

# Investigating the Effects of Green Transformation Leadership and Institutional Pressure on Corporate Low-Carbon Behavior and Green Performance

Guocheng Zhang

Zibo Vocational Institute, Zibo 255300, China

## Abstract

With the continued development of human society and economy in this century, there has been a sharp increase in energy consumption, and governments around the world are increasingly emphasizing environmental protection. This stern challenge places high demands on the low-carbon behavior and green performance of enterprises. As the concept of "low-carbon" is further implemented, enterprises may be influenced by green leadership from their managers while implementing low-carbon behavior to respond to regulatory pressures. This article hopes to provide new insights for enterprises to enhance their green performance, so as to better help them meet challenges and promote sustainable development.

## Keywords

**Institutional Pressure; Enterprise Low-carbon Behavior; Green Performance; Green Transformational Leadership.**

## 1. Introduction

With the rapid development of society, extensive economic activities have caused significant damage to the ecological environment. In order to reduce the impact of economic activities on the environment, governments and enterprises face multiple pressures. On the other hand, the increasing awareness of environmental protection among consumers has influenced their consumption choices, calling for more action on climate change from governments and enterprises. To limit and regulate economic activities that threaten the environment, governments have formulated various environmental policies and regulations. Enterprises are trying to reduce carbon emissions by adjusting their business practices to comply with regulations and consumer preferences, and to meet changing social expectations. Influenced by stakeholders such as governments, competitors, and consumers, enterprises seek legitimacy in their institutional environment, which can be explained by institutional theory. Institutional theory is commonly used to understand various external factors that compel any organization to initiate or adopt any new practices. Institutional theory emphasizes three types of isomorphic pressures, including coercive pressure, normative pressure, and mimetic pressure [1]. Coercive pressure mainly refers to pressure from the government. Normative pressure refers to pressure from non-governmental organizations and industry associations. Mimetic pressure is pressure from competitors. From the perspective of institutional theory, when organizations face external pressures, they must respond to these pressures, sometimes even taking risks that endanger the survival of the organization [2].

As government and societal pressures increase, and competitors increase their green activities, business leaders will feel increasingly pressured. As a response strategy, leaders adjust their operational strategies to meet the rising green standards [3]. According to the resource-based view theory, leadership is considered a critical resource for organizational environmental management. Among different types of leadership, transformational leadership requires

creating an innovative atmosphere, inspiring and encouraging employee trust or alignment with the leader's vision, thus affecting corporate performance. Among them, leaders who inspire employees' green motivation and provide vision and inspiration for these employees to achieve the company's green goals are called green transformational leaders [4].

The low-carbon behavior of enterprises has enormous potential in managing the relationship between the environment and performance. The concept of Corporate Green Performance (CGP) focuses on introducing new or improving existing products or processes to meet customer expectations for quality and improve environmental performance [5]. To mitigate the environmental challenges posed by production activities, CGP can be linked to green products, processes, and management behaviors. In addition, green innovation is also related to CGP, as enterprises can produce, absorb, or utilize new products and processes through the introduction of new technologies, minimizing environmental problems caused by organizational activities, such as pollution and resource consumption [6].

In summary, although preliminary research has shown that institutional pressure is one of the driving forces behind a company's low-carbon behavior, and a company's green performance also depends on the collective impact of low-carbon behavior in production and management, there is still limited research on the role of a company's low-carbon behavior in the relationship between institutional pressure and green performance. Additionally, considering that business leaders are the main recipients of external pressures, although some research has shown that leaders balance pressures and influence company behavior when setting a vision for the company, there is still limited research on how green transformation leadership affects the relationship between pressure and a company's low-carbon behavior. Therefore, this article aims to explore the above issues.

## **2. The Impact of Institutional Pressure on Low-Carbon Behavior of Enterprises.**

According to institutional theory, the low-carbon behavior of enterprises is not only the result of rational internal decision-making, but also influenced by external norms. Here, external norms mainly refer to the governance, institutions, and supervisory environment constructed by governments, industry associations, competitors, and consumers. These shared cognitions will significantly affect the behavioral decisions of enterprises [7]. In the context of pursuing low-carbon development, external norms are usually seen as a type of pressure, which will force any organization to try adopting any low-carbon behavior to respond to the pressure. Specifically, institutional theory divides pressure into three types: coercive pressure, normative pressure, and mimetic pressure. Under the influence of coercive pressure, enterprises will comply with environmental regulations set and implemented by the government in order to avoid penalties, while also mastering updated pollution control technologies, thereby enhancing their competitiveness [3]. Influenced by normative pressure, enterprises will take measures in line with industry organizations and public standards and requirements to improve their industry reputation and user recognition [1]. Under the influence of mimetic pressure, enterprises will actively seek successful competitors in low-carbon development and make self-adjustments in order to achieve the same success. In summary, coercive pressure, normative pressure, and mimetic pressure all have positive effects on the low-carbon behavior of enterprises.

## **3. The Impact of Institutional Pressure on Corporate Green Performance**

According to institutional theory, the government, competitors, and industry associations can form a common understanding of the rules and regulations, and under such environmental pressure, organizations will be influenced and take actions accordingly. Products and services

under the concept of green performance often consider the impact of environmental factors [2]. Specifically, businesses will provide green products and environmentally friendly services in such an environment. Institutional theory proposes three dimensions of isomorphic pressure: coercive, mimetic, and normative pressure. Coercive pressure is usually related to legitimacy issues, and this dimension of pressure often comes from social or cultural expectations and formal and informal pressures exerted by other organizations, such as the government. These pressures will prompt companies to adopt more environmentally friendly solutions to meet market demand for green products, which also aligns with the pursuit of environmental sustainability, further influencing green performance [5]. Mimetic pressure comes from the organization's perception of uncertainty and competitor success, which can be understood as industry competition threats. These threats often prompt companies to make management or strategic adjustments based on potential competitors to improve organizational sustainability. Green performance of an organization should be understood as organizational performance and be fully considered, continuously improved, and maintained to keep the company in a good competitive position. At the same time, the introduction of green performance can also reduce the company's energy demand and improve its market competitiveness. The implementation of green performance is challenging because sustainability is multidimensional, and people often have different cultural understandings of complex principles and characteristics [6]. On the other hand, the sustainable development of a business must consider maximizing positive environmental impact, maintaining the company's survival, and developing green performance processes in the organization to achieve waste reduction goals. Finally, normative pressure comes from industry standards set by industry associations, as well as regulations from public opinion and media attention, which make companies tend to adopt the same measures to gain legitimacy within the industry [8]. From this perspective, companies' behavior will be more inclined to use environmentally friendly raw materials and equipment, adopt recycling and reuse practices, develop sustainability strategies, enhance social responsibility, and improve leadership and management capabilities from multiple angles to enhance green performance. In conclusion, institutional pressure has a positive impact on the green performance of companies.

#### **4. The Impact of Low-Carbon Behaviors of Enterprises on their Green Performance**

Green performance is a standard used to measure environmental sustainability, and it is also an important means to ensure the sustained competitiveness of businesses. Companies that pursue long-term market performance pay more attention to low-carbon behaviors [9]. A strong awareness of low-carbon encourages companies to participate in low-carbon behaviors. In order to obtain the benefits of low-carbon behavior, companies are continuously striving to improve their organizational structure, management systems, and product design [10]. Based on this, it can be inferred that the low-carbon behavior of companies has a positive impact on green performance.

#### **5. The Impact of Green Leadership on Corporate Low-Carbon Behavior**

Green Transformational Leadership (GTL) is an extension of transformational leadership and consists of four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration [11]. Green transformational leaders inspire and motivate their subordinates to take environmental actions through their idealized charismatic personality. More specifically, leaders with GTL are particularly concerned about environmental issues and motivate their employees to develop voluntary green behaviors to follow and achieve the organization's green goals [4]. According to the ability-motivation-

opportunity theory, GTL can guide employees' green behavior in the organization by sharing their own green goals and leading by example to achieve the organization's environmental sustainability goals. In this respect, the organization's green behavior is influenced by GTL. Advocacy from GTL is also a form of motivational incentive, and the impact of this leadership is to inspire employees to move in the same direction by demonstrating a visionary leadership towards ecological sustainability [12]. This also illustrates the driving role of GTL in the organization's green behavior. Based on this, it can be inferred that GTL has a positive impact on a company's low-carbon behavior.

## 6. Discussion

The traditional production model is often considered the main source of ecological degradation. By practicing low-carbon behavior, businesses can significantly reduce pollution emissions and waste, thereby helping organizations improve their ecological performance. For example, green manufacturing can maximize manufacturing capacity by effectively utilizing resources, ultimately leading to better performance. Similarly, reducing environmental pollution through improving the attributes of remanufacturing and recycling is also one of the goals of low-carbon behavior. In this study, we mainly explore and analyze the influence of institutional pressure on corporate low-carbon behavior and green performance from the perspective of institutional pressure, and analyze the role of green transformation leadership in corporate low-carbon behavior. Through this research, we hope to help businesses respond to pressure challenges rationally and take the correct behavioral measures to maximize corporate performance while improving green performance.

## References

- [1] Chen, X., Yi, N., Zhang, L., & Li, D. (2018). Does institutional pressure foster corporate green innovation? Evidence from China's top 100 companies. *Journal of cleaner production*, 188, 304-311.
- [2] Dubey, R., Gunasekaran, A., & Ali, S. S. (2015). Exploring the relationship between leadership, operational practices, institutional pressures and environmental performance: A framework for green supply chain. *International Journal of Production Economics*, 160, 120-132.
- [3] Zhou, Z., Nie, L., Ji, H., Zeng, H., & Chen, X. (2020). Does a firm's low-carbon awareness promote low-carbon behaviors? Empirical evidence from China. *Journal of Cleaner Production*, 244, 118903.
- [4] Chen, Y. S., Chang, C. H., & Lin, Y. H. (2014). Green transformational leadership and green performance: The mediation effects of green mindfulness and green self-efficacy. *Sustainability*, 6(10), 6604-6621.
- [5] Yang, C. S. (2018). An analysis of institutional pressures, green supply chain management, and green performance in the container shipping context. *Transportation Research Part D: Transport and Environment*, 61, 246-260.
- [6] Zhou, J., Sawyer, L., & Safi, A. (2021). Institutional pressure and green product success: the role of green transformational leadership, green innovation, and green brand image. *Frontiers in Psychology*, 12, 704855.
- [7] Wu, M., Zhang, L., Li, W., & Zhang, C. (2022). How Institutional Pressure Affects Organizational Citizenship Behavior for the Environment: The Moderated Mediation Effect of Green Management Practice. *Sustainability*, 14(19), 12086.
- [8] Bananuka, J., Bakalikwira, L., Nuwagaba, P., & Tumwebaze, Z. (2021). Institutional pressures, environmental management practices, firm characteristics and environmental performance. *Accounting Research Journal*, 34(6), 637-665.
- [9] Wan, B., Tian, L., Zhu, N., Gu, L., & Zhang, G. (2018). A new endogenous growth model for green low-carbon behavior and its comprehensive effects. *Applied Energy*, 230, 1332-1346.

- [10] Li, X., Du, J., & Long, H. (2020). Understanding the green development behavior and performance of industrial enterprises (GDBP-IE): scale development and validation. *International Journal of Environmental Research and Public Health*, 17(5), 1716.
- [11] 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, 107-119.
- [12] Çop, S., Olorunsola, V. O., & Alola, U. V. (2021). Achieving environmental sustainability through green transformational leadership policy: Can green team resilience help?. *Business Strategy and the Environment*, 30(1), 671-682.