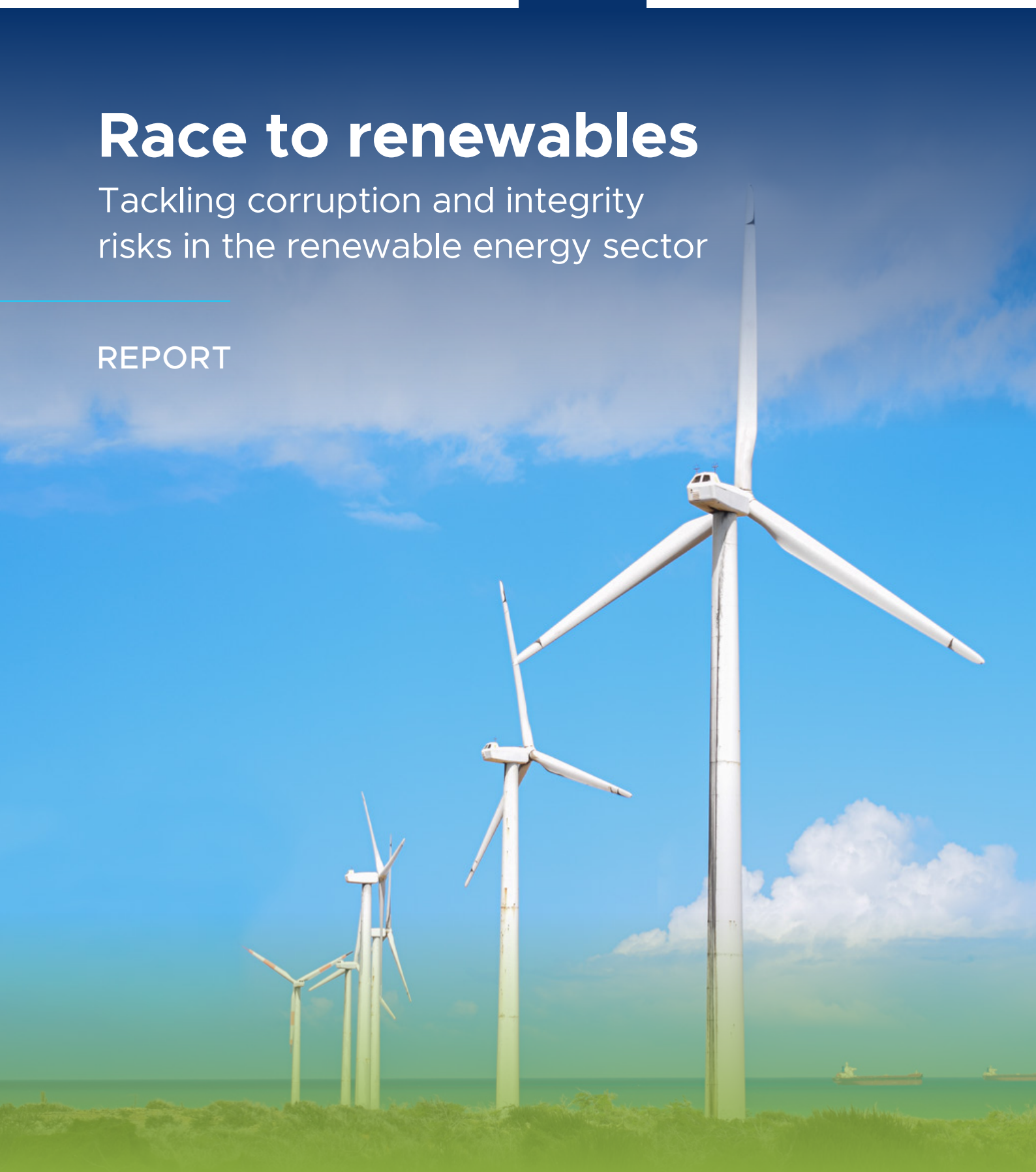
Extractive Industries
Transparency Initiative

Race to renewables

Tackling corruption and integrity risks in the renewable energy sector

REPORT



Extractive Industries
Transparency Initiative

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COVER PHOTO: WIND FARM IN LA GUAJIRA, COLOMBIA / NELSON DAVID ALONSO CHARRY

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CONTINUED GROWTH IN RENEWABLE ENERGY is crucial to meeting net-zero emissions goals. The risks accompanying a shift of this scale and urgency are cause for concern: large flows of financing, rapid scale-up in investment, and expectations of high returns can generate considerable corruption and integrity risks. These concerns bear similarities to the issues observed in the extractive industries over the past decades,[1] and are particularly apparent for large-scale renewable energy investments in regions with weaker governance.

The role of renewables is expanding rapidly in the global energy mix:

- According to the International Energy Agency (IEA), renewables are expected to account for over 90% of global electricity capacity expansion between 2022 and 2027.[2]
- To reach the net zero goals by 2050, an estimated annual investment of around USD 5 trillion is needed in the renewable energy sector by 2030.[3]
- By 2050, the share of renewables in global primary energy could increase to between 35-65%, depending on the scale and pace of decarbonisation efforts, according to bp's Energy Outlook.[4]

Mismanagement and corruption could present acute barriers to the anticipated growth of the renewable energy sector. Weak governance can damage the investment climate, increase the costs of doing business and create operational, legal and reputational challenges for renewable energy companies. Beyond these impacts, mismanagement and corruption also risk creating unfair outcomes for stakeholders, especially in communities directly impacted by renewable energy projects. The risk of human rights violations is particularly severe when large business projects unfold in remote or indigenous communities.

Although stakeholders in the renewable energy sector are showing a growing commitment to addressing environmental and social concerns, there is currently little attention given to corruption and integrity risks in both policymaking and the development and operation of renewable energy projects.

The key risks can be grouped into three major categories: institutional and regulatory gaps; inadequate community engagement; and project implementation and operational risks. Each category presents challenges that can undermine the integrity and success of renewable energy initiatives – from regulatory loopholes that could enable developer collusion, to social and environmental harms that could foster mistrust and project abandonment, to the abuse of untested technologies and grid connectivity issues that could facilitate corrupt practices (see Figure 1).

1 Gillies, A. (2020). *Crude Intentions: How Oil Corruption Contaminates the World*. Oxford University Press. See also Atal, M.R., Trapnell, S. & Zinnbauer, D. (2022). *Merchants of Integrity? Commodity Trading and Corruption Research for a World in Transition*. Global Integrity Anti-Corruption Evidence Programme. Retrieved from https://ace.globalintegrity.org/projects/corruption-risks-trade-commerce/.

2 IEA (2021). *Net Zero by 2050: Roadmap for the Global Energy Sector*. Retrieved from https://www.iea.org/reports/net-zero-by-2050.

3 Ibid.

4 bp (2023). *Energy Outlook 2023*. Retrieved from https://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html.

There are emerging sets of standards or criteria in the renewable energy sector that seek to strengthen responsible business practices. Most of these have been developed by industry associations and tend to focus on specific sub-sectors rather than the renewable energy sector as a whole. Few of the standards directly or thoroughly address transparency, anti-corruption or governance issues, with only a small number setting out detailed expectations on issues such as the disclosure of beneficial ownership, contracts and taxes – disclosures that are established best practices in the extractive industries and key requirements of the Extractive Industries Transparency Initiative (EITI). Existing standards within the renewable energy sector also differ from the EITI in that they focus on industry performance at the project or corporate levels. In contrast, the EITI Standard is implemented at the country level and sets out expectations for both government and companies.

The establishment of open, accountable and inclusive decision-making must serve as the cornerstone for a sustainable shift to renewable energy systems that advance net-zero targets while benefiting populations and preventing environmental and social harm. There is potential to draw lessons from the EITI's reporting framework and multi-stakeholder approach to strengthen public support for the growth of the renewable energy sector, especially as the sector faces unprecedented demands for speed and scale. This could help the sector garner public trust and strengthen its social license to operate, without which the global energy transition risks repeating mistakes of the past.

This report discusses the extent and implications of corruption and integrity risks in the renewable energy sector in high-, middle- and lower-income countries, with a focus on solar, wind, hydropower and green hydrogen. It outlines existing transparency and accountability sector standards, and the degree to which these address areas that are vulnerable to corruption and weak governance. Finally, this report provides recommendations to diverse stakeholders on strengthening accountability and transparency in the renewable energy sector.

The establishment of open, accountable and inclusive decision-making must serve as the cornerstone for a sustainable shift to renewable energy systems

FIGURE 1

Governance and corruptions risks in the renewable energy sector

1. Institutional and regulatory gaps

- Absence of rules and regulatory frameworks may lead actors to take shortcuts and unduly influence bureaucratic processes.
- Opaque and weak licensing and auction processes can lead to collusion, favouritism and other integrity challenges.
- Massive subsidy programmes can prompt the misuse of eligibility criteria and disbursement rules, potentially undermining climate and public benefits.
- Savvy developers may leverage legal prowess to secure contracts that unduly burden future generations with high costs and liabilities.

2. Inadequate community engagement

- Land acquisition processes can be vulnerable to abuse, especially in instances where companies use local brokers operating without oversight and on pay-for-performance terms.
- Consultation, informed consent processes and the negotiation of community benefits may be opaque, manipulated or tokenistic, favouring select local contacts over broader community representation.

3. Project implementation and operational risks

- Governments tying green development loans or licenses to local sourcing can expose companies to pressures to select politically connected firms.
- Pressure to scale investments combined with untested business ideas can fuel hype-driven entrepreneurialism and business scams.
- Challenges tied to grid connectivity may lead to the solicitation of side-payments for preferential treatment by public officials holding gatekeeping positions.

Overview of recommendations

RENEWABLE ENERGY ACTORS should uphold exemplary standards of integrity, particularly as the energy transition is becoming increasingly politicised and any hint of corruption or mismanagement can sow doubts about the overall endeavour. Transparency, accountability and dialogue can be strengthened to maximise opportunities and mitigate risks. Stakeholders can each play a role in strengthening the integrity of the sector, according to the recommendations set out below.

Renewable energy companies

- Regularly map out corruption and integrity risks across value chains to inform effective mitigation measures.
- Incorporate high standards of transparency into business practices and investment decisions, particularly in relation to beneficial ownership, contracts and licenses, and payments to governments.
- Commit to supporting meaningful and inclusive multi-stakeholder dialogue to enhance sustainability, equity and trust.
- Take action when stakeholders raise legitimate concerns.

Governments

- Integrate transparency and good governance in the management and development of the renewable energy sector, by committing to transparent auctions, licensing and public procurement processes and disclosing information on contracts, taxes and subsidies.
- Create spaces for meaningful and inclusive multi-stakeholder dialogue to enhance sustainability, equity and trust.
- Enforce effective accountability mechanisms and protections for civic space.

Civil society organisations

- Integrate calls for transparency and accountability into policy demands, as a means of mitigating long-term risks to community and project outcomes.
- Take a partnership approach that combines the knowledge and connections of local organisations with the global influence and resources of international non-governmental organisations (NGOs).

Donors and development partners

- Take a leadership role in development financing for renewable energy projects, in ways that lower costs and mitigate risks and by requiring strong governance standards in projects that receive technical and financial assistance.

EITI multi-stakeholder groups

- Explore the feasibility of expanding EITI reporting to the renewable energy sector, and in turn, consider the inclusion of renewable energy actors in EITI activities.

International EITI Board

- Share lessons on how to advance transparency and multi-stakeholder dialogue between the extractive industries and the renewable energy sector.

- Explore opportunities for collaboration and partnerships with influential stakeholders to advance collective action in the renewable energy sector either directly through the EITI or by supporting the establishment of a separate entity focused on transparency and good governance in the renewable energy sector.

The Apodi solar plant in Ceara, Brazil.

PHOTO CREDIT: OLE JØRGEN BRATLAND / © EQUINOR

1. Introduction

CONTINUED GROWTH IN RENEWABLE ENERGY is crucial to meeting net zero goals by 2050. The risks accompanying a shift of this scale and urgency are cause for concern: large flows of financing, rapid scale-up in investment and expectations of high returns can generate considerable corruption and integrity risks for the renewable energy sector, as demonstrated in the extractive industries over the past several decades.[5]

The fight against climate change is transforming the energy sector. According to bp's 2023 Energy Outlook, global fossil fuel demand is anticipated to see a sustained decline over the next three decades. In a scenario where the world broadly maintains its current decarbonisation trajectory, the share of fossil fuels in primary energy could drop from around 80% in 2019 to around 55% by 2050. In a more ambitious scenario, aligned with net-zero objectives, the share of fossil fuels in primary energy would drop to around 20% by 2050.[6]

The decline in fossil fuel demand will be offset by the rapid expansion of renewables in the global energy mix. The IEA expects renewables to account for over 90% of global electricity capacity expansion between 2022 and 2027.[7] To reach the net zero goals by 2050, an estimated annual investment of USD 5 trillion is needed in the renewable energy sector by 2030.[8] By 2050, the share of renewables in global primary energy could increase between 35-65%, depending on the scale and pace of decarbonisation efforts, according to bp's Energy Outlook.[9]

Mismanagement and corruption could present acute barriers to the projected growth of the renewable energy sector. Weak governance can damage the investment climate, increase the costs of doing business and create operational, legal and reputational challenges for renewable energy companies.

Beyond these impacts, mismanagement and corruption also jeopardise fair and equitable outcomes for stakeholders, especially the communities impacted by renewable energy projects. The risk of human rights violations is severe when large business projects unfold in remote or indigenous communities. According to research by the Business & Human Rights Resource Centre, more than 200 allegations about human rights abuses were recorded for the renewable energy sector during the past 10 years, with 44% of these allegations tied to wind or solar projects.[11] Though stakeholders in the renewable energy sector are showing a growing commitment to addressing environmental and social concerns, there is currently relatively little attention given to the risks of corruption and mismanagement in policymaking and in the development and operation of renewable energy projects.

> *The rush to scale-up and deploy renewable energy technologies puts incredible pressures on bureaucracy and state administration, which creates incentives for corruption. Even in developed countries there is not enough staffing, resources, or technical knowledge."*
>
> *– Civil society actor*[10]

5 Gillies, A. (2020). *Crude Intentions: How Oil Corruption Contaminates the World*.

6 bp (2023). *Energy Outlook 2023*.

7 IEA (2022). *Renewables 2022*. Retrieved from https://www.iea.org/reports/renewables-2022.

8 IEA (2021). *Net Zero by 2050: Roadmap for the Global Energy Sector*.

9 bp (2023). *Energy Outlook 2023*.

10 Research participant T (civil society representative), interviewed 22 September 2023.

11 Business & Human Rights Resource Centre (2021). *Renewable Energy & Human Rights Benchmark: Key Findings from the Wind & Solar Sectors - 2021 Edition*. Retrieved from https://www.business-humanrights.org/en/from-us/briefings/renewable-energy-human-rights-benchmark-2/.

PHOTO CREDIT: STATKRAFT

The Magat hydroelectric power plant on the island of Luzon in the Philippines.

The fragility of trust in renewables and the particularly adverse consequences of corruption and mismanagement can have far reaching effects, even in industrialised contexts. In Bulgaria, a corruption-prone roll-out of renewables created excessive costs and undermined public support for the transition.[13] A fragile legitimacy even surfaces in higher trust contexts for seemingly benign practices. In the UK and Denmark, for example, wind farm developers adopted community benefit schemes to build public support for their projects. However, some stakeholders have perceived these schemes as corrupt, and they have thus corroded rather than strengthened trust.[14]

In 2022, the G20 acknowledged the presence of corruption and governance risks in the renewable energy sector, but there is limited understanding of the drivers of corruption and few evidence-based mitigation measures. There are also only limited case studies illustrating successes in combatting bribery and corruption in the sector.[15]

> *"Renewables have to get much stronger on governance. No doubt the sector is riddled with corruption and governance risks. Environmental and social concerns have been prioritised and governance standards are lacking."*
>
> *– Industry representative*[12]

12 Research participant J (industry representative), interviewed 26 June 2023.

13 Andreas, J., Burns, C. & Touza, J. (2018). Overcoming Energy Injustice? Bulgaria's Renewable Energy Transition in Times of Crisis. *Energy Research & Social Science*, 42, 44-52. https://doi.org/10.1016/j.erss.2018.02.020.

14 Cass, N., Walker, G. & Devine-Wright, P. (2010). Good Neighbours, Public Relations and Bribes: The Politics and Perceptions of Community Benefit Provision in Renewable Energy Development in the UK. *Journal of Environmental Policy & Planning*, 12(3), 255-275. https://doi.org/10.1080/1523908X.2010.509558; Jørgensen, M.L. (2020). Low-carbon but corrupt? Bribery, inappropriateness and unfairness concerns in Danish energy policy. *Energy Research & Social Science*, 70(101663). https://doi.org/10.1016/j.erss.2020.101663.

15 Westmore, K. (2022, November 8). Clean Energy: Tackling Corruption in the Transition to Net Zero. *Royal United Services Institute (RUSI)*. Retrieved from https://rusi.org/explore-our-research/publications/commentary/clean-energy-tackling-corruption-transition-net-zero.

The energy transition thus poses unprecedented integrity challenges that, if left unattended, threaten to derail the entire project. The EITI – the global standard for open and accountable management of oil, gas and minerals – offers a framework for addressing governance issues. There is potential to draw lessons from its evolving reporting standard and established multi-stakeholder mechanism to strengthen transparency, accountability and public trust in the renewable energy sector, especially as the latter faces unprecedented demands for speed and scale.

The establishment of open, accountable and inclusive decision-making must serve as the cornerstone for a sustainable shift to renewable energy systems that benefit populations and prevent environmental and social harm. The lessons learned from how corruption and integrity risks have been tackled in the extractive industries can help renewable energy industries garner public trust and their social license to operate, without which the global energy transition risks repeating mistakes of the past.

This report discusses the extent and implications of corruption and integrity risks in the renewable energy sector in high-, middle- and lower-income countries, with a focus on solar, wind, hydropower and green hydrogen (though similar dynamics and considerations may also be applicable to the geothermal and biomass sectors).[17] It is supplemented with a comparative assessment and strategic gap analysis of relevant standards and responsibility principles within the renewable energy sector that address governance and anti-corruption. Finally, this report provides recommendations to diverse stakeholders on strengthening accountability and transparency in the sector.

The findings are based on an academic and policy literature review, as well as interviews with industry representatives, academics and policy experts, and civil society actors. Given the relatively early stage of the sector's development in many countries and the usual time lag for applied research, it is not surprising that the empirical evidence base is still rather thin. Evidence is therefore more qualitative and anecdotal in nature, and often produced across intersecting areas of inquiry. The research focused specifically on corruption and integrity issues rather than broader governance aspects. Neither supply chain issues (e.g. transition minerals) nor downstream issues related to carbon credits, offsets or related trading schemes were included in the scope of this study.[18]

> *Because the sector is decentralised, and the size of projects is often small, there is low interest in mitigating corruption risk. But for mega-projects, it is becoming an issue."*
>
> *– Policy expert*[16]

16 Research participant N (policy expert), interviewed 14 July 2023.

17 Green hydrogen is hydrogen produced through the electrolysis of water with renewable energy, producing close to zero greenhouse gas emissions.

18 For more information on governance and corruption risks in transition mineral supply chains, see EITI (2022), *Mission critical: Strengthening governance of mineral value chains for the energy transition*. Retrieved from https://eiti.org/documents/mission-critical.

PHOTO CREDIT: STATKRAFT

Windmills near
Kjøllefjord, Norway.

2. Corruption and integrity risks in the renewable energy sector

EXPERIENCE IN THE RENEWABLE ENERGY SECTOR has highlighted a wide range of potential corruption and integrity risks. While the renewable energy sector is diverse, it is possible to identify characteristics that contribute to a unique sectoral risk profile. These characteristics and associated risks stem primarily from the sector's novelty and forward-looking nature, as well as its rapid expansion. They require tailored responses.

Renewable energy ventures often involve not only the implementation of individual projects but also the creation of entire energy value chains from the ground up. For example, wind farms in remote areas or large-scale hydrogen initiatives come with multiple potential hold-up points that are vulnerable to extortionary practices. A notable challenge arises from sunk investments, which diminish the manoeuvring power of economic actors.[19] Once a developer has invested resources into a specific aspect of the value chain (such as procuring equipment for a wind farm), the success of that investment becomes contingent on other conditions that must align. These conditions encompass factors like access to maintenance and supply services, grid connection agreements and buy-in from local communities, none of which are guaranteed at the project's outset.

"We do see corruption risks in a surprising number of projects across our portfolio."

– Industry representative[19]

Achieving success in renewables projects involves managing complex dependencies.[20] This complexity offers opportunities for both public officials and private actors to gain advantages, particularly when investments are secured but their success hinges on the fulfilment of various interconnected elements. In contrast, conventional energy projects using fossil fuels can typically build on existing ancillary infrastructures, well established supply chains, and a more mature professional services marketplace and do not have to build such structures in parallel.

"Anywhere with sizable projects, bribery and corruption are possible."

– Academic expert[22]

The renewable energy sector faces corruption risks similar to those found in other industries. Business operations or functions that typically pose integrity challenges across different types of corporations and sectors are also vulnerable to corruption within renewables. Whether it be in bidding processes, compliance with regulations, responsible sourcing, inclusive community engagement, the controlling of financial flows, or the monitoring of project quality, the renewable energy sector grapples with corruption and mismanagement like any other industry. It operates under these common processes, subject to risks shaped by the specific business environment and broader integrity context.

However, there is much diversity within the term "renewable energy" that defies easy generalisations. Two dimensions are particularly important for identifying specific corruption and integrity risks for individual technologies and ventures:

19 Research participant F (industry representative), interviewed 5 July 2023.

20 Dasgupta, S. & Sengupta, K. (1993). Sunk Investment, Bargaining and Choice of Capital Structure. *International Economic Review*, 34(1), 203-220. https://doi.org/10.2307/2526957.

21 Research participant E (industry representative), interviewed 21 June 2023.

22 Research participant M (academic expert), interviewed 11 August 2023.

PHOTO CREDIT: NELSON DAVID ALONSO CHARRY

Wind turbines in La Guajira, Colombia.

- **Position in the value chain:** Companies in the renewable energy sector can be involved in different parts of the value chain based on their role. This ranges from upstream equipment manufacturer and specialised service provider to coordinating developer or integrated power provider. Each segment of the value chain brings distinct challenges, causing renewable energy companies to face varying risk combinations based on their role(s) in the value chain. The absence of fully integrated value chains means that there are gaps in knowledge, systems and other aspects of production and supply that add to the pressure of mitigating corruption and integrity risks.

- **Technological complexity and economic scale**: Projects within the renewable energy sector vary in their technological complexity and economic size. These range from large-scale, high-capital custom hydropower projects, to utility-scale, semi-customised, on-grid solar and wind farms, down to smaller community-level on or off-grid developments and household installations. The rapid expansion and increasing scale of renewable energy production raises a number of integrity challenges at the company, sectoral and country levels:

    - At the company level, rapid growth is likely to be associated with more complex and more expansive supply chains, with a growing reliance on external service providers, expansion into unfamiliar locations and the expedited onboarding of new employees. Local partners may lack compliance capabilities and expertise that larger partners bring, thus amplifying risks.[24] These dynamics make effective compliance and the preservation of a culture of integrity challenging in the near term, even if resources and capabilities for these functions grow substantively in the medium term.[25]

> *Governance issues in the renewable energy sector are the same as other sectors, except the actors are quite different. New, smaller players have yet to mature from a governance perspective. This results in higher risks depending on the speed of scale-up."*
>
> *– Policy expert[23]*

23 Research participant Q (policy expert), interviewed 21 September 2023.

24 Research participant E (industry representative), interviewed 21 June 2023.

25 Ramaswamy, V., Ueng, C. J. & Carl, L. (2008). Corporate governance characteristics of growth companies: An empirical study. *Academy of Strategic Management Journal* 7, 21-33. Retrieved from https://api.semanticscholar.org/CorpusID:167163860.

- At the sectoral level, a rapid scale-up amplifies the competition for, and possibility of bottlenecks in, the supply of critical inputs.[26] Once the production of renewables in a country has reached a substantive scale, the major players in the sector will also begin to enter into business relationships with large-scale, energy-intensive industrial customers and larger utilities. In some regions, many of these high-volume or wholesale power clients are state-owned, and several of them have demonstrated weak performance on corruption risk management. Catering to these large new customers will require extra attention and due diligence.[27]

- At the country level, a rapidly scaling renewable energy sector with a substantive and growing economic footprint may become vulnerable to grand corruption. Increased profits are at risk of systematic extraction of private rents by high-level officials, and government institutions can be co-opted to facilitate illicit practices.

"Whenever one faction makes a decision, the others work to block it."

– Industry representative[28]

The following sections provide an overview of the range of corruption and integrity risks that are particularly relevant for the renewable energy sector. They focus on three specific areas: (1) institutional and regulatory gaps that can lead to irregularities in licensing, subsidy schemes and contract negotiations; (2) inadequate community engagement, which includes violations in land acquisition, consultation practices and community benefits; and (3) project implementation and operational risks, which can lead to procurement irregularities, fraud and grid connectivity bottlenecks.

2.1 Institutional and regulatory gaps

Regulatory uncertainty and policy capture

Renewable energy technologies often face challenges due to the lack of clear rules and regulations in the institutional and regulatory landscape. Because the sector's development is still at an early stage in many countries, applicable rules and regulatory frameworks are often not yet in place. Additionally, there may be limited institutional capacities and expertise, with regulatory and enforcement personnel lacking experience, even in some of the countries most advanced in the transition. Determining how competencies are divided among public agencies is often unresolved and sometimes disputed.[29] Navigating such regulatory gaps and uncertainties is difficult, and there may be a strong temptation to take shortcuts and unduly influence bureaucratic processes.

"More coordination and coherence across renewable industries would help to identify industry targets, and likewise help to identify where transparency is most needed."

– Industry representative[30]

26 EITI (2022). *Mission critical: Strengthening governance of mineral value chains for the energy transition*.

27 Walsh, J. et al. (2020, 9 July). FCPA Risks for Renewable Energy in Latin America. *Programme on Corporate Compliance and Enforcement at New York University School of Law*. Retrieved from https://wp.nyu.edu/compliance_enforcement/2020/07/09/fcpa-risks-for-renewable-energy-in-latin-america/.

28 Quoted in Todman, W. & Yousef, L. (2023). *Powering Recovery: Reform, Reconstruction, and Renewables in Conflict-Affected States in the Arab World*. Center for Strategic & International Studies. Retrieved from https://www.csis.org/analysis/powering-recovery-reform-reconstruction-and-renewables-conflict-affected-states-arab-world.

29 Ayoub, M., McCulloch, N. & Otayek, M. (2022). What drives solar energy development? Evidence from Lebanon, Jordan, and Yemen. Retrieved from https://www.thepolicypractice.com/what-drives-solar-energy-development; Ahmad, A., McCulloch, N., Al-Masri, M. & Ayoub, M. (2022). From dysfunctional to functional corruption: The politics of reform in Lebanon's electricity sector. *Energy Research & Social Science*, 86. https://doi.org/10.1016/j.erss.2021.102399.

For example, in Lebanon, unregulated markets for solar installation led to the entry of providers using substandard, second-hand equipment. This prompted concerns about high rates of equipment failures and the loss of public trust in residential solar setups.[31] In Bangladesh, an examination of a solar-powered streetlight project revealed weak oversight, political interference and overcharging. These factors inflated project costs by 28-70% and undermined the project's effectiveness.[32]

BOX 1

Too close to inspire trust? Managing conflicts of interest in administering the energy transition in Germany

In 2021, Germany formed a three-party coalition government with ambitions to speed up the energy transition. They established a new super ministry, led by a prominent Green Party member, to drive these efforts and implement reforms across various sectors. Despite Germany's strong government capacity and transition expertise, the government struggled to secure the necessary administrative ability to drive forward its policy agenda. This resulted in conflicts of interest arising from undisclosed connections among key figures responsible for appointments and budgets.

Media reports in mid-2023, starting with the "Causa Graichen" incident involving a high-ranking official, Patrick Graichen, revealed ties between senior officials and job contenders or grant recipients that were not properly managed. This incident led to investigations into similar relationships between senior bureaucrats in charge of the energy transition and the green research and advocacy community. The incident highlighted a tightly connected network of renewable energy policymakers and experts, even in a large early-transitioning country. The revelations by investigative journalists and the appearance of undue interference and rule violations prompted a public outcry, and subsequently eroded trust in the government's management of the energy transition.[33]

Collusion, favouritism and other integrity challenges in licensing and auctions

Growing demand for low-carbon sources of energy is driving the development of new renewable energy projects in many countries. Associated processes to award licenses and contracts can be vulnerable to corruption. In many countries, project awards and related subsidy levels, as well as delivery commitments are allocated through auctions.

30 Research participant L (industry representative), interviewed 6 July 2023.

31 Todman, W. & Yousef, L. (2023). *Powering Recovery: Reform, Reconstruction, and Renewables in Conflict-Affected States in the Arab World.*

32 Iftekharuzzaman et al. (2020). Climate Change Mitigation Finance and Project Implementation in Bangladesh: Governance Challenges and Way Forwards. Transparency International Bangladesh. http://dx.doi.org/10.13140/RG.2.2.15751.11681.

33 Rückzug von Habecks Staatssekretär: Wie die Graichen-Affäre ins Rollen kam (17 May 2023). *Der Spiegel*. Retrieved from https://www.spiegel.de/politik/deutschland/patrick-graichen-wie-die-affaere-ins-rollen-kam-a-119c2a4d-a64f-4448-aa4c-49f5f8522d7a.

At first sight, these may lower integrity risks and improve outcomes compared to other implementation mechanisms in weak institutional settings as a comparative study of such renewable auction formats in close to 100 countries has found.[34] A possible reason for this finding may be that well-designed auctions in other settings have been found to reduce the discretion of potentially corrupt procurement officers.[35]

Yet auctions in the renewable energy sector also raise distinctive integrity issues. When only a relatively small number of experienced, larger-scale developers bid for projects and contracts in different geographic locations, there is a high risk that these players make arrangements to divide up the market and manipulate bids. This practice was seen in France, and subsequently led to the fining of three renewable energy companies.[36]

Opacity of company ownership structures can add further integrity risks during the auction process as proprietary and anti-competitive links between bidders or conflicts of interest for auction organisers are difficult to detect. Insufficient ownership transparency in auctions has been identified as a problem in Italy and South Africa. Brazil follows good practice by publishing a detailed docket of companies and ownership structures,[37] and the country has managed to strengthen competition in its wind power auction market with the cumulative market share held by the five largest developers decreasing from 60% in 2009 to 37% in 2015.[38] Potential subsidy fraud and collusion with officials can also occur when the implementation progress is not adequately monitored, which has been found to be the case in France, Italy and South Africa. Again, Brazil stands out as a good practice example with monthly published reports on project status.[39]

The urgency of accelerating decarbonisation efforts and developing new renewable energy projects can also encourage government authorities to fast-track permitting and licensing processes. They may use special powers of eminent domain or compulsory purchasing orders to speed up land acquisition, stakeholder consultation or impact assessments.[40] Ensuring that these powers are used carefully and responsibly is a challenge. Section 2.2 on inadequate community engagement outlines some of the key risks associated with subpar stakeholder consultation mechanisms.

Opacity of company ownership structures can add further integrity risks during the auction process

34 Clay, P.M., Börner, J. & Sellare, J. (2023). Institutional and macroeconomic stability mediate the effect of auctions on renewable energy capacity. *Energy Policy* 180(113685). https://doi.org/10.1016/j.enpol.2023.113685.

35 Baldi, S. et al. (2016). To bid or not to bid: That is the question: Public procurement, project complexity and corruption. *European Journal of Political Economy* 43, 89-106. https://doi.org/10.1016/j.ejpoleco.2016.04.002.

36 Rahman, K. (2020). Anti-corruption in the renewable energy sector, CMI U4 Anti-Corruption Resource Centre. Retrieved from https://www.u4.no/publications/anti-corruption-in-the-renewable-energy-sector#potential-forms-of-corruption-in-the-renewables-sector.

37 Bayer, B., Schäuble, D. & Ferrari, M. (2018). International experiences with tender procedures for renewable energy – A comparison of current developments in Brazil, France, Italy and South Africa. *Renewable and Sustainable Energy Reviews* 95, 305-27. https://doi.org/10.1016/j.rser.2018.06.066.

38 Bayer, B. (2018). Experience with auctions for wind power in Brazil. *Renewable and Sustainable Energy Reviews* 81, 264-58. https://doi.org/10.1016/j.rser.2017.06.070.

39 Bayer, B., Schäuble, D. & Ferrari, M. (2018). International experiences with tender procedures for renewable energy – A comparison of current developments in Brazil, France, Italy and South Africa.

40 Research participant B (industry representative), interviewed 21 June 2023.

PHOTO CREDIT: JOSE LUIS STEPHENS / SHUTTERSTOCK

Aerial view of a wind farm in the Atacama desert in Chile.

BOX 2

Entrepreneurial risk and connecting with the grid in Sub-Saharan Africa

The experiences of Sub-Saharan African countries such as Kenya, South Africa and Zambia demonstrate that institutionalised and systemic corruption pose grave risks for renewable energy initiatives, particularly when integrity issues are present across government procurement practices, public spending, and land tenure and acquisitions. For instance, South Africa is anticipated to contribute about 68% of the total renewable energy capacity in Sub-Saharan Africa by 2023.[41] However, its main electricity public utility, Eskom, which is tasked with oversight of the energy transition, has long struggled with mismanagement and corruption allegations.[42] Former Eskom CEO, André Marinus De Ruyter, claimed that the company loses approximately USD 50 million per month to theft and corruption.[43] Tendering processes have led to favouritism in contract awards, as well as collusion and manipulation of community trusts. In the midst of these challenges, the government is set to receive USD 8.5 billion in loans and grants from wealthy nations to fund projects like renewable power, electricity transmission lines, electric vehicle production and green hydrogen.

Zambia, on the other hand, relies on hydropower for 85% of its electricity. Yet, the impacts of climate change-induced droughts have crippled electricity production, reducing capacity to less than 40%.[44] Although Zambia possesses substantial potential for solar and wind energy, very few large-scale installations have been initiated in this direction. Similar to South Africa's situation, Zambia's primary public utility, ZESCO, struggles with mismanagement and corruption, and a lack of transparency and a prolonged absence of audits have exacerbated these issues. Allegations of bureaucratic corruption and tax evasion further jeopardise the success of renewable energy projects by shaking public confidence and triggering community opposition.[45] Despite these challenges, ZESCO is set to receive USD 3 billion for clean energy initiatives through the UK-Zambia Green Growth Compact,[46] as well as an additional USD 2 billion from the United Arab Emirates for solar projects.[47]

41 Oluwole, V. (2023, 21 June). South Africa and Kenya lead renewable energy growth in Sub-Saharan Africa. *Business Insider Africa*. Retrieved from https://africa.businessinsider.com/local/markets/south-africa-and-kenya-lead-renewable-energy-growth-in-sub-saharan-africa/kgmqd8z.

42 Furchtgott-Roth, D. (2023, 11 January). Corrupt Power Sector Strangles South Africa. *Forbes*. Retrieved from https://www.forbes.com/sites/dianafurchtgott-roth/2023/01/11/corrupt-power-sector-strangles-south-africa/.

43 Lo, J. (2023, 27 February). South Africa tried to weaken corruption safeguards in coal hhase out, says CEO. *Climate Home News*. Retrieved from https://www.climatechangenews.com/2023/02/27/south-africa-tried-weaken-energy-transition-deals-corruption-safeguards-says-ceo/.

44 Sparkman, M. & Tobin, W. (2023, 28 March), Country spotlight: Unlocking a high-energy future for Zambia. Atlantic Council. Retrieved from https://www.atlanticcouncil.org/blogs/energysource/country-spotlight-unlocking-a-high-energy-future-for-zambia/.

45 O'Brien, K. & Hinfelaar, M. (2022). Zambia's anti-corruption regime 2001–2021 in the renewable energy sector: A legal and political economy analysis. U4 Issue 2022:2. U4 Anti-Corruption Resource Centre. Retrieved from https://www.u4.no/publications/zambias-anti-corruption-regime-2001-2021-in-the-renewable-energy-sector-a-legal-and-political-economy-analysis.pdf.

46 Smout, A. (2023, 2 August). Britain agrees deals on clean energy, critical minerals with Zambia. *Reuters*. Retrieved from https://www.reuters.com/world/britain-agrees-deals-clean-energy-critical-minerals-with-zambia-2023-08-02/.

47 Miridzhanian, A. (2023, 17 January). Zambia, UAE to develop $2 billion solar projects. *Reuters*. Retrieved from https://www.reuters.com/business/energy/zambia-uae-develop-2-billion-solar-projects-2023-01-17/.

Abuse of subsidy schemes

In order to rapidly scale up renewable energy while also using industrial policy in support of green innovation and strategic autonomy, many industrialised countries have introduced substantial subsidy programmes. Yet public authorities often have limited experience in managing such programmes. Opaque subsidy schemes can be vulnerable to favouritism and corporate capture. A particular risk revolves around companies using lobbyists to influence eligibility criteria and disbursement rules in ways that unduly favour them but do not maximise public and climate benefits.

For instance, various US renewable energy subsidy programmes totalling more than USD 800 billion are perceived to have become targets for lobbying and special interest groups in the past two decades, prompting one lobby insider to acknowledge that "there is a lot there for a lot of people."[48] In Kenya, poorly defined or overly bureaucratic subsidy schemes have also been identified as risks for misuse and rent-seeking.[49] In Iraq, such programmes have allegedly encouraged banks (functioning as financial intermediaries) to create solar companies without any relevant qualification or experience, diverting loans for renewable projects.[50]

Subsidy schemes have also been vulnerable to abuse by organised crime. For example, evidence from Italy shows how criminal organisations have taken advantage of incentives for wind power, triggering investigations into suspected collusion between local officials, entrepreneurs and criminal gangs.[51]

Imbalances in contract negotiations

Renewable energy developments span long timeframes and involve complex legal agreements to ensure predictability of costs and financial returns. This is to compensate for volatile input prices and market uncertainty. Such complex contractual arrangements include legal liability transfers, advance purchase agreements, or guaranteed feed-in schemes that reach far into the future.

These dynamics present two specific corruption challenges. Savvy developers with strong legal teams could exploit inexperienced bureaucrats to secure terms that disproportionately benefit them, locking in high costs and public liabilities for the host country's future generations.[53] Conversely, when weak institutional settings raise doubts about future contract enforcement, even transparent tender processes might only attract politically connected bidders, as seen in Nigeria's energy sector. This reinforces patronage and cronyism, acting as informal insurance mechanisms for investment protection.[54]

> *Back-door deals with governments skew the renewables market and make it difficult for smaller players to follow regular channels."*
>
> *– Industry representative*[52]

48 America's $800bn climate splurge is feeding a new lobbying ecosystem (2023, 10 April). *The Economist*. Retrieved from https://www.economist.com/business/2023/04/10/americas-800bn-climate-splurge-is-feeding-a-new-lobbying-ecosystem.

49 Boamah, F., Williams, D.A. & Afful, J. (2021). Justifiable energy injustices? Exploring institutionalised corruption and electricity sector "problem-solving" in Ghana and Kenya. *Energy Research & Social Science* 73(101914). https://doi.org/10.1016/j.erss.2021.101914.

50 Todman, W. & Yousef, L. (2023). *Powering Recovery: Reform, Reconstruction, and Renewables in Conflict-Affected States in the Arab World.*

51 Deiana, C. & Geraci, A. (2021). Are wind turbines a mafia windfall? The unintended consequences of green incentives. Regional Science and Urban Economics 89 (103691). https://www.sciencedirect.com/science/article/abs/pii/S016604622100051X.

52 Research participant P (industry representative), interviewed 20 September 2023.

53 Research participant E (industry representative), interviewed 21 June 2023.

54 Roy, P. et al. (2023). Breaking the cycle of corruption in Nigeria's electricity sector: Off-grid solutions for local enterprises. *Energy Research & Social Science* 101(103130). https://doi.org/10.1016/j.erss.2023.103130.

2.2 Inadequate community engagement

Violations of land rights

Integrity challenges in land acquisition can increase the risk of violations of community rights

Large-scale renewable energy projects like wind, solar and hydropower developments require access to large amounts of land, often in regions where land ownership and tenure rights are only partially formalised, interspersed with customary claims and often administered by agencies susceptible to corruption.[55] Integrity challenges in land acquisition can increase the risk of violations of community rights.

The production of renewable energy, such as wind and solar power, typically require more land compared to fossil fuels. This increase in land usage is significant and can be thought of as "energy sprawl", which is currently the leading cause of changes in land use in the United States. In fact, the additional land needed for the energy transition is estimated to be on a similar scale as the land required for the expansion of cities and urban development worldwide.[56]

Local competition for land often occurs within the context of land governance regimes that are vulnerable to integrity issues, particularly in land administration, transfer and titling. There are also challenges related to illegal expropriation and enrichment, often exacerbated by high levels of informality and the presence of customary land ownership systems.[57] Securing access to land for large renewable energy projects, which often involve combining a large number of small plots, is particularly challenging and exposes projects to increased corruption risks.[58] One specific concern relates to the use of local intermediaries who negotiate land access and consolidate these small plots into large land holdings.[59] This reliance on local brokers, operating without oversight and on a pay-for-performance basis, is widespread and a significant risk in environments with high levels of corruption.[60]

These developments are not inevitable and there are opportunities for shared land use. For example, this can take the form of agrivoltaics, where photovoltaic panels are installed on agricultural land,[61] or in the case of wind farms where only 2-3% of the total land area is occupied by installations.[62] Yet negotiating fair shared-use arrangements with local communities in relation to joint use projects is equally complex[63] and ties directly to concerns about community participation and engagement.

55 Gordon, E. (2018). The Politics of Renewable Energy in East Africa. *Oxford Institute for Energy Studies*. https://doi.org/10.26889/9781784671181.

56 Lovering, J. et al. (2022). Land-use intensity of electricity production and tomorrow's energy landscape. *PLOS ONE* 17, (7) (e0270155). https://doi.org/10.1371/journal.pone.0270155.

57 Zúñiga, N. (2018). Land Corruption Topic Guide, Transparency International. Retrieved from https://knowledgehub.transparency.org/product/topic-guide-on-land-corruption.

58 Research participant D (industry representative), interviewed 27 April 2023.

59 Research participant A (academic expert), interviewed 16 July 2023.

60 Atal, M. R., Trapnell, S. & Zinnbauer, D. (2022). Merchants of Integrity? Commodity Trading and Corruption Research for a World in Transition.

61 Ritchie, H. (2022, 16 June). How does the land use of different electricity sources compare? *Our World in Data*. Retrieved from https://ourworldindata.org/land-use-per-energy-source.

62 McKinsey (2023). Land: A crucial resource for Europe's energy transition. Retrieved from https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/land-a-crucial-resource-for-the-energy-transition.

63 Research participant A (academic expert), interviewed 16 July 2023.

PHOTO CREDIT: NELSON DAVID ALONSO CHARRY

A Wayúu leader engages in a community meeting in La Guajira, Colombia, as part of the EITI's project "Engaging communities in a just transition". Community members expressed interest in data highlighting the environmental and social impacts of the energy transition.

Manipulated and captured consultations and community benefit agreements

Large-scale renewable energy projects can impact local residents in remote or marginalised communities. As in other economic sectors, companies developing projects with large local footprints are typically required by regulation, corporate commitments or investor expectations to engage in stakeholder consultations, mitigate potential negative impacts and deliver benefits to affected communities. Yet such arrangements and their responsible stewardship can be vulnerable to corruption, potentially resulting in violations of community rights. These issues are particularly acute in contexts where renewable energy companies are interacting with marginalised communities.

Consultation and informed consent can be manipulated, tokenistic or involve only select local contacts that do not represent the whole community. Benefit programmes, including social expenditures, community development and co-ownership agreements, might favour specific groups or be captured by local power brokers. Environmental and social harms may remain unaddressed and local development needs may be inadequately considered. In some instances, developers may ignore the excessive use of force by private and public security personnel, including against human rights defenders and whistle-blowers.

The potential fallouts of this failing stewardship are manifold social, environmental and economic harms that can lead to mistrust, unrest and local violence and may ultimately force high-profile projects to be stalled or abandoned. A growing body of case studies document such challenges in Colombia,[65] Guatemala,[66] Kenya,[67] Malaysia,[68] Mexico,[69] South Africa[70] and the Caucasus.[71]

> *Community benefit models can generate governance risks, especially when there is a lack of transparency about who manages the dividends and how they are distributed."*
>
> *– Industry representative*[64]

64 Research participant P (industry representative), interviewed 20 September 2023.

65 González, D. (2023, 31 May). Wind farms divide Indigenous communities in Colombia. *Dialogo Chino*. Retrieved from https://dialogochino.net/en/climate-energy/368855-wind-farms-divide-indigenous-communities-in-colombia/; Ramirez, J., Velázquez, D.A. & Vélez-Zapata, C. (2022). The Potential Role of Peace, Justice, and Strong Institutions in Colombia's Areas of Limited Statehood for Energy Diversification towards Governance in Energy Democracy. *Energy Policy* 168 (113135). https://doi.org/10.1016/j.enpol.2022.113135.

66 Neslen, A. (2015, 26 March). 'Green' dam linked to killings of six indigenous people in Guatemala. *The Guardian*. Retrieved from https://www.theguardian.com/environment/2015/mar/26/santa-rita-green-dam-killings-indigenous-people-guatemala.

67 International Work Group for Indigenous Affairs (2019). *The impact of renewable energy projects on indigenous communities in Kenya: The cases of the Lake Turkana Wind Power project and the Olkaria Geothermal Power plants*. Retrieved from https://www.iwgia.org/en/resources/publications/3535-the-impact-of-renewable-energy-project-on-indigenous-communities-in-kenya.html; Business & Human Rights Resource Centre (2023, 26 May). Kenya: Court declines to extend time for Lake Turkana Wind Power to agree land deal with community. Retrieved from https://www.business-humanrights.org/en/latest-news/kenya-lake-turkana-wind-power-land-to-revert-to-community-after-court-ruling/.

68 Sovacool, B.K. (2021). Clean, low-carbon but corrupt? Examining corruption risks and solutions for the renewable energy sector in Mexico, Malaysia, Kenya and South Africa. *Energy Strategy Reviews 38 (100723), 1-21*. https://papers.ssrn.com/abstract=3957999.

69 Dunlap, A. & Arce, M.C. (2022). 'Murderous energy' in Oaxaca, Mexico: Wind factories, territorial struggle and social warfare. *The Journal of Peasant Studies 49*, no. 2, 455-80. https://doi.org/10.1080/03066150.2020.1862090; Ramirez, J. (2021), Contentious Dynamics Within the Social Turbulence of Environmental (In)Justice Surrounding Wind Energy Farms in Oaxaca, Mexico. *Journal of Business Ethics 169*, no. 3, 387-404. https://doi.org/10.1007/s10551-019-04297-3.

70 Lawrence, A. (2020). Energy decentralization in South Africa: Why past failure points to future success. *Renewable and Sustainable Energy Reviews 120* (109659). https://doi.org/10.1016/j.rser.2019.109659.

71 Business & Human Rights Resource Centre (2022). *Drying up: Tracking the environmental and human rights harms caused by hydropower in the Caucasus and Central Asia*. Retrieved from https://www.business-humanrights.org/en/from-us/briefings/drying-up-tracking-the-environmental-and-human-rights-harms-caused-by-hydropower-in-the-caucasus-and-central-asia/.

BOX 3

Community engagement or community harm? Wind farms in Latin America

Latin America has the potential to increase its utility-scale solar and wind power capacity by more than 460% if planned projects are completed by 2030.[72] Wind farms, in particular, have become important for the region's shift to cleaner energy sources. However, these projects have faced challenges in ensuring they benefit local communities and respect the environment. Many wind farms are located in rural areas with close-knit communities, which are often indigenous and underserved. These communities might not be familiar with businesses models common in the renewable energy sector.

In La Guajira, a remote desert region on the Caribbean coast of Colombia, wind farms have been heralded as vital for the country's energy transition. They sit on the ancestral land of the Wayúu people, an indigenous community that has seen its share of resource exploitation. A coal mine was opened on their land 30 years ago and recently purchased by commodity trading giant Glencore for USD 588 million. The mine has faced allegations of displacement and ecosystem disruption.[73] The Wayúu have seen so few economic benefits from the mine that the Colombian Constitutional Court ruled in 2017 that their poverty and deprivation was a severe violation of their basic human rights.

The legacy of challenges in the coal industry affects how these communities perceive the renewable energy sector. Even though legislation requires informed consent of affected communities in energy projects, some stakeholders allege that consultations for wind farms are being rushed and little information is being provided. They also claim that signatures are being obtained with small "gifts" like food or school supplies.[74] Among the Wayúu, there is little faith that renewable energy projects will turn out differently from the mining industry's impact in the past. Community pushback and protests against the Windpeshi wind farm development have prompted the indefinite suspension of activities by Enel Colombia, a multinational energy firm with plans to build one of the country's largest renewable energy projects.[75]

Elsewhere in Latin America, communities have successfully pushed back against project developers on the basis of allegations of inadequate consultations and community benefits. For example, in 2022 Mexico's Federal Electricity Commission ruled in favour of the indigenous Zapotec community, finding that Électricité de France (EDF), a utility that is majority-owned by the French government, had not conducted adequate human rights due diligence. The commission subsequently cancelled contracts that were set to allow wind farms to supply electricity to the national grid, resulting in a loss of a nearly USD 350 million.[76]

72 Bauer, S., O'Malia, K., Prasad, S., Clark, G. & Behrsin, I. (2023). *A Race to the Top: Latin America 2023*. Global Energy Monitor. Retrieved from https://globalenergymonitor.org/wp-content/uploads/2023/03/GEM-LATAM-report_v8.pdf.

73 Denina, C. (2021, 30 June). Glencore acuerda comprar a BHP y Anglo American participaciones en mina de carbón Cerrejón de Colombia. *Euronews*. Retrieved from https://es.euronews.com/next/2021/06/28/glencore-colombia.

74 Rubiano, M.P. (2021). In Colombia, Indigenous Lands Are Ground Zero for a Wind Energy Boom. *YaleEnvironment360*. Retrieved from https://e360.yale.edu/features/in-colombia-indigenous-lands-are-ground-zero-for-a-wind-energy-boom.

75 Bocanegra, N. (2023, 24 May). Enel suspends Colombia wind farm construction after years of protests. *Reuters*. Retrieved from https://www.reuters.com/business/energy/enel-suspends-colombia-wind-farm-construction-after-years-protests-2023-05-24/.

76 Agrawal, H., El-Katiri, L., Muiruri, K. & Szoke-Burke, S. (2023). *Enabling a Just Transition: Protecting Human Rights in Renewable Energy Projects: A Briefing for Policymakers*. Columbia Center on Sustainable Development. Retrieved from https://ccsi.columbia.edu/content/enabling-just-transition-protecting-human-rights-renewable-energy-projects.

2.3 Project implementation and operational risks

Political interference in the procurement of goods and services

In weak governance contexts, nepotism, cronyism and conflicts of interest have been found to affect procurement operations for renewable energy projects. This was found to be the case in a review of failed projects conducted across 20 African countries.[77] A widespread lack of transparency regarding the ownership and benefits associated with local service providers catering to green energy developers further exacerbates conflicts of interest and other corruption and integrity risks.[78] As one renewables developer noted, "the awarding of contracts is not meritorious or based on competence and ability to carry out the project; instead, it is based on personal ties."[79] Where governments tie green development loans or operating licenses to mandates for local purchasing or the preference for local vendors, as is the case in some countries in Latin America, these arrangements are vulnerable to rent-seeking behaviour by local officials.[80]

"Renewables markets are fragmented, often smaller than extractives, and starting at different points across business models. It's not a stable market."

– Industry representative[81]

Fraud and business scams

While sophisticated and fraudulent scams are not exclusive to the renewable energy sector, the sector's dynamic landscape – characterised by innovative business ideas and untested technologies – can make it fertile ground for grandiose thinking and hype-driven entrepreneurialism that is prone to abuse. This vulnerability is compounded by the considerable pressure exerted on policymakers and investors to identify and help scale innovation in the sector.

For instance, in the United States, a start-up promised to build novel solar-powered mobile electricity systems that would be able to replace highly polluting diesel generators. The company garnered widespread media attention, secured generous funding from both public and private sources and attracted high-profile business clients. While the venture promised success, it eventually collapsed in 2018 when it was revealed to be an elaborate scam.[82]

Similarly, in Germany, a fraudulent entrepreneur in the wind energy sector marketed wind power projects to international investors who were enthusiastic about Germany's green transition. Yet the purported wind park developments were entirely fictitious and based on forged documents, deceiving even seasoned investors. The individual orchestrating the scheme was found guilty of fraud on a massive scale in 2022.[83]

77 Ikejemba, E.C.X. et al. (2017). Failures & generic recommendations towards the sustainable management of renewable energy projects in Sub-Saharan Africa (Part 2 of 2). *Renewable Energy* 113, 639-47. https://doi.org/10.1016/j.renene.2017.06.002.

78 Research participant E (industry representative), interviewed 21 June 2023.

79 Quoted in Ikejemba, E.C.X. et al. (2017). Failures & generic recommendations towards the sustainable management of renewable energy projects in Sub-Saharan Africa (Part 2 of 2).

80 Walsh, J. et al. (2020, 9 July). FCPA Risks for Renewable Energy in Latin America.

81 Research participant H (industry representative), interviewed 19 July 2023.

82 Sabar, A. (2023, 8 May). The billion-dollar Ponzi scheme that hooked Warren Buffett and the U.S. Treasury. *The Atlantic*. Retrieved from https://www.theatlantic.com/magazine/archive/2023/06/dc-solar-power-ponzi-scheme-scandal/673782/.

83 Erfundene Windpark-Projekte: Siebeneinhalb Jahre Haft für Holt (2022, 12 May). *NDR*. Retrieved from https://www.ndr.de/nachrichten/niedersachsen/osnabrueck_emsland/Erfundene-Windpark-Projekte-Siebeneinhalb-Jahre-Haft-fuer-Holt,windpark644.html; Gude, H. (2020, 4 December). Der Hochstapler, der ganze Windparks erfand - und verkaufte. *Der Spiegel*. Retrieved from https://www.spiegel.de/panorama/emsland-der-hochstapler-der-ganze-windparks-erfand-und-verkaufte-a-00000000-0002-0001-0000-000174316777; Nagel L.M. et al. (2022, 13 May). Hendrik Holt; Statt viel Wind nur heiße Luft. *Handelsblatt*.

PHOTO CREDIT: NICOLE MACHEROUX-DENAULT / SHUTTERSTOCK

The Khi Solar One solar thermal power plant in the Northern Cape region in South Africa.

BOX 4

Green hydrogen: A special docket of governance and corruption risks

More than 70 countries are developing strategies for green hydrogen,[84] which is envisaged to play a strategic role in helping decarbonise a number of important industry applications. Producing no waste and 100% renewable, green hydrogen (GH2) is a clean fuel that offers the ability to store and use energy from renewable sources. It has been ascribed a major role in achieving energy transition goals. Green hydrogen presents several important characteristics that merit attention from a governance perspective:

- **Governance challenges in high-potential regions:** Regions with substantial potential for GH2 production, including Africa, the Middle East, Oceania and South America, often grapple with significant corruption and integrity issues.[85] Out of the 20 largest GH2 projects currently announced worldwide, eight are planned to take place in countries with low scores on Transparency International's Corruption Perceptions Index (CPI), which provides an indication of the perceived level of corruption in the public sector. The massive investments required for GH2 production facilities, often reaching tens of billions of dollars, make these projects particularly susceptible to corruption risks on both the public and private side. Ensuring transparency and stakeholder consultation becomes imperative in such contexts.[86]

- **Selective GH2 use and policy capture risks:** GH2 production is energy-intensive and relatively inefficient. To prevent excessive strain on limited green energy supplies, many experts say that its use must be tightly restricted to hard-to-decarbonise industries (e.g. steel, fertilizer) and heavy-duty transport (e.g. ships, trucks). However, maintaining this discipline can be challenging and risks of policy capture are high. Large legacy players, such as combustion engine car manufacturers and gas utilities, may advocate for GH2 applications in other sectors that would allow them to repurpose their existing infrastructures and technical systems. As an authoritative market observer noted, "there are well-known risks of carbon lock-in if hydrogen strategies prolong fossil fuel use and hinder energy efficiency and electrification."[87]

- **Water-related corruption challenges:** GH2 production requires vast amounts of water, posing potential corruption challenges in countries where the water sector is often already characterised by local scarcities and integrity issues. In arid or semi-arid regions, GH2 projects can exacerbate water scarcities and potentially aggravate existing corruption schemes, from corrupt irrigation practices to collusion between private vendors and public officials.[88]

- **GH2 integrity and traceability:** Being able to verify and trace the origin and production history of specific hydrogen supplies is imperative to validate its green quality. However, such verification and tracing systems experience high risks of corruption, particularly for commodified products with homogenous chemical footprints such as hydrogen, which are close to impossible to trace once they enter pipelines.

84 Munich Re (2022). *Securing the Power of Green Hydrogen*. Retrieved from https://www.munichre.com/en/solutions/for-industry-clients/green-hydrogen.html.

85 IRENA (2022). *Geopolitics of the Energy Transformation: The Hydrogen Factor*. Retrieved from https://www.irena.org/publications/2022/Jan/Geopolitics-of-the-Energy-Transformation-Hydrogen.

86 Ackermann, M. & Contensou, C. (2023). The road to Mauritania's natural gas and green hydrogen future, EITI. Retrieved from https://eiti.org/blog-post/road-mauritanias-natural-gas-and-green-hydrogen-future.

87 IRENA (2022). *Geopolitics of the Energy Transformation: The Hydrogen Factor*.

88 Transparency International (2008). *Global Corruption Report 2008: Corruption in the Water Sector*. Retrieved from https://www.transparency.org/en/publications/global-corruption-report-2008-corruption-in-the-water-sector.

Grid connectivity bottlenecks

Corruption often thrives in situations marked by bottlenecks and resource scarcities, and renewable energy projects face a quintessential challenge in this regard: connecting to the electricity grid. Existing grid lay-outs are primarily built around conventional power plants, making them ill-equipped to accommodate renewable energy projects in remote locations. In addition, these grids frequently lack the capacity to absorb the increased demand resulting from the electrification of various energy applications such as electric vehicles, heat pumps or hydrogen-based technologies. Global grid capacity needs to double by 2050, yet current growth rates are falling behind, resulting in long queues and delays for renewable energy projects seeking grid connection.[91] On average, wait times range from two to five years but can extend to as much as 10 years in some contexts.[92]

The prolonged period of idle capital investments may create temptations for business owners to expedite connections through questionable means. Public officials, holding influential gatekeeping positions, might be tempted to seek side-payments in exchange for preferential treatment. This risk is particularly pronounced when these positions are occupied by individuals with vested interests in maintaining the status quo of the fossil fuel industry, and can burden green projects with interconnection costs that make their operations unprofitable, as observed in the case of South Africa.[93] Even in situations where grid queues are managed fairly, such as through interconnection auctions, they can exert significant time pressure on project execution, which can create integrity challenges. Missing an opportunity to participate in an interconnection auction can mean waiting for a considerably longer time for the next opportunity, putting tremendous pressure on project timelines and milestones.[94]

> *I don't know of any country where the grid is not currently some level of obstacle to the energy transition."*
>
> *– Industry representative*[89]

> *It's a huge problem, to the extent I think we could double the pace of the global renewables rollout if these bottlenecks were not the case."*
>
> *– Industry representative*[90]

89 Quoted in Campbell, C. & Mooney, A. (2023, 11 June). Gridlock: How a Lack of Power Lines Will Delay the Age of Renewables. *Financial Times*. Retrieved from https://www.ft.com/content/a3be0c1a-15df-4970-810a-8b958608ca0f.

90 Ibid.

91 A Power Grid Long Enough to Reach the Sun Is Key to the Climate Fight (2023, 8 March). *BloombergNEF*. Retrieved from https://about.bnef.com/blog/a-power-grid-long-enough-to-reach-the-sun-is-key-to-the-climate-fight/.

92 Campbell, C. & Mooney, A. (2023, 11 June). Gridlock: How a Lack of Power Lines Will Delay the Age of Renewables; Hodson, H. (2023, 5 April). The Electric Grid Is about to Be Transformed. *The Economist*. Retrieved from https://www.economist.com/technology-quarterly/2023/04/05/the-electric-grid-is-about-to-be-transformed.

93 Lawrence, A. (2020). Energy decentralization in South Africa: Why past failure points to future success. *Renewable and Sustainable Energy Reviews 120* (109659). https://doi.org/10.1016/j.rser.2019.109659.

94 Research participant E (industry representative), interviewed 21 June 2023.

3. Transparency and accountability standards in the renewable energy sector

THERE ARE EMERGING SETS OF STANDARDS or criteria promoting responsible business practices in the renewable energy sector which address governance issues to varying degrees, though none are explicitly framed as transparency or anti-corruption standards. These standards tend to be focused on specific sub-sectors rather than being applied across the entire renewable energy industry. This is a consequence of standards being primarily driven by industry associations aiming to establish sustainability in their respective operations.

There are a limited number of standards in the renewable energy sector that directly and comprehensively address transparency, anti-corruption or governance

Overall, there are a limited number of standards in the renewable energy sector that directly and comprehensively address transparency, anti-corruption or governance. Notable among these are the recently updated Renewable Energy and Human Rights Benchmark (2023), the Green Hydrogen Standard (2022) and the Hydropower Sustainability Standard (2021), all of which have sections that not only set standards on transparency and anti-corruption practices, but also explain in detail what is expected of companies. Other standards either have more general transparency requirements and do not specifically address the disclosure of beneficial ownership, contracts, taxes or subsidies.

The existing standards within the renewable energy sector have distinct objectives and approaches when compared to the EITI's application in the extractive industries. The standards reviewed in this section primarily focus on evaluating and strengthening industry performance of individual projects or at the corporate level. In contrast, the EITI operates at the country level and includes reporting requirements for both governments and companies. EITI implementation is overseen through formal governance structures that involve collaboration between government entities, industry stakeholders and civil society.

FIGURE 2

Comparison of transparency and accountability standards in the renewable energy sector

Yes Partial No

	Green Hydrogen Standard	Hydropower Sustainability Standard	Solar Sustainability Best Practices Benchmark	Solar Supply Chain Traceability Protocol	Renewable Energy and Human Rights Benchmark
Disclosure of contracts and licenses	Yes	No	No	No	Yes
Community engagement	Yes	Yes	Yes	Partial	Yes
Community benefits	Partial	Yes	Yes	No	Yes
Environmental and social impacts	Yes	Yes	Yes	Partial	Yes
Disclosure of beneficial ownership	Yes	No	No	No	No
Disclosure of taxes and subsidies	Yes	No	No	No	Yes
Anti-corruption policies and practices	Yes	Yes	Partial	No	Partial
Supply chain due diligence	Partial	Yes	Yes	Yes	Yes

3.1 Green Hydrogen Standard

The Green Hydrogen Organisation (GH2) launched the Green Hydrogen Standard in May 2022, with the aim of managing the environmental, social and governance consequences of green hydrogen production. Projects that meet the Green Hydrogen Standard are eligible to obtain and trade GH2 certificates of origin for green hydrogen and its derivatives, such as green ammonia. The standard is based on project-level certification and accreditation, guided by seven principles that outline certification requirements.

The standard's governance, transparency and accountability section requires project operators to address the management of compliance and external governance issues (e.g. institutional capacity shortfalls, political risks including transboundary issues, and public sector corruption risks), as well as commit to equitable, transparent and accountable procurement processes. Furthermore, GH2 accreditation and certification requires that project operators establish codes of conduct and anti-corruption standards that clearly prohibit bribery and corruption, including facilitation payments to government officials to obtain routine services. These standards must address the obligations for both employees and contractors and incorporate a risk-based due diligence system. Project operators are encouraged to integrate anti-corruption compliance into their business key performance indicators, which ultimately determine employee remuneration.

In terms of transparency, the Green Hydrogen Standard requires the public disclosure of key information about corporate structure, contractual terms related to the project, and financial transactions with the government, including payments. It specifically encourages transparency around beneficial ownership, contracts, and tax and subsidies, and explains what is expected.

3.2 Hydropower Sustainability Standard (and Sustainability Assessment Protocol)

The Hydropower Sustainability Standard is a global certification scheme launched in 2021 by the International Hydropower Association, outlining sustainability expectations for hydropower projects worldwide. It covers 12 environmental, social and governance (ESG) topics, including Biodiversity and Invasive Species, Indigenous Peoples, Cultural Heritage and more. Through an evaluation of basic and advanced expectations, the Early Stage tool may be used for risk assessment and for dialogue prior to advancing into detailed planning. The remaining three documents – Preparation, Implementation and Operation – set out a graded spectrum of good practices.

The principles underpinning the protocol include social responsibility, transparency and accountability as core sustainability principles, explicitly linking governance to sustainability. Both the standard and the protocol remain the most comprehensive approach to governance and anti-corruption in the renewable energy sector, though it lacks further explanation of what is expected in practice. Corruption is indirectly addressed in sections pertaining to political risk and institutional capacity during early-stage planning, preparation, implementation and operational standards related to governance and procurement. Transparency is addressed most directly in sections on governance (as above), and in public disclosure requirements through various aspects of sustainability assessment that address strategy, environmental and social impact assessment, project benefits, economic viability, resettlement and Indigenous peoples.

PHOTO CREDIT: GORAN SAFAREK / SHUTTERSTOCK

Hydropower plant in Mati, Albania.

3.3 Solar Sustainability Best Practices Benchmark

The Solar Sustainability Best Practices Benchmark, initiated in 2021 by industry association SolarPower Europe, presents a collection of sustainability case studies and best practices spanning the solar value chain. Its objective is to identify and showcase state-of-the-art sustainability practices in the solar photovoltaic (PV) industry as benchmarks, to support the whole PV sector's sustainability performance and to drive overall sustainable change. The benchmark places a strong emphasis on transparency throughout the entire supply chain, going beyond basic financial and diversity reporting rules to ensure comprehensive information exchange. Anti-corruption is addressed in the human rights section of the benchmark, specifically establishing that companies carefully monitor supply chain labour practices and relations with local communities, including by taking a proactive stance against corruption. However, specific expectations within these areas remain vaguely defined.

3.4 Solar Supply Chain Traceability Protocol

Derived from the Solar Environmental and Social Responsibility Commitment of the Solar Energies Industry Association (SEIA), the Solar Supply Chain Traceability Protocol centres on ensuring transparency within the solar supply chain. It asserts that companies have a responsibility to ensure that social, environmental and quality standards are not compromised by decisions and activities around the traceability of products. Of all standards in the renewable energy sector, this protocol has the most explicit explanations of what is expected of companies in terms of general business transparency, though it does not address the full spectrum of transparency related to anti-corruption issues, such as beneficial ownership, contracts, and tax and subsidies.

All parties within the supply chain adopting the protocol must make reasonable efforts to engage in due diligence to ensure supply chain transparency.
A participating organisation should be transparent regarding:

- The purpose, nature and location of its activities;
- The nature, origin and characteristics of the materials in its products;
- How decisions are made, implemented and reviewed, including the definition of the roles, responsibilities, accountabilities and authorities across the different functions in the organisation;
- Standards and criteria against which the organisation evaluates its own performance and its suppliers' performance relating to transparency in the supply chain;
- Performance on relevant and significant issues of transparency;
- Known and likely impacts of the organisation's decisions and activities on its stakeholders; and
- The criteria and procedures used to identify, select and engage them.

3.5 Renewable Energy & Human Rights Benchmark

Developed by the Business & Human Rights Resource Centre in 2020, and updated in 2023, the Renewable Energy & Human Rights Benchmark assesses the extent to which major renewable energy companies uphold human rights in the contexts in which they operate. The benchmark evaluates companies across nine human rights risk indicators, which include rights pertaining to affected communities, land, security, labour, inclusion, and transparency and anti-corruption. It also deploys core indicators to evaluate how companies measure up to their responsibilities under the UN Guiding Principles on Business and Human Rights (UNGPs).

All benchmark content has been adapted from existing global standards. This includes the Right Energy Partnership, IRENA, OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, EU Environmental Impact Assessment Directive, OECD Convention on Combatting Bribery of Foreign Public Officials, EITI, ILO Conventions, and the World Benchmarking Alliance Just Transition Methodology, among others.

The Renewable Energy Benchmark includes broad standards on anti-corruption due diligence and reporting. However, there are separate and specific criteria for project developers and wind turbine and solar panel manufacturers regarding payments to governments and contract transparency.

BOX 4

Responsible business conduct in the renewable energy sector – a multi-stakeholder platform in the making?

The International Responsible Business Conduct (RBC) Agreement for the Renewable Energy Sector is a multi-stakeholder partnership sponsored by the Government of the Netherlands and focused on the value chains of renewable energy technologies. It is based on the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles (UNGPs) on Business and Human Rights, which are considered the most authoritative international standards in the area of human rights and environmental due diligence. Any private or public sector organisation or civil society organisation active in the wind and/or solar energy industry is permitted to participate in the International RBC Agreement, including companies, industry associations, labour unions, NGOs, knowledge institutions, the Government of the Netherlands and other institutions (both private platforms and contracting authorities) active in the procurement and/or tender of renewable energy technologies. Companies without a link to the Dutch market are also welcome to join.

The International RBC Agreement contains collective and individual commitments based on the OECD and UN standards. Focus areas include:

- Supporting and monitoring individual company actions with regard to respect for human rights and environmental standards in accordance with the OECD Guidelines and UNGPs;
- Undertaking collective projects to increase supply chain transparency, and address risks and impacts identified through individual and collective due diligence exercises;
- Encouraging embedment of international responsible business conduct criteria in tender and procurement processes regarding renewable energy technologies.

The Independent Secretariat and the Working Group on Due Diligence are tasked with developing the "Renewable Energy Sector Due Diligence Assessment Framework" that will be used to determine and rate how companies implement the six due diligence steps outlined in the OECD Guidance. The Independent Secretariat is also expected to monitor, assess and advise individual companies on their due diligence performance and progress.

While the agreement is an impressive step forward for encouraging multi-stakeholder action to advance responsible business conduct in the renewable energy sector, it does not explicitly address corruption and integrity risks or call for transparency in areas such as beneficial ownership, contracts or taxes and subsidies. It remains to be seen how such issues will be addressed or implemented in practice.

4. Recommendations for strengthening transparency and accountability in the renewable energy sector

WITHIN THE CONTEXT OF THE ENERGY TRANSITION, corruption and integrity risks take on heightened significance due to the existential threats that inaction pose to the well-being of future generations. In this setting, entrusted power must encompass the trust vested in all major actors involved in the energy transition, whether public or private, to exercise responsible stewardship.

Renewable energy actors should uphold exemplary standards of integrity, particularly as the energy transition is becoming increasingly politicised and any hint of corruption or mismanagement could be used to sow doubts about the overall endeavour. Transparency, accountability and dialogue can help to maximise opportunities and mitigate risks. Stakeholders can each play a unique role in strengthening the integrity of the sector, according to the recommendations set out below. These recommendations focus on tackling corruption and integrity risks as a critical component of the sector's broader governance performance.

"The way to establish trust is through transparency – global standards, external validation, stakeholder collaboration."

– Industry representative[95]

4.1 Recommendations to renewable energy companies

1. **Comprehensive risk mapping and due diligence:** Renewable energy companies should regularly conduct thorough risk assessments across their value chains, considering all relevant actors. This includes a detailed analysis of potential corruption and integrity risks at various levels, from local to national. This approach should encompass aspects like local recruitment, permitting processes, input sourcing, land acquisition and the role of intermediaries and local officials. Tailored risk assessments specific to renewable technologies and project implementations can help identify context-specific corruption vulnerabilities more systematically and inform effective risk mitigation measures.

2. **Integrating transparency into business activities:** Renewable energy companies should publicly disclose key information that promotes understanding of renewable energy management, strengthens corporate governance, reduces opportunities for corruption and mismanagement, and supports greater accountability across projects. This includes disclosure of beneficial ownership information and payments to government. It also includes supporting government efforts to disclose contracts, concessions, licenses and permits and information on how those agreements were made. In the extractive industries, endorsing such disclosures is now considered standard practice.

95 Research participant H (industry representative), interviewed 19 July 2023.

3. **Supporting multi-stakeholder dialogue:** Renewable energy companies should commit to fostering inclusive multi-stakeholder dialogue to promote sustainability, equity and trust in project outcomes, especially in projects that impact land tenure and acquisition. While consultation and consent requirements are intended to protect the interests of communities, they are often circumvented, sometimes legally. Multi-stakeholder collaboration can help equalise power imbalances, allow for discussion of entire project life cycles, and empower actors to hold each other accountable against established rules and codes of conduct. Multi-stakeholder platforms also reduce the amount of time and effort needed to convince communities and regulators that projects meet ESG requirements, and eliminate the use of third-party intermediaries that have become a source of corruption and mismanagement in the extractive industries.[97] Renewable energy actors should consider the benefits of multi-stakeholder platforms, both at the local and national levels, to integrate integrity systems into their projects, which can support project sustainability, efficiency and effectiveness.

4. **Acting on stakeholder concerns:** Companies need to take action when stakeholders raise legitimate concerns. Grievance mechanisms and whistleblower protections can reinforce and safeguard accountability.

"The multi-stakeholder model is the only way forward. Renewable industries need trust and relationships to succeed."

– Industry representative[96]

4.2 Recommendations to governments

5. **Integrating transparency and good governance in the management of the renewable energy sector:** Governments can enhance transparency and good governance by committing to transparent auctions, licensing and public procurement processes and disclosing information on contracts, taxes and subsidies. They can also help to create a level playing field in the private sector by requiring companies to disclose beneficial ownership information. This commitment should be accompanied by robust mechanisms for oversight and accountability to ensure that renewable energy projects operate with the utmost integrity and in alignment with sustainability goals.

6. **Creating spaces for multi-stakeholder dialogue:** Similar to the multi-stakeholder approach underpinning EITI implementation in the extractive industries, governments can create formal spaces for inclusive multi-stakeholder dialogue in the renewable energy sector. This approach helps balance power dynamics, facilitates discussions about the impacts and risks in projects and the sector, and empowers stakeholders to hold each other accountable based on established rules and ethical standards. This is critical for promoting sustainability, equity and trust.

7. **Enforcing accountability mechanisms:** Governments should maintain effective systems for addressing grievances and protecting whistleblowers to strengthen accountability. On a broader scale, governments should take steps to ensure that civil society, including groups representing communities affected by renewable energy projects, can operate without restraint, coercion or reprisal.

96 Research participant J (industry representative), interviewed 21 July 2023.

97 Atal, M.R., Trapnell, S. & Zinnbauer, D. (2022). Merchants of Integrity? Commodity Trading and Corruption Research for a World in Transition.

4.3 Recommendations to civil society organisations

8. **Integrating transparency and accountability in policy demands:** Civil society actors working in the renewable energy sector are generally focused on human rights abuses and community harms, because these have been seen as the most pressing needs to address. However, corruption and weak governance in renewable energy projects can lead to adverse community outcomes and significant long-term risks. At the national level, civil society actors can advocate for mandatory transparency regimes, reporting requirements and ethical standards for the renewable energy sector. They could also consider revising policy demands that reconcile strong accountability and integrity with the urgent action needed to meet energy transition targets.

9. **Leveraging partnerships:** International NGOs can collaborate with local organisations to better understand the political economy of entire energy systems. By gathering more relevant information, global civil society actors can work towards reshaping the vested interest networks that hinder progress in transparency and accountability, and work alongside local partners to drive progress. Civil society actors at all levels and spheres of activity could work together to leverage their respective strengths and expertise. As the renewable energy sector expands, diverse organisations could strategically align their efforts with a long-term view towards achieving positive outcomes.

4.4 Recommendations to donors and development partners

10. **Leadership in green development financing:** Donors and development partners could take a leadership role in financing renewable energy projects that emphasise transparency and good governance. Financial incentives provided by the international community can help level the playing field by reducing economic divides and promoting opportunities for economic growth. Such support can reduce costs and mitigate political risks associated with green investments and encourages responsible practices.

4.5 Recommendations to EITI multi-stakeholder groups

11. **Expansion of EITI reporting:** EITI multi-stakeholder groups could explore the feasibility of expanding EITI reporting to include the renewable energy sector, which has already been initiated in some countries.[98] The 2023 EITI Standard includes new requirements around disclosures and public debate, which strengthen its relevance in the energy transition.[99] These changes are a response to the evolving need for data, disclosures and dialogue that support accountability and the good governance of natural resources.

98 For example, Albania's EITI reporting covers the hydropower sector, including the legal and regulatory framework, production figures, government revenues and allocation of revenues to subnational authorities. Germany's EITI reporting provides contextual information about the country's renewable energy sector, including market trends, details on subsidies, and an analysis of the sector's economic contributions, including its impact on employment. In Mauritania, the EITI commissioned an analysis on the revenue potential of the green hydrogen sector. In Colombia, the EITI has been implementing a pilot project to understand how renewable energy projects impact local communities and the extent to which these communities have access to data and dialogue platforms.

99 EITI (2023). *2023 EITI Standard: Summary of changes*. Retrieved from https://eiti.org/documents/2023-eiti-standard-summary-changes.

One of the ways that EITI multi-stakeholder groups can further support the energy transition is by exploring the feasibility of expanding EITI reporting to the renewable energy sector. While not all the EITI reporting requirements may apply to the renewable energy sector, the broad areas of transparency and accountability standards highlighted in Figure 2 may help to shed light on corruption and integrity risks in renewables.

12. **Inclusion of renewable energy actors:** Depending on how established the renewable energy sector is in EITI implementing countries, EITI multi-stakeholder groups could consider including renewables stakeholders in their processes and dialogue platforms. Whether included as part of all EITI activities or convened as a special interest group within the EITI multi-stakeholder group, the involvement of renewables actors would facilitate knowledge sharing on lessons learned from EITI reporting in oil, gas and mining. It may also provide the impetus for further development of multi-stakeholder transparency and accountability standards for the renewable energy sector.

Lessons learned from multistakeholder coalitions in the extractives sector are important for sustainability in the renewable energy sector. New start-up companies are making all the same mistakes that a mining company would make."

– Industry representative[100]

4.6 Recommendations to the international EITI Board

13. **Sharing lessons:** At a global level, the EITI could explore opportunities to share lessons on how to advance transparency and multi-stakeholder dialogue between the extractive industries and the renewable energy sector. These efforts could be taken forward in close collaboration with influential stakeholders in the renewable energy sector.

14. **Pursuing partnerships:** While there is growing recognition that greater effort is needed to advance transparency and anti-corruption efforts in the renewable energy sector, there is no clear consensus among stakeholders on which organisation is best placed to drive this forward. Some actors have suggested the EITI could advance such efforts. Others have expressed a preference for such an initiative to be led from within the renewable energy sector, including potentially through the establishment of a separate, dedicated entity focused on transparency and good governance in the renewable energy sector. In both instances, the EITI could pursue partnerships to apply the EITI's approach of country-level implementation, encompassing disclosure requirements for government and industry, as well as multi-stakeholder dialogue, to complement existing private sector-oriented standards and initiatives.

100 Research participant K (industry representative), interviewed 27 June 2023.

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Annexe: List of organisations that participated in this research

- Adekunle Adesina & Co (Integrity Chambers), Nigeria
- Basel Institute on Governance
- Business & Human Rights Resource Centre
- Copenhagen Business School
- Corporación Transparencia por Colombia
- CWP Global
- Global Wind Energy Council
- Green Hydrogen Organisation
- European Solar Manufacturing Council
- International Hydropower Association
- Investor Group on Climate Change
- Regnskogfondet (Norwegian Rainforest Foundation)
- Right Energy Partnership, Philippines
- Statkraft
- TotalEnergies
- Transparency & Accountability Initiative
- Transparency International

Extractive Industries
Transparency Initiative

We believe that a country's natural resources belong to its citizens. Our mission is to promote understanding of natural resource management, strengthen public and corporate governance and provide the data to inform greater transparency and accountability in the extractive sector.

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