

## **NOT ONLY PROFIT : HOW STRATEGIC MANAGEMENT WORKS IN OIL AND GAS INDUSTRY (O & G) TO ACHIEVING SUSTAINABILITY ?**

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### ***Abstract***

*The importance of sustainable development goal (SDG) in the oil and gas (O&G) industry is undeniable, and it needs to be understood by businesses, firms, and the government to be fully developed and implemented. This study proposes the possible solutions in making growth towards sustainable energy production. A systematic review of literature was conducted to identify and synthesize the existing knowledge on the topic. This study examines the implementation of marketing performance measurement (MPM), green governance, and project development as part of strategic management. The findings indicate that the MPM, green governance, project development and strategic management will positively impact the achievement of the sustainable development goals, applicable to the O&G firms and political leaders. A cohort-specific prioritization of the tools is provided within strategic management growth in the industry.*

*Keywords: Oil and Gas Industry, Strategic Management Growth, Sustainable Development*

## **INTRODUCTION**

In theory, marketing performance measurement (MPM) proves to be an impeccable tool in learning and measuring the effectiveness of marketing practices throughout the business, green governance, and the development of sustainable energy production, which can improve the strategic management growth in implementation of sustainability energy, under the Sustainable Development Goal 7 (SDG7). Marketing professionals are under demand to show how they improve company success, as it has been commonly stated that marketing's position within the company has been damaged by an inability to account for its contribution. Marketers are investing in the development of performance measurement skills in response to this demand. Marketing Performance Measurement (MPM) can be utilized as a tool to measure the contribution of marketing in the firm performance, which can be developed and implemented to reach the accurate measurement (O'Sullivan & Abela, 2007).

Owner's project marketing cycle, including project development to the operation phase, involved in the progress of new initial projects in the company (Tanaka & Bushuyev, 2021). The more sustainable project of energy supplies can be implemented by the new collaboration of green technology, and green governance, the more sustainable the growth of the strategic management. The regulations adjusted by the policy makers and practitioners in ensuring a green governance framework to the oil and gas (O&G) industry will promote a more sustainable production (Shah et al., 2022).

The United Nations (UN) formulated the SDG7, “ensuring access to affordable and clean energy” to pursue a sustainable energy path (Elavarasan et al., 2021). Further, Energy transition, a digitized energy sector, and affordable energy are necessary for change because there are strong connections between energy sustainability (SDG 7) and a sustainable world (Elavarasan et al., 2021b). Strategic Management could be one of the most effective ways of improving the goals of sustainable energy. Throughout history, the SDG 7 has made a number of moving changes to the betterment of energy production. Where the report of SDG 7 adopts a more sustainable and accountable actions of the firms. As an example, an observation on 524 major Libyan oil companies shows that government policies and regulations favorably influence businesses adoption of SDG Rubric (SDGR) and efficient and effective maintenance of social, environmental, and economic responsibilities of the oil and gas companies (Gerged & Almontaser, 2021). In recent times, combination of marketing performance measurement, project development phases, and green governance contributes as one of the major factors that leads to a better implementation of green energy production and promotes its growth towards a better reporting of the firm. The strategic management growth ensures the availability of SDG 7 supporting resources within forms.

With the advancement of technology and science, the oil and gas industry are a large combination of companies that are producing energy, which will be used by a large audience and people from all over the world. Saudi Aramco, one of the biggest oil and gas companies reported on May 9th, 2023, by the first quarter, the production of oil has reached 300,000 barrels per day, with little implementation of a sustainable extraction process. They produce crude oil, refined and chemical products, natural gas and Natural Gas and Liquids (NGLs), and also some metal products.

The hazard this industry brings within the whole steps of production, distribution, consumption is beyond what can be handled by the earth and is indeed contributing to climate change and imbalance of natural geographic activities, causing ambiguities of climate forecasts and strange phenomenon that society now isn't used to. In the production of oil and gas. large transmission pipelines for onshore and offshore oil and gas transportation have been rapidly developed in recent years. Pipeline is one of the most popular ways to transport oil and gas, if a leakage occurs, it can cause a vital harm to public health level, and a disaster for nature (Badida et al., 2019b).

The global volume weighted average upstream Carbon Intensity (CI) estimate, measured in 2015, is 10.3g CO<sub>2</sub> per Megajoule (MJ) of crude oil, with country-level

intensities ranging from 3.3 (Denmark) to 20.3 (Algeria) g CO<sub>2</sub> eq./MJ (Masnadi et al., 2018). CI Venezuela and Canada, two of the world's largest producers of unconventional heavy oils, have high CI at the national level (Masnadi et al., 2018). In 2016, the amount of CO<sub>2</sub> in the atmosphere increased at an alarmingly rapid rate, reaching its highest level in 800,000 years (Ma et al., 2019). According to the International Energy Agency (IEA), in 2017, annual CO<sub>2</sub> emissions of global fossil fuels increased to 36.3 billion tons, and about one-third came from China. The concentration of CO<sub>2</sub> in the air rose at an alarmingly rapid rate in 2016, reaching the highest level in the past 800,000 years (Ma et al., 2019). In Malaysia, the transportation sector contributed 36.2 percent of the total energy consumption, followed by the industrial (29.5%), residential and commercial (12%), and agricultural (1.6%) sectors (Tan & Tan, 2018).

This research is guided by the previous studies conducted by implementation of Marketing Performance Measurement, Project Development, and Green Governance as tools on developing the strategic management and in achieving the SDG7 goals. With the objective to investigate how the strategic management growth towards implementation of sustainable energy, with the project development and marketing practice, green government and sustainable practice affects strategic management growth in achieving sustainable energy in the oil and gas industry with marketing measurement performance, this paper is guided by the following research questions:

1. What is the impact of project development and marketing and sustainable practices, green government policies, and on achieving sustainable energy goals in the oil and gas industry, specifically in the context of SDG 7;
2. How can this impact be measured using a marketing performance measurement; and
3. How the solutions are within the power of firms, in making policy and decision, government on regulating rules and society in order to answer the question we propose the following literature review.

## **RESEARCH METHODOLOGY**

Strategic Management Growth (SMG) encompasses the comprehensive planning required for the transition of oil and gas companies towards alternative energy sources. Additionally, Marketing Performance Measurement (MPM) is identified as a contributing factor to management growth within the oil and gas industry. Enhancements in reputation, brand image, customer loyalty, cost reduction, innovation, employee morale, and regulatory

compliance have all supported the advancement of firms in the oil and gas sector (Whelan, 2017).

Marketing performance measurement provides valuable insights for monitoring performance, reporting progress, enhancing motivation and communication, and identifying issues. It assesses the relationship between marketing activities and business performance (Clark, & Ambler, 2001, p. 231). SMG is instrumental in achieving successful project development and realizing goals, particularly in the context of sustainable energy. Hence, strategic management involves creating and implementing strategies to achieve specific objectives.

Quantitative studies on marketing impact and overall firm growth have indicated that marketing performance can influence growth (Morgan, 2009). However, the practicality of marketing practices may vary, especially within the oil and gas industries. The Green Governance and sustainability practice contributes to the growth of strategic management through their impact from external parties that affect the management of the organization (Li, 2018). This study is to show the relationship of the factors towards the SMG, in a hope that this paper can help organizations strategize the plan for management practice.

A systematic review of the literature was conducted to identify and synthesize the existing knowledge on the topic of this paper. This was done in order to produce a reliable inventory of knowledge that could be used to inform the paper's findings. (Fuertes et al., 2020). For this research, the searching process is limited to published literature, including journal articles, books, conference proceedings, and literature obtained from electronic sources, mainly databases of scientific data (Snyder, 2019). The search engines used were Google Scholar, Proquest, Emerald Insight, Microsoft academics, ResearchGate, Core Research and Sci-Hub. The keywords used are oil and gas industry, sustainability energy, marketing measurement performance, strategic management growth, marketing practice, green governance and sustainability practice. This approach helped provide an overview of the supporting areas of this study. The research findings were analyzed and organized to create a conceptual framework for strategic management. This framework was then used to identify areas where further research is needed. Further, by synthesizing the literature, the feasibility of the framework was tried to justify (Islam et al., 2022).

Resolving this problem by using strategic management and the MPM ability as a tool to integrate sustainable development, and further project development and green governance should give better understanding for future research and academia in becoming the front row

on the lines of the research, that will help company and society in general decide better to inclusivity of SDG7 and green board committees’ activation

## **RESULTS AND DISCUSSION**

Implementing sustainability energy (SDG7) has brought about significant positive changes in energy production, emphasizing sustainability and accountability in firms' actions. The combination of marketing performance measurement, project development phases and marketing practice, green governance, and sustainability practice has emerged as crucial factor in promoting the growth of green energy production and facilitating better reporting by companies. Strategic Management Growth (SMG) within the oil and gas industry highlights the transition toward sustainable energy and the importance of decision-making processes prioritizing organizational performance and sustainability, despite the oil and gas industries. Sustainable development principles and strategic management opportunities should be considered, leading to missed benefits such as improved reputation, cost reduction, and increased innovation. However, integrating sustainability principles into marketing performance measurement processes can help organizations effectively align their marketing goals with sustainability objectives and track progress. Thus, Performance measurement plays a vital role in effective management, providing valuable insights for monitoring, progress reporting, motivation, communication, and problem identification.

Additionally, project development and marketing practices significantly impact SMG, influencing firm growth and highlighting the need for green governance and sustainability practices in the industry. As oil continues to be pivotal in global power generation and economic acceleration, achieving a balance between economic growth, environmental preservation, and social welfare becomes crucial. Therefore, the systematic review conducted in this paper contributes to the existing knowledge on the subject and emphasizes the integration of strategic management and marketing performance measurement as tools to advance sustainable development, project development, and green governance.

Further research and academia in this area are essential for advancing the inclusivity of SDG7 and activating green board committees, benefiting both companies and society. Hence, Quantitative studies on marketing impact and overall firm growth have indicated that marketing performance can influence growth. However, the practicality of marketing practices may vary, especially within the oil and gas industries. Green Governance and

sustainability practice contribute to the growth of strategic management through their impact on external parties that affect the organization's management.

In order to successfully navigate the challenges and opportunities presented by sustainable development, businesses must develop a strategic approach that integrates sustainability into all aspects of their operations. This approach should be based on a clear understanding of their activities' environmental, social, and economic impacts. Finally, by taking a strategic management approach to sustainable development, businesses can not only improve their sustainable energy and the firm performance, but it could also create new opportunities and innovation for the industry. In the hope that this paper can help organizations strategize the plan for management practice, we have outlined several steps businesses can take to integrate strategic management into their operations.

## **CONCLUSION**

To be completely developed and implemented, the sustainable development goals (SDGs) in the oil and gas (O&G) industry must be understood by businesses, firms, and the government. To examine the relationship between project development and marketing, green government, sustainable practices, and strategic management growth toward the implementation of sustainable energy.

First, energy output has significantly improved as a result of the implementation of sustainable energy (SDG7), which emphasizes accountability and sustainability in business practices. Green governance, sustainability practices, project development phases, marketing practices, and marketing performance measurement have all come together to produce a powerful combination that is driving the expansion of green energy production and enabling improved corporate reporting. Within the oil and gas sector, Strategic Management Growth (SMG) emphasizes the shift to sustainable energy and the significance of decision-making procedures.

Second, by resolving this issue through the application of strategic management and the MPM's capacity as a tool for integrating sustainable development, as well as through additional project development and green governance, more knowledge will be gained for future research and academia's role as front-line researchers, which will aid businesses and society at large in making better decisions regarding the inclusion of SDG7 and the activation of green board committees.

Lastly, based on the findings that are relevant to oil and gas businesses and political leaders, green governance, project development, strategic management, and MPM will all have an advantageous effect on achieving sustainable development goals. A cohort-specific tool arranging is offered as a component of the industry's strategic management growth.

## REFERENCE

- Aaker, D. A., Jacobson, R. M. (2001). The Value Relevance of Brand Attitude in High-Technology Markets. *Journal of Marketing Research*, 38(4) 485–493. <https://doi.org/10.1509/jmkr.38.4.485.18905>
- Ailawadi, K. L., Lehmann, D. R., Neslin, S. A. (2002). A product-market-based measure of brand equity. *Social Science Research Network*. <http://ci.nii.ac.jp/ncid/BA57495461>
- Aljaghoub, H., Abumadi, F., AlMallahi, M. N., Obaideen, K., Alami, A. H. (2022). Solar PV cleaning techniques contribute to Sustainable Development Goals (SDGs) using Multi-criteria decision-making (MCDM): Assessment and review. *International Journal of Thermofluids*, 16, 100233. <https://doi.org/10.1016/j.ijft.2022.100233>
- Arena, M., Azzone, G., Ratti, S., Urbano, V. M., Vecchio, G. (2023). Sustainable development goals and corporate reporting: An empirical investigation of the oil and gas industry. *Sustainable Development*, 31(1), 12-25.
- Arena, M., Azzone, G., Ratti, S., Urbano, V., Vecchio, G. M. (2022). Sustainable development goals and corporate reporting: An empirical investigation of the oil and gas industry. *Sustainable Development*, 31(1), 12–25. <https://doi.org/10.1002/sd.2369>
- Badida, P., Balasubramaniam, Y., Jayaprakash, J. (2019c). Risk evaluation of oil and natural gas pipelines due to natural hazards using fuzzy fault tree analysis. *Journal of Natural Gas Science and Engineering*, 66, 284–292. <https://doi.org/10.1016/j.jngse.2019.04.010>
- Barwise, Patrick and John U. Farley (2003), “Which Marketing Metrics Are Used and Where?” Working Paper No. 03-111, Marketing Science Institute.

Bilgen, S., Kaygusuz, K., Sarı, A. (2004). Renewable Energy for a Clean and Sustainable Future. *Energy Sources*, 26(12), 1119–1129.  
<https://doi.org/10.1080/00908310490441421>

Caron, F., Ruggeri, F. (2016). *Project Management in the Oil & Gas Industry—An Bayesian Approach*. Wiley  
StatsRef: Statistics Reference Online, 1.

Clark and Tim Ambler (2001), “Marketing Performance Measurement: Evolution of Research and Practice,” *International Journal of Business Performance Management*, 3 (Winter), 231–44.

Curto-Pagès, F., Ortega-Rivera, E., Castell on-Durán, M., Jané-Llopis, E. (2021). Coming in from the cold: A longitudinal analysis of SDG reporting practices by Spanish listed companies since the approval of the 2030 agenda. *Sustainability (Switzerland)*, 13(3), 1–27. <https://doi.org/10.3390/su13031178>

Dvir, D., Lechler, T. (2004). Plans are nothing, changing plans is everything: the impact of changes on project success. *Research Policy*, 33(1), 1–15.  
<https://doi.org/10.1016/j.respol.2003.04.001>

Eisenhardt, K. M., Schoonhoven, C. B. (1990). Organizational growth: Linking founding team, strategy, environment, and growth among US semiconductor ventures, 1978-1988. *Administrative science quarterly*, 504-529.

Elavarasan, R. M., Pugazhendhi, R., Jamal, T., Dyduch, J., Arif, M., Mustapha, A., Shafiullah, G., Chopra, S. S., Mithulananthan, N. (2021). Envisioning the UN Sustainable Development Goals (SDGs) through the lens of energy sustainability (SDG 7) in the post-COVID-19 world. *Applied Energy*, 292, 116665.  
<https://doi.org/10.1016/j.apenergy.2021.116665>

Elkington, J. *Enter the Triple Bottom Line*; Earthscan: London, UK, 1994.

El-Reedy, M. A. (2016). *Project management in the oil and gas industry*. John Wiley & Sons.

Franco-Santos, M. & Bourne, M. 2005. An examination of the literature relating to issues affecting how companies manage through measures. *Production, planning & control*, 16(2): 114-124



Frynas, J. G. (2010). Corporate Social Responsibility and Societal Governance: Lessons from Transparency in the Oil and Gas Sector. *Journal of Business Ethics*, 93(S2), 163–179. <https://doi.org/10.1007/s10551-010-0559-1>

Frynas, J.G. (2009), *Beyond Corporate Social Responsibility: Oil Multinationals and Social Challenges*, University Press Cambridge, Cambridge

Fuertes, G., Alfaro, M., Vargas, M., Gutierrez, S., Ternero, R., Sabattin, J. (2020). Conceptual Framework for the Strategic Management: A Literature Review—Descriptive. *Journal of Engineering*, 2020, 1–21. <https://doi.org/10.1155/2020/6253013>

Gajere, M. C., Nimfa, D. T. (2021). Strategic drift and organizational culture in oil and gas companies in Nigeria. *Strategic Drift and Organizational Culture in Oil and Gas Company of Nigeria* (April 8, 2021).

García-Rodríguez, F.J., García-Rodríguez, J.L., Castilla-Gutiérrez, C. Major, S.A. (2013), “Corporate social responsibility of oil companies in developing countries: from altruism to Vol. 20 No. 6, pp. 371-384

Gerged, A. M., Almontaser, T. (2021). Corporate adoption of SDG reporting in a non-enabling institutional environment: Insights from Libyan oil industries. *Resources Policy*, 74, 102240. <https://doi.org/10.1016/j.resourpol.2021.102240>

Halkos, G.E., Gkampoura, E.C., 2020. Reviewing usage, potentials, and limitations of renewable energy sources. *Energies* 13 (11), 2906.

Hart, S.L. 1995, "A natural-resource-based view of the firm", *Academy of Management Review*, vol. 20, no. 4, pp. 986-1014.

IEA. 2002. *World energy outlook 2002*. Paris: IEA/OECD.

Islam, M. S., Kedah, Z., Safuan, H. a. J., Ismail, S. (2022). A Conceptual Framework for Digitalising Microenterprises to Cope with the COVID-19 Pandemic. *International Journal of Learning and Development*, 12(2), 57. <https://doi.org/10.5296/ijld.v12i2.19395>

- Li, W., Xu, J., Zheng, M. (2018). Green Governance: New Perspective from Open Innovation. *Sustainability*, 10(11), 3845. <https://doi.org/10.3390/su10113845>
- Ma, X., Wang, C., Dong, B., Gu, G., Chen, R., Li, Y., Zou, H., Zhang, W., Li, Q. (2019). Carbon emissions from energy consumption in China: Its measurement and driving factors. *Science of the Total Environment*, 648, 1411–1420. <https://doi.org/10.1016/j.scitotenv.2018.08.183>
- Masnadi, M. S., El-Houjeiri, H. M., Schunack, D., Li, Y., Englander, J. A., Badahdah, A., Monfort, J., Anderson, J. M., Wallington, T. J., Bergerson, J. A., Gordon, D. M., Koomey, J. G., Przesmitzki, S., Chelikowsky, J. R., Bi, X., Duffy, J., Heath, G., Keoleian, G. A., McGlade, C., . . . Brandt, A. R. (2018). Global carbon intensity of crude oil production. *Science*, 361(6405), 851–853. <https://doi.org/10.1126/science.aar6859>
- Morgan, N. V., Clark, B. H., Gooner, R. (2002). Marketing productivity, marketing audits, and systems for marketing performance assessment: integrating multiple perspectives. *Journal of Business Research*, 55(5), 363–375. [https://doi.org/10.1016/s0148-2963\(00\)00162-4](https://doi.org/10.1016/s0148-2963(00)00162-4)
- Morgan, N. V., Slotegraaf, R. J., Vorhies, D. W. (2009). Linking marketing capabilities with profit growth. *International Journal of Research in Marketing*, 26(4), 284–293. <https://doi.org/10.1016/j.ijresmar.2009.06.005>
- O’Sullivan, D., Abela, A. V. (2007). Marketing Performance Measurement Ability and Firm Performance. *Journal of Marketing*, 71(2), 79–93. <https://doi.org/10.1509/jmkg.71.2.79>
- Rocca, N. (2013). ENVIRONMENTAL SUSTAINABILITY OF OIL INDUSTRY. *American Journal of Environmental Sciences*, 9(3), 210–217. <https://doi.org/10.3844/ajessp.2013.210.217>
- Rust, R. T., Lemon, K. N., Zeithaml, V. A. (2004). Return on Marketing: Using Customer Equity to Focus Marketing Strategy. *Journal of Marketing*, 68(1), 109–127. <https://doi.org/10.1509/jmkg.68.1.109.24030>

- Proceedings of the 1<sup>st</sup> Ikatan Mahasiswa Muhammadiyah International Conference on Environmental Sustainability and Climate Change “Achieving A Collective Awareness in General on the Threat of Climate Change and Environmental Protection” (IMMESCC) 2024
- Sebhatu, Samuel. (2009). Sustainability Performance Measurement for sustainable organizations: beyond compliance and reporting.
- Sénit, C. 2020. “Leaving No One Behind? The Influence of Civil Society Participation on the Sustainable Development Goals.” *Environment and Planning C: Politics and Space* 38 (4): 693– 712. doi:10.1177/2399654419884330.
- Shah, S. a. A., Lai, F., Shad, M. A., Jan, A. A. (2022b). Developing a Green Governance Framework for the Performance Enhancement of the Oil and Gas Industry. *Sustainability*, 14(7), 3735. <https://doi.org/10.3390/su14073735>
- Sharf, I., Malanina, V., Kamynina, L. (2014, August). Features of the marketing strategy of oil and gas companies in exploration drilling. In *IOP Conference Series: Earth and Environmental Science* (Vol. 21, No. 1, p. 012047). IOP Publishing.
- Shojaeddini, E., Naimoli, S., Ladislaw, S., Bazilian, M. (2019). Oil and gas company strategies regarding the energy transition. *Progress in Energy*, 1(1), 012001. <https://doi.org/10.1088/2516-1083/ab2503>
- Shrivastava, P. 1995, "The role of corporations in achieving ecological sustainability", *Academy of Management Review*, vol. 20, no. 4, pp. 936-960.
- Snyder, H. R. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Soliman, M. M., Azari, M., Ansah, J., Kabir, C. (2005). Review and Application of Short-Term Pressure Transient Testing of Wells. In *All Days*. <https://doi.org/10.2118/93560-ms>
- Sullivan, K. T., Thomas, S., Rosano, M. (2018). Using industrial ecology and strategic management concepts to pursue the Sustainable Development Goals. *Journal of Cleaner Production*, 174, 237– 246. <https://doi.org/10.1016/j.jclepro.2017.10.201>
- United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: United Nations.

Proceedings of the 1<sup>st</sup> Ikatan Mahasiswa Muhammadiyah International Conference on Environmental Sustainability and Climate Change “Achieving A Collective Awareness in General on the Threat of Climate Change and Environmental Protection” (IMMESCC) 2024

Waggoner, D.B., Neely, A.D. and Kennerley, M.P. (1999), “The forces that shape organisational performance measurement systems: an interdisciplinary review”, *International Journal of Production Economics*, Vols 60-61, pp. 53-60.

Whelan, T. (2017, June 1). The Comprehensive Business Case for Sustainability. *Harvard Business Review*. <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability>

Winer, Russell S. (2000), “What Marketing Metrics Are Used by MSI Members?” Report No. 00- 119, Marketing Science Institute

Zhu, Q., Sarkis, J. Lai, K. 2012, "Green supply chain management innovation diffusion and its relationship to organizational improvement: An ecological modernization perspective", *Journal of Engineering and Technology Management*, vol. 29, no. 1, pp. 168-185.