

# Ucore's Louisiana Site Selection and US\$15M State Incentives Continues Industry's Push for North American Rare Earths Supply

written by InvestorNews | April 12, 2023

[Ucore Rare Metals Inc.](#) (TSXV: UCU | OTCQX: UURAF), which specializes in separation technologies for rare earths and critical minerals, [has chosen a brownfield facility](#), spanning 80,800 square feet, located within the England Airpark in Alexandria, Louisiana as the site for its first rare earths production facility.

The facility will house the company's Louisiana Strategic Metals Complex (LSMC), which will use its proprietary RapidSX™ technology to separate and produce rare earth oxides (REOs) from various feedstocks.

## Louisiana Strategic Metals Complex (LSMC)

The LSMC is expected to commence construction in 2023 and start production in 2025, with an initial capacity of 2,000 tonnes per year ("tpa") of total rare earth oxides (TREO), increasing to 5,000 tonnes per year by 2026. The company also plans to expand the capacity to 7,500 tonnes per year by 2027, subject to market demand and availability of feedstock. The LSMC will produce both heavy and light REOs for various applications, such as permanent magnets, electric vehicles, wind turbines, aerospace, defense, and medical devices.

## Louisiana increases incentive offers

The company also announced that it has secured an increase in state support from Louisiana Economic Development (LED) to US\$15 million, which includes a 10-year tax exemption to the company, a payroll rebate for up to 10 years, performance-based grant for site preparation and infrastructure, and workforce development support.

Louisiana also offers a Research and Development Tax Credit program and a Small Business Loan and Guarantee Program and Ucore believes it could participate in both of these programs, however, the value of the benefits from these programs will be determined later. Ucore Chairman and CEO Pat Ryan commented,

*“Ucore is extremely grateful to The City of Alexandria, England Airpark, GAEDA, Louisiana Central, LED, Rapides Parish, and Louisiana’s federal delegation. Each has worked together and in concert with Ucore to provide us with the opportunity to establish the first modern technology rare earth processing plant in North America. It is critical that the United States leads in establishing the critical metals supply chain essential to a changing manufacturing landscape across North America. The establishment of the Louisiana SMC in Alexandria represents one of these first building blocks and a significant contributor to the shift toward energy production and consumption diversification.”*

## Ucore hitting milestones

Ucore stated that the site selection and state support are significant milestones for its vision to become a leading advanced technology company providing best-in-class metal separation products and services to the mining and mineral extraction industry. The company also highlighted its

competitive advantages over conventional solvent extraction methods, such as lower capital and operating costs, faster processing time, smaller footprint, modular design, scalability, and environmental sustainability.

The company has successfully demonstrated the technology at its Demonstration Plant in Kingston, Ontario, Canada. Its RapidSX™ technology is based on research and development by Innovation Metals Corp. with some funding assistance from the DoE. Innovation Metals was acquired by Ucore in 2020.

## **The Critical Minerals Shift to North America**

There has been a massive shift by North American governments and agencies to fund the industry to get rare earth production moved to North America in order to secure a domestic supply chain for rare earths and critical minerals that are essential for clean energy technologies.

Recently, the US Department of Energy (DoE) and the US Department of Defense (DoD) have awarded millions of dollars to various projects and initiatives that aim to produce, process, and refine rare earth elements and critical minerals. These investments are expected to create jobs, spur economic growth, and reduce dependence on foreign sources, especially China, which currently dominates the global market for these materials.

Recently funded projects in Canada included:

- In March 2023, [Search Minerals Inc.](#) (TSXV: SMY | OTCQB: SHCMF) announced that the Government of Canada has contributed C\$5.0 million to fund the construction and operation of a rare earth extraction and recovery demonstration plant in Ontario.

- In March 2023, [Geomega Resources Inc.](#) (TSXV: GMA | OTCQB: GOMRF) announced that it is receiving C\$3.0 million in funding from the Government of Canada towards the construction of the rare earths magnet recycling demonstration plant in Quebec.
- In February 2023, [Nano One Materials Corp.](#) (TSX: NANO) reported that it received C\$10 million from Sustainable Development Technology Canada to fund the conversion of its recently acquired facility in Quebec to produce lithium iron phosphate (LFP).

Last year, some major investments in the critical minerals industry were announced in the US:

- In October 2022, the DOE announced US\$39 million in funding for 16 projects across 12 states to develop technologies to increase the domestic supplies of critical elements.
- In June 2022, [Lynas Rare Earths Limited](#) (ASX: LYC) was awarded a US\$120 million contract by the DoD to build a commercial Heavy Rare Earths facility in Texas.
- In February 2022, the DoD awarded US\$35 Million to [MP Materials Corp.](#) (NYSE: MP) to design and build a facility in California to process and separate Heavy Rare Earths (HREE).

## Upcoming Catalysts for Ucore

Ucore is finalizing pre-payment and supply offtake agreements with various strategic partners as well as other grant and incentive programs with both the Canadian and US governments. The company plans to get the LSMC in pre-production by Q4/2024 with a planned production throughput of 2,000 tpa by the start

of 2025.

In the longer term, the company plans to add subsequent SMCs in Alaska and Canada using its technology platform and develop the Bokan Mountain Rare Earth Element Project in southeast Alaska, which is in the Preliminary Economic Assessment (“PEA”) stage, as a potential source of feedstock material.

Ucore closed yesterday at C\$1.30 with a market cap of C\$73.0 million.

## **The Future Louisiana SMC – Alexandria, Louisiana, USA**



# Rare Earths Juniors Search Minerals and Geomega Resources are “Winners” in Canada’s Critical Minerals Strategy

written by Matt Bohlsen | April 12, 2023

As announced last week at the Prospectors & Developers Association of Canada (“PDAC”) mining conference in Toronto, the Canadian government released news regarding their Critical Minerals Strategy. In particular, Canada’s Resources Minister Wilkinson stated there will be “[over \\$344 million for Canadian critical minerals development](#).” The Minister also said that equity stakes could come through the soon-to-be-launched Canada Growth Fund and loans could be arranged through the Canada Infrastructure Bank. This is good news for Canadian critical minerals projects. The Canada Growth Fund was announced last year and is to be backed by \$15 billion in Federal funds. This compares with Australia’s ([clean energy finance corporation](#) – A\$10 billion) and Japan’s ([Green Energy Fund](#) – JPY2 trillion) initiatives but still falls well behind USA’s US\$369 billion Inflation Reduction Act.

The Canadian Critical Minerals Strategy is part of Canada’s climate plan, which outlines Canada’s goals of reducing greenhouse gas emissions by 40-45% below 2005 levels by 2030 and reaching net-zero emissions by 2050.

The Government of Canada has invested in the critical minerals industry recently through various projects including the mining of rare earths in the Northwest Territories and electric vehicle battery assembly in Quebec.

With this latest announcement, two companies that have already been chosen to receive funds are [Search Minerals Inc.](#) (TSXV: SMY | OTCQB: SHCMF), receiving C\$5 million, and [Geomega Resources Inc.](#) (TSXV: GMA | OTCQB: GOMRF), receiving C\$3 million.

## Search Minerals Inc.

Search Minerals is a rare earths explorer and developer in Labrador, Canada. Search's flagship project is the Port Hope Simpson ("PHS") Property which includes the Foxtrot resource, Deep Fox resource, Silver Fox, Awesome Fox, and Fox Meadow deposits. The properties are prospective for Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy), Terbium (Tb), Zirconium (Zr), and Hafnium (Hf).

Search plans for mining and primary production of the Deep Fox and Foxtrot deposits in Labrador and further refining of concentrate into REE mixed oxides and carbonates on the Island of Newfoundland thereafter.

The 2022 PEA (based only on the Foxtrot and Deep Fox Resource) resulted in a [post-tax NPV8% of C\\$1.31B](#) and a post-tax IRR of 41.5%. Initial CapEx was estimated at [C\\$422 million](#) (including a C\$61 million contingency) with a mine life of 26 years. The PEA is based on an annual production of approximately 1,437 t of magnet rare earths oxides (Nd+Pr: 1,291 t, Dy: 125 t, and Tb: 21 t).

Search said on March 7 that they plan to use the [C\\$5 million government funding](#) towards a demonstration plant. Search [stated](#):

*"The Government of Canada has contributed \$5 million in non-dilutive support to Search Minerals via a Contribution Agreement which will be used to fund the construction and operation of a demonstration plant for rare earth extraction*



*and recovery. The total project cost is estimated at approximately \$9.3 million with a further \$1 million of funding under application from other sources. Search Minerals' contribution to the construction costs is expected to be approximately \$3.3 million. The demonstration plant will process ~20 tonnes of rare earth concentrate prepared from 72 tonnes of Deep Fox and Foxtrot mineralization....."*

The demonstration plan will support a Feasibility Study expected to be completed in 2024.

Search Minerals currently trades at C\$0.07 and on a market cap of [C\\$29 million](#).

## **Geomega Resources Inc.**

Geomega Resources is focused on rare earths recycling but also owns the largest rare earth bastnaesite 43-101 resource estimate in North America at their Montviel REE Project in Quebec, Canada.

Geomega is fully funded to develop the first rare earth magnet recycling facility outside of Asia, to be located in Saint-Bruno, Quebec, Canada. The Project is undergoing detailed engineering in preparation for procurement and construction.

**Geomega Resources REE recycling demonstration plant summary**

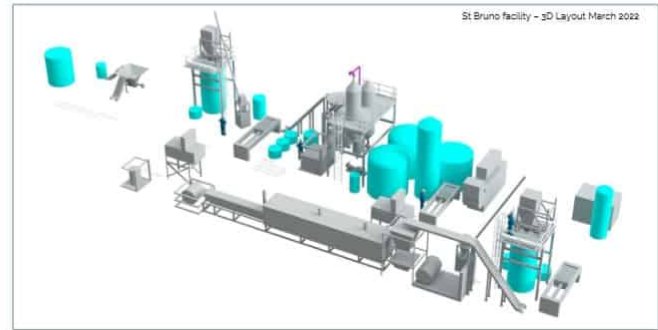


# REE Recycling Demo Plant

- Facility in Saint-Bruno, Quebec
- 1<sup>st</sup> of its kind recycling plant in North America
- Conservative economics based on bottom prices
- Nd, Pr, Tb, Dy prices – 3x increase since 2019

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 (2019 prices)	\$10 M
Target Profit Margin	20%
<b>Conversion to Commercial Plant</b>	<b>Up to 4.5 tpd / 24hr operation</b> Additional costs \$1M-\$2M Targeted Sales \$30 M

Rare Earths Recycling & Clean Processing of CSM



- Detailed Engineering ongoing
  - PFD, PCD – completed
  - P&ID – 50% and ongoing
- Procurement – ready to start
- Pre-construction – finalizing service provider

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Source: [Company presentation](#)

The Montviel REE Project Indicated Resource is [82.4 Mt @ 1.5% TREO & 0.17% Nb2O5](#) plus 184Mt Inferred Resource. The Project has road access nearby and access to power and labor.

## The Montviel REE Project in Quebec, Canada

# Montviel Project

**82.4Mt Indicated**

43-101 Resource Estimate (2015)



**1.5% TREO**  
**0.17% Niobium**



✓ Power ✓ Road ✓ Labour

Source: [Company presentation](#)

Geomega Resources Inc. currently trades at C\$0.215 and on a market cap of [C\\$30 million](#).

## Closing remarks

It appears that the time has finally come for the Canadian junior critical minerals miners to get some real government support. A lot more will be needed to bring projects into production in a timely manner, but it is at least a good start.