live is where you like to have cleanliness and tidiness, but since you see the road with rubbish and plastic bags and everything fall off, it's not nice to have that environmental way." (FATIMA)</i>	<i>"We try to live with the value of environment in term of making our house clean and I love to have my house clean and every week we've got like a Saturday that we do cleaning." (FAITH)</i>	<i>"Because of the pollution and you know we all breathe in at the end and as I said I've got two little children and it's very important for them to have a fresh air around them not polluted with all the emissions from the car and everything." (FAITH)</i>
Theme	Moral duty to protect the environment	Living a varied life	
Example	<i>"We all have a duty to try to conserve" (MICHAEL)</i>	<i>"I like being in a place where there's a bit challenging life that we don't get bored often, we always search and strive for something better." (MAX)</i>	

Source: from the current study

Table 4-8 summarises how the three stages of coding were taken place in this study.

Table 4-8. Examples of data structure of PEV

First-order concept	Second-order theme	Aggregate Theme	Theory
Examples: <i>"... doing what we can to prevent pollution ultimately"</i> (MARIO) <i>"I'm very conscious about it also in the sense we try not to pollute, try to recycle as much as we can at home."</i> (MAX)	Preventing pollution	Biosphere	Personal Values
Examples: <i>"You treat the environment with respect because most of the houses are in small villages and you need a whole lot of fruits and vegetables, everything is natural and organic."</i> (MARK) <i>"It is my strong belief that we should look after what we got, respect every ... form so that it is here for everybody to enjoy, not destroy."</i> (CAMILA)	Respecting the earth		
Examples: <i>"We all have a duty to try to conserve whether that's energy or food, we all have a duty. Or whether that's just turning the lights of our home and saving money, for example. We all have something that we want to achieve out of it."</i> (MICHAEL) <i>"I am a member of the human race and I have a responsibility to give the earth and certainly fossil fuels to a minimum."</i> (MATTHEW)	Moral duty to protect the environment		

Source: from the current study

The above presented how the PEV was developed from the findings. The same activities were carried out for other constructs in the research which comprise the following, which will be presented in the chapter Findings. Revisiting key constructs and mapping their relationships with the research aim to study the interactions of these constructs of interest formed the initial theoretical framework (Mehmetoglu and Altinay, 2006).

1. Interaction of PEV, CEV and PEB (including PEV, Perceived CEV, EEB, the interaction between CEV and PEV, the interaction between CEV and PEB, and the interaction between PEV and PEB)
2. Type of employees
3. Environmental communication
4. Informal work practice
5. Organisational commitment
6. Pressure of workload

7. Incentives and penalties
8. Training
9. Environmental visibility
10. Support infrastructure
11. Other mechanisms to encourage EEB
12. Challenges to implementing PEB

4.6.2.4 Initial Analysis of Employees and Development of Groupings

Besides the developing of initial analysis of the coding, a full matrix of types of employees was developed for each of forty-five employees (out of fifty employees), including their current role in the company, roles in environmental communications at the company/hotel, and roles in implementing PEB in order to look for the common patterns among these employees.

Table 4-9. How to categorise the employees

Role in environmental communications (A)	Role in implementing environmental initiatives at hotel level (B)	Current jobs in hotel/company (C)	Labelling
1. The first key receiver of the environmental information from the regional office.	1. Do not engage in physically carrying out the environmental initiatives at the operational level.	1. The senior managers in the hotel property include GMs and Departmental heads	VIT
2. Communicate internally the environmental messages and initiatives.	2. Do not engage physically carrying out the environmental initiatives at the operational level	2. Green champion, Green members, Health and Safety coordinator, regional engineer in the hotel.	iM
3. Receive the environmental communications	3. The main/minor energy users (directly implement the environmental initiatives)	3. The supervisors and operational staff in Operations/non-operations departments	RD
4. Actively talk about their own actions as setting examples or talk to others to influence these people's awareness and actions.	4. Engage or do not engage in physically carrying out the environmental initiatives depending on their role(s) at the hotel.	4. Any employees working in the hotel	Ir

Source: compiled from the document analysis of job descriptions and field data of current study

'The role in engaging environmental communications' (A), 'The role in implementing PEB in the hotels' (B) and 'The current jobs in the hotels' (C) were chosen because they

were the key to understanding the dynamic interaction between PEV, CEV (through understanding communications between PEVs and CEV) and PEB.

From document analysis of job descriptions, observations, and interviews, **(A)** included (1) the first key receiver of the environmental information from the HOs, (2) communicate internally the environmental messages and initiatives, (3) receive the environmental communications, and (4) actively talk about their own actions as setting examples or talk to others to influence these people's awareness and actions.

(B) include (1) whether engage or not engage in physically carrying out the environmental initiatives at the operational level depending on their role(s) at the hotel and (2) they are either the main or minor energy users.

Next, the researcher looked for the common patterns emerging from the matrix throughout all employees. Based on grouping the common patterns, there were four potential types of employees, with each group sharing common characteristics in *(A)*, *(B)* and *(C)*.

Finally, the researcher labelled the types of employees as 'value initiator-teller', 'influencer', 'internal messenger', and 'receiver-doer'.

This categorisation fitted the overall research which aimed to investigate the interplay of PEV, CEV and PEB in hospitality sector workplaces. Because there were different hospitality sector workplaces (as shown in the chapter *Background to the Hotel Case Studies*) and there were also many types of employees who participated differently in the interaction of PEV, CEV and PEB in these workplaces, the categorisation of employees (as shown in this chapter and the chapter *Background to the Hotel Case Studies*) provided an analytical baseline for studying the categories of the interaction of PEV, CEV and PEB by each category of actors which provided the needed insights to the hotel organisations if they wanted to implement successful PEB programs. As such, this provided a basis for data analysis and discussion later which would analyse themes on these types of employees.

4.6.2.5 The Criteria of PEV Groupings

Table 4-10 describes in detail the criteria of each sub-category of PEV. The employees with the biosphere-based values or PEV shared some common patterns in their extent to show care/respect/appreciation for the environment; whether they deeply thought about their environmental values; could they clearly identify or clearly explain their environmental values; did they show passion about environmental protection in their non-verbal expressions such as body language, voice tone, posture, and eye contact. These were the basis for further refining PEV: Strong PEV; Weak PEV; Have No PEV; and Unknown PEV.

Table 4-10. How to categorise the sub-PEV levels

Sub-PEV levels	Criteria
Strong PEV	<p>The informants with “Strong PEV” or Biosphere value can be defined as</p> <p>(1) those who express their care/respect/appreciation for the environment; <i>and</i></p> <p>(2) show that they deeply think about environmental protection; <i>and</i></p> <p>(3) can identify or explain clearly relevant values of the PEV category; <i>and</i></p> <p>(4) show passion or enthusiasm about environmental protection which is evidenced from non-verbal observations such as body language, voice tone, posture and eye contact which are reflected in the researcher’s memo recording her fieldwork experience with the informant and the setting of the interview</p>
Weak PEV	<p>The informants with “Weak PEV” can be defined as</p> <p>(1) those who express their care/respect/appreciation for the environment to some extent; <i>but</i></p> <p>(2) they put less importance on PEV than other values such as self-interest values; (3) they do not think deeply about their personal relationship with the environment.</p> <p>(4) they can vaguely identify or explain their PEV, but they hold some general values of the Egoistic value and Social-altruistic value categories as good groundworks for the formation of their PEV; <i>and</i></p> <p>(5) non-verbal observations.</p>
Have No PEV	<p>The informants with “Have No PEV” are those</p> <p>(1) who may state they have PEV, however they seem not to care for the environment.</p> <p>(2) they show that they do not deeply think about the environmental protection; (3) cannot identify or explain clearly relevant values of the PEV category; <i>and</i></p> <p>(4) do not have the relevant general values as groundworks for the formation of PEV.</p>
Unknown PEV	<p>The informants with “Unknown PEV” are those did not really state what their PEV is.</p>

Source: from the current study

4.6.3 Discussing the Findings with the Literature

As the second stage resulted in several constructs, themes, concepts and relationships, the researcher compared these with the existing literature in this stage.

4.7 Trustworthiness of Data

Qualitative studies such as case studies are claimed to have some scientific limitations (Saunders, Lewis and Thornhill, 2015) that they cannot be evaluated by applying the same credibility criteria as quantitative studies. However, qualitative studies seek

trustworthiness and developing theory rather than validity, generalising findings, and testing hypotheses. Hence, it is misleading to evaluate case studies using standards of quantitative studies. The development of trustworthiness has been based on four criteria: credibility, transferability, dependability and confirmability (Lincoln and Guba, 1985, p. 314) .

4.7.1 Credibility

Credibility refers to whether findings based on the collected and presented data are credible, or whether the findings reflect the reality of the research subjects and within the given context (Lincoln and Guba, 1985). To achieve the credibility of the findings, the researcher followed several strategies as the follows.

- The use of triangulation of multiple data sources (interviews, on-site observations, documentation, ten-minute survey, and critical examination of literature) increased credibility of the findings. Data emerging from these research methods were triangulated and checked against each other. For example, self-reported PEB were checked against actual PEB observed on site; self-reported PEV in the informants' own words were checked against self-reported PEV in the form of the questionnaire.
- Ongoing peer-reviews and evaluations at various stages of the study with various reviewers (PhD supervisors, CSR contacts of the company and hotel units and other academics at seminars) helped to increase credibility of the study and findings.
- The researcher's interpretations and choices have been explicit under the use of *reflexivity* approach. The researcher has reflected how her experience- and culture-based assumptions influenced the interactions between herself, the research context, and the informants.
- How the researcher's decision-making and the findings informed knowledge have been made *transparently* throughout the study.

4.7.2 Transferability

Transferability assesses the extent to which the findings of a study in a specific context (sending context) can be inferred to other similar contexts (receiving contexts). Lincoln and Guba (1985, p. 298) suggested transferability was related to more the original researcher than the later researcher attempting to make an application elsewhere and hence the original person needed to supply enough sufficient and rich data in order to enable transferability. When the findings may be applied to other situations of analogous, but not identical characteristics, inferences from problem-oriented findings were possible (Patton, 2002). Hence, in qualitative research, the findings in a specific situation such as in a case study might be transferrable to similar situations.

To enable transferability of the findings, *thick description* was used (Lincoln and Guba, 1985). A *thick description* clarifies the behaviour as well as the context of the behaviour in a lengthy detail. In this study, it was a detailed description of the informants, the contexts, and a comprehensive description of findings of PEB, PEV and CEV with sufficient evidence in the form of interview quotes, observation notes, documents, field notes and survey results (Geertz, 1973). This allowed other researchers “in a potential receiving context” to evaluate the similarity (Lincoln and Guba, 1985, p.125).

In this study, a rich and detailed description of the informants’ demographics was included in this chapter. Also, the findings of the informants’ PEV and PEB were described in a specific situation supported by their typology (see the chapter Findings and Analysis) and workplace contexts they were in (see the chapter Background to the Hotel Case Studies). Since the hospitality contexts were very specific and had strong associations with the PEB of the informants, rich description of specific workplace situations (including the business and operational contexts of the international hotel company and its two hotel cases; energy consumption contexts of the two case hotels), in which the informants’ PEB and PEV were studied; rich description of different operational workplaces (i.e., Kitchens, HK and C&E) within each hotel case was provided.

4.7.3 Dependability

Dependability in qualitative research determines whether the study findings agree with the data collected (Lincoln and Guba, 1985). It aims for ‘outsiders’ to agree that the findings become clear and are consistent to the collected data (Merriam, 1988, p.172). The dependability of the findings may be achieved by the triangulation of multiple data collection techniques and the audit trail. The triangulation was already talked in Section *Credibility*. Equivalently for dependability, the use of multiple data collection methods and triangulation sought to obtain more ‘reality’ data that reflected the informants’ perspectives, thus producing more dependable data.

The audit trail provided a detailed description of how data were collected, how themes were developed and how decisions were made by the researcher throughout the study (Creswell and Miller, 2000). As per Chawla (2019), an audit trail comprised of six components as the follows.

- Raw data – Raw data, consisting of a sample of anonymised interview transcript and observation protocol, have been included in the appendices. These helped the reader understand how the raw data were prepared, organised, and finally analysed to arrive at the findings.
- Data deduction – This was an ongoing process. The researcher kept a journal to records notes on the inquiry process (Lincoln and Guba, 1985; Carcary, 2009),

including personal reflections, challenges faced during fieldwork, observations and ideas encountered in the process of data collection as well as the personal reflections during the data analysis process. These helped the researcher to form early ideas about significant findings.

- Data reconstruction and synthesis – the derivations of themes were discussed in the current chapter. The detailed report of the findings of the interactions between PEV, CEV and PEB were presented in the chapter Findings and Analysis.
- Process notes – The whole process of how this study has been conducted is provided transparently and with full details.
- Materials relating to intentions and dispositions – the researcher wrote a personal memo for each interview and recorded observations on each informant which helped her to develop some initial analysis of what was going on with the informant by linking all evidence sources (e.g., looking at the interview transcript, observation and survey of each informant and see the whole picture). An example of a personal memo was included in Appendix K.
- Instrument development information – this current chapter explained how and why the instruments of this study were developed and evolved in practice.

4.7.4 Confirmability

Confirmability is considered as a criterion to evaluate the reliability of findings in qualitative research (Jensen, 2008). *Confirmability* ensures that the provided evidence and researcher's interpretation reflect the reality of informants and is not purposely selected due to the preferences or bias of the researcher. In this study, the conclusions drawn about the roles of PEV, CEV and contextual factors such as "informal work practices" and "productivity tension" in PEB reflected the perspectives of the informants and were not altered by the previous knowledge or experience of the researcher. One way to address confirmability in qualitative studies is the use of reflexive practice (Houghton et al, 2013) which is discussed next.

To set out, it is useful to present the background of the researcher to support the reliability in all decisions made by the researcher. The interests of the researcher have inevitably influenced her choice of the PEB topic for her PhD and her expectations of what the research might yield (Finlay and Gough, 2003). These interests also influenced the definition of the research problem, data collection choices made, data analysis decisions and presentation of findings (Rabe, 2003) The researcher gained her personal interest and knowledge on PEB from working in the tourism and hotel industry for a number of years, hence she has had some awareness of the PEB that might occur in the hotel workplace environment. Furthermore, being a native of Vietnam she has a

deeply embedded understanding of Vietnamese values. She has also lived in the UK for three years and during this time has become familiar with British values.

With this background, when collecting data, the researcher's personal thoughts prompted by the informants were recorded and this has aided the data analysis of the real-world context in which PEB occur. Such self-awareness, or personal experience, has both benefits and limitations. It can help inform the data collection and data analysis approaches the researcher used, whilst it also makes her aware of some biases (Finlay and Gough, 2003) which enhanced the trustworthiness of the study. It is important to review the position of the researcher as an outsider or an insider within this workplace-related research (Rabe, 2003). The researcher can be considered as a semi-outsider (Rabe, 2003) when studying an organisation to which she does not belong. The researcher worked for the industry many years as well as qualitative methods (observations, interviews,) and the significant time spent in the hotels made her an insider to some extent.

4.8 Summary

This chapter explains the research strategies and methods used in this study. It aims to strengthen the trustworthiness of the study findings. The transparency of the entire research process has illustrated the logic and coherence of the study. The following chapters will present the contexts of the cases and work settings of the informants, and then the findings of the interplay between PEV, CEV and PEB in the hospitality workplaces in the UK and Vietnam.

5 BACKGROUND TO THE HOTEL CASE STUDIES

5.1 Introduction

This chapter sets out the background, business, and operational contexts of the international hotel company and its two hotels (embedded cases A & B) in which PEB of employees occurred, as well as types of employees operating at the case study and two hotels. Section 5.2 introduces the company's business and operations; and then describes its global sustainability position and CEV which guide the environmental direction for all its hotels around the world. Sections 5.3 and 5.4 outline the operational structure, type of ownership, energy consumption and practices for each of case A and case B; and the environmental regulations and initiatives under which each hotel case is operating. Section 5.5 describes the operational contexts of hospitality workplaces across the different hotel departments in general. The chapter ends with a summary.

5.2 The Case Study

The case study is an American multinational hotel company that manages and franchises a broad portfolio of more than 6,200 managed and franchised hotels and resorts in 113 countries in 2020. Since 2009, the company's overall environmental commitment has been "to cut our environmental footprint in half through responsible hospitality across our value chain" (company website retrieved in February 2018 and 15 August 2020). In terms of its energy consumption, it has reduced its annual energy use intensity by 26% across its managed hotels since 2008 (2018 CSR Report of the case study). In 2010, the company launched its in-house EMS as a global sustainability measurement tool that analyses aggregate environmental and operational performance across its hotels. In 2018, it became one of the first major hotel companies to set science-based carbon targets approved by the Science Based Targets initiative (*Companies taking action*, 2019). Clear statements on CEV are officially published on the company website to the publicity to guide its global sustainability implementation in five areas including energy, water, waste, carbon, and responsible sourcing (company website retrieved in February 2018 and 15 August 2020).

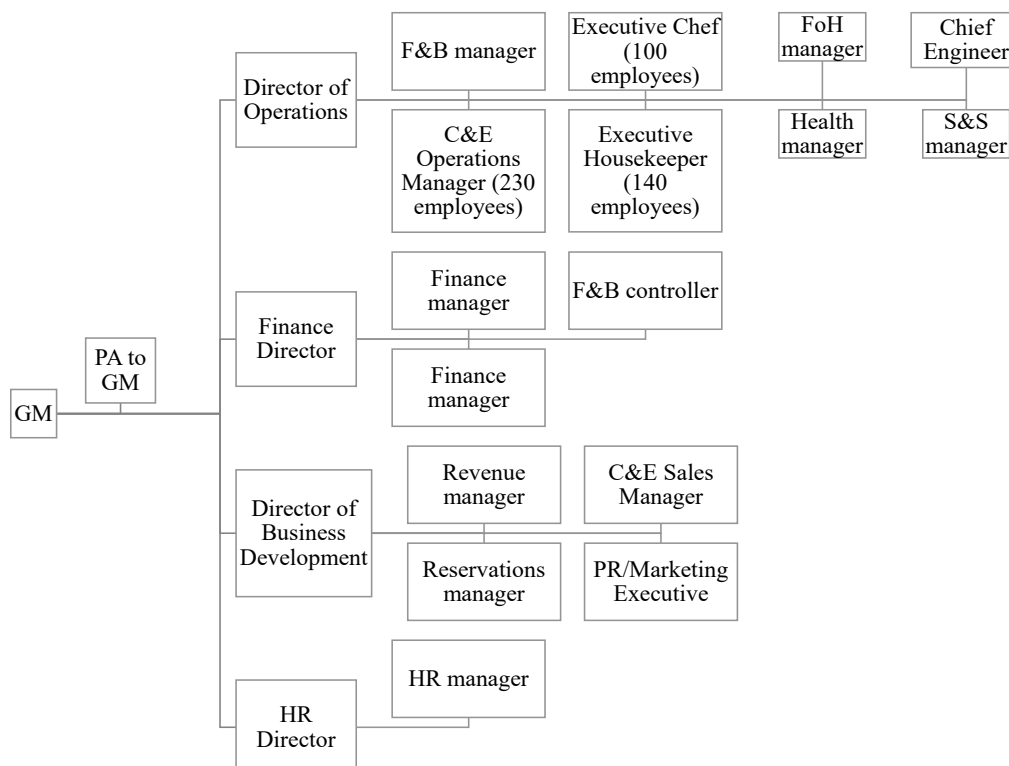
5.3 Embedded Hotel Case A (the UK)

Case A is a luxury convention hotel located within a complex of C&E buildings, in the city of Birmingham, the UK. Its customers are primarily business and conference guests. The hotel has 790 guest rooms. It has 300 permanent employees (on main day shifts) and 400 casual employees (including variable staffing levels).

First built in 1976, the hotel would not meet the requirements specified within the 2010 Part L (EE) regulations for new built properties (Government, 2014). The costs of retrofitting the hotel for EE are significant and are thus a barrier to introducing physical and mechanical controls to deliver EE in Case A. As such, staff behaviours are a key mechanism to deliver EE within the hotel. The hotel is owned by a private company and leased to the case study organisation on a management contract. In 2018, a new owner acquired the hotel but the management contract remains unchanged (Jenkins, 2018, 12 February).

Figure 5-1 shows that Case A has four departments (Operations, Finance, Business Development and HR). The Operations Department, comprising of eight operational units (F&B, C&E, Kitchen, Back of Kitchen, FOH, Health, Engineering, and S&S), are most people-intensive and major energy consumers. The three other departments (Finance, Business Development and HR) are non-operational and minor energy consumers.

Figure 5-1. Organisational structure of Case A



Source: Internal document of Case A

In terms of energy consumption, the main energy sources and systems currently used in Case A are electricity, natural gas, diesel, and cogeneration/CHP plant, mainly for the purposes of cooking, heating, cooling, lighting, printers/photocopiers, computers, and monitors. Energy is the second largest expenditure for the property. In terms of efficiency, the hotel was set to reduce its energy consumption by three percent in 2018.

According to a chief engineer who was also environmental champion, the engineering team led the EE projects. He reported that Case A introduced some policies and actions for improving energy consumption, for example, it introduced a number of EE projects in 2018, including technological projects (for example, retrofitting LED lamps into the ball room, lounge, and some guest rooms); and behavioural projects (for example, development of tips on EE actions for staffs to use equipment in each department; collaboration between the maintenance, Security, C&E teams to ensure that timing devices are set up properly, temperatures for conference rooms are maintained at appropriate level; and increase in staff awareness of energy saving). However, participation in environmental initiatives was voluntary. Hence it was the choice of each manager or team member to implement EE.

In terms of measuring the EE of the technological projects, the in-house EMS report 2019 shows that Case A conducted an informal in-house evaluation of energy use of all businesses at an aggregate hotel level between 2018 and 2017. However, an energy use analysis or audit at the departmental levels is an area for future development due to there has been no sub metering for departmental energy consumption in place yet. In terms of measuring the EE of the environmentally behavioural projects, the head of the engineering department pointed out that energy measurement could be complex. It was not clear how the environmentally behavioural projects were implemented by the main energy users in place.

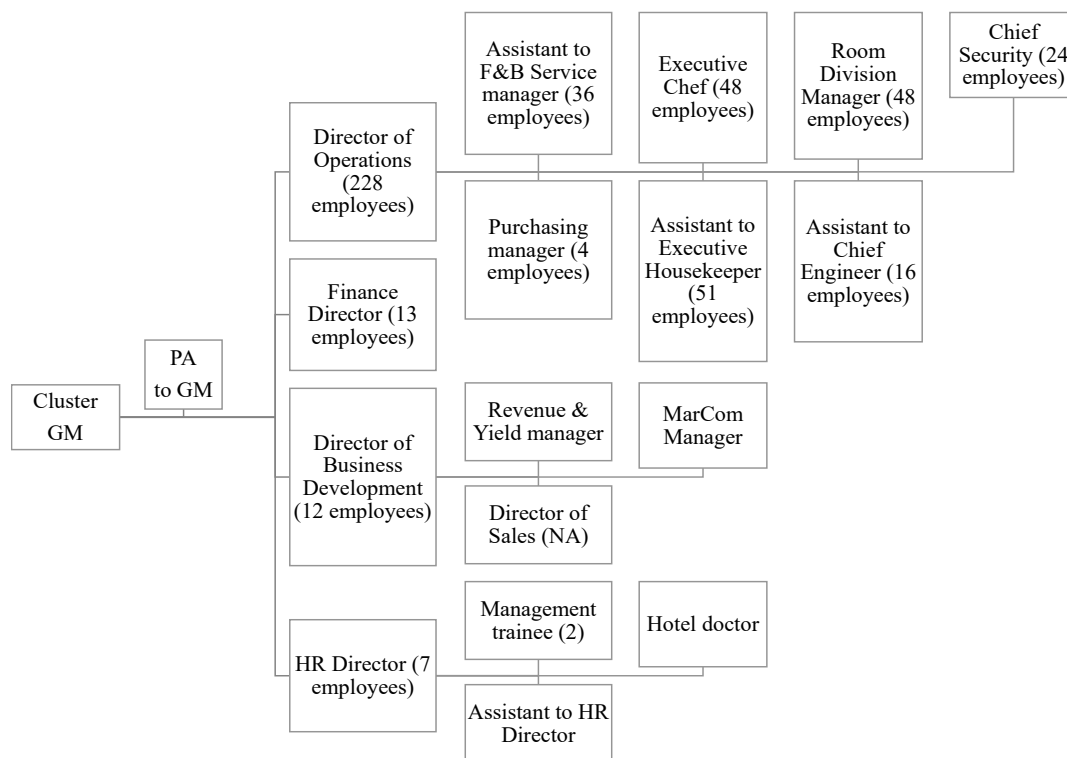
“I don't know what and how you would measure it because we have 700 people and lots of turnover of staff. Some people are students They come here and work when they are not at university, or it is the job that they do while they are looking for another job. I'm not sure what we could measure to be honest unless you can elaborate more on what you mean because I'm not quite sure.”
(MAXWELL)

Hence, there did not appear to have been any assessment of what the best actions for Case A might be. This is also seen in Case B as the follows.

5.4 Embedded Hotel Case B (Vietnam)

Case B is a five-star convention hotel situated in the central location of Hanoi, the capital city of Vietnam. The hotel has 269 guest rooms. It has 278 full time and 14 part time employees (including 11 employed by the hotel and 3 employed by the owners) of which 210 employees are working on main-day shifts. Like Case A, Case B is a managed hotel and privately owned by a group of investors who have determined whether to invest in the building fabric for EE in the hotel. Figure 5-2 describes the organisational structure of Case B, with the Operations Department being comprised of seven operational units (F&B, Kitchen, Room Division, Engineering, Purchasing, HK and Safety and Security; Room Division includes C&E and FO). Unlike Case A, Case B did not have a Health unit, but it has small gym rooms and swimming pools which are managed by the Rooms Division.

Figure 5-2. Organisational structure of Case B



Source: Internal document of Case B

In terms of energy consumption, the main energy sources and systems currently used in Case B were gas, electricity, and diesel. Diesel is used only for running the generators (which provide emergency power should there be power cuts). The kitchen unit used 90% gas and 10% electricity for its entire energy consumption. The kitchen and engineering departments were the largest energy consumers, according to ĐAT (a Director). The engineering team was responsible for setting up and monitoring

environmental initiatives and energy consumption. The company was engaged in technical, and behaviour change initiatives with the aim of reducing energy consumption and waste production. Technological initiatives included simple retrofit measures (such as installing low energy lamps), but the age of the building limited the extent to which EE technologies could be utilised.

“It [EM] is fundamental but our building is about 19 years old, so there are a lot of things that need renovation. We renovated some areas but there are some areas that we did not touch ... It needs some renovation in many areas...we did change the light bulbs to LED bulbs in some parts of the hotel, because they consume less energy. That’s what changed.” (CHARLES)

5.5 Key Operational Hospitality Workplace Settings

The operational contexts of the workplace in this study are subject to the service position of the two hotel cases A and B. As these two hotels are positioned to five-star or luxury services and under a management contract, all their services are designed and operated by the requirements of the 5-star brand standards of the hotel company. It also implies that the hotel management and staff must comply the requirements of these corporatised brand standards. An understanding of the operational context and setting of the hotel cases helps contextualise the data and this is provided in the section that follows.

5.5.1 The Housekeeping

HK is one of the largest sections in both Case A and B and most employees are engaged as room attendants. The typical work of a room attendant was cleaning guest rooms and public areas such as lobby and corridors (excluding the kitchen and back of house areas). The work was repetitive and there were clear written and tightly structured work process guidelines in place for all room attendants. For example, there are ten-HK steps in Case A which guide the work practices of room attendants from the point at which they enter to that at which they leave the guest room.

The room attendants worked on shift basis and – since occupancy was known in advance – it was highly regulated with three identical work shifts provided over a 24 hour basis. There were limited routine opportunities for social interaction between room attendants during working hours, since each cleaned a separate room. Interactions with other employees typically take place at three places: at changing rooms, at registering ID machine and in the canteen for lunch/dinner breaks.

5.5.2 The Kitchen

Generally, two teams work in the kitchen: chefs and the Back of House team. They work on a shift basis. In Case A, the Main Kitchen typically had three shifts per day, including breakfast shift (4.30am – 12.30am), lunch shift (6am – 2pm), and dinner shift (2pm – 10pm). The Lounge and Room Service kitchens operated a 24-hour shift. In Case B, a Sous Chef reported his kitchens operated 24 hours per day and 7 days per week. There were usually 3 shifts including breakfast shift (6am – 2pm/2.30pm: receiving deliveries from the suppliers; ordering and preparing buffets; preparing the a la carte dishes), afternoon shift (2pm – 10pm/10.30pm: preparing the a la carte dishes) and evening shift (10.30pm to 7am).

The kitchen is a high-pressure working environment, with an expectation that food will be delivered to the customer within approximately 20 minutes of the order being made. As a result, kitchen work is very unstructured. The work process guidelines for individual chefs were not easily observed. There were some processes in place for food ordering and menu-based processes. However, these processes were disrupted, upon the demand from guests for food on site at any particular time. Because the demand for meals is unplanned in advance, the workloads of kitchen works are due to the demand for specific types of meals by different types of customers which highly varied. The work design for kitchens varies a lot due to the high variety of customer types.

The kitchen is a highly social workspace with multiple interactions between chefs. However, social interactions between chefs and employees from other departments are limited.

5.5.3 The Food and Beverage (including Conferences and Events)

F&B is a significant energy consuming area and is typically comprised of restaurants, banquets, room service, bars, minibars, and the lobby. Over-and-above serving customers in these spaces, the restaurant team also provide room service to hotel guests twenty-four hours a day, seven days a week and restock minibars. The banquet team is responsible for setting up banquets and functions for meeting rooms and providing F&B.

5.5.4 The Engineering

Engineering is an indirect energy consuming area in a hotel business. There are day and night maintenance engineers who is responsible for routine and preventative maintenance works of the assets and all operations in the hotel. Hence, the working environment of the engineers are not confined in a fixed setting. The engineering team is also largely responsible for energy data entry into the in-house online environmental management platform in the international hotel company case study. The chief

engineers are often promoted as the key green champions in the hotels such as in the current hotel cases A and B.

5.6 Summary

This chapter presented the background of the hotels A and B, the contexts across key departments at each hotel, for instance, HK and Kitchen as their differences imply the different factors to the research phenomenon of interest. Understanding backgrounds and contexts including business and social settings, work nature of employees and situations assist explaining the relationship between dynamic workplace environments and the interplay of PEV, CEV and PEB of individual employee or groups of employees which will be presented in the next chapters.

6 FINDINGS AND ANALYSIS

6.1 Introduction

This chapter presents the findings and analysis that have emerged from the study of Case A and B. Section 6.2 firstly sets out the four types of employees as the analytical framework for other sections in a selective way. Section 6.3 shows the proposed environmental communication framework that emerged from the study of Case A and B. Sections 6.4 and 6.5 present the emerging themes from the data analysis of the study of Case A and B, respectively. Section 6.6 includes the chapter summary.

6.2 Employee Typologies

The analysis reveals that there are four types of employees participating in delivering environmental outcomes at the hotel cases, based on the categorization of their engagement in environmental communication, implementation, and current roles at the hotels. Examples of each type are presented. The categorisation methods were shown in Section 4.6.2.4. These typologies are not mutually exclusive: that is, one employee can have multiple types due to their engagement in several roles in environmental initiatives. It is significant to point out that this employee typology is emerged from the data analysis (not from the literature review).

6.2.1 'Value Initiator-Teller' (VIT)

Comprised mainly of two groups of staff, VIT were characterised by the role they played in initiating or developing and activating the environmental values, policies and ideas that set out the guiding principles for the case study hotels or in communicating these to the staff body. Whilst VIT communicated the values, policies, and ideas to hotels worldwide, they were not empowered to physically implement environmental initiatives within the hotels. The first group of VIT was comprised of CSR staff or policy makers in HOs. They were concerned with strategic policy development. The second were senior managers in hotels (including GMs, directors, and departmental heads). They were tasked with developing more detailed plans to support implementation of policies, including the development of internal communications and projects. The characteristic that binds the two together was the fact that they did not engage directly with carrying out the environmental initiatives that they promoted.

It was the senior managers among VIT that were – in many ways – the most influential when it came to policy activation. The extent to which they actively or passively

supported the environmental ideas from the HOs, dictated whether they employed active or passive leadership techniques to engage departmental heads and the environmental champions in taking these ideas forward for implementation by the staff body (supervisors and operational staff).

Examples of VIT are:

MARIO (M, worked at Case A for 5 years as a SS manager, aged 25-29, British, educated to a bachelor's degree) provides an example of *active VIT*. He has sought to influence his department via a number of actions: (1) he did his own calculations of energy wastage in function suites such as the 'Monarch' and King Suite' where the lights were habitually left on all night even when no function was occurring; (2) he voiced his ideas on energy saving actions to other departments; and (3) he cascaded the energy saving communication to his department by developing verbal guidelines to his staff for their daily work practices.

MICHAEL (M, worked at Case A for +20 years as an Executive Chef, aged 55+ years, English, educated to high school) was an example of *passive VIT*. He was currently managing 100 kitchen team members. He generally received environmental information internally from the GM or Environmental team. He responded to direct demands that he changed practices vis-à-vis EE. However, his support was passive in as much as he responded to direct instructions rather than initiating actions and passing information on to his team only when he felt the communication required him to do so. In addition, his communications to staff were mostly task-based i.e., he interpreted the instructions for his team in a way that he felt was relevant to them. This was evidenced from several observations of the researcher within his kitchen department. For example:

"[my response to the environmental communication was that] It's dependent upon whether it requires an action from me or not or any other team... It depends. There's not a lot that we're talking about...Because there's not a lot that happens." (MICHAEL)

6.2.2 'Internal Messenger' (iM)

Comprised of the environmental champions (who are Director of Finance, HR Director, Chief Engineer and HS coordinators) and informally departmental heads, *iM* or also called *Green Teams* are characterised by their key role, which was communicating environmental messages and initiatives from HOs to hotel managers and staff. Typically, this role was voluntary and held by any managers or members of the staff body that applied to be a green or environmental champion (although in some instances, they were nominated). Many *iM* had mainstream roles as HS coordinators,

chief engineers, HR directors, directors of finance or other operational roles in the hotels. *iM* played important roles in environmental communications and this differentiates them from other groups. However, they generally do not physically carry out the main operational activities at the hotels.

Active iM were pro-actively and frequently communicating the environmental message provided by the HOs and empowered all staff to activate environmental awareness and actions. MATTHEW (M, worked at the HO for NA years as Director of Engineering but working regularly at Case A with the engineering team, aged 55+ years, English, educated to master's degree) was an example. He was highly aware of his role as a messenger and passionate about sharing the messages to a wide range of staff. He empowered them to take action to reduce energy consumption. He pro-actively communicated the environmental policies, principles, values, and benefits of environmental projects to senior managers and all staff in a relevant and inspirational approach.

Passive iM were those who took the environmental communications as information and did not actively and frequently communicate the environmental messages to staff. CAMILA (F, worked at Case A for 5+ years as H&S coordinator at C&E unit, aged 55+ years, British, educated to high school) was an example. The staff body generally viewed her as one of the key *iM* on environmental sustainability because they learnt about environmental information through her H&S training on the induction day and verbal team briefings. However, she viewed environmental communications as a source of general information rather than something that she had to cascade to staff.

"They just come to keep you up to date with what's going on within the company worldwide and what we're doing etc. globally, so just take information on board and think we're doing a reasonably good job and hopefully it will reflect on the community where the company is working."
(CAMILA)

6.2.3 'Receiver-Doer' (RD)

RD comprised of supervisors and lower-grade operational staff (or also called 'grassroot' staff). They share common roles and patterns in their engagement in environmental communications and PEB which differentiate them from other groups. They physically implemented the operational routines and processes at the hotels. *Major RD* were working in the following departments: HK, Kitchen (including Back of House), FO, FB (including C&E), Health, Engineering, S&S. There were also *minor RD* who were working in non-operational departments such as Accounting and Finance. This group were ultimately the key *RD* of the environmental communications in the

hotels. After they received the messages, they were encouraged to implement the environmental actions in their routines.

Active RD were both actively seeking the environmental information and implementing PEB in their routines. For example, they pro-actively implemented ‘turn off’ policies. They also discussed these communications amongst themselves. *Passive RD* were neither actively seeking the environmental information nor implementing environmental initiatives in their routines. They tended to act passively towards the environmental information.

6.2.4 ‘Influencer’ (Ir)

Ir comprised any managers or staff body in the hotels. They shared a common personal motivation: a desire to exert their influence on others to raise awareness, spread wider communication and encourage actions on environmental protection in the hotels. They were active communicators who acted and lead by their visibly displaying PEB within social situations. However, they could be either doers or non-doers when it came to physically carrying out environmental initiatives within a hotel. MORGAN (M, worked at Case A for 5+ years as FO manager, aged 34 years, Spanish, educated to master’s degree) was an example. He held a strong PEV as the right way to live and the right way for businesses to act towards the environment.

“For me, looking after the environment is really crucial in more than one way. Not only my own behaviours but also trying to influence the companies that I work for to try to engage with the sustainability side as much as they can...Trying to influence as many factors as I can actually.” (MORGAN)

6.2.5 Individuals Engaging in Multiple Typologies

Some employees engaged in the activities of ‘*multiple typologies*’ in activating as well as carrying out environmental initiatives at the hotels. For example, Executive Chefs were *VIT* as well as *RD*. They involved in activating CEV as well as cooking processes.

Table 6.1 summarises types of employees for each hotel case and the full detailed explanations are in Appendix O.

Table 6-1. Types of Employees

Types	Case A	Case B
'VIT'	MICHAEL (passive)	KHUÊ (passive)
	MORGAN (active)	CHARLES (active)
	FELICITY (passive)	ĐẠT (active)
	MARCUS (passive)	ANDY (active)
	MAX (passive)	
	MITCHELL (passive)	
	MILO (passive)	
	MARIO (active)	
'Ir'	MARSHALL (passive)	
	FAITH	NGÂN
	MORGAN	ANDY
	MAXWELL	
'iM'	MARIO	
	MATTHEW (active)	MẠNH (passive)
	CAMILA (passive)	HƯƠNG (active)
	MAXWELL (active)	MINH (active)
		BẢO
		BÌNH (passive)
'RD'		ĐẠT (active)
		NHI
	FAITH (active, minor)	NGỌC (active)
	MARK (active, minor)	CHÂU (active)
	FIONA (passive, major)	HƯƠNG (active)
	FREYA (passive, major)	LỄ (passive)
	FATIMA (passive, major)	MIÊN
	MICAH (active, major)	MINH (passive)
	FRANCESCA (passive, minor)	BÁCH (passive)
	MASON (passive, major)	BẢO
	MARTIN (passive, major)	NGÂN (passive)
	FERNANDA (passive, major)	TIÊN (active)
	FRIDA (active, major)	VI (active)
	BÌNH (passive)	
	DŨNG	

Source: compiled from the current study

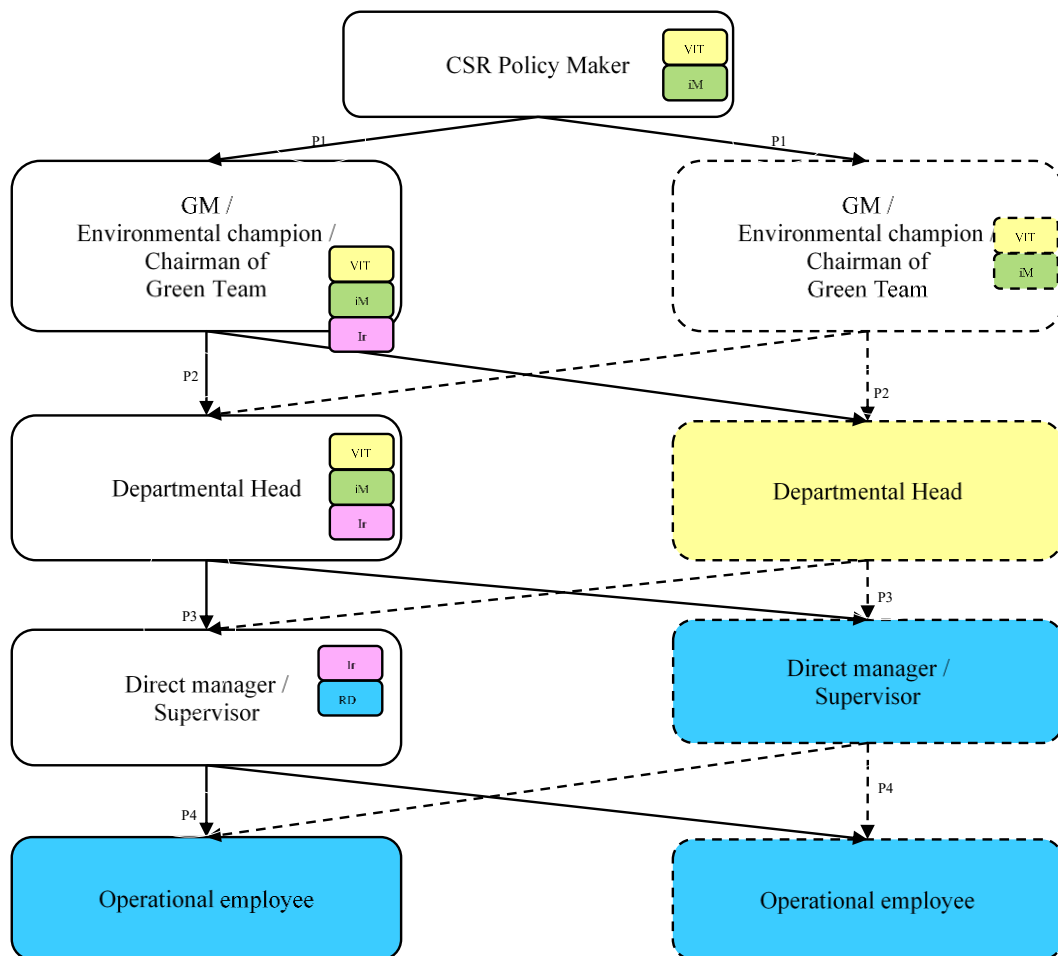
6.2.6 Summary

This section provides the findings and analysis of the four types of employees comprising of *VIT*, *iM*, *RD* and *Ir* that are merged from the data analysis of the study of Case A and B. The frame of employee typologies will be the analytical units for the emerging themes in the current chapter and other following ones throughout the study.

6.3 Environmental Communication Framework

Findings about environmental communication emerged from the study of both Case A and B will set out the general communicational pathways of environmental policies, principles, values, and actions that are applied for the hotels as well as the ways in which the hotels communicated these to their staff. Figure 6-1 describes various pathways that environmental messages took before reaching 'grassroot' employees (the main 'RD') for both Case A and B.

Figure 6-1. Environmental communication framework



Notes:

Yellow→VIT; Pink→Ir; Blue→RD; Green→iM

Continuous-line border→Active supporter; Dotted-line border→Passive supporter

Environmental pathway 1→P1; Environmental pathway 2→P2; Environmental pathway 3→P3; Environmental pathway 4→P4

Continuous-line arrows→Strong pathways (i.e., the environmental policies are actively cascaded through a pathway to the intended audiences); Dotted-line arrows→Weak pathways (i.e., the policies are weakly passed through the pathway)

Source: Compiled from the study of Case A and B

Environmental information usually originated from HOs as a set of policies or principles alongside some tips. It was usually sent to hotels to help them implement the environmental initiatives. Once the information reached the hotels, it was up to each hotel to activate the communication into a specific project or action. After receiving information from the HO, the environmental messengers (iM or green teams) would organise meetings with the environmental committee to distribute and explain the information, and then discuss how to cascade the information to other team members. Then, the communication activities to the team members in the hotel would be implemented. For example, employees reported:

“The information was updated from the HR Director in meetings amongst the Heads of Departments. Then, my manager [Head of Kitchen department] updates me on this...And I am responsible for cascading the information down to kitchen staff. It is like a chain of information...The environmental team at the hotel has been implementing some environmental initiatives that are specific or tailored for this particular hotel. We do not need to wait for the programs sent from HO. The HO can send us macro-level programs. Our hotel has implemented more micro-level programs.” (BÁO)

“If there is anything, that will go to the GM, and the GM then sends it down to you. If it is anything within, that comes under the area of F&B management team, then it might come from F&B managers or direct from the F&B VP. If there is anything [from the HO], it comes via MAXWELL [the champion of Environmental team] ... [who] would then email it around to those involved and green team, notice boards. I may see the minutes of stuff but that's about it.” (MICHAEL)

The findings of the pathways that the environmental information took to reach the intended audiences provided a baseline and context to support understanding about how these took place in terms of awareness, effectiveness of channels, reach and relevance of the communication at each hotel Case A and B which will be presented next.

6.4 Hotel Case A (the UK)

This section presents the findings and analysis that emerged from the results for Case A, comprising the interaction of PEV, CEV and PEB, and other *contextual* factors interfering with the interaction of PEV, CEV and PEB (i.e., informality of practices and pressure of workload, environmental visibility etc). The findings and analysis also show the foundations to how conceptual model built which will be presented in the chapter Discussion.

6.4.1 Environmental Communication

6.4.1.1 Spontaneous and Aided Recalls

The researcher asked the employees of Case A (the UK) if they recalled *the environmental campaigns in general* that were communicated at the hotel. The question was initially posed without prompts (to assess spontaneous recall). Many employees *spontaneously* recalled the general environmental communication in terms of corporate messages, campaigns, and content to some extent.

A second question explored recall of *a particular environmental campaign* which was recently cascaded to the hotel from the HO. With this, the researcher randomly showed leaflets and showcards (see Appendix C) from a specific environmental campaign and asked employees if they could recall them. The majority employees could not recall seeing the specific environmental campaigns on the showcards (see Table 6-2).

Table 6-2. Examples of recalls of the specific environmental campaigns (Case A)

"Eat Your Plate"	"Earth Week"	"CEV"
NA (MATTHEW)	"Yes, we use the in-house SMS." (MATTHEW)	"No" (MATTHEW)
"It sounds familiar. It's definitely the company things." (FAITH)		"No" (FAITH)
"We have content something similar." (FREYA)	NA (FREYA)	"No" (FREYA)
NA (MICAH)	"This may be a newish one; I haven't noticed one of this before. I have been away for two and a half months or nearly three months. This came out in that time; I would have thought." (MICAH)	"No" (MICAH)
"No. Wait, last week? Yeah." (FRANCESCA)	NA (FRANCESCA)	"No" (FRANCESCA)
NA (MARTIN)	"I don't recognize this now. I have not. No" (MARTIN)	"No" (MARTIN)
"No, I haven't seen this one. I may have, it probably has come through to me, but I haven't seen this specific communication, but I know that again through our environmental committee and I keep going back to it because that's probably where we get most of the	NA (MARCUS)	"No" (MARCUS)

"Eat Your Plate"	"Earth Week"	"CEV"
information from...So, I may not have seen this one. I do not remember this thing specifically. I know that information like this has been picked up by the people there they're looking after that, making sure that has been implemented so it has been forwarded to." (MARCUS)		
NA (MAX)	"This one I haven't seen." (MAX)	"No" (MAX)
NA (FERNANDA)	<p><i>It took a long time for FERNANDA to answer. She looked at the showcard and hesitated to answer. Her voice was really low to this answer.</i></p> <p><i>"Yes [the voice and eyes are avoiding and showing uncertainty] and they give us all these for the first time here [she answered quickly, low voice. The researcher felt that she did not recognise this]." (FERNANDA)</i></p>	"No" (FERNANDA)
"It looks familiar, but I wouldn't say it's something that's logged in my memory. It looks so familiar but also quite new as well, but it's very much corporate speak which all hotels or big companies that are part of the FTSE 100 on the stock exchange need to be at to promote the commercial responsibility. Sometimes the challenge is getting that responsibility down to staff level." (MILO)		
"This [campaign], yes...No, this here, Clean Your Plate, yes. Travel with Purpose, no. I don't recognize that." (FRIDA)	"This one, no." (FRIDA)	"No" (FRIDA)

Source: compiled from the current study

6.4.1.2 Reach

Reach refers to the scope or range of distribution and thus coverage that a given communication product has in a targeted audience group (Stacks and Bowen, 2013). The findings show that there were different views on the overall reach of the environmental communication and its availability among different groups of employees. Overall, the environmental communication did not reach majority of grassroot employees although a few employees believed that it got to the intended employees.

“Yes, definitely, it's always communicated down to the people on the floor. Whatever we implement, we get everybody involved, where possible. The communication does work.” (MARSHALL)

Chairman of the environmental team strongly believed that communication did not reach the right “grassroots employees”.

“I don't think it quite gets down to the grassroots staff as well as it could be. I think the company, or a lot of commercial companies can talk good game, but actually does it really come down to the right level?” (MILO)

An executive chef claimed that few environmental initiatives reached him and his kitchen co-workers.

“There aren't necessarily an awful lot of initiatives here. It is not like we are inundated with initiatives. If we get one, I'll be surprised.” (MICHAEL)

FRIDA indicated she did not receive anything related to environmental initiatives from any sender other than verbal briefings from her manager. She claimed that these briefings were embedded into a functional list of cleaning activities.

From the researcher's observations, operational employees, especially night-time employees, seemed to be unaware of environmental initiatives at the hotel. There was a difference between day-time employees and night-time ones in terms of the awareness of environmental initiatives. For example, a night shift supervisor in Back of House suggested that there was no environmental information reaching him. He pointed out the disadvantage of being a night-shift supervisor compared to day-shift employees.

“You must understand when I come to work, we [night-shift employees] don't receive other than anything like you got this job going on (laugh)... When I come in, the 1st thing we get, you know what? - There you go, you got a list of jobs, this, and that, what you need to do tonight - and then you have a cleaning list. You got to clean this up this place, certain place to do, and that is what it happens on my shift, I do not know about morning shift...you speak to the wrong person... Like I come in, most of time just commutator – main job. That is it. I do not talk to [anyone]...I said I don't know any (CEV).” (MASON)

There was a need for more environmental communication available to operational employees, according to a GM.

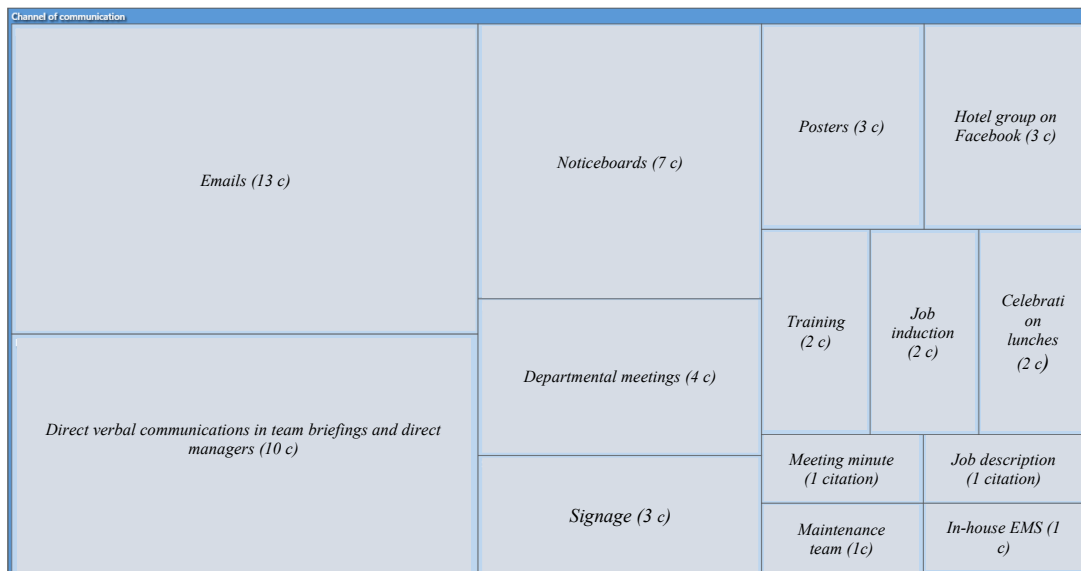
“There is more awareness coming, but we are still a long way away from where we need to be. I still think we are like a community within a city of Vietnam. We

are not leading the way. We have the desire, and we have the opportunity, but we are not quite there yet... [we need more communication] ... Not enough, nowhere near enough.” (ANDY)

6.4.1.3 Channels

Channel of communication refers to a system or method that is used for communicating with other people (Cambridge Dictionary). Figure 6-2 demonstrates that environmental information for Case A was communicated through various channels. The larger size of the box, the greater number of times the channel of communication was cited as a means for gaining information on the company’s environmental messages.

Figure 6-2. Channels of environmental communication (Case A)



Source: Compiled from the current study using NVivo

None of the employees stated that they were aware of the CEV published officially via *written CSR reports* and the webpage of the company. *Email* was the most prevalent communication channel through which ‘VIT’ from HO would cascade CEV to the intended ‘RD’ of the hotels and within the hotels internally. Emails were found not to reach *grassroots staff* because the majority (66%) of casual employees for the hotel sector (below supervisory levels) were not given a company email account. *Direct verbal* was another common communication channel for environmental messages and initiatives. This often occurred in team meetings, team briefings before shifts and informal training sessions.

6.4.1.4 Relevance

Many employees across operational departments perceived that environmental message were too general/non-specific to operational roles and could not be immediately adapted to their day-to-day practices when working in the hotel. An *active RD* reported what he would have to actively seek further information and explanation about the actions he was supposed to take. Hence, he did not activate pro-environmental actions immediately, preferring to wait until he had clarification of what was required.

An VIT (also Ir) reported that the environmental information was usually less relevant to the S&S department.

“You don’t get a lot for S&S. For my staff they probably have not had much sustainability or environmental information passed down to them because there never seems to be anything relevant. Obviously at the company, not every hotel has a safety or security department, so often the CE, HK, maintenance, health club will always get some sort of information. HOs don’t focus on a safety or security point of view because that information will actually only be sent to a handful of properties in the whole estate.” (MARIO)

Another VIT suggested there were not many environmental initiatives that were specific to his Kitchen department.

“If it will come from anywhere or for the GM if he's got anything or if it's related to F&B, it will come from the VP for F&B for the UK and then through streams, so they come through. Are there lots of environmental initiatives? No, there's not.” (MICHAEL)

6.4.1.5 Summary

This section presented the results of environmental communications from the HOs to the hotel case A and within the case. The environmental information that is currently cascaded to the RD is top-down and one-way. There seems to have a cut-off of the most popular channel used for environmental communications (i.e., emails) to the chain of receivers as the information did not reach all grassroots RD effectively. Interesting, there are gaps between low-grade, day-time employees and low-grade, night-time ones in terms of the awareness and making sense of PEV, CEV and PEB as well as what is going on with the company. These results add the explanations to the evaluation of the interaction between PEV, CEV and PEB which will be included in the next sections. Firstly, Section 6.4.2 will present the findings of PEV within hospitality sector workplace in the UK.

6.4.2 PEV-CEV-PEB Interactions

This part continues to present the finding and analysis of the interplay between PEV, CEV and PEB for Case A. The results show that those employees with strong PEV put more efforts in carrying out their PEB, however, the extent to which they could carry out depending on important interactional and contextual factors.

6.4.2.1 PEV

The findings on PEV were studied from two sources: (1) self-reported PEV gathered from interviews with the operational employees via conversation; and (2) a 10-minute values survey completed alone.

With a mean score of greater than 3⁶, the values survey indicates that all employees held positive PEV that were consistent with their concerns for (1) for environmental equity; (2) social equity; and (3) self-equity. Among 27 values in the survey, the value of 'being curious' stood out as a stronger value for the employees in the UK hotel when putting it in relationship with Vietnam (see chapter Discussion).

Findings in the self-reported interviews show that the employees' PEV expressions in their own words were associated with three value orientations, including (1) the biosphere value orientation; (2) the social-altruistic value; and (3) egoistic value orientation.

Biospheric values which concerns for environmental protection (including, 'respecting the earth', 'moral duty to protect the environment', 'environment is important for me/I care about the environment') are *moral based*. Other biospheric values (including, 'preventing pollution', 'individuals can make a difference to the environment', 'living with my environmental values', 'it is important to live in a clean world and clean up the world', 'the environmental protection is an effort that needs to get teams of people on board', 'minimizing our impacts on the environment', 'recycling') are *action-based*.

Some employees strongly expressed their '*moral-based biospheric values*' living within their PEV by actions. For example,

"For me, looking after the environment is really crucial in more than one way. Not only my own behaviours or trying to influence the companies that I work for..., looking after the environment, it is selfless. It is the right thing to do and

⁶ The Value Survey includes 27 PEV. See the full list of values in Literature Review chapter. Each value is measured by a scale of 5 importance scores. The scales are: *Unimportant (score 1); Of little importance (score 2); Moderately important (score 3); Important (Score 4); Very important (Score 5)*.

therefore wherever we can, we should do. You are searching for a reward or a benefit from it. It takes away a huge chunk of the value of the action.”
(MORGAN)

Some employees had moral concerns regarding environment and energy issues and believed that it was the responsibility of humans to minimise their impact on the Earth. However, they believed that environmental protection depended on global rather individual action and hence did not always take actions that reflect their values.

“I am a member of the human race and I have a responsibility to give the earth and ensure use of fossil fuels is kept to a minimum...Okay, I've got a diesel car I don't limit my travel because of the pollution it's probably here a bit hypocritical really but having known all the alternatives I feel it's pretty bad. Whatever must happen, must happen at a global level rather than a personal level.”
(MATTHEW)

Many employees also tended to associate their biospheric values to ‘recycling’ alone rather than other environmental actions such as ‘energy saving’, thinking that this alone was a sufficient action to mitigate their environmental impacts.

“First thing for me how I see it, before buying you think about saving. For example, in my house how I do it, if I eat 16 strawberries this week, I buy only 250g of it. I do not buy a 500g of it even though it is cheaper. I buy 250 so I do not waste any. That is a more environmental concern for me all the time... My recycling bin will almost be full every week, every fortnight. That is how I see the environment” (MITCHELL)

The ‘egoistic values’ category was concerned with self-interest, including ‘following what you are told from above’; ‘being influential’; ‘living a varied life’; ‘living in a beautiful world’; ‘maintaining cleanliness’; ‘being economical/ efficient’; ‘being not wasteful/ saving’; and ‘I don’t have time to take care of the environment’. These values describe perspectives on how individuals live their lives. Some interesting findings from this values category are worth pointing out as the following.

It is interesting to compare how the values of ‘being influential’ and ‘following what you are told from above’ are viewed in Case A in relation to Case B. These values emerged as generalised findings from all experiences the employees related to the researcher during the interviews rather than coming from direct quotes (i.e., answers to the PEV question of the interviews). Many employees in Case A expressed that ‘being influential’ was a significant value for them in the way they expressed to have strong desires to question, give opinions and change the environmental initiatives at the hotel.

“For me, looking after the environment is really crucial ... Not only my own behaviours [but also] trying to influence the companies that I work for to try to engage [them] with the sustainability side as much as they can... I like to see the company doing this [environmental initiatives] because they do not have to. You could spend the same amount of time and money, greenwashing some provocations and making sure that you are in the good side of the public opinion without actually taking some actions. Does it [company values] echo my values? No and I like them to see a lot more [to be done].” (MORGAN)

‘Maintaining cleanliness’ was a distinctive egoistic value possessed by many female room attendants of the HK department.

“As a woman, when you go to your house, you know how you want your house to be, how your room to be, how your toilet to be, all that stuff. That is my passion. I love clean stuff. I do not like when I come home and maybe I see a spoon and I walk on it. I have five kids; I know it is not easy but [laughs]... I like everything neat...Mummy wants the whole house to be clean.” (FERNANDA)

The third value category, namely ‘social-altruistic’ values, demonstrated concern for other human beings. It included ‘keeping a good and sustainable environment for the long term for next generations’; and ‘protecting my family from pollution’.

“My main environmental values are, I'd like the world to continue in a good state because I've got grandchildren and I'd love to see my grandchildren enjoy the earth as much as I have.” (MICAH)

Table 6-3 lists the employees by their PEV levels. Overall, the PEV levels varied among the four types of employees. This finding helped in understanding the link between the PEV, CEV and PEB among the different types of employees when it comes to the next sections. Detailed explanations of how each informant’s PEV is examined can be found in Appendix M.

Table 6-3. Employee typology by PEV characteristics (Case A)

Employee typology	Group category 3	PEV characteristics	Employee
iM	Ir	Strong	MAXWELL
		Strong	CAMILA
		Weak	MATTHEW
RD	Ir	No PEVs	MASON
		No PEVs	FERNANDA
	Ir	Strong	FAITH
		Strong	MARK
		Strong	MICAH
		Strong	FRIDA
		Unknown PEVs	R14AB
		Weak	FIONA
		Weak	FREYA
		Weak	FATIMA
		Weak	FRANCESCA
VIT	IR	Strong	MORGAN
		Strong	MAX
		Strong	MARIO
		Strong	MARSHALL
		Weak	FELICITY
		Weak	MARCUS
		Weak	MITCHELL
		Weak	MILO
		Weak	MICHAEL

Source: the data analysis of the current study based on Methodology chapter.

6.4.2.1.1 Sources of PEV

Figure 6-3 shows various sources influencing the formation of the employees' PEV. The larger size of the box implied the greater importance of the source. For example, the biggest size of the box 'family growing up' indicated that this source had the most cited source in forming the employees' current PEV.

Figure 6-3. Sources of PEV (Case A)

Sources of PEV (Case A)				
'the influence of their parents on them when they were growing up' (17 c)	'real life experience' (12 c)	'CEVs' (8 c)	'professional experience' (6 c)	'the characteristics of the areas they live in' (e.g. whether their home area is abundant in natural resources) (6 c)
	'internally self-driven' factors (10 c)			'co-workers' (6 c)
'media' (15 c)	'country norms and culture' (9 c)	'local government' (5 c)	'current family' (3 c)	'local businesses' (1)
			'training' (2 citations)	'college' (1)

Source: analysed the data from the study of Case A using NVivo

The employees indicated that some sources of PEV had a stronger influence on the formation of their PEV than others. Some information sources mostly contributed to enhancing or re-confirming values they already held.

Examining sources influencing the formation of the PEV *before* and *after* joining the company was helpful for analysing the interaction between PEV, CEV and PEB. However, it was difficult to determine which sources were evident before joining the company and which developed subsequently.

'Early family upbringing' significantly influenced PEV of many employees. Employees who had a loose family structure or left the family at young ages were less influenced by these, than by their personal life experiences. Furthermore, 'the domestic settings' where the individual grew up were another major contributor to the formation of stable environmental values. These domestic settings were expressed as nature-based and hardship-based. 'Nature-based domestic settings' tended to enhance the appreciation of values for keeping the environment clean and beautiful. For example, MORGAN's strong values were formed in his early upbringing, during which he lived in an area that was abundant in natural resources and had high levels of environmental quality.

"I came from a small coastal town in the Mediterranean. For us, it is quite important to look after the environment because that is what gives us our source of income to my village. We started as fishermen and now it is a tourist

spot. For us, looking after the environment is something that you learn quite quickly.” (MORGAN)

... and his passion to do the right thing as the result of his own learnt experience of real-life events and changes.

“... It was discouraging to see such a beautiful thing looking dirty ... I have witnessed the change that can be brought by the people when they see and act. All of our beaches now are certified with Blue Flag from the European Union ... That has brought a lot of money to the community.... I see the impact so a part of that was that. The rest was learning through, ...just seeing what the actual impact of your actions is. Not only from the perspective of, yes, they are trying to recycle our home and all of that, but also for example what I learned through research was about sourcing your produce in a responsible way.” (MORGAN)

‘Hardship-based domestic settings’, where natural resources for daily lives were scarce and difficult to access, formed the values of ‘economical, saving, not wasteful, hence recycling everything’ to protect the environment. This appeared to be more significant for expatriate employees than local British ones⁷. FATIMA had difficult times growing up in Jamaica and these aspects formed her values to minimize her consumption of resources from the environment or re-use everything and to live in a clean place.

“It is from my parents because they were born in Jamaica and with that, they didn’t have the running water, had to carry the water from the wells, and they didn’t have the time to think that they could waste that bit of water they used. Because when we were growing up in my parent house, we did not have central heating within the condo. We did not have all the things that people got. When we used the water and whatever water was left over, we put to the clothes to soak for the washing, so we re-used everything.” (FATIMA)

FRANCESCA strongly associated her environmental values with ‘recycling’. She mentioned ‘recycling’ throughout the interview (Researcher’s Memo 12 dated 27 September 2019). It was linked to her upbringing in China where she witnessed poverty.

“Because in China what happens is if you have boxes and empty containers you can exchange for money. And we have a lot of people pick up from the rubbish land or whatever. If they see a bottle, they will pick it up and that become a part

⁷ Employees profiles of Case A: a high proportion of staff were international or non-British. The employees were experienced with many staff had more than 5 years of experience in their current positions. The staff were generally older (30s-55s).

of their living. You make money from that recycle...In China, you do not have social help. Maybe collecting rubbish or recycling. It is a way of life of many people.” (FRANCESCA)

‘Country norms and culture’ affected the PEV formation of some employees to some extent. For example, British mining coal culture seemed to have a big impact on the UK for MATTHEW (who was an older British national) when he grew up commonly with coal use and limited education on environmental issues which influenced his PEVs strongly.

“... education? No because my education is so long ago. It was not thought or talked about it then. Hopefully, it is now in schools and universities. It should be if it is not, but it did not shape my world at all. I grew up using coal and the mining coal [culture], and 1974 was having power cuts and stuff like that [which affected me].” (MATTHEW)

FAITH’s PEV was strongly rooted in her ‘early childhood growing up’ influenced by ‘family education’, ‘country norm’ as “Poland is a clean country” and ‘kindergarten education’. It was seen in her more than other employees that she emphasized the strong influence of Polish national culture in her values of ‘maintaining cleanliness’ of the world.

“...Poland where I was born, so I remembered when I was maybe five or six year old ... and I dropped the wrapper [of the chocolate bar] on the floor and my mum was like ‘this is not acceptable’ - she made a big issue of it because Poland is a clean country at the end of the day and so if you go to the street there are bins every five metres so people are taught from very early childhood that you need to put waste paper into the bin.” (FAITH)

When joining the company, CEV, ‘professional experience’ in their current role, and social interactions with ‘co-workers’ affected the informants’ PEV to some extent. However, CEV influenced the formation of the employees’ PEV to a lesser extent.

“...the company is not there yet [his eyes are sparkling, and his voice is raised]. They are still going to do a hell of a lot more. If you work for a company that has no CEV, then you would personally feel no point in trying... However, I feel here at this hotel and within the company, if I do have a sustainability idea or anything to do with the environment, the hotel would support me in the idea and implementing it.” (MARIO)

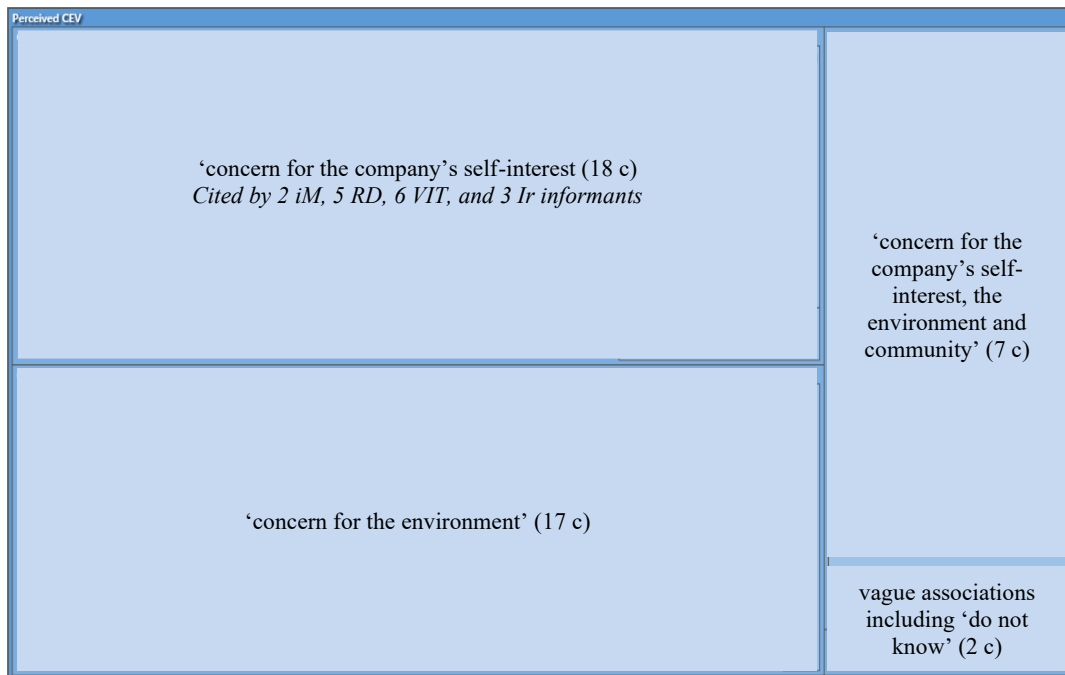
For some employees who held strong PEV prior to joining the company, the CEV was less influential in forming their PEV.

“My values do not come from the company. My values come from my upbringing and interest in the world that I live in...I have been blessed with an upbringing that put me straight in the thickness of it.” (MORGAN, FO manager)

6.4.2.2 CEV

The researcher asked the UK employees “what are the CEV you perceive from the environmental communications within the business? or “What corporate values does the environmental communication about the environmental initiatives convey to you?” They were made aware that their responses on their perceived CEV were associated with the environmental messages communicated from the HOs to the hotels and internally within the hotels. Four categories of responses to the CEV questions are shown in Figure 6-4. Larger sized boxes reflect the greater importance to the employees of the perceived company values. The count is based on the number of ‘direct’ citations of the relevant CEV mentioned by the employees in NVivo software (see Appendix R for the detailed matrix for direct citations by employee typologies).

Figure 6-4. Categories of responses to the CEV questions (Case A)



Source: Compiled from the current study using NVivo

Many UK employees started their unprompted responses to this question by talking about the company's concerns for its profitability, etc (which is not a CEV) ... as the most important corporate value when they were asked about CEV. The informants associated 'concerns for the company's self-interest' with 'being not wasteful', 'efficient', 'cost saving', 'profitability' and 'marketability'. For example,

*"[the priority and commitment of the company is] Profit [as number one], [then number two is] guests; [Number three is] Employees; [And number four is environment] yes [environment]...I think that is the right sequence because you must run a business and run it effectively as possible, or we wouldn't be here."
(CAMILA)*

"Their main focus for the CR programs is to change the image of the company but with the ultimate goal of improving the company's profitability and the company's marketability. Are we likeable? so that more and more owners flock to us? Are we perceived by our guests as being friendly so that more and more of them come to see us and are they with?" (MORGAN)

MORGAN added that he did not like this CEV, with some facial expression of feeling very frustrated.

"Are we engaging with the community in a sense that they are rewarding us for that? I just don't like that approach." (MORGAN)

MILO who perceived the CEV as 'money-oriented' and for 'marketability' rather than real environmental commitment to actions accepted with the company that it was not easy to implement in practice compared to policies.

"Sometimes it comes down to money because-- Have we got the best green environmental canteen, or have we got the best green environmental way of using electricity, gas, or equipment really? if over time, ... we're showing and utilizing all that and also showing that to our customers, -- It's like talking the game, but it's actually you need to back it up with actions and to support it, and I think at home, it's quite easy because you have a green bin and you have a black bin, so you can recycle quite easy but actually we don't always here-- you can only just do little bits at a time." (MILO)

MAXWELL viewed that there was a conflict between 'profitability', CEV and sustainability actions for the company.

*"Therefore, the company becomes less profitable. The hotel down the road is not doing that so the rooms are cheaper, so people go there instead of coming here. That's unfortunately the way of business and life and it's difficult."
(MAXWELL)*

The employees who reported the company 'concern for the environment' (which is a CEV) interpreted CEV 'concerns for the environment' with 'being environmentally friendly', 'caring for the environment and responsible for the environment' as the most important CEV of the company.

The employees who reported the company 'concerns for the company's self-interest, the environment and community' hand in hand say,

"From a company point of view, they talk about saving energy but that is double-benefit. By saving energy you are saving money." (MICHAEL)

"From the company's perspective, to save costs but that has an impact on the environment. Like I said, I may not like the motivation, but I cannot argue with the results. The results are clear because the company wants to reduce and wants us to be efficient. We use a lot less paper and electricity than we used before. Therefore, we're having a better impact on the environment." (MORGAN)

FREYA indicated that the company valued saving the waste and money in the example of promoting saving foods in the kitchen. She also added that she agreed with this.

"They want to save money and don't want to waste the food...It's the right thing they are saying because when we fill up our plate and eat just half of it and then we throw it out, so it is waste of money and food." (FREYA)

Some employees had vague responses to their associations of the CEV through the environmental communications. MARCUS had some general perception about CEV to do something good for the environment whereas MASON said, 'I don't know'.

6.4.2.3 PEB

Matrix tables of the PEB related to EE actions at work by employee typologies (see Appendix H) help in identifying the characteristics and common patterns of PEB among each type of employees. Overall, the current EE actions were common to four types of employees across different departments. They associated the actions mainly involved with 'turning (equipment) off when not in use' and 'turning the temperature down where possible' as being EE actions. Most employees across all departments stated that they understood and implemented energy-related actions. The detailed findings for the PEB of each type of employees are presented in the following sections (i.e., Section 6.4.2.3, etc).

6.4.2.3.1 PEB of 'RD'

The EE behaviours of RD were studied from three evidence sources, including (1) self-reported behaviours gathered during interviews with operational employees on their own EE behaviour; (2) self-reported information provided via interviews with the managers of operational employees, providing information on whether their employees implemented EE behaviours at work; and (3) observations of actual EE

behaviour performed by employees, as observed by the researcher during her field research.

From the self-reported behaviours in interviews with the operational employees, overall, many employees claimed that they 'always adopted EE behaviours' whilst some acknowledged they 'only adopted these behaviours to some extent'.

A room attendant listed the environmental actions she took at work alongside EE behaviours even though she was only asked to talk about her EE actions.

"If talking about my daily works related to environmental protection, we save electricity, water, separate rubbish, and reduce plastic bags. These can be seen closely in my daily works. The hotel is implementing a campaign to reduce water bottle use, but I do not know what the progress of this initiative is because I am not the person implementing it." (CHÂU)

Furthermore, the extent of the incorporation of EE behaviours into RD's current work was linked to the type of departments they worked for. The behaviours within the non-operations departments such as Finance (usually referred to as "departments upstairs") were minimal or simple (i.e., not having significant impacts), compared to other operational departments (usually referred to as "departments on the floor"). For MARK and FAITH (both financial assistants), who were classed as minor RD, their current actions were simply to turn off everything (mostly their PC, lights, and radio) when finishing the day or utilising energy-efficient equipment. For example,

"Turn the lights off if not needed. Turn radio off. Turn computer off. Those are main ones." (MARK)

There were similar findings for some employees in the operational departments such as FO and H&S. These employees were generally of the type 'minor RD'. For example,

"Switch computer off at night, switch everything off at night, switch the light off when you go out to the office and you going home, only use the heater when you need to, keep the door close to conserve what warmth you have got within it." (CAMILA)

A manager indicated that the extent of EE behaviours depended on the current jobs which the FO employees were in.

"This change is depending on the position that you have. Right now, on the role that I have, for me, that is simple as making sure that I do not have computers turned on that I do not have to turn on lights. The AC is only running when it has to be running. For example, now that it is very cold outside, they have got

heaters on. You can have one heater running if it is next to you. Keeping a heater running when you are 10 meters away, it is a waste of energy.” (MORGAN)

From the analysis of the job roles of the employees belonging to ‘operational departments’ such as HK, Kitchen and C&E (these employees were generally classified as ‘main RD’), their EE behaviours were more focussed around activities that embraced managing energy consuming equipment, including lights, air-conditioners, heaters, vacuum cleaners, televisions, radios, hot showers, cooking equipment (for example, gas oven, electronic oven, gas burners...), heaters, laundry and dish washing machines, driers, beverage machines, etc. However, they reported that a similar set of *generic* EE actions/behaviours were incorporated into their current work and that all of these generic actions were mostly about ‘turning off the lights’ whilst other EE behaviours related to turning off other equipment. For example,

“All we can really do is all lights off. Don’t leave lights on.” (FIONA)

Other room attendants reported that they switched off everything.

“When we’re checking the rooms, we switch off all the lights so that they are not left on and anything like the TVs and that is switched off, when we finish cleaning the room and making sure that nothing left on during the time.” (FATIMA)

C&E employees were aware of the need to turn off lights when not in use and implemented this action to some extent. However, they could not do that in many other instances to reduce the energy impact due to the nature of their work.

“With regards to energy specifically, I try to think of energy saving initiatives that we have in place. Again, it’s difficult for us, energy specific, because for example the lounge which is our biggest operation, it is 24-hour operation constantly, so you don’t really have an opportunity to reduce the energy impact that because you do have all of equipment running constantly throughout the day throughout the year. .., hotel is one of the biggest creators on waste and usage of energy, it depends on the operation, it depends on making sure that workable to have everything up and running once the guests still there and then being aware of it, and making sure when they aren’t there, we will take those opportunities to reduce energy.” (MARCUS)

Although MARTIN chef held the view that the environment was important for him and his daughter, he acknowledged he was aware that some of the ways in which he cooked food was wasting energy. However, he chose not to implement any energy saving actions in preference to ensuring the ease and timeliness of dish preparation

because the priority was getting food out to customers as quickly as possible. Consequently, acting on environmental issues in the kitchen was not something that he was thinking about on a day-to-day basis.

“There isn't anything that I will do because every day it's the same. We come in we turn the oven and certainly stoves on, and they are on till after two, three o'clock, then they are off... Yes, just turn it on and leave it on.” (MARTIN)

A second evidence source came from the six observations of full-time room attendants, chefs, and cleaners operating ‘Back of House’ unit (as ‘main RD’) on their EE behaviours. The researcher was informed that this observational period was a quiet time at the hotel. Some employees incorporated EE behaviours, but some did not follow these behaviours throughout the whole shift. In three other quick observations of night-shift cleaners, because their jobs were mainly involved cleaning the public toilets and corridors, the researcher observed their works used energy significantly throughout their shifts. These operational employees were not following the verbal guidance very closely. For example, it was shown in the critical observations of energy use in the main kitchen on 15 February 2018 from 6am to 2pm and 4pm to 11pm in Table 6-4 (also see Photos shot by the researcher in Appendix L).

Table 6-4. Critical observations

Critical Observations	Visual evidence
The kitchen hobs had no separate switches. One switch turned all the gas hobs on and off. The common practice was that all the hobs were turned on at the beginning of each shift and turned off at the end of each shift.	Photo 1
The surrounding areas of the hobs were used for small cooking dishes.	Photo 2
One gas hob was turned on when no food was being cooked on it.	Photo 3
Two hobs were turned on when there was not much cooking activity. Electric ovens (same sizes, all are of large sizes, timer, steam, roast, bake, slow cook) – the same common practice: turned on to standby mode at the beginning of each shift and only turned off at the end of each shift.	Photo 4
Standby mode with the monitor was on when the equipment was not in use.	Photo 5
Standby mode with lights was on.	Photo 6
Baking a tray of bread with lights on. The other sections of the oven were empty.	Photo 7
Steaming three trays of potatoes. The other sections of the oven were empty.	Photo 8
Baking a tray of bread. The other sections of the oven were empty.	Photo 9
Roasting a tray of beef cakes running. The other sections of the oven were empty.	Photo 10
The electric induction hobs were only turned on when cooking the dish starts and turned off when cooking the dish finishes, which is good practice from an EE perspective. There was a separate switch to each burner. However, the electric hobs were not preferred for cooking soups.	Photo 11
The room attendant turned on the lights in both the bathroom and bedroom and left the lights on in the bathroom after finishing cleaning and moving to the bedroom area.	Photo 12

Critical Observations	Visual evidence
Seven rooms (3005, 3006, 3010, 3012, 3017, 3018 and 3022) were left with their curtains open and the lights on. We then checked with the FO staff on which rooms of these seven were unoccupied with guests. The FO provided the list. We found that two of these rooms were unoccupied, but the cleaning staff had forgotten to turn the lights and air conditioner off (room 3010 was a show room and room 3022 had no guests).	Photo 13
The salesperson forgot to turn off the lights and air conditioner after showing a client Showroom 3010.	Photo 14
Bedroom 3022 was cleaned by the room attendant, and it was ready for guests to stay. The hotel's FO system showed that this room was not reserved for any guest. The room attendant and supervisor forgot to turn off the light and air conditioner when leaving the room.	Photo 15
All individual televisions were turned on when there are no guests using them in the Health Unit.	Photo 16
The dish washer machine was running without plates on (Photo 17b)	Photo 17b

Source: from the current study

During the researcher's observations of the two junior chefs, MOSES, and MOE in the main kitchen, they indicated that they were aware of some level of energy waste from their daily work such as using the electric ovens and gas hobs.

"It's quiet down now, but all five ovens are on. There is a lot of waste." (MOE)
"That is a busy place. It is quite something, ovens on and off. They need more. Hell, of a lot of waste." (MOSES)

Some observations of the EE behaviours of the room attendants in the HK department were conducted. On 16 February 2018, starting from 9.45am, the researcher followed a room attendant FERNANDA for two hours and observed that this employee did not do anything to protect the environment. For example, she did not follow the 10-HK steps in an orderly way (e.g., she conducted a random step at her convenience as long as she got the room done) and had no awareness of energy saving actions that should be incorporated in her daily HK. She left the lights in the bathroom on when she finished cleaning that room and had progressed to the bedroom space. When entering the guest room, she turned on the television to watch during her shift (see Appendix F for the detailed observation notes). This was different from what she said she did.

"In workplace, that's what I do. If I am here, I put maybe the radio on to not be bored, listen to news, that is it. When I am leaving, I turned off everything. If I am going out now, I am going to switch off the switch. That is it. The next guest come and only it is off. You don't have to leave it on like this, no. Light, I don't leave lights on." (FERNANDA)

At 6pm on 14 February 2018, the researcher walked outside the hotel building with a night duty engineer. Together, they carried out an exercise counting how many rooms on the third floor had their curtains open and the lights on. Two unoccupied rooms were left with their lights on. (See the description of Photo 13, 14 and 15 in Table 6-4).

Observations of the two areas of the Health unit including the swimming pool and fitness rooms were also carried out. All individual televisions were turned on when there were no guests using them (Photo 16). The fitness employee told the researcher that he had no time to investigate these because he was the only one looking after several areas of the Health unit, including the reception.

Observing the dish washing area of the Back of House showed that operational staff did not have energy efficient actions embedded within their routine. The dish washing machine was running with plates inside (Photo 17a) and the machine was also running without plates inside (Photo 17b). The observations were between 8pm to 9pm at low operational demand hours.

Self-reported sources of evidence from hotel managers showed that the managers had different perspectives on the extent to which their employees were implementing energy efficient behaviours at work. An Executive Chef Deputy talked about his awareness of energy waste in ovens as a result of a lack of implementation of switch off policies in his department. However, it was not practical for his chefs to prioritise energy saving over the operational demands of their jobs. According to him, an active choice to waste energy was justified on operational grounds.

“Sometimes it is different because what will happen sometimes, they put in a little bit earlier. Some items need to be cooked later. That time we cannot always like saving, saving, saving, something which needs to be operational benefit also for us... some items need to be cooked fifteen minutes; some items need to be cooked five minutes. We are not going to save much energy. The moment even though you put in the same oven the time you opened and again you close it; you are going to lose the energy.” (MITCHELL)

A manager of Back of House showed to lack knowledge on how her employees reduce energy consumption within the operations she oversees. She thought energy saving was not dependent on human, but mechanical and engineering factors.

“Difficult with [human]... maybe better machines. Better machinery, for instance if older machine, you know they take more water, they broke down easily. and then you know...” (FRANCESCA)

Engineering and Security managers had different perspectives on EE behaviour of operational employees in the Kitchen, HK, and C&E departments. MARIO (Manager of Security) reported that the operational staff such as chefs, room attendants and porters generally did not have a mind-set of turning equipment off when not in use. For example, senior porters in the conference rooms did not think about turning off the lights or heating after they had accessed and finished doing work in the rooms, and hence, they did not do that. MATTHEW (Director of Engineering) suggested that it was too difficult to change kitchen employees' EE behaviours.

“Kitchens are really bad because they never switch off anything when they go. That is - so everything needs to be on because they offer a room service - That's one of the things we have got. There are not many kitchens that we have got on energy other than the lighting...They still keep the gas burners on ready to grill off the steak. I know you have just been spoken to the chef, but I think it is difficult to get that message over. Some do it. Some are better than others, but some are just-- they go in there and everything's on.” (MATTHEW)

MICAH (a day duty electrician) believed that a lot of gas and water had been used wastefully in the kitchens when there was no operational demand for their use. He walked past the kitchens everyday as part of his main tasks. He suggested that the Lounge Kitchen was where the most wasteful activities occur.

With further analysis of PEB among the 'RD', this group had three main PEB patterns (see Mapping PEB by Subgroupings in Appendix P). In the first subgrouping, many employees claimed they *always implemented all pro-environmental actions*. These employees included a majority of room attendants, as well as many kitchen staff and non-operational staff. In the second subgrouping, a small number of employees claimed they *adopted pro-environmental actions to some extent*. This related mostly to the kitchen and C&E staff. In the third subgrouping, there were several employees claiming that they *had no ideas whether they were involved in PEB*. These individuals fell mostly into the grouping of night-time staff.

Next, the three other types of employees such as 'iM', 'VIT' and 'Ir' generally did not engage physically in significant energy consumption activities except for using energy to power PCs, lights, and heaters in their small offices. The findings of the EE behaviours of these types of employees were sourced from their self-reported interviews and the views of employees towards their leadership on PEB. Most of them reported they had no issues in turning off equipment and lights in their offices when they were not in use. The following sections simply provided the evidence of PEB for the three types of employees.

6.4.2.3.2 PEB of 'VIT'

The PEB reported by 'VIT' included both their own PEB and the environmental actions of their departments since these employees played senior managerial roles at the hotel. Some managers reported the energy saving was done as much as possible, but they pointed out that the opportunities to reduce the current levels of energy consumption were limited. In their view, recycling was an easier area for acting than energy. For example,

"Within my department, I expect that we turn everything off when we're finished with it. We do not leave it running all day... I have got less gas equipment now so that we do not have to run gas all day long. We have got more efficient equipment where possible; we turn everything off at the end of the day that can be turned off...Do I have a list? No, because our physical list does not say, "Switch off lights." It is what can be done." (MICHAEL)

"If I'm completely honest, I probably haven't been as progressive as I should be within my department towards having impacts on the department in terms of the environment... it still happens and still an issue that we looking at...With regards to energy specifically... it's difficult for us, because for example the lounge is 24-hour operation constantly, so you don't really have an opportunity to reduce the energy impact of that ...We don't have a list of EE actions." (MARCUS)

Few managers said their departments had been 'always implementing EE measures' and that felt that there was no need to change within their departments.

"... That is included in all the 10-step training. As far as I am concerned, they have always been here, the EE actions. It is just part of package that is part of a housekeeper's responsibility to ensure when they are cleaning the room, they are considering the environment as well. I have been in the HK industry for 40 years. Even though it might not have been so evident when you were being trained, it was always your best practice to turn off the lights, watch the water and think of the environment. Different hotels deliver the environment regime differently. We created the 10 cleaning steps two years ago, but we've been cleaning rooms like this for generations." (FELICITY)

6.4.2.3.3 PEB of 'iM'

'Switch off when not in use' was reported as a common EE action as claimed among 'iM'.

A manager reported,

“My daily work is sharing the message and advising engineers like R on how to look at things, do things, how to get energy projects through the door on return on investments. We know LED lighting should be everywhere. They have not got it here because their owner does not want to invest the money to do it even though there is a great return on investment...My job is to encourage anybody. [The informant]'s converted, I know he's converted but the rest of the hotel, the GM try and see that light, finance manager sees that “Do it now you'll save at the end of the year. Why you're doing it?” My job is sharing the message is trying to provide hotels and the people I talked to with solutions.” (MATTHEW)

A HS coordinator said,

“... switch everything off at night, switch the light off when you go out to the office and you going home, only use the heater when you need to, keep the door close to conserve what warmth you have got within it...That is the same for conference rooms. If it is not in use, the light should be switched off, not heated until the people are due half an hour before going in and then general recycling that the porters do when they are setting off and breaking down the room...We do not have a list of energy saving actions. No, I mean, it is just the general actions that we do through the sustainability group.” (CAMILA)

An engineer reported,

“Now, our projects are LEDs. We are changing lamps for LEDs where we can, but there are 30,000 lamps in this hotel. Some of it or a proportion of it needs to be an investment. We're speaking to the new owners, as we did the previous owners to say, “We really ought to do this. There's a return on investment and everything,” so they are looking into that...[Hot] water we are looking at poolside showers, because people leave the poolside showers on all the time. We are looking at the push buttons so that when somebody feels switch itself off.” (MAXWELL)

6.4.2.3.4 PEB of 'Ir'

A supervisor in Back of House reported that his energy consumption activities mostly involved electricity consumption of washing machines, cleaning machines, and using lighting, however, he emphasized these behaviours were not associated with energy efficient behaviours.

“So almost every day we try to keep the machines off, which are the machines we not using...Also switch off lights...When it is busy, there is nothing you can do because when you are busy, every single area gets to be used. So, most of

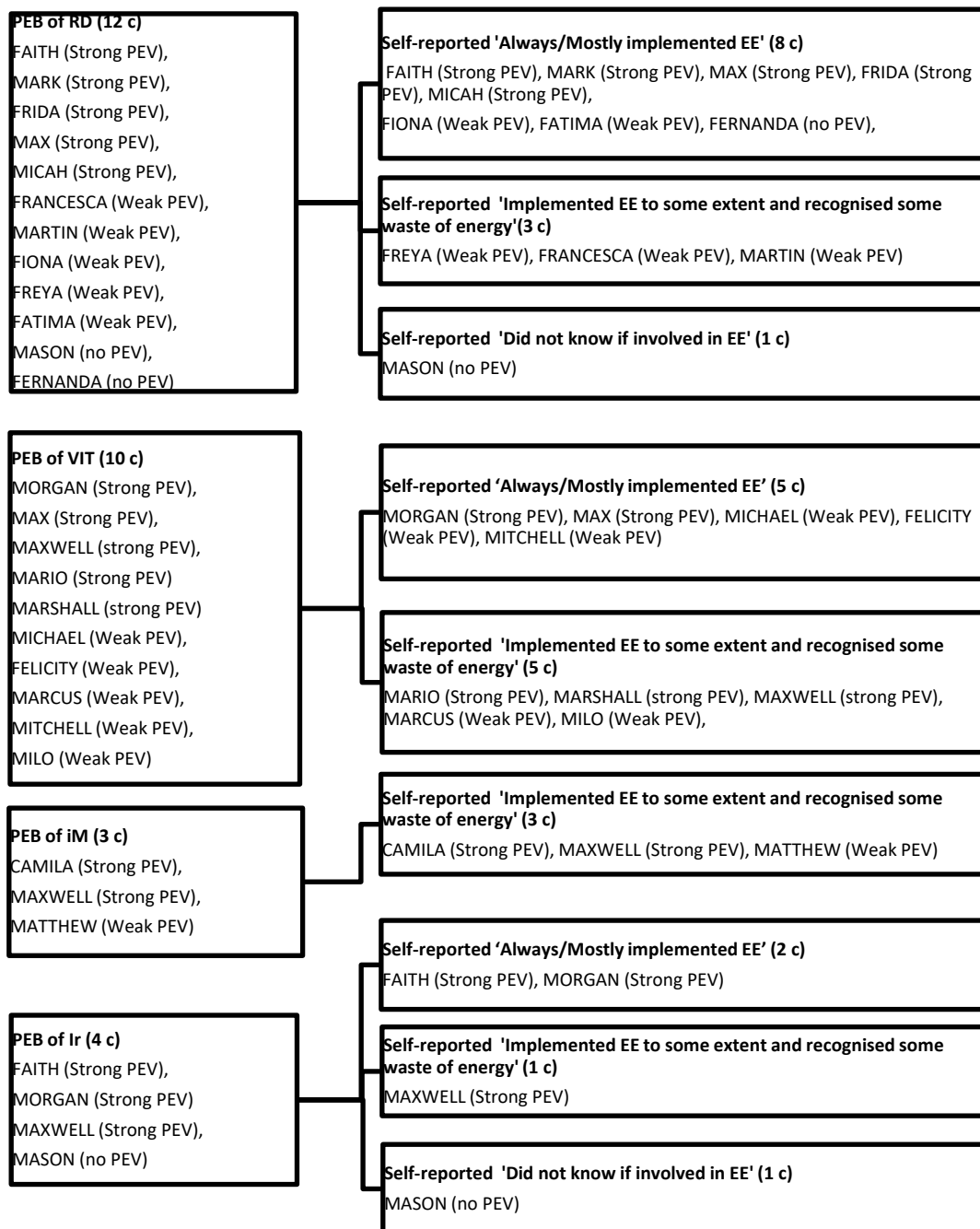
the areas that are not getting used are after midnight...We can easily finish work in the area and start switching off the lights. But when you come down on a busy day, you know what I mean, most of the time, most of the area, we have chefs like they do till 11pm to 12 midnight.” (MASON)

6.4.2.4 PEV-PEB Interaction

Overall, majority of RD who claimed ‘Always/Mostly implemented EE’ also reported to have strong PEV.

Figure 6-5 shows the mapping of ‘PEV-PEB’ by each employee of Case A which was done through the linking unit ‘informant ID’. For example, the box “Self-reported, Always/mostly implemented EE” shows those UK employees who reported they carried out the EE actions at work well had strong or weak PEVs or no PEVs.

Figure 6-5. Mapping PEV-PEB interplay (Case A)



Source: from the current study

FRIDA ('RD', strong PEV) who self-reported that she 'always/mostly implemented EE' as required implied that her strong PEV made her act more towards EE.

"Yes, [my PEV influenced my PEB]. I notice I am more aware of when things are switched on when they do not need to be. If we are not using the kettle, it can be turned off. In that sense, I am more aware of it. I always turn the lights off when I leave a room. If I can see lights on when there is no one in there, I will turn those off. I do think it has influenced me, my behaviours at home, I am

starting to put into place at work. I really put the tap on when I am washing my hands and turn it off rather than leaving it running. I have noticed that.” (FRIDA)

On the other hand, MARTIN (‘RD’, ‘who had weak PEV) self-reported 'Implemented EE to some extent and did not implement some EE'. He indicated that his current PEVs alone, which although they interacted with his PEB, would not make him change his current energy consumption behaviour unless there were other contextual factors in place. He said, these factors included new cooking equipment (top stove with six burners saving more energy which allowed cooking one at a time to replace the current gas top stove turning on the gas top surface equally for six pans at the same time), more communication on environmental initiatives, some specific written guidelines in place and getting every chef on board with these initiatives because the kitchen was a highly stressful environment and the chefs would not have time to think about changing their behaviours, especially if this meant that cooking food took longer.

Some ‘iM’, like MAXWELL (strong PEV) reported that their PEVs influenced what they were doing to reduce energy.

“Again, both. Me personally, I drive it even if we didn't have a value target to drive at, if we didn't have the green team, if we didn't have sustainability, I feel as part of my role as an engineer I would personally be pushy, whatever company I worked for to say, “We can save energy here. We can save landfill,” things go into landfill and that from my personal point of view. It just so happens, as I said earlier, the company is a good company to work for, so it goes hand in hand really.” (MAXWELL)

MAX (‘VIT’, strong PEV) felt a dilemma between his own PEV and actions in implementing EE within his department. MAX was a leader and acted as an Ir and iM more than as a RD for his operational staff on the floor level. As a leader, he spoke on behalf of the organisation rather than with regard to his own actions concerning EE, changing his responses from “I” to “We”. MAX held a strong set of PEV. However, his alignment with the CEV showed that he prioritized guests and co-workers first, hence the sustainability actions had to be accommodated ‘for our clients and co-workers first’. He suggested he spent a lot of effort thinking about how to reduce energy consumption and carry out more recycling within his department. However, the EE actions in his department were limited to turning off equipment, closing the doors and reducing the amount of printing. These actions were voluntary and not monitored systematically. He supported EE and had strong PEV; however, he found it difficult to implement in practice.

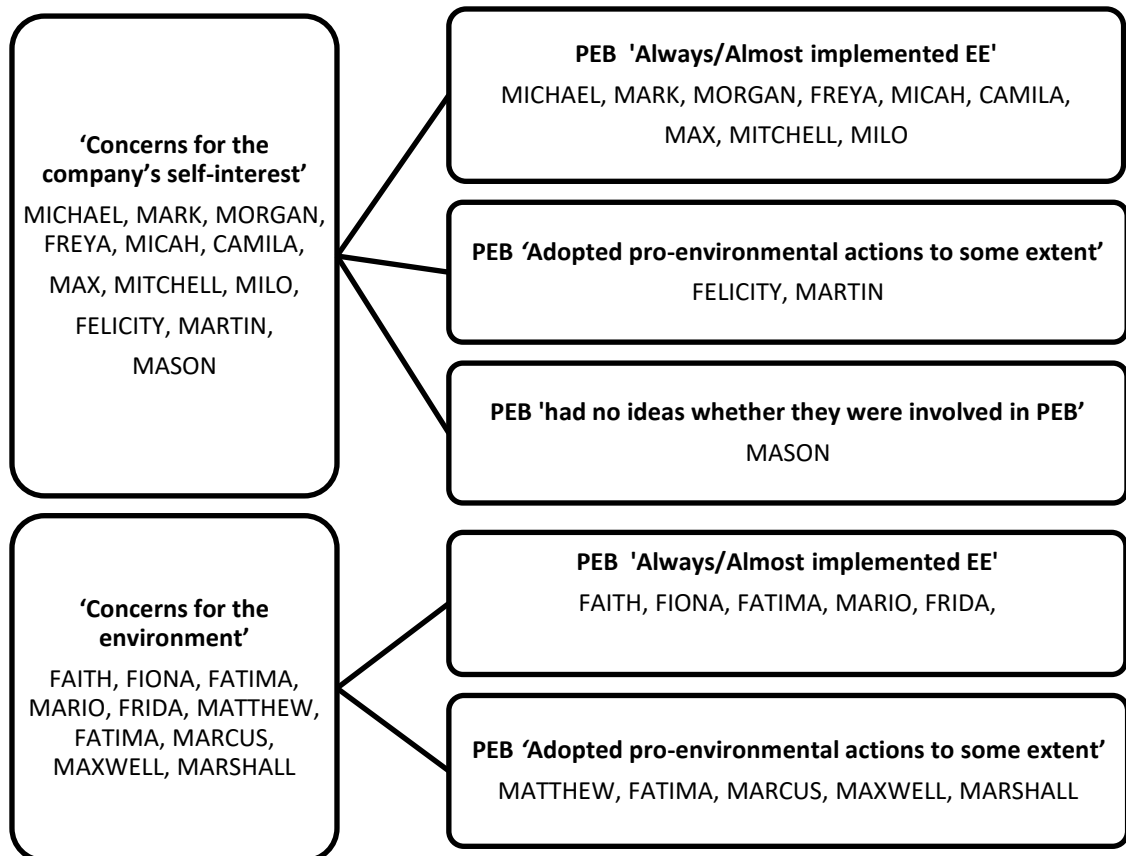
“As a principle, [I support PEB] 100%. As for implementation, there is a difficulty for everyone. I am sure that everyone you talk to finds it difficult to implement.

I make sure every single drop of water counts because sometimes everyone is so used to have the water running all the time and so on. Even when you go to a hotel yourself, take long showers and do not even care about it because nothing is coming out of your pocket. As a principle, I am 100% with it. In practice, it is difficult to implement every single step, although it's not impossible.” (MAX)

6.4.2.5 CEV-PEB Interaction

Figure 6-6 maps the link between PEB and CEV. The CEV used was the response category ‘the number one importance’ as indicated by the UK employees (among the four categories of responses from number one important to number four importance as outlined in Section 6.4.2). The matrix CEV-PEB of all UK employees shows that CEV related PEB to various extent. Most of employees with perceived CEV ‘Concerns for the company’s self-interest’ and ‘Concerns for the environment’ reported that they ‘Always/Almost implemented EE’ or ‘Adopted pro-environmental actions to some extent’.

Figure 6-6. Mapping CEV - self-reported PEB (Case A)

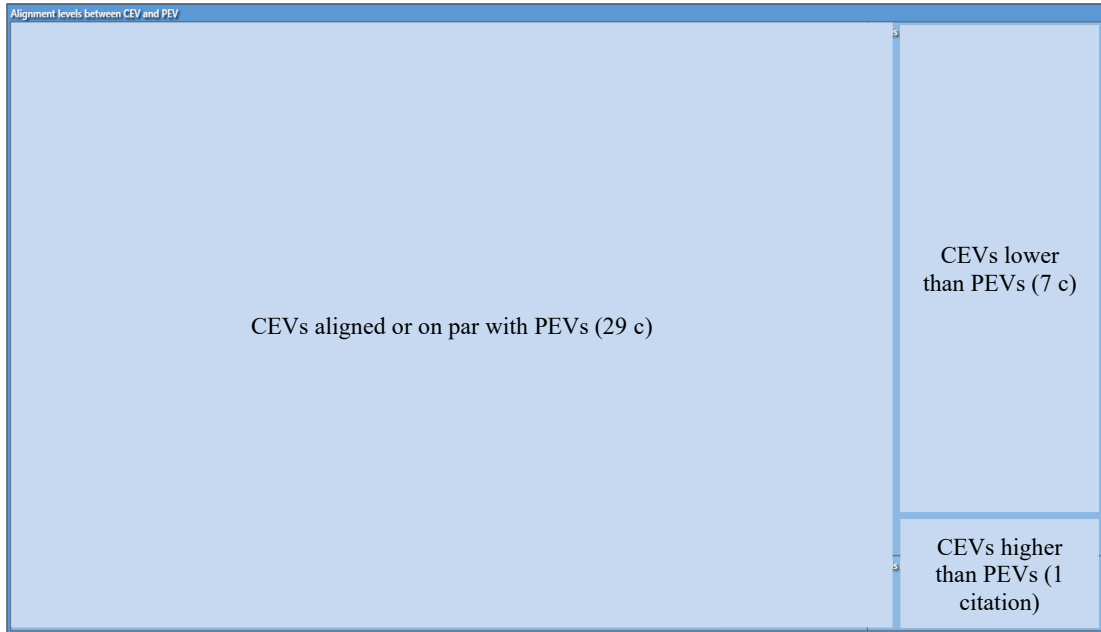


Source: From the current study

6.4.2.6 PEV-CEV Interaction

Figure 6-7 presents the employees reported the alignment between PEV and CEV, and the interplay between the two.

Figure 6-7. PEV-CEV alignments (Case A)



Source: NVivo analysis of the current study

Many employees who perceived CEV in line with their PEV said their CEV-PEV relationship was associated with recycling, saving as much as possible, appreciation of food saving, development of good communities protecting the environment. For example,

“[the corporate values in this communication equal my PEV in the ways] that we should be saving water where possible we should be saving power where possible and saving energy and we should be recycling much more to make life more sustainable for everybody.” (CAMILA)

“Yes, I would say to some degrees. I am not too wrapped up on the CEV specifically, however, I would say it is in line with it, I mean, be one of the largest hotel companies in the world and having the ability to affect many changes in the environment because of what we do. The initiative with the straw and things like that. That’s the one in line with my personal values and view on the environment and I absolutely think that they are on the same level as me.” (MARCUS)

MARIO (Director of Finance, Chairman of the environmental team) said his PEV and the CEV were aligned. However, he suggested the company could do more.

“They line pretty parallel. They are remarkably similar, although I feel they could do more. They are already stepping in the right direction... For me, it could be more about, as well for the company, planting of trees, simple things that are actually creating more of an eco-system within our hotels.” (MARIO)

Fewer employees identified that CEV was more important than PEV. For example, FIONA (HR supervisor) stated that CEV drove her to implement the PEB at work whereas she did not do so at home.

“At home, I do not separate my waste and all that, I just do me cardboards and plastics. I suppose it does have a bit of an influence on you.” (FIONA)

Some employees stated that CEV was not as strong as their PEV.

“This [the environmental communication echoed my PEV] is light. Let's say, my personal values are more than this [CEV]. Because this is a global all reaching, very general approach. We need to look at more of the detail and more of the operations of what is going on in the hotels, from an engineering department to the engineering operations...” (MATTHEW)

“Does it echo my values? No, I like them to see a lot more. Again, their main focus for the corporate responsibility programs is to change the image of the company but with the ultimate goal of improving the company's profitability and marketability. Are we likeable, so that more and more owners flock to us? Are we perceived by our guests as being friendly so that more and more of them come to see us and are they with-- Are we engaging with the community in a sense that they are rewarding us for that? I just do not like that approach. For me, looking after the environment, it is selfless. It is the right thing to do and therefore wherever we can, we should do. You are searching for a reward or a benefit from it. It takes away a huge chunk of the value of the action. That is what why I said. I like it, but it doesn't echo my values, because I think they want something for it.” (MORGAN)

Some employees reported the CEV enhanced their PEV, rather than forming them.

“Not personal. No, [it did not form my PEV] because I already had that anyway. It might more to the younger members of staff because they're already in the '20s onward and when you're 20 you don't think of having environment. It's a last thought to their minds.” (MARTIN)

"It helps because I feel that they have some very good values and I feel that the sustainability, the green team that support my values and I can enjoy the activities that I do with those team members so that is good." (CAMILA)

MARCUS suggested that recycling was the one CEV in alignment with his PEV. He had little interactions with CEV and environmental initiatives (EE in particular) at the hotel. He was not aware of all the existing CEV in detail which were published on the corporate website and other channels, and of any EE actions.

6.4.3 Informal Practices in Energy Consumption

This part presents the findings and analysis of making sense of the 'informal practices' in energy consumption what were widely accepted in different hospitality working environments and contexts (i.e., Kitchen, HK, and C&E) for Case A as well as the different practices of the notion. It also includes the findings and analysis of the role of these play in driving EEB.

6.4.3.1 Informal Processes

For the Kitchen, the informal practices in energy consumption (i.e., gas and electricity) was shown in the widespread use of informal processes in place across operational departments. There were no official processes, guidelines, practices, or list of EE actions within the Kitchen department. Instead of that, there were *informal customs and routines* in the minds of the chefs for operating the kitchens efficiently. MICHAEL (Executive Chef, 'passive VIT') reported there was no formal work process in place in his kitchen unit *"No, there is no [process in place to save energy]"* and that operational practices in the kitchen unit were very informal, not written down or verbal. The monitoring process was very informal and not written down. Similarly, MAX reported, *"[There is not the formal list. No, [It]is a common practice to...turn off the lights and close the door behind it."*

Similarly, for the HK department, although there was a quality control process in place for supervisors to check the work quality of each room attendant (mostly cleanliness and tidiness standards), there was no measure or monitoring process for EE or any other sustainability efforts within the department.

"There's nothing we can analyse to say that "Well done. All the lights were turned off." We cannot do anything about that. There is nothing that we have got as a document to say that they are adhering to what we are asking them to do. We just hope that they have listened to their training. There's no evidence to say that our department as how to the big picture, so to speak, but we hope that every little bit actually helps." (FELICITY)

Again, similarly found for the C&E department, MAX (C&E manager) suggested that EE actions were possible when he acted himself by talking about the message to the heads of the staff in the meetings. However, the biggest shortage was that there were no written and systematic processes on how to implement EE actions in the current standard work procedures (for example, standard procedures on how to set up a room including how to use energy related equipment) and no written and systematic measuring and monitoring mechanisms in place for EE actions.

6.4.3.2 Widespread Use of Personal Evaluation at Work

The informality of practices was also seen in the widespread use of informal evaluations of the customs and routines across the workplaces (i.e., HK, Kitchen, C&E). When the environmental information reached direct managers, their decision about whether they were relevant to their department was subject to *personal judgement*.

"I read and review it. If it is relevant to me, obviously I would try and implement it, do what I can and see how we can implement it into the hotel. If it has nothing really toward safety or security also, I will still take an interest in it but if I cannot often influence it, I leave it for the relevant departments to do so." (MARIO)

The EE behaviours were also based on the '*personal judgements*' of the operational staff. It was not clear on what basis these requirements were developed from. The monitoring process was also based on the widely accepted personal judgements.

For the Kitchen, MICHAEL described that the 'common-sense', as widely accepted practice, was that chefs were all responsible adults who should be aware of their environment and should know when and what to do in terms of turning off/on the ovens as required.

"They are all responsible adults who need to be aware of their environment. If they think that it does not need to be turned on, then they will turn it off and if they think that the lights do not need to be on, they will turn the lights off. It is pretty much a 24-hour operation. There is only so much that can be done. You just cannot turn all the lights off because that will not work. You can turn the ovens off when they are not being used, you can turn off the gas equipment when it is not being used, you can turn off the dishwashers when they're not being used. No, I will turn them off or on as we require them." (MICHAEL)

MARTIN expressed that the personal knowledge in the mind of chefs on how to cook best without wasting any foods was the widely accepted basis.

"Yes. Nobody comes in and says, "Turn that oven off during that day and then that shouldn't be on." It is only common sense that is really required. We only

use one oven or two ovens - that is common. The other side because it is closer to them, they will just put that oven on, and they decide...Yes, we are all the same here. They're not aware of what we use and what we should not use and what we should do or what we shouldn't do.” (MARTIN)

For the Kitchen, it was commonly understood that ‘operational demands overrode the environmental actions.’. In other words, the OpE is the sole priority over EE.

“Because it is not instant like electric or induction hobs, you have to leave it running. Because if you need to do something now, someone orders something now, we cannot wait 10 minutes for it to heat up. They want it now. Whereas with induction, it is straight away or with electric for ovens and stuff, the heat is far quicker.” (MICHAEL)

“Sometimes it is different because what will happen sometimes, they put in a little bit earlier. Some items need to be cooked later. That time we cannot always like saving something which needs to be operational benefit also for us. Some items need to be cooked fifteen minutes; some items need to be cooked five minutes. ok. We are not going to save much energy. The moment even though you put in the same oven the time you opened and again you close it. You are going to lose the energy!” (MITCHELL)

For the Kitchen, it was commonly understood that “it is not practical to turn off, even not in use in kitchen!”. A lack of suitable equipment meant it was impractical to implement environmental initiatives.

“On the other hand, because of our operations, all the ovens are bigger, - You see in the Lounge kitchen the ovens there are smaller and here we do not have a smaller oven -, so we do not have a choice. We know how to cook in a bigger oven. That is what it looks like smaller. That is the thing, you would have noticed for breakfast. They use the omelette, sometimes they cook a sausage in the same oven, like that, but sometimes it's like that.” (MITCHELL)

Gas top stoves were found to be easier to use for cooking soup than electric induction stoves although gas tops were left on, wasting gas when not in use because it took 30 minutes to turn on the gas tops and for the practical reason it could not be turned on and off after the use. For MARTIN, it was not practical to turn off the gas top after he finished his cooking.

“Yes, just turn it on and leave it on because it's not practical. Common sense and practicality are different things.” (MARTIN)

It was important to define the point of turning on and off equipment which was commonly accepted among the operational staff. For example, turning things on at the beginning of the shift or day and turning things off at the end of the shift or day. There was no turning off in between tasks during a shift or day due to some practical limitations. There was a knowledge gap about EE in between the tasks of a shift/day.

Similarly found for the HK, the general perception was that turning off energy consuming equipment was an obvious action that each adult employee should know how to do, hence there was no training or ongoing communication on this. Moreover, in most interviews, it was revealed that the only message regarding energy saving actions was about turning off equipment that consumes energy after finishing the job. However, there was no detailed mechanism in place on how energy should be used efficiently in each task or each process and there was no measurement and monitoring processes for these actions (Memo FIONA).

For the HK department, the informality of practices was in lacking formal work process in place. Although there was a quality check process in place for supervisors to check the work quality of each room attendant (mostly cleanliness and tidiness standards), there was no measure or monitoring process for EE or any other sustainability efforts within the department.

"There's nothing we can analyse to say that "Well done. All the lights were turned off." We cannot do anything about that. There is nothing that we have got as a document to say that they are adhering to what we are asking them to do. We just hope that they have listened to their training. There's no evidence to say that our department as how to the big picture, so to speak, but we hope that every little bit actually helps." (FELICITY)

Consistently similar findings for the C&E, there was a widespread use of personal evaluations of the informal customs and routines. The evaluating the actions of turning equipment/lights off or closing doors were based on 'common sense' personal judgement of his staff.

6.4.3.3 Widespread Use of Verbal and Informal Communication at Work

The informality of practices was also seen in the widespread adoption of verbal and informal communication of EE practices which were mostly verbal and informal across operational departments. Direct managers and supervisors cascaded some basic environmental information (including CEV) to operational staff via *verbal briefings as a common practice*, especially for HK, Kitchen, Back of House, Security and Safety. For example, MARTIN indicates that no environmental communication reaches him or his co-workers in the kitchen except the verbal briefing from the executive chef (nickname

Chef). The most common channel to pass the environmental information from the HO or hotel leaders to grassroots employees like him is verbal whilst he and the majority of grassroots employees (around 66%) do not have access to company email system. The chef is the most important messenger to pass on any environmental information. One important reason for explaining the common use of the verbal communication of the chef within the kitchen is that many older staff are not computer literate - they do not use emails and the internet. (Researcher's Memo MARTIN dated on 19 September 2019).

Similarly found for the HK, the environmental information was verbally shared among the communication channels (Memo FATIMA). Similarly found for the C&E, there was a widespread use of verbal and informal communicating EE information which were mostly verbal and informal. The actions of turning equipment/lights off or closing doors were based on verbal reminders.

6.4.3.4 Cross-Department

There was not common practice for knowledge transfer to be encouraged cross-functions. According to MARIO (SS manager) whose works dealt closely with many cross-functional departments such as the Kitchen, HK, C&E etc., there was an issue of a lack of knowledge sharing across operational departments within the hotel. This lack of understanding of actual work processes or the nature of each department led to some work conflicts in how to consume the energy across departments would not help energy conservation actions. SS employees whose roles were involved in all operational departments, for example, they walked around and checked the rooms. They reported that they were viewed as outsiders to the Kitchen department and were not encouraged to interfere even he/she saw energy being wasted. For example, while a member of staff such as a SS guard who was patrolling and turning off all equipment in the whole hotel may not know if he should or may not even be allowed to switch off the ovens even when the ovens are not in use. The SS guards felt that they had less influence on other operational departments such as kitchens or the "living well" department where the employees from these departments did not agree that the security and safety guards should turn off their equipment. Even when no one was using the equipment, they [the chefs] did not want the security guards to turn the equipment off due to the specific work context of the particular departments. For example, it took too long (i.e., 10 minutes) to turn on and heat up the gas stove in the kitchen after it was switched off, whereas if a customer ordered a bowl of soup, this must be prepared and serviced within 10 minutes after the order has been received.

A VIT talked about his common-sense view on positive PEB in Vietnam as,

“These initiatives are small, but they are suitable with our capability to give something back to the community where I work. These initiatives are also easy to implement because the simple measures are sometimes effective. If we organise some initiatives that are big, it is hard to implement.” (DAT)

6.4.4 Pressure of Workload, and Incentives and Penalties

This section presents the findings and analysis of the role of pressure of work (or productivity), and incentives and penalties in the current PEB of the hospitality employees in different hospitality working environments and contexts (i.e., Kitchen, HK, and C&E) for Case A. The results show that the operational demand commonly override the environmental actions in the hospitality workplace. Many employees perceived this notion in the CEV. In the high pressure of time-to-delivery, the employees consciously and unconsciously choose to not implement the PEB if this means their productivity will be affected.

6.4.4.1 Pressure of Workload (or Productivity) in the HK Department

For Case A, 15-16 rooms per shift of 7.5 hours and 21 minutes per room was the productivity benchmark for each room attendant. Room attendants were expected to clean 15 rooms per shift. In reality, during the researcher’s on-site observations, the room attendants were asked to clean 20 to 21 rooms per shift and helped out other room attendants. The text below paints a picture of the work pressure that room attendants are working under:

“Researcher: Director of Finance agreed to authorize one or two paid hours for some of your room attendants just to spend one or two interviews with me. Is that workable for your department?”

“Not really, no. They are on fire training, so I will have to reduce them for that. Like I said to you yesterday, you can work with them while they are working, but they have a set number of rooms that they need cleaning. They are assessed for their productivity, so they have a set of tasks to be completed by the end of their shift. It is not like a bar manager that can wait until the next person comes up for a drink, our team has a set amount of work—You know - you have worked in the hotel industry... I have not got the staff to actually do that. Then because we are quiet in February that we have to watch every cost that we have, and it is costing. Like I said, by all means, if they agree for you work alongside them, and you can see how they clean the rooms, and then switching the taps off, flashing the toilets, turning the lights off, turning off the aircon, et cetera, I am more than happy to do that. To reduce the workload for my team to sit and

*have an interview, for me, I would say, I cannot really do that, unfortunately.”
(FELICITY)*

Most of room attendants clearly indicated that they understood the productivity targets they were set and the implications of failing to meet them due to time pressure.

6.4.4.2 Pressure of Workload (or Productivity) in the Kitchen Department

There was no data of other productivity targets for each chef except that food was expected to be delivered to the customer within 20 minutes of the order being made. And there were targets for whole kitchen unit. The researcher observed that high pressure of timing and food requirements affected the implementation of the sustainability actions of the chefs.

The kitchen employees reported that they were driven by a fixed ‘time’ metric, that is, ‘to get the required meals to the table quickly’.

6.4.4.3 Pressure of Workload (or Productivity) in the C&E Department

There was no data on productivity target for C&E staff, however, there was a time pressure at the C&E department. Several interesting reports raised by MAX on the dilemma to his implementing energy saving actions within the C&E department. He said the time pressure of the C&E workload negatively influenced the EE actions of his staff. It was the dilemma of the behaviours of his staff in choosing between the implementation of energy saving actions and productivity. There was an issue that turning off the lights when leaving the rooms in a short time could conflict the productivity as the switch was not at the convenient spot to switch off. This choice led to some human errors such as the employees forgetting to come back to turn off the lights in the conference rooms as they were too busy doing something else.

“Their reactions... to take the action to do the procedure, No. But to take the action to learn or keep, reinforce the procedure, yes. If you are taking all, every briefing and so on, make sure they are supervising the floor managers, the managers they do talk about the environment and how to do it and reinforce the procedures. That is a Yes. It is going to create more work for them but the action to do this is quite simple. They just need to think about how to turn off the lighting when you walk out of the room. But then, on the other hand, they say, "I come back to the room after two minutes and the switch is that other side, so I just need to bring a table or five tables and then after it's going back. I have to walk all the way down and come back so I'm not being efficient in my job if I keep that." Leaving the room unattended when they finish the job [unintelligible 00:29:06] Yes, definitely good.” (MAX)

MAXWELL reported there was a conflict between productivity and implementation of environmental initiatives, especially should the latter become compulsory for operational staff:

“If you start saying to them, “This is part of your job - you have got to start separating all the waste that the guest has left and put the paper here, and their food waste here and everything.” We then have to give them maybe 20 or 25 minutes to do a room, therefore, they do fewer rooms. Therefore, we have to employ more people. Therefore, there's more payroll.” (MAXWELL)

Some staff also observed a tension between productivity and environmental actions.

“Therefore, the company becomes less profitable. The hotel down the road is not doing that so the rooms are cheaper there, so people go there instead of coming here. That is, unfortunately, the way of business and life and it is difficult.” (MAXWELL)

CAMILA viewed that environmental actions may interfere with guest satisfaction and there was a fine line between the actions and productivity. There were other views that the actions enhanced productivity while efficiency was obtained.

“The hotel is committed to protect the environment, yes, and it is committed as much as it can without having too much impact on our guests stay and what our staff have to achieve. So yes, it is a fine line as to staff performing to the best of their abilities, providing the guests with all their needs at once and doing it sustainably at the same time.” (CAMILA)

6.4.4.4 Incentives and Penalties

Most of employees reported they were not aware if there was the presence of financial or non-financial incentives or penalties to help implement the EE actions that were directly related to the operational process within their hotel.

However, they reported that there were some personal incentives to encourage the staff to act in a more environmentally friendly way such as riding to work. These incentives were not directly related to the operational work processes.

MARSHALL indicated that his staff tended not to act unless they saw individual benefits from acting.

Interestingly, many employees showed a little concern about whether if the incentives/penalties in place would drive their PEB at work.

6.4.5 Environmental Visibility of Energy Efficiency Behaviour

This part presented the role of environmental visibility of EEB in the positive PEB in hospitality workplace. The results suggest that better visibility have positive links with the positive PEB at the point of actions in practice.

MARCUS (Acting manager of FB department) suggested that a reason for his passive engagement in the EE initiatives within his department was the low physical visibility of EE initiatives compared to recycling. Hence, EE initiatives seem to be there but not at the highest level of awareness of the employees. On a daily basis, recycling initiatives were more *visible* than EE actions in the context that the actions had not become habits or usual ways of doing things in the hotel. Physical visibility influences the perceived PEV and PEB of employees.

It is interesting that ‘recycling’ was the activity that was most associated with pro-environmental behaviours among employees in the hotel. It seemed ‘recycling’ was emphasised much more than other sustainability activities (i.e., energy, water, ...) throughout most of the interviews. It was evidenced that the mentions of recycling as examples in discussions were much more frequent than any other types of pro-environmental actions.

“Yes, they do share same values. I mentioned recycling already for us and in here it is especially important for us to recycle. We are always making sure that all the head of departments are aware of this, like we always analyse the cost of those recycling activities or the general ones. If the general waste collection is going up that means we are not recycling properly, you know what I mean.”
(FAITH)

Another example,

“We mainly recycle... Because we do not have too much impact with EE, you know, for instance, we have to use the machine. We have to let the machine run, because to wash, that is not much you can do. You know what I mean? But you know, what is in our hand, in our power is we have to separate to do the waste...so basically rather than you put them into general waste, you recycle them.” (FRANCESCA)

MARK’s (Finance Assistant) unprompted identification of environmental initiatives was with recycling. His association was influenced by his perception of the leaders’ over-emphasis as well as physical visibility of recycling.

“Yes, definitely. The company does focus on being green and environmentally friendly, especially the director of finance, because he was really concerned with

people mixing up the food bins. Just the food waste and plastic, and everything just get mixed up. He invested some money in getting very big separate containers for food. Then we can actually put the food into the biodegradable waste and actually make biofuel of it...I say what is unique about this hotel, it is a lot more prevalent. So, what we are doing in terms of our staff canteen, you know it is very visual in terms of recycling and putting food waste into separate bins, putting your paper recycling into another one which again makes it easier for the team members. It makes it easier for me when I am down there so I can see exactly where I need to put things so we should be able to recycle effectively.” (MARK)

MARK was influenced by his co-worker’s actions by taking some actions which he also believed good for the environment. The social visibility had positive impacts on promoting pro-environmental behaviour of those with strong environmental values.

“Yes, I guess so because the person I sit right next to A - she’s very flower friendly. She grows a lot of flowers. When she had the flowers, she was really taking care of them, and then influenced me because she bought this thing, this plant feeder to make it grow, and then I bought it also. She did it. She does influence me. That kind of when you see someone else putting the effort in to make something grow, trying to preserve and protect the environment you are like, “Oh yes, I should do that as well.” (MARK)

FAITH suggested that communication of environmental initiatives (i.e., the visibility of issues) was not visible or not easily noticeable to employees.

“Like put the marks, “switch off the light if you don’t need it” to save energy. I think today I will be more aware of it and when I walk through the hotel I will look for something like that, I never pay attention, maybe we have some kind of posters somewhere, but maybe because it just may not realising it, so that will be great to make it more visible I think...I think visible little stickers, posters whatever so we are aware of saving that energy and I believe that for me it is natural, but not for everyone it is natural, I’m sure that there are people that leave the office without switching the lights off, so maybe just make it clearer.” (FAITH)

It found that there was little need to incorporate the better visibility of the current environmental initiatives in the HK particularly the 10-steps (i.e., visibility of issue). It was partly linked to the perspective of the Head of the HK department that cleaning rooms meant being environmentally friendly.

“... that is part of a housekeeper's responsibility to ensure when they're cleaning the room, they're considering the environment as well.” (FELICITY)

MARCUS (Acting FB manager) said that another reason to his passive engagement in EE initiatives within his department was the visibility of the actions that he took. Perhaps it was more difficult to detect an area of energy consumption to be wasted or saved for luxury hotels.

“it's difficult for us, energy [saving] specific, because for example the lounge, which is our biggest operation, it is 24-hour operation constantly, so you don't really have an opportunity to reduce the energy impact there because you do have all of equipment running constantly throughout the day throughout the year. Other parts of the operation, for example our restaurant, there are specific serving times, so when for example our breakfast restaurant is not in use we turn off all the lights, we make sure that power is off in that room, but it depends again you know hotel is one of the biggest creators on waste and usage of energy, it depends on the operation, it depends on making sure that it is workable to have everything up and running once the guests still there and then being aware of it, and making sure when they aren't there, we will take those opportunities to reduce energy.” (MARCUS)

MARK pointed out that the current energy related initiatives lacked 'how to' information or how to adapt the guidelines to different situations. It also lacked ideas about embedding EE that were less visual than recycling.

“It could be a bit more...It could give a few ideas on how to be more environmentally friendly as well and what to do. It could be a bit clearer. It should show some examples of things we can do extra things that we can do. Right now, it is the same stuff about being environmentally friendly, but it is not giving me any ideas, any new ideas on how to be more environmentally friendly.” (MARK)

MARSHALL also thought that his staff viewed environmental actions as creating additional work unless they were easy to do.

6.4.6 Organisational Commitment towards Environmental Sustainability

This part presents the roles of perceived organisational commitment in the positive PEB in hospitality workplaces for Case A. The results show that many managers acknowledge their important roles as the first force to the positive PEB of their employees. It is clear that the employees' actions are directed by what they perceived as important from their leaders.

MARSHALL as a leader of all operational departments, acknowledged that all department heads were figureheads in the hotel to make sure that everything was passed on, implemented, and sustained. Leaders of the departments played the key roles in embedding environmental initiatives at the operational level within their departments.

“Yes, their role is especially important because without the departments' heads passing on the information to their team and their team briefings, it's going to be difficult to sustain. They are key figureheads in the hotel to make sure that everything is passed on.” (MARSHALL)

However, leaders at different management levels had different views on environmental sustainability and either actively or passively supported the implementation of environmental initiatives and communications. MARSHALL did not consider environmental sustainability as a fundamental activity to be urgently incorporated into his operational processes and practices. It seemed he had a vague understanding of whether environmental initiatives should be incorporated into departmental processes (for example the ten HK steps), measuring and monitoring in place at the operational levels. MAXWELL (Chief of Engineering) added that leadership from the owners of the hotel was also an important factor in whether the hotel could go ahead with the energy initiatives.

“Of course, we want to be as energy efficient as possible. We have some restrictions because we are a managed hotel. The company manages the hotel, but they do not own the hotel. When it comes to buying new equipment or for example, replacing halogen lamps for LEDs, it is the owners that pay for that and it's the owner's decision to do that...As the company, we can recommend and put forward and show them cost savings as well which might attract them to do it and so they get a return on the investment. Yes, we would like to be perfect at it whether anybody will ever get there. All we can do is keep striving to reduce our energy costs, reduce our waste sent to landfill, and reduce our water consumption.” (MAXWELL)

MATTHEW expressed that the GM of the hotel was less driven by sustainability.

“[Why has the current GM not been playing a role in the green team?] I do not want to be a part of it. ... I do not know. They do not feel that is important enough, maybe. I cannot speak for them. We've tried in the past.” (MATTHEW)

MAX (C&E manager) reported that there was a dilemma for the hotel's leadership in implementing EE actions. There was a greater priority on profitability and values

related to profitability such as satisfying guests and employees than values on shared responsibility to protect the environment.

“You see many actions from the HO put in place to support every hotel. However, every property lives their lives. When you come down, escalate down to the floor, to the day-to-day basis and so on, everyone lives a life that is so compressed in time. Sometimes, they do not have time to check the emails, for instance even. Then you start prioritizing your time or prioritizing the work because primarily, we live in a capitalist society which is driven by profit. We need to accommodate that, accommodate the environment for our clients and for our co-workers first and then we spread out to the others but also take the steps so as the corporate's saying to us like actions or recycling like we are doing now with the food... With the country steps which the consul takes, they lead in recycling also, plus the corporate from the company, we do try to save it, as well as save the energy and so forth. We have to take through many steps.” (MAX)

MILO (as the chairman of environmental team) was in the position to be the most knowledgeable about environmental initiatives in the hotel. He provided several practical views on the current status of sustainability programmes. He believed that activities that depended on human behaviour change were generally viewed as single and one-off initiatives rather than campaigns for sustained action. He explained that the sustainability pillar of hotel operations was not fundamental to the hotel and hence could only be done within the context of business operations and profitability for the hotel owners (as this is a managed hotel).

Other leaders seemed to hold similar views. For example, MATTHEW (Regional Director of Engineering) expressed disappointment about the perspective of the owners regarding LED lamps.

“We know LED lighting should be everywhere. I have not got it here in this property. They haven't got it here because the owner doesn't want to invest the money to do it even though there's a great return on investment.” (MATTHEW)

Leaders at different management levels also had different views on how the hotel implemented sustainability actions. MARSHALL suggested that the hotel was doing well in terms of implementing the environmental initiatives from HOs and there were no barriers in implementing the project set up although he slightly touches base on costing and people behaviour limitations.

CHARLES (VIT) suggested that there would be opportunities to incorporate sustainability into the ‘operational processes’ within his departments. This would require investments in human behaviour changes and technology.

“We have a lot of opportunities. It depends. We need to have some investment to incorporate something new when we talk about energy. Aside from human behaviour, we need some investment to improve systems. That goes with some spending that we need to seek approval through the company when we get the approval. When we sell the objectives to our corporate office, and if these are approved, of course it is easier to move on, but it needs some financial investment. That is the first step.” (CHARLES)

Managers had different views of the effectiveness of the environmental implementation.

FELICITY as the leader of HK unit believed that the current cleaning practices which had been applied by her generations at her department had been already incorporating good environmental initiatives and she did not show any willingness or necessity to incorporate any further sustainability actions within the 10 cleaning steps and her department.

“I've been in the HK industry for 40 years. Even though it might not have been so evident when you were being trained, it was always your best practice to turn off the lights, watch the water and think of the environment. Different hotels actually deliver the environment regime differently. We created the 10 cleaning steps two years ago, but we have been cleaning rooms like this for generations. It is the way you perceive and how you tell the team. It has always been there. It has always been probably trained differently with different techniques and different angles, worded differently and have they heard about the environment? Yes, they have heard about it, but what is it called back then? Was it called Earth Week then? Probably not. It has all been changed. It's just terminology that changes with the future.” (FELICITY)

This leadership perspective as mentioned above was cascaded and perceived by the hotel employees widely. There were implications of the perception of this leadership perspective on the PEB of the hotel employees. FERNANDA is one example.

“FERNANDA is concerned about being picked up by the HK supervisor to find out some places that FERNANDA forgotten to turn off. She expresses she has no problem to do what she is told without needing an understanding of why she is carrying out the actions. No detailed communication on what or where in the process are needed to be turned off and what the impacts of being wasteful are. No corporate inspiration is perceived that saving energy is for the sake of environmental protection, it is merely for the sake of profitability. The researcher has a general feeling that the hotel's leadership feels that there is no urgent need to inspire the grassroots employees to have such an

understanding of why they should carry out any environmental actions. The key message received from the team briefing from the HK supervisors is “turn off everything when leaving the room”. (Researcher’s Memo FERNANDA)”

There was a shared concern expressed by the employees from Engineering, Security, and the environmental team that it was quite difficult for their teams to interfere with the detailed incorporation of specific energy initiatives in the HK department unless the leader of the department could take this initiative. There seemed to be a lack of official cross-functional teamwork and implementation. (Researcher’s Memo FELICITY).

Leaders at different management levels had different views on the benefits of technology and human factors in implementing EE. Most of the senior managers of the hotel tend to put most focus on technological investments to reduce energy consumption. MARSHALL observed the following: technology (for example, waterless urinals or LEDs) was preferred to change human behaviour and was viewed as a more efficient route to reduce energy consumption. MICHAEL (department head of kitchen) suggested that technology investment could save more than human behaviour change as there were limitations to what his staff could do in the kitchen.

“I’d say that people are aware that they need to turn everything off, not leave it running, only use it when it’s required. It is quite simple actually, quite a good example in here. They’re doing the right thing but there’s only so much that can be done from this whereas if you invested in technology for things like boilers, heated water, et cetera, you tap more opportunity with the launch of equipment to save more.” (MICHAEL)

MATTHEW (VIT) suggested it was difficult to reinforce continuous human behaviour in implementing sustainability initiatives.

“I know where you’re coming from in behavioural side, that’s the difficult part. You can do it once, and in six-months later it is forgotten about that. I look at it as passive and active. The active we can put stuff into site. We can put a time dead switch or a PIR in a room, so lights go out when there is no one in there. How can you tell somebody to switch something off? That is difficult...We tried both and only one works. That is anything that active, anything you put there that saves energy on an automatic basis it works. We know it works. We know we can get the savings. Anything you depend on people; it might happen for time and then it all loses if impetus motivation is difficult.” (MATTHEW)

Interestingly, MORGAN, among few managers, believed that changing human behaviour was the best way of addressing environmental issues in older hotels where

technology change was not so attractive or feasible for the senior management and/or where the owners do not see an adequate return on investment. The decisions on whether or not to invest in EE technology and behavioural initiatives highly depend on the owner's support and perspective on sustainability and return on sustainability investment (Jenkins, 2018, 12 February).

“Changing human behaviour in the best way that I can. Like I said, if I see something that I can get changed on a daily basis that is part of the routine, it makes their work easier, then I do not have to incentivize. This makes your life easier. It is going to save money; it is going to save us time. You will be happier, I will be happier, the company will be happier. Everybody wins.” (MORGAN)

6.4.7 Training

This part presents the roles training play in the positive PEB in hospitality workplaces for Case A. The overall results show several other managers expressed the different perspectives on the need for any changes including training on environmental protection in their current work practices and procedures. Overall, training appeared to be not an important concern for the employees. Overall, training appeared to be not an important concern for the employees.

Employees had different views on training. Lower grades of employees expressed that they could not recall if there was training on environmental issues. Most employees reported that there was no formal training on EE. Instead, there were some hands-on verbal instructions on EE which could be done in staff briefings, health, and safety training/induction and online.

“Oh training, yes, we have our green meeting-- I mean the environmental meetings where they do tell us to be more energy efficient, turn lights off and all the usual, so that does happen in meetings where they do tell us... Formal training, no, I believe not.” (MARK)

“The porter has a routine, the porter has the training, and we do ongoing training to hopefully ensure that fire doors are closed, light are switched off, etc. [the training she is referring might be the Health and Safety. There is no formal training on sustainability].” (CAMILA)

“No, I haven't run any training with my team on it but that's something that we can absolutely [do].” (MARCUS)

A few employees reported that they did some online training through the University of the company and an in-house EMS. However, none of them could recall the detail of the courses nor any specifics about EE.

“No, not really. No training in the hotel...I would not say we have not held any training because we produced an induction document and we have shared that with the hotel team, is there a departmental training session going on? No, it's the company that does some training that has to be done online through the University of the company but again that—I do not always gets put down.” (MILO)

“Yes, the online training. Can I remember what it is? It was someone like training last year at some stages... It is an online sustainability training about reducing water, reducing power, that sort of stuff. I cannot remember that specific details.” (MICHAEL)

“I wouldn't say a training I've received the information and knowledge it is like training, so we don't do training per se. We do courses online where the likes of Rob could go on to look at energy saving. We got various university courses as we call them from Schnyder and whatever, BMS and stuff.” (MATTHEW)

“We do online training but I'm not sure any training about energy recently.” (FAITH)

Younger employees who had better computer literacy skills seemed to have better recall about online courses.

“We have ongoing training online, that we do on computers. Those are set modules. Some of them might also be on iPhones, environmental friendliness. I have done modules on that, on the computer. It is like the company's lobbying, so it is like a place where you log in. Everyone has the training done, and then it will be there. The head chefs are aware. When you have done them, it goes green. If you have not, they become red. Everyone should be up to date, and keyed up on what is the new, latest thing, issue with the environment...I learnt a lot about my recycling from that end of the training program, and about efficiency with energy and the likes, turn off the lights. That comes up on the program. I think that is how we know it. I don't know a specific person I'd go to, but that is more impactful in getting information, be it the training.” (FRIDA)

In fact, relatively few employees and especially 'receiver-doers' had accessed online courses, a result of poor computer skills, lack of access to a computer, email address or the in-house EMS.

"Not yet. I haven't seen any online training." (FIONA)

Another view on online training.

"There are some online training courses on saving energy, water etc. sent out to people but people do not do them as they do not care and not part of my job." (MAXWELL)

Many employees had very varied reports on the effect of the current informal instructions and online courses on their PEV, perceived CEV and PEB in their daily routines. Overall, training appeared to be not an important concern for the employees.

For some employees, training did not change their PEV but did provide more ways to reduce the amount of water, electricity, and more recycling.

"I have formed my value from the long time, so the training has enhanced me by looking at some other ways which are thinking of, and it enhanced, but most of that I have already." (FATIMA)

"You start saving more energy." (MITCHELL)

For some employees, current instructions and training did not have great influence on their PEV and PEB.

"I don't think it taught me anything I didn't know. I don't think so." (MICHAEL)

"Environmental is always important for me. After receiving training, it is increased? the value is not going to change, isn't it? Always changed because I already mentioned I care about environment from when I was year seven, so I always cared about, "When I go to the training, what is going to change for me?" If I did not care about the environment, if I go to the training, it will change my value." (MITCHELL)

"They were more or less the same anyway because I did get to practise it at home. It was more like they were in line with each other, so it was just reinforced what you already knew and prepared anyway." (FRIDA)

On the other hand, fewer employees reported that the current informal training (i.e., verbal instructions and training) had positive influences on them in terms of their awareness and more actions to reduce their resource consumption in their daily routines.

"Yes, awareness - just makes me more aware even though I am aware initially. It makes me more aware when I'm in here in this environment and sometimes I

find it is frustrating when I notice other staff are not i.e. they have a “who cares, it’s not my hotel” attitude and I find that very frustrating, because they should care, because it is their working environment and they are here to earn money and if they are ruining their environment how are they going to earn money and you need money to survive.” (CAMILA)

“One of the things we do is part of the induction now. There is a bit of [training on] recycling, sustainability, and what it does so that helps get them from an early start. (MILO)

“We have ongoing training online, that we do on computers. Those are set modules. Some of them might also be on iPhones, environmental friendliness. I have done modules on that, on the computer... I learnt a lot about my recycling from that end of the training program, and about efficiency with energy and the likes, turn off the lights... I think that is how we know it. I don't know a specific person I'd go to, but that is more impactful in getting information, be it the training.” (FRIDA)

There were different perspectives on the needs of formal training on EE among managers and staff as they believed training and education could change staff behaviour. For example, MORGAN supported it.

“You need to broaden their minds because they're just task-oriented people. You tell them, "Don't leave lights on." They will not leave lights on because they are getting the £10 for that. They might walk past an open tap and not do anything, or they might walk past an unsecured barrel of oil or kitchen things that is going to get spilt and dumped in there and they might not say something. They might see a friend emptying oil into a wrong...spilling into the drain and they might not say anything. Why? They are not getting money for that, and they do not know about that. For me, the key is education. When I change how they behave, they need to know the impact of those things. Where does it go? I don't think they see it.” (MORGAN)

MARIO suggested the success of environmental sustainability implementation equally needs both technology and human factors. Hence, training on environmental protection actions must be mandatory. However, there were other informants (for example, MAXWELL) who did not support the need for it because it was unclear if training and education can make people care enough to activate their actions.

6.4.8 Summary

In summary, directors and departmental managers held positive PEV. The PEV of some managers are fluid in a workplace context and are influenced by the environmental

values of the organisation. From the survey, employees in the UK generally had weaker PEV than those in Vietnam. 'Be curious' is strong PEV for the employees in the UK case.

The results in this section indicated that PEV and CEV matter in influencing PEB to some extent. However, PEV or CEV alone did not drive the positive PEB among the employees. *The environmental communication, informal work practices, pressure of work (or productivity), environmental visibility, and organisational commitment towards environmental protection* play important roles in driving the positive PEB in practice. First, there is inconsistent communication of corporate messaging that may be an inhibitor to progress. Staff do not perceive environmental and non-environmental messaging as separate and so conflicting messaging may have a negative impact on PEB. Second, informality of practices played a barrier to the PEB. Third, the widely accepted notion '*Operational Efficiency is above everything else*' which the employees expressed to perceive from CEV, and some leaders is a barrier to the current PEB. There is a defensiveness about established processes and how these interfaces with (or sometimes contradict) PEB. Fourth, there is an emerging theme about the visibility of EE measures and practices (in comparison with recycling). Lack of visibility of consistent company action may undermine the capacity for managers to encourage PEB. Fifth, leadership played an important role in the current PEB. Finally, interestingly, many informants showed a little concern about whether if the incentives/penalties in place would drive their PEB at work.

6.5 Hotel Case B (Vietnam)

This section presents the findings and analysis that emerged from the results for Case B, comprising the interaction of PEV, CEV and PEB, and other *contextual* factors interfering with the interaction of PEV, CEV and PEB (i.e., informality of practices and pressure of workload, environmental visibility etc). The findings and analysis also show the foundations to how conceptual model built which will be presented in the chapter Discussion.

6.5.1 Environmental Communication

6.5.1.1 Spontaneous and Aided Recalls

The researcher asked the employees of Case B the two same questions as of Case A (the UK). The difference was the key contact of the hotel Case B provided some different campaign materials that modified the similar ideas of the Case A that was provided from the regional offices of each case.

For the first question, many employees spontaneously recalled *the general environmental communication* at little levels in terms of corporate messages,

campaigns and what was going with these campaigns to some extent. For example, NGQC seemed to have little awareness of general environmental campaigns although she somewhat talked about the energy saving activities in her daily work. It was not clear whether these activities referred to environmental campaigns or parts of her job description. DŨNG (laundry supervisor) seemed to have little awareness of the environmental campaigns within the hotel. LỄ had some limited awareness and knowledge of the environmental initiatives around the hotel. BÁCH had a low awareness of the environmental information campaigns. Although he worked for the hotel for three years, he vaguely described some environmental activities related to waste separation and using biodegradable bags in the kitchen. He could not recall any other initiatives at the hotel.

On the other hand, many other employees also reported to have a good awareness of *the general environmental information*. For example, CHÂU seemed to have good awareness of general environmental initiatives at the hotel. She talked confidently about several initiatives and demonstrated good awareness of the contents of the general environmental communications. She talked about the initiatives encouraged to save electricity, water, and waste into the environment. She spontaneously mentioned the names of several environmental initiatives such as ‘Earth Hour’ and ‘Reuse your cup’. She seemed to know about the environmental initiatives that were directly and indirectly related to her current role. She reported that she was *actively* aware of these indirect initiatives through other wider communication channels like Facebook and company noticeboards, not necessarily from her direct manager.

For the second question, the majority employees could recall seeing *the particular environmental campaigns shown on the showcards*. None of the employees stated that they read the CEV published officially via written CSR reports and the webpage of the company Table 6-5 includes examples of their recalls of the specific campaigns.

Table 6-5. Awareness of the particular environmental campaigns (Case B)

Informant	No Plastic Bags	Reuse	Turn Off	Eat/Clean Your Plate	Earth Week/Hour	CEV
NGQC	NA	NA	Yes	Yes	Yes	No
CHÂU	NA	Yes	Yes	Yes	Yes	No
HƯƠNG	NA	Yes	Yes	Yes	Yes	No
LỄ	Yes	NA	Yes	Yes	Yes	No
MINH	Yes	NA	Yes	No	Yes	No
BÁCH	No	No	Yes	Yes	No	No
BẢO	Yes	Yes	Yes	Yes	Yes	No
NGÂN	Yes	Yes	Yes	Yes	No	No
TIÊN	Yes	Yes	Yes	Yes	Yes	No
VI	No	No	Yes	No	Yes	No
BÌNH	Yes	Yes	Yes	No	Yes	No
DŨNG	Yes (Vague)	Yes (Vague)	Yes (Vague)	No	No	No

Source: compiled from the current study

For example, LỄ could recognise the hotel's environmental campaigns presented to her including 'Turn Off', 'No plastic bags for suppliers', 'Earth Hour' and 'Clean Your Plate' and she could explain her understanding of what she did for each campaign. The 'Turn Off' campaign did not tell her in detail what to turn off but only gave a general message to 'Turn Off'. However, she expressed that she knew what to do with respect to the 'Turn Off' campaign based on her own awareness and personal judgement. LỄ then gave an example of her personal understanding of 'Turn Off'.

"No [clear and detailed explanation]. But I am self-aware and act accordingly. I usually do things in that way... For example, when I work in the bedroom, I will turn off the lights in the bathroom and vice versus." (LỄ)

Another example, BẢO could recognise the campaigns including 'Turn Off', 'Earth Week', 'No plastic' ('No plastic bags from suppliers'), 'Reusable cups. First, he was not aware of the 'Clean Your Plate' campaign in English format. Then after the researcher explained to him in Vietnamese, he said the hotel actually ran this program "Lấy đủ ăn" (Take only enough food). He said no the poster was not there, but it became an unwritten rule in the canteen where the staff were self-aware of not getting more food that they could eat. He could describe the 'reusable cups' initiative in terms of the program activities and the goal of the programme.

"My understanding is simple that the company must have some messages or reasons why they introduce that program and what the program will affect. And the company and the hotel want employees to minimise the waste sent to landfill. As I mentioned to you previously, you can use this reusable cup 100 times and that prevents 100 ordinary cups from going to landfill. That is about protecting the environment and also saving our money." (BẢO)

6.5.1.2 Channels

The informants of Case B said that they learned about environmental messages through various channels which is shown in Figure 6-8. The larger size of the box indicated the greater number of times the channel of communication was cited as a means for gaining information on the company's environmental messages.

Figure 6-8. Channels of environmental communication (Case B)

Channel of communication (Case B)				
Hotel group on Facebook (8 c)	Direct verbal communications in team briefings and direct managers (6 c)	Emails (4 c)		Posters (2c)
	Departmental meetings (4 c)	In-house EMS (2 c)	Training (1)	Oral messages (1)
Written noticeboards (7 c)		Meetings of environmental teams (5 c)	Campaigns (2 c)	Hand-written notes on the board (1)
			Maintenance team (1)	Logbook (1)

Source: Compiled from the current study using NVivo

None of the employees stated that they were aware of the CEV published officially via *written CSR reports* and the webpage of the company. ‘*The hotel group on Facebook*’ was the most popular communication channel for environmental messages and initiatives among the lowest-grade employees.

“the hotel management who acted as admin set up this group [on Facebook] to post daily news. Almost all employees know this group. I do not guarantee 100% employees but at least 75% of employees know about the programmes that the management communicate.” (TIÊN)

‘*The hotel group on Facebook*’ was perceived as particularly useful for those employees who did not have access to environmental information via other direct or face-to-face channels.

“For those employees who do not directly receive the information [in meetings, or emails], they can know the news on this Facebook channel.” (CHÂU)

‘*Verbal and informal communication*’ for environmental information often occurred in meetings and briefings before the shifts. For example, BÁCH reported that his *direct manager* was the only channel through which he received any environmental information. The company-related information he received in general, and the environmental information in particular was communicated by the manager to the staff in the kitchen using very informal channels including verbal ‘messages’, leaving a note on a ‘logbook’, ‘writing a note on a board’ in the kitchen or via verbal team briefings.

'Emailing' environmental information was reported to be used among only managers. For example, CHÂU (room attendant) reported that she never received any environmental communication through emails. Most of the information reached her via direct managers via verbal briefing, Facebook forum, posters, and noticeboards. The researcher also observed most of the operational staff such as chefs do not have access to the company email system (Memo 34).

6.5.1.3 Reach

There was a similarity between the lower-level employees and managers about the effective reach of the environmental communication among different employees across operational departments at Case B.

LỄ (senior room attendant) mentioned that she received environmental information verbally from direct managers, the Environmental team and via the company's Facebook forum. However, the way she answered was vague that little information was retained in her mind. She reported that she had little access to official communication channels and the precise content of the information, but instead what she talked about was from what she overheard from someone (e.g., "I heard that..."). Moreover, the most official channel was from her direct head of unit, but this was usually a verbal briefing in the morning.

CHÂU (room attendant) suggested the employees were more aware of environmental protection messages. However, she reported she overheard information about CEV rather than received that via official channels.

"It was true that the hotel communicated about it more, so we heard more about it. People will eventually get the idea into their heads. It is difficult to change the behaviour of people outside the hotel because not everyone will listen. People out there are so different. Some even scold at me when I told them about this. It is not easy. But I think the culture of the company is not like that."
(CHÂU)

Similarly, senior managers reported the environmental communication did not reach most of grassroot staff and some did not know. CHARLES (Director of Operation) was unsure of the effectiveness of environmental communications. He emphasised that the HR department played an important role in training and communicating to staff about environmental initiatives and messages. He also said communication from the HOs should be tailored for each local market - e.g., in Vietnam, these should be provided in Vietnamese.

BÌNH (Chief Security Manager) said most of these campaigns were communicated mostly within departmental meetings but they did not reach grassroot staff.

“In fact, this is only in the meeting... because the kitchen people have not been communicated much, maybe some employees are not sure about this programme. Because I am the department head, so I know. Well, this programme was posted on Facebook forum of the hotel. More staff read if the news is interesting, but many staff miss reading.” (BÌNH)

He explained some campaigns were in English and that this made them inaccessible to some team members who did not speak English. He said he could not understand completely everything on the campaign.

“Because the English language is a limit to Vietnamese. As a department head, my English level is limited, and I cannot understand everything. Of course, it is just enough for my job.” (BÌNH)

However, ĐẠT (Cluster Director of HR, Chairman of the Environmental team) explained that some environmental posters were kept in English because the term should be known by every employee. For example, he thought everyone should be familiar to the term Earth Hour.

“[the posters] were sometimes in English, sometimes in Vietnamese. For example, we do not translate the Earth Week [and] Earth Hour because nearly everyone understands Earth Hour because the hotel does that campaign every year and they are familiar to the term (laughs) Earth Hour [and]... that message.” (ĐẠT)

6.5.1.4 Relevance

A Director said the environmental ideas from HOs were both relevant and implementable in the hotels in Vietnam. He also added that HO communicated principles which each hotel could implement in the way that worked best for its specific circumstances.

“Everything from the HOs is relevant. There is nothing that are too much that we cannot implement. However, I repeat, these are just suggestions. They do not request us to implement exactly what they said. Hence, we need to adjust the implementation to fit the Vietnamese working environment.” (ĐẠT)

He reported the key themes from messages received from HOs were communicated to the employees at his hotels but adapted to emphasise the specific actions that were required.

“I will use the same messages of the HO in order to ensure the consistency. When there are specific measures such as Earth Hour, we must use the term

Earth Hour or the same message to communicate. However, we sweep the house instead of cleaning it. Something like that. The difference is in the measures how to implement. The messages or themes remain the same.” (ĐẠT)

HU’ONG perceived the environmental actions at the hotel were linked directly to her service charge. At first, she found the environmental communication ‘a bit new’ to her, but after a while, she found it a right thing to do.

“Because these things are too practical, people don't need to remind me to do them. Protect the environment, our lives, I do not find any difficulty at all. Maybe today they put a new program, at first, I was surprised, but I did it the second and third time, it became a habit and I felt very good. Those are things I find useful regardless.” (HU’ONG, room attendant)

BÁCH found the environmental initiatives of the hotel relevant to his current role as a chef in terms of waste management and saving energy hence these environmental saving actions were part of his routine.

“In terms of its relevance, for example, these wastes and separations of rubbish are directly related to my works. For example, we separate organic and non-organic rubbish into two bins and this task is listed in our routine... Saving energy is also directly relevant to my role. Every day we use energy...we have to turn on the ovens all day to be ready for cooking during the busy times and we turn down the temperature of the ovens or gas tops to save energy during the less busy times. We turn off the ovens and gas top stoves completely after our shifts are over. The new shift at 6pm will then turn the ovens and stoves on low heat to start with and turn them to high heat when there are orders at 9pm, etc...” (BÁCH, Cook 1)

TIÊN reported that the environmental campaigns were relevant to her current role in terms of reusing cups and saving energy.

“Yes, it is relevant. For example, the recent initiative about take-away cups [Ceramic]. When the guests do not use [paper cups], we save more budget and protect the environment. If we throw paper cups into landfill, it costs time and effort. That is what I think... “Turn on when in use” is relevant to my job. In fact, our C&E team uses a large amount of electricity as we have 9 rooms for meetings and banquets, compared to the lobby and bar. We can save a lot if we do not use them. Hence, turn equipment off or only to it on when it is in use to help protect the environment.” (TIÊN, banquet supervisor)

BẢO suggested that to change Vietnamese behaviours toward environmental protection, messages should focus on educating staff about 'the consequences' of not acting.

"Talking about the Vietnamese society, we must talk about good and bad sides. Sometimes, when people watch some clips about the sausages made of dirty pork meat, they will surely never want to eat...Another example is the introduction of wearing a helmet when driving a motorbike. First people said it was a crazy idea. Finally, people wore helmets when driving on the highway and did not wear them in urban streets. So, the police could not reinforce the laws. Now, you must wear a helmet whenever you drive a motorbike. So, everyone wears a helmet now. Making it compulsory works. Now 9 out of 10 people wear helmets when driving a motorbike. Introducing financial penalties scares people and then they follow the rules." (BẢO, Ba Mien Chef)

NGÂN suggested that her behaviour towards environmental protection would probably change if messages focussed on providing education on good practices rather than 'the consequences' of not carrying out environmental protection activities.

"In Vietnam? What message style is more effective and can change human behaviour? I think both message styles [educating people about a better world and educating people about the consequences of not protecting the environment] ...the message of educating the consequences of not protecting the environment is a bit dry but practical. The message of educating people about the better world that can be achieved by protecting the environment is gentler and more flexible. I personally prefer the latter because in this way I can change my behaviour because I like to do good things that make me and other people happy. Some people, maybe a small or large number, will only change their awareness and behaviour when we use stronger methods. Hence, these two styles each have their own benefits. We need to apply the right style for the right people, and we need to be flexible." (NGÂN, Pastry Commis 3)

Many employees like CHÂU reported that they understood the message in general, but she understood only vaguely the details on what to do and how to do it.

"I roughly understand the details about saving electricity, water, waste...I apply these into my works from this understanding." (CHÂU, room attendant)

ĐẠT reported that his employees understood the environmental messages and what actions they should take. There were several monitoring activities to measure the effectiveness of environmental communications, for example, the annual survey from HO which somewhat asked the employees of individual hotels about the general

communications. In addition, the employees were asked about that in their semi-annual performance review interviews. He reported the results were that all employees answered they understood the environmental messages and were encouraged to participate into the environmental programs.

BÁO said the environmental initiatives needed clearer explanation and that was what he should do in his particular role.

“Actually, people will be made to be more aware if it is more specific. Now it is communicated generally, hence people do not know what it is, and people do not bother reading. For example, people said Earth Hour on the television, but many people do not know what the Hour means. Many people surely do not know...What do people need to do? I am sure people do not know it and what the Earth Hour is for so of course they do not know what to do. Until there is an entertainment program at the Big Theatre where they say, “oh that is about saving energy”. But it is too late then. Only the people who watch television hear that. Only having posters with a logo does not make people understand what it is. People only know “60+”. There are people who already know a lot about Earth Hour and who understand it, but there are other people who do not know.” (BÁO)

VI said she could understand the instructions of the environmental tasks to some extent.

“I usually understand a little bit about what are told to do. I just understand that what contributes to making a cleaner environment. I understand my manager’s points about using electricity and water in a way to reduce the waste going into the environment so that the environment is cleaner. I only understand something like that.” (VI, room attendant)

6.5.1.5 Summary

This section included a narrative of similarities and differences in the environmental communication between Case A and B. The similarity is that the current top-down communication did not reach the lowest-level employees (who are the main RD). The key reason was the environmental messages was mostly communicated by emailing to mid-grade employees (supervisors) and above who tended to verbally cascade the task-oriented actions (rather than explaining the environmental message) if they personally judged relevant to their department. In both cases, many low-grade employees reported they had low awareness of the general environmental information as well as the environmental measures and targets for the company and operational levels. The key difference between Case A and B is that the employees of

Case B perceived the current environmental communication and messages were more relevant and specific to their daily routine than those of Case A.

The results of the environmental findings help the evaluation of the interaction between PEV, CEV and PEB which will be included in the next sections. The following sections will present the findings of PEV within hospitality workplaces in the UK and Vietnam.

6.5.2 PEV-CEV-PEB Interaction

This part continues to present the finding and analysis of the interplay between PEV, CEV and PEB for Case B.

6.5.2.1 PEV

The findings of PEV were studied from two sources, including (1) 'self-reported interviews' of the operational employees on their PEV in their own words; and (2) values survey.

In the values survey, the employees in Vietnam generally held positive PEV, especially as regards environmental protection, social equity, self-discipline and being obedient, with the Mean score of greater than 3. PEV that was strongly expressed in Vietnam included '*protection of the environment*'; '*preventing pollution*'; '*living in harmony with nature*'; '*being helpful*'; '*living in a world at peace*'; '*having authority*'; '*having social power*'; '*maintaining the social order*'; '*being influential*'; '*belonging to my community*'; '*honouring my parents*'; '*maintaining cleanliness*'; '*exerting self-discipline*'; '*being obedient*'. In particular, '*being obedient*' was a significant value for the Vietnamese employees (see the detailed results tables of Values survey in Appendix N).

From the self-reported interviews, many employees of Case B reported that they did not know when a certain source formed their values (for example, CHÂU) and they had a vague understanding of the concept of PEV and found difficult to state or articulate their PEV clearly in their own words. MẠNH expressed that his PEV was not strong, and he hardly thought about this area until the researcher interviewed him.

"Although you explained, my making sense of the concept of "personal values" is unclear to me... Actually, I also did not compare and did not measure what I was like, so when I asked, I started thinking about it ... actually my awareness of environment...I think it is not strong...I do not understand deeply the concept of life [PEV] as you tell me, maybe I am vague [about that]." (MẠNH)

The employees self-reported that their PEV was associated with three value orientations, including (1) the biosphere value orientation; (2) the social-altruistic

value orientation; and (3) the egoistic value orientation. Some interesting findings worth pointing out rather than describing everything.

Biospheric values including *'protecting the environment is important for everyone'*; *'environment is important for me and everyone'*; *'moral duty to protect the environment'*; *'respecting the earth'* were moral based. Other biospheric values including *'environmental protection is an effort that needs to get teams of people on board'*; *'individuals can make a difference to the environment'*; *'it is important to live in a clean world and clean up the world'*; *'living with my environmental values'*; *'minimizing our impacts on the environment'*; *'preventing pollution'* were action-based.

ĐAT (Cluster Director of HR, Chairman of the Environmental team, VIT and active iM) reported that his PEV were *'environment is important for me and everyone'* and *'educating others to protect the environment'*. He seemed to think deeply about his PEV and was able to describe his PEV clearly.

"My first PEV is I need to be aware that the environment as the most important thing for everyone's life now. Because if we do not live in a good quality environment and we do not protect that environment, there will be consequences for both us and our children in future. Because the Earth is only limited (smile). And there are more humans on the Earth, and they exploit it with a disrespect to the Earth, then it will...The most important value for me is I must respect and protect the environment where we live and work. That is my first value that I can feel. We must respect and preserve our environment. Secondly, I myself need to inspire and transfer my thoughts and values to my wife, children, and relatives so that they can educate others because we need more people to increase the effects of education. These are two important environmental values for me personally. Once I have these values and these thoughts, my actions will be formed accordingly." (ĐAT)

However, many other operational employees, for example, BÁCH (Acting Executive Sous Chef, a passive RD) found it hard to explain his PEV in his own words.

"Just to protect the environment so that is clean without waste or dust...in general, everyone wants to have a place where they do not see any dirt and where there are no bad smells. Secondly, we can live in a clean environment which is what everyone wants...Personally, I think about the long term, for example for the future of our children. Our generation should protect future generations." (BÁCH)

However, BÁCH could not explain the association between 'saving energy' in his kitchen and 'environmental protection' at first. Then after a long period of thought, he said,

"Hence every action of saving energy will contribute a part to keeping the environment green, clean, beautiful and unpolluted." (BÁCH)

CHARLES (Director of Operations, an active VIT) expressed clearly his PEV was 'keeping a good and sustainable environment for the long term for the next generation', by 'being not wasteful' and 'educating others to protect the environment' and it was his 'moral duty to protect the environment'.

"For me, what is important is to keep the planet green and to keep some natural place on the planet. We tend to destroy things because the population is increasing in some countries. I think that there is a limit on what we can do as human beings so it's vital to keep green places in the planet untouched because this is what we need to survive... it is very important to educate your employees to be green [environmentally friendly], to be able to recycle, to be able to understand why it is important to recycle, why is it important to preserve these resources." (CHARLES)

VI (room attendant) associated her PEV 'making her children aware of a green, clean and beautiful world' with 'better life'.

"Exactly, better earning means better living standards and so a better civilisation. Because you cannot do much if you do not have money, even in a civilised society. Saving a little instead of wasting money and saving for later. It is important that my children are aware that a good life must include a green, clean and beautiful world." (VI)

Values concerned with self-interest comprising 'being economical/efficient'; being not wasteful/ saving'; 'following what are told from above'; 'being healthy'; 'living in a beautiful world'; 'maintaining cleanliness'; 'educating others to protect the environment' were grouped into egoistic values category.

CHÂU strongly expressed that her values on 'saving or being not wasteful' in her work and at home were driven strongly by the values on the 'more saving, less costing and more profit' principle. For example, she explained her 'monthly service charge' would be higher based the evaluation of work performance which was linked on the cost of the operational units on energy costs etc. Therefore, she would like to train her to develop a habit of saving everything in her work and daily life.

"If we do not save now, we don't have the chemicals to use for cleaning... First of all, it is my personal values. Because what I do here...is efficient. And my work efficiency benefits my income. Saving for the hotel means saving my pocket money. For example, the revenue of guest rooms minus all costs equals the work performance which determines my month service charge. Now, if the cost is lower, the profit of the hotel rises which influences my personal income."
(CHÂU)

It is noticeable that the notion 'saving for the hotel means saving my own money' was widely understood by many operational staff in this hotel. NGÂN (Pastry Commis 3) reported her quarterly bonuses were linked to the hotel profitability which linked to forming her PEV 'saving, being not wasteful' (this is different from 'economical and efficient').

"I do not pay for the electricity bills of the hotel, but my salary will pay. Hence, I save for a big team so that the expenses of the hotel will go down and the budget for wages will go up. For example, the annual bonus is based on overall performance. If we save small things for the hotel, we can save more money for the hotel. We can benefit from that although the benefit is not immediately visible but it is good for the long run." (NGÂN)

For many Vietnamese employees, 'following what are told from above' was an interesting value. Many Vietnamese employees inferred that they had a strong propensity to follow the leadership of managers and showed a high level of contentment towards any requests from their managers without questioning or giving opinions. This was observed from their happy and highly cooperative attitudes and body languages throughout the interviews.

"I just did it what was told from above [without questioning]. I'm also happy and agree with the opinions of the bosses like that." (NGỌC)

LỄ reported that it was common among the Vietnamese room attendants that they (she used "We" rather "I" many times throughout the interview) would exhibit attitudes that indicated that they would only carry out what they were told to do by the managers, without any rationalisation much or expressing any personal opinions. She explained that she would need to save energy, water, and chemicals in their work, because this was what she was told to do. She also reported that, as a more experienced worker at the hotel, she would teach the junior workers what to do in terms of saving energy, water, and chemicals.

Some employees interpreted their value 'educating others [especially children] to protect the environment' with 'being influential' rather than a strong desire to question, give opinions and change the current environmental initiatives at the hotel.

"Exactly, better earning means better living standards and so a better civilisation. Because you cannot do much if you do not have money, even in a civilised society. Saving a little instead of wasting money and saving for later. It is important that my children are aware that a good life must include a green, clean, and beautiful world." (VI)

Many employees who were general public or non-energy expert did not distinguish 'being not wasteful/saving' and 'being economical/efficient' ⁸as two separate and interlinked values. They implied and used the two interchanged. The researcher felt that most employees indicated these two values as 'saving everything' in everything they do in daily works and life, which was underlined by their view that life was full of hardships, rather than 'being economical/efficient'.

'Being healthy' was a significant egoistic value for Vietnamese employees. CHÂU (a room attendant) stated that her most important personal value was being healthy for herself and people around which then drove her to develop 'living in an unpolluted environment'. She further explained that only 'being healthy' would allow her to be a useful person for the community.

"Personally, I want a good health, so I can work and be devoted to everything. But if you want good health, the environment must first be safe, for example no pollution." (CHÂU)

After several probing questions on PEV, NGQC (room attendant) could not explicitly state her PEV in her own words. Based on the analysis of the overall report from her, the researcher felt that the employee put an importance on the 'being healthy' value. She explained that by 'keeping green' she could give herself a better living environment (i.e., breathe fresher air and give herself a better feeling).

LỄ (room attendant) did not think deeply about her PEV and had a vague understanding of the concept of PEV. She stated that 'good health' was the most important thing for her to have a good life and she believed a clean and neat environment was necessary for her good health.

⁸ *Being not wasteful/saving* and *being economical/efficient* were two different but interlinked values (i.e., efficiency is usually related to energy consumption in an efficient method which leads to saving, whereas waste is about an act of using materials inefficiently and not wasteful also leads to saving).

"It is important to have a good living environment as then we will have a good life, that is, [the environment] does not affect human health. I just thought simply like that." (LỄ)

MINH (Acting Executive Sous Chef, a passive RD and an active iM) valued 'greener spaces mean better health and a better lifestyle for me and my family' and he associated 'green space' with green trees. He explained the rationale of his PEV because trees brought peace, relaxation and good health for him and his family. Also, he described the stressful nature of his job that made his need for green space after work.

"Because with this type of job, it is very stressful, and I often work in an environment that does not have a lot of trees like other beautiful offices and where there are flames, gas, smoke, and all kinds of smells. The pressure for me is not about the working of eight hours a day, not about sitting but about standing and running a lot so I must have a place where I can relax after all this hard work. That is particularly important to me." (MINH)

'Maintaining cleanliness' was a distinctive egoistic value possessed by room attendants and chefs in the Vietnamese hotel.

"I want everywhere to be clean, to make my thoughts feel comfortable, I feel I enjoy them." (NGQC)

For NGQC (room attendant, RD), "*maintaining cleanliness*" was underlined by her association with it providing better living standards, rather than it being related to the aims of environmental protection. This would be reviewed in the source of forming her PEV.

"I want everywhere to be clean, to make my thoughts feel comfortable, I feel I enjoy them." (NGQC)

BẢO (chef, RD) said *cleanliness* was associated with protecting the environment.

"My point of view is that it must be clean. At work, it must be clean too because cleanliness says everything...If you are clean, then you know that waste separation is the priority. You know where to throw your rubbish, right? You know which ingredient (is good for the environment.) For example, my family says no to charcoal briquettes because they pollute the environment. They produce ammoniac smoke, which is extremely dangerous, for example it can corrode iron frames." (BẢO)

MINH (Acting Executive Sous Chef, RD) described the meaning of 'environmental

protection’ as ‘tidiness, cleanliness and harmony with his surroundings’ and ‘sustainable’.

“If you define [environmental protection], its meaning is very broad. In my opinion, firstly, it must be neat, clean, harmonious. Planting too many trees in one place is not necessarily good. This is because it will affect some constructions and underground waterways. It must be beautiful, good, and the best is to aim for long-term sustainability value, rather than having a project focused on environmental protection just for today but that is then cancelled tomorrow and replaced with a new project.” (MINH)

‘Recycling’ was more frequently cited as an important issue by the employees from a list of all environmental initiatives and was more frequently associated with environmental protection than other environmental initiatives such as ‘energy saving’ because it was more visible. However, ‘energy saving’ was also associated with PEV for some informants.

‘Keeping a good and sustainable environment for long term for next generations’ and ‘protecting my family from pollution’ were grouped into the third value *social-altruistic* values category which demonstrated concerns for other human beings.

Table 6-6 listed the employees by their PEV levels. Overall, the PEV levels varied among the four types of employees. This finding helped in understanding the link between the PEV, CEV and PEB among the different types of employees when it comes to the chapters 5 and 6. Detailed explanations of how each informant’s PEV was examined can be found in Appendix M.

Table 6-6. PEV levels (Case B)

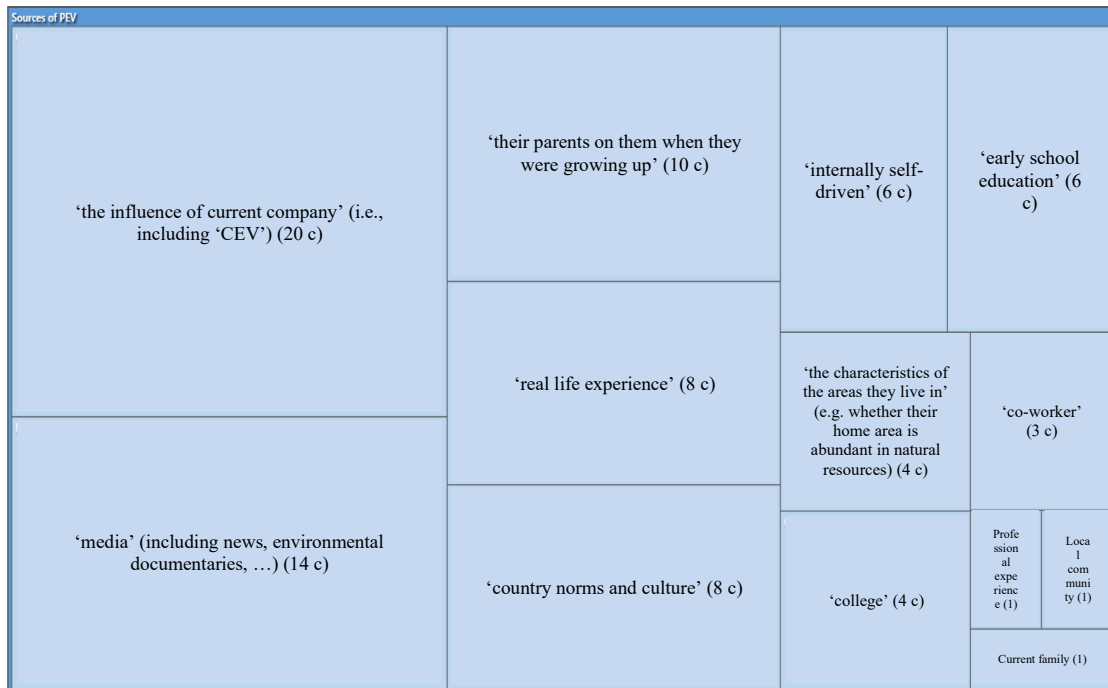
Employee typology	Group category 3 (if have)	PEV levels	Employee
iM	X	Weak	MẠNH (active)
		Weak	MINH (active)
		Weak	BẢO
		Weak	BÌNH (passive)
		Strong	ĐẠT (active)
		Strong	NHI
RD	X	Weak	NGỌC (active)
		Weak	CHÂU (active)
		Strong	HƯƠNG (active)
		Weak	LỄ (passive)
		NA	MIÊN
		Weak	MINH (passive)
		Weak	BÁCH (passive)
	Weak	BẢO	
	Ir	Weak	NGÂN (passive)
	X	Strong	TIÊN (active)
		Weak	VI (active)
		Weak	BÌNH (passive)
		Strong	DŨNG
		Strong	DŨNG
VIT	X	NA	KHUÊ (passive)
		Strong	CHARLES (active)
		Strong	ĐẠT (active)
	Ir	Strong	ANDY (active)

Source: the data analysis of the current study based on the chapter Methodology.

6.5.2.1.1 Sources of PEV

Figure 6-9 showed various sources influencing the formation of the employees' PEV of Case B. The size of the box showed the number of times cited of the source. The larger size of the box the words implied the greater importance of the source.

Figure 6-9. Sources of PEV (Case B)



Source: analysed the data from the study using NVivo

Among these employees who were influenced by 'current company', for CHÂU (room attendant), the CEV like 'more saving, less costing and more profit' strongly drove her PEV 'being not wasteful/saving' and 'economical/efficient' in her work and at home. She explained her monthly service charge would be higher based on the evaluation of work performance which was linked on the cost of the operational units on energy costs etc...Therefore, she would like to train her to develop this habit of 'saving everything'.

"First, it is my personal values. Because what I do here...is efficient. And my work efficiency benefits my income. Saving for the hotel means saving my pocket money. For example, the revenue of guest rooms minus all costs equals the work performance which determines my month service charge. Now, if the cost is lower, the profit of the hotel rises which influences my personal income."
(CHÂU, room attendant)

CHÂU revealed the strict requirements of her current workplace also formed her PEV.

"Firstly, [it came from] my daily life, gradually formed, then through the media, then I worked in a very strict environment regarding this, and all of a sudden it formed in me." (CHÂU)

NGÂN implied that the ‘professionalism’ of the company changed her in the way she became more aware of saving and reusing resources. For her, saving and reusing resources was associated with positive factors for her personal development. Consequently, her awareness of environmental protection was positively influenced by the company. In some ways, she implied that the professional environment was associated with environmental protection.

“Actually, when I come [here] and started working in a professional environment, I realised I needed to change positively to be more professional. When I become more positive in that way, I suddenly became more aware of many matters including saving resources and not wasteful, and my awareness of environmental protection suddenly changed. If I had worked in an unprofessional environment, I would have developed in a backward way. But when I work in a professional environment with positive factors, I will change my attitudes in a positive direction and I will be a more useful person...As I said my awareness changes, I am naturally not wasteful, for example we do not throw these plastic bags away. We reuse these plastic bags, wash and reuse them.” (NGÂN)

Some sources had strong references to the stable formation of the employees’ PEV than others whilst the other sources mostly contributed to enhancing or re-confirming the prior stable values. NGOC reported that CEV reinforced or strengthened rather than formed her PEV.

“When I go to work, I learn from the company. I feel my values are even more right for me.” (NGOC, room attendant)

HƯƠNG emphasised that her PEV formed prior to joining the hotel. The CEV of hotel reinforced her PEV.

“I feel that when I joined the hotel, my PEV was reinforced, not changed. For example, keeping eating and living in a clean and tidy manner and being economical and saving, for example, [I told me children] “for washing clothes, you have to wash white clothes first and then use the water from the waste to wash black clothes. Those are the things we already did in my family. When I worked for the hotel, I learned many things with bigger picture than the scope of my family. And it will add much more to me in my life. In the family, I studied a little bit, small things. When I grew up and worked here, I learned a lot of bigger things.” (HƯƠNG, HK supervisor)

LỄ gave only very vague ideas whether the source ‘the company’ related to her PEV as she never directly answered the researcher’s question although she did say she had

the same thoughts about the company's environmental actions in the workplace. However, she reported that the company was the most influential source in forming her awareness and values on environmental protection because the company always communicated about environmental protection.

BÌNH said the habits of the workplace influenced him more than those of at home.

'Early family upbringing' that was cited 10 times was an important influencing factor to form the stable environmental values of some Vietnamese informants.

MINH reported the most important factor forming his PEV was the saving habit of his 'early family life' in term of energy/resource saving although he pointed out the 'saving habit' of the early period was due to the 'hardship' of life and was not necessarily about the awareness of environmental protection.

"One energy saving tip from my grandma: at 6:00pm she hasn't turned on the lights yet. [laughter] just to save money. In the past, there were no views on environmental protection. We did not have enough food to eat, and we could not think that far." (MINH)

BÁCH said his early family did not influence his PEV because his parents lived a hard life.

"My parents lived a hard life, so they did not hold these environmental values because they were too busy for earning a living." (BÁCH)

BÌNH also reported his way of living and thinking 'being not wasteful' was formed from his 'early growing up' where his family lived a tight economy where did not enable people to afford living wastefully.

"...because you ask deep questions. My parents were retired teachers, and, in the past, they received their monthly salaries in the form of vouchers. They have 5 children, and I am the youngest. Hence, they seemed to live in a fixed frame which was 'to get what you worked for' and their monthly salaries of few hundred thousand VND to be divided equally into living costs of 5 children's schooling, this and that. So, until now, my parents still tell me to live economically and not wastefully. Hence that is an influential value. People who always live in a fixed frame can do things up to a certain limit. They do not have extra or unexpected incomes. Hence, they can only think within that frame. Hence, this forms me of today." (BÌNH)

NHI said her "living conditions relied on natural resources" and made her aware of protecting the environment. The informant originally came from Bac Giang, a

mountainous and rural region in Northern Vietnam.

“[the local people] live in harmony with nature. The local people are aware of protecting the environment such as planting trees, maintaining green spaces...they know that maintaining green trees can directly influence the quality of the living environment.” (NHI)

‘National culture’ was explicitly expressed to be influential to the PEV. NHUNG viewed that many Vietnamese people had a bad habit of throwing rubbish everywhere and not everyone was aware of environmental protection. She said it became a culture. People were like that because they saw everyone else doing that. She said, through the media influence, people are more aware of environmental protection.

‘Regional Vietnamese culture’ *“sạch nhà nhưng mà bẩn ngõ”* (clean my own house but dirty my neighbourhood) affected the PEV formation of some Vietnamese informants to some extent. HƯƠNG (HK supervisor) reported that regional culture, for example, Northern and Southern Vietnamese, might have some influence on her PEV (she seemed to be unsure as her voice showed some level of uncertainty).

“It also influences, for example, as I said previously, I lived in the countryside near Noi Bai [the international airport of Hanoi Capital]. It is just the countryside, so people had an awareness of throwing rubbish carelessly everywhere as long as not their houses. But when I moved to live in Hanoi the urban area. The culture of Hanoi and the city were very different. I cannot just throw trash out of my house, I have to put it in the right place, at the right time so that they take it. I think for the culture, the city has more advanced things than in the countryside.” (HƯƠNG)

NGÂN was very curious about the thoughts and experience of the researcher with respect to her cultural awareness towards environmental protection. The culture of the Northern region is to “keep my house clean, make the yards of my neighbours dirty”. The informant kept asking the researcher about this area. The researcher shared her story about the regional culture of the Northern region she had heard from other informants from the north of Vietnam.

MẠNH revealed the similar value ‘clean my own house but dirty my neighbourhood’ and he further implied country culture might influence the PEB of its citizen. He gave example of Vietnam and Laos.

“Culture influences human behaviour that affects the environment very much. The culture of the North, the South [of Vietnam] - it is because in the old days when this constant war, and the lives of people in the North were quite difficult, the education might not be high, so the awareness of environmental protection

did not exist. And when people have just overcome the difficulties in the war, everyone owns a thought (of the previous generation of brothers and their children can be infected). The thought might be named as 'the want to enjoy individually'. When in Vietnam there is a saying 'clean my own house but dirty my neighbourhood'. Mostly, you will feel it in the North of Vietnam...This is not Vietnamese culture. I think more from the North. In Saigon [the capital of the South of Vietnam], they do this better. It means there is no care for society, no care for the outside, only care for their families, themselves. Such actions will greatly affect the environment... Laos is poorer than Vietnam, but their awareness of environmental protection is better. The evidence is that their traffic is cleaner. They have a small the population, so it less affects the environment. However, for the people I contact with, they have a better idea of environmental protection. Even in a social way of life, people are less competitive than people in the North like Hanoi." (MANH, Assistant Chief Engineer)

'Japanese culture' was an influential source to forming CHARLES's PEV to protect the environment.

"Japan is pretty conscious about many things. They classify all the different waste, recycle everything that they can, reuse energy, and have clean energy like solar energy. They have been well educated there. They are quite a small country, but they try to maximize what they have so I thought this is a good example...Perhaps. You are always influenced by what others are doing. It is like people who respect, for instance, they have a special and tough culture. People do respect the public environment, not throwing waste in the street, or trying to respect others, not perhaps like in Europe, where people tend to throw used cigarettes on the street. In Japan, they have this kind of very strict culture and behaviour. That perhaps helped the whole country to control some initiatives that they are having. Personally, I like nature, so it's very nice to have, for instance, beautiful beaches. When you go to a beach and see the beaches are dirty and full of paper, it's because people don't have respect for nature. It's all a question of habits and understanding that you contribute to the big picture. Try to open your mind to the big picture, and not be self-centred and selfish because we are only here for a short time and a single lifetime, and our lives are limited as well. Why not try to influence things positively, rather than to say, "Okay. I don't care." If nobody cares at the end, it is the end. I mean we should care more about each other." (CHARLES)

'The characteristics of the areas they live' tended to enhance the appreciation of values for keeping the environment clean. For example, NGOC explained that her current

internal values came from her family growing and living in the countryside where they were surrounded by trees and relied on trees, which she believed gave her better health and wellbeing. This was the most influential source forming her PEV.

“I see people, in the past, myself and others [including my parents, grandparents, and everyone in the countryside] also lived a countryside lifestyle with lots of fresh air. The feeling of health is also much better than life in my city. Well, I myself come from the countryside, so I think I compare life here and life in the countryside and they are completely different. From this, I conclude that, well, if I can have a green atmosphere like in the countryside, I will feel more comfortable.” (NGQC)

Many informants suggested that the most influential source was their ‘own internally-driven’ values which were based on a process of learning and rationalising their overall life experience. For example,

“Sources of influence make me aware of that. I formed these PEV within myself. Firstly, I myself need to be aware of what I need to use, if no need, then turn off.” (CHÂU)

‘Real life experience’ was an important source of forming PEV for several informants. BÁCH reported when he was 25-26 years old, he first came to be aware of environmental issues via the ‘real-life experience’ with environmental pollution which influenced the PEV formation.

“Yes, at that time (when he was 25-26 years old), I went onto a road and saw so much pollution around me. I felt very uncomfortable, so dirty. I saw the climate change of the Earth. Some years I felt too hot. Some years I felt too cold. There was a lot of rain. The Earth become hotter. I could feel this day by day, not just suddenly in one day.” (BÁCH)

‘Co-workers’ was an important source for some informants.

“From that time, I joined the company where many colleagues encouraged each other to have more awareness of [environmental actions]. I do not understand what to do about environmental protection if only watching TV programs. There were some activities in my village but these were not active compared to my school and workplace.” (BÁCH)

BÁO said the strongest source to form his PEV, ‘maintaining cleanliness’, came from the influence of a Hong Kong ‘co-worker’ when he started his career as a chef.

“I got it when I started my career. I met a man in my first job who taught me about my job, and he was a foreigner, a Hong Kong person, not Vietnamese. When I worked with him, he was extremely strict about cleanliness. I learnt my values from this...Without cleanliness, you cannot talk about the environment or health. My PEV stemmed from the notion that that person gave me. This was a passport into my career. The reality of the chefs in this place [laugh]is that I found I had to work hard on this issue with them.” (BẢO, Ba Mien Chef)

ĐẠT reported that some senior leaders affected his thinking of environmental protection at work. He also said other junior staff might not held the PEV although all of them might report to the researcher that they were aware of environmental protection.

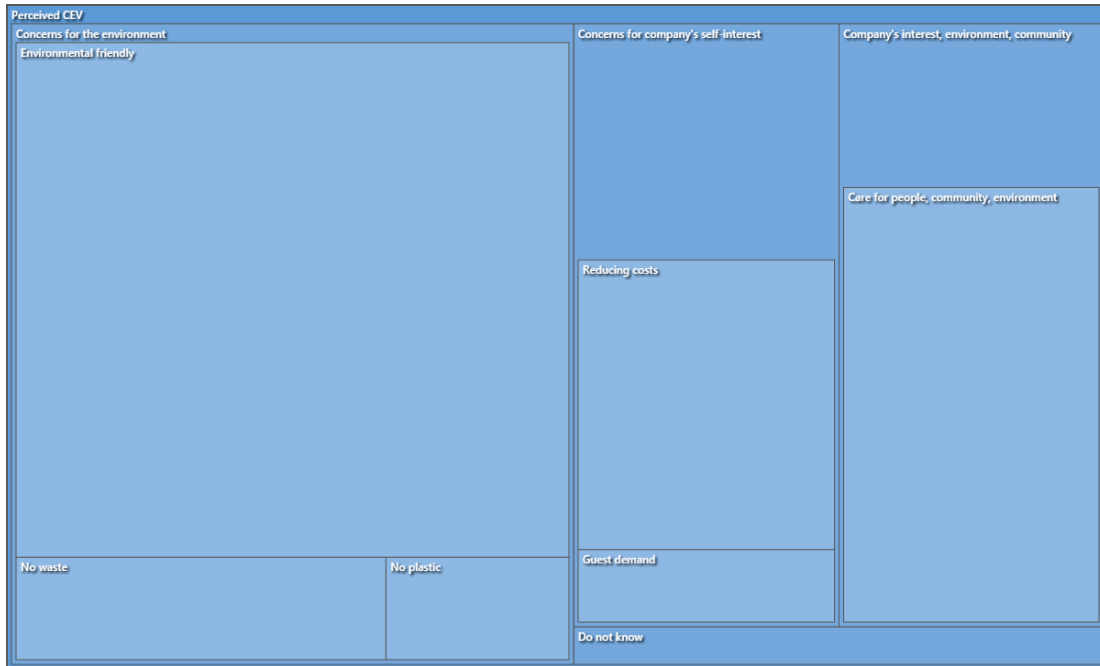
“Some co-workers are also aware of the environment, but some others are not. I do not dare to say 100 percent staff is aware of that...Yes, some key people [at work] are determining the decisions about environmental issues. For example, the senior leaders certainly have the same thinking about the environmental protection like me. Because they are like me. They gradually learn about the benefits of environmental protection. Perhaps, colleagues at staffing levels are various about their awareness of the environment. However, 100 percent of them will definitely say that they want to protect the environment. In some ways, they might have that awareness, but they have not implemented the environmental initiatives due to their habits or being distracted or forgetting.” (ĐẠT, VIT)

6.5.2.2 CEV

The researcher asked the Vietnamese employees the same CEV questions “*what are the CEV you perceive from the environmental communications within the business?* or “*What corporate values does this communication about the environmental initiatives convey to you?*”. As in the UK case study, the Vietnamese employees were made aware that their responses on the questions relating to CEV should be associated with both the environmental messages communicated from the HOs to the hotel and those communicated internally within the hotel.

There were four categories of responses to the CEV questions, comprising (from most to least common response) (1) ‘concerns for the environment’ (18 c); (2) ‘concerns for company’s self-interest’ (8 c); (3) ‘concerns for the company’s self-interest, the environment and community’ (4 c) and (4) vague associations including ‘do not know’ (2 c), as shown in Figure 6-10. The larger sized boxes reflect the relative importance to the CEV perceived by the employees.

Figure 6-10. Categories of responses to the CEV (Case B)



Source: from data analysis using NVivo

6.5.2.2.1 'Concern for the Environment'

The highest number of responses provided by Vietnamese employees to the CEV question, indicated that the most respondents felt that 'concerns for the environment' is the most important CEV for the company. They associated this category of responses with the company 'being environmentally friendly', 'caring for the environment and being responsible for the environment', 'caring to ensure no waste' and 'caring to avoid no plastic' as the most important CEV.

MANH perceived that the company was really committed to protecting the environment.

"As for the company, it really wants [to protect the environment] and is good at it. However, it depends on each property and each case...Because what I see in my hotel is it is truly happening for long term, not just one or two days or a short period of time for the reporting purposes...Right from the moment I joined the company, and I am often reminded by my brothers [colleagues] that the company is a corporation that seems to be the leader in being environmentally friendly and protecting the environment. Therefore, the company never misses environmental programs such as Earth Week, World Water Day. Besides, the LS program, which is an amazing operating unit for hotels, we must always look for ways to save energy and save even more, always having the target behind

it will be better than the previous year. So, the company values here are very environmentally friendly and protecting the environment and nature.” (MANH)

BÁCH struggled to understand the concept of CEV. The researcher explained to him about CEV by talking about the core values of the company which was to train all employees during an orientation session and to have a high focus on communicating environmental protection actions to the operational staff (the researcher observed) and that led him to think about the company values towards environmental protection. He responded that he did not have any idea what the CEV of the company were. However, he perceived the company was committed to protect the environment because the company acted on what it said. However, he also perceived that the company's saving activities were driven by cost saving and profitability.

“The company is truly committed [to environmental protection]. Because I saw that it acted strongly on what they said. Because I am implementing these measures so I know it. Even in my small unit, we acted upon the campaigns. For example, we strictly followed the rules of putting the right waste into the right place.” (BÁCH, Acting Executive Sous Chef, ‘receiver-doer’)

Many Vietnamese employees explained that they felt that the hotel was really committed to what was communicated as they pointed out that the hotel acted in line with these values through practical initiatives.

DŨNG said the company was fully committed to protect the environment over the profit motivation because he perceived the leadership and actions of the hotel showed that.

“The company is committed to the environment rather than profit driven... because it costs a lot to produce these cups. The first thing is about the environment not about the costs. The cups can be reused which is good. It does not do it to make more profits.” (DŨNG)

MINH believed that the company valued ‘care for the environment’ because the good environment was fundamental to the success of the tourism sector.

“The company's values here are sustainable development with sustainable employees, being sustainable with customers, and co-development with the local environment. The Hanoi Company strives to play a part in promoting the development...Because the purpose is to protect the environment, not for economic reasons... Currently, the company in Vietnam has two properties: one is here and one in Da Nang. The same situation for both properties...The company always promotes these initiatives so that everyone can contribute to

protecting the environment where they work.” (MINH, Acting Executive Sous Chef, a passive RD and an active iM)

TIÊN perceived the messages from the environmental campaigns to be ‘saving, reducing cost, higher profitability, higher wages’ and ‘caring for people, community and environment’. She believed the company was committed to environmental protection.

“My 10 years of working at this hotel is just enough [for me to say]. All the messages that the hotel has given to us are focused on the ideas that saving for the company means saving for yourself. Because if we can save, the management can save, the investor can save, and then our wages will go up. That is what we understand. That is also saving for ourselves. Secondly, it brings high community values and contributes to environmental protection which means our community can have a better life...I perceive the company wholeheartedly cares about environmental protection, the wider community and its staff.” (TIÊN)

6.5.2.2.2 ‘Concerns for the Company’s Self-Interest’

There were much fewer responses (8 c) to the question provided by the Vietnamese employees who indicated the company’s CEV was focused on ‘concerns for its self-interest’ and a focus on *operational efficiency*, as the number one importance. They associated this category of response as ‘being not wasteful’, ‘being efficient’, ‘saving cost’, ‘profitability’ and ‘guest demand’ as the first value focus of the company.

CHARLES perceived the company was driven by ‘customers’ first, second by ‘cost-efficiency’ and thirdly by ‘corporate responsibility to protect the environment’.

“The goal of the operation is to try to provide the best service to all our guests but also trying to be cost-efficient, also some time to have some initiatives, surprise the guest at the same time. That is also important. I mean, we want to personalize our service as much as we can, even though we have a limited number of team members, but we always try to do that...Of course. at the end, we are a big organization and of course, we have some values as well. Of course, one goal is that the business will make some profits. Nonetheless, we will redistribute part of that profit to, as I mentioned before, to our corporate responsibilities. When I was in Japan, after this big earthquake in 2011, the north of Japan called Fukushima was destroyed. What we did was, after a few years we went there to try to contribute as a team to build some playgrounds for the kids who live there. As a team to show our commitment we just did that to try to give the people living in that part of the country some more resources.

We try to show them that we care. That is important. The company's values are there also for our guests, for our team members, for our stakeholders. It's very important to show that you care and to respect people, as well...We have some corporate responsibility as a big company...It's very important for us to be conscious about the energy and waste, and water". (CHARLES)

6.5.2.2.3 'Concerns for both the Company's Self-Interest and the Environment'

At the same time, some Vietnamese employees responded that the company had 'concerns for both the company's self-interest and the environment' that went hand in hand (4 c) and that this combination of values was the most important CEV.

MANH perceived that the company was 'environmentally friendly' and at the same time, he expressed that the company was driven by 'customer demands.'

"If the room has a guest staying, we are not allowed to change how the guests left the room, even if the guest has left all the electrical equipment on when they leave the room, we are not allowed to change this. When we go to clean the room or to repair, we leave the room without altering the previous status of the room. For example, we could turn off the TV but most of us do not touch the TV if it has been left on, but the guests are not there." (MANH)

ANDY (VIT) reported the company was globally committed to having positive impacts on the environment. However, it was fully committed to financial returns at the same time.

"I do believe we as a company globally have a huge responsibility to lobby government to make change. That is where I believe we have a bigger impact in that we should be lobbying the decision makers in countries to make the right decisions, even if it means fining people, including companies like us, for not doing the right thing. Then people that have a financial impact in the hotel or that financial impact will affect them is the time that they will make a change sometimes... The other change is about what we can't impact as a company, but as a hotel we have a responsibility to try and influence that where we can and we can only influence it by having the right practices within our hotels that encourage and show people that this is what we do and why we do it and the impact they can have...From a financial side, it is difficult because we do it because it is the right thing to do." (ANDY)

6.5.2.2.4 "I don't know"

The responses from the Vietnamese employees included a few comments that they had only vague knowledge of the CEV through the environmental communications and

initiatives. BÁCH had some general perception about CEV as being about doing something good for the environment although his initial response to the question was, “*I don't know*”. DÜNG could not think of the corporate messages the company wanted to send to the staff through the environmental campaigns. However, he could understand the key messages from each of the environmental campaigns he remembered - for example, the message to avoid wasting food from the “Clean Your Plate” campaign which prevented negative impacts on the environment.

In the PEV survey, senior managers and acting departmental managers generally held positive PEV. However, in interviews, they were unwilling or unable to explore these values and their relationship to company values in more depth.

6.5.2.3 PEB

From section 6.2, there were the four types of employees (‘RD’, ‘VIT’...) which contributed to the matrix table of the PEB related to EE actions at work. The matrix table included the PEB of the four types of informants helped in identifying the characteristics and common patterns of PEB among each type of employees for Case B (see the detailed matrix table in Appendix I). Overall, the current EE actions were in the main common to all four types of informants across different departments. They associated the actions mainly involved with ‘turning (equipment) off when not in use’ and ‘turning the temperature down where possible’ as being EE actions. Most employees across all departments stated that they understood and implemented energy-related actions. The detailed findings for the PEB of each type of employees are presented in the following sections (i.e., Section 6.5.3.1, ...).

Among the ‘RD’, there were three main PEB patterns. In the first grouping, many informants claimed they carried out all pro-environmental actions. These informants included a majority of room attendants, as well as many kitchen staff and non-operational staff. In the second grouping, a small number of informants claimed they adopted pro-environmental actions to some extent, and they did not adopt a few pro-environmental actions related to energy consumption. This related mostly to the Kitchen and C&E staff. In the third grouping, there were several informants claiming that they had no ideas whether they were involved in PEB.

6.5.2.3.1 PEB of ‘RD’

The EE behaviours of ‘RD’, who were the main actors carrying out PEB, were studied from three evidence sources, including (1) self-reported behaviours gathered during interviews with the operational employees (‘receiver-doer’) on their own EE behaviour; (2) ‘self-reported’ information provided via interviews with their managers, providing information on whether their operational employees implemented the EE

behaviours at work; and (3) observations of actual EE behaviour performed by employees, as observed by the researcher during her field research.

From the 'self-reported' interviews with the operational 'RD', most of the RD reported that they implemented the PEB well, for example, MẠNH suggested he personally implemented 'turn off' very well.

*"For myself, I assess that I am very aware of turning off lights in unused areas."
(MẠNH, Assistant Chief Engineer)*

Many room attendants reported that they developed their PEB into strong 'habits' at work and also implemented these at home.

"I create a habit for myself at the hotel and at home or anywhere. For example, at our house, it is a good rule of thumb. For example, if I do not turn off, I will pay more for electricity which means no money for other expenses - that is my principle. I thought it would be the same for my hotel. Because I think like that, and I should do it and I make it a habit so that I will do it automatically when I even forget about it." (CHÂU, Room attendant)

The HK supervisor HƯƠNG as a 'RD' and 'iM' emphasized she would make sure that these [she reported her employees implemented a list of energy saving actions at work] become 'habits' for her room attendants. HƯƠNG reported that she would not turn off the lights which were forgotten by her room attendants, but she would ask them to go back to the room and turn off the lights themselves. She explained that she would like to hear the reason why they had omitted this action and wanted her room attendants to remember this error and hence develop a habit to turn off the lights when leaving a room.

*"Previously we [housekeeping employees] closed the curtains, now we removed the curtain to get natural lights. Or when I work in the bedroom, I turn off the bathroom light, and when I go to the bathroom, I turn off the bedroom light, that is all. Except when we vacuum the room, we must turn all lights on so that we can see the dust clearly. Saving electricity is like that. Leaving the room means all the lights have to be turned off except the one on the guest's desk which is on a separate system. So, it does not turn off [with the other lights], I just turned off the central switch by the main door to the guest room. The room's electrical system will be turned off when we turn off the central switch. We often remind our employees about this in our daily routines to make it a habit."
(HƯƠNG)*

CHÂU reported that most of her colleagues did not save energy in their daily works because their minds were pre-occupied with other things.

“Most of them care little because their minds are distracted and full of other things. I come here and still have to work at home, maybe my child is sick, hurt, or something happens to my family. I am not sure because I am completely like that.” (CHÂU, ‘receiver-doer’)

HƯƠNG (‘RD’) reported the environmental actions at the hotel were very practical and related to her current role as the hotel’s profit was linked directly to her service charge.

LỄ (‘RD’) claimed to implement all the required environmental actions at the hotel.

“I implemented these environmental actions and everyone at the hotel acted according to the environmental campaign.” (LỄ)

LỄ listed out several PEB she implemented, including turning off power/lights to save energy, separating waste, reducing chemicals to save chemical costs, avoiding water waste. As a senior room attendant, her role sometimes extended to include checking rooms cleaned by junior room attendants. She mentioned she checked the rooms to make sure that the power/lights had been turned off.

Interestingly, the researcher sensed that LỄ’s PEB actions were strongly driven by ‘saving costs’ rather than ‘environmental protection’ because she did not once mention environmental protection when explaining the motive behind each PEB she listed.

MINH reported he implemented “turn off” policies, “explaining to staff about the importance of saving food”.

“I try to utilise what I can. For example, for the stove tops are turned on low and have been not used in the meantime, I will put some water kettles to heat water on these spots instead of having to turn on another gas top. Every staff knows about that...As I gave a previous example of heating the water on the stove tops [which are always turned on low heating level] to save gas from turning on another stove top. In addition, I do not plug in the electric appliances that I do not use or have not used yet. I do not use the appliances wastefully...As previously said, in the kitchen, firstly I told my staff about the hardship of farmers to produce foods such as it takes many efforts to plant rice trees and produce rice because I originally came from a farming family...so that my staff can understand and respect the importance of foods and ingredients and they do not waste them...that is up to the chefs who are self-aware and understand by themselves. Besides, I also have other measures, for example, having strict

measures for staff to follow. That means, I have rules like whoever is wasteful will be warned [verbally]. Also, rules like the staff must do that and this for ingredients and energy consumption in the kitchen...” (MINH, Acting Executive Sous Chef, a passive ‘RD’ and an active ‘IM’)

BÁCH reported he implemented ‘turn off’ policies.

“In general, in my kitchen, if the lights do not need to be on, we will turn them off. My kitchen operates twenty four hours a day, hence all lights are left on so that we have enough lighting for working. For example, in other kitchens or canteens, in the cold dish kitchen, or the steward section, they turn off all lights during the evenings. That is part of the ‘saving electricity’ campaign... in my kitchen, we turn off the ovens when we do not need to use them. We turn down the gas top stoves to low heat when there are no food orders to save energy. Or we can try to warm up something else on these gas tops. This is also one way to save energy.” (BÁCH, Acting Executive Sous Chef, ‘RD’)

NGÂN (Pastry Commis 3. ‘RD’ and ‘Ir’) reported that she had tried to “save ingredients” in her pastry works. Also, she was encouraged to ‘turn off equipment that was not in use.

While TIÊN reported she implemented various environmental actions at the hotel but noted that some operational staff wasted electricity and water in the locker areas (the staff room). This was resolved by investment in technological projects such as the installation of automatic lights and showers.

“Actually, water and electricity were the two most wasteful areas at the hotel before. This did not happen in the guestrooms or functions rooms but in the staff locker areas. There were employees who used the resources wastefully, for example forgetting to turn off lights when leaving the bathrooms or using excessive water for washing their hands and brushing their teeth. It was so wasteful. After that, the departmental management and hotel organised a monthly team meeting to talk about that. The solution was to install smart lights which automatically turn off after two minutes when there were no people instead of human behavioural change because they often forget. This was a saving.” (TIÊN, Banquet Supervisor)

VI reported she ‘turned off’ equipment, ‘reused soaps’, ‘reduced water’ in her cleaning routines. However, there were some factors that meant that she could not always implement the PEB, including family pressures.

“Yes, that is true. We cannot claim that we have forgotten, because so many things lead to [not turning off lights/appliances etc..]. For example, my life is

influenced by my family. Sometimes I have an argument with my husband, I become distracted at work. But that rarely happens because I form a habit to turn things off when leaving a room.” (VI, room attendant)

From ‘self-reports’ of senior managers on the PEB of their employees, KHUÊ highlighted that many employees who worked in the hotel for a long time seem to ignore the 13 cleaning steps and did not care because her staff perceived these steps were not helpful in achieving the required productivity.

“On theory, the employee follows the full procedure but in practice some employees skip steps. They find overloaded and skip steps they think unnecessary. That is a reality.” (KHUÊ)

She added there were cases of her room attendants who did not care for energy saving.

“That is training like that. But in the process of doing it, many people did not care, mostly running after work speed, for example, entering that room, if guests let things turned on, they left them on They saw that lighting on, but they did not come to turn them off. There are still cases that happened.” (KHUÊ)

MINH reported that all his chefs implemented the EE actions (such as not wasting energy). If there was any energy wasted, this was due to new chefs or interns who were not aware of the environmental protection measures.

“There are several levels of staffing. Some brand new and interns from the schools are maybe not aware of that. But when I see it, of course I must remind them not to do that.” (MINH)

BÌNH said he observed that there were some staff who did not care much about using resources economically because they carried unhealthy living habits from home.

“I do not think deeply about it which I have not been able to talk deeply about the environmental values. But with the current awareness of the staff here, there is still a need to remind them of being not wasteful. Saving energy and cleaning the environment. Is that related to the environment? Perhaps, the staff are influenced by the old habits of daily living in somewhere else.” (BÌNH, Chief Security Manager)

BÌNH also said some staff used the elevator even they only needed to travel a few floors. He said he encouraged his staff to walk instead of using the elevator to keep fit and save electricity. He reported he accepted the unused stoves were left on low heat because it was a functional requirement of the kitchen. However, he thought the water was used wastefully in the kitchen.

"I see here that the kitchen is also one of the parts where people also consume relatively much water. Of course, gas stoves must have a low fire always when employees lower the gas level to leave a constant low gas fire [to help the chefs turn on the big fire immediately when they need]. Because when you [refer to the researcher] go to the kitchen, you know the gas stove were always on low, because how can we warm up. But actually, it is the construction of the kitchen, no problem at all. But water is relatively a waste. The kitchen staff just let the tap on constantly during their washing of something. They rinse or wash anything which consumes much water. In fact, water consumption is related to the use of extra chemicals to treat water waste. Because when the sewage is full, it needs to discharge for treatments. So, it is expensive, I think so. The water just runs from taps for you to use. It is related to sewage and the treatment."
(BÌNH)

6.5.2.3.2 PEB of 'VIT'

As a VIT, CHARLES (Director of Operations) reported he engaged some PEB actions such as 'turn off', 'paperless' and 'educate his staff on PEB'.

Another VIT, ĐẠT (Cluster Director of HR) reported that he personally followed up the implementation of the environmental initiatives. For example, he daily checked the number of non plastic bags were collected against the target on the in-house built EMS.

6.5.2.3.3 PEB of 'iM'

MẠNH suggested he personally implemented 'turn off' policies because he was the controller of the automatic energy systems at the hotel. He reported he did not have a list of EE actions for himself or the operational employees. He said he did not monitor EE activities at departmental levels.

"I don't track [monthly energy consumption]. Even though I have my individual meters, but I do not record it. If I want, I can get it, but I did not record it...We have not never done gas efficiency. Since I came here, I have not done any project to increase the efficiency of using gasoline. Or-- there is no index for gasoline. We only collect the monthly consumption [for the whole hotel unit], that is all ... I don't have an idea how to save the gas." (MẠNH, Assistant Chief Engineer)

HƯƠNG reported a list of energy saving actions that she did at work. Interestingly she emphasized she would make sure that these become 'habits' for her room attendants. However, she reported that she would not turn off the lights which were forgotten by her room attendants, but she would ask them to go back to the room and turn off the

lights themselves. She explained that she would like to hear the reason why they had omitted this action and wanted her room attendants to develop a habit to turn off the lights when leaving a room.

“Previously we closed the curtains, now we removed the curtain to get natural lights. Or when I work in the bedroom, I turn off the bathroom light, and when I go to the bathroom, I turn off the bedroom light. That’s all. Except when we vacuum the room, we must turn all lights on so that we can see the dust clearly. Saving electricity is like that. Leaving the room means all the lights have to be turned off except the one on the guest’s desk which is on a separate system. So, it does not turn off [with the other lights], I just turned off the central switch by the main door to the guest room. The room’s electrical system will be turned off when we turn off the central switch. We often remind our employees about this in our daily routines to make it a habit.” (HU’ONG, room attendant)

MINH reported he implemented several PEB including ‘saving energy’. He reported that all his chefs implemented the EE actions (such as not wasting energy). He said if there was any energy wasted, this was due to some new chefs or interns who were not aware of environmental protection measures.

“I try to utilise what I can. For example, for the stove tops are turned on low and have been not used in the meantime, I will put some water kettles to heat water on these spots instead of having to turn on another gas top. Every staff knows about that... In addition, I do not plug in the electric appliances that I do not use or have not used yet. I do not use the appliances wastefully.” (MINH, Acting Executive Sous Chef)

BẢO reported he implemented PEB actions including ‘Turn off when not in use’, ‘reducing gas’, ‘avoiding water waste’.

“...turn off those things when they are not in essential use... It is not necessary to turn the gas on high always for the pot of water to boil noodle soup. We only need to keep the water on warm... Open the taps only if I need to use water. I call the maintenance department right away if there are leakages from the taps. Because drops of water running from the taps for hours will cost a lot of money.” (BẢO, Ba Mien Chef)

BÌNH (Chief Security Manager) said some staff used the elevator even they only needed to travel a few floors. He said he encouraged his staff to walk instead of using the elevator to keep fit and save the electricity. For his PEB, he reported he implemented the turn off to some extent on the principle of being not wasteful. However, he said he

did not implement “turn off when leaving the room” if there was no one in the room because there might be another staff coming to use soon.

ĐẠT (Cluster Director of HR) reported he actively participated in ‘Turn off’ initiative in his office, implementing the ‘Earth Week’ and ‘Reusable Cups’ initiatives as the main coordinator of the environmental initiatives. He reported that he personally followed up the implementation of the environmental initiatives. For example, he daily checked the number of non plastic bags were collected against the target on the in-house built EMS.

NHI (Executive Housekeeper Assistant) said she was aware that as she was a team leader, she had to set examples for other employees to follow, hence she needed to actively participate in the environmental initiatives. She reported her environmental actions were ‘turn off when not in use’, ‘saving water’, ‘reminding and explaining to staff about energy/resource saving. She reported that her department implemented the ‘turn off’ when not in use actions. She observed this during her supervisory activities. She reported she always encouraged her staff to reuse the plastic bags, separate waste and she purchased fewer plastic bags in her department.

6.5.2.3.4 PEB of ‘Ir’

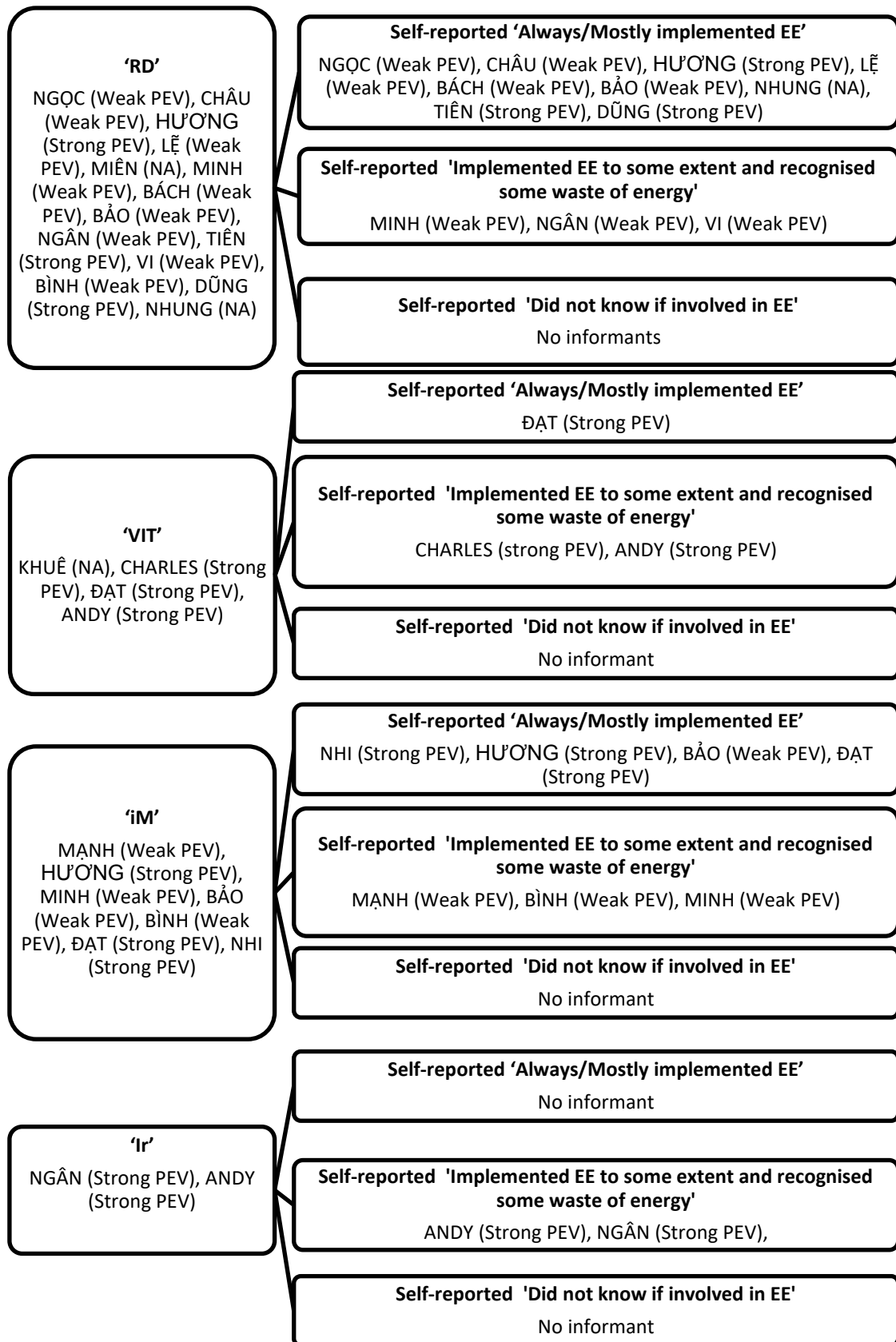
As an Ir, NGÂN said that she had tried to implement the measure ‘saving ingredients’ in her pastry works. Also, she was encouraged to ‘turn off when not in use’. However, for her kitchen, it was a reality that all equipment (i.e., baking ovens) in her pastry kitchen must be turned on twenty-four hours a day and seven days a week and it was an impossible mission to reduce energy even by 5% without impacting the work quality, customer satisfaction.

*“This type of saving is not effective. Hence, we need to consider this carefully. We cannot save energy if compromise the other aspects that I talked about.”
(NGÂN, Pastry Commis 3, an informal Ir)*

6.5.2.4 PEV-PEB Interaction

This part continues to present the findings of the alignments and the interplay between PEV and PEB for Case B. Figure 6-11 shows the mapping of ‘PEV-PEB’ by each employee of Case A which was done through the linking unit ‘informant ID’. For example, the box “Self-reported always/Mostly implemented EE” shows those Vietnamese employees who reported they carried out the EE actions at work well had strong or weak PEV or no PEV. Overall, PEV has lesser influence on PEB for the employees of Case B, compared with those of Case A. Majority of RD employees of Case B with strong and weak PEV reported that they ‘Always/Mostly implemented EE’. Noticeably, many RD reported their PEB were driven by their work habits.

Figure 6-11. Mapping PEV-PEB interplay (Case B)



Source: combined from the current study

NGQC explained her attitude to 'saving everything' came from her life habits, hence, she believed her energy saving behaviours could be completed naturally even under high pressure of productivity.

"It can be done [But with the productivity pressure of 16 to 19 rooms per shift, can you follow [the application of all environmental protection steps]. It's a habit that has been absorbed and so it can be done." (NGQC)

NGQC however suggested she could keep this value in her mind around 80% of the time during her work, which drove her to not forget to implement saving energy at work.

"Actually, there was a time when I neglected/forgot. For example, maybe I have not reached 100% of the time yet, but I can do 80% or 90% of the time. I can confirm that I have achieved with my habit...That is both my personal value and the requirement of my job." (NGQC)

BÁCH reported that he implemented the energy saving actions in the kitchen which were partly driven by his self-awareness of PEV, partly by the requirements of the job and partly by habits.

"Partly due to the job requirement. But it is more due to my self-awareness...It is about the self-awareness of saving energy. I do not do it with a hostile and fake attitude. Gradually it becomes a habit in my routine." (BÁCH)

MẠNH reported that his PEV related to his energy saving actions strongly. However, he also added that his EE actions were more driven partly by his strong ambition to do well in his career rather than for the sake of the environment.

"[my PEV affect my energy-saving actions] very much. The influence is high. I review the chiller daily. If other people want to change the temperature, most of them have asked my advice, especially if I need to control the energy consumption in the building. Secondly, it fits as not everyone can change it. It is possible that each person's perception is different. Their different understanding will lead to inappropriate energy usage, Mine is appropriate, maybe until I see something, I meet one like you or someone who is more professional just shows me that it does not fit right then it needs adjusting. But my perception of that system is working best here, that everyone needs to follow me, and I'm the only control." (MẠNH, Assistant Chief Engineer)

LỄ ('RD') reported that her PEB was aligned with her PEV because she felt it was right thing to do and she felt comfortable about that. She stated that she implemented the PEB based on her PEV and not because of the company's requirements.

TIÊN reported that her current PEB was driven by her job requirement and PEV.

"[my PEB] are driven by both [my PEV and job requirement]. Firstly, if we want to ensure that we do a good job, of course we must follow the job requirement. That is my view. Secondly, saving resources at work now forms part of my habits which will then influence my habits at home and in public. This is for my family."
(TIÊN)

CHARLES said his PEV influenced his commitment to implementing the environmental actions at the hotel to some extent such as educating the staff on that, but they also depended on the cooperation of his staff.

"Here it is all a question of trying to educate our team members. Right? Because I have only two hands. How can I ask my department to save more just for them to be committed? How do I explain that to them? We gain enough commitment to try to track what we are doing against some measurements. Also, from time to time we refresh what we've been saying so that the team members understand that we need their commitment, to reach this kind of level, or to reduce our wastage to enable better forecasting of the demand for resources...For instance, when the chefs forecast the demand for food to support the food ordering process, they understand that you need to order a certain quantity, and they do not say, "Oh! I do not care. I will order the same amount regardless." Anyway, it is the companionship, right? You must try to educate the team members in order for them to be able to gain this commitment." (CHARLES)

ANDY (VIT) suggested that *cultural and societal value factors* were a barrier to implement the environmental initiatives in the Vietnamese hotels. He viewed that the employees in New Zealand, Australia, and the UK were more environmentally aware than those in Vietnam and some Asian countries.

"Because the employees are much more focused and environmentally aware in the west Australia... than those in Vietnam... I find it a lot easier to implement those changes in those countries, probably because those countries are little bit more aware. I am not saying they are any better, but they are more aware of the social impact. Particularly Australia and New Zealand are very aware of the impact on their personal environment... Whereas, other countries are not, and Vietnam certainly is not. Or if they are, being known to not give any impression that they are harmed at all... employees, because of where they come from, are a lot more aware in the west than they are here...it is only that way because culturally that is an area that Vietnam needs to really focus on, really try to work towards...it's a society thing." (ANDY, VIT)

6.5.2.5 CEV-PEB Interaction

The results reveal that CEV and PEB overlap to some extent.

ĐẠT ('VIT', who perceived the CEV as 'concerns for the environment') reported the CEV influenced him in his way of thinking and acting at work and emphasized his behaviour changed under the influence of CEV.

"[CEV] affect me in my decisions because people have certain values, and they prefer doing things aligning with their values. People always questions like how I can do to protect the environment?... Yes. Because I also change my behaviours a lot about the environment. For example, in the past, I sometimes forgot to turn off the taps while I shaved my beard. Now, I have never let that happen." (ĐẠT)

HƯƠNG ('RD' and active 'IM') stated the CEV of the hotel reinforced her PEV and behaviour of using the rubbish bags changed after an environmental programme was introduced at the hotel.

"At the hotel, when a program launched on rubbish separations or in the past, I also ordered a lot of big plastic garbage bags to use, then I no longer ordered the purchase but reused the bags given by the suppliers whom we bought things from. Before, I used to tear the used bags apart and throw them away. Each day I threw away many of them. Now I tell my room attendants "Why don't you reuse these big plastic bags for trash. You just waste a lot by tearing them up and throwing them away. At home, you have big plastic bags, you keep and reuse them. Why come here and do not do that". I influence them [room attendants] a lot because I am training and supervising now, so I think I influence them more. I keep reminding the room attendants many times until they have the habits...it affects a lot [laughs]. From the savings of the Hotel, what makes the room clean, and tidy... a lot [influence]... it also affects me a lot." (HƯƠNG)

CHARLES suggested 'the company' changed the behaviour of its employees.

"A big company like this also influences behaviour through the different tools that we use to help us do our jobs better in a more environmentally conscious way." (CHARLES, VIT)

VI also perceived a 'resource-saving' value of the company as a good culture which had a positive impact on her.

“Here there is a highly educational environment which is good for me. Since coming here, I have learned a lot, from the small to the big, the culture of life, the culture of resource saving. I feel that bringing things to life makes things very practical, helping me with a lot of knowledge so that I can work and contribute to the environment. I can also aim to teach my children, something that is very typical for me.” (VI, room attendant)

6.5.2.6 CEV-PEV Interaction

This section presents the alignment between CEV and PEV and the interplay between the two. Most of the employees reported the CEV was aligned or on par with their PEV.

HƯƠNG reported the perceived CEV from the EE actions at the company aligned with her PEV.

“[The CEV is] very aligned with my thoughts. Also, I consider this hotel like my home. At home, I must turn off the light in the next room if I am in this room for example. I find it [CEV] very much aligned with my thoughts and actions.” (HƯƠNG)

CHÂU suggested such CEV were on par with her PEV because this was right thing for the community.

“It matches with my personal values because this affects daily life of the whole community.” (CHÂU)

NGÂN said her PEV-CEV alignment linked to enhancing her loyalty to the company.

“There is alignment between my PEV and the CEV. Because when I chose to work for the hotel and I can stay in this workplace for a long time, I think there are similar lines between my thoughts and their core values. This is good, and I like it.” (NGÂN)

ĐẠT reported that CEV aligned with his PEV in terms of its commitment to no plastic usage, recycling, waste management, water and EE and sustainable development. He also re-enforced that matching CEV to PEV helps increase loyalty to the company.

“CEV matches my PEV very much. That is the reason why I communicated the supplier stop bring plastic bags to our hotel. I think the company values are aligned with my personal objectives. This is an important thing for many employees nowadays that the company values are aligned with our personal values to some extents, right? I think these two values must go along well together. For example, I believe in something, but I join a company that does not believe the same thing. That is difficult to align these values later.” (ĐẠT)

On the other hands, a few other informants, for example ĐẠT said the CEV was higher than his PEV because the company was large and ambitious.

Furthermore, several informants reported CEV affected their PEV to some extent.

“Yes, that is correct [CEV affect my PEV]. Because you will expose to something called a company culture when you join the company. The company has its own focus or direction which I believe the focus is a right thing because the environment is almost everything we live in (smile). If we do not protect it, we will not have that living environment one day.” (ĐẠT)

A few other like MẠNH reported that CEV did not change his PEV.

“It [CEV] does not help me feel more optimistic about the working environment of the company, nor does it help me feel much more optimistic about the global environment in general. But it will work.” (MẠNH, Assistant Chief Engineer)

6.5.3 Informal Practices in Energy Consumption

This part presents the findings of making sense of the ‘informal practices’ in energy consumption what were widely accepted and used in different hospitality working environments and contexts (i.e., Kitchen, HK) for Case B as well as the different practices of the notion, which links closely to PEB.

6.5.3.1 Informal Work Processes

The ‘informal work practices’ was firstly shown in the widespread use of informal customs, routines, rules, and cultures rather than formal processes in place across workplaces (i.e., HK, Kitchen, C&E). Many informants said there were no official processes, guidelines, practices, or lists of EE actions within the Kitchen department.

MINH emphasized there were powerful ‘unwritten rules’ of the kitchen which he would not change or influence his colleagues because they were part of an unwritten culture that is hard to change.

“[laughs] It is too early to say. Because I have just come to this property site for few days [20 days]. There are many already unwritten laws that people will follow. But in this hotel, people know what to do so I do not need to influence them. Because people also know what is good and what is not good. However, when I aim for the good, people will do it.” (MINH, Acting Executive Sous Chef)

These powerful customs and routines were purely focused on OpE, with the aim of enabling tasks to be completed as easily and quickly as possible in the context of the highly time pressured environment of the kitchen, where delivering high quality food

quickly to meet customer demand is of paramount importance. These customs and routines were reported to be so powerful that NGÂN reported it was “an impossible mission” to reduce current electricity consumption in her kitchen even by 5%.

“It is an impossible mission [to reduce the electricity consumption by 5%] for the kitchens. This might be possible for other departments where they can turn off one bulb or doing other things. But it is difficult for my kitchen to do that...5% reduction might be possible if the engineering team evaluates what can be reduced without impacting the quality of the work. If the reduction impacts the quality of the work, it will impact customer satisfaction. This type of saving is not effective. Hence, we need to consider this carefully. We cannot save energy if we compromise the other aspects.” (NGÂN, Pastry Commis 3)

On top of that, due to there being ‘no operational targets’ and ‘no monitoring’ set for departmental and member levels in terms of energy consumption, which was currently set only at the hotel level, according to CHARLES (VIT, a director), there seemed to be no mindset among the operational employees to reduce energy consumption levels. This was especially true in the kitchens, according to MẠNH (Assistant Chief Engineer). Hence, it was not natural for the chefs to adopt and implement sustainability actions.

“However, either because the thought has not directly affected me or because it is not yet part of my measurements, it will be difficult for me to seriously implement it. Even though I have that thought, I do not keep the thought in mind long. At first, I followed this approach very well, but later it gets ‘laxer’. That is also the common mentality of everyone, including those working in the kitchen. For example, now that they have a certain goal that touches on energy usage. They will start to be verbally calling for saving. For now, they are comfortably consuming energy and whilst the responsibility of energy saving is left with the Engineering team, then it has not affected them then they will not be too concerned. Of course, there are people who do really care about the environment because they think of the hotel as a whole, then they will have good actions towards the environment, but for most people I don’t think they particularly care about the environment.” (MẠNH)

MINH suggested that the supervisor of each shift needs to monitor the staff regularly for positive PEB in the kitchen.

“Especially the chief supervisors must monitor and follow up the environmental implementation and always keep an eye on that.” (MINH)

The Sous Chef MIÊN explained the reason to why it was ‘common sense’ to prioritise the ‘operational requirements or efficiency’. All gas stoves would be kept at low heat

even when they were not in use. He explained the reason for this was that the chefs needed to make meals within 'a fixed timeline' from the moment the dishes were ordered by customers and it took 15 to 20 minutes for a gas stove to reach the required temperatures if it was turned off completely. If the gas stoves were left on low heat as they were now [the researcher observed], it only took 3 to 5 minutes to get the gas stove to reach the right heat levels. He also talked about food hygiene standards which related to the heating level of the cooked dishes.

"According to hotel standards, the food must reach a minimum temperature of 63 degrees, and then that ensures the food is not infected; that's the hotel standard of 63 degrees. It is the hot cupboard that keeps the dishes always hot. And currently I am setting 100 degrees which is shown on the computer, but in reality, the food is heated to about 63 degrees only." (MIÊN)

NGÂN reported a 'common practice' for kitchens as a reality that all equipment (i.e., baking ovens) in her pastry kitchen must be turned on twenty-four hours a day and seven days a week. She explained that this was because:

"Overall, the kitchens run even during evenings, hence we cannot implement the same things as the office departments (i.e., non-operational departments) where they can turn off everything when they leave the office. In kitchens, we keep the electrical equipment on almost 24 hours per day, but we are always reminded to turn off equipment, for example the baking oven, if we are not using them immediately...This is about adjusting the temperature to a standard level. It means, in baking cakes, we must turn on the ovens for 10 minutes to obtain the stable temperature, then we can start to bake different cakes. Hence, when the temperature reaches [the standard level], we can immediately bake or wait for a few more minutes. Otherwise, we are always encouraged to turn off the oven in order to save energy as well as prevent fires and explosions...As I said, kitchens most definitely use a lot of electricity, because we do not turn off any equipment...that does not mean that we are not saving energy but that we are using the equipment according to the requirements of our jobs. We are not wasteful. Because you said if there is a wasteful issue, then there is a need for saving resources. However, here we are doing things properly, just enough, not wasteful." (NGÂN, Pastry Commis 3, 'RD' and 'Ir')

MINH emphasized that 'business demands must override the environmental actions' in the kitchen. He explained it was not a matter of his choice but 'it is immutable' to keep the gas stove tops turned on when not in use. He said the gas stoves were kept on low heat when not in use to save some energy, but that they could not be turned off.

“It is not like that. If I say, when a customer has an order, I start turning on the gas stove top, I will wait for the stove to heat for 10 to 20 minutes, but “20 minutes” is the timeline to bring the food for the customer. For the cooking process, for example, I prepare many dishes from 20 to 30 minutes extra, which takes up to an hour already, and everything must be prepared. That is immutable, it must be that way. The water must always be boiled, so that it is ready to be used. There is not enough time if I start boiling the water only after the order comes in. Our kitchen receives few “a la carte” orders, whereas other kitchens have many a la carte orders. We cannot prepare everything from start when there is an order...When people are hungry, they want to eat soon, right? If the customers must wait for an hour for food when they are hungry, my business standard is going down. Also, when the dishes are not at the right temperature, they do not meet the customers’ standards.” (MINH)

These comments again highlight that the kitchen staff have a strong focus on ‘operational efficiency’.

Furthermore, there is a widely accepted notion about realising ‘practicality’ under real-world conditions. MINH also pointed out that *the old or outdated status of the kitchen and equipment* did not meet the requirements for making modern meals/dishes (consequently, PEB) because the kitchen was built 20 years ago.

ANDY (Cluster GM) explained that the *unavailability of adequate internal and external infrastructure* was a challenge to incorporate the environmental initiatives into the current work procedure or process. For example, the unavailability of two-bin system limited the room attendants to separate waste in despite of adequate PEV and environmental communication. The informant referred to infrastructure including the plant [the building], equipment, logistic systems.

MINH suggested upgrading the current equipment in the kitchen for better EE and control.

“With the unwritten rules, we can apply [environmental protection] for some companies and cannot for others. In my previous company, we changed all the gas fryers to electronic fryers because it is difficult to control the heating level for the gas fryers. We can control the heating level better with the electronic equipment...there is more energy waste from the gas equipment than electronic ones. So, we should change this equipment. Also, we should turn off the food warmers when they are not in service.” (MINH)

Furthermore, the informality of these customs and routines showed in being mostly stored in the minds of the chefs, rather than being written down as formal work

processes. BẢO (Ba Mien chef) reported that there was an informal and unwritten list of the 'energy efficiency' actions in the minds of the chefs.

"Yes, we do have a list. For example, each day we discuss about how to use this and that. However, we have not written the list down...Actually, we know through our hands-on experience. We do not write that down. Suppose we have a written list - we wouldn't have anywhere to hang the list up." (BẢO)

Consistently found for the HK, the 'informal work practices' was shown in 'the widespread use of informal customs, routines, rules, and cultures.'

NGQC (room attendant) reported "Ms. S [the assistant of the Executive Housekeeper] might have it [a list of energy-saving actions for cleaning the rooms or tips of saving energy and she seemed not sure].

HƯƠNG also reported that there were step-by-step guidelines to save electricity in the housekeeping process. The researcher observed that these guidelines were not available in written form but were assumed to be understood in *the minds of the room attendants*.

According to Acting Executive Housekeeper KHUÊ, 'turn off all' at work was the widely received message. However, the 'turn off' action was not clearly associated with PEB or was only associated with a common part of the HK operational procedure. Also, it is unclear when to turn off.

"Turn off lights or all [in the room]. When [the room attendant] enters the room, they must turn on all equipment to check which lights are working. But when they do cleaning tasks, they turn the lights on first and if they see the lights work, they then turn it off. They don't turn off the lights on the ceiling." (KHUÊ)

There seemed to be some *informal rules* on how to turn lights off. When HK staff entered a room occupied by a guest, they will usually leave the room's lighting in the same state as when they entered the room to clean it. For rooms where guests are not in, the HK staff should turn off all lights except the bathroom lights. All lights should be turned off if no new guests are coming after a room has been cleaned and made up.

"Usually, the general rule is to leave the occupied room in the same conditions [with respect to leaving lights/electrical equipment on or off] that the guest left it in. For cleaning an unoccupied room, turn off lights/electrical equipment in the bathroom when working in the bedroom and turn off lights/electrical equipment in the bedroom when working in the bathroom. For the room "on arrival", the rule is to turn off in the bedroom and leave the light on in the bathroom." (KHUÊ)

KHUÊ revealed her experiences with the implementation of her staff's routines that were related to EE were based on 'common-sense widely accepted' rather than formal processes. Firstly, she reported that 'reality is different from theory'. She said on principles, her employees were expected to implement the 13 cleaning steps, however, in reality, she did not see this happening. It seemed that this reality was widely accepted due several reasons.

"But what I think is that moving from this [written documents] to practice, will be different [Laugh]. I tried to be open with you about that. You see things here like this but when you go to reality, the practice will not be like this [smile]. I try to be open with you [laugh]." (KHUÊ)

6.5.3.2 Widespread Use of Personal Evaluation at Work

The second instance of the 'informal work practices' notion was shown in the widespread use of personal evaluation of the customs and routines across the workplaces. The employees in the kitchens generally made sense of the customs or routines related to energy saving, for example, how to use equipment efficiently in terms of energy rather than operational efficiency, based on their hands-on experience, through personal discussions among team members, and personal judgements.

A VIT reported that there was no formal written documentation on the extent to which employees need to use or not use the resources at the hotel. It was based on the 'personal judgement' and 'self-awareness' of each employee.

"We have not defined the EE, for example, "turn of when not in use" in formal written documents...It depends on the personal judgement of each employee when they can define it [the specific list of turning off when not in use]. Hence, I think it is based on their self-awareness. In fact, the advertising or communication at the hotel is macro, which is something like raising awareness, keeping talking about it. It hopes that people will change their behaviour, but...do you agree with me that the posters cannot ensure that people can implement accordingly? But it is ok. At least we must raise awareness for employees first, in order for them to know about that first. And gradually it can change behaviours. Hence, I think that is the activity that the hotel is focusing on." (ĐAT)

Furthermore, many operational employees often used their current 'common-sense' approach to justify that they were already working with EE in mind (i.e., they felt they already demonstrated PEB) whilst their actions were in reality only focused on OpE. For example, MINH also suggested that "it costs more to turn off and turn on again each time" which was commonly accepted in his kitchens. In his view, it was more

'energy saving' if the chef let the gas stove top burnt on low gas. However, the informant said he only knew this through his own judgement and did not have any evidence that this was actually the case.

"The chefs will leave the gas stove tops on at the lowest heat level so that they can use the stove immediately when a food order arrives. For some equipment, it costs less to leave the stove like that than to turn it off and turn it on again...For example, a pizza oven or baking oven, if I turn it off and I turn it on whenever there is an order, then it takes time for it to reheat the entire system which still cost more and takes longer." (MINH)

BẢO (Ba Mien Chef) reported the same belief *"it costs more to turn off and turn on again each time"* which was commonly accepted in his kitchens.

"But in terms of turning off completely, as I shared previously, for example an oven, if we want to save to the maximum, we need to turn it off completely. But if we turn it on again to the required heat level for grilling meat, it takes around 30 minutes. And such a long time to turn the oven on again actually costs more." (BẢO)

Consistently found for the HK, the informality of practices was shown in 'the widespread use of personal evaluations' of the informal customs and routines. According to CHÂU (room attendant), common sense practice – 'turn off when not in use' could be judged by the employees' 'personal evaluation'. It was viewed as common sense that each staff member knows how to turn off the equipment and there is no need for monitoring this easily understood message.

"This must be based on the general self-awareness of each employee. Every day the manager sometimes patrols but I think it must be mainly based on self-awareness. I myself decided to do that in my works." (CHÂU)

6.5.3.3 Widespread Use of Verbal and Informal Communication at Work

The third instance of the 'informal work practices' was shown in the widespread use of verbal and informal communicating EE information across the workplaces within the hotel. BÁCH reported,

"Most of the environmental information I receive is from my manager. I do not receive it from other channels...environmental actions are communicated to us by leaving messages or via the managers announcing them verbally during the morning briefings or at the start of each shift after their meeting [about the environmental activities at the hotel] where everyone is present or by writing a note in a logbook. For example, if there is environmental information presented

at the 3pm meeting held the previous day, I will write it on a board for all staff working during the night shift (10pm to 7am) or for all three shifts. Because I cannot meet all of the staff working across the three shifts, I have to write notes on the board.” (BÁCH, Acting Executive Sous Chef)

The given reasons included that there were no staff rooms for meetings in the kitchen and most of the chefs did not have access to the company email system.

“Actually, we know through our hands-on experience. We do not write that down. Suppose we have a written list - we wouldn’t have anywhere to hang the list up.” (BÁO)

Similarly found for the HK, the informality of practices was also shown in ‘communication of EE practices.’ According to CHÂU (room attendant), ‘turn off when not in use’ seemed to be *widely communicated verbally as a ‘common-sense’ practice* within the housekeeping department. Staff should pro-actively help other staff who might forget to turn off the lights in their working rooms when they walked pass these rooms. This common practice was, however, not explained in detail in terms of what to do in different parts of the job.

VI (room attendant) reported that she received environmental information from various informal sources and verbal communication was common in her daily works.

“I get information from many people at work for example co-workers, friends and direct supervisors...From sisters who attended the environmental meetings, maybe from housekeepers or assistants or supervisors. On some days when the managers are on leave, the senior supervisors will do the morning briefings with us. Or if I miss the briefings, other room attendants will brief me on that...The morning briefings are usually verbal.” (VI)

NGQC reported *verbal and ‘word of mouth’ communication* was common at her kitchen.

“Every morning we still talk [verbally] about that. We thought it was not necessary to talk about that [in the morning briefing], however, we still mentioned the issue every morning. ‘We have to turn off the electricity when we leave the room.’ It is like saying every day, so we don’t save it on paper, but the savings are based on word of mouth among the staff. Every morning the meeting is “Today our agenda is like this and that”, and we just follow. This is the daily thing, so we don’t have to write and put it on poster, because all the staff understand the problem already.” (NGQC, room attendant)

HU'ONG (room attendant) also reported that the step-by-step guidelines to save electricity were in the minds of the room attendants and often reminded verbally.

6.5.4 Pressure of Workload (or Productivity), and Incentives and Penalties

This section presents the findings and analysis of the role of pressure of workload (or productivity), and incentives and who penalties in the current PEB of the hospitality employees in different hospitality working environments and contexts (i.e., Kitchen, HK, and C&E) for Case B.

6.5.4.1 Pressure of Workload in the Housekeeping Department

For Case B, the room attendants reported that 16-23 rooms per shift of 8.5 hours and 19-30 minutes per rooms was the average productivity required for each room attendant. This productivity varied to the operational demand of the day and the staff's experience.

NGOC (room attendant) reported that she was clear about the company's required productivity that was to clean 16 rooms per shift (that is, 31.87 minute per room) and sometimes she would do 2 extra rooms if required.

At the same time, there was the 'under-staff' issue, (called "manning" in the hotel).

"...because the key issue is manning. In order to thoroughly follow up all the procedures the corporation requests, there must be an adequate amount of 'manning'." (KHUÊ)

The onsite observation supported that there were personnel shortages. Most of the leadership positions for operational units (including the leader of HK department) were vacant and the units were operationalised by the acting leaders who were usually the assistants.

KHUÊ also revealed that there were time pressures and staff felt overloaded and in fact it took 19 minutes for room attendants to clean each room. As a result, employees many of whom had worked in the hotel for many years choose to skip the 13 steps because they were overloaded. Furthermore, her staff found these current steps unnecessary in achieving the productivity required.

"[EE] was used to be done, but most of the employees have been working here for many years, hence this is in their blood. They will always follow the step-by-step procedure. There are still changes. For example, some room attendants start their routines with making up bedrooms first and some clean bedrooms later. Hence, I prefer two employees clean in the same room at the same time. One cleans in the bathroom, and one in the bedroom and they can watch out

for each other which can complete the work faster such making the bed linens faster. However, this hotel assigns one employee in one room. On theory, the employee follows the full procedure but in practice some employees skip steps. They find overloaded and skip steps they think unnecessary. That is a reality.” (KHUÊ)

CHÂU (room attendant) explained workload pressure could make her colleagues less careful about the PEB at work.

“That was partly due to the workload pressure, or partly due to forgetting to check even we planned to check. The pressure was too high, so we forgot that. But actually, we always call out staff to act “when you enter the room, you must turn off the electricity.” (CHÂU, room attendant)

LỄ (room attendant) reported that she needed to finish cleaning 16 rooms for her shift on that day with the researcher. On average, she would need to complete 16 – 19 rooms per shift. However, she reported that she did not feel overloaded or under pressure with this workload. She explained that she could complete her work through good time management and effective organisation of her schedule. She confirmed that she would still follow all required cleaning standards for all these rooms. She did not mention whether she would incorporate EE actions in carrying out her work.

VI reported she cleaned 16 – 21 rooms per shift on average. Rarely she cleaned more than 21 rooms per shift with helps from other co-workers.

“I don’t get help from others, yet I have 21 rooms per shift. It means we cannot be given more than that number if the rooms cannot be made up to a good standard. In fact, I have not got enough time to clean even these rooms. It is necessary to have someone to help in order for me to complete the job...Sisters [employees called each other as part of Vietnamese culture and as majority of room attendants are female] will have to delegate the right workload.” (VI, room attendant)

6.5.4.2 Pressure of Workload in the Kitchen Department

Unlike the room attendants, there was no evidence of specific productivity targets for each chef but there were operational targets for whole kitchen unit.

The kitchen employees reported that they were driven by a fixed ‘time’ metric, that is, ‘to get the required meals to the table quickly’ and the rules of thumb for the commonly accepted fixed time was within 20 minutes after the customers ordered.

Unlike the HK works with planned demand known in advance, the 'time' metric was even more pressures for the kitchen employees when the demand for meals were unplanned in advanced.

It was reported that 'under-senior staff' (i.e., no leader of kitchen department for a long time and a newly leader just arrived) added extra pressures on the 'time' metric for the kitchen employees.

6.5.4.3 Pressure of Workload in the C&E Department

TIÊN (banquet supervisor) reported that a lack of manpower in her C&E team. This could be a limitation to implement more initiatives on energy savings.

6.5.4.4 Incentives and Penalties

Most of the informants were unaware of any incentives or penalties on implementing EE actions at the hotel.

6.5.5 Environmental Visibility of Energy Efficiency Behaviour

This part presents the role of environmental visibility of EEB in the positive PEB in hospitality workplaces.

KHUÊ (Acting Executive Housekeeper) reported that there was a lack of *documentation or low visibility of adequate documentation* to facilitate the environmental implementation at the HK unit. She found it difficult to access relevant written documents on key *work processes* and procedures related to energy consumption behaviour although she acknowledged that her previous hotel in Central Vietnam (managed by the same corporation) had better documentations and higher work standards. She revealed [in a low voice as she did not want other staff to hear] that she sensed the previous Executive Housekeeper was not willing to share her work knowledge (she had apparently used the term "secrets") to other staff members.

"I talked about the previous heads who kept all the information secret from his/her assistant. That is why Sister S (she referred to the Assistant) let me know - No. I really want to share with you - And I came up with a file of my own and Ms S's, a little bit of my time. Let me find [Stop 10s, click mouse] ... Here. [There is an outside conversation] There, such as SOP. [Interrupt - Phone ringing, calling. Pick up: I hear it, yes, yes, sister S went down there ...] There, here is the set-up trolley. Well, there are procedures like this. This is unadjusted because I've been following the previous corporation." (KHUÊ)

There was a culture of limited documentation and poor knowledge transfer as senior

managers leave the company without passing this information on.

“BÁCH: Yes, the former manager did have a list of EE tips... [Laughs] Because he left the company suddenly, he did not do the handover to us at all.”

Another visibility issue that led to the limited knowledge transfer was that most of the documents in English had not been translated into Vietnamese for the Vietnamese HK staff. However, most of the training or communications were carried out verbally or included in verbal staff briefings in advance of shifts. Sometimes handouts were given.

“Yes, usually during supervising. Or the assistant who did the training carry them and ask staff to record it [by handwriting], when they are done, they will write a report. They write a report so that they can test it according to this process or not? But actually, I don't know why these documents have not been translated yet.” (KHUÊ)

BẢO said the ‘visibility of maintaining cleanliness’ of the hotel influenced him to some extent.

“What I saw visually in this hotel, there were always people cleaning, hence I followed that... Yes, partly [this influenced my PEV]. Because, for example, why do you see that the hotel is always clean? Why can't our houses be cleaned like that? Yes? Why? Because people here always clean everything, hence for our normal life, we must also clean so that our houses are clean. I am not rich enough to employ someone to clean my house [laugh], we must clean our house by ourselves.” (BẢO, Ba Mien chef)

BẢO reported he noticed well the physical sticker/signs that say “Turn Off When Not in Use” beside the switches in his kitchen.

ĐẠT reported,

“Office departments start with simple measures such as we have “Turn Off” or “Turn Off When Not in Use” signs that are very eye catching and in good formatting in order to remind the staff to implement these actions.” (ĐẠT)

ANDY suggested the successful factor in the implementation of environmental initiatives at his hotels was to set up the environmental infrastructure that make things easy for operational employees. Hence, the visibility of environmental initiatives was key to the successful implementation. The environmental infrastructure needs to be visible to the employees to implement.

“In hotels, I think what we need to do is we need to implement a coloured bin system, for example, let us just say for an office. Let us have a different bin for paper in cans. This is your paper bin; all your papers go into this bin. This is your general waste, and you might even have a plastic. Well, we should not have plastics because we are supposed to be-- There should not be any plastic in the back of house. They should not have plastic but encouraging team members in the bar, for example, to make sure that they do not put wet waste or water waste into the same bin as a general waste. Then encourage them to use-- because unfortunately sometimes we do have some plastics in there, but we have now taken away straws. We have removed plastic straws we only have paper straws.” (ANDY)

6.5.6 Organisational Commitment towards Environmental Sustainability

This part presents the findings of the roles of perceived organisational commitment in the positive PEB employee engagement in environmental protection in hospitality workplaces for Case B.

Leadership played a determining role in successful EE programmes. He reported the implementation of environmental initiatives at his hotel that were dependent on the leadership of the hotel GM and the company.

“Being honest with you, it depends on the direction that we’re having also from our general manager. Everyone has different views and needs, right?... the leadership is quite important as well. On how much your GM is oriented but depending also on the region.” (CHARLES, Director of Operations)

A senior manager who had strong PEV, a good awareness of the environmental information at the hotel had positive support to environmental initiatives. However, he admitted that the company did not get the environmental initiatives down to operational levels.

“I was encouraged when we did the mugs and we saw 60% of the mugs sold and all the team bought them, and then it was like, “The team bought them. That is not the idea. “But it is the idea. The idea is, we are trying to educate anybody, it does not matter, this is a mug that you can use, and you still can take it everywhere, and the team members take it when they're going to coffees, they take it over with them. Not only are they proud of the fact that it is got the company logo on, but they also have something that they understand that there is an impact that they can have. Just by doing that we have created something, but now we need to follow it up... if you do not engage the hearts and minds of the people to make a change, it will never change. Giving them

the policy is not engaging with them at all, it is just telling them how it is. Once you have engaged their hearts and mind, then they can write the policy, this is how we believe it should be...It is more than another policy, more of a statement of how they believe that we should be operating from an environmental perspective. That is why it is more important for me to go down the hearts and mind route than it is to go with policy, because there are too many policies here, policy for everything...A little bit more because of the waste management system we are trying to finalize and implement, more so from that. This has been a good learning curve for us to understand we are a long way off where we should be. That is quite evident to all of us. I say to all of us, we were talking about really, to me, and ultimately, it must start with me.” (ANDY)

Several operational employees reported their GM cared for and supported the environmental protection at the hotel.

“Because to my knowledge, the GM cares a lot about this, because there are meetings or Facebook messages to communicate to the employees to implement or check if there are any new ideas. For example, environment-friendly cups. They think about more ways on how to do have less impacts on the environment.” (DŨNG)

MANH reported the owners of the hotels did not approve much of the environmental projects. He implied that the supports of owners played important roles in implementing the successful EE initiatives.

“None of the EE projects at the hotel can go ahead as they need the approvals from the owners.” (MANH, Cluster HR Director)

ANDY (a senior leader, VIT) reported that *no financial benefits* were perceived by the hotel managers to result from some environmental protection actions (e.g., waste management) in Vietnam. Hence there were different perspectives on environmental practices between the hotel owners and management. For EE initiatives, potential cost savings forced the hotel owners to be keener to invest on EE initiatives at his hotel.

“Obviously, there is a cost implication to that. Then it is managing the cost implication to the owner because there is a cost to set it up and to manage it. There is no financial benefit to them to do it. Therefore, when I have worked in other countries, there are either financial penalties for not doing it [environmental initiative] or financial incentives to do it. From a financial side, it is difficult because we do it because it is the right thing to do. There are some people within our organization from an owner's perspective that have no..., not that they do not have an interest, but because there is a financial impact to

them. Their desire to do it is not as strong as ours...We are quite good at EE, mainly because the cost implications are quite big here. The government imposes energy price increases each year and that could be generally 10%, whatever they decide it is going to be. Therefore then, you expect big rises, then you need to become more efficient in how you use it.” (ANDY)

A senior leader was keener on technological change projects than behavioural changes in the area of EE because he believed the former would be easier to implement and have a greater impact on the latter. He added the limitation to the energy technological projects were the old building and equipment.

“Yes, I will be interested in your thoughts on EE and maybe other hotels do have success. When it comes to energy, I really believe that the biggest saving in energy is always going to be mechanical and I genuinely believe that me turning out a light here when I go out of the office and come back, will of course have an impact, of course it will, but a measurable impact, I can’t see, me personally, how that will have a measurable impact when I have a mechanical plant and machinery that’s inefficient in itself. All I am doing is just counteracting where the problem really is, therefore like I feel I need to address the main problem and the main source, and its usage and control where I can that has a significant impact. That is how I believe.” (ANDY)

Furthermore, senior leaders tended to prefer *technology change* to *behavioural change* because they viewed that technology was more reliable than human behaviour.

“It is not easy to change behaviour. It must be really someone who cares about the environment or who cares about the cost change.” (MANH, Assistant Chief Engineer)

ĐAT (VIT) reported the environmental initiatives were currently more related to the waste and recycling management than water or energy saving at his hotel.

6.5.7 Training

This part presents the roles training play in the positive PEB in hospitality workplaces for Case B.

Senior leaders of the hotel reported the importance of the educational programs on PEB and said the hotel provided some training on behavioural changes towards saving resources.

A senior manager also reported some staff behavioural initiatives including educational training from HR. And the staff were expected to demonstrate certain behaviours to avoid waste, minimise water use, reduce energy consumption and reduce food waste (rather than efficiency).

“With respect to staff behaviour change, we also try to educate our team members through training with Mr. H, on how to exhibit certain behaviours, not to waste some resources, not to keep the water running when you have finished using, not to leave the power on when you can turn it off, and to turn your computer off when you finish your work. There is a lot of training also, educational training that HR will provide as well.” (CHARLES, VIT)

Another senior manager stated the current environmental personnel was inappropriate and had no passion for environmental protection. He emphasized the importance of selecting the right environmental staff and training.

“Yes, we focus here [the training]. That is the only way we are ever going to make an impact, is to make sure that it-- Also, instead of, I think some of the people that we selected as the environmental group are the wrong people because again you have to select people that are passionate about it not just anybody.... Training is the biggest part of everything that we are trying to do at this stage of this project, and where I thought the biggest challenge would come with the owners because they have to invest some money to change some areas and to buy some things, but yes, it’s proven a bigger challenge to get people to get to buy into it and do what we want them to do.” (ANDY, VIT)

NHI (Executive Housekeeper Assistant) said that there was no need for formal training on energy saving because it was not complicated to understand.

On the other hand, most of the operational employees (who were ‘receiver-doer’ of PEB) reported they received no or little training in energy PEB.

KHUÊ (acting executive housekeeper) reported that there was no clear official training on sustainability actions that her employees could take, but there were tips which were usually passed on from one staff to another when they were trained hand on.

NGQC (room attendant) reported she had not had any training on environmental protection. VI (room attendant) reported she did not attend any training on EE. LỄ (room attendant) reported that she did not get any training on the EE actions. HU’ONG (room attendant) suggested that the room attendants should be aware of the EE actions as they are all adults, hence there was no need for training.

MINH (Acting Executive Sous Chef) reported the training on using equipment correctly was 'one off'.

"I am sure that the chefs were once told how to use the equipment in the kitchen when the equipment was first bought or previously during their first three months of probation when they started working for the company...to make sure everyone know how to use and not damage the equipment. Because without training, the chef will damage the equipment and they will not complete their tasks or producing high quality food in an efficient manner." (MINH)

BÁCH (Cook 1) reported he received some informal verbal training on how to use gas and electrical equipment in the kitchen by his direct manager, but these were not related to EE.

BẢO (Ba Mien Chef) reported that the engineering team trained the kitchen staff on how to use the equipment (i.e., operational procedures) but there was no guidance on how to save energy (i.e., energy efficiency). However, BẢO said there was *no need for training* on how to consume energy efficiently because there was an 'inevitable practice' which was widely accepted in the kitchen that the oven always needed to be turned on for the whole shift. He said the training changed his awareness of cleanliness.

"Of course, I changed after the training. I became more knowledgeable about how to clean appropriately. As I talked to you previously, I did not understand what cleanliness was until I started this career and met some people who taught me well. I learnt and applied what I learnt into my life." (BẢO)

On the other hand, MẠNH (Assistant Chief Engineer) reported he received limited training on environmental protection actions as these trainings were online and in a foreign language.

TIÊN (Banquet supervisor) reported that she received training on how to save electricity in her work from the HR department. She said the training made her implement the energy saving actions immediately.

"After any training, it affects us to some extent. For me, it affects me for sure. I immediately implement saving [which I have already done anyway], for example turning on lights and equipment only when they are needed. When I pass through an area with lights on when not in use, I turn the lights off for other co-workers. Also, I take only enough food for myself on plates instead of taking too much food which would lead to me wasting the food that I am unable to finish." (TIÊN)

6.5.8 Summary

Similar to Case A, the results in this section indicated that PEV and CEV matter in influencing PEB to some extent for Case B. Hence, PEV or CEV alone did not drive the positive PEB among the employees. *The environmental communication, informal work practices, pressure of workload (or productivity tension), environmental visibility, organisational commitment towards environmental sustainability* play important roles in driving the positive PEB in practice. First, a limited understanding of environmental messages and their relationship with corporate priorities might have a negative impact on staff's propensity to implement practices, especially when those practices are not visible (i.e., EE rather than recycling).

Second, informality of practices played a barrier to the PEB.

Third, the widely accepted notion 'Operational efficiency is above everything else' which the employees expressed to perceive from CEV, and some leaders is a barrier to the current PEB.

Fourth, staff experience lower visibility of EE measures/practices (in comparison with recycling). Again, lack of visibility of consistent company action may undermine the capacity for managers encourage PEB.

Fifth, there is a strong propensity to follow the leadership of managers and, thus, there is an emphasis on technology rather than EEB change and a more leadership support for recycling than EE.

These emerging findings will be parts of the key discussions of the next chapter.

7 DISCUSSION

7.1 Introduction

This chapter discusses several significant mega-themes that emerged from the theme analysis of the study results that contribute to the current PEB framework proposed in this study. These discussions are presented in Sections 7.2 to 7.4. In addition, a cross-category theme of the significance of environmental communication within a hospitality business is incorporated within the discussions of these mega-themes that contribute new knowledge to the current literature.

Section 7.2 analyses the three-layer, value-action gaps: PEV-CEV-PEB and the significance of incorporating them into the environmental policy and strategies that are important for a hotel business. Also, discussions on the role of 'cultural and societal values' are added to these gaps. Section 7.3 includes dialogue on the importance of integrating individual employee typologies in the current PEB framework. Section 7.4 discusses work-related factors as the drivers for positive PEB of employees in the hotel workplace. The chapter ends with a summary.

7.2 Multi-Layer PEV-CEV-PEB Aggregation to the Current PEB Framework: 'Value-Action' Gaps

Pairs of interplays of PEV, CEV and PEB will be discussed first in this section which then lead to discussions of the changes to the conceptual PEB framework (Research Objective 5).

7.2.1 PEV-PEB

Primary data suggests that PEV interact with and explain PEB to some extent. However, the individual employees with positive PEV alone do not necessarily lead to them demonstrating positive PEB in their actions. This is clearly evidenced in this study in that majority of the employees who claim to have positive PEV do not implement positive PEB at work. This finding is similarly evidenced in the previous studies that generally suggest the same PEV and PEB relationship (Blake, 1999; Chung and Leung, 2007; Chaplin and Wyton, 2014; Ruepert, Keizer and Steg, 2017). For example, Chan et al (2017) have demonstrated that, in the hospitality sector in particular, employees express a desire to act in an environmentally sensitive way in general sustainable behaviours but fail to translate these desires into actions. However, these previous studies look at general sustainable behaviours. Hence, the findings from this new

research are adding specific evidence with respect to energy saving behaviours in the hospitality sector workplace to the existing literature on the PEV-PEB relationship.

Adding the further in-depth knowledge to the existing PEV-PEB relationship, the study also looks at PEV *strength*-PEB interplay. With this approach, the primary data shows that those employees with relatively strong PEV demonstrate greater levels of PEB than those employees with weaker PEV (see Figures 6-5 and 6-11). What the study finds, which is different from previous values-PEB studies, is that there is a stronger likelihood for those employees that 'hold positive PEV' to then 'implement positive PEB' than there is a likelihood for those employees who '*do not* hold positive PEV' to '*not* implement PEB'.

Furthermore, in contrast to the previously empirical studies, this study looks at *actual observations* of the employees' PEB and their *self-reported* PEB whilst the previous studies are solely based on *own claims* of the participants of their PEB in which the observation of real behaviours in the employees' daily routines are missing. Additionally, the participants of most of previous PEB studies were university students, not hotel employees. Hence, the observations of the actual PEB of these participants during their normal working hours were limited in these previous studies.

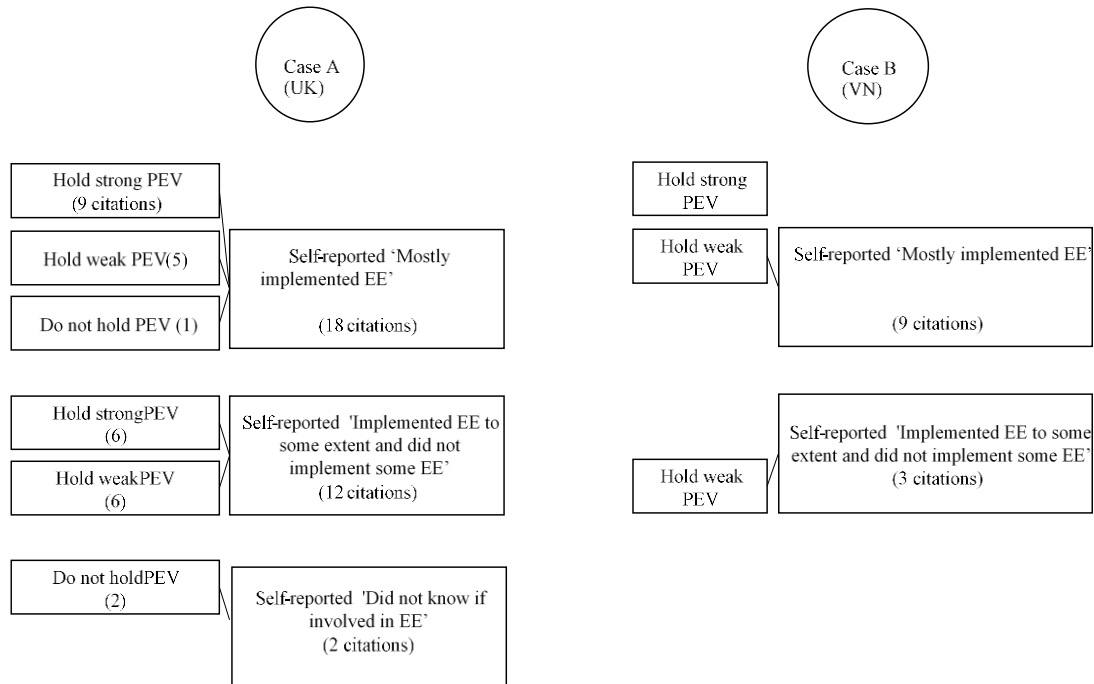
The primary data shows the clear evidence of several PEV-PEB gaps from examining the PEV-PEB (self-reported & actual observed) interplay that are different to the existing PEV-PEB ones that are identified in the literature. Firstly, there is a disconnect between what the employees *said with regard to the importance of PEV* (i.e., of the weaker scale of the PEV strength) and what they *said they did (PEB)*. For example, across the workplace settings in both of the hotel case studies, a large majority of the operational employees ('RD') claimed to carry out PEB to some extent while (i) some of these employees said that they *did not hold PEV and (ii) some of these said they hold PEV*. That is, those that said not to hold PEV also did *claim to carry out PEB* to some extent. This is a surprising finding as the previous studies generally agreed that PEV is prerequisite to the positive PEB, even if it alone does not lead to positive PEB. This can be explained by the second gap with – what they *understood about PEB* mismatches their *actual PEB (what they did as observed)*. Many employees thought they implemented PEB in their daily routines hence claimed for it. However, they were actually carrying out many standard operating actions, but surprisingly, they thought these actions were already pro-environmentally friendly. With further analysis, their claimed actions are clearly not pro-environmental activities, but operationally efficient activities with a focus on maximising productivity and customer satisfaction that are required by the hotel brand within a particular time allocation. If there were activities that are associated with PEB, they were quite weak and minor. Thirdly, there is a gap between what the employees *said they did (self-reported PEB)* and what they *were observed to do by the researcher (i.e., observed PEB)*, and their managers and other

cross-unit employees (i.e., PEB reported by managers and peers) (Chung and Leung, 2007; Zientara and Zamojska, 2018).

These above identified gaps imply that some individual employees hold positive values towards the environmental protection and therefore they are more likely to intend to act to save the environment, but they do not necessarily act in this manner which is in line with findings of several value-PEB studies (Ture and Ganesh, 2014; Ruepert, Keizer and Steg, 2017). For example, Ruepert et al (2017) suggest that PEV particularly encourage environmental actions when PEV is activated by contextual factors that drive people to act towards their perceived environmental consequences (such as CER). This is similar to other authors (Chung and Leung, 2007; Chaplin and Wyton, 2014). It informs the roles of other factors that drive the employees to act PEB within the hospitality workplace. Another implication is that it highlights the importance of investigating the PEV-PEB interplay in multi layers rather than one layer. As such, and different from these previous works, this study adds another two layers of interplay to this current PEB framework when adding the CEV factor to the framework which is missing in the existing literature. This will be discussed in the next sections CEV-PEB & PEV-CEV-PEB.

With placing the PEV-PEB interplay in a cultural dimension by combining all data sources for the UK and Vietnamese cases, the study finds the Vietnamese employees express stronger PEV than the those in the UK hotel case. More Vietnamese informants claim to be *always/almost always* carrying out PEB compared to those in the UK (Figure 7-1).

Figure 7-1. PEV-PEB between the UK and Vietnamese cases



Source: compiled from the self-reported interviews

When looking at PEV as the influencer of PEB in isolation from other drivers, this implies that the Vietnamese employees with stronger PEV link to more frequent PEB than those in the UK case who claim to have weaker PEV.

This study did not fully evaluate the impact of national and regional culture on PEV which can indirectly explain the differences in PEB by the individuals from different cultural backgrounds. However, it empirically reveals some interesting findings in this aspect that adds knowledge to the literature. In terms of cultural differences of PEV, the employees in the Vietnamese case study generally hold more positive PEV (or biospheric orientation values) than the those in the UK case study with regards to environmental protection; social equity (social-altruistic value orientation), and also display significantly stronger egoistic orientation values of 'being obedient' or 'doing what you are told from above'. This is linked to the specific EE practices included in routine staff processes that appear to have a more positive outcome for the Vietnamese operational staff compared with the UK ones under the current environmental practices and environments for each hotel case. On the other hand, the attribute of 'being curious' (egoistic orientation) was significantly stronger for the UK employees compared with Vietnamese employees and was linked with the desire for more information and engagement of the operational staff in the PEB practices as expressed by several chefs in the kitchen. This finding is similar to Chawla (2019) to an extent. This scholar studied the employee engagement in PEB specific to managing food waste in the same hotel company of this study with two both Western European

hotels in the UK and Germany. He indicated that the Western-oriented employees in these hotels were reluctant to engage in PEB due to weak perceived behavioural control (PBC) and recommended a greater degree of flexibility for the employees to make decisions and more control in their engagement in the PEB practices. With the analysis of the UK and Vietnamese cases, this study adds an additional knowledge of the Vietnamese/Asian value dimension to the existing PEV-PEB literature, which is heavily focused on Western organisations (also see Table 2-3), for example, Chawla (2019) only reflected the PEV-PEB relationship in his current Western European context.

7.2.2 CEV-PEB

Primary data shows CEV can reinforce or discourage the actual behaviour of hotel employees in carrying out positive PEB at work.

CHARLES (a VIT) says *“A big company like this also influences behaviour through the different tools that we use to help us do our jobs better in a more environmentally conscious way.”*

This finding adds the re-enforcement to the two previous studies in CEV-PEB relationship. Ruepert et al (2017) – one of two studies looking at this CEV-PEB relationship up to this time – who proposes that CSR in company mission values can increase or decrease the likelihood that employees engage in PEB at work that depends on how the employees perceive whether company’s ambitions are driven towards environmental protection or profitability, respectively. However, these scholars only look at the *self-reported* PEB of the employees and did not provide in-depth reasons for why CEV can influence PEB actions. Whilst the study reveals that there are important gaps between the *CEV-self reported* PEB and *CEV-actual* PEB. The investigations of these gaps provide the insightful knowledge of how, and the context for where the RD operational employees actually carry out PEB to different levels in their daily routines in practice and why they choose to take these levels of actions. In general, the study finds that many employees with CEV ‘concern for company’s self-interest’ or ‘concerns for the environment’ report they ‘always/almost implemented EE’ or ‘adopted PEB to some extent’. In essence, the mismatch in such CEV-actual PEB evidently drives many RD employees not to carry out the environmental initiatives. They explained it is because they are encouraged by what they perceived as commonly reinforced corporate messages that many operational employees are encouraged to choose OpE over EnE. Many employees believe the company – with senior leadership being viewed as the representatives of the company – is only prioritizing productivity, customer satisfaction and profitability over environmental protection. These beliefs are seen to be partially due to employees’ perceptions and observations of leadership attitudes towards environmental initiatives at work. For example, the current

voluntary nature (i.e., several hours a month on the top of their mainstream job) of the functions of Green Teams in supporting important environmental leadership and environmental communication activities is perceived as passive support of leadership towards environmental protection, which is in line with some previous studies (Dangelico, 2015). In addition, the study finds that the current efforts of Green Teams originate from senior leaders of various departments rather than 'grass roots' employees. This reflects a difference with the finding from Dangelico (2015, p. 739) who suggests Green Teams *"often generate from a 'grass roots' effort; they are loosely organized at the beginning and become officially recognized and supported by the management as they grow"*. This ensures *"helping to identify and implement specific improvements to help their business operate in a more environmentally sustainable fashion"* (Bray, 2008, p. 2). However, top-down, and non-physical engagement of senior leaders VIT in environmental initiatives and top-down Green Teams development contribute further to a lack of belief that CEV are viewed as important by the company management team. Consequently, many employees believe and act in ways that prioritise operational demands over environmental initiatives in their daily routines, as found in this study.

This implies the importance of the CEV-PEB relationship in (i) effectively designing a company's CEV; (ii) the effective communication of the CEV with the awareness of multiple actors who have different values and motivations; and (iii) the significance of identifying influential factors that affect the perceptions of the employees on the company's CEV in an international hotel chain.

7.2.3 CEV-PEV

Primary data indicates that it is important to recognise the interplay of CEV with both PEV and PEB. In essence, this study found that the CEV firstly interact with the employees' PEV. However, they interact in a way that they generally have less influence on the formation of the individual environmental values than other sources such as education, domestic and nearby settings of family growing-up, media on environmental issues and real-life experience. This is seen as being more significant for the older informants aged over fifty years old.

7.2.4 Integrating PEV-CEV-PEB into the Current PEB Framework

Primary data suggests that PEV and CEV interact with PEB in both personal and corporate spheres within a hospitality sector workplace. However, the PEV-CEV interplay affects PEB to some extent, and in fact there are many employees with strong PEV and positive perceived CEV who do not choose to carry out the positive PEB in their daily routines.

Analysing the 'values gap' in the PEV-CEV interplay and their influence on PEB, the study finds there is a mismatch in the perceived CEV and the PEV of the employees. For example, many RD employees perceived the most visible corporate message – profitability is the most important for the company rather than environmental protection – as committed in the CEV. This has some implications on the actual PEB they carried out. Interestingly, the employees claim that the current CEV does *not* reflect some traditional values attached with their job roles as expressed in PEV of the grassroots employees ('RD') who do not have the serious awareness of environmental issues. This contributes to the failure in carrying out PEB among the operational employees. For example, the key traditional value of PEV expected for a room attendant is only to get the room 'clean' within a specified duration of time. When the hotel's management become aware of environmental issues, energy efficiency (i.e., being environmentally friendly in using energy) is perceived to be not necessarily aligned with the traditional key value of 'clean fast'. It is because there is no mechanism in place to reinforce the behaviour change in order to show that the company is truly committed to implementing changes that improve environmental performance. The perceived message is that, these environmentally friendly actions are 'extra work' for the staff and there are no benefits for them in carrying out these sustainable actions (Chawla, 2019). For example, MILO says, *"It can be a challenge at times, because for a lot of staff, it is about coming in just to do their work; for a HK person, it's all about cleaning the room. We put pressure on them to do this quickly and then say all the time "make sure it's clean" and that does not always fit in with being as environmentally friendly as we would like to be."* As such, this finding also contributes to the previous literature which has not identified PEV-CEV interplay by providing the evidence of the negative impacts of a PEV-CEV mismatch on the delivery of good environmental outcomes.

Despite increasing interest in the well-known complexity of the factors affecting positive PEB at work for hospitality practitioners, there is very little published literature on the value-action gap theory for the sector. Previous studies on this topic mainly investigate one-layer PEV-PEB gap (Blake, 1999; Chung and Leung, 2007; Chaplin and Wyton, 2014). Very few studies look at the role of CEV at the interface of PEV-PEB at work. In particular, the inclusion of the PEV-CEV-PEB interplay in the PEB framework has received little attention in values-PEB research, except for a survey conducted by Ruepert et al (2017) which looked at the relationship between CER and PEB. The scholars use a similar concept to CEV as corporate environmental responsibility CER (referred as pro-environmental goals, strategies and practices of companies want to express) and suggest that relationship between perceived CER and self-reported PEB is stronger among individual students who have moderate to weak PEV. Hence, they argue that relatively weak PEV are still less likely to reduce PEB at work when employees believe that their organisation is committed to CER. In other words, they

argue that CER has a stronger role than PEV in increasing PEB at work. However, the scholars only investigated PEV-CER-PEB in isolation and failed to look at how CER-PEB interact PEV within the real-life hospitality workplace where there are work-related factors that are significant drivers to the successful delivery of positive PEB, and importantly the participants of that study were students, and consequently did not truly reflect the real world of employees in the hospitality sector workplace.

A number of inferences can be made from the analysis of the interplays of PEV-PEB, CEV-PEB, and CEV-PEV. First, employees are happier with the companies with environmental commitments that are in line with their personal values including PEV. The alignment between CEV and PEV is important in attracting individuals with existing ecological values to join the company. Hence, it is important that the CEV can be designed and communicated in the ways that can attract the right employees to join the organisation when the employees find their PEV share similarities with the company values. MAXWELL says, *"they're very much the same. I would have been doing what I do at home anyway, even if I were not working for the company and its values. I certainly would not be working for a company that I felt did not have good values. If I worked for a factory that I felt caused pollution and things like that then I would not work for them. That's my own values but I'm fortunate to be working for a company that shares my values basically."* Second, the alignment of PEV and CEV is more likely to drive the positive PEB among employees in the workplace than positive PEV alone.

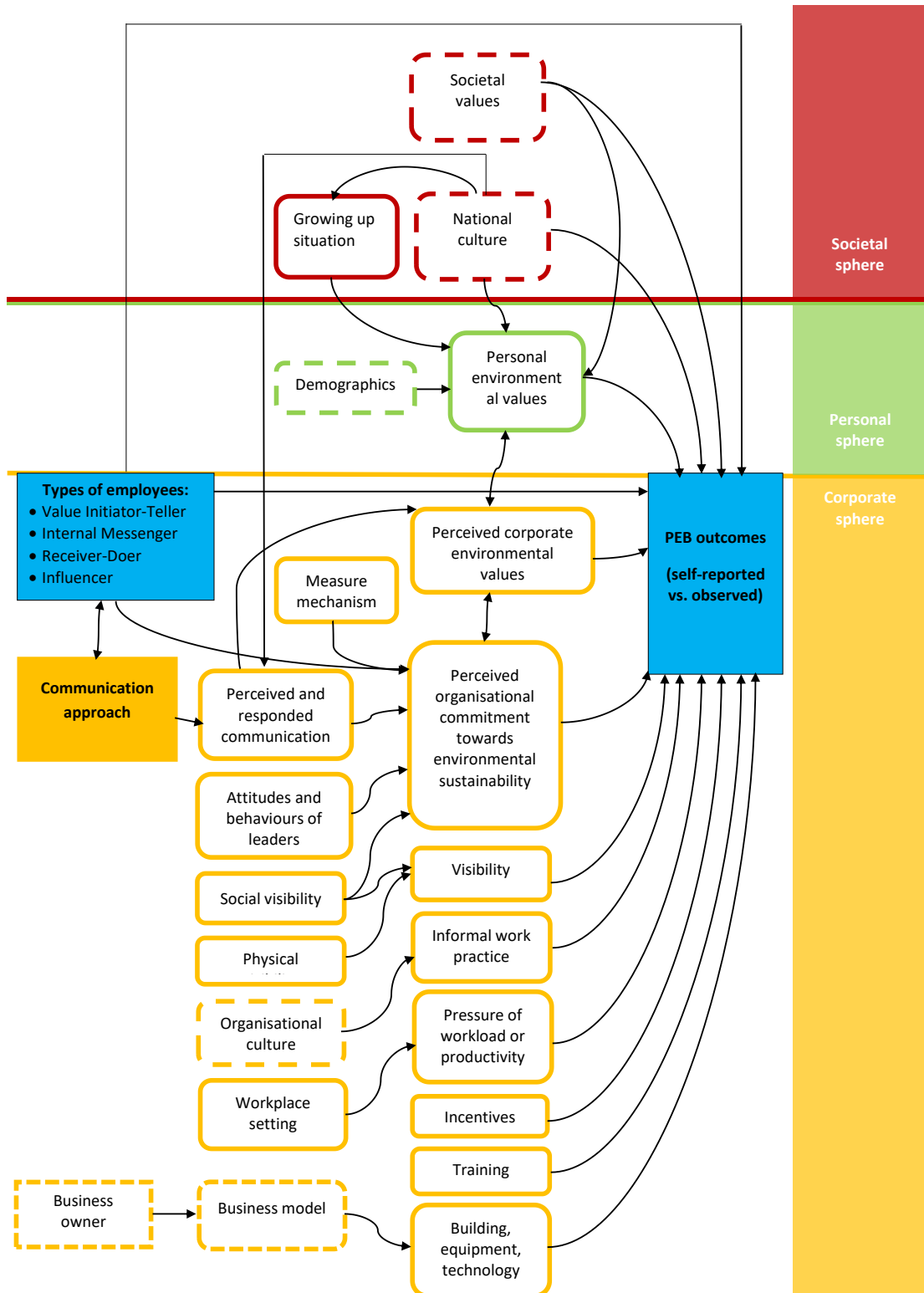
The above findings of the study stress the importance of designing an active and positive green message in CEV and having them communicated effectively to the grass-root operational employees for positive environmental outcomes.

A furthermore valuable discussion is to look into distinctive differences in PEV among the employees of the UK case study and the Vietnam case study to the CEV and PEB implementations. In essence, it has some cultural and societal implications for successful environmental communication of values and initiatives via CEV; and for PEB implementation when it links to its applications to different country locations for an international hotel chain. 'Do what you are told from the above' is an important value for many employees of the Vietnamese case study whilst 'being curious' – in the way they expressed to have strong desires to question, give opinions and change the current environmental initiatives at the hotel – is a more significant value for the employees in the UK hotel case study who are mostly from European countries. This difference will mean a change to the way the PEB projects should be communicated (especially via CEV as an important mechanism), cascaded, and implemented, which is different from the current environmental communication that follows a one-way, top-down approach for each country where the hotel is located in. For example, the values that are expressed most strongly for a particular country can help inform the most

suitable communication approach from leaders to the employees for hospitality establishments in this country. 'Following what we are told from above' is a strong value for many Vietnamese employees which is in line with the distinctive societal value of the Vietnamese for high levels of obedience to authority such as obedience to parent authority and higher power as an influence of Confucian sociocultural values of the Vietnamese society and socialist political values (Mestechkina, Son and Shin, 2014). The Vietnamese have a strong propensity to follow the leadership of managers and show a high level of acceptance of any requests from their managers without questioning or giving opinions. This implies a preferred leadership and communication model for Vietnamese employees. Several scholars studied the commonness of an autocratic, top-down, directive leadership style among Vietnamese leaders (Ralston, van Thang and Napier, 1999; Thayer, 2014; Truong and Hallinger, 2017). It suggests the current top-down (one way) communication appears to work for these employees. In the UK hotel case, the 'be curious' value item appears to be strong for many employees who are mostly British and Europeans. This is in line with the fundamental values of British people and with general Western values which puts greater importance on liberal democracy and individualism (Lockley-Scott, 2019). This indicates that the current top-down (one way) communication does not work for these employees.

An important implication of the results from investigating the PEV-CEV-PEB is that it informs the significant roles of work sphere and societal factors that drive PEB of the employees in the hospitality workplace. In essence, this implies the importance of examining PEB in a comprehensive framework that aggregates PEB antecedents in multi-levels of personal, corporate, and societal spheres that can be applied for an international hospitality business as shown in Figure 7-2.

Figure 7-2. PEB employee engagement framework in hospitality sector workplace



Notes:

Red→Societal sphere; Green→Personal sphere; Yellow→Corporate sphere

Continuous-line border→within the scope of this study; Dotted-line border→not within the scope of this study and areas for future research (see Section 8.5)

Source: Compiled from the fieldwork, analysis, and discussion of this study

In particular, the PEB framework is suggested to also include several work sphere factors emerged in this study that are integral to the current PEB framework. These factors are CEV, Communication of CEV, Employee Typologies, Informal Work Practices, Pressure of Workload (or Productivity), Environmental Visibility, Organisational Commitment towards Environmental Sustainability. Furthermore, differences in cultural values, for example the importance of obedience for Vietnamese employees, should be incorporated into the analysis of those personal and work sphere factors. Comparing this final conceptual PEB framework (i.e., Figure 7-2) with the initial PEB framework (Figure 3-1) proposed from the literature review, there are different factors that have emerged from the data analysis that appear to be important drivers of the employees' engagement in delivering positive PEB outcomes. They include *Employee Typologies* and *Pressure of Workload*. Within this study, there is less systematic evidence for the factors *Incentives* and *Training* to establish their significant matter to the employees' engagement in delivering the positive PEB.

7.3 Integration of Employee Typologies in the Current PEB Framework: Importantly, 'Do Not Shoot the Green Messenger'

Integration of employee typologies into the environmental policies has emerged in this study to be important in delivering positive environmental outcomes in a hospitality workplace. Primary data reveals that there are four distinct employee typologies – VIT, iM, Ir and RD. These employees have different agencies to deliver environmental programs, because they have different roles, functions, values, motivations, and ways to respond to the environmental communication within the hotel cases, as well as have different functions and values in engaging in environmental initiatives. The integration of this agency factor to the current PEB framework becomes important because the differences of the four types of employees evidently influence different environmental outcomes in the hospitality workplace. The study implies that one type of actor alone – with each unique important role – cannot deliver changes in PEB. It needs all types of actors to deliver positive PEB.

To illustrate this point of discussion, the study comprehensively presents an important issue of the current composition of the key actors that adds new knowledge to the existing literature. In essence, the current composition of the management and staff hierarchy does not enable positive PEB to happen. For example, managers have often been thought of as the main influencers of work practices. Chawla (2019, p.81) argues that managers script and enforce work practices so that organisational objectives can be achieved. But the study finds that the doers – the ground staff – are the people who can really affect the practices in the reality. The current issue can be further explored with the in-depth analysis of the current composition of the important employees who are the most passionate about environmental issues but who do not engage in the

ground-level delivery of environmental activities. Extensive environmental literature indicates that employees are more likely to engage in environmental initiatives at work if they hold positive PEV (Ruepert, Keizer and Steg, 2017). To illustrate, the first group of pro-environmentally passionate employees – VIT (including GM and departmental heads) – are at a too-high level to do anything to physically carry out environmental initiatives and actions themselves. Their participation in environmental initiatives is solely in environmental policy and strategy development such as CEV and high-level environmental communication (which are themselves important activities). The second group of employees include some passionate employees – iM – as part of Green Teams who are generally communicators of environmental information, but they are not physically engaged in carrying out the environmental activities or seldom get their hands dirty. The third group includes RD employees who are passionate about environmental protection (i.e., they hold positive PEV) at the ground level whose daily tasks are physically involved in consuming energy, yet do not necessarily do anything about the environmental initiatives for several reasons. The first reason is that RD do not have sufficient knowledge about the environmental initiatives which is found to be related to two causes. It is firstly because some environmental communicators do not believe that PEB work. Consequently, they have not been actively communicating environmental initiatives in the way that the RD employees find specific or relevant to incorporate any environmental initiatives into their daily routines. Secondly, it is because the environmental communication has not reached them effectively. However, this is not due to a lack of communication from the person who is in charge. The main reason is the most popular official channel of communicating environmental information used in the hotels is email but 66% of the employees do not have an email address. In addition, doers who either receive mixed environmental messages that the company and managers are not committed or tell them to do things that add extra activities to their workday without being given sufficient reasons or incentives. Finally, RD employees perceive via CEV that the company is not truly committed to environmental protection over other business priorities such as profitability and OpE. The study highlights that importance of profiling the RD because they are the employees who actually deliver the key environmental actions.

From the analysis of the current composition of key actors and the effectiveness of the environmental communication above, the study also reveals another important issue of effective environmental messengers (iM) or the composition of the Green Team within the hospitality workplace that affect the successful delivery of positive PEB. With the detailed knowledge of an environmental communication framework for the hospitality organisation, the study shows that the environmental messages have been diluted or caused misunderstanding when they go through a number of nonlinear communication channels and agencies (i.e., types of actors) that leads to failure of the positive PEB at various possible pathways in the communication flows of the

environmental values and initiatives as shown in Section 6.5.1. For example, the issue of inadequate composition of several key actors was discussed previously. Another example, leaders, for example MARSHALL as a senior leader of all operational departments, acknowledge that all department heads are figureheads in the hotel to make sure that everything is passed on, implemented, and sustained. However, many leaders do not consider environmental sustainability as a fundamental activity to be urgently incorporated into his or her operational processes and practices. Such passive leadership, as a result, hinders the implementation of environmental initiatives of employees. The study implies that it is important for senior leaders to demonstrate consistent corporate environmental commitments by their strong belief, effective communication of the environmental policies and values to the ground level staff, and the ability to translate these into specific actions and measures that work for the RD.

As revealed by a review of 242 papers published between 1977 and 2021 on general environmental and PEB topics, the existing literature – despite its importance in sustainability and sustainable strategies (Genç, 2017) – fails to differentiate between employee types and their relative commitment to PEB (among the identified types of actors) as an integral part of delivering PEB. Different to the existing studies, this study contributes the in-depth knowledge of different types of actors, the way these actors interacted and communicated in the daily work routines and their personal passion towards sustainability that influence positive PEB.

In fact, the relevant literature largely focuses on the phenomenon of Green Teams and the links between the existence (or otherwise) of Green Teams and the environmental performance of companies (Dangelico, 2015; Moxen and Strachan, 2017; Pham, Tučková and Jabbour, 2019) which support the finding of the study on the important role of iM. However, current literature on Green Teams is largely conceptual and theoretical (Jabbour et al., 2013), with limited focus on the values of those within Green Teams and thus their propensity to engage in PEB (Pham, Tučková and Jabbour, 2019). For example, Dangelico (2015) finds that the development of Green Teams positively affects firm environmental performance and reputation. Pham et al (2019) among a few scholars on similar area but look at the relationship between green human resource management towards organizational citizenship behaviour for the environment in the hospitality organisation. They also suggest the level of green performance management and green employee engagement (i.e., Green Team members) affect employees' voluntary green behaviour in the hospitality sector. As seen, the literature has not necessarily recognised that effective achievement of environmental objectives requires engagement from all types of actors rather than Green Teams alone. Furthermore, what these previous studies have not done is to look at the composition of the Green Teams. The finding of the composition of the Green Teams in this study implies that when comprising the Green Teams and doers RD, it is

essential to think carefully about the composition, who is empowered to act and how that influences their perceptions of their jobs.

7.4 Integration of Work Sphere Factors to the Current PEB Framework That Is Required for Hospitality Sector Workplace

As indicated in the previous discussions, there are important work sphere factors that are significantly influencing employees' engagement with positive PEB in the hospitality workplace sector, which will be discussed next.

7.4.1 'Operational Efficiency is above everything else' under Pressure of Workload

The major finding is that – for the hospitality workplace sector – pressure of workload is especially a significant driver for employee engagement in delivering positive PEB outcomes. In the hotel cases A and B, the employees confront various managerial and operational decisions that are driven by a dilemma of competing and conflicting priorities between *either* operational efficiency *or* energy efficiency. This finding adds a case of energy efficiency to an only previous PEB work looking at the same area of competing decisions for environmental sustainability under pressures in the hotel workplace setting. Chawla et al (2021) with a food waste study in the luxury hotels found the chefs faced competing priorities between food waste reduction and corporate set standards.

Primary data indicates that many employees are aware of the energy wasting impacts of their chosen actions when they choose 'Operational Efficiency above everything else'. The following explanations for their decisions highlight several important insights on the current failure to deliver positive PEB. Firstly, these decisions are evidently seen to be driven by the pressure of workload or productivity particularly in the hospitality business. In this study, it is evident that the RD employees – in various daily activities – confronted various 'moment of truth' which refers to a situation where they have to choose to act upon OpE or EnE. For example, a chef within a 7.5-hour shift would face various 'moments of truth' including whether to leave the gas top stove on throughout the whole shift and only turning it off at the end of the shift on a less busy day which will help his/her productivity. A C&E staff would face a 'moment of truth' to decide whether he/she left all the lights on in a large ball room when leaving the room to collect chairs or flowers when he/she travelled a long distance from point A to point B to turn off the lights and left the room or his/her productivity. For a HK person, the 'moment of truth' is when he/she confronted *"it's all about cleaning the room. We put pressure on them to do this quickly and then say all the time "make sure it's clean" and that does not always fit in with being as environmentally friendly as we would like to be."*

The primary evidence of many employees acting upon operational efficiency OpE and guest satisfaction highlights that many employees perceive that choice of EnE means a reduction in their OpE or productivity which negatively affect the guest experience, given these two five-star hotels are branding for luxury services. It is evident that the OpE measure – ‘getting the daily routine works done in the easiest way’ given the limitations of old equipment and buildings as many employees mentioned – is the most dominant driver to their daily works, over environmental efficiency EnE especially when EnE measure was not in place. Even the employees who hold the most positive PEV choose OpE over EnE because they are working under a very high pressure of ‘fixed-timing’ of the hotel sector while still meeting the customer demand. FELICITY (Executive Housekeeper) explains this is a commonly accepted behaviour among her HK department, originating from top-down managerial demands, *“A lot of it is driven by the productivity that we ask the team to do as well.”* Some other employees added that there are other work sphere factors such as the old buildings and equipment that make it difficult for them to influence EnE. A CE employee described the current way that some electronic equipment is set up; for example, the layout of the large ballroom in the hotel does not allow employees to turn off the lights when carrying out the task of moving chairs and tables. In this circumstance the employee chooses to leave the lights on when he/she leaves the room. Such conflicts or dilemma between OpE and EnE in a hotel business has much to do with the employee’s perception. They believe they cannot achieve their required productivity if they choose to implement environmental initiatives, as these are ‘extras’ to their daily activities (Chawla, 2019). With a focus on OpE, EE becomes an unnatural process for many operational employees, hence, it imposes a strong resistance to PEB changes among these employees.

Further insight into different working environments (i.e., different operational departments) within a hotel working environment, include the fact that there are differences in the pressures of time for Kitchen and HK departments. It is important to recognise the productivity of each operational department in a hotel varies, according to the working context and operational demand of each department or in other words different operational departments have different relevant performance metrics. For example, for HK, the quota of 15-16 rooms per shift of 7.5 hours and time metric of 21 minutes per room is the productivity benchmark for each room attendant. Whilst, for Kitchens, the time metric is not developed for an individual chef, but output metrics are based on the preparation of high-quality food that is expected to be delivered to the customer within 20 minutes of the order being made by the customer. As such, the Kitchen department is under greater and shorter time pressure with specific food requirements (i.e., heating level, food health and quality) whilst the HK’s ‘time’ metric is more flexible as long as the cleaners can make up the required number of rooms per shift. This is because the ‘time’ pressure for Kitchen staff cannot be taken away for the

Kitchen due to its special working context. Hence, there were a 'common-sense' routine to 'turn on the stoves at the beginning of the shift and turn off them at the end of the shift when they are not in use' in the kitchens (i.e., EE is compromised).

Studies of competing priorities including the relationship between pressure of workload and PEB in the hospitality sector workplace are currently under research in the PEB literature despite the importance of each factor in the hospitality industry and extensive literature in all sectors. Most of the existing literature on productivity concerns puts productivity as the main financial and economic motive of companies and hence the topic of the determinants of productivity is focused (Ortega and Benavides Chicon, 2013). What is different to the previous scholars who studied similar topic areas (Chawla, Lugosi and Hawkins, 2021) is that this study not only examines the chefs in the kitchen setting like these scholars but many employee actors from managers to the lowest levels in multiple workplace settings in the hotels including kitchen, housekeeping, CE, FO, engineering, accounting, Health unit, etc. This contributes to new knowledge of how different pressures of workload combined with workplace settings such as equipment, materials and social interactions influence the decisions of these competing priorities. This again implies the importance of integration of different actors participating in the delivery of PEB outcomes which is previously discussed.

Furthermore, interestingly, these competing priorities are found to be decided upon through many personal perceptions of the employees themselves which will be discussed in Section 7.4.2.

7.4.2 Informal Practices Related to Energy Consumption

Despite the fact that informal practices are generally thought to be important at the workplace level (Warde, 2005; Marchington and Suter, 2013), and in particular in the hotel workplace (Chan *et al.*, 2014; Chawla, 2019), little has been done to catalogue the different types of informal working practices and their impacts on good environmental outcomes in the context of hospitality workplaces.

Primary data reveals that informal practices add an important shape to the current operational environment of the hospitality business (Marchington and Suter, 2013; Chan *et al.*, 2014; Chawla, 2019). In essence, there are many informal practices that affect the energy consumption of activities that are common in many operational, 'back of the house' workplaces in a hospitality organisation, for example kitchens, housekeeping, C&E, engineering etc. The primary data also shows that these informal practices are closely related to many standard processes, guidelines, rules, customs, and communications for environmental initiatives that are formed in the 'minds' of the operational employees and managers.

Linking this with the dilemma of choosing competing and conflicting priorities between OpE and EnE that was discussed in the previous section, the study highlights that many current informal practices enable the choice of OpE in preference EnE to happen; or in other words, they hinder the employees' engagement in positive PEB. For example, Sous Chef MIÊN said that all gas stoves are kept on and at low heat for the whole shift even when they were not in use, and even though some chefs are aware of the gas wasted from such actions. This is a common-sense or commonly accepted practice that is applied by all of the chefs in the hotel. He explained that the reason for this was that the chefs needed to prioritise meals being delivered within '*a fixed timeline*'. Noticeably, these "common sense" or unwritten rules are followed by many junior employees when first joining the department.

This above point is linked to two key issues caused by the informal practices that lead to the failure of PEB. Firstly, the existing environmental practices in energy consumption and EE are generally informal which allows personal judgements. In essence, the informal aspects of the energy-related practices leave judgements of what are 'common-sense' or generally accepted on the part of the individuals tasked with implementing the practice about when, how and if to do so because "*they are all responsible adults*", according to the Executive Chef MICHAEL. Secondly, it leaves these personal judgements in the hands of the lowest-grade employees (i.e., RD doers) rather than managers. The first and second issues enable flexibility or give power for these employees to choose OpE over EnE (as discussed previously) within their daily routines since the PEB are viewed as voluntary and un-incentivised. This second issue in this study is different to the existing studies which generally indicate that managers are often those who script and enforce, and hence influence the practices in the workplaces (Chawla, 2019). Furthermore, this can be seen clearly when analysing different types of actors who participate in the environmental practices that they influence in many different ways. For example, hotel managers (of VIT and iM) have set up the standards and guidelines for the formal work processes (for example, 10-cleaning steps for Hotel A and 13-cleaning steps for Hotel B) to some extent. In addition, the extent to which green practices are formally incorporated into these current operating processes is also limited. As the managers do not really engage physically in these work activities, they have little influence on how the green practices are actually enforced and carried out on the ground. Thus, the empowerment of the informal environmental practices is largely left with RD doers as they can decide whether and how they should carry out environmental initiatives. Adding to this context, there are no written or systematic processes on how to implement EE actions in the current standard work procedures (for example, standard procedures on how to set up a room including how to use energy related equipment), and no measuring, monitoring, incentive mechanisms in place for individual and departmental EE actions. As a result, many RD doers choose not to implement environmental actions in their

daily routines. In sum, the study finds that the informal practices are formed and influenced by both managers and operational employees of these workplaces.

This finding is different from some previous studies which claim that the practices in the workplace are often scripted and enforced by managers (Chawla, 2019; Chawla, Lugosi and Hawkins, 2021). In fact, the narrative above clearly shows the RD doers who are relatively junior in the organisational hierarchy are the key individuals tasked with implementing PEB and deciding their own implementation of PEB practices.

Another aspect of the informal environmental practices is informal environmental communications. These communications are either delivered via email as the main official main channel, or largely verbal via staff briefings. As previously identified, such informal communication appears to hinder the employees to engage in positive PEB within a hospitality workplace because such informal communications appear to be less effective in promoting positive PEB. This finding is different to other studies that claim informal communication practices are more functional rather than formal communications to enable behavioural change in the workplace (Fortado, 2011).

The insights of the roles of informal practices play an important role for the hotel management in helping to develop communications strategies and work practices. In essence, the hotel management needs to be aware of these informal rules and practices at the ground level and the potentially negative impact of these rules and practices on employees' PEB. As such, this study has identified the link between informal practices and PEB change in the hospitality workplace by providing information on which actors encourage these practices, how different operational practices really happen and whether any corporate environmental initiatives are actually incorporated into these practices in reality. For example, knowledge of how informal practices are formed and carried out helps understand how these informal practices could be modified and the best ways to encourage new informal practices (e.g., practices that have environmental benefits) to be adopted in practice. This also implies the importance of having written processes with guidelines and incorporation of environmental indicators in the employee's performance appraisal schemes in successful delivery of good environmental outcomes.

7.4.3 Environmental Visibility

Environmental visibility is found to be a significant work factor in employee engagement in delivering the positive PEB outcomes in a hotel business. In essence, it currently hinders the extent to which the employees can implement PEB in their daily routines in practice. There is an ongoing issue of environmental visibility, in both hotel cases, that affects the efforts of environmental protection. This can be perceived to be the *physical visibility* of the environment, including documents/guides/policies. Firstly, if work processes and guidelines are poorly documented, this will negatively

affect the knowledge transfer, especially when senior managers leave the company. This issue is significantly more visible for Case B. The poor documentation is also linked to the critical shortage of departmental managers in all operational managing positions. The study finds that low visibility of relevant official environmental documentation and physical signs hinders the employees to carry out the PEB. This then enhances the dominant role of the informal customs, routines, rules, and cultures, in the absence of visible formal documentations. Secondly there is an issue of lower visibility of energy use behaviour in comparison with other environmental behaviours such as recycling or food waste. In particular, the study finds that there is less visibility of energy use behaviours in comparison with that of recycling behaviours. In both hotel cases, the signs indicates that energy use behaviours are less likely to be implemented, as employees do not see the positive energy efficient outcomes, as they do with positive recycling outcomes. This can be explained that energy use – unlike recycling or food waste – is largely invisible in both physical and social ways. In addition, energy systems are complex, and daily practices are significant. The employees do not directly use energy, instead they carry out a range of activities or ‘practices’ that lead to the consumption of energy.

Environmental visibility is under-researched in contemporary environmental management research, in particular PEB at work with very few exceptions of studies (Bowen, 2000; Pedersen, 2000; Brick, Sherman and Kim, 2017b; Yu, Lo and Li, 2017) although visibility can be a useful tool for enabling the positive PEB at work (Bowen, 2000; Brick, Sherman and Kim, 2017b) in the way that values explain PEB. However, the extent of this depends on the visibility of PEB to the company and individuals in that workplace.

Some authors however suggest that visibility can both increase and decrease behaviour based on social identity (Brick, Sherman and Kim, 2017b). Most of the literature looks at the relationship of visibility and PEB in sociological perspectives which can be referred to as social visibility. Individuals generally engage in more pro-social behaviour when their actions are visible to others. Visibility is generally considered as a moderator to the effect of other direct determinants on PEB. For example, visibility moderates the effect of identity on PEB (Brick, Sherman and Kim, 2017c). Furthermore, these studies do not include sustainability related workplaces.

As such, the current study reinforces the current literature by adding another piece of evidence on the effects of *physical* visibility of the environmental initiatives on the employees’ engagements in positive PEB in the hospitality sector. It has some managerial implications for sustainable practitioners/managers to review the contents and availability of the physical visibility of the environmental initiatives if they wish to deliver the successful environmental programs in their hospitality organisations.

7.4.4 Organisational Commitment towards Environmental Sustainability

Primary analysis reveals that many employees perceived that the company had a weak commitment towards environmental protection, and a strong focus on profitability and cost saving. Furthermore, the weak organisational commitments towards environmental sustainability currently *discourages* employees from engaging in EE behaviours in their daily routines (Blau, 1964; Wesselink, Blok and Ringersma, 2017). In essence, by analysing the issues linked with this perception, the study informs knowledge in the four areas that are associated with the employees' perceived weak organisational-level environmental commitments, including a) *perceived CEV*; b) *attitudes and behaviours of leaders* c) *operational PEB actions that are visibly supported by direct managers, supervisor and peers or called social visibility of environmental actions of managers, supervisors, peers; and d) mechanisms of measures, incentives and penalties, and training in place.*

Firstly, as discussed in the section covering the PEV-CEV-PEB interplay, the mismatch in the CEV-actual PEB evidently *encourages* many operational employees to choose OpE over EnE, or in other words, the mismatch *discourages* PEB among the employees. It is because they perceive a commonly reinforced corporate message in relation to operational efficiency, that the CEV message appears to not reflect a strong organisational commitment towards environmental protection. Instead, the message that employees receive is that there is a strong organisational focus on OpE, and that this is dominant and more important than improving the company's environmental performance. This perception is also influenced by the strong messages from the current service positions of the two hotels. As these two hotels are positioned as five-star or luxury services hotels and are under management contracts, all their services are designed and operated by the requirements of the 5-star brand standards of the hotel company. There appears to be a conflicting view in that energy saving could imply a reduction in luxury service quality required for 5-star experiences. Actual environmental initiatives can be seen as extra efforts (Chawla, 2019) that can hinder employees from achieving the required productivity. This view is supported by the similar finding in Chawla's work in food waste in luxury hotels (Chawla, 2019). In addition, such a perception of CEV is partly linked to the issue of ineffective articulation of a mix of different environmental messages via low coverage of the existing primary channels of information to the low-grade employees who actually affect the PEB at the operational level.

Secondly, the behaviours of managers from all managerial levels towards environmental protection contribute to the perceived environmental organisational commitment by the employees. The employees indicate that they view their leaders as figureheads or role models of the company's commitment towards environmental

protection (Chawla, 2019). However, the study expands further to the existing literature in providing in-depth insights in management conflicts in adopting environmentally efficient mechanisms for the business. In particular, the study finds managers at different management levels have inconsistent views, values, and support efforts toward initiating and prioritising the environmental changes within their departments although many managers in the two hotels acknowledged they are currently driven by OpE. Furthermore, most of the senior leaders put more value on technological improvements for achieving improvements in energy efficiency over the changes in employee and guest behaviour because they believe technological impacts are better implemented in their management. By contrast, the hotel *owners* prefer to focus on behavioural change under the current trend towards light asset business models, because this minimises their own capital expenditure (Roper, 2017). As a consequence of viewing the managers as not providing support, employees are discouraged to incorporate environmental initiatives in their daily duties (Young *et al.*, 2015), given they are under pressure to be productive (Chawla, Lugosi and Hawkins, 2021).

Thirdly, the study finds that only PEB actions that are *visibly* supported by direct managers, supervisors, and peers are followed. There are many observations that the operational employees follow the actions that were centered around getting the jobs done in the fastest way, and the actions focused on on OpE over those on EnE. For example, many junior chefs are encouraged to leave the gas-fired oven tops on during the whole working shift even when they are not in use as these actions are commonly accepted and followed by senior chefs in the kitchens because ensuring customer satisfaction through the timely delivery of high quality meals is the top priority and is accepted by the hotel management given the old kitchen equipment. When the junior employees viewed such commonly accepted practices, they interpreted this as a visible signal of a lack of organisational commitment to environmental sustainability

Finally, the employees perceive that the weak organisational commitment towards environmental protection is reflected in the lack of measures, incentives and penalties, and training for energy efficiency, that is essential for behavioural changes (Young *et al.*, 2015). Without these mechanisms in place, the environmental team members, as well as operational supervisors, find it difficult for their teams to make changes, or incorporate environmental initiatives in the current work practices, to be adopted by the operational team members.

7.5 Chapter Conclusion

This chapter shows that the PEB in the hospitality sector workplace is complex and interacts with multi-layer factors of several spheres. The PEB of the employees were

evidently driven by several new work factors that were crucial to the hospitality workplace that have not been included in the existing PEB models. As a result, one single model is not adequate to investigate PEB in the hospitality sector workplace. Instead, a multi-model approach is suggested to be effective for understanding PEB in the workplace. In the context of an international hospitality sector workplace, there are *the new emerging work factors* (for example, *Employee Typologies, Environmental Communication, Informal Work Practices, and Pressure of Workload*) that are suggested to be integral parts of the existing PEB framework.

8 CONCLUSIONS

8.1 Introduction

This chapter presents the summary of the results of the study, and how each research objective has been met. It also provides theoretical contributions to knowledge and practical recommendations for hotel managers and practitioners. Finally, it gives recommendations for future research.

Positive employee engagement in the PEB at work has become an increasingly important topic for academics and practitioners in the hospitality sector as international hotel chains have been seeking ways (including behavioural and technological changes) to reduce their environmental impacts (Zhang and Huang, 2019; Budovska, Torres Delgado and Øgaard, 2020) and increase their resource and cost saving, and hence profitability (RPA, 2015; Gössling and Lund-Durlacher, 2021). This trend has been inspired by increasing global concerns associated with increased greenhouse gases (GHGs) from the tourism sector, accounting for around 8% of total global GHG emissions (Dunne, 2018; Lenzen *et al.*, 2018). Consequently, the mechanisms to encourage the adoption of PEB have become an increasing focus for governments, scientists, academics, and businesses.

Two research gaps have been presented in this study. *The first gap* is that the application of PEB to reduce environmental impacts in the hospitality sector – especially the PEB framework applied for energy efficiency behaviours in comparison with food waste and recycling – has been little explored (Bohdanowicz, Zientara and Novotna, 2011; De Grosbois and Fennell, 2011; Teng, Horng and Hu, 2015; Zientara and Zamojska, 2018). This is despite the broader emphasis on the PEB mechanism to reduce environmental impacts in other sectors and the trend of introducing new technologies to do that. In essence, few theoretical PEB models have incorporated the influencers in the hospitality work sphere into the theoretical PEB model (Young *et al.*, 2015). Furthermore, few of the models that incorporated the work factors have been tested in the workplace and most being in domestic/public settings, in which these personal PEB model do not need to include the work factors (Dunlap, Grieneeks and Rokeach, 1983; Neuman, 1986; Cialdina, Reno and Kallgren, 1990; Stern, Dietz and Kalof, 1993; Karp, 1996; Daamen *et al.*, 2001; Soyez *et al.*, 2009; Pensini, Slugoski and Caltabiano, 2012; Soyez, 2012; Zhang, Wang and Zhou, 2013; Chou, 2014; Faye, 2014; Mikhailovich and Fitzgerald, 2014; Paillé and Mejía-Morelos, 2014; Ture and Ganesh, 2014; Gkorezis, 2015; Mohd Suki and Mohd Suki, 2015; Young *et al.*, 2015; Bailey, Mishra and Tiamiyu, 2016; Karp, McCauley and Byrne, 2016; Onel and Mukherjee,

2016; Raineri *et al.*, 2016). The limited focus on PEB in workplace settings means that many areas of application of PEB including values-PEB theory remain under-researched; in particular, the role of different values (for example PEV in personal sphere and CEV in corporate sphere) and their interactions with PEB (Dunlap, Grieneeks and Rokeach, 1983; Neuman, 1986; Stern, Dietz and Guagnano, 1995b; Karp, 1996; Potocan *et al.*, 2016; Groot and Thøgersen, 2018). This acknowledges that a few authors place personal and corporate influencers of PEB in the same framework like Young *et al.* (2015) who sought to address this gap to some extent by developing a PEB workplace model. However, his model is only conceptual and has not been empirically tested.

The second gap is that existing PEB work models have not included the influencers that are crucial for the real-life hospitality workplace setting. For example, the conceptual models of Young *et al.* (2015) and other authors provide a number of work factors that are relevant to the general workplace, for instance, CER, institutional support and leadership behaviour, environmental visibility, training and incentives. However, these work factors have not been tested empirically in the real working workplace setting in the hospitality sector. The participants in Young *et al.* (2015) were not real employees and were mostly students. In essence, there is a lack of studies on the outcomes of PEV-CEV-PEB interactions and the influences of the contextual factors in the workplace (Blake, 2001; Olli, Grendstad and Wollebaek, 2001) that are unique to the international hospitality sector.

To close these gaps, this study evaluated the interaction between PEV and CEV, and their influence on the PEB of individual employees in the international hospitality sector workplace (*Gap 1*). In essence, this thesis viewed hospitality employees' engagement in PEB through the different lenses of values-behaviour theory, a multi-layer framework and the environmental communication framework. The environmental communication framework was used within an embedded working hotel case, with one hotel in the UK and one cluster hotel in Vietnam that allowed the observations of the important interaction. The impacts of PEV, CEV, PEB and other hospitality work factors on the energy efficiency behaviour of the hotel employees and the impacts on their energy efficiency behaviours were also studied via this framework and lens to put the PEB in a context. Ultimately, the aim was to create a PEB framework that supports the adaptation of PEB for application in hospitality sector workplaces (*Gap 2*). The PEB framework was evaluated and tested in the real working environment where the determining personal and work factors were activated, contextualised, and considered during interviews with the employees and observations of their actual business-as-usual behaviour. From this method, the key work factors that were crucial to this whole workplace context emerged.

To achieve the research's aim and objectives, several essential research activities were carried out for this study. Firstly, to put this study in an adequate theoretical framework, the critical reviews of the existing literature about PEB and its antecedents in general and hospitality (*Research Objective 1*) and about individual and corporate values as they relate to PEB (*Research Objective 2*) were conducted. The aim of these activities was to develop a conceptual framework from existing literature, creating an important lens through which to view the relationship between PEV, CEV and PEB and other work determinants among individuals that are required to adapt to the international hospitality workplace (*Research Objective 3*). This allowed the employee engagement in PEB to be placed in a framework that was comprehensive and applicable for the hospitality sector, for empirical investigation and evaluation in the real hospitality sector workplace, using an international hotel company with two embedded hotels: one in the UK and one in Vietnam (*Research Objective 4*). The practical objective of the study was to create a framework that supports the adaptation of PEB for application in hospitality workplaces and make practical recommendations on how to engage employees in positive PEB in the international hospitality workplace (*Research Objective 5*).

8.2 Summary of Results

Overall, the study reveals several important findings that inform the changes to the existing PEB framework.

The first set of findings is about the interplay of PEV, CEV and PEB. The study finds that positive PEV are important to the employees' engagement in the positive PEB, and the knowledge of the formation of PEV provided in-depth explanations to the relationship between PEV and PEB in the hospitality workplace. However, the PEV factor alone is insufficient to stimulate positive PEB in the context of an international hospitality workplace. On another layer, the PEV and the CEV interacted in the corporate sphere. Consequently, the CEV attracted the right employees to join the organisation when the employees found their own PEV similar to the company's values. Importantly, the CEV evidently reinforced or discouraged employee engagement in PEB work. On another layer, the PEB were influenced by the interplay of PEV and CEV in the corporate sphere to some extent. In fact, many employees with strong PEV and positive perceived CEV did not choose to carry out the positive PEB in their daily work routines. This set of findings hence highlighted the significance of work factors that drove the actual PEB of these employees in the context of an international hospitality workplace.

The evaluations of the original conceptual PEB framework and the current study indicates that the *multi-model approach* is suggested to be realistic and effective for understanding PEB in the workplace in practice. It is because the PEV, CEV and PEB of the employees interacted closely in a complex and multi-level way within the real-life

workplace setting of the hospitality business. The PEB of the employees were evidently driven by several new work factors that were crucial to the hospitality workplace and that have not been included in existing PEB models. As a result, one single model is not adequate to investigate PEB in the hospitality sector workplace.

In the context of an international hospitality sector workplace, there are *the new emerging work factors* (for example, *Employee Typologies, Environmental Communication, Informal Work Practices, and Pressure of Workload or Productivity*) that are suggested to be integral parts of the existing PEB framework. It is because the particular characteristics of real-life hospitality workplaces require adaptation of the existing PEB model in the literature. These work factors are new and currently missing in the existing PEB research.

With this logic, the second finding is that there are different actors engaging in environmental initiatives and communication within an international hospitality business. Furthermore, the significant differences of the four types of actors in their roles, values, and stories of communication in environmental protection have yielded the different PEB outcomes in the hospitality workplace. As a result, placing the new factor *Employee Typologies* (VIT, iM Green Messengers, Ir, and RD) as a new lens on the existing PEB framework is essential. Moreover, the study especially highlighted the different ways that the environmental initiatives were influenced by a non-vertical hierarchy of the actors (VIT → iM → RD) who also had different communication methods that contributed to the implementation of the environmental initiatives of other actors. This in turn contributed to the employee engagement in positive PEB. The knowledge of the types of employees and their roles in the different PEB outcomes provided the contextualised explanations for these differences. With this insight, the study stressed the importance of the roles of the indirect factor of green communication in promoting the positive PEB within an international hospitality organisation.

Thirdly, the *Informal Work Practices* to the employee engagement in PEB framework is important because this factor has evidently negative impacts on employee engagement in PEB. The study highlighted that the way in which many operational employees carried out their daily duties, especially junior staff, was based on their own personal interpretation of informal 'common sense' practices that were widely accepted as unwritten rules. It was powerful to observe this informality driving the behaviours of all employees including those who held strong PEV.

Fourthly, *Pressure of Workload* emerges to be the most powerful contextual barrier to the employees' engagement in PEB in the hospitality sector workplace because it was evident that the employees had this decision in their mind of choosing between OpE and EnE at *the same time* when they took a physical action at work. Hence, it is

essential to place this factor in the PEB framework. The study highlights the important finding that 'OpE is above everything else' was widely adopted among all operational employees and managers, which greatly drove all other actions including the PEB of the employees.

Fifthly, the study finds that the *perceived weak Organisation Commitment towards Environmental Protection* discourages the employees engaging in EE behaviours in their daily routines. In essence, the employees perceived the environmental organisational commitment in four factors, including perceived CEV; PEB actions that are visibly supported by the organisation, managers and peers; behaviours of managers; and mechanisms of measures, incentives/penalties, and training in place.

Lastly, *Environmental Visibility* is an important driver for employee engagement in positive PEB as shown in a few previous PEB studies. In this study, the low physical visibility of the environmental initiatives hindered employee engagement in PEB. To illustrate, the poor documentation of the environmental initiatives had negative impacts on knowledge transfer that enables the employees to be aware of the PEB action that they needed to take. This was significant for Case B. Many documents, guidelines and policies were reported by the current acting managers to be missing or not in written forms when the former managers left the company. The employees of Case B (international hotel in Vietnam) also reported that their limited English made them only vaguely understand the environmental initiatives in the hotel because many environmental materials are in English and not available in Vietnamese. The study also highlighted the finding that better visibility has positive links with positive PEB at the point of actions in practice. EE initiatives seem to be there but not at the highest level of awareness of the employees. On a daily basis, recycling initiatives were more *visible* than EE actions in the context that the actions had not become habits or usual ways of doing things in the hotel.

8.3 Theoretical Contribution to Knowledge

It is important to point out that the theoretical contribution to knowledge in this chapter are the ones from the results of this study while those in the chapter Introduction are the expected ones from the literature review.

This thesis produces new knowledge in the area of employee engagement in PEB in the international hospitality sector workplace. In essence, it contributes new knowledge to expand the existing conceptual PEB framework in the workplace with a new lens through which to view the interplay between PEV and CEV and their influence on PEB among individuals in the hospitality workplace in several following ways.

Firstly, this study creates new knowledge in the area of the antecedents of PEB in the hospitality workplace setting by producing the interplay between PEV and CEV and their influence on PEB of the individual employees in the hospitality workplace. In essence, the new CEV factor was added to the existing PEB framework. With this, the study produces the knowledge of how values of individuals and ones of the company come together in the workplace. Additionally, the study applied a 3-layer interplay (of PEV-CEV-PEB) instead of the existing 1-layer interplay (PEV-PEB) framework and a new lens of an environmental communication framework, as intergal parts of the proposed PEB framework in this study. As revealed by a review of 242 papers published between 1977 and 2021 on general environmental and PEB topics, the interaction of PEV, CEV and PEB as well as the environmental communication framework in the hospitality sector workplace have not yet been studied previously. As a result, knowledge of new value-behaviour gaps was also produced in this study. The new value-behaviour gaps include the gap between *self-reported PEB* and *observed PEB*; the gap between *what they said they did based on what they understood about PEB* and *their actual PEB (what they did as observed)*. Futhermore, it re-confirms a value-behaviour gap in the existing literature that there is a disconnect between what the employees *said with regard to the importance of PEV* and what they *said they did (self-reported PEB)* as studied by various scholars. It also adds evidence to the existing body of knowledge about the existing value-action gap at different operational and managerial levels of a hospitality business. This knowledge captures the complexity and dynamics of the PEB and the employees' engagement in PEB, that illustrates the real working environment and context of a hotel business, that contributes to the production of new emerging work factors in the work sphere as follows.

The second theoretical contribution is that the thesis produces the in-depth information of different key actors in the hotel workplace (the employee types: VIT, RD, iM and Ir) as a new lens to the existing PEB framework. It provides the knowledge of roles, functions, values, motivations, and communicational ways of these actors. It also provides the evidence that each actor was driving different environmental outcomes in the company. As revealed by a review of 242 papers published between 1977 and 2021 on general environmental and PEB topics, the existing PEB literature has not differentiated between key actors in their engagement in PEB at work. In fact, this knowledge emerged from the data analysis of this study.

Thirdly, the thesis produces the knowledge of an environmental communication framework within a hospitality organisation which becomes an integral part of the existing PEB framework. Linked with the second contribution, the study especially highlights the significant roles of green messengers in a successful communication framework of environmental information within the hospitality sector workplace. The knowledge of the Green Team produces some practical recommendations for green

managers in the hospitality sector. Expanding on this contribution in the area of the environmental communication framework, the thesis further provides a cultural dimension to understand how the employees from different national cultures perceived and responded to the information about CEV and the way how the CEV was communicated.

The thesis also contributes to knowledge in the area of employees' engagement in PEB to the existing PEB framework by producing new evidence of the work influencers *Informal Work Practices, Pressure of Workload, Environmental Visibility and Organisational Commitment towards Environmental Sustainability* that are currently little studied in the current literature. These emerging factors were evidenced to be determining the employees' PEB that contributes to the application of the PEB framework for the hospitality sector workplace.

Following this logic, another theoretical contribution is that the thesis produces the greater knowledge of the significance of Pressure of Workload as an integral part to the current PEB framework. In essence, the conflicting and competing relationship of Pressure of Workload and the PEB of the employees determines the different outcomes of PEB. Furthermore, the study provides in-depth knowledge of the 'dilemma' reasons of these outcomes which are essential to the successful promotion of the positive PEB. For example, the employees faced the dilemma of 'moment of truth' in various routine works which was driven by the notion and 'OpE is above everything else'. With this, many employees reported and were observed to operate their work routines that 'OpE overrides EnE'. The negative relationship between Pressure of Workload and PEB in the workplace has been under-researched and was previously confirmed by only one empirical study on food waste behaviour of hotel employees in luxury hotels by Chawla (2019). This study contributes to new knowledge of how different pressures of workload combined with workplace settings such as equipment, materials and social interactions influence the decisions of these competing priorities that are influenced by the employees' personal perceptions and evaluations of these priorities. This links to another contribution to knowledge in terms of providing the in-depth knowledge of Informal Work Practices of several hospitality sector workplaces and their negative impacts on driving the employees' PEB engagement in a positive PEB. In essence, the new knowledge also helps explaining how the operational practices really happen, whether the environmental initiatives are incorporated into these practices in reality, and informal agencies that empowered the PEB practices.

Finally, the study adds new insights into the mutually reinforcing relationship between PEB and the visible signals that pro-environmental behaviours are being implemented in the workplace. In essence, it adds knowledge to the existing literature in the roles

of environmental visibility by providing the evidence of a specific sustainable activity in the hospitality sector workplace (i.e., energy efficiency behaviour) to the existing ones that have been preferably studied such as recycling and food waste (Chawla, Lugosi and Hawkins, 2021).

Based on these contributions to knowledge, the following recommendations for future PEB-related practice and research in hospitality sector are provided.

8.4 Practical Recommendations

This study outlines several practical recommendations for any hotel company that is inspired to promote their employees' engagement in the positive PEB outcomes in the workplace.

The first recommendation is related to *the organisational commitment towards environmental protection*. This factor evidently drove the PEB engagement of the employees. Hence, it is important for the company to demonstrate a strong and consistent aspirational leadership and commitment towards environmental protection in the workplace across all departmental or operational levels. This can be translated into several special areas of actions that the company can consider.

- The first area of action is related to *the effectiveness of the environmental communication*. The company needs to demonstrate consistent and clear corporate environmental messages (i.e., CEV) to the employees as the study finds that the environmental messages were diluted when it went through several nonlinear communication channels and agencies (i.e., types of actors) and became vague to many RD employees. It was evident in the study that this factor negatively influenced the current PEB of the employees. Following this area, the study recommends three specific actions for the effective environmental communication, including *channel of communication*, *design of communication approach*, and *composition of green messengers*, for the hotel companies to take.
 - The first specific action is related to *the channel*, that is, it is important to effectively communicate the environmental policies and values to the ground level staff (i.e., RD). The study found that email is the current key channel of communication but that this is ineffective as a means for communicating with all of the RD employees as most do not have access to email. To address this issue, the companies can consider increasing the current coverage (about 66% was reported by a senior manager) of staff with access to email (of which were the majority of RD employees) to 100% or investigate another main communication channel that works for the RD employees.
 - The second specific action is related to *the design of the communication approach*, that is, the company needs to consider the *cultural dimension of the*

application of the international environmental communication framework in terms of *the communication approach* to different employees in different countries. For the case of the hotel A (in the UK) and hotel B in Vietnam, the study found the Vietnamese employees in the Vietnamese hotel had a strong tendency to 'be obedient' or 'do what they are told from the above' while the British and European employees in the UK hotel had a strong tendency to 'be curious'. This has several practical implications for the company.

- The first practical implication is that the *top-down approach* appears to be not effective for the hotel A but works for the hotel B. Incorporating specific and compulsory EE practices into *routine processes* has a positive outcome given the higher PEV of Vietnamese operational staff while a greater degree of flexibility in the empowerment in environmental practices are more effective for the employees in the UK hotel that was also recommended by Chawla (2019).
- The second practical implication is related to educational effect of the environmental message. For the successful activation of the message on the employee engagement in positive PEB, the environmental message should focus on 'consequences on the environment of the actions not carrying out positive PEB' and 'making it compulsory works' for changing the Vietnamese employees' behaviours toward environmental protection, for example, Bao (Ba Mien Chef), "*Talking about the Vietnamese society... introducing financial penalties scares people and they follow the rules*". For the UK employees, the message should emphasise 'benefits on the environment of the actions carrying out positive PEB'.
- The second area of action is related to the behaviours of managers towards environmental protection within their daily routines and management. It is important for them to consistently and clearly demonstrate PEB as the employees viewed them as figureheads or role models and the employees (especially junior staff) evidently copied the behaviours of these role models (Chawla, 2019).

The second practical recommendation is related to the development of both holistic and specific measuring and monitoring mechanisms of the PEB in place. The study revealed that the company's ability to translate CEV into specific actions that work for the RD is particularly important to promoting the active employee engagement in the positive PEB outcomes. The study revealed that the absence of PEB measuring and monitoring mechanisms at operational levels – currently the company has measured all five environmental areas including total energy consumption at the company level – increased the employees' behaviours in not acting pro-environmentally in their daily routines. An important recommendation for the company to develop an energy metric at the departmental level as the current energy technology practically allows this practice for most hotels. Furthermore, it is important for the company to develop

measurement mechanisms that incentivise and enable the individual employees to act when confronting the cost-benefit dilemma of OpE or EnE at the 'moment of truth'. In an ideal world, the measuring and monitoring mechanism is recommended to be based on individual employee performance.

The current study reinforces the existing literature by adding further evidence of the positive effect of clear *physical* visibility of the environmental initiatives related to the area of energy efficiency on the employees' engagements in the positive PEB in the hospitality sector. It has some managerial implications for sustainable practitioners/managers to consider. Firstly, it was evident in the study that the poor physical visibility of the documentation hindered the employees' engagement in PEB at work. In particular, the poor documentation of work processes, guidelines, and policies – it was found that many documents were not written and stored systematically – negatively affected the knowledge transfer within the operational departments of the hotel cases. This resulted in a low access to any environmental documentation. In the case of hotel B, this issue is more serious with the absence of many departmental heads who left the company. The study recommends the managers to address this issue with a good practice for the departmental heads to prepare and make available written documents systematically so that any managers in charge at any stage can obtain the knowledge and easily transfer the knowledge to their employees. Secondly, it recommends that all the environmental documents can be available in the local language so that the 'grass roots' employees can have a good and clear understanding of current environmental programmes within the business as this can increase their engagement in the programme.

Lastly, it is impractical, or opposite to the current trend, for the hospitality sector to recommend the reduction of the current demand for productivity mechanically (for example, reduce the number of rooms cleaned per shift for each room attendant) for the hotel managers. However, the study recommends the green practitioners to gain the knowledge of the conflicting and competing relationship between productivity and the employees' engagement in PEB in the hospitality sector as it is evidently a powerful driver to the employee behaviour at work. The findings in this current study provide knowledge of the role of productivity in PEB and how productivity affects PEB in a rich story can be useful for the green practitioners/managers in the sector who can consider the effective CSR policies for balancing productivity and PEB that enables the employees' engagement in positive PEB.

8.5 Recommendations for Future Research

8.5.1 Work-sphere factors:

This study has highlighted the importance of work-sphere factors as integral parts of the positive PEB employee engagement in the hospitality sector workplace. The study proposed several operational solutions in the work-sphere such as visible signals, operational targets for PEB, and incorporating EE into the work processes that are important for positive PEB. The study also acknowledged that engineering or technological solutions seemed to be an important area for positive PEB outcomes in the hotel case study. However, it was not possible to investigate them in depth, as the primary scope of the current study was focused on behavioural changes rather than technological changes related to environmental sustainability within the hospitality workplace. In particular, the study evidenced the negative impacts associated with the absence of measuring and reporting mechanisms for EE behaviours on employee engagement in the environmental initiatives related to EE. Many of the measurement and reporting mechanisms required are reliant on technology and equipment. An interesting finding beyond the current and focused analysis of this study was that the senior leaders of the hotel cases emphasised their preference for technological solutions over human behavioural change to reduce the environmental impacts of their hotels. In addition, there has been a fast-growing interest in the application of building automation technologies in commercial buildings (including in hotels) to improve EE behaviours, according to Maxwell (a chief engineer of the hotel case A). It is worth noting that the significance and urgency of climate change as highlighted at the recent United Nations COP26 climate conference has placed a societal expectation for hotel businesses to include environmental sustainability as a core or essential part of the organisational strategies (Varley, 2021). Furthermore, new advancements in Artificial Intelligence (AI) based automation to support environmental monitoring can help achieve improved energy efficiency through smart building automation (Basnayake *et al.*, 2015; Dawson, 2021; Galaz *et al.*, 2021). Based on these findings, there is a need for the future research on the interface between employees' pro-environmental behaviours and AI automation applications for hoteliers and academics.

Furthermore, in 2021, a new revolutionary trend has emerged that brings currently siloed building automation systems that have so far largely existed for energy systems in the majority of commercial buildings, including hotels (for example, the security system and the heating, ventilation, and air conditioning (HVAC) system cannot share information) to the application of an internet-protocol based building automation system (IPBAS) (Jorg, 2021) to improve energy behaviours in the building significantly (Johnson, 2021). For example, occupancy information for parts of a building from the security system combined with weather information, could be used to deliver energy

for heating or cooling (HVAC), in a much more efficient way. Additionally, this new application can resolve a number of current issues of sub-meters at the room level that are currently impractical for hotels. IPBAS, such as Internet Protocol for Building & Lighting Standards (IP-BLIS), can allow the data reporting at these sub-meters automatically. Similarly, according to the Chair of the Marketing and Communications Work Group of the Open Connectivity Foundation (OCF), and the OCF representative of an IP-BLIS group (Johnson, 2021), one of outcomes of the application of this new revolution is that the way people interact with buildings is likely to change, with applications being used by different actors in the building lifecycle accessing information and statistics associated with the building to better inform decision making. As with cellular communications during the first two decades of the 21st century with the development and adoption of smartphones, there is some evidence that building automation systems and their associated standards are moving towards internet-protocol connectivity, that will enable automation systems to encourage greater PEB. Buildings commonly have information technology (IT) systems based on internet-protocol connectivity, but these systems are generally used to connect computers, and provide Wi-Fi access for cell phone connectivity. By moving to an internet-protocol based building automation system, the data from the operational infrastructure of the building will be carried over the existing IT system. By creating suitable cell phone or computer applications, the problems associated with measuring and monitoring, can be solved. Moreover, reporting of information is facilitated for all the important decision makers in a building. All these applications are argued to improve PEB related to energy efficiency. Hence, this poses a new and interesting future research question to study the impacts of the application of IP-BLIS into the hotel buildings on the employee engagement in PEB.

The asset-light business model of the hotel industry in which it primarily focuses on operations rather investment in the physical assets (Seo, 2021) impacts the successful investment in EE for buildings, equipment and technologies. Some emerging evidence from the study indicated that there was a division between the owners of the contract-management hotels and the senior management including engineering teams in their perception of the value returns of investing in sustainability. For example, a Regional Director of Engineering reported, *“We know LED lighting should be everywhere. I have not got it here in this property. They haven't got it here because the owner doesn't want to invest the money to do it even though there's a great return on investment.”* (MATTHEW). A manager, MORGAN, believed that changing human behaviour was the best way of addressing environmental issues in older hotels where technology change was not so attractive or feasible for the senior management and/or where the owners do not see an adequate return on investment. The decisions on whether or not to invest in EE technology and behavioural initiatives mainly depend on the owner's support and perspective on sustainability and return on sustainability investment

(Jenkins, 2018, 12 February). However, within the scope of this study, it was not possible to investigate in depth the impact of the asset-light business strategy on the employee engagement in PEB in the hospitality sector, since the sector is well known for having a highly diversified set of employees in different demographics. Hence, a new future investigation on this topic is suggested.

Organisational culture builds norms and routines in the workplace, thereby influencing employees' behaviours (Tudor, Barr and Gilg, 2008). Furthermore, Chawla (2019) argued that organisational culture may interact with volitional drivers of PEB. He found that organisational culture directly impacted employees' waste saving behaviours as well as shaping work practices. Steinhoff and Owens (1989) also argued that organisational culture indirectly influenced behaviours through social norms that were institutionalised and enforced. This study found that many work practices that were informally formed and shared in the workplace impacted the EE behaviours of the employees in both hotel cases. However, with the scope of collected data, this study could not fully evaluate the impact of the green-oriented organisational culture of the studied organisations on the EE behaviours of the employees as well as how it together interacted with the informal work practices on the EE behaviours of the employees. Given its significance, this suggests future research in the influence of organisational culture on PEB in the workplace.

Lastly, the study found the significant role of environmental communication in employee engagement in PEB. The study recommended several actions for the current environmental communication programme for the green practitioners to consider. It was out of the scope of this study to investigate the behavioural changes of employees before and after the application of this environmental communication approach. This opens a future topic for researchers in PEB area. Given the need to observe the change in employees' behaviours of the energy consumption, it suggests a longitudinal approach for this research.

8.5.2 Societal-sphere factors:

This research looked at influencers of the employees' PEB engagement within the real-world workplace setting. Hence, it has limited scope to investigate in depth the influence of the non-workplace factors such as national culture and societal values on the individual employees' engagement in PEB in the workplace (see Figure 7-2). The hotel management and policy makers of the head offices would have little influence on these non-workplace factors. Nevertheless, the research acknowledged that there were some indications of the influential relationships of these societal-sphere factors on the PEV and PEB of the employees in the workplace that worth future research.

People across national cultures differed in their ecological values (Soyez et al., 2009; Li and Ernst, 2015; Litina, Moriconi and Zanaj, 2016), intended PEB (Oreg and Katz-Gerro, 2006) and PEB (Boeve-de Pauw and Van Petegem, 2013). However, the studies that looked at the influence of the national culture on the ecological values and PEB were in the non-workplace setting. For example, Pauw et al (2013) found the effect of environmental values of the children in Belgium, Guatemala, and Vietnam on their PEB was different across cultural contexts. This PEB-workplace study could not fully evaluate the impact of national culture on the formation of PEV in all attributes and orientations. Nevertheless, the study found some cultural differences in PEV orientation and attributes between the employees in the Vietnamese hotel and those in the UK one. For example, the employees in the Vietnamese case study generally held more positive biospheric and social-altruistic orientation values than those in the UK one. Also, the employees in the Vietnamese hotel displayed significantly stronger egoistic orientation values of ‘being obedient’ or ‘doing what you are told from above’ whilst those in the UK hotel held significantly stronger ‘being curious’ egoistic orientation. This finding was linked to the specific EE practices applied in routine staff processes that appeared to have a more positive outcome for the Vietnamese operational staff compared with the UK ones under the current environmental practices and environments for each hotel case. On the other hand, the UK employees were linked with the desire for more information and engagement of the operational staff in the PEB practices as expressed by several chefs in the kitchen. This finding is similar to Chawla (2019) to an extent. He indicated that the Western-oriented employees in these hotels were reluctant to engage in PEB due to weak perceived behavioural control (PBC) and recommended a greater degree of flexibility for the employees to make decisions and more control in their engagement in the PEB practices (Tam and Chan, 2017). The study also found PEV of the cross-cultural individuals partially explained the differences in their PEB via the perceived control behavioural practice at work (Tam and Chan, 2017). Given the multi-cultural nature of the hospitality workforce in the international hotels, it suggests further research in the impact of the national culture on the adoption of PEB in the international hotels as suggested in Figure 8.2 below.

Figure 8-1. Relationships of national values, PEV, perceived control of behavioural practices at work, and PEB at work

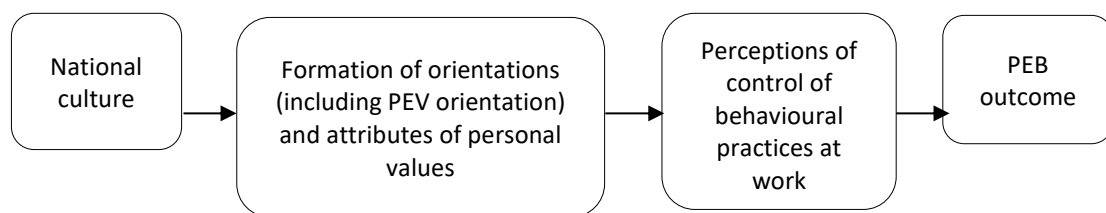


Table 8-1 shows that the societal framing on the significance of concerned environmental issues have changed since the 1960s by reviewing the environmentally remarkable events, developments and advances (Cole, 2004). Stern et al (1995a) suggested that environmental concerns are a subset of moral-related human concerns, rooted in universal values. The changes in the significance of the environmental issues have led to the shifts in societal values, norms, and attitudes on environmental issues (Dantas, Moreira and Valente, 2018; Weyler, 2018).

Table 8-1. Environmental concerns, marked events, and societal values from the 1960s to the 2020s

Time	Environmental concerns	Marked events, development, and advances	Societal values
1960s	Environmental crisis related to hazardous chemicals (Carson, 2013), the forest cutting for logging on pollution, and nuclear weapons (Wikipedia, 2020)		Human health, environmental health (Carson, 2013), respect for the mother earth, interdependence of human and ecology, and the merging peace with ecology (Weyler, 2018)
1970s	Land, water pollution The endangered species (Kovarik, 2012)	The creation of the U.S. Environmental Protection Agency (Wikipedia, 2021) Federal Water Pollution Control Act 1972 Coastal Zone Management Act 1972	Global actions to save the earth (Weyler, 2018) and an emerging land ethic (Dunlap & Van Liere, 1977a, 1977b; Heberlein, 1972, 1977) or biospheric value orientation (Stem, Dietz, & Kalof, 1993)
1980s	The depletion of the ozone (Kovarik, 2012)	The Vienna Convention for the Protection of Ozone in 1985 The 1987 Montreal Protocol	Attitude of survival (Cole, 2004)
1990s	Climate change and biodiversity	Rio Summit (UN, 1992)	Responsibility and stewardship (Cole, 2004)
2010s	Consequences of climate change (Freedman, 2021)	Paris Agreement (COP21) on 12 December 2015 (UN, 2015)	Anxiety about the climate change and future of the planet Emerging lifestyle habits in response to environmental anxiety: Vegetarianism converted from a meat-eating diet from the West (Ruby, 2012), vegans, cyclists and sustainable resource consumption behaviours (Kurz <i>et al.</i> , 2019).
2020s	The climate change becomes a significant global concern (see Table 8.7)	COP26 (UN; Varley, 2021)	Environmental ethics and responsibility as a core or essential part of the businesses (Varley, 2021) and people's daily life (Perry <i>et al.</i> , 2021). For example, the 2021 Ipsos Global Trends study

			<p>showed 7 in 10 globally tend to buy brands that reflect their values and say that business leaders have a corporate social responsibility (Lim, 2021).</p> <p>The pursuit of intrinsic values associated with more sustainable and climate-friendly ecological activities (Kurz <i>et al.</i>, 2019)</p>
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Source: compiled from literature review

Within the scope of this study which focuses on the work-place setting, it is not possible to investigate the influence of the shifting societal values over time on the PEB of the employees. However, Perry et al (2021) suggested that environmental social norms that must be activated by beliefs specific to environmental conditions. For example, the changes in environmental concerns and societal values framing on the environmental issues promoted sustainably behavioural change include recycling, and nascent behavioural shifts such as the move away from single-use plastics, and vegetarianism. This will be an interesting area for the future research in the influence of the shifting societal values on the PEB in the workplace.

8.5.3 Personal-sphere factors:

Lastly, demographic factors influence individuals' environmental values. For example, Pauw et al (2014) found a gender difference in environmental values of young individuals using the class analytical approach. Some emerging evidence from a few employees in this study suggested that age differences moderated the effect of country norms and culture on the formation of PEV. For example, the historic British coal mining culture had a bigger impact on the PEV of older British employees than younger ones. Within the scope of this study, it was not possible to investigate deeply the impact of these factors on the employee engagement in PEB in the hospitality sector since the sector is well known for having a highly diversified set of employees in different demographics. Hence, it suggests a direction for new future investigation on this topic.

8.6 Methodological Limitations and Reflections

There were several challenges during the qualitative interviewing. These challenges were related to unexpected behaviour of the participants and unexpected occurrences during the field research (Creswell, 2013) including:

Firstly, it was challenging to arranging and chase the informants to participate within their busy working routine.

Secondly, 'conservative' informants were not willing to provide their direct opinions on the interview topics. For example, BẢO did not answer many questions directly which was partly due to her Northern origin and she tended to talk around the topic of the questions. As a native Vietnamese person, the researcher knew well that there are differences in the ways in which people from the north and south of Vietnam communicate. The Northern Vietnamese are well known for indirect communications as part of indirect cultural expressions, compared to the direct communication style of the Southern Vietnamese people. The questions asked were about the informant's sources that influence her personal environmental values. Her answers were not about herself but about people in general. However, this information reflected her own values and beliefs to some extent. CHARLES did not answer some questions directly or did not answer at all. He explained,

"Sorry, I did not to reply to some questions specifically enough. Maybe I have been influenced by my time in Japan when people [laughter] did not answer all my questions directly. No, the replies I gave you are really what I believe and what we really strive to do at the company level with our employees."

Thirdly, there were 'limited' informants who did not deeply understand the complex and abstract concepts such as values and hence gave explicit or vague responses.

Fourthly, there was 'limited' physical space for private interviews. 'Noises' interfering with the interviews such as the noises from other employees due to the interview happening during the normal duties of the informants and the presence of other employees such as managers at some interviews that might influence the answers of the informants. For instance, for NGÂN, there were several pastry staff in the pastry kitchen which had only limited space. There were several baking machines and other equipment running. The noise levels were high and constant. The pastry staff looked busy preparing the pastry orders, so cooking equipment and ingredients were everywhere. Other staff were running around the informant who was making cakes. When the researcher entered the room, all the staff were very friendly and welcoming. A rapport was quickly established between the researcher and the staff here. The researcher helped one members of the pastry team to fill some cakes. It was a big challenge for the researcher to find a quiet place for the interview and hence the interview was conducted while the informant was making cakes in the same room with other pastry staff who were also working on their pastry products. The informant seemed to be open to participating in the conversation with the researcher. The interview was split into various parts because of constant interruptions from other staff and noises in the room. It was important that the researcher was flexible and quickly adapted to the circumstances of the field setting. the research quickly got the

interviewee back to focusing on the interview questions. It was equally important that the researcher prepared the interview questions well (she learnt the key topics to ask by heart) and had a good, portable audio recorder (the researcher attached the recorder to her shirt front so that her two hands were free) because it was not possible to keep notes to refer to and write notes in this situation. For DÜNG, the interview was held in the staff room during normal working hours hence his direct department head was also present at the time of the interview. Sometimes the head of department challenged his answers if he did not know the corporate messages.

For overcoming these challenges, the researcher suggested the adoption of the following in order to create good conversations which contributed to enabling the adequate and quality data to be obtained (Creswell, 2013) as well as brainstorming on key issues and possibility of theorisations:

- Adopting tools that allowed adaption and flexibility.
- Keeping an open mind for unexpected occurrences during the interviews.
- Where possible, reflected the findings after the data collection each day or after the completion of fieldwork.

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APPENDIX A: PARTICIPANT INFORMATION SHEET



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Participant Information Sheet for Operational Staff at Hotel Units

Study title How do values influence pro-environmental behaviour among employees in cross-cultural workplaces? A case study of an international hotel company in Vietnam and the UK.

Background and aims of the study

International hotel companies often seek to stimulate environmental behaviour change among employees as a way to meet their Corporate Social Responsibility commitments. When trying to address climate change, adapting employee behaviours is particularly important. The extent to which employees will change their behaviour has been proven to be influenced by their underlying value sets. Improving our understanding of employee environmental value and staff behaviours towards climate change can, therefore, help in the battle to combat climate change.

Van Nguyen is undertaking a PhD research project into how Team Members from different cultures engage with corporate environmental values. As part of this, she would like to investigate environmental engagement and behaviour at several Hilton hotels. Hence, she would like to request your hotel's valuable participation for this project. The outcomes of her research will inform Hilton's future environmental engagement campaigns, helping to increase their success and chances of hotels achieving long-term savings. By being part of this study, your hotel will benefit from tailored advice on how to communicate with your Team Members more effectively on environmental issues such as reducing energy consumption.

Why have I been invited to be part of the study?

You are an employee (part time or full time) of a hotel that has an active Corporate Social Responsible program and an interest in individual environmental behaviour change. You have involved in reducing energy consumption activities at your hotel units.

Do I have to take part?

No, you do not need to take part in this study. You can ask any questions you like about the study before deciding whether to participate or not. It is your choice whether you participate and, if you do, you may withdraw yourself without penalty at any time, and without giving a reason, by advising the researchers of this decision.

What will happen in the study?

You will be asked to participate in:

- an hour interview on how you engage in the corporate environmental values and energy saving activities at your hotel unit.
- "shadowing" observations by the researcher during your routine tasks to identify energy saving behaviours for a period of one to more shifts over a maximum of seven days. A notice to say when the observations occur will be put on staffroom notice boards, but the observations will be limited to some volunteers and will not impact others and no one else will be being formally observed as part of the research process.

Are there any potential risks in taking part?

No, there are no risks involved in participating in this study. Anyone who is a part of the observation or the interview process will be given a consent form to sign stating that they agree to participate. No individual data will be identified in anywhere of the final report or publications. Participants can withhold their consent to participate in the study at any time. No information regarding compliance of staff activity will be given back to the hotel management, unless illegal activity is occurring.

Please note:

- The researcher will ensure her observations and interviews not interrupt routine operations at hotels because she has a number of years working in the hotels.

Will what I say in this study be kept confidential?

All information collected about the individual employee and hotel will be kept strictly confidential. All the research data will be encrypted and stored safely at the university's drives with protected passwords.

Will the research be published?

The results of the study will be used in the researcher's thesis for a degree of Doctor of Philosophy. The researcher hopes to present the results at a scientific conference or in seminar as well as to publish in the academic journals. All data will be anonymised and no individual will be identified in anywhere in the PhD thesis, academic publications, scientific conference or seminars for a period of ten years after the completion of the research.

Who is organising the research?

The principal researcher (Van Nguyen) is conducting this study as a PhD researcher at Oxford School of Hospitality Management, Oxford Brookes University.

Who has reviewed the study?

The research has been approved by the University Research Ethics Committee, Oxford Brookes University.

Who do I contact if I have a concern about the study or I wish to complain?

If a participant in this study is ever considered to have suffered harm through their participation, the University has arrangements in place to provide for compensation. If you have a concern about any aspect of this project, please speak to the principal researcher Ms Van Nguyen (16041673@brookes.ac.uk) who will do her best to answer your query. The researcher should acknowledge your concern within 10 working days and give you an indication of how he intends to deal with it. If you have any concerns about the way in which the study has been conducted, you should contact the Chair of the Research Ethics Committee on ethics@brookes.ac.uk.

The supervision team of this research project includes:

TITLE & NAME	POST	DEPT & FACULTY / DIRECTORATE	PHONE	EMAIL
Dr Rebecca Hawkins	Senior Lecturer in Tourism	Oxford School of Hospitality Management, Faculty of Business, Oxford Brookes University	+44 (0) 7599 990 835	rjhawkins@brookes.ac.uk
Prof Levent Altinay	Professor of Strategy and Entrepreneurship, Research Area Leader	Oxford School of Hospitality Management, Faculty of Business, Oxford Brookes University	+44 (0) 1865 483 832	laltinay@brookes.ac.uk

Thank you for taking time to read the information sheet.

APPENDIX B: INTERVIEW SCHEDULE

OXFORD SCHOOL OF HOSPITALITY MANAGEMENT

Oxford School of Hospitality Management
Faculty of Business
Oxford Brookes University
Westgate Campus
Oxford OX3 9EP UK

Van Th Nguyen
PhD student
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Interview Guide (for staff in case study hotels who participate in the interviews and observations)

Issue	Question/Statement
A. Coding & Administration	Full names of the participant _____ Hotel _____ Date _____ Time starts _____ ends _____
B. Opening	<p>BEFORE THE INTERVIEW, THE INTERVIEWEE WILL BE INVITED TO FILL IN THE QUESTIONNAIRE ON THEIR VALUES TOWARDS THE ENVIRONMENT.</p> <p><i>Thank you for agreeing to participate in this interview. This study will look at how your environmental values are formed and how these influence your environmental behaviour in the workplace.</i></p> <p><i>All your data will be securely stored and kept confidential. No individual data of business entity and people will be identified. Your participation is voluntary and you may withdraw at any time.</i></p> <p>HAND OUT AND SIGN CONSENT FORM</p>
C. Demographics	<p>THIS DEMOGRAPHICAL SECTION WILL BE SKIPPED IF THE RESEARCHER CAN IDENTIFY THE SAME INTERVIEWEE WHO COMPLETED THE VALUES QUESTIONNAIRE BEFORE THIS INTERVIEW.</p> <p>SHOWCARD A</p> <p>How many months/years have you worked for this hotel? What is your current job title in the hotel? Age Gender What is the highest level of educational award you hold? Nationality</p>
D. Value Formation Process	<p>Now let's talk about your personal environmental values.</p> <p>Can you describe your personal environmental values? PROMPT: An example of an environmental value is: living in harmony with nature.</p> <p>In your opinion, where did these values come from? PROBE:</p> <ul style="list-style-type: none"> • Do your <u>family</u> share these values? Do you think that family members have been influential in forming these values? • What about your <u>co-workers</u>, do they share these values? Do you think they have been influential in forming these values?

	<ul style="list-style-type: none"> • What about <u>your community</u>, do they share these values? Do you think they have been influential in forming these values? • What about <u>the company you work for now</u>, do they share these values? Do you think that the <u>corporate environmental values</u> have been influential in forming your personal environmental values? <u>How?</u> • What about <u>the media</u>? Do you think the media has been influential in forming these values? • What about <u>the Government</u>, including schools and universities? Do you think they have been influential in forming these values? • Do you think <u>culture</u> (the country, region or group of people that you identify yourself as belonging to) has been influential in forming your environmental values? <ul style="list-style-type: none"> ◦ Which culture would you consider yourself to belong to?
E. Communication of environmental values from your company IN GENERAL	<p>Thinking about environmental communications from head office <u>in general</u>, can you tell me:</p> <p>Who in the organisation would you usually receive information about environmental initiatives from?</p> <p>PROMPTS (SHOW CARD B)</p> <ul style="list-style-type: none"> • Is it your direct manager? (please state job title) • The senior management team? • From the regional head office? • Other? <p>By which communication channel do you normally receive environmental messages?</p> <p>PROMPTS (SHOW CARD C)</p> <ul style="list-style-type: none"> • By email • Via the staff Green Team notice board • Personal communication from a colleague • In a staff briefing by a manager • Other? <p>How would you typically respond to environmental messages when you receive them?</p> <p>PROMPTS (SHOWCARD D)</p> <ul style="list-style-type: none"> • Do nothing • Delete it • Would you raise it with your manager? • Would you send an email to the originator of the message? • Would you communicate about the message with other co-workers or employees? • Other?
F. Communication of environmental values	<p>THE RESEARCHER RANDOMLY ROTATES AND SHOWS THE INTERVIEWEE THE COMMUNICATION SHOWCARD E/F. (THE CASE STUDY COMPANY WILL</p>

<p>focussed around a SAMPLE CAMPAIGN</p>	<p>PROVIDE A COPY OF TWO RECENT SEPARATE COMMUNICATIONS FROM THE COMPANY)</p> <p>INTERVIEWER TO WRITE WHICH COMMUNICATION IS ISSUED TO THE INTERVIEWEE IN HERE_____.</p> <p>Please read this communication about the environmental initiatives of the hotel group. This was issued recently.</p> <p>What corporate values does this communication about environmental initiatives convey to you?</p> <p>PROMPT: A value is a guiding principle that underpins your actions.</p> <p>PROBE:</p> <p>Does the communication echo your own environmental values? Why/why not? Does it make you feel that the company is committed to protecting the environment? Why/why not? Does it make you feel more positive about the company as an employer? Why/why not? Does it make you feel like you are being asked to do more work? Why/why not? Does the message in the communication I have given you:</p> <ul style="list-style-type: none"> • Seem relevant to your job role? Can you tell me more? • Explain the action that you need to take clear? Can you tell me more?
<p>G. Current PEBs</p>	<p>Now, let's talk about how you reduce energy consumption in the workplace.</p> <p>Would you please describe some of the energy efficiency actions that you are encouraged to take to reduce energy in this hotel?</p> <p>PROMPTS</p> <ul style="list-style-type: none"> • Do you have a <u>list of energy efficiency actions</u> that you should use when doing your daily tasks? • Is there a <u>process</u> that you are expected to use to report a broken energy equipment?
<p>H. Values and PEBs</p>	<p>Earlier, you talked about your personal environmental values and the process through which they were formed.</p> <p>Can you please tell me how your personal environmental values influence your current energy efficiency actions at work?</p> <p>Do the energy efficiency actions implemented in this hotel in any way match your personal environmental values?</p> <p>PROMPT: can you tell me how and why/why not?</p>
<p>I. Other factors impact the influence of the value formation process on PEBs</p>	<p>Are there <u>incentives</u> for you to implement energy efficiency measures?</p> <p>PROMPT: Can you tell me more?</p> <p>Are there <u>penalties</u> if you do not meet the energy efficiency targets of the company?</p>

	<p>PROMPT Can you tell me more?</p> <p>FURTHER PROBES if not mentioned in the conversation:</p> <ul style="list-style-type: none"> • Is there a personal financial reward if the hotel achieves its energy efficiency targets? • Does the team achieve a non-financial reward (e.g. a contribution to a charitable fund that they select) if they achieve their energy efficiency targets? • Are there other mechanisms that encourage energy efficiency behaviour? • Does the hotel use technology to reduce the need for staff to behave in an energy efficient way? <p>Have you received training in energy efficient behaviours?</p> <p>Has this training changed the way that you use energy in your day-to-day role?</p> <p>PROBE:</p> <ul style="list-style-type: none"> • What about your values? (Have your values changed as a result of the training?) • Has the training changed these values at all? <p>Are there any other factors in your workplace that influence your current energy efficiency actions at work?</p> <p>PROMPT: Can you tell me more?</p> <p>End and thanks the interviewee.</p>
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APPENDIX D: PARTICIPANT CONSENT FORM



CONSENT FORM FOR INTERVIEWS AND OBSERVATIONS

Full title of Project: How do values influence pro-environmental behaviour among employees in cross-cultural workplaces? A case study of an international hotel company in Vietnam and the UK.

Name, position and contact address of Researcher:

Van Thi Nguyen
PhD Researcher
Oxford School of Hospitality Management
Faculty of Business
Oxford Brookes University
Oxford OX30BP, UK
E: 16041673@brookes.ac.uk
M: (0044)7392970451



Please initial box

- | | |
|---|--------------------------|
| 1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. | <input type="checkbox"/> |
| 2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason. | <input type="checkbox"/> |
| 3. I agree to take part in the above study (the interview and observation of my routine tasks). | <input type="checkbox"/> |

Please initial box

- | | Yes | No |
|--|--------------------------|--------------------------|
| 4. I agree to the interview being audio recorded | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I agree to the use of anonymised quotes in publications | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I agree that my data gathered in this study may be stored (after it has been anonymised) in a specialist data centre and may be used for future research. | <input type="checkbox"/> | <input type="checkbox"/> |



Name of Participant

Date

Signature

APPENDIX E: ETHICAL APPROVAL



Dr Rebecca Hawkins
Director of Studies
Oxford School of Hospitality Management
Oxford Brookes Business School
Headington Campus

7 February 2018

Dear Dr Hawkins

UREC Registration No: 181169

The multi-level value formation process and its influence on pro-environmental behaviours among employees: a cross-cultural case study of an international hotel company in Vietnam and the UK

Thank you for the email of 6 February 2018 outlining the response to the points raised in my previous letter about the PhD study of your research student Van Thi Nguyen and attaching the revised documents. I am pleased to inform you that, on this basis, I have given Chair's Approval for the study to begin.

The UREC approval period for the data collection phase of the study is two years from the date of this letter, so 7 February 2020. If you need the approval to be extended please do contact me nearer the time of expiry.

Should the recruitment, methodology or data storage change from your original plans, or should any study participants experience adverse physical, psychological, social, legal or economic effects from the research, please inform me with full details as soon as possible.

Yours sincerely

A handwritten signature in blue ink, appearing to read "S Quinton".

Dr Sarah Quinton
Chair of the University Research Ethics Committee

cc Levent Altinay, Supervisory Team
Van Thi Nguyen, Research Student
Karen Handley, Research Ethics Officer
Jill Organ, Research Degrees Team
Louise Wood, UREC Administrator

APPENDIX F: OBSERVATION NOTES

Date & Time	16 Feb 2019, starts 9.45am – ends 11.30am
Staff's personal details (names, job title, gender, age range)	R19, Day room attendant, Housekeeping department, Female, working at HBM (UK) for 1.5 years, 34 years old. Côte d'Ivoire (a French-colonial country in West Africa).
Department	Housekeeping
Observational venue & setting	Guest Room 2101, Room 2062 Also conducted the interview & observation during R19's shift hence the respondent kept working on her cleaning when talking to the researcher. Sometimes the researcher helped her with some quick cleaning jobs so that she could finish her room within the required timing
Physical layout of the venue (no. of the photo taken)	see photo IMG_1195, IMG_1196, IMG_1197, IMG_1198, IMG_1199)
Flow chart of a typical shift	10 cleaning steps
Which task carrying out	<ul style="list-style-type: none"> • She began her shift by registering herself at the ID employee register machine (photo). • Check the roster at the housekeeping department on the first floor. • Change her uniform at the staff room. • Go into the Housekeeping room on the 2nd floor to prepare her trolley (photo). • Knock the room 2101 and enter • Open the window <ul style="list-style-type: none"> • Turn on lights in all rooms • Folding towels • Spray the floor • Organise toilet paper • Clean the mirror of the bathroom • Clean the floor of bathroom by guest towels • Clean the bin in the bathroom by the guest towel • Vacuum the room • Clean toilet • Complete cleaning the toilet, turn light on. There is only separate one switch to the toilet. • Find a leg of bed is broken – report synergy • Turn on television • Spray air • Check the last time before leaving the room • Turn off television • Turn off light at 10.43 • Left the room. The room is ready for supervisor to check. <p style="text-align: center;">End of observation at 10.45am</p> <p style="text-align: center;">Move to room 2062</p> <ul style="list-style-type: none"> • Check Safety box

	<ul style="list-style-type: none"> • Put hair dryer in a bag • Bring dirty teacups to wash in the bathroom with the tap on • Spray the bath with hot fountain • Put chemicals in the toilet • Empty bins in a bag • Guest bin looks dirty – wash the bin • Change bed sheets and linens • Turn on television • Wash cups and tray • Use guest towels to dry the cups and tray • Put the fill tug into cupboard • Spray the dirty table, dry the table surface by pillowcases of guests • Organise toothbrush and accessories • Clean the mirrors by the pillowcases • Clean tablet and other surfaces <p>Moving to Room 2056</p> <ul style="list-style-type: none"> • Similar cleaning but not in a <u>particular order</u> • <u>Critical: turn television the whole cleaning process</u>
Critical incidents (what task is not complying with the hotel's environmental guidelines/practices/policies - against which guideline/practice/policy)	<ul style="list-style-type: none"> • Turn on the lights in both bathroom and bedroom. Let lights on in bathroom after finishing cleaning and moving to bedroom • Turn on television during the cleaning.
Reason to the critical incidents	
List of key energy consumption activities during the shift	
Which equipment use the most energy	Lights; Television; Air condition
Which equipment use the least energy	Vacuum machine
How does the staff interact with her/his co-workers regarding their own environmental engagement and behaviour)	No interactions
How does the staff interact with her/his co-workers regarding the other co-worker's environmental engagement and behaviour?	No interactions
agree to participate in the interview?	Yes
Contact details	NA

APPENDIX H: ENERGY PEB BY INDIVIDUAL EMPLOYEE AND TYPE OF EMPLOYEES (CASE A)

Informant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R2	MATTHEW	Internal Messenger		Weak	<p>Yes, I suppose. My daily work is sharing the message and advising engineers like Rob how to look at things, do things, how to get energy projects through the door on return on investments. We know LED lighting should be everywhere. I haven't got it here. They haven't got it here because their owner doesn't want to invest the money to do it even though there's a great return on investment.</p> <p>My job I think is to encourage anybody. Rob's converted, I know he's converted but the rest of the hotel, the general managers to try and see that light, finance managers to see that "Do it now you'll save at the end of the year. Why you're doing it?" My job is sharing the message is trying to provide hotels and the people I talked to with solutions.</p>	Self reported 'Implemented EE to some extent and did not implement some EE'
R10	CAMILA	Internal Messenger		Strong	<p>Switch computer off at night, switch everything off at night, switch the light off when you go out to the office and you going home, only use the heater when you need to, keep the door close to conserve what warmth you have got within it.</p> <p>Well, that is exactly the same for conference rooms. If it is not in use, the light should be switched off, not heated until the people are due half an hour before to go in and then general recycling that the porter do when they are setting off and breaking down the room.</p> <p>We do not have a list of energy saving actions. No, I mean, it's just the general actions that we do through the sustainability group and we have ongoing training about shutting fire door and do the rest of it, work procedures for house and safety and sustainability. We hope that the training that is ongoing and staffs have on their induction day and then their department on induction day. Any further training then from supervisor and manager, we're hoping that is carried out on the daily basis and hold all sources of good steps.</p>	Self-reported 'Always/Mostly implemented EE as required'
R20	MAXWELL	Internal Messenger	Influencer	Strong	<p>No, just to switch off this stuff and make sure that everything is off before you go out, that's it. They don't tell you to do this, do that, do that or unplug this, no. Just switch off, that is it. They can't tell you oh, can you unplug the TV. No, you don't unplug the TV, just switch off, and you can't leave the TV on when there's no one. They'll teach you good stuff.</p> <p>At the moment our projects are LEDs. We're changing lamps for LEDs where we can, but there are 30,000 lamps in this hotel. Some of it or quite proportion of it needs to be an investment. We're speaking to the new owners, as we did the previous owners to say, "We really ought to do this. There's a return on investment and everything," so they're looking into that.</p> <p>Water we're looking at poolside showers, because people leave the showers on all the time, poolside. We're looking at the push buttons ones so that when somebody feels switch itself off. What's the other one? This waste, we've recently had a food machine. That's basically all our waste food is now processed and gets turned into a fertilizer.</p> <p>It's not one of the usual ones, where it uses bacteria and you have to use water as well and then you get lots of gray water as a waste product that goes down the drain. This is a technology where it advances the decomposition.</p>	Self reported 'Implemented EE to some extent and did not implement some EE'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R3	FAITH	Receiver-Doer	Influencer	Strong	When we go for lunch, we always switch the light off in our office and it is a natural thing again, we leave the office, we switch the light off because we know we're not gonna be there for half an hour, so what is the point for the light to be on if we're not there. Leaving work, not leaving your computer on or switching sleeping mode or whatever, switching it off completely. These are the main things that I involved in and I try to encourage my team as well just to do it so. I think that's it, computer and the light that what I involved in, I don't think that anything else.	Self-reported 'Always/Mostly implemented EE as required'
R4	MARK	Receiver-Doer		Strong	Turn the lights off if not needed. Turn radio off. Turn computer off. Those main ones.	Self-reported 'Always/Mostly implemented EE as required'
R5	FIONA	Receiver-Doer		Weak	We make sure when we've checked a room that we turn all the lights off. At the moment, we're having to leave the ACs on because it's so cold, but normally, we do turn ACs off. It's just basically making sure lights are off to save energy, and the ACs, but as I say at the minute, they're having to be stopped on because it is so cold and the rooms do get really cold. That, really. That's what we make sure we do. That's what I do when I check a room, I turn everything off.	Self-reported 'Always/Mostly implemented EE as required'
R7	FREYA	Receiver-Doer		Weak	For example, when I go-- I need to clean up some rooms, it's a full clean. So, when I enter the room, I switch on the lights. And there is a vacuum as well, so when I finish my vacuum, I make sure that the button is pressed up so it's off. I am not really sure [why I need to switch off the button there], but at home, I do like this, so my husband does like this. So maybe it's kind of saving energy. That's what I am thinking. When I leave the room, I make sure that the lights off.	Self-reported 'Always/Mostly implemented EE as required'
R8	FATIMA	Receiver-Doer		Weak	No, I haven't got a list of energy efficiency actions, but I know that we used to have. We got recycling bins and we have like the plastic bottles, and they are recycling when we do offices, we put them into the white bins which take into white bags, then take off for the environment and recycling. When we're checking the rooms, we switch off all the lights so that they are not left on and anything which like the TVs and that is switched off, when we finished cleaning the room and making sure that nothing left on during the time. Like the heating, turn down the heating, at the moment, because of the cold fell, it's been switched off because keep the warm rule the room warm, but normally keep it down to 21 and then it's more efficient for the electricity then during the time.	Self-reported 'Always/Mostly implemented EE as required'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R9	MICAH	Receiver-Doer		Strong	Yes, well, as I said before, the main one is probably changing lamps to a different form of lighting like the LED lighting when you're finished because we have to. We've got 790 rooms in this hotel and when you do a job, if you walk out of the room, turn lights off. It's just one switch, it's one second and that will save running say, through not occupy for another 24-48 hours. You've got 48 hours of use of lamps, electricity and you don't need to. We are encouraged to turn the lights off to make sure taps aren't running, to make sure heating is turned off, anything like that. That's a positive.	Self-reported 'Always/Mostly implemented EE as required'
R12	FRANC ESCA	Receiver-Doer		Weak	If I see the machine running and there is nothing on, I will turn it off as I always do.m Um...just normal you turn off your light when you are leaving the office... um...for instance, this room so cold, you might get another heater, um...my just a... you know, now two heaters only one working. I: So why you do more food waste recycling than energy efficiency saving? R12: Because we don't have too much impact [with energy efficiency], you know, for instance, we have to use the machine. We have to let the machine run, because to wash, that is not much you can do. You know what I mean? But you know, what is in our hand, in our power is we have to separate to do the waste...so basically rather then you put them into general waste, you recycle them. we mainly recycle. Yeah, that is our main thing to look after environment. Because i don't actually, um, we don't actually do it. No, we do. For instance, we separate the boxes, um. If we see the box if we will to put in the cupboard. So nicely then we can recycle the cupboard.	Self reported 'Implemented EE to some extent and did not implement some EE'
R13	MASON	Receiver-Doer	Influencer	Have no PEV	So almost every day we try to keep the machine off, which are the machine we not using...also switch off light...when is busy, that is nothing you can do because when you busy, every single area getting used. So most of the area not getting use, that is after 12pm at night...we can easily finish the area start switching off the light. But when you come down on the busy day, you know what I mean, most of the time, most of the area, we have chefs like they do till 11 -12 o'clock.	Self reported 'Did not know if involved in EE'
R14A B	MOSES and MOE	Receiver-Doer		Unknown PEV	R14A: Well, it's quiet down now, but all five ovens are on. R14B: That is a busy place. It is quite something, ovens on and off. They need more. R14A: There's a lot of waste. R14B: Hell of a lot of waste..	Self reported 'Implemented EE to some extent and did not implement some EE'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R15	MARTIN	Receiver-Doer		Weak	<p>Well, like I said the ovens go off at-- the only way we could do is like what you said that making people aware how much it costs to run a kilowatt hour and to basically get together and use the ovens more efficiently as a department instead of just leaving the oven on...We are not really encouraged to reduce the use of electricity or gas really...Nobody comes in and says, "Turn that oven off during that day and then that shouldn't be on." It's just common sense really required. We only use one oven ovens that people are common. The other side because it's closer to them they'll just put that oven on and they decide...There isn't anything either to do to reduce energy. There isn't anything that I will do because every day it's exactly the same. We come in we turn the oven and certainly stoves on and they are on till after two, three o'clock, then they are off.</p> <p>I: You just turn on one time and then turn off at one time?</p> <p>R15: Yes, just turn it on and leave it on...Yes, I'd say yes. The breakfast turns this on. They turn this on at four o'clock and they turn it off at eleven o'clock so that that side is off. That's not going back on till breakfast. That's not left on all day as again as goes on at six o'clock and goes off about two o'clock, they seal it up and that's not back on again. But the brat pans, they're more instant enough. They're used properly the brat pans because that instant uses it off where the ovens are on constantly on...That there. Well, that's because we finished with it for the day or because he's doing a menu tasting and that starts at twelve o'clock so he just puts his oven-- he'll be doing that there. You can't turn those on and off. We have got induction on the opposite side. There's an induction hub which is better for the environment, isn't it. That's not certainly on when you put the pan on.</p>	Self reported 'Implemented EE to some extent and did not implement some EE'
R18	MIGUEL	Receiver-Doer		NA	NA	NA
R19	FERNANDA	Receiver-Doer		Have no PEV	<p>I: can you describe to me some of the electricity saving actions that you are encouraged by your supervisor or your department to reduce electricity in your workplace?</p> <p>R19: We don't use that much, maybe guests use because we don't, just over anything. Maybe they have to speak to - I don't know, how much guests pay here to get a room. That one, I don't know.</p> <p>I: Are there any electricity saving actions that they tell you to do?</p> <p>R19: No, just to switch off this stuff and make sure that everything is off before you go out, that's it. They don't tell you to do this, do that, do that or unplug this, no. Just switch off, that is it. They can't tell you oh, can you unplug the TV. No, you don't unplug the TV, just switch off, and you can't leave the TV on when there's no one. They'll teach you good stuff.</p>	Self reported 'Implemented EE to some extent and did not implement some EE'
R24	FRIDA	Receiver-Doer		Strong	<p>I would say we are always encouraged to, if we open a fridge door, close it as soon as possible to keep the temperature the same amount so we don't have to keep messing with the temperatures. If no one's in the room, turn the lights off. Otherwise, don't leave taps running. That's one of the big ones, especially with the wash-up area, and with washing hands, and stuff. We have electric hob. If there's nothing on the hob, make sure you turn it to zero so that you're not wasting and keeping it going when there's no need. Yes, I think they're one of the big ones in my department that I know of...I'm not sure, personally if we have a list of energy saving actions or not. I'm not sure. We could do, but I'm not sure about that.</p>	Self-reported 'Always/Mostly implemented EE as required'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R1	MICHAEL	Value Initiator-Teller		Weak	Within the department, I expect that we turn everything off when we're finished with it. We don't leave it running all day. That sense why we tried to-- I've got less gas equipment now so that we don't have to run gas all day long. We've got more efficient equipment where possible, we turn everything off at the end of the day that can be turned off.	Self-reported 'Always/Mostly implemented EE as required'
R6	MORGAN	Value Initiator-Teller	Influencer	Strong	Again, this change is depending on the position that you have. Right now on the role that I have, for me, that's simple as making sure that I don't have computers turned on that I don't have to turn on. Lights, that I don't have to turn on. The AC is only running when it has to be running. For example, now that it's very cold outside they've got heaters on. That's great. You can have one heater running if it's next to you. Keeping a heater running when you're 10 meters away, it's a waste of energy because the heat is not going to reach you. You're just wasting electricity for the sake of it. It's about looking for these things. Looking for the leaks of power usage. Anybody has got chargers plugged in that are not using. Anything that can use even the slightest bit. In a hotel this size, anything that you can do has a massive impact in the end. The same thing with water leakage and the same thing with paper usage. For us, those screens were a game-changer because we've got on some occasions it's 700 checkouts a day. That's 1,400 pieces of paper just on billing, just for the invoice. If on top of that, I have to give them an information invoice, that's again a minimum of 2,800 folios a day. Just to tell the guests what they've spent? You can pop up on	Self-reported 'Always/Mostly implemented EE as required'
R11	FELICITY	Value Initiator-Teller		Weak	Yes, because when I mentioned earlier on, just at the beginning of the meeting, that I said about when we're training them on the 10 steps, that we encourage them that when they're cleaning, one, we provide them with the correct products. Secondly then, that what they do when they're knocking and entering, when the housekeeper enters the room, when the maid enters the room, when they're washing the bathroom, that they're not keeping the taps running or the showers running, et cetera. They have to flush the toilet once. Then if the guests just left a note to say that they don't want their bed changed, they don't change the bed. If they don't want the towels changed, they don't change it. That's included in all the 10-step training. As far as I'm concerned, they've always been here, the energy efficiency actions. It's just part and package that is part of a housekeeper's responsibility to ensure when they're cleaning the room, they're considering the environment as well. I've been in the housekeeping industry for 40 years. Even though it might not have be so evident when you were being trained, it was always your best practice to turn off the lights, watch the water and think of the environment. Different hotels actually deliver the environment regime differently. We created the 10 cleaning steps two years ago, but we've been cleaning rooms like this for generations. It's the way you perceive and how you tell the team. It's always been there. It's always been probably trained differently with different techniques and different angles, worded differently and have they heard about the environment?. Yes, they've heard about it, but what's it called back then? Was it called Earth Week then? Probably	Self reported 'Implemented EE to some extent and did not implement some EE'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R16	MARCUS	Value Initiator-Teller		Weak	<p>If I'm completely honest I probably haven't been as progressive as I should be within my department towards having impacts on the department in terms of the environment. You know, for me we got a lot better about the recycling the bottle and making sure glass contamination, it still happens and still an issue that we looking at, but you know that definitely something that we are working on to make sure it work better in how we treating the environment.</p> <p>With regard to energy specifically I mean, I try to think of energy saving initiatives that we have in place. Again, it's difficult for us, energy specific, because for example the lounge [11:45] which is our biggest operation, it is 24-hour operation constantly, so you don't really have an opportunity to reduce the energy impact that because you do have all of equipment running constantly throughout the day throughout the year. You know, other part of the operation, for example our restaurant, you know, those are specific serving time, so when for example our breakfast restaurant not in use we turn off all the lights, we make sure that power off in that room, the same for general restaurant when it is not in operation, we make sure that we are being very aware of turning light on and off and so on which reduce energy impact as well, but it depends again you know hotel is one of the biggest creators on waste and usage of energy, it depends on the operation, it depends on making sure that workable to have everything up and running once the guests still there and then being aware of it, and making sure when they aren't there, we will take those opportunities to reduce energy.</p> <p>We don't actually a list of energy efficiency actions. That is very good point you know, we don't actually I guess I did slightly reflection on my aggressiveness of how environmental friendly you can be. We don't have a list in our department specific</p> <p>and you know how we can be more energy efficient, I guess we try things like the straw initiative we try to implement that, that is in progress right now and that would be definitely in action points for us to be more environmentally aware and more environmentally friendly, but we don't have specific prior department.</p> <p>Then again as a hotel we do have a blue energy, have you heard about blue energy committee? so we do have a specific environmental blue energy committee focused around the environment, that does a lot of work across the hotel and across different department so it is not specific to one area. Maintenance team does tend pick it up a little</p>	Self reported 'Implemented EE to some extent and did not implement some EE'
R17	MAX	Value Initiator-Teller		Strong	<p>Yes, absolutely. I think the biggest thing you have to talk about energy as electricity is the LED. Installed these LEDs bulb lights in almost every single room we have today. If it's not 100%, mostly, they are LEDs. In one of our biggest room, we have 3,500 lamps.</p> <p>It's a ballroom. We have three ballrooms basically, right? The biggest one's just down here. Just the chandelier has hundreds of lights and bloody spotlights and so on. Yes, with that, we managed to save a lot in cost and at the same time, obviously, we save the energy which avoids more pollution in burning oil or coal or whatever it is now.</p> <p>Then also on the floor, with the team, they're saying that we need to turn off the lights and close the door behind you, because if the room is not in use and you have thousands of bulb lights on all the time for no reason. Everybody understands that's a big issue for us.</p> <p>Not the formal list, no. All the lists of, for instance, the installation, the changed bulb lights and so on, all come through the maintenance people. On the floor is all the rules. We have many rules in the service, how to serve and so on, is a common practice to do, that is, turn off the lights and close the door behind it.</p>	Self-reported 'Always/Mostly implemented EE as required'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R21	MITCHELL	Value Initiator-Teller		Weak	Yes, because when we change-- when we upgrade the system. For example, when we upgraded the fridge, we put LED lighting in the fridges. All the fridges we got LED lighting and when we upgraded the gasoline, we take the gas off and put in the electrical induction hob. Straight we get the induction hob. This other one and when we change the fried egg so we turn off one gas burner. Which is like use lot of kilowatt hour so the thing-- Yes, fried egg. Before we used to do on the stove, now we do it in the oven. We save a lot of energy on it. Especially when I got involved in a room service, we changed the gas fryer to normal fryer. Electric fryer. We no need to take a gas up to the room service so it saves again. It's like one of it save a piping work to be done. It's a new piping work all the stove. In other hand is save water or resavings -- I know it's so small but in a long run is costly.	Self-reported 'Always/Mostly implemented EE as required'
R22	MILO	Value Initiator-Teller		Weak	We've done waterless urinals. We do the LED lights, the clothes recycling, so a lot of our uniforms get recycled. We get a lot of goods left behind by customers, so clothes, and if they don't come and reclaim them, then they get put in the recycling for air ambulance which-- The canteen, trying to make that 90% recyclable. Even just the bins in the offices, make sure the paper is recycled, so those are the key ones. We're looking at the electric cars and at the moment to have the plug-ins and stations for that.	Self-reported 'Always/Mostly implemented EE as required'

Infor mant	Name	Group category 1	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R23	MARIO	Value Initiator-Teller		Strong	<p>For me, my department, it's really important. From a sustainability point of view, that's where we can affect it the most. At the nighttime and in the evening time, our security are tasked with closing down the function rooms. But as part of that checked it isn't just to close them down to secure them, but it's also turning off the lights and turning off the heating as well because what's the point in heating and lighting the room. A, there's a cost benefit from turning those off.</p> <p>It's been part of the job description since April 2015, so two years almost nowere's an environmental impact why heat an empty room at night when no one's there to benefit from it.</p> <p>Part of me, I was just seeing them close down rooms when I joined security. I used to be a safety manager and then took over security. It seemed pointless them going around closing the doors but then not thinking about turning off the lights. In our offices upstairs there're those little posters that are saying "please switch off the lights when not in use." Subconsciously, it is ingrained into me to do that in the whole of the hotel as well.</p> <p>In terms of we kind of managed the car park as well. We try and push initiatives like car sharing. Rather than an individual and another individual drive to work if you live by each other, why not car share on that particular day and share it throughout the week. Instead of two people driving their vehicles to work then you've only got one vehicle driving to work. The hotel has invested in things like a bike shelter, if people want to ride their bikes rather than get transport to the hotel, then they can actually ride their bike, instead of having to get a bus or the train or a vehicle of any type.</p> <p>There's lots of ideas that could be implemented to the hotel. For example, you notice this whole area here in the bar, all the lights are on 24/7. Now, maintenance is doing a great job at changing halogen lights to LED lights which saves on energy consumption. However, the hotel needs to get better at sensors. For example, why is this whole bit lit up now it should just be lit up when someone walks in to the area to provide the lights, we can save on energy.</p> <p>It's a hard one for me and my department to influence. For example, it's not just obviously the lockdown at the bedroom, so it will be the first floor offices, so the 20, 25 offices on the first floor and they're not in use will turn the lights off there. For other areas, it's pretty much a 24/7 use. There's not much they can do because for example, they can't turn off the lights here in the pavilion suite because these lights are probably on a fuse which connects this whole area. Really from a light energy point of view, they can really only concentrate on the office and conference rooms. Trying to influence the other departments such as living well or housekeeping is not something we do much.</p> <p>We leave that to the other managers</p>	Self-reported 'Always/Mostly implemented EE as required'
R25	MARSH ALL	Value Initiator-Teller		Strong	<p>LED projects</p> <p>I think we could do better, maybe, definitely and if you have some examples or something that you can share to help us, definitely we'll have a look at that. so I think as a team, pretty much everybody's focused but I'm sure there are some departments maybe where we could implement something that you maybe have picked up that we haven't. So</p>	Self reported 'Implemented EE to some extent and did not implement some EE'

APPENDIX I: ENERGY PEB BY INDIVIDUAL EMPLOYEE AND TYPE OF EMPLOYEES (CASE B)

Infor mant	Name	Group category 1	Group category 2	Group category 3 (if have)	PEV	Stated PEB in workplace	PEB patterns
R26	MẠNH	iM	Active		Weak	<p>Current company:</p> <p>I: Hiện tại bây giờ theo em đánh giá những trưởng bộ phận đó họ có đang thực hiện những hoạt động tiết kiệm năng lượng hoặc là đưa cái sustainability vào trong công việc hằng ngày của họ hay không? (Now, do you think those department heads are doing energy-saving activities or putting sustainability into their daily work?)</p> <p>R26: Sustainability thì có một cái sử dụng lại giấy recycle hai mặt, thì bộ phận nào bọn em cũng sử dụng và đều theo cách đó. Còn lại về điện, nước, gas không nghĩ là họ làm được. (About sustainability, there is one about recycling printing on paper using the double-sided" function, which my department is implementing and following. The remaining sustainability issues, namely electricity, water, gas, I do not think they can do it.)</p> <p>No monitoring of energy efficiency activities:</p> <p>R26: Em không theo dõi [monthly energy consumption]. Mặc dù là có đồng hồ riêng nhưng mà em không record lại. Nếu muốn thì em có thể lấy được, nhưng mà em không record lại. (I don't track [monthly energy consumption]. Even though I have my individual meters, I don't record it. If I want, I can get it, but I didn't record it.)</p> <p>R26: Efficiency của gas thì bọn em khá là-- gần như là từ đầu đến giờ chưa làm. Từ khi mà em vào đây là chưa làm được cái dự án nào để tăng cái hiệu quả sử dụng gas cả. Hay là-- không có cái chỉ số cho xăng dầu. Bọn em chỉ thu thập cái chỉ số tiêu thụ hàng tháng, thế thôi... Thực ra em không có một cái idea gì để tiết kiệm cái gas đấy. (We have not never done gas efficiency. Since I came here, I haven't done any project to increase the efficiency of using gasoline. Or-- there's no index for gasoline. We only collect the monthly consumption, that's all ... I don't have an idea how to save the gas.)</p> <p>No list of the energy efficiency actions</p> <p>I: Em có một danh sách các hành động tiết kiệm năng lượng mà em đang sử dụng trong công việc hằng ngày của mình không? (I: Do you have a list of energy-saving actions that you are using in your daily work?)</p> <p>R26: Em không lập danh sách. (I do not have a list)</p> <p>Technology is more reliable than human behaviour.</p> <p>R26: Cái behavior thì nó không dễ thay đổi và phải thực sự những người nào đó quan tâm đến cái môi trường hoặc là người ta quan tâm đến cái chi phí thì người ta mới có cái sự thay đổi. (it is not easy to change behaviour. It must be really someone who cares about the environment or who cares about the cost change.)</p> <p>Common "lax" mentality in implementing the sustainability actions</p> <p>R26: Tuy nhiên thì do cái suy nghĩ nó chưa ảnh hưởng trực tiếp đến mình hoặc là nó chưa phải là cái chỉ số đo đếm của mình thì đảm ra nó cũng sẽ khó để mình thực hiện nghiêm túc. Mặc dù là mình cũng có hoặc là mình không keep in mind, lúc đầu thì mình follow rất là tốt, nhưng càng về sau thì nó càng ảu cả đi. Thì em nghĩ đây cũng là cái tâm lý chung của mọi người thời kể cả bên bếp. Ví dụ như là bây giờ họ có một cái chỉ tiêu gì đấy mà động đến cái sử dụng năng lượng chẳng hạn, thì em nghĩ là họ cũng sẽ bắt đầu là-- hò nhau là cũng phải tiết kiệm đi, nhưng hiện tại thì năng lượng họ cứ dùng thoải mái và cái việc follow và cái trách nhiệm là tiết kiệm của engineering thì em nghĩ là nó chưa ảnh hưởng đến họ thì họ sẽ không quá để tâm đến. Đương nhiên vẫn có những người có thể thực sự người ta quan tâm đến môi trường thì thực sự người ta nghĩ cho tổng thể của khách sạn, thì người ta cũng sẽ có những cái hành vi tốt, nhưng mà hầu hết thì em nghĩ là không. (However, either because the thought has not directly affected me or because it is not yet part of my measurements, it will be difficult for me to seriously implement it. Even though I have that thought, or I don't keep the thought in mind long, at first, I followed this approach very well, but later on it gets more "lax". I think that is also the common mentality of everyone, including those working in the kitchen. For example, now that they have a certain goal that touches on energy usage, for example, I think they will start to be verbally calling for saving. For now, they are comfortably consuming energy and whilst the responsibility of energy saving is left with the Engineering team, then I think it has not affected them then they will not be too concerned. Of course, there are people who do really care about the environment because they think of the hotel as a whole, then they will have good actions towards the environment, but for most people I don't think they particularly care about the environment.)</p> <p>Roles of owners in implementing the EE initiatives</p> <p>R26: thật ra ngay tại thời điểm này cũng đang có dự án chưa thực thi được, vì nó yêu cầu về vốn của các chủ đầu tư. (now, none of the EE projects at the hotel can go ahead as they need the approvals from the owners).</p> <p>He suggested he personally implemented "turn off" very well.</p> <p>R26: Về bản thân em, em đánh giá là em có ý thức rất tốt việc tắt đèn ở những khu vực không sử dụng. (R26: For myself, I assess that I am very aware of turning off lights in unused areas.)</p>	Self reported EE to some extent and did not implement some EE' Implemented

APPENDIX K: SAMPLE OF ANALYTICAL MEMO

Memo R21 on 23 September 2019

Executive Chef Deputy, kitchen department, male, working at HBM (UK) for +5 years, 50-54 years old, Indian British. [The interview was conducted in the staff room of kitchen area where was very busy and having other office staff working at the time of interview. It was challenging to keep the respondent concentrated on the questions.

R21 holds strong generic mindset for living economically and saving because of his early life experience of growing up in India where he witnessed severe sufferings from poverty and polluted water and his early family bringing up with a great focus on the need to save and reuse things. With this value, he then holds some environmental values towards living environmentally friendly and reducing his impact on the environment by recycling. Now, he seems to concern about keeping a good ecosystem of the environment for his existence and family.

"R21: Is killing the small insects going to one day kill me? That's why I was turned into more environmentally friendly all the stuff."

He is aware of some sustainability initiatives in the hotel and indicates that being environmentally friendly is the core value of the business, but he is unaware of the specific H corporate environmental values underlined.

R21 describes some energy efficiency actions within his kitchen.

- upgrading the energy systems in the kitchen towards energy efficiency or avoiding wasting gas by human behaviour such as LED lighting in the fridges;
- replacing some gas hob having one switcher with electric induction hob. This upgrade is more relied on technology rather than behavioural change.

R21 also talks about his awareness of some areas of waste due to human behaviour, however, for chefs it is not practical to focus on the saving over the operational demand. According to him, the act of choosing to waste the energy is something he is aware of, and the decision to not take any action is justified on operational grounds. For example,

"I: What about you can put two [dishes] in one oven and cook together?"

R21: Because if you see the things like us sometimes if you see some foods cook in a different temperature. You can see, as a bigger one its always just pre-heating takes some energy. Once it is getting ready re-heated, there is no energy loss, so it's reduced the energy. For example, once we don't cook all the-- Some of [unintelligible 00:10:14] you may notice that many items in the oven but is all cooking, but it's in a different temperature under different program. We can't cook everything in the same temperature and same program.

I: But there will be some dishes the same. Some dishes can cook in the same temperature.

R21: Sometimes it's different because what will happen sometimes, they put in a little bit earlier. Some items need to be cooked later. That time we can't always like a saving, saving, saving something which needs to be operational benefit also for us. It sorts of, for example, some items need to be cooked fifteen minutes, some items need to be cooked five minutes. We are not going to save much energy. The moment even though you put in the same oven the time you opened and again you close it, you are going to lose the energy. Do you get it?"

It is interesting to listen to his rationale about the judgement on the basis that the small waste of one kilowatt is better than the potential large waste of "If somebody forgot, then the entire food product go waste." It feels like he does not rely on human behaviour. This again points to hotel operational demands being more important than environmental impacts. This is understandable as making a change in this area would probably slow down the cooking times for meals overall.

He emphasizes the difference between theory and practicality, the difficulty or impracticality of saving energy with the nature of kitchen where his actions must be chosen on the operational benefit first over saving benefit.

"R21: No. How many politicians they do action? They can speak everything they can speak, but when it's coming to the action, it's not going to be same. Sometimes last-minute orders come in. We need to prepare. It's

not going to be like that it doesn't work out. We tried whatever we cook everything together. We try to cook all the time together. Especially the moment you would have noticed is because this time of the year just we don't have many events. That's why you may be running one or two ovens. We are always conscious about our energy so all the good, but sometimes do happen but you can't avoid it."

He mentions some barriers to impracticality of implementing saving and efficiency are not having suitable equipment (for example no smaller oven for small dishes for last-minute late orders where small ovens are more energy efficient to use);

He expresses that the corporate environmental values are the company cares about the planet and the waste. Then he hesitates to say that the company is for the saving cost and money.

It seems there is a link between the personal environmental values and a high frequency of mention or focus on recycling actions throughout the interview and many other interviews. R21 mentions a lot about recycling and landfill when associating to his values and actions towards the environment in workplace.

Some insights in the kitchen environment:

- There is no fixed number of staff per shift. The scheduling varies depending on the occupancy level and customer demand per day.
- Foods must be cooked in 10-20 minutes after the order to the kitchen.

R21 thinks the company is committed to the environmental protection and that is in line with his personal values. However, he says he does not know why, and it seems he does not think deeply about the meaning of commitment and why he finds the company is committed to the environmental protection. He suggests that the company cares because the company seems to give some guidelines to use the resources and they do the environmental communication.

The researcher has an overall sense that R21 wants to give some positive image about the company to the researcher regardless he may not deeply think about that. He seems to struggle to answer further when the researcher asks him to elaborate further his thought.

"Another staff in the room: No, it's not like it's a legal requirement, they choose to do it."

The interview goes into a bit difficult situation when there are several staff in the room and R21 is talking and using his computer at the same time. Another member of staff enters the conversation while she is listening to the interview. The room is open to the very busy and noisy kitchen hence it is very noisy interviewing environment.

He is willing to incorporate energy efficiency actions in his kitchen as long as these do not affect his current operational performance as this is his main priority over saving energy.

He does not think deeply about why the environmental communication is relevant to his current role.

He seems avoid talking about his own thoughts on the environmental communications. He uses "we" not "I" when the researcher asks about his own thoughts and actions.

Although R21 is a second ranking manager in the kitchen after the Executive Chef, it seems he is not active influencer on other staff behaviours in energy efficiency. He seems he does not think deeply about the role of leadership of his own and his manager in implementing energy saving actions in the kitchen.

Cascading an environmental message or initiative from the general manager/blue energy/head office to the operational staff in the kitchen: the administrator receives by email, then print it out and put on the noticeboard for the operational staff because most of kitchen staff who are not chefs do not have H emails. There is no measure of whether the operational staff have read and actions on that.

It seems he is the only member of staff (besides the environmental champion) mentioning about his training on energy saving tips. However, he mentions that this training happened in 2009 and no other formal training on this have been done in the last 9 years.

APPENDIX L : PHOTOS ON SITE

Photo 1



Source: shot by the researcher on field

Photo 2



Source: shot by the researcher on field

Photo 3



Source: shot by the researcher on field

Photo 4



Source: shot by the researcher on field

Photo 5



Source: shot by the researcher on field

Photo 6



Source: shot by the researcher on field

Photo 7



Source: shot by the researcher on field

Photo 8



Source: shot by the researcher on field

Photo 9



Source: shot by the researcher on field

Photo 10



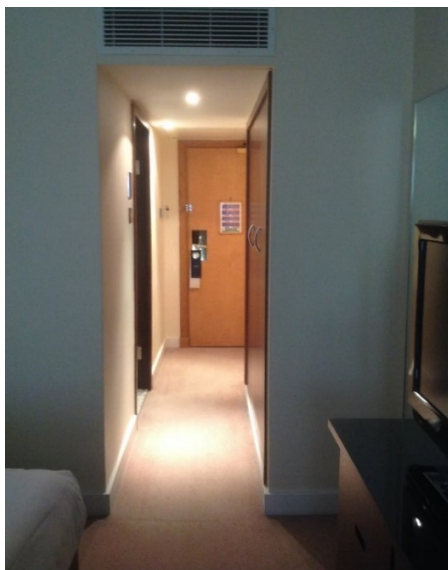
Source: shot by the researcher on field

Photo 11



Source: shot by the researcher on field

Photo 12



Source: shot by the researcher on field

Photo 13



Source: shot by the researcher on field

Photo 14



Source: shot by the researcher on field

Photo 15



Source: shot by the researcher on field

Photo 16



Source: shot by the researcher on field

Photo 17a

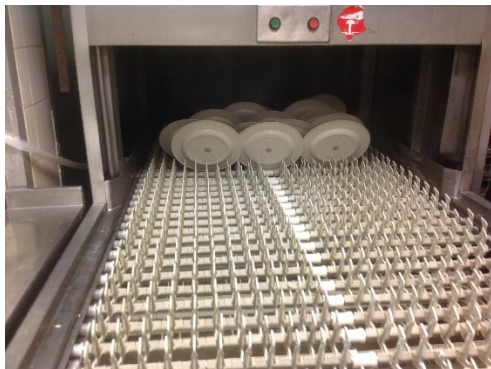


Photo 17b



APPENDIX M: EXPLANATIONS OF THE LEVELS OF BIOSPHERE VALUES

Table 8-2. Explaining the levels of biosphere values

Informant	Level	Explaining the sub-category
MICHAEL	Weak	<p>MICHAEL expresses his care for the environment to some extent; but puts more values on cost saving as the priority.</p> <p><i>"Now for my individual process, that tends to be if you're home or here, it tends to be about turning off energy saves you money. It's the simplest form of... Whether that means you're in touch with nature, well, I don't think so. I think it's more initially you think about the cost element to yourself. Also, from a company perspective, you tend to look at things from the cost and how can we improve things and that's simplistic by recycling or separation and not putting it in the landfill."</i> (MICHAEL)</p> <p>MICHAEL vaguely describes his PEV as a moral duty to protect the environment and we all must act and associated his values with recycling food waste.</p> <p>The researcher has an overall sense that MICHAEL is reluctant to changes in his current department. His voice is a bit irritating, disbelief and displeasing when he talks about changing his staff's behaviour for EE.</p>
MATTHEW	Weak	<p>MATTHEW has some concerns regarding environment and energy issues and believes that it is human responsibility to minimise its impact on the earth. He believes that it is more an effort of many people on the globe rather than himself in environmental protection.</p> <p><i>"I am a member of the human race and I have a responsibility to give the earth and ensure use of fossil fuels is kept to a minimum."</i> (MATTHEW)</p> <p>However, he does not totally act upon his values in some situations where he balances between his personal needs and environmental benefit. Examples of a diesel car but all LED bulbs at home.</p> <p><i>"it's from that. Possibly I've known from work is that you try and do the same at home. Okay, I've got a diesel car I don't limit my travel because of the pollution it's probably a bit hypocritical really but having known all the alternatives I feel it's pretty bad. Whatever must happen, must happen at a global level rather than a personal level. I know it starts from a single person then maybe goes up but that's a difficult road to go through, I think. Now, I believe we are all concerned about the earth. I'm at an age where I probably you got more time to live on the earth than I have. I feel probably I'm done with just this really."</i> (MATTHEW)</p>
FAITH	Strong	<p>FAITH can explain her PEV very clearly. The environment is quite important for her family and everyone hence we have to look after it and it is our duty to look after it. Also, she and her family live with the value of environment in terms of maintaining cleanliness of her house, not littering, and reducing their impact on the environment.</p> <p>She sounds like she thinks deeply about her PEV and she can explain the sources influencing her PEV very clearly.</p> <p>FAITH is a pro-active PEB leader and influencer consistently in her home, local community, and workplace. She states she tries to live by her values by exerting strict and strong disciplines and consistent actions in reducing her impacts and those of others on the environment; she also pro-actively leads others in driving their PEB behaviours.</p> <p><i>"Yes, definitely. I don't think I would be able to work for a company that doesn't care about the environment, I don't think I would. It wouldn't go with me; it wouldn't be my thing."</i> (FAITH)</p> <p>FAITH's voice sounds greatly confident and excited, and her eyes are open large when she talks about her PEV and PEB.</p> <p>FAITH is willing to participate in the interview, incredibly open and honest in sharing her thoughts about the topic and very helpful to connecting the researcher with her other colleagues. She pro-actively books a private room for the interview.</p>
MARK	Strong	<p>MARK can explain his PEV and sources influencing the PEV clearly. It is important for him to take care of the natural environment. His born and bringing up in his mother's rural setting and social examples of neighbouring conservation workers forms his early values to treat the environment with respect and to take care of the environment. The green environment is part of his family's daily living environment which makes him put values on trees, animals, and rural countryside.</p> <p><i>"they [conservation workers living near my parents' house] are very environmentally friendly because they produce most of their stuff themselves... Yes, in my house we have a lot of plants and my parents do reflect the idea of protecting the environment. They have a garden, they grow their own vegetables, they grow their own fruits."</i> (MARK)</p> <p>Some evidence showing his appreciation of living in the countryside and actively reducing paper prints in workplace, actively participating in growing sunflower trees even he just joins the hotel support clearly that he tries to live with this environmental value by his actions. MARK has high awareness of sustainability initiatives and communication in the hotel.</p>

Informant	Level	Explaining the sub-category
FIONA	Weak	<p>She does not exactly describe her PEVs. The researcher refers to what she describes that the top association comes to her mind when being asked about her values towards environmental protections is recycling. Also, she believes “if everybody did a little bit, it makes it better for everybody, it’ll be better for everybody else then. I do try and do my bit”.</p> <p>However, she can describe some sources influencing her associated PEV to some extent. She can talk about the influence of her parents and the media in helping her develop her thoughts on environmental issues.</p> <p>Her voice is even a bit nonchalant, and the eyes are not so attentive when talking about sustainability initiatives and she is more interested in completing what is told to do in the HK leaders as a HK supervisor (Researcher’s Memo FIONA dated 10 September 2019).</p>
MORGAN	Strong	<p>MORGAN can explain his PEV very clearly.</p> <p><i>“For me, looking after the environment, it’s selfless. It’s the right thing to do and therefore wherever we can, we should do. You’re searching for a reward or a benefit from it. I think it takes away a huge chunk of the value of the action.” (MORGAN)</i></p> <p>He can explain very clearly the sources influencing his values. His strong values are deeply formed in his early upbringing setting where his family strongly relied on natural resources and environmental quality (i.e., a small coastal home in the Mediterranean) as a source of main income.</p> <p><i>(Researcher’s Memo MORGAN dated 5th September 2019) “When he talked about his values, his voice was very passionate, and his eye contact was very attentive, and his eyes were sparkling when he spoke on this topic. He also demonstrated a passion to do the right thing with respect to protecting the environment as the result of his own experience of seeing the environmental impacts and the outcomes of sustainability actions and efforts to protect the environment.”</i></p>
FREYA	Weak	<p>(1), (2), (3) & (5) (Researcher’s Memo FREYA dated on 19 September 2019) “FREYA seems not think deeply about her personal values and PEVs. The area of environment and environmental protection are not in her thoughts much. She states that she does not have time to care for the environment. She mentions that a clean and neat environment is important for her. Maintaining cleanliness seems to emerge often as an important general value for all room attendants so far. It is perhaps the most important value expected for the room attendants’ roles. FREYA stopped many times in answering the question as she seemed to have difficulty in understanding some questions on PEVs and environmental initiatives. Sometimes she laughs shyly, and her eyes look down to the ground quickly when she realises, she does not know much about this area.”</p> <p>(4) maintaining the cleanliness (Egoistic value) might provide a good foundation to the PEV “It is important to live in a clean world and clean up the world” for the room attendants.</p>
FATIMA	Weak	<p>FATIMA does not state exactly her PEV. She does not think deeply about the questions asked and seems not understand the concept of the personal environmental value. Later, the researcher can refer from what she describes some values associated to her PEV as minimizing her consumption of resources from the environment, recycling or re-use everything in order to reduce the damage to the environment and save the environment for the next generation and living in a clean place.</p> <p>She can explain some sources where she picks up these values are from her parents. What makes her appreciate the environment because she learns that her parents made from scratch everything for their essential life from the environment when there is no industrial production in her parents’ place to provide available products for essential life.</p>
MICAH	Strong	<p>MICAH can explain his PEV and influencing sources very clearly.</p> <p>It is important for MICAH to live and keep a good-status environment where the natural beauty is preserved for his grandchildren. This value is primarily from his extensive travel experiences visiting many countries where he appreciates their beauty and develops his strong values for appreciating the good status of the environment. It is important for him to prevent the world from being dumped with wastes and pollution. This value is formed from his early 20s when he got some opinions from watching the media on climate change in the Antarctica. Although his parents did not directly influence the formation of his PEVs to appreciate the natural environment, he indicates that some good general values from the family upbringing such as not wasteful anything and re-utilise everything is a good basis for him to form his current environmental values. He has very strong values on preventing wastes to keep the good environment.</p> <p>He shows his enthusiasm about his PEV and PEB throughout the interview.</p>

Informant	Level	Explaining the sub-category
CAMILA	Strong	<p>CAMILA can explain her PEV and influencing sources very clearly.</p> <p>For CAMILA, the natural environment is important for providing a healthy and good life standard hence it is important for her to respect and take care of the environment. This value mainly comes from her childhood bringing up attached closely with the gardening lifestyle of her mother and grandfather and her closeness with the natural environment.</p> <p><i>“The environment that we’re working here is very special one because we are next to the Woodland area and Pendigo lake so obviously we have a lot of nature around us and I think it is important that we do not encourage them into the hotel, but we respect the nature it’s surviving around us, I always aware of that, plants, vegetation and animal, bird, etc. I think it is important that we protect our environment as much as possible because global warming is happening whether we like it or not and as you say it is very important for your future generation that we don’t destroy this planet as quickly as we are doing at the moment.” (CAMILA)</i></p> <p>CAMILA associates the meaning of environmental values to a good healthy quality life and lifestyle. In workplace, she associates that to a good working environment.</p> <p>However, she seems not to be very enthusiastic about the environmental communications and implementation in the routine work operations around the hotel. She is only interested in growing plants projects.</p>
FELICITY	Weak	<p>FELICITY (who is the HK executive and managing a team of 150 HK employees) is a difficult case to categorise because she did not really state what her PEVs were when the researcher kept asking her PEV several times. She kept saying that she followed what the hotel wanted her to do on environmental initiatives. However, she might be categorised to have a “Weak PEV” because the researcher can infer her PEV by her very little concern about actual environmental actions within her department and her non-verbal evidence.</p> <p>Her PEVs are to reduce the resource usage (saving) and waste during the cleaning (not necessarily about efficiency or environmental sustainability). In particular, for her, reduction value means less usage of water, turning off lights when leaving the guest room and separate guest bins. Her belief is that the current cleaning practices which have been applied alright by her generations at her department has been already incorporating good environmental initiatives and she does not show any willingness or necessity to incorporate any further sustainability actions within the 10 cleaning steps and her department. The researcher analysed the current 10 cleaning steps which does not incorporate the energy saving efforts.</p> <p>Evidence in her non-verbal are: <i>(Researcher’s Memo FELICITY dated on 5 September 2019) “It was challenging to interview this respondent and it was hard to get her to agree to participate in the interview (i.e., the researcher had to contact her several times to get her time to participate). She was not interested in the conversation and she was late for the interview; she did not make eye contact with the interviewer; there were many phone interruptions. She gave the impression that she was very unwilling to make any changes to act on the environmental initiatives being promoted in her department. The researcher was struggling to get her to answer the questions attentively and accurately as she avoided to answering many questions directly and only talked very generally about something else.”</i></p>
FRANCESCA	Weak	<p>FRANCESCA expresses that the environment is important for her and it is a moral duty for everyone to protect the environment. Interestingly, she associates her environmental value strongly to recycling. She mentions recycling throughout the interview. It is perhaps linked to her up-bringing in China where she witnessed the poverty and people living on collecting rubbish and re-use these rubbishes and her early education on the importance of plants and trees and recycling is a great emphasis at the hotel.</p> <p>Although she seems to express that she has strong PEVs, but many of the other things she says indicate that she really does not think about the environment much. She seems to have a very low awareness of environmental issues in her personal life and within the hotel workplace. Aside from recycling due to her upbringing in China where it is common to recycle as a means for making money (rubbish pickers, etc.), she mentions three times that she does not have time for watching media (television or internet) including the environmental issues, for stopping and reading the environmental posters, and for thinking too much about EE behaviours around the hotel. She is aware of recycling as a main thing in her department. But she seems not to know or unsure about the details of the implementation. She lacks knowledge on how to reduce energy with the operations she oversees. She thinks energy saving is not up to human factor as her team cannot do anything else to reduce the energy, rather than it is more relied on better machines.</p>

Informant	Level	Explaining the sub-category
MASON	Have no PEV	<p>The informants in the lower economic social class do not think deeply about their PEV, have low awareness of environmental issues and initiatives. These individuals might find PEVs concept difficult to grasp or tell in their own words. Perhaps they do not know words to put or they do not have knowledge of this type of value and have not thought of this until the researcher interviewed them.</p> <p><i>"I am stuck, I didn't ever answer that." (MASON)</i></p> <p>Quiet and shy person. He presented himself that he was not keen on his current position and was thinking of moving on to another career (taxi driver). For the whole interview, in the weak light of the bulb, his eyes looked sad and a bit dark and his vision about his current job and life is a bit dark. It was a bit difficult to start the interview because the interview was conducted in a staff room of back of the house.</p> <p>His voice shows lots of displeasure and resistance to environmental initiatives.</p>
R14AB	Unknown PEV	<p>There is not enough information to refer the PEV of the two junior chefs although the chefs talk about the energy consumption behaviours of their own and around the kitchen where they are working.</p>
MARTIN	Weak	<p>Although MARTIN thinks that he holds a strong value towards environmental protection, he seems not understand the pro-environmental values deeply. Some conflicts in his expressed PEVs – he loves the countryside environment however he loves fishing, shooting and planting foods. It is clearly he loves a good lifestyle of the countryside rather than protecting the natural environment. He would like to keep the good environment for his daughter's future. It is also interesting to hear than MARTIN can describe his parents' PEVs in a deeper language such as they look after the environment by not dumping things into it. MARTIN suggests that his values are perhaps influenced by his parents' values, his personal life experiences of being a fisherman living in the natural riverside and become stronger aware of environmental issues raised by media and government.</p>
MARCUS	Weak	<p>Although MARCUS states that he has strong PEVs, he does that without really thinking about this too deeply. Like many other general publics, who do not work in the environmental field, he does not think too closely about environmental behaviours on a day-to-day basis, except for actions with high visibility, such as recycling.</p> <p>MARCUS does not exactly describe her PEV. The research can infer his PEVs through the conversation with him and his positive language expression. It seems that it is important to him to utilise the environment in a sustainable and long-term way.</p> <p><i>"So, for me that has been a chance continuing what I feel especially important. As you say, you want a place beautiful and so on. For me, I want the same. I want something that is sustainable in the long term because the way that we currently operate, and we live and society that we run, and it is sustainable in long-term." (MARCUS)</i></p> <p>Although MARCUS says he has strong PEV, he does not engage the sustainability initiatives in his department. he is himself not actively going out there to seek the information on what sustainability is going on in the hotel as he has other more fundamental focuses (i.e., too busy operating business as usual).</p> <p><i>"I have my only focuses heading up another committee so I'm not always able to utilise that information as much as I probably should." (MARCUS)</i></p>
MAX	Strong	<p>MAX can describe his strong PEV and influencing sources clearly. MAX holds strong values to preserve the natural environment "my values are preserving everything, make sure we have for my grandchildren also" and would like to be influential in re-enforcing some environmental actions on this large team as a leader of the conference and events department with 230 staff. The frequent words he uses are "I try to influence to fix it" or "I try to push this value through". His values are influenced by his family and strongly personal interest on conservation and ecotourism (for example, his master's thesis is on conservation and ecotourism).</p>
FERNANDA	Have no PEV	<p>This informant can explain her general values "cleanliness, safety and not wasteful" that are closely associated to PEV concept which is referred to as to protect the environment. She does not care anything rather than her assigned room to be cleaned. She does not do anything in personal life and workplace to protect the environment. She states that she has concerns for protecting the environment in her works however what she is describing is all about the job description of room attendants which has no incorporations of EE actions. she has no consciousness of actions to protect the environment in the workplace.</p> <p><i>"R: can you describe to me some of the electricity saving actions that you are encouraged by your supervisor or your department to reduce electricity in your workplace?"</i></p> <p><i>"We do not use that much, maybe guests use because we don't, just over anything. Maybe they have to speak to-- I do not know, how much guests pay here to get a room. That one, I don't know." (FERNANDA)</i></p> <p>She does not really understand that some of her actions (observing her let lights on in the bathroom when the works are done in the bathroom while working in the bedroom area) might be negative PEB.</p>

Informant	Level	Explaining the sub-category
MAXWELL	Strong	<p>MAXWELL can explain his PEV and influencing sources clearly. He holds very strong values toward environmental protection and conservation because the nature is an important part of his living way.</p> <p><i>“My PEV is I’m a nature person and part of my hobby is going out for walks and taking photographs of nature. I’m very keen on conservation...As I said just from my own personal behaviours, who I am because I’ve always been interested in nature, the countryside, and everything. I always felt a bit protective about that.”</i> (MAXWELL)</p>
MITCHELL	Weak	<p>He holds strong generic mindset for living economically and saving because of his early life experience of growing up in India where he witnessed severe sufferings from poverty and polluted water and his early family bringing up with a great focus on the need to save and reuse things. With this value, he then holds some environmental values towards living environmentally friendly and reducing his impact on the environment by recycling. Now, he seems to concern about keeping a good ecosystem of the environment for his existence and family.</p> <p><i>“Is killing the small insects going to one day kill me? That’s why I was turned into more environmentally friendly all the stuff”</i> (MITCHELL)</p> <p>When talking about other related to the environmental values and PEB within his department, he shows that he does not really think deeply about the meaning of PEV and how that is related to his PEB within the department. Although MITCHELL is a second ranking manager in the kitchen after the Executive Chef, it seems he is not active influencer on other staff behaviours in EE. He seems he does not think deeply about the role of leadership of his own and his manager in implementing energy saving actions in the kitchen.</p>
MILO	Weak	<p>MILO has put a certain importance and concern on environmental protection however his PEVs are clearly on saving and avoid wasteful. This value is formed from his family bringing up, professional career in finance and current role of Director of Finance whose main job is to manage costs and make sure profitability to the business and its owners. Becoming the chairman of environmental team is due to his current value in line with the corporate values which he believes is all coming down to money then good for the environment given the global movements and public expectations around environmental protection.</p>
MARIO	Strong	<p>MARIO can explain his PEV and influencing sources clearly.</p> <p><i>“For me, the environment it’s very important. My background in terms of safety is environmental as well as, so environmental comes into that. For me the environment is quite an important thing. We all play a role in protecting the environment and doing what we can to prevent pollution I think ultimately.”</i> (MARIO)</p> <p>The researcher is impressed with his strong PEVs and his way of living his values. MARIO strongly values the environment and sustainability of the environment. He shows a good knowledge about sustainability initiatives around the hotel. He suggests that he has a higher personal environmental value than the company and there are more things that the hotel can do than it is doing now.</p> <p>The researcher remembers that she has a thoroughly enjoyable conversation with the security and safety manager who is very open to share lots of interesting insights about his views and actions and other departments regarding sustainability initiatives in the hotel.</p>
FRIDA	Strong	<p>FRIDA can describe her PEV and influencing sources clearly. For her, the environment is important for her and she seems to show that she is trying to live by this value. She indicates that she really puts that value and mind to her actions of reducing waste at home and in workplace. She indicates that she is highly aware of the environmental initiatives around her such as she is actively looking out for the environmental signs such as the signage and participating in online training on sustainability.</p> <p>Her values are influenced by her early bringing up (parents), later by schooling and education and media. Just joining the hotel for 9 months, she does not think her value is influenced by the company environmental values.</p>
MARSHALL	Strong	<p>MARSHALL can describe his PEV and influencing sources clearly. He has strong personal values towards promoting environmental protection and supporting communities. It is particularly important for him his family do their parts to clean up the environment. His PEVs are influenced by his current family (not parents), local government and media.</p>

APPENDIX N: RESULTS TABLES OF VALUES SURVEY

Table 8-3. Descriptive statistics

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Having security for my family	75	4	5	4.87	0.342
Being honest	75	3	5	4.68	0.573
Living in a world at peace	75	2	5	4.60	0.658
Equality between all people	75	3	5	4.59	0.572
Enjoying life	75	2	5	4.59	0.595
Honouring my parents	75	2	5	4.56	0.775
Protection of the environment	75	2	5	4.55	0.722
Preventing pollution	75	2	5	4.52	0.723
Living in a fair society	75	3	5	4.51	0.578
Being loyal	75	3	5	4.51	0.623
Respecting the earth	75	2	5	4.51	0.705
Being helpful	75	2	5	4.45	0.664
Maintaining cleanliness	74	2	5	4.43	0.778
Being polite	75	2	5	4.43	0.720
Exerting self-discipline	75	2	5	4.28	0.781
Living in a beautiful world	74	2	5	4.27	0.849
Living an exciting life	75	2	5	4.24	0.694
Living a varied life	75	3	5	4.16	0.658
Living in harmony with nature	75	2	5	4.16	0.916
Maintaining the social order	75	2	5	4.13	0.844
Belonging to my community	75	2	5	4.07	0.811
Being obedient	75	1	5	3.75	1.104
Being curious	73	1	5	3.74	1.155
Having authority	74	1	5	3.72	1.041
Being influential	75	1	5	3.68	1.016
Having wealth	75	1	5	3.63	1.010
Having social power	75	1	5	3.45	1.106

(Source : Values Questionnaires, sample size = 75)

Table 8-4. One-way ANOVA table¹⁰

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Living in harmony with nature	Between Groups	6.702	1	6.702	8.834	0.004
	Within Groups	55.378	73	0.759		
	Total	62.080	74			
Protection of the environment	Between Groups	6.718	1	6.718	15.388	0.000
	Within Groups	31.869	73	0.437		
	Total	38.587	74			
Equality between all people	Between Groups	0.435	1	0.435	1.338	0.251
	Within Groups	23.751	73	0.325		
	Total	24.187	74			
Being helpful	Between Groups	2.653	1	2.653	6.471	0.013
	Within Groups	29.933	73	0.410		
	Total	32.587	74			
Preventing pollution	Between Groups	6.509	1	6.509	14.751	0.000
	Within Groups	32.211	73	0.441		
	Total	38.720	74			
Respecting the earth	Between Groups	1.541	1	1.541	3.195	0.078
	Within Groups	35.206	73	0.482		
	Total	36.747	74			
Living in a world at peace	Between Groups	7.146	1	7.146	20.988	0.000
	Within Groups	24.854	73	0.340		
	Total	32.000	74			
Living in a fair society	Between Groups	0.596	1	0.596	1.803	0.184
	Within Groups	24.150	73	0.331		
	Total	24.747	74			
Living in a beautiful world	Between Groups	1.946	1	1.946	2.767	0.101
	Within Groups	50.648	72	0.703		
	Total	52.595	73			
Belonging to my community	Between Groups	7.830	1	7.830	13.997	0.000
	Within Groups	40.837	73	0.559		
	Total	48.667	74			
Having authority	Between Groups	19.215	1	19.215	23.125	0.000
	Within Groups	59.826	72	0.831		
	Total	79.041	73			
Having social power	Between Groups	10.695	1	10.695	9.773	0.003
	Within Groups	79.891	73	1.094		
	Total	90.587	74			
Having wealth	Between Groups	2.376	1	2.376	2.370	0.128
	Within Groups	73.171	73	1.002		
	Total	75.547	74			

- ¹⁰ ANOVA analysis helps to understand the difference between averages/means and indicates whether they are a result of actual differences. A significance score (indicated by the abbreviation Sig in the final column of the table above) of less than 0.005 indicates that PEV between two groups (the UK and Vietnam) are likely to be statistically significant. These values are highlighted in green in the table above.
- The crosstab table takes the ANOVA results further. It defines whether the PEV is more strongly expressed in the UK or Vietnam for each of the statistically significant values.
- The strong PEV (highlighted in green) have significance of <0.05

ANOVA (cont)

		Sum of Squares	df	Mean Square	F	Sig.
Being influential	Between Groups	9.179	1	9.179	9.979	0.002
	Within Groups	67.141	73	0.920		
	Total	76.320	74			
Living an exciting life	Between Groups	1.143	1	1.143	2.417	0.124
	Within Groups	34.537	73	0.473		
	Total	35.680	74			
Living a varied life	Between Groups	0.897	1	0.897	2.101	0.151
	Within Groups	31.183	73	0.427		
	Total	32.080	74			
Being curious	Between Groups	13.660	1	13.660	11.771	0.001
	Within Groups	82.395	71	1.160		
	Total	96.055	72			
Enjoying life	Between Groups	0.558	1	0.558	1.590	0.211
	Within Groups	25.628	73	0.351		
	Total	26.187	74			
Honouring my parents	Between Groups	4.105	1	4.105	7.421	0.008
	Within Groups	40.375	73	0.553		
	Total	44.480	74			
Being honest	Between Groups	0.845	1	0.845	2.627	0.109
	Within Groups	23.475	73	0.322		
	Total	24.320	74			
Having security for my family	Between Groups	0.071	1	0.071	0.600	0.441
	Within Groups	8.596	73	0.118		
	Total	8.667	74			
Exerting self-discipline	Between Groups	2.946	1	2.946	5.100	0.027
	Within Groups	42.174	73	0.578		
	Total	45.120	74			
Being obedient	Between Groups	5.338	1	5.338	4.593	0.035
	Within Groups	84.848	73	1.162		
	Total	90.187	74			
Maintaining cleanliness	Between Groups	3.202	1	3.202	5.628	0.020
	Within Groups	40.960	72	0.569		
	Total	44.162	73			
Being polite	Between Groups	0.423	1	0.423	0.814	0.370
	Within Groups	37.924	73	0.520		
	Total	38.347	74			
Maintaining the social order	Between Groups	6.493	1	6.493	10.265	0.002
	Within Groups	46.174	73	0.633		
	Total	52.667	74			
Being loyal	Between Groups	0.092	1	0.092	0.234	0.630
	Within Groups	28.655	73	0.393		
	Total	28.747	74			

(Source : Values Questionnaires, sample size = 75)

Table 8-5. Crosstab table: counts between the UK and Vietnam ¹¹

Count		HotelOrigin		Total	Count		HotelOrigin		Total
		UK	Vietnam				UK	Vietnam	
Living in harmony with nature	Of little importance	6	0	6	Being influential	Unimportant	1	1	2
	Moderately important	7	1	8		Of little importance	5	2	7
	Important	16	13	29		Moderately important	17	4	21
	Very important	15	17	32		Important	18	10	28
	Top two scores	31	30	61		Very important	3	14	17
	Percent of top two scores	70%	97%	81%	Top two scores	21	24	45	
Total		44	31	75	Percent of top two scores	48%	77%	60%	
		HotelOrigin					HotelOrigin		
		UK	Vietnam	Total			UK	Vietnam	Total
Protection of the environment	Of little importance	2	0	2	Being helpful	Of little importance	1	0	1
	Moderately important	4	0	4		Moderately important	3	1	4
	Important	17	3	20		Important	22	8	30
	Very important	21	28	49		Very important	18	22	40
	Top two scores	38	31	69		Top two scores	40	30	70
	Percent of top two scores	86%	100%	92%	Percent of top two scores	91%	97%	93%	
Total		44	31	75	Total	44	31	75	
Preventing pollution	Of little importance	1	0	1	Being curious	Unimportant	0	4	4
	Moderately important	6	1	7		Of little importance	1	6	7
	Important	17	2	19		Moderately important	10	5	15
	Very important	20	28	48		Important	17	8	25
	Top two scores	37	30	67		Very important	16	6	22
	Percent of top two scores	84%	97%	89%	Top two scores	33	14	47	
Total		44	31	75	Percent of top two scores	75%	48%	64%	
Living in a world at peace	Of little importance	1	0	1	Being obedient	Unimportant	1	0	1
	Moderately important	4	0	4		Of little importance	10	2	12
	Important	18	1	19		Moderately important	10	5	15
	Very important	21	30	51		Important	11	13	24
	Top two scores	39	31	70		Very important	12	11	23
	Percent of top two scores	89%	100%	93%	Top two scores	23	24	47	
Total		44	31	75	Percent of top two scores	52%	77%	63%	
Belonging to my community	Of little importance	1	1	2	Exerting self-discipline	Of little importance	2	0	2
	Moderately important	15	1	16		Moderately important	9	0	9
	Important	20	12	32		Important	15	15	30
	Very important	8	17	25		Very important	18	16	34
	Top two scores	28	29	57		Top two scores	33	31	64
	Percent of top two scores	64%	94%	76%	Percent of top two scores	75%	100%	85%	
Total		44	31	75	Total	44	31	75	
Having authority	Unimportant	1	0	1	Being helpful	Of little importance	1	0	1
	Of little importance	9	1	10		Moderately important	3	1	4
	Moderately important	14	3	17		Important	22	8	30
	Important	16	11	27		Very important	18	22	40
	Very important	4	15	19		Top two scores	40	30	70
	Top two scores	20	26	46	Percent of top two scores	91%	97%	93%	
	Percent of top two scores	45%	87%	62%	Total	44	31	75	
Total		44	30	74					
Having social power	Unimportant	4	0	4	Honouring my parents	Of little importance	3	0	3
	Of little importance	8	3	11		Moderately important	4	0	4
	Moderately important	13	7	20		Important	11	5	16
	Important	16	11	27		Very important	26	26	52
	Very important	3	10	13		Top two scores	37	31	68
	Top two scores	19	21	40	Percent of top two scores	84%	100%	91%	
	Percent of top two scores	43%	68%	53%	Total	44	31	75	
Total		44	31	75					
Maintaining the social order	Of little importance	4	0	4	Maintaining cleanliness	Of little importance	2	0	2
	Moderately important	8	2	10		Moderately important	6	1	7
	Important	21	12	33		Important	14	8	22
	Very important	11	17	28		Very important	21	22	43
	Top two scores	32	29	61		Top two scores	35	30	65
	Percent of top two scores	73%	94%	81%	Percent of top two scores	81%	97%	88%	
Total		44	31	75	Total	43	31	74	

(Source : Values Questionnaires, Sample size = 75)

- ¹¹ The crosstab table takes the ANOVA results further. It defines whether the PEV is more strongly expressed in the UK or Vietnam for each of the statistically significant values.

APPENDIX O: EXPLANATIONS OF TYPES OF EMPLOYEES

Informant	Type of Employees	Role in environmental communications (A)	Role in implementing environmental initiatives at hotel level (B)	Current jobs in hotel/company (C)
MẠNH	an 'IM'	MẠNH is generally the first key receiver of the environmental from the regional office as he is a champion of environmental team. His main role is then to communicate internally the environmental messages to hotel staff and senior managers about the environmental initiatives.	As an assistant chief engineer, he did not engage physically in carrying out the energy consumption initiatives with other operational staff. His main role is mainly to manage his engineering staff who will take care of the technology enabling the energy consumption activities. <i>MẠNH: Three areas: Water, energy and waste are what I pay most attention to. The energy here has electricity and gas, along with water, which is directly related to my career, and it's in my hands. Every decision-making power in that field is mostly in my hands, which is a very direct relation to me.)</i>	Assistant Chief Engineer
KHUÊ	a 'VIT'	Generally, the informants whose current roles were top senior managers of each unit usually are expected to play the roles of 'VIT' who is involved in developing the corporate value process and their leadership plays a symbolic role in communicating CEV and implementing the environmental actions. However, due to the particular situation of this informant transferring from another hotel to Hotel B to assist and although she acted as the highest senior HK manager at the current time of the interview, the researcher observed that the informant was perhaps finding it difficult to demonstrate that she was the VIT.	She did not engage in physically carrying out the environmental initiatives at the operational level.	<i>Acting Executive Housekeeper</i> (See job description)

NGQ C	an active 'RD'	She received the environmental communications from her manager. Moreover, she seemed to be an active 'receiver-doer' as she was able to show that she was actively implementing the environmental protection measures in her daily work, and she was keen to encourage her co-workers to follow these measures too.	She explicitly implemented the physically environmental initiatives in her daily works such as turning off all lights when not in use while making up the guest rooms.	<i>Room attendant (see job description)</i>
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CHÂU	a 'RD'	She received the environmental communications from her manager.	<p>After receiving the environmental communications, she explicitly implemented the physical environmental initiatives in her daily works such as turning off all lights when not in use while making up the guest rooms.</p> <p>Moreover, she seemed to be an active 'receiver-doer' as she was able to show that she was actively implementing the environmental protection measures in her daily work, actively searched for the company-wide environmental information beyond her current role, and actively spread the news to other co-workers and seemed at attempt to influence others.</p> <p><i>(CHÂU: Firstly, getting the information, then reading and thinking about it. That is, for example, what information does the person want to give me? That is, we have to know what the content of the information is? Well, if maybe I might go to Facebook and know first, then maybe there are people who do not know then maybe I told them that on Environmental team such information is posted, and guys, if you haven't seen it, you can come in. And together means that once you are in a hotel, we are a team already, and let's do that together in order to achieve a good outcome!)</i></p>	Room attendant (see job description)
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HUỒ NG	an active 'RD' as well as active 'iM'	She received the environmental communications from her manager and passed the information to her room attendants in the morning briefings and during personal interactions. For example, she reminded her colleagues about turning off lights and electrical equipment in guest rooms when she went on her supervisory routines.	As a HK supervisor, she did not directly implement the physical environmental initiatives in her daily works such as turning off all lights when not in use while making up the guest rooms. Her main role was to check whether the room attendants make up the rooms according to the standards and sometimes she physically carried out some cleaning tasks when the room had some areas that were not made up properly during her supervision. For example, she turns off the lights when the room attendant forget to turn them off. She showed that she was active in influencing other people around her (co-workers and family members) in implementing the energy saving and pro-environmental actions.	HK supervisor (see job description)
LỄ	a passive 'RD'	She received the environmental communications from her manager, was aware of the Environmental team page on Facebook and informal channels such as "I overheard.... However, she seemed not to actively use the information further.	After receiving the environmental communications, she directly implemented the physical environmental initiatives in her daily work such as turning off all lights when not in use while making up the guest rooms.	Senior room attendant (see job description)
MIÊN	a passive 'RD' and an active 'iM'	The informant received environmental communications from his manager.	After receiving the environmental communications, on theory, he was expected to implement the physical environmental initiatives in his daily work such as turning off when not in use.	Sous Chef (see job description)

MINH	a passive 'RD' and an active 'iM'	<p>As the second most senior person after the Executive Chef in the Kitchen unit, the informant receives environmental communications from his manager and cascades them to his chefs.</p> <p>MINH: <i>I cascade information to staff about the good things and encourage them to act in an environmentally friendly manner, not only at work but also at home. I encourage them to save electricity, energy, water, natural resources with the overall objective of environmental protection.</i></p>	<p>The informant said that he was expected to implement the physical environmental initiatives in his daily work such as turning off equipment when not in use. However, in reality he did not do this for several reasons (see the section PEB).</p>	Acting Executive Sous Chef, Male
BÁCH	a passive 'RD'	<p>The informant receives environmental communications from his manager.</p>	<p>The informant said that he was expected to implement the physical environmental initiatives in his daily work such as turning off equipment when not in use.</p>	Acting Executive Sous Chef (see job description)
CHARLES	an active "VIT"	<p>CHARLES was the first key receiver of the environmental information from the regional office. He seemed to play some active roles in communicating the environmental information to his staff.</p> <p>CHARLES: <i>I think that the HR has an important role to play, but also by leading by example, meaning when you take an initiative, you must explain. You must explain through communication when you do trainings with your employees, that's very important.</i></p>	<p>CHARLES did not engage in physically carrying out the environmental initiatives at the operational level himself. However, he played a leadership role in enabling the implementation of environmental initiatives in his operations departments.</p>	Director of Operations (see job description)

BẢO	a 'RD' and a 'iM'	<p>As the third most senior person in the Kitchen unit, the informant received environmental communications from his manager and cascades them to his chefs. He described how the environmental information was communicated within this hotel. The departmental heads first get the information from the environmental champion who was the HR Director. His kitchen's department head would then cascade the information to him and then he would organise team meetings to cascade the information to kitchen staff.</p> <p>BẢO: <i>From the Department Heads. For example, the information was updated from the HR Director, with meetings amongst the Heads of Departments. Then my manager [Department Head of Kitchens] updates me on this...And I am responsible for cascading the information down to kitchen staff. It is like a chain of information...</i></p> <p>BẢO: <i>The Environmental team at the hotel has been implementing some environmental initiatives that are specific or tailored for this particular hotel. We do not need to wait for the programs sent from the regional office. The regional office can send us macro-level programs. Our hotel has implemented more micro-level programs.)</i></p>	<p>The informant said that his main role was to supervise staff and plan sales. However, he was expected to implement the physical environmental initiatives in his daily work when needed.</p> <p>BẢO: <i>I have worked at this hotel for 14 years up to this June. And my job is to manage the Asian kitchen and now also the European kitchen as we discussed yesterday. You have heard about it, haven't you? Well, now I mainly supervise staff. However, if it is a busy time, I will also cook, take care of the staff who do breakfasts, then help things around for them, prepare items and plan sales. The next day is to plan for the day after that when I will order goods to prepare for the following day again. As I am currently managing 16 people...I report directly to the Executive Chef who is on leave now.</i></p>	Ba Mien Chef (see job description)
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NGÃ N	a passive 'RD' and 'Ir'	The informant received environmental communications from her manager.	After receiving the environmental communications, she attempted to implement the physical environmental initiatives in her daily work such as turning off equipment when not in use (although she reported she could not do that). She seemed to attempt to ensure her actions influenced other people to follow her lead. NGÂN: <i>For example, I tried to spread that action on social media. When I share these actions, I write clear captions for people to read, and I consider this as a positive influence.</i>	<i>Pastry Commis 3</i> (see job description)
NHU NG	NA			
TIÊN	an active 'RD'	The informant received environmental communications from the Environmental team via the Facebook forum and noticeboard.	After receiving the environmental communications, she implemented the physical environmental initiatives in her daily work such as turning off light and electrical appliances when not in use.	<i>Banquet Supervisor</i> (see job description)
VI	an active 'RD'	The informant received environmental communications and actively circulated the information to co-workers.	After receiving the environmental communications, she implemented the physical environmental initiatives in her daily work such as turning off lights and electrical appliances when not in use.	<i>Room attendant</i> (see job description)

BÌNH	a passive 'RD' and passive 'iM'	<p>The informant received environmental communications and actively circulated the information to his staff.</p> <p><i>BÌNH: I just communicate to the staff what the hotel owner and environmental programmes need to do. There are no rules or regulations in place for staff about saving this or that or how to do that.</i></p> <p><i>BÌNH: After receiving the information from me, the staff themselves will gradually form an awareness of that.</i></p>	<p>Although he was a security manager who mainly delegated staff to implement the environmental actions during the patrols, however he reported he himself implemented the physical environmental initiatives due to understaff, for example, patrol 100% kitchens.</p>	<p><i>Chief Security Manager (see job description)</i></p> <p><i>BÌNH: My job is to ensure the general security for hotel B as well as I make security plans for special occasions such as having a VIP group coming, and normally I follow the operation teams with any requests. In addition, the security guards' routine works include checking personnel traveling back and forth, as well as contractors, suppliers, and event organizers. In general, we are responsible for the safety and security of physical hotel of guests, staff, and the hotel. I manage all issues related to security and fire issues.</i></p>
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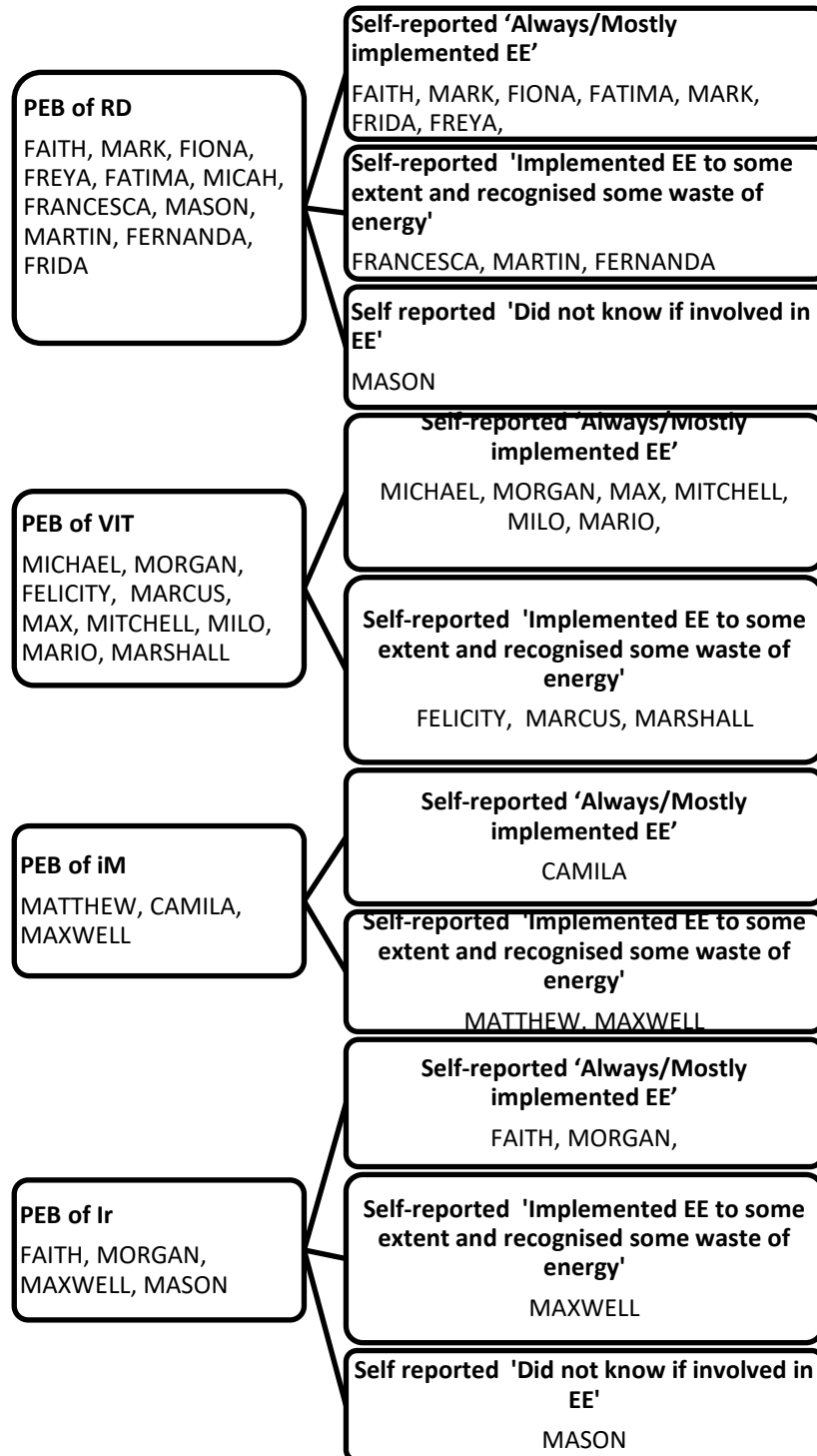
ĐAT	active 'VIT' and active 'iM'	<p>The informant was the first receiver of the environmental information from the regional office. With the additional job as the Chairman of the Environmental team at the cluster hotels in Hanoi, he also involved in initiations or development of sets of sustainability values and policies which were generally in the form of CSR reports for the company and the initial ideas for implementing the sustainability efforts at the hotel levels. He engaged in communicating sustainability values, policies, and initial ideas to the properties worldwide.</p> <p>The informant actively supported the environmental ideas from the regional offices. However, it was not clear if he cascaded his active leadership direction on this matter to the departmental heads and the environmental champion within the properties and empowered his staff to implement these ideas.</p> <p>The informant actively circulated the information to his staff.</p> <p><i>ĐAT: My main role is Chairman, sounds a big role!!! I manage Environmental committee which is a culture of the B brand. With this culture, they focus on 4 factors. The first factor is customers. The second is employees. The third is sustainable development, for example what we are doing are based on sustainable development. The fourth which is also important is community where the hotels are located in. My role is like a catalyst for Environmental members which inspire them and make them think about what they are doing, and in turn they will inspire other colleagues in what they think and do which result in customer satisfaction as well as employee satisfaction. In fact, I care about sustainable development and always care for the community where I work.)</i></p>	He did not physically carry out the environmental initiatives in his daily routines at the properties as he is not part of Operational departments.	Cluster Director of HR (see job description)
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NHI	an 'iM'	The informant was the first receiver of the environmental information from the Environmental team or her direct manager. The informant circulated the information to her staff.	As an Executive Housekeeper Assistant, she might not physically carry out the environmental initiatives in her daily routines at the properties.	Executive Housekeeper Assistant (see job description)
DŪN G	a 'RD'	The informant was the first receiver of environmental information from his direct manager. He reported that he implements the environmental initiatives in his work as requested after receiving the information. He sometimes reminded his laundry staff to avoid wasting water and electricity when he saw the staff were not using the machines to the required standard.	As a laundry supervisor, he both physically carries out the environmental initiatives in his daily routines such as washing the clothes as well as supervising the laundry staff at the hotel.	Laundry Supervisor (see job description)
ANDY	an active "VIT" and active 'Ir'	The informant was the first receiver of environmental information from the regional office or the environmental champions. He seemed to actively inspire his employees with his PEV and company environmental values.	He does not physically carry out the environmental initiatives in his daily routines. He actively supported the environmental projects at the properties and played a strong educational role as a supportive leader to his employees.	Cluster GM (see job description)

APPENDIX P: MAPPING PEB BY SUBGROUPINGS

Figure 8-2 presents the mapping of PEB groupings and identifies the employee of these groupings for Case A.

Figure 8-2. Mapping PEB (Case A)

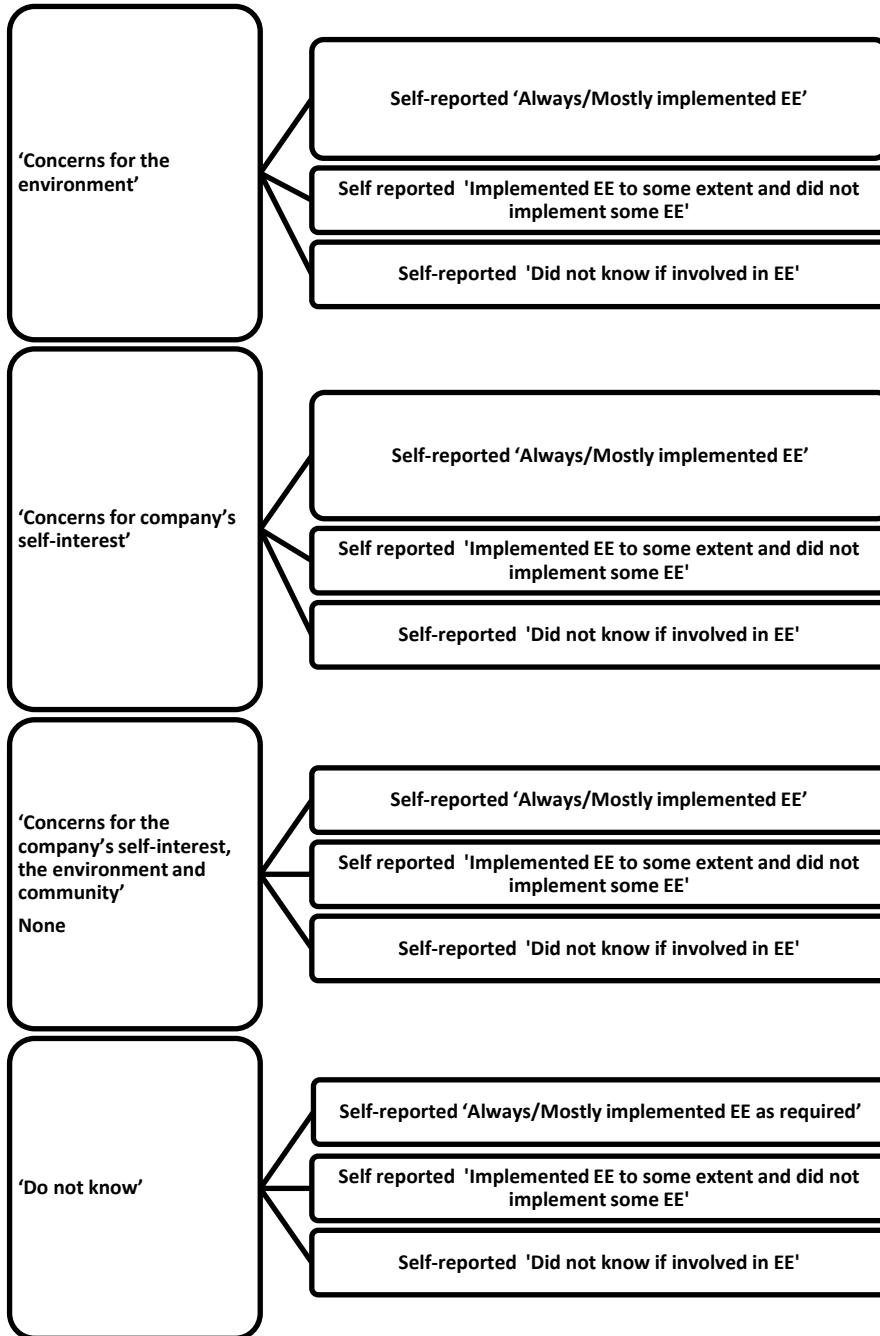


Source: from the current study

APPENDIX Q: MAPPING CEV-PEB

Figure 8-3 maps the link between PEB and CEV. The CEV used was the response category ‘the number one importance’ as indicated by the Vietnamese employees (among the four categories of responses from number one important to number four importance as outlined in Section 6.5.2).

Figure 8-3. Mapping the ‘first importance’ CEV-PEB (Case B)



Source: From the current study

APPENDIX R: CEV PERCEIVED BY EMPLOYEE TYPOLOGY

Table 8-6. CEV perceived by employee typology (Case A)

1st corporate values perceived	2nd corporate values perceived	3rd corporate values perceived	Employee Typology 1	Employee Typology 2 (if have)	Informant
company commitment to be responsible for the environment	cost saving, profitability & marketability		iM	lr	R20
company commitment to be responsible for the environment			iM		R2
company commitment to be responsible for the environment			RD	lr	R3
company commitment to be responsible for the environment	Care people, community, environment		RD		R24
company commitment to be responsible for the environment			RD		R5
company commitment to be responsible for the environment			RD		R8
company commitment to be responsible for the environment			RD		R12
company commitment to be responsible for the environment			VIT		R23
company commitment to be responsible for the environment	Care for community		VIT		R25
company commitment to be responsible for the environment			VIT		R16
cost saving, profitability & marketability	company commitment to be responsible for the environment	Care people, community, environment	iM		R10
cost saving, profitability & marketability	company commitment to be responsible		RD		R4

1st corporate values perceived	2nd corporate values perceived	3rd corporate values perceived	Employee Typology 1	Employee Typology 2 (if have)	Informant
	for the environment				
cost saving, profitability & marketability	Have double wedge		RD		R9
cost saving, profitability & marketability	company commitment to be responsible for the environment		RD		R7
cost saving, profitability & marketability	company commitment to be responsible for the environment	Have double wedge	RD		R15
cost saving, profitability & marketability	company commitment to be responsible for the environment	Have double wedge	VIT	lr	R6
cost saving, profitability & marketability	company commitment to be responsible for the environment		VIT		R17
cost saving, profitability & marketability	Landfill is important		VIT		R21
cost saving, profitability & marketability	Have double wedge	Internationally committed	VIT		R22
cost saving, profitability & marketability	Have double wedge		VIT		R1
Do not know			RD		R19
Guest demand			RD	lr	R13
Guest demand			VIT		R11
Unknown			RD		R14AB

Source: compiled from this study

APPENDIX S: CARBON FOOTPRINT BY PURCHASED COMMODITY RELATED TO TOURISM (2013)

Table 8-7. Carbon Footprint by purchased commodity related to tourism sector (2013)

Commodity related to tourism	In MtCO ₂ e	% of Tourism sector
Total	4430.6	
Transport unspecified	871	19.7%
Road transport	602	13.6%
Air transport	547	12.3%
Water transport	97.9	2.2%
Rail transport	54.6	1.2%
Goods	534	12.1%
Agriculture	353	8%
Services	350	7.9%
Accommodation	282	6,4%
FB serving	227	5.1%
Food	194	4.4%
Construction	139	3.1%
Mining	121	2.7%
Hospitality unspecified	58.1	1.3%
Trade	-	0%
Utilities	-	0%

Source: Lenzen (2018) (<https://doi.org/10.1038/s41558-018-0141-x>); Dunne (2018) (<https://www.carbonbrief.org/tourism-responsible-for-8-of-global-greenhouse-gas-emissions-study-finds>, accessed on 10 June 2021)

APPENDIX T: MOST IMPORTANT ENVIRONMENTAL ISSUES FACED WORLDWIDE IN 2020

Table 8-8. The most important environmental issues faced worldwide in 2020

Environmental issues faced worldwide	Percentage of respondents
Global warming or climate change	37%
Air pollution	33%
Dealing with waste	32%
Deforestation	26%
Water pollution	25%
Nature resource depletion	20%
Future energy sources and supplies	18%
Over-packing of consumer goods	15%
Overpopulation	15%
Wildlife conservation	15%
Emissions	14%
Poor quality drinking water	12%
Flooding	11%
Future food sources and supplies	9%
Soil erosion	6%
None of these	1%
Don't know	3%

Source: Statista (<https://www.statista.com/statistics/895943/important-environmental-issues-globally/>)