



Operationalizing the SDGs in Mining for Emerging Economies

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Context

Minerals and metals fundamentally underpin the functioning of every aspect of modern society. In spite of its relatively small size as an industry, the environmental impact of the mining and extractives sector means that it has an extraordinary potential to support the achievement of the Global Sustainable Development Goals (SDGs). The sector makes a significant contribution to the macro, social and political economy; this contribution is not entirely understood by mining companies themselves, governments or civil society. Thus the real impact of mining is generally under-reported, to the detriment of mining companies, which in turn tarnishes their reputation in society. By embracing the SDGs, a metamorphosis from the current negative perceptions of an environmental and socially compromising extractives sector can move to that of a cornerstone of sustainable development through the supply of critical resources while generating significant multiplier effects across the broader economy. For this to happen, the SDGs need to be more than aspirational targets: they need to be ingrained in the culture and behaviour of all participants. The Minerals to Metals Signature Theme, hosted by the Department of Chemical Engineering at the University of Cape Town, undertakes cross cutting interdisciplinary research and has pro-actively embraced the imperative of operationalising the SDGs in the mining sector. To this end, this concept note sets out to assess the extent to which mining companies already contribute towards the SDG objectives, in both quantitative and qualitative terms. It will also identify ways in which the sector should adapt and improve, implementing new operating procedures or methods and to more effectively embed the SDGs in governance, management systems, organisational culture and disclosure.

This initiative is unique in its potential to design tangible and practical actions for operationalising the full suite of SDGs at project and company level in a highly sensitive sector in a leading emerging market. South Africa has a mature regulatory and capital markets context which is rapidly adopting the global trends in integrated company reporting as well as responsible investing. This provides a fertile setting to motivate mining and extractives companies to take sustainability issues more seriously and embed these in company systems and disclosure. What is lacking is a well-defined and pragmatic route for implementation of the SDGs, supported by a strong capacity building solution. The approach taken will practical and focused on building on existing knowledge and reporting metrics. This should ensure that it can be embedded successfully within industry.

Structure

Phase I: Benchmark current SDG contribution status

- Collect information on current practices in the sector through questionnaires, company interviews and comprehensive analysis of public domain information.
- Review key company documents, including: i) Integrated Annual Reports, ii) Company policies, iii) Operating Procedures, iv) Environmental Management Plans, v) Corporate Social Investment Programmes, vi) Social and Labour Plans and v) Mining Charter compliance.
- Assess comparative levels of alignment of companies' reported information with the objectives of the SDGs

Phase II: Identify and design practical and economically attractive solutions

- The initiative will apply a design thinking approach familiar to practitioners in the field of engineering to develop innovative and pragmatic solutions for the mining sector to embed the SDGs.
- Possible avenues for deploying these solutions will include project technical architecture and design, company policies and operating procedures, as well as the key strategic tools for environmental and social management (e.g. Environmental Management Plans, Corporate Social Investment Programmes, and Social & Labour Plans).
- A key element of the operationalisation imperative will be to map these SDG elements appropriately across to every job description in the organisation and reflect these in individual KPIs.

Phase III: Implement solutions in partnership with the industry

- The Project will develop the necessary tools for use across the industry, such as; a suitable
 model and platform for discussion, monitoring tools and scorecards, training material that
 incorporates continuous improvement and safety journey models, ongoing capacity building
 for facilitation and execution.
- Partners and companies will be identified to execute changes in a pilot phase and provide feedback on effectiveness and impact to inform broader rollout.
- The findings will also continue to shape the research agenda with the development of new methods and technologies that improve production processes.

Approach and Status

- Undergraduate and postgraduate student projects analysing selected companies.
- Questionnaire developed by KudosAfrica to be incorporated into the data analysis and used to engage further with companies.
- Discussion with current and potential partners ongoing
- Mining Indaba 2017 platform presented
- AngloGold Ashanti: following our lead they have taken their material issues from their SD report and mapped them to SDGs - to be presented at WEF in September 2017

Collaboration

The UCT approach is highly collaborative:

Internally within the University we have a multi-disciplinary team comprising senior academics from including inter alia: The Department of Chemical Engineering and the Engineering and the Built Environment, Mineral Law and Policy, Environmental Science, Medical and Social Anthropology.

Nationally we have strategic alliances with other universities and representative organisations such as the Southern African Institute of Mining and Metallurgy, Centre for Sustainability in Mining and Industry (CSMI), mining schools at the Universities of the Witwatersrand, Pretoria, Johannesburg and South Africa

Internationally we seek to become: a lead partner in Operationalising SDGs in Mining within the core UNDP, WEF, Columbia strategic partnership; to explore joint venture programme development opportunities with the Columbia Center on Sustainable Investment; to establish and consolidate relationships with other universities and mining representative organisations around the world such as the Latin American Mining Association, AusIMM, CIM, ICMM, AME.