

# **SRC Rare Earth Processing Facility**

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# Outline

- SRC Rare Earth Processing Facility
  - Overview
  - Why does North America need this Facility?
  - REE Supply Chain
  - REE Expertise
- Procurement - how to get involved

# Facility Overview

- Government of Saskatchewan announced \$31 million for facility
  - SRC is contributing \$4 million
  - Funding will go to specialized equipment and specialized building requirements
- Estimated 69,000 square feet
- Located in Saskatoon's north industrial area
- Owned and operated by SRC – large scale, fully commercial demonstration facility



# Facility Overview

- Northstar Innovative Developments is responsible for construction of the building and owns the property
- Construction is expected to start this fall (2020) and finish in fall 2022
- About 50 jobs created during construction; the plant itself is expected to have 24 permanent positions and another 10 in R&D
- Estimated \$25 million in annual economic benefits



# Why does North America need this Facility?

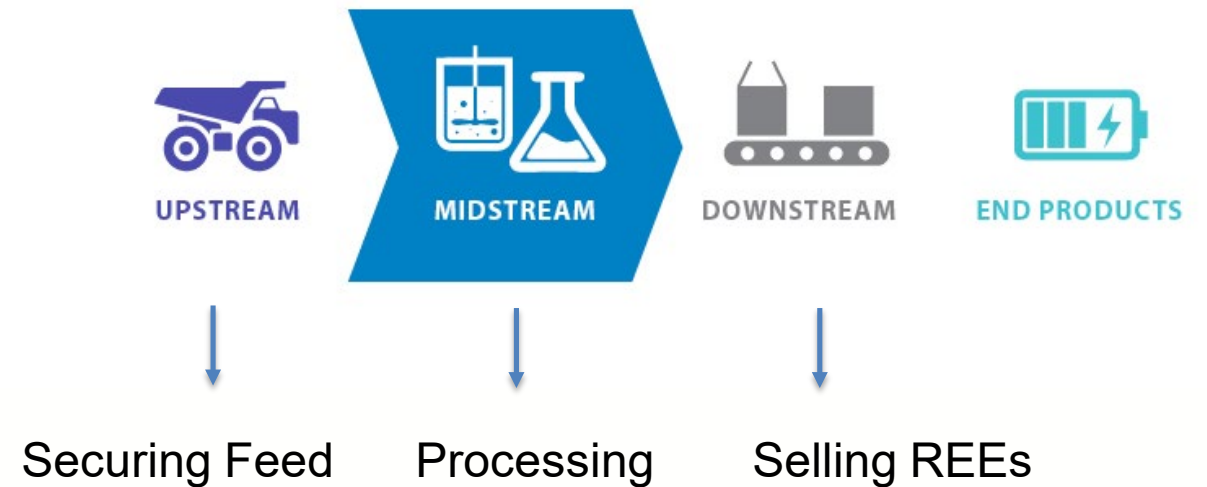
- Current situation: China dominates the current production and export of rare earths – 70% of global production
- Canada has some of the largest resources of REEs in the world ~15 million tonnes
  - Uneconomical to produce REEs here without an established supply chain
- An independent domestic rare earth and critical minerals supply chain has become a priority for Canada and the United States to secure a supply of REEs
- Access to specialized rare earth processing facilities in safe and open jurisdictions - critical importance to industry

# Why does North America need this Facility?

## → Establishing an REE Supply Chain

- Boost domestic supply of key ingredients for renewables, electric vehicles and smartphones.
- New REE Facility = Commercial REE resource expansion in the province
- Open to industry use
- Early-stage supply chain needed to generate cash-flow, investment and industrial growth of the sector

## RARE EARTH PROCESS





# Why does North America need this Facility?

## → Establishing an REE Supply Chain

- Facility will be the **first-of-its-kind** in Canada to concentrate *and* separate REEs
- Process of turning rare earth elements (REE) ore into individual products is done in **two main stages**:
  - First is the **concentration** of ore to mixed REE Carbonate
  - Second is the more complex **separation** stage that converts the mixed REE Carbonate to commercial pure-grade REEs



# How will the Facility work?

- Ore or crushed sand will arrive by truck or rail from producers in Canada and the U.S., as well as potential overseas clients
- SRC can process rare earths from uranium raffinate, as well as from **bastnasite** and **monazite**—most common mineralogical sources of rare earths





# REE Expertise

- SRC has extensive REE extraction and processing technologies expertise
- Already separating rare earths at the bench and pilot-scale level developed with in-house technologies
- Working with mining companies on concentrating REE ore for +10 years



JACK ZHANG



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## MEET OUR REE EXPERTS

SRC Rare Earth Processing Facility



# Procurement Process

- SRC is committed to fair and transparent procurement processes
- A private landlord is handling the building construction
- SRC is responsible for specialized equipment and facility upgrades
- Competitive award process through SaskTenders
  - Available opportunities will be posted on SaskTenders
  - Contact Roger Dauvin ([roger.dauvin@src.sk.ca](mailto:roger.dauvin@src.sk.ca)) to be added to our notification list

# Procurement Process

- SRC will be looking to procure project management expertise for the design, construction, installation and commissioning of the Rare Earth Processing Facility
- We are still working out the details of what will be required in the various stages
- We expect the first competitive award process to be issued in the fall sometime

# Project Phases

- Phase 1 – Facility design, equipment sourcing, business development
- Phase 2 – Construction
- Phase 3 – Hiring personnel
- Phase 4 – Opening ~ Fall 2022

## Purchasing

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## Business Development

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