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## From love for nature to sustainable value creation: A Gioia-based study of ecopreneurial transformation in SMEs

Indra Lukmana Putra<sup>1\*</sup>, Sudarmiatin<sup>2</sup>, Agus Hermawan<sup>3</sup>, Wening Patmi Rahayu<sup>4</sup>

<sup>1 2 3 4</sup> Universitas Negeri Malang, Malang, Indonesia

\*Corresponding Author: [indra.lukmana.2604139@students.um.ac.id](mailto:indra.lukmana.2604139@students.um.ac.id)

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### Abstract

Small and medium-sized enterprises (SMEs) face increasing pressure to create economic value without intensifying environmental problems, yet the process through which ecological concern becomes entrepreneurial action remains insufficiently understood. This study aims to examine how love for nature develops into an ecopreneurial orientation, translates into green business innovation, and generates sustainable value. An exploratory qualitative approach was employed with 27 informants involved in seven groups of green businesses in East Java, Indonesia, using the Gioia methodology for data analysis. The findings indicate that ecopreneurship develops through ecological orientation, entrepreneurial translation, and value creation and change. This process transforms *Love for Nature* into *Ecological Values*, *Ecopreneurial Motivation*, *Green Business Innovation*, *Community Value Creation*, and *Sustainable Change*. The study contributes an *Ecopreneurship Transformation Model* that positions ecological concern as the foundation for creating economic, social, and environmental value through entrepreneurial action.

**Keywords:** Ecopreneurship; *Love for nature*; *Green business innovation*; *Community value creation*; *Sustainable change*.

### Abstrak

Usaha Mikro, Kecil, dan Menengah (UMKM) menghadapi tuntutan untuk menghasilkan nilai ekonomi tanpa memperbesar tekanan terhadap lingkungan, tetapi proses yang mengubah kepedulian ekologis menjadi tindakan kewirausahaan masih kurang dipahami. Penelitian ini bertujuan menganalisis bagaimana kecintaan terhadap alam berkembang menjadi orientasi ecopreneurship, diterjemahkan ke dalam inovasi bisnis hijau, dan menghasilkan nilai berkelanjutan. Penelitian menggunakan pendekatan kualitatif eksploratif terhadap 27 informan yang terlibat dalam tujuh kelompok usaha hijau di Jawa Timur, dengan analisis data menggunakan *Gioia methodology*. Hasil penelitian menunjukkan bahwa ecopreneurship berlangsung melalui rangkaian orientasi ekologis, penerjemahan kewirausahaan, serta penciptaan nilai dan perubahan. Proses tersebut membentuk transformasi dari *Love for Nature* menuju *Ecological Values*, *Ecopreneurial Motivation*, *Green Business Innovation*, *Community Value Creation*, dan *Sustainable Change*. Penelitian ini menghasilkan *Ecopreneurship Transformation Model* yang menempatkan kepedulian ekologis sebagai fondasi penciptaan nilai ekonomi, sosial, dan lingkungan secara berkelanjutan.

**Kata Kunci:** Ecopreneurship; *Kecintaan terhadap alam*; *Inovasi bisnis hijau*; *Penciptaan nilai komunitas*; *Perubahan berkelanjutan*.

## Introduction

Small and medium-sized enterprises (SMEs) face pressure to pursue growth without exacerbating environmental problems. Green SMEs respond to this pressure by incorporating ecological considerations into their products, operations, supply chains, waste management, and resource use. Omowole et al. (2024) explain green business practices in SMEs as a mechanism for aligning business activities with sustainable development, while Odeyemi et al. (2023) emphasize their potential to reduce environmental impacts. This transformation is important because SMEs are not merely recipients of the sustainability agenda; their relatively flexible structures enable them to experiment with new practices and markets. Tereshchenko et al. (2023) also demonstrate that SMEs contribute to *eco-innovation* through activities such as recycling, reuse, renewable energy, and waste reduction. Thus, the issue is no longer whether SMEs can act ecologically, but how ecological concern becomes embedded in entrepreneurial decision-making.

This challenge becomes more complex because SMEs must pursue green transformation under conditions of limited resources and capabilities. Access to financing, technology, managerial competencies, regulation, and market acceptance can determine whether ecological intentions are actually translated into sustainable business practices (Herhan & Bakhri, 2026). Ogunyemi and Ishola (2024) emphasize financing and business development as important conditions for SMEs' competitiveness and environmental sustainability, while Manoharan et al. (2024) show that the development of *green entrepreneurship* is influenced by organizational and environmental contextual factors. Thekkootte (2022) also demonstrates that integrating *lean*, *green*, and sustainability practices can improve operational performance. However, resources alone do not fully explain why some entrepreneurs continue to pursue ecological transformation despite various constraints. A more fundamental issue concerns the internal orientation that leads entrepreneurs to regard ecological responsibility as part of their entrepreneurial decisions and actions.

Ecopreneurship provides a perspective for understanding this orientation because it connects entrepreneurial action with ecological responsibility and value creation. In SMEs, *green marketing* and sustainable supply chain practices can strengthen business positions in responding to environmental demands, as demonstrated by Oyeyemi et al. (2024). Khatun et al. (2024) show that digital transformation can support *green entrepreneurship* and sustainable development, while green technologies and innovation can improve environmental performance when appropriately implemented (Omri & Al-Qasir, 2025). Gul et al. (2025) also demonstrate that green entrepreneurial orientation can connect innovative business models with social value creation. However, these approaches primarily explain how practices and innovations generate sustainability outcomes. What remains insufficiently understood is the

process that precedes them: how entrepreneurs develop an ecological orientation before translating it into innovation and business action. This process requires greater attention to the values and meanings that entrepreneurs attach to nature.

Research on *green entrepreneurship* has examined business practices, innovation, and sustainability orientation. Omowole et al. (2024) demonstrate the importance of *green business practices* in SMEs, but do not examine in depth how entrepreneurs' ecological orientation develops. Tereshchenko et al. (2023) identify various sustainability practices and *eco-innovation* opportunities among SMEs, yet do not explain how ecological opportunities come to be understood as part of an entrepreneurial orientation. Rodgers (2010) demonstrates that sustainability can be integrated into organizational identity and practices in SMEs, while Nuringsih and Mn (2021) highlight the relevance of *green entrepreneurship* to economic sustainability and younger generations. However, these lines of research do not specifically explain how attachment to nature develops into an entrepreneurial drive. Planet Patrol (2020) further illustrates how *upcycling* practices can transform perceptions of used goods, but does not explain the conceptual process connecting such perceptual change to an ecopreneurial orientation.

This study aims to explain how *love for nature* develops into an ecopreneurial orientation, how this orientation is translated into *green SME* practices, and how the process generates economic, social, and ecological value. This focus is important because green transformation cannot be adequately explained through financing, technology, efficiency, or market strategies alone. These factors explain the conditions that enable action, but they do not fully explain the underlying orientation that directs such action. Putra et al. (2026) demonstrate that innovation can translate ecological values into sustainable practices and outcomes, but the process preceding this translation still requires attention. This study therefore places *love for nature* at the starting point of the analysis rather than treating it merely as an environmental attitude. Its urgency lies in understanding how ecological concern becomes translated into concrete entrepreneurial decisions, particularly among SMEs that must pursue sustainability while maintaining business viability.

## Method

This study employed an exploratory qualitative approach to understand how *love for nature* develops into an ecopreneurial orientation, how green business practices are implemented, and how these activities encourage entrepreneurs to become agents of sustainable change. The study was conducted in East Java Province, Indonesia, involving 27 informants selected through *purposive sampling*. The informants included SME owners and managers, *social enterprise* practitioners, community managers, environmental activists, educators, and entrepreneurs directly involved in environmentally oriented activities. The activities examined included *waste processing*,

*upcycling, waste banks, environmental organizations, waste-based crafts, ecotourism, and flower-related businesses.* Informants were selected based on their direct involvement in business activities, experience with environmental issues, understanding of value creation, and willingness to share their experiences, motivations, practices, and challenges. The informant profiles are presented in Table 1.

Table 1. Informant profiles

| Code | Main Activity                     | Role                  | Experience | Dominant Themes |
|------|-----------------------------------|-----------------------|------------|-----------------|
| P01  | <i>Waste processing</i>           | Entrepreneur          | 7 years    | EV, GI          |
| P02  | <i>Waste processing</i>           | Owner                 | 5 years    | EM, MVC         |
| P03  | <i>Organic waste</i>              | Entrepreneur          | 6 years    | EM, GI          |
| P04  | <i>Waste-based craft</i>          | Entrepreneur          | 4 years    | LN, GI          |
| P05  | <i>Waste bank</i>                 | Manager               | 8 years    | EV, CVC         |
| P06  | <i>Upcycling</i>                  | Entrepreneur          | 5 years    | LN, GI          |
| P07  | <i>Upcycling</i>                  | Designer/entrepreneur | 6 years    | GI, MVC         |
| P08  | <i>Waste bank</i>                 | Manager               | 7 years    | EV, CVC         |
| P09  | <i>Waste bank</i>                 | Coordinator           | 6 years    | CVC, SC         |
| P10  | <i>Recycled products</i>          | Entrepreneur          | 4 years    | GI, MVC         |
| P11  | <i>Environmental organization</i> | Activist              | 9 years    | LN, EV, SC      |
| P12  | <i>Environmental organization</i> | Member                | 5 years    | EV, SC          |
| P13  | <i>Environmental organization</i> | Educator              | 7 years    | CVC, SC         |
| P14  | <i>Waste bank</i>                 | Coordinator           | 8 years    | EM, CVC         |
| P15  | <i>Waste processing</i>           | Entrepreneur          | 10 years   | EV, EM          |
| P16  | <i>Waste-based craft</i>          | Entrepreneur          | 5 years    | GI              |
| P17  | <i>Community enterprise</i>       | Entrepreneur          | 6 years    | MVC, CVC        |
| P18  | <i>Ecotourism</i>                 | Entrepreneur          | 7 years    | LN, EV          |
| P19  | <i>Ecotourism</i>                 | Manager               | 8 years    | LN, SC          |
| P20  | <i>Flower business</i>            | Entrepreneur          | 6 years    | LN, EV          |
| P21  | <i>Sustainable products</i>       | Entrepreneur          | 5 years    | GI, SC          |
| P22  | <i>Environmental business</i>     | Entrepreneur          | 7 years    | SC, MVC         |
| P23  | <i>Waste processing</i>           | Entrepreneur          | 9 years    | EM, GI          |
| P24  | <i>Flower-based business</i>      | Entrepreneur          | 4 years    | EV, MVC         |

|     |                      |              |          |             |
|-----|----------------------|--------------|----------|-------------|
| P25 | Waste management     | Entrepreneur | 8 years  | CVC, SC     |
| P26 | Sustainable business | Entrepreneur | 6 years  | GI, MVC     |
| P27 | Upcycling            | Entrepreneur | 10 years | LN, SC, MVC |

Note: LN = Love for Nature; EV = Ecological Values; EM = Ecopreneurial Motivation; GI = Green Business Innovation; MVC = Multiple Value Creation; CVC = Community Value Creation; SC = Sustainable Change.

Source: Developed by the Author (2026).

Data were analyzed using *Gioia methodology* to develop a conceptual understanding grounded in empirical data. Gioia (2021) emphasizes the importance of maintaining closeness to informants' experiences during the initial stage of analysis before abstracting the data to a conceptual level. The analysis was conducted through three levels of abstraction: *first-order concepts*, *second-order themes*, and *aggregate dimensions*. *First-order concepts* retain the language and experiences of informants, whereas *second-order themes* interpret these patterns at a more conceptual level. Subsequently, interconnected themes were integrated into *aggregate dimensions* to form the analytical structure of the study. Kressmann and Mueller-Seeger (2025) emphasize that this inductive approach can strengthen rigor while maintaining the connection between empirical data and theoretical abstraction. The research framework was used as an initial guide to explore the relationship between ecological orientation, entrepreneurial practices, and sustainable change without establishing the resulting model before the analysis. This exploratory relationship is visualized in Figure 1, which positions ecological issues, entrepreneurial orientation, green business practices, value creation, and sustainable change as the main contexts of the study.

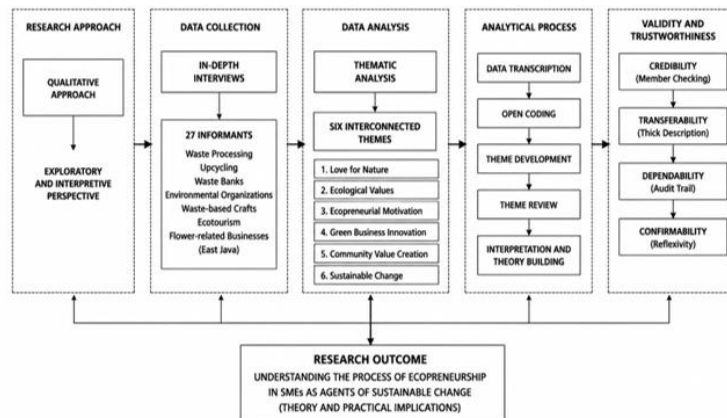


Figure 1. Research framework

Source: Developed by the Author (2026).

The subsequent analysis process involved comparing, grouping, and abstracting concepts emerging from the informants' experiences to ensure that the conceptual structure remained grounded in the data. The analysis was not intended to test causal relationships but to explain process patterns emerging from the diverse experiences of ecopreneurs and environmental actors. This process produced six *aggregate dimensions*

that formed the basis for presenting the findings in the Results section. These dimensions were then connected with second-order themes to explain how ecological orientation is translated into entrepreneurial action, value creation, community engagement, and sustainable change. This analytical structure also provided the basis for developing the *Ecopreneurship Transformation Model* in the Discussion section. Thus, the analytical method connects empirical data, the Gioia structure, and the conceptual development of the study systematically without claiming statistical relationships among the dimensions.

## Results and Discussion

### From emotional connection with nature to green entrepreneurial orientation

Ecopreneurship in the context of this study refers to entrepreneurial activities that integrate environmental concern into processes of economic and social value creation. Across the various business activities undertaken by the informants, this orientation appeared to develop through an interconnected sequence of experiences and actions, beginning with connection with nature, the formation of ecological values, and the emergence of motivation to address environmental problems, followed by the development of business innovation, value creation with communities, and the emergence of more sustainable forms of change. This sequence subsequently formed six aggregate dimensions that constitute the main thematic structure for understanding the ecopreneurship process in this study. The relationships among concepts derived from the informants' experiences, second-order themes, and the six aggregate dimensions are presented in Table 2.

Table 2. Gioia-style data structure

| First-Order Concepts                   | Second-Order Themes      | Aggregate Dimensions      |
|----------------------------------------|--------------------------|---------------------------|
| Emotional attachment to nature         | Connection with Nature   | Love for Nature           |
| Personal experiences with nature       |                          |                           |
| Desire to protect nature               |                          |                           |
| Environmental concern                  | Ecological Consciousness | Ecological Values         |
| Ecological awareness                   |                          |                           |
| Environmental responsibility           |                          |                           |
| Desire to solve environmental problems | Environmental Purpose    | Ecopreneurial Motivation  |
| Recognition of green opportunities     | Opportunity Recognition  |                           |
| Desire to create positive impact       |                          |                           |
| Viewing waste as a resource            | Ecological Reframing     | Green Business Innovation |
| Waste transformation                   |                          |                           |

|                                    |                           |                    |       |
|------------------------------------|---------------------------|--------------------|-------|
| Recycling and upcycling            | Circular Innovation       |                    |       |
| Product creativity                 |                           |                    |       |
| Process innovation                 |                           |                    |       |
| Community involvement              | Community Engagement      | Community Creation | Value |
| Environmental education            | Environmental Empowerment |                    |       |
| Social value creation              | Multiple Value Creation   |                    |       |
| Economic opportunities             |                           |                    |       |
| Changing waste behavior            | Behavioral Transformation | Sustainable Change |       |
| Changing environmental perceptions | Mindset Transformation    |                    |       |
| Influencing communities            | Change Agency             |                    |       |
| Long-term environmental impact     | Sustainable Impact        |                    |       |

Source: Developed by the Author (2026).

The structure presented in Table 2 shows that the various concrete experiences described by the informants do not remain as individual codes but form broader patterns through second-order themes and are subsequently consolidated into six aggregate dimensions. These six dimensions reveal two main sequences of findings. The first three dimensions, namely Love for Nature, Ecological Values, and Ecopreneurial Motivation, describe how an ecopreneurial orientation develops from connection with nature, ecological values, and the motivation to act. The subsequent three dimensions, namely Green Business Innovation, Community Value Creation, and Sustainable Change, describe how this orientation is translated into business practices, value creation, community engagement, and broader forms of change.

Interviews with 27 informants show that the green entrepreneurial orientation identified in this study did not primarily emerge from considerations of economic profit. Instead, the data indicate that the process began with the informants' personal relationships with nature and their concern about environmental problems encountered in everyday life. These relationships developed into ecological awareness and responsibility before ultimately encouraging the informants to take action through entrepreneurial activities. Thus, the findings reveal a gradual pattern from emotional connection with nature and the formation of ecological values to the emergence of motivation for entrepreneurial action. To illustrate the thematic structure underlying this process, Table 3 summarizes the three aggregate themes identified in the initial stage of analysis—Love for Nature, Ecological Values, and Ecopreneurial Motivation—along with their main concepts, focused categories, and representative informants.

Table 3. Thematic structure of the initial stage of ecopreneurial orientation formation

| Aggregate Theme          | Main Concepts/Codes                                                                  | Focused Category                                   | Representative Informants |
|--------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------|
| Love for Nature          | Emotional attachment, personal experiences, desire to protect nature                 | Nature as an emotional and personal value          | P04, P18, P19             |
| Ecological Values        | Environmental awareness, concern, responsibility, conservation                       | Environmental concern as personal responsibility   | P05, P11, P12, P20        |
| Ecopreneurial Motivation | Problem recognition, opportunity recognition, desire to solve environmental problems | Environmental problems as entrepreneurial triggers | P03, P14, P15, P23        |

Source: Developed by the Author (2026).

Table 3 shows an empirical sequence among the first three aggregate dimensions rather than three isolated categories. Love for Nature represents the point at which nature holds emotional and personal meaning. Ecological Values capture the development of awareness and responsibility toward environmental problems. Ecopreneurial Motivation captures the point at which informants described a desire to seek practical solutions through entrepreneurial activities.

The first finding shows that nature occupies a personal position in the informants' experiences before becoming part of their economic activities. Informants P04, P18, and P19 described their relationship with nature through everyday experiences, emotional attachment, attention to environmental changes, and a desire to protect their surroundings. These data indicate that nature is not understood merely as a resource for producing goods but as part of life that holds personal value. This pattern is reflected in P04's statement: "I did not start this business because of money. I was concerned about what was happening to the environment around me." This statement shows that environmental concern emerged before economic considerations. Thus, *Love for Nature* in this study represents an affective foundation that provides the initial direction for entrepreneurial action.

Emotional attachment to nature does not, by itself, produce an entrepreneurial orientation. Between this personal connection and entrepreneurial action lies the process of forming *Ecological Values*. Informants P05, P11, P12, and P20 showed that their concern for nature developed into awareness of concrete problems, such as waste, pollution, resource depletion, and the need to protect the environment. These problems were not merely recognized as ecological issues but were also understood as conditions requiring responsibility. P12 stated, "When I saw the waste problem in my community, I felt that I could not just ignore it." This statement illustrates the shift from awareness to personal responsibility. In this context, *Ecological Values* serve as a

link through which concern for nature acquires consequences for how informants understand their position and role in addressing environmental problems.

The development of ecological values subsequently leads to *Ecopreneurial Motivation*. Informants P03, P14, P15, and P23 described a growing motivation to seek solutions that could be implemented in practice after environmental problems were recognized as issues requiring a response. At this stage, environmental problems were no longer viewed merely as issues to be reduced but also as spaces for productive and entrepreneurial action. P03 described this process as follows: “We initially wanted to reduce the organic waste, and later we realized that the waste could actually become a product that people would buy.” This sequence is important because it shows that the ecological objective emerged first, while the economic opportunity was discovered through the search for a solution. Thus, *Ecopreneurial Motivation* develops when ecological responsibility begins to be translated into action that connects the resolution of environmental problems with the possibility of creating economic value.

The relationship among these three dimensions shows that the ecopreneurial orientation experienced by the informants does not emerge instantaneously but develops through the interaction of affective, value-based, and action-oriented dimensions. *Love for Nature* provides a foundation of personal and emotional connection with nature; *Ecological Values* transform this connection into awareness and responsibility toward environmental problems; and *Ecopreneurial Motivation* translates that responsibility into the motivation to act productively. This pattern demonstrates that concern for nature acquires an entrepreneurial meaning when informants begin to recognize that ecological problems can be addressed through activities that simultaneously pursue environmental and economic objectives. Thus, the formation of an ecopreneurial orientation does not stem solely from the search for market opportunities but from a process in which concern, responsibility, and opportunities for action converge.

### **From green business innovation to value creation and sustainable change**

Once the ecopreneurial orientation had been established, the interviews showed that the informants began translating their ecological concern and responsibility into more concrete business practices. This process was characterized by changes in how materials previously regarded as waste were perceived, the development of product and process innovations, and the creation of value that was not solely economic. These activities subsequently involved communities more actively and generated changes in materials, behavior, and perceptions of environmental issues. Thus, the second stage of the findings consists of three aggregate themes: Green Business Innovation, Community Value Creation, and Sustainable Change. The thematic structure of these three themes is presented in Table 4.

Table 4. Thematic structure of innovation, value creation, and sustainable change

| Aggregate Theme           | Main Concepts/Codes                                                                                         | Focused Category                                  | Representative Informants                   |
|---------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------|
| Green Business Innovation | Waste as resource, waste transformation, recycling, upcycling, product creativity, process innovation       | Ecological reframing and circular innovation      | P06, P07, P10, P16, P21, P23, P26           |
| Community Value Creation  | Community involvement, environmental education, social value, economic opportunities                        | Multiple value creation and community co-creation | P02, P08, P09, P10, P13, P17, P22, P24, P25 |
| Sustainable Change        | Changing waste behavior, environmental perceptions, influencing communities, long-term environmental impact | Material, behavioral, and mindset transformation  | P21, P22, P25, P27                          |

Source: Developed by the Author (2026).

Table 4 presents the thematic structure of the second stage in the ecopreneurship process identified from the data. Green Business Innovation shows how ecological orientation is translated into changes in the way materials are perceived and processed. Community Value Creation shows how these activities generate multiple forms of value while actively involving communities in the value creation process. Sustainable Change, meanwhile, captures broader changes in materials, behavior, and mindsets emerging from these activities. The categories of Ecological Reframing and Multiple Value Creation are positioned as focused categories because they help explain the mechanisms shaping their respective aggregate themes. Thus, Table 2 functions as an empirical map illustrating how green entrepreneurial practices develop from changing perceptions of resources toward innovation and value creation, and subsequently involve community actors and generate broader forms of change.

The findings on *Green Business Innovation* show that an important change occurs in how informants perceive discarded materials. Informants P06, P10, P16, and P26 no longer viewed these materials merely as something to be discarded but recognized their potential for reuse, recovery, and transformation. This shift reflects a process of *Ecological Reframing*, in which waste is reinterpreted from an object perceived as having no value into a resource that can still be developed. P06 stated, “People see this material as rubbish, but I see something that can still used.” This statement illustrates how the same material can acquire different meanings when viewed through an ecological and entrepreneurial perspective. Thus, *Ecological Reframing* becomes a mechanism that opens possibilities for productive action toward materials previously regarded as useless.

This new interpretation of materials is then translated into *Green Business Innovation* through experimentation and product development. Informants P07, P16, P21, P23, and P26 demonstrated innovation through experimentation with discarded materials, product *redesign*, the creation of new products, material reuse, production process development, and increased consumer awareness. P07 explained, “We keep experimenting with discarded materials until we find a product that is useful and attractive to customers.” This statement shows that innovation occurs through a process of testing, adapting, and finding forms that are both usable and acceptable to consumers. In other words, green business innovation does not stop at the ability to reduce waste but requires the ability to transform materials into products with functional and market appeal. This process brings ecological objectives into alignment with the demands of business viability.

This innovation not only generates products and income but also produces *Multiple Value Creation*. Informants P02, P10, P17, P22, and P24 indicated that their business activities generated economic, environmental, and social benefits simultaneously. Economic value emerged through income and livelihood opportunities, environmental value through waste reduction and resource recovery, and social value through employment opportunities and environmental education. P17 summarized this relationship: “Business gives us income, but creates work for people in the community and reduces waste.” Income, employment, and waste reduction demonstrate that the benefits of business activities do not accrue solely to the entrepreneurs. In this context, the success of green businesses can be understood through their capacity to generate multiple forms of value simultaneously, making economic profit part of a broader value creation process.

This value creation takes place through community involvement in business processes. Informants P08, P09, P13, P17, and P25 demonstrated community participation through household waste separation, material provision, environmental education, collaboration, local job creation, and collective action. Communities are therefore not merely recipients of benefits but also provide resources and carry out activities that enable the business to operate. P09 stated, “Waste bank cannot work without households participating. They separate the waste, bring it here, and become part of the process.” This statement shows that *Community Value Creation* is built through direct participation from the initial stage of material management. Value creation therefore does not occur unilaterally from entrepreneurs to communities but develops through the involvement of multiple actors in the same economic and environmental process.

Such involvement is associated with the emergence of *Sustainable Change*, encompassing changes in materials, behavior, and mindsets. Informants P21, P22, P25, and P27 showed that ecopreneurial activities not only transform waste into products

or reusable resources but also encourage changes in how communities handle materials and understand environmental problems. P27 stated, “Our activity are not only selling products. We want people to see that business can also solve environmental problems.” This statement demonstrates an effort to broaden the meaning of business activities from product sales toward changing perceptions of the role of business in addressing environmental problems. Thus, *Sustainable Change* in this study is not limited to material outcomes but also encompasses behavioral and mindset changes that extend the impact of entrepreneurial activities to the community level.

The relationship among these three dimensions demonstrates that ecopreneurship practices develop through a process that extends beyond economic activity. *Green Business Innovation* begins with *Ecological Reframing*, which changes how informants interpret waste, and is then translated through experimentation and product development into offerings with functional and market value. This process generates *Multiple Value Creation* in the form of economic, environmental, and social benefits while simultaneously taking place through community involvement in *Community Value Creation*. Community involvement subsequently expands the outcomes of business activities into *Sustainable Change* through transformations in materials, behavior, and mindsets. Thus, the data show that ecopreneurship practices do not merely transform waste into valuable products but also connect innovation, value creation, community participation, and sustainable change within a single sequence of business practices.

### **Ecological Orientation and Ecopreneurial Orientation**

Ecopreneurship loses much of its meaning when the success of green businesses is measured only by their ability to generate profit while reducing environmental impacts. Such a perspective explains what ecopreneurs do, but not how individuals arrive at the decision to make ecological problems the basis of entrepreneurial action. Santini (2017) examines ecopreneurship primarily through business characteristics and sustainability orientation, whereas Galkina and Hultman (2016) show that ecopreneurship remains a field requiring stronger conceptual development, particularly in understanding its position as a form of entrepreneurial agency in addressing ecological problems. Data from the 27 informants in this study indicate that this process begins long before a green product emerges: connection with nature develops into ecological values, these values foster entrepreneurial motivation, environmental problems are then reframed as opportunities, and those opportunities are translated through innovation into value for businesses and communities. Therefore, the central argument of this study is not that ecopreneurship generates environmental benefits, but that ecopreneurship is a transformative process that

converts ecological orientation into entrepreneurial action and ultimately into sustainable value creation.

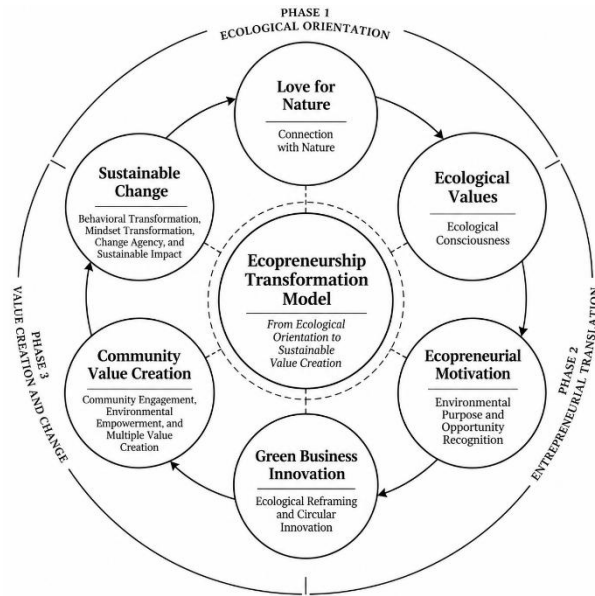


Figure 2. Ecopreneurship Transformation Model

Source: Developed by the Author (2026).

Figure 2 is presented because the Gioia structure in the Results section identifies what was found but does not fully explain how the various dimensions operate as a single process. The model comprises six aggregate dimensions organized into three conceptual sequences. Love for Nature, Ecological Values, and Ecopreneurial Motivation constitute Ecological Orientation; Green Business Innovation represents the space of Entrepreneurial Translation through Ecological Reframing and Circular Innovation; while Community Value Creation and Sustainable Change constitute the Value Creation and Change phase. Thus, the arrows in Figure 2 do not represent statistically tested causal relationships but rather the sequence and interconnectedness of the process emerging from the informants' experiences. The function of this model is to transform six empirical categories into a single conceptual argument: ecopreneurship develops when ecological orientation is translated into business action, that action generates multidimensional value, and that value subsequently extends into community-level change.

The position of Love for Nature at the beginning of the model is not arbitrary. P04 explicitly explained that the business was not started because of money but because of concern about the environmental conditions surrounding them. Galkina and Hultman (2016) position ecopreneurship more broadly as a form of entrepreneurial agency associated with ecological problems and the development of more sustainable societies. Makhoulfi et al. (2022) also show that environmental concern can serve as one basis for the emergence of green entrepreneurial orientation. However, the data in this study provide a more specific emphasis: such concern acquires entrepreneurial

force because it is rooted in a personal connection with nature. In other words, Love for Nature is not merely a positive attitude toward the environment; it becomes a source of orientation that determines which problems are considered important and worthy of response through business activities. This explains why Ecological Orientation is positioned before entrepreneurial action in Figure 2.

When the relationship with nature develops into a sense of responsibility, the process enters the Ecological Values dimension. P12 stated that the waste problem in the community made them feel unable to ignore it. Ploum et al. (2018) demonstrate that pro-environmental values and moral competencies play a role in recognizing entrepreneurial opportunities for sustainable development. Jing and Rasiah (2025) also found that ecological values are associated with individuals' tendency to take sustainability-oriented action. However, this study shows that ecological values serve a more active function than merely acting as antecedents. Ecological values provide direction for action by establishing that environmental problems are not simply matters to be understood but issues that carry a moral imperative to respond. Therefore, Ecological Values function in the model as a bridge between affective connection with nature and the decision to act.

From this point, Ecopreneurial Motivation emerges not as an independent business drive but as a consequence of environmental responsibility meeting the possibility of entrepreneurial action. P03 described how the desire to reduce organic waste subsequently developed when they realized that the waste could be transformed into a product that consumers would buy. Hanohov and Baldacchino (2018) show that sustainable opportunity recognition is associated with environmental and communal knowledge, motivation, and entrepreneurial knowledge, providing empirical support for the process of recognizing sustainability opportunities. Hanohov and Baldacchino (2018) position opportunity recognition as an important mechanism in the formation of sustainable entrepreneurship. However, the data in this study reveal a more distinct sequence: opportunities do not emerge first and then make informants concerned about the environment; rather, ecological concern and purpose enable those opportunities to be recognized. Thus, Ecopreneurial Motivation represents the point at which environmental purpose and opportunity recognition converge, rather than simply a desire to obtain profit through green markets.

This distinction becomes even clearer when environmental problems undergo Ecological Reframing. P06 stated that material regarded as rubbish by others was instead seen as something that could still be used. Belz and Binder (2017) describe sustainable entrepreneurship as a process that moves from recognizing social or ecological problems toward opportunity recognition and solution development. Their model demonstrates that sustainable entrepreneurial processes unfold progressively and integrate economic, social, and ecological objectives. Dewiyan et al. (2025) also

show that environmental problems can be transformed into entrepreneurial opportunities. However, the data in this study reveal something that cannot be adequately explained by the term opportunity recognition alone: before an opportunity emerges, the meaning attached to the object changes. Waste is not simply “discovered” as an opportunity but is first reinterpreted as a resource. Ecological Reframing therefore represents an interpretive mechanism connecting environmental problems with entrepreneurial opportunities. This is one of the most important elements of the study’s conceptual contribution.

### **Ecological Reframing: From Opportunity Recognition to Green Business Innovation**

Reframing is then given concrete form through Green Business Innovation. P07 explained that they continuously experimented with discarded materials until they found products that were useful and attractive to consumers. de Bruin (2016) places transitional green entrepreneurship within a framework of transition toward more ecological and sustainable conditions, so entrepreneurial activity is understood not merely as an economic activity but as part of a broader transition process. Song et al. (2019) also position green innovation as an important response to environmental challenges. However, this study challenges the view that positions green innovation as the starting point of change. In the informants’ experiences, innovation emerged after materials had been reinterpreted and ecological opportunities had been recognized. Recycling, upcycling, product creativity, and process innovation became forms of translating ecological orientation into business activities. Therefore, Green Business Innovation in the model is not merely an indicator that a business is “green,” but a mechanism that transforms ecological values into practices with economic utility.

The consequences of such innovation are reflected in the types of value generated. P17 connected business income with job creation for the community and waste reduction simultaneously. Kuckertz et al. (2019) show that ecological startups create value by responding to environmental problems and that such value creation is associated with various environmental challenges. Shahrahmani et al. (2025) also demonstrate that sustainable entrepreneurship can generate economic, social, and environmental benefits simultaneously. What the data in this study demonstrate is not merely the existence of these three types of benefits but their integration within a single business activity. Income, employment, and waste reduction do not emerge as three coincidental outcomes existing alongside one another; they are produced by the same business practices. Therefore, Multiple Value Creation should be understood as the value-creation logic of ecopreneurship rather than as an additional benefit calculated only after economic profit has been generated.

This value-creation logic subsequently changes the position of the community in the model. P09 explained that a waste bank cannot operate without households that

separate waste, bring it to the site, and become part of the process. de Bruin (2016) views green entrepreneurship as part of a transition process involving changes that extend beyond individual organizational activities. Esteves et al. (2021) also show that community engagement strengthens the social and environmental dimensions of green entrepreneurship. However, the data in this study assign a stronger position to the community: communities are not merely recipients of benefits after businesses create value but actively enable that value to be created. Households provide materials, sort waste, participate in the process, and simultaneously experience behavioral changes. Therefore, Community Value Creation in Figure 2 is more appropriately understood as co-creation rather than merely social impact. The ecological and economic value generated through ecopreneurship partly depends on the involvement of community actors in the process.

This changing position of the community explains why Sustainable Change is not positioned merely as an “end impact” separate from the business process. P27 stated that their activities were not only intended to sell products but also to encourage people to see that businesses can be used to solve environmental problems. Terán-Yépez et al. (2020) show that sustainable entrepreneurship has developed into an increasingly complex field requiring a more organized understanding of the relationship between entrepreneurship and sustainability. Rodríguez-García et al. (2019) also demonstrate that ecopreneurship can generate change at the social and environmental levels. However, this study reveals more concrete forms of change: changes in waste management practices, perceptions of materials, behavior, and the capacity to influence communities. Thus, Sustainable Change is not merely an environmental outcome but encompasses behavioral transformation, mindset transformation, change agency, and sustainable impact. This position expands the measure of ecopreneurial success from “how many green products are produced” to “the extent to which business practices transform how communities relate to environmental problems.”

If each dimension is considered separately, this study would produce only a list of ecopreneurship characteristics. Gast et al. (2017) show that the ecological sustainability entrepreneurship literature remains a relatively young and fragmented field, with attention dispersed across drivers, practices, strategic actions, and outcomes. Halder (2019) also discusses motivation, business practices, and sustainability outcomes as important components of ecopreneurship. However, the empirical pattern in this study indicates that this fragmentation can be connected through a process. Love for Nature provides an affective foundation; Ecological Values provide normative direction; Ecopreneurial Motivation transforms orientation into the motivation to act; Ecological Reframing changes how problems are understood; Green Business Innovation translates this understanding into practice; Community Value Creation expands the value generated; and Sustainable Change reflects the extension of

consequences to behavioral and community levels. Therefore, the contribution of Figure 2 lies in the relationships among the dimensions, not in the addition of a new dimension.

### **Sustainable Change through an Integrated Ecopreneurship Transformation Model**

Sustainable Change is not simply the final outcome of ecopreneurship; it is the point at which ecological orientation, entrepreneurial action, green innovation, and community value creation become integrated into broader material, behavioral, and mindset transformation. This position also distinguishes the model developed in this study from previously developed sustainable entrepreneurship process models. Belz and Binder (2017) show a process that moves from recognizing a social or ecological problem and recognizing an opportunity to developing solutions, establishing a sustainable enterprise, and entering the sustainable market. Musona et al. (2020) identify a relatively similar process in which environmental problems are translated into entrepreneurial opportunities and business solutions. The model developed in this study operates at a different level: the process begins earlier, with the human relationship with nature before ecological problems are recognized as entrepreneurial problems. The study then adds Ecological Reframing as a mechanism explaining the shift from problem perception to opportunity recognition and extends the process to Community Value Creation and Sustainable Change. Thus, this model does not simply reproduce the sustainable entrepreneurship process model but clarifies what shapes orientation before the entrepreneurial process begins and how that process extends into changes beyond organizational boundaries.

This reinforces the position of ecopreneurship as a transformative process. Terán-Yépez et al. (2020) show that the development of sustainable entrepreneurship increasingly requires conceptual integration to understand the field's various directions of development. Masjud (2020) positions ecopreneurship as an entrepreneurial response to environmental problems. The data in this study show that this transformation occurs through four fundamental changes: a change in relationships, from connection with nature to ecological orientation; a change in perspective, from environmental problems to entrepreneurial resources; a change in practice, from ecological orientation to green innovation; and a change in value, from individual profit to economic, environmental, social, and community value. These four changes make it inappropriate to position ecopreneurship merely as "more environmentally friendly business." It is a process that transforms how actors understand problems, recognize opportunities, conduct business, and relate to communities.

Ultimately, "beyond economic profit" in this model does not mean that economic profit loses its importance. Rather, profit remains an essential component of business sustainability, but it is no longer the sole logic determining the value of an

ecopreneurial activity. Kuckertz et al. (2019) show that ecological startups can create value by responding to environmental problems, while Romero-Hernández and Romero (2018) illustrate how income, employment, and waste reduction can emerge from the same business activity. The involvement of P08, P09, P13, P17, and P25 in waste sorting, material provision, environmental education, collaboration, and job creation demonstrates that value creation occurs through community participation. Meanwhile, the experiences of P21, P22, P25, and P27 show that these activities are also associated with changes in how communities manage materials, understand environmental problems, and perceive the role of business in addressing them. This pattern provides the basis for Figure 2, which not only summarizes the findings but conceptually explains how ecopreneurship develops through three phases: *Ecological Orientation* provides direction, *Entrepreneurial Translation* gives it form, and *Value Creation and Change* extends its consequences. The model connects *Love for Nature*, *Ecological Values*, and *Ecopreneurial Motivation* with *Ecological Reframing*, *Green Business Innovation*, *Community Value Creation*, and *Sustainable Change*. Thus, sustainable value creation is positioned as the outcome of a transformative process in which ecological concern is translated into entrepreneurial action involving business, the environment, and the community.

## Conclusion

This study shows that ecopreneurship is not merely a form of business that combines economic profit with environmental concern but a transformative process from ecological orientation toward sustainable value creation. What this study demonstrates is an interconnectedness among six aggregate dimensions: *Love for Nature*, *Ecological Values*, *Ecopreneurial Motivation*, *Green Business Innovation*, *Community Value Creation*, and *Sustainable Change*. Why this process can occur lies in the way emotional connection with nature develops into ecological values and responsibility, which subsequently encourages actors to recognize environmental problems as entrepreneurial opportunities. How this process occurs becomes evident through *Ecological Reframing*, in which waste is no longer understood merely as a problem but as a resource that can be transformed through green business innovation. Such innovation subsequently enables the simultaneous creation of economic, environmental, and social value, while community involvement extends the process into changes in behavior, mindsets, and the capacity of communities to act on environmental problems. Thus, the *Ecopreneurship Transformation Model* developed in this study explains that sustainable value creation is not the starting point of ecopreneurship but a consequence of a process in which ecological orientation is successfully translated into entrepreneurial action and change that extends beyond organizational boundaries.

The main contribution of this study lies in developing a conceptual understanding of how ecopreneurship moves from ecological concern toward entrepreneurial action and sustainable change, particularly by positioning *Love for Nature* as the initial orientation and *Ecological Reframing* as an important mechanism connecting environmental problems with business innovation. In practical terms, this model can serve as a framework for ecopreneurs and green entrepreneurship program developers to build businesses that do not stop at environmentally friendly products but also create value for communities and promote sustainable change. Nevertheless, this study is limited to 27 informants purposively selected from various forms of green businesses in East Java and employs an exploratory qualitative approach; therefore, the resulting model is not intended to test causal relationships or support statistical generalization. Future research could examine this model across more diverse geographical contexts, business sectors, and groups of ecopreneurs, while also employing quantitative or longitudinal approaches to examine how each dimension develops and interacts over time.

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