

The Role of Green Entrepreneurship and Green Variables in Sustainable Development in the Culinary Sector in Indonesia: Early Days of the COVID-19 Pandemic

Helin G. Yudawisastra¹ *  | Mokhamad Anwar²  | Sulaeman R. Nidar³  | Yudi Azis⁴ 

¹Universitas Padjadjaran, Faculty of Economics and Business, Bandung, Indonesia

²Universitas Padjadjaran, Faculty of Economics and Business, Bandung, Indonesia

³Universitas Padjadjaran, Faculty of Economics and Business, Bandung, Indonesia

⁴Universitas Padjadjaran, Faculty of Economics and Business, Bandung, Indonesia

*Correspondence to: Helin G. Yudawisastra, Universitas Padjadjaran, Faculty of Economics and Business, Bandung, Indonesia
E-mail: helinyudawisastra.id@gmail.com

Abstract: The UN Sustainable Development Goals are among the crucial missions of countries worldwide, including Indonesia. Nevertheless, application of a production system does not guarantee sustainability, and the Indonesian government's support for sustainability in the entrepreneurial sector is nonoptimal. This study investigates green entrepreneurship in Indonesia's culinary sector in relation to sustainable development and green variables. Using a culinary sector survey based on the UNWTO and the Ministry of Tourism, this study references primary questionnaire data, applying a random sampling technique and structural equation modeling covariance with a sample of 270 respondents. The results indicate that the provision of green products affects sustainable development, regardless of respondents' green entrepreneurship. While green products may affect sustainable development, directly or through green entrepreneurship, green design does not appear to affect sustainable development, and green entrepreneurship does not appear to support sustainable conditions. Environmentally friendly product design and production processes have generated multiple recyclable products; however, the culinary sector must be made aware of the entrepreneurial ecosystem surrounding culinary business governance and the concerns and practices of sustainable development. This study was conducted at the beginning of the COVID-19 pandemic and represents the conditions of the culinary sector during the pandemic.

Keywords: COVID-19 pandemic, culinary sector, green entrepreneurship, green variables, sustainable development

Article info: Received 30 August 2022 | revised 15 September 2022 | accepted 19 September 2022

Recommended citation: Yudawisastra, H. G., Anwar, M., Nidar, S. R., & Azis, Y. (2022). The Role of Green Entrepreneurship and Green Variables in Sustainable Development in the Culinary Sector in Indonesia: Early Days of the COVID-19 Pandemic. *Indonesian Journal of Sustainability Accounting and Management*, 6(2), 314–325. <https://doi.org/10.28992/ijSAM.v6i2.689>

INTRODUCTION

In early 2020, the World Health Organization declared the COVID-19 pandemic a public health emergency of international concern (Cucinotta & Vanelli, 2020). The COVID-19 pandemic, a new virus variant, has highlighted the urgency of implementing the 2030 Agenda (Coccia, 2021). The principles that underlie the formulation of the SDGs are the key to better recovery after the COVID 19 pandemic (Odoemelam et al., 2020). Governments and academia have taken lessons from this pandemic. They are planning for higher energy utilization from renewable



resources and sustainable technologies to improve the environment, economic system, and public health in the long term (Ratnamiasih et al., 2022). Businesses and economies around the world have been devastated by the COVID-19 pandemic. Many people lost their jobs, and the real sector did not support the workforce when business was down (Kaushik & Guleria, 2020). Some industries suffered losses that could not be overcome, so government support in various forms was needed. Indonesia, as a developing country, is vulnerable to the COVID-19 pandemic. One of the contributing factors is the lack of international support to ensure progress toward Sustainable Development.

Sustainable development is the organizing element that supports non-renewable and limited resources to be made available to the next generation. The use of resources will meet human needs without compromising the integrity and stability of vital systems (Garg, 2015). Sustainable development remains a significant problem. The growth of urban waste generation, and the increase in anthropogenic wastewater, compounded by the increasing population growth, have significantly threatened environmental ecosystems. Sustainable development as a business challenge has been at the forefront of policymaking over the past two decades (Hall & Lerner, 2010). Tu & Huang (2015) explained that the implementation of sustainable development is solely based on the morality of entrepreneurs without being followed by economic incentives and legal restrictions. Kopnina (2013) states that the ecocentric perspective in environmental ethics is currently marginalized. Lawrence & Lorsch (1967) put forward the importance of the relationship between firms and the environment in a new conception (Porter & van der Linde, 1995). Purvis et al. (2019) promote the pillars of sustainable economic, social, and environmental development. Mikušová (2017) argues that sustainable development is influenced by the activities of a micro, small, medium, and large businesses. Micro entrepreneurs' business activities have negatively impacted the environment due to the lack of application of environmentally friendly practices. The challenge during the COVID-19 pandemic is keeping the business afloat (Espinosa, 2015).

Hall & Lerner (2010) show that entrepreneurship is increasingly recognized as a significant channel for bringing transformation to sustainable products and processes. Culinary sector actors have become the dominant spokespersons for food products, consumption, and sustainable production (Van Winkle, 2017). Green business refers to the eco-friendly nature of intra-organizational products, updates, and policies (Walley et al., 2010). Gibbs (2009) and Pacheco et al (2010) suggest the importance of business activities as a driver of social, environmental, and economic sustainability. Audretsch et al. (2015) more specifically show the relationship between entrepreneurial activities and local, sustainable development. Green entrepreneurship creates new products and technologies to solve environmental problems (York & Venkataraman, 2010). Lotfi et al. (2018) stated the position of the green market towards green entrepreneurship and sustainability. Various problems include ecological issues and the development of the culinary sector in Indonesia, especially those related to sustainability issues. Bure & Tengeh (2019) shows the problem of weak internal control in small businesses for sustainability. The environment is a crucial issue affecting all aspects of human life, leading to the emergence of an environmentally friendly market or green market (Sharma & Kushwaha, 2015).

There needs to be a balance of social and environmental economy in culinary management oriented towards sustainability. Fischer et al (2020) argue that the balance between sustainable development and profit is a condition that must be pursued but is rarely achieved. There is a paradox between the differences between desirable, interdependent, and sometimes conflicting business activities with sustainability goals such as environmental protection and social welfare (Hahn et al., 2015). The concept of sustainability is defined as a triple bottom line that includes three pillars of sustainability: economic, social, and environmental (Pechancová et al., 2019). The implementation of sustainable development is also carried out in developing countries. Increased awareness of natural resources and environmental quality has driven the concept of sustainable

development, with the same focus on the following three main components of development - economic, social and environmental (Dudin et al., 2019). The idea of sustainable development and an environmentally oriented economy has spread worldwide (Lavrinenko et al., 2019). Sustainable development is a process of promising the future desired by the community. Living conditions and resource use will meet human needs without compromising vital systems' integrity, beauty, and stability (Garg, 2015). Sustainable development uses resources, directs investment, develops technology, and changes following current and future needs (Sharma & Kushwaha, 2015). Lunde (2018) argues that sustainability is more than just resource resilience with a broader, holistic notion of the environment. Sustainable development as a business challenge has been at the forefront of policymaking over the last two decades (Hall & Lerner, 2010). Sustainable development is a paradigm in the structural arrangement of the economic system (Dalevska et al., 2019).

Green entrepreneurship is based on a green business that starts with making innovations either for marketing benefits or because of ethical issues (Allen & Malin, 2008) and entrepreneurial mechanisms that can answer the need for greener and environmentally friendly business activities (Pacheco et al., 2010). According to de Bruin (2016), green entrepreneurship involves solving and applying environmental problems to bring about social change. Halder (2019) defines green entrepreneurship as an engine of change, innovation, and sustainability in channeling the energy sector towards cleaner and more efficient renewable energy and consumption. The concept used in this study refers to Lotfi et al. (2018), which define green entrepreneurship as a creative activity based on ethical commitment as a foundation for communities and people to ensure a balance between profitability and sustainability.

The green variables referred to in this study include green products, green production, and green design. Chang & Zhang (2019) show that green products differ from existing offerings. Green products in business activities describe changes in economic evolution and the proposition of a conceptual model that analyzes how products are formulated, changes in knowledge of green technologies, and finally, how to make green products. Green products are products whose functions or ideas are related to the extraction of materials, production, sale, utilization, and treatment of general waste for recycling, reducing pollution, and saving energy. The same thing was also stated by Albino et al. (2009) that the product is designed to minimize the environmental impact during the product life cycle. Green products are defined as the development of new ideas about green products, services, green processes, or green practices that are considered original, new, and valuable (Chen & Chang, 2013). Wang et al. (2019) put forward the definition of green products as products that are environmentally friendly and conducive to environmental protection.

Baines et al. (2012) argue that green production is increasingly seen as applying environmentally sensitive and socially sensitive production practices to reduce the negative impacts of manufacturing activities while also aligning the pursuit of economic benefits. Tsai et al. (2015) define it as the continuous implementation of an integrated environmental strategy for processes, products, and services to increase efficiency and reduce risks to humans and the environment. Bhat (1993) explains that green design is a strategy that must be followed to remain competitive in the international market. Moreover, Nair (1998) states that green design is formulated based on a paradigm to improve environmentally friendly products and processes that concern the environment. Tseng et al. (2013) suggest green design as a clean production application based on prevention strategies and resource-oriented approaches that produce environmentally friendly products. Gambatese et al. (2007) stated that green design aims to minimize environmental impact and use of resources and improve customer safety, health and productivity. Tu & Huang (2015) explained that green designs were recommended and developed in response to the deteriorating global environment. Green design means using materials optimally and minimizing waste piles (Bag et al., 2018).

Kuzmin et al. (2019) emphasize that economic sustainability is related to the life cycle and economic activity. Changes in the view of the environment and humans and nature as subjects have changed human productive activities to produce value. Saxena & Khandelwal (2010) emphasize that more and more consumers will choose green products in the future. Companies that sell green products will last longer than sellers of non-green products (Lavuri et al., 2021). Chen et al. (2016) show that developing green products is increasingly important for companies in the environmental era. Chang & Zhang (2019) also show that consumers pay attention to environmental sustainability, and companies are motivated to develop green products that adopt innovations or sustainable materials. Mrkajic et al. (2019) show that green entrepreneurship is crucial in promoting sustainable development. Lotfi et al. (2018) further explain that green entrepreneurship is a new type with an environmentally friendly commitment. Akhmetova et al. (2019) suggest developing an ecologically oriented quality management system, such as a recycling system.

This study examines the relationship between green variables such as green products, green production, green design, and sustainable development, considering the mediating role of green entrepreneurship. This analysis is considered necessary in the global and local economy because of changes in the socio-economic environment and pandemic conditions that occur in the world.

METHODS

This study uses primary data obtained by filling out a questionnaire. The type of this study was a descriptive survey and a verification survey of 270 culinary entrepreneurs in Indonesia (Bandung, Semarang, Solo, Yogyakarta, Mataram, and Badung) who were randomly selected technique. The analysis method began by looking at the characteristics of the data through descriptive statistics. Then, multivariate data analysis was conducted, particularly factor analysis using SEM covariance. The measurement of green products, green design, green production, and green entrepreneurship (Table 1) refers to research conducted by (Lotfi et al., 2018). For sustainable development, the researchers develop measurements according to the Indonesian context, which is socio-cultural indicators according to Badan Pusat Statistik (2018).

Table 1 Variables and Dimensions in the Study

Variable	Dimensions
Green product	Energy efficient, recycled products, environmental pollution
Green Production	Production commitment, technology, health
Green Design	Environmental rules, product safety, recycled product design
Green Entrepreneurship	Production priority, service priority, profit priority
Sustainable Development	Human welfare, quality of natural resources, quality of human resources

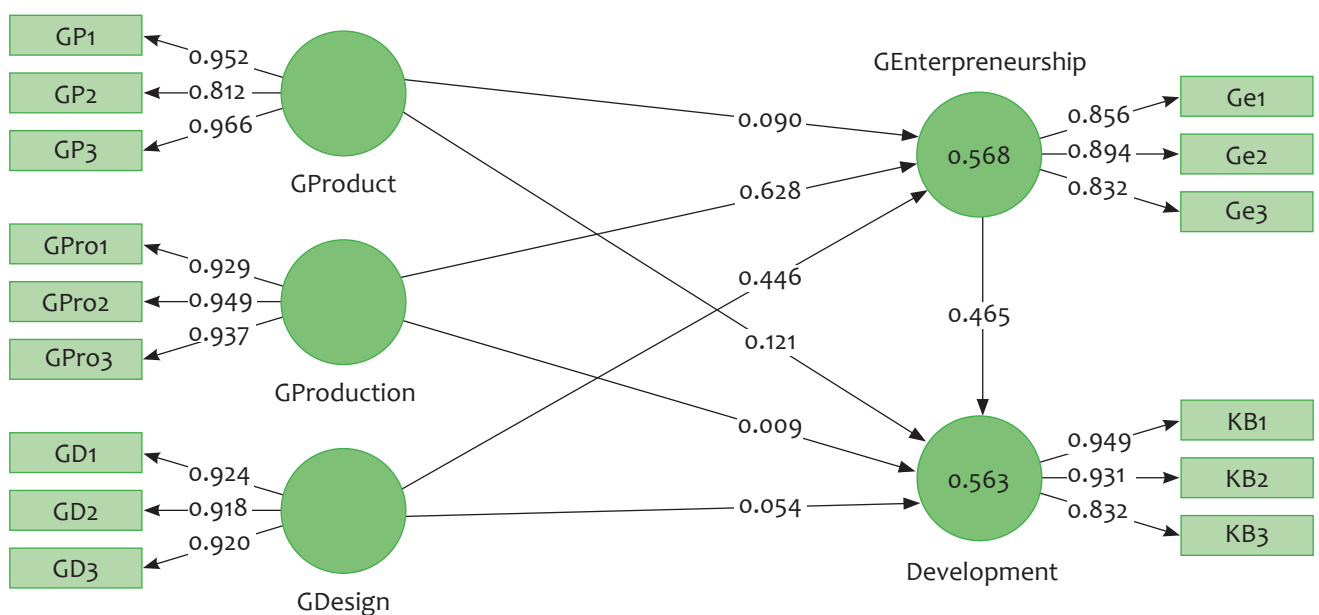
RESULTS AND DISCUSSION

The results of tests carried out at the beginning of the COVID-19 pandemic showed that the construction of variable indicators of green product, green design, green production, green entrepreneurship, and sustainable development was acceptable following (Lotfi et al., 2018). Factor weighting values for the green product indicator are energy efficient GP1 (0.952), recycled products GP2 (0.812), and environmental pollution GP3 (0.966). The indicators are accepted to explain green products. The ability of the culinary sector to use efficient energy

is quite good so that it can reduce environmental pollution. Products used as raw materials can be recycled into other useful products. This is in line with the concept of low carbon consumption (Li & Li, 2017). Loading Factor Indicators of green production are commitment GPro1 (0.929), technology GPro2 (0.949), and health GPro3 (0.938). The key to success in producing green production is a commitment rooted in the ethical values of society and the environment. Intrinsic value in green production activities is based more on intrinsic value considerations, in line with Leonidou et al. (2017) regarding sustainable strategic goals and profitability. Green design is an essential factor in the value chain system for green products. Factor weighing on the indicator of understanding of the rules GD1 is 0.944, packaging safety GD2 is 0.918, and design GD3 is 0.920. This is in line with Bag et al. (2018) regarding green design through optimization and minimization of waste.

The indicators of the green entrepreneurship variable are production priority GE1 of 0.856, service priority GE2 of 0.894, and profit priority GE3 of 0.791, which are in line with Malin (2008) regarding ethical issues in entrepreneurship. This is in line with Pacheco et al. (2010), (Kirkwood & Walton, 2010), and (de Bruin, 2016) regarding business activities that pay attention to the environment. Understanding the ethics of society and the environment to overcome moral problems in value creation activities determines green entrepreneurship. Critical thinking leads to value-oriented entrepreneurial practices as the basis, as stated by (Lotfi et al., 2018).

The concepts put forward and developed follow the socio-cultural indicators set by the government. The weight values of the sustainable development indicator factors are human welfare SD1 of 0.949, quality of natural resources SD2 of 0.931, and quality of human resources SD3 of 0.832. The synergy of social and economic values in business activities ensures a balance between profit and the environment that is required. This is in line with Garg (2015) which stated the importance of integrity, beauty, and stability of vital systems to demonstrate sustainable development. Lotfi et al. (2018), Hall & Lerner (2010), Cao et al. (2019) expressed the same consideration about environmental ethics, where society functions as a business challenge to realize sustainable development. Only the loading factor value shows test results > 0.6 , which is 0.781, or the suitability of the modified model (Figure 1).



Source: Data processing using smartPLS

Figure 1 Loading Factor

Based on the test results, it is concluded that all indicators used are valid. For more details, it can be seen in Table 2 which shows that the results of this study are valid and reliable.

Table 2 Validity and reliability tests

Variable	Dimension			Loading factor	Conclusion	Composite Reliability	Conclusion
Green Product	1	GP1	Energy efficient	0.952	valid	0.937	Reliable
	2	GP2	Recycled products	0.812	valid		
	3	GP3	Environmental pollution	0.966	valid		
Green Production	4	GPro1	Production commitment	0.929	valid	0.957	Reliable
	5	GPro2	Technology	0.949	valid		
	6	GPro3	Health	0.938	valid		
Green Design	7	GD1	Environmental rules	0.924	valid	0.944	Reliable
	8	GD2	Product safety	0.918	valid		
	9	GD3	Recycled product design	0.920	valid		
Green Entrepreneurship	10	GE1	Production priority	0.856	valid	0.896	Reliable
	11	GE2	Service priority	0.894	valid		
	12	GE3	Profit priority	0.832	valid		
Sustainable Development	13	SD1	Human welfare	0.949	valid	0.932	Reliable
	14	SD2	Quality of Natural Resources	0.931	valid		
	15	SD3	Quality of Human Resources	0.832	valid		

Source: processed data

Green entrepreneurs cannot be used as a mediating variable regarding the effect of green products on sustainable development. Green products affect sustainable development directly. Green products affect sustainable development both directly and through green entrepreneurs. Meanwhile, the green design variable does not affect sustainable development either directly or through green entrepreneurship (Table 3).

What needs to be criticized is the position of green design and its impact on entrepreneurship. This is the opposite of (Lotfi et al., 2018). The activities of green products, green design, and green production are separate from culinary business activities in Indonesia. The study is in line with the hypothesis that green entrepreneurship mediates the relationship between sustainable development and green production. The position of green entrepreneurship as an intervention in the culinary business structure in Indonesia cannot be ignored, although it must be reviewed for several other green variables and the research period. The culinary business structure requires value creation practices that are oriented towards a balance of values and the environment. The development of green entrepreneurship is seen as a step forward that establishes the order in sustainable business activities.

The Indonesian culinary system separates green design from the product as an output and production process. The relationship between green products and green production is possible to promote the development of green entrepreneurship through a partnership process. Social interaction and exchange of resources enable culinary entrepreneurs to design green entrepreneurship to encourage sustainable development. Value creation cannot be separated from the context and its relationship with the social environment. Likewise, Lawrence &

Lorsch (1967) stated the importance of the relationship between the company and the environment. Porter & van der Linde (1995) added that this new conception ensures a balance between profits and the environment that affects industrial behavior, including business competition, social/economic desires (environmental protection), and economic burdens. Designing an entrepreneurial marketing system that ensures sustainability requires the role of policymakers in culinary business activities. Interventions are needed to develop sustainable markets and society for sustainable innovation (Schaltegger & Wagner, 2011).

Table 3 Hypothesis Tests

	T Statistics	P Values	Conclusion	F Statistics	Conclusion
GProduct -> GEntrepreneurship	1.748	0.081	Not Supported		
GProduct -> Development	7.298	0.000	Supported		
GProduction -> GEntrepreneurship	14.032	0.000	Supported		
GProduction -> Development	4.488	0.000	Supported	68.24	Supported
GDesign -> GEntrepreneurship	1.960	0.051	Not Supported		
GDesign -> Development	0.046	0.963	Not Supported		
GEntrepreneurship -> Development	5.828	0.000	Supported		

Source: processed data

The sustainability of the culinary sector business requires entrepreneurial support committed to sustainability. Product variations in the food and beverage menus are natural products with a back-to-nature concept. However, this requires support in the form of sustainable green designs, ranging from business design to consumer management that is oriented towards environmentally friendly values (Khoiruman & Haryanto, 2017; Rusyani et al., 2021; Kement et al., 2021), such as converting food waste into organic fertilizer. The position of culinary business players is highly significant in terms of economic, social, and supporting capacity for environmental changes. Sustainable development is a shared orientation for culinary entrepreneurs.

Awareness of culinary sustainable development can guarantee changes in culinary activities and the social and economic environment. This awareness grows based on rational arguments that do not ignore moral and aesthetic rationality about sustainable development. Culinary business players are images that show the identity of business players who understand their role in sustainable development. These activities require a guaranteed system integrated into governance, as Akhmetova et al. (2019) suggested, while ensuring a balance of costs (Batkovskiy et al., 2019). The management of the creative culinary industry is part of the sustainable development governance system; as stated by Dalevska et al. (2019) modernization of the economy and society follows the socio-economic indicators of sustainable development. The partnership supports the entrepreneurial ecosystem that directs the culinary business governance system in sustainable development.

CONCLUSION

Green entrepreneurship becomes a mediator for the green production variable in sustainable development. Green design does not affect sustainable development either directly or through green entrepreneurship. Integrating green products and production in one culinary business partnership system ensures the functioning of green variables to promote sustainable development in the culinary business. SMEs' main strengths today are

product hygiene, business environment sanitation, and health protocols. This is applied to both employees and consumers so that the level of consumer confidence and SME personnel will be well established. This will have an impact on the growth and readiness of SMEs, especially SMEs in Indonesia, in facing the COVID-19 pandemic and welcoming and adapting to the New Normal era. The government needs to support partnership programs through various training and financing based on environmentally friendly concepts by leading to culinary business governance in sustainable development. Research is limited to certain culinary business groups. A unique methodology in this study limits the disclosure of in-depth data. Further research is needed to understand the role of green entrepreneurship, which will ensure sustainability in the entrepreneurial ecosystem for the culinary sector. This study was conducted during the COVID-19 pandemic, so culinary activities were limited by government regulations, such as the Micro-Scale Social Restrictions (PSBM) and visitor capacity, which were carried out in the early days of the pandemic.

ORCID

Helin G. Yudawisastra  <https://orcid.org/0000-0002-4126-8025>

Mokhamad Anwar  <https://orcid.org/0000-0003-2641-7667>

Sulaeman R. Nidar  <https://orcid.org/0000-0002-9780-2012>

Yudi Azis  <https://orcid.org/0000-0002-4093-7581>

REFERENCES

- Akhmetova, S. O., Suleimenova, M. S., & Rebezov, M. B. (2019). Mechanism of an improvement of business processes management system for food production: case of meat products enterprise. *Entrepreneurship and Sustainability Issues*, 7(2), 1015–1035. [https://doi.org/10.9770/jesi.2019.7.2\(16\)](https://doi.org/10.9770/jesi.2019.7.2(16))
- Albino, V., Balice, A., & Dangelico, R. M. (2009). Environmental strategies and green product development: an overview on sustainability-driven companies. *Business Strategy and the Environment*, 18(2), 83–96. <https://doi.org/10.1002/bse.638>
- Allen, J. C., & Malin, S. (2008). Green Entrepreneurship: A Method for Managing Natural Resources?. *Society & Natural Resources*, 21(9), 828–844. <https://doi.org/10.1080/08941920701612917>
- Audretsch, D. B., Link, A. N., Walshok, M., Pena-Legazkue, I., Guerrero, M., & Gonzalez-Pernía, J. L. (2015). Entrepreneurship and Sustainable Development. In *The Oxford Handbook of Local Competitiveness*. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199993307.013.19>
- Badan Pusat Statistik. (2018). *Indikator Tujuan Pembangunan Berkelanjutan (TPB) Indonesia 2018*. Jakarta: Badan Pusat Statistik.
- Bag, S., Gupta, S., & Telukdarie, A. (2018). Exploring the relationship between unethical practices, buyer–supplier relationships and green design for sustainability. *International Journal of Sustainable Engineering*, 11(2), 97–109. <https://doi.org/10.1080/19397038.2017.1376723>
- Baines, T., Brown, S., Benedettini, O., & Ball, P. (2012). Examining green production and its role within the competitive strategy of manufacturers. *Journal of Industrial Engineering and Management*, 5(1), 53–87. <https://doi.org/10.3926/jiem.405>
- Batkovskiy, A. M., Leonov, A. v., Pronin, A. Yu., Semenova, E. G., Fomina, A. v., & Balashov, V. M. (2019). Sustainable development of Industry 4.0: the case of high-tech products system design. *Entrepreneurship and Sustainability Issues*, 6(4), 1823–1838. [https://doi.org/10.9770/jesi.2019.6.4\(20\)](https://doi.org/10.9770/jesi.2019.6.4(20))

- Bhat, V. N. (1993). Green Marketing Begins with Green Design. *Journal of Business & Industrial Marketing*, 8(4), 26-31. <https://doi.org/10.1108/08858629310047243>
- Bure, M., & Tengeh, R. K. (2019). Implementation of internal controls and the sustainability of SMEs in Harare in Zimbabwe. *Entrepreneurship and Sustainability Issues*, 7(1), 201–218. [https://doi.org/10.9770/jesi.2019.7.1\(16\)](https://doi.org/10.9770/jesi.2019.7.1(16))
- Cao, S., Tian, D., Zhang, X., & Hou, Y. (2019). Sustainable Development of Food Processing Enterprises in China. *Sustainability*, 11(5), 1318. <https://doi.org/10.3390/su11051318>
- Chang, Y., & Zhang, T. (2019). The Effects of Product Consistency and Consumer Resistance to Innovation on Green Product Diffusion in China. *Sustainability*, 11(9), 2702. <https://doi.org/10.3390/su11092702>
- Chen, Y.-S., & Chang, C.-H. (2013). The Determinants of Green Product Development Performance: Green Dynamic Capabilities, Green Transformational Leadership, and Green Creativity. *Journal of Business Ethics*, 116(1), 107–119. <https://doi.org/10.1007/s10551-012-1452-x>
- Chen, Y.-S., Chang, T.-W., Lin, C.-Y., Lai, P.-Y., & Wang, K.-H. (2016). The Influence of Proactive Green Innovation and Reactive Green Innovation on Green Product Development Performance: The Mediation Role of Green Creativity. *Sustainability*, 8(10), 966. <https://doi.org/10.3390/su8100966>
- Coccia, M. (2021). The relation between length of lockdown, numbers of infected people and deaths of Covid-19, and economic growth of countries: Lessons learned to cope with future pandemics similar to Covid-19 and to constrain the deterioration of economic system. *Science of the Total Environment*, 775. <https://doi.org/10.1016/j.scitotenv.2021.145801>
- Cucinotta, D., & Vanelli, M. (2020). WHO Declares COVID-19 a Pandemic. *Acta Bio-Medica: Atenei Parmensis*, 91(1), 157–160. <https://doi.org/10.23750/abm.v91i1.9397>
- Dalevska, N., Khobta, V., Kwilinski, A., & Kravchenko, S. (2019). A model for estimating social and economic indicators of sustainable development. *Entrepreneurship and Sustainability Issues*, 6(4), 1839–1860. [https://doi.org/10.9770/jesi.2019.6.4\(21\)](https://doi.org/10.9770/jesi.2019.6.4(21))
- de Bruin, A. (2016). Towards a framework for understanding transitional green entrepreneurship. *Small Enterprise Research*, 23(1), 10–21. <https://doi.org/10.1080/13215906.2016.1188715>
- Dudin, M. N., Ivashchenko, N. P., Gurinovich, A. G., Tolmachev, O. M., & Sonina, L. A. (2019). Environmental entrepreneurship: characteristics of organization and development. *Entrepreneurship and Sustainability Issues*, 6(4), 1861–1871. [https://doi.org/10.9770/jesi.2019.6.4\(22\)](https://doi.org/10.9770/jesi.2019.6.4(22))
- Espinosa, A. (2015). Governance for Sustainability: reflections from three VSM interventions. *Kybernetes*, 44(6/7), 955-969. <https://doi.org/10.1108/K-02-2015-0043>
- Fischer, D., Brettel, M., & Mauer, R. (2020). The Three Dimensions of Sustainability: A Delicate Balancing Act for Entrepreneurs Made More Complex by Stakeholder Expectations. *Journal of Business Ethics*, 163(1), 87–106. <https://doi.org/10.1007/s10551-018-4012-1>
- Gambatese, J. A., Rajendran, S., & Behm, M. G. (2007). Green Design & Construction Understanding the effects on construction worker safety and health. *Professional Safety*, 52.
- Garg, A. (2015). Green Marketing for Sustainable Development: an Industry Perspective. *Sustainable Development*, 23(5), 301–316. <https://doi.org/10.1002/sd.1592>
- Gibbs, D. (2009). Sustainability Entrepreneurs, Ecopreneurs and the Development of a Sustainable Economy. *Greener Management International*, 55, 63-78. <https://doi.org/10.9774/GLEAF.3062.2006.AU.00007>
- Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). Tensions in Corporate Sustainability: Towards an Integrative Framework. *Journal of Business Ethics*, 127(2), 297–316. <https://doi.org/10.1007/s10551-014-2047-5>
- Haldar, S. (2019). Green entrepreneurship in the renewable energy sector – a case study of Gujarat. *Journal of Science and Technology Policy Management*, 10(1), 234–250. <https://doi.org/10.1108/JSTPM-12-2017-0070>

- Hall, B. H., & Lerner, J. (2010). The Financing of R&D and Innovation. *Handbook of the Economics of Innovation*, 1(1), 609–639. [https://doi.org/10.1016/S0169-7218\(10\)01014-2](https://doi.org/10.1016/S0169-7218(10)01014-2)
- Kaushik, M., & Guleria, N. (2020). The Impact of Pandemic COVID -19 in Workplace. *European Journal of Business and Management*, 12(15), 9-18. <https://doi.org/10.7176/EJBM/12-15-02>
- Kement, Ü., Güçer, E., Çavuşoğlu, S., & Demirağ, B. (2021). Investigating the Effect of Customer Experience, Perceived Value, and Customer Satisfaction on Environment-Friendly Behavior. *Indonesian Journal of Sustainability Accounting and Management*, 5(2), 175–186. <https://doi.org/10.28992/ijSAM.v5i2.210>.
- Khoiruman, M., & Haryanto, A. T. (2017). Green Purchasing Behavior Analysis of Government Policy About Paid Plastic Bags. *Indonesian Journal of Sustainability Accounting and Management*, 1(1), 31–39. <https://doi.org/10.28992/ijSAM.v1i1.25>
- Kirkwood, J., & Walton, S. (2010). What motivates ecopreneurs to start businesses? *International Journal of Entrepreneurial Behavior & Research*, 16(3), 204–228. <https://doi.org/10.1108/13552551011042799>
- Kopnina, H. (2013). Evaluating education for sustainable development (ESD): using Ecocentric and Anthropocentric Attitudes toward the Sustainable Development (EAATSD) scale. *Environment, Development and Sustainability*, 15(3). <https://doi.org/10.1007/s10668-012-9395-z>
- Kuzmin, E. A., Vinogradova, M. v., & Guseva, V. E. (2019). Projection of enterprise survival rate in dynamics of regional economic sustainability: case study of Russia and the EU. *Entrepreneurship and Sustainability Issues*, 6(4), 1602–1617. [https://doi.org/10.9770/jesi.2019.6.4\(4\)](https://doi.org/10.9770/jesi.2019.6.4(4))
- Lavuri, R., Jusuf, E., & Gunardi, A. (2021). Green sustainability: Factors fostering and behavioural difference between millennial and Gen Z: Mediating role of green purchase intention. *Ekonomia i Środowisko*, 76(1), 8-38.
- Lavrinenko, O., Ignatjeva, S., Ohotina, A., Rybalkin, O., & Lazdans, D. (2019). The Role of Green Economy in Sustainable Development (Case Study: The EU States). *Entrepreneurship and Sustainability Issues*, 6(3), 1113–1126. [https://doi.org/10.9770/jesi.2019.6.3\(4\)](https://doi.org/10.9770/jesi.2019.6.3(4))
- Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and Integration in Complex Organizations. *Administrative Science Quarterly*, 12(1), 1-47. <http://dx.doi.org/10.2307/2391211>
- Leonidou, L. C., Christodoulides, P., Kyrgidou, L. P., & Palihawadana, D. (2017). Internal Drivers and Performance Consequences of Small Firm Green Business Strategy: The Moderating Role of External Forces. *Journal of Business Ethics*, 140(3), 585–606. <https://doi.org/10.1007/s10551-015-2670-9>
- Li, X., & Li, Y. (2017). On green market segmentation under subsidy regulation. *Supply Chain Management: An International Journal*, 22(3), 284–294. <https://doi.org/10.1108/SCM-11-2015-0425>
- Lotfi, M., Yousefi, A., & Jafari, S. (2018). The Effect of Emerging Green Market on Green Entrepreneurship and Sustainable Development in Knowledge-Based Companies. *Sustainability*, 10(7), 2308. <https://doi.org/10.3390/su10072308>
- Lunde, M. B. (2018). Sustainability in marketing: a systematic review unifying 20 years of theoretical and substantive contributions (1997–2016). *AMS Review*, 8(3–4), 85–110. <https://doi.org/10.1007/s13162-018-0124-0>
- Mikušová, M. (2017). To be or not to be a business responsible for sustainable development? Survey from small Czech businesses. *Economic Research-Ekonomska Istraživanja*, 30(1), 1318–1338. <https://doi.org/10.1080/1331677X.2017.1355257>
- Mrkajic, B., Murtinu, S., & Scalera, V. G. (2019). Is green the new gold? Venture capital and green entrepreneurship. *Small Business Economics*, 52(4), 929–950. <https://doi.org/10.1007/s11187-017-9943-x>
- Nair, I. (1998). Life Cycle Analysis and Green Design- A Context for Teaching Design, Environment, and Ethics. *Journal of Engineering Education*, 87(4), 489-494. <https://doi.org/10.1002/j.2168-9830.1998.tb00383.x>

- Odoemelam, N., Ofoegbu, G. N., & Ojukwu, C. (2020). Moderating Role of Negative Earnings on Firm Size and Corporate Social Responsibility Relationship: Evidence from Listed Firms on Nigeria Stock Exchange. *Indonesian Journal of Sustainability Accounting and Management*, 4(1), 114–133. <https://doi.org/10.28992/ijsam.v4i1.221>
- Pacheco, D. F., Dean, T. J., & Payne, D. S. (2010). Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development. *Journal of Business Venturing*, 25(5), 464–480. <https://doi.org/10.1016/j.jbusvent.2009.07.006>
- Pechancová, V., Hrbáčková, L., Dvorský, J., Chromjaková, F., & Stojanovic, A. (2019). Environmental management systems: an effective tool of corporate sustainability. *Entrepreneurship and Sustainability Issues*, 7(2), 825–841. [https://doi.org/10.9770/jesi.2019.7.2\(3\)](https://doi.org/10.9770/jesi.2019.7.2(3))
- Porter, M. E., & van der Linde, C. (1995). Toward a New Conception of the Environment-Competitiveness Relationship. *Journal of Economic Perspectives*, 9(4), 97–118. <https://doi.org/10.1257/jep.9.4.97>
- Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: in search of conceptual origins. *Sustainability Science*, 14, 681–695 (2019). <https://doi.org/10.1007/s11625-018-0627-5>
- Purvis, M. R. (1987). Three pillars of sustainability: in search of conceptual origins. *Environmental Conservation*, 14(2), 101–110. <https://doi.org/10.1017/S0376892900011449>
- Ratniasih, I., Ridwan, M., & Septiawan, B. (2022). Factors Influencing Green Human Capital to Improve Green Performance in Indonesian Start-Up Business. *Indonesian Journal of Sustainability Accounting and Management*, 6(1), 71–81. <https://doi.org/10.28992/ijsam.v6i1.488>
- Rusyani, E., Lavuri, R., & Gunardi, A. (2021). Purchasing Eco-Sustainable Products: Interrelationship between Environmental Knowledge, Environmental Concern, Green Attitude, and Perceived Behavior. *Sustainability*, 13(9), 4601. <https://doi.org/10.3390/su13094601>
- Saxena, R., & Khandelwal, P. K. (2010). Sustainable development through green marketing: The industry perspective. *The International Journal of Environmental, Cultural, Economic and Social Sustainability*, 6(6), 59–79.
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business Strategy and the Environment*, 20(4), 222–237. <https://doi.org/10.1002/bse.682>
- Sharma, N., & Kushwaha, G. (2015). Emerging Green Market as an Opportunity for Green Entrepreneurs and Sustainable Development in India. *Journal of Entrepreneurship & Organization Management*, 04(02). <https://doi.org/10.4172/2169-026X.1000134>
- Tsai, S.-B., Xue, Y.-Z., Huang, P.-Y., Zhou, J., Li, G.-D., Guo, W.-F., Lau, H., & Shang, Z.-W. (2015). Establishing a criteria system for green production. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 229(8), 1395–1406. <https://doi.org/10.1177/0954405414535923>
- Tseng, M.-L., Chiu, (Anthony) Shun Fung, Tan, R. R., & Siriban-Manalang, A. B. (2013). Sustainable consumption and production for Asia: sustainability through green design and practice. *Journal of Cleaner Production*, 40, 1–5. <https://doi.org/10.1016/j.jclepro.2012.07.015>
- Tu, J.-C., & Huang, H.-S. (2015). Analysis on the Relationship between Green Accounting and Green Design for Enterprises. *Sustainability*, 7(5), 6264–6277. <https://doi.org/10.3390/su7056264>
- Van Winkle, T. N. (2017). “Savor the earth to save it!”—The pedagogy of sustainable pleasure and relational ecology in a place-based public culinary culture. *Food and Foodways*, 25(1), 40–57. <https://doi.org/10.1080/07409710.2017.1270648>

- Walley, L., Taylor, D., & Greig, K. (2010). Beyond the Visionary Champion: Testing a Typology of Green Entrepreneurs. In *Making Ecopreneurs: Developing Sustainable Entrepreneurship* (2nd Ed.). Routledge.
- Wang, E., Liu, X., Wu, J., & Cai, D. (2019). Green Credit, Debt Maturity, and Corporate Investment—Evidence from China. *Sustainability*, 11(3), 583. <https://doi.org/10.3390/su11030583>
- York, J. G., & Venkataraman, S. (2010). The entrepreneur–environment nexus: Uncertainty, innovation, and allocation. *Journal of Business Venturing*, 25(5), 449–463. <https://doi.org/10.1016/j.jbusvent.2009.07.007>