

# The State of Mining Sustainability

2019 Business Purpose Scorecard™ from *TrueFootprint*

**Do mining companies report on the impact and effectiveness of their sustainability activities and show they are delivering positive change?**

**We analysed the annual and sustainability reports of 23 mining companies. We discovered:**

- Over 70% of the material indicators used for reporting are either indicators of inputs – for example how much was spent, or how much natural resource was used – or of outputs, for example what activities were conducted
- Only 26% of the indicators that were disclosed explained the outcomes
- Our analysis shows that it is possible to report outcomes for all material sustainability topics
- We conclude that the mining industry does not account for most of the value it creates. It does not do enough to show that it is delivering positive change.

# The 2019 TrueFootprint Business Purpose Scorecard for the mining industry

## Introduction

Companies are under great pressure to make positive contributions to pressing environmental, social and economic issues. This pressure comes from the combined expectations and scrutiny of asset managers, stock exchanges, current and prospective employees and consumers (see *Box 1*). A KPMG survey of corporate responsibility reporting found that 93% of the world's 250 largest companies now publish sustainability reports. The survey also found that 75% of the largest 100 companies across 49 countries do so. Twenty years ago, the reporting rates were 35% and 24% respectively<sup>1</sup>. Today, a company's sustainability performance can be demanded by any of its stakeholders: their bank, insurers, supply chain partners, retailers, as well as the general public. Companies face an almost perfect storm of expectations to define their purpose and to be part of a positive change narrative.

## Business Purpose Scorecard

In this 2019 TrueFootprint Business Purpose Scorecard™ for the mining industry we ask: if a mining company reports on its sustainability – and virtually all large mining companies do – how deep, comparable and informative is this reporting?

Ultimately, our aim is to discover whether a company actually delivers positive change.

This report follows the same format of *TrueFootprint's* 2019 Business Purpose Scorecards™ for other industries.

Some general findings cut across all industries, but the core analysis is specific to the mining industry.

The Scorecard analyses the non-financial reporting of 23 mining companies to see how they perform along two dimensions:

1. *The relevant sustainability areas they are reporting on*
2. *Whether they are reporting on the outcomes and impact of their sustainability efforts*

By analysing these dimensions we discover which companies are reporting on what really matters, and whether they are delivering true change.

Sophisticated benchmarking will, over the coming years, pick out the leaders from the laggards. Companies that are serious about achieving their purpose have the opportunity to differentiate themselves from their peers by measuring and communicating the outcomes and impact of their way of doing business.

**Ultimately, our aim is to discover whether a company actually delivers positive change.**

## Box 1. Stakeholders Want Business to be Positive Change Agents

**Investors:** The Sustainable Stock Exchanges Initiative, for example, now has over 80 members. Exchanges from London to Singapore, and emerging markets in Asia, Africa and South America now provide guidance and sometimes requirements for thousands of public companies to report on their sustainability<sup>1</sup>.

**Asset owners and managers:** \$89 trillion in assets are managed by the members of the UN Principles for Responsible Investment (UN PRI), and 87% of them say they consider Environment, Social and Governance (ESG) criteria in their directly managed assets<sup>2</sup>.

**Company law:** All EU-based companies with more than 500 employees are required to publish reports on their policies in relation to environmental protection, human rights, social protection and the treatment of employees, anti-corruption and board diversity. This directive now covers over 6,000 companies across the EU<sup>3</sup>. The UK's new corporate governance code (2018) mandates that boards define a company's purpose.

**Employees:** In an international survey of millennials, who are the youngest workplace cohort (those born between 1983-1994), Deloitte found that employers were 'out of step' with that generation's priorities: 39% of millennials believe that businesses should try to improve society, but only 25% think that their employers make this a priority. Only 24% of millennials think that generating profits is a priority, but 51% think that it is their employers' priority<sup>4</sup>.

**Consumers:** According to a Nielsen poll of 30,000 consumers in 60 countries, 66% of global respondents were willing to pay more for sustainably produced goods (compared to 50% in 2013). Lower income groups and younger consumers are among those most willing to pay a premium for sustainability. Consumers who are closest to the problems caused by failures of sustainability, that is people in Africa, Asia, Latin America and the Middle East, are 23-29% more willing to pay a premium than consumers in rich, industrialised countries. This should be good for business, since these regions are also the fastest-growing consumer markets. Nielsen also found that consumer goods with a demonstrated commitment to sustainability grew on average more than 4% compared to less than 1% growth for those without<sup>5</sup>.

**Lower income groups and younger consumers are among those most willing to pay a premium for sustainability**

<sup>1</sup> See <http://www.sseinitiative.org>

<sup>2</sup> UN Principles for Responsible Investment, Annual Report 2018 ([https://d8g8t13e9vf2o.cloudfront.net/Uploads/g/f/c/priannualreport\\_605237.pdf](https://d8g8t13e9vf2o.cloudfront.net/Uploads/g/f/c/priannualreport_605237.pdf))

<sup>3</sup> [https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting\\_en](https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en)

<sup>4</sup> 2018 Deloitte Millennial Survey: Millennials disappointed in business, unprepared for industry 4.0

(<https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-2018-millennial-survey-report.pdf>)

<sup>5</sup> <https://www.nielsen.com/us/en/press-room/2015/consumer-goods-brands-that-demonstrate-commitment-to-sustainability-outperform.html>

The mining industry is a key case study because its products are essential to the fabric of modern life: manufacturing, engineering, construction, healthcare, transportation, and home appliances are all dependent on mining products and mining supply chains. Most of the technological fixes to climate change also depend on mining products. The sustainability results of many other industries depends at least in part on the performance of the mining sector, because the output of the mining sector is found in so many products. For example, a car maker's sustainability should be assessed in relation to how and where the metals its cars contain were mined, including the cobalt and lithium in the batteries of its electric vehicles and the iron ore that goes into its steel.

### **Industry bellwether**

Mining is also an important industry bellwether for sustainability reporting: They have some of the highest rates of sustainability reporting compared to other business sectors.<sup>6</sup>

Even more important, mining companies are at the forefront of a multifaceted approach to sustainability because their license to operate depends on them successfully addressing regulatory, social, environmental, human and health and safety norms and values.

**The sustainability results of many other industries depends at least in part on the performance of the mining sector**

These standards are far from static. They keep evolving with shifting social and political expectations.

Furthermore, no other industry combines large, immovable assets in some of the world's most challenging countries and vulnerable ecosystems with the regulatory oversight and stakeholder demands that come from being listed on major stock exchanges and being part of the portfolio of major investment funds. Finally, the industry's risk profile is compounded by the lifespan of a major industrial mine, which often exceeds 30 years.

**Mining companies are at the forefront of a multifaceted approach to sustainability**

<sup>6</sup> 80% of mining companies in a global KPMG survey produced sustainability reports. Only oil and gas and the chemical industry did marginally better, with 81% reporting levels. [The Road Ahead: The KPMG Survey of Corporate Responsibility Reporting 2017]

## Goal

TrueFootprint set out to look at how the mining industry reports on sustainability. The question we ask is, how meaningful is the reporting and is it capturing the data that really matters?

## Method

There are numerous standards and frameworks mining companies can use for their reporting.<sup>7</sup>

As a result of these many options, there is not much consistency between companies on the categories against which they choose to report. TrueFootprint suggests a simplified framework that can be used across a range of industries.

First, we use the framework provided by the Sustainable Development Goals (SDGs), the standard that has the most universal application and consensus. The 17 SDGs are the closest thing we have to a global standard. The world's governments, including local governments, are committed to them. The SDGs are also truly global in that they apply to every country, irrespective of its level of development. Moreover, over 70% of companies surveyed by PWC last year mention the SDGs in their reporting.<sup>8</sup>

Since companies almost never report systematically against all SDGs we use a simplified framework by grouping the 17 SDGs under 5 headings: the '**5 Ps of Business Purpose**'<sup>9</sup>:

- **People** covers health and safety, gender and inclusivity
- **Planet** is the use of water, land, ecosystems, and power as well as emissions and pollution
- **Partnerships** is engagement with local communities, especially to help them meet their basic needs
- **Prosperity** captures the economic and financial benefits that can arise from the business; and finally
- **Peace** includes conflict with communities and indigenous peoples, corruption and ethics, as well as human rights and respect for the rule of law

We suggest that *the 5 Ps* provide a useful framework for reporting with purpose and that companies are well advised to take a multifaceted approach to corporate responsibility. A scandal in one area (for example aggressive tax avoidance, which has an impact on Prosperity) can easily undermine achievements under the heading People or Planet.

<sup>7</sup> These include the Global Reporting Initiative, the UN Global Compact, ISO 26000:2010, the IFC Performance Standards, the International Council on Mining and Metals principles, the Sustainable Development Goals, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the OECD Due Diligence Guidance for Responsible Mineral Supply Chains, the Voluntary Principles on Security and Human Rights, and the Extractive Industries Transparency Initiative for reporting on taxes and royalty payments.

<sup>8</sup> <https://www.pwc.com/gx/en/services/sustainability/sustainable-development-goals/sdg-reporting-challenge-2018.html>. The Norwegian sovereign fund, which is invested in over 9,000 companies, published its perspective on the SDGs last year: [https://www.nbim.no/contentassets/092e192d14d34d8eaf6110b75a27977c/nbim\\_amp\\_1\\_18\\_the-sdgs-and-the-gpfg.pdf](https://www.nbim.no/contentassets/092e192d14d34d8eaf6110b75a27977c/nbim_amp_1_18_the-sdgs-and-the-gpfg.pdf)

<sup>9</sup> This 5 Ps approach is already in use by companies, like Belgian retailer Colruyt: [https://issuu.com/colruytgroup/docs/colruyt\\_group\\_sustainability\\_report?e=29882345/63482505](https://issuu.com/colruytgroup/docs/colruyt_group_sustainability_report?e=29882345/63482505).

## Matching the 17 SDGs to the 5 Ps of Business Purpose:

### People



### Planet



### Peace



### Partnerships



### Prosperity



Ultimately, the most important question is whether a company actually delivers positive change. In order to answer this, we check to what extent a company reports:

- **Inputs:**

how much was spent on any given set of activities, how many people were employed, natural-resource and energy inputs

- **Outputs:**

activities conducted to advance sustainability performance

- **Outcomes:**

the direct measurable effects of activities and the rate of improvement against set targets; changes in outcomes are usually attributable to specific activities

- **Impacts:**

the ultimate measurable effects that are a combination of inputs, outputs and outcomes; they can be both positive and negative; some impacts are multi-causal so they may not be solely attributable to a single set of inputs or activities.

These distinctions tell us about the depth and the quality of corporate reporting.

Within a single industry - mining in this case - inputs, outcomes and impacts are comparable, with the companies all doing roughly the same thing. If we compare different business sectors or companies within a single supply chain, one company's input will be another company's output. For example, energy is an input for a mining company, but it is the output of an energy producer. Furthermore, an energy supplier that delivers 100% renewable energy may also be helping the mining company achieve improvements in their overall GHG emissions 'impact'. Similarly, a consultant or technology provider that helps to achieve major production efficiency gain is delivering an output that produces an outcome improvement for their customer.

For example, a company may donate labour and construction materials (inputs) for the building of ten new schools that are designed for over three thousand children in the local community (the output). But are 3,000 children attending the schools, are teachers teaching and are the children learning? These are all outcomes and they are measurable. If the company is ambitious, it may also have an impact indicator, for example that the schools rank among the top 30% nationally. This is the impact vision for 2025 of a major mining company. A company with such an impact vision is far more likely to ensure that the children are attending school and that they are learning, than a company that just reports how much it spent last year on building a handful of new schools.

Another mining company reported that its malaria eradication programme led to an 88% reduction in malaria incidence among employees, their dependents and on-site contractors in a mining area. They also achieved a 45% reduction in reported cases in nine beneficiary communities. These are potentially life-saving outcomes. The outcome is more impressive and informative than a tally of how much they spent and how many treated bed nets they distributed.

In this first mining industry Scorecard we analyse the annual and sustainability reports of 23 mining companies to see how they perform along the two dimensions identified above: first, what categories do they report under, and, second, do they report on the outcomes and impact of their investments?

### Mining Companies Analysed for the 2019 Business Purpose Scorecard™:

COMPANY NAME	HEADQUARTERS	COMPANY NAME	HEADQUARTERS
African Rainbow Minerals	 South Africa	Goldcorp	 Canada
Anglo American	 UK	Hydro	 Norway
AngloGold Ashanti	 South Africa	Kenmare Resources	 Ireland
ArcelorMittal	 Luxembourg	Kinross Gold	 Canada
Barrick	 Canada	MMG	 Australia
BHP	 Australia	Newcrest	 Australia
China Minmetals	 China	Newmont	 USA
Coal India	 India	Rio Tinto	 UK
Eurasia Resources Group	 Luxembourg	Vale	 Brazil
Freeport McMoran	 USA	Vedanta Resources	 UK
Glencore	 Switzerland	Zijin	 China
Gold Fields	 South Africa		

This group of companies includes most of the world's ten largest mining companies as well as several midsize and smaller mining operators.

It covers companies headquartered in a range of jurisdictions, with a preference for firms that operate across multiple locations. Collectively, these companies employ more than 1.5 million people and operate over 700 mines. The reporting period covers the most recent non-financial documents. For the majority of the companies this is 2017, but in some cases the most recent report goes back to 2016 and even 2015.

## Findings

How well do the companies perform? Do they tend to report on just inputs and outputs, or do they pay equal attention to outcomes and impact?

Most large mining companies have produced regular sustainability reports for at least five to ten years. All reports are usually accessible on company websites and industry leaders have numerous forums and conferences where they can share their learnings. We worked on the assumption that if managers knew how to measure and report positive performance they would be doing so, since there is nothing to be gained from under-reporting achievements.

**We found that on average across all 23 companies around 70% of the material indicators used consisted of input and output indicators, 26% of the indicators were outcome indicators, and only 4% of the total were impact indicators [Table 1]**

**Table 1. Mining Industry Reporting up to 2017**

CROSS-INDUSTRY INDICATORS	INPUTS	OUTPUTS	OUTCOMES	IMPACT
Number of material indicators	159	348	186	33
Percentage	21.9%	47.9%	25.6%	4.5%



Our analysis has also enabled us to compile a state-of-the-art Scorecard that combines the best-practice reporting indicators found across the industry. We picked key material indicators derived from annual and sustainability reports, identifying a total of 122 material indicators in current use. The state-of-the-art Scorecard represents the current collective wisdom of the industry. Our findings from the state-of-the-art Scorecard (*Table 2*) shows that a more balanced distribution, with 55% of indicators consisting of input and output indicators is possible:

**Table 2. Mining Industry State-of-the-Art Indicators**

STATE-OF-THE-ART INDICATORS	INPUTS	OUTPUTS	OUTCOMES	IMPACT
Number of material indicators	27	41	48	6
Percentage	22.1%	33.6%	39.3%	4.9%

Why does all this matter? And does this analysis tell us anything useful we need to know about the actual sustainability impact of the industry?

One way to illustrate the importance of outcome and impact reporting is with what are perhaps the most important non-financial metrics in the mining industry: total fatalities and the injury frequency rates.

All reputable and listed mining companies list these outcome figures openly in their reports. Now imagine a hypothetical company that reported that it spent \$25 million in the past year to improve health and safety (an input). They might also report that 98% of their employees received health and safety training, and that this is a 5% improvement over the previous year's training compliance (two output indicators).

But they decided not to report the outcome, namely the result of those investments. Are their employees safer? Have the fatality and injury rates improved as a result of these investments? We suggest that a company that failed to report these important outcome data would not be taken seriously by its peers or key stakeholders.

A company can report how much it spent (an input) on improving its water usage and efficiency or its carbon footprint, and that it rolled out its new policy across 70% of its mining operations (an output). But supply chain partners and major institutional investors really want to know how efficient they are (for example how much water or energy they use per tonne of ore, an outcome indicator), and ultimately the effect on their total greenhouse gas emissions (GHG) (the impact).

### Hallmarks of transparency

Outcomes and impacts may be positive or negative. It is a hallmark of a company's transparency and accountability that it is willing to report negative as well as positive data. A death is always negative. But an improvement in the fatality or injury rate is positive news. Similarly, while GHG emissions are negative, an improvement in efficiency per tonne of ore produced can be a powerful step in a positive direction.

**We suggest that a company that failed to report these important outcome data would not be taken seriously by its peers or key stakeholders**

Outcome and impact indicators also gauge effectiveness. Outcome indicators make meaningful comparisons between companies possible, whereas an input or an output may simply be a function of size. A prime example is the total recordable injury frequency rate, or total recordable injury rate. This is the number of fatalities, lost time injuries, substitute work, and other injuries requiring treatment by a medical professional. This is often measured per two hundred thousand hours worked. Irrespective of company size these are roughly comparable outcomes. So is the gender pay gap, or the percentage of women and the percentage of local hires at various levels of management and the board of a company.

When the outcome and impact are combined with inputs and output data this gives an indication of efficiency. How much resource was required to achieve a particular end?

Teams whose key performance indicators (KPIs) consist in the main of inputs and outputs are not being assessed for the efficiency and effectiveness of their work. Our analysis suggests that a step-change in reporting – and therefore also in results – is a relatively easy win because good practices are already being implemented within the industry. What is missing is systematic implementation since there are pockets of best-practice spread across the industry. We think it is possible – and highly desirable – to achieve a better balance between the indicators. This includes those categories of reporting where outcome and impact measurement are the weakest.

To have a better appreciation of where there is more settled good practice and where there is ample room for improvement, we break down the indicators into the *5 Ps of Business Purpose*:

**Table 3. 5 Ps Scorecard of Mining Industry Sustainability Reporting**

CROSS-INDUSTRY 5 Ps ANALYSIS	INPUTS	OUTPUTS	OUTCOMES	IMPACT
People	<b>36</b> (17%)	<b>68</b> (31%)	<b>113</b> (52%)	<b>0</b> (0%)
Planet	<b>44</b> (22%)	<b>70</b> (36%)	<b>51</b> (26%)	<b>32</b> (16%)
Partnerships	<b>18</b> (17%)	<b>81</b> (79%)	<b>4</b> (4%)	<b>0</b> (0%)
Prosperity	<b>58</b> (54%)	<b>36</b> (34%)	<b>12</b> (11%)	<b>1</b> (1%)
Peace	<b>3</b> (3%)	<b>93</b> (91%)	<b>6</b> (6%)	<b>0</b> (0%)

Table 3 shows that existing indicators for People and Planet already lean towards significant outcome and even impact reporting. These are sophisticated sectors with widely accepted standards. The Carbon Disclosure Project framework is, for example, used by many mining companies to disclose GHG emissions. The biggest room for improvement is in the Partnerships,

Prosperity and Peace categories. In these three areas – which account for more than 40% of the total indicators used in the industry – outcome indicators are very weakly represented, and impact indicators are missing altogether.

When we look at the state-of-the-art Scorecard (Table 4), which picks out the material indicators in current use across the industry the picture improves.

**Table 4. 5 Ps Scorecard Based on Mining Industry State-of-the-Art**

STATE-OF-THE-ART 5Ps	INPUTS	OUTPUTS	OUTCOMES	IMPACT
People	<b>3</b> [9%]	<b>9</b> [26%]	<b>23</b> [66%]	<b>0</b> [0%]
Planet	<b>16</b> [34%]	<b>11</b> [23%]	<b>15</b> [32%]	<b>5</b> [11%]
Partnerships	<b>1</b> [33%]	<b>2</b> [67%]	<b>0</b> [0%]	<b>0</b> [0%]
Prosperity	<b>7</b> [44%]	<b>4</b> [25%]	<b>4</b> [25%]	<b>1</b> [6%]
Peace	<b>0</b> [0%]	<b>15</b> [71%]	<b>6</b> [29%]	<b>0</b> [0%]

While outcome/impact reporting is still missing for the Partnerships category there are some good indicators in use for Prosperity and Peace and there is a better balance between the categories of reporting. The mining industry state-of-the-art Scorecard contains a total of 122 indicators taken from the best indicators of existing reports. On average, company reports used 31 indicators, and these were not necessarily ones we would consider state-of-the-art or best practice. The most detailed mining company report contained 86 material performance indicators. In other words, even the most detailed performer under-performed by a significant margin.

Financial institutions often have a preference for the ESG terminology, which stands for Environment, Social and Governance. The 5 Ps of Business Purpose can also be mapped against ESG reporting standards, where E = Planet, Social = People + Partnerships + elements of Prosperity, and Governance = some dimensions of People, especially gender distribution on boards, and some aspects of Peace.

If we analyse the mining industry using the ESG framework we find that the categories of reporting for Environment and Social are quite well balanced, but that Governance reporting is lopsided, with over 90% of indicators being output indicators.

**Table 5. ESG Analysis of the Mining Industry**

ESG ANALYSIS	INPUTS	OUTPUTS	OUTCOMES	IMPACT
Environmental	<b>44</b> [22%]	<b>70</b> [36%]	<b>51</b> [26%]	<b>32</b> [16%]
Social	<b>112</b> [26%]	<b>185</b> [43%]	<b>129</b> [30%]	<b>1</b> [0%]
Governance	<b>3</b> [3%]	<b>93</b> [91%]	<b>6</b> [6%]	<b>0</b> [0%]

See Appendix 1 for *The 2019 TrueFootprint Business Purpose Scorecard for the mining industry*.

Our analysis has also enabled us to divide the 23 mining companies in this Scorecard into 4 bands according to the depth and detail of their sustainability reporting. Since the Scorecard is not a league table, these findings are not published as part of this report.

## Considerations

Based on the 2019 TrueFootprint Business Purpose Scorecard, here are a few things to consider:

**Capture the true value you create:** The mining industry does not account for most of the value it creates for local economies and communities. One of the industry's large firms, for example, spends an amount on social programming that puts them on par with a well-staffed international development NGO. But this company spends more than 80 times that amount on payments to over ten thousand suppliers, and 30 times that amount on taxes and royalties to governments.

Another company reports that it sources 79% of its goods and services from local suppliers within the host country and that over 97% of its workforce comes from host countries. These companies report the amounts spent on local sourcing. But they do not capture the full value they create as a result of that sourcing, for example in terms of jobs created, the quality of those jobs, or progress out of poverty for those local suppliers. Companies only reports a small portion of the social and community value they create as a direct of social spending, whereas their cumulative outcomes and impact - if measured - could be shown to be many times larger.

**Save money:** Companies have learned that efficiency improvements in water and power use, and GHG and other polluting emissions reductions are directly correlated with cost savings over time. This also reduces the costs related to mine closure. The economic benefits of good environmental stewardship can therefore be considerable. Similar savings could be made for improvements in Partnerships, Prosperity and Peace, but this can only happen with outcome and impact metrics that drive efficiency, effectiveness and therefore innovations.

**Size doesn't matter:** We found that the best reporting is clustered around some of the largest companies, but that several smaller companies also do very well. Companies in the middle were the ones that tended to under-perform. Good performance is therefore not simply a function of size.

## About TrueFootprint

TrueFootprint has developed the first bottom-up impact verification solution. Our approach is scalable, low-cost and empowers communities to take ownership of the solutions to improve their lives.


We help companies report the outcomes and impact of their business and operations and to increase the return on investment of their sustainability projects. We achieve this through a unique combination of technology and community engagement. We work with the beneficiaries of a company's sustainability projects: your employees and the communities where you operate. Our technology empowers these people to collect data and to take ownership of the investments. The people at the base of supply chains deliver the outcome data on your investments because it works for them. It's good for them and it's good for your business.

TrueFootprint builds upon 15 years of pioneering experience in bottom-up monitoring of public projects and development projects worth over \$1B in a dozen countries in Africa, Asia and the Middle East.

TrueFootprint is supported by a team of advisors and associates with decades of experience in mining, responsible sourcing, technology, product development, business integrity, compliance, consumer reviews, finance, asset management, sustainability, climate change, international development, and economics.

TrueFootprint is based in Cambridge, UK.

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