A typology and comparison of responsible sourcing schemes for mineral supply chains

Nic Bilham
University of Exeter Business School/Camborne School of Mines, University of Exeter, Penryn, UK (nb533@exeter.ac.uk)

 Responsible mining means minimising the negative impacts of mining, and maximising its positive impacts – economic, environmental and social. Responsible sourcing and certification schemes aim to provide assurance that this is being done. This sounds simple in principle, but in practice it is challenging to design such schemes and to ensure that they are widely adopted.

Part of the reason for this is that the potential social, environmental and economic impacts of mining, both positive and negative, are so numerous, varied and complex. ‘Responsible sourcing’ is often taken to refer to ensuring only that mineral extraction does not involve child labour, does not exacerbate or help to fund conflict, and avoids bribery and corruption. These are vital issues, but responsible mining can also refer to matters such as the health and wellbeing of the workforce and local communities, equitable water use, minimising and responsibly managing waste, minimising greenhouse gas emissions and respecting cultural heritage, among many others. Such considerations have different meanings and implications in different places and communities, and also vary across resource and deposit types and at different points in the mining life-cycle, from exploration to mine closure and beyond.

Increasingly, the most responsible mining companies are making serious efforts to address these challenges, working closely with local communities as they go beyond the minimal requirements that have hitherto all too often characterised the ‘social licence to operate’. There is also increasing interest in responsible sourcing across the value chain, including from manufacturing companies (i.e. industrial consumers of minerals), investors and commodity traders, among others. But the context-dependent complexity of the issues germane to responsible mining, and the complexity and opacity of the supply chains into which mined resources then pass, has given rise to a large and ever-growing variety of responsible sourcing schemes, and this may hinder rather than help development and implementation of good practice as companies across the value chain struggle to decide which of these schemes they should engage with.

Responsible sourcing schemes vary in terms of the social, environmental and economic impacts they address, where in the value chain they focus, what mineral resources they refer to and geographical scope, among other factors. There may be trade-offs between breadth of scope and level of uptake, and different supply chain actors will respond differently to the various characteristics of responsible sourcing schemes. Understanding these relationships is essential if such schemes are to be taken up across value chains, and to make a positive practical difference to people and places affected by mining.

This presentation sets out a preliminary typology of responsible sourcing schemes, and maps key existing and planned schemes to this typology. Drawing on this analysis, it offers some thoughts on their likely effectiveness, and sets out future research plans to test these ideas.