

Building Green Entrepreneurship: A Journey of Environmental Awareness to Green Entrepreneurs in Thailand

Kornthong Tesprasit* · Pakatip Aksharanandana** · Athikom Kanchanavibhu***

Abstract

Global waste has become a global issue and we can see the new trend of discovery businesses established to focus on solving the waste problem using new renewable energy technology and the circular economy business model. This paper aims to study factors that impact green entrepreneurship in Thailand, such as environmental concern, organizational environment, founder demographics, education background, entrepreneurship awareness, as well as external factors of a business. The study analyzes the data from three qualitative in-depth interviews with green entrepreneur founders who started the businesses in polymer up-cycling, waste management, and renewable energy. The study finds overseas educational background to be one of the key main drivers for the entrepreneurial courage to decide to pursue a new business venture. By having the exposure toward the different culture, three entrepreneurs hands-on experiential learning through three key drivers who are composed of the can-do attitude, the willingness to be self-employed, and the way of seeking for the freedom to express their passions.

Keywords : Green Entrepreneur, Environmental Awareness, Innovation, Technology

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1. Introduction

Global waste problems could grow by 70 percent by 2050 as urbanization and populations rise [Kristyn and Andy, 2018]. A booming waste burden could contribute to climate change impact; consequently, waste becomes a big problem worldwide including Thailand [Visvanathan, 2011]. These crucial waste problems have not only led to climate change but generated extreme weather events, air pollution, and bad respiratory health. The Thai study found population has produced waste of about 1.14 kilograms per person per day or more than 2 million tons in total [Pollution Control Department, Ministry of Natural Resources and Environment Thailand, 2016, 2017]. Thailand is ranked 6th of the country that dumped plastic waste into the sea. The overuse of plastic grocery bags is a shred of evidence that Bangkok has a huge waste and crisis of waste management problems these years. Thai Government announced the national waste policy roadmap during the year 2018 to 2030 to reduce the amount of plastic waste 0.78 million tons per year [Environmental Quality Promotion Department, Ministry of Natural Resources and Environment Thailand, 2019].

This research aims to understand what reasons, triggers, and success factors of green entrepreneurship and to identify the relationship between environmental awareness to green entrepreneurship. The analysis data relies on the perceptions and attitudes towards the environmental awareness of three entrepreneurs. A notable research challenge in this study is to find the key trigger that would convert environmental awareness entrepreneurs to green entrepreneurs.

2. Literature Review

In the private sector, Corporate Social Responsibility (CSR) is a concept whereby companies integrate social and environmental concerns in business operations and interaction with their stakeholders voluntarily [Commission of the European Communities, 2002]. Ethical behavior, a concern for people, and the environment have been shown to have a positive correlation with corporate performance [Crowther and Aras, 2008]. According to the research, there was a relationship between the environmental entrepreneurs who systematically run waste management business and the creation of an economic circulate community to the ecosystem [Singirunnusorn et al., 2012].

Through sustainable entrepreneurship, nature, ecosystems and communities are to be sustained, whereas gains to individuals, the economy, and society need to be created [Shepherd and Patzelt, 2011]. Sustainable entrepreneurship refers to entrepreneurial activities that contribute positively to sustainable development and the objectives derived from it [Kuckertz and Wagner, 2010].

Regarding Gibbs' study, sustainable entrepreneurship bases itself upon Schumpeter's fundamental concept of creative destruction and it has the potential to break the current economic model which exhausts the Earth's resources without being able to substitute them with others or to leave them enough time to replenish themselves naturally. Sustainable entrepreneurship can turn into the driving force for the emergence of a new holistic, sustainable system in the three dimensions-economy, environment, and society [Gibbs, 2006].

Correct understanding and clear definition of green entrepreneurship models become important in a reality where big corporations prefer to invest in green marketing by creating a green image without a real, measurable and strategically directed change in their business processes rather than in green innovations (Farinelli et al., 2011).

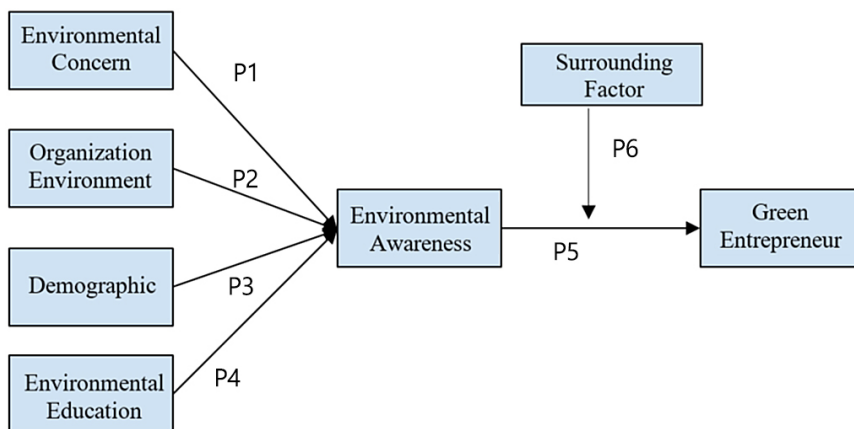
Yu et al. [2019] studied the relations of people who are interested in the environment and the interest in recycling. The results showed that students who received the importance of the environmental study and join the environmental movement would have an interest in creating environmental sustainability, including recycling [Yu et al., 2019].

Therefore, we are interested in the relationship and the size of the operator that has awareness and pays attention to the creation of products and services that pay attention to the environment. Besides, we also are interested in studying which factors are the driving force for people with environmental awareness to become a green entrepreneur. These factors include the knowledge gained from environmental matters, participation in environmental activities, education, and other demographic data.

3. Propositions

This paper studies the origin and understands the current situation which affects the awareness and environmental mindset of the entrepreneurs. First, the causes of environmental awareness were studied. We are interested in factors that affect environmental awareness, such as environmental concern, the surrounding factors in their organizations, life background, and environmental education. Then, we study the relationship between being an environmental awareness individual and becoming a green entrepreneur. We defined propositions and question for in depth-interview as follows:

- P.1 Environmental Concern has a positive effect on Environmental Awareness.
- P.2 Organization Environment/Surrounding affects Environmental Awareness.
- P.3 Demographic data, such as gender, age, education, and social status, affects Environmental Awareness.
- P.4 Environmental Education affects Environmental Awareness.
- P.5 Environmental awareness affects Green Entrepreneurship.
- P.6 External factors affect Going Green.



<Figure 1> Conceptual Framework

4. Methodology

Fragmented literature is reviewed and synthesized to develop a greater understanding of the in-depth interview data from three entrepreneurs. The research uses a qualitative research technique. To begin with, the nature of the research questions determines the research methods. We establish the criteria to select the entrepreneurs who are the green business start-ups. These entrepreneurs have self-owned their business for not less than three years. Their businesses are stable and have online secondary sources of information available. We found seven environmental-related business entrepreneurs that match our criteria. Three entrepreneurs agreed to be the interview informants. The analysis uses the three ethnographic in-depth interview data of the entrepreneurs by drawing on a life story approach (see <Appendix 3>).

5. Results & Discussions

We interviewed 3 entrepreneurs:

1. Subject 1, Founder of Social Enterprise which makes slippers from sea trash
2. Subject 2, Chief Operating Officer of energy and environment firm which generate electric power from garbage
3. Subject 3, Chief Executive Officer of a solar firm which provides solar rooftop for factory roof to produce electricity

For (P1) and (P2), we found that 2 out of 3 entrepreneurs have environmental concerns in the workplace and all have concerns in daily life. Subject 1 works at the polymer laboratory at University; he realizes the bad perspective toward plastic-based products. Since he lives close to the sea and has found waste increasing in the sea, he decides to

manage a recycling plant to separate the recyclable plastics and generates electric power from these combustible wastes. He has to deal with the environment with high odor. To turn garbage into electricity by burning all combustible wastes, including day-by-day spoilage, Subject 2 has to deal with bad smell emitted to community and wastewater management. In daily life, Subject 2 also has to separate the recyclable wastes and reduce plastic bag usage. Subject 3 founded a solar rooftop company to turn sunlight into electricity and sell that back to the factory at a low price. His warehouse has followed safety regulations, but there was no environmental concern engagement. However, because of living in Bangkok, a crowded city, he also concerns about the environment and pollution awareness.

Demographic (P3) shows positive effects on environmental awareness, especially at the education level.

Our study evaluates the impact of entrepreneur education on green entrepreneurship. There was an effect of overseas education on social and environmental responsibility in a long time after graduating. As mediated by male gender and strong family business background, all correspondents finished engineering at the undergraduate level, and all pursued their studies in business and related sciences at graduate levels. 2 out of 3 studied abroad since they were in high school. There was only one who studied entrepreneurship class, while others did not have it. Educational background in Science and Engineering has further developed the idea of entrepreneurship in terms of generating basic science techniques and foresting logical thinking processes. Since all used to study overseas for five years or more, this broad-culture education has nourished them over the years. These benefits them to become more

creative, opportunity oriented, proactive, and full of self-reliance. When we discuss entrepreneurship in education differs significantly, these overseas educational backgrounds have affected a growth into entrepreneurial career paths from scratch, seeking new businesses, opening the new start-up company, and being own boss.

Former occupation and economic status also have positive effects on entrepreneurship succession. Entrepreneurs who have stable economic status have no barrier to creating a new green business. Former occupations grow business mindset, 2 out of 3 interviewees said that business trigger is revenue. They thought green businesses with a business-driven mindset could have great success. Education background in an overseas country, especially in entrepreneurial countries such as the United States, plays a vital role in entrepreneurial spirits within our respondents.

- First, they have a broader point of view on diversity among different cultures and environments, which can be used to start a new business in Thailand.
- Second, they have positive spirits that it is possible to start a new business and create a viable business by themselves.
- Third, by having a strong connection from both the education network and their family business network, it compliments each other to have a complete team covering from finance, engineer, marketing, and any unique area such as political power, which is required to run a new business.

Based on the interview with our correspondents, connection and business network play a vital role in enabling successful entrepreneurship, especially for the **Effectual Entrepreneurs** style, where the founders keep adapting their business based on available re-

sources and business opportunities. We find that connection is acting as enabling factors in the following situations:

- Starting a business: we find that the founder teams usually are friends and connecting developed during academia time or business network
- Expanding a business: we find that by having a large business network, the business can identify new business opportunities and further develop their business

Surprisingly, we found that three informants have full environmental awareness; however, they've never joined any environmental activity (**P4**). Basic education backgrounds and their ecosystem formed environmental awareness. From criteria as sustainable operations, efficient energy usage, low operation cost, eco-friendly, least pollution and stable both politics and environmental activities, all three correspondents was defined as green entrepreneurs (**P5**). Greenery and Sustainable Development Enterprise (SDE) trend are creating a new business opportunity for new entrepreneurs due to traditional players are mostly small and unable to use technology and develop a scalable and sophisticated business model.

The interviews review an incompatibility of environmental awareness to entrepreneurial intention and business opportunity, but awareness affects the living attitude. In these three green businesses, innovation usage is applied to any process and operation to produce the appropriate products and optimize the best eco-friendly process. In some perspectives, all three green entrepreneurs have a successful business. Although all three businesses have obstacles (**P6**), with the characteristics of these entrepreneurs, they can find their solutions with close teamwork and

professional in the organization. From the in-depth interview, we found that three entrepreneurs can estimate their abilities, strengths, and weaknesses and evaluate their products. The common approaches of these three informants are finding business supporters such as collaboration with partners, long-term concessions with government, and a good business model (see <Appendix 1~2>).

6. Concluding Thoughts and Implications

For this phase of the study, the main themes were collated from three in-depth interviews by identifying the common patterns across the transcribed interviews. Overseas educational background is one of the key main drivers for the entrepreneurial courage to decide to pursue a new business venture. By having the exposure toward the different culture, three entrepreneurs hands-on experiential learning through three key drivers who are composed of the can-do attitude, the willingness to be self-employed, and the way of seeking for the freedom to express their passions. These drivers motivate all three informants to go extreme in their way. The connection is also the enabling factor that plays a critical role in securing sustainable business as well as to drive growth via the network of business partners.

Next, entrepreneurial opportunity in the current business landscape creates ample room for a green entrepreneur because they are aware of the global waste concerns. Greenery and Sustainable Development Enterprise (SDE) trends are creating business opportunities for new players. Being an effectual entrepreneur's style helps them to quickly seize business opportunities and grow the business with calculated and manageable risks. Lastly, our correspondents possess a competitive advan-

tage by having financial resources to sufficiently focus on business development without having to worry about financing and loan management that will generally force founders to choose the risk-averse approach or unable to capture the business opportunities that need sharp decision and investment.

7. Recommendation

Based on our study, we found three key success factors that contribute to becoming a successful green entrepreneur: funds and resources, network and connection, new opportunity identification and process capture. Even without these factors from the beginning, it is possible to become successful with below recommendation:

1. *Securing enough funds and resources to start a business:* A hand on learning from our study identifies funding and investment followed by resource impacts the green business. The difference distinguishes green entrepreneurs from others easily attract funding from the right investors and compete with traditional growth. Since green businesses seek to leverage technology to create environmentally-friendly products and to encourage social good, it helps to solve problems through the development of an innovative solution. The entrepreneur could use the benefit of green business to gain financial support from green investors, green venture capitalists, leading financial institutions, or crowdfunding platforms.
2. *Expanding the professional network and connection:* The entrepreneur needs to keep the network to create an opportunity of being a successful green entrepreneur. Bringing a good network and integrating team from different parts of various expe-

periences become a challenge to be accomplished. Although it is very difficult to do, discovering green business opportunities is likely to come across from friends and partners. Entrepreneurs could engage with their various professional friends, network and connection to accelerate the arrival of new opportunities.

3. *Scouting for new opportunities and become swift when an opportunity arises:* It is a great performance for entrepreneurs if they could identify a potential environmental-related green business opportunity and grasp its hotbed trend at the right time. Defining new customer propositions and leveraging from idea to implementation will help green entrepreneurs create the development of better products, standard services, and experiences throughout the flows. Generating environmental awareness can drive the increase in customer engagement and sustainable sales growth, which supports green entrepreneurs to move forward and become more competitive in this green environmental activity business journey.

References

- [1] Commission of the European Communities, A European action framework for CSR Defining, communication from commission concerning Corporate Social Responsibility: A business contribution to Sustainable Development, 2002.
- [2] Crowther, D. and Aras, G., Corporate Social Responsibility, Ventus Publishing ApS., 2008.
- [3] Environmental Quality Promotion Department (EQP) Report Statement, The answer to the question of waste in Thailand. Ministry of Natural Resources and Environment Thailand, 2019.
- [4] Farinelli, F., Bottini, M., Akkoyunlu, S., and Aerni, P., "Green entrepreneurship: the missing link towards a greener economy", *ATDF Journal*, Vol. 8, No. 3/4, 2011, pp. 42-48.
- [5] Gibbs, D., "Sustainability entrepreneurs, ecopreneurs and the development of a sustainable economy", *Greener Management International*, No. 55, 2006, pp. 63-78.
- [6] Kristyn, S.-K. and Andy, L., Global Waste Problem, Global Waste to Grow by 70 Percent by 2050 Unless Urgent Action is Taken: World Bank Report, The World Bank, 2018.
- [7] Kuckertz, A. and Wagner, G., "The influence of sustainability orientation on entrepreneurial intentions-investigating the role of business experience", *Journal of Business Venturing*, Vol. 25, No. 5, 2010, pp. 524-539.
- [8] Pollution Control Department (PCD) Report Statement (2016, 2017), Ministry of Natural Resources and Environment Thailand.
- [9] Shepherd, D. A. and Patzelt, H., "The new field of sustainable entrepreneurship studying entrepreneurial action linking 'What is to be sustained' with 'What is to be developed'", *Entrepreneurship Theory and Practice*, Vol. 35, No. 1, 2011, pp. 137-163.
- [10] Singhirunnusorn, W., Donlakorn, K., and W. Kaewhanin, "Contextual Factors Influencing Household Recycling Behaviours: A Case of Waste Bank Project in Mahasarakham Municipality", *Procedia-Social and Behavioral Sciences*, Vol. 36, 2012, pp. 688-697.

- [11] Visvanathan, C., "Business and employment opportunities in waste management and recycling in Asia", *Waste Management*, Vol. 31, No. 6, 2011, pp. 1083-1084.
- [12] Yu, T.-K., Lin, F.-Y., Kao, K.-Y., Chao, C.-M., and Yu, T.-Y., "An innovative environmental citizen behavior model: Recycling intention as climate change mitigation strategies", *Journal of Environmental Management*, Vol. 247, 2019, pp. 499-508.

〈Appendix 1〉

In-depth Interview Results of 3 Entrepreneurs Shown in Any Components

Propositions	# Subject 1	# Subject 2	# Subject
P.1 Environmental Concern			
Concern in Workplace	Yes	Yes	No
Concern in Daily Life	Yes	Yes	Yes
P.2 Organization Environment			
Environment in Organization	Yes	Yes	Yes
P.3 Demographic			
Home Demographic	South(Pattani)	South(Phuket)	BKK
Gender	M	M	M
Age	45	35	39
Education	PhD.	Master	Master
Entrepreneurship Class	No	No	No
Study Abroad	Yes	Yes	Yes
Local Resident	Yes	No	No
Former Occupation	Academic	Business	Business
Originally-Own Family Business	Yes	Yes	Yes
Economy Status	Stable	Stable	Stable
Entrepreneurship Trigger	Occupation (Polymer Teacher)	Revenue	Revenue
P.4 Environmental Education			
Educated	No	No	No
Awareness	Yes	Yes	Yes
P.5 Green Entrepreneur			
Become Green Entrepreneur	Yes	Yes	Yes
Awareness to Entrepreneurial Intention	Yes	No	No
Awareness to Living Attitude	Yes	Yes	Yes
Awareness to Business Opportunity	Yes	No	No
Innovation Usage	Yes	Yes	Yes
Project Succession	Yes	Yes	Yes
P.6 External Factors			
Obstacles	Product Development		
Promoters	Support from Business Partners	Long-term Concession	Win-Win Business Model

〈Appendix 2〉

Cases and Insights with a Life-Story Approach

Entrepreneurs Life Theme:

Subject #1 The Polymer Upcycling Entrepreneur

Subject 1 was born and grew up in Songkla province, one of the prominent provinces in the southern part of Thailand. He loved nature since he lived very close to the beach. In terms of educational background, he graduated with a bachelor's degree from Mechanical Engineering, Chulalongkorn University, Bangkok, Thailand, and got a scholarship from the same University to further his study about Polymer Science and PhD. in Macromolecular Science from Case Western Reserve University in the USA as follows. He is now the lecturer in the Faculty of Sciences and Technologies in the Department of Rubber and Polymer Technology at Prince of Songkla University (PSU), Pattani campus. At the same time, he also runs an environmentally friendly business named "**Trash Hero**" in Pattani, starting from the small acts as a social enterprise to change Thai society.

Trash Hero is the group of volunteers who collect trash on the beach every week. The Trash Hero group can be found in Thailand and another country. Trash Hero was launched firstly at Koh Lipe, by Roman Peter, from Switzerland. The inspiration to do Trash Hero was initiated from the "**Tlejourn**" project, the waste recycling project of the southern beach to be the source of the shoes and sell to the customers. The problem occurred when there were not enough of raw waste materials. He decided to get into Trash Hero and run it well in Pattani. There is a group of people who are interested in this project and jointly collect trash at the beach, cleanse, developed by locals, and transfer the trash to be the shoes. Trash Hero activities become his day-to-day daily life, responsibility, and lifestyle. He was very enjoyable and felt that he could do better for society. Local people together help and get revenue sharing, while Thai Society will see the message to do this social and environmental awareness of work, and they will realize that they can reduce the impact from the trash as well.

Entrepreneurs Life Theme:

Subject #2 The Waste Management Entrepreneur

Subject 2 has grown into a construction-based business family. He studied abroad since high school and he graduated Engineering program in a Master's Degree. After graduation and being a student who lives overseas for almost ten years, he went back to Bangkok to help the family business. He also has a closed connection with the other three friends who studied abroad and see opportunities in energy and environment business. He and his friends set up the energy and environment firm in 2014. The company has become Thailand's leading company in implementing a "Zero Waste, Zero Landfill" model designed specifically for the country. After starting the firm in 2014, he fully contributes his time to his environmentally friendly waste management company. He hired the professional to run the family business in Property & Land.

As stated above, the energy and environment firm started in 2014 aiming to be the leading company in creating the best energy and environmental sustainability solution that would sustain both environmentally and financially.

In the following year, he created the waste management solution, the first investment in Samut Sakhon Province in Thailand, taking over land to start the first full-scale zero-waste piloting plant. These impacts reduce the waste and it consequently affected the conflict on financial benefit among traditional local waste companies in a particular area. He has tackled the problems specifically in the rural area and gained the lesson learn from preventing "Mafia" of tradition local trash influential companies by cooperating with the private leading local firms and the government sector. While he was challenged on the firm, he tried to learn and adopt best practices from Canada and Europe for waste management combined with advanced technologies from other countries and localized it in Thai Style. Not only seeing the business opportunity and grasping it on time with his professional teamwork. But he also inspires to increase Thai people's understanding of the important role they play in effective waste management. This includes what the company he would like to move towards a waste-free for generating a better environment.

Entrepreneurs Life Theme:

Subject #3 The Renewable Energy Entrepreneur

From the education background, Subject 3 had studied the primary education level at Saint Gabriel, Bangkok Thailand until ninth grade before leaving to study in the United States for the high school and continue his bachelor's and master's degrees in the Engineering field from Duke University. He started his career at Unilever Thai Trading, Bangkok, Thailand as a marketing & sales trainee where he learned skills around the trading business. As he has strong entrepreneurship spirits and encountered with air-compressor manufacturing company looking for a distributor, he left from Unilever and started his own trading company Nova Trade International Co., Ltd. focusing on industrial air-compressor, wastewater treatment equipment, and biogas for ten years before he start new business with his partner that worked together for 4 years to implement a complete wastewater treatment solution.

After 3 years in this business, he started to have the opportunity to implement a solar system with funds from different sources such as PEA's ENCON fund, BANPU Power. The business model offers to invest in the long term 25 years for an industrial customer that has a factory that has high electricity consumption demand. After this business model become stable and continue to expand, he set up a new solar company in March 2019 to focus on fund management and aiming to push this company into Thailand's stock exchange (SET) within five years. In the same year, he was invited to work with Scan Inter Public Company Limited ("SCN"), where his brother works, to start the new joint venture Scan Advance Power Co., Ltd. ("SAP") in October 2019 with the business focus on rooftop solar cell for environmentally conscious businesses and to provide complete solar solution from lead management, feasibility assessment, budgetary proposal, MOU, details assessment using drone, until final proposal stage. One first target group is a small group of customers; for example, Yashiyado Alloy Wheels.

〈Appendix 3〉

Questionnaire Guideline

I. Study the origin and understand the current situation which affects awareness and environmental mindset.

- P.1** Environmental Concern has a positive effect on Environmental Awareness.
- QP1A Do you realize any environmental problems around your workplace and in everyday life? What is your opinion? Do you think we can get involved in the solution?
- P.2** Organization Environment affects Environmental Awareness.
- QP2A Does your organization have an awareness of environmental problems? Whether it is the light, sound or smell?
- P.3** Demographic data including gender, age, education, and social status, etc., affect Environmental Awareness.
- QP3A As operators, do you think the level of education, age, gender, and social status affect awareness and establish an Environmental mindset (Environmental Awareness)?
 - QP3B Which factors are the motivation for you to be interested in the environment? Does your current occupation relate to environmental interest?
- P.4** Environmental Education affects Environmental Awareness.
- QP4A Have you ever received knowledge about the environment or joined environmental events whether personally or organized by the organization?
 - QP4B After receiving the knowledge how do you aware of the environment?

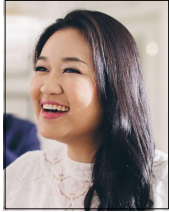
II. Study the relationship of Environmental Awareness and being the Green Entrepreneurship

- P.5** Environmental awareness affects green entrepreneurship.
- QP5A Do you think you are a Green entrepreneur? (Based on sustainable operations, efficient energy usage, low operation cost, eco-friendly, least pollution and stable both politics and environmental activities.)
 - QP5B Do you think environmental awareness affects you to start your business?
 - QP5C Do you think environmental awareness affects your attitude towards work and personal life?
 - QP5D Do you think environmental awareness affects your business opportunity?
 - QP5E How are innovations used in entrepreneurship and your business operations?
 - QP5F What is the succession of your project?

As covariant, external factors such as obstacles and promoters were concerned.

- P.6** External factors that affect Going green.
- QP6A What factors are obstacles to becoming a green entrepreneur?
 - QP6B What factors do you think support or encourage you to become a green entrepreneur?

■ Author Profile



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Kornthong Tesprasit is a second year Ph.D. Student in the Technopreneurship and Innovation Management Program, Chulalongkorn University, Thailand. Her study is

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