



CERA
CERTIFICATION OF RAW MATERIALS

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Certification of Raw Materials

UNECE Resource Management Week 2019 – Resources For Sustainable Development | 1 – 3 May 2019

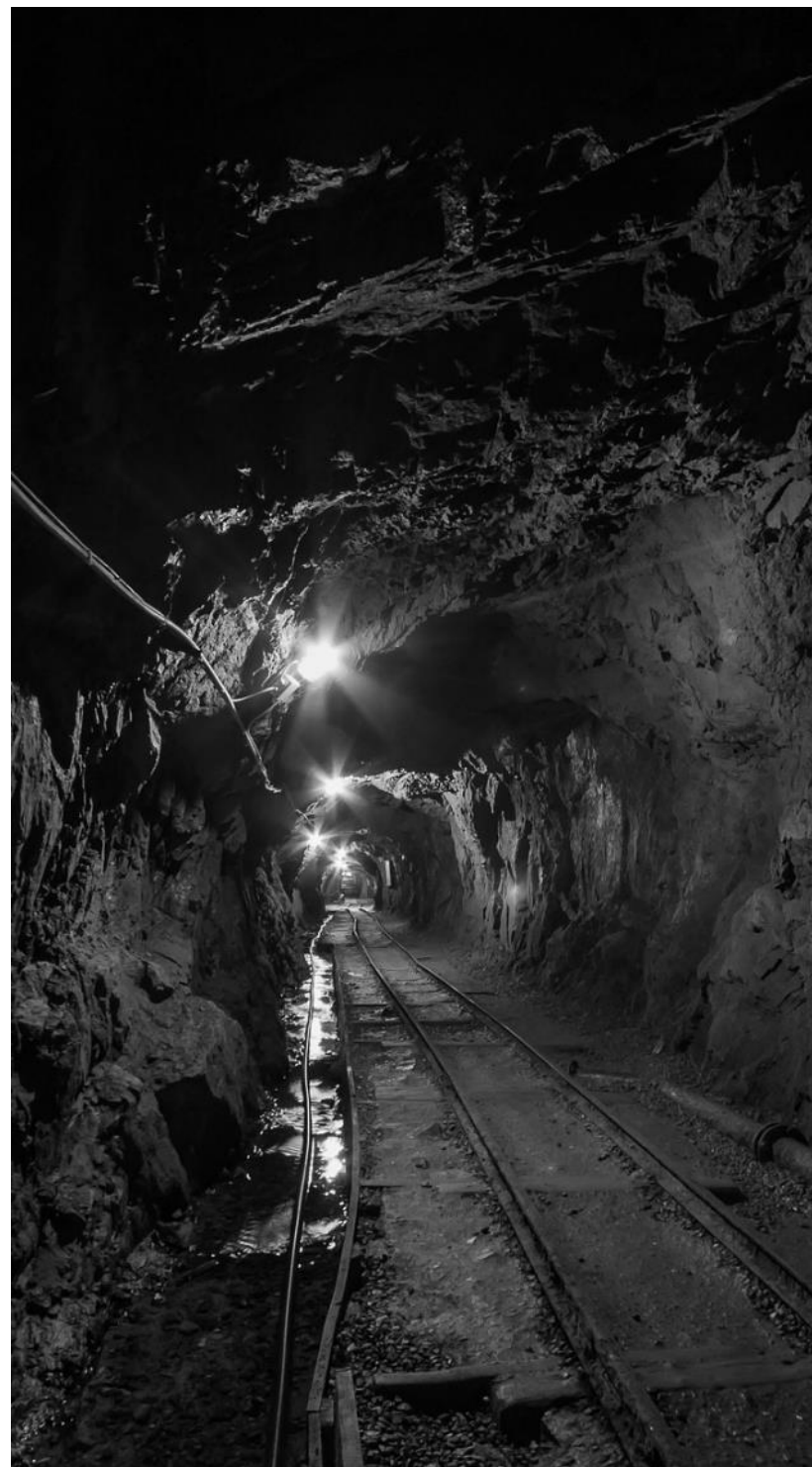
Dr. Andreas Hucke

CERA – System

A Certification System for Sustainable
Production and Processing of Raw Materials

Overview

Overview CERA



PARTNERS

Our Project Team consists of universities, institutes and independent audit and consulting companies.



Mining



Certification



Proof of Origin



Chain of Custody

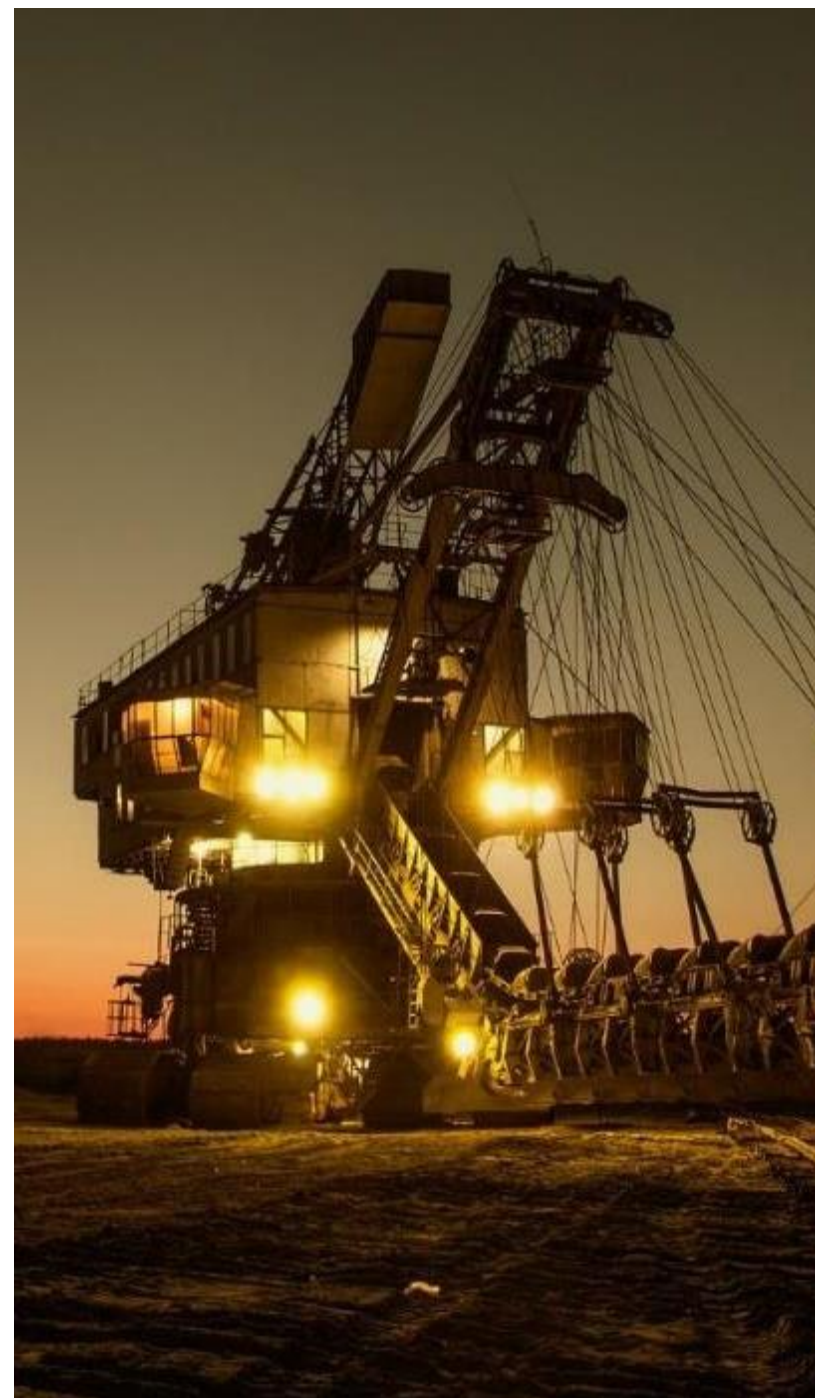


Market Entry



Blockchain

Overview CERA



ADVISORY BOARD

An international Advisory Board supports the project team and brings aspects into the discussion.



CERA Uniqueness



Situation: Existing certification schemes

- Not holistically applicable to all raw materials and fossil fuels.
- Missing global scale.
- Small-scale mining (ASM) or recycling is often not considered.

The **CERA** standard closes this gap by being a holistic certification scheme that is

- applicable to the entire value chain from greenfield to consumer
- applicable on a global scale, all mining-related operations, all sizes of operation and all raw materials,
- introduces mechanisms to ensure reliability in the Chain of Custody.



The CERA system consists of four different Sub-standards that look at different aspects but build on each other and are optimized for the value chain actors.

These are the



Readiness
Standard
CRS



Performance
Standard
CPS



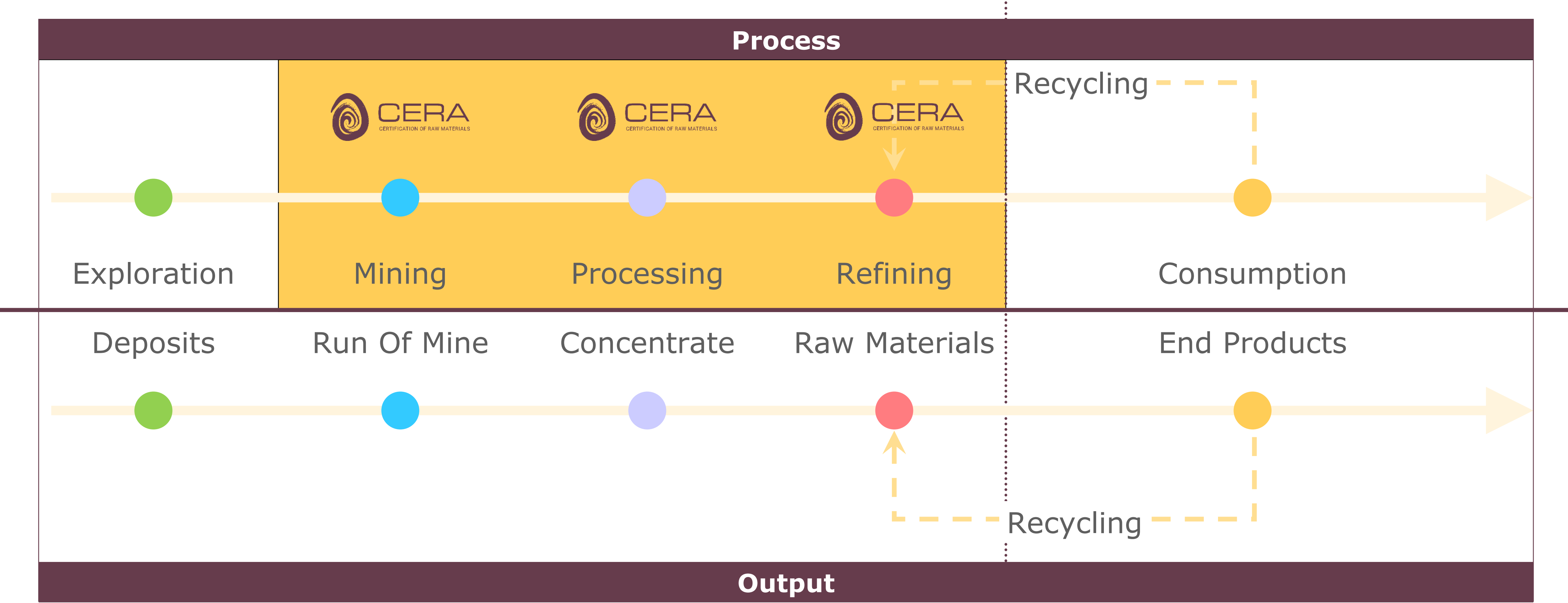
Chain of Custody
Standard
CCS



Final Product
Standard
CFS

The overall system leads to certification of the complete mineral resources & recovery chain.

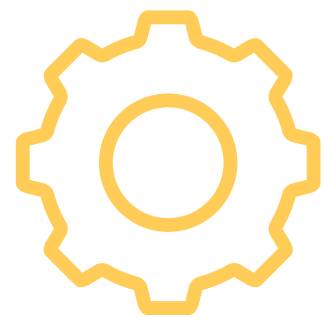
CERA Performance Standard (CPS)



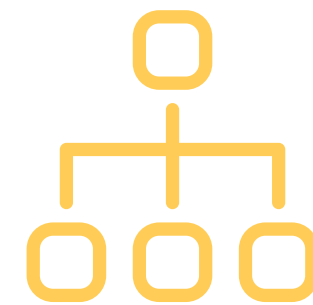
CERA – 4 Standards in 1 System



1. CERA Performance Standard (CPS) – published in April 2019



The Performance Standard certifies a facility or sequence of operations.



The standard defines a set of minimum criteria, which every operation in the upstream supply chain have to fulfil.



The individual aspects of the respective minerals or processes are taken into account.

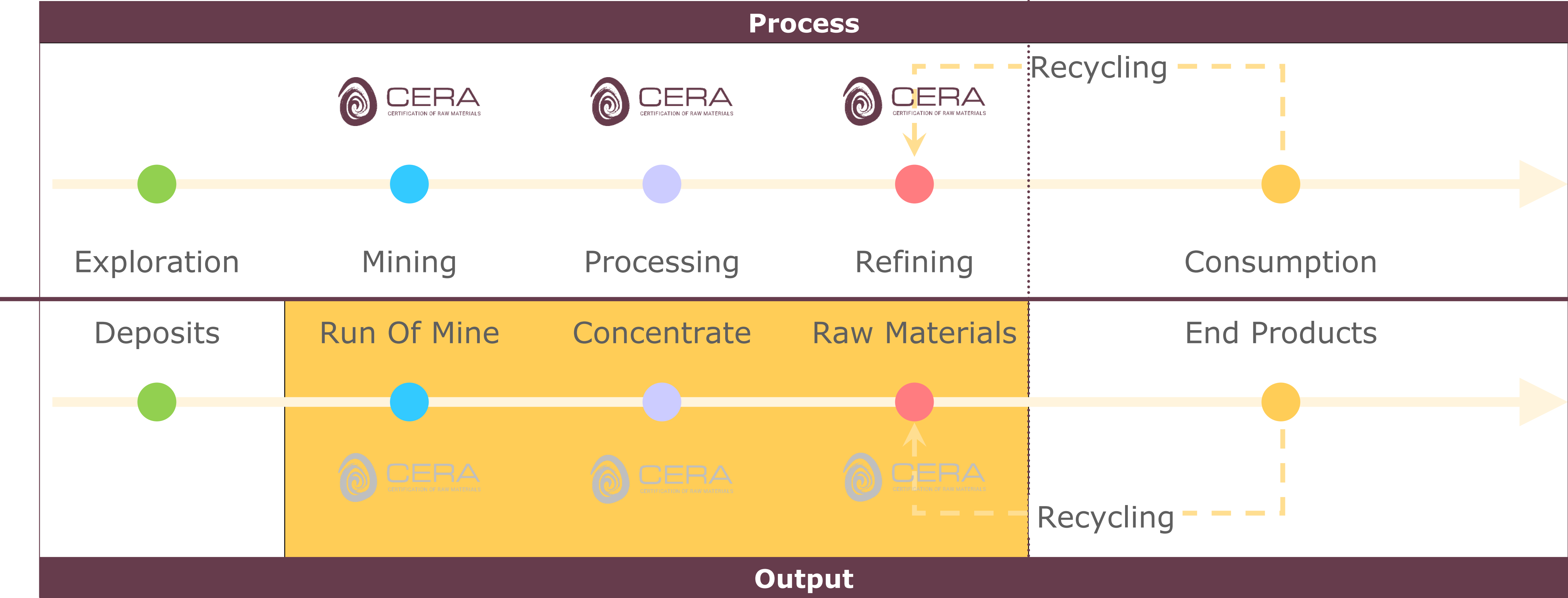


CERA Structure and Labeling



CERA Performance
Standard (CPS)

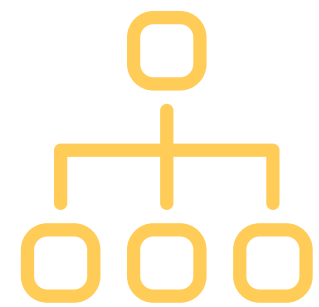
CERA Chain of
Custody Standard
(CCS)



CERA – 4 Standards in 1 System



2. CERA Chain of Custody Standard (CCS)



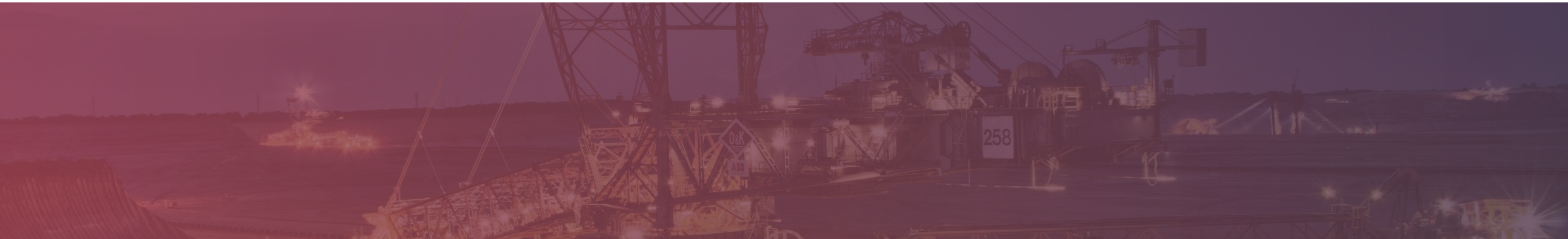
The Chain of Custody Standard refers to the mining product.



The standard aims to provide criteria for appropriate management systems for a complete traceability, that guarantee a chain of custody of sustainably extracted raw materials.



The standard will also include ASM and recycling through specific approaches.



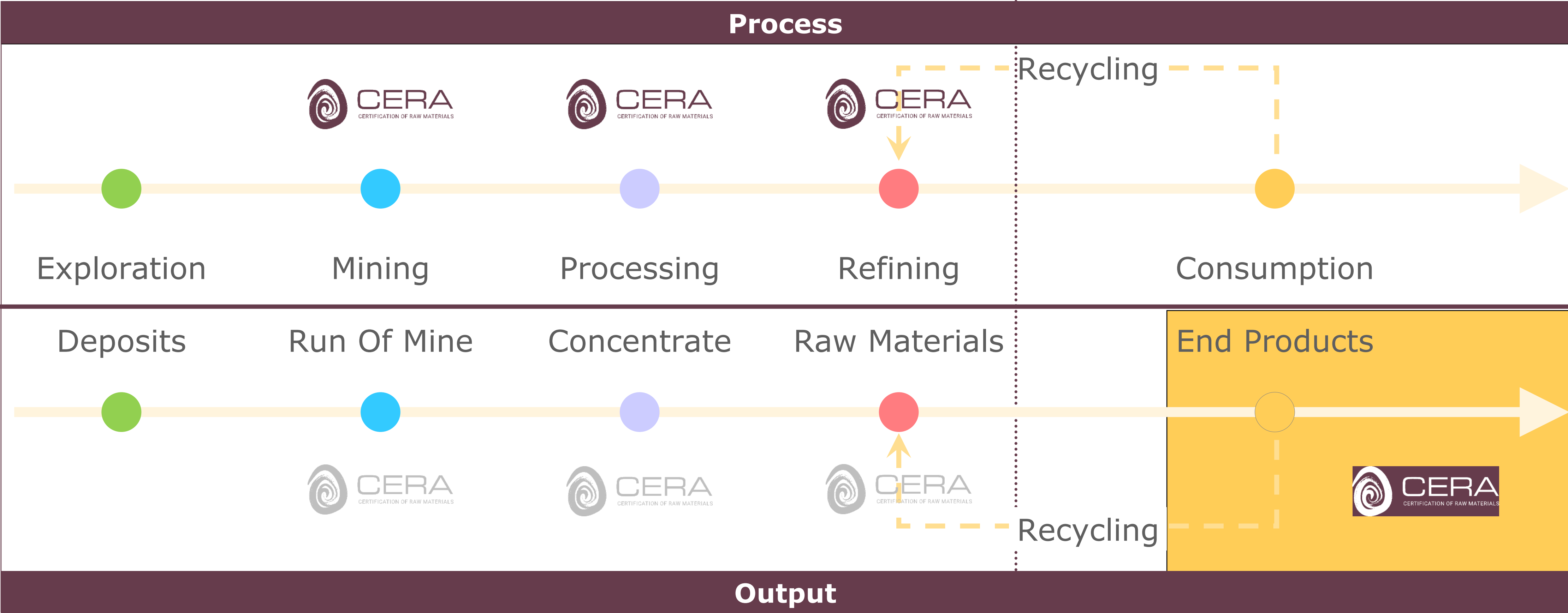
CERA Structure and Labeling



CERA Performance
Standard (CPS)

CERA Chain of
Custody Standard
(CCS)

CERA Final
Product Standard
(CFS)



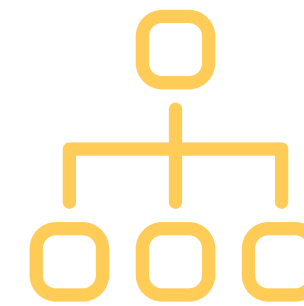
CERA – 4 Standards in 1 System



4. CERA Product Standard (CFS)



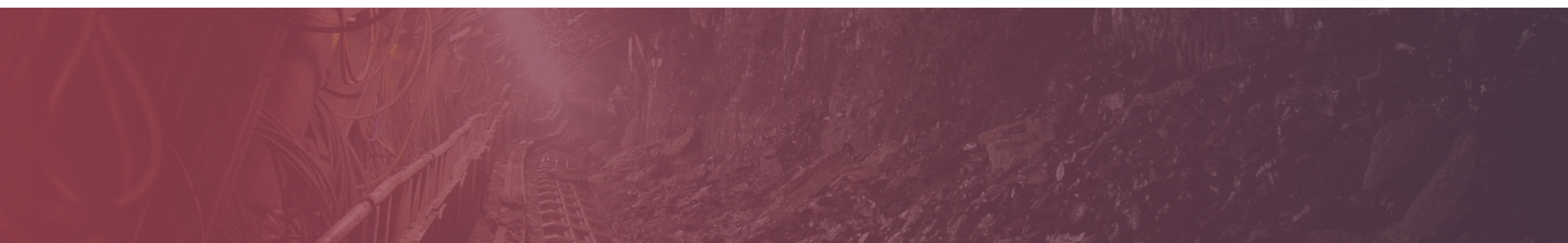
The CERA Product standard certifies the end product that the consumer ultimately purchases.



For the CFS the former standards CPS and CCS are required.



The assignment of the standard is indicated by a product label. (→ Label on Final Product)



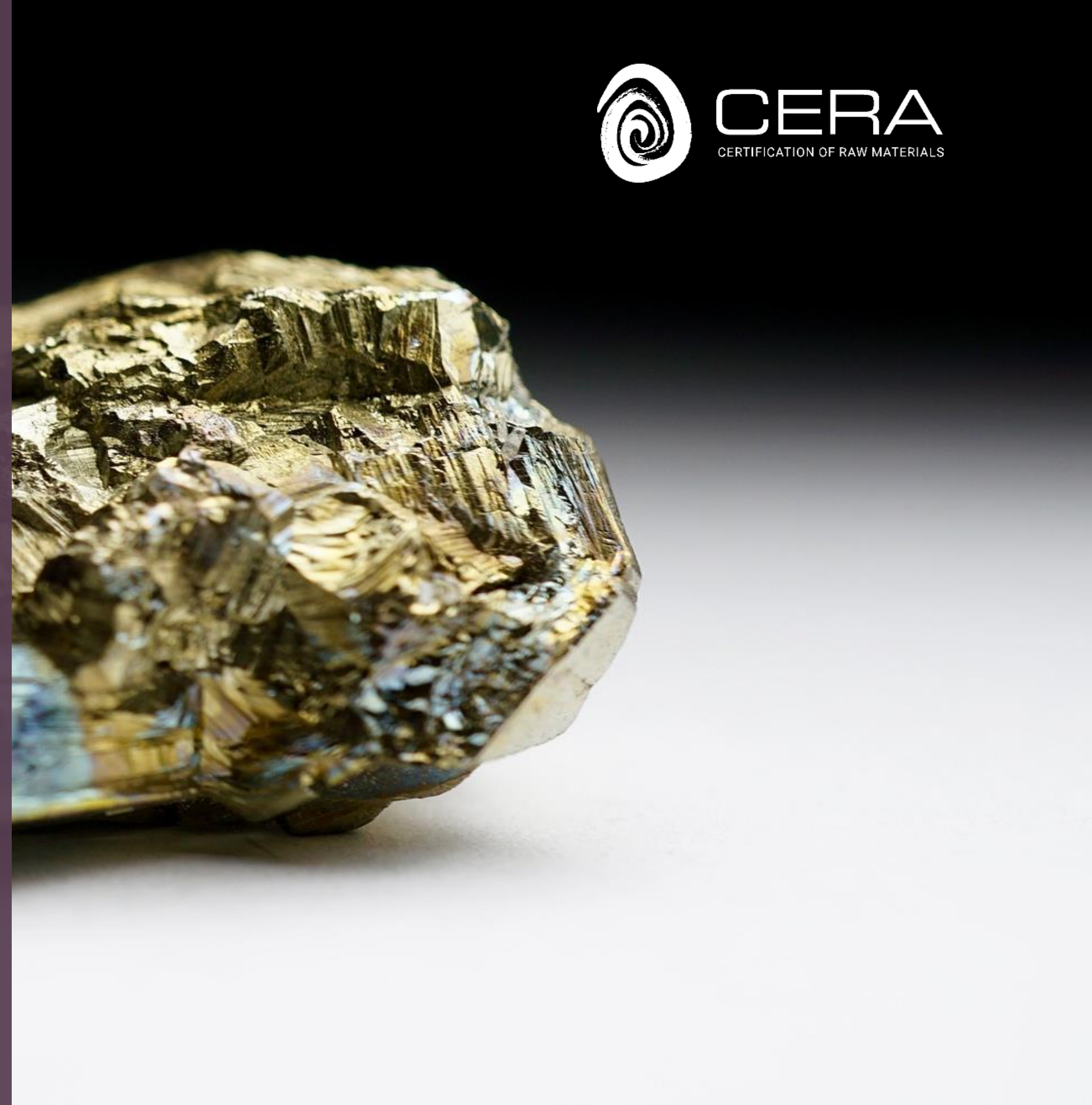
CERA Readiness – Standard (CRS)

Overview

Status Quo 1/2

Situation:

- Increasing demand of OEM, consumer as well as financial and trade sector for sustainable raw materials production.
- Pressure on value chain actors handling with raw materials regarding sustainable sourcing.
- Insufficient harmonization of already existing evaluation standards with Agenda 2030.
- Missing clear, minimal sustainability criteria within the evaluation phase.



Status Quo 2/2

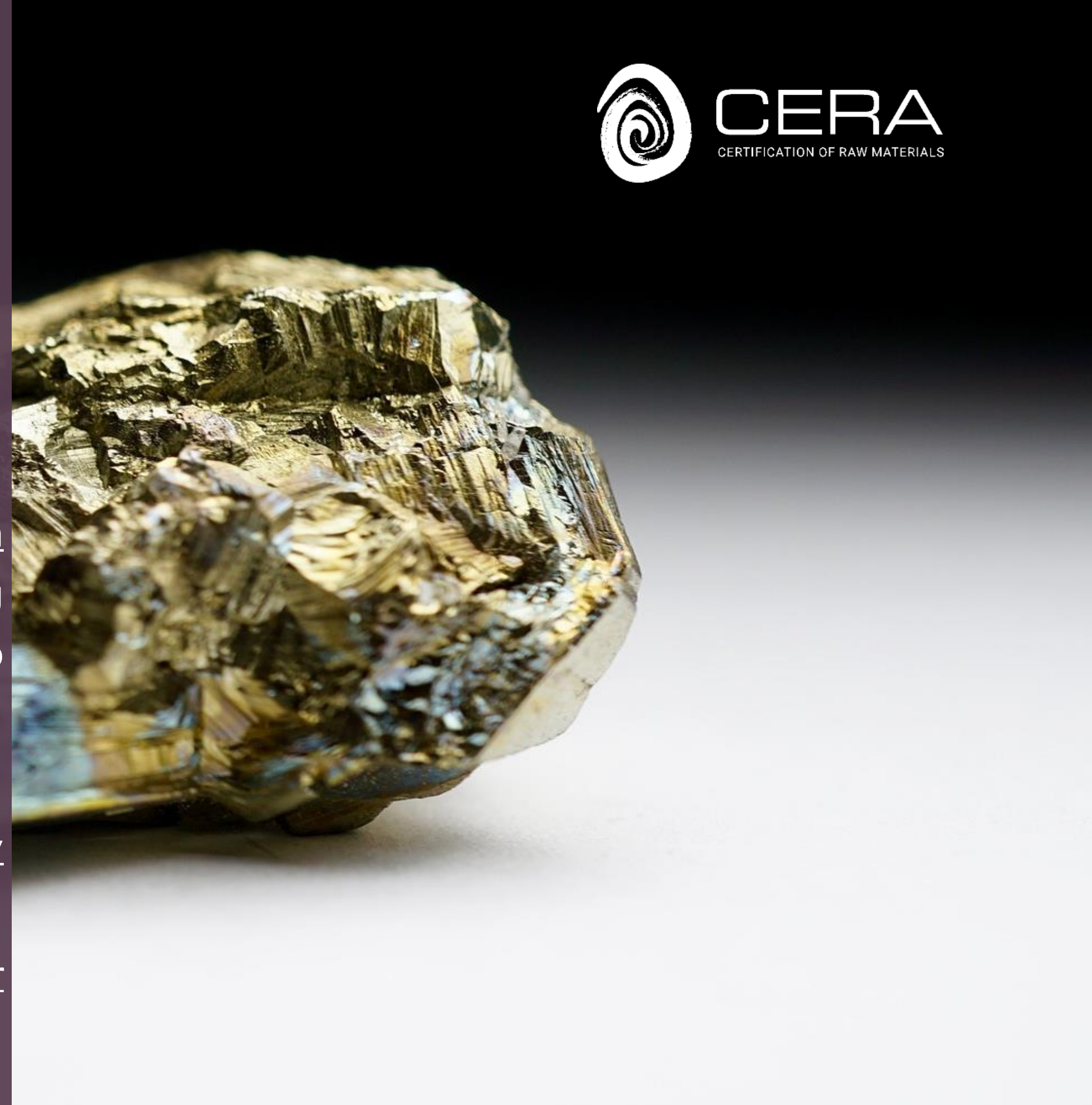
Results:

- Fragmented market of evaluation schemes that are not applicable with the required sustainability in mining.

Within **CERA** system a comparable standard with clear criteria is defined that is considered during the e.g. feasibility studies and mine planning to ensure sustainable sourcing from the beginning.

More over **CERA** tries to contribute in:

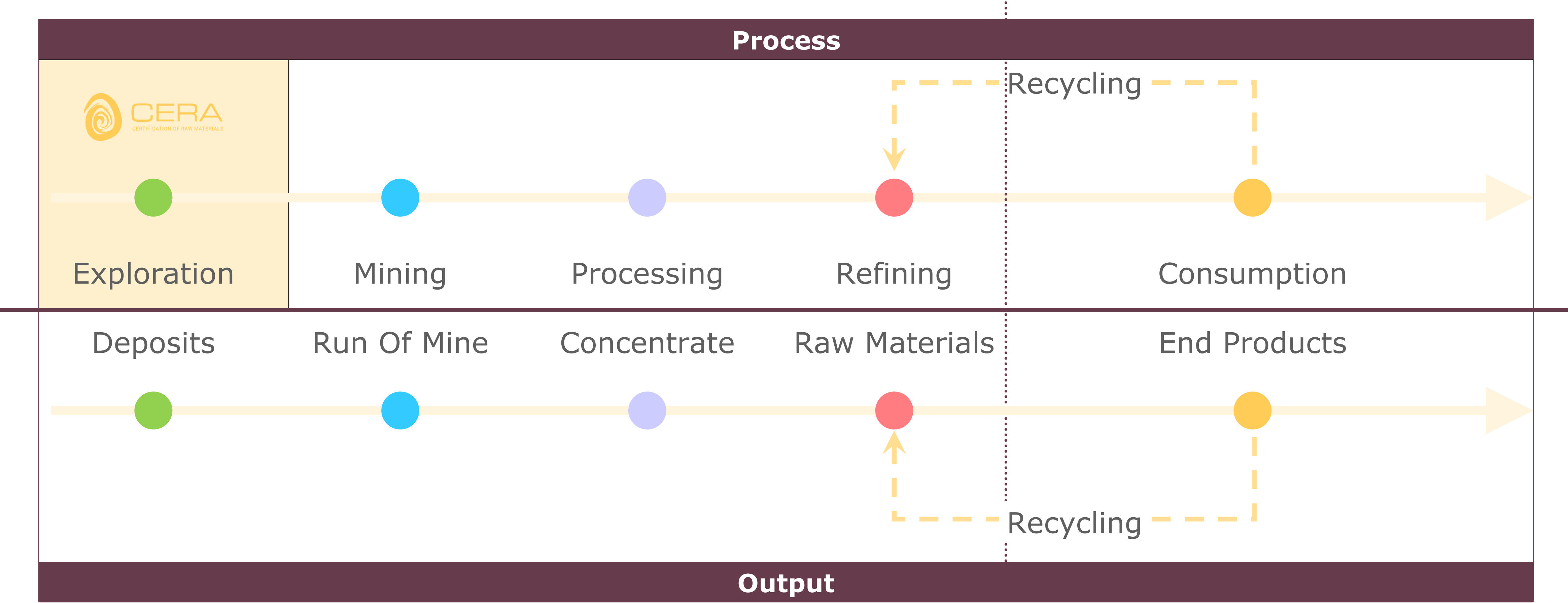
- Harmonization. Linking the SDG's with already existing standards and add missing aspects.
- Raising acceptance in financial and trade sector by considering their demands.



CRS – Structure and Labeling



CERA Readiness Standard (CRS)



CRS – Scope



3. CERA Readiness Standard (CRS)



The CERA Readiness standard certifies the companies that are executing feasibility studies.



The Readiness Standard defines binding sustainability minimum criteria to be considered before the extraction of a deposit.



Concretized evaluation from resources to reserves and it is taken into account when preparing e.g. feasibility studies.



CRS – Framework

The aim is to exclude a arbitrary, subjective assessment with regard to sustainability and to replace it with clear evaluation.

Modifying Factors:

- Mining
- Processing
- Metallurgical
- Infrastructure
- Economic
- Marketing
- Legal
- Government
- Environment
- Social

Clear Classification of sustainable aspect within the **CERA Performance (CPS) and Readiness Standard (CRS)**



The Modified Factors are covered by three sustainable aspects within the CERA Performance Standard (CPS).

Modifying Factors:

- **Mining**
- **Processing**
- **Metallurgical**
- **Economic**
- **Government**
- **Environment**
- **Social**

ENVIRONMENTAL RESPONSIBILITY



Emission & Waste,
Resource & Energy use,
Biodiversity

SOCIAL RESPONSIBILITY



Human & Community Rights,
Labour Conditions,
Occupational Health & Safety,
Safety & Security

CORPORATE GOVERNANCE



Legal Compliance,
International Best Practice,
Business Integrity,
Stakeholder Involvement,
Supply Chain Due Diligence,
Complaints and Grievance
Mechanism,
Management Approach

CRS – Extended Evaluation Tool (2/2)



The CRS-system modify and extend the existing evaluation tools of resources to reserves.

Modifying Factors:

- **Mining**
- **Processing**
- **Metallurgical**
- **Economic**
- **Government**
- **Environment**
- **Social**

ENVIRONMENTAL
RESPONSIBILITY

SOCIAL
RESPONSIBILITY

CORPORATE
GOVERNANCE

Within the CRS the impacts on the three sustainability aspects in mining are further categorized into



Space

Location, Region,
Country, Global



Time

Short-Term, Mid-Term,
Long-Term, Eternal



Contact

You are welcome to become part of CERA! Join us as

- Member of the Advisory Board (society, politics and industry)
- Partner for pilot phase



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