

REE Minerals AS – the only proven exploitable LREE-resource in Western Europe

Last summer the French financial newspaper – Les Echos – was visiting REE Minerals in Norway. The newspaper wanted to write an article about Rare Earth and about a promising Rare Earth-project. Ryan Castillough, Adamas Intelligence was recommending the journalist to visit REE Minerals AS, as this project according to Ryan Castillough is one of just two active projects in Europe, has ideal mineralogy, and continues to make steady progress when most others have stalled.

The article concluded that the solution to the stranglehold of China on these metals essential to modern industries could well be in the Norwegian countryside.

REE Minerals' deposit is located close to key markets in Europe and has a second to none standard on local infrastructure with proximity to existing roads, railway, channel transport and deep-water port. It is located around 130 km from Oslo and has been a mining resort since 1650.

In 2012 and 2014 REE Minerals performed 2 drill programs with very promising results confirming substantial homogeneous deposits – 2 million ton of rare earth oxides. The drilling was covering a 750m x 300m surface area down to a depth of 300 meters. All holes were open-ended, indicating that the resource continued further on and was even bigger. This was confirmed by Norwegian Geological Survey drilling in 2017 a hole down to 1.000 meter – and rare earth was everywhere.

The rare earth occurs within large mineral clusters in the ore with rare earth oxide grades up to 9 % found in sections of the deposit which should indicate low CAPEX and OPEX when using cheap and

well-known beneficiation processes. This was later proven by samples sent to laboratories in UK, USA and Canada.

REE Minerals has an exploitation license of 86 acres granted on February 2014 from the Norwegian Directorate of Mineralogy as the only company in the area.

Permission for extraction in 10 years – is subject to renewal for additional 10 year' periods.

21st North has been the project manager, geologists and consultants from the beginning. They did the surface sampling, performed the drilling and were responsible for the mineralogy and the Project Economic Assessment-study. They further managed OPEX verification with flotation (Wardell Armstrong in UK), the separation processes with Kingston Process Metallurgy (Canada) and Metallurgy Viability (USA).

21st North performed the study of underground mining layout and estimated the current OPEX/CAPEX mining figures.

Operational costs expected to be in the range 11–15 dollars per kg total rare earth oxides – the average of 13.5 dollars is used later in PEA-calculations - with a number of potential additional upsides – one of them is Rare Earth Salts.

REE Minerals and Rare Earth Salts have agreed to a Letter of Intent, signed 16 October 2017. Rare Earth Salts has a similar agreement only with a few more companies including Medallion Resources Ltd.

An 8,9 % oxide sample has been shipped to Rare Earth Salts' laboratory in Nebraska to be tested in Acid Leach and Separation processes with RES-processes only. Leaching and Separation were successfully completed according to Rare Earth Salts. RES is indicating a significant reduction in OPEX and CAPEX using their methods compared to traditional technologies.

REE Minerals recruited SRK Exploration to perform an independent technical and project Quality Review.

SRK reviewed the work performed, talked to the local authorities, water supply, electricity companies etc. and came up with proposals within mineral processing, infrastructure and social and environmental settings.

SRK has given the Project a General Stamp of Approval and did not identify any red flags – confirming the quality of the project.

REE Minerals are in the middle of the PFS/FS-process and plan to conclude a FS within 2 years.

REE Minerals have performed a Project Economic Assessment study and an NPV-calculation with the following assumptions:

- The investments will start in 2022 with ramp-up of production to full production of 11.200-ton total rare earth oxides per year from 2024.
- Assumed basket price development in line with Adamas Intelligence's projections until 2030 and then flat at 31 dollars per kg.
- Stable OPEX of 13.5 dollars per kg total rare earth produced.

Using these numbers, an NPV of 551 million dollars with an IRR of 38 % was calculated.

To summarize: Being indeed the only proven exploitable light rare earth resource in Western Europe, REE Minerals will be capable to satisfy all light rare earth-demands from the European industries in the years to come.