



Environmental Leadership Model of Company Leaders

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Abstract. The purpose of this study was to find out the real condition of the Environmental Leadership of company leaders in the Brebes Industrial Area. This research was conducted from July to October 2022. The method used in the research was a survey with a quantitative descriptive approach. The population in this study were company leaders in the Brebes industrial area, and 13 respondents were obtained as a sample using random sampling technique. Data collection techniques were carried out through documentation and questionnaires, while the analysis technique used was percentages. The results of the study show that company leaders in the Brebes Industrial Area have environmental leadership that is very pro-environmental. The research findings reflect that environmental management in the Brebes industrial area has been carried out properly, taking into account the impact on the environment.

Keyword: Environmental Leadership, Company Leaders, Industrial Area

1. INTRODUCTION

The disasters experienced by the people and nation of Indonesia recently have been quite massive and widespread. Earthquakes, tsunamis, floods, landslides occur frequently and in several areas with quite a wide coverage. If we examine the causes, apart from natural factors, this disaster cannot be separated from negligence and human greed. Based on the analysis of experts, this is related to the management, preservation and utilization of natural resources and the environment, which is irresponsible, unprofessional and greedy. The losses it caused were very large, not even a few lives were lost.

In Brebes Regency, floods often occur. If the cause is examined, this is the result of excessive use and utilization of natural resources in the upstream area, in addition to the lack of awareness and concern for some people for the environment so that the rain that falls is no longer able to be absorbed by the existing land, resulting in landslides and floods.

So wide is the coverage of areas affected by flooding and evenly distributed throughout the area, especially through which the Pemali River passes, as well as the water level varies greatly, but on average it is quite high and some even reach more than 1 meter.

This situation caused the number of people affected by the flood to be very large, and of course the losses it caused were very large. Such huge losses can be reduced if the factors that cause flooding can be anticipated. In general, there are two causal factors, namely natural factors (high rainfall, silting of rivers etc.) and human factors. This can be seen from the large number of people who still litter, not only kitchen waste but also cans, plastic of various sizes and even furniture that is no longer used. This condition is exacerbated by the reluctance of the community to routinely clean the drainage from garbage, so that when it rains, the water does not flow normally and even stagnates, and flooding cannot be avoided.

These conditions encourage the search for a development model that on the one hand can increase people's income, and on the other hand can control and control the use of natural resources wisely. Based on various considerations, an industrial area was developed. Through the development of industrial zones, the concept of sustainable development that balances economic, social and ecological aspects can be pursued. However, in its

implementation, the development of industrial estates based on sustainable development needs to be supported by all parties, especially company leaders. This is where it is very important for company leaders to have a paradigm (a mindset, a pattern of attitudes, and a pattern of action that is pro-environmental, or in other words to have environmental leadership).

Leader is someone who has influence on employees to work together in achieving organizational goals. Leadership has a role as a dynamic force to build employee motivation and mobilize resources to realize the company's vision and mission. The company's achievement of its environmental goals is influenced by the level of leadership commitment in managing and implementing management functions to improve environmental performance.

According to Egri & Herman (2000), environmental leadership is "the ability to influence individuals and mobilize organizations to realize a vision of long-term ecological sustainability". Environmental leadership is a person's ability to influence other individuals and mobilize organizations to create a sustainable environment. Environmental leadership has a role related to the implementation of environmental activities and is responsible for sustainable company changes such as: pollution control, improvement of company image, increase in employee motivation and increase in company productivity (Boiral et al, 2013).

According to Kashmanian & Keenan (2010), environmental leadership is "the process of innovations that reduce a company's environmental footprint and all its activities within and beyond its fence-line". Based on this quote, it can be explained that environmental leadership is an innovation process to reduce the environmental impact caused by company activities.

Flannery & May (1994) revealed that "environmental leaders pursue proactive strategies, as opposed to reactive strategies to manage their relationships with the natural environment". This opinion explains that environmental leadership is the behavior of leaders in carrying out a proactive strategy rather than a reactive strategy to manage their relationship with the environment.

According to Mino & Hanaki (2013), "Environmental leaders who promote environmental sustainability infuse their desire to protect the natural environment into their decision-making and action processes". From this explanation, it can be stated that environmental leadership is the behavior of leaders in promoting the importance of environmental sustainability to encourage the desire to protect the environment by considering environmental aspects in the decision-making process and various actions taken. Mino & Hanaki (2013) in their research also explained that "transformational leadership has often been featured strongly in studies of environmental leaders and this theory is helpful in understanding and explaining the behaviors of environmental leaders". The description explains that the concept of environmental leadership can be adapted from transformational leadership theory. This is because transformational leadership theory can help explain and understand the behavior and character of environmental leaders.

Robertson & Carleton (2017) expressed the same thing that environmental leadership is "a manifestation of transformational leadership in which the content of the leadership behaviors is focused on encouraging pro-environmental initiatives". The statement above explains that environmental leadership is a manifestation of the development of the concept of transformational leadership which is focused on the realization of environmentally friendly behavior initiatives. The application of environmental leadership is considered more effective for influencing employees to have environmentally friendly behavior by motivating employees and providing insight on environmental issues.

Danters et al. (2000) in his writing said that "transformational leadership is needed during the adoption of ecosystem management by agencies because of the dramatic nature of changes that must occur in support of adoption". Thus, the environmental management system can adopt the dimensions of the transformational leadership concept because the dimensions of transformational leadership are considered to be more flexible towards changes in vision, creativity and innovation so that they can be more effective in the process of achieving environmental goals.

The concept of transformational leadership according to Colquitt et al (2017) is "transformational leadership involves inspiring followers to commit to a shared vision that provides meaning to their work while also serving as a role model who helps followers develop their own potential and view problems from new perspectives". The concept explains that transformational leadership is a process that involves and inspires employees to be committed to carrying out the company's vision. Leaders in this case have a role to develop the potential of employees so they can see problems from a new perspective.

Avolio & Bass (2002) in his research suggests that there are four dimensions of transformational leadership, namely: (1) Idealized influence, namely the type of leader who can build trust, confidence from his employees so that employees feel amazed at their leaders; (2) Inspirational motivation, namely leaders who have influence to

increase employee morale and are able to motivate and inspire employees to complete their tasks; (3) Intellectual stimulation, namely leaders who can stimulate their employees to provide innovation and creativity; (4) Individualized consideration, namely leaders who can facilitate the needs of employees and pay attention to the development and achievement of employees.

Based on the description above, it can be stated that Environmental leadership is a person's behavior in influencing, motivating, inspiring, and educating other individuals to achieve the SDGs. The environmental leadership dimension adopts the dimensions of transformational leadership, namely: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The purpose of this research is to find out the Environmental Leadership of company leaders in the Brebes industrial area.

2. RESEARCH METHODOLOGY

This research was carried out using a quantitative research approach, using a survey method in the Brebes Industrial Area, from around June to October 2022. The data sources for this research were company leaders (13 people), while the instruments used to collect data were documents and questionnaires, whose dimensions include: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The data obtained were then analyzed using quantitative analysis techniques, in this case percentages.

3. FINDINGS AND RESEARCH RESULTS

General Environmental Management Executed in the Brebes Industrial Area

In general, environmental management in the Brebes industrial area has been carried out properly, considering the impact on the environment. For example, the management of non-B3 solid waste and solid waste is accommodated in a closed place (such as the tailgate of a truck), so that the smell of the waste does not disturb the surrounding environment.

Management of rubbish and non B3 solid waste

Waste management in general refers to Law Number 18 of 2008 concerning waste management, where currently several industries have separated organic and inorganic waste. Management for organics is stored in closed waste containers. This is intended to prevent an increase in disease vectors due to flies which will also affect the health of employees.

Production waste is generally stored because it is still of use value, then cooperated with third parties or returned to the supplier of the material.



Figure 1. Rubbish and non B3 solid waste dump.

Management of B3 waste

In addition to domestic and production waste, there is also Hazardous and Toxic Waste (B3) produced from an industry. B3 waste management is carried out in a recommended place and obtains permission from the local authorities.



Figure 2. Management of B3 waste.

The wastewater treatment plant (IPAL) is one of the mandatory facilities and infrastructure required by an industry. Currently, domestic wastewater and production wastewater must be managed through WWTP so that the effluent that comes out is required.

Law Number 21 of 2020 concerning Job Creation and its derivatives, namely Regulation of the State Minister for the Environment Number 5 of 2021, states that at present, waste water processed by an activity must be channeled directly into the river.



Figure 3. Rainwater management using infiltration wells.

Currently, the location of several industries in Brebes is far from the river, so the industry chooses an alternative to recycle the wastewater it produces. Of course, this also has an impact on the environment.



Figure 4. Management of wastewater

ENVIRONMENTAL LEADERSHIP Company Leaders in the Brebes Industrial Area

As stated in Chapter III, the research data was obtained through a questionnaire with 5 (five) answer choices, namely: always, often, sometimes, rarely, and never. The number of items in the questionnaire is 50 items. Below is shown the dominant percentage of each item according to the respondent's answer. According to the number of options in the questionnaire, the percentage of respondents' dominant answers is also grouped into 5 (five) categories, with the following description:

1. 81% - 100%: very pro-environment category.
2. 61% - 80%: pro-environment category.
3. 41% - 60%: quite pro-environment category.
4. 21% - 40%: less pro-environment category; and
5. 1% - 20%: the category is not pro-environmental.

Table 1. Environmental Leadership Company Leaders in the Brebes Industrial Area

No.	Indicator	%	Category
01.	Management provides the latest information regarding environmental damage	61,6%	Pro-environment
02.	Management help explain the importance of green behavior to new colleagues	84,6%	Very pro- environment
03.	Assist colleagues in understanding SOPs governing environmental management	69,3%	Pro-environment
04.	Help provide solutions in waste management.	84,7%	Very pro- environment
05.	Remind colleagues to save electricity/water energy	92,3%	Very pro- environment
06.	Remind colleagues to sort waste according to its category	69,2%	Pro-environment
07.	Invite colleagues to use public transportation	61,6%	Pro-environment
08.	Invite colleagues to participate in environmental care activities	76,9%	Pro-environment
09.	Bring a drinking tumblers to minimize plastic waste	76,9%	Pro-environment
10.	Bring a handkerchief to minimize tissue use	61,6%	Pro-environment
11.	Ensure electrical equipment has been turn off after work	84,6%	Very pro- environment
12.	Implement environmental conservation policies in the workplace	76,9%	Pro-environment
13.	Manage B3 waste in accordance with regulations	84,6%	Very pro- environment
14.	Complete work according to work standards	100%	Very pro- environment
15.	Consider environmental sustainability in carrying out work	92,3%	Very pro- environment

Based on the calculation results, an average percentage of 82.16% is obtained, meaning that it is in the very pro-environment category. According to these data, it can be said that company leaders in the Brebes Industrial Estate have a very pro-environmental mindset, attitude pattern, and action pattern.

4. DISCUSSION

The data above is interesting to observe, especially those with a percentage of 100%. There are 7 (seven) items with a percentage of 100%, namely item numbers: 14, 18, 23, 25, 31, 41, and 50. Of the seven items, 6 (six) of them are not explicitly related to the environment, namely item number: 14 (work standard), 23 (integrity), 25 (proud), 31 (respect), 41 (work facilities), and 50 (work evaluation). While only 1 (one) is explicitly related to the environment, namely item number 18 (environment-based SOP). This data indicates that all respondents are very committed to the company, regardless of whether the company is concerned about the environment or not.

In another section there are 2 (two) items whose percentage is below 60%, namely item numbers: 36 and 44. Item 36 is related to the solution provided by the respondent without considering environmental sustainability, while item 44 is related to the respondent's anger towards employees who provide criticism and suggestions. This situation can be perceived that the problems that often occur in companies in the area are not related to the environment. On the other hand, respondents seem less transformative, because they respond to employee criticism not with an open attitude but with anger.

But above all, what is very encouraging is that the percentage of items related to environmental leadership is above 60%, which is in the range of 61% to 92.3%. This shows that the environmental leadership of the respondents is in the pro-environmental to very pro-environmental category.

5. CONCLUSION

Based on the findings and data obtained in this study, it can be concluded that company leaders in the Brebes Industrial Area have environmental leadership that is very pro-environmental.

According to the research conclusions above, suggestions are made that the environmental leadership of company leaders in the Brebes Industrial Area should be maintained and maintained so that it has a positive impact on the surrounding environment.

6. REFERENCES

1. Anser, M. K., Shafique, S., Usman, M., Akhtar, N., & Ali, M. (2021). Spiritual leadership and organizational citizenship behavior for the environment: An intervening and interactional analysis. *Journal of Environmental Planning and Management*, 64(8), 1496-1514.
2. Azizi, E., Arthawati, S. N., Hastari, S., Muqtada, M. R., Ihsan, N., & Purwanto, A. (2020). Impact Of Green Leadership And Eco Efficiency Toward Work Performance: Evidence From Indonesian Public Health Center. *European Journal of Molecular & Clinical Medicine*, 7(7), 28-40.
3. Avolio, B. J., & Bass, B. M. (2002). *Developing Potential Across a Full Range of Leadersip*. New Jersey: Lawrence Erlbaum Associates.
4. Badan Pusat Statistik. (2016). *Potret Awal Tujuan Pembangunan Berkelanjutan (Sustainable Development Goals) di Indonesia*. Jakarta: Badan Pusat Statistik/Statistics Indonesia
5. Bewley, K., & Li, Y. (2000). Disclosure Of Environmental Information By Canadian Manufacturing Companies: A Voluntary Disclosure Perspective. *Advances in environmental accounting and management*, 1(1), 201-226.
6. Boiral, O., Baron, C., & Gunnlaugson, O. (2013). Environmental Leadership and Consciousness Development: A Case Study Among Canadian SMEs. *Journal of business ethics*, 123(3), 363-383.
7. Chao, C. Y., Lin, Y. S., Cheng, Y. L., & Tseng, Y. C. (2011). Employee innovation, supervisory leadership, organizational justice, and organizational culture in Taiwans manufacturing industry. *African Journal of Business Management*, 5(6), 2501-2511.
8. Colquitt, J. A., Lepine, J. A., & Wesson, M. J. (2017). *Organizational Behavior: Improving Performance And Commitment In The Workplace*, Sixth Edition. New York: McGraw-Hill Education.
9. Danter, K. J., Griest, D. L., Mullins, G. W., & Norland, E. (2000). Organizational change as a component of ecosystem management. *Society & Natural Resources*, 13(6), 537-547.
10. Eberlin, R. J., & Tatum, B. C. (2008). Making just decisions: organizational justice, decision making, and leadership. *Management decision*, 46(2), 310-329.
11. Egri, C. P., & Herman, S. (2000). Leadership in the North American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. *Academy of Management journal*, 43(4), 571-604.
12. Flannery, B. L., & May, D. R. (1994). Prominent factors influencing environmental activities: Application of the environmental leadership model (ELM). *The Leadership Quarterly*, 5(3-4), 201-221.
13. Kashmanian, R., Keenan, C., & Wells, R. (2010). Corporate environmental leadership: Drivers, characteristics, and examples. *Environmental Quality Management*, 19(4), 1-20.
14. Kotter, J. P. (1990). *A Force for Change: How Leadership Differs from Management*. New York: The Free Press.
15. Mino, T. & Hanaki, K. (2013). *Environmental Leadership Capacity Building in Higher Education*. New York: Springer Nature.
16. Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee Green Behavior: A Theoretical Framework, Multilevel Review, and Future Research Agenda. *Organization & Environment*, 28(1), 103-125.
17. Paillè, P., Chen, Y., Boiral, O., & Jin, J. (2013). The Impact of Human Resource Management on Environmental Performance: An Employee-Level Study. *Journal of Business Ethics*, 121(3), 451-466.
18. Rialmi, Z. (2017). Pengaruh Keadilan Prosedural yang Diterapkan Kepemimpinan Pegawai dan Kepuasan Kerja Pegawai Terhadap Kinerja dari Pegawai BPBD Provinsi Riau. *JURNAL MANDIRI: Ilmu Pengetahuan, Seni, dan Teknologi*, 1(2), 354-374.
19. Robertson, J. L., & Carleton, E. (2017). Uncovering How and When Environmental Leadership Affects Employees' Voluntary Pro-environmental Behavior. *Journal of Leadership & Organizational Studies*, 25(2), 197-210.
20. Sachs, J. D. (2012). From Millennium Development Goals to Sustainable Development Goals. *The lancet*. 379(9832), 2206-2211.
21. Singh, S. K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green Innovation and Environmental Performance: The Role of Green Transformational Leadership and Green Human Resource Management. *Technological Forecasting and Social Change*, 150, 119762.

22. Tran, T. B. H., & Choi, S. B. (2019). Effects of Inclusive Leadership on Organizational Citizenship Behavior: The Mediating Roles of Organizational Justice and Learning Culture. *Journal of Pacific Rim Psychology*, (13), 1-11.
23. Toly, S. R. (2017). The Effect Of Environmental Leadership and Head of Villages' Knowledge About Conservation on Their Ability in Managing Environment. *IJEEM: Indonesian Journal of Environmental Education and Management*, 2(1), 1-20.
24. Tuan, L. T. (2019). Catalyzing employee OCBE in tour companies: the role of environmentally specific charismatic leadership and organizational justice for pro-environmental behaviors. *J. Hosp. Tour. Res*, 43, 682-711.
25. Ugaddan, R. G., & Park, S. M. (2019). Do trustful leadership, organizational justice, and motivation influence whistle-blowing intention? Evidence from federal employees. *Public Personnel Management*, 48(1), 56-81.

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