The ReeMAP project

-Extracting critical minerals for a sustainable future

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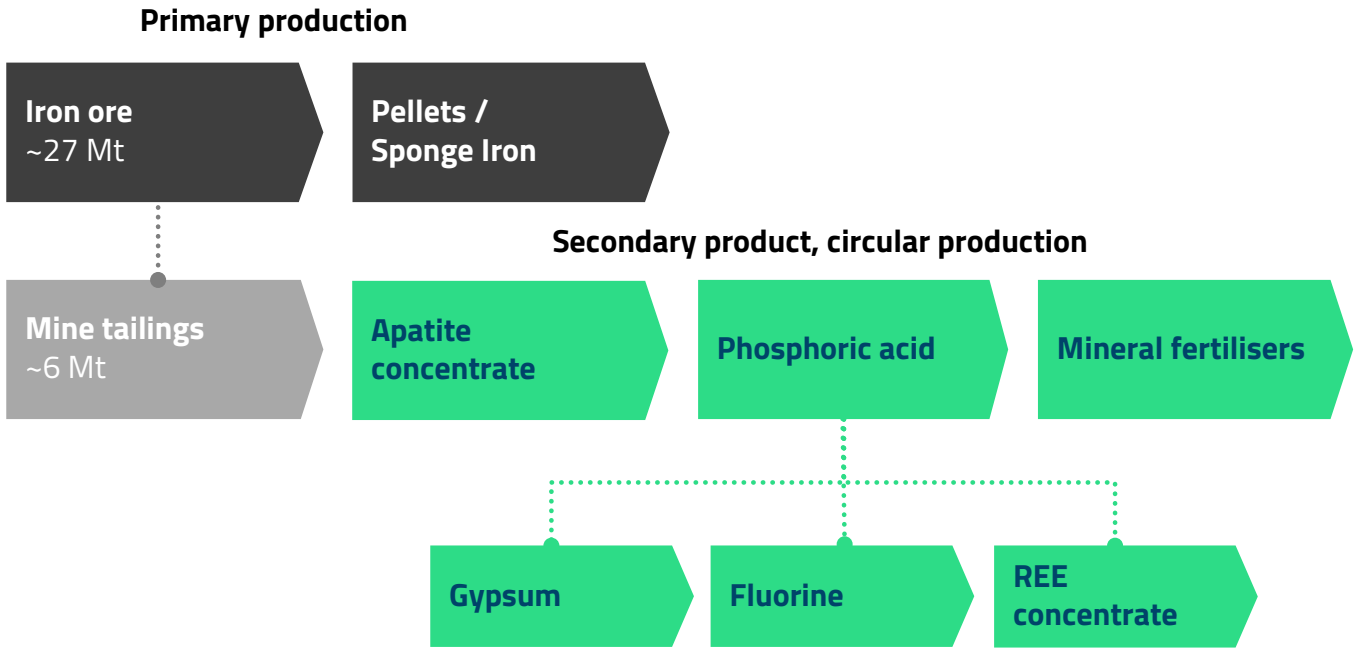
Innovation for circular production of phosphorus and rare earth elements



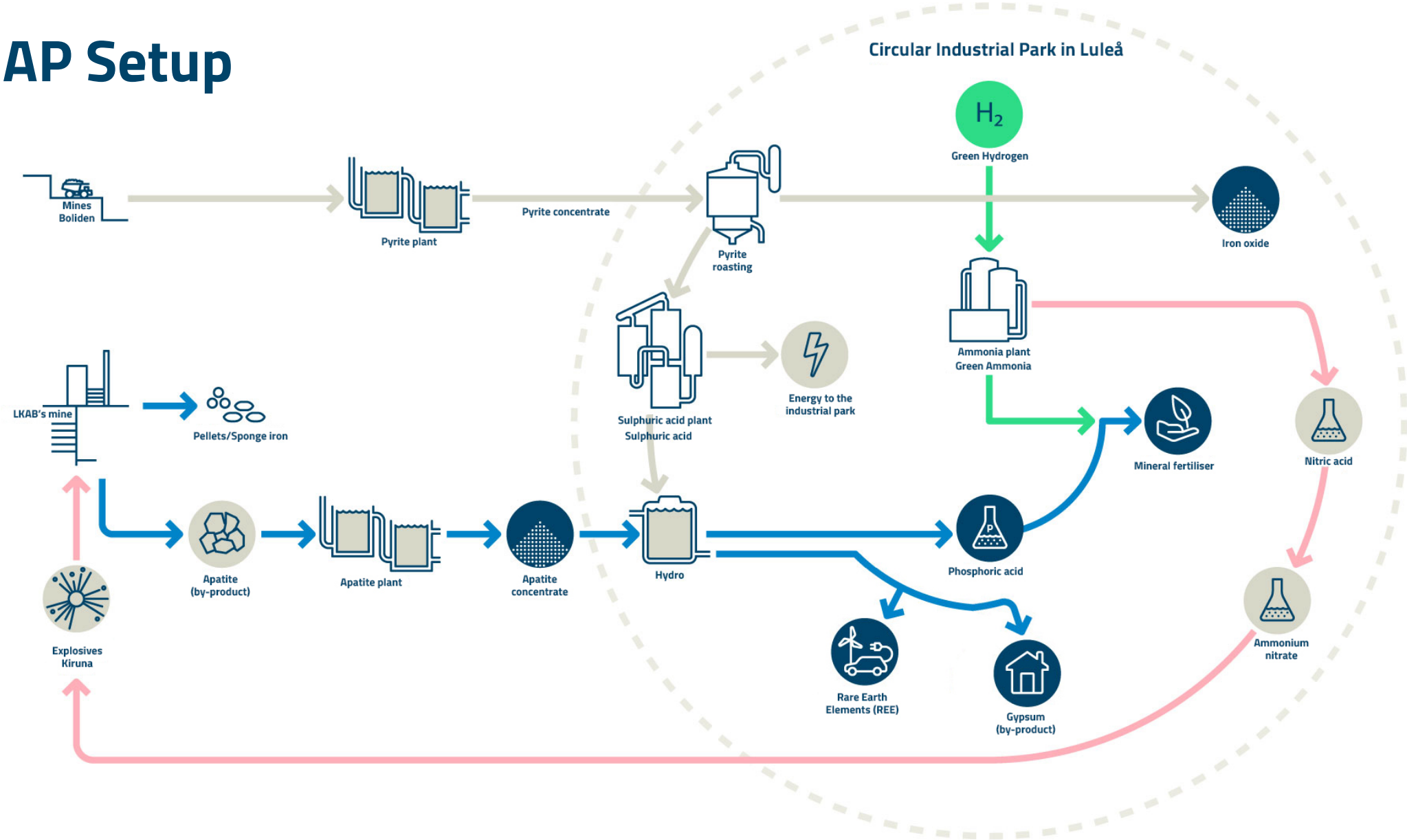
Fossil-free energy and processes

500 jobs
10 billion SEKs

Own circular and fossil-free production of inputs

Sulphuric acid
Hydrogen
Ammonia
Ammonium Nitrate

The ReeMAP Setup



A completely new industry from today’s mine waste

We are broadening our business by extracting critical minerals

Phosphorus for mineral fertiliser, essential for the world's food production

Rare Earth Elements for electrical vehicles and wind turbines

Gypsum for construction

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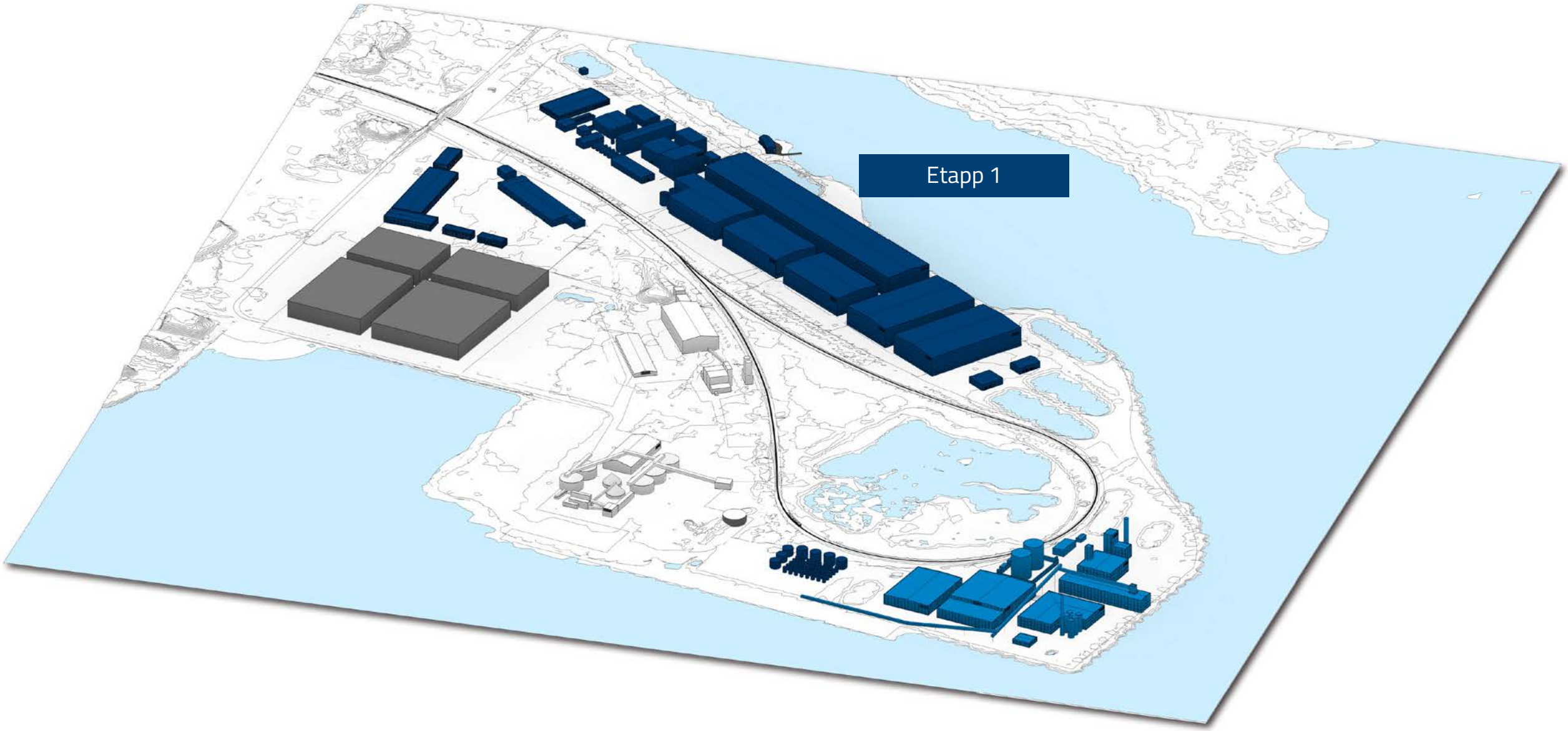
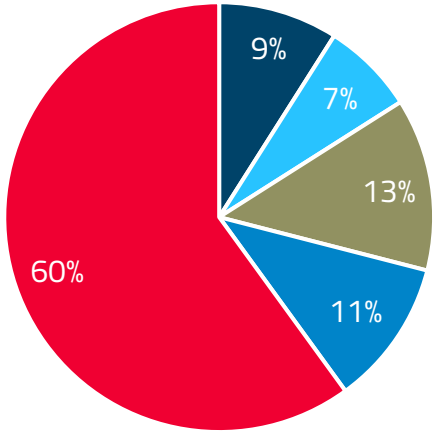

Etapp 1

Future expansion in all parts of the business

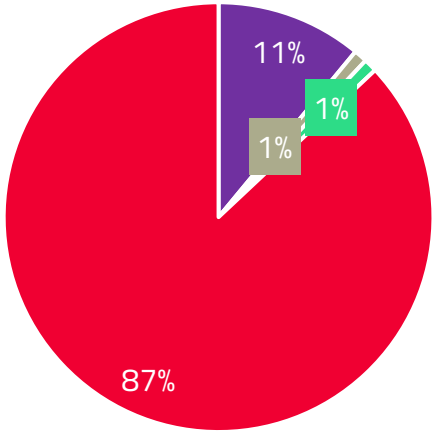
- Investments and jobs in Malmfälten, apatite plant that provides the Industrial Park for further processing
- Possible with increased production of apatite and direct sales
- Luleå best choice for the industrial park
  - Logistics in and out
  - Inputs
  - Product volumes
  - Land and electric power
  - Synergies with existing operations – 220 employees in Luleå

Europe needs rare earths but has no extraction and marginal refinement

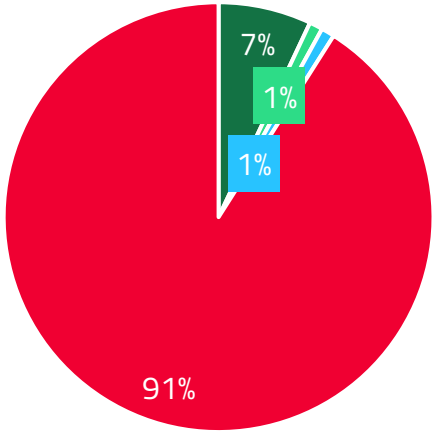
Rare earth oxide mining



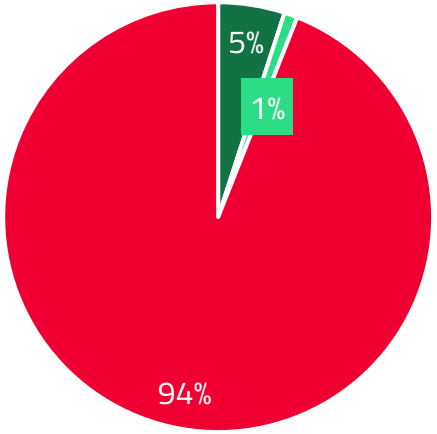
Rare earth oxide processing



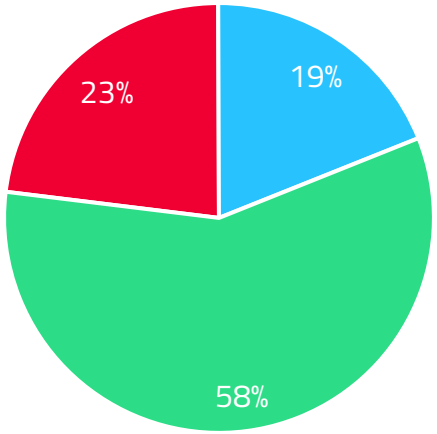
Rare earth metals



Permanent magnets



Example: Wind turbines

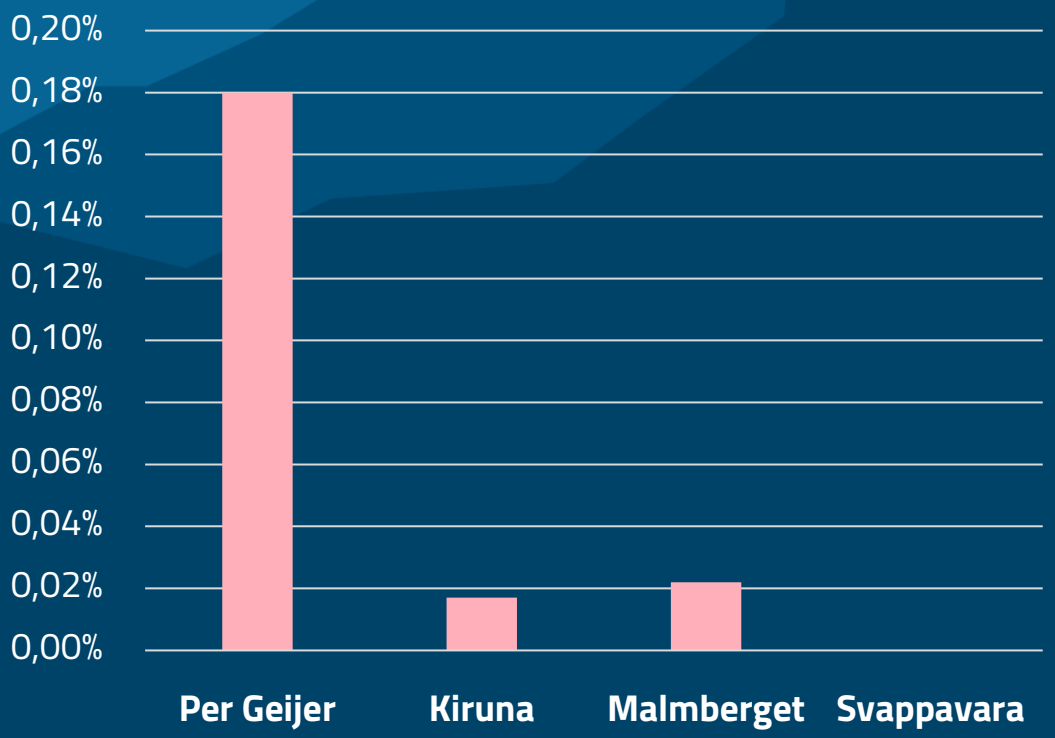


Source: European Raw Materials Alliance, combined data from Roskill 2018; Adamas Intelligence 2019; Peteves 2017; Carrara et at 2020; IEA 2021; USGS 2021

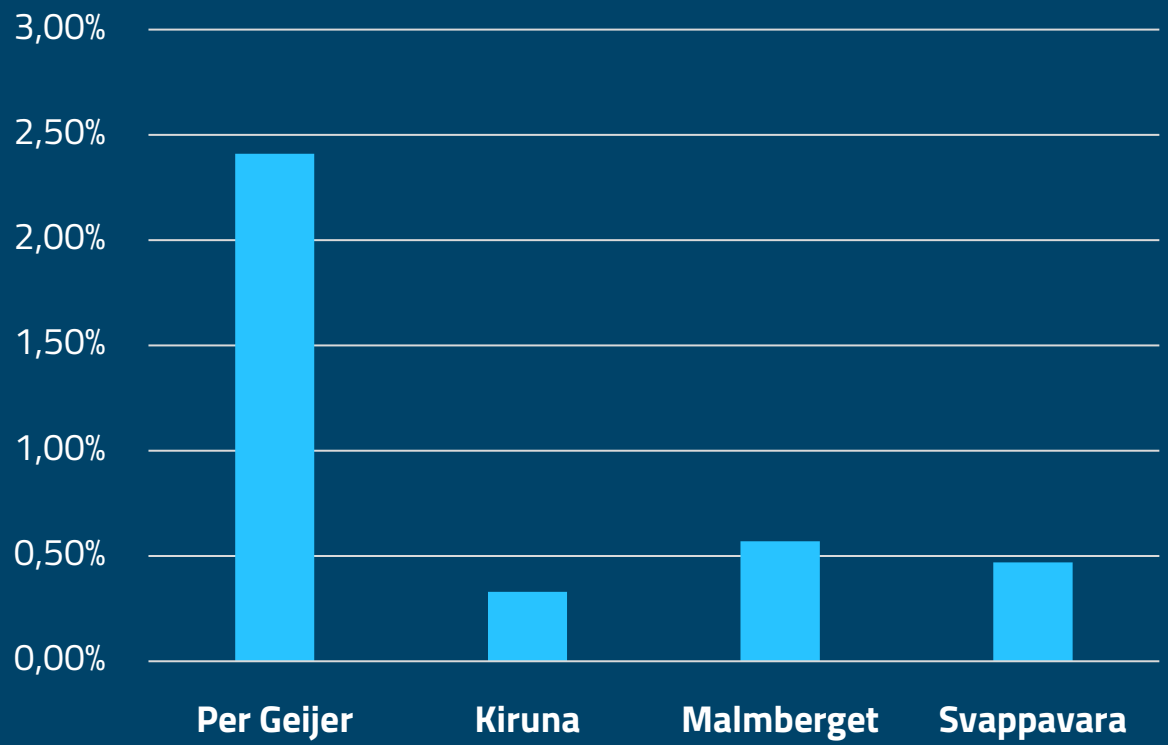
Creation of a strong value chain for a sustainable production of REE

Great potential with increased mineral assets and reserves

Total Rare earth metals (TREO)



Phosphorus



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