

CIRAN

A project to reconcile diverging societal needs and expectations

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INTRAW - International Raw Materials Observatory

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**THE CHALLENGE:
BALANCING MINING AND
ENVIRONMENT**

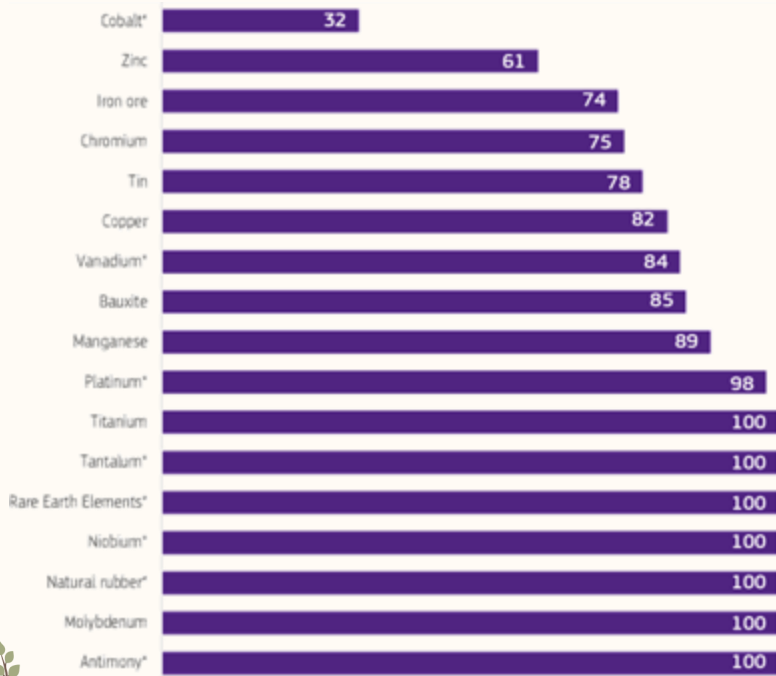


**OVERCOMING HURDLES TO
RESPONSIBLE DOMESTIC
MINING**



**A PATH TOWARDS
SUSTAINABLE COEXISTENCE**

EU Raw materials dependency



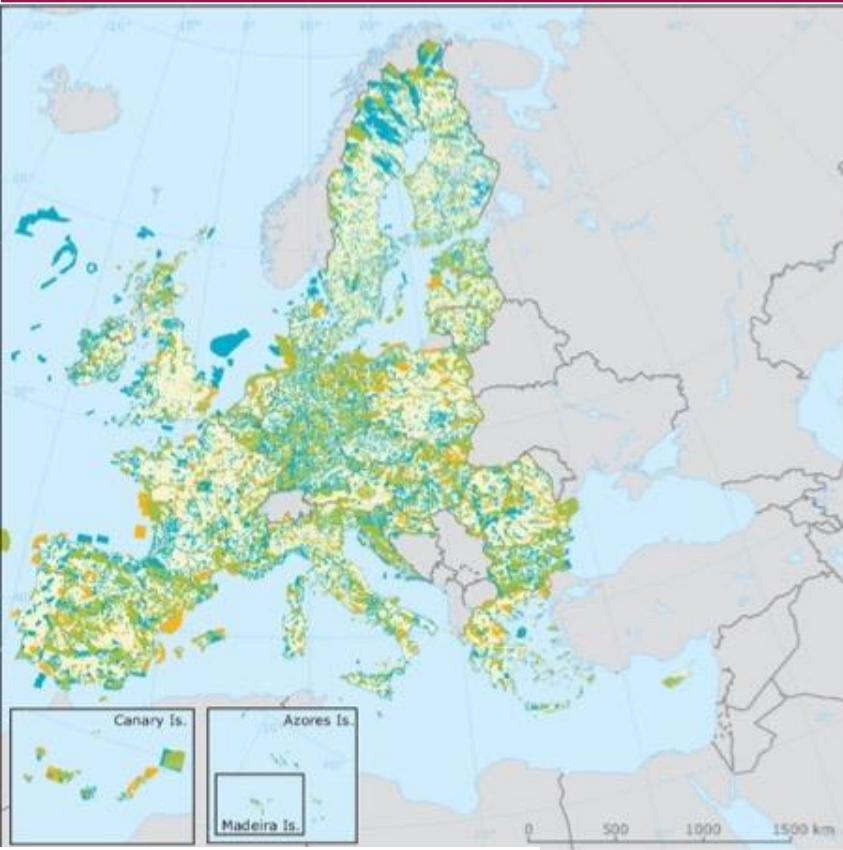
Source: JRC (2018): EU Raw materials scoreboard.

Policy framework



- ***Protecting its natural environments and biodiversity vs.***
- ***ensuring a sustained and sustainable supply of mineral raw materials.***
- Decarbonisation is bought by using more minerals.
- Many 'new' materials, e.g. REE, for which there is no societal reservoir.
- Recycling only will have significant impact in a few decades from now.
- Persisting paradigm of economic growth.
- Reaching SDGs worldwide greatly enhances raw materials needs.
- Domestic supply enhances resilience, but stakeholder resistance (NIMBY).

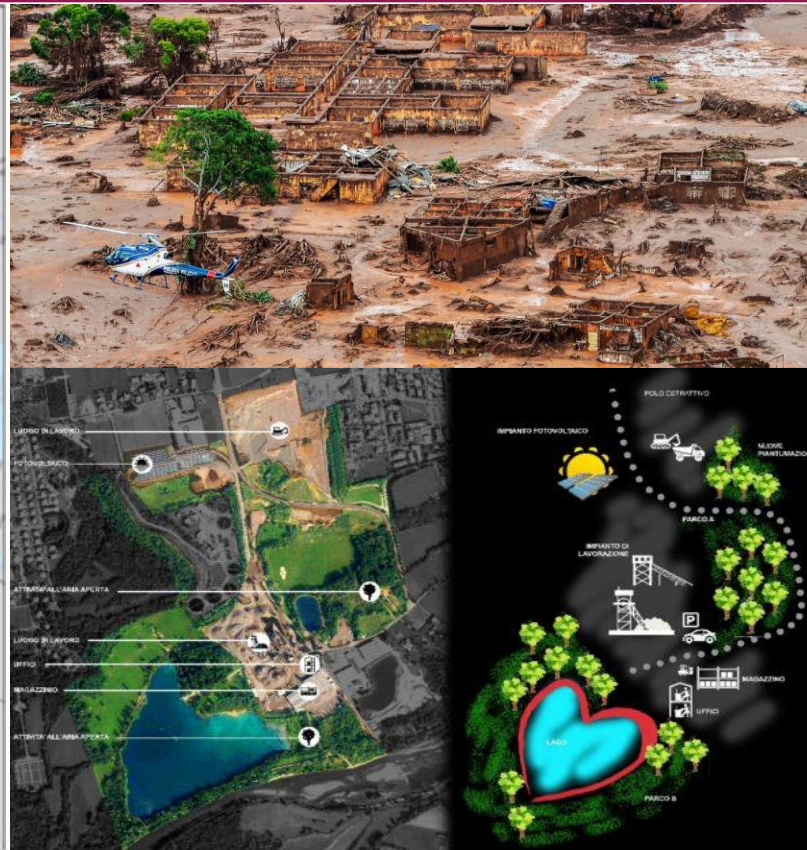




NATURA 2000

- Sites—or parts of sites—belonging to both Directives
- Habitats Directive sites, pSCI, SCI, SAC
- Birds directive sites (SPA)

■ Outside coverage

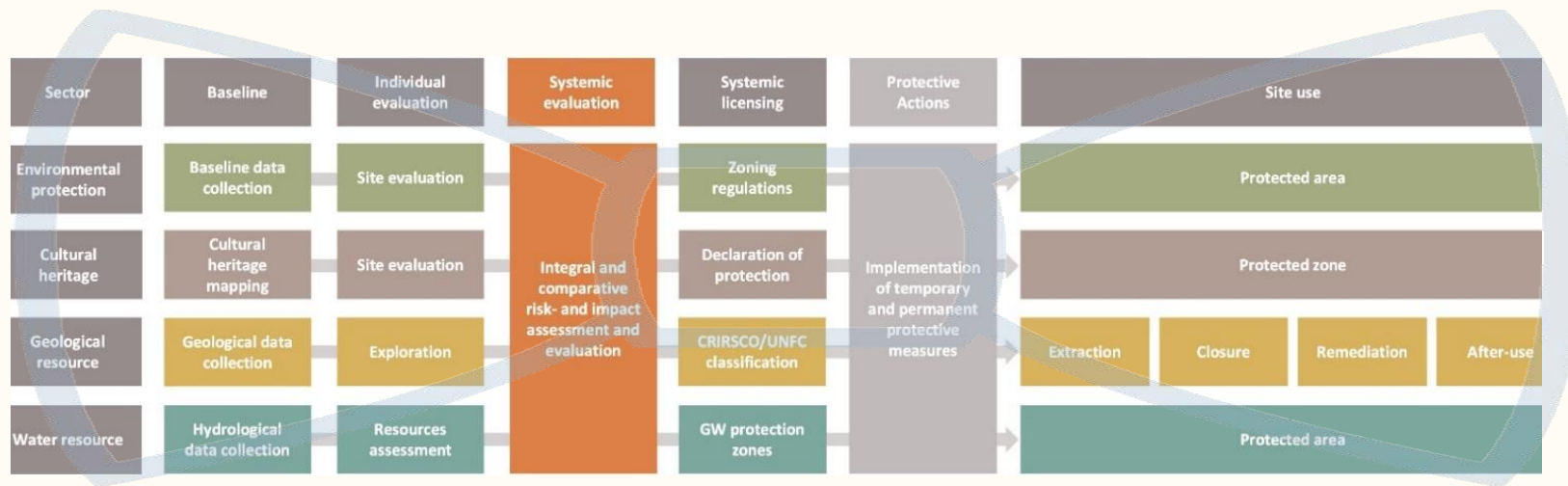


UEPG SUSTAINABLE DEVELOPMENT AWARDS 2020

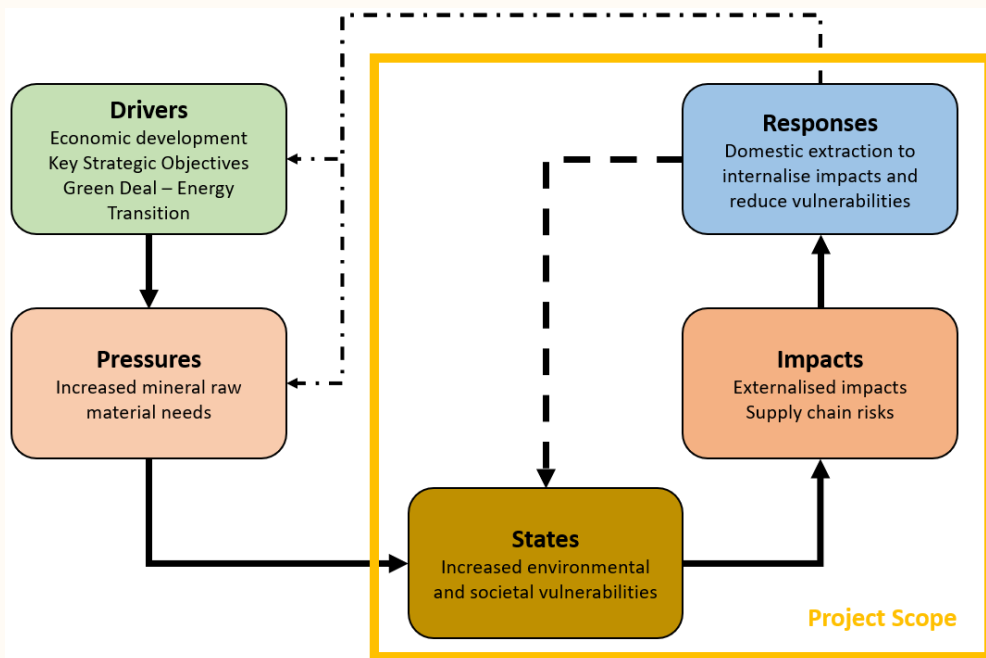
Biodiversity in a sand and gravel extraction area, **Nuova Demi, IT**



- Isolated procedures, based on sectoral policies and regulations.
- Decisions often made exclusive and categorical.
- Full spectrum of societal needs and expectations not considered.
- Systemic, cross-sectoral approaches enable balanced and integrated permitting.



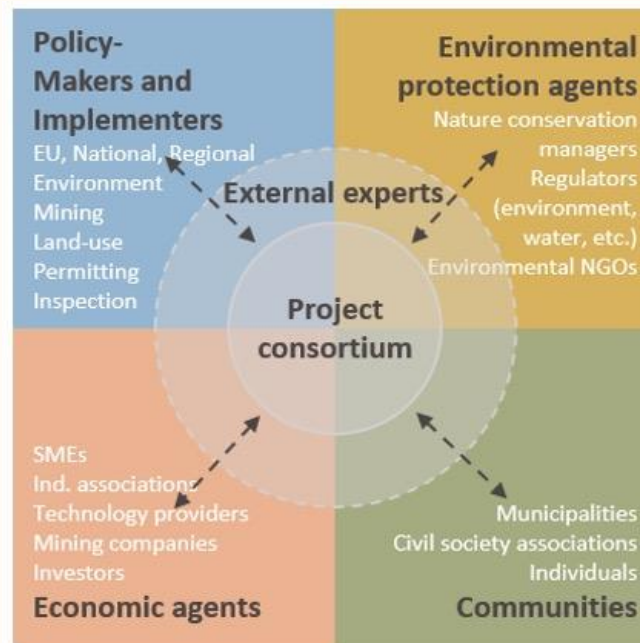
Driver-Pressure-State-Impact-Response framework (EEA)



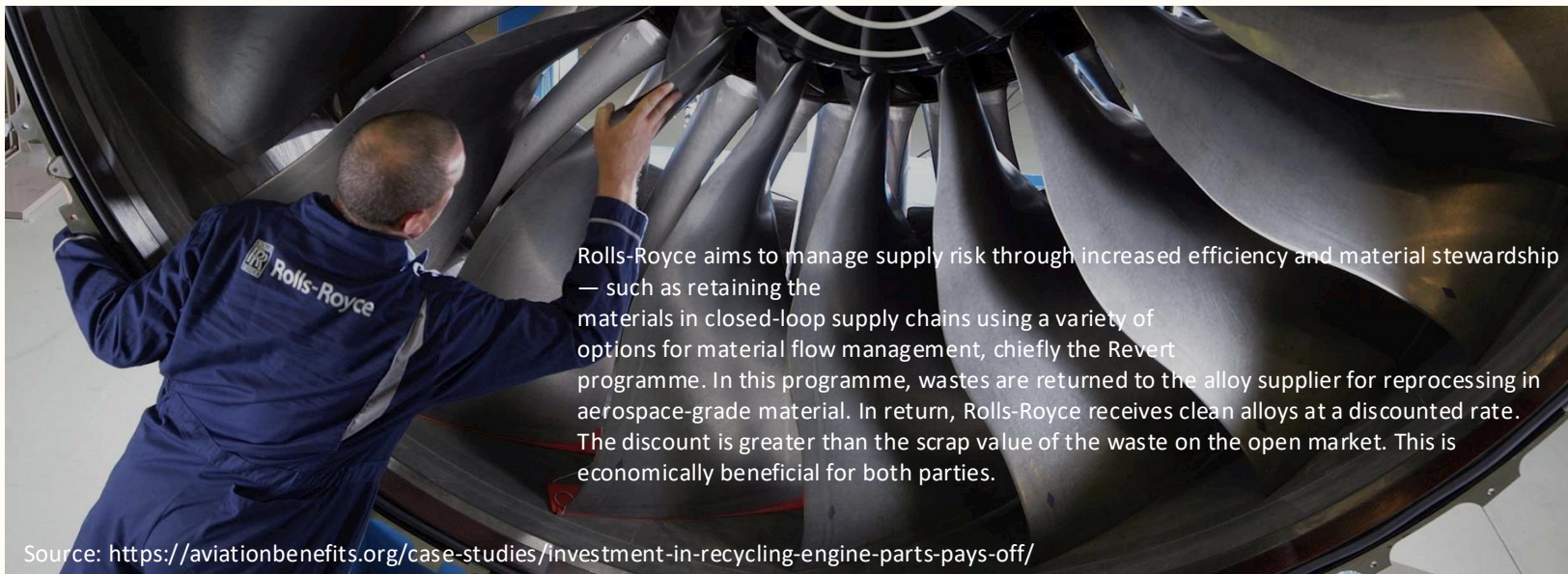
Economic scenario analyses



- Development of a lasting Community of Practice (CoP) between
 - regional and local authorities (land-use, environment, water, etc.),
 - curators/managers of protected areas,
 - industry,
 - geological surveys, etc.
- Expert Groups work with project partners on
 - policy-making and -implementation,
 - economic drivers,
 - local governance and social capital,
 - nature conservation and ecosystems



- Bridges between established sectoral permitting methods and ones responding to the economic, environmental, societal, and governance (ESG) challenges of today.
- Transparent, system-oriented approach to managing natural resources above and below ground for the benefit of society.
- Paving the way towards sustainable co-existence of mining and protected areas.



Rolls-Royce aims to manage supply risk through increased efficiency and material stewardship — such as retaining the materials in closed-loop supply chains using a variety of options for material flow management, chiefly the Revert programme. In this programme, wastes are returned to the alloy supplier for reprocessing in aerospace-grade material. In return, Rolls-Royce receives clean alloys at a discounted rate. The discount is greater than the scrap value of the waste on the open market. This is economically beneficial for both parties.

Source: <https://aviationbenefits.org/case-studies/investment-in-recycling-engine-parts-pays-off/>



- CIRAN is a three-year project, running from 1st January 2023 to 31st December 2025 with 13 partners from 11 European countries.
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Thank you for your attention !

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