





# **Executive Summary**

Transitioning to a low-carbon economy is critical to the sustainability of the planet. A recent World Bank report found that increasing demand for clean energy technologies could increase demand for minerals such as graphite, lithium, and cobalt by nearly 500 percent by 2050. Even though we expect recycling rates to go up in the future, mining will still be required to supply critical minerals: the shift to a low-carbon future will be mineral-intensive, and mining will remain a critical industry.

It is in this context that the World Bank Group established the Climate-Smart Mining Initiative (CSM), which is sustained by a partnership between industry and country governments. The initiative supports the sustainable extraction, processing, and recycling of the minerals and metals that are needed for low-carbon technologies. The concept is built upon four pillars: i) Climate Mitigation ii) Climate Adaptation iii) Reducing Material Impacts and iv) Creating Market Opportunities.

#### Pillars of the Climate-Smart Mining Initiative

The highlighted boxes indicate topics where gender-responsiveness is further explored.

World Bank, IFC support to decarbonize and reduce material footprint of mining sector	Climate mitigation	Climate adaptation	Reducing material impacts	Creating marketing opportunities
	Integration of renewable energy in the mining sector	Forest-Smart Mining with Iandscape management	Adoption of a circular economy for low-carbon minerals	De-risking investments for low-carbon minerals
	Innovation in extractive practices	Resource efficiency in mineral value chain	Reuse/ recycling of low-carbon minerals	Leverage carbon finance instruments
	Energy efficiency in mineral value chain	Innovation waste solutions	Low-carbon mineral supply chain management	Robust geological data management
	Gender and multi-stakeholder engagement			



In order for mining to shift toward being climatesmart and equitable, it is important to consider gender-responsiveness and to reduce gaps every step of the way. Gender diversity in the workforce, on boards, in supply chains, and in engagement with communities not only minimizes risk, but also makes companies more productive, innovative, and competitive. Furthermore, since women tend to be disproportionately affected by the negative impacts of mining and climate change, their needs must be considered.

The literature shows that female employees often are more likely to follow safety protocols, treat equipment responsibly, and operate safely. As a result, women are increasingly in demand in mining operations as truck drivers and machine operators, because their behavior yields better safety outcomes, reduced equipment maintenance and repair, and a more safetyconscious operating environment.

PricewaterhouseCoopers (PwC) and Women in Mining found a positive correlation between the number of women on boards in the top 500 mining companies in the world, and financial performance indicators such as dividend yield and earnings per share, as well as increased transparency and disclosure of Environmental, Social and Governance (ESG) matters.

Improving women's participation in the community engagement of climate-smart mining projects is critical to their continued success. Gender-responsive community assessments, consultations, and benefit sharing can make the project more efficient, build a stronger social license to operate, prevent delays, and save both time and money.

Therefore, the active engagement of women and women's organizations at the local, national, regional, and global levels is essential in order to achieve a gender-equitable transition to clean energy.

### 1. Climate Change Mitigation: Gender-Responsiveness in the Integration of Renewables into Mining

As mining companies shift to more renewable energy sources, women can be particularly valuable in leadership roles; the research shows that they tend to be more receptive to issues related to local and global sustainability than men.

Women currently hold 32 percent of the jobs in the renewables sector, and as the number of jobs in this sector is expected to increase from 10.3 million in 2017 to nearly 29 million in 2050, it presents diverse career opportunities that require different skill sets and talents along the value chain.

Actively engaging women in the sale, repair and maintenance of off-grid renewable energy solutions such as solar lighting, heating can be profitable to renewable energy companies running these programs and to mining companies who wish to support energy solutions through community investments. But it will require a focus on training and skills development for women, awareness raising, helping them gain access to finance, and tapping into existing social networks such as savings and loans associations.

#### 2. Climate Adaptation: Forest-Smart Mining and Women

Women are typically the main users and household providers of nontimber forest products. The role of women in community forest management is increasingly recognized, as is the importance of including them in strategies for Reducing Emissions from Deforestation and Forest Degradation (REDD+) to minimize adverse impacts and maximize opportunities for women.

#### 3. Reducing Material Impacts: The Case for Gender-Responsiveness in the Circular **Economy and in Recycling**

Engaging women in the circular economy and in recycling is critical. Women are the key decision makers when it comes to 70-80 percent of household purchases; thus, they can become key drivers of environmentally sustainable behaviors and consumption patterns.

In many countries, women do much of the work of informal waste handling. However, their presence is sparse in the ownership and senior management roles of recycling companies and landfill operations, where profit margins and income-earning capacity are the highest: this is a situation that begs for intervention.

#### 4. Creating Market Opportunities: Gender Considerations in the De-Risking of Investments

More and more, mining companies are being assessed for their social and environmental impacts on both the local and global levels, by increasingly discerning investors, consumers, governments, and communities. As gender inclusivity has been gaining more traction in the mining sector in recent years, companies have begun to see gender equality issues as being relevant to risk mitigation strategies, as well as a business opportunity. Not only does proactively hiring, procuring, and engaging local women ensure that benefits will be shared with the community; it also facilitates community trust and provides a strong social license to operate. Companies realize that a social license without women's approval is not a true social license.

The Business Case for Gender-Responsive Climate-Smart Mining seeks to create a more equitable and climate-smart mining sector, through awareness of the business case, collaboration and partnerships. You can read the full report here.

Non-timber forest products include fruits, nuts, game, fish, resins, a range of barks and fibers such as bamboo

## Recommendations

Governments, companies, and civil society organizations should work individually as well as in partnership to ensure that women are part of the equation to design and implement climatesmart mining practices. The "top actions" that stakeholders can take to ensure that climate-smart mining practices are gender-responsive and are designed in partnership with women and women's organizations are summarized below. These actions often reach across the CSM pillars, and many of them are applicable to multiple actors, as shown below.

#### **Government, Companies, Civil Society:**

- Ensure that strategies and plans for climate mitigation and adaptation, climate-smart agriculture, forest governance, and disaster preparedness are designed in consultation with women's community organizations, and that they integrate gender responsiveness and gender-specific commitments.
- Meaningfully engage women from the beginning in participatory planning processes and consultations, especially those concerning land-use planning, in order to not perpetuate existing gender inequalities (especially when it comes to major changes such as land acquisition, resettlement, and compensation).
- In climate adaptation and resilience policies and practices, consider the risks and impacts to surrounding communities, ecosystems, and supply chains.
- 4. Make gender-equality commitments in forest planning and governance, and promote private sector investment in women-owned and operated forest-based enterprises.
- 5. Encourage women's leadership by supporting women's groups and ensuring that women have equal access to leadership training programs.
- 6. Strengthen family incomes by supporting an enabling environment for women who are interested in entrepreneurship—for example by providing opportunities for training and income generation, supporting women in developing their skills to access markets for their products, and creating community-based banks for the benefit of women.

#### **Government:**

- 7. Include gender-equality measures in line with existing international norms and best practices within legislation and regulations for mining, labor, climate change, and the environment, and include them in environmental and social impact assessment requirements.
- 8. Include actions and strategies that demonstrate a strong commitment to gender responsiveness in national climate policies and programs, for example, in the nationally determined contributions (NDCs) under the Paris Agreement, and REDD+ activities under the United Nations Framework Convention on Climate Change (UNFCCC).

#### **Companies:**

- 9. Consider mechanisms to reduce risks and improve the climate resilience of host communities as part of social investment strategies, and facilitate partnerships between communities, women's organizations, and companies around this issue.
- 10. Unlock opportunities for women's continued participation in the workforce and in leadership roles in the mining and renewables (such as wind and solar energy) sectors through gender-responsive company policies; tailored training skills and development; and providing women with access to outside training and university programs, childcare, and flexible work options.
- 11. Create opportunities to equitably improve family incomes, train and employ women, and facilitate and promote the inclusion of women-owned and operated businesses within the company supply chain, and in company initiatives on sustainability and the circular economy.

The complete list of detailed actions categorized into pillars and actors can be consulted here.

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