



**Johan Hedlin**  
**CEO, Rock Tech Centre AB**  
**[Johan.hedlin@rocktechcentre.se](mailto:Johan.hedlin@rocktechcentre.se)**

*Moving theory into practice*  
*[www.rocktechcentre.se](http://www.rocktechcentre.se)*



**RTC**  
ROCK TECH CENTRE

# Towards a competitive Europe of tomorrow- benefits of a KIC in Raw materials.

## Outline

Introduction

About Rock Tech Center and our owners

Background – about Swedish research and development strategies

The mining industries needs

Conclusions and expected benefits from a KIC raw material for Europe

# RTC - The mission

## RTC run global R&D projects.

RTC identifies and solves technology problems and transfers the solutions to practical applications.

Acting in close collaboration with owners and stakeholders.  
Keeps an updated project portfolio.

RTC initiate, administrate and manage projects.



# Owners, project partners and stakeholders

## Owners of RTC



**On going dialogs** with companies from South Africa, Australia and Canada.

**Cooperation** with several universities in Europe.

## Partners and stakeholders

Company	Business	Country
ABB	Equipment	Sweden
Andra	Nuclear Power	France
Atlas Copco	Equipment	Sweden
Barrick	Mining	Canada
BASF	Equipment	Switzerland
Boliden	Mining	Sweden
KGHM	Mining	Poland
LKAB	Mining	Sweden
Metso Minerals	Equipment	Sweden
NCC	Contractor	Sweden
Normet	Equipment	Finland
Sandvik	Equipment	Sweden(Finland)
SKB	Nuclear Power	Sweden
Vibrometric	Consult/Service	Finland
Vale	Mining	Canada
Xstrata	Mining	Canada
ÅF - Infrastruktur	Consult/Service	Sweden
Camiro	R&D proj manager	Canada
Universitys	Research	Several

# Swedish mining industry

## **R&D departments**

- ❑ Boliden Mineral,
- ❑ LKAB
- ❑ Zink gruvan(Lundin mining)
- ❑ Atlas Copco,
- ❑ Sandvik
- ❑ and other companies

## **Research institutes/Universities**

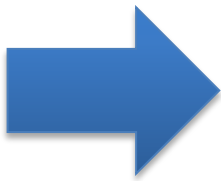
- ❑ Luleå University of Technology (The Swedish mining University)
  - the whole mining value chain
- ❑ MEFOS - process metallurgy, heating, metalworking, the environment and energy technology.
- ❑ KTH Royal Institute of technology
- ❑ Uppsala University

# Swedish mining industry

## **Common long term R&D strategies**

for the whole value chain, -exploration, - extraction, - processing, and metallurgy.

- ❑ Sustainable Mining and Innovation for the Future(SMIFU)
- ❑ Strategic Research and Innovation agenda for the Swedish Mining and Metal producing industry (STRIMM)



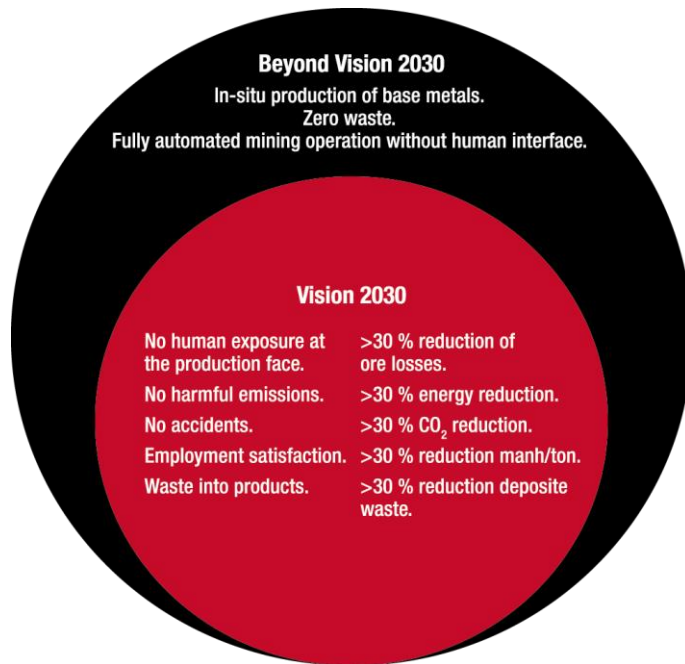
A large number of short and long term R&D projects



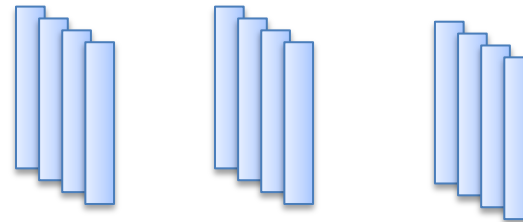
# SMIFU

## Sustainable Mining and Innovation for the Future(SMIFU)

### Vision



### Preliminary organisation



R&D projects



**RTC**  
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Strategic Research and Innovation agenda for the Swedish Mining and Metal producing industry

## The vision

- ❑ Strengthening the international competitiveness of the Swedish mining and metal producing sector
- ❑ Fostering leading centres and clusters for research, innovation and education that become European centres of excellence and where domestic and international participants are developing sustainable solutions for the future.



# Needs identified in the strategy programs

## **For example...**

- ❑ Increased research capacity
- ❑ More engineers and geologists
- ❑ New technology
- ❑ More innovations and new solutions
- ❑ More efficient production
- ❑ Increased cooperation between research institutes and companies
- ❑ New products and shorter time to market
- ❑ Sustainable solutions - safer, leaner and greener

# Benefit for mining industry from a KIC raw material

- ❑ Developed higher education, master and doctors degree
- ❑ Increased capacity in our research organisations
- ❑ Increased cooperation with several research institutes and universities within Europe
- ❑ Faster development and implementation of new solutions
- ❑ Better use of research result for shorter time to market for new products
- ❑ Increased number of products on global market
- ❑ Stronger capacity to develop sustainable solutions
- ❑ Stronger integration of European industry and countries
- ❑ Even stronger contribution to raw material supply to Europe
- ❑ Improved image for the mining industry in Europe
- ❑ Keep the leading position in the global mining industry

# Rock Tech Centre - Please feel free to contact us:



Chairman of the board Nordic Rock Tech Centre AB  
**Staffan Sandström**, Technology Director Mining Boliden Mineral AB,  
representing Bergforsk Foundation.  
Tel: +46-(0)910-77 40 00  
E-mail: [staffan.sandstrom@rocktechcentre.se](mailto:staffan.sandstrom@rocktechcentre.se)



CEO Nordic Rock Tech Centre AB  
**Johan Hedlin**  
Luleå University of Technology, SE-971 87 LULEÅ, Sweden  
Mobile +46 (0)70 575 28 10  
E-mail: [johan.hedlin@rocktechcentre.se](mailto:johan.hedlin@rocktechcentre.se)



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