

# A smart producer of magnet metals.



China has dominated the rare-earth industry for almost forty years and there is little indication this will change. Now, with a dramatic increase in demand for the rare-earth magnets needed for clean energy solutions, the industrial world is again exposed to Chinese dominance. And the stakes are higher.

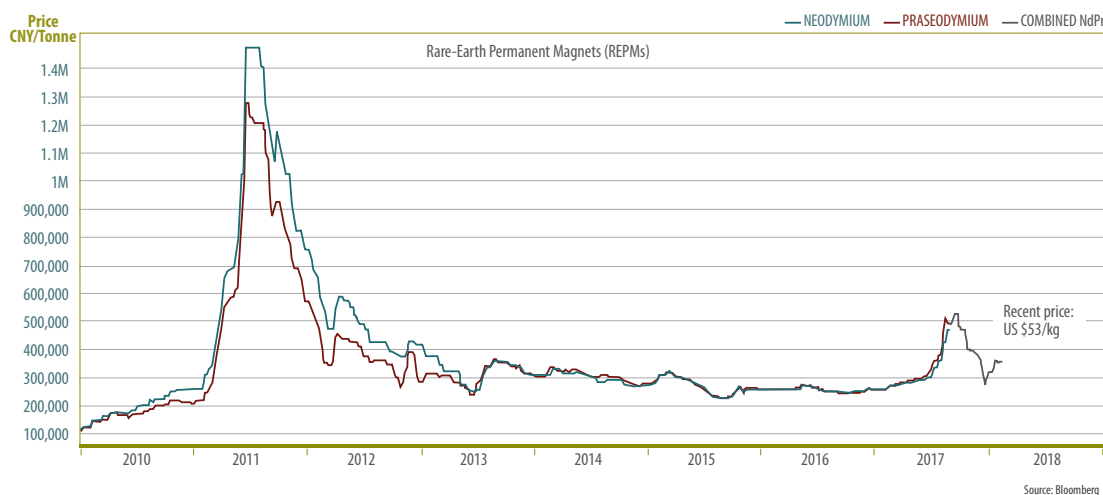
Medallion has been working for a number of years on a smart approach to achieve significant and low-cost production of these magnet metals. Our plan focusses on processing monazite, a readily available by-product mineral. Given the long timeframes and high-capital investment required to develop new mining operations, Medallion offers lower risk and a viable alternative to deliver near-term magnet metals.

## CLEAN ENERGY NEEDS POWERFUL RARE-EARTH MAGNETS

The recent magnet metal price movement is being driven by the growing demand for high-powered and lightweight magnets that use neodymium and praseodymium (shortened to NdPr). NdPr is the key input to magnets needed in the motors and generators of electric and hybrid vehicles, wind turbines, and a variety of other clean energy applications. These rare-earth magnets are about 3X stronger and 1/10 the weight of conventional magnets, and there is currently no known substitute. This growing market means that NdPr now represents about 80% of the value of global rare-earth demand. The benchmark China prices of NdPr has increased by approximately 55% since the beginning of 2017 and demand is expected to remain robust for many years—and there are virtually no new significant mining projects in development to fill the void.



NdPr Prices in China



## MARKET SIZE

The value of global annual rare-earth oxide demand for the production of rare-earth magnets totaled \$1.44 billion in 2016.

Longer-term forecasts see an increase in demand for the magnet-oriented rare-earth oxides to \$6.07 billion by 2025, a compound annual growth rate of 17.4%

(Source: Adamas Intelligence)

## MONAZITE - AN UNTAPPED SOURCE OF RARE EARTHS

Five years ago, Medallion recognized that, except for Australian producer Lynas, none of the existing rare-earth projects could economically solve the world's long-term critical rare-earth supply issues. Enter monazite. Monazite is a phosphate mineral containing 60% rare earths and is the world's original commercial rare-earth source. For 100 years, monazite has been processed using well-understood metallurgical methods. Monazite and bastnaesite (the main rare-earth mineral in Chinese production) are the only two rare-earth minerals to have ever successfully produced large commercial quantities of rare earths.

“I believe Medallion's plan to produce rare-earth elements from heavy-mineral sands monazite is on the right track. Monazite's simple metallurgy is well-understood and large quantities of monazite are readily available. It also is important to remember that monazite is one of only two minerals that have ever economically produced rare-earth elements.”

**Dr. Tony Mariano, PhD Geology** - Specialist in the geology and mineralogy of rare earths.

Since China restricts its rare-earth exports, monazite remains available as a by-product from North American, Australian and African heavy mineral-sands operators. Medallion believes that this is the best new non-Chinese source of NdPr and other rare earths. Many of these heavy mineral-sand mines have ore reserves in excess of one billion tonnes of gross ore, which often translates to 20-to 40-years of production and of the by-product monazite. Medallion's monazite strategy delivers all the right magnet metals (currently over 85% of rare-earth value). Medallion has spent years working with heavy mineral-sands companies for monazite supply arrangements and with a number of other parties for downstream processing and marketing partnerships.

## TOWARDS COMMERCIALIZATION

Medallion has developed a modern metallurgical process to produce a magnet metal-rich, rare-earth chemical concentrate product from the by-product monazite sand—this product is ideal feedstock to the global marketplace via both existing and emerging rare-earth refineries.



### Milestones Completed -> Expected Newsflow

	2015	2016	2017	2018 (planned)
<b>Process Development</b>	Bench level tests Sample product produced	Lab and process development analysis	Re-agent determination Bench level optimization test work	Locked cycle tests Economic studies
<b>Customer Development</b>	Market analysis	Samples delivered to REE refiners Engage new entrants	Commercial Agreement: Rare Earth Salts	Larger samples to customers / additional customer / strategic relationships
<b>Financing / Strategic Deals</b>	\$550,000 equity raise	\$300,000 equity raise	\$670,000 equity raise	Equity feedstock agreements

In June 2017 Medallion partnered with Rare Earth Salts Separations and Refining, LLC (RES), a US-based materials technology company to jointly produce, market and share revenues from the sale of finished rare-earth products. Medallion looks to supply a rare-earth concentrate, extracted from monazite sand, which RES will separate and refine into marketable rare-earth products—all in North America. Medallion and RES anticipate initial production volumes of 500 tonnes per year of rare-earth oxides potentially in 2019 and growing over time to 3,000 tonnes per year.

## MEDALLION INVESTMENT OPPORTUNITY

Medallion has a smart plan for magnet metals production outside of China to provide material for the increasing clean energy demands in transportation and energy production—all from a rare-earth mineral available as a by-product from current mining operations or existing stockpiles.

An investment in Medallion provides excellent upside by exposure to:

- The fast growing and important magnet metal marketplace;
- Major industrial companies that seek alternative (non-Chinese) sources for magnet metals that is key to their growth plans; and
- Attractively priced and de-risked equity—in a sector that has been out of favour for many years.

### Management & Board of Directors

David Haber, ICD.D, Chairman of the Board  
 Don M. Lay, President/CEO and Director  
 Thomas Arnould, CPA, CA, CFO and Corporate Secretary  
 Rod C. McKeen, LLB, Director  
 David Shaw, PhD Geology, Director  
 Andrew Morden, CPA, CA, Director

#### Medallion Resources

1160 - 595 Howe Street  
 Vancouver, BC V6C 2T5  
 (604) 681-9558  
 info@medallionresources.com

Shares issued:	25.2 million shares + 1.7 million options + 9.5 million warrants
Fully diluted:	36.4 million shares
Market capitalization:	~ \$3 million
52 week low - high:	\$0.08 - \$0.28
Insider holdings :	~10%

This presentation by Medallion Resources Ltd. ("the Corporation") is for informational purposes only and does not constitute a solicitation or offer to sell securities. This presentation contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include, without limitation, statements based on current expectations or other assumptions that involve a number of risks and uncertainties. Forward-looking statements and information are not guarantees of future performance of the Corporation. Forward-looking information is subject to risks and uncertainties that may cause actual results, and the Corporation's plans and objectives to differ materially from those expressed in the forward-looking information. Such risks and uncertainties are detailed in the Corporation's public filings available on SEDAR. Actual results and future events could differ materially from those anticipated in forward-looking information. These, and all subsequent written and oral forward-looking statements are based on estimates and opinions of management on the dates that they are made and expressly are qualified in their entirety by this notice. The Corporation assumes no obligation to update forward-looking information, should circumstances or management's estimates or opinions change.