



Promoting Electricity-Saving Practices in Urban Office Settings: The Role of Employees in Vietnam's Banking Sector

Vu Cam Nhung*

12 Nguyen Van Bao, Hanh Thong Ward, Industrial University of Ho Chi Minh City, Ho Chi Minh City, Vietnam.

*Email: vucamnhung@iuh.edu.vn

Received: 16 May 2025

Accepted: 04 September 2025

DOI: <https://doi.org/10.32479/ijeep.20792>

ABSTRACT

This study looks into the key motivators that influence the attitude of bank employees toward electricity-saving, viewed in the light of energy productivity at the workplace and its connection to more general sustainability aims. This study posits a contribution toward the understanding of pro-environmental behavior in the workplace by examining factors, including attitudes, awareness toward electricity-saving, and intention, that influence low-carbon behavior for banking employees. This study makes use of a quantitative research design on details obtained from 405 employees selected by convenience sampling from various levels of hierarchy in the firm. This will provide a varied view of behavioral patterns linked to the use of energy. The findings of this study will bring out the motivation of employees to support the corporate electricity-saving conservation initiative in the prevailing trend of rising importance of environmental concern and strategic significance of employee engagement towards the sustainability drive of the organization. More specifically, subjective standards, perceived behavioral control, sense of responsibility, and cognition of electricity price are factors that influence electricity-saving behaviors among the banking employees in HCMC. These findings show a strong connection between these factors and the actual uptake of the practice by the employees. These insights should, therefore, inform the action of banks in Ho Chi Minh City in taking electricity-saving opportunities while reducing the negative environmental impacts that result from their operations. Moreover, saving on electricity presents organizations with enormous economic benefits due to resultant cost savings, which enhances their competitiveness. In this regard, implementing the findings of this study may help the employees in banking services raise awareness regarding electricity-saving and provide the valuable knowledge for practices as well as scholars.

Keywords: Customer Behavior, Electricity-Saving Behaviors, Sustainable Development Goals, Banking Services

JEL Classifications: Q56, G32, Q54

1. INTRODUCTION

Both firms and clients are more informed about social and environmental issues. Earlier, the drive was not just for profit (Akbari et al., 2020). The world over is responding to climate change and natural energy resources lack energy towards energy conservation campaigns. Most governments take it up as a major national policy and run educational schemes to promote energy efficiency (Chen and Chen, 2021). Most firms are making efforts to ensure that their office buildings are more ecologically safe and also lower energy consumption in their office buildings for

social-economic motives (Su et al., 2022). The fulfillment of companies based on economic, commercial, ethical, social, and environmental levels is becoming more prevalent (Egbulem et al., 2024). Now it becomes so important to focus on these dimensions of sustainable development in today's context. Corporate social responsibility along with environmental concerns happen to be integral to the sustainable development of our businesses. Moreover, in the fast-evolving world today where energy consumption is on a daily rise, the bank's staff assumes very vital importance in propagating energy-saving initiatives, a must for collective sustainability. With global warming increasing,

experts insist on the psychological aspect that will change the perception of people and encourage them towards energy saving. The more advanced a society becomes and the more electronic devices and machines are developed, the more demand there will be for energy. This makes it very important for individuals and institutions like banks to follow and propagate such practices of energy saving.

The initiatives and practices of sustainable energy consumption can only be designed to meet emerging needs and challenges once policymakers can continuously track progress and change strategies based on the information at hand (Van Doren et al., 2016). It also majorly contributes to global warming, that is the Carbon dioxide and other greenhouse gases released in the atmosphere due to the electricity utilization by business setups. The effectiveness of a company's environmental initiatives heavily relies on the behavior of its employees (Fatoki, 2022). Sustainable consumption is assessed by how often individuals engage in actions like turning off electrical devices when not in use, unplugging mobile chargers, switching off lights when leaving a room, choosing showers over baths, running washing machines and dishwashers only when full, and buying energy-efficient appliances and light bulbs (Gajdzik et al., 2024). Developing cooperative relationships with regulators and energy suppliers to enhance efficiency and encourage sustainable use is vital. In Vietnam, bankers are becoming more exposed to the importance of saving electricity in relation to environmental conservation. Through the campaign on energy-saving behavior, bankers execute their responsibility for environmental protection and enable other people to imitate as well.

Promoting an energy-saving culture is seen as the most effective approach for firms that seek to reduce the energy consumed within the precincts (Su et al., 2022). It is important to understand how employees in the workplace perceive executing energy conservation and its importance relating to sustainability, and the environment (Camacho et al., 2023). Although previous studies have indicated that green training does bring about environmentally responsible behavior at work, there is scant scholarly attention to its effect on the eco-behavior of employees outside work (Usman et al., 2023). It is only through the comprehension of psychological motives for energy-saving actions that sustainable practices can be promoted and sustained among employees and customers of the bank.

Additionally, the recommendations are developed on the basis of such theories as the Theory of Planned Behavior, which implies that interventions be developed to alter various factors like social norms, perceived control, response awareness of electricity pricing within the identified target audience to promote energy conservation. Equally, it becomes prudent to instill environmental consciousness regarding behavior in the employees of the bank. The integration of aspects from the Theory of Planned Behavior can, therefore, help understand the underlying factors that motivate employees of banks to engage in energy conservation. With this in mind, therefore, there is a need for effective strategies to be designed so far as the promotion of eco-friendly practices is concerned. Employees at the bank are seen as both guardians

of financial resources and esteemed stakeholders because of their strong ability to influence societal norms regarding energy-conserving practices. Their tangible contribution is in the creation of a greener and healthier future for generations to come, brought about by their endorsement of renewable energy, support for energy efficiency, and inculcation of environmental consciousness. The efforts of bank employees on this account go beyond the enactment of professional commitments about saving energy and become symbolic actions reflecting our common aspirations towards a sustainable future. This study, however, has indicated that subjective norms relating to the practice, perceived behavioral control, sense of personal responsibility, and awareness of electricity pricing are the main psychological and cognitive factors that quite significantly influence the behaviors of saving electricity among the banking employees in Ho Chi Minh City. These, therefore, reiterate that on the organizational front, pro-environmental behavior is a result of the combined effect of motivations within the individual as well as from outside the individual.

2. LITERATURE REVIEW

2.1. The Role of the Theory of Planned Behavior in Understanding Energy Efficiency among Banking Employees

The Theory of Planned Behavior by Ajzen (1991) states that human behavior is determined by three factors: attitude toward the behavior, subjective norms, and perceived behavioral control. In the dimensions of energy-saving practices among banking sector employees: attitude reflects how positive or negative views are toward the benefits of saving electricity; subjective norms relate to corporate culture pressures and encouragement from colleagues; and perceived behavioral control represents the sense of ability and conditions for the behavior to be undertaken. This helps in understanding the driving and restraining factors of energy-saving behavior, which supports the development of strategies for sustainable development.

2.2. Promoting Electricity-Saving Behavior among Banking Employees

A strong endorsement by the top management has positive effects in motivating energy-saving practices within the organizations (Zhang et al., 2018). Promoting electricity conservation and inculcating energy-preserving behaviors amidst the banking staff becomes vital in nurturing sustainability at and beyond the workplace. This ushers in an energy-conscious culture (educating, setting goals, engaging employees in electricity-usage management) for energy savings. It is through education that attention is drawn to the significance of saving, its cost implications, and those related to the environment. Implementing educational programs within a banking organization provides the staff with the knowledge to choose energy appropriately. Discussion can range from the advantages of conservation, environmental effects of misuse, and practical tips on cutting electricity use at work.

Such drives toward the penetration of energy-efficient appliances call for a focus on what motivation consumers have. Most research in this field has focused on how beliefs, values, attitudes, and

personal norms influence pro-environmental energy-saving behaviors (Bhutto et al., 2020). Compromise of environmental quality calls for a shift to environmentally sustainable behavior, such as the adaptation of sustainable consumption choices. Including efforts such as saving energy at work from companies. Therefore, the behavioral intention gap is what could be the subject of interest to study further (Camacho et al., 2023). One other component of how to drive bank staff in saving electricity is by having clear targets. Letting the financial institution's workforce know precisely what is expected from them regarding lowering energy use provides directions and drives them into adopting practices that will save energy. These goals need to be very specific to each establishment based on issues such as the number of employees and how operations are set up. Employee engagement is a key factor to the successful conservation of energy within any organization. This way, if the banks involve their staff members in identifying opportunities through which energy may be conserved and later implementing set measures, then they will be leveraging collective creativity, as well as collective commitment. Incentives, forming green teams, and involvement in decision-making processes are some of the approaches through which a culture of being sensitive to energy may be nurtured within an organization.

Energy saving behavior is the totality of those actions by individuals that result in reduced overall energy (electricity) consumption (Sweeney et al., 2013). Very critical, leading by an example in the installation of energy-saving practices by the staff. In this, the management has laid down a commitment on saving electricity; it is a practice that is imitated by many employees. The demonstration of being responsible for being at the bank showcases environmental responsibility. This can inspire employees to own up to their energy usage, therefore playing a part in sustainability. Lastly, electricity conservation among the banking staff is recommended to take a holistic approach in terms of education, goal setting, employee engagement, efficient technologies to be adapted, and monitoring of it. It is very important in reducing the environmental footprint that these strategies are deployed by banks. It also helps cut costs and helps in developing a sustainable culture.

2.3. The Role of Subjective Standards in Influencing Electricity-saving Behaviors among Banking Employees

Both constructs, pro-environmental behavior and energy saving at work, were crucial in the evaluation of subjective norms. Of particular importance is that subjective norm has a very strong positive influence on intention (Winter et al., 2022). Therefore, the examination of subjective norms as a reference-dependent underlying mechanism may efficiently promote pro-environmental behaviors through energy conservation. Furthermore, subjective norms (personal convictions, social pressures, mental tendencies) play a big part in the way people will act concerning electricity-conserving actions. The norms are influenced by perception of typical behavior and by personal beliefs regarding sustainability as well as the weight of the social circle. Moreover, actions are also the result of one's sense of agency and psychological predispositions. This way, concrete subjective norms can be

formed, and actions be influenced regarding the effort of energy conservation through communications that stress benefits like money saved and the environment protected. Any effective intervention design to promote sustainable behaviors must take fully into account these factors.

Employees in an office building are very much influenced by the environment and energy consumption. Hence, because office spaces are shared by many employees, the personal energy usage behavior of an individual could be observable and might as well influence the others (Su et al., 2022). A case in point, the impact a person has on electricity saving habits among banking professionals is a complex concept: it includes personal beliefs, corporate norms, and perception of appropriateness from organization to home. These subjective standards, involving personal attitudes and norms based on energy conservation, and which result in turning off lights, unplugging a device, and using energy-efficient appliances all add up to behavior change. These standards act as channels through which behavior gets influenced. For example, workplace norms can streamline the actions of employees. If a worker's peers are into saving energy, he would do the same. It is also determined by personal views on environmental responsibility. People who consider the concept of sustainability more important will take better care of electricity and, thereby, engage in more practices to save electricity. The perceived belief in the effectiveness of such actions also moderates involvement in them; if employees believe that their efforts are making a change, then they are involved in saving electricity.

Subjective norms refer to the perception of individuals about the extent of approval or disapproval from people or society or significant others with regard to a specific behavior (Sultan et al., 2020). Behavioral attitude measures the degree to which an individual has positive or negative feelings while considering a particular behavior (Fatoki, 2022). Attitudes and behavior are greatly influenced by workplace culture and policies. In the banking sector, professional identities developed by core values can influence sustainability approaches. Moreover, managers' and coworkers' behaviors can strengthen subjective norms regarding energy saving. Subjective norms, thus developed with respect to saving electricity, can substantially enhance an organization-based banking employee's intention of exhibiting such behavior. The strategies of reducing electricity costs need imperative importance. Information related to subjective norms of energy-saving behavior largely depends on the sector. Efforts to save electricity should be aimed at cultivating a sustainability culture within the banking setup. Many organizations strive to make individual employees feel powerful in making choices that have an impact when it comes to professional life and otherwise. We know subjective norms have a huge impact on electricity-saving behaviors because it is a part of their organizational culture. This eventually becomes a way of life that respects what others are trying to do for the environment as well. Therefore, based on the analyses above, the hypothesis can be formulated as follows:

H₁: There is a positive relationship between Subjective standards and Electricity-saving Behaviors.

2.4. Role of Perceived Behavioral Control on Electricity-saving Behaviors among Banking Employees

It is indicated in the findings by Zhang et al. (2024) that employees' attitudes towards electricity-saving and perceived behavior controls both have a positive impact on intention toward electricity conservation. The interaction of perceived control behaviors on behaviors to conserve electricity among banking sector employees still remains a big challenge in the behavior and sustainability fields.

Perceived behavioral control shapes, with much weight, the sensitivity of individuals to planned energy-conserving acts under the Theory of Planned Behavior. It covers an individual's self-efficacy regarding the behavior in question. Those with high perceived behavioral control are self-assured in adopting the behavior of saving energy, for instance by ensuring that lights are switched off or using energy-saving equipment. Confidence in this regard is based on various factors, such as self-confidence, availability of resources, perceived barriers, social pressure, and feedback mechanisms. When obstacles are removed and support is granted, and an opportunity for control is also given, then perceived behavioral control can be uplifted to promote sustainable energy-saving practices. Besides, the interest of the employees in conserving electricity positively impacts their intention to save electricity, feeling control over work (Zhang et al., 2014).

The goal of reducing operational energy consumption is within reach for business leaders who implement a sustainable energy-saving culture that can influence the level of consciousness and behavior of their employees in regard to energy use (Su et al., 2022). To effectively instill electricity-saving practices in workers at a bank, an in-depth and comprehensive assessment of the determinants that affect their perceived behavior control is very important. For without it, the culture change program runs a risk of not achieving its goals. This perception of control can go a long way to influence the adoption of electricity-saving practices at banking workplaces. The development of an energetic workplace culture, along with addressing factors at the psychological level of analysis and removing barriers, can enable employees to take up electricity saving quite easily. This includes appreciating the environmental effect of generating electricity, the financial impact on utility bills, and a bigger picture for energy stability and social responsibility. A simple practice followed by individuals in their lives can help save the environment and inculcate a culture of sustainability. This simple practice helps reduce one's carbon footprint. Save resource funds glean more resilience and serve sacrificially for sustainability. Conservation of electricity often leads to other effects that are indirect. Ensuring a healthier future for the general public. Therefore, knowledge on what electricity serves to be functional. Helps individuals make informed decisions on sustainable options for positive changes leading to a future that is brighter environmentally conscious.

The development of work surroundings that first energy-saving will help create more habits of electricity saving among the staff in the bank. This involves providing access to tools and infrastructure

that support efficiency while inculcating a culture conducive to sustainability. Identification and removal of barriers such as ignorance or infrastructural issues are important for empowerment of the workforce. Incentivizing electricity conserving practices does not only support environmental respect but also enhances firms' productivity and cost-effectiveness. Indeed, a holistic policy aimed at the psychological front, work environment of the conditions acting as inhibitors to behavior change is necessary for the effective preservation of energy in any banking organization. Therefore, based on the analyses above, the hypothesis can be formulated as follows:

H₂: There is a positive relationship between perceived behavioral control and electricity-saving Behaviors.

2.5. The Role of Sense of Responsibility in Electricity-Saving Behaviors among Banking Employees

The concept of a 'sense of responsibility' regarding electricity saving behaviors is entailed in individuals recognizing, taking ownership of, and dedicating themselves to saving energy in their day-to-day activities. It involves understanding the environmental, economic, and social effects of electricity usage, and feeling obligated, to use it efficiently and responsibly.

Because energy prices are going through the roof and concern over climate change is increasing, the importance of energy conservation is emphasized now more than ever (Heib et al., 2023). Sense of duty towards saving electricity is influenced by various things. Hence, to protect the social environment, cooperation needs to stimulate employees to take part in energy saving activities. For workers who are not environmentally aware, these activities may be voluntary and, therefore, very inconvenient (Chen and Chen, 2021). In addition, it is first and foremost the environmental notion that asks people to comprehend the harm being done by such precipitous electricity usage to the environment and climate. This comprehension in turn brings to the table a commitment to decreasing personal energy use and taking part in green actions. And the idea of collective responsibility comes up with its head right in the same place when people understand how their consumption of electricity affects their community and future generations. This community duty toward shared actions for the saving of energy and renewable energy projects within the communities is what fosters sustainable energy practices all in all.

Organizations that implement energy-efficient offices and centers nationwide and develop standards for energy-consuming equipment can also increase household-level education and awareness of energy knowledge systems, and behavior practice which is going to improve energy saving behaviors (Duong et al., 2022). Ideally, economic factors remain the most significant motivation for promoting responsible energy use. The motivation that drives people springs from the financial benefits that bequeath the practices pertaining to energy and cost savings in real-time as well as in the distant future. More so, this economic incentive from the country has facilitated many to have the provisions of adopting energy-saving behaviors towards renewable energy solutions. In other words, ethical reasons are based on sustainability because of the avoidance of harm or injury to equity and social justice in situations of individuals' implicit or explicit commitments. Indeed,

thereby minimizing energy waste and by promoting fair access to renewable energy sources, people live up to the ethical standards implicit in their energy consumption.

Positive perception to energy conservation may develop an energy conserving intention during the initiation stage. An employee viewing electricity saving behavior as advantageous is likely to develop a positive attitude, and that will subsequently positively influence their intention to save electricity (Fatoki, 2022). Secondly, long-term-oriented people consider the effects of their actions on future generations. This concern encourages the adoption of energy-saving practices, investment in green energy sources, and policy advocacy for a more just and sustainable energy system due to its long-term outlook. Therefore, based on the analyses above, the hypothesis can be formulated as follows: H₃: There is a positive relationship between sense of responsibility and electricity-saving Behaviors.

2.6. Role of Cognition of Electricity Price Policy in Electricity-saving Behaviors among Banking Employees

Energy-saving behavior is also strongly connected to environmental awareness, particularly regarding social norms and social influence (Wang et al., 2023). Moreover, if these pricing strategies integrate cognitive psychological and behavioral economic insights, they will be much more effective as they are in motivating energy saving among employees of the banking sector by the prices of electricity. This demonstrates how important it is to understand consumer psychology and highlights the need for holistic solutions: those which address personal choices in addition to the societal and environmental context. This will certainly result in a banking sector conducted in a more ecologically and environmentally friendly energy scheme when behavioral insights are utilized.

Cognitive skills are crucial in influencing human behavior and shaping how individuals think about and comprehend information related to energy savings (Appiah et al., 2023). Moreover, in this case intention is driven by personal norms and perceived behavioral control to smaller extent by injunctive social norms and not at all by descriptive social norms. Equally, the knowledge of the electricity pricing policy has a significant effect on the energy-saving behaviors of tellers in the bank, depending on information/financial interests/ecological consciousness/efforts from the institution as random factors. Employees should be informed due to the fact that an understanding of pricing structures, e.g. time-based rates and tiered tariffs, informs them about how their energy use affects their bills. This can motivate them to adopt more efficient habits. Policies on electricity pricing often involve rewards for those who reduce usage during peak times and penalties for exceeding set limits. Banking employees, who comprehend such policies, may also alter their behavior to take advantage of the incentives, or steer clear of the penalties — which will accrue to energy savings. Their financial awareness can help them make strategic choices of when to use energy-intensive equipment, potentially cutting back during costly periods.

Moreover, in a spirit of environmental awareness, energy pricing reflects environmental costs of conservation and damage avoidance. Workers understanding this may also adopt energy-saving approaches that are allowed by the edict goals. Such knowledge might lead them to voluntarily embrace technology that promotes the control of consumption. For instance, corporate programs on sustainability foster energy-conserving behaviour. The more knowledgeable employees are about pricing policies, the more they become involved in such initiatives that help overall conservation efforts. In turn, such training as workshops gives an employee the power to be confident when making decisions about the use of energy and its importance. In other words, staff of financial institutions will not be motivated to save energy if they do not understand electricity pricing policies. Awareness informed the employees with information related to it, apart from other organizational supportive initiatives, enhances environmental concern and drives them into adopting the first two practices and technologies. The benefits are not only financial (for individuals and organizations) but also environmental, which are involved in reducing energy use and emissions. Therefore, based on the analyses above, the hypothesis can be formulated as follows:

H₄: There is a positive relationship between cognition of electricity price and electricity-saving Behaviors.

3. METHODOLOGY

This study concentrates on assessing and suggesting solutions for improving the electricity savings act of employees in banks in Ho Chi Minh City. The study's population is composed of employees at different levels within the banking system in Ho Chi Minh City, up to and including directors. Sampling methods were conducted conveniently to be diverse and represent different perspectives on electricity savings.

Clean the collected data by deleting incomplete or not properly filled-in samples. Then, from the cleaned data, select the samples that have to be taken for analysis. Methods of data analysis shall include assessing scale measurement reliability, hypothesis testing, and appraising the acceptance of applied research models. The assessment of variables within the research framework was based on studies conducted earlier and customized to the Vietnamese context. The adaptations are outlined as follows: The measurement of Subjective Standards (SST) comprises three items (SST1, SST2, and SST3), adopted from Wang et al. (2021). Perceived Behavioral Control (PBC) was adopted from Fu et al. (2021) and consists of three items (PBC1, PBC2, and PBC3). Sense of Responsibility (SOR) is assessed using four items (SOR1: 'Do you feel that you have a personal responsibility for saving electricity in your workplace or at home', SOR2: 'Do you believe that saving electricity contributes to environmental and social protection', and SOR3: 'Do you often implement or promote electricity-saving measures in the workplace based on your sense of responsibility'). Cognition of Electricity Price (CEP) consists of three components (CEP1, CEP2, and CEP3), adopted from Fu et al. (2021). Electricity-saving Behaviors (ESB) encompass four elements (ESB1, ESB2, ESB3, and ESB4), also adopted from Fu et al. (2021).

4. FINDINGS

The author will conclude and recommend a set of specific actions to improve electricity savings by employees in banks in Ho Chi Minh City. These recommendations may include changes in behavior related to energy consumption, the adoption of more efficient technologies for saving electricity, or informing the banking community about the issue of awareness in energy efficiency. Also, recommendations for policy and support actions at the management level that would improve electricity savings and environmental protection will be made for banking employees. In addition to which, promoting electricity saving in this case will also be of considerable economic advantage to employees in helping them save costs.

From Table 1, it can be seen that the participation rate in this survey for bank employees in Ho Chi Minh City, in relation to saving electricity, is as follows: males account for 56.3%, females account for 42.2%, and others account for 1.5%. The age range of survey participants is from 22 to over 35 years old.

Table 1: Demographic profile

Demographic profile	Frequency	Percent	Valid percent	Cumulative percent
Gender				
Male	228	56.3	56.3	56.3
Female	171	42.2	42.2	98.5
Other	6	1.5	1.5	100.0
Total	405	100.0	100.0	
Ages				
22-25	56	13.8	13.8	13.8
26-30	167	41.2	41.2	55.1
31-34	148	36.5	36.5	91.6
Over 35	34	8.4	8.4	100.0
Total	405	100.0	100.0	

Table 2: Reliability scale

Variables	Cronbach’s alpha	rho_A	Composite reliability	Average variance extracted (AVE)
CEP	0.820	0.825	0.893	0.735
ESB	0.882	0.883	0.919	0.739
PBC	0.785	0.792	0.874	0.699
SOR	0.805	0.811	0.872	0.630
SST	0.780	0.788	0.872	0.695

Table 3: Heterotrait-Monotrait (HTMT) ratios

Variables	CEP	ESB	PBC	SOR	SST
CEP					
ESB	0.618				
PBC	0.232	0.523			
SOR	0.498	0.686	0.426		
SST	0.230	0.578	0.566	0.453	

Table 4: The results of hypothesis testing in the research

Interrelationships among the factors	Beta	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV)	P values	Estimating the hypothesis
H4: CEP -> ESB	0.326	0.324	0.045	7,183	0.000	Support
H2: PBC -> ESB	0.166	0.167	0.041	4,096	0.000	Support
H3: SOR -> ESB	0.309	0.310	0.043	7,178	0.000	Support
H1: SST -> ESB	0.239	0.239	0.042	5,714	0.000	Support

From the statistical results in Table 2, it can be observed that the Cronbach’s Alpha for all factors is >0.7, the Composite Reliability for all factors is >0.8, and the Average Variance Extracted (AVE) for all factors is >0.6. Therefore, the reliability of the measurement scale for all factors is ensured.

All HTMT ratio values, as shown in Table 3, are below 0.9, affirming discriminant validity and meeting the designated statistical standards. The next step will involve analyzing 5,000 bootstrap samples, and the research model results will be presented with Figure 2 as follows.

Based on the results of the data analysis from Figure 2 and Table 4, it can be observed that SST has a positive effect on ESB, with a

Figure 1: The conceptual model of this study (The author generated)

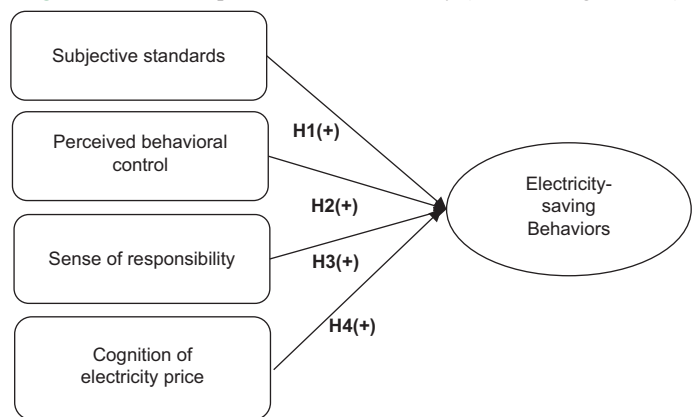
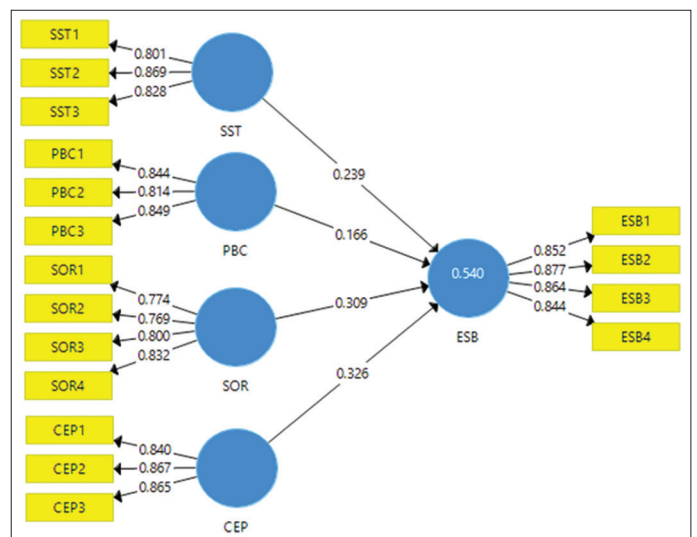


Figure 2: An SEM diagram for this study



beta coefficient of 0.239 ($P < 0.05$), supporting hypothesis H1. PBC positively influences ESB, with a beta coefficient of 0.166 ($P < 0.05$), supporting hypothesis H2. SOR positively impacts ESB, with a beta coefficient of 0.309 ($P < 0.05$), supporting hypothesis H3. CEP also has a positive effect on ESB, with a beta coefficient of 0.326 ($P < 0.05$), supporting hypothesis H4. Therefore, the research model is meaningful, and all hypotheses are supported.

5. DISCUSSIONS AND CONCLUSION

Employees as stakeholders share a significant burden in the implementation of green policies. This means that full resources should be enlisted not only in the adoption of green activities but also in aligning and supporting employee interests with the environmentally friendly agendas of the organization (Ahmad et al., 2022). Thus, employees implement green activities within the organization as a part of corporate social responsibility, community awareness, and environmental initiatives (Khalil, 2005). Therefore, studying electricity-saving behavior in the workplace is of great importance today. This paper tries to investigate the influence of the following factors on Electricity-saving Behaviors, including key factors: Subjective standards, perceived behavioral control, Sense of responsibility, Cognition of electricity price, on the Electricity-saving Behaviors by banking employees in HCMC. The results indicated the influences of all these factors on positive Electricity-saving Behaviors by banking employees in HCMC. The developed hypotheses were fully confirmed, and the model proposed was acceptable. Here are discussions based on the results of the study:

5.1. The Contribution of Subjective Norms to Guiding Electricity-saving Actions within the Banking Workforce

A major other subjective norm is defined as an individual's perception of the social pressure put on them by others that would like them to or not to perform behavior (Gao et al., 201201). The banking sector has to use an all-encompassing strategy if they want to instigate electricity-saving practices amongst their staff. This kind of approach will consist of different sections that are meant to raise awareness, drive behavioral change, and sustain a culture of sustainability. Firstly, hosting workshops where employees in banking services collaborate to set personalized goals is crucial. These workshops provide a platform for discussion, allowing staff to contribute ideas for electricity saving targets. Employee involvement in the bank involvement can create a sense of ownership and commitment in attaining the set goals. Bank in HCMC campaigns that reveal success with saving energy within the workplace. Stories about the innovative solutions either individual employees or teams have put in place serve as an inspiration to others. Moreover, if saving electricity can be gamified, it adds another layer of competition and fun. Coming up with challenges, leaderboards, and reward systems will entice employees at the bank in HCMC to take part in the initiatives actively. It will promote engagement and make them feel accomplished. Equally important is providing feedback to employees personally. Regular updates to the staff about their

patterns of consumption help them know how close they are to achieving the set goals. This, in turn, reinforces the concept of personal responsibility and is information-based.

From the results of the data analysis in this study, it can be observed that SST has a positive effect on ESB with the Beta of 0.239 ($P < 0.05$, supporting hypothesis H₁). Moreover, Liu et al., (2020) argue that subjective norms are very vital in inculcating intentions within building occupants towards energy saving. Further, offering training sessions helps in obtaining information about the set goals. Therefore, an intense training session on the set energy conservation goals will make sense to the banking staff. In such guiding also, the effectiveness of incentive programs is an important tool for further motivation. The recognition and reward to meet or exceed the targets help in the reinforcement of positive behavior change for the improvement to improve the culture. Lasting momentum is sustained through the managerial support and a process of continuous enhancement for everlasting transformation. Leadership commitment to this kind of saving and resourcing for looking into changes ensures success and scalability of sustainability initiatives. Theoretically, it should take such a collective approach to drive all the banking employees in HCMC to exhibit electricity-saving behavior. That would mean that banking organizations in HCMC really scissor their staff into making use of the energy-saving practices. It could be a build-up of all these efforts that may not only reduce electricity consumption but will also contribute to sustainability in general, which is good for the environment and also good for the organizational performance.

5.2. Perceived Behavioral Control as a Determinant of Electricity-Saving Behavior among Employees in Banking Institutions

In the modern business world, privileging electricity saving as much more than an issue of importance to one's company takes on a real meaning of commitment to environmental shield. This is notably so in sectors such as banking, which holds noteworthy consumption of energy, where their employees assume a leading role in driving efforts on how to save electricity. Their actions are largely dependent on their belief in their ability to control their behavior, which psychologists termed perceived behavioral control. Assurance concerning this perception is quite paramount in the banking sector, and there are multitudinous ways of doing so. First and foremost, energy-efficient practices should be expounded to the employees in the banking sector, which would create awareness and confidence in them regarding the same. Thirdly, providing tools for monitoring energy usage enables employees to keep track of their efforts and make necessary adjustments to their behavior. It also involves employees by setting personal targets for energy savings that make them feel accountable for their contribution.

PBC has a positive effect on ESB, with a beta coefficient of 0.166 ($P < 0.05$), which supports Hypothesis 2 in my study. Another study like Chen, and Chen, (2021), an employee's perceived control over behavior is positively related to energy saving habits at the workplace. Besides, workplace conditions have a great effect on the behavior of employees. The Bank in HCMC can keep a supportive work environment by colleagues and managers giving support that

it creates teamwork and shared responsibility in saving electricity. These supporting policies highlight the corporate focus toward sustainability, laying down guiding principles for its employees. In other words, the control of behavior is also considered such that if the bank in HCMC regards this as that they may regulate control practices within their power by motivating an energy-saving culture. This has ripple effects that benefit the environment and further establish a sense of sustainability and resilience within the business. In the end, empowerment of employees in taking control of actions towards saving electricity will be a contributing factor to leaving a greener future and lifestyle more sustainable for the posterity.

5.3. The Influence of Personal Responsibility on Electricity-Saving Behavior Among Employees in the Banking Sector

A good way to drive saving energy with electricity, especially in the banking sector, is through a positive feeling of duty. The employees in this sector, who are considered as one of the most essential supports of the business operational model, should understand that they take part in conserving the environment and nature resources just by adapting electricity-saving measures. Just realizing how important energy is conserved is not enough; it should be acted upon.

In my study, SOR positively impacts ESB, with a beta coefficient of 0.309 ($P < 0.05$), hence Hypothesis H3 is supported. Besides, household electricity saving behaviors need to be studied and promoted to reduce electricity consumption and help protect the ecological environment (Hien and Chi, 2020). Corporate Social Responsibility and environmental consideration is the critical way for enterprises to develop sustainably. Banking professionals can contribute immensely by observing minor yet impactful practices such as turning off idle electric-supported devices of equipment, and being the active propagandist of electricity-saving initiatives within the banking sector that would further serve the purpose of reducing energy consumption, other than demonstrating commitment to sustainable practices beyond the workplace. Inspiring an organizational culture that is supportive in recognizing, effective management of responsible electricity use among employees is crucial for instilling sustainability principles aimed at addressing environmental stewardship within the institution.

Additionally, the household in the study by Qalati et al. (2022) that appreciated their moral responsibility for climate change and global warming was more likely to perceive energy-saving intentions and practices. Besides, responsibility moves beyond personal borders; it is an enabler of sustainability in the workplace. Consistency in embedding electricity saving activities within its operations and culture will set the banking sector apart as an environment-progressive entity and, thereby, an example of a responsible corporate citizen. This will not only be in fulfillment of an obligation to nature but in recognition of being a change catalyst in the larger society.

5.4. Electricity Price Perception as a Motivator for Energy-Saving Practices Among Employees in Banking Institutions

CEP also has a positive effect on ESB, with a beta coefficient of 0.326 ($P < 0.05$), supporting hypothesis H4. Further, Electricity

is very important in the living of human beings and is termed as a basic necessity for socio-economic development (Baidoo et al., 2024). Increased awareness regarding the environment encourages individuals to be part of eco-conscious actions (Liu et al., 2023). Professionals in the banking sector realize that saving electricity is not only a habit at an individual level but also plays an important role in enhancing productivity, efficiency, and environmental sustainability in their sector. The knowledge of the electricity pricing policy is one of the keys that can help in motivating them to use energy-saving practices.

Employees in the banking sector, because of their expertise in the financial and consumption fields, are better placed to understand pricing structures for electricity. Proper knowledge empowers them to execute specific strategies, such as setting appliance usage to run at times other than peak hours, when the cost of electricity is higher. More so, having open information on electricity pricing policies gives a deeper understanding to banking experts about the importance of electricity saving compared to the saving of the environment and personal financial management. Hence, it encourages them to engage in electricity-saving behavior not only for individual gain but also for the activity's impact on the larger community and environmental welfare. Therefore, effective educational programs and counseling initiatives concerning electricity pricing policies become very relevant in encouraging banking employees to save electricity. These could take the form of seminars, training programs, or through online programs where insights and exemplary practices regarding energy-conscious behaviors are shared within the banking sector.

In conclusion: The results of this study show that all the factors, Subjective standard, perceived behavioral control, sense of responsibility, and cognition of price of electricity, have a positive impact toward electricity-saving behavior among banking employees. This gives very important guidance to the relevant facets of policy-makers and leaders within a bank who intend to bring about encouragement for electricity-saving work practices. This could be in the form of targeted interventions and communication drives to enhance subjective standards, perceived control, sense of responsibility, and knowledge of electricity pricing among the employees so that electricity saving at workplaces can be boosted.

Theoretical implication: This study has built a theoretical model expounding the determinants of energy-conservation behavior in the banking sector, with a focus on the perception of employees. Key factors in the model of this study include subjective standard, perceived behavioral control, sense of responsibility, and cognition of price, all of which have a positive impact on electricity-saving behaviors among the employees in banks. From this research outcome, scholars can reference and carry further in-depth studies to come up with policies and rational recommendations on electricity conservation for sustainable development goals.

Practical Applications: The implications drawn from this study can be of help to design interventions or training programs within banking sectors specifically targeting the cultivation of electricity saving routines among the employees. For example, one can

have training sessions focusing on building up commitment to environmental sustainability among the employees and providing them with tools to be able to have comprehensive management and self-regulation of their electricity consumption. Besides the findings in this study being used to boost effectiveness in electricity-saving behaviors among personnel working in banks in Ho Chi Minh City, it is also very vital for individuals to understand that saving electricity is being humanitarian and having responsibility in protecting the environment toward sustainable development. For instance, the managers should remind their staff members and themselves also have some regulations on electricity saving with the devices in their departments and may also motivate them to switch off essential devices when not functioning.

5.5. Limitation and Future Research Directions

The study is immensely bound to limitations. Practical considerations and time constraints make certain methodological boundaries unavoidable. The most important is the small sample size, which may not assure the generalizability of the findings to the whole banking industry and other sectors. The sample size should be increased in future research to make the results more applicable outside the setting while also ensuring diversity among the participants. This would make the results more generalizable and also enhance the external validity of the research. Results of this research would make it impossible to establish causes of relationships between identified predictors and electricity saving behavior. Thus, recommendations for future longitudinal or experimental studies to establish proper causes of such relationships and unearth more intervening variables have to be implemented. Finally, the present study failed to analyze differences among subgroups across key demographics, such as gender. It is worth expecting variations in behaviors of saving electricity among male, female, and other gender identities. This would throw more light on the dynamics of behavior and help make interventions at the workplace much more specific. Overcoming these limitations will not only make the evidence stronger but will also ensure that the policies for promoting sustainable energy behaviors and the organizational strategies are based on evidence and are made more effective.

REFERENCES

- Ahmad, B., Shafique, I., Qammar, A., Ercek, M., Kalyar, M.N. (2022), Prompting green product and process innovation: Examining the effects of green transformational leadership and dynamic capabilities. *Technology Analysis and Strategic Management*, 36, 1-13.
- Ajzen, I. (1991), The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Akbari, M., Mehrali, M., SeyyedAmiri, N., Rezaei, N., Pourjam, A. (2020), Corporate social responsibility, customer loyalty and brand positioning. *Social Responsibility Journal*, 16(5), 671-689.
- Appiah, M.K., Gyening, E.K., Teye, P.K., Frimpong, C., Nsowah, A. (2023), The implications of energy literacy on energy savings behavior: A model of contingent effects of energy value and attitude. *Energy Reports*, 10, 72-85.
- Baidoo, A.N.A., Danquah, J.A., Nunoo, E.K., Mariwah, S., Boampong, G.N., Twum, E., & Nyametso, J.K. (2024), Households' energy conservation and efficiency awareness practices in the Cape Coast Metropolis of Ghana. *Discover Sustainability*, 5(1), 1-18.
- Bhutto, M.Y., Liu, X., Soomro, Y.A., Ertz, M., Baeshen, Y. (2020), Adoption of energy-efficient home appliances: Extending the theory of planned behavior. *Sustainability*, 13(1), 250.
- Camacho, L.J., Pasco, M., Banks, M., Pasco, R., Almanzar, M., Rodriguez, A., Rosima, N. (2023), Understanding employees' energy saving in the workplace: DR and the Philippines' realities. *Journal of Risk and Financial Management*, 16(1), 49.
- Chen, C.H.V., Chen, Y.C. (2021), Assessment of enhancing employee engagement in energy-saving behavior at workplace: An empirical study. *Sustainability*, 13(5), 2457.
- Duong, K.T., Nguyen, T.T., Do, T.A. (2022), The relationship between the factors influencing energy-saving behaviors in households in Urban Vietnam. *International Energy Journal*, 22(3), 291-302.
- Egbulem, P.C., Khalil, K., Bamidele, R., Modupe, A., Omokeji, G.R., Rabi, U.A. (2024), The Impact of Technology on Work and Society: Nigerian Experience. *Open Access Journal of Social Sciences Research*, 2(2), 1-13.
- Fatoki, O. (2022), Determinants of employee electricity saving behavior in small firms: The role of benefits and leadership. *Energies*, 15(9), 3168.
- Fu, W., Zhou, Y., Li, L., Yang, R. (2021), Understanding household electricity-saving behavior: Exploring the effects of perception and cognition factors. *Sustainable Production and Consumption*, 28, 116-128.
- Gajdzik, B., Jaciow, M., Hoffmann-Burdzińska, K., Wolny, R., Wolniak, R., Grebski, W.W. (2024), Impact of economic awareness on sustainable energy consumption: Results of research in a segment of polish households. *Energies*, 17(11), 2483.
- Gao, L., Wang, S., Li, J. (2017), Application of the extended theory of planned behavior to understand individual's energy saving behavior in workplaces. *Resources, Conservation and Recycling*, 127, 107-113.
- Heib, S., Hildebrand, J., Kortsch, T. (2023), Energy saving behavior in university organizations: The value of norm constructions in a "rational choice" action model. *Frontiers in Psychology*, 14, 1082061.
- Hien, N.N., Chi, P.H. (2020), The factors affecting household electricity saving behavior: A study in Vietnam. *International Journal of Sustainable Development and Planning*, 15(8), 1241-1250.
- Khalil, K. (2005), Relationship between Managerial Behaviour of Assertiveness and Responsiveness, and Organizational Culture of Trust (Doctoral dissertation, University of South Australia).
- Liu, T.L., Lin, T.T., Hsu, S.Y. (2023), Exploring the perspective of bank employees on the impact of green process innovation and perceived environmental responsibilities on the sustainable performance of the banking industry. *Sustainability*, 15(22), 15925.
- Liu, X., Wang, Q., Wei, H.H., Chi, H.L., Ma, Y., Jian, I.Y. (2020), Psychological and demographic factors affecting household energy-saving intentions: A TPB-based study in Northwest China. *Sustainability*, 12(3), 836.
- Qalati, S.A., Qureshi, N.A., Ostic, D., Sulaiman, M.A.B.A. (2022), An extension of the theory of planned behavior to understand factors influencing Pakistani households' energy-saving intentions and behavior: A mediated-moderated model. *Energy Efficiency*, 15(6), 40.
- Su, S., Li, J., Yuan, J., Tang, M., Wang, E., Ding, Y. (2022), How can energy saving culture of a company influence energy behaviors and consumptions in its offices? A simulation and optimization model. *Journal of Building Engineering*, 58, 105011.
- Sultan, P., Tarafder, T., Pearson, D., Henryks, J. (2020), Intention-behaviour gap and perceived behavioural control-behaviour gap in theory of planned behaviour: Moderating roles of communication, satisfaction and trust in organic food consumption. *Food Quality and Preference*, 81, 103838.
- Sweeney, J.C., Kresling, J., Webb, D., Soutar, G.N., Mazzarol, T. (2013), Energy saving behaviours: Development of a practice-based model. *Energy Policy*, 61, 371-381.

- Usman, M., Rofcanin, Y., Ali, M., Ogbonnaya, C., Babalola, M.T. (2023). Toward a more sustainable environment: Understanding why and when green training promotes employees' eco-friendly behaviors outside of work. *Human Resource Management*, 62(3), 355-371.
- Van Doren, D., Giezen, M., Driessen, P.P.J., Runhaar, H.A.C. (2016), Scaling-up energy conservation initiatives: Barriers and local strategies. *Sustainable Cities and Society*, 26, 227-239.
- Wang, Q.C., Lou, Y.N., Liu, X., Jin, X., Li, X., Xu, Q. (2023), Determinants and mechanisms driving energy-saving behaviours of long-stay hotel guests: Comparison of leisure, business and extended-stay residential cases. *Energy Reports*, 9, 1354-1365.
- Wang, Q.C., Xie, K.X., Liu, X., Shen, G.Q.P., Wei, H.H., Liu, T.Y. (2021), Psychological drivers of hotel guests' energy-saving behaviours- Empirical research based on the extended theory of planned behaviour. *Buildings*, 11(9), 401.
- Winter, K., Pummerer, L., Hornsey, M.J., Sassenberg, K. (2022), Pro-vaccination subjective norms moderate the relationship between conspiracy mentality and vaccination intentions. *British Journal of Health Psychology*, 27(2), 390-405.
- Zhang, Y., Wang, Z., Zhou, G. (2014). Determinants of employee electricity saving: The role of social benefits, personal benefits and organizational electricity saving climate. *Journal of Cleaner Production*, 66, 280-287.
- Zhang, Y., Wei, Y., Zhou, G. (2018), Promoting firms' energy-saving behavior: The role of institutional pressures, top management support and financial slack. *Energy Policy*, 115, 230-238.