political leaders form an alliance to push reforms that focus on increasing sustainability

there is only green mining and a reduced consumption of primary raw materials

environment-friendly way of producing with the aid of green technologies

increased use of high tech for exploration and extraction

substantial progress in re-use, recycling and substitution of materials

Future scenarios for the world of raw materials 2050

Scenario 1: SUSTAINABILITY ALLIANCE

A new generation puts sustainability above everything else to keep deposits for future generations.

http://s.fhg.de/INTRAW1
Postcard from the Future. Recommendations for a robust development in Scenario 1
Future scenarios for the world of raw materials 2050

Scenario 2: **UNLIMITED TRADE**
Increased global consumption leads to raw materials growth.

- Increased demand for raw materials due to growing consumption
- Integration of processing industry
- International cooperation and elimination of trade barriers
- Increased use of high tech for exploration and extraction
- Recycling gains importance

Wide application of remote mining
Postcard from the Future. Recommendations for a robust development in Scenario 2

Scenarios compiled by Fraunhofer IAO | www.intraw.eu
Future scenarios for the world of raw materials 2050

Scenario 3: NATIONAL WALLS

Economic standstill gives rise to nationalist politicians and protectionist measures.

- countries that abandoned mining have re-started
- mining technology development is at a standstill, but some countries have to catch up
- little economic growth, mostly boosted by national government
- acceptance of mining (it is a necessity)
- no collaboration across national borders
- mining practices are basically the same as 40 years ago
- less mining employees than 30 years ago
Postcard from the Future. Recommendations for a robust development in Scenario 3

Scenarios compiled by Fraunhofer IAO | www.intraw.eu