

### The Ashram Rare Earth Project:

A Critical Strategic Asset for a new global reality



### **Forward-Looking Information**

Disclaimers and Cautionary Statements: The information contained in this presentation is provided by Commerce Resource Corp. ("Commerce") for informational purposes only and does not constitute an offer to issue or arrange to issue, or the solicitation of an offer to issue, securities of Commerce or other financial products. The information contained herein is not investment or financial product advice and is not intended to be used as the basis for making an investment decision. The views, opinions and advice provided in this presentation reflect those of the individual presenters, and are provided for information purposes only. The presentation has been prepared without taking into account the investment objectives, financial situation or particular needs of any particular person. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, none of Commerce nor its directors, officers, employees or agents, nor any other person accepts any liability, including, without limitation, any liability arising out of fault or negligence, for any loss arising from the use of the information contained in this presentation.

Except for statements of historical fact, this presentation contains certain "forward-looking information" within the meaning of applicable securities laws. Forward-looking information is frequently characterized by words such as "plan", "expect", "intend", "believe", "anticipate", "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking statements, including, among others, the accuracy of mineral grades and related assumptions, planned expenditures, proposed exploration and development at the Ashram Rare Earth Project and the Blue River Tantalum/Niobium Project, anticipated rare earth element prices and the relationship between rare earth elements and Chinese and global demand, the anticipated timing and conclusions of drilling results, as well as those risk factors identified in Commerce's Management Discussion & Analysis for the period ended July 31, 2016 and other disclosure documents available at www.sedar.com under Commerce's name. Commerce undertakes no obligation to update forward-looking information if circumstances or management's estimates or opinions should change except as required by law. The reader is cautioned not to place undue reliance on forward-looking statements.

This presentation includes industry, market and competitive position data from industry journals and publications, data on websites maintained by private and public entities, including independent industry associations, general publications and other publicly available information. Commerce believes that all of these sources are reliable, but we have not independently verified any of this information and cannot guarantee its accuracy or completeness. Industry publications and surveys generally state that they have obtained information from sources believed to be reliable, but do not guarantee the accuracy and completeness of such information. Further, because certain of these organizations are industry organizations, they may present information in a manner that is more favourable to the industry than would be presented by an independent source. In addition, forecasts are often inaccurate, especially over long periods of time. References in this presentation to research reports or articles should not be construed as depicting the complete findings of the entire referenced report or article. The information in each report or article is not incorporated by reference into this presentation.

Cautionary Notes regarding Technical Information: This presentation includes disclosure of scientific and technical information, as well as information in relation to the calculation of resources, with respect to the Ashram Rare Earth Project and the Blue River Tantalum/Niobium Project. Commerce's disclosure of mineral resource information is governed by National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as may be amended from time to time by the CIM ("CIM Standards"). There can be no assurance that mineral resources will ultimately be converted into mineral reserves. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

Further information about the Blue River Tantalum/Niobium Project, including information relating to quality assurance and quality control procedures, is available in accordance with NI 43-101 within the Technical Report entitled "NI 43-101 Blue River Tantalum-Niobium Project, British Columbia, Canada" with an effective date of March 18, 2015, a copy of which is filed under Commerce's profile on SEDAR at www.sedar.com. Further information about the Ashram Rare Earth Project, including information relating to quality assurance and quality control procedures, is available in accordance with NI 43-101 within the Technical Report entitled "NI 43-101 Technical Report – Preliminary Economic Assessment – Ashram Rare Earth Deposit" with an effective date of July 5, 2012 (revised date of January 7, 2015), a copy of which is filed under Commerce's profile on SEDAR at www.sedar.com.

The technical information in this presentation has been prepared in accordance with the Canadian regulatory requirements set out in NI 43-101 and reviewed on behalf of the Company by Mr. Darren Smith, M.Sc., P.Geol., of Dahrouge Geological Consulting Ltd., a Qualified Person.



### **Financial Summary**

#### **Corporate Information**

Listings: TSX-V (Canada): CCE

FSE (Germany): D7H

USA: CMRZF

Share Price (22 Jan, 2019) \$0.055

52 Week High \$0.11

52 Week Low \$0.05

Shares Issued 310M

Average 90-day Volume Canada 350k

Frankfurt 500k

\$CAD

Market Cap \$17M

#### **Capital Objectives**

Phase 1 Project Level Investment	\$15M
Phase 2 Capital Expenditure	TBD

#### **Share Performance**



#### **Ownership**

#### Institutional

Ressources Québec	6.47%
Zimtu Capital Corp	5.69%
Marquest Asset Management	2.43%



### **Experienced Team**



Axel Hoppe
PhD. Chem.
Chairman

Internationally acknowledged leader in the global tantalum market

Formerly Head of Technical Services and Engineering Group for H.C. Starck; the world's largest consumer of tantalum

President of the Tantalum and Niobium International Study Center for the years 2002 and 2007



David Hodge
Chief Executive
Officer

Veteran resource executive with over 20 years experience

President of Zimtu Capital Corp., founder of Commerce Resources in IPO in 2001.



Chris Grove President

Corporate Communications for Commerce Resources since 2004

Has established significant financial contacts in North America, Europe, and Asia

Has been instrumental in raising over \$70 million dollars for Commerce Resources over the past 10 years



Darren Smith M.Sc, P.Geol,

Ashram Project Manager

Project Manager for Ashram Rare Earth Project

Instrumental in the discovery of the Ashram Rare Earth Deposit and its advancement

Over ten years of experience in the mineral exploration industry



#### **Mireille Smith**

M.Env, Ashram Social & Environmental Sustainability Manager

Instrumental in
Commerce Resources
being awarded the 2015
e3 Plus Award from the
AEMQ for high level of
environmental and social
responsibility, &
adherence to industry
best practices relating to
the company's Eldor
Property exploration and
Ashram Project
development



#### Jenna Hardy

M.Sc, MBA, P.Geo, Technical Services Project Manager for Blue River Tantalum/Niobiu m Project

Over 20 years as seasoned mining and exploration professional.



### Commerce Resources Corp.

#### **Commerce Resources Corp.**

- Canadian junior exploration and development company
- Headquartered in Vancouver, BC, Canada
- Focused on carbonatite-hosted deposits of rare metals and rare earth elements (REEs)

#### Two advanced projects

- Ashram Rare Earth Project, Eldor Property, Quebec:
  - Major high-grade, large tonnage rare earth deposit, with middle and heavy rare earth enrichment confirmed
  - Positive Preliminary Economic Assessment <sup>1</sup>
  - Pre-feasibility Study underway
- Upper Fir Tantalum / Niobium Project, Blue River, BC:
  - Largest production scenario for tantalum globally
  - Advancing towards Pre-feasibility Study





### A Short History of the Non-Chinese Opportunity in REE's

- 2002 China dominates REE supply with Government subsidies and lowers global REE prices to make Molycorp (MCP) uneconomic and Mountain Pass is put on care & maintenance
- 2005 China installs 2 tiered pricing system to drive manufacturing into China to access cheaper priced domestic REE feed stock
- 2005 In regards 2 tiered pricing system, Rhodia (Solvay) and Hitachi, as well as others, set up processing and manufacturing within China
- 2005 The Rest of the World (ROW) realizes there is an opportunity to provide an alternate source of REE's
- 2005 Estimated 460 REE projects are brought to market, but less than 1% share fundamentals with current REE producers including Commerce Resources
- 2010 The Senkaku Boat Incident Chinese producers halt all shipments of REE's to Japan
- 2010 REE prices rise as much as 3,000%
- 2010 ROW begins R & D drive to find economic substitutes for the REE's
- 2010 MCP announces re-starting production with new lower cost "Phoenix" process



### A Short History of the Non-Chinese Opportunity in REE's

- 2011 REE prices reach all-time highs in March and then begin fall off
- 2012 2 tiered pricing system ruled "Illegal" by the World Trade Organization and prices "equalize" and continue to fall
- 2012 Lynas begins mining in Australia, and processing in Malaysia; public outcry about radioactive waste
- 2015 MCP losses amount to ~\$1 Million USD per day Bankruptcy announced in June, Phoenix never worked at scale
- 2016 ROW concludes there are no substitutes for the REE's in magnet manufacturing, and prices have reverted to where additional R & D is abandoned
- 2017 REE prices begin rise, REE prices spike in summer 2017
- 2018 China announces imported REE feed stock surpasses domestic production

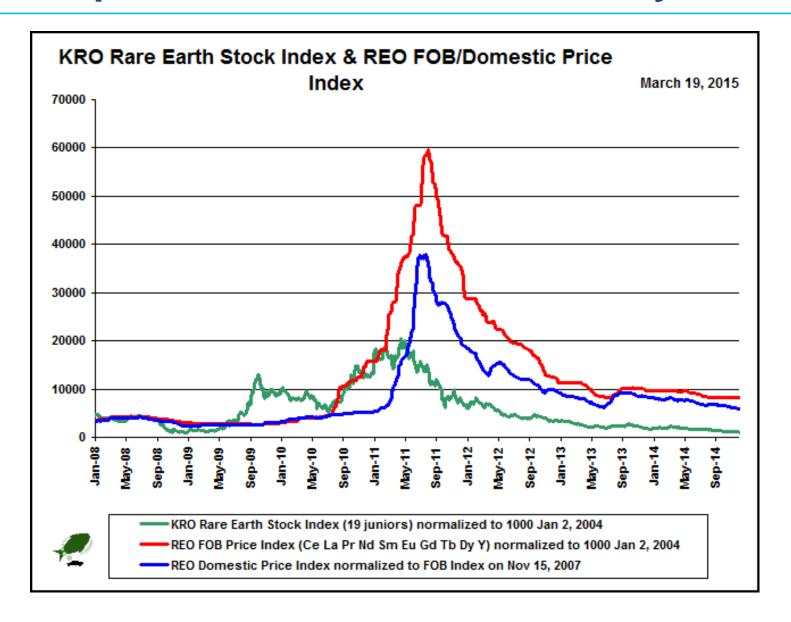
   REE imports from North Korea, Myanmar, Vietnam and the United States
   (Mountain Pass) and Lynas (???).
- 2018 ~20 Non-Chinese REE projects active, ~10% share fundamentals with current REE producers including Commerce Resources
- 2018 Malaysian Government releases review of operating license for radioactive waste at Lynas plant; demands removal of all radioactive waste by Sept. 2019.



### **REE Upward Price Pressure - History**

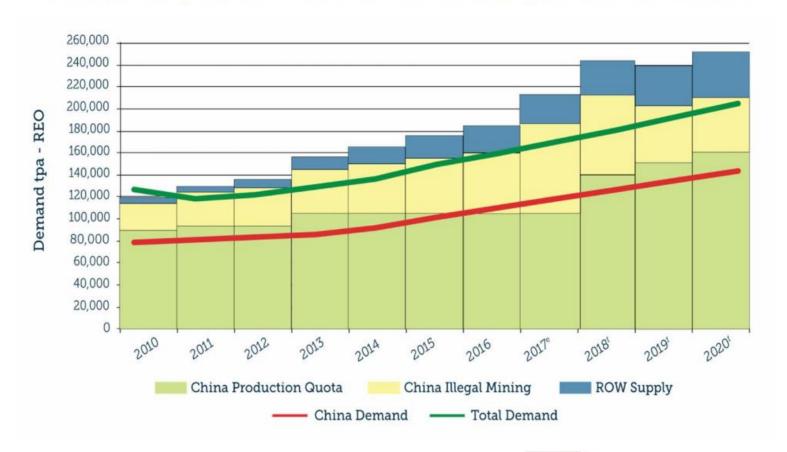


### **REE Upward Price Pressure - History**



#### **Current Global REE Market**

#### RARE EARTHS SUPPLY & DEMAND 2010-2020





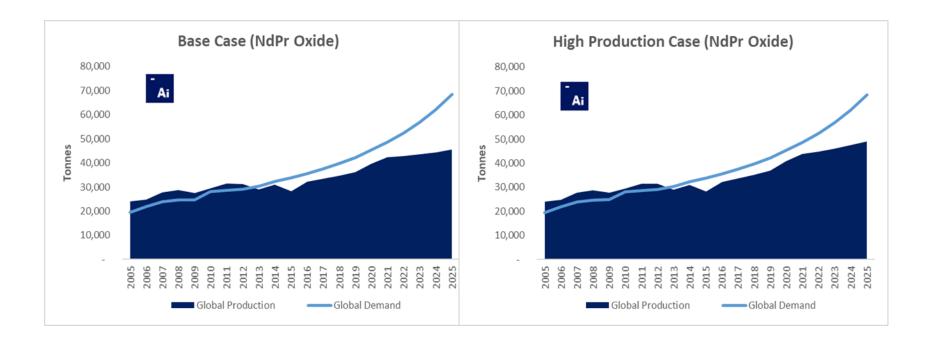






### **REE – Magnet Feed Demand**

Global NdFeB magnets market forecasted to grow at CAGR of 9% from 2018-2022.



**Source:** Adamas Intelligence's "Rare Earth Market Outlook to 2025"



### **Neodymium/Praseodymium Price Range**

	Low	315,000	317,000	↑2,000
NdPr oxide	High	317,000	321,000	†4,000
	Average	316,000	319,000	↑3,000

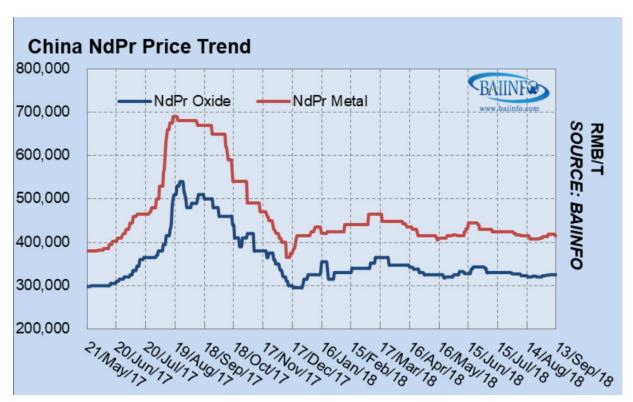
BAIINFO, Nov. 15, 2018

Price range for NdPr oxide currently 317,000 RMB to 321,000 RMB, with the average being 319,000 Rmb per tonne, equal to \$45,873.54 USD per tonne, or \$46.00 USD per kilo.



### Risk of continuing reliance on Chinese REE

- China, remains the dominant producer and can manipulate global prices as they did in 2010 and 2017.
- China has control over the majority of Non-Chinese deposits, and will retain the ability to manipulate global prices.





### **REE Upward Price Pressure - Current**

#### **Alert: REE Production News**

October 15, 2018: "The import ore will become main source of rare earth, domestic output is still difficult to resume, and with the large resistance due to the increasing volume of import ores, so, middle and heavy rare earth supply is still short, which will support the price of dysprosium and terbium, and there is likely to be a surge."

Main suppliers of REE feed to China – Myanmar, North Korea, Vietnam, Australia (Lynas), and the United States (Mountain Pass – former Molycorp mine, now under Chinese control).

Source: Baiinfo

### **Security of Supply – Canada/US – Long-time Allies**

### The majority of REE supply is from China. Security of supply is a major issue for the Western World

Region / Deposit	Stage (~% of global production)	Deposit Type	Primary Rare Earth Mineralogy	Production Costs	Host Country Proven US Ally	Conventional Processing
CHINA (Hardrock)	Production (60-70%)	Carbonatite	Bastnaesite, Monazite	Low - but rising labour costs	NO	YES
RUSSIA	Production (<3%), Development	Various	Loparite,	By-product subsidized	NO	NO
Australia/ Malaysia	Producer (5-10%)	Laterite	Monazite (secondary)	High	YES	NO
CANADA (Ashram)	Development	Carbonatite	Monazite, Bastnaesite	Low - simple processing, with Innovation continuing to reduce costs	YES	YES

The Ashram Deposit is the most logical alternative to Chinese REE dominance

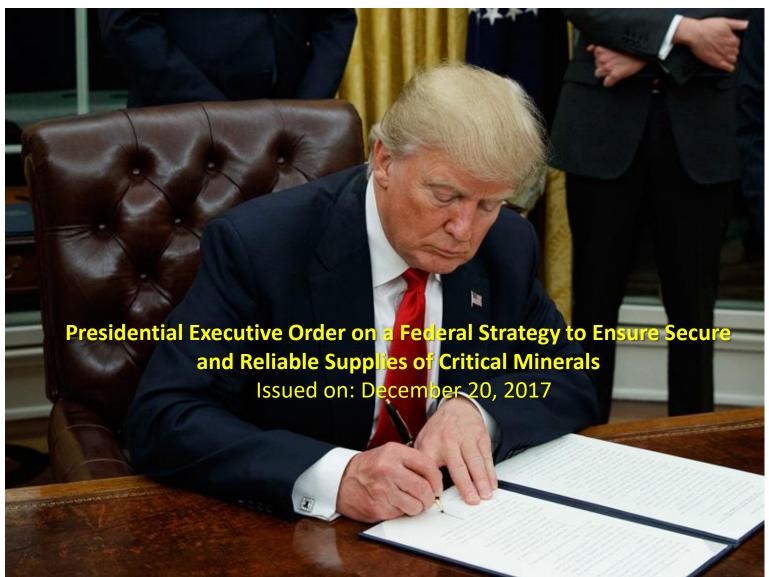
Ashram has the potential to be cost competitive with China, and the lowest cost REE producer outside of China.



### Peter Navarro: White House National Trade Council



### President Trump Executive Order 20 Dec. 2017



### 2019 National Defense Authorization Act

Signed into law - Aug.13, 2018

# "SEC. 871. PROHIBITION ON ACQUISITION OF SENSITIVE MATERIALS FROM NON-ALLIED FOREIGN NATIONS.

- '(a) IN GENERAL .... the Secretary of Defense may not—
- '(1) procure any covered material melted or produced in any covered nation, or any end item that contains a covered material manufactured in any covered nation..."
- "(1) COVERED MATERIAL.—The term 'covered material' means—
- (A) samarium-cobalt magnets;
- (B) neodymium-iron-boron magnets...
- "(2) COVERED NATION.—The term 'covered nation' means—
- (A) the Democratic People's Republic of North Korea;
- (B) the People's Republic of China;
- (C) the Russian Federation; and
- (D) the Islamic Republic of Iran."



### White House Industrial Base Study Focuses On Near-Term Fixes

"These single points of failure\* already limit military modernization and potentially could disrupt operations in a crisis. That's especially true if production needed to ramp up urgently for a major war, a subject the chairman of the Joint Chiefs of Staff, **Gen. Joseph Dunford**, has publicly angsted about."

Breaking Defense, August 1, 2018



\*Supply line interruption from single source (China)



## "We need to understand what alternate sources [there] are."



Ellen Lord
Under Secretary of Defense for Acquisition and Sustainment

"We need to talk with our allies and partners. Rare-earth metals are a real issue for us right now. China is buying up a lot of the supply in Africa and other places. We need to understand what alternate sources [there] are."



### **United States DLA SM Grant Application**



# Broad Agency Announcement National Defense Stockpile Research DLA STRATEGIC MATERIALS

Application filed for grant of up to \$3M USD for completion of Ashram REE pilot plant and production of representative samples for delivery to US REE processors





### Production Process for Rare Earth Hydroxide Refinery Feedstock from the Ashram Monazite Deposit Commerce Resources Corp. BAA-DLASM-2018-01



Contribution to the Requirement

Confirmation of the Ashram REE Project's Process Flowsheet will validate the future mine's ability to supply the United States with strategically vital Rare Earth Elements.

Relevance Including Transition to Military Systems or Programs

Areas of interest number:

1 (a), 1 (d), 2 (b), 3 (a), 3 (b), 3 (c), 3 (d), 4(a), 4(c), 5 (a), 5 (b), and 6 (c).

TRL: Current \_\_6\_ Anticipated \_\_8\_\_\_

#### Technical Approach/Qualifications

#### **Project objectives:**

- Final-stage pilot plant confirmation of Ashram Rare Earth Elements (REE) Processing Flowsheet
- · Confirm positive economics
- Produce commercial-grade REE concentrate samples for civilian and defense manufacturers

#### Key personnel, facilities, and equipment:

- · Hazen Research, Inc., Golden, Colorado
  - Nick Hazen, President and CEO
  - Christel Bemelmans, Senior Project Manager
- Advanced pilot plant, created specifically for Ashram project Related prior or current work:
- Process Flowsheet has been proven at laboratory-sized scale.
  - 249 million ton REE/Fluorspar deposit, at 1.9% TREQ TREQ TREATMENT OF TREATMENT OF

#### Cost and Schedule

Estimated cost: \$3.0 million USD

Major activities/milestones:

 Production and delivery of mixed rare earth hydroxide samples from the Ashram Pilot Plant to U.S. Rare Earth processors Ucore Rare Metals Inc., Vineyard, Utah and Rare Earth Salts LLC., Beatrice, Nebraska.

#### Deliverables:

 Delivery of metallurgical update reports documenting progress of pilot plant.

#### Potential risks:

Unknown issues preventing pilot plant success.

### China's Loss – Canada/ Quebec's Gain



CANADA-UNITED STATES

Friends \* Partners \* Allies

#### Canada and the United States:

#### DEFENSE TRADE PARTNERS

January 2011

#### An integrated North American defense industrial base

The Canadian defense industry is closely integrated with U.S. industry. Many of the largest Canadian firms are U.S.-owned, such as: Lockheed Canada, Raytheon Canada, Boeing Canada, and General Dynamics Land Systems (Canada).

One successful product of the integrated North American defense industrial base is the Light Armoured Vehicle ('LAV'). The LAV III, introduced by the Canadian Forces in the Late '90's, is the basis of the Stryker family of wheeled infantry vehicles—the workhorse of the U.S. Army in Iraq and Afghanistan. These vehicles are manufactured in Anniston, AL, Lima, OH and London, Ontario.

Another example of the integrated supplier base is the cockpit of the Registan desert near the Canadian Forward Operating Base, Spin Boldak, Afghanistan Hawker Beechcraft T6-B trainer aircraft, depicted below and produced by CMC in Montreal, with key suppliers in both Canada and the U.S.



Soldiers from the Royal Canadian Dragoons drive their LAV III along the edge of the

Trade with the United States as covered by the 1956 Defense Production Sharing Agreement (follow-up to the Hyde Park Agreement, 1941)



### **Introduction to the Ashram Project**

#### **Attractive Jurisdiction**

- Northern Quebec (Nunavik territory), Canada
  - ~130 km south of Kuujjuaq, the administrative centre of Nunavik
- Territory is under treaty (JBNQA & NEQA)
  - Modern agreement with clear mechanisms in place for indigenous dialogue, consultation, and resource management

#### 100% Ownership – One Claim Block (115 km²)

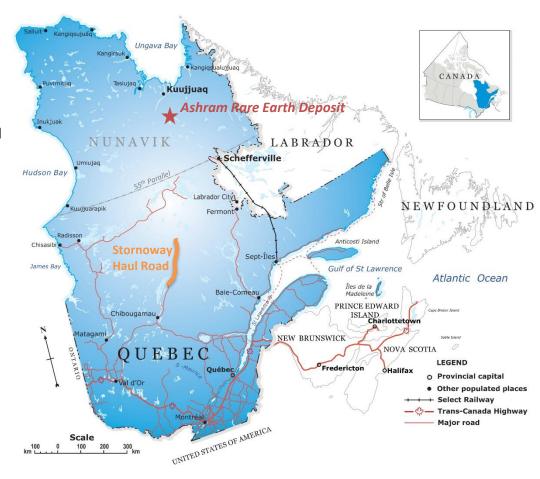
- Control over entire prospective district
  - REE, Nb, Ta, Fluorspar, Phosphate

#### **Advancing Infrastructure**

- Quebec government's Société du Plan Nord mandated to promote investment in northern development
  - Energy & Mineral resource development
  - Transportation infrastructure & access

#### **Investment of Ressources Québec**

 Direct equity investment of \$1 M CAD on February 17, 2017





The government of Quebec, through Investissement Québec and the Société du Plan Nord, arranged financing and construction of the 245 kilometre long road for the Renard Diamond Project owned by Stornoway Diamond Corporation

### **Ashram Project Advantages**

#### Simple mineralogy amenable to reproducible high-grade mineral concentrates (fundamental to low-cost processing)

- 42% TREO at 76% recovery, 46% TREO at 71% recovery, and 49% TREO at 63% recovery
- Monazite, bastnaesite, & xenotime rare earth mineralogy, with all sharing conventional processing characteristics

#### By-product potential with no negative impact on REE flowsheet/recoveries

Fluorspar

#### One of the highest grades of the large tonnage, advanced-stage REE deposits

Measured resource of 1.6 million tonnes (Mt) at 1.77% TREO, an indicated resource of 28 Mt at 1.90% TREO, and an
inferred resource of 220 Mt at 1.88% TREO

#### Favourable and well-balanced REE distribution, with enrichment in the Magnet Feed REE's (Nd, Pr, Tb, Dy)

- Anchored by Magnet Feed REEs (Nd, Pr, Tb, Dy) with strongest market fundamentals over the near, mid, and long-term
- Primary mineralized zone contains 24% combined NdPr (19% Nd, 5% Pr) with significant Dy (0.9%) and Tb (0.2%)

#### Robust economics indicated from Preliminary Economic Assessment (PEA) 1 completed in May 2012

- Pre-tax<sup>2</sup> NPV of \$2.3 billion CAD, IRR of 44%, payback period of 2.25 years, and a 25 year initial mine-life
- CAPEX of \$763 million CAD (including sustaining capital) and OPEX of \$7.91/kg (in CAD) of REO produced (to mixed REC)
- Mineralized from surface with industry low strip ratio (0.2:1), allowing for a relatively low-cost, open-pit operation

#### Located in a mining friendly jurisdiction

- Quebec consistently ranked as a top destination globally for mining investment
- Société du Plan Nord mandated to promote investment in the development of Quebec's northern resources

#### Strong management team with expertise in project development and rare metals

Management and Directors have extensive experience in exploration, development, and rare metal markets



<sup>1.</sup> Results of the PEA represent forward-looking information. This economic assessment is by definition preliminary in nature and it includes inferred mineral resources that are considered too speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary economic assessment will be realized. Mineral resources are not mineral reserves as they do not have demonstrated economic viability.

<sup>2.</sup> The current Ashram Technical Report dated January 7, 2015 explains why no after-tax case is presented, and that a combined tax rate of around 32.5% may apply to production.

### Mineralogy and Geology

- 1. Over 150 rare earth minerals exist, but **only 4 have been commercialized** (monazite, bastnaesite, xenotime, and loparite)
  - Monazite, bastnaesite, and xenotime account for >80% of global REO production, current and historic
    - Remainder is dominated by the ion-absorption type clay deposits in China
- 2. Only monazite, bastnaesite, and xenotime mineralogies are amenable to producing high-grade mineral concentrates of >40% REO (up to ~75% REO)
- 3. The host rock type for >80% of current global REO production is carbonatite

The Ashram Deposit has <u>all of these traits</u>, along with a demonstrated ability to produce high-grade (>45% REO) mineral concentrates at high recoveries (>75%)

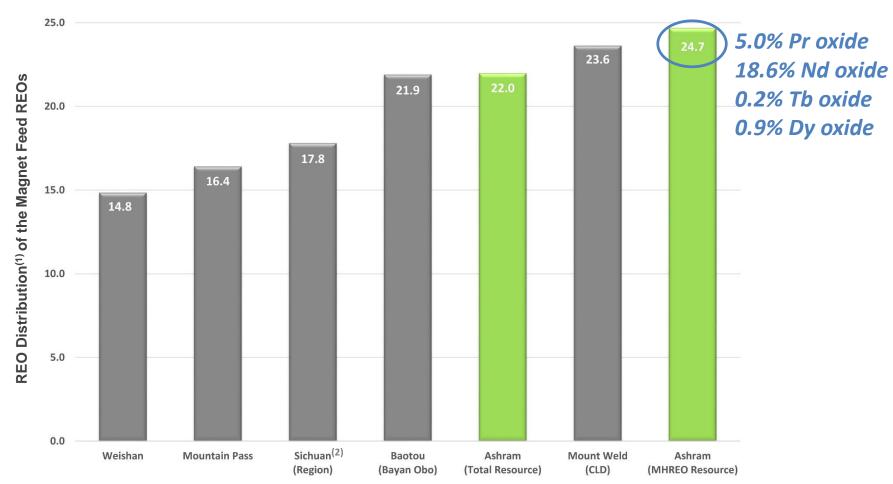






### **Magnet Feed REO Distribution**

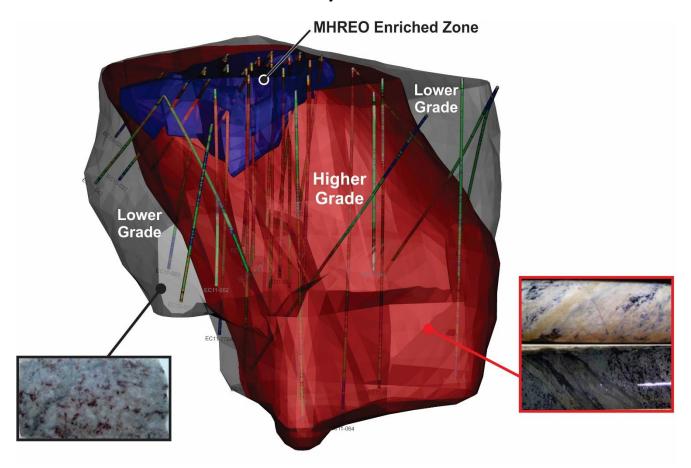
Ashram has an enrichment in the Magnet Feed REOs that is superior to leading global producers, thus, better positioning it for the market long-term





### **Evolution of Ashram Model – MHREO Zone**

#### **Definition of near-surface MHREO Enriched Zone by the end of 2011:**



Ashram remains open to the north, south, at depth, and is not fully constrained to the east and west. Mineralized footprint is 700 m along strike, over 500 m across, and 600 m deep.



### **Updated NI 43-101 Resource Completed in 2012**

#### Ashram (Total Resource<sup>1,2</sup>)

Resource Category	Tonnage (Mt)	La <sub>2</sub> O <sub>3</sub> (ppm)	Ce <sub>2</sub> O <sub>3</sub> (ppm)	Pr <sub>2</sub> O <sub>3</sub> (ppm)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Sm <sub>2</sub> O <sub>3</sub> (ppm)	Eu <sub>2</sub> O <sub>3</sub> (ppm)	Gd <sub>2</sub> O <sub>3</sub> (ppm)	Tb <sub>2</sub> O <sub>3</sub> (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	Ho <sub>2</sub> O <sub>3</sub> (ppm)	Er <sub>2</sub> O <sub>3</sub> (ppm)	Tm <sub>2</sub> O <sub>3</sub> (ppm)	Yb <sub>2</sub> O <sub>3</sub> (ppm)	Lu <sub>2</sub> O <sub>3</sub> (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)	TREO* (%)	MH/T Ratio	F (%)	CaF2* (%)
Measured	1.6	4158	7865	859	3102	475	121	297	33	139	20	41	5	24	3	583	1.77	9.8%	3.76	7.7
Indicated	27.7	4960	8747	909	3131	403	94	229	23	93	13	28	3	16	2	378	1.90	6.7%	2.89	5.9
Inferred	219.8	4895	8775	911	3137	386	88	209	20	77	10	22	2	13	2	302	1.88	6.0%	2.21	4.5

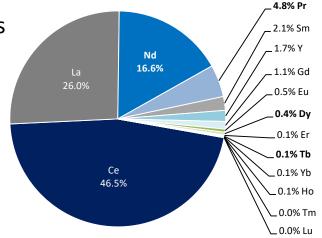
Note: \*COG 1.25% TREO (BASE CASE); CaF2 approximated from F (2.055 conversion factor) based on mineralogy

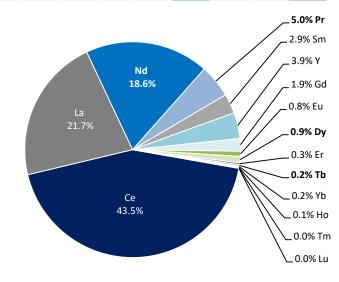
#### Ashram (MHREO Resource<sup>1,2,3</sup>)

Resource Category	Tonnage (Mt)	La <sub>2</sub> O <sub>3</sub> (ppm)	Ce <sub>2</sub> O <sub>3</sub> (ppm)	Pr <sub>2</sub> O <sub>3</sub> (ppm)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Sm <sub>2</sub> O <sub>3</sub> (ppm)	Eu <sub>2</sub> O <sub>3</sub> (ppm)	Gd <sub>2</sub> O <sub>3</sub> (ppm)	Tb <sub>2</sub> O <sub>3</sub> (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	Ho <sub>2</sub> O <sub>3</sub> (ppm)	Er <sub>2</sub> O <sub>3</sub> (ppm)	Tm <sub>2</sub> O <sub>3</sub> (ppm)	Yb <sub>2</sub> O <sub>3</sub> (ppm)	Lu <sub>2</sub> O <sub>3</sub> (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)	TREO* (%)	MH/T Ratio	F (%)	CaF2* (%)
Measured	1.1	3690	7336	831	3100	513	134	330	38	163	23	48	5	27	3	685	1.69	12%	4.18	8.6
Indicated	5.4	3512	7047	804	3015	480	125	310	36	153	21	44	5	25	3	624	1.62	11%	3.90	8.0
Inferred	2.8	3423	6823	783	2910	448	115	289	34	145	21	43	5	25	3	605	1.57	11%	3.43	7.0

Note: \*COG 1.25% TREO (BASE CASE); CaF2 approximated from F (2.055 conversion factor) based on mineralogy

#### **REE Distributions**







<sup>2.</sup> Includes results to end of 2011 drilling (15,692 m over 45 drill holes)
3. The MHREO Resource is contained within the Ashram Total Resource

### **Disclosure Notice – Ongoing PFS**

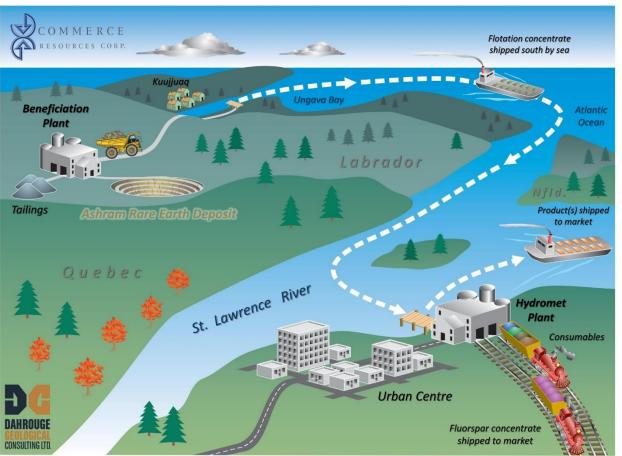
The Pre-feasibility Study (PFS) is ongoing, with the results of the work described herein anticipated to be incorporated, along with other necessary technical data including geological and engineering studies, into the PFS with costs and potential benefits to be described in more detail therein. As the PFS is not yet completed, its results are not known, with discussion presented herein considered preliminary in nature, and based on certain expectations that may or may not change.

In addition to the potential benefits disclosed in this presentation, there could be risks, costs, and detriments which increase as compared to the Preliminary Economic Assessment (PEA) last filed on the Ashram Project by the Company (effective date of July 5, 2012 – revised date of January 7, 2015). Readers should consider the disclosure of potential benefits in this presentation as only one potential aspect of the economics of the overall project, many of which are currently unknown.



### PFS<sup>1</sup> (Ongoing) Anticipated Mine to Market Scenario

Targeted annual production capacity of 3,000 to 5,000 tonnes REO (modular approach), with evaluation of saleable products ongoing through discussion with end-users & market consultants



- Open-pit mine with mineral process plant on-site
  - Flotation concentrate produced
- Trucked north on haul road to barge facility near Ungava Bay
- Transported by boat to hydromet facility in the St. Lawrence Seaway region
- Flotation concentrate processed at hydromet facility to a high-grade mineral concentrate (~45-50% REO), and through to saleable product(s)

#### **Product Suites being considered**

- 1. Mixed rare earth carbonate (REC)
- 2. La-Ce depleted mixed REC, La oxide, Ce carbonate
- 3. Nd-Pr oxide, La oxide, Ce carbonate, SEG-HRE carbonate
- 4. Separated REOs via strategic Partner

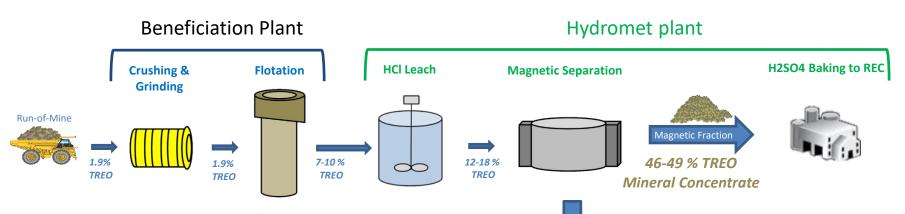




#### PFS¹ (Ongoing) – Metallurgical Advancements Since PEA

Subsequent work to the PEA has resulted in a refined beneficiation flowsheet that now includes flotation, HCl leaching, & magnetic separation (WHIMS) to produce high-grade rare earth mineral concentrate

- Now produce mineral concentrate of >45% REO at high recovery (~75%), whereas the PEA was based upon mineral concentrate grade of only 10% REO at 70% recovery
- Potential fluorspar by-product now recovered, whereas the PEA did not incorporate by-products
- An approximate 80% reduction in flotation reagent consumables compared to the PEA



Refined flowsheet allows for high-grade mineral concentrate to be produced (Beneficiation Process) to use as feed to the Hydromet Process, as well as for a **potential fluorspar by-product** (not included in PEA)



Potential By-Product, saleable as met-spar OR as acid-spar with additional processing



### Pilot Plant Concentrate Samples Requested

Solvay/Rhodia
Mitsubishi Corporation RtM Japan
Treibacher Industrie AG
BASF SE
DKK
Auer-Remy GmbH
Neo Performance Materials
Elkem AS Foundry Products

#### **USA Requests**

Albemarle, Blue Line (TX), Ucore Rare Metals (UT), Rare Earth Salts (NB), Texas Rare Minerals / K-Tech (FL), University of Tennessee, Tufts University (MA)









### Potential By-Product: Fluorspar

## March 2018: Fluorspar prices hit US\$600/ ton - poised to break all-time highs.

Ashram test work has identified a fluorspar potential by-product not included in the PEA

- Two principal commercial grades Met-spar (~60-85% CaF2) and Acid-spar (>97% CaF2)
  - Acid-spar is the premium fluorspar product and accounts for roughly two-thirds of global market
    - Mainly used in aluminum production and in the manufacture of hydrofluoric acid (key ingredient in mineral processing)

#### **Ashram Fluorspar Concentrate**

- Flowsheet currently produces a potentially saleable met-grade concentrate (>60% to 94% CaF2)
- No additional cost to produce as the met-grade fluorspar is the final tails product of the primary REE recovery process
- Test program is being designed to evaluate the potential for upgrading the met-grade fluorspar concentrate to acid-grade

Ashram's potential contribution to the fluorspar market will be evaluated as part of the ongoing PFS





### Strategic supply relationship with NorFalco Sales

In April 2016, the Company announced it had entered into a binding Memorandum of Understanding with NorFalco Sales for sulphuric acid supply

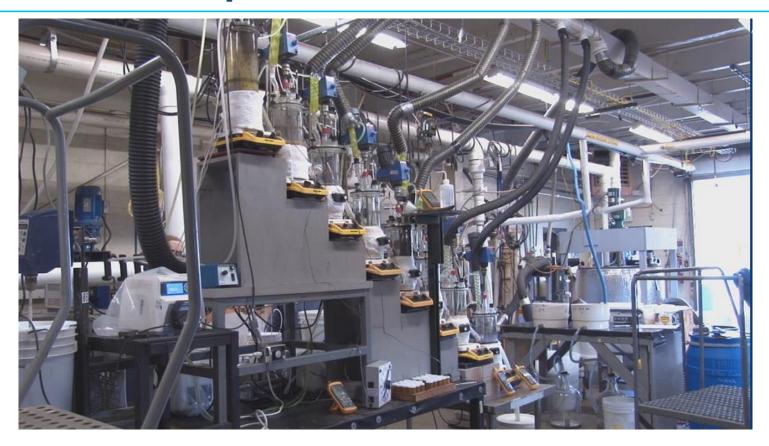
- NorFalco to be the sole provider of sulphuric acid (H2SO4) for the Ashram Project
- Binding agreement with highly competitive market rates and terms
- NorFalco is a division of Glencore Canada Corporation, a major global commodities trader
- The agreement is a significant first step in ongoing discussions regarding the project
- Glencore has a vested interest in seeing the Ashram Project advance







### **Pilot Plant Operation – Hazen Research**



Full demonstration of flow sheet, using bench and pilot scale testwork, through to the production of several kilograms of REE concentrate (mixed and partially separated)



### PFS<sup>1</sup> (Ongoing) – Quebec Government Grants

#### **Universite' Laval**

 Ongoing pilot plant program and software modelling financed by Quebec Government (\$365,000CAD)

(news releases May 31, 2018, July 24, 2018)

#### Institut national de la recherché scientifique (INRS)

 Ongoing tailings optimization program financed by the Quebec Government (\$300,000 CAD)

(news releases June 16, 2016, June 5, 2018)



## Advantages of Offtake Agreement with Commerce Resources

 Captive source for the next 100+ years based on current projected production scenario.

 Price stability – fosters ability to make accurate economic projections of margins

Strategic commodity sourced from a stable strategic ally.



### **Summary Highlights**

- Deposit is high tonnage with geology, mineralogy, and REE distribution that compare favourably to major REE producers globally
- ✓ Well-balanced REE distribution containing significant amounts of the Magnet Feed REEs (Nd, Pr, Tb, Dy) from surface to depth, with a highly enriched MHREO Zone near surface
- ✓ Flowsheet is simple with the flexibility to produce many different REE concentrates for industry processors and manufacturers
- ✓ Flowsheet currently produces a potentially saleable met-grade fluorspar concentrate (>60% to 94% CaF2) as the tailings to the REE mineral concentrate (i.e. no additional processing)
- ✓ Flowsheet able to produce high-grade mineral concentrates (>45% TREO) at high recovery (>75%) that are comparable to producers

















### **Contact Information**



### Chris Grove, President

Investor Relations

cgrove@commerceresources.com

jschroenn@commerceresources.com Tel: 604 484 2700

Tel: 604 484 2700 Toll: 866 484 2700

Toll: 866 484 2700

Justin Schroenn,

