

Raw Materials Trends and Actions

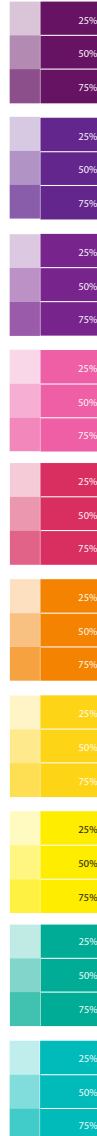
Karen Hanghøj





SUSTAINABLE DEVELOPMENT GOALS

<p>1 NO POVERTY</p> 	<p>2 ZERO HUNGER</p> 	<p>3 GOOD HEALTH AND WELL-BEING</p> 	<p>4 QUALITY EDUCATION</p> 	<p>5 GENDER EQUALITY</p> 	<p>6 CLEAN WATER AND SANITATION</p> 
<p>7 AFFORDABLE AND CLEAN ENERGY</p> 	<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 	<p>10 REDUCED INEQUALITIES</p> 	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> 	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 
<p>13 CLIMATE ACTION</p> 	<p>14 LIFE BELOW WATER</p> 	<p>15 LIFE ON LAND</p> 	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p> 	<p>17 PARTNERSHIPS FOR THE GOALS</p> 	 <p>SUSTAINABLE DEVELOPMENT GOALS</p>



Predictions

World Economic Forum (2015) Mining and Metals in a Sustainable World 2050:

- A strong move towards recycling and circularity
- Mining will not disappear
- The need for raw materials will not disappear
- Technology will matter more than ever
- Understanding value chains will be important

EIT RawMaterials

Vision:

To develop raw materials into a major strength for Europe

Mission:

To boost competitiveness, growth and attractiveness of the European raw materials sector via radical innovation and entrepreneurship.

Objectives:

- Securing raw materials supply
- Designing solutions
- Closing material loops

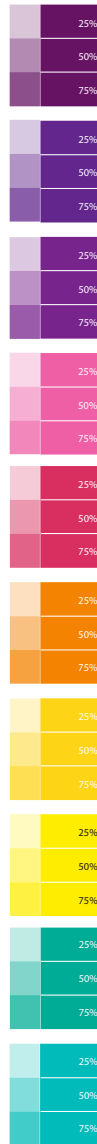


Our partners – our network – our knowledge triangle





SUPRIM – Sustainable Management of Primary Raw Materials through a better approach in Life Cycle Sustainability Assessment

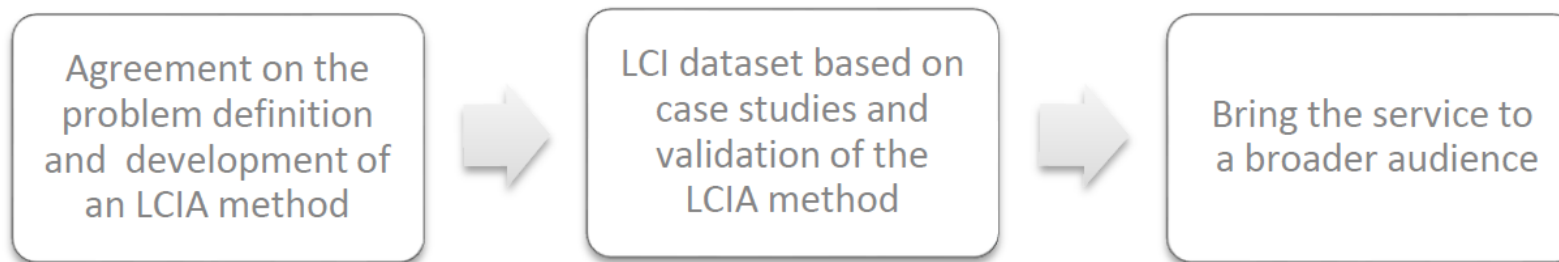


SUPRIM: Why this Project?

- LCA (Life Cycle Assessment) community developed pretty well:
 - Area of Protection 'Ecosystem Quality' (e.g. impact by acid rain)
 - Area of Protection 'Human Health' (e.g. impact by particulate matter)
- LCA community developed poorly:
 - Area of Protection 'Natural Resources':
 - Trying to quantify 'Resource Depletion'
 - Developments done disconnected from the Primary Raw Materials Sector/expertise
- LCA becomes now prominent in EU: PEF using ILCD ...
 - Threats for the raw materials of the poorly developed methods on 'resource depletion'
 - Hence threatening raw materials sector

SUPRIM: Project objectives

1. Develop a Life Cycle Impact Assessment (LCIA) method to address resource availability ('depletion') in sustainability assessment
2. Develop a Life Cycle Inventory (LCI) dataset through case studies in collaboration with the industrial partners from the mining sector
3. Bring the service to a broader audience – E.g. the mining sector, policy makers, KIC partners, academic community and LCA community (Development of business model)



SUPRIM: Project partners



Universiteit
Leiden



BOLIDEN

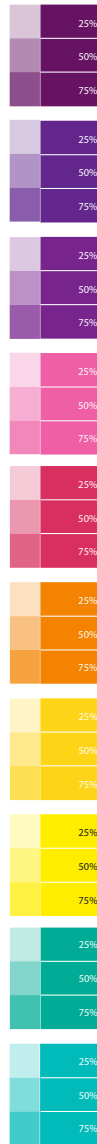




CERA
CERTIFICATION OF RAW MATERIALS



CERA – Certification of raw materials

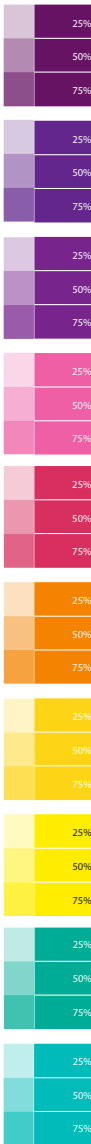


CERA - Certification

The need of CERA derives from the strengthened demand for sustainability and transparency in consumption in large parts of society (e.g. Dodd-Frank Act, EU Conflict Mineral Regulation).

The implementation of a raw material certification not only fulfils political requirements, but also generates an image boost for certified companies.

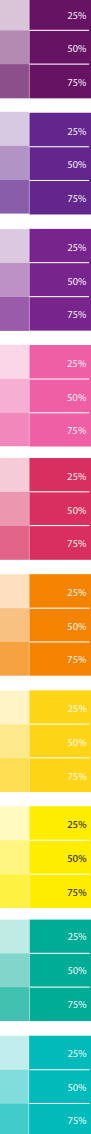




CERA - Certification

- A standardized certification ensuring environmental, social and economic sustainability in extraction, processing, trading and manufacturing .
- Guarantee traceability of certified materials by using a combination of traceability technologies including proof of origin methods throughout the entire value chain.
- A certification operating on the principle of the Chain of Custody certification.

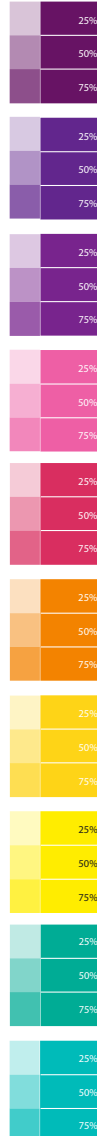




CERA – Key Elements and challenges

- To unify and simplify the certification process (develop an appropriate standardization system)
- Traceability of the extracted material along the entire value chain
- Trustworthiness of the certificate
- Avoid of geographic, social and company-size exclusion or imbalances
- Minimize number of certification schemes
- Guarantee environmental, social and economic standards in the entire value chain





CERA: Partners and Advisory Board

Partners



DMT



**Universiteit
Leiden**



Current Advisory Board (will be expanded)



THE
UNIVERSITY OF
BRITISH
COLUMBIA



FAIRPHONE



Thank you for your
attention

