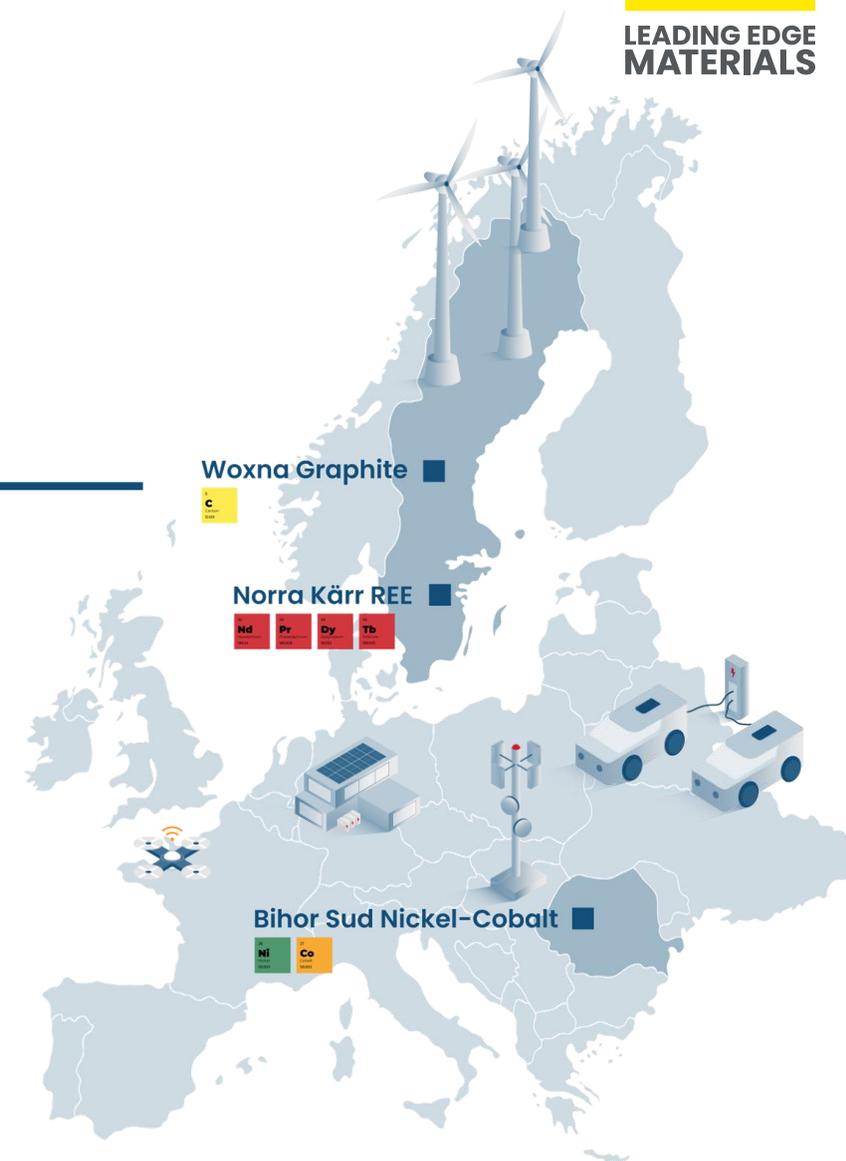




**LEADING EDGE
MATERIALS**

Critical Raw Materials in Europe

October 2021



TSX.V: LEM

Nasdaq First North: LEMSE

OTCQB: LEMIF

FRA: 7FL

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The Woxna project has never defined a mineral reserve. On June 9, 2021, Leading Edge announced the results of an independent preliminary economic assessment for the development of Woxna (the "2021 Woxna PEA"), the full details of which are included in a technical report entitled "NI 43-101 Technical Report – Woxna Graphite" prepared for Woxna Graphite AB with effective date June 9, 2021 and issue date July 23, 2021, available on Leading Edge's website www.leadingedgematerials.com and under its SEDAR profile www.sedar.ca. The 2021 Woxna PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

On July 22, 2021, Leading Edge announced the results of an independent preliminary economic assessment for the development of Norra Kärr (the "2021 Norra Kärr PEA"), the full details of which are included in a technical report titled "PRELIMINARY ECONOMIC ASSESSMENT OF NORRA KÄRR RARE EARTH DEPOSIT AND POTENTIAL BY-PRODUCTS, SWEDEN" prepared for Leading Edge Materials Corp. with effective date August 18, 2021 and issue date August 19, 2021, available on Leading Edge's website www.leadingedgematerials.com and under its SEDAR profile www.sedar.ca. The 2021 Norra Kärr PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

This presentation has been prepared by Leading Edge Materials Corp. The scientific, technical and economic information related to the Norra Kärr project has been reviewed and approved by Dr. Rob Bowell of SRK Consulting (UK) Ltd, a chartered chemist of the Royal Society of Chemistry, a chartered geologist of the Geological Society of London, and a Fellow of the Institute of Mining, Metallurgy and Materials, who is an independent Qualified Person under the terms of NI 43-101 for REE deposits. The scientific, technical and economic information related to the Woxna Graphite project has been reviewed and verified by Christopher Stinton of Zenito Limited, BSc (Hons), CEng MIMMM, an independent Qualified Person as defined by NI 43-101.

Strategy and Project Portfolio

Developing a portfolio of critical raw material projects located in the European Union. Critical raw materials are determined as such by the European Union based on their economic importance and supply risk. They are directly linked to high growth technologies such as batteries for electromobility and energy storage and permanent magnets for electric motors and wind power that underpin the clean energy transition towards climate neutrality.

Woxna Graphite (100%)

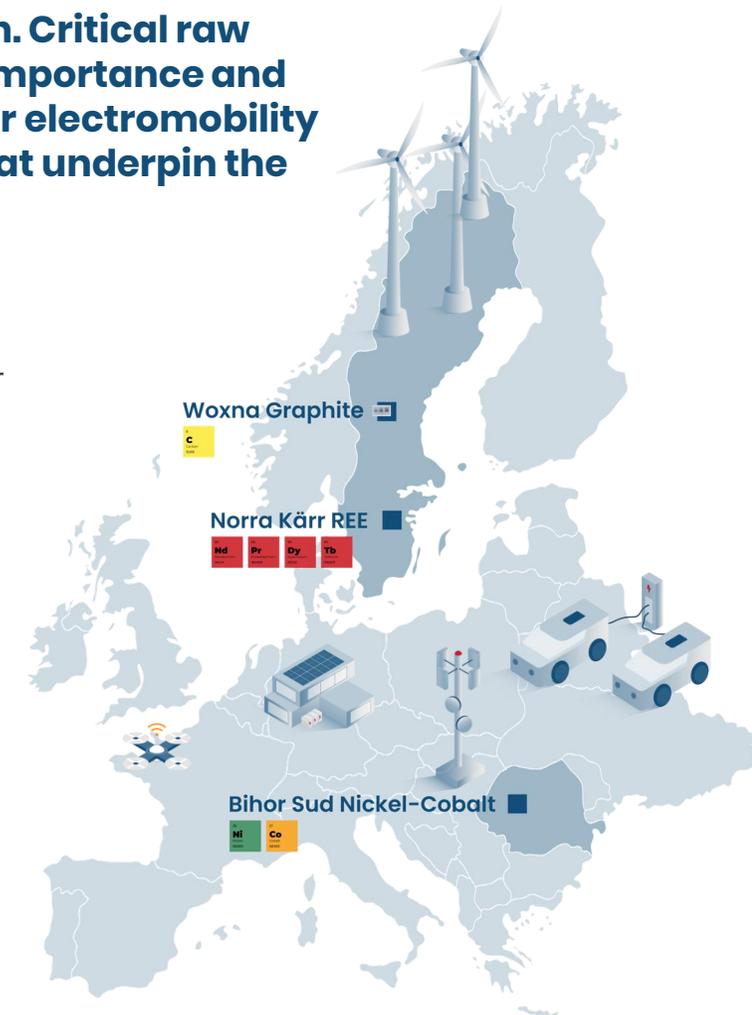
- One of few fully-built graphite mines in the western world. Four deposits under mining leases, fully-built processing plant and infrastructure. Built in the mid 90s and restarted under current ownership in 2014. Targeting a vertically integrated mine to anode material production. Proposed 50/50 JV with Sicona for silicon-graphite composite anode production.

Norra Kärr REE (100%)

- One of the worlds most significant heavy rare earth deposits with an unusual enrichment of the heavy magnet critical elements Dysprosium and Terbium. Identified as a critical project by the European Parliament (ERECON study).

Bihor Sud (51% → 90%)

- Exploration alliance with local JV partner for a potential discovery of high-grade nickel-cobalt mineralizations in the Tethyan Belt in a historic mining area.



Woxna Graphite

Annual potential anode output from Woxna Graphite* could support the production of lithium-ion batteries needed for a significant amount of electric cars



100 000



* Management estimate calculations based on publicly available data and product output numbers from National Instrument 43-101 report entitled "NI 43-101 Technical Report – Woxna Graphite" prepared for Woxna Graphite AB with effective date June 9, 2021 and issue date July 23, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Image source: Polestar

Norra Kärr HREE

Annual potential output from Norra Kärr* could support the production of NdFeB permanent magnets needed for a significant amount of electric cars

60 Nd Neodymium 144.24	59 Pr Praseodymium 140.908
--	--

1 200 000

66 Dy Dysprosium 162.50	65 Tb Terbium 158.925
---	---------------------------------------

1 900 000



* Management estimate calculations based on publicly available data and product output numbers from National Instrument 43-101 report titled "PRELIMINARY ECONOMIC ASSESSMENT OF NORRA KÄRR RARE EARTH DEPOSIT AND POTENTIAL BY-PRODUCTS, SWEDEN" prepared for Leading Edge Materials Corp. with effective date August 18, 2021 and issue date August 19, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Image source: Polestar

Norra Kärr HREE

Annual potential output from Norra Kärr* could support the production of NdFeB permanent magnets needed for a significant amount of 10MW wind turbines

60 Nd Neodymium 144.24	59 Pr Praseodymium 140.908
--	--

370

66 Dy Dysprosium 162.50	65 Tb Terbium 158.925
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2 185



* Management estimate calculations based on publicly available data and product output numbers from National Instrument 43-101 report titled "PRELIMINARY ECONOMIC ASSESSMENT OF NORRA KÄRR RARE EARTH DEPOSIT AND POTENTIAL BY-PRODUCTS, SWEDEN" prepared for Leading Edge Materials Corp. with effective date August 18, 2021 and issue date August 19, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Image: Unsplash

Board and Management

Canadian public company with EU leadership



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Chairman

Lars-Eric Johansson

Past
President & CEO Ivanhoe Mines
CFO Kinross Gold Corporation
CFO Noranda Inc
CFO Falconbridge
Vice President & CFO Boliden Mineral


Director

Daniel Major

CEO GoviEx Uranium Inc. (TSXV)

Past
Chief Executive and later Non-Executive Chairman of Basic Element Mining and Resource Division in Russia
Mining analyst HSBC Plc and JPM
Rio Tinto Rossing Uranium Mine


Director

Eric Krafft

Private investor and largest shareholder. Serves on the boards of numerous private financial holding and ship-owning companies.
Director GoviEx Uranium Inc. (TSXV)

Past
Trafalgar Shipping/Dragon Maritime
Corporate Finance DVB Bank AG


CEO

Filip Kozlowski

Past
Director Leading Edge Materials
Portfolio Manager Macro HF
Investment Manager Family Office
Portfolio Trader Deutsche Bank Ldn


CFO

Sanjay Swarup

CEO and founder SKS Business Services Ltd.

Past
CFO Mandalay Resources (TSX)


Ops

Peter Young

Past
ORSU Resources
Oriel Resources
MINOPEX
Johannesburg Consolidated Industries


Geo

Magnus Leijd

Past
Tasman Metals Ltd.
Lundin Mining
North Atlantic Natural Resources


Geo

Rikard Taljaard

Past
Country Manager Walkabout Resources (ASX)
General Manager Amani Alluvial Gold


Adv

Mark Saxon

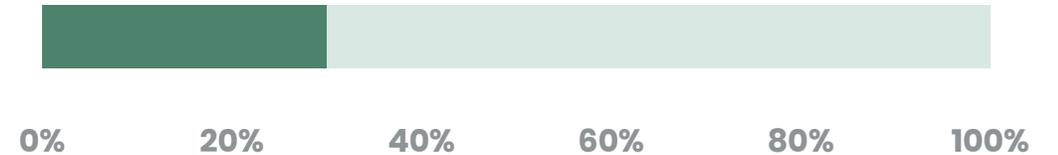
Past
CEO Leading Edge Materials Corp.
Founder Tasman Metals Ltd.

Share Capital

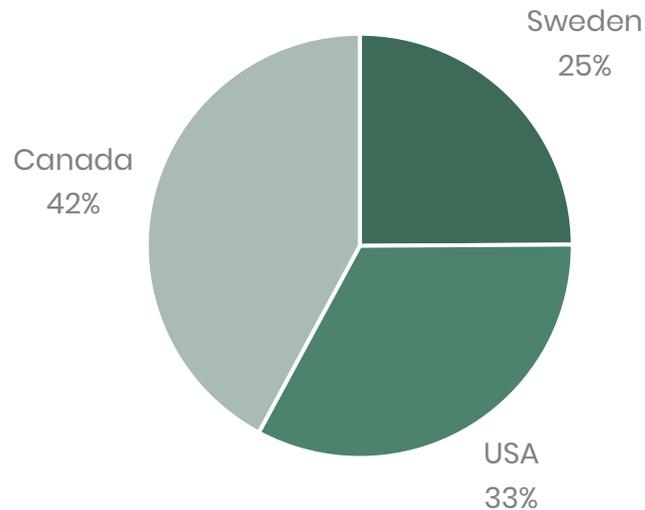


- **Tickers:** LEM.V (TSXV) LEMIF (OTCQB) LEMSE (NFN) 7FL (Fra)
- **Quote:** CAD \$0.36 / SEK 2.70 (per 19.10.2021)
- **Mkt Cap:** CAD \$53m / SEK 372M (non-diluted)
- **Shareholder base:** ~50% North American vs European

Insider Ownership



Fiscal 2020 trading volume

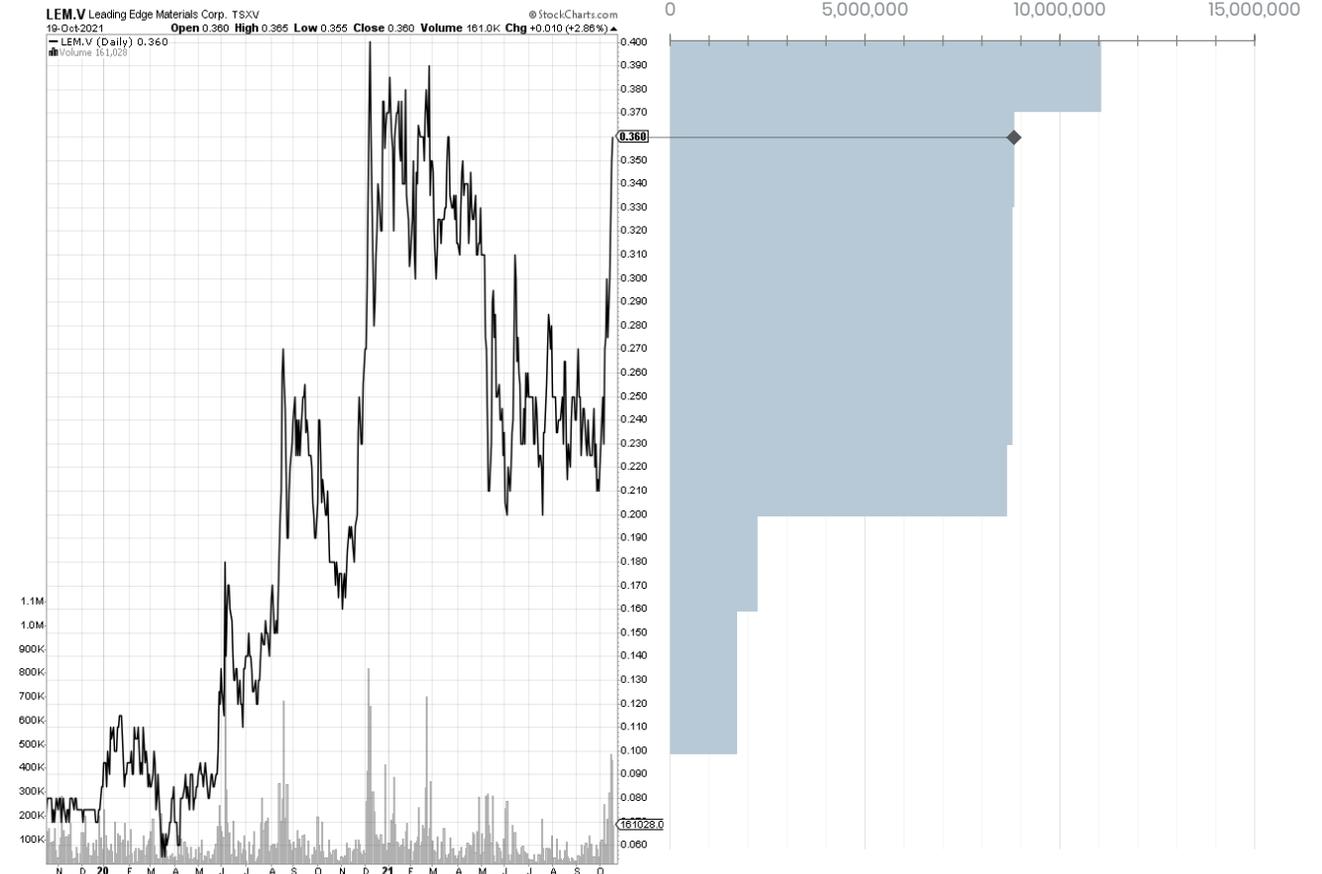


Shares, Warrants and Options

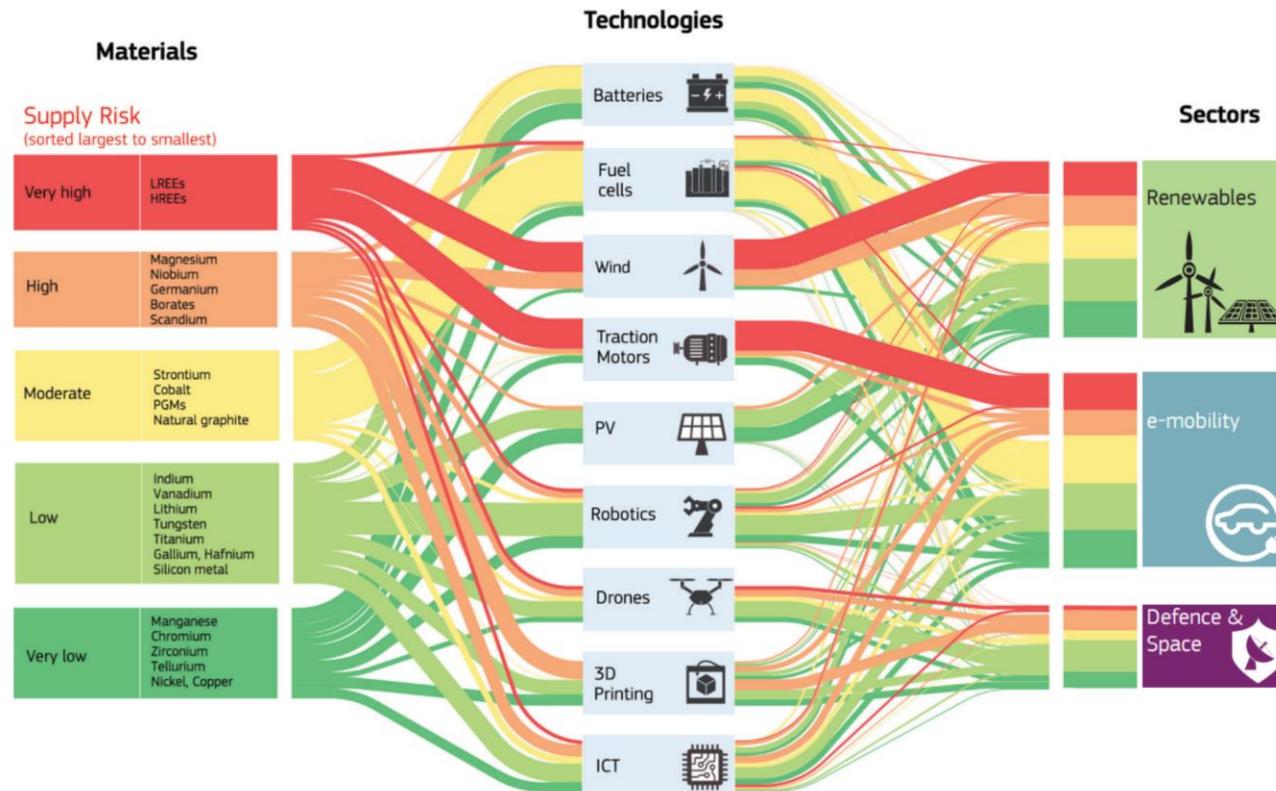


Potential proceeds from exercise

Issued and Outstanding as of October 18, 2021:		146,960,500
Stock Options		6,050,000
Expiring May 30/22	@ 0.225	600,000
Expiring Nov 02/22	@ 0.64	1,900,000
Expiring Aug 11/23	@ 0.155	3,400,000
Expiring Aug 14/23	@ 0.33	150,000
Warrants		55,227,855
Expiring Nov 21/2021	@ 0.37	6,027,855
Expiring Dec 30/2023	@ 0.10	17,200,000
Expiring Aug 7/2024	@ 0.20	32,000,000
Fully Diluted:		208,238,355



Critical Raw Materials



Economic Importance

- CRMs are directly linked to technologies such as batteries and permanent magnets that are critical for growth industries like renewables, energy storage and electromobility
- CRMs enable the transition to a green, digital and autonomous EU

Supply Risk

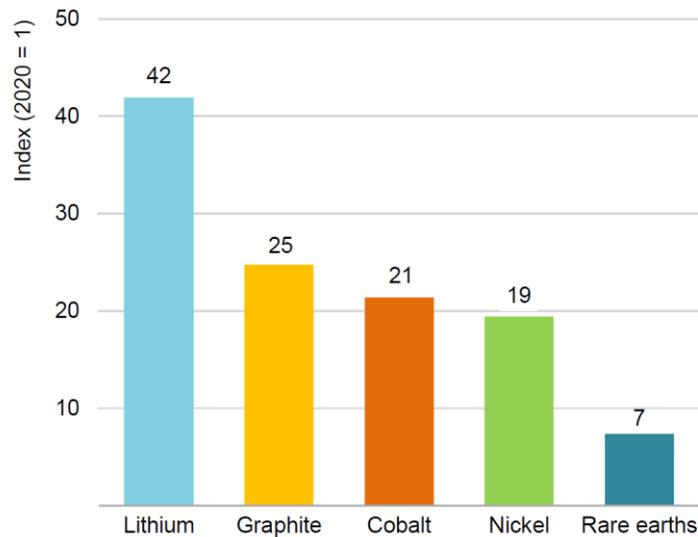
- EU is dependent on imports of CRMs
- A few single countries dominate the export of CRMs which leave the EU vulnerable for supply disruptions

Economic Importance and Supply Risk

Economic Importance

- Expected growth in industries such as renewables, energy storage and e-mobility is expected to drive demand growth for critical raw materials

Growth of selected minerals in the SDS, 2040 relative to 2020

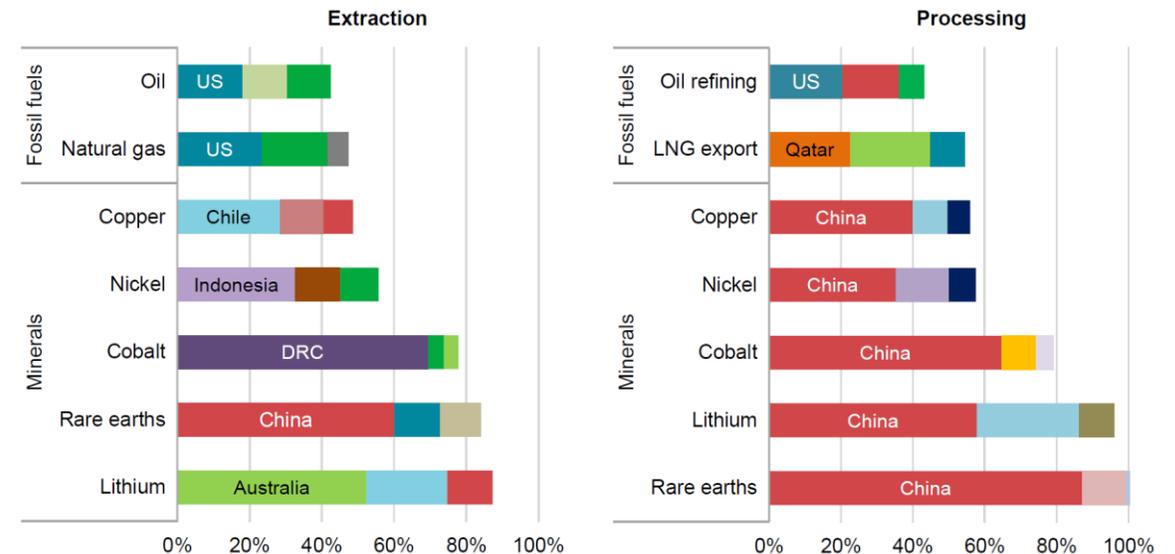


Source: <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary>

Supply Risk

- The production of many critical raw materials is dominated by individual third countries making the EU reliant on supply

Share of top three producing countries in production of selected minerals and fossil fuels, 2019



Source: <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary>

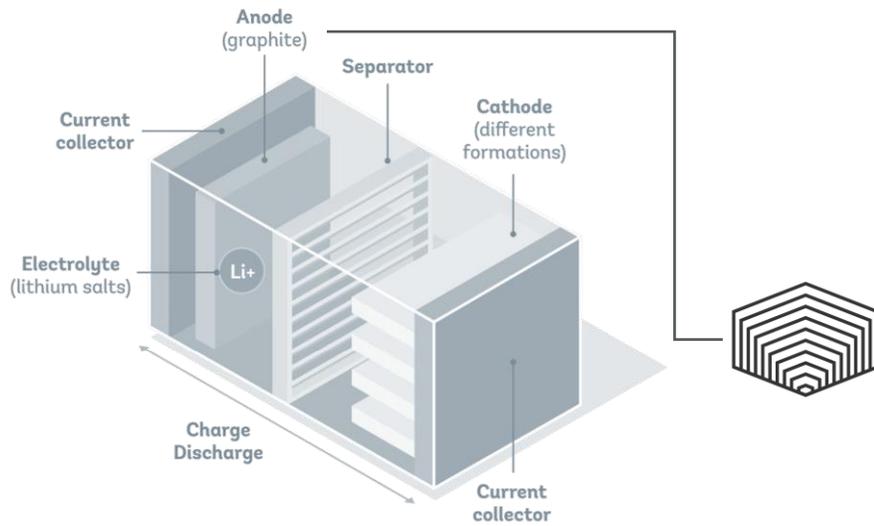
The Challenge for Europe

“Green and digital technologies currently depend on a number of scarce raw materials. We import lithium for electric cars, platinum to produce clean hydrogen, silicon metal for solar panels. 98% of the rare earth elements we need come from a single supplier: China. This is not sustainable. So we must diversify our supply chains.”

- Opening speech by European
Commission President von der
Leyen at the EU Industry Days 2021



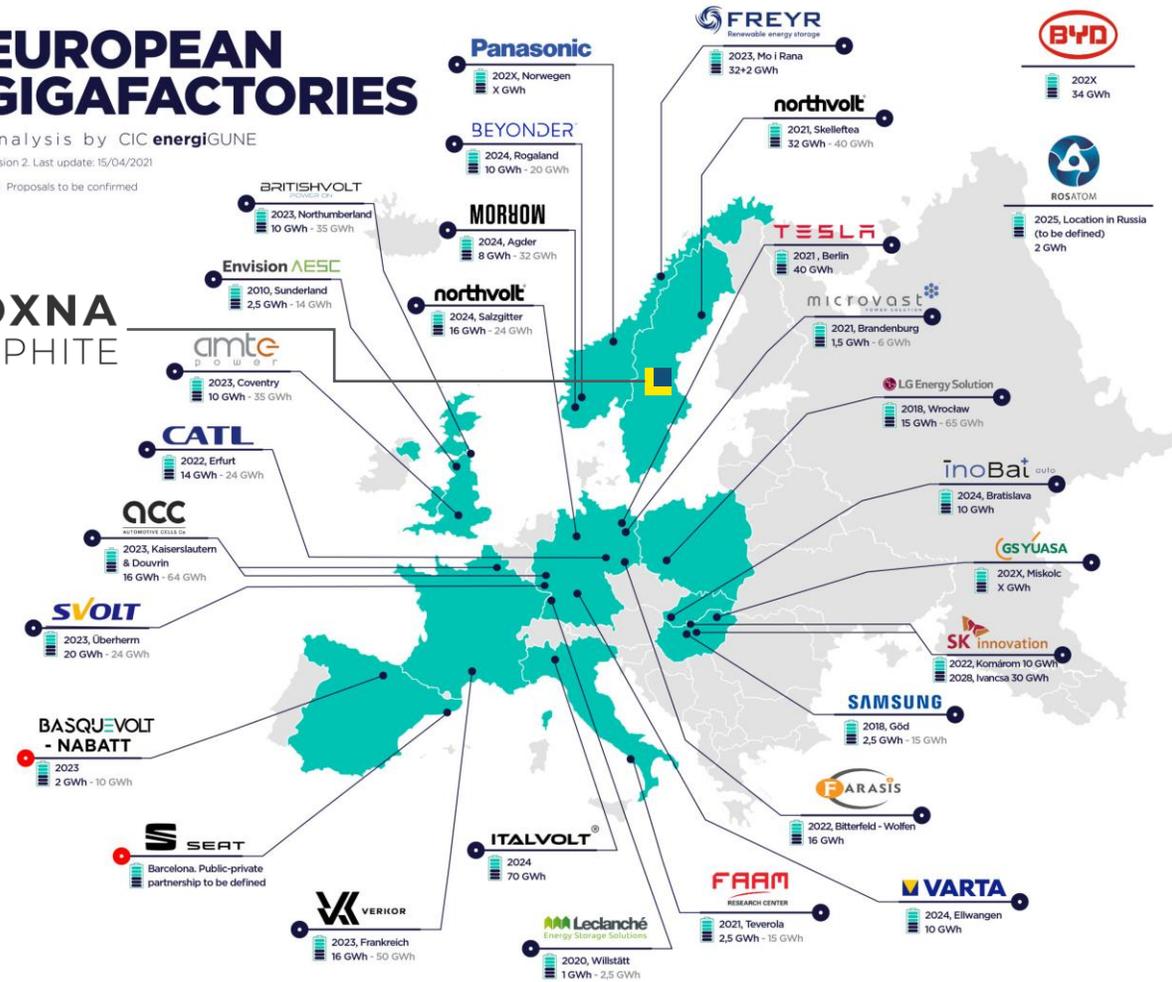
European Battery Industry



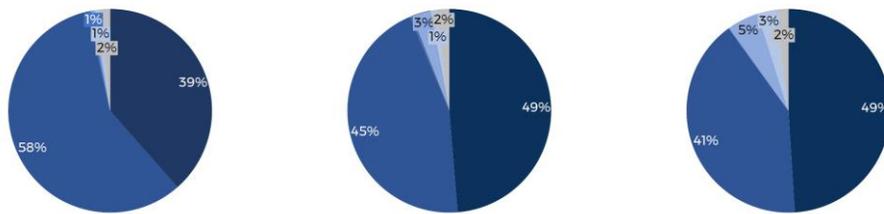
WOXNA GRAPHITE

EUROPEAN GIGAFACTORIES

Analysis by CIC energigUNE
Version 2. Last update: 15/04/2021
Proposals to be confirmed



2020 2025 2030



Legend: Natural, Synthetic, MCMC, Silicon, LTO, Other



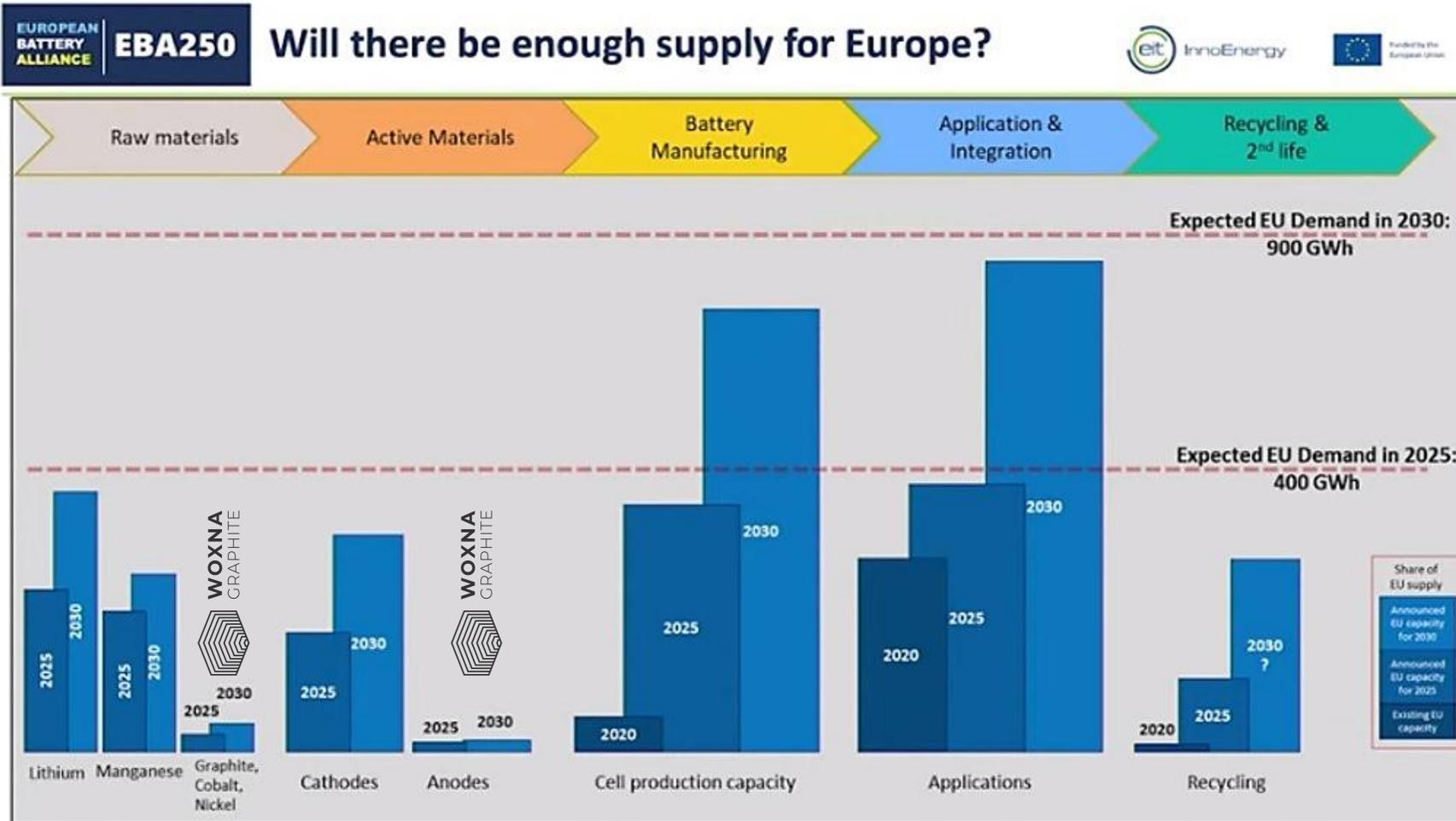
Flake Graphite Demand for LIB (tonnes)

202,617

1,108,448

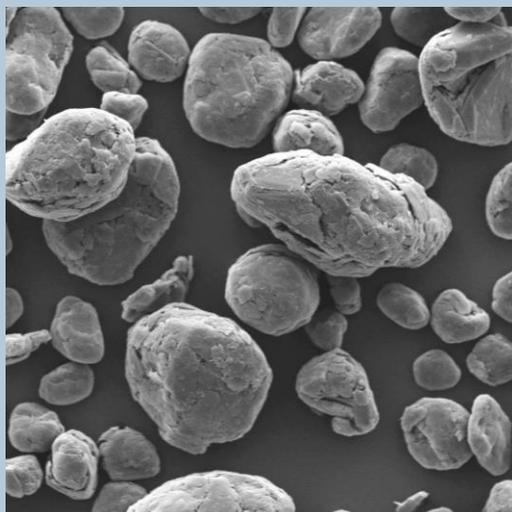
2,896,225

Battery Value Chain Gap



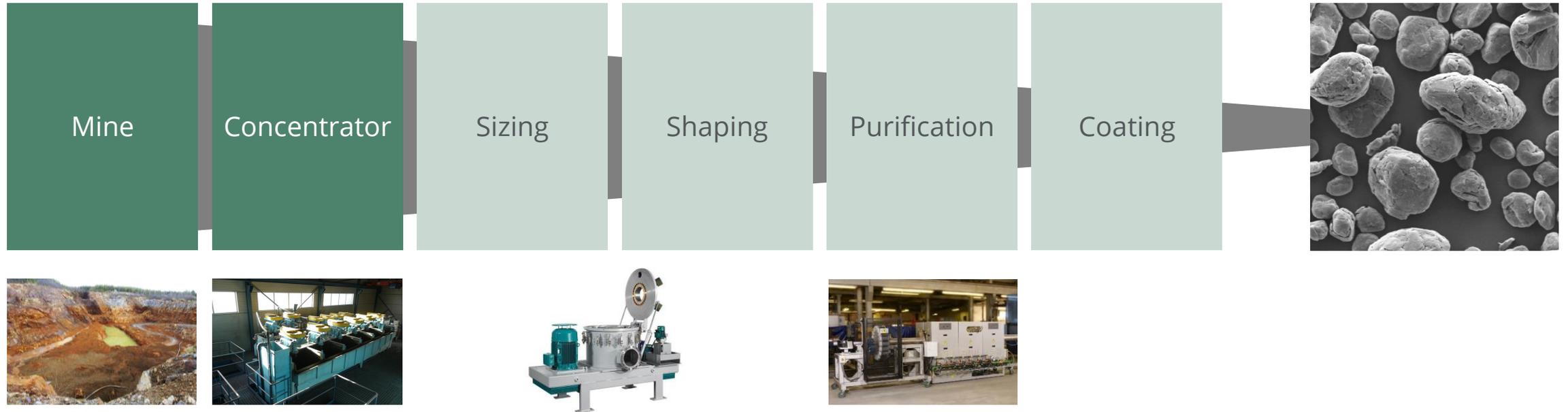


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Woxna Graphite Anode project

Woxna Graphite Overview



Woxna Graphite Resources*



Mineral Resource Estimate – Measured and Indicated

Property	Classification of Mineral Resource	Tonnes (Mt)	Grade C (%)
Kringel	Measured	0.96	9.21
	Indicated	1.65	9.09
	Sub-total Measured + Indicated	2.61	9.13
Gropabo	Indicated	2.33	7.72
Mattsmyra		5.83	7.14
Total	Measured + Indicated	10.77	7.75

Mineral Resource Estimate – Inferred

Property	Classification of Mineral Resource	Tonnes (Mt)	Grade C (%)
Kringel	Inferred	0.39	8.72
Gropabo		0.61	8.07
Mattsmyra		1.51	8.06
Total	Inferred	2.51	8.16

Source: ReedLeyton 2021

Notes:

- Inconsistencies in totals are due to rounding;
- 4% Cg mill cut-off grade applied for reporting purposes constrained within the MPlan 2021 pitshell;
- Reported according to CIM Definition Standards 2011;
- Reported according to CIM Mineral Exploration Best Practice Guidelines (Nov 2018);
- No geological losses applied;
- Default Density of 2.7 t/m³ applied to in situ, then Density of 2.82 t/m³ applied to Type A Graphite and Density of 2.86 t/m³ applied to Type B Graphite for Gropabo and Mattsmyra; and Default Density for Kringel remained at 2.7 t/m³;
- The previous Mineral Resource Estimates for the Project were developed without the constraint of an applied mine plan and open-pit shell. In the light of more rigorous compliance requirements, the Mineral Resources were reported by ReedLeyton within the constraints of the PEA mine plan as a means of demonstrating “reasonable prospects for economic extraction” as required by numerous international reporting codes. No new exploration data was included in the reporting process;
- Effective date of Mineral Resource Estimate is June 9, 2021; and
- Mineral resources are not mineral reserves and do not have demonstrated economic viability;

* See National Instrument 43-101 report entitled "NI 43-101 Technical Report – Woxna Graphite" prepared for Woxna Graphite AB with effective date June 9, 2021 and issue date July 23, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Woxna Graphite Anode PEA*



Financial Highlights

- Pre- and post-tax Net Present Value (NPV) of \$317m and \$248m using an 8% discount rate
- Pre- and post-tax IRR of 42.9% and 37.4%
- Accumulated project revenues of \$1,425m
- Average annual EBITDA of \$49m
- Initial Capital Expenditures (CAPEX) of \$121m
- Pre-tax Payback Period from first production of 2.24 years
- Operating cost per tonne of coated spherical purified graphite (CSPG) of \$2,519 after revenue credit from micronized graphite product vs forecasted selling price of \$10,000 per tonne

Operational Highlights

- Life of Project (LOP) is 19 years
- Life of Mine (LOM) is 15 years
- LOM average annual plant feed of 159,967 tonnes
- LOM average annual CSPG product 7,435 tonnes
- LOM average annual micronized graphite product 8,421 tonnes
- LOM average strip ratio of 3.7:1

* See National Instrument 43-101 report entitled "NI 43-101 Technical Report – Woxna Graphite" prepared for Woxna Graphite AB with effective date June 9, 2021 and issue date July 23, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

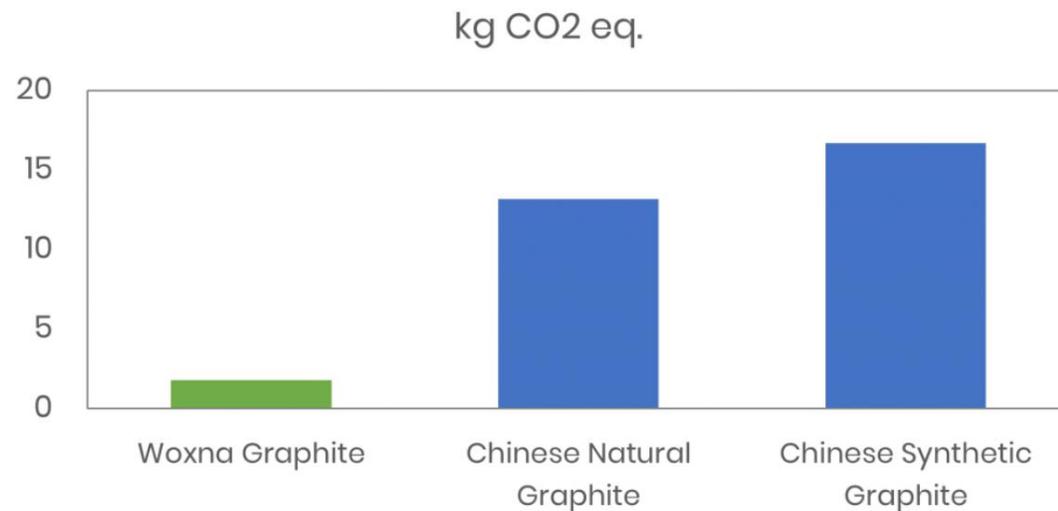
Woxna Graphite Anode PEA*

- The PEA indicates the potential viability of a Swedish operation producing battery grade graphite anode material utilizing an existing graphite mine and concentrator with the addition of a value-add processing facility offsite
- Thermal purification process which, combined with access to low cost hydropower offers a low carbon footprint for the Project demonstrated through a recently announced life cycle assessment (LCA) report
- Improved waste management process for tailings further improving the sustainability ambitions of the Project
- The PEA utilizes one out of four deposits currently owned by Woxna under granted exploitation concessions, where two of the other deposits also have indicated and inferred mineral resource estimates offering potential upside for further expansion in future development or studies



* See National Instrument 43-101 report entitled "NI 43-101 Technical Report – Woxna Graphite" prepared for Woxna Graphite AB with effective date June 9, 2021 and issue date July 23, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Woxna Graphite LCA Results*



- 1 tonne of natural graphite anode material (coated spherical purified graphite (“CSPG”)) from natural graphite extracted at the Woxna Graphite mine is forecast to have an impact of 1.8 tonnes CO2 eq
- 85% to 90% lower impact than the current market dominant Chinese alternatives
- Significant factor influencing the dramatically reduced carbon footprint for Woxna Graphite is the access to hydropower as the main electricity source
- 62.5% of the 1.8 tonnes CO2 eq. for Woxna contributed by argon and nitrogen. Local suppliers can offer climate neutral alternatives which would lead to further improvements in Woxna’s footprint
- The LCA study was conducted according to the requirements of the ISO-104040:2006 and ISO-14044:2006 standards and used a cradle-to-gate approach

* See news release dated June 21, 2021: <https://leadingedgematerials.com/leading-edge-materials-announces-preliminary-life-cycle-assessment-results-on-woxna-graphite-project/>

Proposed 50/50 JV with Sicona*



- Targeting the production of advanced natural graphite and silicon-graphite-carbon composite active anode materials
- Sicona is commercialising innovative silicon-graphite-carbon composite anode and binder technology and materials that have been developed over the last ten years at the Australian Institute for Innovative Materials at the University of Wollongong and now owned by Sicona
- Due to its improved storage capacity, silicon graphite composite anode materials attract higher selling prices. However, due to the higher capacity the cost per capacity unit becomes lower for battery cell manufacturers, driving an increased interest to transition into these materials over the future
- Proposed Sweden-based advanced anode materials production facility targeting an annual production of up to 20,000 tonnes per year of multiple active anode materials products using Woxna graphite and other complementary suitable feedstocks such as externally sourced silicon and other carbon or graphite materials utilizing Sicona's significant proprietary IP and know-how

The Sicona Battery Technologies logo, featuring the word "SICONA" in a large, blue, sans-serif font with a green power button symbol integrated into the letter 'O'. Below it, the words "Battery Technologies" are written in a smaller, blue, sans-serif font. The background is a light blue gradient with a blurred bokeh effect.

SICONA
Battery Technologies

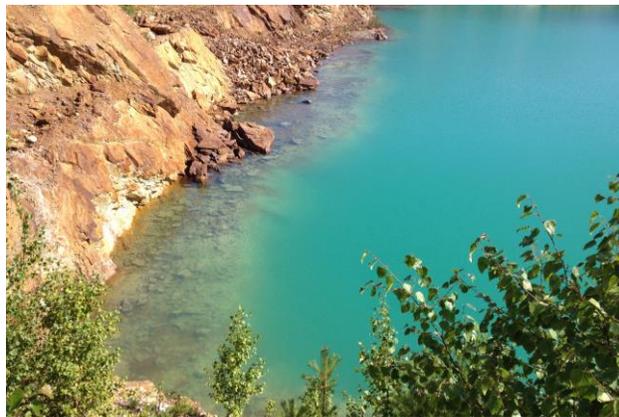
“Sicona has pioneered a simple & robust production process for high-performance silicon-graphite composite anode and polymer binder materials”

-Christiaan Jordaan CEO

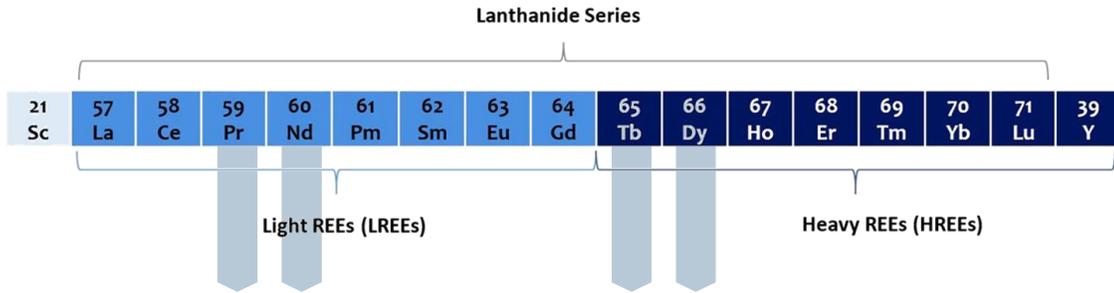
Woxna Graphite Mine



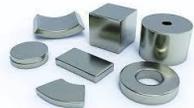
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Rare Earth Elements



Permanent Magnets



Electric Vehicles

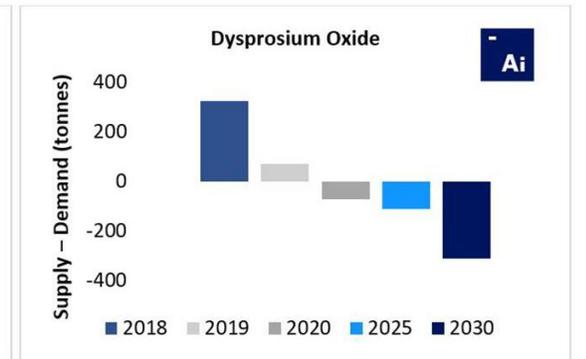
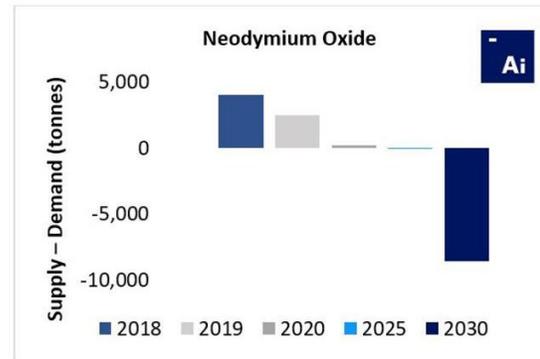
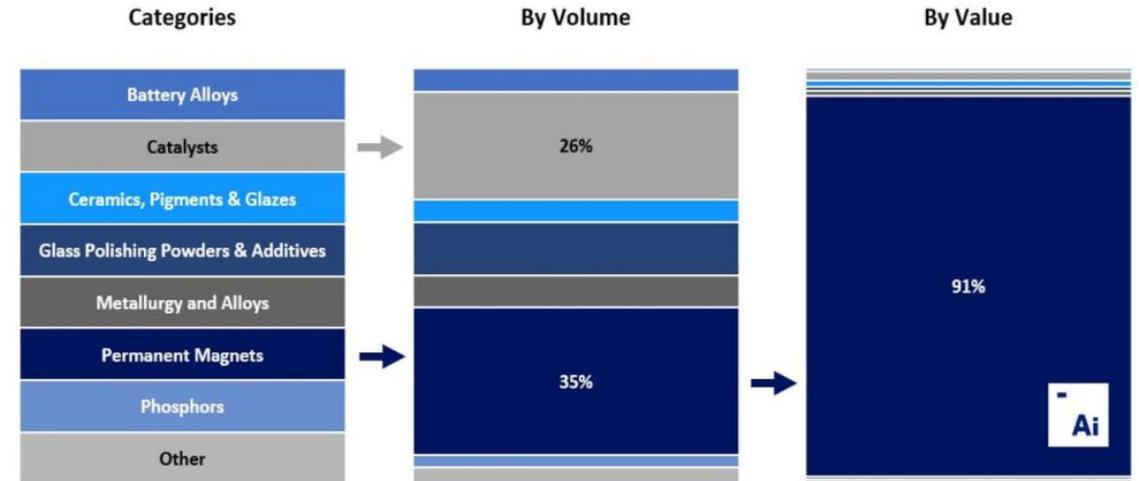


Wind Power



“rare earth elements may see three to seven times higher demand in 2040 than today”

“The Role of Critical Minerals in Clean Energy Transitions” – IEA, 2021



Source: Adamas Intelligence



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Norra Kärr HREE Project

Location of Norra Kärr



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Base from U.S. Geological Survey Global 30 arc-second elevation data (1996) and from Natural Earth (2014); Robinson projection; World Geodetic System 1984 datum

Norra Kärr Mineral Resource Statement



Norra Karr Mineral Resource Statement (SRK, 18 August 2021)*

Mineral Resource Classification	Tonnes (Mt)	TREO (%)	ZrO ₂ (%)	Nb ₂ O ₅ (%)	Nepheline Syenite (%)
Inferred	110	0.5	1.7	0.05	65

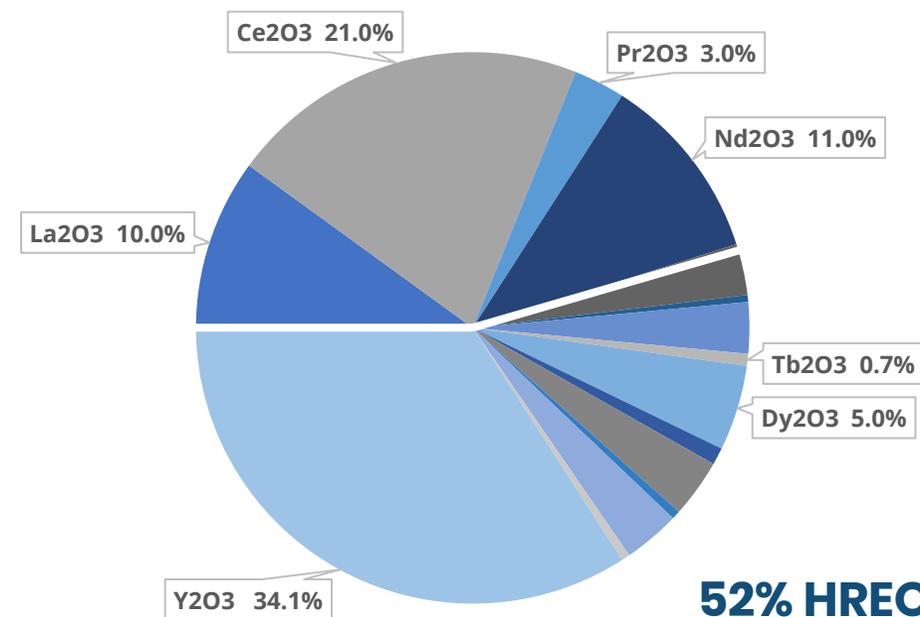
**Notes:*

1. Effective date 18 August 2021.
2. Qualified Person Mr Martin Pittuck MSc C.Eng
3. Mineral Resources are not Mineral Reserves until they have Indicated, or Measured confidence and they have modifying factors applied and they have demonstrated economic viability based on a Feasibility Study or Prefeasibility Study.
4. There is no guarantee that Inferred Mineral Resources will convert to a higher confidence category after future work is conducted.
5. The Mineral Resources reported have been constrained using an open pit shell assuming the deposit will be mined using open pit bulk mining methods and above a cut-off grade of USD150/t., including a 30% premium on projected commodity prices and unconstrained by commodity production rates and the 260m highway buffer zone.
6. The Mineral Resources reported represent estimated contained metal in the ground and has not been adjusted for metallurgical recovery.
7. Total Rare Earth Oxides (TREO) includes: La₂O₃, Ce₂O₃, Pr₂O₃, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₂O₃, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃.
8. Heavy Rare Earth Oxides (HREO) include: Eu₂O₃, Gd₂O₃, Tb₂O₃, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃
9. HREO is 52% of TREO

Norra Karr Rare Earth Element Distribution

Light REO proportion of Total REO					Heavy REO proportion of Total REO									
La ₂ O ₃	Ce ₂ O ₃	Pr ₂ O ₃	Nd ₂ O ₃	Sm ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Tb ₂ O ₃	Dy ₂ O ₃	Ho ₂ O ₃	Er ₂ O ₃	Tm ₂ O ₃	Yb ₂ O ₃	Lu ₂ O ₃	Y ₂ O ₃
0.100	0.210	0.030	0.110	0.030	0.004	0.030	0.007	0.050	0.010	0.034	0.005	0.033	0.005	0.340
0.48					0.52									

Resource REO Distribution

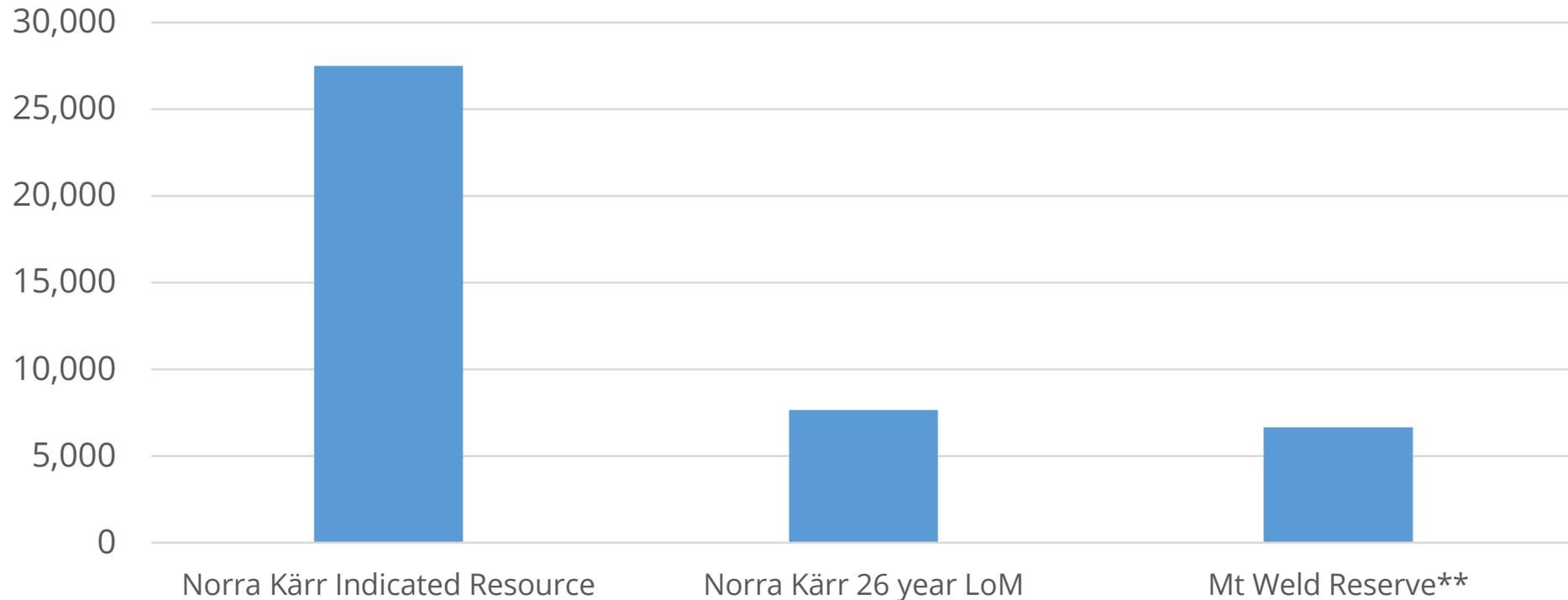


* See National Instrument 43-101 report titled "PRELIMINARY ECONOMIC ASSESSMENT OF NORRA KÄRR RARE EARTH DEPOSIT AND POTENTIAL BY-PRODUCTS, SWEDEN" prepared for Leading Edge Materials Corp. with effective date August 18, 2021 and issue date August 19, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Significant Dysprosium Resource*



Contained dysprosium



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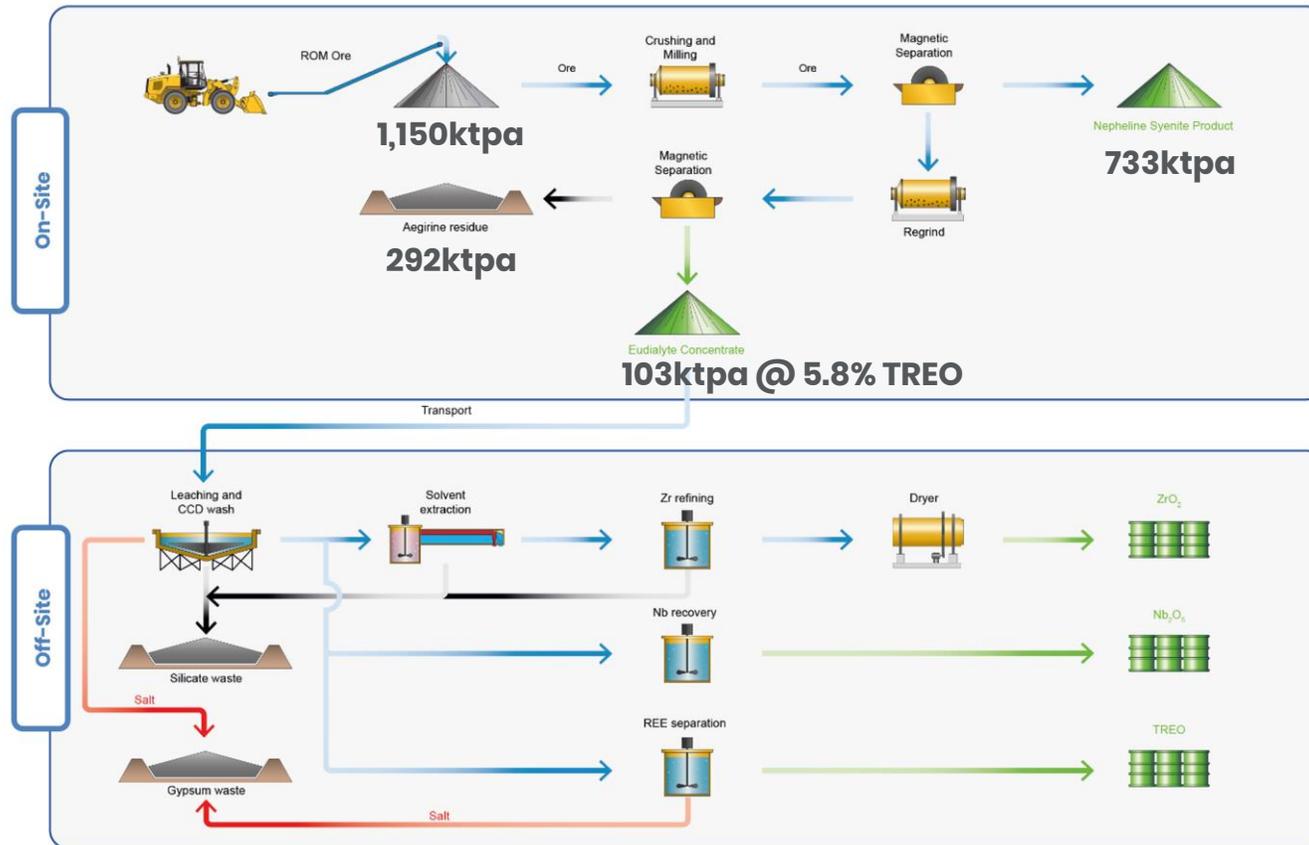
** August, 6, 2018 – Lynas Corporation Ltd, Reserve update

Norra Kärr 2021 PEA* vs 2015 PFS

- More than 50% of total mined material is planned to be sold as products compared with less than 1% in the previously project submitted for permitting
 - Opportunity for further improvement with waste rock for construction material and aegirine for paint pigment or block colouring
- Only mining, crushing, milling and magnetic separation at site. Chemical processing and associated waste (reduced amount) moves to a more suitable off-site location
- Waste at site is aegirine, dry stacked in a lined impoundment together with mining waste rock
- No wet tailings at site
- 80% reduction in land area usage
- 50% reduction in water requirements, and no processing water discharge planned

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Norra Kärr 2021 PEA*



Operational Highlights

- Life of Mine (LOM) is 26 years
- LOM average annual
 - Mining rate of 1,150,000 tonnes
 - strip ratio of 0.32
 - TREO 5,341 tonnes
 - Magnet REOs (Nd, Pr, Dy, Tb) 1,005 tonnes
 - Dy₂O₃: 248 tonnes
 - Tb₂O₃: 36 tonnes
 - Nd₂O₃: 578 tonnes
 - Pr₂O₃: 143 tonnes
 - Nepheline Syenite co-product 732,885 tonnes
 - Zirconium dioxide co-product 10,200 tonnes
 - Niobium oxide product 525 tonnes

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Off-site Chemical Plant Localization

- Luleå chosen conceptually due to vicinity of sulphuric acid production, brownfield industrial areas and logistics
- Access to low cost low carbon footprint hydropower
- 900 kilometers by train
- Other locations in Sweden, or neighbouring countries will be evaluated



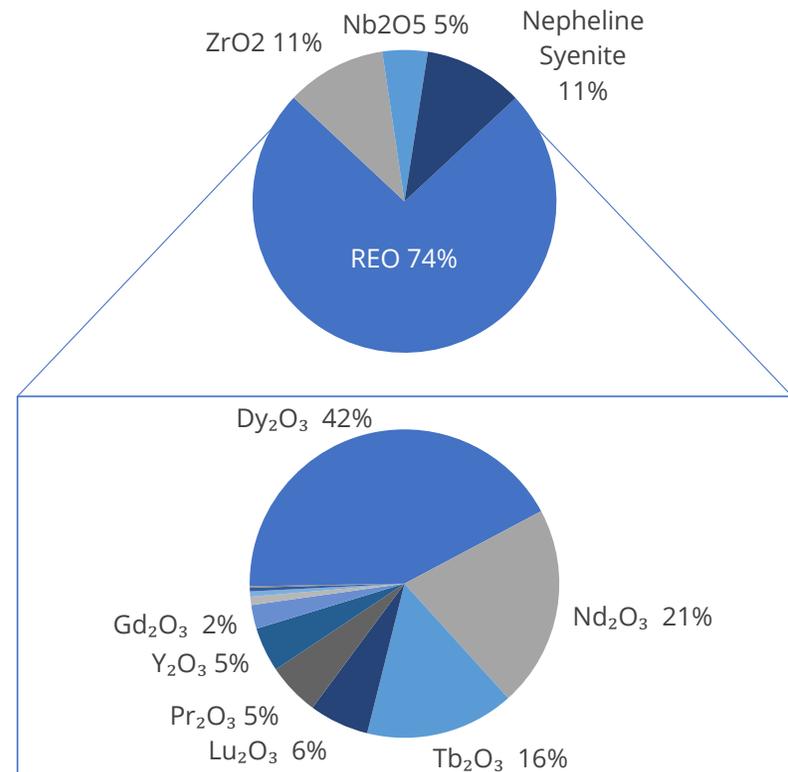
Norra Kärr 2021 PEA*



Financial Highlights

- Pre- and post-tax Net Present Value (NPV) of \$1,026M and \$762M using a 10% discount rate
- Pre- and Post-tax Internal Rate of Return (IRR) of 30.8% and 26.3%
- Accumulated LoM project revenues of \$9,962M
- Average annual EBITDA of \$206M
- Initial Capital Expenditures (CAPEX) of \$487M split across \$165m on-site and \$323m off-site
- Pre-tax Payback Period from first production of 5.1 years
- Life of mine average gross basket price per kg of separated mixed REO product at \$53

Revenue Distribution

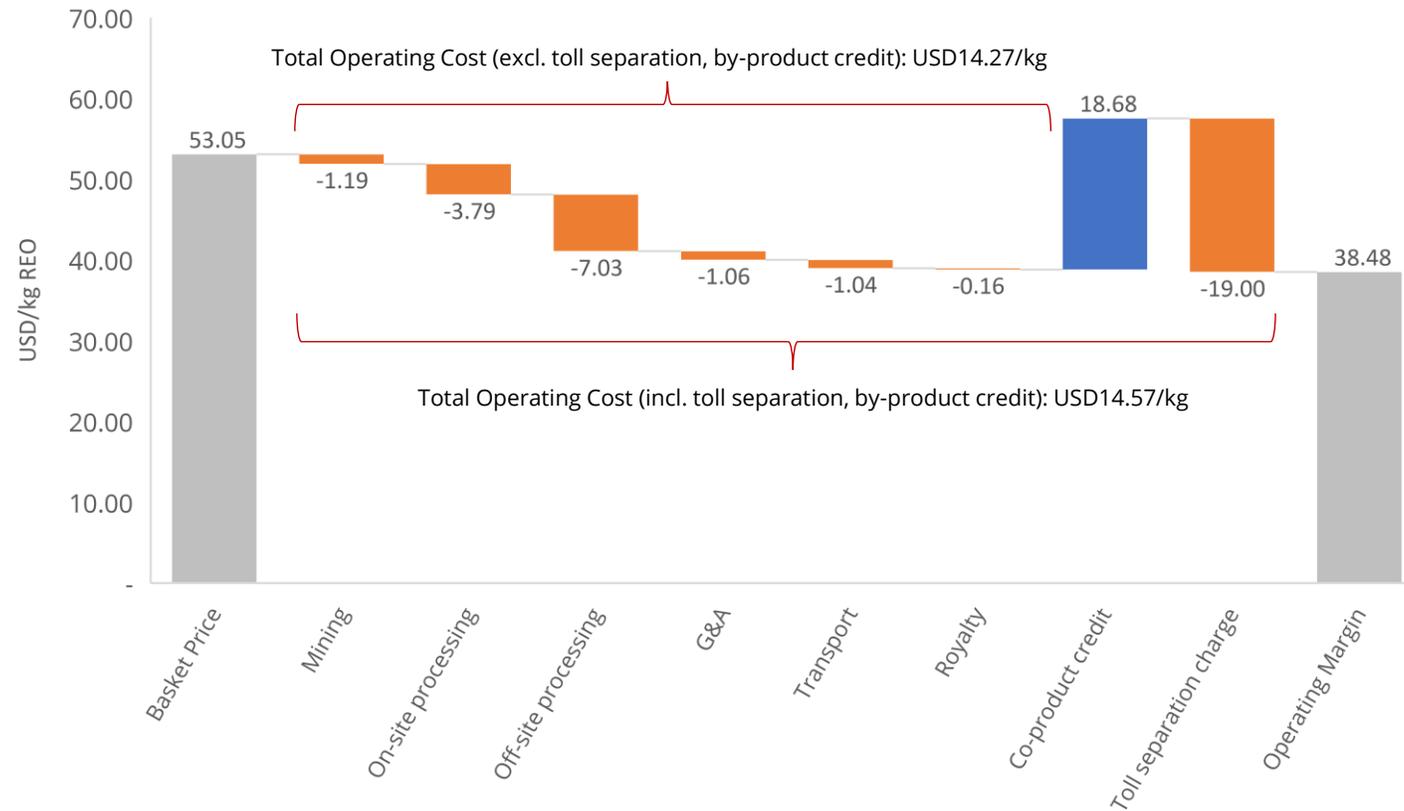


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Norra Kärr 2021 PEA*

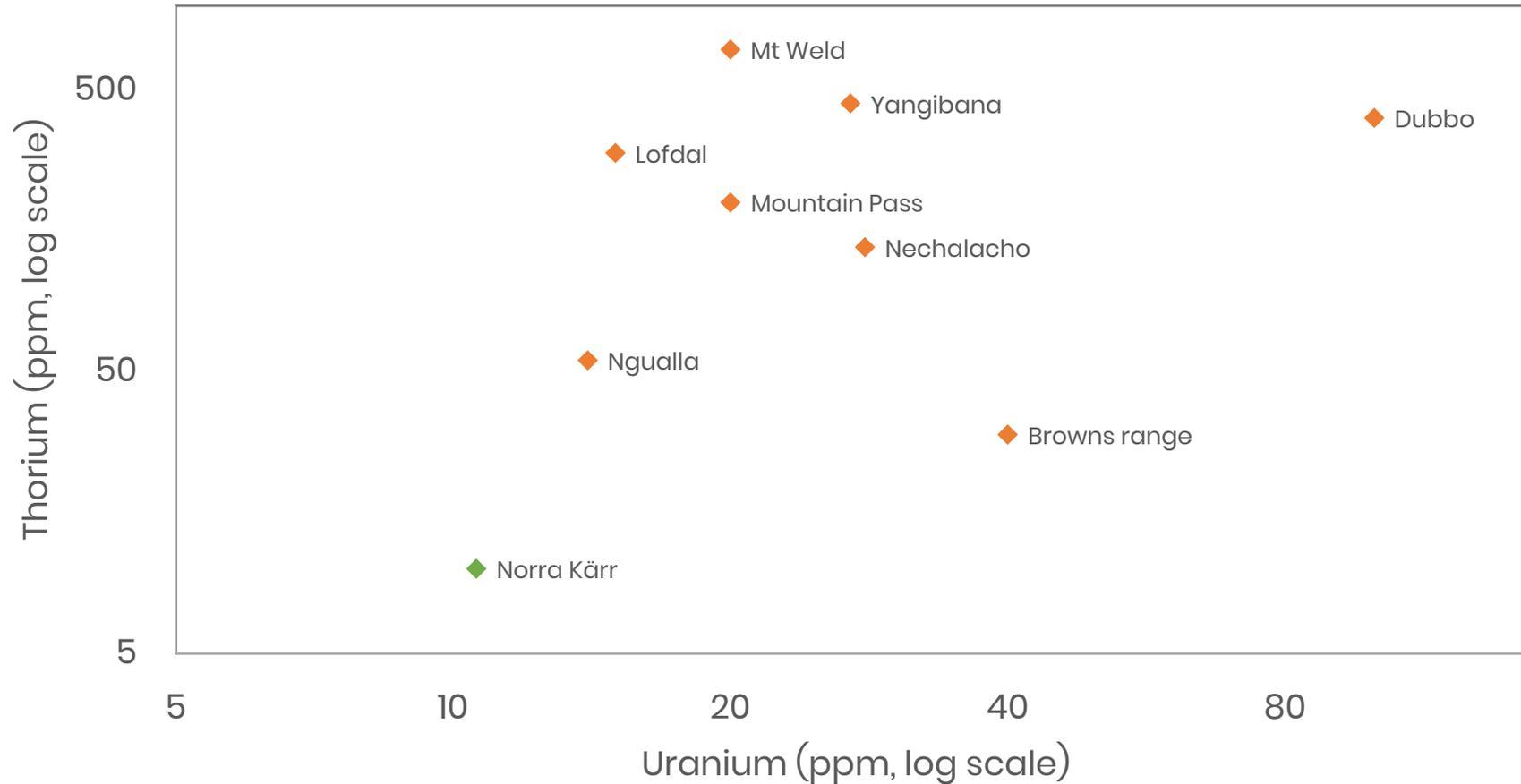


LoM Unit Operating Cost Economics (USD/kg REO)



* See National Instrument 43-101 report titled "PRELIMINARY ECONOMIC ASSESSMENT OF NORRA KÄRR RARE EARTH DEPOSIT AND POTENTIAL BY-PRODUCTS, SWEDEN" prepared for Leading Edge Materials Corp. with effective date August 18, 2021 and issue date August 19, 2021. See Leading Edge Materials Corp.'s SEDAR profile on www.sedar.ca or www.leadingedgematerials.com for report and more information. The PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Radionuclide Content



Sustainability Opportunity of Norra Kärr

Comparison of dysprosium production from different resources by life cycle assessment

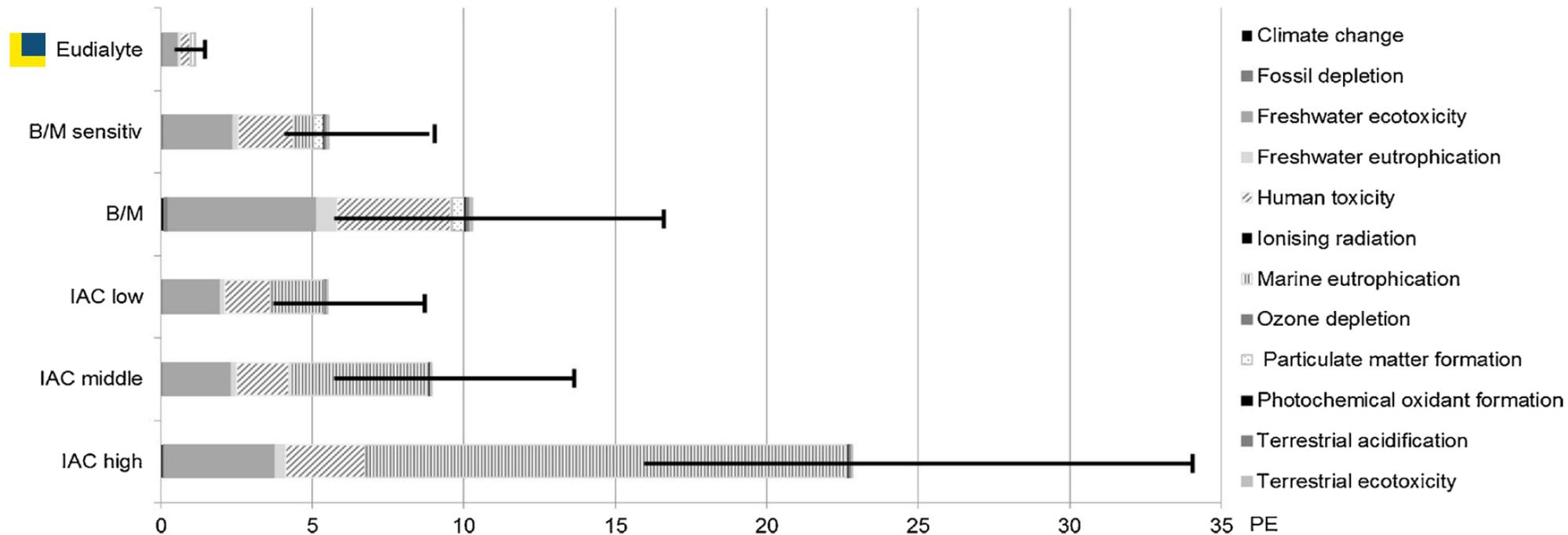
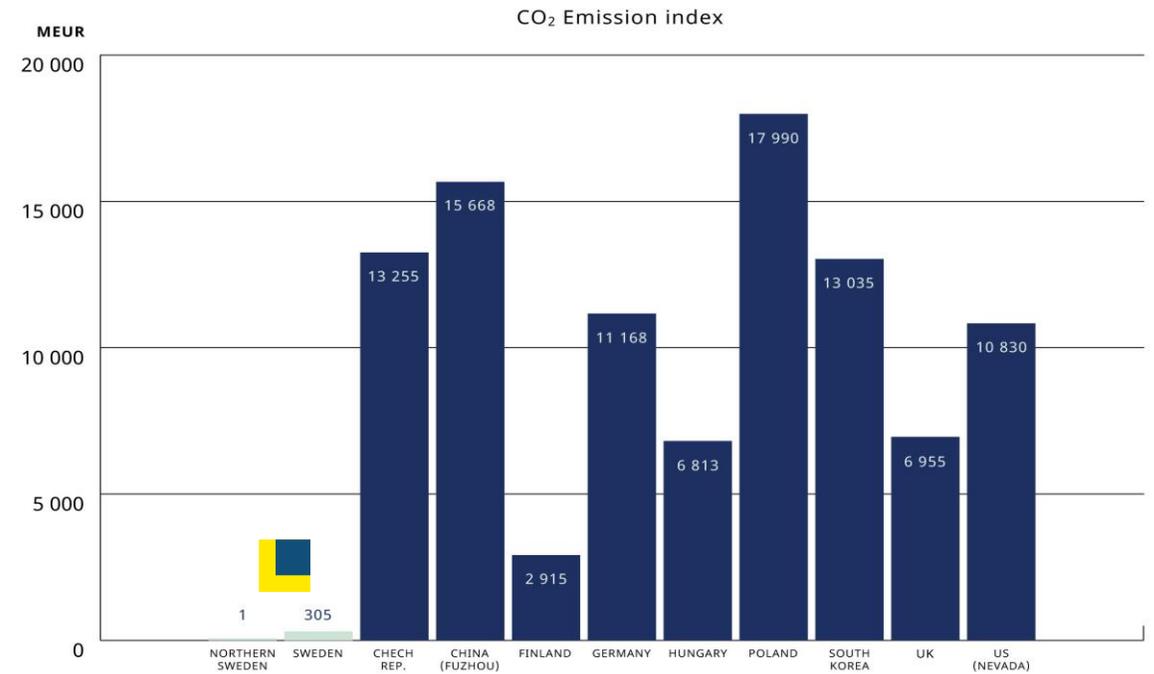
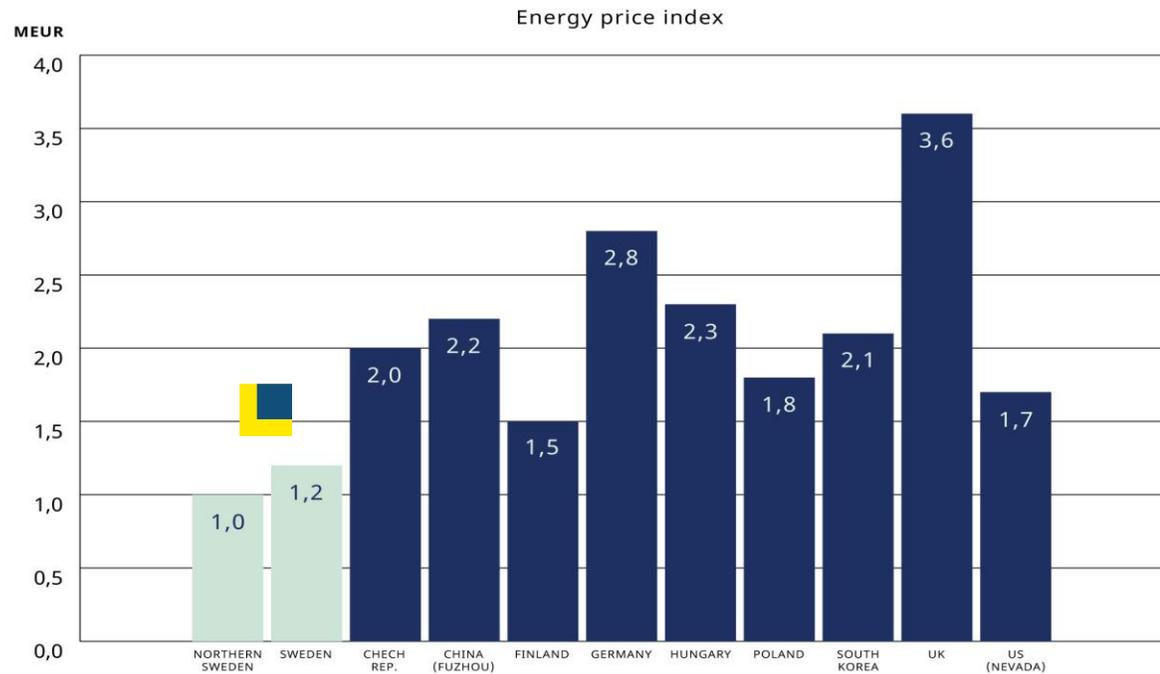
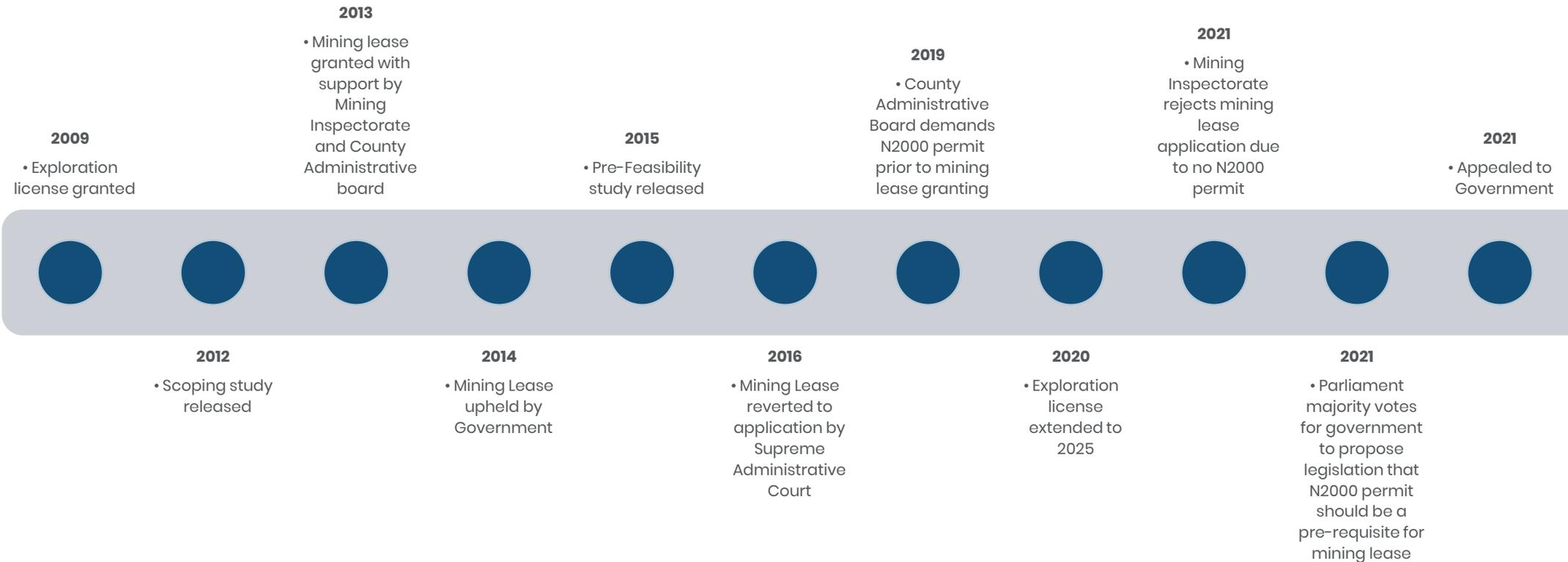


Fig. 3. Normalised impacts of process chains in person equivalents per kg Dy with deviation.

Sweden's Power Advantage

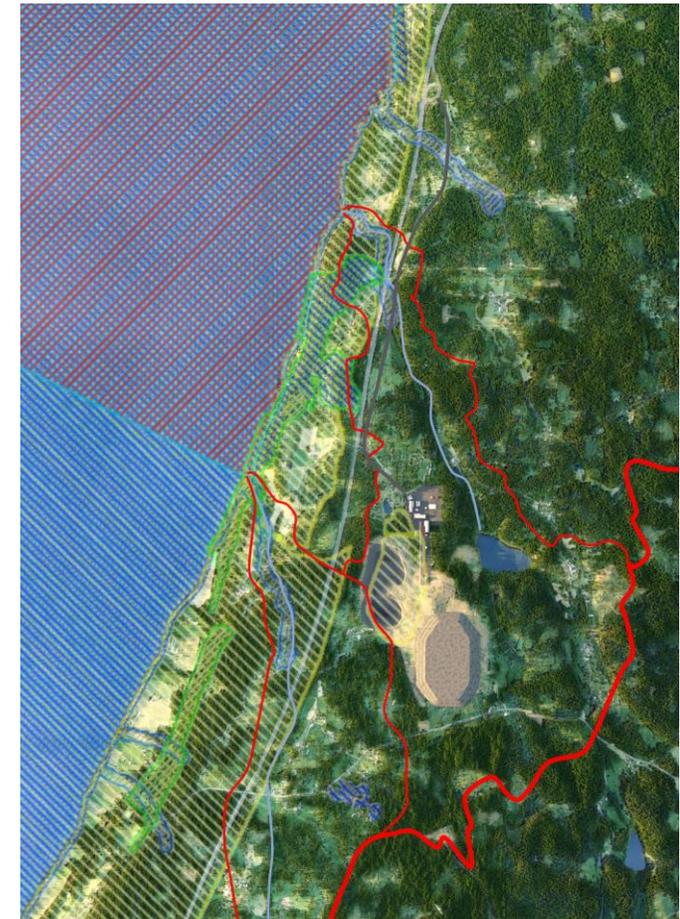
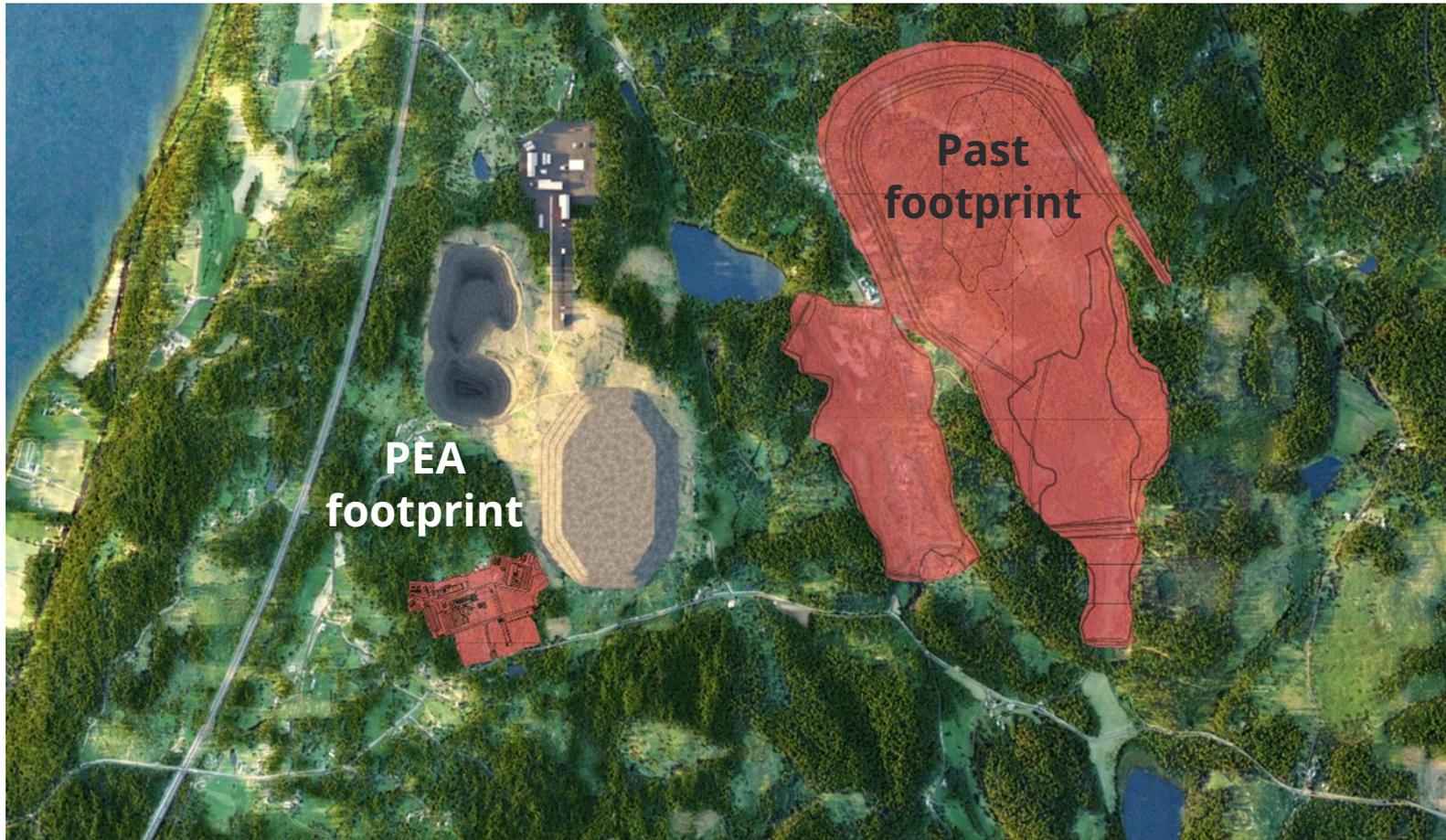


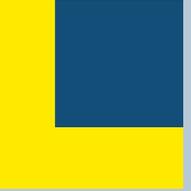
Social License of Norra Kärr



2021
New Scoping Study released focussed on maximizing resource efficiency and minimizing local footprint of project which will drive permitting forward.

Norra Kärr 2021 PEA Environmental Context





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Bihor Sud Exploration Project

Bihor Sud Cobalt Project

27
Co
Cobalt
58.933

28
Ni
Nickel
58.693



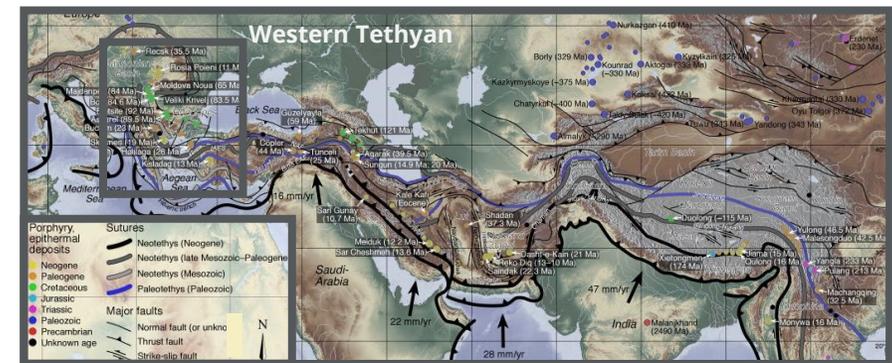
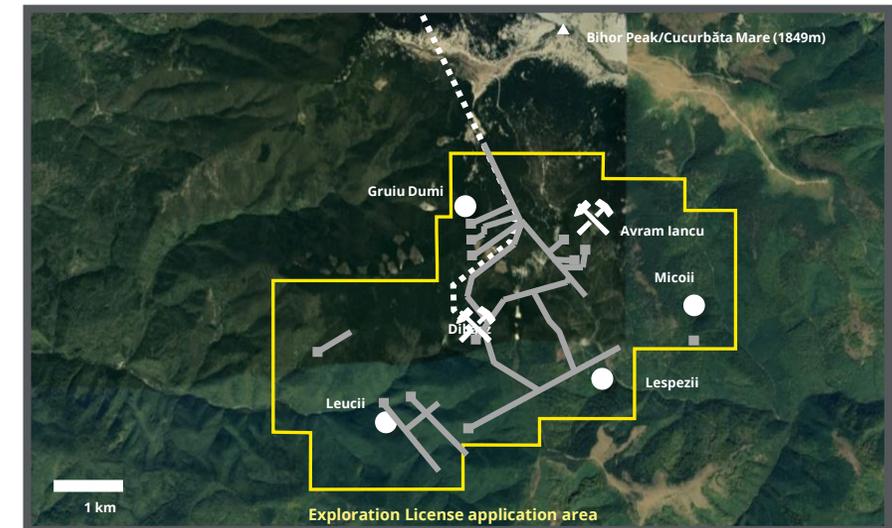
**LEADING EDGE
MATERIALS**

Overview

- JV from 2018 with 51% ownership with potential to move to 90%. Local JV partner operates a Dolomite mine in the area offering shared resources and local knowledge
- Located in the upper Cretaceous megallogenic belt, part of the Tethyan Belt in a historic mining area with a number of historic mines, one being a significant uranium mine
- Initial prospecting campaign and sampling from past mine workings indicates potential for high grade nickel-cobalt mineralizations

Opportunity

- Bihor Sud is relatively isolated site whilst the road and power network is well developed due to prior mining and forestry. No permanent residences lie within 5km of the Exploration License boundary.
- Awaiting final ruling from court on tender process for exclusive exploration license for the Bihor Sud perimeter which would launch prepared exploration program
- Romania is a historic mining country but nowadays one of Europe's poorest countries which should attract interest from strategic investors





**LEADING EDGE
MATERIALS**

 www.leadingedgematerials.com

info@leadingedgematerials.com

 @LeadingEdgeMtl

TSX.V: LEM
Nasdaq First North: LEMSE
OTCQB: LEMIF
FRA: 7FL

