



Potency of Green Insurance in Indonesia

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ABSTRACT

The danger of natural disasters has awakened the world society to the need for better protection. Green insurance is a breakthrough in achieving environmental sustainability. Green insurance has been introduced in various parts of the world for a long time and has now gained increasing public acceptance. This research examines the potential and possibilities of developing green insurance in Indonesia. Based on its benefits and wide-ranging opportunities, green insurance could become a new business opportunity. It is also in line with the green economy agenda for sustainable economic growth. We believe Indonesian people will be attracted to the new things better as their life protection. There are three perspectives regarding green insurance products that can be developed: consumer, commercial, and specialist. Various types of green insurance can be created based on the needs of these three groups; a type of product that can represent all economic agents. Therefore, all parties can be involved in the development of green insurance for sustainable economic growth.

Keyword:

*green insurance
environmental sustainability
natural disasters
green economy*

1. INTRODUCTION

Awareness of the dangers of global warming has prompted many people to take immediate action. Air temperatures rose by 1.75°C above pre-industrial levels in January 2025 (WMO, 2025). This indicates that the Earth is warming even further compared to January 2024. The insurance industry has responded to this global warming issue by offering green insurance products—environmentally friendly products that support environmental sustainability and mitigate global warming.

Green insurance is currently a hot topic. This is because current business trends are shifting toward environmentally friendly demands. Businesses, including insurance companies, that fail to adapt to current conditions will inevitably be displaced and abandoned by their customers. Businesses will always seek new ways to expand their market share and increase sales. This is an unavoidable fact. However, entering the green insurance business presents significant challenges that must be carefully considered.

Insurance companies are always looking for ways to differentiate their products from their competitors. Developing and offering new products is a concrete step in advancing their respective businesses. This includes green insurance products, which are naturally packaged in various models and formats to attract potential customers. Some concepts related to green insurance include: responding to climate change, supporting sustainable growth, being environmentally friendly, and no waste things.

The problem is that the development of green insurance in several developing countries has not been optimal. This is due to weak infrastructure, a lack of awareness and knowledge among individuals and businesses, a lack of policy support, minimal demand, political instability, corruption, and security concerns (Desalegn, 2023).

In Indonesia, several companies already offer green insurance programs to the public. For example, PT. Jasindo offers two types of green insurance products: government program assignments and commercial agricultural insurance. Similarly, PT. Reasuransi Maipark Indonesia also offers a green insurance program, specifically earthquake insurance (Hariani, 2021). We are confident that the growth of green insurance will become increasingly widespread, with a wider range of products and full support from the government.

This research will focus on reviewing green insurance products that can be developed and promoted to the public in Indonesia. There is still limited literature in developing countries addressing this issue, so we strive to address this gap. The novelty of this research lies in our conceptual analysis. This paper's strength is its exploration of the issue, opening up broader research and opportunities for in-depth analysis.

2. LITERATURE REVIEW

The concept of green insurance in Indonesia can be considered a concrete manifestation of Financial Services Authority Regulation (POJK) Number 51/03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Insurers, and Public Companies. This regulation clearly demonstrates that green insurance has clear legal support from the government. This regulation obliges financial services institutions (LJK), issuers, and public companies to implement sustainable finance principles, particularly in their operations.

Through this regulation, the Indonesian government aims to encourage financial practices that are environmentally responsible while contributing to social welfare. This will ensure the

achievement of sustainable economic development goals in Indonesia. Therefore, the OJK imposes strict sanctions on LJK, issuers, and public companies that fail to comply with the provisions of the POJK.

Green insurance is a part of the green economy agenda, which is currently being actively developed by various communities worldwide. The green economy itself is an extension of the concept of sustainable economic growth. Therefore, green insurance can be considered a product of the broader concept of sustainable economic growth.

Green insurance products are insurance products that provide environmental, social, and economic benefits while simultaneously protecting public health and environmental sustainability. To achieve the goal of green insurance acceptance, there is a transition phase leading to closer attention to these insurance products. This will certainly take time to build public awareness.

The insurance industry is not primarily an industry whose products contribute to carbon dioxide emissions. However, the traditional insurance industry is one that sometimes finances industries that contribute to greenhouse gas emissions and environmental damage. It can be noted that several jobs consistently involve insurance services, as a form of protection for workers and on-site operations, requiring insurance services. For example, fossil-fueled car factories, manufacturing industries such as steel mills, electronic equipment assembly, and mining processing. Therefore, the insurance industry indirectly contributes to the escalation of greenhouse gas emissions worldwide. This role must be highlighted to find a balancing solution so that the insurance industry is not entirely blamed. In other side, the industry can also play a role in supporting environmental sustainability. In this regard, green insurance products are being developed.

Green insurance products can be considered sustainable because they protect the design, production, and use of sustainable products, or cover liabilities (financial burdens) related to their production and use. These products also cover various potential environmental damages caused by climate change. Therefore, the scope of green insurance products is linked to policies that support sustainability and green policies. Through green insurance, not only human life but also the environment can be covered by these green financial schemes.

Overall, the insurance industry in Indonesia contributed approximately 5.12% to Gross Domestic Product (GDP) in 2024 (Primantoro, 2025). Nevertheless, this industry continues to grow and is expected to make an even greater contribution to the national economy. Awareness of environmental sustainability is the reason for the growing development of green insurance in various parts of the world, and is expected to grow even further in Indonesia. In practice, green insurance has a direction summarized in the concept of ESG (Environmental, Social & Governance). The scope of ESG in green insurance can be explained as follows:

Table 1. ESG (Environmental, Social, Governance) Characteristics

Scope	Explanation
Environmental	Mitigating the impacts of and adapting to climate change
	Protecting biodiversity
	Sustainable use and protection of water, maritime resources, and land
	Transitioning to a circular economy, avoiding waste
	Reducing environmental pollution, protecting ecosystem health

Social	Adhering to employment standards (no child labor, forced labor, or discrimination)
	Adhering to worker safety and health protection standards
	Decent remuneration, fair working conditions, diversity, and training/development opportunities
	Right to form associations and freedom of assembly
	Adequate guarantees of product quality, including health protection
	Inclusiveness and consideration of the interests of communities and social minorities
Governance	Tax transparency and anti-corruption measures
	Sustainability management board, remuneration based on sustainability criteria
	Facilitating the reporting of violations (whistle-blowing), guaranteeing workers' rights
	Guarantee of data protection and information disclosure

Source: Stricker et. al., (2022)

As an industry that prioritizes public trust, insurance's core business is to provide understanding, manage, and effectively mitigate risks. Through effective measures, the negative impact of a risk can be minimized. The insurance industry protects the public from various losses by sharing risks with multiple parties. Furthermore, insurance can foster innovation and serve as a foundation for economic development.

Being faced with environmental, social, and governmental challenges, the insurance industry must adapt to changing business conditions. ESG has significantly altered traditional businesses and impacted the industry's sustainability. Therefore, any industry today relies on foresight to manage ESG-related risks (UNEPFI, 2025a).

Currently, more than 170 companies worldwide have signed agreements for green insurance programs (UNEPFI, 2025b). This number is expected to increase as companies worldwide become more aware of the Principles for Sustainable Insurance. In the next ten years, people around the world will benefit from this green finance to protect their lives. It is a time where people around the world realize that environment must be maintained with a better strategy.

The Principles for Sustainable Insurance is a framework developed by the United Nations for the insurance industry to manage environmental, social, and governance risks and opportunities (UNEPFI, 2025c). The vision is to raise global public awareness and provide understanding for community protection to achieve a better life. The insurance industry is entrusted with managing sustainable economic development without damaging the environment, improving social standards of living, and realizing good governance.

3. METHODS

To analyse and conduct research about green insurance is not easy, especially in a developing country like Indonesia. It is because there is no empirical data regarding the development of green insurance freely available for researchers and academics to use. This is because the development of green insurance is not widely recognized by the public yet.

Therefore, this research method uses a literature review approach, focusing on the concept of green insurance, which is currently attracting widespread attention. Books, journals, scientific reports, and various news sources scattered throughout the media served as material for review and analysis. Given that green insurance is still very limited in Indonesia, we will seek examples of its implementation abroad. The literature review aims to provide references for in-depth discussion (Creswell, 2009; Fink, 2014).

4. RESULTS AND DISCUSSION

The idea of popularizing green insurance is indeed very urgent. Green insurance products are becoming increasingly popular in various countries, and the public is consciously aware of it. However, it must be noted that green innovation in any industry is a long-term, risky product design (Hu et al., 2023). The returns from green products may not be gained immediately, but rather will have to be seen over the next few years. People must be patient in waiting for the benefit.

Several forms of green insurance have the potential to be developed in Indonesia, as they have already been developed in other countries. In addition to currently available green products, such as green credit, green funds, and green bonds which have successfully encouraged communities and industries to become more environmentally friendly, green insurance can be classified into several categories. Green insurance can be viewed from several perspectives: the consumer, the commercial, and the specialist side. As explained by Zona et al. (2014), forms of green insurance can be seen as follows:

The first forms of green insurance from a consumer perspective, green insurance can be of various types, including: (1) Green property and housing rebuilding insurance. This insurance product typically covers the policyholder's home or building. However, in this context, the insurance is aimed at more than just that, but also at making the home or building environmentally friendly, using eco-friendly materials, more efficient energy use, and highly energy-efficient equipment. (2) Property renewable energy reimbursement insurance. This type of insurance protects property owners who use renewable energy systems. For example, if a homeowner with renewable energy experiences a power outage, they are entitled to compensation. (3) Discounts on disaster mitigation equipment. This type of insurance applies to homeowners who install disaster-prevention equipment, such as in disaster-prone areas. It takes the form of a discount. (4) Pay-as-you-drive/ low mileage discount. Pay-as-you-drive car insurance provides an incentive to drive less frequently. This can reduce pollution that contributes to global warming. This results in quieter roads, fewer traffic jams, and cleaner air. (5) Fuel efficiency/discounts on low-emission vehicles. The insurance industry can offer discounts for hybrid or electric cars to increase public interest in new, renewable energy vehicles. This business model can be implemented through collaboration involving multiple stakeholders.

The second form of green insurance, beyond the consumer perspective, insurance can also be viewed from a commercial (business) perspective. Therefore, business owners can capitalize on opportunities in the green insurance industry. The type of insurance as follows: (1) Insurance for upgrading to green commercial fleets. This type of insurance offers environmentally friendly vehicle upgrade options. Car manufacturers must offer this type of insurance if they are serious about supporting a healthy and clean environment. (2) Insurance for renewable energy projects. This insurance product provides protection for companies involved in the renewable energy industry (solar, wind, hydraulic systems, etc.). Currently, the need for renewable energy is increasing. Renewable energy is becoming a popular energy

source worldwide. Therefore, the opportunity to provide this type of insurance is wide open and commercially profitable.

(3) Insurance for renewable energy properties and workers' equipment that uses renewable energy. This type of insurance adapts to rapid technological changes in the renewable energy sector. Furthermore, the alignment of environmentally friendly properties is increasingly in demand by communities worldwide. (4) Insurance for green buildings. This type of insurance allows insurance companies to assist consumers in building construction by evaluating designs and specifications for the highest quality structures. This insurance product can guarantee the use of green materials and environmentally friendly construction in every building. (5) Energy savings insurance. This type of insurance requires insurance companies to support energy savings guarantees at various energy service providers. Collaboration between insurance companies and energy providers will strengthen, ensuring the best possible service to the public. (6) Insurance for carbon capture and emission reduction. This type of insurance can be applied worldwide, as maintaining a stable global temperature is the responsibility of all humanity. The opportunities are enormous not only in Indonesia, but also in many countries. (7) Insurance that protects green buildings against negative publicity. This type of protection applies to green buildings that experience adverse publicity. For example, a building that complies with environmentally friendly regulations is then tarnished, for example, due to business competition or an unforeseen accident. This insurance is similar to reputation protection. (8) Insurance for perishable food products. This insurance product supports the use of equipment aimed at reducing the amount of food that loses its nutritional content and maintaining quality throughout the distribution process from producer to consumers. Food distributed from one region to another often experiences a decline in quality. This insurance product offers a product to provide this protection. Of course, there are specific mechanisms for preserving the food during the shipping process. The application of cutting-edge technology is essential to complement this insurance. (9) Global weather insurance. This insurance product bridges the gap left by traditional insurance, covering general property damage due to weather changes. Important buildings sometimes require constant maintenance, especially during extreme weather that causes disasters. This insurance product protects against the impact of these extreme weather changes.

(10) Political risk insurance for carbon trading. Anyone interested in becoming a project sponsor, investor, or financier in carbon trading is provided with financial protection against the risks of government interference, embargoes, license revocations, war, and political violence that could disrupt the production, certification, and servicing of carbon credits.

C. Given public concern about global warming and the potential for lawsuits that may contribute to climate change, the following additional specialized insurance products may be necessary in normal business operations: (1) Pollution/environmental liability insurance. This type of insurance provides individuals, companies, and any institution with protection against various pollution and environmental disturbances. Premium levels can be determined based on prevailing circumstances. (2) Director and employee insurance. Some insurance companies currently offer directors and employees insurance policies with the option of protection against global warming litigation. For example, if a company employee is sued for allegedly causing global warming due to their production processes, this is crucial because companies often shirk responsibility when their work procedures do not comply with environmentally friendly principles. As a result, the company's employees are punished for negligence, even though they have actually worked according to regulations. (3) Architectural and structural engineer professional liability insurance. This insurance protects architects and engineers

from claims for negligent or unintentional errors during the course of their professional work. This type of insurance protects professionals whose work clearly supports various environmentally friendly programs. (4) Professional liability insurance for home energy appraisers and surveyors. Qualified appraisers and surveyors are offered professional liability, general liability, and property coverage to protect themselves from accidents and potential lawsuits that may arise from unintentional negligence.

Based on the above explanation of a number of green insurance products that can be developed, we believe that Indonesian society tends to be adaptive to modern progress. Green insurance products, if packaged with attractive labels and good promotions, will be very attractive to society. Moreover, environmental issues in Indonesia are relatively strong and supported by the majority of the community. Until now, obstacles to the development of green insurance products include the relatively low public literacy regarding green insurance products, limited data and technology, and regulations supporting the development of green insurance, which must also be resolved (Bani, et. al., 2025); (Rosydayanti et., al. 2024). Firm steps to accelerate the absorption of green insurance products must be taken comprehensively, involving not only the government but also private and state partnerships, as well as a international network that determines quality at the global level.

So far, the presence of green insurance has not resulted in any negative impacts or losses. In fact, its presence can bring benefits because it guarantees environmental protection. Companies with green insurance products can build a green brand name. This can expand market share and achieve greater profits.

Furthermore, empirical research has shown that green insurance can encourage long-term corporate investment and increase companies' willingness to register patents for environmentally friendly green products (Hu et al., 2023). This is because companies that take out green insurance are able to obtain more resources, are willing to take risks in green projects that tend to be high-cost, and pursue a long-term vision. With green insurance, a company's fundamental performance can be improved by promoting green innovation to the public. Implementing environmentally friendly standards relieves companies of the burden of health and pollution issues.

Akomolehin & Oluwaremi (2025) emphasized that green insurance can reduce risk and simultaneously increase industrial opportunities in developing renewable energy, which society needs now and in the future. This is possible because green insurance helps investors avoid ambiguity and significant risk burdens, allowing renewable energy projects and programs to run more smoothly and achieve optimal results. However, the success of green programs must be supported by government policies that support the advancement of the energy sector and market dynamics that can absorb its benefits.

In this research, we propose a way to diversify green insurance products in Indonesia. Currently, environmentally friendly insurance products are still limited. These include eco-friendly vehicle insurance, earthquake insurance, agricultural product insurance in the event of disasters or climate risks, and waste recycling insurance. This latter option needs to be expanded, as waste management is a frequent problem in Indonesia. Waste is not only collected but must be burned into ash. This requires hard work and advances in environmentally friendly technology. In neighbouring countries such as Singapore (Shukor, 2020), waste is even used to generate electricity, and the smoke from burning it is processed to prevent environmental damage. The ash from burning waste is collected in one location to prevent polluting residential areas. Indonesia should learn from this national program.

Green insurance is basically aligned with environmental sustainability and the ESG concept, which is currently gaining widespread attention. Environmental, Social, and Governance (ESG) factors are crucial for advancing the industry. Currently, ESG adherence is not merely an ethical issue in the business world but a benchmark for the success of business objectives (Sood & Özen, 2024). Economic benefits will be greater if environmental sustainability, social resilience, and sound management are considered. Almost all businesses, from small to large, will consider these issues in every goal and program they implement. Green insurance is one such business that aligns with this.

5. CONCLUSION

In this paper, green insurance products are presented into three categories: consumer, commercial, and specialist perspectives. These three categories encompass various types of insurance that protect the needs of policyholders. In Indonesia, not all insurance products within these three categories may be applicable. However, as the life of society continues to grow, the development of green insurance with all products will inevitably become a necessity.

While this research successfully explains the phenomenon of green insurance, we realize that it still has several shortcomings. For example, the research focuses only on conceptual explanations of various types of potential green insurance, but does not utilize data for further analysis. Future researchers can expand the research by involving broader studies and using new methods to achieve better results.

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