

## RARE EARTHS - POWERING THE FUTURE



## CANADA RARE EARTH CORP.

IN THE BUSINESS OF RARE EARTHS

Investor Overview November 2017



## FORWARD-LOOKING STATEMENTS

- During the course of this presentation, Canada Rare Earth Corp.
  may make statements with regard to the company's projects,
  resources, business plans, business strategy, products, partners,
  and market position which could be construed as forward-looking.
  Forward-looking statements are subject to risk and uncertainties
  that could cause results to be materially different from
  expectations.
- The presentation has been prepared by Canada Rare Earth Corp. and does not represent a recommendation to buy or sell its securities. Investors should always consult their investment advisors prior to making any investment decision.



# Canada Rare Earth Corporation THE OPPORTUNITY

### The Opportunity

- > \$3 Billion of rare earths are critically incorporated into \$1 Trillion of Products
- ➤ China dominates the global supply (85%) not through the raw mineral material, but through the processing of the material into critical oxides and metals. China wants to uses this dominance to capture an increasing share of the \$1 Trillion market
- 200+ major international manufacturing companies are significantly dependent on China in this regard
- The 200+ are seeking alternatives to balance their supply chains

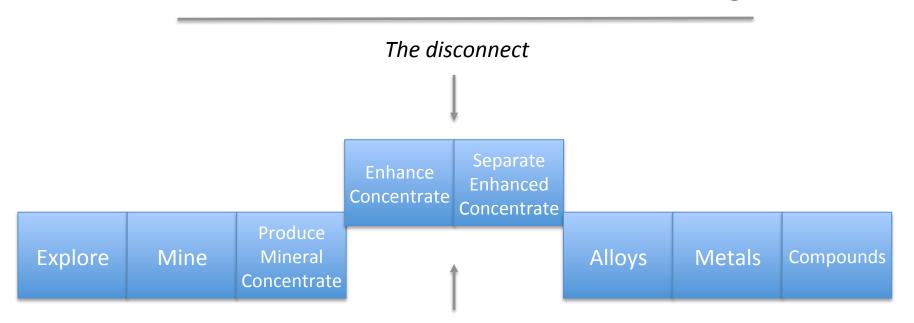
### Canada Rare Earth's Unique Solution

- ✓ Close working and business relationship with a most capable designer, builder, and operator of rare earth refineries
- ✓ We are in business:
  - ✓ Sourcing and selling rare earths
  - ✓ Developing refineries
  - ✓ Acquiring a complete refinery
- ✓ We are positioned to accelerate from our technical and commercial platform



## RARE EARTH SUPPLY CHAIN

## Rare Earths Are Not Rare... Processing is



- China dominates
- Only 4 refineries of note outside of China



## VERTICAL INTEGRATION

## **Supply**

Explore, Mine, Concentrate Separation & Refining Oxides, Metals and Alloys

Hundreds of companies exploring have 4 choices

China dominates

Rest of world will separate primarily light rare earths

Canada Rare Earth Corp. refineries will produce all critical rare earths

Major customers have 4 choices

Sell to China

Engage "major" engineering firm

Deploy "new" unproven technologies

Access proven technology and capabilities with Canada Rare Earth

Buy from China

Manufacture in China

Engineer away from rare earths

Purchase rare earths from refineries outside 

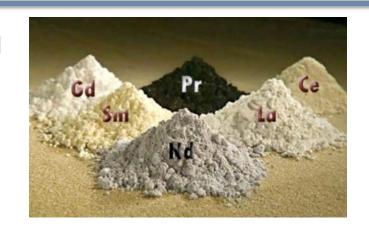
of China

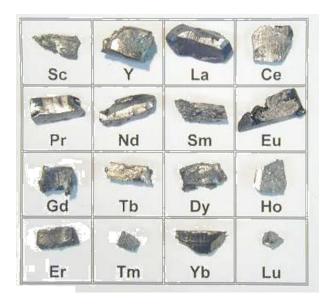
**Demand** 



## RARE EARTHS ARE....

- 17 elements used for improved performance and quality
- Found combined together in mineral deposits
- Rare earths are of little industrial value unless separated





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3	4											5	6	nitrogen 7	osygen 8	9	10	
Li	Be											В	C	N	0	F	Ne	
6.941	9.0122											10.611	12.011	14.007	15.999 auffur	18.996 chlorine	20.180	
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Cs	Ba		Hf	Ta	W	Re	Os	l Ir	Pt	Au	Hg	TI	Pb	Bi	Po	At	Rn	
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fundum 87	radium 88		rutherfordium 104	dubnium 105	seaborgium 106	bohrlum 107	hasslam 108	meltrerium 109	damstadtum 110	roentgenium 111								
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O.L.	er rare met																	
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## RARE EARTH APPLICATIONS

- Rare earths are used in an almost endless list of applications
- Unique properties make them invaluable for improved performance, efficiency and quality of the end products
- New applications are being developed in rapid succession





## **ECONOMIC BENEFIT POTENTIAL**

# From a report by the American Chemistry Council in April 2014:

"each job in the rare earth industry generates an additional 5.0 jobs elsewhere in the North American economy"

"the industry generates a total of \$1.9 billion in economic output in North America"

"The rare earth industry is supportive of \$329.6 billion in economic output in "downstream" end-market products and technologies that employ 618,800 workers (with a combined payroll of \$37.6 billion) in the United States and Canada"

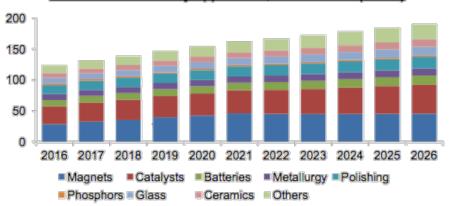
Raw Materials	Basic Rare Earth Materials	Engineered Rare Earth Materials	Components & Systems	End Market Products & Technologies
	Separated Rare Earth Oxides Oxylates Chlorides & Nitrates Rare Earth Mixed Oxides Rare Earth	Rare Earth Alloys Magnets & Magnetic Powders Catalysts Metallurgical Additives Polishing Powders Phosphors Glass Additives	& Systems  Batteries  Controls Drives  Fabricated Metal Products Lasers Motors & Generators  Sensors	
	Metals	Ceramics Water	Transducers Other	Other Electronics
			Purification Chemicals	Systems & Components



## FUTURE OF RARE EARTH MARKET

- Demand growth for rare earths is strong and increasing
- Applications will continue to be developed rapidly especially if a dependable, cost effective, high quality supply is established outside of China
- NdFeB magnet growth will shape the industry over the next five years, resulting in an increasing deficit of neodymium and rising prices for this element
- In the longer-term, prices may fall as NdFeB consumers move to alternative technologies
- Rare earth demand forecast to grow at 6%py 2016 to 2012 (based on growth in magnets and catalysts)
- Rare earth demand forecast to grow by 3%py 2021 to 2026 (as demand for magnets slows and substitution begins
- Phosphors market continues to contract

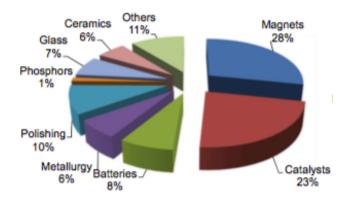
#### Rare earth demand by application, 2016 to 2026 (t REO)



#### Source: Roskill

# Roskill

## Rare earth demand by application, 2021 (163kt REO)





# Canada Rare Earth Corporation BUSINESS FOR CANADA RARE EARTH

	Now	Future	
Buying and Selling Concentrate	For delivery to existing operating refineries in China	Additional deliveries to refineries outside of China	
Buying and Selling Rare Earth Products (oxides, compounds etc.)	From China refineries to ROW	Additional supply from refineries outside of China	
Developing Refineries Outside of China	Permitting of Laos refinery to exercise option to buy control Contracts for management, procurement, and sales	Development of additional refineries in South America and Southeast Asia	
Other Initiatives	JV with advanced exploration companies to assist with mine development AND develop a viable concentrate and separation solution		

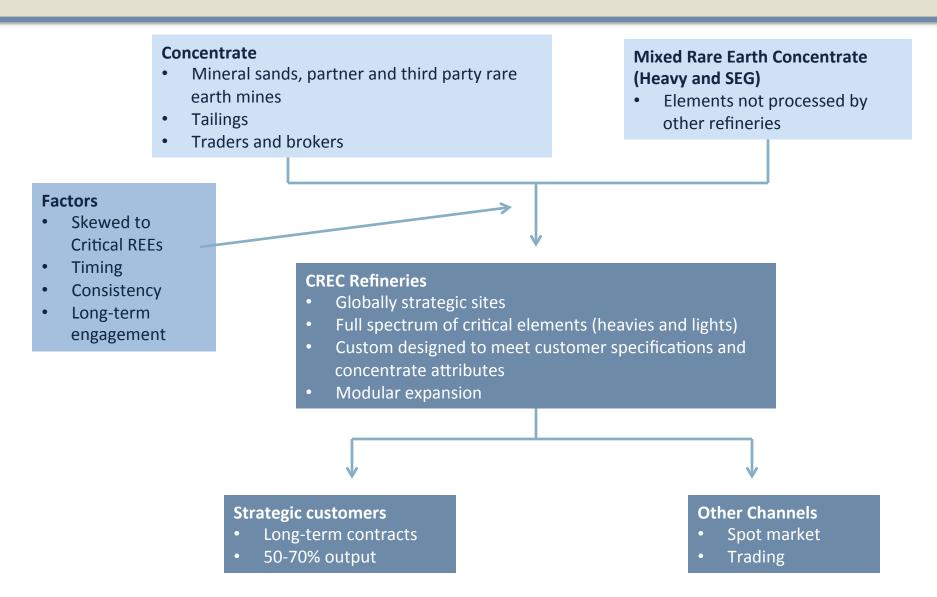


## Uniquely Positioned Platform

- Aggressive, managed rollout based on customer demand and direct access to technical and operational capabilities
- 2. In business: operational procurement, logistics, and sales activities generating revenues and gross profits
- 3. Distribution channel is expandable for similar, complementary products with common suppliers and customers



### RARE EARTH MINERALS TO MARKET CHAIN





## Canada Rare Earth Corporation PROSPECTIVE PROJECTS AND ALLIANCES

Mineral Resources/ Concentrate Sources	Concentrate Pretreatment (Hydrometallurgy)	Rare Earth Separation Facilities	Rare Earth Downstream Processing	
• Africa	Hunan China	Ganzhou Zhanhai	China	
<ul><li>South America</li><li>Australia</li></ul>	Tranan Ciina	Hunan China	Cilila	
<ul><li>Southeast Asia</li><li>India</li></ul>	Laos	Laos	Laos	
North America	Southeast Asia	Southeast Asia	Southeast Asia	
	South America	South America	South America	
	India	India		
			Europe	
	Middle East	Middle East	Middle East	
	Prospective		In Place	

#### **End Customers**





## MANAGEMENT, BOARD AND ADVISORS

### **Management and Board of Directors**

Tracy A. Moore CEO & Director Corporate finance in 20 countries

Peter Shearing COO & Director Broad international experience in electronics and high-tech manufacturing

Salil Dhaumya CFO Extensive experience in the resource sector

Gordon J. Fretwell Director, Secretary & Legal Counsel

Multiple clients and directorships in the exploration and mining industry

Chris F. Goodman Director Commodity trading and international business development

Mark Peters Director International tax structuring and financial reporting

Bill Purcell Director Background in downstream oil industry

#### **Advisory Board**

Rojer Li Chairman - Extensive network of relationships in rare earth market, inside and outside of China.

Li Family Advisors, capability partners, and major shareholders - Owns and operates the premier rare earth

engineering

and design company, as well as a refinery, in China

Wencai Zhu Multiple patents and publications rare earth processing. General Manager of a major refinery in China

Mike Fillipoff Large-scale project management

Bob Schafer Global exploration/mining experience

John Treleaven Domestic and foreign government relations, former Ambassador of Canada



## STRATEGIC CAPABILITIES

Canada Rare Earth Corp., and its partners, has unparalleled experience and skills in the rare earth industry.

- Successful track record of designing, building and operating rare earth separation plants inside and/or outside of China
- Proven capability and technology for the separation of ALL critical rare earth products

The foundation for Canada Rare Earth to fulfill its vertical integration strategy includes:

- Identifying and securing optimal sources of rare earth concentrate
- Establish network of full spectrum rare earth refineries for supply of Canada Rare Earth products to key international customers
- Customer engagement and sales support



## CAPITAL STRUCTURE

	Directors, Sr. Management & Advisers	Other	Basic and Fully Diluted
Shares	36,036,167 (22%)	130,903,826	166,940,141
Options	8,525,000	nil	8,525,000
Total	44,561,167 (25%)	130,903,826	175,465,141

Trading Prices: 6¢ - 2.5¢ 52 Week high/low

Market Capitalization: \$5,842,900



### **Vancouver Office Contact Information**

15<sup>th</sup> Floor – 1040 West Georgia St. Tracy A. Moore, CEO & Director

Vancouver, BC <u>tmoore@canadarareearth.com</u>

V6E 4H1

(+1) 604-638-8886 Peter Shearing, COO & Director pshearing@canadarareearth.com

#### Website

www.canadarareearth.com

### **Corporate Data**

Transfer Agent
Computershare

Listing
TSX Venture Exchange
TSX:LL

Legal Counsel
Gordon J. Fretwell
DeVisser Gray LLP