Environmental Insurance: Legal Protection and Certainty Mechanism in Recovery of Forest Damage Due to Land Burning

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Abstract

". Environmental law enforcement against corporations that commit destruction is constrained by the execution of court decisions to carry out rehabilitation or compensation, where business actors do not intend to implement the decision. Therefore, environmental insurance can be a solution to cover compensation for environmental damage to realize legal certainty. The research conducted is normative juridical or research that analyzes written law, jurisprudence, and norms that live in society. The descriptive-analytical approach aims to take systematic, factual, and accurate data on a problem based on applicable laws and legal norms. The results of this study show that the legal basis for environmental insurance is regulated in Articles 42 and 43 of Law Number 32 of 2009 concerning Environmental Protection and Management jo Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management. The implementation of environmental insurance is constrained by insolvency problems by corporations who are required to make a recovery due to environmental damage but are not willing to pay compensation costs. plantations, as well as providing certainty in the enforcement of environmental laws following sustainable development goals.

I. Introduction

Forests have ecological functions that are very important for the sustainability of the environment and humans.[1] However, forest sustainability is increasingly threatened along with the massive activity of opening new land for plantations, livestock, housing, and industry. Many business actors are clearing land by burning forests. The method of burning land is considered the most practical and efficient compared to other methods.[2] Land clearing by burning was initially practiced by traditional farmers and then widely adopted by plantation companies on a large scale, to propagate and burn forests which resulted in large-scale ecosystem damage.[3]

Based on data from the Ministry of Environment and Forestry (KLHK) of the Republic of Indonesia, it is reported that the area of forest fires in Indonesia in 2022 reached 204,894 hectares, of which 20% of the fire locations are in corporate concession areas. Meanwhile, data from the Indonesian Forum for the Environment (WALHI) reported that from January to September 2023, there were 184,223 hotspots, dominated by their presence in the concessions of 194 companies, of which 38 companies had burned forests and land from 2015 to 2020.[4] Data from the National Disaster Management Agency (BNPB) in 2019 recorded six provinces that were worst affected by Forest and land fires (Karhutla) including West Kalimantan (622 points), South Sumatra (226 points), Central Kalimantan (195 points), South Kalimantan (178 points), Jambi (81 points) and Riau (76 points).

Plantation companies are increasingly burning land which results in forest burns that damage ecosystems massively, but law enforcement against corporations as perpetrators of environmental crimes is still very weak.[5] An example can be seen in Maulaboh District Court Decision Number 133/Pid.B/2013/PN. MBO *jo* Decision of the Supreme Court of the Republic of Indonesia Number: 1174 K/PID. SUS/2015. The panel of judges stated that the defendant Ir. Khamidin Yoesoef as Estate Manager of Suak Bahong Garden Development PT. Kalista Alam, legally and conclusively proven to have committed the crime of clearing land for Oil Palm

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[1] Etika Khairina and Purnomo, "Sustainable Development Goals: Kebijakan Berwawasan Lingkungan Guna Menjaga Ketahanan Lingkungan Di Kabupaten Bantul Daerah Istimewa Yogyakarta," *Jurnal Ketahanan Nasional* 26, no. 2 (September 18, 2020): 162, https://doi.org/10.22146/jkn.52969.

[2] Yuli Rosianty, "Pengetahuan Dan Sikap Masyarakat Terhadap Sistem Pertanian Sonor Di Desa Secondong Kecamatan Pampangan Kabupaten Ogan Komering Ilir Provinsi Sumatera Selatan," *Tengkawang* 12, no. 2 (2022): 186, https://doi.org/http://dx.doi.org/10.26418/jt.v12i2.59163.

[3] Zakiah, "Implementasi Kebijakan Pembukaan Lahan Tanpa Bakar Di Kabupaten Ogan Ilir, Provinsi Sumatera Selatan," *Pesirah: Jurnal Administrasi Publik* 1, no. 1 (December 22, 2022): 74, https://doi.org/10.47753/pjap.v1i1.15.

[4] https://www.walhi.or.id/walhi-laporkan-194-perusahaan-yang-terduga-terbakar, Retrieved Friday, February 16, 2014 at 10.00 WIB. on

[5] Anindyajati, "Konstitusionalitas Norma Sanksi Pidana Sebagai Ultimum Remedium Dalam Pembentukan Perundang-Undangan," *Jurnal Konstitusi* 12, no. 4 (May 20, 2016): 878, https://doi.org/10.31078/jk12410.

Plantations by continuously damaging the environment. The defendant is sentenced to imprisonment for 3 (three) years and a fine of Rp. 3,000,000,000 (three billion rupiah) subsidiary to imprisonment for 5 months.

The court in this case only punished the Manager as the perpetrator, while the Corporation (PT. Kalista Alam) and its Board of Directors, were completely untouched. This is certainly very contrary to the provisions of Article 116 of Law Number: 32 of 2009 concerning Environmental Management and Protection *jo* Article 50 of Law Number: 41 of 1999 concerning Forestry where criminal sanctions can be imposed on people who give orders and/or administrators either individually or together.

Another obstacle in environmental law enforcement is insolvency, which is a situation where companies or individuals cannot pay off debts/obligations because the amount of debt exceeds all assets. When a corporation does not have the ability or intention to pay compensation for burning land and forests, all it has to do is confiscate all its assets.[6] This issue becomes more complex if an audit or calculation is carried out that the corporation has no assets or the amount is lacking so that the corporation cannot pay compensation determined by the court due to environmental damage. In addition, even if they have sufficient assets, most corporations do not commit to implementing court rulings to repair environmental damage. Ironically, the government and law enforcement officials do not have sufficient political will or instruments to force corporations to carry out their obligations.[7]

Environmental insurance can be a solution or anticipation effort as a guarantee to restore the environment damaged by land burning which results in damage to forest ecosystems by plantation companies and industries. Given the high risk of environmental damage in land clearing activities, plantation companies must protect themselves with environmental insurance and the government must create regulations to accommodate these interests.[8]

Environmental insurance is regulated in Article 43 of Law Number 32 of 2009 concerning Environmental Protection and Management *jo* Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management. However, there are still many plantation companies that do not cover operations with environmental insurance, one of the reasons is the high

[6] Subagio Aridarmo, "Asuransi Lingkungan Berdasarkan Polluter Pay Principle Dan Command And Control Untuk Pemulihan Lingkungan Hidup Akibat Pencemaran Dan Kebakaran Hutan," *Dharmasisya Jurnal Program Magister Hukum FHUI* 2, no. 2 (2022): 553, https://scholarhub.ui.ac.id/dharmasisya/vol2/iss2/2/.

[7] Islamiyati, "Analisis Politik Hukum Dan Implementasinya," *Law, Development and Justice Review* 2, no. 1 (May 27, 2019): 109, https://doi.org/10.14710/ldjr.v2i1.5139.

[8] Zaka Firma Aditya, "Rekonstruksi Hierarki Peraturan Perundang-Undangan Di Indonesia (Reconstruction Of The Hierarchy Of Legislation In Indonesia)," *Negara Hukum: Membangun Hukum Untuk Keadilan Dan Kesejahteraan* 9, no. 1 (June 1, 2018): 96, https://doi.org/10.22212/jnh.v9i1.976.

number of premiums to be paid, so it is considered only a financial burden on the company and less profitable.[9]

The application of environmental insurance is based on the polluter pay principle and command control in the framework of environmental sector law enforcement. Thus, natural resource management, especially the plantation sector, will have a clear legal protection system for all parties. Business activities continue to take place while prioritizing aspects of environmental protection and social welfare, in accordance with the principles of sustainable development.[10]

2. Research Method

Legal research conducted is normative juridical research or research that analyzes written law, jurisprudence, and norms that live in society. The descriptive-analytical approach aims to take systematic, factual, and accurate data on a problem based on applicable laws and legal norms. Data collection techniques are carried out through literature research, namely obtaining data by reviewing library materials or secondary data which include primary legal materials, secondary legal materials which can be in the form of laws and regulations, books and works, or other scientific journals or university legal materials in the form of dictionaries, magazines, newspapers, and articles.[11]

3. Results and Discussion

Legal Regulation and Implementation of Environmental Insurance in Plantation Business

The Forum for the Environment (WALHI) Kalteng said that oil palm plantation companies are the cause of many forest and land fires. Based on WALHI's study and analysis, there are still many palm oil companies that do not control their plantation areas, causing forest and land fires. This problem is rarely seen and goes unnoticed by the public who often blames the community for the emergence of forest and land fires. The provincial, district, and city governments have time to control and supervise the activities of these palm oil companies. If necessary, sanctions and reprimands must be given so that palm oil companies participate in controlling and protecting vast plantations from fires and forest destruction. Failure to control large palm oil companies in this dry season will have a huge impact if it continues to occur.[12]

Forest fires caused by land clearing activities by plantation companies are increasingly massive. In addition to causing ecological losses, forest and land fires also cause huge

[9] Tiara Andrianti, *Pertanggungjawaban Pidana Korporasi Deteriorasi Lingkungan Hidup Terhadap Bencana Alam* (Medan: Fakultas Hukum Universitas Muhammadiyah Sumatera Utara, 2022), http://repository.umsu.ac.id/bitstream/handle/123456789/18385/SKRIPSI TIARA ANDRIANTI.pdf?sequence=1.
[10] Dharmasisya., op cit hlm 555.
[11] Agustina and Triono Eddy, "Reconstruction of Corporate Liability Law in the Provision of Construction Services," *Journal of Law and Sustainable Development* 11, no. 6 (September 15, 2023): 5, https://doi.org/10.55908/sdgs.v11i6.932.
[12]https://www.rri.co.id/daerah/361548/walhi-kalteng-perusahaan-sawit-penyebab-terbesar-karhutla

amounts of material losses, both for companies, governments, and the wider community affected.[13] Article 43 of Law Number 32 of 2009 concerning Environmental Protection and Management *jo* Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management, explains environmental insurance, namely to protect in the event of environmental pollution and/or damage.

Article 42 Paragraph (1) of Law Number 32 of 2009, states that to preserve environmental functions, the central government and local governments are obliged to develop and implement environmental economic instruments. Article 43 paragraph (2) of Law Number 32 of 2009 concerning Environmental Management, states that environmental funding as referred to in Article 42 paragraph (2) point b includes:

1. Environmental restoration guarantee fund;
2. Funds for pollution mitigation and/or environmental damage and restoration;
3. Trust funds/assistance for conservation.

While article, 43 Paragraph 3 letter E, economic environmental instruments include, among others, the development of environmental insurance. Article 87 Paragraph (1) of Law Number 32 of 2009 states that every person responsible for a business and/or activity that commits unlawful acts in the form of pollution and/or destruction of the environment that causes harm to other people or the environment must pay compensation and/or take certain actions. This article indirectly implies regulating insurance as an institution for risk transfer for compensation due to environmental damage. On this basis, the concept of Environmental Insurance policy received appreciation from the Ministry of Environment.[14]

The Mediaindonesia.com report notes that from 2015 to 2021 there was Rp. 3.4 trillion in the amount of compensation in forest and land fire cases that had not been paid by corporations. This report also reveals the fact that the main obstacle in the execution stage, namely the difficulty in calculating and applying for confiscation of the assets of the Defendant (corporation) to meet the amount of compensation that has been determined.[15]

Environmental compensation is often faced with the problem of insolvency when the perpetrator (corporation) is obliged to carry out rehabilitation or recovery due to environmental damage, he is not willing to do or pay the cost of compensation.[16] In the case of forest and land fires, the possibility of insolvency is very large because the average value

[13] Hanafi Amrani, *Urgensi Pertanggungjawaban Pidana Korporasi Sebagai Pelaku Tindak Pidana Lingkungan Hidup Dan Pola Pemidanaannya* (Yogjakarta: Fakultas Hukum Universitas Islam Indonesia, 2017).

[14] Zahry Chumaida, "Lembaga Asuransi Sebagai Salah Satu Alternatif Penanggung Risiko Dalam Pengelolaan Lingkungan Hidup," in *Prosiding Seminar Nasional (Kerjasama Kementrian Lingkungan Hidup Dan Kehutanan World Wide Fund)*, 2016, 115, https://publikasiilmiah.ums.ac.id/bitstream/handle/11617/9466/8. Dr. Zahry Vandawati Chumaida%2C S.H.%2C M.H.pdf?sequence=1&isAllowed=y.

[15] Ganti Rugi Rp3,4 Triliun Kasus Karhutla Belum Masuk Kas Negara", Mediaindonesia.Com, 27 Juni 2021, https://mediaindonesia.com/humaniora/414747/ganti-rugi-rp34-triliun-kasuskarhutla-belum-masuk-kas-negara. Diakses pada 4 April 2024,pukul 20.00 wib

[16] Andri G Wibisana, "Pertanggungjawaban Perdata Untuk Kebakaran Hutan/Lahan: Beberapa Pelajaran Dari Menteri Kementerian Lingkungan Hidup Dan Kehutanan (Klhk) Vs Pt. Bumi Mekar Hijau (Bmh)," *Bina Hukum Lingkungan* 1, no. 1 (2016): 224, https://www.bhl-jurnal.or.id/index.php/bhl/article/view/45/24.

of compensation set by the court is very high. *Greenpeace Indonesia* recorded the amount of compensation in forest and land fire cases from 2012-2018 as follows:[17]

Table
Environmental Compensation Due to Fire and Fire for the 2012-2018 Period

No	Corporation	Value of Damages in Court Decisions
1	PT Kallista Alam	Rp.366 Billion
2	PT Jatim Jaya Perkasa	Rp.491 Billion
3	PT Waringin Agro Jaya	Rp. 466.5 Billion
4	PT Waimusi Agroindah	Rp. 29.6 Billion
5	PT Bumi Mekar Hijau	Rp.78.5 Billion
6	PT Nasional Sago Prima	Rp. 1.07 Trillion
7	PT Ricky Kurniawan Kertapersada	Rp. 191 Billion
8	PT Palmina Utama	Rp. 22.3 Billion
	Amount	**Rp. 2,71** Trillion

Source: Compiled from various sources.

The fundamental problem in environmental law enforcement in Indonesia is the execution of decisions in environmental pollution lawsuits or forest and land fire cases, in this case, the penalty of paying compensation, fines, and/or environmental restoration costs. Business actors do not have the intention or good faith to pay the fine/compensation. This condition results in the imposition of fines or compensation sanctions in environmental law enforcement is not effective and hinders recovery due to environmental damage.[18]

The problem becomes more complex when the calculation turns out that the perpetrator does not have enough assets, so in the end, it cannot pay compensation optimally. Judgment proof not only violates the polluter pays principle, but can also deprive other corporations of incentive to act cautiously because there are no consequences for their environmental damage.[19]

Mining companies, plantation companies, and industry players must be charged with the obligation to pay environmental insurance as a condition to be able to carry out activities or businesses. The application of environmental insurance is based on the Polluter Pay Principle and Command and Control in the context of environmental sector law enforcement. The obligations of mining companies, plantations, and industry players regulated in various regulations currently do not guarantee the safety and recovery of pollution and/or environmental damage due to activities or businesses, due to several

[17] Greenpeace.org, 15 Februari 2019, diakses pada 7 Maret 2022, https://www.greenpeace.org/indonesia/siaran-pers/1103/ganti-rugi-189-triliun-terkait-kasuskebakaran-dan-kerusakan-hutan-gagal-dibayar-sejumlah-perusahaan-pemerintah-harus-mengambil-langkahtegas/
[18] Aridarmo, "Asuransi Lingkungan Berdasarkan Polluter Pay Principle Dan Command And Control Untuk Pemulihan Lingkungan Hidup Akibat Pencemaran Dan Kebakaran Hutan."
[19] Wibisana, *op., cit* hlm 225.

reasons.

For example, forest area borrowing permit holders do not carry out their recovery obligations, but there are no sanctions applied to them, and many plantation permit holders do not pay compensation in forest and land fire court decisions. This reality threatens the existence of the environment and sustainable development. Therefore, environmental insurance needs to be developed and applied as part of the requirements for mining, plantation, and industrial activities or businesses.[20]

Legal Aspects of Business and Environmental Insurance Protection

The National Association of Insurance Commissioners (NAIC) report states that environmental insurance is entering a transformative period along with the rapid growth of the insurance market. The environmental insurance market is estimated to have annual premiums of around $2 billion (equivalent to Rp. 32 trillion) with double-digit growth, surpassing the annual growth rate of property insurance and general accident insurance. Like other segments of the insurance industry, the environmental insurance sector is geared up for the use of big data to drive new innovative solutions.

The approach of economic instruments called the market-based approach is closely related to the principle of polluters paying. The Polluter Pays Principle is derived from the OECD that polluters must pay environmental costs for their actions.[21] The definition of polluter according to the Council of the European Communities 1975 as mentioned by David Wilkinson states that polluters as people or entities that directly damage the environment or anyone who makes conditions that lead to environmental damage. Polluters cover or cover at least the costs of regulating their activities and also the cost of restoration for the resulting environmental damage.[22]

Environmental insurance is seen as a preventive and anticipatory effort as a guarantee to repair and restore the environment damaged by activities or businesses, especially plantations, as well as certainty in the enforcement of environmental laws following sustainable development goals.[23] The parties involved in environmental insurance include:

1) Insurance Industry

The transfer of risk to an uncertain event due to exploitation by business actors (plantations), makes the insurance company more active in providing explanations to the government and business people about the importance of environmental insurance. Given the risks posed are quite large, cooperation between insurance companies is needed to form a consortium for high risks of environmental insurance, making it easier to prepare policy construction, form proposals, warranties and clauses, policy schedules, calculation of

[20] Subagio Aridarmo., *op, cit* hlm 556.
[21] Uttpal Anand, Anukool Vaishnav, and Sharma, "Current Advances and Research Prospects for Agricultural and Industrial Uses of Microbial Strains Available in World Collections," *Science of the Total Environment* 842, no. January (2022): 2, https://doi.org/10.1016/j.scitotenv.2022.156641.
[22] David Wilkinson, *Environment and Law* (New York: Taylor and Francis e-Library, 2005).
[23] Ansiyah Putri Novanda and Uli Br, *Hukum Lingkungan: Membangun Masa Depan Yang Berkelanjutan* (Medan: Program Studi Hukum Universitas Medan Area, 2019).

adequate premium rates with risks, and appropriate reinsurance treaties.[24]

2) Government

The Ministry of Environment and agencies that handle AMDAL are elements of the government that must be involved in environmental insurance. The success of environmental insurance implementation is highly dependent and needs optimal government support. The government must prepare regulations, and conduct good socialization of the importance of environmental insurance through the Financial Services Authority (OJK). In addition, the government must supervise and implement strict requirements for the business world on the empowerment of natural resources. The point is that the obligation of plantation business actors is to cover operations with environmental insurance.[25]

3) Business or industry people

It needs to be instilled in business people or industry about the importance of environmental insurance as a follow-up to risk management, which is referred to in Law No. 32 of 2009 Article 47 concerning the regulation of environmental risk analysis, namely:

a. Every business and/or activity that has the potential to cause important impacts on the environment, threats to ecosystems and life, and/or human health and safety must conduct an environmental risk analysis;
b. Environmental risk analysis as referred to in Paragraph (1) includes risk assessment, risk management; and/or risk communication;
c. Further provisions regarding environmental risk analysis are regulated in a Government Regulation.

The next step that needs to be done by the insurance is openness and good management from business people or industry. This has also been affirmed in Law No. 32 of 2009 in article 63 which reads: Everyone who conducts business and/or activities is obligated to:

a. Provide information related to environmental protection and management in a correct, accurate, open, and timely manner;
b. Maintain the sustainability of environmental functions; and
c. Comply with the provisions on environmental quality standards and/or standard criteria for environmental damage.

Business people can provide the widest possible information on the data and information needed by the insurance world, and the business world also shows good faith in managing these environmental risks.[26] Furthermore, the business world must also realize that industries that can survive and develop in the future are industries that pay

[24] Desi Nandasari, "Analisis Penerapan Manajemen Risiko Dalam Proses Underwriting Asuransi Energi Offshore Di PT Asuransi XYZ," *Jurnal Asuransi Indonesia* 2, no. 1 (2023): 12, https://oldejournal.stma-trisakti.ac.id/index.php/premium/article/view/95.
[25] Purgito, *Hukum Asuransi* (Tangerang: UNPAM Peers, 2022).
[26] Zahry Vandawati, *Prinsip Itikad Baik Dalam Perjanjian Asuransi Yang Berkeadilan* (Surabaya: PT Revka Petra Media, 2014).

attention to environmental aspects.[27]

There are a number of challenges in building environmental insurance, especially for insurance companies. The environmental insurance consortium still needs an in-depth study to be realized because the risks borne by members of the environmental insurance consortium are large. More in-depth studies are needed to be able to form an environmental insurance consortium, as well as accurate statistical calculations to calculate risk, as well as the amount of premiums.[28]

The functions of the service management institution guarantee the fulfillment of environmental risk coverage include:

1. Provide transfer services for the fulfillment of environmental risk coverage in the form of payment of compensation for property and/or loss of community rights due to environmental risks due to indeterminate events;
2. Perform coverage fulfillment services for the burden of obligations in connection with the emergence of lawsuits from other parties due to the occurrence of an environmental risk;
3. Fulfill environmental risk management and/or mitigation coverage services in connection with the implementation of a certain policy, strategy, and/or program in a certain activity and/or business;
4. Perform insurance services for various activities and/or businesses that according to the provisions of applicable laws and regulations are required to participate in insurance programs and/or procure environmental funding for their business activities; and
5. Managing and distributing community funds to support legal structuring and environmental management activities.[29]

In environmental insurance, there are at least three forms, namely liability insurance, third-party insurance, and first-party insurance. First, liability insurance is a transfer of risk for the possibility of judgment proof or insolvency, namely the condition of polluting assets (business actors) that are insufficient to pay compensation for the restoration of environmental functions and pay compensation to third parties (compensation).[30] The main objectives of liability insurance include:

[27] M Munir and Saraswati, "Study Kelayakan Bisnis Dalam Aspek Lingkungan Hidup," *LABATILA: Jurnal Ilmu Ekonomi Islam* 3, no. 2 (2019): 160, https://doi.org/https://doi.org/10.33507/lab.v4i01.
[28] Nur Huda Sulaeman, "Tanggung Jawab Konsorsium Asuransi Penyingkiran Kerangka," *Notaire* 1, no. 2 (April 9, 2019): 328, https://doi.org/10.20473/ntr.v1i2.10954.
[29] Theodore Meron, Investment Insurance In International law, Oceana, 1976, hal. 187-188. Sebagaimana dikuti dari Zahry Vandawati Chumaida. Lembaga Asuransi Sebagai Salah Satu Alternatif Penanggung Risiko Dalam Pengelolaan Lingkungan Hidup. *Prosiding Seminar Nasional 2016 (Kerjasama Kementrian Lingkungan Hidup dan Kehutanan World Wide Fund (WWF)*;122.
[30] Ahmad Sudiro, "Asuransi Tanggung Jawab Produk Dan Perlindungan Terhadap Konsumen," *Jurnal Hukum IUS QUIA IUSTUM* 21, no. 4 (October 2014): 685, https://doi.org/10.20885/iustum.vol21.iss4.art8.

1. Overcoming the problem of reduced levels of prevention by business actors (under deterrence), reduced value of compensation obtained by victims (under-compensation), and the occurrence of externalization through insolvency;
2. Protect business actors or insured from bankruptcy in the event of risks beyond control;
3. It is expected to assure certainty and speed of availability of repair costs and restoration of damaged and polluted environments.[31]

Second, third-party insurance, provides coverage for remediation costs, which include replacement costs, if there is pollution or environmental damage. It aims to help reduce the impact of environmental pollution and restore environmental functions.[32] The person in charge of the business/activity ensures the place or risk of the business/activity and compensation is given not only to the insured party (in this case the person in charge of the business/activity) but also to third parties who suffer losses from the insured's business/activity.[33]

Third, first-party insurance premiums are paid by prospective victims and aim to pay compensation to victims, both material and immaterial losses without considering whether there is a party who should be responsible for losses suffered by victims (insured). In environmental loss insurance, the main purpose is to avoid large losses to the insured who do not like risk (risk averse) and premiums paid by potential polluters. Environmental loss insurance is a shift from the third-party insurance system toward first-party insurance.[34]

Environmental third-party insurance is different from first-party insurance, which helps restore environmental functions through first-party activities. Environmental third-party insurance is also different from liability insurance, which helps restore environmental functions affected by third-party activities, such as environmental pollution caused by companies.[35]

The limit of the amount of coverage for each environmental risk is determined through various ways such as including various conditions that allow risks to occur, paying attention to the moral conditions of various parties, being aware of possible losses that are difficult to calculate, and adopting various elements of uncertainty caused by natural

[31] Muhamad Muhdar, *Pertanggungjawaban Hukum Dalam Penegakan Hukum Lingkungan Di Indonesia* (Yogyakarta: CV Pustaka Ilmu, 2020).
[32] Deviana Az Zahra Rakasiwi, "Tanggung Gugat Asuransi Terhadap Kerusakan Lingkungan Hidup Di Indonesia," *Indonesian State Law Review (ISLRev)* 4, no. 1 (October 30, 2021): 7–15, https://doi.org/10.15294/islrev.v4i1.47415.
[33] Ananda Dara Prameswari, "Praktik Subrogasi Oleh Perusahaan Asuransi Di Kota Bandung Menurut Kajian Hukum Asuransi," *Acta Diurnal Jurnal Ilmu Hukum Kenotariatan Dan Ke-PPAT-An* 1, no. 2 (June 29, 2018): 269, https://doi.org/10.24198/acta.v1i2.120.
[34] Purwanto, "Pembaruan Definisi Asuransi Dalam Sistem Hukum Di Indonesia (Insurance Definition Renewal in Law System in Indonesia)," *Risalah Hukum Fakultas Hukum Risalah Hukum Unmul* 2, no. 2 (2006): 89, https://e-journal.fh.unmul.ac.id/index.php/risalah/article/view/130.
[35] Elda Aldira Laniza Zainal, *Hukum Asuransi* (Jakarta: PT Cipta Gadhing Artha, 2020).

ecological cycles and human activities.[36]

The limit of liability for damage caused by industrial activities is difficult to predict, especially claims from third parties. Besides the potential loss is very high, research is also needed to determine the reasonable limit that must be set to be the maximum compensation obligation of the insurance.[37] Premium rates are determined based on coordination between insurance companies, and regulators of financial institutions, and take into account the principle of mutual benefit and the existence of a reasonable balance (adequate) between premiums and risks.[38]

An example of environmental insurance is AIG Indonesia's insurance product, Environmental Impairment Liability. This product protects against risks that may occur in the management and business operations of the company. This insurance has two types of protection, first, contractor's pollution liability protects contractors or consultants from the risk of pollution due to the work done. Second, pollution legal liability in the form of comprehensive protection against pollution risks that can affect business continuity. Some of the benefits provided by this protection are the financial costs provided to third parties for property loss and bodily injury, the cost of cleaning up polluted sites, and the cost of legal defense.[39]

Environmental insurance is the same as insurance in general. To get good insurance must pay attention to the principles in the insurance agreement. Likewise, in environmental insurance institutions, there must be legal principles, including:

1. The principle of interest of the insured party as stipulated in Article 250 of the Criminal Code;
2. The principle of good faith from all parties in accordance with the norms in the provisions of Article 251 of the KUHD *jo* Article 32 of Law Number 40 of 2014 concerning Insurance, especially in making insurance contract clauses on insurance policies;
3. The principle of Indemnity applied to prevent the practice of seeking profit alone, and or making losses to other parties as stipulated in article 253 of the Criminal Code;
4. The principle of Subrogation following the norms of Article 271 and Article 284 of the Criminal Code, allows the insurer to divide and or transfer the legal object of

[36] Martina Eka Saputri, "Ketidakpastian Dan Risiko Yang Dialami Masyarakat Di Era Modernisasi," *Jurnal Insan Pendidikan Dan Sosial Humaniora* 1, no. 2 (May 15, 2023): 132, https://doi.org/10.59581/jipsoshum-widyakarya.v1i2.261.

[37] Revania Nadira Putri; Adi Sulistiyono, "Menggugat Peran Otoritas Jasa Keuangan Dalam Perlindungan Data Nasabah Konsumen Jasa Keuangan Perbankan," *Jurnal Privat Law* 10, no. 1 (2022): 42, https://doi.org/https://doi.org/10.20961/privat.v10i1.60463.

[38] Marsidah Marsidah, "Premi Restorno Dalam Perjanjian Asuransi," *Solusi* 18, no. 3 (September 1, 2020): 316, https://doi.org/10.36546/solusi.v18i3.306.

[39] Aridarmo, "Asuransi Lingkungan Berdasarkan Polluter Pay Principle Dan Command And Control Untuk Pemulihan Lingkungan Hidup Akibat Pencemaran Dan Kebakaran Hutan."

environmental risk coverage to the re-asurador, pool Insurance, re-insurance, and/or Co-Insurance based on a letter of subrogation;

5. The principle of acceptance follows the norms of Article 246 of the KUHD which stipulates the obligations of all parties to fulfill various obligations by risk coverage procedures;
6. Risk management principles provide flexibility to all parties to make various efforts to avoid the occurrence of risks, prevent the formation and/or development of risks, and face and or transfer the risks faced;
7. Environmental protection principles are applied to guarantee accountability for the management, protection, preservation, and maintenance of correct environmental conditions.[40]

4. Conclusion

" The legal basis for environmental insurance is regulated in Articles 42 and 43 of Law Number 32 of 2009 concerning Environmental Protection and Management *jo* Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management. The implementation of environmental insurance is constrained by the problem of insolvency when the corporation is obliged to carry out rehabilitation or recovery due to environmental damage, he is not willing to make or pay the cost of compensation. In addition, business actors also do not intend to carry out court decisions on repairing environmental damage which results in fines or compensation sanctions in environmental law enforcement not running effectively and hindering recovery due to environmental damage.

Environmental insurance is a preventive and anticipatory effort as a guarantee to repair and restore the environment damaged by activities or businesses, especially plantations, as well as certainty in the enforcement of environmental laws under sustainable development goals. The limit of compensation for damage caused by industrial activities is difficult to predict, in addition to the potential loss being very high, research is also needed to determine the reasonable limit that must be set to be the maximum compensation obligation of the insurance.

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Refrences

Aditya, Zaka Firma. "Rekonstruksi Hierarki Peraturan Perundang-Undangan Di Indonesia (Reconstruction Of The Hierarchy Of Legislation In Indonesia)." *Negara Hukum: Membangun Hukum Untuk Keadilan Dan Kesejahteraan* 9, no. 1 (June 1, 2018): 96. https://doi.org/10.22212/jnh.v9i1.976.

Agustina, and Triono Eddy. "Reconstruction of Corporate Liability Law in the Provision of Construction Services." *Journal of Law and Sustainable Development* 11, no. 6 (September 15, 2023): 5. https://doi.org/10.55908/sdgs.v11i6.932.

[40] Emy Rosnawati and M. Tanzil Multazam, *Buku Ajar Hukum Lingkungan*, *Buku Ajar Hukum Lingkungan*, 2022, https://doi.org/10.21070/2022/978-623-464-035-9.

Amrani, Hanafi. *Urgensi Pertanggungjawaban Pidana Korporasi Sebagai Pelaku Tindak Pidana Lingkungan Hidup Dan Pola Pemidanaannya*. Yogjakarta: Fakultas Hukum Universitas Islam Indonesia, 2017.

Anand, Uttpal, Anukool Vaishnav, and Sharma. "Current Advances and Research Prospects for Agricultural and Industrial Uses of Microbial Strains Available in World Collections." *Science of the Total Environment* 842, no. January (2022): 2. https://doi.org/10.1016/j.scitotenv.2022.156641.

Andrianti, Tiara. *Pertanggungjawaban Pidana Korporasi Deteriorasi Lingkungan Hidup Terhadap Bencana Alam*. Medan: Fakultas Hukum Universitas Muhammadiyah Sumatera Utara, 2022. http://repository.umsu.ac.id/bitstream/handle/123456789/18385/SKRIPSI TIARA ANDRIANTI.pdf?sequence=1.

Anindyajati. "Konstitusionalitas Norma Sanksi Pidana Sebagai Ultimum Remedium Dalam Pembentukan Perundang-Undangan." *Jurnal Konstitusi* 12, no. 4 (May 20, 2016): 878. https://doi.org/10.31078/jk12410.

Aridarmo, Subagio. "Asuransi Lingkungan Berdasarkan Polluter Pay Principle Dan Command And Control Untuk Pemulihan Lingkungan Hidup Akibat Pencemaran Dan Kebakaran Hutan." *Dharmasisya Jurnal Program Magister Hukum FHUI* 2, no. 2 (2022): 553. https://scholarhub.ui.ac.id/dharmasisya/vol2/iss2/2/.

Chumaida, Zahry. "Lembaga Asuransi Sebagai Salah Satu Alternatif Penanggung Risiko Dalam Pengelolaan Lingkungan Hidup." In *Prosiding Seminar Nasional (Kerjasama Kementrian Lingkungan Hidup Dan Kehutanan World Wide Fund)*, 115, 2016. https://publikasiilmiah.ums.ac.id/bitstream/handle/11617/9466/8. Dr. Zahry Vandawati Chumaida%2C S.H.%2C M.H.pdf?sequence=1&isAllowed=y.

David Wilkinson. *Environment and Law*. New York: Taylor and Francis e-Library, 2005.

Elda Aldira Laniza Zainal. *Hukum Asuransi*. Jakarta: PT Cipta Gadhing Artha, 2020.

Islamiyati. "Analisis Politik Hukum Dan Implementasinya." *Law, Development and Justice Review* 2, no. 1 (May 27, 2019): 109. https://doi.org/10.14710/ldjr.v2i1.5139.

Khairina, Etika, and Purnomo. "Sustainable Development Goals: Kebijakan Berwawasan Lingkungan Guna Menjaga Ketahanan Lingkungan Di Kabupaten Bantul Daerah Istimewa Yogyakarta." *Jurnal Ketahanan Nasional* 26, no. 2 (September 18, 2020): 162. https://doi.org/10.22146/jkn.52969.

Marsidah, Marsidah. "Premi Restorno Dalam Perjanjian Asuransi." *Solusi* 18, no. 3 (September 1, 2020): 316. https://doi.org/10.36546/solusi.v18i3.306.

Martina Eka Saputri. "Ketidakpastian Dan Risiko Yang Dialami Masyarakat Di Era Modernisasi." *Jurnal Insan Pendidikan Dan Sosial Humaniora* 1, no. 2 (May 15, 2023): 132. https://doi.org/10.59581/jipsoshum-widyakarya.v1i2.261.

Muhdar, Muhamad. *Pertanggungjawaban Hukum Dalam Penegakan Hukum Lingkungan Di Indonesia*. Yogyakarta: CV Pustaka Ilmu, 2020.

Munir, M, and Saraswati. "Study Kelayakan Bisnis Dalam Aspek Lingkungan Hidup." *LABATILA: Jurnal Ilmu Ekonomi Islam* 3, no. 2 (2019): 160. https://doi.org/https://doi.org/10.33507/lab.v4i01.

Nandasari, Desi. "Analisis Penerapan Manajemen Risiko Dalam Proses Underwriting Asuransi Energi Offshore Di PT Asuransi XYZ." *Jurnal Asuransi Indonesia* 2, no. 1 (2023): 12. https://oldejournal.stma-trisakti.ac.id/index.php/premium/article/view/95.

Novanda, Ansiyah Putri, and Uli Br. *Hukum Lingkungan: Membangun Masa Depan Yang Berkelanjutan*. Medan: Program Studi Hukum Universitas Medan Area, 2019.

Prameswari, Ananda Dara. "Praktik Subrogasi Oleh Perusahaan Asuransi Di Kota Bandung Menurut Kajian Hukum Asuransi." *Acta Diurnal Jurnal Ilmu Hukum Kenotariatan Dan Ke-PPAT-An* 1, no. 2 (June 29, 2018): 269. https://doi.org/10.24198/acta.v1i2.120.

Purgito. *Hukum Asuransi*. Tangerang: UNPAM Peers, 2022.

Purwanto. "Pembaruan Definisi Asuransi Dalam Sistem Hukum Di Indonesia (Insurance Definition

Renewal in Law System in Indonesia)." *Risalah Hukum Fakultas Hukum Risalah Hukum Unmul* 2, no. 2 (2006): 89. https://e-journal.fh.unmul.ac.id/index.php/risalah/article/view/130.

Rakasiwi, Deviana Az Zahra. "Tanggung Gugat Asuransi Terhadap Kerusakan Lingkungan Hidup Di Indonesia." *Indonesian State Law Review (ISLRev)* 4, no. 1 (October 30, 2021): 7–15. https://doi.org/10.15294/islrev.v4i1.47415.

Rosnawati, Emy, and M. Tanzil Multazam. *Buku Ajar Hukum Lingkungan*. *Buku Ajar Hukum Lingkungan*, 2022. https://doi.org/10.21070/2022/978-623-464-035-9.

Sudiro, Ahmad. "Asuransi Tanggung Jawab Produk Dan Perlindungan Terhadap Konsumen." *Jurnal Hukum IUS QUIA IUSTUM* 21, no. 4 (October 2014): 685. https://doi.org/10.20885/iustum.vol21.iss4.art8.

Sulaeman, Nur Huda. "Tanggung Jawab Konsorsium Asuransi Penyingkiran Kerangka." *Notaire* 1, no. 2 (April 9, 2019): 328. https://doi.org/10.20473/ntr.v1i2.10954.

Sulistiyono, Revania Nadira Putri; Adi. "Menggugat Peran Otoritas Jasa Keuangan Dalam Perlindungan Data Nasabah Konsumen Jasa Keuangan Perbankan." *Jurnal Privat Law* 10, no. 1 (2022): 42. https://doi.org/https://doi.org/10.20961/privat.v10i1.60463.

Vandawati, Zahry. *Prinsip Itikad Baik Dalam Perjanjian Asuransi Yang Berkeadilan*. Surabaya: PT Revka Petra Media, 2014.

Wibisana, Andri G. "Pertanggungjawaban Perdata Untuk Kebakaran Hutan/Lahan: Beberapa Pelajaran Dari Menteri Kementerian Lingkungan Hidup Dan Kehutanan (Klhk) Vs Pt. Bumi Mekar Hijau (Bmh)." *Bina Hukum Lingkungan* 1, no. 1 (2016): 224. https://www.bhl-jurnal.or.id/index.php/bhl/article/view/45/24.

Yuli Rosianty. "Pengetahuan Dan Sikap Masyarakat Terhadap Sistem Pertanian Sonor Di Desa Secondong Kecamatan Pampangan Kabupaten Ogan Komering Ilir Provinsi Sumatera Selatan." *Tengkawang* 12, no. 2 (2022): 186. https://doi.org/http://dx.doi.org/10.26418/jt.v12i2.59163.

Zakiah. "Implementasi Kebijakan Pembukaan Lahan Tanpa Bakar Di Kabupaten Ogan Ilir, Provinsi Sumatera Selatan." *Pesirah: Jurnal Administrasi Publik* 1, no. 1 (December 22, 2022): 74. https://doi.org/10.47753/pjap.v1i1.15.

at 19.00 WIB http://smktpi99.blogspot.com/2013/01/pernikahan/15. html accessed on 9 March 2021 at 11.34 WIB http://amahabas.wordpress.com/diary/pengantar telematics / jasa-3 - video-streaming-danteleconference/, accessed on 04 April 2021 at 19.00 WIB

https://kuaumbulharjo.org/tas-dan-function/ Accessed on April 12 2021 at 23.47 WIB

http://smktpi99.blogspot.com/2013 /01/ marriage /15.html accessed at 11.34 WIB, June 18 2021

https://www. Hukumonline.com/berita/baca/lt5e85a2c184126ijab-kabul-pakai-iteleconference-i-cepatpandemi--how- to access the law) Hit 02.35 : 12 July 2021

Indonesia. (1974). Law concerning Marriage Number 1 of 1974, Article 2 paragraph (1) Indonesia, Law Number 1 of 1974 concerning Marriage was ratified in Jakarta by President Soeharto on January 2 1974. Law Number 1 Compilation of Islamic Law (KHI) was established based on Presidential Instruction Number 1 of 1991, which was followed up in 1974 concerning Marriage, promulgated by Minister/State Secretary Sudharmono on January 2 1974 in Jakarta.

Mahrom, Mahrom. (2008). Consent Qabul Performed _ Through Telephone Based on Law no. 1 of 1974 Concerning Marriage Studies Case Determination Case No. 1751/1989 At the South Jakarta City Court. (Semarang: Diponegoro University Postgraduate Program Thesis, 2008).

Mardani. (2011). Islamic Marriage Law in the Modern World, Graha Science , Yogyakarta.

Mertokusumo Sudikno.(1982). Legal Discovery , a introduction . Liberty, Yogyakarta, 2004. Poerwodarminto , S. Wojowiseso , Dictionary Complete English-Indonesian Jakarta, Hasta.

Minister of Religion Regulation Number 11 of 2007 concerning Marriage Registration

Minister of Religion Regulation Number 19 of 2018 concerning Marriage Registration with Keput Minister of Religion of the Republic of Indonesia Number 154 of 1991.

Padli, Muhammad. (2015). Online Marriage Law and Its Implications To Marriage Registration , (Thesis Law Department 2015).

Rofiq Ahmad. (1995). Islamic Law in Indonesia, PT. RajaGrafindo Persada , Jakarta.

R. Soetjo Prawirihamidjojo and Marhalen Pohan. (2007). person and family law Personen enfamile-Recht , Surabaya, Airlangga University Press, 2008 Sadiani , Initiating Legal Update.

Sadiani.(2008). Marriage Via Telephone , Initiating Marriage Law Reform in Indonesia, Palangkaray Intimedia and STAIN.

Saepudin Jahar Asep and Jamhari Makruf.(2013). Family Law, Crime and Business Study of Indonesian Legislation, Jurisprudence and International Law, Jakarta Kencana Prenadamadia Group.

Saleh K. Wantjik. (1976). Indonesian Marriage Law, Ghalia Indonesia, Jakarta, cet. IV.

Samin Sabri and Andi Nurmaya Aroeng.(2010). Fiqh 11, Makassar, Alauddin Press.

Sembiring Rosnidar. (2013). Family Law : Internal Property Marriage , Jakarta, PT Raja Grafindo Persada, 2016 Sitti Nuraisah, Law on marriage contracts through Teleconference according to Constitution number 1 of 1974 about marriage and Islamic Law compilation.UIN Sunan Mountain Jati Bandung.

Shomad. (2001). ABD, Normative Islamic Law Sharia Principles in Kencana Indonesian Law Prenada Media Group, Jakarta, 2010 Subekti and Tjitrosudibio . Code of Civil law Burgerlijk Wetboek and the Law Number . 1 of 1974. Jakarta, Pradnya Paramita Sudiyat Iman, Customary Law , Sketch Principle . Yogyakarta, Liberty, 1981. Syarifuddin Amir, Islamic Marriage Law in Indonesia, Antara Fiqh Munakahat and Law Marriage , Jakarta,

Prenada Media, 2006 Main, 1992 Soerjono Soekanto and Sri Mamudji , Normative Legal Research Something Overview Brief , Jakarta, Raja Grafindo Persada.

Tarigan , Azhari Akmal and Amiur Nurddin. (2006). Islamic Civil Law in Indonesia Cet. III; Jakarta: Kencana.

Utama Widhi Susila. (2006). aspect aspect juridical Pasundan University Bandung teleconference wedding.

Vardiansyah Dani. (2008). Philosophy Knowledge Communication Something Introduction , Cet. II Jakarta: PT Index.

Referee Aulawi and Asro Sastroatmodjo. (2006). Marriage Law in Indonesia, Jakarta, Bulan Bintang Yusip Dede, punch law Islam to teleconference marriage , Syarif State Islamic University hidayatullah 2010 Zainuddin Ali, Islamic Civil Law in Indonesia, Jakarta, Sinar Graphics.

Yusuf Rangkuti Ramlan. (2003). Renewal of Islamic Law in Indonesia. Dissertation in the Postgraduate Program , (UIN Syarif Hidayatullah Jakarta, 2003).