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Crime-Proofing the Future

SAFEGUARDING SUSTAINABILITY TRANSITIONS



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Key messages



Sustainability transitions can reshape criminal opportunities by creating new markets, infrastructure, investment flows, regulatory requirements and demand for high-value resources.



Much of the associated criminality is not, though it appears to be on the rise. Established forms of crime and corruption are adapting to changing economic, technological and regulatory conditions, while some actors may also seek to protect interests threatened by the transition away from less sustainable industries and practices.



None of this crime is inherent to these transformations; rather, it is largely contingent on the socio-political contexts in which the changes are taking place



Sustainability transition-related crime looks set to increase over the coming years, fuelled in large part by increased opportunities and incentives. Early action is therefore essential to safeguard the legitimacy, security and long-term effectiveness of these transitions.



Governments and other stakeholders should therefore integrate crime and corruption risk assessments into transition planning, financing and implementation from the outset, rather than relying primarily on enforcement after offences have occurred.

Economic transformations have often been prone to criminal exploitation. The green and other sustainability transitions[1] may prove similarly vulnerable. Across the world, criminal and corrupt actors, many of them politically or economically invested in the status quo, are manipulating, undermining or otherwise disrupting shifts to more environmentally friendly practices. Given the potential of such conduct to obstruct essential sustainability transitions and undermine public safety, security and the rule of law, there is a pressing need to document and better understand these risks.

This report is among the first to examine these forms of criminal and corrupt activity together under a single analytical framework. To do so, it pursues three interrelated objectives.

First, by illustrating the extent of sustainability transition-related crime (see box: Sustainability Transition-Related Crime Defined), the report is designed to bolster awareness of a kind of lawbreaking that appears to have surged in scale and consequence as these economic transformations have gathered pace. Between 2020 and 2024, global investment in the energy transition more than doubled, reaching approximately $2.1 trillion in 2024.[2] That uptick in investment and political commitment has brought both increased opportunity for criminality, given the degree of disruption, and increased incentive for these actors to break the law, given the amounts of money involved and the range of interests at stake.

Second, this report maps the wide array of offences connected to sustainability transitions. Unsurprisingly, these transitions may ultimately leave few people, places or industries untouched. The actors involved in such forms of crime range from individuals engaged in opportunistic or low-level offending to transnational criminal groups implicated in globally significant instability. At up to $1 trillion a year in immediate and long-term economic damage, according to a 2019 study,[3] illegal logging, fishing, and wildlife trade are as big a business as they are a peril to natural landscapes.

Sustainability Transition-Related Crime Defined

Sustainability transition-related crime refers to criminal and corrupt activities that interfere with, exploit, circumvent or capture processes intended to move economies and societies towards more environmentally sustainable, climate-resilient and resource-efficient models.

The concept does not encompass all environmental harm, political opposition to sustainability policies or unintended negative effects of transition measures. It focuses primarily on conduct that is criminal under applicable legal frameworks or involves corruption, fraud, or other deliberate unlawful behaviour.

1 In this report, *green and other sustainability transitions* refer to the interconnected processes through which economies and societies move towards more environmentally sustainable, climate-resilient and resource-efficient models of production and consumption. These processes include the transition from fossil fuels to renewable energy; the electrification and decarbonization of transport and industry; the expansion of circular-economy practices; more sustainable management of water, forests, land and waste; and the development of supply chains for critical minerals and other materials required for low-carbon technologies.

2 BloombergNEF, *Energy Transition Investment Trends 2025* (BloombergNEF, January 2025).

3 World Bank Group, *Illegal Logging, Fishing, and Wildlife Trade: The Costs and How to Combat It* (World Bank Group, October 2019).

Moreover, crimes connected to sustainability initiatives are closely intertwined with non-environmental criminality in many parts of the world. Criminal groups may use the same routes, intermediaries, corrupt facilitators and financial channels to traffic gold and drugs as they do timber and endangered wildlife species. Lucrative and regular profits attract actors already engaged in other criminal markets, notably drug trafficking, and furnish them with the networks, funds and infrastructure required to expand into other criminal sectors. In other words, this kind of crime can become an entry point into broader criminal economies and a driver of volatility as in Southeast Asia, where criminal organizations in countries including Myanmar have sometimes escalated resource extraction in response to casino shutdowns.[4] Conversely and sometimes simultaneously, environmental crime can be made possible by proceeds derived from drug trafficking and other non-environmental crime, as in Latin America and other areas.[5]

Third, and perhaps pivotally, this report hopes to build the knowledge that policymakers, business, law enforcement and civil society will need to combat threats that they may soon have no choice but to confront at the highest level. As these transitions accelerate, albeit slowly and unevenly, there is a chance that related crime will boom with them. It is only by incorporating an awareness of these risks into decision-making that investments across critical infrastructure, energy security and other pivotal sectors can be safeguarded and transitions kept on track. This may require more than applying existing enforcement approaches to new sectors. Sustainability transition-related crime cuts across environmental regulation, organized crime, financial crime, public procurement, trade, land governance and critical-infrastructure protection. Public authorities need to adapt their structures, technical knowledge, partnerships and information systems to combat sustainability transition-related crime successfully.

Among many potential pitfalls associated with this kind of crime, disorder (or the appearance of it) is prone to sour the public on change, especially when there are myriad bad faith actors primed to present these troubles as intrinsic to the transitions themselves, rather than as a byproduct of the increasingly complicated contexts where they are being implemented. As this report will illustrate, these transformations are crucial to addressing pressing environmental and sustainability challenges. However, they must be implemented in a manner mindful of their possible unintended ramifications.

In some ways, these crimes are simply the latest episode of in a class of crimes that have so often accompanied dramatic economic shifts. Like farriers displaced by the rise of the automobile, people often lose out in these periods. Those affected are not always inclined to accept their losses. But there are key differences. The scale of the transformations required to move away from fossil fuels and other unsustainable norms is arguably unlike anything seen before. The rapidity with which these changes must occur poses unique challenges, as does the geopolitical landscape in which they are unfolding.

4 Kevin M. Woods, *Nature Crimes: The Convergence of Criminal Economies in the Mekong Region* (Forest Trends, March 2026).

5 Bram Ebus and Ulrich Eberle, *Crimes against the Climate: Violence and Deforestation in the Amazon* (International Crisis Group, 8 December 2023).

Dramatic and fast-moving economic shifts can alter incentives and market structures in ways that create opportunities for unlawful exploitation or obstruction. These transitions also come at a time of more inter-state conflicts than at any point since the Second World War.[6] In conflict-affected and fragile settings, limited institutional capacity, weak regulatory enforcement and corruption create additional opportunities for criminal and corrupt actors to exploit transition-related markets, resources and investments.[7] Even in more stable countries, heightened distrust of the state and more acute economic stress can incentivise environmentally destructive lawbreaking.[8]

Then there are the stakes. Though some of these transformations are yielding meaningful results, they are not progressing fast enough to meet key sustainability objectives.[9] This is especially true of the transition away from fossil fuels, which is moving more slowly than climate scientists deem necessary to avoid far more devastating warming.[10] As a result, and insofar as crimes connected to the transitions further delay or stifle action, they exact a human toll well out of proportion to their immediate security consequences.

To date, most work related to this subject has been centred on the political, technical and socio-economic barriers to sustainability transitions. In contrast, this report explores the criminal obstructionism that exists alongside those more visible, higher-order hurdles, such as anti-net-zero advocacy by some media outlets and disinformation spread online. These supposedly lesser obstacles have sometimes been ignored amid the focus on the political backdrop of global economic uncertainty, great power competition and general geopolitical flux. This report sheds light for the first time on this under-explored phenomenon, filling a significant gap in the literature just as its relevance grows.

6 Siri Aas Rustad, Conflict Trends: A Global Overview, 1946–2025 (PRIO Paper, Peace Research Institute Oslo, 2026).

7 Camilla Sacchetto, Nicholas Stern and Charlotte Taylor, Priorities for Renewable Energy Investment in Fragile States (International Growth Centre, 4 November 2020).

8 Organisation for Economic Co-operation and Development (OECD), *States of Fragility 2025* (OECD Publishing, February 2025).

9 United Nations Environment Programme and International Resource Panel, *Global Resources Outlook 2024: Bend the Trend – Pathways to a Liveable Planet as Resource Use Spikes* (UNEP, 2024)

10 United Nations Environment Programme, *Emissions Gap Report 2024: No More Hot Air … Please!* (UNEP, October 2024).

Methodology

Like crime in general, many offences connected to sustainability transitions are difficult to detect and document. Available evidence is often fragmented, and the number of recorded incidents understates the scale of the phenomenon. This may be particularly true of this topic because of its relative newness. It may also be true due to the exceptionally veiled and often geographically isolated nature of many relevant criminal acts. This report therefore makes no claims to exhaustiveness. It provides a series of illustrative snapshots of sustainability transition-related crime rather than a thorough examination of it.

This report draws on more than 50 interviews with experts in government, academia, environmental activism, law enforcement and industry. Conducted mostly online between February and May 2026, these interviews involved experts from countries across almost every continent. An expert group, comprising 12 interviewees, also contributed advice during the development and refinement of the analytical framework.[11] In addition, the researchers reviewed media reports and academic literature, and drew on some of their own prior work in this area. Personal names in all case studies have been withheld in whole or in part, or changed entirely to protect sources; in some cases, interviewees did not consent to the use of their names in this context.

This report has a number of inherent limitations based on how it was produced. The examples are disproportionately drawn from a few continents and countries – notably Europe and South Africa – which may be more a reflection of the volume of literature in those places than the volume of crime. In the case of the European Union, the bloc's tighter regulatory landscape may also ensure that more environmental harms there qualify as criminal. With more laws focused on advancing sustainability across Europe and other regions, there is simply more potential for crimes of this nature.

The research would also have benefited from additional field-based data collection but limited resources, together with the sensitive nature of the subject, restricted opportunities to verify some findings directly. Some in the private sector, especially in the renewable energy sector, appeared wary of revealing the extent of their losses for fear of jeopardizing investment. At the same time, many industry bodies seem to be seeking a lower public profile amid domestic political uncertainty.

However, many of this report's gaps are by design. Its relative brevity is intended to help readers absorb key points without losing important detail. Its emphasis on less-investigated crimes, rather than better known and heavily substantiated forms of environmental crime, is meant to add new value and not duplicate previous work, particularly with regard to critical minerals and carbon market fraud. The report focuses mostly on instances that are criminal, rather than merely environmentally harmful, or criminal but largely subsistence-based, as with vulnerable people cutting protected mangroves to meet their needs. In doing so, the researchers have tried to present the findings in ways that more easily translate into immediate action.

11 See Acknowledgments section.

In some regions, the boundaries between state, non-state armed and criminal actors are increasingly blurred. State actors have, for instance, been accused of recruiting or directing criminal intermediaries to carry out attacks on European critical infrastructure and other acts of sabotage using relatively low-cost means.[12]

The analytical framework below was developed iteratively through the review and classification of documented cases and relevant literature and refined with input from the expert group. It identifies recurring patterns of criminal and corrupt conduct associated with sustainability transitions rather than distinct legal categories.

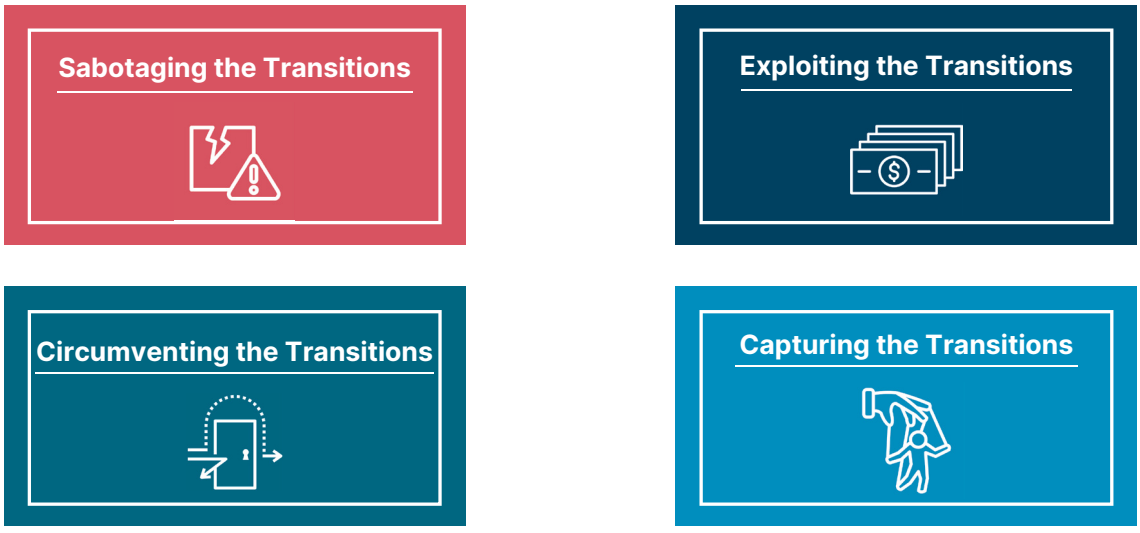


12 Kacper Rekawek, Julian Lanchès, Maria Zotova and Donald Bowser, *Russia's Crime-Terror Nexus: Criminality as a Tool of Hybrid Warfare* (International Centre for Counter-Terrorism and GLOBSEC, September 2025).

Analytical framework for sustainability transition-related crime

Four principal types of criminal and corrupt conduct relating to sustainability transitions emerged from this analysis.[13]

First, ***Sabotaging the Transitions*** encompasses deliberate criminal acts intended to obstruct, delay, disrupt or damage sustainability-related policies, projects, infrastructure or implementation processes. Second, ***Exploiting the Transitions*** refers to criminal activity that seeks to generate illicit profit from the new markets, investments, infrastructure, materials and demand created or expanded by these transformations. Third, ***Circumventing the Transitions*** covers conduct intended to evade or bypass environmental rules, standards, restrictions and compliance costs introduced as part of the transitions. Finally, ***Capturing the Transitions*** concerns the corrupt or otherwise unlawful manipulation of decision-making processes, land usage, public funds, licensing, procurement or regulatory processes to secure control over, or privileged access to, transition-related projects and benefits. Unlike the other types, the conduct associated with Capturing the Transitions may facilitate or accelerate climate and environmental action, at least in the short term.



13 For the purposes of this report, pre-existing forms of crime are considered sustainability transition-related only where a sustainability transition creates, expands or materially alters the criminal opportunity concerned.

These four types are not mutually exclusive. A single offence may relate to more than one type. For this report, each case described is assigned to the type that most closely reflects the conduct's principal purpose or effect. This typology does not imply that all actors involved shared the same motive, or that the wider consequences of the conduct are confined to a single type.

Arranged within this typology, specific case studies illustrate how these crimes play out on the ground. The report concludes with a series of recommendations and an appendix of additional examples of sustainability transition-related crime.



Sustainability transitions

A. Sabotaging the transitions

The first type of sustainability transition-related crime – sabotaging the transitions – encompasses deliberate criminal acts intended to delay, obstruct or damage sustainability-related policies, projects, infrastructure or implementation processes.

As might be expected with such dramatic changes, sustainability transitions have often generated strong opposition. Much of this has been expressed through legal channels, as with local resistance to renewable energy projects in more than 40 US states, and political pushes to ban clean air zones and oil-fuelled car phase-outs in a range of countries across Europe and North America.[14] Some opposition, however, has crossed into criminal conduct. In recent years, many countries have experienced concerted attempts to block, damage or in other ways undermine key parts of these transformations through sabotage. Given the incentive for secrecy among both victims and perpetrators of this destruction, its full extent and consequences may not be reflected in publicly available information.

A number of reported cases appear to have been committed by those who are economically invested in unsustainable or less-sustainable status quo industries, such as forms of mining, large-scale agriculture and manufacturing. Many individuals, companies and other entities derive their living from sectors or ways of doing business that are threatened by these transformations.[15] A minority of them are unwilling to adapt or to be displaced without a fight. Reported instances have included attacks on – and, in some cases, the killing of – officials, environmental defenders and others involved in advancing transition initiatives.[16]

Notably, some of those allegedly responsible for acts of sabotage, such as hoteliers and others in the tourism and hospitality industries, may not actually stand to lose from these transformations. However, in some reported cases, the mere perception that their businesses could suffer – for example, from the placement of new wind turbines – has been associated with unlawful action.[17] Others appear intent on creating (through damage to public and other utilities) business opportunities where previously there were none. In Kathmandu and Johannesburg, water mafias, as they are referred to locally, have successfully instrumentalized and sometimes exacerbated state infrastructure failures in order to carve out demand for themselves, often to the detriment of people and sustainability at large.[18]

14 Matthew Eisenson, Jacob Elkin, Harmukh Singh and Noah Schaffir, *Opposition to Renewable Energy Facilities in the United States: June 2024 Edition* (Sabin Center for Climate Change Law, Columbia Law School, June 2024).

15 United Nations Environment Programme, *Environmental Rule of Law: First Global Report* (United Nations Environment Programme, January 2019); Global Witness, *Roots of Resistance* (Global Witness, September 2025).

16 United Nations Human Rights Council, *Situation of Environmental Human Rights Defenders: Report of the Special Rapporteur on the Situation of Human Rights Defenders*, A/HRC/40/60 (United Nations, 10 January 2019).

17 Rai News Toscana, "Raid nel parco eolico di Villore, aperta un'inchiesta" (Rai News, 8 July 2025).

18 Henk Boshoff and Peacemore Mhodi, "Water Mafias: Is It Not Time to Look at the Terrorism Act?" (South African Human Rights Commission, 11 April 2025).

Sabotage is often grounded in political opposition to the transitions, some of it seeded through misinformation and disinformation. For example, companies and others in the fossil fuel industry who stand to lose in the transition have been implicated in the spread of' fake news.. For many years, the green transition and other forms of transformation have been cast as symbols of government overreach, of unnecessary ideological interference in economic systems as well as extensions of various conspiratorial machinations.[19] Feeding off this rhetoric, individuals and groups have reportedly targeted sustainability infrastructure, both physically and digitally, for reasons that have little to do with the transformations' actual merits and pitfalls.[20] Again, wind and solar transformation projects have often borne the brunt of this backlash.

In other cases, sustainability infrastructure is seemingly falling victim to its increasing ubiquity. The more these transformations advance, the more bricks-and-mortar assets there are to succumb to mischief-making and other forms of vandalism that lack obvious strategic or economic motives[21], such as the targeting of solar parking meters or the felling of recently planted trees. Renewable energy set-ups are tangible, generally accessible and frequently singled out by transition detractors, making them, in particular, the most conspicuous targets for undirected popular anger. Ironically, this type – sabotaging the transitions - may partly reflect their relative success to date: increasingly visible, increasingly a target. As transition-related infrastructure becomes more digitally connected, sabotage takes cyber-enabled forms, targeting smart grids, charging networks and other digital systems to disrupt services, manipulate data or facilitate theft and fraud.[22]

Irrespective of the motivations of those responsible, the consequences are clear. The attacks raise insurance costs for owners and operators, rendering certain projects economically unviable and potentially jeopardizing future investment.[23] They also spawn copycat crimes and heighten local community opposition to infrastructure for fear of the trouble that could accompany it. Ultimately, this kind of crime delays key parts of the sustainability transition and preserves unsustainable business models – precisely the intent of the perpetrators.[24]

Moving forward, politically and economically motivated acts of sabotage may not persist, especially if transition momentum continues to build. But there remains significant potential for enduring and perhaps even aggravated targeting in the interim. Accelerating transformations threaten the interests of parties not previously exposed to this kind of social and economic disruption. As transformations associated with rapid change intensify, the upheaval will drive further incidents.[25] Then there is the politics. Anti-green transition discourse has become increasingly confrontational as these transformations have progressed. It may yet intensify further and directly or indirectly inspire even more sabotage before it subsides.

19 Eleanor Buckley and R. M. Colvin, "Transmission, Turbines, and Trust: The Social Dynamics and Narratives of Opposition to Renewable Energy Infrastructure in Regional Australia", *Energy Research & Social Science*, vol. 132 (2026).

20 Lawrence Susskind, Jungwoo Chun, Alexander Gant, Chelsea Hodgkins, Jessica Cohen and Sarah Lohmar, "Sources of Opposition to Renewable Energy Projects in the United States", *Energy Policy*, vol. 165 (June 2022).

21 Eugene C.X. Ikejemba and Peter C. Schuur, "Analyzing the Impact of Theft and Vandalism in Relation to the Sustainability of Renewable Energy Development Projects in Sub-Saharan Africa", *Sustainability*, vol. 10, No. 3 (14 March 2018).

22 Sarah Y. Zheng et al., "Mapping Current and Potential Criminal and Security Issues Associated with Climate Change Mitigation Technologies," *Sustainable Futures*, vol. 12 (December 2026),

23 Institute for Human Rights and Business (IHRB), *The Hidden Bill of Green Conflict: Insurers Brief* (2026).

24 Stephen Jarvis, "The Economic Costs of NIMBYism: Evidence from Renewable Energy Projects", *Journal of the Association of Environmental and Resource Economists*, vol. 12, No. 4 (July 2025).

25 Organisation for Economic Co-operation and Development (OECD), *States of Fragility 2025* (OECD Publishing, February 2025); I*ntergovernmental Panel on Climate Change (IPCC), Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2022).

Case study: Shattering the competition[26]

For much of the year, Baghdad is a very hot, very sunny city. It is also one afflicted by regular electricity outages. So, when affordable solar panels started to appear on the market, shopkeeper Abu Haidar was quick to see the win-win potential. By placing panels on his low flat, south-facing rooftop, he could simultaneously keep fans spinning through the brutal summer months – and reduce his dependence on the costly diesel-powered generators that many Iraqis turn to when the mains supply is out. In early 2018, he duly borrowed several thousand dollars from relatives. That, he assumed, would be that. "I saw these devices as a way to save money," he said. "This is Iraq. One thing we do not lack is sunshine."

But others in his Sadr City neighbourhood saw things differently. About six months after he installed the panels, Abu Haidar returned home to find the tempered glass smashed and other parts of the system damaged beyond repair. Assessing the destruction soon after the attack, much of it seemingly inflicted by a hammer, he was still fuming. "Last week I had functioning solar panels. I had the ability to keep many appliances working even when the electricity was out. This week, I have nothing," he said. "I have lost not only the money I put into the panels, but also the ability to save money from diesel. I cannot afford to use the generator much."

Still, upon reflection he was not surprised this had happened. The generator supply businesses, who are routinely described locally as a mafia and who he and most others suspected of being responsible for his losses, make too much money delivering diesel to welcome the rise of alternative energy sources. They were particularly keen, a local imam said, to dissuade others from making similar investments. He said, "They do big business because the electricity is always out here. They do not want to encourage things that will threaten their profits."

Although there is no relevant data, others appear to have experienced similar troubles across the Iraqi capital. At least four other households with rooftop solar were also attacked that week, according to Abu Haidar and his neighbours. Vendors at two solar panel showrooms reported periodic warnings that they and their co-workers would be harmed were they to make sales to people in particular parts of the city.



26 Interviews and field reporting conducted by the author in Baghdad, November 2018. Names and identifying details have been changed or withheld; see Methodology.

Additional examples

Additional crimes of this type include the following:

a. Policy and regulatory obstruction

Political patronage, regulatory capture and other forms of undue influence can be used to slow or prevent environmental legislation, especially laws that might accelerate renewable energy rollouts or complicate mining, among other activities. In Indonesia, for example, solar and wind uptake has seemingly been partly compromised by fossil fuel producers and carbon intensive industries, many keen to avoid the costs that would accompany decarbonization.[27] Similarly, in Bosnia and Herzegovina, environmental organizations have accused authorities of protecting the state-owned coal sector by weakly enforcing environmental rules and continuing to offer policy support, helping to preserve coal's dominant role in the country's energy system.[28]

b. Damage to tree-planting schemes

Tree planting and ecosystem-restoration schemes have suffered wholesale destruction or damage. Some of this occurs on land desired for other purposes, but some of it appears to be the result of wanton vandalism. In January 2026, Northumberland Wildlife Trust reported destruction at two nature reserves in northern England: trees had been set alight at St Nicholas Park in Newcastle, while up to 200 trees were estimated to have been damaged at the West Chevington reserve near Druridge Bay.[29]

c. Attacks on water infrastructure

Attacks have occurred on desalination units, pipelines and other infrastructure intended to improve the resilience and sustainability of water supply. This has been the case in Greece, where efforts to reduce dependence on expensive water shipments from the mainland to the islands have resulted in the sabotage of desalination units, potable water outlets and undersea pipelines built or sponsored as alternatives.[30] In one instance, a pipeline to the island of Aegina was reportedly repeatedly punctured with a drill. Officials and water-sector specialists have suggested that commercial interests connected to private water supply may have played a role in these and other incidents, but no perpetrators or motives have been judicially established.[31]

d. Attacks against officials

Officials have been targeted for pushing or advocating for renewable energy at the expense of fossil fuel businesses. In December 2022, André de Ruyter, then Group Chief Executive of Eskom, South Africa's state-owned electricity utility, reported that he had been poisoned with cyanide.[32] South African parliamentary records subsequently referred to an alleged poisoning case in which he was the complainant. The motive has

27 Philip Gass et al., *Missing the 23 Per Cent Target: Roadblocks to the Development of Renewable Energy in Indonesia* (International Institute for Sustainable Development, February 2018).

28 Interview with Denis Žiško, environmental activist, conducted by UNICRI, February 2026; CEE Bankwatch Network, *Comply or Close 2025: Seven Years of Deadly Legal Breaches by Western Balkan Coal Plants* (June 2025).

29 Northumberland Wildlife Trust, "Senseless vandalism at Druridge Bay reserve", 27 January 2026.

30 Giorgos Lialios, "Damage to Aegina Water Pipeline 'No Coincidence'," *Kathimerini*, 2 February 2024.

31 Associated Press, "A Greek Island Is Without Drinking Water after Pipeline Damage That Authorities Blame on Sabotage" (Associated Press, 6 February 2024).

32 Joe Lo, "Eskom poisoning raises fears for South Africa's energy transition", *Climate Home News*, 11 January 2023.

not been publicly established, although the incident occurred against the backdrop of his efforts to address corruption and mismanagement at Eskom and to reform the utility as it assumed a central role in South Africa's energy transition.[33]

B. Exploiting the transitions

A second type of sustainability transition-related crime – exploiting the transitions – refers to criminal activity that exploits new markets, investments, infrastructure and valuable materials created or expanded by sustainability transitions to generate illicit profit.

Like acts of sabotage, offences that exploit the transitions may also stem, in part, from the significant strides made by the transitions in recent years. Crime of this nature, perhaps more than any other, is expected to become more prevalent as investment in green-transition infrastructure accelerates.[34] Reported cases indicate that both opportunistic offenders and organized criminal groups have been quick to seize the seize the opening presented presented by increased finance, greater disruption and, in some places, a more accommodating political environment in which climate action is pursued with insufficient oversight.

Carbon markets provide a particularly clear example of how new transition-related markets can be exploited for illicit profit.[35] Authorities have investigated or prosecuted schemes involving fraudulent carbon credits, exaggerated emissions reductions, misleading investment products and credits generated from fraudulently acquired land. In some contexts, criminal groups have also reportedly levied a "tax" on beneficiaries of carbon investments, while businesses have misrepresented the nature or impact of their emissions-offsetting activities. Similar opportunities arise from public incentives intended to accelerate sustainability transitions, including renewable-energy subsidies, energy-renovation grants and renewable-fuel credits.[36]

Much of this is best described as crime of opportunism. Theft of copper and other valuable materials is not unique to sustainability transitions. However, the expansion of renewable energy and other transition-related infrastructure can create new targets and increase the scale of existing criminal opportunities. [37][38] Solar and wind facilities can require tens,

33 Parliament of the Republic of South Africa, "Hawks Do Not Know Identity of Senior Politician Implicated by Former Eskom CEO, Committee Hears", 10 May 2023.

34 Giuseppe Scandurra, Alfonso Carfora and Antonio Thomas, "Does Crime Influence Investment in Renewable Energy Sources? Empirical Evidence from Italy," *Energies*, vol. 17, no. 14 (July 2024).

35 INTERPOL, *Guide for Carbon Trading Crime* (INTERPOL, 2013).

36 United States Attorney's Office, Southern District of New York, "U.S. Attorney Announces Criminal Charges in Multi-Year Fraud Scheme in the Market for Carbon Credits," press release, 2 October 2024; U.S. Securities and Exchange Commission, "SEC Charges Former C-Quest Executives in Carbon Credit Fraud Scheme," 2025; U.S. Commodity Futures Trading Commission, "CFTC Charges Former C-Quest Executives with Carbon Credit Fraud," 2025; European Public Prosecutor's Office, "France: Seven Convicted of €1.13 Million Fraud Involving Energy-Renovation Scheme MaPrimeRénov'," 11 June 2026; United States Attorney's Office, Southern District of Florida, "Fort Pierce Man Sentenced to 18 Months in Prison for Biofuel Fraud Conspiracy," 29 May 2026.

37 Jillian Ambrose, "Windfarms in England Hit by Wave of Copper Cabling Thefts," *The Guardian*, 23 June 2025; Kana Inagaki, Harry Dempsey and Michael Stott, "Global Surge in Copper Theft Snares Telecoms and Trains," *Financial Times*, 30 July 2026.

38 Giuseppe Scandurra, Alfonso Carfora and Antonio Thomas, "Does Crime Influence Investment in Renewable Energy Sources? Empirical Evidence from Italy," *Energies*, vol. 17, no. 14 (July 2024); Michael Hitch, Robert J. Wood, George Barakos and Christophe Schinckus, "Copper, Crime, and the Circular Economy: How Shadow Flows Threaten the Green Transition," *The Extractive Industries and Society* (2026).

if not hundreds, of kilometres of copper and other metal cabling whose value has soared in large part because of the demand from the green transition.[39] Copper prices have risen by up to 40 per cent to record highs since mid-2025.[40] Cables are the most frequently stolen parts from solar farms, according to Chile's Solar Energy Association, closely followed by the photovoltaic panels. Importantly, this infrastructure is often spread across isolated, lightly guarded sites that are much less risky to strip than similarly attractive rail or telecommunications infrastructure.[41] A security company has estimated that around 5,000 'major' solar thefts occur annually across Europe.[42] As a UK-based security expert stated, "the substantial price of copper is unfortunately driving high rates of offending across all forms of critical infrastructure."[43]

Extensive sections of electrified rail, another lucrative target, have been stolen in South Africa and other countries. These thefts have undermined signature green achievements, disrupted services and reportedly slowed the roll out of additional rail lines. Though most of this theft appears to have been motivated by a pursuit of the valuable materials themselves, the line between 'sabotage' and 'exploitation' can be a fine one. In Nigeria and South Africa, some bus and taxi operators or networks have been accused of facilitating or benefiting from damage to rail infrastructure, their operations profiting from the reduction in these alternative and generally more sustainable transport options[44]

Crimes exploiting the sustainability transition also target the components required to make old cars less polluting and the parts required to make some new electric vehicles (EVs) function. Catalytic converters, designed to limit emissions from internal combustion engines, are targeted for their platinum, palladium and rhodium content. Similarly, hybrid cars are vulnerable because their converters are less exposed to high temperatures, so the metals inside are less degraded.[45] EVs are increasingly being targeted too, with both opportunistic offenders and organized criminal groups taking apart EV chargers,[46] which, anecdotally, may be slowing EV adoption in some places.

Further up the supply chain, rapidly growing demand for critical energy-transition minerals – essential for batteries and other transition technologies – can create or expand lucrative opportunities for organized criminal groups.[47] In mineral-rich Latin America and Southeast Asia, criminal networks operate with limited government control, allowing them to extract with environmentally destructive abandon.[48] Lucrative revenues enable groups to expand their operations quickly, fuelling even greater criminal activity and environmental destruction.

39 Asociación Chilena de Energía Solar (ACESOL), "Un nuevo foco de delito en el sector eléctrico: Al robo de cables se suman los paneles solares" (ACESOL, 15 July 2024).

40 Pratima Desai, "Record Copper Price Signals Accelerating Race for Supplies," *Reuters*, 5 January 2026.

41 Jillian Ambrose, "Windfarms in England Hit by Wave of Copper Cabling Thefts," *The Guardian*, 23 June 2025.

42 Kelly Barnes, *Keeping the Lights On: Disrupting Organised Crime against Solar Farms* (DeterTech, October 2024).

43 Richard Crisp, DeterTech, interview with UNICRI, May 2026; DeterTech, "Media Alert: North-West England Sees Surge in Copper & Cable Theft" (DeterTech, 30 September 2025).

44 Proceedings of the Commission of Inquiry into Violence, Intimidation and Instability in the Taxi Industry in the Western Cape, testimony of André Harrison (Parliamentary Monitoring Group, November 2006).

45 West Yorkshire Police, *Catalytic Converter Theft Prevention Advice.*

46 Kana Inagaki, Harry Dempsey and Michael Stott, "Global Surge in Copper Theft Snares Telecoms and Trains," *Financial Times*, 30 July 2026.

47 United Nations Office on Drugs and Crime, Minerals Crime: Crimes in the Supply Chains of Critical Energy Transition Minerals (UNODC, 2025).

48 Ibid.

Allegations of abuse at mines reviewed by the Business and Human Rights Centre more than doubled in 2024 compared with the previous year.[49]

Less obviously, though not necessarily less significantly, demand for other critical minerals central to the green transition, such as silica, has fuelled significant illegal and poorly regulated sand extraction.[50] Sand dredgers have been held responsible for worsening flooding and other ills, such as land grabbing, in dozens of countries, including India and Haiti. Some take more than their allotted amounts to benefit from higher prices; and others reportedly work outright illegally with the acquiescence of corrupt local officials.[51] Much of that silica goes towards solar panel glass, wind turbine blades and lightweight EV components, among many other transition-centred uses.[52] In this respect, as with the environmental toll of critical minerals, there is a vicious cycle: attempts to redress climate change can reduce some communities' capacity to withstand climate shocks.

If left unaddressed, these crimes may make the transformations both more expensive and more politically fraught in the long run, providing detractors with additional ammunition. For now the greatest impact of these crimes is likely to be felt among lower-income households, who are most likely to get caught up in the criminal dragnet. Some are already changing their risk calculus, unable to tolerate the possibility that their solar and other investments may be lost, despite the technologies' financial advantages, as in parts of South Africa.[53] As a consequence, these crimes of exploitation risk further entrenching inequalities.



Case study: Robbing Peter to pay Paul[54]

It was a little after 7am, and Muhammad and his crew had already been hard at work for hours. Slowly drifting back and forth along the Pashur River, they busily sucked sand from the riverbed, the captain's shouted orders barely audible above the drone of the generator. In the background, shovel-wielding labourers swiftly redistributed the soggy piles across the deck. It was only when the broad, 30-metre-long barge was full and riding so low in the water that waves lapped over the gunwales that they reeled in their pumps and slowly made for the port of Mongla. Having found "the best quality sand in the area," it had been a good morning of dredging, Muhammad said.

These men did not look like criminals, and operating within plain view of Bangladesh's second largest port, they did not act like them either. But by plying these waters without a permit, they and many of the other crews in this area were engaging in wrongdoing with stakes well out of proportion to the mundane-looking nature of the work.

Some of the consequences would be broadly recognizable in hundreds, if not thousands, of other riverside communities around the world. By speeding up the flow of the current,

49 Business & Human Rights Resource Centre, *Transition Minerals Tracker 2025* (Business & Human Rights Resource Centre, 2025).

50 United Nations Environment Programme (UNEP)/GRID-Geneva, *Sand and Sustainability: 10 Strategic Recommendations to Avert a Crisis* (UNEP, 2022).

51 Prem Mahadevan, *Sand Mafias in India: Disorganized Crime in a Growing Economy* (Global Initiative Against Transnational Organized Crime, GI-TOC, July 2019).

52 Indoalam Editorial, "Silica Sand for Solar Panels: Essential Material for Photovoltaic Manufacturing," *Indoalam*, 21 April 2026, https://indoalam.co.id/en/articles/silica-sand-solar-panel-photovoltaic-manufacturing

53 Uzziah Mutumbi, Gladman Thondhlana and Sheunesu Ruwanza, "South Africans Want Solar Power but They Worry Panels Will Be Stolen—Study," *The Conversation*, 16 April 2026.

54 Interviews and field reporting conducted by the author in southwestern Bangladesh, May 2018. Names and identifying details have been changed or withheld; see Methodology

and redirecting water towards the flanks, among other adverse effects, sand miners both licensed and not have contributed to intensified flooding and riverbank erosion. In Banishanta Union, the cluster of villages alongside which Muhammad was working that day, the collapsing docks and abandoned houses speak to the increasingly unruly character of the rivers. “We live in terror of losing our land to the water,” said one local farmer.

But around these particular communities, where sand mining has picked up dramatically for reasons including the higher price of fine silica sand, villagers and their representatives hold these men responsible for an even more destructive ill. They accuse the miners of extracting so energetically that many of the protective embankments that surround low-lying villages and stifle flooding are being steadily undermined. When fiercer cyclones, stronger storm surges and other climate and environmental shocks strike, those weakened structures need ever less encouragement to subside.

Locals alleged that some river police officers accepted bribes in exchange for overlooking illegal sand mining operations. “They are earning enough now to satisfy officers’ appetites,” alleged the chairman (mayor) of Banishanta Union, who also maintained that sand miners exceed their quotas even when they do have permits, an allegation that Muhammad said was sometimes correct.

Moreover, as demand surges, local environmentalists also accuse port officials of sanctioning the passage of ships larger than regulations allow, many transporting thousands of tonnes of sand to Dhaka to fuel its construction boom, and farther afield to China to supply solar panel manufacturers and other industries. Amid this frenzy for materials, riverside communities say they feel that they are living on borrowed time.



Additional examples

Additional crimes of this type include the following:

a. Fraudulent inflation of carbon credits

In the United States, authorities alleged that executives associated with a major carbon project developer fraudulently overstated the emissions reductions achieved by improved cookstove programmes across Sub-Saharan Africa, Asia and Central America. Investigators alleged that project data and assumptions were manipulated to inflate the number of credits issued, misleading buyers in the voluntary carbon market.[55]

b. Fraud involving energy-efficiency grants

French authorities dismantled a criminal network that fraudulently obtained public subsidies intended to support residential energy-efficiency improvements under the MaPrimeRénov' programme. The scheme involved submitting false documentation and claiming grants for renovation works that were either inflated or never carried out, resulting in losses exceeding €1 million.[56]

c. Illegal extraction and fraudulent mineral documentation

In Brazil, criminal groups have reportedly extracted minerals from places where mining of any sort is prohibited,[57] fabricated certificates to misrepresent the source of their wares and mislabelled cargoes.[58] This is one example among other documented practices associated with the pursuit of critical minerals.

d. Fraudulent sales of household transition technologies

In countries including Egypt and Canada, sellers and companies have been accused of misrepresenting cheap, unreliable household systems such as solar water heaters and heat pumps.[59] Often more poorly made than advertised, these systems leave members of the public to bear the cost of their efforts to transition to more ecologically sensitive solutions.

55 United States Attorney's Office, Southern District of New York, "U.S. Attorney Announces Criminal Charges in Multi-Year Fraud Scheme in the Market for Carbon Credits," press release, 2 October 2024; U.S. Securities and Exchange Commission, "SEC Charges Former C-Quest Executives in Carbon Credit Fraud Scheme," 2025; U.S. Commodity Futures Trading Commission, "CFTC Charges Former C-Quest Executives with Carbon Credit Fraud," 2025.

56 European Public Prosecutor's Office, "France: Seven Convicted of €1.13 Million Fraud Involving Energy-Renovation Scheme MaPrimeRénov'," 11 June 2026.

57 Ministério Público Federal (Brazil), *MPF recomenda criação de sistema que possibilite o rastreio de cassiterita e estanho no país* (27 February 2026)

58 Ministério do Desenvolvimento, Indústria, Comércio e Serviços & Receita Federal, *Relatório traz resultados de combate a fraudes no Comércio Exterior* (8 April 2024).

59 Competition Bureau Canada, "Competition Bureau Warns Consumers about Deceptive Door-to-Door Sales of Water Heaters and HVAC Systems" (Competition Bureau Canada, July 2016).

C. Circumventing the transitions

A third type of sustainability transition-related crime – circumventing the transitions – refers to criminal activity intended to evade, bypass or undermine environmental rules, standards and compliance costs introduced as part of sustainability transitions.

Sustainability measures are not new, and nor is business opposition to them. As environmental legislation has become more stringent in many countries, so too has the cost of compliance with these laws. It has all given rise to a type of crime centred on ignoring, sidestepping or circumventing sometimes expensive and onerous regulations.

Wrongdoing occurs across many sectors, involving many actors ranging from individual offenders and legitimate businesses to organized criminal groups. However, waste-related crime figures figures prominently. After years of introducing progressively stiffer rules governing waste disposal, many countries have experienced widespread illegal dumping by small and large enterprises keen to rid themselves of waste more cheaply and easily than the law allows. In practice, this frequently means discarding solid waste in isolated rural areas, releasing wastewater into lakes and rivers and emitting air pollutants without regard for restrictions. Charges for legally disposing of materials can increase with their toxicity, creating an additional incentive to dump or even burn the most hazardous materials, such as e-waste.[60]

At the same time, organized criminal groups transport large quantities of waste across borders and into jurisdictions where regulation or enforcement may be weaker. These flows may be facilitated by white-collar offences, including fraud, falsification of records and the deliberate misdeclaration of the type, origin or place of generation of waste. As Amy Youngman of the Environmental Investigation Agency observed, "it is still easy to misdeclare items and misdeclare where they have been generated,"[61] while actors in importing countries may rely on corruption and the exploitation of vulnerable populations. The result can be that the poorest and most vulnerable communities bear the consequences of waste of far more affluent societies, while criminal groups and complicit businesses profit substantially from its illegal transport and disposal.

Tighter regulations concerning the use of environmentally damaging products have also restricted access to established products previously readily available. A significant criminal ecosystem has subsequently emerged to cater to those who continue to seek out these products despite their illegality. Various single-use plastics, for example, are banned or stringently controlled in dozens of countries.[62] After Kenya banned the use and manufacturing of plastic bags in 2017, traffickers began smuggling them over the country's borders.[63]

Other products or commodities are licit but may be sourced illegally, used in an unlawful manner or acquired in or from prohibited places. Much of this is agricultural in character. Farmers may defy regulations to grow illegal or proscribed water-intensive crops in drought-

60 United Nations Environment Programme and INTERPOL, *Waste Crime - Waste Risks: Gaps in Meeting the Global Waste Challenge. A Rapid Response Assessment* (UNEP and INTERPOL, August 2015).

61 Interview with Amy Youngman, Environmental Investigation Agency, May 2026.

62 United Nations Environment Programme, *Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations* (UNEP, 2018).

63 The Asia Foundation, *Reducing Plastic Pollution in Kenya: Lessons from Navigating Environmental Policy Change*, 2023, pp. 18–19, https://asiafoundation.org/wp-content/uploads/2023/12/Philippines_Reducing-Plastic-Pollution-in-Kenya.pdf

ridden areas and withdraw more water than they are permitted from protected and often overstretched sources. But this same pattern extends beyond agriculture. Companies and intermediaries in timber supply chains have been accused of misdeeds, including sourcing wood from restricted, often biodiverse-rich areas and manipulating the forest certification system to misrepresent the sustainability of timber supply chains.[64]

Circumvention may also increase where new environmental restrictions raise costs or constrain access to previously common products. Estimates suggest that illegally traded hydrofluorocarbons (HFCs), widely used in refrigeration and air-conditioning, may account for between 20 and 30 per cent of the volume of legal trade in the European Union.[65] As rising temperatures bolster demand for air-conditioning, clamor for both legal and illegally traded refrigerants may grow. A 2021 estimate placed the annual climate impact of illicit HFC trade in the European Union at up to 30 million tonnes of carbon-dioxide equivalent.[66]



Case study: Trading health for cash[67]

Disposing of electronic waste is a dirty, difficult business, which is why in most rich countries with exacting environmental standards it does not come cheap. For example, in Israel, formal treatment and disposal can reportedly cost several thousand shekels per tonne,[68] creating a significant burden for companies and municipalities. Many are keen to save themselves the expense.

This helps to explain why, for at least two decades, operators there and in the Occupied Palestinian Territory, specifically the West Bank, have presided over a cheaper, if deeply destructive, illegal workaround. According to an estimate by the Israeli state comptroller, 51,000 tonnes of e-waste originating in Israel were burned at illegal sites in the West Bank in 2023.[69] There, across at least 3,000 sites, many adjacent to the wall partitioning Israel and the West Bank, "burners" deconstruct everything from rusting washing machines to old transformers. They then roast the parts over open fires to extract the copper and other precious metals.

In some ways, this could look like a win-win-win. The trade may appear to offer benefits to several parties by reducing disposal costs, generating income for some Palestinian workers and enabling the recovery of valuable materials. These incentives operate in the context of severe economic pressures in the West Bank, including conflict-related disruption, movement and access restrictions associated with the occupation, reduced employment opportunities and cuts in development assistance. In turn, the materials are valuable, and have in many instances grown even more so due to rising (if frequently fluctuating) global prices. Burners can earn thousands of dollars a month, many times

64 Cassie Dummett, Arthur Blundell, Kerstin Canby, Michael Wolosin and Eszter Bodnar, *Illicit Harvest, Complicit Goods: The State of Illegal Deforestation for Agriculture* (Forest Trends, May 2021).

65 Environmental Investigation Agency, *Europe's Most Chilling Crime: The Illegal Trade in HFC Refrigerant Gases* (Environmental Investigation Agency, 2021).

66 Environmental Investigation Agency, "We Expose Illegal Refrigerant Trade in Europe - 'The Biggest Eco-Crime No-One's Heard Of'" (Environmental Investigation Agency, 8 July 2021).

67 Names and identifying details have been changed or withheld; see Methodology

68 Daniel G. Weiler, "Industrial Symbiosis: Good for the Economy, Good for the Environment" (Zavit, 21 June 2021).

69 Office of the State Comptroller and Ombudsman of Israel, *Transboundary Air Pollution Originating from Waste Burning in the Judea and Samaria Region* (Office of the State Comptroller and Ombudsman of Israel, March 2024).

the average wage, often reportedly selling the materials back to buyers in Israel or on to other countries.[70]

But the reality on the ground is very different, say local activists and international scholars. Burning toxic products poses grave consequences for public health, with the locations of e-waste sites closely correlated with clusters of childhood cancer and other illnesses.[71] The ramifications for the environment are also bleak, and appear to be reinforcing the health and economic impacts. These pyres of tar black smoke, many visible from miles away, taint water resources, sully farmland and poison livestock, including some in nearby Israeli communities.[72]

Additionally, these waste transfers fuel corruption, some of it allegedly involving Israeli security personnel facilitating the transit of trucks through checkpoints,[73] and aggravate other forms of criminality, such as money laundering.[74]

Still, the practice shows few signs of going anywhere. The more the economy wavers, the greater the risks people appear to be taking with their own health, especially when enticed by surging demand. "Instability equals higher commodity prices, which equals more burning," said Yaakov Garb, an Israeli academic who has spent decades researching the trade. He added, "You can see the literal smoke signals of commodity prices before you read them in the news."[75]

Given the financial incentives involved and the cross-border nature of waste trafficking, enforcement action in Israel or the occupied West Bank alone may be insufficient to disrupt the wider market. As seen following China's crackdown on the import of international waste in 2018, blocking one route often transfers flows of waste to others.[76]



70 Office of the State Comptroller and Ombudsman of Israel, *Transboundary Air Pollution Originating from Waste Burning in the Judea and Samaria Region* (Office of the State Comptroller and Ombudsman of Israel, March 2024).

71 John-Michael Davis and Yaakov Garb, "A Strong Spatial Association Between E-Waste Burn Sites and Childhood Lymphoma in the West Bank, Palestine", *International Journal of Cancer*, vol. 144, no. 3 (2019).

72 Office of the State Comptroller and Ombudsman of Israel, *Transboundary Air Pollution Originating from Waste Burning in the Judea and Samaria Region* (Office of the State Comptroller and Ombudsman of Israel, March 2024).

73 Yaakov Garb and Nelly Leblond, "Flowing Toxics: E-Waste Field Work in the Palestinian-Israeli Space," *Environment and Planning C: Politics and Space*, vol. 42, no. 1 (SAGE Publications, February 2024), pp. 45-63.

74 United Nations Environment Programme and INTERPOL, *Waste Crime - Waste Risks: Gaps in Meeting the Global Waste Challenge* (UNEP and INTERPOL, 2015).

75 Interview with Yaakov Garb, conducted as part of the author's reporting, May–June 2026.

76 United Nations Office on Drugs and Crime, *How Waste Trafficking Hinders the Development of Circular Economies: Impacts, Challenges and Solutions - Lessons from Southeast Asia* (United Nations Office on Drugs and Crime, 2025).

Additional examples

Additional crimes of this type include the following:

a. Misleading environmental claims

In countries such as Morocco, some real estate developers have been accused of presenting materials as sustainably sourced when they are not, of exaggerating properties' natural cooling features and of misrepresenting properties' energy efficiency grades, among other abuses.[77]

b. Illegal waste disposal

Across the world, individuals, businesses and large criminal networks frequently dump waste in protected natural areas (as in California's Redwood National Park),[78] on agricultural land (as in Italy's "Triangle of Death" near Naples)[79] and even at sea (as off the coast near Athens)[80]. In the process, those responsible despoil landscapes that locals and municipalities lack the resources to repair.

c. Illegal water extraction during drought

Climate-adaptation measures can include tighter controls on water extraction in areas facing increasing scarcity. Where such measures introduce new restrictions or allocation rules, individuals and businesses may seek to circumvent them through unauthorized extraction or diversion. In Mexico, authorities have accused avocado producers of illegally extracting water from already-stressed reservoirs.[81] In California, marijuana growers have reportedly tapped fire hydrants, raided remote filling stations and contributed to losses of pressure in built up communities by improperly closing off valves.[82]

d. Use of prohibited agricultural chemicals

Though farmers are often aware of the environmental and human health pitfalls of prohibited agricultural chemicals, survey and enforcement data indicate that their use continues in parts of Europe, partly because they may be cheaper than regulated alternatives.[83] Climate and other stresses are making many farmers more inclined to cut costs on agricultural inputs where possible.

77 Based on the author's reporting in Marrakesh and interviews with relevant stakeholders conducted in Morocco, May 2021; Farzana Quoquab, Rames Sivadasan and Jihad Mohammad, "Do They Mean What They Say? Measuring Greenwash in the Sustainable Property Development Sector," *Asia Pacific Journal of Marketing and Logistics*, vol. 34, no. 4 (Emerald Publishing, 2022), pp. 778-799.

78 Redwood National and State Parks, "Can You Help Solve This Case?" (U.S. National Park Service, 21 August 2025).

79 Maria Triassi, Rossella Alfano, Maddalena Illario et al., "Environmental Pollution from Illegal Waste Disposal and Health Effects: A Review on the 'Triangle of Death'," *International Journal of Environmental Research and Public Health*, vol. 12, no. 2 (MDPI, 2015).

80 Giorgos Lialios, "Agistri Seabed Harbors Illegal Dumping Evidence," *Kathimerini*, 12 March 2026.

81 Procuraduría Federal de Protección al Ambiente (PROFEPA), "Profepa Realiza Inspecciones Forestales en Michoacán, en Atención a Acuerdos de la Comisión para la Cooperación Ambiental" (PROFEPA, 4 February 2026); Armando Solís, "Angry Mexican Farmers Target Avocado Orchards", *Associated Press*, 24 April 2024.

82 Julie Cart, "Thieves Are Stealing California's Scarce Water. Where's It Going? Illegal Marijuana Farms," *CalMatters*, 20 July 2021.

83 Kate Abnett, "Europe's Illegal Pesticide Trade Surges as Farmers Cut Costs," *Reuters*, 10 July 2025.

D. Capturing the transitions

A fourth type of sustainability transition-related crime – capturing the transitions – refers to the corrupt or otherwise unlawful manipulation of decision-making processes, land usage, public funds, licensing or regulatory processes to secure control over, or privileged access to, transition-related projects and benefits.

Most crime connected to the transitions is at odds with sustainability itself, these offences often burdening natural landscapes with additional challenges and further compromising efforts to positively transform economic systems. However, there are exceptions: a smaller category of offences may, at least in the short term, facilitate the implementation of transition-related projects. Where such projects are advanced through unfair or unlawful means, they risk generating local grievances, undermining public trust and fuelling opposition to other transition initiatives. Some offences may fly under the radar precisely because of the positive purposes they appear to serve.

Corruption in the licensing and construction of wind, solar and other renewable energy infrastructure accounts for most of this wrongdoing. By bypassing planning requirements and environmental procedures, the backers of some projects have reportedly been able to build more quickly, at greater scale or in locations that might not otherwise have been authorized.[84] Local communities in countries such as Greece accuse the renewable energy sector and its state partners of allocating land in protected areas, such as mountain ridges, for projects that may be cheaper to build than better suited sites for electricity generation.[85] Critics maintain that environmental impact assessments have been rushed through without proper regard for national laws, and that developers have frequently breached these laws during construction.[86]

In some reported cases, solar companies have allegedly installed more capacity than permits allow, potentially increasing project revenues. Wind-energy developers in Türkiye and Greece have likewise been accused of clearing more trees than permitted by relevant forestry authorities to facilitate construction.[87]

Conversely, local communities in other locations have been accused of manipulating renewable energy rollouts for their own personal advantage.[88] Industry sources have alleged that some municipalities demand bribes or other improper payments to allow solar and wind projects to proceed swiftly or at all.[89]

Transition-related projects have also been associated with threats and violence against affected communities and environmental defenders. In Honduras, Indigenous rights defender Berta Cáceres was killed in 2016 after opposing the Agua Zarca hydroelectric

84 Caterina Gennaioli and Massimo Tavoni, "Clean or Dirty Energy: Evidence of Corruption in the Renewable Energy Sector," *Public Choice*, vol. 166 (2016), pp. 261-290.

85 Hellenic Ornithological Society, "Greece Fails to Protect the Second Most Important Habitat of Griffon Vulture" (Hellenic Ornithological Society, 14 November 2024).

86 Samadhi Lipari, "Gaming the System: Exploiting Regulatory and Institutional Loopholes for Accumulation in Southern Italy's Wind Energy Sector," *Energy Research & Social Science*, vol. 130 (2025), article 104465.

87 Şeyda Öztürk, "RES için onay alan şirket 52 türbin için 36 bin 903 adet ağacı kesecek: Verimli ormana hançer," *Cumhuriyet*, 9 July 2026.

88 Alexandra Potamianos, "How to Blow Up a Solar Farm: Local Opposition to Renewable Energy Projects," *Environmental Law Reporter*, vol. 54 (2024).

89 Ming-sho Ho and Chun-Hao Huang, "Green Electricity Cockroaches": An Environmental Criminology of Fraud, Embezzlement, and Bribery in Taiwan's Renewable Energy Development, *Energy Research & Social Science* (2026).

project. Judicial proceedings subsequently established the criminal responsibility of several individuals, including a former executive of the company developing the project.[90]

In some places, tree planting and nature protection schemes have been advanced in a criminal or at least harmful manner. The land that various reforestation and afforestation projects claim is sometimes contested. In their zeal to meet targets, public bodies or the private organizations implementing projects on their behalf have frequently planted and enclosed those spaces, heedless of the rights of residents, farmers, pastoralists and others who may own them, or who have long used those lands but lack formal title deeds.

Along with a wide range of other offences, criminal and corrupt actors are profiting by dishonestly exploiting the sustainability narrative and the desire of both the public and some businesses to support environmentally beneficial initiatives. From Iraq to Italy, some dams and reservoirs have been built for ostensibly climate-related reasons, presented by advocates as environmentally friendly sources of electricity. However, NGOs and environmental officials have questioned the rationale and siting of certain projects, including those in water-stressed areas, as well as procurement irregularities and contracting that may have benefited favoured or politically connected companies.[91]

Fearful of climate impacts and intent on transitioning in a hurry, some residents near contentious wind farms allege that authorities are ignoring offences of this nature because the alleged lawbreaking is deemed acceptable in pursuit of the greater good. If true, officials may be miscalculating. This behaviour risks aggravating local objections to otherwise welcome renewable energy investments, as well as fuelling a culture of impunity in which crime in general becomes likely. Moreover, businesses appear to recognize the opportunity. The greater the latitude they are granted, the greater the scope for abuse.

90 Suprema Corte de Justicia de la Nación (Mexico), *Reporte sobre la Magistratura en el Mundo*, Año XXII, No. 4,861, "Honduras: La Suprema Corte confirma las sentencias contra los asesinos de la activista Berta Cáceres" (27 November 2024).

91 Save the Tigris, *Into Thin Air: Evaporation Losses from Dam Reservoirs in Iraq* (Save the Tigris, October 2021); Atif Ansar, Bent Flyvbjerg, Alexander Budzier and Daniel Lunn, "Should We Build More Large Dams? The Actual Costs of Hydropower Megaproject Development," *Energy Policy*, vol. 69 (June 2014).

Case study: The ends cannot justify the means

In the desert corridor between Mount Kulal and the eastern shore of Lake Turkana, the wind blows hard and almost without pause. It is one of the most reliable energy sources in Africa, and since 2019 it has been turning the 365 turbines of Lake Turkana Wind Power, a 310-megawatt project built at a cost of some 70 billion Kenyan shillings and wired to the grid by a purpose-built 438-kilometre line.[92] But according to Kenyan courts, this farm, the largest of its kind south of the Sahara, is also built on land that was taken unlawfully.[93]

In October 2014, residents of Laisamis Constituency and Karare Ward in Marsabit County went to the Environment and Land Court in Meru. Suing on behalf of El Molo, Turkana, Samburu and Rendille pastoralists, they argued that the 150,000 acres leased to the company had been allocated in breach of the Trust Land Act and the Constitution: without free, prior and informed consent, and without proper compensation.[94]

Seven years later, they won. In October 2021, judges ruled that the constitutional requirements had not been observed, and that irregularly issued titles can be cancelled. They gave the county government and three national bodies twelve months to regularize the acquisition, failing which the titles would lapse and the land revert to the community.[95] The project company did not dispute that irregularities had occurred in the land-acquisition process.[96]

The judges also recorded a complaint that goes to the heart of the matter. The turbines occupy roughly 40,000 acres. The company had fenced off 150,000.[97] For pastoralists whose herds depend on exactly this kind of marginal grazing land, the gap between those two figures can be the difference between a project they live beside and one that displaces them.[98]

The company sought a review, then an extension and then a stay. All were refused. The titles fell in 2023, and the litigation has continued into its second decade.[99] The appeal set out the argument that gives this typology its character: unwinding the land arrangement now would jeopardise the entire investment, underwritten as it is by a government letter of support to the project's financiers and a twenty-year power purchase agreement.[100] The turbines continue to generate electricity, and the project makes a significant contribution to Kenya's renewable-energy supply.

92 Lake Turkana Wind Power Ltd., *Lake Turkana Wind Power Project* (Lake Turkana Wind Power Ltd.).

93 Mohamud Iltarakwa Kochale & 5 others v Lake Turkana Wind Power Ltd & 4 others; Aaron Iltele Lesianntam & 4 others (Interested Parties) [2021] KEELC 1441 (KLR), 19 October 2021.

94 Environment and Land Court of Kenya, *Mohamud Iltarakwa Kochale & 5 Others (suing on behalf of the residents of Laisamis Constituency and Karare Ward, Marsabit County) v National Land Commission & 4 Others* [2021] KEELC 1441 (KLR), Judgment of 19 October 2021.

95 Ibid

96 Business & Human Rights Resource Centre, *Lake Turkana Wind Power Lawsuit (re Land Rights, Kenya)* (Business & Human Rights Resource Centre, updated 2023).

97 Mohamud Iltarakwa Kochale & 5 others v Lake Turkana Wind Power Ltd & 4 others; Aaron Iltele Lesianntam & 4 others (Interested Parties) [2021] KEELC 1441 (KLR), 19 October 2021.

98 Ilse Renkens, *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*, IWGIA Report 28 (International Work Group for Indigenous Affairs, 2019).

99 Business & Human Rights Resource Centre, *Lake Turkana Wind Power Lawsuit (re Land Rights, Kenya)* (Business & Human Rights Resource Centre, updated 2023).

100 Lake Turkana Wind Power Limited v Kochale & 13 others (Civil Application E064 of 2023) [2023] KECA 1596 (KLR) (22 September 2023).

> Yet the environmental value of an asset does not remove the obligation to respect land rights, consultation requirements and due process. Where irregularities are addressed only after construction has been completed, affected communities may reasonably conclude that consultation is treated as a procedural defect to be corrected later rather than as a condition that must be satisfied before a project proceeds. Such cases risk weakening trust not only in the project concerned, but also in future transition initiatives.



Additional examples

Additional crimes of this type include the following:

a. Displacement and abuses associated with protected areas

The establishment or expansion of parks and protected areas can involve the displacement of communities with longstanding claims to or use of the land. In some cases, communities have been forcibly displaced in the name of conservation and wilderness protection, while in others, rangers have been accused of perpetrating abuses, including torture, while defending parks in countries including Nepal, the Democratic Republic of Congo and Cameroon.[101]

b. Corruption and fraud in renewable-energy development

Renewable-energy projects may also be affected by corruption or fraud in environmental assessment, licensing and land allocation. In March 2026, Spain's Civil Guard arrested six people as part of an investigation into the suspected manipulation of environmental impact assessments for wind and solar projects in the province of Teruel. Investigators allege that the irregularities may have benefited a renewable-energy business group.[102] No final determination of criminal responsibility had been made at the time of writing. In Bulgaria, investigative journalists have alleged that the country's largest solar farm was developed on unlawfully acquired land and that illegal logging was undertaken to prepare the site.[103]

c. Exploitation of community-energy incentives

Regulatory incentives intended to support small-scale or community-owned renewable-energy projects may be exploited by larger commercial actors. In Greece, licences made available on preferential terms to local communities have reportedly been transferred or sold to larger companies by the residents themselves, potentially allowing commercial developers to benefit from arrangements intended to promote community participation and local ownership.[104] In other instances, improperly installed power lines from wind farms in forested areas were implicated in devastating wildfires in 2026.[105]

101 Tom Warren and Katie J. M. Baker, "WWF Funds Guards Who Have Tortured and Killed People," *BuzzFeed News*, 4 March 2019.

102 Guardia Civil, "Desarticulada una presunta trama de corrupción medioambiental relacionada con parques eólicos y fotovoltaicos en Teruel" (3 March 2026).

103 Dimitar Stoyanov and BIRD Investigative Team, "Through Corruption to Green Energy" (BIRD, 1 December 2024).

104 Lena Neij et al., "Energy Communities - Lessons Learnt, Challenges, and Policy Recommendations," *Oxford Open Energy, vol. 4 (2025)*.

105 Louisa Gouliamaki, Vania Turner and Angelos Tsatsis, "Greek Crews Fight Wildfire Northwest of Athens for Fourth Day," *Reuters*, 3 August 2026.

Policy implications

In recent years, as key aspects of the green and other sustainability transitions have progressed, a number of narratives have taken hold in certain quarters. The shift to clean energy, in particular, has been portrayed as inevitable, or even unstoppable. These transformations are claimed to be unequivocally good. This process also represents an opportunity to redress the wrongs of unsustainable economic and social systems, many of which have disadvantaged the most vulnerable.

While these assumptions contain some, and perhaps significant, truth, each is at least partly blind to the spoiler role that criminality may present. Criminal and corrupt actors are unlikely to derail the transition to renewable energies, but they may well slow it at a time when urgency is essential. Although sustainability transitions will harm far fewer people than continued adherence to unsustainable ways of operating, criminals may ensure that this process has more losers than originally envisaged. In short, if not pursued with the potential for criminal and other harms in mind, parts of the transition may leave significant difficulties in their wake, akin to burning the village to save it.

Moreover, the mainstays of the new economy may be every bit as susceptible to criminal capture and infiltration as the old economies were. There is nothing inherently just or secure about the process of transitioning itself. Where regulatory systems, procurement processes, land governance and supply-chain oversight fail to keep pace with investment, criminal actors and corrupt interests may become embedded in new markets before effective safeguards are in place.

There are reasons to expect these risks of criminality to grow. In their efforts to accelerate transitions, especially after recent armed conflicts and geopolitical disruptions affecting energy and commodity markets, many states may be more willing to accept weaknesses in the oversight of transition-material procurement. They may also grant business wider and under-regulated latitude across previously unexploited or lightly-exploited landscapes, such



as mineral-rich stretches of seabeds, and invest more heavily in technologies or practices that have yet to emerge or fully evolve. Some of these sectors, notably carbon capture, utilization and sequestration, are currently too underdeveloped to properly predict their security implications. However, if these technologies are scaled up, they are more likely to be disruptive and lucrative enough to attract the same kind of criminality as more mature technologies.

The space in which criminal groups can operate with limited risk of detection or accountability may expand, not least because the climate stresses that the green transition seeks to mitigate are themselves complicating global governance. This is occurring at a time when multilateralism and cross-border cooperation in many regions are already widely perceived as ebbing. As described earlier, successful transitions may also create greater incentives and opportunities for criminality. The openings are big and growing. Once criminal networks, corrupt intermediaries or fraudulent businesses become established in profitable markets, they can be difficult to dislodge – they become a fixture. The objective should therefore be to identify and address vulnerabilities before illegal markets and practices become fully entrenched.

There are many practical and policy entry points for action. As geopolitical tensions escalate and climate impacts grow more pronounced, many states have become more cognizant of the importance of safeguarding critical infrastructure. That awareness could and should be extended to encompass criminal interference, particularly as security rises up voters' list of concerns in many parts of the world. Similarly, many policymakers in wealthier countries are mindful of supporting fair transitions abroad. This understanding may also be broadened to recognize the unfairness – and perceived unfairness – that these changes can engender at home, along with the criminal opportunities that may arise from them.

Above all, states have the legislative tools to better protect parts of these transformations, especially in places and sectors where criminality has not fully taken hold. The vast majority of the investment that a full green transition will require – up to an estimated $110 trillion[106] – has yet to be made. As climate impacts become ever-more frequent and debilitating, there is a strong case for crime-proofing that investment as best as possible to prevent anything – or anyone – from further jeopardizing these essential changes.



106 International Renewable Energy Agency, *Global Renewables Outlook: Energy Transformation 2050* (IRENA, 2020).

Recommendations: A framework for safeguarding sustainability transitions

Sustainability transitions affect a wide range of sectors, institutions and communities. Preventing criminal and corrupt actors from sabotaging, exploiting, circumventing or capturing these processes will therefore require coordinated action across multiple levels of governance. No single institution can address the risks identified in this report. International organizations, regional bodies, national authorities, law enforcement agencies, regulators, financial institutions, businesses, project developers, civil society and affected communities all have distinct but complementary roles.

The recommendations below are organized around five mutually reinforcing strategic priorities.

Anticipate crime and corruption risks before they become entrenched

1. Recommendation: Integrate crime and corruption risk assessments into sustainability transition policies, financing and projects

International organizations, multilateral development banks, climate funds, governments, investors and project developers should integrate organized crime and corruption risk assessments into sustainability-transition policies, financing and major projects.

Assessments should examine vulnerabilities in procurement, beneficial ownership, conflicts of interest, land acquisition, licensing, subsidies, certification, auditing, transport, infrastructure security and enforcement. Particular attention should be given to **areas where transitions create or materially alter criminal opportunities,** including rapidly expanding, high-value or weakly regulated sectors, including critical minerals, renewable-energy infrastructure, carbon markets, waste management and climate-adaptation investment.

Assessments should be conducted before projects or programmes are approved and updated as technologies, markets and criminal methods evolve.

2. Recommendation: Crime-proof emerging transition policies, technologies and markets

Governments and international organizations should anticipate how transition-related changes in technologies, regulations, subsidies and investment patterns may create, expand or alter criminal opportunities.

Strategic foresight and early-warning analysis should consider which materials and assets may become attractive targets, how incentives or certification systems could be manipulated, how regulatory differences may create illegal markets and what risks

may arise from emerging sectors such as seabed mineral extraction, carbon capture and storage, new energy-storage technologies and future carbon or environmental markets.

Detect and disrupt criminal networks and illicit finance

3. Recommendation: Establish operational coordination and information-sharing mechanisms

Governments should strengthen cooperation among environmental regulators, police, customs authorities, prosecutors, financial intelligence units, tax authorities, anti-corruption bodies and relevant sectoral regulators.

Investigations should examine the full criminal and financial chain, including documentation, transport, corrupt facilitation, corporate ownership, export arrangements, money laundering and final markets.

4. Recommendation: Target enabling actors and criminal finances

Investigations should extend beyond seizures and low-level offenders to the actors who organize, facilitate, legitimize and profit from sustainability transition-related crime. These may include brokers, traders, transporters, document forgers, corrupt officials, company directors, beneficial owners, financiers and professional intermediaries.

Financial intelligence units, tax authorities, anti-corruption bodies and financial regulators should be involved early in relevant investigations. Greater use should be made of beneficial-ownership information, financial profiling, asset tracing, anti-money-laundering measures and recovery of criminal proceeds.

Strengthen legal, corporate and supply-chain accountability

5. Recommendation: Strengthen legal frameworks, public-sector integrity and corporate responsibility

Governments should improve transparency in transition-related procurement, licensing, land allocation, subsidies, environmental assessment and project approval.

Tender and licensing systems should be digitized where appropriate and designed to detect conflicts of interest, common ownership among bidders, unusual cost increases, opaque subcontracting and hidden beneficial ownership.

6. Recommendation: Strengthen traceability, certification and independent verification

International organizations, governments, businesses and standard-setting bodies should strengthen traceability and certification systems for high-risk products and commodities, including critical minerals, timber, waste, carbon credits and renewable-energy components.

Standards should be clear, interoperable, enforceable and independently verifiable. Authorities should verify underlying documentation rather than relying solely on certificates.

Protect infrastructure, communities and those affected by crime

7. Recommendation: Apply preventive security measures to transition infrastructure

Governments, developers and operators should assess security risks affecting renewable-energy installations, electricity networks, desalination plants, water systems, electric-vehicle charging infrastructure, transport systems and related storage facilities.

Measures should address theft, sabotage, cyber intrusion, insider facilitation, extortion and fraudulent maintenance or procurement. Depending on the level of risk, these may include secure design, access controls, component marking, cybersecurity safeguards, incident-reporting procedures and continuity planning.

Regulators, industry bodies and law enforcement agencies should also establish trusted and, where appropriate, confidential mechanisms through which operators can report security incidents and emerging criminal methods.

8. Recommendation: Embed participation, rights safeguards and local oversight in transition projects

Public authorities, developers and financial institutions should involve affected communities throughout project design, implementation and monitoring.

Projects should include meaningful consultation, accessible information, transparent land and compensation arrangements, trusted grievance mechanisms and channels for reporting corruption, threats and criminal activity. Human rights, land rights, conflict sensitivity and displacement risks should be assessed throughout the project cycle.

Where criminal or corrupt conduct causes harm, responses should seek not only to punish offenders but also, where possible, to repair damage suffered by affected communities and ecosystems. Criminal justice authorities must also distinguish clearly between unlawful sabotage or violence and lawful protest, opposition or community grievance.

Build the evidence and institutional capacity needed for sustained action

9. Recommendation: Improve data, monitoring, training and evaluation

International organizations, regional bodies, governments and research institutions should establish sustained mechanisms for monitoring crime and corruption risks across sustainability transitions.

Businesses, civil society organizations, investigative journalists and affected communities may hold information that does not appear in official statistics. Trusted mechanisms should be developed for sharing such information while protecting confidential data, sources, whistle-blowers and the integrity of investigations. Public-private information-sharing should be subject to clear safeguards, accountability and appropriate limitations on the use of data.

These mechanisms should consolidate documented cases, identify emerging trends, assess new technologies and markets, map enforcement gaps and disseminate practical guidance.



Appendix

This appendix presents additional illustrative cases identified through interviews, expert consultations, academic literature, official documents and media reporting. Cases are placed under the type that best reflects their principal relationship to the transition, although some may overlap with more than one category.

Case	Summary
	Principal Type - Sabotaging the transitions
A.1	**Main transition area:** Clean cooking **| Country:** Uganda **Alleged vandalism of clean-cooking equipment installed in rural colleges** The equipment was intended to reduce reliance on charcoal as part of a transition to lower-carbon cooking practices. The vandalism was allegedly linked to conflicts of interest where students earned additional income by supplying charcoal to their colleges.[107]
A.2	**Main transition area:** Sustainable transport **| Country:** England, Wales **Growing theft and vandalism of electric-vehicle chargers** Police intelligence indicates that this type of vandalism more than doubled in 2024 compared with the previous year. The most common offences involved theft of charging cables for copper, alongside deliberate damage motivated by opposition to EVs.[108]
A.3	**Main transition area:** Renewable energy **| Country:** Poland **Coordinated cyberattack targeting renewable energy infrastructure** In December 2025, Polish authorities reported that a large-scale cyberattack sought to disrupt elements of the country's electricity system, including renewable energy infrastructure. Officials attributed the incident to a sophisticated, coordinated campaign consistent with growing cyber threats facing critical energy infrastructure amid heightened geopolitical tensions.[109]
A.4	**Main transition area:** Sustainable transport **| Country:** Nigeria **Alleged sabotage of railway infrastructure** In 2026, the Nigerian Railway Corporation reported a series of attacks, including vandalism and sabotage affecting railway assets. The incident occurred against a backdrop of allegations that constituents of the road transport sector had sought to undermine rail development to protect commercial interests, including testimony presented to South Africa's Taxi Commission regarding violence linked to competing transport modes.[110]

107 Sarah Y. Zheng and others, "Mapping Current and Potential Criminal and Security Issues Associated with Climate Change Mitigation Technologies," Sustainable Futures, vol. 12 (2026).

108 Energy Saving Trust, "EV Charger Vandalism," 26 February 2026.

109 Reuters, "Massive Cyberattack on Polish Power System December Failed, Minister Says," 13 January 2026.

110 Proceedings of the Commission of Inquiry into Violence, Intimidation and Instability in the Taxi Industry in the Western Cape, testimony of André Harrison (Parliamentary Monitoring Group, November 2006); Punch, "NRC Slams Repeated Attacks on Trains, Calls for Community Support," 3 May 2026.

Case	Summary
	Principal Type - Exploiting the transitions
B.1	**Main transition area:** Renewable energy **| Country:** Chile **Organized theft from solar farms** Rising demand for photovoltaic equipment and elevated resale values have contributed to a growing wave of thefts targeting solar installations across northern Chile. Criminal groups have stolen panels and associated equipment from remote solar farms before selling them through black-market channels. Industry representatives warned that the thefts have increased operating costs and disrupted renewable energy generation.[111]
B.2	**Main transition area:** Renewable energy **| Country:** Greece **Organized theft from wind farms** Police arrested six suspects in connection with a series of thefts targeting transformers and other electrical equipment from windfarms in Evia and Attica. Investigators alleged that the group dismantled and stole components containing valuable metals before selling them through illicit scrap markets.[112]
B.3	**Main transition area:** Energy access and electrification **| Country:** Guinea **Theft of rural electrification equipment** In January 2026, judicial authorities opened an investigation into the theft of equipment intended for an electrification project in the Kankan region. The stolen materials – part of efforts to expand electricity access – reportedly disappeared before or during installation, delaying the rollout of electrification initiatives and increasing project costs.[113]
B.4	**Main transition area:** Carbon markets / clean cooking **| Country:** Malawi **Alleged carbon-credit fraud involving clean-cooking projects** Authorities and project stakeholders alleged that fraudulent practices affected carbon-credit schemes linked to clean-cooking initiatives, raising concerns about the integrity of credits generated through improved cookstove projects. The reported irregularities cast doubt on whether claimed emissions reductions accurately reflected activities on the ground, potentially undermining confidence in voluntary carbon markets.[114]

111 Antonia Mufarech, "Thieves Are Stealing Chile's Solar Panels and Cashing In on the Black Market," Bloomberg, reproduced by Insurance Journal, 7 May 2026.

112 eKathimerini, "Six Nabbed for Transformer Theft in Evia, Attica," 6 June 2026.

113 Presse des Jeunes, "Communiqué du Parquet Général près la Cour d'Appel de Kankan," 9 January 2026; MediaGuinée, "Haute-Guinée : ultimatum de la notabilité après une série de vols d'équipements d'interconnexion," 8 January 2026.

114 Rebecca Chimjeka, "Malawi among Countries Duped in Carbon Credit Scam," The Times Group, 15 March 2025.

Case	Summary
B.5	**Main transition area:** Carbon markets **| Country:** United Kingdom **Investment fraud involving voluntary carbon credits** Authorities prosecuted a network that fraudulently marketed voluntary carbon credits as high-return investments. Victims were persuaded to purchase carbon credits that were either significantly overpriced or had little realistic resale value, resulting in losses of millions of pounds.[115]
B.6	**Main transition area:** Carbon markets, REDD+ **| Country:** Brazil **Carbon credits generated from fraudulently acquired public land** Brazilian Federal Police launched Operation Greenwashing to investigate allegations that criminal networks fraudulently acquired public land in the Amazon before using it to generate and sell forest carbon credits. Investigations alleged that forged land titles and false ownership claims were used to register Reducing Emissions from Deforestation and Forest Degradation (REDD+) projects, enabling the commercialization of carbon credits derived from unlawfully claimed forests. The case prompted Verra, the world's largest voluntary carbon credit standard, to place several associated projects under formal review while investigations continued.[116]
B.7	**Main transition area:** Water security, Climate adaptation **| Country:** Jordan **Expansion of illegal groundwater and tanker water markets** Prolonged drought and growing water scarcity have fuelled illicit groundwater extraction and tanker water markets across Jordan. Unauthorized wells and unlicensed water vendors have reportedly profited by extracting and selling water outside the regulatory system.[117]
B.8	**Main transition area:** Energy efficiency, Building decarbonization **| Country:** United Kingdom **Alleged fraud targeting owners of solar panels** Kent Police warned of fraudsters targeting households with solar panels through unsolicited calls and visits, falsely claiming that systems required urgent inspections, maintenance or upgrades. Victims were persuaded to make advance payments or disclose personal and financial information for services that were unnecessary or never provided.[118]

115 Crown Court at Southwark, *Rex vs Luke Ryan*, EWCA Crim 1347, 28 September 2022; City of London Police, "Investment Fraudsters Found Guilty of £2m Scam after Eight-Year-Long Investigation," 12 May 2021; Chris Lang, "Five Men Found Guilty in £13 Million Essex and London Properties Ponzi Scheme, Including Jeffrey Razaq, Director of Carbon Scam Company MH Carbon," *REDD-Monitor*, 27 April 2022.

116 Polícia Federal (Brazil), "Operação Greenwashing," 5 June 2024; Verra, "On Verra's Formal Review of Projects Implicated in Brazil's Operation Greenwashing," 13 June 2024.

117 Christian Klassert and Samer Talozi, "Climate Crisis Sees Rise in Illegal Water Markets in the Middle East," *The Conversation*, 26 June 2024.

118 Kent Police, "Warning Issued to Solar Panel Owners Following Arrests for Fraud," 28 July 2026.

Case	Summary
B.9	**Main transition area:** Sustainable fuels, Transport decarbonization **| Country:** United States **Fraudulent renewable-fuel and tax credits** In the United States, authorities prosecuted individuals involved in a scheme to fraudulently generate renewable fuel credits and claim associated tax benefits by misrepresenting the production and movement of biofuels. The operation relied on false records and fraudulent transactions to obtain financial incentives intended to promote cleaner transport fuels.[119]
B.10	**Main transition area:** Transition finance **| Country:** Italy **Alleged fraud involving funds intended for small and medium-sized enterprises ecological transition** The European Public Prosecutor's Office investigated a scheme involving the suspected fraudulent use of Recovery and Resilience Facility funds allocated to help small and medium-sized enterprises finance ecological transition projects. Authorities alleged that false documentation and fictitious investment plans were used to obtain public subsidies for projects that were ineligible or never implemented.[120]
Principal Type - Circumventing the transitions	
C.1	**Main transition area:** Circular economy, Plastic waste **| Country:** Germany **Continued sale of banned single-use plastic products** Three years after Germany implemented restrictions on a range of single-use plastic products under the European Union Single-Use Plastics Directive, investigations found that many prohibited items remained widely available. The findings suggested widespread non-compliance with the legislation despite strengthened regulatory controls.[121]
C.2	**Main transition area:** Circular economy, Electronic waste **| Country:** Bangladesh **Illegal import of electronic waste into Bangladesh** Investigations found that Bangladesh has increasingly become a destination for imported electronic waste despite international controls. The reports allege that e-waste was entering the country through illegal or improperly declared shipments, where it was dismantled and processed under hazardous conditions.[122]

119 United States Attorney's Office, Southern District of Florida, "Fort Pierce Man Sentenced to 18 Months in Prison for Biofuel Fraud Conspiracy," 29 May 2026.

120 European Public Prosecutor's Office, "Italy: EPPO Seizes Assets in Investigation into Subsidy Fraud Involving RRF Funds for SMEs," 8 June 2026.

121 Deutsche Umwelthilfe, "Nach 3 Jahren Einweg-Plastikverboten: Tests der Deutschen Umwelthilfe belegen noch immer massenhaften Einsatz illegaler Plastikprodukte in der Gastronomie," 2 July 2024; Rethink Plastic Alliance, *Evaluation of the Single-Use Plastics Directive: NGO Assessment Report*, December 2024.

122 Sajibur Rahman, "The Digital Graveyard: Is Bangladesh Becoming China's E-Waste Back Door?", *Mongabay*, 5 May 2026; Sajibur Rahman, "Illegal E-Waste Trade Turns Bangladesh into Net Importer," *Mongabay*, 9 June 2026.

Case	Summary
C.3	**Main transition area:** Circular economy, Plastic waste **| Country:** Cameroon **Smuggling of banned non-biodegradable plastic into Cameroon** Despite restrictions on non-biodegradable plastic bags, authorities reported that large quantities continued to enter the country through cross-border smuggling networks. The illicit trade has undermined efforts to reduce plastic pollution, with banned products remaining readily available in local markets.[123]
C.4	**Main transition area:** Circular economy **| Country:** Italy **Contaminated waste allegedly marketed as green products** Italian authorities dismantled an alleged criminal network accused of processing contaminated industrial waste and falsely marketing it as recycled or environmentally sustainable material. Investigators alleged that hazardous waste was disguised through fraudulent documentation before being reintroduced into commercial supply chains, generating illicit profits while avoiding lawful disposal costs.[124]
C.5	**Main transition area:** Sustainable agriculture, Forest conservation **| Country:** Brazil **Illegal deforestation and cattle laundering in beef supply chains** Investigations alleged that cattle raised on illegally deforested land in the Amazon were transferred through intermediary farms before entering the supply chains of major beef producers, concealing their true origin. This practice, known as 'cattle laundering', enabled livestock linked to environmental crimes to bypass traceability controls and appear compliant with market requirements.[125]
C.6	**Main transition area:** Sustainable fuels, Bioenergy **| Country:** Indonesia **Misrepresentation of palm oil exports linked to sustainable aviation fuel supply chains** An international investigation alleged that Indonesian exporters supplied palm oil linked to questionable origin claims and potential regulatory breaches to companies producing feedstocks for sustainable aviation fuel. The reporting raised concerns that weaknesses in traceability and certification systems allowed unsustainable products to enter supply chains marketed as supporting aviation decarbonization.[126]

123 Oluwole Ojewale, "Smuggled Plastic Is Trashing Cameroon's Environment," *ISS Today*, Institute for Security Studies, 21 September 2022.

124 ANSA, "Rifiuti contaminati commercializzati come prodotti, 12 arresti," 19 May 2026; Rai News, "Trento, operazione dei carabinieri: 12 arresti per traffico illecito di rifiuti," 19 May 2026.

125 Amnesty International, *Brazil: From Forest to Farmland - Cattle Illegally Grazed in Brazil's Amazon Found in JBS's Supply Chain*, 15 July 2020; Organized Crime and Corruption Reporting Project, "How Illegal Land Grabs in Brazil's Amazon Feed the Global Beef Industry," 2025.

126 SourceMaterial and AFP, "Indonesian Exporters in Palm Oil Probe Supplied European Fuel Majors," 16 March 2026.

Case	Summary
C.7	**Main transition area:** Critical minerals **| Country:** Philippines **Illegal nickel mining in protected ecosystems** Environmental organizations and legal advocates alleged that unlawful nickel mining continued within or adjacent to protected ecosystems despite environmental safeguards and permitting requirements. The reported activities were associated with deforestation, habitat degradation and pollution, prompting calls for legal action for stronger enforcement. [127]
	Principal Type - Capturing the transitions
D.1	**Main transition area:** Climate adaptation **| Country:** Philippines **Alleged corruption involving flood-control projects** Anti-corruption investigations examined allegations that public funds intended for flood-control infrastructure had been misused through inflated contracts, ghost projects, and other procurement irregularities. The allegations prompted widespread public protests and intensified scrutiny of government spending on climate adaptation infrastructure.[128]
D.2	**Main transition area:** Climate adaptation, Water security **| Country:** Nepal, India, and Pakistan **Alleged collusion to restrict public water supply** Investigative reporting documented allegations that politically connected tanker operators and other private interests in Nepal, India and Pakistan have sought to profit from chronic water shortages by restricting or influencing access to public water supplies. As climate change and rapid urbanization intensified water stress, informal water markets reportedly expanded, with vulnerable communities increasingly reliant on privately supplied water at inflated prices.[129]
D.3	**Main transition area:** Renewable energy **| Country:** South Africa **Alleged fraud and procurement irregularities in solar project** Investigative reporting alleged that South Africa's largest solar project was affected by procurement irregularities, labour violations and possible fronting practices linked to Broad-Based Black Economic Empowerment requirements. The allegations raised concerns over the awarding of contracts, project governance and compliance with labour and procurement regulations.[130]

127 Conservation Litigation, ""We Use Law to Defend & Remedy Nature."

128 Reuters, "What's Fuelling Anti-Graft Protests in the Philippines," Reuters, 17 November 2025.

129 Peter Schwartzstein, "The Merchants of Thirst," *The New York Times*, 11 January 2020.

130 Azarrah Karrim, "SA's Largest, R4.7bn Solar Project Plagued by Alleged Fraud, Labour Violations, BEE Fronting," *News24*, 18 April 2026.

Case	Summary
D.4	**Main transition area:** Renewable energy | **Country:** Italy **Organized crime infiltration of the wind energy sector** Italian courts convicted Vito Nicastri, widely known as the "King of the Wind," for helping to finance fugitive Mafia boss Matteo Messina Denaro through his extensive renewable energy business empire. Prosecutors alleged that criminal networks exploited investments in wind energy to launder illicit proceeds and secure control over lucrative public incentives and contracts.[131]
D.5	**Main transition area:** Renewable energy, Rural electrification | **Country:** Indonesia **Procurement and corruption risks in solar electrification** A governance assessment identified procurement fraud, conflicts of interest and weak oversight as significant corruption risks affecting solar electrification projects in Indonesia. The report warned that opaque procurement processes, political interference, and limited accountability could undermine the delivery of publicly funded renewable energy infrastructure, particularly in remote communities.[132]
D.6	**Main transition area:** Climate adaptation, Flood resilience | **Country:** Philippines **Alleged misuse of flood-control dredging for sand extraction** Philippine lawmakers called for an investigation into allegations that dredging operations presented as flood-control and river management projects were being used to facilitate large-scale sand extraction. Concerns were raised that commercial dredging exceeded legitimate flood mitigation needs, causing environmental degradation while generating substantial private profits.[133]

131 Lorenzo Tondo, "Sicily's 'King of the Wind' Guilty of Bankrolling Top Mafia Fugitive," *The Guardian*, 1 October 2019.

132 Robert Forster, Aled Williams, Lakso Anindito and Amanda Cabrejo le Roux, *Addressing Conflicts of Interest and Corruption in Indonesia's Energy Transition*, U4 Issue 2026:04, Chr. Michelsen Institute and Basel Institute on Governance, 2026.

133 Dredging Today, "De Lima Urges Probe into San Felipe Dredging Activities," 4 November 2025; House of Representatives of the Philippines, House Resolution No. 424, 2025.

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