Deloitte.

Tracking the trends 2022

Redefining mining

Deloitte's Global Energy, Resources & Industrials specialists provide comprehensive, integrated solutions to all segments of the Oil, Gas & Chemicals, Power & Utilities, Mining & Metals, and Industrial Products & Construction sectors by offering clients deep industry knowledge and a global network.

Introduction

Redefining mining

What will successful mining and metals companies look like in a low-carbon, low-waste, purpose-driven future?

The beauty of this question is that there is no definitive answer. While the core objective of the mining industry remains unchanged going forward: to extract and provide metals and minerals to downstream sectors, many of the factors that have influenced how mining companies should look, feel, and act in the past, have shifted in recent years.

The way in which companies fulfil this mission is now open to interpretation. And today, there is a rare opportunity for leaders to reorganize, generate new value, and forge partnerships to create a more responsible and attractive future for the industry.

While some early movers saw the need for change coming 10, 15, even 20 years ago and have been redefining their organizations and operations accordingly, for many firms, the necessity for fundamental change only really hit home in 2020-21. The convergence of factors including the ongoing effects of the COVID-19 pandemic on the world of work, continued drive towards digitization, the growing need to integrate ESG commitments with central business functions, and the need to pivot in response to fast-moving business and operating environments, has opened many choices for companies.

Of course, the biggest underlying driver and opportunity for transformation lies in the green energy transition. The 2021 United Nations Climate Change Conference (COP26) held in Glasgow in November, highlighted the mining industry's integral role in supplying the metals and materials critical for a low-carbon future[1]. The way in which mining companies position themselves today in preparation for this change, will determine their sustainability, and could make or break their competitive advantage over the next decade.

Change on this scale is undoubtably daunting, which is why in this, its 14th year, Tracking the trends has focused on effecting transformation. The following 10 trends provide a toolkit to help mining companies start thinking through, and moving towards, their vision of future success.

In them, our global team of experts share insights and case studies designed to get ideas flowing. We explore how to evolve traditional mining and metals businesses through new business models, capital allocation, agile work practices, and data-driven technologies to create organizations fit for the 21st century; ones that can not only survive but profit from whatever the future might throw at them and leave a positive social impact in their wake.

The next decade will be one of the most exciting and transformative in the mining industry's history. We look forward to discussing the trends with you and supporting your company on its journey. Thank you for your ongoing support.

Endnote:

1. Judith Magyar, "COP26 Takeaways: Renewables Replace Fossil Fuels As Metals Become A Major Force", published 28 November 2021 https://www.forbes.com/sites/sap/2021/11/29/cop26-takeaways-renewables-replace-fossil-fuels-as-metals-become-a-major-force/?sh=948a2f626763, accessed 3 December 2021.

Trend 4

Embedding ESG into organizations

Creating operating models to support ESG commitments

Henry Stoch, Sustainability Leader, Deloitte Canada
Harsha Desai, Associate Director, Consulting, Deloitte Africa

Pressure on mining and metals companies is growing to reach beyond environmental compliance and make high-level commitments in the public domain around environmental, social, and governance (ESG) issues that are shaping the future of the industry.

Although commitments to voluntary targets and standards around matters such as climate change or tailings management are usually set with the best of intentions, without the proper internal structures in place, companies will find it hard to make effective progress toward them. They also run the risk of failing to demonstrate, when asked by investors and ratings agencies, how they are honoring those commitments from the boardroom to the mine site.

Research shows that this issue is fairly pervasive; the Responsible Mining Foundation's RMI Report 2020[1] assessed the policies and practices of 38 large-scale mining companies around the globe. It found that, while most companies mention the United Nations Sustainable Development Goals (SDGs)[2] in their sustainability reporting, and a few have integrated the SDGs into their business strategies.

Create senior-level accountability in the structure

To move from pledge to action, mining and metals companies must be functionally set up to respond to and deal with ESG-related opportunities, challenges, and risks. At a practical level, this requires an operating model that facilitates visibility, accountability, and collaboration between departments, along with a clear governance structure.

A decade ago, the sustainability, or corporate social responsibility, agenda was overseen by a leader of sustainability, either at the executive level or reporting into another senior decision-maker. However, with the rise of ESG, the implications are far more cross-cutting, expanding to cover areas such as investor relations, finance, human resources, operations, supply chain, communications, and corporate development. In many respects, ESG now represents a wider transformation of the business.

Today, many organizations have large teams of people focused on environmental and safety issues, with a chief sustainability officer role (or similar) overseeing them. This is a good start, and will help ensure compliance with environmental-permit regulations. However, to move beyond this, operational teams should be properly connected to corporate strategic initiatives; they should understand that ESG commitments are steadfast, and there should be clarity on how they translate into business or operational processes within their specific function.

We are also seeing different models emerge. Where ESG initiatives are led by the sustainability function, it's important that this function is elevated to have sufficient corporate representation at the executive level, i.e., a vice president or executive vice president of sustainability role might be required in the case of large or multinational companies.

In other cases, we have seen executive roles, such as the chief financial officer (CFO), taking responsibility for the ESG agenda, particularly as they need to face off with investors and market analysts. In many ways, it doesn't matter who leads the effort, as long as integration takes place across the organization and the individual in question has sufficient organizational authority.

Henry Stoch—Sustainability Leader, Deloitte Canada, says, "There's a more sophisticated level of expectation now from external stakeholders, particularly large institutional investors, around ESG. Many are asking very complex questions and are keen to understand how companies are integrating targets around issues such as climate change or diversity, equity and inclusion (DEI) throughout their organizations."

He goes on to explain: "If organizational structures are not yet designed for a high level of collaboration and interaction between certain departments and business units, then companies are going to struggle to demonstrate how these issues form part of their strategic planning, or budgeting and forecasting processes, for instance."

Design processes for transparent information flow

For ESG commitments to be properly met at the operational level, information must be able to flow freely up and down the organizational structure, rather like through neural pathways. Leaders must be able to look into the business and check that the commitments they have made publicly are being understood and reflected in practices below them.

Likewise, information must also flow back up from operational teams in the form of risk registers, internal audits, operational plans, and capital commitments that show whether teams are on track with the commitment or not. Digital transformation will go some way toward this, making timely, critical information transparent and available on demand.

The danger is that, if companies don't implement and test these structures and processes, and they cannot answer stakeholders' questions or, worse still, if a failure in governance occurs, they could lose an important source of capital or be accused of greenwashing.

The latter isn't just damaging to an individual company's reputation, but to the industry as a whole. Creating accessible engagement structures through which plans and progress can be discussed with key stakeholders can foster a more cohesive and responsive approach.

This is why ESG needs to be incorporated into a broader corporate strategy as well as enterprise risk management (ERM) and performance-management systems. Using past examples of tailings dam or social failures, it's now possible to quantify both the financial and non-financial impacts of not having the appropriate operating model in place. Leading companies are starting to question traditional ERM approaches, and are developing their language and thinking to reflect this.

Embed ESG into roles and incentives

As ESG starts to be reflected in corporate strategy, it should also be reflected in the functional strategies and plans of the organization and within each function's roles. Every function across the organization has a part to play in delivering the overall ESG strategy, whether that is operations, finance, human resources, or any other key corporate role. Harsha Desai, Associate Director, Consulting, Deloitte Africa says: "This is an opportunity to make the day-to-day choices in the business very personal for people, so they are empowered to make many little or large shifts that directly affect their community. Whether this is water consumption at the operations or working with local vocational training institutions to bring more females into the workforce." With time, these elements will become embedded in role profiles, development plans, and performance systems.

Like many organizational transformations, ESG will require people to change their individual behaviors, and how people are incentivized will be a significant driver of this. Individual and functional incentives should therefore reflect the wider ESG agenda, so that companies can create the required level of accountability.

Designing and testing ESG-driven operating models

- **Factoring ESG into organizational establishment:** For companies that are either just establishing themselves or are reorganizing following an acquisition, it's important to set up the organization in a way that creates clear accountability for external commitments from the outset. In these cases, ESG can be designed into the heart of the business and becomes part of the way the company operates from exploration to mining, to operations and decommissioning.
- **Test structures regularly:** Established organizations that have made bold ESG commitments have begun to put structures and processes in place to support them, and it is crucial that these connections or lines of reporting are tested regularly. Audits are an effective way to do this. Internal or external auditors can assess whether a company is meeting its commitments at every level. A key success factor is then ensuring that the results of the assessment go beyond the mine manager and that information is shared at senior executive levels. This enables change to be effected from the top if shortcomings are identified.
- **Quantify the risk:** Once companies quantify the level of risk associated with social or environmental failures—such as the impact of an ESG re-rating among key investors or the exclusion of a stock in an index—it becomes easier to make the case for capital allocation into ESG-driven organizational restructures, resource allocation and the creation of new roles. The latter will cost much less than the former.
- **Create a transparent and agile ESG culture:** If an audit or risk-management exercise reveals that the organizationa structure is not working as it should—perhaps a key role or communications channel is lacking—then it's important that leaders facilitate positive action based upon it. This is a learning journey for many organizations, and adjustments and changes will need to be made. Being congruent in what is said and what is do will be the most important currency to build credibility.
- **Revaluate incentives:** Incentives are a powerful behavioral lever within organizations. Companies should re-evaluate current incentive structures and align these with the broader ESG agenda.
- **Define ESG responsibilities across the value chain:** ESG-related expectations and responsibilities need to be written into roles at every level of the organization and at every stage of the value chain. Aligning these responsibilities within functional mandates to ensure that individuals are empowered to make decisions and take action should be considered. Miners must clearly communicate their expectations around key internal and external interfaces, both verbally and in writing, so that there's strong alignment—particularly with regard to supply-chain partners.

Endnotes:

1. “Mining and the SDGs: huge potential, limited action,” Responsible Mining Foundation, published 17 September 2020 https://www.responsibleminingfoundation.org/media/sdgs2020/, accessed 29 October 2021.

2. “Sustainable development: The 17 goals,” United Nations Department of Economic and Social Affairs, 2021 https://sdgs.un.org/goals, accessed 1 December 2021.

Global contacts

Rajeev Chopra
Global Leader—Energy, Resources & Industrials
Deloitte Touche Tohmatsu Limited
+44 20 7007 2933
rchopra@deloitte.co.uk

Andrew Swart
Global Sector Leader—Global Mining & Metals
Deloitte Touche Tohmatsu Limited
+1 416 813 2335
aswart@deloitte.ca

Regional/Country Mining & Metals Leaders

Africa
Andrew Lane
+27 11 517 4221
alane@deloitte.co.za

Argentina
Alejandro Jaceniuk
+54 11 4320 2700 ext. 4923
ajaceniuk@deloitte.com

Australia
Steven Walsh
+61 8 9365 7097
swalsh@deloitte.com.au

Brazil
Patricia Muricy
+55 21 3981 0490
pmuricy@deloitte.com

Canada
Andrew Swart
+1 416 813 2335
aswart@deloitte.ca

Chile
Dominic Collins
+5 622 729 8089
dcollins@deloitte.com

China
Kevin Bin Xu
+86 10 8520 7147
kxu@deloitte.com.cn

Colombia
Andres Roa
+57 1 426 2008
andresroa@deloitte.com

Ecuador
Jorge Brito
+59 32 381 5100
jorgebrito@deloitte.com

France
Veronique Laurent
+33 1 5561 6109
vlaurent@deloitte.fr

Francophone Africa
Damien Jacquart
+33 1 55 61 64 89
djacquart@deloitte.fr

India
Rakesh Surana
+91 22 6122 8160
rvsurana@deloitte.com

Indonesia
Ali Henry
+62 21 2992 3100
ahery@deloitte.com

Japan
Yuichi Shibata
+81 80 9087 4406
yuishibata@tohmatsu.co.jp

Mexico
Valeria Vazquez
+52.55.50807548; ext 548
vavazquez@deloittemx.com

Peru
Karla Velásquez
+51 1 211 8559
kvelasquez@deloitte.com

Poland
Zbig Majtyka
+48 32 508 0333
zmajtyka@deloittece.com

Russia – CIS
Andrei Shvetsov
+74957870600; ext 5188
ashvetsov@deloitte.ru

Southeast Asia
Jiak See Ng
+65 93 877 958
jsng@deloitte.com

Switzerland
Geoff Pinnock
+41 58 279 6066
gmpinnock@deloitte.ch

Turkey
Elif Dusmez Tek
+90 312 295 47 00
etek@deloitte.com

United Arab Emirates
Bart Cornelissen
+971 4 376 8888
bpcornelissen@deloitte.com

United Kingdom
Roman Webber
+44 20 7007 1806
rwebber@deloitte.co.uk

United States
Amy Chronis
+1 713 982 4315
achronis@deloitte.com

Authors

Trend 1: Aligning capital allocation to ESG

Andrew Swart | Global Mining & Metals Leader, Deloitte Touche Tohmatsu Limited | aswart@deloitte.ca
Andrew Lane | Energy, Resources & Industrials Leader, Deloitte Africa | alane@deloitte.co.za

Trend 2: Reshaping traditional value chains

Andrew Lane | Energy, Resources & Industrials Leader, Deloitte Africa | alane@deloitte.co.za
John O'Brien | Partner, Financial advisory, Deloitte Australia | johnobrien@deloitte.com.au

Trend 3: Operating in the new super-cycle

Roman Webber | Mining & Metals Leader, Deloitte North South Europe: UK | rwebber@deloitte.co.uk
Valeria Vazquez | Mining & Metals Leader, Deloitte Mexico | vavazquez@deloittemx.com

Trend 4: Embedding ESG into organizations

Henry Stoch | Sustainability Leader, Deloitte Canada | hstoch@deloitte.ca
Harsha Desai | Associate Director, Consulting, Deloitte Africa | hardesai@deloitte.co.za

Trend 5: Evolving mining's world of work

Janine Nel | Partner, Consulting, Deloitte Canada | jnel@deloitte.ca
Marcello Cordova Alvestegui | Director, Consulting, Deloitte Chile | macordova@DELOITTE.com

Trend 6: Establishing a new paradigm for Indigenous relations

Professor Deen Sanders OAM | Lead Partner, Integrity, Deloitte Australia | deensanders@deloitte.com.au
Joe Hedger | Partner, Indigenous Services Group, Deloitte Australia | jhedger@deloitte.com.au
Jason Rasevych | Partner, National Indigenous Services Leader, Deloitte Canada | jrasevych@deloitte.ca

Trend 7: Continuing the journey toward innovation-led organizations

Steven Walsh | Mining & Metals Leader, Deloitte Australia | swalsh@deloitte.com.au
Roland Labuhn | Partner, Consulting, Deloitte Canada | rlabuhn@deloitte.ca

Trend 8: Unlocking value through integrated operations

Eamonn Treacy | Director, Consulting, Deloitte Canada | etreacy@deloitte.ca
Dominic Collins | Energy, Resources & Industrials Leader, Deloitte Chile | dcollins@deloitte.com

Trend 9: Closing the IT-OT vulnerability gap

René Waslo | Global Risk Advisory Leader, Energy, Resources & Industrials, Deloitte US | rwaslo@deloitte.com
Andrew Kwong | Partner, Risk Advisory, Deloitte Canada | akwong@deloitte.ca

Trend 10: Preparing operations for climate change

John O'Brien | Partner, Financial Advisory, Deloitte Australia | johnobrien@deloitte.com.au
Patricia Muricy | Mining & Metals Leader, Deloitte Brazil | pmuricy@deloitte.com