

The changing landscape of the energy transition for security-related human rights issues in critical raw materials and renewable energy projects

A study on the application of the voluntary principles on security and human rights

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About Levin Sources

Levin Sources is a B CorpTM certified consultancy that drives the transition to just and sustainable minerals value chains. We are a core team of strategists, researchers, project managers, educators and communicators with multidisciplinary abilities and collective expert knowledge in sustainable supply chains, extractives, minerals science & engineering, biodiversity and conservation, human rights and vulnerable groups, responsible business conduct and good governance.

We are trusted by the full diversity of players in the minerals system, from Fortune 500 companies and SMEs to industry associations and certification bodies to NGOs and civil society to governments in fragile states and in G20 economies.

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Executive Summary

The global transition from fossil fuels to renewable energy is rapidly increasing demand for critical raw materials (CRMs) and accelerating the deployment of renewable energy infrastructure such as wind, solar and hydropower. While essential for climate goals and technological development, the expansion of CRM mining and renewable energy projects is intensifying competition over land and natural resources and reshaping relationships between companies, governments and host communities. These dynamics can heighten tensions around land access, benefit-sharing, environmental impacts, and livelihoods. Where disputes escalate, companies and governments may rely more heavily on public or private security to protect project sites, increasing the risk of security-related human rights incidents, particularly in contexts with fragile governance or limited oversight. The Voluntary Principles on Security and Human Rights (VPs) provide an established framework and practical implementation tools to guide responsible security practices in such environments. However, the scale, speed and geography of the energy transition are reshaping the context in which security risks emerge, raising questions about how the framework and tools should be applied, reinforced and expand in reach in this evolving landscape.

This study, commissioned by the Geneva Centre for Security Sector Governance (DCAF) with UK Foreign, Commonwealth and Development Office (FCDO) funding, examines the continued applicability of the VPs and the Voluntary Principles Initiative (VPI) to CRM mining and renewable energy projects. Conducted by Levin Sources through a combination of literature review and key stakeholder interviews, the research assesses how energy transition dynamics are reshaping security-related human rights risks, evaluates whether the VPs remain suitable for addressing these risks, and identifies practical adjustments that could strengthen implementation under these changing conditions.

The Changing Context and Dynamics of the Global Energy Transition

Accelerated demand and urgency associated with CRMs and renewable energy are intensifying security-related human rights risks in some places and creating new risks in others. The most significant changing conditions and emerging trends that the study identified include:

- Changing **characteristics of the places** where CRM and renewable energy projects occur, including increasingly fragile governance and security environments, land-dependent livelihoods in project locations, and areas marked by historical (usually negative) legacies of past extractive experiences, which shape community expectations and responses to new projects.
- Growing **competition for natural resources**, including worsening land and resource pressures, competition between artisanal and small-scale mining (ASM) and large-scale mining (LSM), and rising interest and influence of criminal or non-state armed groups in CRMs, can intensify disputes over land and mineral access and heighten risks of confrontation.

- **Changing expectations** of host communities, including rising expectations for development benefits and growing demands for meaningful participation, justice and legitimacy, can increase grievances and mobilisation where communities perceive that benefits, consent or rights are not adequately respected.
- **Geopolitical pressures**, including narratives framing the energy transition as a 'global good' and growing emphasis on supply chain security and geopolitical competition for CRMs, can create pressure to accelerate projects and compress engagement, regulatory and human rights safeguards.
- **Digital communication**, including increased use of social media and advocacy networks that enable **rapid mobilisation** and voicing of grievances, while also contributing to misinformation, misattribution of blame and creating opportunities for negative forces seeking to exploit tensions.
- Worsening **patterns of vulnerability**, including the heightened vulnerability of Indigenous Peoples (IPs), human rights defenders (HRDs), women and ASM operators, who often face structural inequalities in land rights, participation and legal protection and therefore greater exposure to intimidation, displacement or violence when resource conflicts escalate.

Implications for the Voluntary Principles

The VPs and the VPI remain highly relevant for addressing these evolving challenges. The framework provides established and flexibly adaptable tools and implementing measures to help companies, governments and civil society actors identify, understand, and address security-related human rights risks in a wide range of operating environments. However, **important limitations and gaps** also remain regarding implementation and coordination.

- **Conventional VP risk-ranking approaches** may struggle to capture slow-moving societal risks such as evolving community grievances, politicised resource debates and rising expectations, which develop gradually but can ultimately escalate into significant security incidents.
- Companies often tend to treat complex disputes such as land conflicts or historical grievances as governance issues outside their responsibility, relying on state mechanisms rather than sustained engagement, which can leave tensions unresolved and increase the likelihood of security escalation.
- Although the VPs provide tools for **local conflict analysis and conflict-sensitive approaches**, applying them effectively requires specialised expertise and sustained attention. **These analyses are not always prioritised**, limiting companies' ability to identify and address emerging tensions before they escalate.
- Despite strong guidance, **gaps persist between corporate commitments to the VPs and operational practice**, particularly where internal silos separate security, community engagement and sustainability functions, reducing the framework's preventive potential and leading to more reactive security responses.
- As a key actor for the implementation of the VPs, **the impact of In-Country Working Groups** (ICWGs) relies largely on their ability to engage multiple stakeholders, particularly companies.

Yet, the oftentimes limited presence of business actors in ICWGs vis à vis government or civil society representatives may undermine the groups' capacity to foster dialogue and cooperation and, ultimately, to prevent and resolve security and human rights issues. Moreover, as a space that does not require formal VPI membership, ICWGs can be a powerful tool for both incentivizing adhesion to the initiative as well as disseminating information on it, notably demonstrating the positive impacts of VP implementation.

- Existing VPI guidance addresses risks facing IPs, women and HRDs, but provides **more limited coverage of the specific vulnerabilities of ASM producers**, despite growing tensions between ASM and LSM as CRM demand intensifies competition over mineral-rich land.
- The **voluntary nature of the VPs means implementation varies widely across members and locations**, with limited visibility into how consistently the framework is applied at site level and often low awareness among local stakeholders affected by security arrangements.

Recommendations to enhance effectiveness and uptake

For the VPs and associated guides and application tools to remain relevant, effective and to reinforce implementation, particularly in the context of the energy transition, all actors need to apply them more strategically and comprehensively. This report recommends strengthening implementation, coordination and capacity-building across the spectrum of stakeholders present in the VPs and renewable energy space in the following ways:

- Companies and governments should elevat**e mitigation approaches and community participation** in their risk assessment and management processes. They should **prioritise localised conflict analysis** and ensure evolving grievances are accurately and comprehensively captured in risk assessments by systematically monitoring evolving community tensions and identifying and tracking potential escalation triggers. Companies and governments should integrate historical legitimacy, justice and benefit-sharing considerations more explicitly into stakeholder engagement processes. The VPs ICWGs offer a well-suited space to hold such sustained dialogue with communities, with outputs then feeding into project design, implementation and monitoring and negotiations between companies and governments.
- The VPI and the broader range of actors engaging in the security and human rights agenda should further **promote the VPs as a comprehensive management and governance framework** across company functions and government agencies. A stronger business case for implementation can be made by developing case studies and communication materials, demonstrating how responsible security practices reduce operational risks, improve long-term project stability, increase return on investments, and support government's geopolitical goals related to stable access to CRM supply chains. This is particularly relevant amid the energy transition, as responsible business practices can have significant operational and financial benefits for companies operating beyond the extractive industries that have traditionally been the scope of VPI outreach. Targeting a broader range of companies and demonstrating the return on investment can contribute to stronger VPs buy-in and

implementation. This expanded outreach should also target governments in CRM-rich countries, demonstrating the added value of the VPs for realising supply chain resilience in the context of the energy transition.

- The VPI should also strengthen **practical implementation support** by creating an "implementation aid" or "checklist" to help members navigate the existing suite of VP tools. The checklist can help members better understand which tools are needed and how to use them in combination across project stages and operational contexts, while fostering a practitioner community of practice and targeted training to support consistent application.
- Furthermore, companies, the VPI, and other organisation promoting the VPs should **support knowledge-building on emerging energy transition dynamics** by highlighting security risks linked to land and resource pressures associated with renewable energy infrastructure and by developing operational guidance on managing tensions and security risks related to ASM-LSM competition. This is aligned with embedding the VPs as a governance and decision-making framework across company functions; however, in the context of renewable energy and increasing competition over CRM resources, additional guidance and resources might be needed to ensure that the differentiated security and human rights risks are accounted for in the context of LSM managing ASM relations and other CRM projects.
- The VPI, its members, and international partners should strengthen the **role, capacities, and coordination among ICWGs** as crucial mechanisms for implementation of the VPs. Stronger coordination with other initiatives, including relevant multilateral actors and initiatives operating in the energy transition and CRM spaces, would contribute to better implementation and stronger alignment of actions.
- And finally, the VPI should **clarify communications on the scope and applicability of the VPs**, particularly their relevance to renewable energy projects, and expanding targeted outreach and dialogue with renewable energy companies to encourage broader uptake.

List of acronyms

ASM	Artisanal and small-scale mining / miner
CRM	Critical Raw Materials
DCAF	Geneva Centre for Security Sector Governance
DNH	Do No Harm
DRC	Democratic Republic of Congo
EDF	Électricité de France
EDM	Electricidade de Moçambique
FCDO	Foreign, Commonwealth and Development Office
FPIC	Free, Prior and Informed Consent
GBP	Great British Pounds
GCBHR	Geneva Center for Business and Human Rights
GMNK	Mphanda Nkuwa Hydroelectric Project Implementation Office
GWh	Gigawatt-hour
HCB	Hidroeléctrica de Cahora Bassa
HMNK	Mphanda Nkuwa Hydroelectric Facility
HRD	Human Rights Defenders
HRIA	Human Rights Impact Assessment
ICRC	International Committee of the Red Cross
ICWG	In-Country Working Group
IFC	International Finance Corporation
IGT	Implementation Guidance Tools
IISD	International Institute for Sustainable Development
IP	Indigenous Peoples
IRMA	Initiative for Responsible Mining Assurance
JTF	Joint Task Force
Km	Kilometres
LSM	Large-scale mining
MDN	Ministry of National Defence
MINT	Ministry of the Interior
MoU	Memorandum of Understanding
NGO	Non-governmental organisation
OECD	The Organisation for Economic Co-operation and Development
PNP	Peruvian National Police
SAPP	Southern African Power Pool
SHRIM	Security and Human Rights Implementation Mechanism
SLAPP	Strategic Lawsuits Against Public Participation
SLO	Social License to Operate
SNMPE	National Society of Mining, Petroleum and Energy
UN	United Nations
UNDP	United Nations Development Programme
UNGPs	UN Guiding Principles on Business and Human Rights
USD	US Dollars
VPs	Voluntary Principles on Security and Human Rights
VPI	Voluntary Principles Initiative

CHAPTER 1 Introduction

Background

The transition from fossil fuels to clean energy is accelerating global demand for CRMs, driven by the expansion of renewable energy systems and rising societal demand for new technologies. Renewable energy infrastructure, including wind, solar and hydropower, carbon capture, and battery storage, relies heavily on CRMs for its deployment and long-term operation. Ensuring reliable and responsible access to these materials is therefore essential to sustaining the energy transition and supporting future economic and technological development. In addition, the infrastructure of renewable energy projects requires access to natural resources (land, water, air). As a result, renewable energy projects may give rise to heightened risks to communities and their associated livelihoods and quality of life where access to and use of these resources are not adequately and fairly governed. If poorly managed, the energy transition could unintentionally increase human rights abuses, worsen conflict and violence, and deepen unjust burdens and vulnerabilities for communities located near mining and energy sites.[1]

Project expansions to obtain the required CRMs is elevating competition over access to minerals, putting additional strain on associated natural resources and expanding disputes about ownership, equitable distribution of benefits, and forced livelihood adaptations. Similarly, renewable energy projects are triggering local contestation over land acquisition, benefit-sharing, resettlement and at times adding pressure on cultural practices where projects are developed without meaningful community engagement.[2] These dynamics may heighten tensions between mining and renewable energy companies, host communities, and governments. In response, companies may increase security measures to protect their assets, including hiring or subcontracting additional private security providers or relying more heavily on public security forces. Weak governance and oversight of security actors, combined with risks such as excessive use of force, corruption, collusion with organised crime or non-state armed groups, accountability gaps, and inadequate consultation with host communities, can increase the likelihood of violence and human rights abuses and violations being committed by security forces.

The Voluntary Principles on Security and Human Rights (VPs) offer an established framework and practical implementation guidance to help companies manage security-related risks in a manner consistent with international human rights standards.[3] However, the relevance and sufficiency of this framework and its corresponding implementation tools require renewed examination in the context of the rapidly evolving energy transition. At the same time, it is important to assess the unique value that the VPs can provide in helping companies and other stakeholders anticipate and manage emerging security-related human rights risks in CRM mining and renewable energy projects. The accelerated pace and expanding scale of CRM extraction and renewable energy deployment, often occurring in new geographic locations, under compressed timelines,

sometimes by new players (companies, investors), and within governance environments that are still adapting, are reshaping the nature of security risks faced by companies and communities alike. These shifts have implications for how security arrangements are envisioned and designed (including through consultations with various stakeholder), implemented, and overseen. Public and policy discourse has not kept pace with the emerging security-related human rights issues associated with the energy transition.

Study objective and methods

This research therefore examines the applicability of the VPs and the VPI to contemporary CRM mining and renewable energy projects. It seeks to assess whether the framework, implementation tools and related guidance remain adequate under changing energy transition conditions. The research will identify potential gaps in its current application, examine the value the VPs may offer in helping companies, governments and other stakeholders anticipate and manage emerging security-related human rights risks, and explore how the VPI and the VPs implementation may need to adapt to remain effective and reinforce their value as demand for CRMs and renewable energy continues to expand.

DCAF's Security and Human Rights Implementation Mechanism (SHRIM) commissioned Levin Sources to conduct this study with funding from the UK FCDO. The findings were presented during the VPI plenary in London in March 2026. The research was guided by three questions:

- ✓ How are changing energy transition conditions reshaping security-related human rights risks and impacts in CRM mining and renewable energy projects?
- ✓ To what extent are the VPs, as currently drafted and applied, suitable for addressing security-related human rights risks and impacts arising under changing energy transition conditions in CRM mining and renewable energy projects?
- ✓ What adaptations or implementation adjustments could strengthen the effectiveness of the VPs, as well as the VPI, in addressing security-related human rights risks and impacts under evolving energy transition conditions?

The research is grounded in the understanding that CRM mining does not constitute an entirely new mining industry, nor does it introduce wholly new categories of security-related human rights risks. Many CRMs have been extracted for decades, and the associated risks are well established, including for minerals that are not classified as CRM (such as gold). Rather than representing a shift to a completely new set of challenges, the energy transition is characterised by a rapid and substantial increase in global demand for these materials. This surge is reshaping the conditions under which CRM extraction and renewable energy projects are developed and operated. It is also bringing new geographies into the mix, often which had not previously been considered by global supply chains because of their fragile governance or security environments. In many cases, these changing conditions interact with pre-existing grievances, such as those related to land access, environmental impacts, benefit-sharing or conflict, which may amplify tensions and create new security-related human rights risks.

To explore these dynamics, the study combined desk-based analysis with expert insights and illustrative case studies. A targeted literature review was conducted to examine existing research, policy debates, and emerging trends related to the energy transition, CRM mining, renewable energy development, and security governance. This was complemented by semi-structured key informant interviews conducted remotely with nine stakeholders selected in coordination with DCAF. Interview participants included two government representatives, two representatives from standards-setting bodies, one private sector representative, two civil society representatives, and two private security providers. All interviews were conducted with informed consent and analysed qualitatively to identify emerging themes and perspectives.

To illustrate how security-related human rights risks emerge and evolve in practice, the research also includes three case studies, namely a copper project in Peru; a proposed lithium mine in Ghana; and a renewable energy project developed in Mozambique. These examine CRM mining and renewable energy infrastructure projects at different stages of development, highlighting how governance gaps, historical grievances, and complex relationships between companies, governments, and host communities can shape security dynamics during the entire project life cycle.

The history and structure of the VPs

To contextualise the analysis that follows, it is important to briefly outline the origins, structure, and implementation mechanisms of the VPs. Understanding how the VPs were developed and how the VPI functions helps situate the study's assessment.

The VPs were developed in 2000 through a dialogue process between governments, companies in the extractive and energy sectors and non-governmental organisations (NGOs) interested in promoting responsible security approaches within the industry. The VPs were developed to respond to increasing patterns and incidents of serious human rights abuses and violations committed by security forces protecting natural resource projects. While not legally binding, they set clear expectations for responsible security practices and are aligned with internationally accepted best practices. Given the challenges of putting the VPs into practice, especially in weak governance or violent conflict contexts, VPI members recognised the need for, and subsequently developed, tools and guidance to help companies better operationalise the VPs. Foundational tools and resources,[4] such as the DCAF-ICRC toolkit on Security and Human Rights Challenges in Complex Environments, Implementation Guidance Tools (IGT), the Guidance on Respecting the Rights of HRDs, the IGT Companion Tool on Women and Other Disadvantaged Groups, the Conflict Analysis Tool for Companies and others, were developed to further the implementation of the framework. These tools and guidance play an important role in helping members navigate and strive to better apply the VPs in practice and ultimately support responsible security practices.[5]

The VPI is a multi-stakeholder initiative dedicated to developing best practices in responsible security and supporting the implementation of the VPs. It membership-based

and participants are organised according to three pillars: governments; companies that focus on extraction and natural resources development including mining, oil and gas, renewable energy; and NGOs working to advance human rights or other important norms relevant to the VPs.[6] The VPI has a two-tiered membership structure with different requirements for each tier. Engaged Members work towards implementing the VPs, strengthen their own processes and can seek advice and support from other members but do not have voting rights. Full Members must advance to meet specific requirements, including demonstrating efforts to implement or support the VPs implementation. The VPI also has Observer organisations which are able to share information and contribute to advance VP implementation but are not members.

To advance VP implementation, members participate in thematic and regional working groups, share lessons learned and develop guidance and tools. Members collectively identify gaps in need of additional guidance and can share approaches that help other members address challenges. At the local level, the VPI encourages the establishment of in-country working groups (ICWGs) to help ensure approaches are tailored to the local context.[7] In this regard, the VPs ICWGs play a key role in the implementation of this framework by bringing together multiple stakeholders, building mutual trust, and strengthening conflict prevention, dispute resolution, and oversight. Moreover, as a space that does not require formal VPI membership, ICWGs can be a powerful tool for both incentivizing VPs buy in and adhesion to the VPI as well as disseminating information on it, demonstrating the positive impacts of VP implementation and making the business case for responsible security practices. Examples of positive impacts of ICWGs can be found in Ghana, where the WG provided a forum for the socialisation, stakeholder feedback, revisions and implementation of the country's national policies on security and human rights; or in Colombia, where the WG has produced a significant amount of guidance for diverse stakeholders, applicable also beyond Colombia.[8]

Report structure

CHAPTER 2 The Global Energy Transition: Changing Context and Dynamics examines how changing energy transition conditions are reshaping security-related human rights risks in CRM mining and renewable energy projects. **CHAPTER 3** Implications for the Voluntary Principles analyses these changing conditions against the current scope and application of the VPs, assessing their suitability in this evolving context. **CHAPTER 4** Recommendations outlines recommendations for potential adaptations and implementation adjustments to strengthen the effectiveness of the VPs and the VPI. **CHAPTER 5** Conclusions summarises the findings in the report. The **Annex** then presents three illustrative case studies in Peru, Ghana, and Mozambique.

CHAPTER 2 The global energy transition: changing context and dynamics

The accelerated demand and the urgency associated with the need for CRM and renewable energy supplies is intensifying security-related human rights risks in some places and is creating new risks in other areas.[9] Below are the key conditions and emerging trends that have the potential to trigger violence, increase security needs, and escalate human rights risks. These are key conditions that the VPs and VPI should address to remain relevant and fit for purpose to guide communities, government and companies in responsible security management.

Table 1: Key changing conditions due to the global energy transition affecting how security-related human rights risks and impacts evolve and escalate.

Changing condition	What is changing?	How does this affect security-related human rights risks and impacts?
Characteristics of place		
Fragile governance and security environments	CRMs and areas suitable for high-yield renewable energy project development are often located in countries with weak governance structures and limited institutional capacity. Research done by the International Institute for Sustainable Development (IISD) in 2018 found that "in countries struggling with political instability, where governance for the mining sector is weak, the extraction of these minerals can be linked to violence, conflict and human rights abuses."[10] One of the key findings of this research also estimates that "significant reserves of all of these identified [transition] minerals are found in states perceived to be both fragile and corrupt, as defined by Transparency International's Corruption Perceptions Index and the Fund for Peace's Fragile States Index."[11] At the same time, the accelerating demand for CRMs and renewable energy infrastructure is expanding exploration and project development into jurisdictions that may previously have been considered too fragile for large-scale investment, increasing the likelihood that such projects operate in complex governance environments.	Where governance systems are non-inclusive or lack effective and legitimate mechanisms for public participation, affected people may have few meaningful opportunities to engage in decision-making, seek remedy, or advocate for their rights through peaceful and institutionalised channels. In such contexts, grievances related to land access, livelihood disruption, or benefit-sharing may accumulate and simmer without resolution. This often increases the likelihood that community concerns and demands are expressed through protest, increased social tension, backlash against company assets and violent conflict, rather than dialogue and process. This can heighten perceptions of risk or actual violent incidents among both communities and project operators, often resulting in the deployment of public and private security forces to manage dissent and discontent. This cycle can create a reinforcing feedback loop in which increased risks lead to increased security responses and ultimately higher security-related human rights incidents. The VPI has consistently recognised this relationship between weak or contested governance in resource-rich areas and security-related human rights risks. Many VPI tools indeed speak to these governance challenges already but their relevance and ability to adapt to the increased pace and demand as well emerging trends will be critical to the VPs application in the energy transition.[12]
Land-dependent livelihoods in project locations	Resource-rich areas are often located in regions where communities' livelihoods and cultural identities are closely tied to land and natural resources that may be directly affected by mining and infrastructure development. Mining operations inevitably change landscapes and thereby affect multiple aspects of community life in the surrounding area. There is a long history of mining projects presenting environmental, social, economic and security-related risks to communities whose livelihoods depend on land and natural resources. Renewable energy projects may initially be perceived	Where projects are developed in areas where communities depend heavily on land and natural resources for farming, grazing, fishing or cultural practices, changes to land access or resource use can quickly affect livelihoods and social stability. When communities perceive that their livelihoods or cultural connections to land are threatened, tensions may emerge between companies and communities. The increased demand and pace for CRM and renewable energy projects can intensify these perceptions because processes such as risk assessment and community consultation processes meant to build trust, create shared value approaches and assuage tensions may be truncated or incomplete.

Land-dependent livelihoods in project locations	as lower risk given that traditional mining risks such as chemical spills, land degradation and tailings accidents may not be present. Yet in practice, the land- and water-intensive nature of renewable energy projects can pose community risks similar to those associated with traditional extractive industries.[13] A company making payments to some smallholders for use of their land (e.g., to erect wind turbines), but not to their direct neighbours, can also create tensions within a community. Competition over land and natural resources is further intensified by climate change dynamics, where weather patterns disrupt livelihoods, reshape the economic value of resources and threaten the traditional ways of life for many dependent communities. These dynamics increase communities' vulnerability to restricted access to land and natural resources	For existing or expanding projects, these dynamics can contribute to protests, strained relationships, and a declining social licence to operate (SLO), potentially leading to project delays, stop-work orders, or calls for increased security presence around project sites. For new projects, these tensions may shape community acceptance and spark security risks before the project begins. The initial stages of exploration and development of projects are critical for building trust, managing expectations and addressing past harms to reduce the likelihood of future escalation.
Historical legacies of past extractive experiences	CRM and renewable energy projects are often located in countries and regions that have already experienced significant mining or oil and gas development. As a result, new projects are frequently viewed through the lens of past extractive experiences. For communities, the distinction between minerals such as gold, uranium, copper, or lithium may be less relevant than the broader experience of extraction itself.[14]	These historical experiences influence how communities respond to new projects. Where previous mining or infrastructure developments were associated with displacement, inadequate compensation, land grabbing, limited implementation of free, prior, and informed consent (FPIC), negative environmental impacts or the prioritisation of company assets over community rights, communities may approach new projects with scepticism or distrust from the outset. In some cases, communities have seen companies exploiting their land and colluding with government and security officials to protect mining assets at the expense of communities. Where public security forces are involved, they may be perceived as working primarily to protect company personnel and assets rather than the rights of communities as citizens. This can increase the likelihood of early opposition. In such contexts, companies may respond by increasing their security posture to protect personnel and assets, which, if not carefully managed, can further escalate tensions.

Changing condition	What is changing?	How does this affect security-related human rights risks and impacts?
Competition for natural resources		
Increased land and resource pressures	CRM mining and renewable energy infrastructure can require significant land and water resources, creating a large project footprint. Solar and wind farm projects often require large tracts of land and access to that land, which can conflict with communities' land-based needs for agriculture, pasture, forests, or access to cultural heritage sites. Hydropower projects change water patterns, often involve displacement, and create flood zones and changes in water siltation that directly affect communities' ability to resettle, fish, and farm.[15] As Swedwatch notes, "the land-intensive character of renewable energy projects can often cause adverse human rights impacts and exacerbate tensions with local communities especially when projects adversely impact local environment or negatively impact access to livelihoods and natural resources that communities depend on."[16]	Increased competition between communities and CRM mining or renewable energy projects over land and water resources can trigger community outrage, protests, and backlash against company assets. Where communities perceive that access to land, water, or livelihoods is being restricted or redistributed unfairly, tensions may escalate into conflict. This may lead to project disruptions, blockades, or damage to infrastructure. In response, companies or governments may deploy public or private security to protect project sites or manage protests, which can increase the risk of security-related human rights incidents if underlying grievances remain unresolved.
Increased competition between ASM and LSM operators	Rising demand for CRMs is intensifying competition over mineral-rich land between ASM and LSM. In many regions, ASM miners have historically operated in areas that were previously unexplored or not economically viable for industrial mining. As mineral demand increases, these areas are becoming more attractive for LSM development.[17] Companies often have greater financial and political capacity to secure mining concessions from governments, sometimes in areas already occupied, owned or used by ASM communities. In other cases, ASM miners may be expanding their operations into LSM concessions in response to rising mineral prices, new supply chains opening up and in search of new livelihood opportunities.	Overlapping claims to mineral resources can generate disputes between ASM miners, LSM companies, and governments. Where governance institutions are weak or regulatory frameworks are unclear, competition over mineral access may escalate into confrontation, encroachment, or displacement. Companies or governments may deploy security forces to protect concessions or remove miners from sites, which can increase the risk of clashes and ongoing tensions between miners and security actors. In some contexts, members of public security forces may also become directly involved in ASM activities or related corruption, for example through informal taxation of miners or control over access to mining areas, further complicating governance and heightening risks of abuse.
Rising interest and influence of criminal or non-state armed groups in CRMs	In some areas, the high and rising value of CRMs is increasing the economic attractiveness of mining activities for organised crime networks, non-state armed groups, and other opportunistic actors. As demand and prices increase, these actors may seek to profit from mining operations or transport routes.[18]	The involvement of criminal networks, non-state armed groups, or other opportunistic actors can intensify local insecurity and expose communities and workers to violence and intimidation. Their presence can weaken governance around mining activities. These actors may also infiltrate or operate alongside host communities, making it more difficult for companies and governments to distinguish between legitimate community grievances and actors seeking to exploit the situation for criminal or political gain. This n complicate genuine stakeholder engagement. In response to heightened insecurity, governments or companies may increase security presence around project sites, infrastructure, or transport corridors. If not carefully managed, these dynamics can increase the risk of confrontations between security actors and local populations.

Changing condition	What is changing?	How does this affect security-related human rights risks and impacts?
Changing expectations		
Rising expectations for development benefits	The discovery and development of mineral projects are often presented to communities as economic opportunities, with promises of jobs and prosperity. This raises expectations about how projects will improve livelihoods and transform local economies. However, past experience shows that the realities may differ. Communities are often promised access to jobs, local content creation, skills development, infrastructure improvements, and broader local economic development benefits, but these promises have not always been fulfilled. In practice, projects may face delays, rely heavily on expatriate workers for specialised roles, or create short-term and subcontracted positions rather than stable long-term employment for local communities.[19]	When expectations fail to match communities' experiences during project development and implementation, tensions can increase and grievances may escalate. These dynamics can weaken a company's SLO and strain relationships between operators and affected communities.
Growing demands for meaningful participation and decision-making	As CRM and renewable energy projects expand, expectations around stakeholder engagement are also changing. In the past, community engagement was often framed through corporate responsibility or community development projects, where companies determined community needs and conducted limited consultations. These initiatives sometimes resulted in 'token' projects such as schools or clinics with limited community input or ongoing dialogue. Communities and other stakeholders are increasingly rejecting this model and demanding meaningful participation in decisions that affect their lives.[20] Civil society organisations, Indigenous groups, youth, artisanal miners, environmental and HRDs and others are increasingly organising to amplify these expectations. Responsible mining initiatives and international standards are also reinforcing calls for inclusive participation, transparency, and accountability.	When demands for meaningful engagement are not met, communities may seek alternative avenues to influence decision-making. This can include protests, roadblocks, sabotage of project infrastructure, public campaigns or social media mobilisation to call attention to perceived injustices in stakeholder engagement. Escalation of these forms of engagement can increase tensions between communities, companies and security actors, creating situations where security forces may be deployed to manage dissent.
Growing demands for justice and legitimacy	Communities and civil society are increasingly questioning the fairness and legitimacy of past agreements governing access to land and other natural resources.21 In many cases, communities argue that concessions were granted without meaningful consultation, fair compensation, or recognition of their rights. These concerns are linked to broader calls for fairness in how benefits are distributed, how decisions are made, and how past harms are addressed. As a result, communities and social movements are increasingly challenging existing land arrangements, mining concessions, or agreements between governments	When the legitimacy of concessions or land access agreements is contested, disputes over who has the right to access or control land may intensify. Companies may increase security presence at project sites to control access to their concessions or infrastructure. This can heighten the risk of confrontation between communities and security personnel, particularly where grievances remain unresolved. These dynamics can lead to protests, land occupations, or operational disruptions.

Growing demands for justice and legitimacy	and companies. In some cases, communities seek redress through legal channels, including lawsuits filed against companies or governments in domestic courts or international jurisdictions.[22]	
Geopolitical pressures		
Energy transition narratives and the 'global good' framing	The speed at which minerals are needed to meet global climate goals has created powerful narratives around the energy transition. Within these narratives, access to CRMs and renewable energy is framed as a 'global good,' contributing to pressure for the rapid expansion of CRM and renewable energy projects. This framing can sometimes prioritise environmental objectives and the urgency of the transition over human rights or local community considerations. Some groups have characterised these dynamics as 'green colonialism,' 'green conflict minerals,' or 'sacrifice zones,'[23] where some territories are exposed to social or environmental harm in the name of global climate interests. In some contexts, groups opposing CRM extraction or renewable energy expansion have been subsequently labelled as hostile to climate action or even as domestic security threats.[24] Producer governments in the Global South often prefer the term 'strategic minerals' to 'critical minerals', suggesting that the minerals are more critical to the Global North economies who are trying to shift to renewable energy than to them, and that the benefits of the minerals do not always fairly reach communities in producer countries.	Both the 'global good' framing of the energy transition and national security narratives around supply chain resilience intensify pressure to accelerate CRM and renewable energy projects. This emphasis on speed can shorten or bypass important processes intended to safeguard human rights, including meaningful community engagement, FPIC, permitting procedures, and robust environmental and social impact assessments. When these processes are weakened, trust deficits between communities, governments and companies can deepen, increasing the likelihood of grievances escalating into protests, blockades, or conflict. At the same time, framing opposition to projects as a threat to climate action or national security can delegitimise community concerns and contribute to the criminalisation of dissent. In such contexts, security actors may be deployed to protect project assets or manage protests, increasing the risk of intimidation, excessive use of force, and other security-related human rights incidents.
Supply chain security and geopolitical competition for CRMs	In parallel with energy transition narratives, governments are increasingly framing access to reliable and secure supply chains for CRMs and energy as a national security priority. Ensuring uninterrupted access to CRMs is seen as essential for economic stability, industrial competitiveness, military readiness, and protection against geopolitical manipulation of supply chains. In response, major economies have adopted dedicated policy frameworks, such as the EU's Critical Raw Materials Act, the US Inflation Reduction Act provisions on critical minerals, and the UK's Critical Minerals Strategy, all of which aim to diversify supply sources, strengthen domestic capacity, and secure access to CRMs. At the same time, many producing countries are also developing national strategies to position CRMs as central to their economic development and industrialisation agendas, including through efforts to increase local value addition, strengthen state control over resources, and renegotiate terms of foreign investment. China has also, over several decades, pursued a coordinated approach combining domestic industrial policy, overseas investment in mines and supply chains, and control over processing capacity to secure access to CRMs and strengthen its position across global value chains, including in renewable energy technologies. Increasingly, governments are combining external investment tools, development finance, commercial	

Supply chain security and geopolitical competition for CRMs	diplomacy (incl. working closely with the private sector) and partnership agreements to advance their geopolitical and economic interests. For example, under its Global Gateway, the EU has advanced CRM partnerships with producer governments globally, while the US has played a role in facilitating regional peace agreements including between the DRC and Rwanda that prioritise provisions related to the development of CRM supply chains and US government and private sector access to them. This geopolitical competition reinforces the urgency of expanding CRM and renewable energy projects globally.[25]	
Communication and mobilisation dynamics		
Digital communication and community mobilisation	The ways in which governments, industry, and civil society groups communicate around CRM and renewable energy projects are rapidly changing. Increased use of social media and communication technologies is reshaping how information about community rights, land and water use, benefit sharing, and security-related human rights incidents is shared. Action-based advocacy and international, national and local NGO networking are also reshaping how communities engage with mining companies and governments. These platforms allow affected groups to know their rights, organise, share information and articulate demands regarding engagement and participation in decision-making. Social media also allows communities to share past extractive experiences and document environmental and social impacts in real time. Governments and industry are also utilising similar channels for communication, helping them share information and enhance engagement. However, the increased use of digital communications also brings challenges. In certain contexts, these tools are being used to monitor dissent and target communities or groups through surveillance, intimidation or reprisals.[26] AI and surveillance are increasingly used by governments, police, armies and private security companies to provide security to mining concessions, and it can negatively limit free speech by silencing the voices of advocacy groups or affected groups. Furthermore, some Indigenous communities living in remote or hard-to-reach areas may have limited or no access to communication platforms, which creates disproportionate vulnerabilities by constraining their ability to access information, raise concerns, and mobilise peacefully in the context of project development.	These communication channels can strengthen participation of previously marginalised voices and increase demands for accountability and transparency. They can also enable communities to mobilise quickly around perceived grievances, organise protests, and coordinate advocacy campaigns. As mobilisation becomes faster and more visible, companies and governments may face increased public pressure and operational disruptions, which can heighten tensions around projects and increase the likelihood of security deployments to manage protests or protect assets. When communication tools are used to intimidate, silence or limit the right to organise, advocate and communicate community demands they aid repression, which can increase tensions and confrontations and lead to increased security deployments. If groups are unable to peacefully organise and advocate for their rights, they may turn to other avenues to express their voice, which may result in increased operational disruptions and violence. The interaction of these dynamics can create a reinforcing loop of security escalation.
Misinformation and opportunism	Networking and communication tools may also spread misinformation or misattribution of blame and can enable actors to misrepresent grievances.27 In some cases, individuals claiming to represent communities may allege human rights violations or abuses to extract quick financial payments from companies. Criminal networks, extremist groups or corrupt actors may also instrumentalise community grievances to extort companies. For example, groups may claim land rights violations, stage protests or maintain roadblocks until companies agree to pay money.	These dynamics can make it increasingly difficult for companies and governments to distinguish between legitimate claims and opportunistic or criminal behaviour. In fragile governance contexts, this may present extortion risks. Faced with uncertainty and reputational risks, companies may rely more heavily on security measures rather than peaceful engagement approaches.28 This can lead to over-securitised responses and escalate tensions.

Changing condition	What is changing?	How does this affect security-related human rights risks and impacts?
Patterns of vulnerability		
Heightened vulnerability of IPs	IPs remain a highly vulnerable group in relation to CRM and renewable energy projects.[29] IPs often have complicated relationships with the state and their land tenure rights, and access to justice and agency can be tenuous. They are often located in remote areas, may have limited access to communication tools and have land-based livelihoods and traditional cultural and spiritual connections to the land, which is increasingly targeted for CRM mining and renewable energy projects. The UN Declaration on the Rights of Indigenous Peoples advocates for IPs to provide consent (including the right to say 'no') in projects that impact them, their lands or territories, or other resources, particularly in connection with the development or exploitation of mineral, water or other resources.[30] Company policies and international norms and frameworks, including the VPs, often prominently highlight FPIC, but the application of FPIC takes time and can be difficult to implement in many settings.[31] Land access and land rights issues also represent one of the most significant categories of community grievance in renewable energy development. The Business and Human Rights Resource Centre's Renewable Energy and Human Rights Benchmark (2023) found that Indigenous Peoples' rights and land rights are linked to some of the highest number of serious human rights allegations related to renewable energy project development.[32]	As more land belonging to IPs is explored for mining and renewable energy projects, conflicts over land access and consent may intensify. At the same time, the increasing pace of project development, driven by global efforts to meet net-zero targets and enhance access to critical supply chains, is accelerating permitting processes and can lead to the truncation of FPIC and broader community engagement processes. FPIC can be a time-consuming process to build trust and agency. If meaningful engagement is not prioritised, FPIC is denied or incomplete, or if communities feel misinformed or not properly consulted, this can increase tensions, lead to resistance, and in some cases increase the need to deploy security actors, increasing security-related human rights risks.
Heightened vulnerability of HRDs	HRDs are vulnerable in the energy transition because they often operate in high-risk areas, frequently in countries with closing civic space and limited legal protections. Swedwatch notes that "more than half of the world's total prospective wind farm capacity, and more than two thirds of the prospective solar farm capacity, is estimated to take place in countries with obstructed, repressed, or closed civic space," and that "several top countries in the energy transition also have the highest rates of killings of defenders."[33] HRDs face elevated risks because they often challenge powerful corporate and government actors and interests. Raising concerns about land acquisition, environmental harm, and participation processes can place defenders at risk of reprisals, criminalisation, intimidation or legal harassment.	As a result, HRDs may increasingly face security-related human rights risks, including intimidation, violence or criminalisation. In some contexts, defenders may be targeted through legal actions such as Strategic Lawsuits Against Public Participation (SLAPPs). When tensions around projects escalate, security forces may adopt more aggressive postures in engagement with defenders.[34]
Heightened vulnerability of women	Women may face heightened vulnerability in the energy transition due to structural inequalities in land tenure, participation, and protection.[35] In many contexts where CRM and renewable energy projects are developed, women have weaker formal or customary land rights and may be disproportionately affected by changes in natural resource management. When access to	When land access and livelihoods are disrupted, women may have fewer avenues to assert claims, seek remedies or benefit from new jobs or compensation. This leaves women at heighten risks for exploitation and abuse. In contexts where tensions increase or security forces are deployed around project sites, women may face increased risks of harassment, intimidation or sexual and

Patterns of vulnerability		
Heightened vulnerability of women	land or water is reduced or altered, women may need to travel further to collect water or secure food and fuel or find alternative ways to sustain household livelihoods. This increases their unpaid labour burden, which can limit their income-generating opportunities and reduce their economic independence. Women also often face barriers to participating in decision-making processes or accessing fair compensation.[36] Women are more likely to be left out of benefit-sharing, receive little or no compensation when land or livelihoods are lost, and have fewer chances to access jobs created around these projects.	gender-based violence, particularly where accountability for security actors is weak.
Heightened vulnerability of ASM	Artisanal and small-scale miners often operate in contexts with limited legal recognition, weak protections and restricted access to formal grievance or regulatory mechanisms. Many ASM producers depend directly on mineral resources for their livelihoods and may lack secure land tenure or formal mining rights. As demand for CRMs increases and mining areas expand, ASM communities may face increasing pressure on the resources they rely on.	These conditions can increase the vulnerability of ASM producers to livelihood losses or criminalisation. In some contexts, miners may face violence, intimidation, or forced displacement when access to mining areas is contested or restricted. Where security actors are deployed to control access to mineral deposits or enforce concessions, ASM may be exposed to heightened security-related human rights risks.

CHAPTER 3 Implications for the Voluntary Principles

Chapter 3 explores the extent to which the VPs, as currently drafted and applied, and the VPI, as currently structured and implemented, are suitable for addressing the evolving and escalating security-related human rights risks and impacts under the changing energy transition conditions.[37]

Throughout this chapter, analysis is illustrated through case studies of the Antapaccay Copper Mine in Peru, the Ewoyaa Lithium Project in Ghana, and the Mphanda Nkuwa Hydropower Project in Mozambique (see Annex). These case studies are used to ground the analysis in concrete operational contexts, highlighting how the VPs have been or could be applied in practice to identify, address and mitigate security-related human rights risks, and where gaps or limitations may emerge under changing conditions.

The VPs were developed as the result of a dialogue process between governments, companies in the extractive (oil, gas and mining) and energy sectors, and NGOs, to guide ”companies in maintaining the safety and security of their operations within an operating framework that ensures respect for human rights and fundamental freedoms.”[38] The VPs’ application at its inception was focused primarily on extractives and energy projects as referenced in the ‘Introduction’ of the VPs themselves. Yet, over time, the VPs membership page and VPI communications website signalled expansion of membership for other companies in the industries of extracting, harvesting, developing natural resources, or energy.[39] The VPI membership page also refers to renewable energy-related companies as being eligible for membership. Interviewees also noted the VPs are being used beyond these sectors, with more companies in manufacturing, large-scale infrastructure, pharmaceuticals and other industries adopting them to better assess and manage security-related human rights risks across their operations and supply chains.[40]

Given the VPI’s openness to working across the spectrum of extractives and energy industries, it is important to examine how the VPs and associated VPI tools function under the changing conditions created by the energy transition. As discussed in Chapter 2, the energy transition is reshaping the conditions surrounding CRM extraction and renewable energy development. These evolving dynamics influence how security-related human rights risks emerge and how they must be managed in practice. These changing conditions may complicate the ability of companies, governments and other stakeholders to effectively apply the VPs in practice and to achieve their intended outcome of responsible security management that respects human rights. This chapter therefore examines how the VPs and existing VPI guidance and practical implementation tools respond to the dynamics identified in Chapter 2, The global energy transition: changing context and dynamics. It highlights areas where the framework and tools continue to provide strong guidance, while also identifying potential limitations.

Guidance and tools

The VPs are supported by an extensive suite of guidance and implementation tools developed by VPI stakeholders to help members operationalise responsible security practices. This section examines how these tools currently support the application of the VPs and assesses their relevance in the context of the changing conditions outlined in Chapter 2. It highlights both the strengths of the existing guidance and tools and areas where prioritisation, adaptation, or strengthened application may be needed.

Overall, the VPI suite of tools is relatively well positioned to address the changing conditions discussed above. All stakeholders interviewed noted the strength and comprehensive nature of these tools as written, while also offering insights on how their application and focus could be improved in the context of the energy transition. The full suite of tools is available on the VPI resource page, and several of these tools are referenced in the analysis below.[41]

The VPs themselves are organised into three parts and provide the foundation upon which the broader set of guidance and implementation tools are structured:

1. **Part One** calls for a risk assessment, including identification of security risks, potential for violence, human rights records, rule of law considerations, conflict analysis, and equipment transfers.
2. **Part Two** addresses interactions between companies and public security, including security arrangements, deployment and conduct, consultation and advice, and responses to human rights abuses.
3. **Part Three** covers such interactions between companies and private security providers.

To support implementation of the VPs, the IGT[42] was developed in 2012 to translate key implementation approaches into practical guidance. The IGT is structured around four modules:

- **Module 1**: Stakeholder Engagement
- **Module 2**: Risk Assessment
- **Module 3**: Public Security Providers
- **Module 4**: Private Security Providers

Modules 2, 3 and 4 mirror and expand upon the core components of the VPs. Module 1, Stakeholder Engagement, provides steps to establish the foundation for successful implementation of the other modules. The tool highlights the value of implementing the VPs, including reducing production delays, maintaining a SLO, mitigating litigation risks, protecting company reputation, and enabling more effective operations in complex environments. It also emphasises that seeking to achieve local community support is often “one of the most important layers of security protection a company can possess.”[43]

While the VPs and key implementation tools such as the IGT provide a strong foundation for responsible security practices, the sections below highlight limitations that may arise in their application under changing energy transition conditions. The VPI resources include both strategy-level and implementation-level tools, including actional measures such as detailed guidance for managing public and private security forces and advancing stakeholder engagement. Together these strategic and operational tools provide a comprehensive framework and actionable approaches for guiding responsible security practices in the energy transition. However, the accelerated pace of CRM extraction and renewable energy development, combined with geopolitical pressures to secure CRM supply chains, may create incentives to shorten or bypass processes that require sustained engagement and long-term investment. Many of the approaches emphasised within the VP framework, such as building trust with communities, establishing decision-making processes that are inclusive and community-based, and strengthening grievance mechanisms, require time and consistent implementation. As discussed in the sections below, these longer-term approaches can sometimes be difficult to prioritise and sustain in rapidly evolving operating environments. The VPs nevertheless provide a strong foundation for managing these tensions, particularly where members prioritise the most relevant tools and openly share lessons learned and implementation challenges.

In addition, effectively bringing together and applying the full suite of tools may require specialised skills and coordination, suggesting that companies and the VPI may need to strengthen aspects of training, staffing, or internal capacity to maximise their impact.

Risk assessment: strengths and limitations

Risk assessment is one of the cornerstones of implementing the VPs. The IGT Module 2 outlines a seven-step process for conducting risk assessments, including checklists to help develop risk scenarios with assigned probabilities and consequences (catastrophic, high, medium and low), which are then plotted in a heat map. These processes help companies determine possible risk treatment options for each scenario, including whether to accept, avoid, mitigate, transfer or share the risk, and to identify appropriate mitigation measures.[44]

The VPI also complements the IGT with companion guides that support companies in systematically identifying and assessing risks. Stakeholders consulted for this research consistently highlighted the strength and relevance of these tools as written. However, several interviewees noted that some of the evolving conditions associated with the energy transition and easier access to information in a digital world, such as heightened stakeholder expectations, increased competition over land and water, and the politicisation of resource development, may be difficult to capture within conventional risk-ranking processes. In particular, societal grievances and expectations that may eventually escalate into large-scale unrest often develop gradually and follow unpredictable timelines. As a result, they may not be easily prioritised within traditional risk assessment frameworks that tend to focus on more immediate or easily identifiable security threats. Addressing these risks typically requires long-term investments in meaningful stakeholder

engagement and sustained grievance management processes.[45] Several interviewees also observed that the compressed timeframes and growing urgency associated with expanding CRM extraction and renewable energy projects may create pressure to prioritise rapid responses to acute risks. In practice, this can mean focusing on immediate operational threats rather than investing in the longer-term mitigation measures identified through risk assessment processes. When community tensions escalate and underlying grievances remain unresolved, companies may respond by increasing their security footprint to manage immediate risks. While this may address short-term operational concerns, it can also exacerbate tensions and divert attention away from engagement processes that could strengthen partnerships with communities and support a more sustainable SLO.[46]

For example, as illustrated in Case Study 2, Atlantic Lithium's Ewoyaa Project in Ghana, set to become one of the most significant lithium projects in Africa and currently still in the development phase, demonstrates how emerging, longer-term community grievances may not be adequately captured or prioritised within risk assessment processes. Community stakeholders have reportedly been raising concerns regarding the adequacy of consultations, the lack of community consent, and the poor design of benefit-sharing mechanisms. These issues, alongside impacts on land access and livelihoods, appear to have contributed to increasing tensions and distrust towards the company, prior to project implementation. This suggests that early-stage risk assessments may not have sufficiently identified or prioritised these slower-moving risks, reinforcing the need to better integrate such dynamics into conventional risk-ranking approaches.

Conflict prevention: strengths and limitations

Conflict and tensions around mining and renewable energy projects are avoidable in many environments, but doing so requires a long-term focus on mitigation, dialogue and grievance resolution processes that can systematically reduce security-related human rights risks. As discussed above, risk analysis frameworks often prioritise acute risks, such as imminent violence, loss of life, or severe human rights abuses, when assigning response measures. While this approach is understandable, some interviewees noted that it may come at the expense of adequately addressing the types of slow-moving risks increasingly associated with the energy transition, where unresolved grievances can gradually escalate into security incidents.

Addressing these risks requires companies and governments to adopt a long-term conflict prevention approach that elevates grievance-related risks within management systems, risk analysis processes and operational responses. The VPs and the broader VPI suite of guidance explicitly recognise the importance of conflict prevention and provide actionable tools intended to support members in implementing such approaches. In particular, the Conflict Prevention Tool (CPT, developed by DCAF, ICRC, Queen's University, and AngloGold Ashanti) provides guidance and support to companies on conflict management and resolution in business operations through multistakeholder engagement strategies, conflict analysis, and risk management and prevention

approaches.[47] However, both the literature and stakeholder consultations suggest that it is not always clear whether the potential escalation of community grievances is consistently prioritised in practice. Simmering tensions may trigger violence in localised ways, but broader cycles of grievance, rising tensions and recurring disruptions may remain poorly understood or insufficiently addressed. Interviewees noted that companies may at times view these risks, particularly complex ones linked to, for example, land tenure, access, or historical grievances, as primarily governance issues that fall outside the company's lane of responsibility. As a result, such tensions may be treated as contained or external risks, with companies relying heavily on national governance or judicial systems to address them.[48]This can result in a more litigious approach to complex disputes, where issues such as land conflicts are referred to formal legal processes rather than being addressed through more sustained engagement efforts.[49]

While this distinction between corporate and governmental responsibilities has merit, stakeholders noted that it can lead to over-reliance on governance systems that are often perceived by stakeholders as inefficient, weak or lacking legitimacy. International frameworks such as the UNGPs and UNDP's Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts clarify that companies retain a responsibility to identify, prevent and mitigate human rights risks linked to their operations. This responsibility applies even where companies have not directly caused the harm, but where their activities, projects or business relationships are connected to those impacts.[50] Under these frameworks, companies cannot defer responsibility for such risks solely to government authorities.

This issue becomes particularly pronounced in fragile governance contexts. Where rule of law is weak or judicial systems are perceived as corrupt or ineffective, reliance on formal dispute resolution mechanisms may fail to address underlying grievances and may even deepen distrust among affected communities. In such environments, tensions related to land access, resource control or benefit-sharing can become directly associated with company operations, heightening security-related human rights risks at project sites.

When these grievances escalate and begin to disrupt operations, they quickly become both security and production concerns. Companies may respond by deploying additional public or private security to protect personnel and assets. While intended to stabilise operations, increased security presence can further escalate tensions, leading to protests, blockades, trespassing or other operational disruptions. As a result, stakeholder consultations and literature consistently emphasise that operating in fragile and conflict-affected contexts requires companies to continually prioritise conflict prevention approaches and apply them more comprehensively and consistently in the context of the energy transition.

However, conflict prevention needs to extend beyond increased security provision. As illustrated in Case Study 1, the Antapaccay copper mine in Peru highlights how insufficient attention to underlying grievances can contribute to escalating security-related

human rights risks. Community stakeholders have reportedly raised longstanding concerns related to land acquisition, consultation processes (including FPIC), and alleged environmental and health impacts. These grievances appear to have remained only partially addressed over time, contributing to persistent tensions between communities and the mining company. In this context, a perceived reliance on policing and security measures to manage unrest, rather than sustained engagement and grievance resolution, may increase the likelihood of protests, blockades and other disruptions. This illustrates how a reactive, security-led approach, absent a stronger conflict prevention focus, can contribute to the escalation of tensions.

Local conflict analysis and conflict sensitivity: strengths and limitations

To identify appropriate conflict prevention approaches, prioritising local context and conflict analysis is essential. Several elements of the VPs framework support this and multiple tools provide actional approaches. These include Part One of the VPs, Module Two of the IGT, the 10 Steps to Maintain Security and Compliance with Human Rights, the Conflict Analysis Tool for Companies, and DCAF, the International Committee of the Red Cross (ICRC) and Geneva Center for Business and Human Rights (GCBHR) Addressing Security and Human Rights Challenges in Complex Environments - Toolkit.[51] Together, these tools provide guidance to help companies operating in fragile and conflict-affected contexts conduct structured conflict analysis and identify appropriate prevention and mitigation approaches.

This suite of tools helps companies analyse the root causes of conflict, understand how conflicts interact with their operations, and assess how company activities may influence broader conflict dynamics. In the literature and in practice, this approach is commonly referred to as conflict sensitivity.[52] Conflict-sensitive approaches recognise that once operations enter a context, they inevitably become part of the surrounding grievance and conflict environment. As a result, companies must focus on Do No Harm (DNH) principles, ensuring that their actions do not exacerbate tensions, contribute to human rights abuses, or heighten security-related risks. Integrating conflict prevention approaches into operational planning can help companies minimise the risk of complicity in abuses and support more stable and constructive relationships with surrounding communities.

The VPI's Conflict Analysis Tool for Companies emphasises this dynamic clearly. As the guidance notes, even when companies do not originate conflicts, their presence and activities can influence the nature and intensity of existing tensions and shape where conflicts manifest. At the same time, conflicts can directly affect operational risks and the stability of company activities. Where local conflicts are linked to broader political, social or economic dynamics, understanding conflict drivers beyond the immediate project site becomes critical for managing risks at the site level. Applying both DNH principles and proactive conflict prevention strategies can therefore help reduce real or perceived company complicity in security-related human rights risks while strengthening trust and contributing to a stronger SLO.[53]

In conflict-affected and fragile contexts such as those surrounding the Mphanda Nkuwa Hydropower Project in Mozambique (Case Study 3), robust local conflict analysis is critical to ensure that existing tensions and grievances are not exacerbated by project development. In Mozambique, historical grievances linked to extractive activities in Cabo Delgado (gas) and Montepuez (rubies) may shape community perceptions of new large-scale projects, including Mphanda Nkuwa. Community stakeholders have reportedly raised concerns regarding potential environmental and livelihood impacts, and protests linked to these concerns have, in some instances, been met with intimidation and threats from public security forces, including through increased police presence, detainment of community leaders, denied access to legal counsel, and blocking and controlling of local civil society meetings. While the project's consortium is not directly involved in these actions and the project remains in pre-construction phases, such responses risk becoming associated with the project in the eyes of affected communities. This case illustrates how insufficiently context-specific conflict analysis may lead companies to underestimate how historical grievances and state responses can become intertwined with their project dynamics, thereby also heightening security-related human rights risks linked to their own operations.

Taken together, the VPs and the broader VPI guidance emphasise the importance of analysing risks through a localised conflict lens in order to identify the most salient security-related human rights risks at the site level and to design conflict-sensitive mitigation strategies. When prioritised and applied comprehensively, these actionable tools provide a strong foundation for advancing responsible security practices in the context of the energy transition.

However, the full application of these tools requires specialised skills, sustained management attention and a long-term strategic perspective. Stakeholder consultations and the literature suggest that while these approaches can be time-consuming, they often generate long-term benefits when communities and other stakeholders perceive tangible shared value from company operations. Localised conflict analysis and prevention will not eliminate all security-related risks, particularly in fragile settings. However, these approaches can reduce the likelihood that tensions escalate into violence and can help companies identify more effective mitigation strategies over time. This remains one of the core strengths of the VPs framework: it provides flexible tools that can be adapted to local contexts and used to address emerging tensions before they escalate into more severe security-related human rights risks.[54]

VPs as a management approach: strengths and limitations

The VPs and the broader suite of VPI tools emphasise that responsible security practices should be seen as an integral component of effective corporate management. The framework and implementation tools explicitly encourage companies to integrate security and human rights considerations into core management systems and decision-making processes. Step One of the 10 Steps to Maintain Security in Compliance with Human Rights highlights this by encouraging companies to "embed security and human rights

into business strategy, governance, plans and budgets." Step Nine reinforces this management approach by calling for companies to "monitor implementation at the business level and corporate level."[55]

These expectations are also reinforced by several responsible mining and investment frameworks, such as the Initiative for Responsible Mining Assurance (IRMA) Standard for Responsible Mining[56] and the International Finance Corporation (IFC) Performance Standards (Performance Standard 4)[57] which explicitly reference the VPs. As such, investors and downstream companies seeking to align with these frameworks increasingly expect mining projects to implement responsible security practices consistent with the VPs, linking their application not only to good governance but also to access to finance and responsible sourcing markets.

Under these frameworks, security should not be treated as a stand-alone operational function limited to security departments, site plans or corporate policies. Instead, the VPs emphasise that security considerations should be integrated across all management functions and organisational levels. Part Two of the VPs further highlights the importance of embedding security considerations within broader stakeholder engagement processes and ensuring that security arrangements are transparent and accountable at the local level. This integrated approach is one of the key strengths of the VP framework.

The VPI suite of tools supports this integration by providing practical implementation guidance for companies and governments. For example, the framework and related tools include sample Memoranda of Understanding (MoUs) that outline how companies should structure cooperation with public and private security providers. These templates provide tested language and practical guidance for defining roles, responsibilities and expectations for security actors. Other tools establish expectations for training requirements, vetting procedures and operational standards for security personnel. Together, these tools provide structured and actionable approaches for embedding responsible security practices into corporate governance and operational planning.

Beyond technical guidance, the VPI also provides institutional platforms that support management and implementation. The initiative organises plenary sessions, peer-to-peer learning exchanges and other forums where members can share experiences, challenges and best practices. Members are encouraged to establish in-country working groups that bring together governments, companies, NGOs and other stakeholders to adapt VP implementation to local contexts. In several cases, member governments have also been supported in developing VP National Action Plans or integrating the VP into domestic regulatory frameworks. The DCAF and ICRC's Addressing Security and Human Rights Challenges in Complex Environments Toolkit[58] outlines potential steps for companies to create better engagement with governments, highlighting the unique value that multi-stakeholder in-country working groups bring to better management. These mechanisms provide opportunities to strengthen collective learning and operationalise responsible security practices across jurisdictions. Thus, the VPs and VPI implementation tools,

coupled with these institutional platforms, including in-country working groups, operate in concert to enhance coordination, improve transparency, build trust and support more effective decision-making among communities, governments and companies. These approaches improve tripartite relationships in mining and renewable energy jurisdictions and contribute to improved governance and more coherent approaches. In these respects, many stakeholders interviewed for this research noted that the VPI's management guidance and collaborative platforms are well suited to support responsible security practices in the energy transition. At the same time, both the literature and stakeholder consultations highlighted a persistent gap between the existence of these management tools and their consistent application in practice.[59] While many companies have adopted corporate policies referencing the VPs, it is often unclear how deeply these principles are embedded in operational decision-making or how consistently they shape interactions at the site level. Several interviewees noted that internal silos can still emerge between security functions and other departments responsible for community engagement, civil society and government relations or sustainability.[60]

When these functions operate separately, opportunities to address tensions early through dialogue and relationship-building may be missed. Instead of integrated responses that combine security management with community engagement and grievance resolution, companies may rely more heavily on reactive security measures once tensions escalate. Stakeholders consulted for this study emphasised that these gaps between guidance and practice can weaken the preventive potential of the VPs.[61]

Interviewees also noted that improving the integration between security management and community engagement functions can produce tangible operational benefits. When community tensions are addressed early and trust is built through consistent engagement, companies are less likely to face disruptions. Conversely, failures in security governance at the site level can quickly escalate into operational crises. Several stakeholders emphasised that when security-related human rights issues are not effectively managed, companies may face production shutdowns, reputational damage, declining investor confidence and broader operational instability.[62] In this sense, effective implementation of the VPs directly affects companies' bottom line. Responsible security practices help protect revenue streams and reduce costly disruptions and legal exposure.

Vulnerable Groups: Strengths and Limitations

The VPs and the broader suite of VPI implementation tools recognise the importance of addressing the needs and risks of vulnerable groups in the context of resource extraction and energy development. Both the literature and stakeholder interviews highlighted that several VPI tools already incorporate clear guidance relevant to groups that are widely identified as particularly vulnerable in the energy transition, including IPs, women, and HRDs. In these areas, the VP framework provides actionable guidance that acknowledges their heightened exposure to security-related human rights risks and emphasises the need for responsible engagement and protection. However, stakeholder consultations and literature suggest that the growing security-related human rights risks

faced by ASM are not yet reflected to the same extent in the existing VPI guidance. As discussed in Chapter 2, the expansion of CRM extraction is intensifying competition over mineral-rich land and resources, particularly between ASM operators and LSM companies. While issues such as illegal encroachment, environmental impacts, and operational disruptions associated with ASM near LSM concessions are frequently emphasised by industrial mining companies, this framing can overlook two important considerations.

First, ASM constitutes a critical livelihood for millions of people globally, and past efforts to eliminate the sector have rarely proven successful, as proposed alternative livelihoods often fail to provide comparable economic opportunities. Second, regardless of differing views on ASM activities, the sector's informality and related limited legal protections and heavy reliance on access to mineral resources mean that ASM communities can face heightened vulnerability to security-related human rights risks as LSM expansion intensifies competition over land and resources.

These dynamics can generate complex security risks and tensions, yet the specific vulnerabilities of ASM producers and the associated security implications are not yet addressed as comprehensively in the current suite of VPI tools.

The voluntary nature of the VPs

Finally, a commonly noted limitation of the VPs is their voluntary nature and the absence of formal enforcement mechanisms. As a result, it is often unclear to what extent members implement the full suite of VP guidance and implementation tools in practice, or with what level of consistency and fidelity across their operations. Evidence from literature and stakeholder consultations suggests that implementation can vary significantly. For example, research on the application of the VPs in Ghana found "a general lack of awareness of the VPs by most stakeholders, especially at the local level."[63] The study further notes that although some mining companies have formally committed to the VPs, implementation has been uneven, with limited community participation in risk assessment and mitigation processes, contributing to a lack of trust in how security-related decisions are made.[64]

These findings are consistent with insights from stakeholder interviews conducted for this study,[65] which also pointed to gaps between formal commitments to the VPs and their implementation at the site level. In many contexts, awareness of the framework among local stakeholders remains limited, and the extent to which its guidance and implementation tools shape day-to-day operational practices can be difficult to assess.

At the same time, the VPs and the VPI provide mechanisms that do explicitly encourage continuous improvement among members. Through guidance tools, peer learning, and ongoing dialogue among governments, companies and civil society, the initiative creates opportunities for members to strengthen implementation over time. In this sense, while the voluntary nature of the framework presents limitations, the VPI's emphasis on

learning and progressive changes remains an important mechanism for strengthening responsible security practices in the context of the energy transition.

CHAPTER 4 Recommendations

Chapter 3 - Implications for the Voluntary Principles focused on the extent to which the VPs and VPI, as currently structured and implemented, are suitable for addressing the evolving security-related human rights risks and impacts in the energy transition. This chapter will highlight potential adaptions to enhance the consistent, effective and comprehensive application of the VPs and VPI implementation tools in addressing those issues. The recommendations are organised as follows:

- **Recommendations with regard to strengthening the application of existing tools to address security and human rights issues in business operations, including VP tools**. These are primarily targeted at companies and governments.
- **Recommendations to further emphasise and promote the VPs as a comprehensive management and governance framework**. These are primarily targeted at the VPI and its members, but are also relevant for companies, governments, and multilateral actors operating across the CRM, security, business, and human rights agendas.
- **Recommendations to further upscale implementation support of the VPs.** These are targeted primarily at the VPI, as well as to VPI members.
- **Recommendations to support knowledge-building and responsible security responses to specific emerging energy transition dynamics**. These are targeted primarily at the VPI, although it could consider collaborating with civil society or other members for implementation.
- **Recommendations to clarify the scope and expand the initiative**. These are targeted at the VPI.

Strengthening the application of existing tools

Recommendation #1: Elevate mitigation approaches and community participation to ensure community grievances are meaningfully captured in company risk assessments

Companies should elevate how community-related risks are identified, assessed and mitigated within risk assessment processes. While the VPs and its existing tools such as the IGT provide structured approaches for identifying risks and assigning mitigation measures,[66] community grievances and tensions are not always prioritised within risk matrices or assigned sufficiently robust mitigation strategies.[67] Moreover, these are challenges faced by companies across different sectors and regardless of whether they are VPI members. As competition for land, water and mineral resources intensifies during the energy transition, disputes between companies, communities and other land users are becoming an increasingly important driver of security-related human rights risks (see Chapter 2). These grievances often develop gradually and may initially appear

as lower-probability or lower-consequence risks within conventional risk-ranking frameworks. However, these contexts are dynamic, and when such tensions escalate, for example through protests, site blockades, or attempts to access project areas, companies and governments may deploy security forces to protect staff, infrastructure or transport routes. This can heighten the risk of confrontations and security-related human rights incidents. Therefore, it is essential that companies develop, monitor and review their risk assessments as threats and dynamics evolve, potentially triggering new risks, impacting existing ones or leading to incidents.

To ensure that community grievances are meaningfully captured in company risk assessments, different stakeholder groups should consider the following actions:

For the VPI and other organisations promoting the VPs:

- Further strengthen guidance on how community grievances and social tensions can be integrated into security and human rights risk assessments.
- Promote good practice examples demonstrating how engagement, dialogue and grievance resolution can reduce security-related risks.
- Encourage members to adopt dynamic risk assessment approaches that capture evolving community concerns over the lifecycle of a project.

For companies:

- Ensure that risk assessment processes systematically identify and monitor evolving community grievances, including issues related to land access, livelihoods, benefit sharing, environmental impacts and resettlement.
- Regularly review risk assessments as project contexts evolve and as new grievances, incidents or stakeholder concerns emerge, instead of relying primarily on reactive security response.
- Prioritise mitigation measures focused on dialogue, engagement, grievance resolution and conflict prevention alongside security measures.
- Involve affected communities and other stakeholders early in identifying risks and discussing mitigation strategies where appropriate.
- Strengthen coordination between security, community relations, environmental and social performance, and project management functions to ensure risks are assessed holistically.

For governments and public authorities:

- Support transparent and inclusive consultation processes related to land, natural resources and development projects.
- Promote mechanisms for early dispute resolution and mediation before tensions escalate into security incidents.

For investors and development finance institutions:

- Assess whether projects have effective mechanisms for stakeholder engagement, grievance resolution and conflict prevention.

- Recognise community relations and social performance as important indicators of potential security-related human rights risks.

For civil society organisations and community representatives:

- Support mechanisms that enable communities to safely raise concerns and participate in discussions regarding project-related risks.
- Contribute local knowledge and context to risk identification processes where appropriate.
- Promote dialogue and collaborative problem-solving approaches that help address tensions before they escalate.

Recommendation #2: Prioritise localised conflict analysis, conflict sensitivity and conflict prevention approaches

In many contexts where CRM extraction and renewable energy projects operate, tensions related to land governance, state-community relations, corruption, historical grievances, or weak public institutions influence how communities perceive companies and respond to project activities. Companies and governments should prioritise localised conflict analysis to better understand how broader political, social and governance dynamics shape security-related human rights risks around CRM and renewable energy operations.

For governments, localised conflict analysis can help identify how project-related tensions interact with broader state-society grievances, including distrust of public authorities, contested land governance, weak service delivery, or perceived bias in how benefits and burdens are distributed between citizens and companies. It can also help public agencies anticipate how the involvement of public security forces may be perceived by communities, particularly in contexts where those forces lack legitimacy or are associated with past abuses. This is important because government actors shape the wider enabling environment around projects and often determine how tensions are managed once they emerge. A stronger understanding of these local dynamics can therefore help governments avoid responses that inadvertently deepen grievances or heighten security-related human rights risks.

For companies, tensions related to land governance, state-community relations, corruption, historical grievances, or weak public institutions may not be caused by company operations themselves, but they can nonetheless become closely associated with them and shape patters of mobilisation and confrontation around project sites. This is particularly relevant in contexts where public security forces are deployed to protect company assets or infrastructure. Where such forces use excessive force against protestors or communities, the resulting harms may be perceived as linked to company operations through security arrangements or broader business relationships. Under the UNGPs, companies are expected to identify and address human rights risks connected to their operations or business relationships, even where they have not directly caused

those impacts. Localised conflict analysis therefore helps companies anticipate how external tensions may interact with their operations and security arrangements, and reduce the likelihood that projects become focal points for broader grievances.

Companies and governments should recognise that violence does not always develop through gradual, linear escalation. [68] Sudden triggers can rapidly intensify tensions even where underlying relationships appear stable. Such triggers may include events such as accidents involving project staff, incidents involving security personnel, election periods, arrests of community members, disputes over compensation, or the rapid spread of rumours through social media. Localised conflict analysis is also increasingly important in navigating evolving patterns of community mobilisation and communications. The use of social media can quickly amplify grievances, spread misinformation, or misattribute blame for harms associated with project development. In some contexts, groups may claim to represent communities while, in reality, advancing opportunistic demands, including staging protests or roadblocks to pressure companies for financial payments. Conflict-sensitive monitoring therefore requires attention both to long-term grievance dynamics and to short-term triggers that may spark rapid escalation.

To ensure that conflict analysis and prevention are localised, prioritised and sustained, different stakeholder groups should consider the following actions:

For companies:

- Keep strong relationships with communities and monitor how community tensions evolve over time, using community liaison officers and maintaining regular dialogue with community leaders and local authorities.
- Develop internal early warning systems that track changes in local dynamics and adjust mitigation measures before tensions escalate.
- Strengthen coordination between security teams and community engagement or social performance teams[69] to build clear pathways for managing conflict based on risk and scale, including escalation as necessary.
- Develop community relations as part of localised conflict analysis and monitoring to ensure adequate understanding of communities' grievances and combat opportunistic demands from illegitimate actors.

For governments and public authorities:

- Track the evolution of community tensions by maintaining regular dialogue with companies and community leaders to understand emerging dynamics and identify early warning signs.
- Strengthen conflict prevention and management by reinforcing understanding of local dynamics, perceptions of public security forces by communities, and community views on the distribution of benefits and burdens between companies and local populations.

For international development cooperation institutions and partners:

- Reinforce capacity-building of local actors in conflict monitoring and prevention, strengthening localised early warning, mediation and dispute resolution mechanisms and ensuring they are tailored to the security and human rights risks in resource management contexts.

Recommendation #3: Robustly integrate legitimacy and justice considerations into stakeholder engagement processes

In many resource-rich countries, concerns about the legitimacy of resource governance frameworks are becoming increasingly prominent.[70] These broader dynamics can shape how communities interpret the presence and actions of companies. Even where companies comply with national legal requirements, projects may still be perceived as illegitimate if communities believe that land was allocated without their meaningful participation or that the economic benefits of resource development are captured primarily by political elites or external actors. In some contexts, these concerns are reinforced by historical experiences in which extractive industries were associated with colonial resource extraction, elite capture or corruption. Such perceptions can contribute to protests, resistance or attempts to disrupt operations, which may in turn trigger the deployment of security forces and heighten the risk of security-related human rights incidents.

On the contrary, transparent communication about employment opportunities, local procurement, community investments and revenue-sharing mechanisms can help manage expectations and reduce grievances that may otherwise escalate into security risks.

Both governments and companies need to recognise how both current and past state-society relationships shape perceptions of legitimacy and justice related to CRM and renewable energy projects. Security and human rights frameworks, such as the VPs, the UN Global Compact and the OECD Guidelines for Responsible Business Conduct, already emphasise the importance of stakeholder engagement and SLO. Strengthening attention to legitimacy and justice concerns within these processes can help address underlying grievances that frequently drive mobilisation around CRM and renewable energy projects. In this regard, ICWGs can be instrumental in facilitating a platform for engagement and a neutral space for dialogue between companies and communities.

To ensure meaningful and participatory stakeholder engagement that addresses community concerns, the following actions are recommended:

For companies:

- Address community concerns and their historical experiences of legitimacy, fairness and benefit-sharing of resource management in stakeholder engagement processes,[71] so that communities and civil society actors remain informed on issues

related to land use and designation, benefits distribution, or mining licensing.
- Maintain transparent communication with communities about operations and investments, and provide participatory opportunities for communities to share the benefits, such as community oversight of development funds or dialogue on community investment priorities.
- Participate actively in VPs ICWGs to hold a sustained dialogue with communities and authorities and integrate their concerns into policy and project design, implementation and monitoring.

For governments and public authorities:

- Use the outputs from stakeholder engagement processes, such as the VPs ICWGs, to inform negotiations and management of relations with companies and ensure they integrate justice and legitimacy dynamics in their operations.

For the VPI and other organisations promoting the VPs:

- Support the set-up and operationalisation of ICWGs to ensure they are sustainable, inclusive and effective, by providing opportunities for knowledge-sharing, coordination and exchange of resources.

Further emphasise and promote the VPs as a comprehensive management and governance framework

Recommendation #4: Promote the VPs as a comprehensive management framework

Security and human rights frameworks already emphasise that responsible security management should be embedded within broader corporate governance and operational systems: the UNGPs, the OECD Due Diligence Guidance, and the VPs articulate security as an integral element across corporate conduct and governance. In the case of the VPs, this approach translates into an emphasis on risk assessment, multistakeholder engagement and coordinated implementation across corporate functions.

While the VPs are often associated primarily with security management,[72] many of the drivers of security-related human rights risks, such as land disputes or political tensions, are closely linked to broader business functions including land acquisition, community engagement, environmental management and government relations.

Where the VPs are interpreted narrowly as a security tool, responsibility for their implementation often remains confined to specialised security teams.[73] This can create siloed approaches where security considerations are insufficiently integrated into broader corporate decision-making processes. In practice, however, preventing security incidents often requires coordinated action across multiple departments and management levels. Framing the VPs as an integrated management framework can help demonstrate their practical value for companies operating in complex environments. Where security-related human rights risks are not effectively managed, companies may face operational

disruptions or reputational damage that effect their revenue streams, investment attractiveness, and relations with downstream buyers. Integrating VP principles into broader management systems and reinforcing the coherence and collaboration with other actors working across the security and human rights space can therefore contribute to greater operational stability.

To promote the VPs as a comprehensive management and governance framework and, consequently, strengthen their implementation, the following actions are recommended:

For companies:

- Embed the VPs across company functions, ensuring that different departments approach governance, decision-making and risk management in a coordinated manner within the VPs framework.
- Strengthen vetting mechanisms for private security companies and ensure that providers are adequately trained on international norms and standards, including IHRL, IHL, and the VPs.

For the VPI and other organisations promoting the VPs:

- Reinforce the understanding among companies of the VPs as an integrated management framework for addressing complex operational risks and not just a security management tool.
- Promote stronger linkages between the VPs and other security governance frameworks by enabling opportunities for collaboration.

Recommendation #5: Demonstrate the Return on Investment of implementing the VPs

Beyond their human rights value, implementing the VPs can be cost-efficient for companies, helping them avoid costly disruptions, reduce conflict-related losses, safeguard staff and assets, and maintain more predictable operating environments. Therefore, demonstrating the tangible operational and financial benefits that responsible security practices deliver can strengthen the business case for VPs buy-in and implementation.

Examples could illustrate how investments in responsible security practices helped directly reduce conflict-related costs or strengthen long-term operational resilience. Other responsible mining and security standard-setting organisations are increasingly developing similar evidence-based materials to demonstrate the operational and financial value of their frameworks; the VPI could draw inspiration from these approaches when developing its own communications.

To promote buy-in and implementation and make the business case for the VPs, the following actions are recommended:

For the VPI and other organisations promoting the VPs:

- Develop communications materials or case studies highlighting the operational and

financial benefits of implementing the VPs to prevent conflict escalation, reduce operational disruptions, strengthen relations with stakeholders, and improve risk management in complex environments.

For multilateral actors and development finance institutions:

- Support research and studies that quantify the economic costs of conflict in resource-rich contexts and the return on investment associated with implementing responsible security practices such as the VPs.

Recommendation #6: Demonstrate and highlight to governments the benefit of the VPs for advancing their strategic commercial, environmental and security goals

The realisation of governments' national security or green energy transition imperatives depends on access to stable (diversified and uninterrupted) supply chains. This reality has made the topic of CRM and renewable energy projects highly political. Poor security conditions, along with rising violence and instability at project sites, can easily interrupt operations and disrupt supply chains, thereby creating risks with broader geopolitical implications. **The VPI tools and guidance provide practical pathways for how to reduce security-related risks which can ultimately help reduce instability and disruptions around project sites**. The VPs and VPI implementation tools already make the case for why these approaches are important. However, **stronger communication and messaging to governments regarding how the VPs can advance their goals and policies could help ensure CRM and renewable energy projects are developed in a way that both respects human rights and promotes global stability**, including in fragile states. This also aligns with the growing emphasis many governments place on supply chain security in the context of the energy transition.[74]

To promote governmental buy-in and uptake of the VPs, the following actions are recommended:

For the VPI and other organisations promoting the VPs:

- Develop tailored communications materials to demonstrate how effective implementation of the VPs contributes to geopolitical priorities, including more stable and secure mineral and energy supply chains and investment stability.
- Utilise the ICWGs to position the VPs as a practical tool for governments, by drawing insights and evidence of the benefits of responsible security practices for enabling predictable operating environments and reduced disruptions.
- Promote opportunities for collaboration among governments and ICWG members, such as platforms for peer learning and exchange, to facilitate the sharing of information, lessons learned, and best practices for VPs implementation.

Upscaling implementation support from the VPI

Recommendation #7: Strengthen support for practical implementation of existing tools

The VPs and the broader suite of VPI tools are extensive and highly relevant to the challenges associated with the energy transition. However, effectively applying these tools in operational contexts often requires significant time, experience and specialised expertise. Members may struggle to determine which tools are most relevant to their particular operating context and how they should be applied together in practice. Resources such as the DCAF-ICRC toolkit can help stakeholders implementing the VPs to zoom in on specific aspects, for instance, on community consultation and consent, or training of security providers, and determine when to prioritise particular approaches.

This type of support can be instrumental for companies, helping them identify potential gaps in implementation, and more systematically integrate relevant guidance across different aspects of their risk management processes. While not all tools are necessary in every context, most project sites will require a combination of approaches. A simplified implementation guide could therefore help members identify which tools are most appropriate in specific situations and how they can be used together for greater impact. It would also provide the VPI with clearer insight into how comprehensively its guidance is being applied across member operations.

Another way to support practical implementation is to strengthen the opportunities for learning and exchange among actors engaging with the VPs. While the VPI already facilitates peer learning among members through plenary discussions, pillar meetings and in-country working groups, many companies still rely on external practitioners, such as responsible mining consultants, security advisors and development specialists, to help operationalise the VPs. These actors often play a key role in translating the framework from paper into practice by designing risk assessments, advising on stakeholder engagement strategies, developing security management systems and supporting implementation at project sites. In doing so, they frequently shape how the VPs are interpreted and applied in operational settings.[75] Fostering networks and spaces for exchange, paired with targeted training materials, would help ensure that those responsible for translating the framework into operational practice have a strong understanding of its intent and expectations. This approach should not replace engagement with companies themselves but rather complement it by acknowledging the practical reality that many aspects of VP implementation are outsourced to external specialists. To ensure that support and exchange opportunities are available for actors implementing the VPs across complex contexts, the following actions are recommended:

For the VPI and other organisations promoting the VPs:

- Develop a simple implementation aid that helps navigate and prioritise existing tools and apply the most relevant ones to different stages of project development or risk management.

- Foster communities of practice for practitioners who support VP implementation to exchange experiences and discuss shared challenges.

Support knowledge-building and responsible security responses to specific emerging energy transition dynamics

Recommendation #8: Highlight how land and resource pressures in renewable energy projects increase risks

The VPs were originally developed in the context of extractive industries to guide companies in managing security-related human rights risks around large-scale resource projects. In these contexts, security risks have often been linked to operational hazard or environmental impacts typically associated with extractives that may trigger community grievances or protests.

Some interviewees noted that renewable energy projects are sometimes perceived as presenting fewer risks than traditional extractive operations because they lack certain industrial hazards. As a result, risk assessment processes may not always identify renewable energy projects as high-risk environments from a security perspective. However, as set out in Chapter 2 as well, renewable energy infrastructure, including solar and wind farms and hydropower, often requires substantial land areas and can alter local water ecosystems and land use patterns. Disputes related to land access, compensation and benefit-sharing can therefore become focal points for community tensions and potentially associated violence or other security threats. These situations may prompt the deployment of public or private security forces to protect project infrastructure, increasing the potential for security-related human rights risks.

To ensure that the security risks of renewable energy operations are adequately understood, mitigated and addressed, it is recommended:

For companies in the renewable energies sector:

- Adopt the VPs as a comprehensive framework governing decision-making and operation across company functions, actively engaging in dialogue with communities and integrating their concerns over access to land and water, compensation and benefit-sharing into investment and operational decisions.

For the VPI and other organisations promoting the VPs:

- Develop communications that emphasise the relevance of the VPs to renewable energy development and encourage their adoption by companies in the renewable energies sector.
- Strengthen guidance and knowledge-sharing on the risks and impacts of renewable energy projects over access to natural resources.

Recommendation #9: Address emerging risks related to competition between ASM and LSM

Given the growing demand for CRMs, competition over access to mineral resources and land is likely to intensify, particularly in contexts where ASM already operates on or near industrial concessions. In this context, it is necessary to develop proactive approaches to address emerging security dynamics associated with increasing competition over CRM resources. The VPI already provides guidance and tools that address the security-related human rights risks faced by several vulnerable groups, such as IPs, women and HRDs. However, the framework and implementation tools currently provide limited guidance on the specific dynamics associated with interactions between LSM and ASM operations. There is therefore merit in developing additional resources that account for security and human rights risks and interactions between ASM and LSM and enable their peaceful coexistence and enhancing of mutual trust. To ensure that emerging risks associated to the growing competition between ASM and LSM are tackled in a robust and rights-compliant manner, it is recommended:

For companies:

- Integrate the specific risk management and responsible security practices linked to ASM and LSM in their implementation of the VPs and their broader operations, engaging also with relevant initiatives related to CRM operations, such as the World Gold Council and IRMA, for adequate guidance.
- Engage proactively with relevant stakeholders, including affected communities, ASM miners and associations, and security forces, through platforms such as the VPs ICWGs.
- Ensure that security providers receive relevant training to interact with ASM actors in a human rights responsive manner, recognising that not all ASM is illegal and that though often informal, can play an important role in local economies.

For governments:

- Support ASM professionalisation, legitimisation and formalisation efforts that promote coexistence between ASM and LSM and support the socioeconomic development of communities.

For the VPI and other organisations promoting the VPs:

- Develop tailored guidance, studies, and tools that help diverse actors navigate the dynamics and risks associated with ASM and LSM.
- Promote the exchange of experiences and best practices among ICWGs operating in contexts with high presence and coexistence of ASM and LSM.

For investors and development finance institutions:

- Ensure that human rights impact assessments are required as part of the design of new projects in ASM/LSM contexts, encouraging stakeholder engagement and cooperation with ASM miners.

Clarifying the scope and expanding the initiative

Recommendation #10: Clarify communications on the scope and applicability of the VPs and expand outreach to the renewable energy sector

While the VPs were originally developed for the oil, gas and mining sectors, the scope of the VPI has expanded over time to include natural resource and energy industries more broadly. Yet, references to applicable industries currently vary across different sources. The VPI application framework now states that companies may apply to join the VPI (initially as Engaged Members) if they are "in the industries of extracting, harvesting, or developing natural resources or energy."[76]

Several interviewees noted that, despite having detailed knowledge of the VPs, or even direct engagement with the VPI, there was still some uncertainty about which industries the VPI is actively targeting for membership and engagement.[77] Clearer communication on how renewable energy projects fall within the existing mandate could therefore help avoid confusion and strengthen outreach to relevant actors, particularly amid the accelerating energy transition. In this context, renewable energy projects will increasingly operate in the same governance environments and community contexts as traditional extractive operations, providing the VPs past applications and learnings with an opportunity to catalyse more responsible practice across a broader range of industries. It would therefore be helpful for renewable energy companies to have spaces to share with extractive sector companies around responsible security practices and security-related human rights risks. Because the VPs are often implemented in fragile and conflict-affected environments that are continuously evolving due to economic, political or social pressures, it is rarely possible to eliminate security-related human rights risks entirely. Even where companies and governments apply the available tools carefully and in good faith, outcomes cannot always be fully controlled, particularly during periods of heightened tensions.[78] The purpose of the VPs is therefore not to guarantee perfect outcomes, but to help companies and governments systematically strengthen their practices over time and reduce risks as much as possible.[79]

Several interviewees noted that discussions about VP implementation sometimes focus primarily on shortcomings in practice, which may be valid but can also obscure the purpose of the framework as a tool for continuous improvement.[80] Communicating this more clearly in outreach messaging could help reinforce the idea that engagement with the VPs is intended to support better practices over time rather than require immediate perfection. This framing may also help address concerns among some companies or governments that participation could expose them to reputational risks before they have fully developed their internal systems. To promote the implementation and expansion of the VPs and encourage buy-in, the following recommendations are addressed at different actors:

For companies:

- Implement the VPs across company operations as a tool for the systemic

strengthening of security practices.

- Adopt agreements and MoUs with public security forces to clarify expectations and responsibilities. Review these arrangements and those involving private security systematically to strengthen responsible practices.
- Participate actively in multistakeholder platforms such as the VPs ICWGs to incorporate community concerns, including emerging risks, into security and risk management.
- For VP members, engage in dialogue with other companies in the renewable energy space to exchange on best practices and experiences implementing the VPs.

For governments:

- Establish a continuous dialogue with companies across the extractives and renewable energy sectors and communities to ensure that security risks, concerns, and best practices are integrated into agreements with public security forces.

For the VPI and other organisations promoting the VPs:

- Streamline how it communicates the scope of the VPs, clarifying on its website, membership guidelines and outreach materials how renewable energies fall within the VPI mandate and how companies in this sector can engage with the VPs.
- Emphasise the positive framing of the VPs as a mechanism supporting progressive improvement in responsible security practices over time, particularly when approaching potential new members.
- Increase targeted outreach to companies in the renewable energy sector and associated industries, making the business case of VPs implementation adapted to the specificities of the sector.
- Promote the exchange of experiences and information between existing VPI members from the extractive sector and companies expanding into renewable energy.
- Strengthen the role, capacities and coordination among ICWGs, by providing increased support and guidance and promoting spaces for exchange of practices and lessons learnt.

Chapter 5 Conclusions

The energy transition is reshaping the economic, social, political and governance dynamics surrounding CRM mining and renewable energy development. Rapidly growing demand for CRMs and the expansion of renewable energy infrastructure are accelerating project development across a wider range of geographies, including regions characterised by fragile governance, contested land tenure systems and complex security environments. In many of these contexts, projects intersect with communities whose livelihoods, identities and cultural practices are closely tied to land and natural resources. At the same time, rising expectations around benefit-sharing, meaningful participation and fairness in resource governance are reshaping how communities engage with mining and energy projects. These pressures are further intensified by geopolitical competition over CRM supply chains and the framing of the energy transition as a global priority, which can create pressure to accelerate projects while compressing governance processes. These dynamics interact with historical grievances, new forms of digital mobilisation, and growing competition over land and mineral resources, creating conditions in which community tensions, protests, and / or operational disruptions may increasingly trigger the deployment of security actors and heighten the risk of security-related human rights incidents.

The VPs and the VPI remain highly relevant for addressing these evolving challenges. The framework and implementation tools help companies, governments and civil society actors anticipate and manage security-related human rights risks in complex operating environments. In particular, the VPs' emphasis on risk assessment, conflict analysis, stakeholder engagement and responsible management of public and private security offers practical pathways to help reduce these risks and support more responsible development of CRM mining and renewable energy projects.

However, important limitations and gaps remain. While the VPs and the broader VPI toolset provide a strong and flexible foundation, the changing conditions of the energy transition may require greater prioritisation, adaptation and more consistent application of existing guidance. In particular, the accelerated pace of CRM and renewable energy development can make it harder to sustain the longer-term approaches on which effective implementation depends, including meaningful stakeholder engagement, trust-building, grievance resolution and overall conflict prevention. These pressures can compress timelines, strain institutional capacity, and increase the likelihood that complex social tensions are met with reactive or securitised responses rather than preventive approaches embedded in dialogue.

To remain relevant and effective, the VPs and associated guides and tools therefore need to be applied more strategically and comprehensively in the context of the energy transition. This includes better capturing community grievances in risk assessments, strengthening local conflict analysis, early warning and conflict-sensitive approaches, integrating justice, legitimacy and benefit-sharing concerns into stakeholder engagement,

and addressing emerging dynamics such as renewable energy-related land pressures and ASM-LSM interactions. It also requires embedding the VPs more fully as a cross-functional management framework, strengthening practical implementation support, and communicating more clearly how the framework applies to renewable energy and how it supports progressive improvement over time. In this regard, the VPs and the VPI will provide a strong, clear and valuable direction which will stay relevant to the changing context, provided the VPI continues to refine its tools, guidance, outreach and implementation support in line with those evolving realities of the energy transition.

ANNEX I Case studies

The case studies below provide country-specific examples of how the changing dynamics of the energy transition are unfolding in real time and affecting CRM mining and renewable energy projects in Peru, Ghana and Mozambique. The case studies demonstrate how these changing conditions can escalate into security-related human rights risks and how the VPs and VPI can help manage risks where responsible security responses are still lacking.

Case study 1: The Antapaccay copper mine in Peru

Context of Peru's copper mining industry

Copper is a key CRM for battery and electric vehicle technologies. Peru is the world's third largest copper producer, producing an estimated 2.3 million tonnes in 2025. The Peruvian National Society of Mining, Petroleum and Energy (SNMPE) projects that copper production will grow by 4% in the next few years and between 2026 and 2028, USD 40 billion will be invested in new copper mining projects across the country. Successive governments have pursued an investor-oriented approach to the mining sector, combining relatively stable fiscal and regulatory frameworks with policy commitments to responsible and sustainable mining.[81] At the same time, copper mining has long been associated with complex social dynamics, including disputes over land, environmental impacts, benefit sharing, and the recognition of Indigenous rights. These dynamics have, in some cases, contributed to recurrent protests and operational disruptions, often involving the deployment of public and private security forces to protect mining infrastructure and maintain access routes.

Peru hosts multiple copper projects; the largest projects include:[82]

1. Cerro Verde in Arequipa Province, owned by Freeport-McMoRan and Sumitomo Metal Mining[83]
2. Antamina in Huari Province, owned by BHP, Glencore, Teck and Mitsubishi Corporation[84]
3. Toquepala in Jorge Basadre Province, owned by Southern Copper Corporation
4. Las Bambas in Cotabambas Province, owned by China MinMetals (MMG)[85]
5. Quellaveco in Mariscal Nieto Province, owned by Anglo American
6. Toromocho in Junin Province, owned by Chinalco[86]
7. Antapaccay in Espinar Province, owned by Glencore
8. Mina Justa in Nazca Province, owned by Marcobre
9. Costancia in Chumbivicas Province, owned by Hudbay Minerals

Peru provides a relevant context for examining how security-related human rights risks emerge and evolve in a mature mining jurisdiction experiencing sustained expansion linked to energy transition demand. The sector is characterised by active civil society engagement, a history of community mobilisation around mining projects, and established practices of collaboration between public and private security actors.

This makes it possible to explore how security arrangements interact with longstanding grievances, and how corporate approaches, including alignment with the Voluntary Principles, respond to those. This case study focuses especially on the Antapaccay coppermine, which was acquired by Glencore from Xstrata in 2013. It examines how Glencore has responded to community grievances and security-related incidents over time. Peru is not a member of the VPI, while Glencore participates as a company member, providing an opportunity to examine how the VPs are applied in a context without a national VPI multi-stakeholder platform.

Ongoing and exacerbating security-related human rights issues

Tensions between mining-affected communities and copper projects in Peru date back several decades, with recurrent disputes over environmental impacts, access to land and water, and perceived inequities in benefit distribution. One illustrative example is litigation brought in 2013 against Xstrata in English courts, relating to events in May 2012, when environmental activists protested alleged pollution linked to the Antapaccay mine. Protestors claimed that mining operations were contaminating local water sources with cadmium and arsenic and that community complaints were not being adequately addressed.[87] During these demonstrations, public and private security forces allegedly used excessive violence, resulting in several serious injuries and the killing of two protestors. Court proceedings and related disclosures indicated that Xstrata had entered into arrangements with the Peruvian National Police (PNP) involving payments reportedly totalling around GBP 700,000 for the services of 1,300 officers and the provision of weapons such as tear gas and rubber bullets. Internal communications cited in proceedings suggested encouragement of a “direct, proactive and strong approach” towards protestors. Evidence presented also indicated that company representatives covertly monitored community meetings and used informants to share information with police authorities.[88]

Such incidents form part of a broader pattern of social mobilisation around copper projects that has persisted, and in some cases intensified, alongside rising global demand for copper, expansion of production capacity, and the extension of mining operations into new areas. Protests and operational disruptions have been reported across several major sites, including Antapaccay, as well as Las Bambas and Constancia in March 2023,[89]protests at the Las Bambas mine in February 2023[90] as well as at Southern Copper in March 2022.[91]

Political instability has further shaped the risk environment. For example, following the removal of President Pedro Castillo in December 2022, nationwide protests resulted in 58 deaths and nearly 1,800 injuries.[92] These dynamics extended into mining regions, with demonstrations reaching the Antapaccay mine in January 2023, when protestors blocked a ‘mining corridor’, a highway used for the transportation of supplies and mineral concentrates.[93] Protestors reportedly also vandalised and looted worker areas and vehicles.[94]

Rising copper prices are also leading to a growing number of farmers moving into ASM in Peru's southern copper regions, increasing competition for mineral resources between LSM and ASM operations. Due to perceived inequities in access to resources, mining communities have in recent months organised protests and roadblocks affecting LSM operations. While roadblocks targeting large mines have occurred for many years, the latest wave is notable in that it is explicitly aimed at securing greater access to mineral resources for local miners. Major operations, including Antapaccay, have at times struggled to transport goods freely in the region. However, despite a high police presence at these protests, no notable violent incidents have been reported this year.[95]

Security arrangements and implementation of the VPs

Glencore's response to the demonstrations combined immediate operational measures with longer-term adjustments to its security approach. In the immediate aftermath, the company reported the incident to the police and requested additional security support, although this request was reportedly not fully met by law enforcement. As a precaution, most personnel were evacuated from the site, with only essential staff remaining to maintain critical functions.[96] Operations continued at reduced capacity, and mining activities were temporarily curtailed to limit risks to workers, contributing to an estimated 30% reduction in copper output.[97]

In the longer term, Glencore revised its security strategy and entered into a two-year agreement with the PNP to support the maintenance of public order and ensure a continuous security presence around the operation. As a member of the VPI and having integrated the VPs into its policies since 2020, the company reports that this agreement was developed with reference to the VPs. This included provisions linked to its Human Rights Policy, processes for assessing and managing human rights risks and impacts, and guidance on engagement with both private security providers and public security forces.[98] The Antapaccay operation also reports ongoing engagement with the VPI working group and the delivery of regular training for private security contractors on human rights standards, application of the VPs, and approaches to interacting with local communities.[99]

Implications for future CRM project development and the application of the VPs

Agreements between mining companies and the PNP have been the subject of sustained criticism from international organisations and civil society, who argue that such arrangements contribute to human rights risks.[100] These concerns carry broader implications for future CRM project development in Peru. Three interrelated issues are frequently highlighted: reliance on militarised security approaches rather than meaningful community engagement, unresolved community grievances, and perceived shortcomings in benefit sharing.

- Local stakeholders, including the Mayor of Espinar and representatives of the Espinar Committee for Resistance, argue that security responses centred on policing and control do little to address underlying concerns related to land acquisition, environmental impacts, exposure to heavy metals, and issues around FPIC.[101] Historical grievances linked to earlier or nearby operations, including those under Xstrata, also continue to shape perceptions of Glencore's presence. Where communities perceive that past harms and their demands for remediation remain unresolved, trust erodes and the company's SLO is weakened, in turn significantly affecting the company's bottom line, reputation, and stability of operations.
- In December 2025, Glencore announced plans to expand the Antapaccay mine to meet rising global copper demand.[102] This expansion, in a context of fragile community relations, may heighten pressures on community livelihoods and, subsequently, increase the likelihood of protests. This underscores the importance of sustained, meaningful engagement and a commitment to procedural justice approaches through existing dialogue mechanisms and the continued application of human rights-aligned security practices consistent with the VPs.[103]
- Perceptions of unequal distribution of mining benefits also remain a source of tension. The Framework Agreement for the Antapaccay/Tintaya operations, established in 2003 following protests, sets out expectations around annual financial contributions (approximately 3% of profits) to support development projects in Espinar, alongside commitments related to environmental management, local employment, procurement, training, and human rights. While intended as both a benefit-sharing and oversight mechanism, stakeholders report challenges in implementation, including limited enforcement, incomplete follow-through on certain provisions, and a continued emphasis on simple projects such as food and medicine distribution, soup kitchens and free internet, over communities preferred remediation of cash transfers.[104]

Where trust is already fragile, visible security deployments can be interpreted by communities as prioritising asset protection over legitimate grievance resolution. For future and expanding CRM projects, this case highlights the importance of grounding security arrangements in broader efforts to maintain a SLO, including conflict-sensitive engagement, credible grievance mechanisms, and collaborative approaches (incl. through regular, two-way communication opportunities) with communities to define how security is managed in practice in line with the VPs. The VPs and VPI guidance provide a framework and step-by-step tools to help companies, governments and communities navigate these complex issues at the project site and if deployed they can help reduce the likelihood of security-related human rights violations.

Case study 2: The Ewoyaa Lithium Project in Ghana

Context of Ghana's lithium mining industry

Lithium is a CRM in high demand for energy transition technologies, and the Ewoyaa Lithium Project in Ghana's Cape Coast region, developed by Australian exploration and development company Atlantic Lithium in Ghana, represents one of the most significant new lithium developments on the African continent. Atlantic Lithium was awarded the mining lease in October 2023.[105] However, the project remains pending full parliamentary ratification following the Ghanaian government's withdrawal of an earlier agreement amid public debate over fiscal terms and the distribution of benefits, and lawmakers are currently reviewing revised contractual arrangements.[106] The project is expected to produce approximately 3.6 million tonnes of lithium over an estimated 12-year mine life, positioning it as a major contributor to the country's efforts to develop a new 'strategic' minerals sector.[107] The Government of Ghana has identified lithium as a strategic mineral and views the sector as an opportunity to diversify beyond gold, promote domestic value addition, support downstream processing (including ceramics, glass, and battery-related industries), and increase state participation along the supply chain.[108] At the same time, Ghana's mining sector has a long history of tensions in the gold mining sector, including between communities, ASM and LSM operators.

This case study examines how security-related human rights risks emerge during the exploration and early development phases, that also risk future mine development, using Atlantic Lithium's Ewoyaa project as an example. Such issues may revolve around land acquisition, resettlement planning, community expectations, and the establishment of effective grievance mechanisms, as well as how narratives around resource access and sector governance may shape local perceptions and responses.

Ghana is a Full Member of the VPI and has prior experience applying the VPs, particularly in the context of gold extraction. However, Atlantic Lithium is not a VPI member, creating an opportunity to examine how security governance and human rights considerations are approached in a context where national familiarity with the VPs exists, but the project operator is not formally participating in the VPI. The case is therefore selected to explore how early-stage project development interacts with evolving security risks and how early community engagement and security approaches may be shaped in anticipation of future tensions.

Ongoing and exacerbating security-related human rights issues

At Ewoyaa, security-related human rights risks are emerging due to restricted land access, livelihood losses, and the management of community dissent as the project moves toward approval. A government MoU has reportedly restricted most farming and construction activities within the concession area for roughly two years, leaving several communities unable to use the lands. Compensation and resettlement arrangements remain pending, and some residents have described the situation as creating economic

pressure and heightened vulnerability.

Reports indicate that farms and cash crops were cleared prior to the conclusion of meaningful consultation and compensation processes. Affected community members have therefore raised questions about this process' alignment with Ghanaian legal requirements relating to consultation, consent, and protections under Article 20 of the 1992 Constitution. These developments have contributed to rising tensions between affected communities, local authorities, and company representatives. Community members have expressed growing frustration, including threats to resume farming activities, organisation of demonstrations, and seeking compensation for lost income and property damage.[109] Civil society organisations have also pointed to governance gaps in Ghana's emerging lithium sector and challenges in enforcing consent and equitable benefit-sharing provisions.[110]

> *'For over two years, Atlantic Lithium Mining Company has prevented us from continuing our development (…). We, the affected people, are suffering. We therefore have no option but to demonstrate against Atlantic Lithium Mining company in the coming days. If we are not compensated after this press conference and our impending demonstration, we will go back to the site and work.'*
>
> Affected resident in Mfantseman Municipality, near Ewoyaa. Press Conference, February 2026[111]

Community engagement by Atlantic Lithium has so far been widely described by as weak and insufficient. Interviews and focus group discussions with affected residents indicate that many people were not aware of prospecting activities until company personnel were already operating on their lands. While the company engaged with traditional authorities, information did not consistently reach all affected households. Discussions on compensation and resettlement are ongoing, but community members report delays, cases of non-payment or partial payment for crops, and difficulties in accessing formal channels to challenge compensation decisions. As a result, many households remain uncertain about when compensation will be finalised or how livelihoods will be restored.[112]

In this context where communities report prolonged restrictions on land use and have indicated intentions to demonstrate or resume access to restricted lands, these dynamics may heighten the potential for tensions to escalate. Should public and / or private security actors be engaged to manage access or respond to community actions, this could increase the risk of confrontations and associated human rights impacts if underlying grievances remain unresolved.[113]

Security arrangements and implementation of the VPs

As mining operations have not yet started at the Ewoyaa Mine, there is limited public information about the security arrangements currently in place. While some form of site security is likely present to safeguard equipment and manage access to the concession, there is no publicly available information describing how security is governed, including whether security personnel (public or private) are expected to operate in line with human rights standards.

A review of publicly available company disclosures indicates that Atlantic Lithium publishes some general environmental and social information, including references to engagement with traditional authorities and environmental initiatives such as reforestation. However, this lacks detail and there is no publicly available human rights policy, no dedicated community engagement policy, and no clear indication that company frameworks are aligned with the VPs, nor with the United Nations Guiding Principles on Business and Human Rights (UNGPs) or recognised responsible mining standards. Public materials also do not describe how the company assesses or manages security-related risks, how it oversees interactions between security personnel and communities, or how it prepares for potential grievances or disputes.[114] Atlantic Lithium did not respond to invitations to be interviewed, and it was therefore not possible to verify whether internal policies or procedures exist but are not publicly disclosed.

The absence of publicly articulated commitments or guidance from the project operator raises questions about how the VPs may be interpreted or applied in practice as the project progresses. Yet, given the early stages of development and Ghana's experience with the VPs, there will be opportunities to enhance meaningful stakeholder engagement, integrate MoU language into agreements with security actors, enhance and require security training and to ensure that processes follow transparent and accountability approaches touted by VPI tools. The VPI also offers many ways to engage through in-country working group and peer-to-peer sharing sessions which could be likely be extended to Atlantic Lithium and other stakeholders so that processes are put in place to increase stakeholder engagement and reduce risks for security-related human rights risks.

Implications for future CRM project development

The Ewoyaa case highlights the importance of carefully sequencing project development and ensuring that decisions early in the mine's life cycle do not inadvertently create grievances and weaken the SLO. In this case, communities are experiencing prolonged restrictions on land use following the allocation of the concession, limiting their ability to sustain livelihoods. This means negative perceptions of the company have already taken hold in the mine's host communities even before production has started, when livelihood impacts are likely to intensify. These dynamics illustrate how security risks can emerge well before production begins. Where communities perceive that land access is rapidly

curtailed without compensation or meaningful consultation, trust erodes and tensions accumulate, potentially shaping how future project activities, including any security deployment, are received.

Integrating responsible security practices, including context-specific risk assessments, clear protocols for engagement with communities, and proportionate responses to emerging tensions, across the entire mine life cycle will be critical to reduce the risk of escalation in this context of trust deficits. More broadly, this case suggests that for new CRM frontiers, particularly in jurisdictions developing first-of-their-kind projects, early attention to land access, benefit sharing, meaningful consultation, and responsible security governance can play a critical role in preventing the escalation of disputes and supporting more stable and fair project development trajectories.

Case study 3: The Mphanda Nkuwa Hydropower project in Mozambique

Context of the Mphanda Nkuwa Hydropower Project

The Mphanda Nkuwa Hydropower Project is a proposed hydroelectric project located on the Zambezi River in the Tete Province in northern Mozambique and around 60km downstream from the Cahora Bassa dam.[115] The project was first commissioned in 2010, and the concession was to be operated and developed by the Mphanda Nkuwa Hydroelectric Facility (HMNK) – a consortium of Carmago Correa (Brazil), Insitec (Mozambique) and Electricidade de Moçambique (EDM), Mozambique's state-owned electricity company. Construction was scheduled to begin in 2011 with expected completion in 2015. However, several issues meant significant delays occurred, including a lack of investment and obstacles to securing a power-purchase agreement with South Africa (i.e., a binding long-term electricity off-take agreement to guarantee project revenues).[116]

As a result, in August 2018, the Mozambican government revoked the concession from Camargo Correa and Insitec and employed Hidroeléctrica de Cahora Bassa (HCB), the operators of the Cahora Bassa Hydropower Plant, to develop the project instead.[117] Following this, the Mozambican government established the Mphanda Nkuwa Hydroelectric Project Implementation Office (GMNK) to oversee project development in February 2019.[118] Between 2019 and 2022, the project remained stagnant until the African Development Bank and World Bank in 2022 and 2023, respectively, signed agreements to provide financing and technical assistance towards the development of the project.[119] Today, the Mphanda Nkuwa Hydroelectric Project is being developed by a government-appointed consortium consisting of Électricité de France (EDF), TotalEnergies (France) and Sumitomo Corporation (Japan), who will be working alongside Mozambican state entities EDM, HCB and GMNK.[120] EDM and HCB own 30% of the project, whilst the consortium owns the remaining 70%.[121]

The Mphanda Nkuwa Hydropower Project is estimated to cost a total of USD 6.4 billion including USD 5 billion for the construction of the dam and power plant and USD 1.4 for

the power transmission lines.[122] The project is scheduled for completion by 2031 and includes a dam, power station with four turbine-generator units and a 1,300 km-long, high-voltage transmission line from Tete Province to Maputo.[123] Once operational, the plant will generate 8,600 Gigawatt-hour (GWh) of electricity per year, increasing Mozambique's electricity production capacity by more than 50%. The Mphanda Nkuwa Hydropower Project is seen as key for Mozambique's long-term energy strategy to increase electricity generation, diversify energy sources and decarbonise energy. The plant also aims to export surplus energy to other Southern African countries through power trading agreements coordinated by the Southern African Power Pool (SAPP) which includes member countries of Angola, Botswana, Democratic Republic of Congo (DRC), Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe.[124] However, there is no public information about whether the power-purchase agreement between the SAPP and GMNK has been signed.

Mozambique is a VPI Engaged Member. The Mphanda Nkuwa Hydropower Project has been selected as a case study due to its scale, its potential prominence within regional energy planning, and the involvement of both Mozambican state entities and international consortium partners, including TotalEnergies, a VPI member. Unlike smaller renewable energy projects, large hydropower developments of this scale typically require extensive land acquisition, physical and economic resettlement, potentially displacing at least 1,400 households and causing long-term changes to river flow patterns. In the Zambezi basin, where communities depend on floodplain agriculture, fishing, grazing land, and seasonal river access, changes in water regulation are likely to affect both directly displaced households as well as other downstream users.[125] Furthermore, the project's downstream location below the Cahora Bassa Dam may intensify cumulative livelihood impacts, shaping community perceptions and contestation, and potentially affecting around 350,000 downstream residents.[126] In such contexts, land access, compensation, benefit-sharing, and the management of protest or resistance during construction become central to understanding how security-related human rights risks may emerge as development progresses.

Ongoing and exacerbating security-related human rights issues

Reports of community grievances concerning the Mphanda Nkuwa Hydropower Project highlight issues of land dispossession, livelihood disruption, exclusion from decision-making, and intimidation from public security forces and local authorities. Reports state that the consortium agreement was signed between EDF, TotalEnergies and Sumitomo Corporation, and the project advanced without consultation meetings with affected communities. These communities report significant information gaps on project impacts, resettlement plans and timelines, especially given the long gap between the project's initial proposal in 2011 and its renewed funding and development in 2023.[127] Civil society and local communities have raised concerns regarding the project's environmental and human rights risks.

These environmental concerns include altered river flows that may disrupt ecosystems in the Zambezi Delta, destruction to irrigation systems downstream, greater drought frequency and more extreme flooding.[128] Human rights concerns centre on potential displacement linked to transmission line construction, land dispossession affecting Indigenous and tribal communities, a lack of FPIC, and livelihood losses. When these concerns were raised with the GMNK, or when communities requested updated project information, the Implementation Office reportedly failed to respond.[129] These concerns are further compounded by the fact that the last environmental and social impact assessment was conducted in 2011 and therefore does not consider the cumulative environmental effects of both the Cahora Bassa Dam and the proposed Mphanda Nkuwa Hydropower Project.[130]

Flooding and altered river flows caused by the hydropower project are expected to lead to the displacement of around 1,400 families due to livelihood loss. This includes disruptions to fishing, farming and livestock rearing, loss of cultural heritage sites and increased risks of food insecurity for around 350,000 people living in the Zambezi Delta.[131] Additionally, many residents express doubts that they will benefit from the construction of the dam, anticipating exclusion from local electrification initiatives or other meaningful development benefits. Reports from activists and community members indicate that raising grievances, organising protests, or conducting information sessions about the hydropower project often results in intimidation, either through the use of police presence, direct threats from local authorities, or detention of community leaders.

Security arrangements and implementation of the VPs

Protests against the Mphanda Nkuwa Hydropower Project have been mostly handled by public security forces. Protestors and local activists allegedly faced intimidation and threats from local authorities and district police, including detaining community leaders, denying access to legal counsel, blocking and controlling local civil society meetings and limiting movement.[132] As the project has not begun construction or commercial production, it is difficult to outline and analyse the security arrangements of TotalEnergies, EDF or Sumitomo Corporation in these cases.

Each company does make available general environmental and social information as well as some policies and frameworks around community engagement, use of security forces and human rights.

- **TotalEnergies:** TotalEnergies is a VPI member and has been since 2012. They publish an annual report outlining achievements, good practices, challenges faced and lessons learnt whilst implementing the VPs.[133] Though the VP 2024 Report makes no mention of the Mphanda Nkuwa Hydropower Project, there is a dedicated country reflection on TotalEnergies' other operation, Mozambique LNG, at its Afungi site. The report outlines a Security MoU (signed in 2019 and disbanded in 2023) between TotalEnergies and the Mozambican Ministry of National Defence (MDN) and

Ministry of the Interior (MINT) to ensure that the Joint Task Force (JTF) was well equipped, sensitised and trained in line with the VPs. The MoU also outlined VP training to be given to officers and security guards, incident reporting of human rights impacts, investigation of incidents, and promotion of the VPs.[134] Other mechanisms outlined by TotalEnergies include:

  - Human Rights Impact Assessments (HRIA) on community security and interactions with public security providers, TotalEnergies' resettlement programme, workers' rights and access to remedy. The findings from the HRIA were developed into an action plan and integrated into the companies Human Rights Policy.[135]
  - Community engagement mechanisms that share information about the roles and responsibilities of security personnel to local communities and stakeholders, as well as act as forums for local communities to address grievances and include them in decision-making processes. TotalEnergies reports there is a team of 6 commanders responsible for overseeing community relations within the JTF, involving engagement of community leaders and procurement of local products and services to ensure benefit sharing.[136]
  - Grievance mechanisms that allow local communities to raise concerns about JTF activities and investigations to be conducted by authorities about the claims submitted.
  - Regular updates to security protocols based on stakeholder feedback, incidents reported and best practices.[137] Additionally, an MoU signed between Mozambique LNG and the Ministry of Justice was used to ensure communities had access to justice and remedy.
  - Though the Security MoU has now expired, the mechanisms used by TotalEnergies demonstrates how the VPs can be implemented and adapted across different contexts. However, there is limited publicly available analysis on how effective previous approaches to responsible security arrangements and community engagement have been, or how these lessons have informed current and future implementation.

- **EDF:** EDF has an overall human rights commitment which, it states, is aligned with the UN International Bill of Human Rights, UNGPs, and OECD Guiding Principles for Multinational Enterprises on Responsible Business Conduct. It is a signatory of the UN Global Compact. From public sources, there is little information about how EDF assesses its policy on human rights, how it remains compliant with its aligned principles and how the company engages with security forces.[138]
- **Sumitomo Corporation:** The Sumitomo Corporations website indicates that the company has an overall Human Rights policy. It outlines statements on stakeholder engagement, implementation of human rights and the use of security forces. This policy is aligned and guided by the UN International Bill of Human Rights, the UNGPs, and the VP. The company is a signatory of UN Global Compact. However, there is no annual report or detail given that explains what procedures have been implemented to remain compliant with the principles, how the company manages

security arrangements or what mechanisms are used to resolve grievances or disputes.[139]

In response to ongoing tensions at the Mphanda Nkuwa Hydropower Project, the consortium (HCB, EDF and TotalEnergies) stated in 2026 that "[it] is not involved in, does not condone, and does not benefit from acts of violence or repression. [It] has no mandate over law enforcement activities and does not interfere with the actions of public authorities." They announced that they will conduct a HRIA and remain open to engage with relevant stakeholders.[140]

Implications for future renewable energy project development

The Mphanda Nkuwa Hydropower Project case study highlights the need for continuous and meaningful engagement with affected host communities, particularly when the development phase occurs long after the project's initial inception. The risks first presented to local communities in 2011, no longer reflect the current realities, especially given new factors such as the construction and operation of the Cahora Bassa Dam. Although this project is promoted as a 'clean energy project' promising mutual benefits for local and broader communities, the absence of consistent engagement with stakeholders and reports of intimidation by public security forces and local authorities have further eroded community trust and heightened tensions. This impacts the project's SLO, even before construction or operations have begun and could influence attitudes about future project activities and how security arrangements are perceived.[141] Therefore, implementing the VPs within security practices and community engagement could help prevent the deepening of existing grievances and foster an environment of trust and transparency. Given Mozambique's VPI Engaged Member status and its participation in in-country working groups, the VPI tools are well placed, if comprehensively, implemented to guide meaningful stakeholder engagements and to help ensure processes are, and are perceived as accountable, transparent and legitimate by community stakeholders.

References

1. Business and Human Rights Centre (2025a). Boom in energy transition minerals fuels human rights abuses, provokes conflict and threatens fast transition to clean energy, new analysis shows Gayle, D. (2025). Rise in legal action against renewables companies over minerals. The Guardian. Swedwatch (2025). Renewables and Reprisals: Defenders at risk in the green energy transition in Brazil, Honduras, Mozambique, and the Philippines. Business and Human Rights Centre (2025b). Renewable energy and human rights benchmark 2025. Droubi, S., Carvalho, E., Elizondo, C. J. F., & Osório, L. M. (2025). Human Rights in the Life Cycle of Renewable Energy and Critical Minerals
2. Droubi et al., 2025; Business and Human Rights Centre, 2025b
3. Voluntary Principles (2026a). The Voluntary Principles on Security and Human Rights
4. Voluntary Principles (2026b). Resource Library
5. Stakeholder interview with a membership organisation.
6. Voluntary Principles (2026c). Membership
7. Stakeholder interview with a membership organisation.
8. DCAF, FFP (2020). From Commitment to Impact: Experiences from Local Working Groups on Business, Security and Human Rights
9. Stakeholder interviews with NGOs, standards bodies and government representatives
10. International Institute for Sustainable Development (2018). Green Conflict Minerals: The fuels of conflict in the transition to a low-carbon economy
11. IISD, 2018
12. Stakeholder interview with standards body
13. Stakeholder interviews with NGOs, standards bodies, and government representatives.
14. Stakeholder interview with NGOs and government representatives.
15. Stakeholder interviews with NGOs, standards bodies, and government representatives.
16. Swedwatch, 2025
17. Stakeholder interview with NGOs
18. Hunter, M. and Ofosu-Peasah, G. (2022) Organised crime threatens green minerals. Global Initiative Against Transnational Organised Crime Meehan, P. and Seng Lawn, D. (2024) Rare Earth Mining in Myanmar: A Primer. University of Warwick and Kachinland Research Centre
19. Canpolat, E., Lokanc, M., Bakx, J., Baker, S. and Kaplan, K. (202). Fostering a Just Transition in the Energy Transition Minerals Sector in the Eastern and Southern African Region. World Bank.
20. Stakeholder interviews with government representatives
21. Stakeholder interviews with private sector actors
22. Stakeholder interviews with government representatives
23. Alibert, C., Bailey, C., Chauque, M., Kreder, C., Mendes, E. and Patreque, L. (2025) “Without Our Land and River, We Will Starve”: Uncovering Green Colonialism in EDF, Sumitomo and TotalEnergies Hydroelectric Dam Project in Mozambique
24. Stakeholder interviews with NGO and Government Representatives; Ateyo, P. (2022). Fuelling conflict? The impact of the green energy transition on peace and security. International Alert
25. Stakeholder interviews with standards bodies, NGOs, and government representatives.
26. Stakeholder interview with NGOs.
27. Stakeholder interviews with government representatives.
28. Stakeholder interview with NGOs and private sector actors
29. Stakeholder interviews with NGOs
30. United Nations (2018). Article 32. United Nations Declaration on the Rights of Indigenous Peoples
31. Stakeholder interview with standard bodies
32. Avan, C. (2023). Renewable Energy & Human Rights Benchmark: Key findings from the wind & solar sectors. Business & Human Rights Resource Centre
33. Swedwatch, 2025
34. Stakeholder interview with NGO
35. Ibid.

36. Stakeholder interviews with government representatives
37. DCAF Methodology
38. Voluntary Principles (2023) Voluntary Principles on Security and Human Rights
39. Voluntary Principles, 2026c
40. Stakeholder interviews with government and standards bodies.
41. Voluntary Principles, 2026b
42. Voluntary Principles (2021) Voluntary Principles on Security and Human Rights: Implementation Guidance Tools (IGT)
43. Voluntary Principles, 2021
44. Voluntary Principles, 2021, p. 32
45. Stakeholder interviews with NGOs and standards bodies
46. Ibid.
47. DCAF, ICRC, Queen's University, AngloGold Ashanti (2022) Conflict Prevention Tool
48. Stakeholder interviews with the private sector, NGOs and government representatives
49. Stakeholder interviews with NGOs and standards bodies
50. United Nations (2011) Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. United Nations Human Rights. UNDP (2022) Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts: A Guide
51. DCAF, ICRC, and GCBHR (2022) Addressing Security and Human Rights Challenges in Complex Environments: A Practical Toolkit
52. International Alert (2026) Conflict Hub
53. Voluntary Principles, 2021; Stakeholder interviews with NGOs
54. Stakeholder interviews with NGOs
55. Voluntary Principles (2022) 10 Steps to Maintain Security and Compliance in Human Rights
56. Initiative for Responsible Mining Assurance (2018) IRMA Standard for Responsible Mining
57. IFC (2012) Community Health, Safety and Security
58. DCAF, ICRC, and GCBHR, 2022
59. Stakeholder interviews with NGOs and standards bodies.
60. Ibid.
61. Ibid.
62. Ibid.
63. Mohammed, A. S., Issaka Kanton, O., & Adamba, C. (2023) Incidences of human rights violations and practice of the voluntary principles on security and human rights in selected mining communities in Ghana. Journal of Planning and Land Management, 2(2), 50–61
64. Mohammed, Issaka Kanton and Adamba, 2023
65. Stakeholder interviews with NGOs and standards bodies
66. Voluntary Principles, 2021, p.30
67. Stakeholder interviews with a membership organisation
68. Stakeholder interview with private security provider
69. Stakeholder interviews with private security provider and standards bodies
70. Stakeholder interviews with NGOs, standards bodies and government representatives
71. Ibid.
72. Stakeholder interviews with standards bodies and NGOs
73. Ibid.
74. Stakeholder interviews with standards bodies
75. Ibid.
76. VPI (2024) Appendix 3.1 – Framework for the Admission of New Companies: The Voluntary Principles Initiative and the Voluntary Principles Association Framework for Admission of New Companies
77. Stakeholder interviews with NGOs, standards bodies, membership organisations and government representatives
78. Stakeholder interviews with private security provider
79. Stakeholder interview with government representatives
80. Stakeholder interviews with government representatives

81. Garcia, M. (2025) Peru's Mining & Metals Investment Guide 2025/2026. EY
82. GBR (2025) Mining Production in Peru: Copper and More
83. Mining Data Online (2026) Cerro Verde Complex
84. Teck (2026) Antamina
85. MMG (2026) Las Bambas
86. Jabiel, S. (2025) The final days of a Peruvian village displaced by a giant copper mine. Dialogue Earth
87. Bowcott, O. (2017). UK mining firm in court over claims it mistreated environmental activists. The Guardian; Blackstone Chambers (2018) Vilca & Ors v Xstrata Limited and Compania Minera Antapaccay SA
88. Bowcott, 2017
89. Reuters (2023). Peruvian communities to resume blockade of crucial 'mining corridor
90. Business and Human Rights Centre (2023) Peru: MMG's Las Bambas halts mining over safety concerns due to unrest at nearby mining site owned by Glencore
91. Business and Human Rights Centre (2022). Peru: Communities protesting against Southern Copper's mine expansion project denounce alleged violent eviction and illegal retention by the company.
92. Jamasmie, C. (2023) Glencore reopens Peru copper mine with extra security. Canadian Mining Journal.
93. Reuters (2023b) Glencore copper mine in Peru suspends operations after another fire breaks out
94. Reuters, 2023b
95. Kontagora, A. (2025) Peru's informal mining sector protests block copper shipment. Global Situational Awareness.
96. Ruiz Leotard, V. (2023) Glencore evacuates personnel after protestors vandalise Antapaccay mine camp. Mining.com
97. Ruiz Leotard, V., 2023
98. Glencore (2025a) Voluntary Principles on Security and Human Rights Report 2024
99. Glencore, 2025
100. Terra Justa (2020) A Giant in Espinar – Glencore and the patterns of corporate power in the South of Peru.
101. Terra Justa, 2020
102. Glencore (2025b) Glencore Strengthens Presence in Peru with Acquisition of the Quecha Project adjacent to its Antapaccay operation
103. Glencore, 2025
104. Terra Justa, 2020
105. Bentham, J. (2023) Ghana awards historic first mining lease for lithium. Global Mining Review
106. Sperber, A. (2026) West Africa's first lithium mine awaits go-ahead as Ghana seeks better deal. Climate Home News
107 Sperber, 2026
108. Zadeh, J. (2025) Ghana's First Lithium Mine: Atlantic Lithium Ewoyaa Project 2025. Discovery Alert
109. Addo, A. (2026) Ewoyaa Lithium Project: Residents threaten "demo" over delayed compensations. Citi Newsroom.
110. Arhin, G. E. (2025) Protecting Community Rights in Ghana's Lithium Sector. Climate Compatible Growth
111. Joy News (2026) Ewoyaa Lithium delay: Affected residents demand compensation from Atlantic Lithium
112. Arhin, 2025 Protecting Community Rights in Ghana's Lithium Sector
113. Sperber, 2026
114. Atlantic Lithium (n.d.) ESG
115. NS Energy (2019) Mphanda Nkuwa Hydropower Project
116. NS Energy, 2019
117. Ibid.
118. Ibid.
119. Club of Mozambique (2025) Mozambique: AfDB delegation visits Mphanda Nkuwa hydro project; International Finance Corporation (2022) IFC and Mphanda Nkuwaa Implementation Office Sign Agreement to Support the Development of a 1,500 MW Hydropower Project in Mozambique

120. Ingram, E. (2023) Consortium selected to develop 1.5 GW Mphanda Nkuwa hydropower project in Mozambique. Factor This
121. Ingram, 2023
122. Alibert et. al., 2025
123. Ingram, 2023
124. NS Energy, 2019; Green Building Africa (2025) World Bank backs Mozambique's 1500MW Mphanda Nkuwa hydro power project
125. Business and Human Rights Centre (2026a) Mozambique: The Mphanda Nkuwa dam project allegedly poses severe human rights risks; incl. company responses
126. Business and Human Rights Centre, 2026a
127. Hever, A. (2025) Development at What Cost? The Mphanda Nkuwa Dam and the Fight for Human Rights in Mozambique. Human Rights Research Centre
128. Hever, 2025
129. Ibid.
130. Ibid.
131. Business and Human Rights Centre, 2026a
132. Hever, 2025
133. TotalEnergies (2026) VPSHR
134. TotalEnergies (2025) VPSHR 2024 Report
135 Ibid.
136. Ibid.
137. Ibid.
138. EDF (2026) EDF group's human rights commitments
139. Sumitomo Corporation (2024) Respect for Human Rights
140. Business and Human Rights (2026b) EDF's response (part of The Consortium)
141. Hever, 2025

Key tools

- **Addressing Security and Human Rights Challenges in Complex Environments A Practical Toolkit**
  - The Toolkit is a practical handbook that brings together all relevant resources and good practices related to human rights compliant security practices, as well as tools and case studies that help translate the good practices to a particular operational context.

- **Conflict Prevention Tool**
  - The CPT is an innovative framework for conflict management and resolution in relation to business operations. The overarching goal is to equip companies to proactively identify, analyze, and mitigate conflict-related risks.

- **From Commitment to Impact: A Guide for Local Working Groups on Business, Security and Human Rights**
  - The guide aims to encourage and support the development of effective In-Country Working Groups (ICWGs) that foster responsible business conduct. It provides good practices and insights to support the development and successful implementation of local ICWGs that support implementation of the Voluntary Principles on Security and Human Rights (VPSHR).

- **From Commitment to Impact: Experiences from Local Working Groups on Business, Security and Human Rights**
  - The study provides guidance to existing groups, to encourage effective implementation of new In-Country processes, and more broadly to establish a rubric for how security and human rights multi-stakeholder processes can be implemented at the national and sub-national level worldwide.

- **Promoting Coherence between the OECD Guidance and the Voluntary Principles on Security and Human Rights**
  - The study explores the relationship between the VPs and the OECD Guidance in terms of both policy and practice, and offers recommendations for seeking greater coherence among the two initiatives to strengthen their implementation.

- **Security and Human Rights Knowledge Hub**
  - The Knowledge Hub is an interactive platform designed to compile practical guidance and tools for governments, civil society, and companies on business, security, and human rights.

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