



Energy sector corruption, climate change & efforts to address it: An international law perspective

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Abstract

The problem of climate change has become of the international community, increasing the earth's temperature, massive natural disasters, also the other climate changes impact. This is a serious problem whose root cause lies in the country's low commitment to reducing CO₂ emissions due to corrupt practices and weak democracy, as well as how the influence of oligarchic capitalism that aggressively invests in foreign and creates natural damage, deforestation, and degradation of environmental quality. The extent of the role of international legal mechanisms under the 2015 Paris Convention to overcome these problems. This research question is: (1). Legal accountability for perpetrators of corruption in the energy sector that contribute to the adverse effects of climate change within the framework of international law; (2). Diplomatic mechanisms and international law as well as national legal mechanisms in preventing corruption in the energy sector in an effort to prevent climate change. This research uses socio-legal methods, to identify political-economic aspects that influence the State policies and the commitment of the international community regarding eradication corruption in energy and climate change. The results of this study explain that limited jurisdiction to deal with perpetrators of energy corruption crimes makes compliance in the prevention of corruption crimes highly dependent on the political-legal of each country, including for TNCs / MNCs that invest abroad and bribe foreign public officials in accordance with UNCAC regulations. Therefore, the importance of international cooperation in tackling climate change as a follow-up to the 2015 Paris convention, both universal, regional, and bilateral cooperation, including encouraging TNC / MNC compliance in making green investments in anticipating climate change that occurs as a direct or indirect result of corruption in the energy sector.

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Keywords

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Introduction

The climate change has become a problem of international community, increasing the earth's temperature, massive natural disasters, to other climate changes. This is a serious problem whose root cause lies in the country's low commitment to reduceCO2

emissions due to investments made without paying attention to the adverse effects of climate change on the one hand, and various illicit business efforts carried out such as bribery to carry out business activities carried out [1]. Due to corrupt practices and weak democracy [2], and how the influence of oligarchic capitalism that aggressively invests in foreign and creates natural destruction, deforestation, and degradation of environmental quality [3].

The issue of climate change stemming from environmental crimes poses a complex challenge for all nations worldwide. It requires a multidimensional approach that delves into structural, cultural, and ecological aspects. Environmental activists face the daunting task of addressing the impacts of these crimes on society, the environment, and sustainable development [4]. Community groups advocating for ecological rights often find themselves in conflict with state and oligarchic entities, leading to authoritarian practices and impunity for perpetrators, including those involved in corruption that inflicts severe environmental damage.

The legal prosecution of environmental crimes instigated by oligarchs presents significant challenges, as there is often resistance to upholding human rights standards. This resistance manifests in reluctance to provide adequate compensation for environmental harm, support for victims, and participation in environmental recovery efforts encompassing health, education, and other aspects. Addressing these challenges necessitates a robust human rights and socio-political legal framework [5]. The role of international law mechanisms outlined in the 2015 Paris Convention becomes crucial in addressing these complexities and mitigating the impacts of environmental crimes.

The high risk of climate change is certainly a concern for the international community, where the United Nations makes standards and mechanisms for the urgency of information disclosure carried out by entrepreneurs in relation to climate change. Investors are required to measure the extent of risk exposure to investments made and their relation to investment portfolios, all countries are required to be adaptive to the mechanism [6].

Several relevant strategies should be done by calculation of environmental costs and including the impact of environmental pollution and / or environmental damage. Environmental impact analysis is no longer a formality requirement in business and investment activities Moreover, investments are made in developing countries and choose how to block anti-climate change principles and it is certainly a problem that creates damage and losses for countries that even have populations of wet rainforests or other natural resources in tackling climate change [7].

Several studies related to corruption in the energy sector and its impact on climate change, such as how state compliance in carrying out climate action, especially related to mitigation and adaptation to cross-border renewable energy investment (CB-REI). Of the 74 vulnerable countries throughout 2018-2019, it was found that state control of

corruption, regulatory quality, and the encouragement of accountability based on public voice are key in regulating CB-REI as a mechanism accepted by the international community, with certainly seeing the risks in the energy transition, low-emission transition, and climate-resilient pathways [8].

The impact of corruption on green investment and innovation is also determined, through the panel corrected standard error (PCSE) method of 61 OECD and non-OECD member countries between 2010 and 2018 concluded, that effective corruption prevention and enforcement can affect the increase in green investment and innovation, through policies made by the authorities, and supported by relevant mitigation mechanisms in corruption prevention, This is very effective in tackling the problem of climate change [9].

Then, regarding the measures to identified of strengths and weaknesses of the democratic system on climate change in making relevant policies, there is a correlation between democracy and performance in making policies in dealing with climate change, through the promotion of decarbonization, mainstreaming investment and green economy, as well as the capacity of countries to overcome influential corruption in policymaking, including the influence of political policies in reducing the use of fossil energy impact on energy transition and carbon level reduction that affects climate change mitigation policies [10].

In the context of Indonesia, after the New Order regime and the established of the Corruption Eradication Commission, it shows the effectiveness and success in preventing and minimizing corruption, including its impact on market liberalization, as well as policies and accountability of public officials. The presence of an independent anti-corruption institution is needed by the state in realizing policies and arrangements to mitigate the impact of climate change, especially in various sectors that are prone to corruption cases such as corruption in the forestry, mining, and other natural resource sectors [11].

This research wants to focus the topic on climate change and its effects on energy sector corruption, with relevant efforts and strategies in tackling it. Based on the facts that have been presented, this study is focused on two major issues that will be discussed, namely: (1). Legal accountability for perpetrators of corruption in the energy sector that contribute to the adverse effects of climate change within the framework of international law; (2). Diplomatic mechanisms and international law and national legal mechanisms in preventing corruption in the energy sector in efforts to prevent climate change.

Methods

This study conducted within socio-legal studies extends beyond textual analysis to encompass a contextual examination of all processes, spanning from the formulation of laws to their implementation. The term "socio-legal studies" has evolved into an overarching label that encompasses various disciplines applying a social scientific lens to legal studies. These disciplines include legal sociology, legal anthropology, legal history, psychology and law, judicial political science, and comparative science [12].

The socio-legal approach integrates methodologies from the social sciences, such as political science, economics, culture, history, anthropology, and communication, with approaches found in legal studies, such as the study of legal principles, doctrines, and hierarchies. As a result, the socio-legal approach represents a unified concept that combines these diverse perspectives. Consequently, legal analysis conducted within this framework adopts a broad and interdisciplinary viewpoint in addressing the issues explored in this research [13]. Thus, this legal research aims to comprehensively address key issues, particularly the nexus between climate change and its relevance to corruption within the energy sector, from the perspective of international law.

Results and Discussion

The concept of corruption in the energy sector

In his doctrine, Aristotle referred to the group of "robbers" as individuals who prioritized the absolute pursuit of wealth (economic). According to him, as people's appreciation of wealth increases, then their appreciation of values such as morality, truth, humanity, and justice will decrease. This philosophical statement basically teaches us that the wealth of a nation becomes difficult to achieve maximum prosperity for its people due to extensive and continuous looting by corrupt individuals [14].

Corruption in the energy sector includes private and public corruption, which involves dishonest or unethical behavior by individuals who have the authority to achieve private gain. This definition is particularly relevant in the energy sector, where consistent standards are required outside national law. To fight corruption effectively, comprehensive policies must be created by energy companies, which address abuse of personal office for personal gain, including cases where company employees exploit their company positions. Preventing and fighting corruption requires understanding the specific risks faced by energy companies and developing appropriate mitigation plans based on the nature of their operations [15].

The concept of corruption in the energy sector occurs due to monopolistic state power in natural resource management and the absence of transparency and accountability in the allocation and concessions given. Due to corrupt political practices, accompanied by a network of black-market transactions in the energy sector, and supported by bribery practices between public officials and the private sector that play a role in facilitating extractive businesses that are given without regard to the rights of affected communities and natural damage provided, this makes corrupt practices in the energy sector occur [15].

In the measure for tackling the corruption cases in the mining sector, vertical synchronization is very important. This means that the justice system, especially in cases

of corruption, must work in a coordinated manner and have the same understanding from investigation to implementation of court decisions. It is important for all parties involved in handling corruption cases to agree on the articles of law violated by the suspects. The first step in handling corruption cases is to determine whether a case is worthy of prosecution, which can begin at the investigation or prosecution stage. In addition, vertical synchronization (Police, Prosecutor's Office, and Anti-Corruption Agencies) is also needed to ensure that the legal rules applicable in certain fields do not conflict or overlap with each other [16].

The 2015 Paris Convention and climate change prevention mandate

The company's expansion into risky markets to access energy reserves and increase exploration activities requires an evaluation of corruption risks in this new region. Many countries that have energy resources, such as Africa, Latin America, Asia, and the Middle East, rank lower in the corruption perceptions index, which indicates higher levels of corruption due to a lack of infrastructure and controls to tackle corrupt practices.

The Paris Convention is an international agreement adopted at the 21st Conference of the Parties (COP21) in Paris, France, in December 2015. The ultimate goal is to limit global average temperature rise to below 2 degrees Celsius above pre-industrial levels and work to limit temperature rise to 1.5 degrees Celsius. The agreement focuses on reducing greenhouse gas emissions, promoting transparency and accountability, providing financial and technological support to developing countries, and conducting periodic reviews to increase ambition and response to climate change [17].

The main objective of the convention is to limit the rise in global average temperature to below 2 degrees Celsius above pre-industrial levels, with efforts to limit it to 1.5 degrees Celsius where possible. In addition, the agreement also commits to significantly reducing greenhouse gas emissions and supporting mitigation and adaptation efforts in countries most vulnerable to the impacts of climate change. The agreement is an important step in global efforts to address climate change and emphasizes the importance of collective action to mitigate its impacts.

Legal accountability for corporations in energy sector corruption

1. Effects of contractual relationships in foreign investment by corporations in the energy sector

In the energy sector, mergers and acquisitions are common, including involving stateowned companies. These transactions often involve the appointment of government officials as supervisors or board of directors to protect the interests of the state as shareholders. However, such appointments can create conflicts of interest, potentially damaging business reputations and increasing the risk of corruption, especially in public procurement processes where employees involved in procurement may be offered bribes in exchange for business opportunities [18].

During the tender process, some companies may collude and manipulate bids by agreeing to offer the lowest price to get the project. In return, other companies involved

in this tender conspiracy scheme will also offer low prices for other projects. This practice is more likely to occur when there are limited suppliers or in cases where significant investment is required for large infrastructure projects. Such tender and pricing conspiracy activities may lead to anti-competitive behavior and may result in market takeover. In the Indonesian context, this action results in less than optimal governance performance, especially in non-renewable energy such as coal. This happens because of several things: Rimšaitė, "Corruption Risk Mitigation in Energy Sector: Issues and Challenges." First, In-efficiency policies and regulations. This can be seen from the many violations of environmental and safety regulations committed by coal mining companies. In addition, inconsistent government policies also contribute to low unsustainable energy governance in the coal mining sector in Indonesia.

Second, environmental and social issues. These related to the coal mining industry, such as deforestation, river pollution, and conflicts over land and environmental rights, significantly affect the performance of sustainable energy governance in the coal mining sector in Indonesia. These challenges highlight the need for coordinated efforts between governments, companies, and communities to improve policies and regulations, improve monitoring and enforcement, strengthen community participation in decision-making, and implement innovative technologies and waste management systems to reduce the environmental impact of coal mining activities. Third, suboptimal mining waste management. Identified as a significant factor affecting energy governance performance that is not optimally sustainable in the coal mining sector in Indonesia. Inadequate waste management poses a threat to the health and safety of local communities, as well as environmental degradation. In addition, poor waste management practices can lead to a decrease in water and soil quality around mining sites.

2. Compliance mechanism for handling the climate change

The energy sector is particularly vulnerable to corruption due to factors such as geopolitical influence and dependence on a single source of supply. Tight control of the government and its ability to regulate prices and project execution also contribute to this vulnerability. Because basically the problem of corruption is the main trigger for climate change that occurs [19].

Corruption exists in both the public and private sectors, and in the energy sector, corruption can appear in the form of corruption on the supply and demand sides. Due to the time-sensitive nature of energy resources, government involvement, and economic significance, corruption can lead to the imposition of special regulations that restrict private companies from carrying out energy projects, influenced by stakeholders and private individuals. The dual nature of corruption in the energy sector arises from the strategic importance and indispensable natural resources [20].

Public procurement has a risk factor because it allows business entities to collude and compromise at the lowest price to win a tender, known as a tender conspiracy. This can

lead to market foreclosure for competitors, especially in the waste management sector where such companies are controlled by the government. Acts of corruption in the private sector, such as price fixing and market sharing, can also violate competition law, although these actions are usually evaluated from the point of view of business competition or the procurement of goods and services, and not from the point of view of corruption [21].

To address corruption risks, the company implements an anti-corruption program that includes compliance standards and procedures based on risk assessment. These programs aim to promote corporate integrity and accountability through a code of ethics, education, communication, and monitoring. It is important for employees to prioritize compliance with laws and regulations to achieve long-term benefits for the company rather than seeking short-term benefits [22].

3. Compliance mechanism in preventing corruption in the climate change sector

The limited jurisdiction to prosecute perpetrators of energy corruption crimes underscores the significant reliance on each country's political and legal frameworks to prevent corruption, including transnational corporations (TNCs/MNCs) investing abroad and engaging in bribery of foreign public officials, as outlined in the UNFCCC (UN Framework Convention on Climate Change) and UNCAC (UN Convention against Corruption).

To address these challenges effectively, countries must establish a comprehensive framework rooted in international environmental law mechanisms. This framework should integrate principles that balance investments with the impacts of environmental degradation, aiming to safeguard environmental sustainability and sustainable development. It is imperative to avoid policy paradigms solely driven by liberalization and free markets, known as the Policy-Based Market-Driven Paradigm [23].

Furthermore, international cooperation plays a crucial role in addressing climate change, building on the commitments made in the 2015 Paris Agreement. This cooperation should encompass universal, regional, and bilateral efforts aimed at encouraging TNCs/MNCs to invest in green initiatives and prepare for climate change impacts resulting directly or indirectly from corruption in the energy sector.

Various efforts that need to be made by the international community by prioritizing the principles of international law in tackling corruption in the energy sector that have a direct effect on climate change are: (1). Examining various principles in international legal mechanisms in responding to climate change issues (2). Examine various climate change challenges that affect state sovereignty, both within land boundaries to sea boundaries; (4). Link the relationship between climate change and human rights issues; (5). Examine the various mechanisms of international law whether they are adequate in giving adequate responsibility for tackling the effects of climate change itself.

a. Diplomatic measures

The relationship between corruption and energy consumption has received relatively less attention than the literature on corruption and economic growth or emissions. However, a study by Fredriksson et al. (2004) showed that higher levels of corruption are associated with reduced assertiveness in energy policy, leading to an increased effect of corruption on energy intensity. These findings imply that corruption can adversely affect energy efficiency [19].

Diplomatic mechanisms play an important role in addressing the issue of climate change as they require global cooperation to reach effective solutions. Climate change, which is a global challenge, requires international collaboration to reduce greenhouse gas emissions and mitigate their impacts. Diplomatic mechanisms facilitate communication, negotiation, and the establishment of global agreements, providing a framework for coordinating global efforts in response to climate change.

International cooperation is essential in tackling climate change, as it is a global challenge that requires collaborative efforts. The importance of diplomatic mechanisms in facilitating communication, negotiation, and reaching mutual agreements among countries to reduce greenhouse gas emissions and mitigate the effects of climate change. This diplomatic mechanism allows countries to work together towards effective solutions that transcend national borders [24].

The establishment of international agreements, facilitated by diplomatic mechanisms, such as the United Nations Framework Convention on Climate Change (UNFCCC) and the 2015 Paris Agreement, plays an important role in coordinating international efforts to address climate change. These agreements provide the necessary framework for global coordination and response to the challenges posed by climate change, enabling negotiation and the establishment of collective action to mitigate its impacts.

b. International dispute mechanism

In the material context, corruption crimes in the energy sector do face a legal vacuum. However, if countries around the world consider the issue of climate change to be a serious crime and become a Prompt Norm, then it can take advantage of existing international mechanisms [25] based on the 1998 Rome Statute is still attached to the types of war crimes regulated in Article 8 paragraph (iv) of the 1998 Rome Statute which states that intentionally launching an attack while knowing that it will cause unintended loss of life or injury to civilians, damage to civilian objects, or extensive, long-term, and severe damage to the natural environment, which would be clearly disproportionate to the anticipated concrete and direct military advantage.

Article 25 of the 1998 Rome Statute outlines individual liability for international criminal acts. It states that individuals who commit crimes within the Court's jurisdiction are personally responsible and subject to punishment. A person can be held responsible if they commit a crime individually, jointly with others, or through someone else. They can also be held accountable for ordering, soliciting, or inducing a crime, aiding or abetting its commission, or contributing to it intentionally. This contribution must either aim to further the criminal activity of a group or be made with knowledge of the group's criminal intentions. Additionally, individuals can be held accountable for publicly inciting genocide or attempting to commit a crime, even if it is not completed. However, abandoning the attempt to commit a crime may exempt individuals from punishment for attempted crimes. It's important to note that individual criminal responsibility under this Statute does not affect the responsibility of States under international law.

In terms of holding individuals and private entities accountable, the current limitations in prosecuting corruption crimes in the energy sector under war crimes only pose a significant challenge. It's difficult to hold perpetrators accountable for their actions, whether they are individuals or multinational corporations [26]. This issue highlights the need for international commitment to amend the 1998 Rome Statute and strengthen political commitment to environmental sustainability. By doing so, we can prevent the practice of impunity for those responsible for ecocide crimes in the dimension of international law.

Conclusion

The limited jurisdiction to deal with perpetrators of energy corruption crimes makes compliance in the prevention of corruption crimes highly dependent on the political-legal of each country, including for TNCs / MNCs that invest abroad and bribe foreign public officials in accordance with UNCAC regulations. Therefore, the importance of international cooperation in tackling climate change as a follow-up to the 2015 Paris convention also ICC under the 1998 Rome Statute, both universal, regional, and bilateral cooperation, including encouraging TNC / MNC compliance in making green investments in anticipating climate change that occurs as a direct or indirect result of corruption in the energy sector.

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