

# SEG 2024 Conference: Sustainable Mineral Exploration and Development

---

## United Nations Resource Management Systems as a Guide for Sustainable Resource Management: Case Example from Copperbelt Province, Zambia

Michael M. Musialike<sup>1</sup>, Eva Marquis<sup>3</sup>, Gabriel Ziwa<sup>1</sup>, Mubanga Mutale<sup>2</sup>, Karen Hudson-Edwards<sup>3</sup>, Frances Wall<sup>3</sup>

1. The Copperbelt University, Kitwe, Zambia, 2. Geological Survey Department of Zambia, Lusaka, Zambia, 3. Camborne School of Mines, University of Exeter, Penryn, United Kingdom

In this contribution, we present the results of an initial scoping study of the application of the United Nations Resource Management System (UNRMS) to the critical raw materials (CRM) sector in the Copperbelt and Northwestern provinces of Zambia. As the global economy transitions to use of clean energy technologies, the demand for CRM needed to develop these technologies is rising. The surge in demand for CRM presents real economic benefits to producer countries, especially those that are resource rich and developing. To sustainably benefit from these resources, producers should build legislative and policy frameworks that ensure that operations across the value chain in the sector leave minimal climate footprints and have high environmental standards and quality social circumstances. Zambia is a major producer of CRMs such as copper and cobalt, with major nickel projects underway. Like the rest of the world, Zambia has realised the need to adopt a more sustainable way of managing its mineral resources in order to deliver the socio-economic transformation necessary for improved well-being for its people and the planet. As the country is in the process of reforming its mining policy to align it with the sustainable development agenda, it is timely to investigate how sustainable management of the CRM sector can support this objective. Published in 2019, the UNRMS aims to provide a comprehensive framework for sustainable resource management by government, industry, investors and the civil society. It links to the African Mining Vision, African Minerals and Energy Resource Classification (AMREC) and the Sustainable Development Goals.