



# THE WHITE PAPER ON RESPONSIBLE MINING

*Giuseppe Di Capua<sup>1,5</sup>, Nikolaos Arvanitidis<sup>2,5</sup>, Jan Boon<sup>3,5</sup>, Pekka A. Nurmi<sup>4,5</sup>*

EOS4 "Geoethics: ethical, social and cultural implications of geoscience knowledge, education, communication, research and practice"



(1) Istituto Nazionale di Geofisica e Vulcanologia, Italy ([giuseppe.dicapua@ingv.it](mailto:giuseppe.dicapua@ingv.it)); (2) SGU - Geological Survey of Sweden, Sweden ([Nikolaos.Arvanitidis@sgu.se](mailto:Nikolaos.Arvanitidis@sgu.se)); (3) FaciliTech International, Ottawa, Canada ([facilitech@sympatico.ca](mailto:facilitech@sympatico.ca)); (4) GTK - Geological Survey of Finland, Finland ([pekka.nurmi@gtk.fi](mailto:pekka.nurmi@gtk.fi)); (5) IAPG - International Association for Promoting Geoethics ([iapgeoethics@aol.com](mailto:iapgeoethics@aol.com))



## Abstract

Our modern society is very dependent on minerals and metals-based raw materials. They are essential for development and supply of renewable "green" energy. They are also used to build homes, schools, hospitals and the infrastructure needed by sustainable communities. Despite the recent financial downturn across the globe, the demand for mineral raw materials will increase as attempts are made to boost economies and push the growth of manufactured goods and as populations grow. A continuous supply of minerals and metals will, in other words, be necessary also in the future. There is no doubt that mining can bring positive benefits to the host countries but these can come at a cost to the environment and local communities if the mines are not managed properly. The fundamental aim must be for the benefits of development to be distributed as widely as possible and for the negative impacts on people and environment to be minimized. Mining-generated wealth has the potential to improve the quality of life of regions and communities, and brings opportunities for economic growth and diversification. Mining generates revenue for governments through royalty and tax income. It also brings skilled employment, technology transfer and training for people, together with further jobs through the multiplier effect. Mining can bring substantial improvements in physical, social, legal and financial infrastructure. While mining has historically affected its surrounding environment, advances in technology and changes in public attitude and management features mean that many negative impacts are now avoidable. Increasingly, mining companies are making efforts to reduce the environmental impact of mining and to minimize the footprint of their activities throughout the mining cycle, including restoration of land and ecosystems after mine closure. In this context, the Task Group on Responsible Mining of the IAPG - International Association for Promoting Geoethics (<http://www.geoethics.org>) has prepared a "White Paper on Responsible Mining" (<http://www.geoethics.org/wp-responsible-mining>). This document aims to provide essential reference elements for framing this important topic from an ethical perspective and to draw geoscientists', companies', policy makers' and society's attention to the ideas and approaches that the actors involved in mining have developed and are using. It illustrates the need for geoethics and, for those working in this field it shows areas in which they can put the values enunciated in the "Cape Town Statement on Geoethics" (<http://www.geoethics.org/ctsg>) into practice. This document summarizes the results of an extensive survey of relevant literature. The bibliography lists relevant source documents. This presentation will illustrate structure and content of the "White Paper on Responsible Mining".

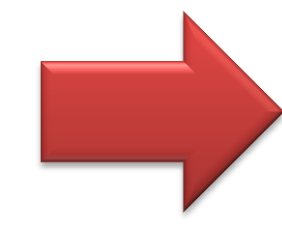
## Context



Mining can bring positive benefits to the host countries



But this can come at a cost to the environment and local communities if relationships, resources, and operations are not managed properly.

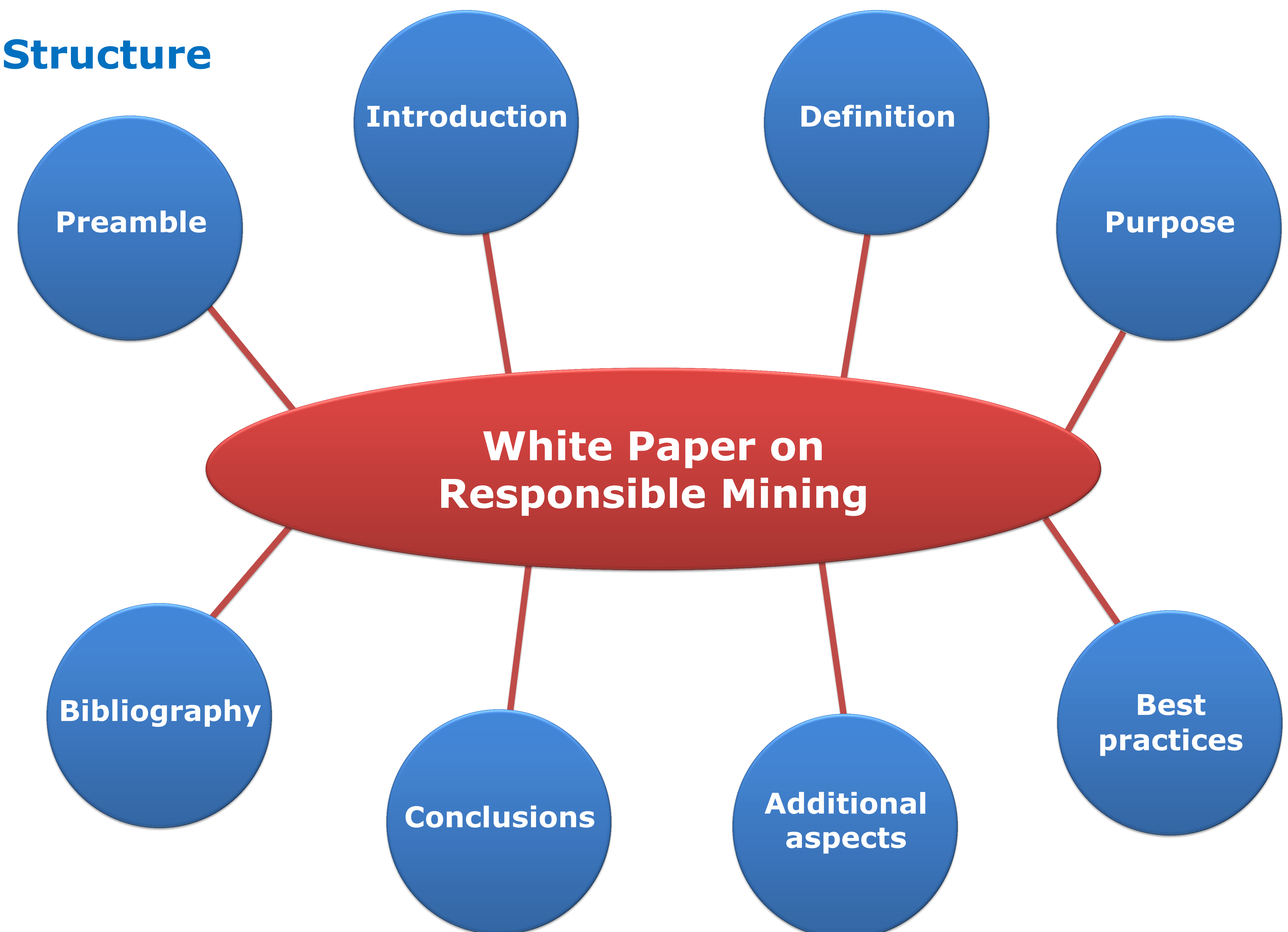


The fundamental aim must be equitable distribution of the benefits and minimization of the negative impacts on people and the environment.



Responsibly navigating this field requires a strong ethical compass.

## Structure



The White Paper on Responsible Mining has been drafted by the **IAPG - Task Group on Responsible Mining**

**Drafting Committee:** Nikolaos Arvanitidis, Jan Boon, Pekka Nurmi, Giuseppe Di Capua

**With the contribution of:** Vitor Correia, Roberto Lencina, David Ovadia, Mark Rachovides, Ian Thomson

**Approved by the IAPG Executive Council on 1th December 2017**

### How to cite:

Arvanitidis N., Boon J., Nurmi P. and Di Capua G. (2017).  
White Paper on Responsible Mining.  
IAPG - International Association for Promoting Geoethics,  
<http://www.geoethics.org/wp-responsible-mining>





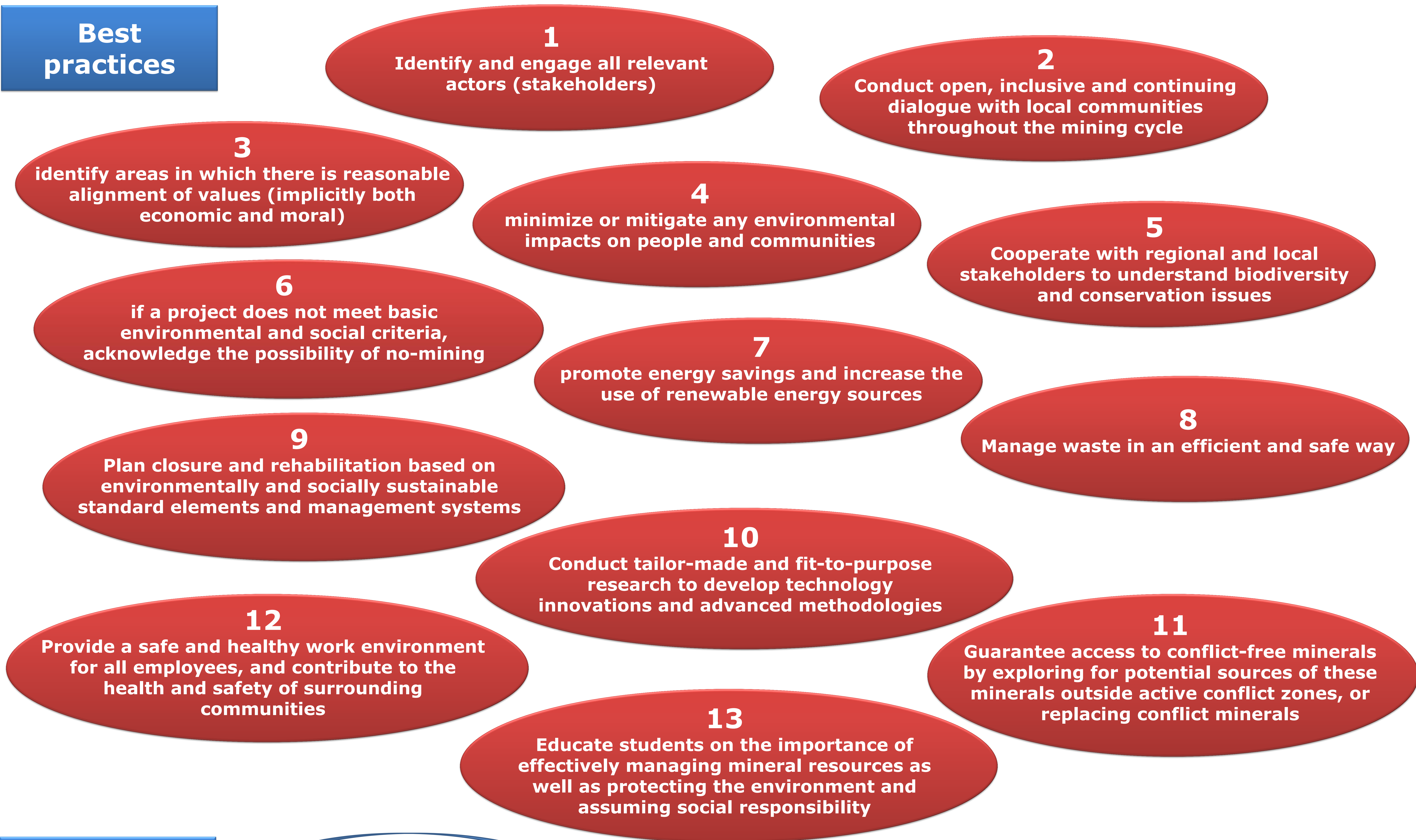
## Definition

Responsible mining demonstrably respects and protects the interests of all stakeholders, human health and the environment, and contributes discernibly and fairly to broad economic development of the producing country and to benefit local communities, while embracing best international practices and upholding the rule of law.

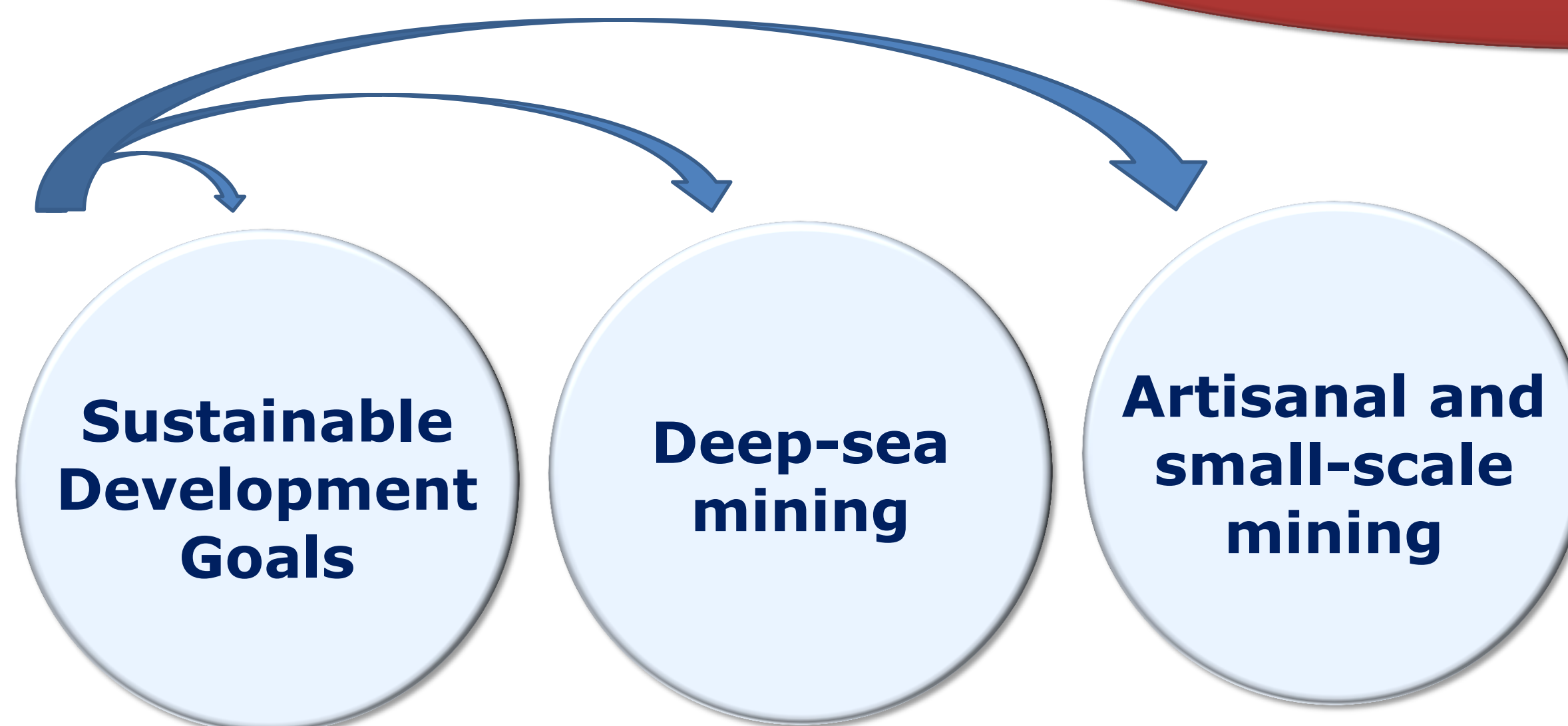
## WHITE PAPER ON RESPONSIBLE MINING



## Best practices



## Additional aspects



## Conclusions

Responsible mining concerns the principles and ethics of sustainable development applied to the exploration for and exploitation and use of economic mineral resources, including the entire value chain, from studies, exploration, and extraction to processing, refining, waste management, mine closure and rehabilitation