GEOMEGA
Rare Earths · Refining · Recycling

Recycling & Clean Processing Technologies

Rare Earth Elements and Critical & Strategic Metals from

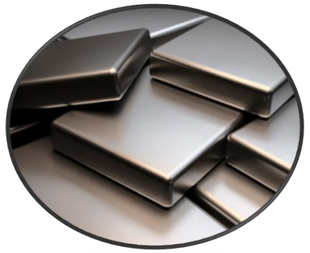
- Magnets
- Bauxite Residues
- Mining and Industrial sources

Oct. 27, 2021 – Annual General Meeting

Forward Looking Statement

Our presentation contains "forward-looking statements" not based on historical facts. Forward-looking statements express, as of the date of this presentation, our estimates, forecasts, projections, expectations and opinions as to future events or results. The forward looking statements that are contained in this presentation are based on various assumptions and estimates by the Corporation and involve a number of risks and uncertainties. As a consequence, actual results may differ materially from results forecast or suggested in these forward-looking statements and readers should not place undue reliance on forward-looking statements. We caution you that such forward-looking statements involve known and unknown risks and uncertainties, as discussed in the Corporation's filings with Canadian Securities Administrators. Various factors may prevent or delay our plans, including but not limited to, contractor availability and performance, weather, access, mineral prices, success and failure of the exploration and development carried out at various stages of the program, and including as regards the commercialization of any of the technology, general business, economic, competitive, political and social conditions. The Corporation expressly disclaims any obligation to update any forward-looking statements, except as required by applicable securities laws.

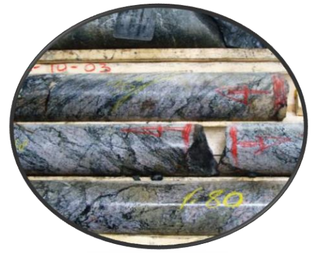
Clean Technologies for Sustainable Metals



REE Recycling

- Fully funded to develop the 1st rare earth magnet recycling facility outside of Asia
- Ongoing detailed engineering in preparation to procurement and construction
- Sustainable solution to the magnets that drive transport electrification and the global renewable energy movement

Montviel REE Deposit



- Largest rare earth Bastnaesite 43-101 resource estimate in North America
- Patented metallurgical process
- Road and power infrastructure

Bauxite Residues Sustainable Processing

- Working with a major industrial partner to advance technology to pilot stage
- Production of bulk metals (Fe, Al) while reducing waste volume >80%
- Recovery of valuable critical metals (REE, Sc, Ti, V) and recycling of main reagents

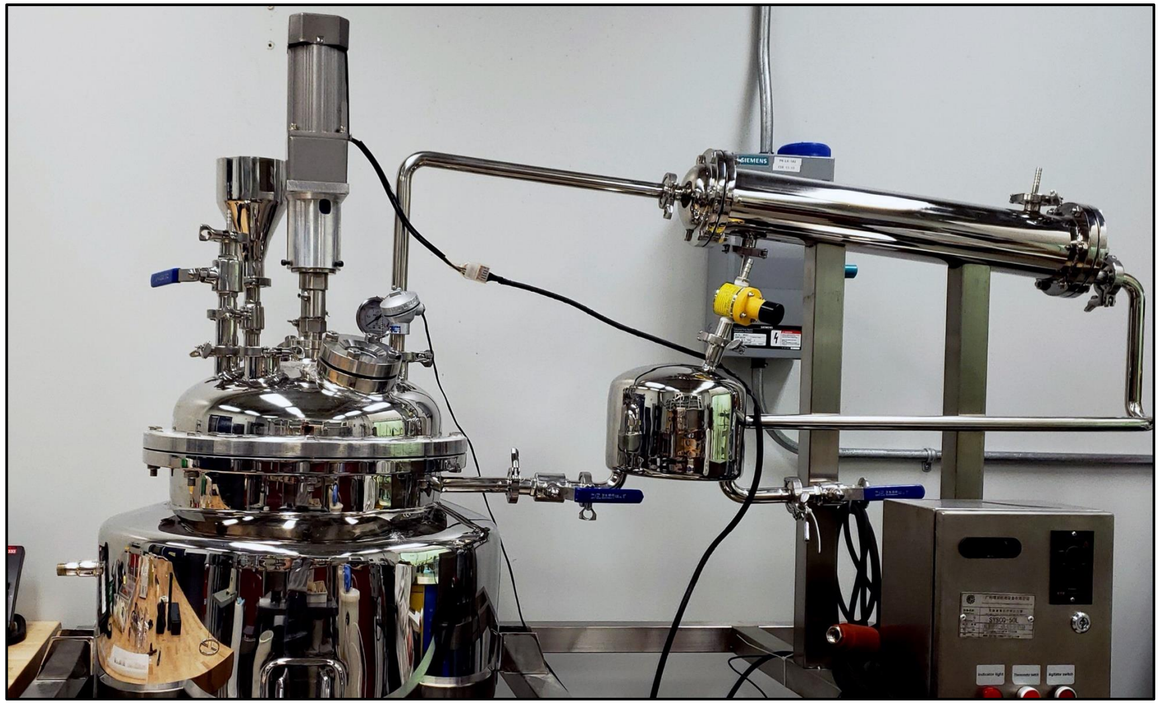
Other Sources & Other Metals

- Strong technical team led by CTO Dr. Pouya Hajiani
- Leveraging REE expertise to evaluate other sources (mining, industrial & e-waste)
- Healthy pipeline of projects

REE Recycling

- Proprietary technology
- Environmentally safe
- Small footprint
- Low CAPEX

Magnet Feed



Pilot Unit

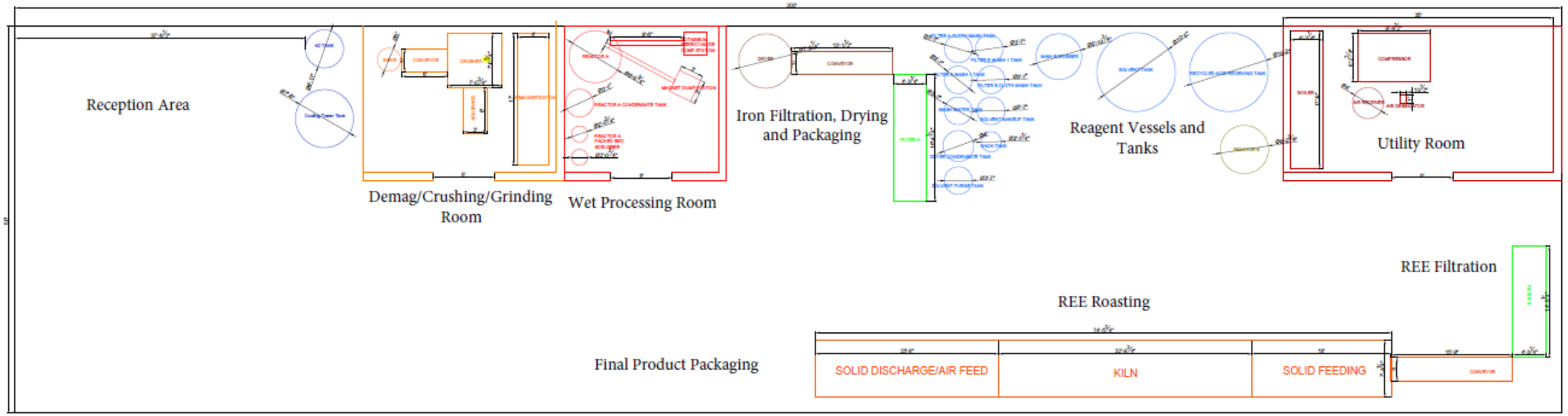
REO Product

- Recovery of main reagents > 90%
- No liquid effluent produced
- High purity, >99.5% REO Product
- Iron oxide as by-product
- Lower GHG emissions than conventional mining

Iron By-Product

REE Recycling Demo Plant

- Facility in Saint-Bruno secured
- Construction completed in 2020
- Industrial condo w/ loading dock, 14' door
- 10,000 sq.ft. plant area, 30ft ceilings
- 4,880 sq. ft over 2 levels – offices and employee change house, lunch room



REE Recycling Demo Plant

- **> 6,800 hrs of in-house engineering in 2020 & 2021**
  - 4 engineers involved
  - Process design
  - Pilot plant
  - Process optimization
  - Detailed engineering - ongoing
- **Supported by >2,750 hrs of external engineering & consultants**

- In 2021
  - Shifted towards more internal engineering
  - Continuing that by bringing now additional disciplines (Sr. process engineer, mechanical, instrumentation engineers, etc)

REE Recycling Demo Plant

- **Plant main equipment pieces: 31**
- **Plant secondary / support equipment pieces: 35**
- **Vendors involved to date: 93**
  - North America, Europe & Asia
  - Priority to buy local as much as possible
- **Narrowed down to main 24 vendors**
- Details & adjustments still ongoing
- Layout design ongoing
- Next:
  - P&ID
  - Equipment ordering
  - Ground preparation by construction company

REE Recycling Demo Plant

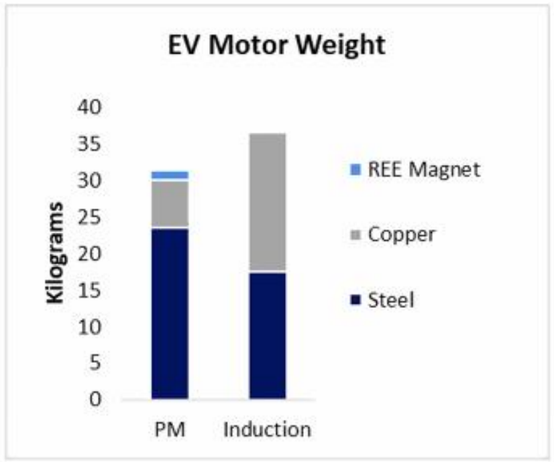
- **Engineering supported by laboratory testwork**
  - A team of up to 7 researchers and engineers
  - **> 5,300 hrs of R&D** on process optimization, feed variability, etc…
  - **> 800 tests** completed
  - Critical in process design
  - All testwork is in-house
  - **More than 70 different representative samples** received from 26 potential suppliers

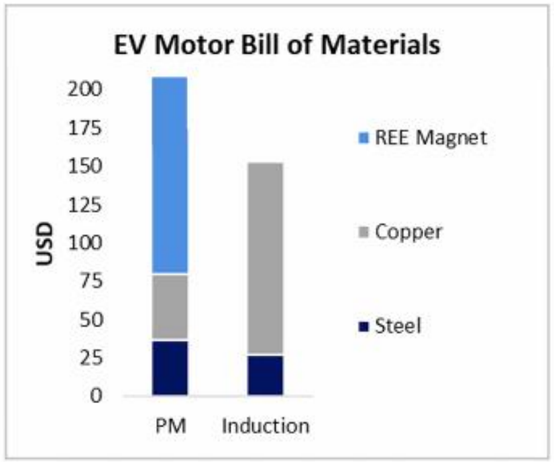
REE Recycling Demo Plant

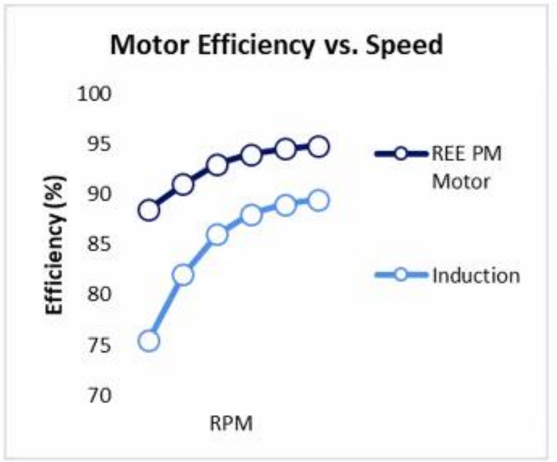
Demo Plant Economics	
Demo plant feed throughput	1.5 tpd / 8hr day
Average grade of feed stock	30% TREO (Nd, Pr, Dy, Tb)
Capital costs (inc. WC)	$4.8 M
Direct operating costs	$3 / kg of TREO
Targeted Sales*	$10 M
Target Profit Margin	20%
Conversion to Commercial Plant	**Up to 4.5 tpd / 24hr operation** Additional costs $1M-$2M Targeted Sales $30 M

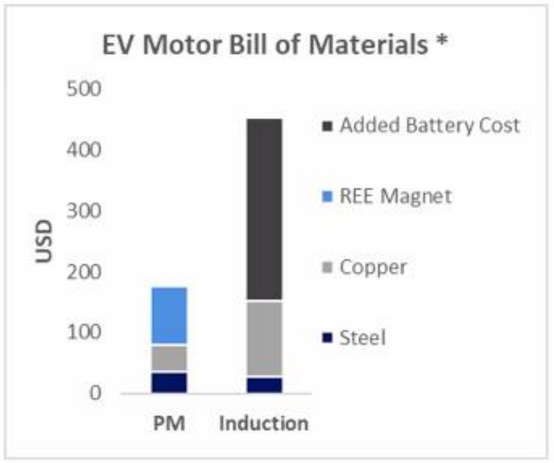
***Based on REO bottom prices pre 2020 increase**

Permanent Magnet Sector









Lightest, most power-dense, most efficient type of EV traction motor commercially available

Used in over 90% of all EVs produced globally to-date

BOM for a typical PMSM is around 20-40% higher than that of comparable induction motor

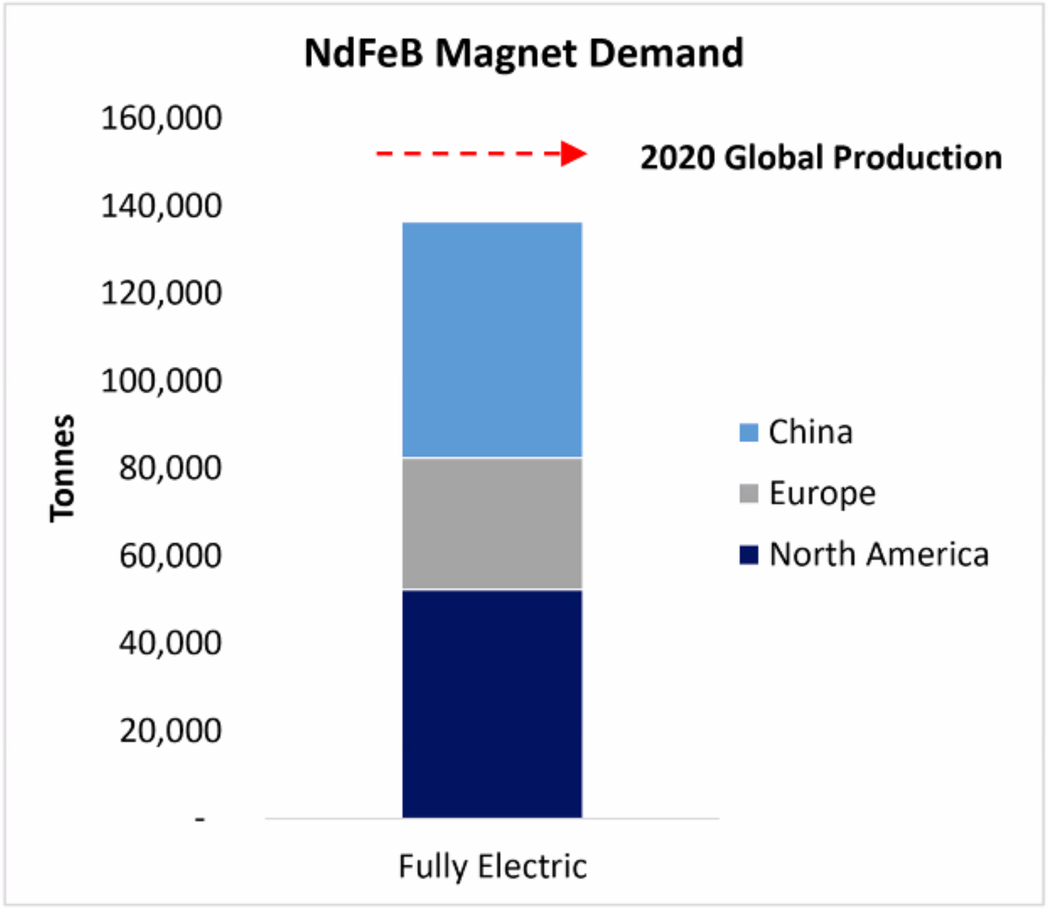
PMSM around 10-15% more efficient than comparable induction motor

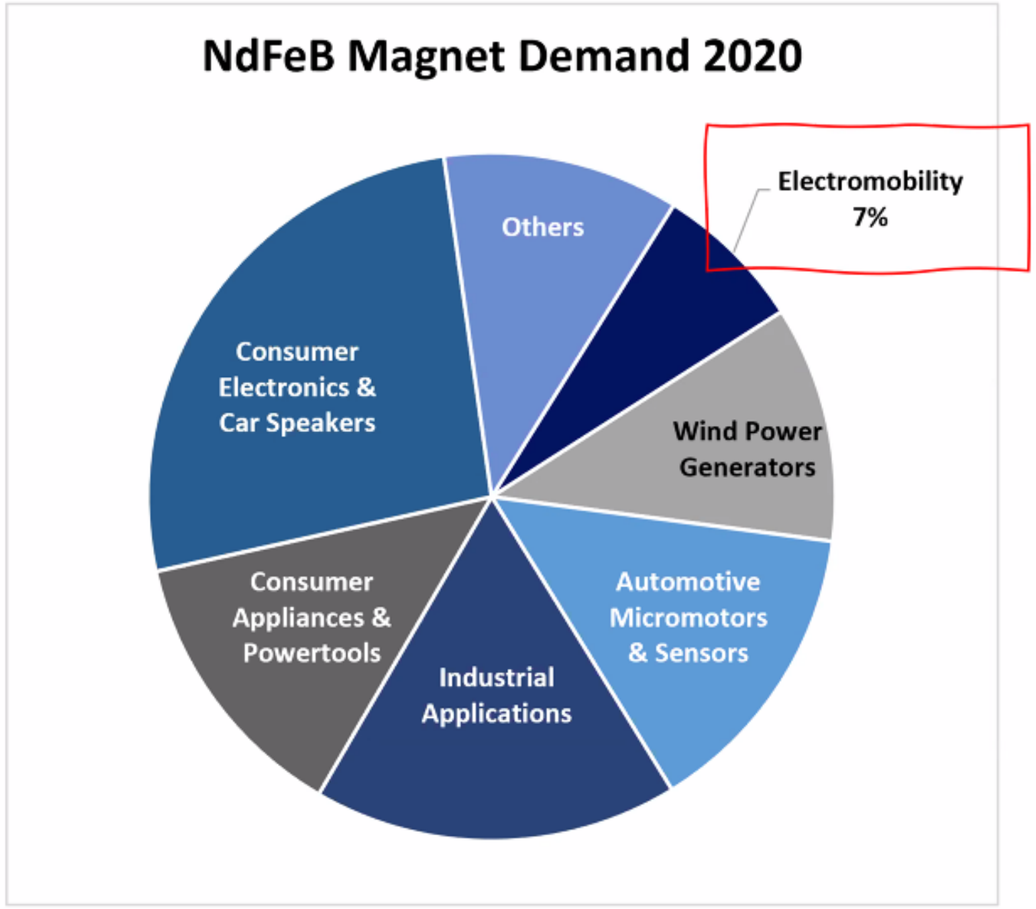
Increasing pack capacity of 60kWh BEV by 5% = $300

Increasing pack capacity of 60kWh BEV by 15% = $900

Source: Adamas Intelligence REE Day Oct 2021

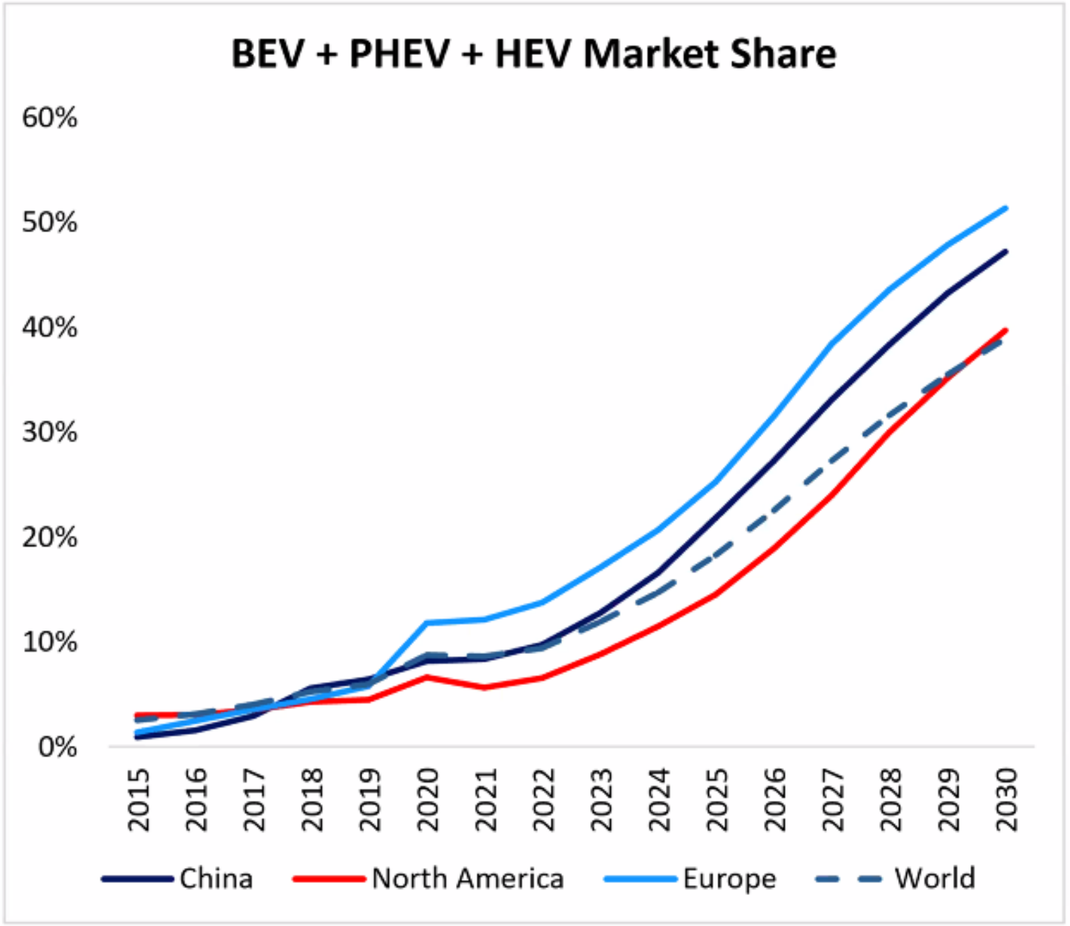
Permanent Magnet Sector

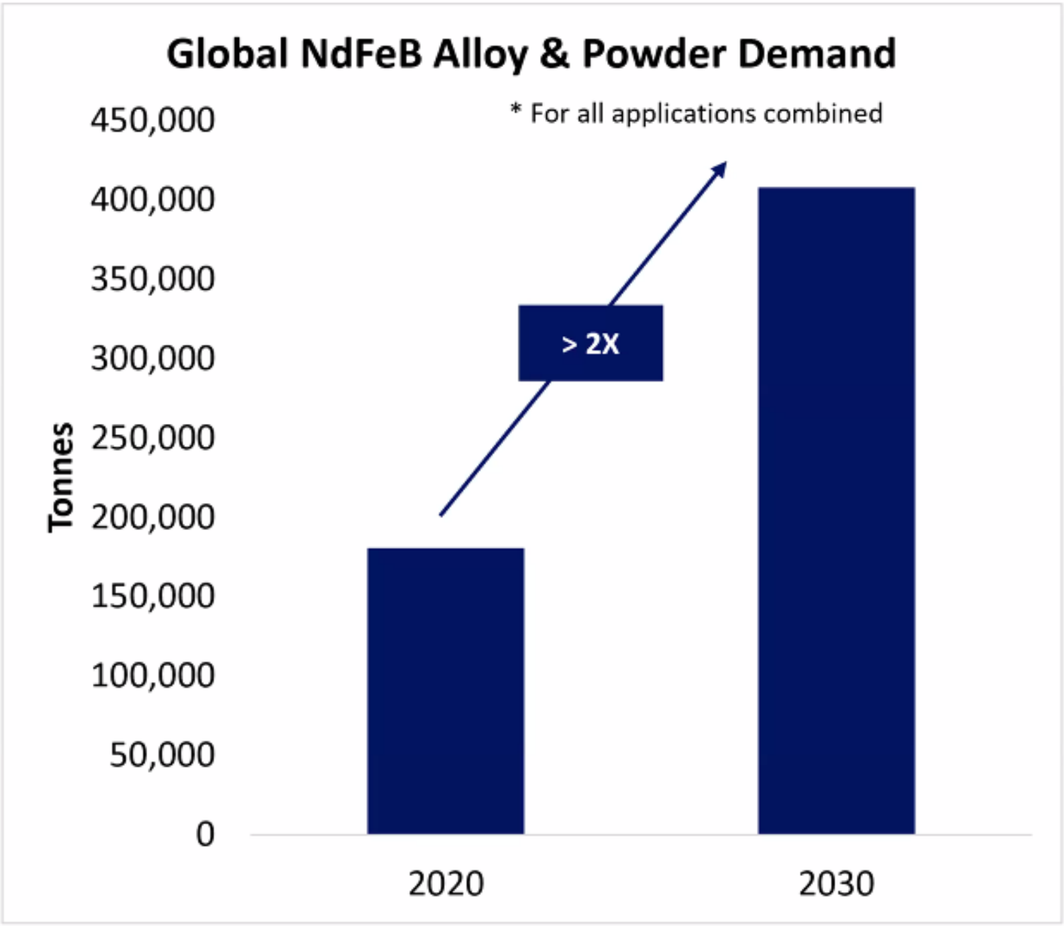




Source: Adamas Intelligence REE Day Oct 2021

Permanent Magnet Sector

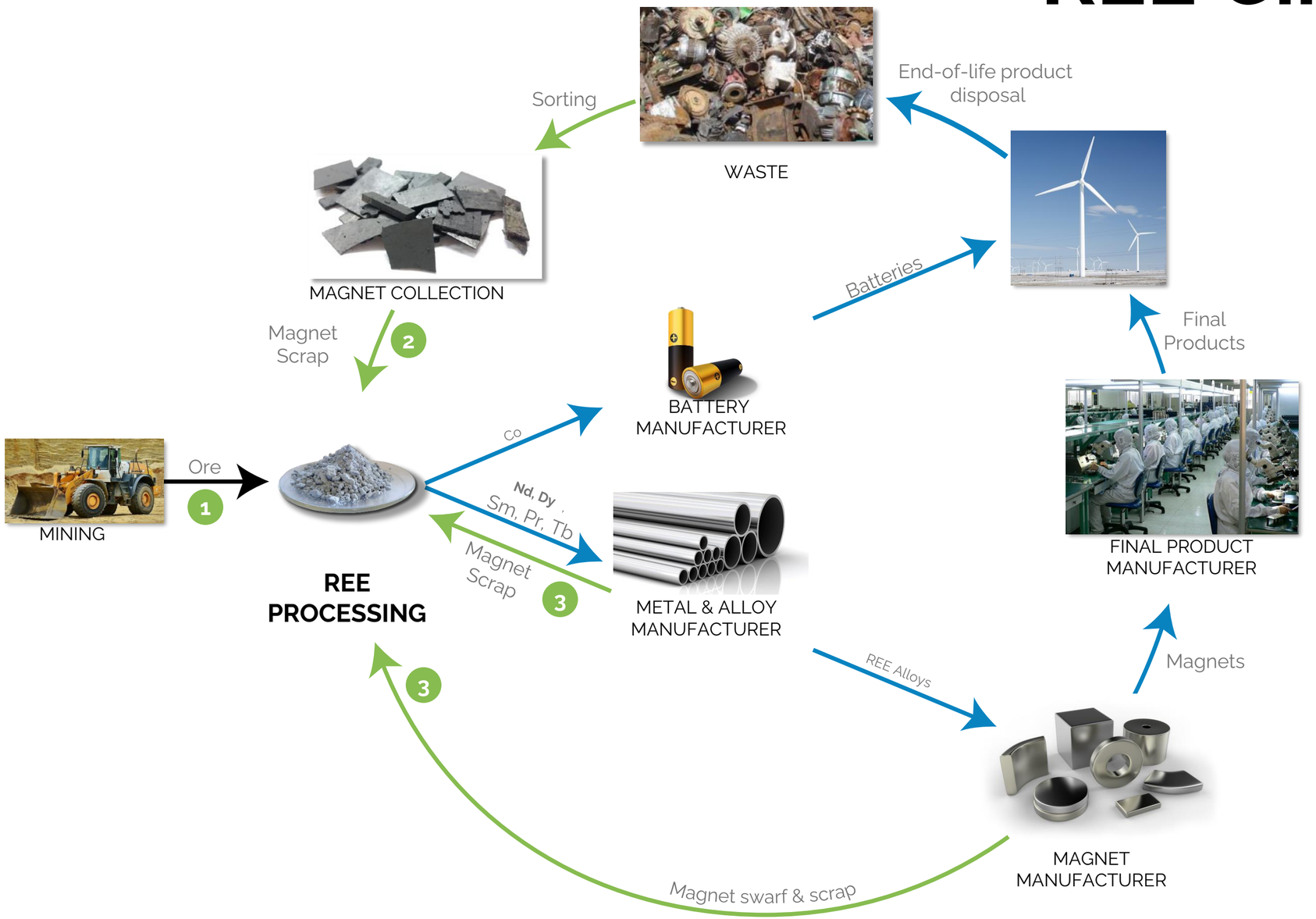




*** Excludes mild and micro HEVs**

Source: Adamas Intelligence REE Day Oct 2021

REE Circular Economy



Critical Metals R&D

- **Leveraging**

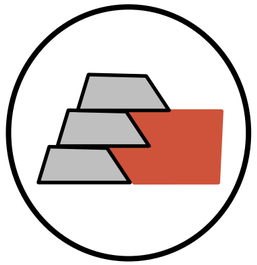
Expertise | Technology Strengths | Technical Team

- **> 25 samples received from various groups & types of materials**
- **> 700 tests completed**
- **> 1,700 hrs of testwork**
- **> 2,500 hrs spent preparing proposals**
- Since June 2020, non-dilutive funding:
  - > $600K received & > $300K approved and in progress
- 4 projects submitted and under review
  - Total value of projects $15.5M*
- Opportunity to monetize through licenses & royalties

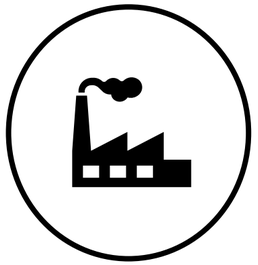
* Amount of funding varies depending on the program. There is no guarantee that the project will be approved by the funding organism.

Bauxite Residues Basics

More than 80 plants worldwide produce bauxite residues

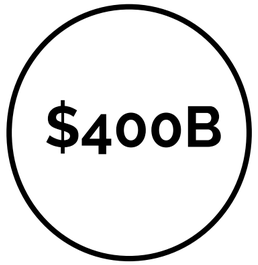


Over 4 B Tonnes of Bauxite Residues are stored in tailings globally

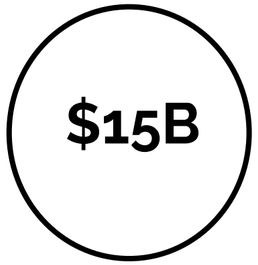


Over 150MT of Bauxite Residues are produced annually worldwide

$80 – $120 in lost metal value per tonne of bauxite residues



in metal value in storage



in metal value in annual bauxite residues production

Bauxite Residues Value Proposition

2MT

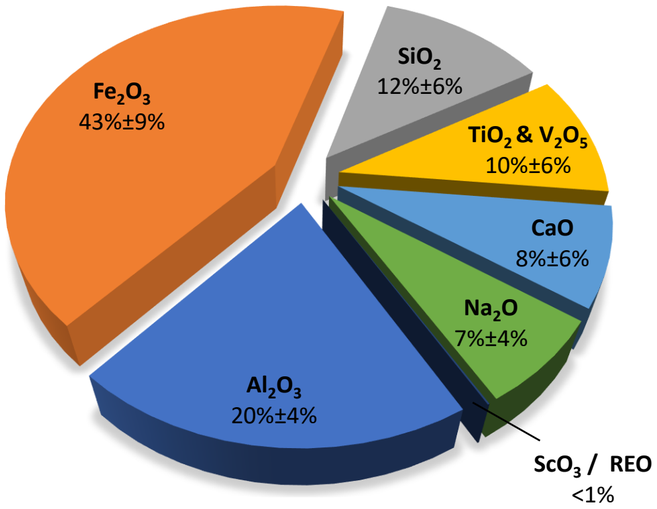
Average plant production of bauxite residues per year

$200M

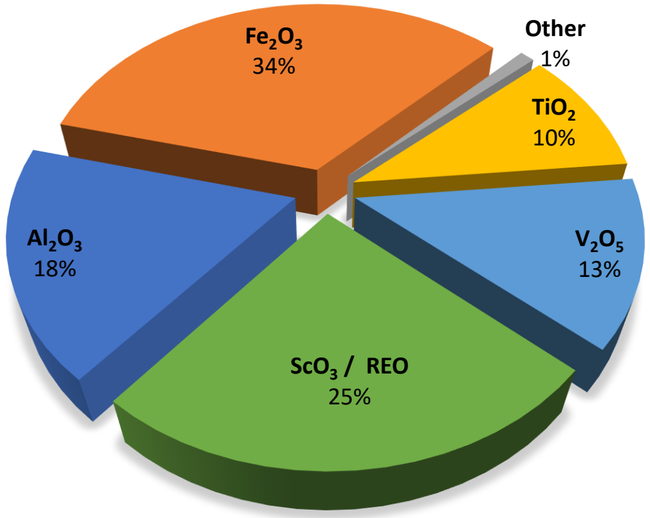
in metal value per year mostly in Iron, Aluminum and Scandium

Technology to be deployed globally through licensing and royalty agreements

Average composition



Value distribution*



***Estimated at $100/T and 80% recovery**

Bauxite Residues Technology

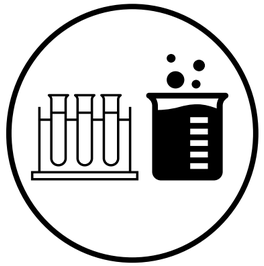
- Recovery of **bulk metals (Fe, Al)** to maximize **volume reduction (>80%)**
- Recycling of main reagents to **reduce costs and effluents**

- Production of **valuable** minor metals concentrates (Ti, V, Sc/REE)
- To develop **sustainable** Scandium supply for the automotive, aerospace and other industries

- To conserve and contribute to **cleaner water**
- To remove potential **soil** contamination from seepage

Bauxite Residues Technology

- Working with a major industrial international partner
- Advancing the technology to pilot stage



- Bench scale successfully demonstrated
- Positive internal economic evaluation
  - **Synergis** between various processing steps
  - **Non-corrosive** reagents eliminates the need for high-cost specialized equipment
  - No sophisticated purification steps **reduces CAPEX** and **de-risks scale-up**

Montviel REE Project

- 100% owned by Geomega
- Located in Quebec with power and road infrastructure available
- Largest rare earth Bastnaesite 43-101 resource estimate in North America
- 82.4 Mt @ 1.5% TREO & 0.17% Nb_2O_5 Indicated and over 184Mt Inferred
- Patented metallurgical process (US15/578,498)
- Strong support from the Quebec government, local communities and the CREE First Nation
- The most accessible REE project in Canada

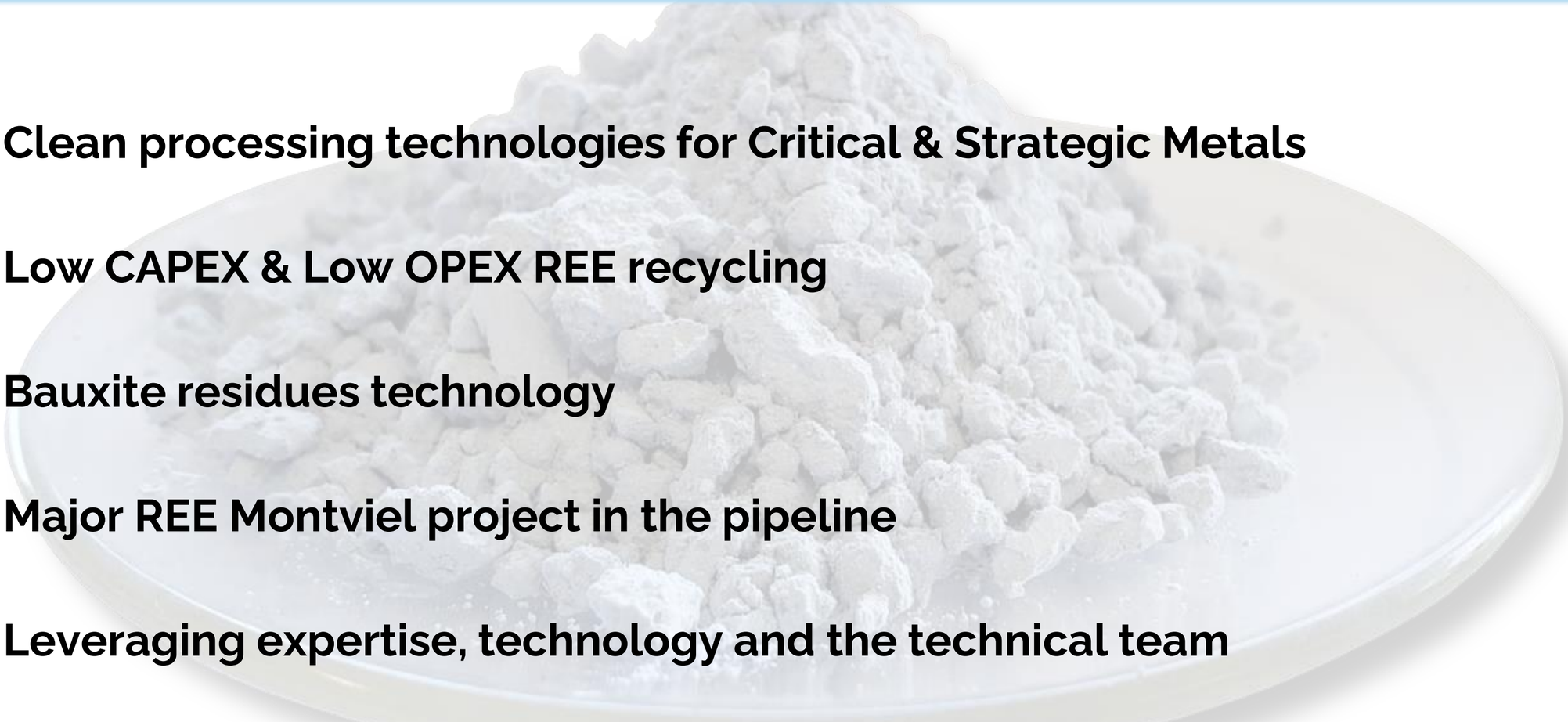
Montviel REE Project

- Geomega's technology developed with Montviel in mind

- Technology to demonstrate Montviel as a robust project even at low REO prices
  - Recyclability of main reagents
  - Reduction of environmental footprint
  - Simplified process
  - Iron as a by-product

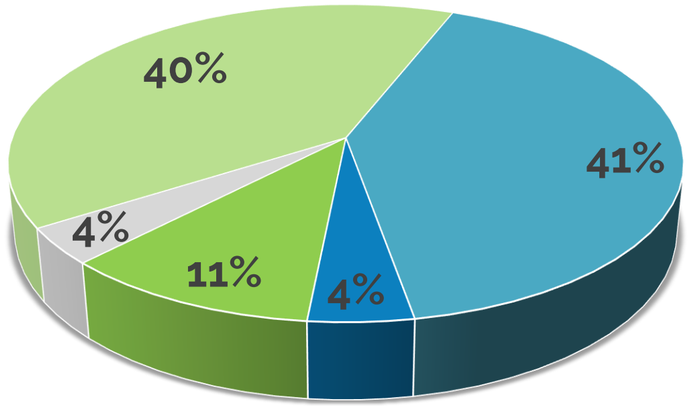
- Technology more mature than it was in 2015
- Market demand stronger than it was in the last 10 years and only growing

Summary



- Clean processing technologies for Critical & Strategic Metals
- Low CAPEX & Low OPEX REE recycling
- Bauxite residues technology
- Major REE Montviel project in the pipeline
- Leveraging expertise, technology and the technical team
- Royalties & licenses opportunities on major global waste streams of CSM

Share Structure



Issued & Outstanding (31/05/2021)	**129,867,211**
Stock Options	8,496,250
Warrants (2.2M - $0.15, 14.3M - $0.22)	17,039,137 (exp 2022)
Fully-Diluted	155,402,598
Equity assets	16.8M shares of KTR.V
Cash	$3.4M & $3M IQ*

Analyst coverage:
Fundamental Research: $1.20 target

*Debt financing from IQ for $3M has not yet been withdrawn

Rare Earths Recycling
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