

AMURCON 2020
International Scientific Conference**DEVELOPMENT OF ECOPRENEURSHIP IN THE COMPANY:
THE CASE OF TRANSNEFT KOZMINO PORT**

Tatiana Ershova (a)*

*Corresponding author

(a) Vladivostok State University of Economics and Service, 41 Gogolya St., Vladivostok, Russia,
Tatyana.Ershova@vvsu.ru

Abstract

The ecological component is one of the key components of sustainable development. The key condition for ensuring the existence and development of this concept is the involvement of the entrepreneurship. Despite this, ecological entrepreneurship (ecopreneurship) is still a research field with an insufficient degree of development of the theoretical base. The study of factors that hinder or encourage the development of ecopreneurship is one of the most relevant areas. This study focuses on the role of the internal institutional environment in the formation and development of ecopreneurship as a company activity. The case method was used as the research method. The case of Transneft Kozmino Port LLC allowed us to study internal conditions that affect the development of ecopreneurship in the organization. The influence of institutional pillars (regulatory, normative, cognitive) on ecopreneurship as a company's activity is analyzed. We assume ecopreneurship is the type of entrepreneurship for the development of which the accumulation or change of cognitive factors must initially occur, and then normative and regulatory ones. The novelty of the research is the application of institutional theory to explain the prerequisites and barriers to the development of ecopreneurship, which contributes to development of the ecopreneurship concept. The practical significance lies in the possibility of applying the results obtained by companies interested in the development of ecopreneurship as a field of activity, as well as companies engaged in ecopreneurship as the main type of activity. Limitations of the results obtained are due to the method used.

2357-1330 © 2021 Published by European Publisher.

Keywords: Ecological entrepreneurship, ecopreneurship, institutional theory, case study

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

The modern policy of the state and the relevant changes in the legislation of the Russian Federation are aimed at stimulating business activity in the field of environmental protection – ecological entrepreneurship (ecopreneurship). However, the share of Russian companies engaged in ecopreneurship is still low.

The concept of ecological entrepreneurship is in its infancy, most aspects are insufficiently investigated, including the role of external and internal contexts that deter or encourage ecopreneurial intentions (Ershova, 2016). Conducted in Hungary (Györi & Ocsai, 2014), Switzerland (Seidl et al., 2003), Indonesia (Gunawan & Dhewanto, 2012), Bosnia and Herzegovina (Silajdzic et al., 2015), Russia (Ershova & Gafforova, 2018) studies show that the degree of ecopreneurship development depends on the presence or absence of various external and internal driving forces (drivers), triggers, and barriers. It can be assumed that drivers, triggers, and barriers are derived from institutions. Modern institutional theory asserts that institutions consist of cognitive, normative, and regulatory structures and activities that provide stability and meaning to social behaviour (Scott, 1995). The study of institutional conditions of the development of ecological entrepreneurship in conjunction with institutional theory will contribute to ground of the theory and raise the practice of ecopreneurship.

2. Problem Statement

Ecopreneurship is the one of the most potent alternatives for dealing with environmental problems and sustainable development (Panackal et al., 2016).

The development of the ecopreneurship concept is at the emerging stage of the scientific theory, which is characterized by formulating of the open matters, using qualitative methods for the empirical research, and by the assumptions about the development of the theory (Ershova, 2016). The study of factors contributing to the development of ecopreneurship is considered one of the most relevant areas (Ershova & Gafforova, 2018).

Ecopreneurship's studies identified different drivers, triggers and barriers that affect individual ecopreneurs and the level of development of ecopreneurial activity in general. These drivers, triggers and barriers can be both internal and external to the ecopreneur personality.

Researchers identify the following external factors and conditions for the development (drivers):

- Favorable environmental policy at the regional and national level (Pacheco et al., 2010),
- Power (support) of regulators (Al-Saleh & Mahroum, 2015),
- Customer requirements (Seidl et al., 2003),
- Support at the earliest stages of business creation including financial support (Solaja, 2019),
- Government assistance in the form of environmental education and promoting (Gunawan & Dhewanto, 2012).

On the contrary, barriers are the absence or underdevelopment of the listed factors and conditions. Removing any barrier or creating new driver can become a trigger.

Meanwhile external factors such as policies and direct prescriptions of existing legislation will not be as effective as possible without the organization's independent commitment to follow these prescriptions

(Al-Saleh & Mahroum, 2015). It should also be borne in mind that ecopreneurship can be both the main activity of a company (for example, a waste recycling company) and one of the directions of entrepreneurial activity. The first companies from the moment of their creation are ecopreneurial, with the corresponding mission, as well as the motivation of the creators and employees. In the case of existing companies, in our opinion, it is internal institutional factors can serve as the main driving forces for the development of independent solutions aimed at the implementation of ecological projects and the principles of ecopreneurship.

3. Research Questions

Existing research on the internal environment of ecopreneurial companies is mainly focused on the motivation and goals of ecopreneurs (Santini, 2017). But according to (Wennekers & Thurik, 1999), the development of entrepreneurship in any sphere should be understood as a complex institutional process that cannot be reduced to the role and psychology of the entrepreneurial personality. The factors that influence the implementation of the principles of ecological entrepreneurship in the field of sustainable development of the organization are not sufficiently studied (Saleem et al., 2018; Thiong'o, 2020).

3.1. Pro-environmental behavior

The willingness of individual employees to actively engage in pro-environmental behavior (here in after referred to as PEB) that supports the environment is crucial (Wesselink et al., 2017). In the case of PEB that requires self-initiative, managers cannot oblige employees to participate, they can only encourage employees. A firm can fix a number of regulations that require employees to adhere to the organization's ecological policy, but without internal initiative, such methods will be ineffective (Banwo & Du, 2019).

At the same time, the material and normative motivational components should ideally be minimized or completely absent. However, in modern conditions, it is impossible to completely do without fixing the principles of ecological entrepreneurship in a normative manner. If the key factor for the organization's staff to display PEB is strict requirements on the part of the organization, this may lead to a loss of interest, as well as to the development of a confrontational position (Wesselink et al., 2017).

Since there has not yet been enough research to identify a clear link between PEB and the successful implementation of an enterprise's ecopreneurship policy, it can be assumed that factors that influence pro-environmental behavior of employees may also influence the support of the organization's employees for ecopreneurship. This support is, as one might expect, the creation of a special internal environment of the organization named institutional conditions.

3.2. Institutional conditions

Entrepreneurship, regardless of the field, requires certain institutional conditions, so institutional theory can serve as a theoretical foundation for studying various areas of entrepreneurship research (Stenholm et al., 2013). However, it is still not clear how these conditions can be correlated with ecopreneurship. The neo institutional approach proposed by Scott (1995) was chosen as the most relevant

for this work. Scott (1995) identified three main sources of institutions – regulatory, normative, and cognitive.

Regulatory institutions are formal rules that regulate the behaviour of organizations. The functioning of normative institutions is based on rules that introduce prescriptive, evaluative, and binding areas into social life. The explanation of the cognitive approach is not so much related to rules and norms, but rather to differences in the ability to act and perform certain functions. At the same time, people's behavior is influenced by a culture that makes this or that behaviour impossible. The legitimacy of cognitive institutions is related to the consistency of behaviour with culture (Scott, 1995) in contrast to the normative component, which explains what individuals do to get approval and reflects the collective principles of decision-making, cognitive factors are related to individual experiences and beliefs of individuals, who, in turn, are influenced by the culture and traditions that exist in society.

Considering the above, the main research question was formulated as follows: "How do internal institutional conditions affect the formation and development of ecopreneurship as a company activity?"

4. Purpose of the Study

The purpose of this study is to investigate the role of internal institutional conditions on the formation and development of ecopreneurship as a company activity. To achieve this goal, it is necessary to consider the implementation of concepts and methods of ecological entrepreneurship in the internal conditions of organizations, to analyze social institutions, traditions and norms that affect the formation of a predisposition to ecopreneurship in organizations.

5. Research Methods

Given the stage of development of the theory of ecopreneurship and the research question, the most appropriate is the case method (Eisenhardt, 1989). The object of the study is a branch of Transneft – Transneft Kozmino Port LLC. Transneft Kozmino Port is the end of the Eastern Siberia – Pacific Ocean pipeline system. The semi-structure interviews, internal documents of companies, data from external open sources were used as methods and sources of data collection. The interviews were subsequently coded in order to facilitate comparisons and to find a pattern or structure in the data. The data were triangulated by a variety of means and analyzed using the content analysis technique. An abductive approach to data analysis and contextualised explanation are used as a method for theory building.

6. Findings

6.1. The case of Transneft Kozmino Port LLC

Transneft is a Russian natural transport monopoly, an operator of main oil and oil product pipelines, owns 68.4 thousand kilometers of main pipelines and transports 84% of the oil produced in Russia and 26% of the light oil products produced. Transneft Kozmino Port LLC is a part of Transneft, PJSC. The Kozmino oil loading port is designed for receiving oil through a pipeline and transporting it to modern sea vessels.

In the context of continuous work with oil products, ensuring environmental safety is a priority for all organizations of the Transneft system. This is especially true for the port of Kozmino, because its activities affect not only the interests of Russia, but also the countries of the Asia-Pacific region.

To ensure a high degree of environmental safety, the organization has developed a special attitude to preventive measures to protect the environment. The state of the port's water area is monitored by an ecological and analytical laboratory. To protect the atmospheric air from pollution, the port provides for the installation of oil vapor recovery.

The most unusual object for environmental monitoring was the Primorskiy scallop. In 2010, the port of Kozmino created a landfill for growing marine hydrobionts in Kozmin Bay. Over the years, the test site has become an entire mariculture site.

Transneft Kozmino Port LLC has already made significant progress in implementing the principles of ecological entrepreneurship in its activities. First of all, these are large-scale measures to increase production energy efficiency and save energy resources. Transneft is one of the first major companies in the country to implement a comprehensive energy management system in accordance with the international standard ISO50001:2011.

Environmental development is also promoted by the company's internal regulations, which have long adhered to the principles of sustainable development. Social responsibility, labor protection, innovation and increased control over industrial safety-all this, together with increased attention to the environment, creates a favorable environment for the further development of environmental initiatives.

6.2. Case discussion

It is necessary to consider the results of research on the impact of institutional conditions on the formation and development of ecological entrepreneurship as a company's activity in the context of three pillars – regulatory, normative and cognitive.

The regulatory pillar is represented by the external environment, the context of the organization, the impact of economic conditions and existing legal requirements. Given the nature of the organization of Transneft Kozmino Port LLC and the entire structure of Transneft, we can say that the role of the state in General, environmental legislation, environmental policy of the state and local authorities in particular is extremely strong:

"Transneft is a unique project for Russia, so I think we can say to some extent that the laws on oil transportation mainly concern us";

"When implementing various environmental projects, it is necessary to coordinate with regional and Federal authorities."

The results of the study once again confirm that when creating favorable conditions and removing barriers to the development of environmental policy of enterprises, a special role is assigned to the state, represented by the government and other state authorities. Significant changes made in recent years to the environmental legislation of the Russian Federation can be called ecological modernization, but at the moment these changes do not have a significant impact on the activities of enterprises and do not change the existing attitude and approach to environmental policy.

In the normative pillar based on this study, it would like to highlight the role of the administrative apparatus of the enterprise, as well as the established systems of public opinion and formed value systems. There is no doubt that legal acts of an organization are an administrative method of regulation, but in this study, the focus has shifted from documented rules to internal norms of the enterprise, established values and the position of management in relation to ecological policy. For example, interviews often mention the high level of encouragement and support for ecological initiatives on the part of management:

"Our management actively encourages and finances environmental projects";

"Management recognizes the importance of environmental education for employees and the importance of open information about environmental safety activities."

Both in interviews and in the information provided on the company's website and in independent sources (mass media), we can find many references to various ecological projects that have already been implemented and are only planned for implementation.

In the theoretical part of this study, it was noted that the policy of the organization's management apparatus on the degree of approval and implementation of environmental policy has a significant impact on the development of internal institutional conditions of the enterprise. In this context, the main aspect is the cognitive pillar, which will be considered from the point of view of the employee's own opinion, his experience and feelings of the interviewee, as well as from the point of view of all employees of the enterprise.

The effectiveness of efforts to implement the principles of environmental policy in the organization depends not only on the efforts of management, but also on the internal motivation and initiative of employees. This is undoubtedly facilitated by the company's set of measures and documentation, but the importance of personal beliefs cannot be denied. Based on this, Transneft Kozmino Port LLC, management is aware of the importance of human resources and is therefore willing to meet them halfway:

"As you can see, we are trying to make environmental initiatives not something like an "order from above", on the contrary, we are trying to encourage the initiatives of ordinary employees";

"Working together at environmental events helps to improve the atmosphere in the team. Creating a comfortable working environment is also one of our most important tasks. Our management believes that a high level of job satisfaction leads to increased productivity."

A separate pride of the employees is the project on bio monitoring the water area with the help of mariculture-scallop, mussels, kelp and other hydrobionts. The initiative to create the landfill belongs entirely to the employees of Transneft Kozmino Port LLC:

For the branch, this project is a landmark and fundamental in the field of ecological policy. The very fact of its existence indicates a high level of interest in solving environmental problems, as the project at this stage of its development faces a number of legislative problems:

"We have to produce products for sale, otherwise they will take away the allocated water area and there will be no place to conduct bio monitoring. Although the sale of products in itself is a positive phenomenon..."

The willingness of employees to support their project, even despite the existing institutional barriers from the legislation, indicates a high level of motivation of staff, and the approval of the management

apparatus gives hope that in the near future a precedent can be created, according to which the conditions for monitoring the ecological state of reservoirs will be significantly expanded by relevant legal acts.

However, the very existence of this project makes it possible to talk about an internal precedent, when an organization, despite possible legal restrictions, implements a project, creates an institutional precedent in which the cognitive pillar exerts pressure on the normative one, thereby creating completely new norms. This possibility allows us to say that the possibilities of implementing personal motivation of personnel for the implementation of ecological projects have not yet been sufficiently studied and hide a huge potential.

7. Conclusion

The case of Transneft Kozmino Port LLC allowed to study external and internal norms, barriers and motivators (triggers) influencing the development of ecopreneurship factors in the organization. The influence of institutional pillars (regulatory, normative, cognitive) and their components on ecopreneurship as a company activity was analyzed.

The general conclusion is substantiated that ecopreneurship is the type of entrepreneurship for the development of which the accumulation (change) of cognitive factors, and then regulatory and regulatory factors, should initially occur.

The novelty of the study is the application of institutional theory to explain the prerequisites and barriers to the development of ecopreneurship, which contributes to the development of the concept and formation of the theory of ecological entrepreneurship. The practical significance lies in the possibility of applying the results obtained by companies interested in the development of ecopreneurship as a field of activity, as well as companies engaged in ecopreneurship as the main activity.

It is important to emphasize that the results of this study, taking into account the chosen goal and methodology, allow us to make conditional generalizations to the theory, and not to the general population. In addition, it should be taken into account that the study was conducted in a specific area – the transportation of oil and petroleum products, which has virtually no analogues in Russia and is deeply regulated by law. In the future, it is advisable to replicate research on the cases of other enterprises, including in other regions of Russia, in order to obtain more valid results.

Acknowledgments

The author is grateful to Transneft Kozmino Port LLC for participating in the study.

References

- Al-Saleh, Y., & Mahroum, S. (2015). A critical review of the interplay between policy instruments and business models: Greening the built environment a case in point. *Journal of Cleaner Production*, 109, 260-270. <https://doi.org/10.1016/j.jclepro.2014.08.042>
- Banwo, A. O., & Du, J. (2019). Workplace pro-environmental behaviors in small and medium-sized enterprises: an employee level analysis. *Journal of Global Entrepreneurship Research*, 9. <https://doi.org/10.1186/s40497-019-0156-4>
- Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.

- Ershova, T. V. (2016). Ekologicheskoe predprinimatel'stvo: os-novnye napravleniya i etapy razvitiya issledovaniy [Ecological entrepreneurship: main trends and stages of the studies development]. *Vestnik of Saint Petersburg University. Management*, 1, 66–90. [in Russ.].
- Ershova, T., & Gafforova, E. (2018). Institutional Barriers and Ecopreneurship in Russia: The Longitudinal Case of the Recycling Industrial Park. Book of Abstracts. *International Research Conference "GSOM Emerging Markets Conference-2018"*, 162-163.
- Gunawan, A. A., & Dhewanto, W. (2012). Why eco-friendly family business is less popular in Indonesia? *Procedia - Social and Behavioral Sciences*, 57, 61–68. <https://doi.org/10.1016/j.sbspro.2012.09.1158>
- Györi, Z., & Ocsai, A. (2014). Ecologically-oriented enterprises in Hungary. *World Review of Entrepreneurship, Management and Sustainable Development*, 10(1), 52–65.
- Pacheco, D., Dean, T., & Payne, D. (2010). Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development. *Journal of Business Venturing*, 25, 464–480. <https://doi.org/10.1016/j.jbusvent.2009.07.006>
- Panackal, N., Singh, A., & Sharma, A. (2016). Developing a conceptual framework on ecopreneurs and sustainability using ISM and MICMAC methodology. *Nature Environment and Pollution Technology*, 15(4), 1321-1327.
- Saleem, F., Adeel, A., Ali, R., & Hyder, S. (2018). Intentions to adopt ecopreneurship: moderating role of collectivism and altruism. *Entrepreneurship and Sustainability Issues, Entrepreneurship and Sustainability Center*, 6(2), 517-537.
- Santini, C. (2017). Ecopreneurship and ecopreneurs: limits, trends and characteristics. *Sustainability*, 9, 492-503.
- Scott, W. R. (1995). *Institutions and organizations. Ideas, interests and identities*. Sage. <https://doi.org/10.3917/mana.172.0136>
- Seidl, I., Schelske, O., Joshi, J., & Jenny, M. (2003). Entrepreneurship in biodiversity conservation and regional Development. *Entrepreneurship & Regional Development: An International Journal*, 15(4), 333–350.
- Silajdzic, I., Kurtagic, S. M., & Vucijak, B. (2015). Green Entrepreneurship in transition economies: A case study of Bosnia and Herzegovina. *Journal of Cleaner Production*, 88, 376–384. <https://doi.org/10.1016/j.jclepro.2014.07.004>
- Solaja, O. M. (2019). Challenges and prospects of small and medium ecopreneurs (SMEcos) in contemporary Nigerian circular economy. *Recycling and Sustainable Development*, 12, 1-11. <https://doi.org/10.5937/ror1901001S>
- Stenholm, P., Acs, Z. J., & Wuebker, R. (2013). Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing*, 28(1), 176–193.
- Thiong'o, W. (2020). Drivers of women ecopreneurship: A review of literature. *International Journal of Science and Research*, 9(4), 1046-1050. <https://doi.org/10.21275/SR20412012833>
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), 27-55. <https://doi.org/10.1023/A:1008063200484>
- Wesselink, R., Blok, V., & Ringersma, J. (2017). Pro-environmental behaviour in the workplace and the role of managers and organisation. *Journal of Cleaner Production*, 168, 1679-1687. <https://doi.org/10.1016/j.jclepro.2017.08.214>