



SDSG

**SUSTAINABLE DEVELOPMENT
STRATEGIES GROUP**

23 September, 2022

Voluntary Standards and
Certification in the Minerals
Industries

SDSG is an independent, nonprofit, research institute advancing best practices for sustainable management of renewable energy and natural resources.





International
MetCoke
Summit
C o l o m b i a 2 0 2 2

VOLUNTARY STANDARDS AND CERTIFICATION

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SDSG



A reality in the minerals industries

- Many minerals are sold in international markets
- The products arrive in bulk
- Customers do not really know in many cases much about where their minerals come from
- And may know even less about the conditions in which they are produced

Oda al Cobre

-- Pablo Neruda

*A donde llegue el cobre, utensilio o alambre,
nadie que lo toque verá las escarpadas soledades de
Chile,
o las pequeñas casas a la orilla del desierto,
o los picapedreros orgullosos, mi pueblo, los mineros
que bajan a la mina.*

Most minerals are sold into intermediate markets

- Individual consumers do not buy copper concentrate or industrial diamonds or met coke for personal use
- They buy final products that minerals have been used to create
- And historically have known almost nothing about the origins of the minerals in their supply chains and how they are produced

Who cares?



- But increasingly, people care where things are coming from
- Individual consumers want to know
- Manufacturers who buy minerals want to know
- Financial institutions and investors increasingly want to know
- Some insurers want to know
- Increasingly, some governments want to know
- Some of this started with the concern over ‘blood diamonds’

Critical Minerals

- The growing awareness of the scale of mineral supply that is needed for the energy transition, and for “high tech” uses has driven this tendency
- Cobalt
- Some very unfortunate examples of products produced under terrible labor conditions, with child labor, or through abuse of indigenous rights, or associated with environmental problems or corruption have come to public attention and caused consumer backlash



The result

- There is a growing demand on the part of consumers to be sure that what they are buying is responsibly sourced
- Manufacturers increasingly want to be sure they are not going to suffer reputational injury, loss of market access, or sudden interruptions of supply
- All kind of other institutions are wanting assurance that products re responsibly sourced
- The result is an avalanche of new standards systems
- **Standards and certification are separate and distinct systems but with similar objectives**



Responsible Steel

- Founded: 2010
- Approximately 117 business participants, including Mercedes Benz, IUCN, and Volvo.
- Goals: allowing producers to meet the sustainability needs of their buyers, improving responsible sourcing, promoting steel as a responsible resource, and providing a discussion platform for producers and stakeholders

Responsible Steel Principle 3. Responsible Sourcing of Input Materials

Criterion 3.1: Commit to responsible sourcing and incorporate it in key functions and processes

Criterion 3.2: Know your upstream supply chains

Criterion 3.3: Understand supplier ESG performance and promote improvement

Criterion 3.4: Strengthen and account for responsible sourcing

Criterion 3.5: Report publicly on responsible sourcing

International Copper Association (ICA)

- 30 of the World's leading copper producers are a part of the ICA.
- The Copper Mark is the certification this non-profit provides using third party assessment of mine sites.
- There are currently 30 recipients of the Copper Mark worldwide.





Our vision is to maximise the contribution of aluminium to a sustainable society.

Our mission is to recognise and collaboratively foster responsible production, sourcing and stewardship of aluminium.

Our values include:

- Being inclusive in our work and decision making processes by promoting and enabling the participation of representatives of all relevant stakeholder groups.
- Encouraging uptake throughout the bauxite, alumina and aluminium value chain, from mine to downstream users.
- Advancing material stewardship as a shared responsibility in the lifecycle of aluminium from extraction, production, use and recycling.

International Zinc Association

- “**IZA and its members** are committed to the principle of sustainability, and this commitment is embedded in our sustainability charter and guiding principles.”
- 30+ members as of 2021, including brand names like Ford, Hyundai, and General Motors.



International
Zinc Association

Zinc...essential for modern life

International Tin Association Tin Code

- 10 members all over the world.
- They follow the Tin Code with 10 principles supported by 70 standards.
- “ITA Full and Associate members represent 73% of global tin production, including nine of the top ten global producers who meet twice annually”.



World Gold Council

- 32 members found in 45 countries across the world.
- Their three core pillars are improving understanding, access, and trust.





Frequently Asked Question: Is this only for big companies?

Answer: There are examples of successful standards and certification systems for small producers.

Alliance for Responsible Mining (ARM)

- Founded: 2004
- They strive to improve the quality of life for artisanal gold miners and their communities.
- They use standards, governance, responsible supply chains, and assist miners in the field.



ALLIANCE FOR
RESPONSIBLE MINING

Fairmined

- Founded: 2004
- 8 certified gold mines can be found in both Colombia and Peru.
- This company supports small-scale and artisanal mining.
- The certification standard is not only for large scale companies.



Why is there an avalanche of new standards?

- Certifications also offer economic and communication benefits to members (Schoderer 2020).
- The industry is, “at risk of falling behind societal expectations on climate change and behind the leaders from other industries on natural capital considerations” (Tost 2018).
- Companies must observe some sort of standards to stay relevant and profitable.



There are Three Options We See for Standards for Metallurgical Coal:

1. Bettercoal
2. IRMA
3. Equitable Origin



EQUITABLE
ORIGIN



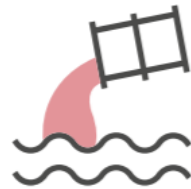
THE BETTERCOAL CODE: 12 PRINCIPLES

The **Bettercoal Code** is composed of 12 Principles, aligned to the three pillars of ESG

ENVIRONMENT



PRINCIPLE 9
Water Stewardship



PRINCIPLE 10
Management of
Emissions and Waste

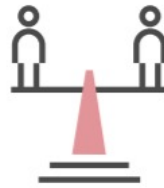


PRINCIPLE 11
Greenhouse Gas
Emissions



PRINCIPLE 12
Biodiversity and
Land Use

SOCIAL



PRINCIPLE 5
Human Rights



PRINCIPLE 6
Labour Rights



PRINCIPLE 7
Occupational Health
and Safety (OHS)



PRINCIPLE 8
Communities and
Stakeholders

GOVERNANCE



PRINCIPLE 1
Business Integrity



PRINCIPLE 2
Policy and Management



PRINCIPLE 3
Transparency



PRINCIPLE 4
Mine Rehabilitation
and Closure

BETTERCOAL SCOPE

The Bettercoal Code is **the international sustainability standard for assessing, assuring and sustaining** stringent ethical, environmental and social performance in the coal supply chain.

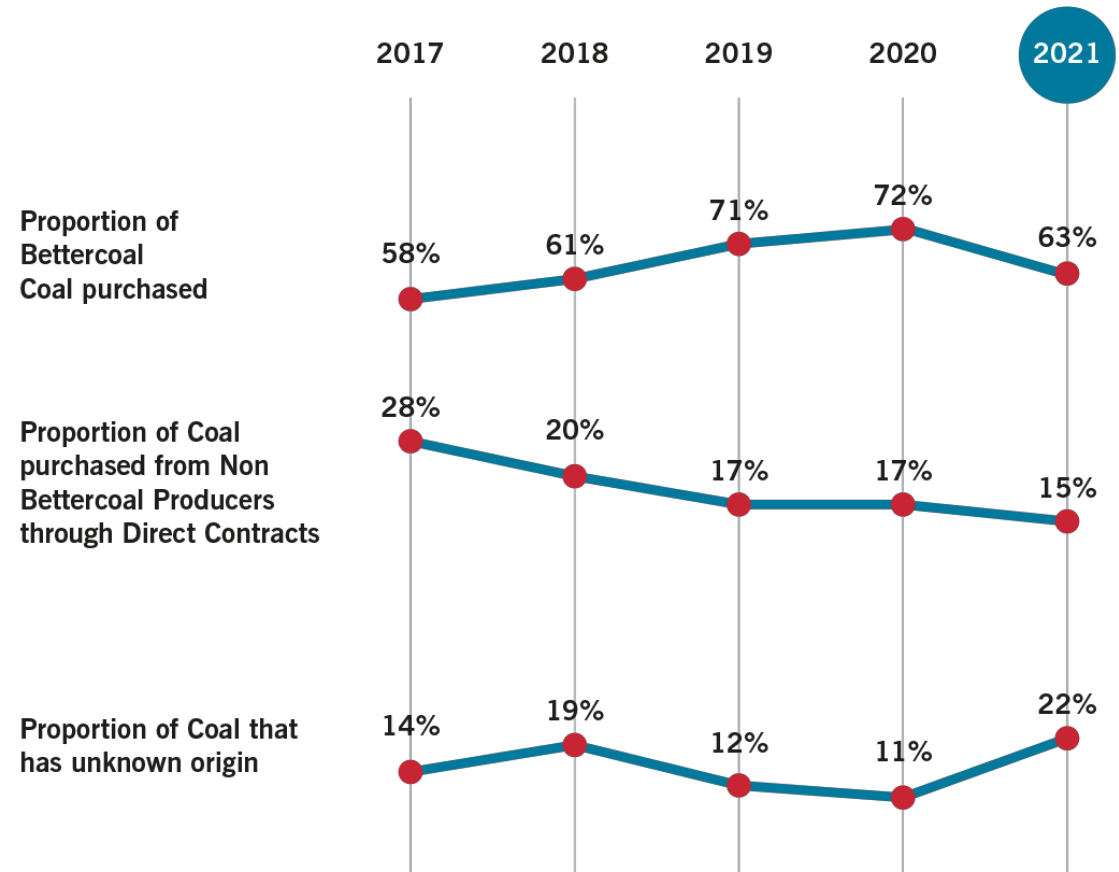
We are a **Continuous Improvement Plan** (CIP) framework, **not a certification scheme**.

- i. Our focus is on promoting international standards in coal mining, through the 144 thorough and comprehensive provisions of our Standard, the **Bettercoal Code**.
- ii. Mine sites are assessed every four years, with some actions in Continuous Improvement Plans also requiring site verification before they can be closed.
- iii. Between assessments, every three months, evidence is provided by the mine site as to how it is working towards meeting the expectations of its CIP.

The code has also been **revised (2.0) to reflect changes in international standards**, as well as increase alignment to ESG principles and the UN Sustainable Development Goals.

Bettercoal

- “To promote the **continuous improvement** in the mining and sourcing of coal for the benefit of all people impacted by the industry, workers and coal mining communities.”
- Founded: 2013
- 12 members



What Does it Take to Become a Member of Bettercoal?

- The code consists of 144 provisions, under 12 principles.
- The principles are broken into three sections:

Governance

1. Business Integrity
2. Policy and Management
3. Transparency
4. Mine rehabilitation and closure

Social

1. Human Rights
2. Labor Rights
3. Occupational Health
4. Communities and Stakeholders

Environmental

1. Water Stewardship
2. Management of Emissions and Waste
3. Greenhouse Gas emissions
4. Biodiversity and land use

What is IRMA?

- IRMA stands for Initiative for Responsible Mining Assurance.
- It was founded in 2006. It promotes certification of most types of minerals
- It sets the bar for robust multi stakeholder governance
- Its goal is to use collaborative methods to “certify social and environmental performance at mine sites globally..”



What is the Initiative for Responsible Mining Assurance?

A voluntary certification system for large-scale mines



1. The IRMA Standard for Responsible Mining

- **Best practice** requirements on 26 topics – a comprehensive and rigorous mining standard
- Standard was developed through a robust **multi-stakeholder** process

2. A third-party, independent assurance system

- Auditors external to the mining company evaluate whether a mine is meeting the IRMA requirements
- The **audits include site visits** and **input from rights holders**, mine workers and stakeholders

What is the IRMA Certification?

- The certification is achieved by following three steps, self report, an independent audit, and a third-party assessment.
- Each mine must adhere to social responsibility, environmental responsibility, business integrity and plan for positive future legacies.
- The certification lets buyers know their mine is practicing acceptable mining practices.

Achievements

- For companies who cannot reach the full certification, there are achievements they may earn. This is an excellent way of incorporating mines of all sizes and financial statuses.

Not an Achievement Level

Self-Assessment

Mines rate themselves.

Required for mines seeking independent 3rd-party assessment.

No claims of IRMA-verified achievement.

Option to share publicly.



Auditors assess performance.

Publicly share results.

Auditors assess performance.

For IRMA 50 or 75, mines must meet a set of 40 critical* requirements, as well as 50 or 75% of the requirements in each of the four Principle areas of the Standard.

Publicly share results.

* minor nonconformity allowed for critical requirements if timebound corrective action plan in place.

Auditors assess performance.

For IRMA 100—IRMA certification— mines must meet **all*** relevant requirements.

Publicly share results.

* minor nonconformity only allowed for non-critical requirements, and only if timebound corrective action plan in place.

—Mines must undergo independent, 3rd-party audit and share results publicly to be able to make public claims about reaching an achievement level—

The IRMA Standard

Comprehensive coverage of mining issues

Business Integrity

- Legal compliance
- Stakeholder engagement
- Stakeholder grievance mechanism
- Human rights due diligence
- Revenue transparency/anti-corruption

Planning for Positive Legacies

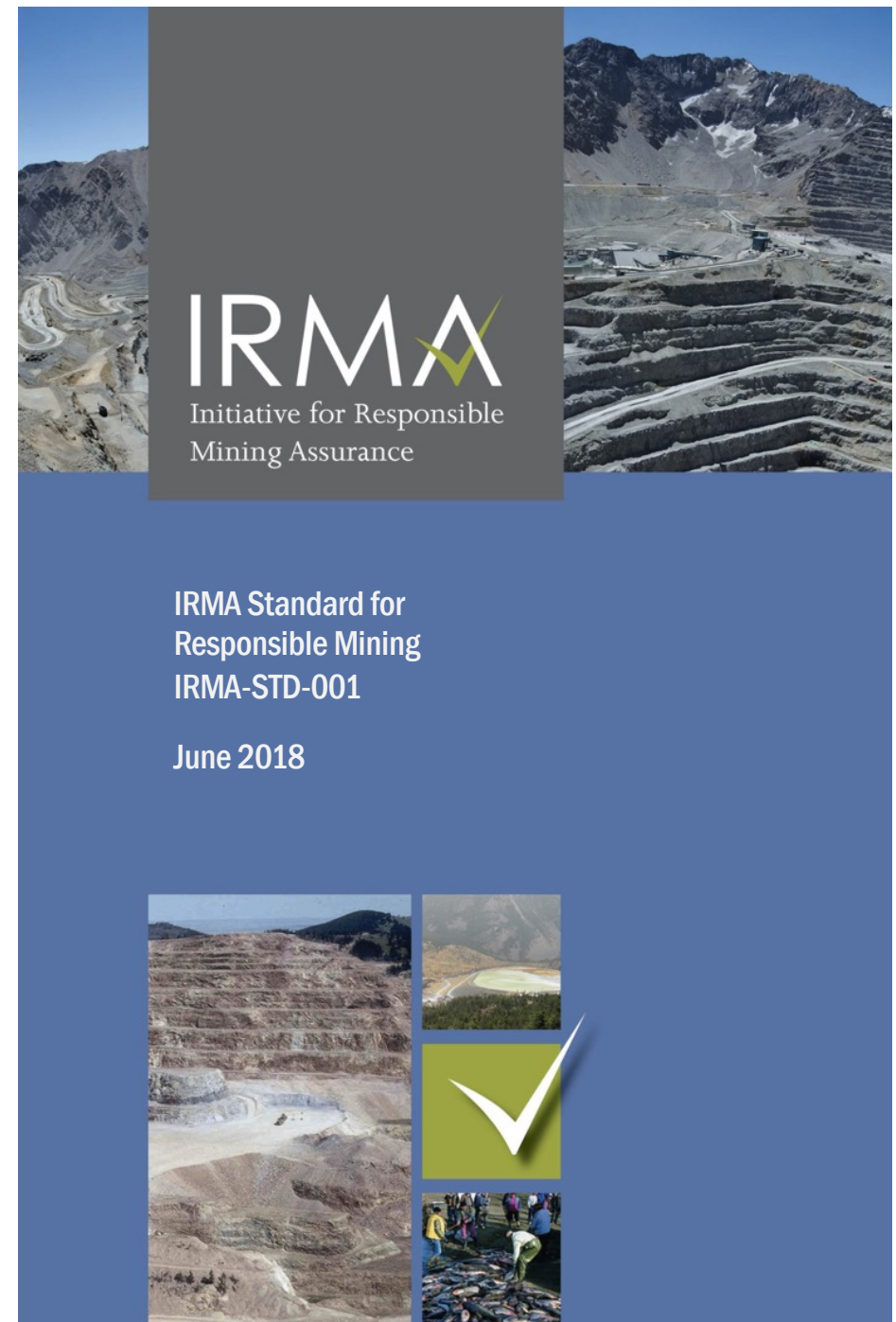
- Environmental and social impact assessment and management
- Free, Prior and Informed Consent
- Community support and benefits
- Resettlement
- Emergency preparedness and response
- Planning and financing reclamation and closure

Social Responsibility

- Labor rights
- Worker health & safety
- Community health and safety
- Conflict affected areas
- Security arrangements
- Cultural heritage protection
- Artisanal and small-scale mining (ASM)

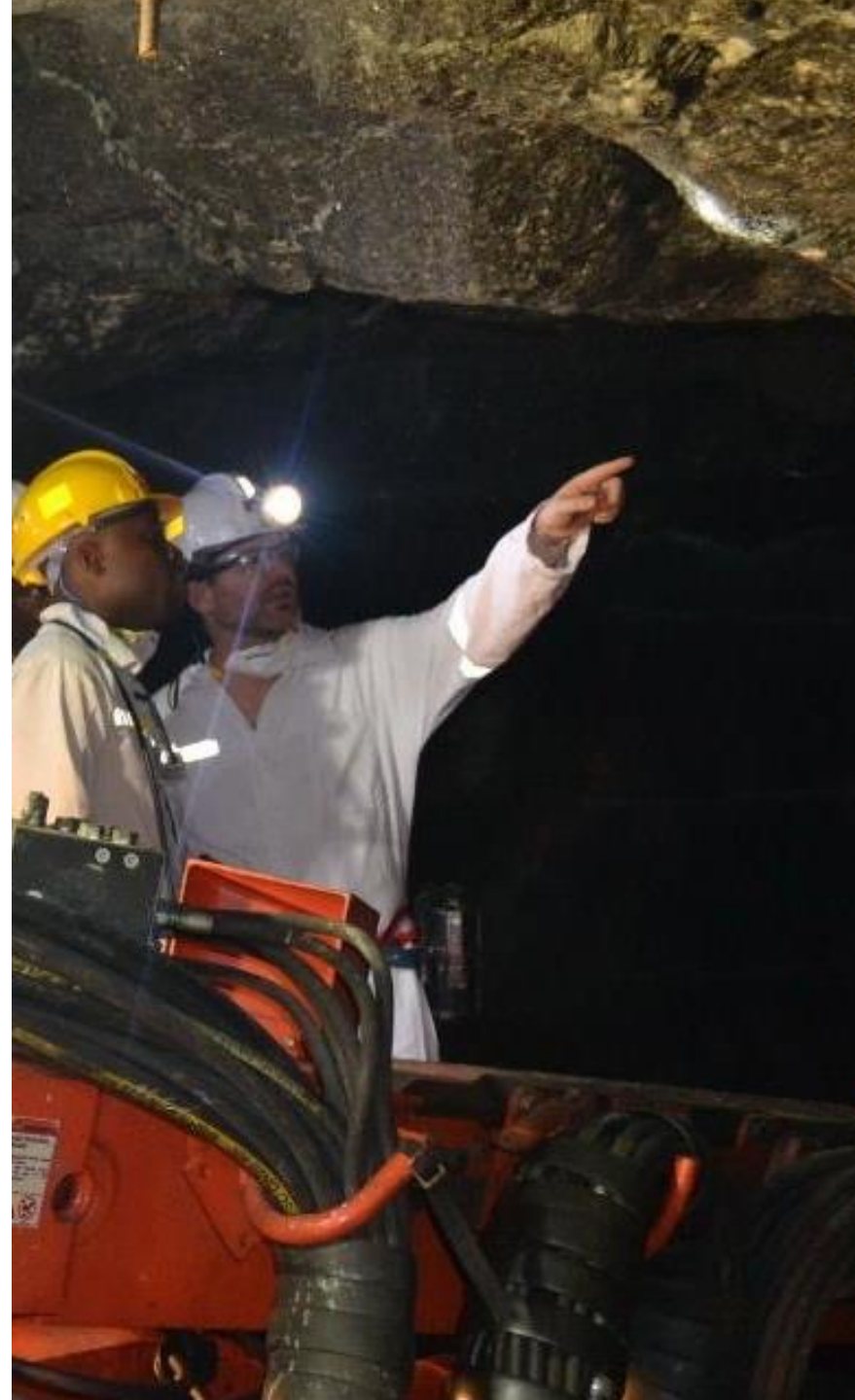
Environmental Responsibility

- Water management
- Waste (tailings) management
- Air quality
- Greenhouse gases emissions
- Noise management
- Biodiversity, ecosystem services, protected areas
- Cyanide management
- Mercury management



IRMA's Assurance Process

- Audits are publicly announced
- Audits are 2-stage: desk review and on-site visit
- Requires input from workers, communities, other stakeholders
- Mines review draft audit report for factual errors
- Detailed summary of audit results is made public
- Mines and stakeholders have access to a complaints mechanism



Initiative for Responsible Mine Assurance (IRMA)

While thermal coal producers are not eligible to join IRMA, they are encouraged to use its self-assessment tool.

Equitable Origin



EQUITABLE
ORIGIN

- “We partner with business, communities and government to support transparent, equitable, and sustainable development of energy and natural resources.”
- Founded: 2009
- Oriented to energy industry
- 7 partners, supporting indigenous rights, resilient infrastructure, and sustainability.
- They focus on indigenous issues such as Free, Prior, and Informed Consent (FPIC).
- And have presence in Colombia

In Partnership with the National Hydrocarbon Agency, EO Supports Strengthening of Human Rights Protections in the Oil & Gas Sector in Colombia

“We help set the most innovative developers and operators apart and give downstream customers of fuel and electricity the power to support and express their preference for more responsible development practices. With our innovative market-based performance measurement system, Equitable Origin is bringing the successful and growing trend of certification to the energy industry.”

Elements of a standards and certification system

Four things to look for:

- **Governance:** Who manages the system and makes the decisions?
- **Code:** What are the rules? Are they simply statements of good intentions or do they require something?
- **Assurance:** Are we simply talking self-certification? Or is there rigorous third party verification?
- **Consequences:** What are the rewards for complying? Or the penalties for not complying?

Governance

Many certification systems have participation not just of industry but of other stakeholders such as labor, communities, or NGOs

This is often thought to increase the credibility and value of the process

There is a great range, from:

- Equal participation of other stakeholders (IRMA)
- Minority participation of other stakeholders
- Other stakeholders on advisory boards but without power in governance
- “Industry only” processes

Codes and Standards

Some codes are very vague and not really auditable: “our company will engage in responsible business practices wherever we operate.”

Some do not include the full range of ESG concerns

- The real issue is whether the code drives better performance. If it just describes what people are already doing, what is the point?
- Bettercoal has driven better performance in the coal industry with a detailed and challenging code.
- Again, IRMA probably sets the bar with its rigorous and comprehensive 26 chapter Standard

Assurance

There is a big difference between 'paper' assurance relying on documents in a corporate office and on the ground mine site assurance

- There is self-certification
- Certification by an industry trade group involving people outside the company being assessed
- Assurance by professionals responsible to a multi stakeholder organization
- Assurance by trained professionals responsible to a truly independent management

Consequences

- Any system should give people space to improve. After all, improving performance is what this is about
- But how much space?
- Is the process built so that it eventually can and will say “this is just not good enough?”

Do The Benefits Outweigh The Costs and Inconvenience to Get Certified?

- A major decision that should be thoroughly considered
- The goal is to protect the company and its brands from reputational damage associated with negative social or environmental performance and resulting publicity
- And protect access to buyers
- In the long run, implementing these standards can save the company money, and give it access to increasingly demanding markets.
- A company using less resources may spend less.
- Additional benefits include: employee satisfaction, easier recruitment, higher market demand, and reduced environmental risks in the supply chain.



What do we do?

SDSG recruits and organizes world class teams of lawyers, social scientists, engineers, physical scientists and other experts to conduct multidisciplinary research in the mining and energy sector with the aim of solving complex issues surrounding environmental protection, community development and meeting society's needs for minerals.



Where do we work?

SDSG has a global footprint with past work for international organizations, and a track record of projects in Mongolia, Chile, Peru, Mozambique, Mexico, Papua New Guinea, Guinea, Kazakhstan, Ecuador, Afghanistan, Guinea, Panama, India and other countries.



Who do we work with?

SDSG has clients that are mainly from the public and non-profit sectors. We have worked for private sector clients as well. Previous clients include the World Bank, the Intergovernmental Forum on Mining, the Extractive Industries Transparency Initiative, and several national aid agencies.

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Fifteen years of contribution to the future of the minerals industries

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