Fuelling conflict?
The impact of the green energy transition on peace and security
About International Alert

International Alert works with people directly affected by conflict to build lasting peace. We focus on solving the root causes of conflict with people from across divides. From the grassroots to policy level, we bring people together to build sustainable peace.

www.international-alert.org

Acknowledgements

This paper was written by Priscilla Ateyo. The author would like to thank Najib Bajali, Nic Hailey, Jessica Hartog, Ella Irwin, Harriet Mackaill Hill and Mark Nowottny for their input into the paper. The production of this paper was made possible by the generous support of the Dutch Ministry of Foreign Affairs.

International Alert is also grateful for the support from our key funding partners: the Dutch Ministry of Foreign Affairs; the Irish Department of Foreign Affairs and Trade; and the Swedish International Development Cooperation Agency. The opinions expressed in this paper do not necessarily reflect the opinions or policies of our donors.
Fuelling conflict?
The impact of the green energy transition on peace and security

Author: Priscilla Ateyo
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive summary</td>
<td>3</td>
</tr>
<tr>
<td>The impact of the green energy transition on peace and security</td>
<td>4</td>
</tr>
<tr>
<td>Cobalt mining in DRC</td>
<td>5</td>
</tr>
<tr>
<td> Overview</td>
<td>6</td>
</tr>
<tr>
<td> The Mining Code and weak mining sector governance</td>
<td>7</td>
</tr>
<tr>
<td> Recommendations</td>
<td>8</td>
</tr>
<tr>
<td>Large-scale wind power in Kenya</td>
<td>10</td>
</tr>
<tr>
<td> Overview</td>
<td>11</td>
</tr>
<tr>
<td> Lack of community engagement in the green energy transition</td>
<td>12</td>
</tr>
<tr>
<td> Recommendations</td>
<td>13</td>
</tr>
<tr>
<td>Solar and wind power generation in Western Sahara</td>
<td>15</td>
</tr>
<tr>
<td> Overview</td>
<td>16</td>
</tr>
<tr>
<td> Prolonging conflict in Western Sahara</td>
<td>17</td>
</tr>
<tr>
<td> Recommendations</td>
<td>17</td>
</tr>
<tr>
<td>Conclusion</td>
<td>18</td>
</tr>
<tr>
<td>Annex 1. Research objectives and methodology</td>
<td>20</td>
</tr>
<tr>
<td> Research objectives</td>
<td>20</td>
</tr>
<tr>
<td> Research methodology</td>
<td>20</td>
</tr>
</tbody>
</table>
Executive summary

The rush to achieve net zero is driving massive global investments in renewable energy. Surges in energy prices as a result of the conflict in Ukraine make the green transition even more pressing and may further increase the benefits for investors.

No one needs a net zero world more than the almost two billion people who live in fragile and conflict-affected places: for them, the climate emergency can be literally a matter of life or death. And many of these places have huge potential for green transition investments, whether in energy sources such as solar, hydro or wind, or as vital sources of the minerals on which green technologies rely.

But green energy projects can cause or exacerbate conflicts and tensions, nowhere more so than in the world’s most fragile areas. If investments are not done right, there is a significant risk of the world’s green transition coming at the expense of higher levels of conflict and suffering.

This report examines three case studies: the cobalt mining industry in the Democratic Republic of Congo (DRC), and wind and solar projects in Kenya and Morocco.

In **DRC**, the rapidly increasing demand for cobalt poses risks to the stability of mineral-producing regions already characterised by weak mining sector governance and histories of human rights violations. Implementation and understanding of the country’s recently revised Mining Code remains patchy and the governance of artisanal and small-scale mining (ASM) activities remains ambiguous. Lack of transparency and the exploitative behaviours of mine owners and companies buying the cobalt are exacerbating tensions between industrial mining companies and ASMs around issues of land allocation, dispossession and concessions.

DRC also illustrates how countries may miss the benefits of a global green transition. Concerns around human rights violations within its cobalt extraction industry are already driving some companies to source their cobalt elsewhere. Improving consumer and industry confidence in cobalt sourcing from DRC depends on establishing and implementing industry standards and business practices that encourage and facilitate responsible, conflict-free artisanal mining.

Meanwhile, the **Kenya** and **Morocco** wind and solar infrastructure projects studied in this report highlight several ways that green energy transition projects can cause conflict and escalate tensions. The Kenyan case shows how an absence of adequate, meaningful community engagement and participation in decision-making processes, particularly around land acquisition, can aggravate complex tensions among local communities. Fair sharing of the benefits of investments are also at the heart of the disputes. International frameworks, such as those requiring free, prior and informed consent and human rights due diligence, provide guidelines for managing these risks, but only if they are well implemented.

The case study from Morocco highlights how the drive for green energy can prolong and deepen existing conflicts in disputed territories such as Western Sahara. Extracting solar and wind energy from Western Sahara for export to European countries contributes to conflict dynamics and creates human rights risks. New job opportunities in the green energy sector are attracting skilled Moroccan workers from outside Western Sahara, but this has exacerbated tensions with local Saharawi communities who already feel marginalised from national decision-making processes.
Grievances around large green projects could undermine decades of work by governments and local civil society towards mitigating and transforming conflict, and could significantly contribute to tensions between governments and local populations, companies and marginalised groups. This in turn poses serious risks to the vital global effort to tackle climate change and the potential of fragile and conflict-affected places to attract vital investment.

But there are answers. In designing green energy strategies, governments and climate investors must fully recognise present and potential conflict situations, and what lies behind them. Managing these issues well can make such investments opportunities for peace, as well as for the planet.

The need for a global transition to green energy is acute. At COP26, world leaders agreed to urgently accelerate climate action and reaffirmed their intention to keep global temperature rises within 1.5 degrees. This can only be achieved through concerted effort and if all countries deliver on their commitments. The current fossil fuel price shocks felt around the world provide additional impetus to the drive for green energy technologies. Such investments have risen hugely over the past decade, with massive investments in solar, wind, geothermal, hydro and mineral mining operations.

Meanwhile, the demand for so-called green minerals, such as cobalt, lithium and rare earth elements, is growing at an unprecedented rate, due to their vital role in the production of wind turbines, electric vehicles and energy storage. Solar power mineral demand is predicted to increase 300% by 2050.

Significant reserves of green minerals exist in fragile or conflict-affected situations, such as DRC, Afghanistan, Guinea and Guatemala, where governments and mining companies have poor track records for conducting due diligence, respecting human rights and ensuring sensitivity to conflict and the needs of local communities. In addition, wind and solar energy infrastructure projects are linked to human rights violations and the perpetuation of conflicts.

This new research commissioned by International Alert, which explores three case studies of renewable energy projects in DRC, Kenya and Morocco, shows how green energy projects in fragile or conflict-affected situations can trigger grievances and prolong conflict.

The research methodology (see Annex 1) draws on key informant interviews and focus group discussions with actors on the frontline of the green energy transition in DRC, Kenya and Morocco, including government officials working at district, provincial and national levels; ministries of mines, energy, and budget and planning; national land commissions, civil society organisations working on human rights, land issues, cobalt and ASM issues; relevant cooperatives and associations; and mining company representatives.
Cobalt mining in DRC
Overview

DRC supplies 70% of the world’s cobalt, a metal critical to the low carbon transition, used in batteries that power everything from phones to electric vehicles.

Figure 1: Map of cobalt mining area in DRC

![Map of cobalt mining area in DRC](source: Federal Institute for Geosciences and Natural Resources)

Figure 2: Global cobalt mine production in 2021 (% of total)

![Global cobalt mine production in 2021](source: US Geological Survey)

This huge market should bring prosperity to Congolese citizens. However, poor governance of the mining sector, which makes up 90% of DRC’s exports, means that most Congolese do not experience the benefits of this industry. Its returns are not ploughed back into welfare systems or grassroots economic initiatives.

An estimated 72% of the population live in poverty and DRC is ranked near the top of the global list of most fragile and vulnerable countries, sixth out of 179.

Corruption at all levels of society sits at the root of much of the country’s poverty and conflict; DRC ranked 169th out of 180 countries in the 2021 Country Corruption Perception Index.

Transparency around the issue of contracts between the DRC government and the large multinational cobalt companies is poor. Companies frequently break the new Mining Code by using state services as private security operators to ‘protect’ their business interests from local communities. Chinese companies realised the economic potential of this strategic mineral years ago and now control 15 of DRC’s 19 cobalt mines.
By contrast, the ASMs which produce over 20% of DRC’s cobalt are characterised by unfavourable working conditions and very weak governance, with many cooperatives operating illegally, mining on privately-owned concessions. These challenges prevent ASMs from formal integration into the mining sector and therefore being able to reap the benefits of the green energy transition and bring the profits back to local populations.

**The Mining Code and weak mining sector governance**

DRC’s 2018 Mining Code aims for transparent allocation of extraction permits, clarification on mining royalties returning to local communities and facilitation of government tax to provide basic services for mining communities. However, institutions in DRC are still running on systems of personal patronage, as they have done for decades. Many individuals with roles in national, provincial and district authorities are not prepared to let go of their opportunities for personal gain or risk losing out on their cut of the mining royalties by allowing any profits to be shared for the broader benefit of local communities.

The issue reflects the wider governance system in DRC, meaning there is little political or economic interest in implementing the Mining Code. The conflict prevention and resolution mechanisms outlined in the code are not operating effectively, allowing tensions between ASM cooperatives or conflicts between ASM miners and industrial actors to emerge and escalate rapidly into violence, stoked by the heavy involvement of armed groups and an underfunded and poorly trained security sector.

However, the Mining Code in full operation is still not enough to support ASM cooperatives, as the code is restrictive of ASM operations, especially compared to the relative freedom it allows the industrial mining companies.

“As with several other artisanal cooperatives and unregistered diggers, we do not have our own concession as recommended by the Mining Code. We usually work on the sites of private companies, which limits our production margins. We have pleaded with the authorities to find us viable sites, but nothing happens.”

— Mining cooperative representative

“The most worrying thing right now is that the province is almost ungovernable. The mining taxes collected by local entities are not reallocated to the budgets for the local development plan. All the money stays in the pockets of the individuals.”

— Civil society representative

A study on preventing conflict in resource-rich countries shows that overall revenue collection from DRC natural resources is very low, with the country ranking 104th out of 117 countries. Mismanagement of mining revenue and inequitable distribution of cobalt benefits lead to grievances and community distrust of provincial and local government authorities and industrial companies. The increasing impoverishment of local people and ASMs who have lost their land to the large mining companies along with the widespread perception of inequitable distribution of cobalt benefits causes tensions to escalate into conflicts.

“AsM diggers are often forced to trespass sites belonging to large industrial companies because the government has not granted zones to cooperatives and communities, as stipulated in the Mining Code.”

— Mining cooperative representative
The sites allocated by the government to ASMs are often unsuitable, or unworkable, requiring digging down to 120 metres, which is beyond the reach of ASMs using basic excavation tools. This means ASMs start operating in large-scale mining sites, which is a source of conflict.

Mine site owners and independent traders who sell cobalt to large-scale miners determine the buying prices for cobalt, to maintain their profitability, and this is often to the detriment of the ASM miners who are at risk of exploitation because they lack the negotiating power to get a fair price for their goods. Emerging artisanal mining cooperatives owned by informal businessmen, influential politicians and military officers are now playing the role of intermediaries in the production chain and further weakening ASM positions.

“The conditions of extraction by the diggers are inhumane and large companies are the ones who decide the buying prices. We are constantly hearing of scams and cheating on weight measurements and the cobalt content.” – Provincial government representative

“The mining companies asked us to leave our land and move elsewhere in exchange for money. Some of us moved far away and now live in difficult conditions because we have lost our fields and can no longer cultivate. Although we agreed to leave, the amount of money we negotiated does not correspond to what we received. It is dishonest and inhuman.” – Mixed FGD respondent

“The issue that concerns us most is the relocation of people forced to leave their original homes to live in non-viable sites with insufficient compensation. We fear that their frustrations will lead to the rise of local militias against the international mining companies operating here.” – Provincial government representative

Despite its challenges, ASM mining is a critical source of income for many people in DRC. While worldwide demand for cobalt is continuing to rise, encouraging the cobalt mining industry in DRC, increased awareness of the human rights violations associated with cobalt extraction in DRC is driving some companies to look to source their cobalt elsewhere.

The DRC government, the mining sector and ASMs must collaborate to find ways to support an effective system of national cobalt production which is sustainable and contributes to the livelihoods and wellbeing of many Congolese people.

Recommendations

- The DRC’s government, investors, cobalt buyers and end-users and the international community must make greater efforts to combat corruption and weak governance in DRC’s mining sector. Without such efforts, the trend of end-users looking for alternative sources is likely to accelerate, meaning DRC’s people will lose out on the benefits of their rich natural resources to the green energy transition.
- DRC’s 2018 Mining Code must be implemented effectively, at all levels, and with a strong focus on reducing tensions between foreign companies and local artisanal mining cooperatives.
- Strong efforts are needed by the government or investors to manage artisanal and small-scale mining on the sites of large mining companies, which contributes to local livelihoods and economies, to avoid exacerbating risks of conflict in the cobalt-producing regions.
- Much stronger mechanisms must be established to manage cobalt mining revenues in ways that contribute to local community development.
- Initiatives to create and implement mechanisms to support and guide a more responsible, transparent cobalt industry, such as those by the Fair Cobalt Alliance, require strong and wide support. The Fair
Cobalt Alliance brings together actors in the cobalt supply chain to support the legalisation and development of artisanal mining cooperatives and sites, issuing permits, providing artisanal miners with safety equipment and ensuring children are not permitted on the mining sites.\textsuperscript{22} 

- The Organisation for Economic Co-operation and Development’s guidance on due diligence and the EU conflict minerals regulation provide useful entry points for mitigating conflicts and grievances, even though cobalt is not classified as a conflict mineral.\textsuperscript{23} The Climate-Smart Mining Initiative aims to help resource-rich developing countries benefit from the increasing demand for minerals and metals while ensuring the mining sector is managed in a way that minimises the environmental and climate footprint. 
- Ideas from the private sector, such as the Responsible Minerals Initiative, can provide platforms for improving the international governance of mineral supply chains. 
- The state and corporates respecting the UN Guiding Principles on Business and Human Rights is crucial to ensuring mining in DRC is fair and equitable, and to improving consumer and industry confidence in sourcing cobalt from DRC.
Large-scale wind power in Kenya
Overview

Kenya leads the green energy movement in Africa with renewable energy mainly from hydropower and geothermal energy, which accounts for 73% of Kenya’s installed power generation.

By diversifying its energy production from hydro to wind and solar, in response to the erratic rainfall patterns, Kenya seeks to provide cheap and reliable energy, helping the country to meet its Paris Agreement obligations.

However, many of these renewable energy projects are developed on indigenous people’s land, often perceived by state authorities and developers as empty spaces, wastelands and unproductive. These vast drylands provide livelihoods to the pastoralist communities, but their suitability for renewable energy and large infrastructure projects makes them highly attractive. The speed and strength of the winds in the area make it ideal for wind power generation.

The Lake Turkana Wind Power project (LTWP) is the largest wind power plant in sub-Saharan Africa and the biggest public–private investment in Kenyan history. LTWP is owned by a consortium of private companies led by KP&P Africa consisting of Anergi International (formerly British Aldwych International – the largest shareholder), Danish Vestas Wind Systems and Sandpiper Ltd, as well as the Norwegian, Finnish and Danish governmental development funds. The wind power plant supplies approximately 15–20% of the country’s electricity needs.

The farm is situated near Loiyangalani, 10 kilometres east of Lake Turkana in Marsabit county on 150,000 acres (60,703 hectares) of land. The land belongs to indigenous pastoralist groups – Turkana, Samburu, Rendille and El Molo – who lay ancestral and cultural ownership claim. The land was given to the private investors in 2009 for a 33-year renewable lease by the former Marsabit county council (now Marsabit county government), which held the land in trust on behalf of the community. The lease transferred ownership rights of the communal land to the investors, without any meaningful consultation or compensation. Similarly, the Kenyan government’s non-ratification of the UN Declaration on the Rights of Indigenous Peoples allowed the renewable energy
corporations and international financial institutions to avoid triggering indigenous people policies in the land acquisition process.30

The local communities were aggrieved that land ownership changed without proper consultation, and only relocation payments were made to a village of about 1,180 people on site, while private landowners along the power transmission lines were not compensated.31 This was a violation of the former Trust Land Act and the current Community Land Act (2016). For these communities, the land is used communally and forms an integral part of the pastoralist livelihoods. The illegal acquisition of this land has therefore deprived these communities not only of their land rights, but also their cultural rights.32 The communities presented their case against the LTWP company, Marsabit county government and the Kenya Ministry of Lands to the Environment and Land Court in 2014.

In October 2021 – seven years after the case was filed – the court declared the process of acquiring land for the project as illegal. It further directed the county government of Marsabit, the Attorney-General, the Chief Land Registrar and the National Land Commission to regularise the illegal land allocation process within one year.33 Failure to do so would lead to a nullification of LTWP title deeds.34 It remains to be seen what the court ruling portends for the local communities and how the LTWP investor and government will handle the matter, as the wind project is already completed and operational. This ruling highlights that the green energy transition can only succeed if human rights due diligence is at the core of implementation.

Lack of community engagement in the green energy transition

The process of land acquisition for LTWP was marred by controversy and a failure of consultation. The Kenyan government and the LTWP consortium did not obtain free, prior and informed consent from local communities in the development stage of the project.

Free, prior and informed consent, according to the International Labour Organization, embodies the rights of a people to determine the future of the different aspects of their collective identity including “the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development”.35 By failing to secure the free, prior and informed consent of the local communities in the project area, LTWP investors violated these rights.

“The few meetings convened were attended by town dwellers and fishermen from one area and did not include the pastoralist communities. The meetings were vague on details. The investors did not declare the size of land required for the project nor inform the community about the loss of access to their land, instead focusing on the benefits of the project to the communities.”36 – Plaintiff lawyer

By engaging with the authorities holding the community lands in trust instead of with the communities utilising the land, the LTWP team excluded the perspectives of those most affected by the project.

“As per the Community Land Act 2016 and the Constitution of Kenya 2010, local communities are inherent owners of both the land and the energy that the government seeks to extract from Loyangalani in Marsabit county.”37 – Civil society representative
Community brokers and gatekeepers blocked the local communities from real engagement with the investors and other stakeholders. The county council of Marsabit and the local political elites at the time sidelined communities in the negotiations and benefit-sharing processes, in the name of development, while overlooking the local issues and dynamics. Before the enactment of the Community Land Act (2016), the indigenous people's lands were held in trust by the county governments, making it easier for these existing structures and political players to give away land. However, the new act classifies former trust lands as community land and provides recognition, protection and registration to communities, if fully implemented.

“There are tendencies to think indigenous and marginalised groups are ignorant thus the need to make decisions on their behalf for the common good and development of the region.” – Civil society representative

Harmful pre-existing prejudices against the northern drylands as ‘empty wastelands or idle spaces’ were used as a justification for allocating that land to investors, ‘to make good use of it’, with little consultation with or compensation to the pastoralist communities who depend on that land for their livelihoods. The LTWP resettlement plan recognised only one village as eligible for compensation. Tensions are rising among all the local communities over their lack of access to information and compensation, and their exclusion from the energy projects and benefits. Localising community engagement frameworks can help to prevent local elites with their own agendas from brokering on behalf of the communities.

“Communities are not opposed to development, but they are opposed to people coming behind their backs to flex state muscle to access their resources. If you are acquiring land in Nairobi through consultation and adequate compensation, why can’t it be done in Loyangalani?” – Civil society representative

Recommendations

- Obtaining free, prior and informed consent for land acquisition, fair compensation, and agreements on sharing the benefits of investments are crucial to managing complex local tensions in such environments.
- The Kenyan government’s ambition to attract investment in the renewable sector reveals a risk to Kenyan regulatory frameworks, constitution and human rights due diligence processes. Public–private partnerships may be necessary sources of funding, but they can increase the pressure to skirt regulatory mechanisms and rights. This must be avoided if investments are to be sustainable and not contribute to raising conflict risks.
- Engagement structures must reach beyond land trusts and local authorities and fully engage with members of the broader community in ways that respect their rights.
- The potential and desire for renewable energy investments can radically change perceptions among government actors about the ‘usefulness’ of land, particularly the northern dryland. However, a close understanding of local communities’ rights, traditions and livelihood practices is vital for defining what lands are, can and should be used for. This requires close and ongoing engagement with those communities. The key is communities’ meaningful participation in relevant project discussions and decisions, ensuring that communities are aware of and agreeable to the proposed development, compensation and benefit sharing.
- Meaningful dialogue between the government, investors and local communities must take place in order to reconcile the diverging views on the value and use of lands. If these stakeholders’ different values are not reconciled, there can be no basis for negotiating coexistence.
Renewable energy projects like LTWP must conduct rigorous conflict-sensitive analysis at the outset. It is the responsibility of governments to design and enforce regulations in this area. The ruling by the High Court of Kenya reinforces the position that businesses are responsible for undertaking their own due diligence processes. These must be done before investing in project land acquisition, to avoid the costly risks and consequences of contravening human rights standards such as free, prior and informed consent and reputational risks.

To this end, Kenya’s government needs to design and implement strategies for national and local consultation with stakeholders around green energy projects and clarify methods for obtaining free, prior and informed consent and procedures for land acquisition and addressing community rights. An initial step for prospective renewable energy companies is to engage with local land users and seek their collaboration in project planning, to avoid local resistance and rejection of the project.

Institutional and private investors must share responsibilities with local governments to ensure that environmental, social and governance standards and attendant assessments are performed transparently and hold energy companies accountable when designing and implementing agreements with communities. Carefully mediated dialogue and conflict-sensitive approaches are vital in project development, particularly in situations of contested land rights.
Solar and wind power generation in Western Sahara
Overview

Figure 4: Map of Western Sahara

All the territory east of the white line is controlled by the Polisario, everything west of the line is controlled by Morocco. The government-in-exile is in Tindouf, southwest Algeria.

Source: kmusser/wiki, CC BY-SA

Currently importing 90% of its energy, the Moroccan government is seeking to reach 52% renewable power generation by 2030 – comprising 20% solar, 20% wind and 12% hydropower – and is looking to the huge power generation potential of the Western Sahara to make this happen.

According to Western Sahara Resource Watch, the occupied Western Sahara could produce up to 47% of wind and 32% of solar energy for Morocco by 2030.

Morocco is striving to become a renewable energy global leader, but Saharawi organisations allege that its plans to install solar and wind farms in the ‘non-self-governing territories’ of the Western Sahara violate the international humanitarian laws protecting civilian populations under occupation and are harming peace efforts.

The allegation is that the expansion of green energy production represents an attempt by Morocco to legitimise its presence in the Western Sahara. It argues that Morocco’s exploitation of Western Sahara’s natural resources for its renewable energy projects triggered armed conflict in November 2020, breaking a 1991 UN-brokered ceasefire that had promised a referendum on independence for the local Saharawi people.

The concerns over the exploitation of Western Sahara’s natural resources and its impact on the conflict were shared by the African Union’s communiqué at its 496th meeting and by the African Commission on Human and Peoples’ Rights. It was also acknowledged by the 2015 Judgment of the General Court of Justice of the EU on trade agreements between the EU and Morocco.
The issue has global impact, as Morocco is attracting international private investment for its schemes to export renewable power to Europe and Africa. Two electricity cables to Spain are already in place and plans are underway for an undersea connection to the UK. A major beneficiary of climate finance, Morocco is receiving US$603m (£511m) (yearly average, 2018 and 2019) from donors, mostly from Germany.

**Prolonging conflict in Western Sahara**

Many Saharawi people see Morocco's installation of wind and solar farms in Western Sahara as an attempt to legitimise Morocco's presence in the region and further delay their efforts to exercise self-determination. The African Union recognised these activities as illegal and called on the UN Security Council to address the situation. They also recommended boycotting the products of companies involved "as a way of further sustaining the attention of the international community on the situation in Western Sahara".

Companies involved in renewable energy production are reportedly failing to undergo meaningful community engagement to consider the impact of their projects on local communities and livelihoods, as prescribed by articles 3, 18, 22 and 31 of the UN Guiding Principles on Business and Human Rights.

Western Sahara Resource Watch alleges that Enel (Italy) and Siemens Gamesa (Spain) claimed to have undertaken the due processes of consulting and obtaining the consent of local stakeholders, despite not engaging with the indigenous Saharawi people. The European Court of Justice states that consent in the case of Western Sahara can only be obtained from the liberation movement Polisario Front, the representative of the Saharawi people.

The risk of the contentious use of natural resources fuelling conflict is further exacerbated by most of the energy produced in the Western Sahara going to power industry, rather than to supply domestic populations. The planned 150MW Dakhla solar plant is targeting the region's booming largely foreign-owned agri-business sector.

The Noor plant's concentrated solar power technology requires large amounts of water, a challenge in this water-scarce region. The project relies on water from the El Mansour Eddahbi dam, which is also used by the local people for irrigation and domestic purposes. The intense water competition caused the dam to dry up, jeopardising the livelihoods of the local population dependant on irrigated agriculture and livestock herding, increasing their vulnerability to changes in land and water supply. The consequent environmental degradation and unbalanced pressure on natural resources leading to scarcity could also exacerbate conflict in the region.

Western Sahara has huge renewable energy potential that could bring prosperity to everyone in the region. However, the lack of conflict sensitivity and respect for international standards on business and human rights poses a significant threat to such prospects.

**Recommendations**

- The Moroccan government and companies involved in green energy production should ensure meaningful community engagement in line with international standards on business and human rights.
- Renewable energy projects in places of active conflict like Western Sahara must conduct conflict analysis to ensure business operations do not exacerbate the conflict dynamics in the areas in which they are operating.
Effective mechanisms must be established to manage the revenues from renewable energy production in ways that contribute to local community development, as well as ensure community access to the energy produced.

The Moroccan government and companies involved should ensure that the increasing industrialisation of Western Sahara does not risk worsening the environmental degradation of the region. Large industrial sites like concentrated solar power projects that are water intensive in this water-scarce region create risks for resource-related conflicts, social inequalities and loss of habitat and livelihoods.

International organisations, including the UN, the EU, the World Bank and the African Development Bank, as well as the private sector, need to operate in a conflict-sensitive manner when in Western Sahara, recognising the rights of local people over their natural resources.

**Conclusion**

These case studies illustrate both the transformational potential of green investments in fragile contexts and the high levels of risk they require investors and states to manage. But there are clear answers on how to get this right that these case studies illuminate.

As illustrated in the key considerations for conflict-sensitive business practice on page 19, close understanding of local conflict dynamics is vital. These conflicts will often centre around issues such as land and land tenure, the expected benefits of the project to local communities (employment opportunities, community benefit schemes, access to energy and so on), the impact on the surrounding environment, and the relationships between leadership at local, regional and national levels.

Engaging local communities early in project planning discussions, meaningfully and with respect, can help to identify concerns, mitigate potential conflicts, understand the impacts of the proposed energy project on people’s lives and consider alternatives, particularly regarding fair and adequate compensation, land reallocation and ways for sharing the project benefits with local communities.

Communities, peacebuilders, investors and other organisations are learning about what works practically, on the ground, to mitigate the risk of conflicts. Initiatives range from standards-setting (such as widely-recognised international and UN principles on human rights due diligence or supply chain regulations) to collective action (such as the Fair Cobalt Alliance). But the actions of investors themselves will often provide the key. Getting this right is good for investors, for local communities and for the green energy transition our world so urgently needs. Working for both peace and the planet is a priority for all.
Key considerations for conflict-sensitive business practice

- **Understand the local context:** A deep and up-to-date understanding of the context in which you are working is imperative for a conflict-sensitive business approach. For example, an investor may see the past occupancy of the land they are allocated as being of limited importance, but legacy issues, such as past or customary ownership, can be critical in how a company is seen by local communities.⁶⁶

- **Community engagement and expectation management is critical:** Investors need to consider their impact on local communities beyond their immediate workforce. Effective consultation and continuous community dialogue can help manage expectations and communicate the benefits of their operations. This will help the company obtain the social license to operate, i.e. the ongoing acceptance by communities.⁶⁷

- **Ensure mechanisms for the management of grievances:** Companies need to provide a meaningful space for communities to raise concerns and grievances (e.g. about the environmental impact of an investment), as well as mechanisms for these to be addressed in a transparent and timely manner.⁶⁸

- **Implement effective and meaningful community development:** While corporate social responsibility projects can help build legitimacy and good relations with local communities, if they are not done effectively, they can contribute to grievances over ‘broken promises’. It is critical to engage communities at all stages of the planning of such initiatives to ensure the projects actually meet the communities’ needs and requirements. Community development projects are seen as a means to obtain the social licence to operate, but it is important that these initiatives are not used to offset negative impacts on communities.

- **Enhance peace when possible:** Companies should understand the full potential of both positive and negative impacts in the environments where they operate. Given the link between realising human rights and peace, enhancing positive impacts in fragile and conflict-affected places can lead to peace and stability. One way to maximise positive impacts in fragile and conflict-affected places is to support sustainable peace and stability as framed by five ‘peace factors’ – namely, in terms of power, income and assets, fairness, equality and effectiveness of law, safety and wellbeing.⁶⁹
Annex 1. Research objectives and methodology

Research objectives

The objective of this study is to assess the impact of green energy transition on peace and stability in fragile and conflict-affected situations. Specifically, it aims to:

- assess the extent to which the increase in the mining operations of green minerals to supply the global energy sector are exacerbating conflict dynamics or creating new ones;
- explore the risks connected to the surging demands for cobalt and other minerals and how the mining sector and actors are responding to these challenges;
- assess the extent to which green energy production in fragile and conflict-affected situations is exacerbating grievances and conflicts or creating new ones;
- examine the existing efforts and renewable energy sector initiatives for mitigating common conflict risks associated with green energy projects; and
- recommend ways of strengthening responses and mitigating risks.

Research methodology

The study combined an extensive literature review of primary and secondary data sources relating to the three case studies of DRC, Kenya and Morocco.

The rationale for case study selection was informed by the research objectives. Morocco and Kenya are the two front runners in the continent’s large-scale renewable energy investment activities. Focusing on those two countries enabled a comparative analysis of contextual dynamics, motivations for accelerated investment in renewable energy and the risks. The DRC case was selected due to the surging demand for cobalt and DRC’s history of conflict and fragility, particularly in the mining sector.

The literature review built the theoretical underpinning and grounded the analysis of the data collected within current policy and academic discourse. The secondary sources of information include scholarly publications, pieces of legislation, official statements, organisational reports on the impact of green energy transition projects in Kenya and Morocco and the cobalt mining supply chain in DRC and other policy documents.

Data collection employed qualitative methods of gathering and analysing data through key informant interviews and focus group discussions with regional government officials, provincial Ministry of Mines and the Mines Division, the Ministry of Budget and Planning, civil society organisations working on human rights, land, cobalt and ASM issues, the ASM cooperative and associations, the National Land Commission and the Ministries of Energy in DRC and Kenya.
Endnotes

1. COP26: The Glasgow climate pact, UN climate change conference UK 2021
2. Include phasing down coal power, halting and reversing deforestation, switching to electric vehicles and reducing methane emissions.
3. J. Jaeger, "Explaining the exponential growth of renewable energy," World Resources Institute, 20 September 2021
4. C. Church and A. Crawford, "Green conflict minerals: The fuels of conflict in the transition to a low carbon economy," International Institute for Sustainable Development, August 2018
7. S. Lasley, Batteries create critical cobalt situation, Mining News, June 2020
8. Kolveriz and Fungurume, "How the world depends on small cobalt miners," The Economist, July 2022
10. The World Bank in DRC: Overview, June 2022
13. G. Brande, "The potential of the new mining code and partnerships for sustainable mining in the DRC," The European Centre for Development Policy Management, November 2019
14. KII mining cooperative representative #1, May 2022
15. Kab civil society organisation representative #1, May 2022
17. KII mining cooperative representative #1, May 2022
18. KII ASM cooperative representative #1, May 2022
20. KII provincial government representative #1, May 2022
22. KII Fair Cobalt Alliance representative, May 2022
24. Office of the President, Republic of Kenya, "Kenya to fully transition to clean energy by 2030, President Kenyatta says," November 2021
29. Ibid.
33. Business and Human Rights Resource Centre, Kenya: Court rules that Lake Turkana Wind Power acquired community land unprocedurally, November 2021
34. Ibid.
38. KII civil society organisation representative #1, May 2022
40. The Republic of Kenya, Community Land Act, No. 27 of 2016
41. KII civil society organisation representative #2, May 2022
43. Ibid.
44. KII civil society organisation representative #1, May 2022
45. Business and Human Rights Resource Centre, Kenya: Court rules that Lake Turkana Wind Power acquired community land unprocedurally, November 2021
46. N. Bajali, Towards peace-positive investment: Bringing investors and fragile and conflict-affected states together, sustainably, International Alert, May 2022
47. A. Alami, "How Morocco went big on solar energy," BBC Future, 19 November 2021
48. Western Sahara Resource Watch, "Greenwashing occupation: How Morocco’s renewable energy projects in occupied Western Sahara prolong the conflict over the last colony in Africa," 2021
49 Ibid.
50 Ibid.
53 Communiqué of the Peace and Security Council of the African Union (AU), at its 496th meeting held on 27 March 2015, on the situation in Western Sahara, African Union, 1 April 2015
55 Judgment of the General Court (Eighth Chamber), Case T-512/12, 10 December 2015
56 A. Alami, How Morocco went big on solar energy, BBC Future, November 2021
57 J. Gabbatiss, Analysis: Why climate-finance flows are falling short of $100bn pledge, Climate Brief, October 2021
62 Ibid.
63 Western Sahara Resource Watch, Dirty green energy on occupied land, 14 April 2022
65 G. Douglas, Shining a light on the injustices of the Noor-Ouarzazate solar plant, Empoword Journalism, 21 March 2021
66 Heightened human rights due diligence for business in conflict-affected contexts: A guide, UN Development Programme, 2022, p.11
68 Ibid., article 29