

# **CHALLENGES AND OPPORTUNITIES FACING THE MINERALS SECTOR IN ITS CONTRIBUTION TO THE TRANSITION TO SUSTAINABLE DEVELOPMENT**

## **(DRAFT)**

Informed by ten months of dialogue and research, the Mining Minerals and Sustainable Development project (MMSD) at the International Institute for Environment and Development has identified the following eight questions facing the mining and minerals sector worldwide. MMSD proposes that the dilemmas beneath these questions be debated and strategically outlined so they can be turned into keys for action leading to change. Even though these are not the only problems affecting the sector, MMSD hopes that this set of questions cuts across most of the key challenges. These dilemmas are where MMSD will focus its efforts in the coming months and from where its key outcomes will emerge.

### **1. Can the Industry Assure its Own Long-Run Sustainability?**

Mining and metals companies worldwide are facing a set of serious financial challenges while at the same time they are required to take on board a broad range of new problems and issues. Access to capital is becoming more difficult for much of the industry. How can the industry succeed in these conditions?

To what extent are all these forces creating a new industry structure and what will that look like? To what extent does this broader agenda imply higher costs. If there are higher costs, where is the money to come from to pay them in a highly competitive market?

### **2. To What Extent Can the Industry Drive Development of National Economies?**

Developing countries are competing for mineral investment by liberalising mining codes and conditions of investment. If taxes are lowered, free investment without a mandatory government share of the enterprise becomes the rule, and royalties are decreased, how can the industry be a strong contributor to economic development at the national level?

How effective have governments been in employing their share of mineral revenues, however derived, for development? Is the “resource curse” experience avoidable with appropriate public policies? Are there capacity issues? What role, if any, does corruption play?

If the industry is to promote development by stimulating additional private investment – through upstream linkages, downstream linkages, or by creating social infrastructure – how effective has it been in doing this. Can its contribution be more effective? If so, through what kinds of policies?

Is the ability to succeed at the national level constrained by problems of North-South equity and terms of trade? How can smaller companies and artisanal miners contribute in this framework?

### **3. How Can the Industry Best Contribute to Broad Economic and Social Development at the Community Level?**

Even if the minerals sector is assumed helpful to national economies, it does not necessarily imply that it is an effective motor of social and economic development at the local level. Indeed, large mining operations are consistently reducing the amount of direct employment per unit of production, and there is evidence that indirect employment and purchases from local economies are also falling. Some companies have also been accused of complicity in human rights abuses in their host countries.

Given these trends, how can mineral development promote effective and long-term sustainable economic development at the local or community level? How can it ensure benefits are shared and distributed equitably in the local community, and do so without marginalising local government? Where do the boundaries of responsibility lie for social development between the companies and government? How can companies ensure that they are respecting the protection of human rights in their operations? How can small scale mining's contribution to sustainable livelihoods be maximised?

### **4. How Can the Industry Improve its Environmental Record?**

Mining moves more physical material than any other human activity. There is a considerable degree of environmental risk associated with most mining and impacts are spread over large areas. Some of the negative impacts on the landscape and the human environment, such as acid generation, can effectively be permanent. While some segments of the minerals industries, governments, and others are much more conscious of these issues, effective sector-wide management of these problems is hardly universal and there is still no consensus on what the ultimate targets need to be. In addition, there is no clear direction on what to do about legacy issues – contamination from past operations – which continue to affect both the environment and attitudes toward the industry.

What are the options for dealing with wastes produced during a mine's operation? What is the state of environmental planning and design for closure and rehabilitation, and what are the technologies/practices available? Who takes responsibility for abandoned sites? What is the pollution intensity of refining and processing methods and what mechanisms are being developed for improvement? What progress has been made in improving health and safety conditions for workers and nearby communities? To what extent are environmental standards negotiable?

## **5. What are the Ground Rules for Land: its Management, Access, Control and Use?**

World population is growing and demand for many minerals is growing faster than the population. This increases both the need to find a place to produce minerals and the demand for land for other uses, including conservation of biological diversity. Political liberalisation, the new global information regime, and more open societies have placed a premium on consensus choices regarding the use of land, rather than imposed solutions. Uncertainty over the ability to access land for mineral development imposes serious risks on industry. Many other actors, including local communities and indigenous peoples, also have vital interests in how land is used and who makes the decisions. In many cases, legal regimes are unclear, contradictory, and poorly administered.

Who decides where mining is permitted? On what basis are these decisions taken? How are those who must make way compensated and resettled? How can competing needs and rights be balanced in land use decisions?

## **6. How Can We Ensure that Future Markets and Consumption Patterns are Compatible with a Sustainable World?**

Current patterns of metals consumption face a growing number of sustainability challenges. These include efforts to improve the efficiency of metals use (the eco-efficiency agenda), to reduce hazards to people and the environment (the risk reduction agenda) and to close the materials loop (the waste minimisation and re-use agenda). All of these challenges are deeply intertwined, and have multiple social and economic implications in terms of industrial development, employment and community well being. Furthermore, there is a strong global dimension to these issues – not only in terms of multilateral initiatives (such as the Basel Convention), but also in terms of unilateral actions to restrict or ban the use of metals and minerals in various parts of the world for environmental and health reasons.

Addressing these challenges is hampered in many instances by insufficient analysis and a lack of processes that build confidence and trust between government, business, civil society and the scientific community on both method and objectives. If metals and minerals are to be part of a sustainable future, we need to focus on new models of how to produce, process, use, recycle, and dispose of them. Is there a single answer for all minerals or are there a variety of answers? How does the structure of the industry assist or hamper the process of transition?

## **7. How Can We Keep Pace with the Information Revolution and Ensure Meaningful Access to Information for All Stakeholders?**

The generation of information, and the process by which it is communicated, play a key role in building or undermining trust and the ability to negotiate effectively. Recognising this, there has been an explosion of initiatives and requirements designed

to build transparency, require disclosure and build confidence. It is not clear that all of these generate benefits commensurate with the cost of generating the information.

There is a strong need for building a shared understanding of the role of information in creating a solid basis for sustainable development. What information needs to be gathered in the mining and minerals sector? Who needs to gather it? Who should pay the costs of doing so? With whom and how is it shared?

## **8. What Should Be the Administrative Relationships, Roles, Responsibilities and Performed Standards of the Key Actors in a More Sustainable Future?**

An increasing number of investors want to be able to distinguish companies who perform well in environmental and social dimensions from those who do not. An increasing number of consumers are looking for ways to ensure that their purchases are produced in ways consistent with sustainable development principles, or at least have some confidence that the product is not associated with human rights violations, exploitation of labour or environmental abuses. Companies who feel they are doing well in these areas would like to differentiate their products or their shares in the market from companies who are not performing well. Governments and communities want to know with which companies they should choose to transact.

In the era of globalisation, it has become clear that national governments must be part of the solution and that they cannot be the whole solution. They have limited territorial jurisdiction; many of them are not equipped to cope with the speed at which capital moves in modern global markets; many of them lack the capacity to serve as effective counterweights to powerful corporate actors.

There is a growing need for sets of broadly accepted criteria for performance that reflects differences between regions and scale of operations, widely accepted institutions capable of making some independent judgement as to whether the criteria have been met, and some sort of system of positive or negative incentives to meet them. The demand for such systems is evident from the fact that so many sources are now promoting one or another solution: sustainability indexes for investors, certification systems for buyers, guidelines for lenders, the Global Compact, proposed treaties, export credit agency guidelines, human rights guidelines, labour rights conventions, World Bank standards, a World Environment Agency, and many others.

Which if any of these is a way forward in the minerals industries? Is there any possibility of convergence?