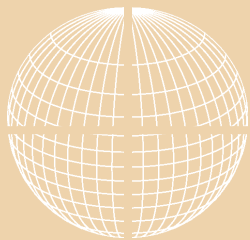
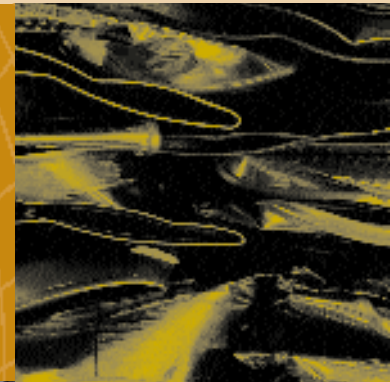
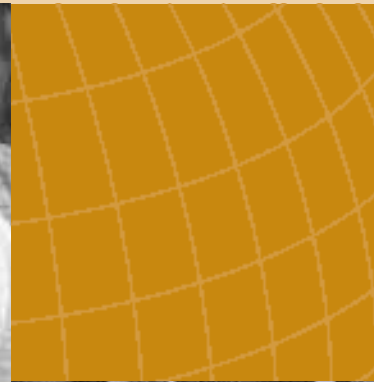
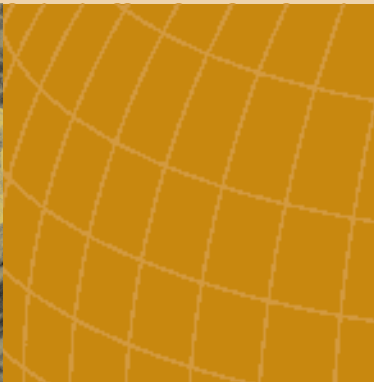


THE MINING AND MINERALS SECTOR: PART OF THE PUZZLE OF GLOBAL SUSTAINABILITY



From aluminium in the microchips powering the Internet revolution, to mining-related industries boosting GDPs in producing and consuming countries, to abandoned mines polluting rivers and streams, to extractive operations displacing indigenous peoples, the mining and minerals sector touches societies throughout the world in both positive and negative ways.



Despite yielding the minerals that support global economic development, this sector faces a number of challenges to its continued viability. These are more than ever magnified by the consequences of widespread human poverty and environmental depletion. If this sector is to fulfil its role in responding to these challenges, it must act with responsibility and expedience.

In the midst of these concerns, sustainable development is a scheme built on four pillars: economic opportunity, social development, environmental safeguards, and effective, transparent and open management systems.

Yet sustainable development raises as many questions as it answers.

- Governments in developing countries remain dependent on mining revenues and constrained by institutional capacity. How can they carry out policies consistent with sustainable development?

- With fiercer competition in the private sector, how can a decisive role be played by an industry whose ten largest firms combined have a value one-third the size of the largest software manufacturer?

- Civil society groups are increasingly mobilising to change the ways in which mining and minerals affect the environment and people's livelihoods. What responsible roles can such groups play?

Though they may sometimes be divided by conflicting viewpoints, most of these groups are united by the belief that change, leading to a reduction in global poverty and efficient and equitable management of the world's natural resources, is essential.

Can their ideas converge? How can individual pieces be put together to solve this complicated and controversial puzzle?

THE MINING, MINERALS AND SUSTAINABLE DEVELOPMENT PROJECT (MMSD)

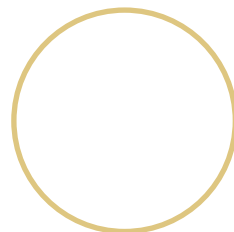
An Innovative Opportunity for Puzzle-Solving

In 1998 ten of the world's biggest mining companies established the Global Mining Initiative (GMI) to explore how the industry could contribute to the global transition to sustainable development. A year later these companies, and 20 others, commissioned the International Institute for Environment and Development (IIED) in London, through the World Business Council for Sustainable Development (WBCSD), to conduct an independent two-year project of participatory analysis seeking to understand how the sector as a whole could make this transition.

Operating in full independence from the industry, the Project has set its foundations on the participation of the widest possible cross-section of groups holding a stake in the mining and minerals sector. In this way, MMSD aims to bring together some of the issues facing this sector at the global level with the target of proposing an agenda for change.



SUSTAINABLE DEVELOPMENT RAISES AS



The world around the mining and minerals sector includes a wide range of actors: local communities, consumers, suppliers, governments, industry, labour organisations, indigenous groups, NGOs, international organisations, financial institutions, and others. What is more, all of these actors are scattered throughout the world: from boardrooms in London, to mines in Zambia, to streets in Seattle, to ministry offices in Peru, to communities in Indonesia.

The Project is unprecedented in many ways, including its geographic scope and the great diversity of people, institutions, and cultures with whom it is interacting. MMSD will continue to evolve as it moves forward so it can meet the needs and concerns of this broad range of actors with multiple and conflicting views.

HOW IS MMSD TRYING TO SOLVE THE PUZZLE?

Seeking the Voices of Experience

The range of interests arising from the sector is large:

- Some are concerned with mining activities, surrounding issues like profit margins in financing exploration and the productivity of operations.
- Others are preoccupied with the mineral products, including recycling and disposal of minerals and their impacts on the environmental integrity of an area.
- Others are troubled by the social and economic aspects of the sector, including the livelihoods of local communities inhabiting mineral-rich land or the sector's contribution to economic development at the national level, among many more.

MMSD believes that, when brought together, these diverse perspectives hold the key to understanding how the sector could change.

MMSD has actively been seeking the 'voices of experience' and trying to encourage them to express their views through workshops, information sessions, interviews, surveys, dialogues and other outreach activities.

Communicating with these actors on the real issues of concern to them is essential if MMSD seeks to reflect this variety. This is one of the principal reasons why MMSD is working through a worldwide network of regional partners currently developing activities in Australia, Latin America, North America and Southern Africa.

The depth of engagement necessary for MMSD to probe and understand this diversity of views can only come about by building relationships with as many of the key actors as is feasible.

Indeed, one of the Project's main outcomes will be the set of relationships it is building through this process and their capacity to continue, and perhaps implement, a change agenda in the future.



MANY QUESTIONS AS IT ANSWERS



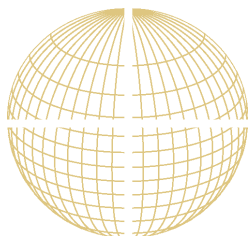
What's Next for MMSD?

The 'Key' Pieces

Through broad consultation the Project has pinpointed eight major challenges facing the mining and minerals sector worldwide. MMSD understands these not so much as eight impediments to a transition to sustainable development, but as eight opportunities to tackle important issues in the broadest possible multistakeholder effort.

The Project is proposing that these challenges be researched, debated and outlined strategically so they become keys for action leading to change.

- How can the sector move towards a viable structure that will contribute more effectively to sustainable development?
- How can the minerals sector support the development of national economies, especially in the poorest countries?
- How can the sector best contribute to sustained improvements in livelihoods and well-being at the community level?
- How can environmental management in the mining and metals industry be improved?
- What are the ground rules for land: its management, access, control and use?
- How can we ensure that future markets and consumption patterns are compatible with a sustainable world?
- How can we ensure meaningful access to information for all stakeholders in the information age?
- What should be the relationships, roles, responsibilities and performance standards for the key actors in a more sustainable future?



THE FINAL REPORT

The principal product of MMSD will be its Final Report. In this report, MMSD will document the state of the mining and minerals sector from the perspective of the transition to sustainable development and propose a positive agenda for change in the future.

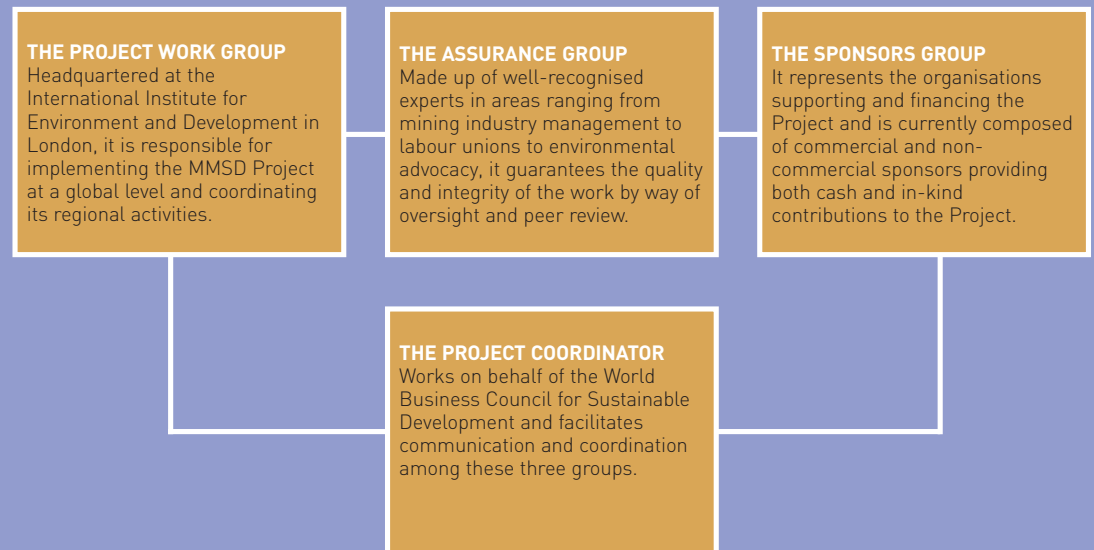
The challenges MMSD addresses are complex and will not be resolved in the course of this Project. The Final Report will necessarily focus on the progress achieved and the agenda for the future – it will not offer a definitive set of 'answers'. The insights MMSD aims to generate will come instead from a synthesis of this enormous range of information to try to identify – not necessarily solve – key problems and trade-offs.

At the base level, the Report will concern itself with the spectrum of issues comprising the sustainable development agenda in this sector. The list is long and ranges from energy use to human rights to water quality to local economic problems – all around the world.

The Report will be published in draft in December 2001 and the final version in March 2002.

MMSD's STRUCTURE

Undertaking a project like MMSD calls for a governance structure that ensures the Project's quality, effectiveness and integrity. Following a thorough process of consultation and consideration, a tripartite structure – aiming to serve as a 'checks and balances' system – was established.



At the regional level, MMSD Regional Partners in Australia, Latin America, North America and Southern Africa also have governance structures based on the same principle.

Managing Mineral Wealth. In cooperation with Professor Rod Eggert of the Colorado School of Mines. Aimed at deepening the understanding of obstacles preventing developing countries from using mineral revenues as a catalyst for economic and social development at both national and community levels.

Business Assessment of Current Corporate Practice. In cooperation with PricewaterhouseCoopers. A survey of the top 50-60 biggest mining companies is being undertaken to assess companies' current understanding and management of sustainability issues.

Management of Large Volume Waste. In cooperation with Professor Dirk van Zyl of the Mackay School of Mines. Seeking to develop a comprehensive approach through a clearer understanding of the problems associated with mineral waste disposal practices, mine closures and abandoned mines.

Long-Run Minerals Availability. In cooperation with Professor John Tilton of the Colorado School of Mines. Examining the extent to which progressive internalisation of environmental and social costs in the industry may lead to constraints on mineral availability in the long-run.

PUTTING THE PIECES TOGETHER

In response to stakeholder input, MMSD has been carrying out activities around a number of issues. These issues include: abandoned mines and large volume waste; livelihoods depending on small-scale mining; understanding minerals markets; and the role of financial institutions in the sector's transition to sustainable development.

● MMSD Regional Partners

○ Scoping activities in Europe, Russia, Kazakhstan, Indonesia, The Philippines and Papua New Guinea (including initial stakeholder consultations and information sessions)

A list of MMSD sponsors is available at www.iied.org/mmsd/sponsors.html



Life Cycle Analysis.

In cooperation with the United Nations Environment Program (UNEP), Dr. Robert Ayres of INSEAD and others. Focussed on bringing together experts in metals' life cycle analysis, with the purpose of identifying chief methodological issues and difficulties in the analysis of several metals.

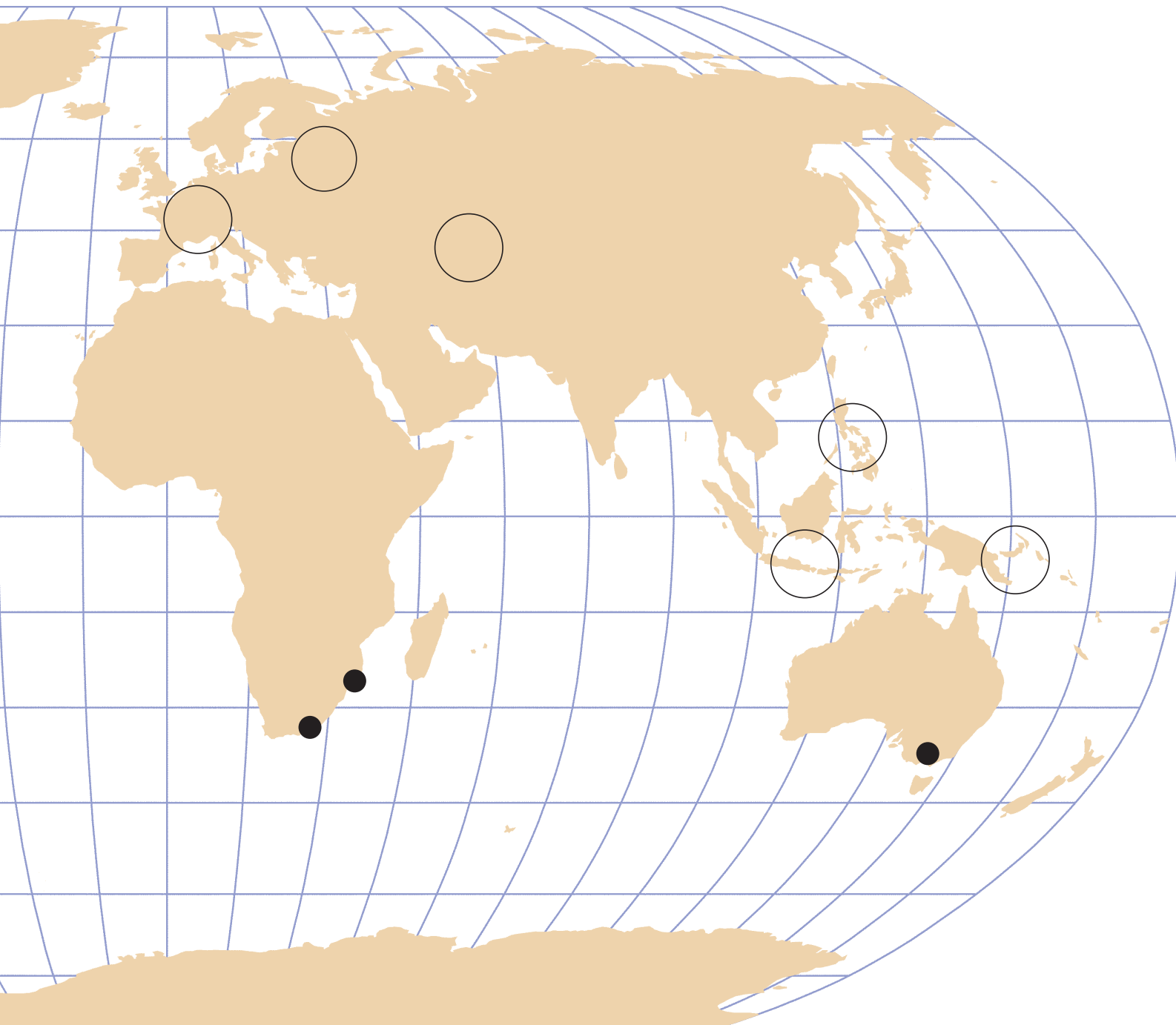
Financial Institutions and Sustainability. In cooperation with the World Bank and the United Nations Environment Programme (UNEP). Aimed at exploring the role of private and public institutions financing mining activities in the transition to sustainable development.

Small-Scale Mining.

80-100 million people are dependent on small-scale mining for their livelihoods. The environmental, economic and social issues surrounding small-scale mining activities will be explored through regional case studies to improve understanding.

Access to Information in the Mining and Minerals Sector.

Investigating how information is made available to those involved in the sector and what types of information are needed to improve interactions within the sector.



WHERE IN THE WORLD HAS MMSD BEEN?

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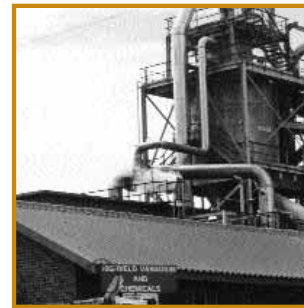
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WILL YOU JOIN US?

Bring your piece of the puzzle!

MMSD needs the active involvement of companies, governments, civil society organisations, the research community, existing institutions active in the field and many others for its success.

You can get involved by joining our network of contacts and remaining informed about our activities, and by contributing your or your organisation's views and ideas. You can also send direct queries by e-mail to mmsd@iied.org.

For more information on MMSD, visit us at www.iied.org/mmsd.

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Mining, Minerals and Sustainable Development



World Business Council for
Sustainable Development

This Project has been made possible by the support of the WBCSD. For more information on the WBCSD visit www.wbcd.org