



50th Anniversary

Southern States Energy Board Annual Meeting



September 15, 2010





Forward-Looking Statements and Other Important Cautions

This presentation contains forward-looking statements that represent Molycorp's beliefs, projections and predictions about future events or Molycorp's future performance. Forward-looking statements can be identified by terminology such as "may," "will," "would," "could," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "potential," "continue" or the negative of these terms or other similar expressions or phrases. These forward-looking statements are necessarily subjective and involve known and unknown risks, uncertainties and other important factors that could cause Molycorp's actual results, performance or achievements or industry results to differ materially from any future results, performance or achievement described in or implied by such statements.

Factors that may cause actual results to differ materially from expected results described in forward-looking statements include, but are not limited to: Molycorp's ability to secure sufficient capital to implement its business plans; Molycorp's ability to complete its modernization and expansion efforts and reach full planned production rates for rare earth oxides and other planned downstream products; uncertainties associated with Molycorp's reserve estimates and non-reserve deposit information; uncertainties regarding global supply and demand for rare earths materials; Molycorp's ability to maintain appropriate relations with unions and employees; Molycorp's ability to successfully implement its "mine-to-magnets" strategy; environmental laws, regulations and permits affecting Molycorp's business, directly and indirectly, including, among others, those relating to mine reclamation and restoration, climate change, emissions to the air and water and human exposure to hazardous substances used, released or disposed of by Molycorp; and uncertainties associated with unanticipated geological conditions related to mining.

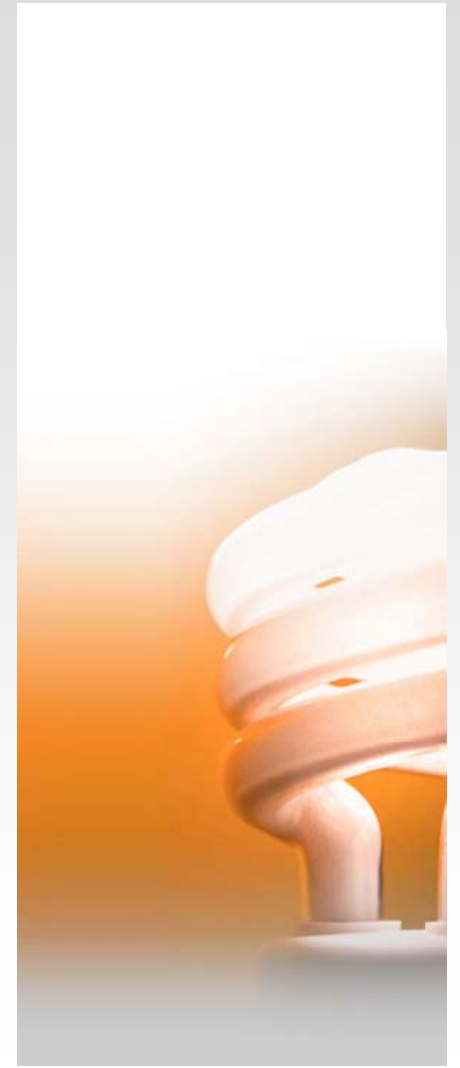
For more information regarding these and other risks and uncertainties that Molycorp may face, see the section entitled "Risk Factors" beginning on page 15 of the prospectus described below. Any forward-looking statement contained in this presentation or the prospectus reflects Molycorp's current views with respect to future events and Molycorp assumes no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future, except as otherwise required by applicable law.

This presentation also contains statistical data and estimates obtained by Molycorp from industry publications and reports generated by third parties. Although Molycorp believes that the publications and reports are reliable, it has not independently verified such data.

THIS PRESENTATION USES THE TERM "RESOURCES" TO DESCRIBE THOSE QUANTITIES OF REE'S THAT ARE POTENTIALLY RECOVERABLE FROM ACCUMULATIONS YET TO BE DISCOVERED. BECAUSE OF THE UNCERTAINTY OF COMMERCIALITY AND LACK OF SUFFICIENT EXPLORATION DRILLING, THE RESOURCES CANNOT BE CLASSIFIED AS RESERVES. INVESTORS ARE ADVISED THAT THE SEC DOES NOT RECOGNIZE RESOURCES. ONLY PROBABLE AND POSSIBLE RESERVES MAY BE DISCLOSED TO INVESTORS IN AN SEC FILING. RESOURCES HAVE A GREAT AMOUNT OF UNCERTAINTY AS TO THEIR EXISTENCE. THERE IS NO CERTAINTY THAT ANY PORTION OF THE RESOURCES WILL BE DISCOVERED AND, IF DISCOVERED, WHETHER THEY COULD BE DEVELOPED ECONOMICALLY. THEREFORE, INVESTORS ARE CAUTIONED NOT TO ASSUME THAT ALL OR ANY PART OF MOLYCORP'S RESOURCES EXIST, OR THAT THEY CAN BE DEVELOPED ECONOMICALLY. ACCORDINGLY, INFORMATION CONCERNING DESCRIPTIONS OF RESOURCES CONTAINED IN THIS PRESENTATION IS NOT COMPARABLE TO INFORMATION INCLUDED IN SEC FILINGS.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and the other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC Web site at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling toll-free Morgan Stanley & Co. Incorporated at 1-866-718-1649 or J.P. Morgan Securities Inc. at 1-866-803-9204.

Rare Earths: Heartbeat of Clean-Tech



- 1 America faces a serious and immediate supply challenge in rare earths.
- 2 America is on the verge of resuming robust production of American rare earths and critical rare earth materials, such as permanent magnets.
- 3 We must look more strategically at these and other critical materials and manufacturing supply chains.



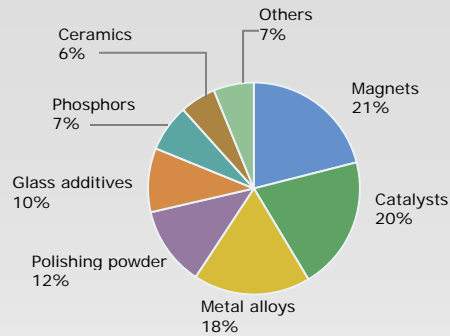


PMG Wind Turbines

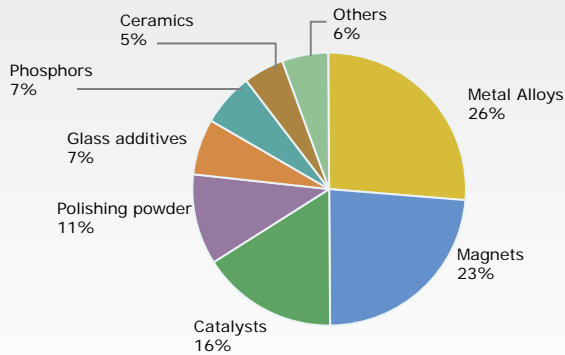


Robust Expected Demand Growth Driven by Rapidly Expanding End-Markets

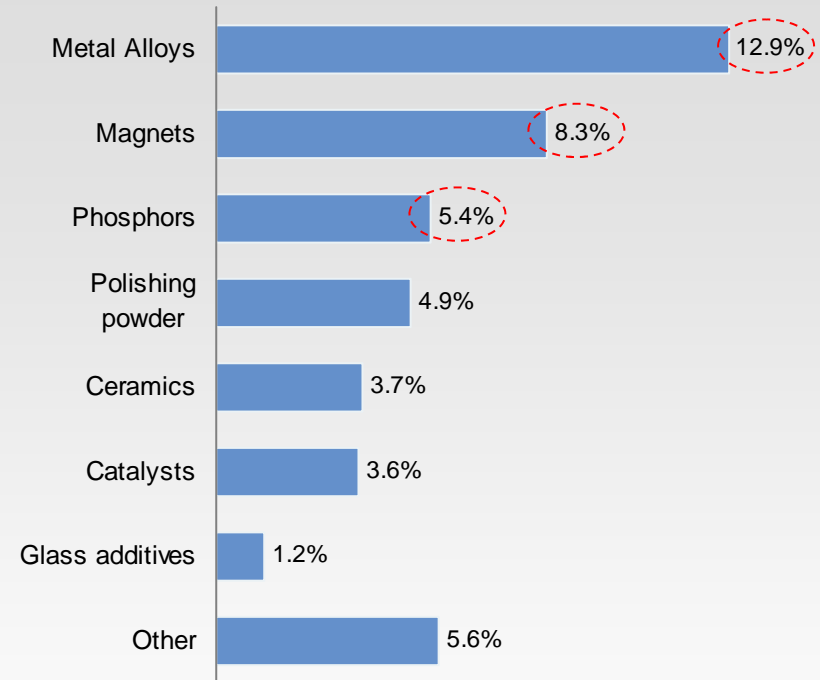
2008A REO Demand by Application



2015E REO Demand by Application



2008A–2015E End-Market Demand CAGR (REO)



2008A Total
124,000 mt REO

2008A - 2015E Total Growth
81.5%

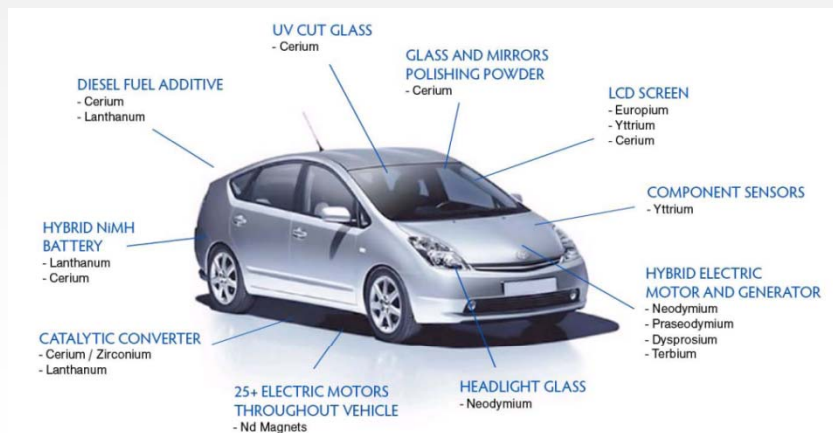
2015E Adj. Total
225,000 mt REO

Source: IMCOA
Note: Totals may not add to 100% due to rounding

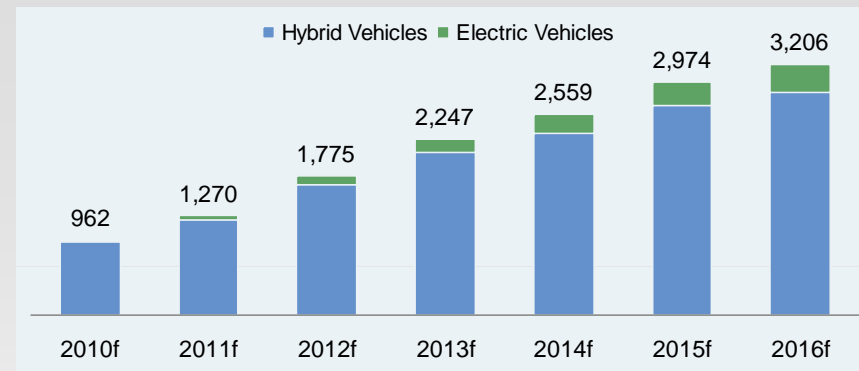
Rare Earths Are Critical Inputs for the Hybrid and Electric Vehicles Market

Hybrid and Electric Vehicles Demand Drivers:

- Intensive use of rare earths in hybrid and electric vehicles are compounding the traditional use of rare earths
- Hybrid and electric vehicles contain 20-25lbs of rare earths
- Anticipated rare earth demand from hybrid and electric vehicles is estimated to grow significantly

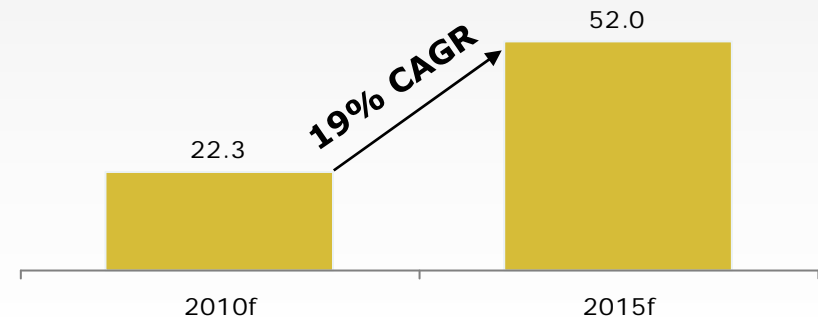


Annual Hybrid and Electric Vehicle Sales (000's)



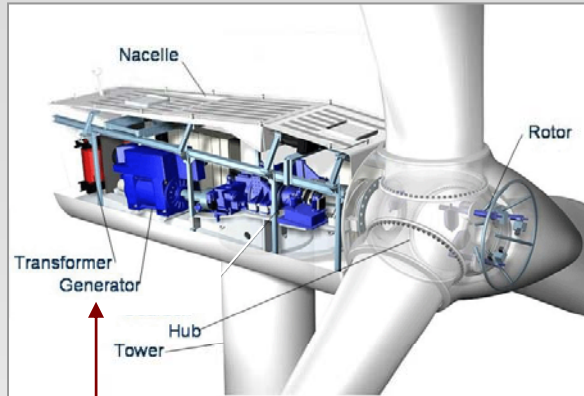
Source: JD Power and Associates

Total Rare Earth Metal Alloys Consumption (ktpa)



Source: IMCOA

Wind Turbines Are a Significant Emerging Driver for Rare Earth Magnet Growth



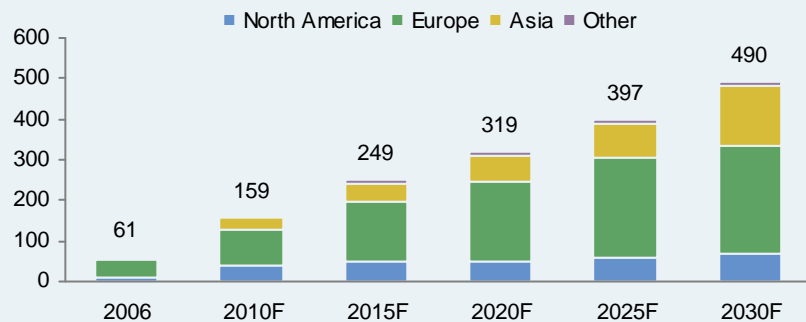
Permanent rare earth magnet in generator

Each 3MW permanent magnet turbine requires approximately one metric ton of neodymium iron boron magnets¹

Wind turbine demand drivers

- Global commitment to increasing the presence of wind energy:
 - U.S. EIA estimates >3x increase in installed wind generation 2010-30 to 490GW
 - China is estimated to have allocated >\$150bn to become the world's wind leader
 - Growing European use of offshore wind generation
- Permanent rare earth magnets are used in generators of wind turbines
 - Increased reliability and efficiency – reduces expensive breakdowns and maintenance expenditures
 - Critical element for 3MW+ and off-shore turbine segments
- With the expected JV, Molycorp would have access to the raw materials, IP and technical expertise to be a world-class supplier of permanent magnets

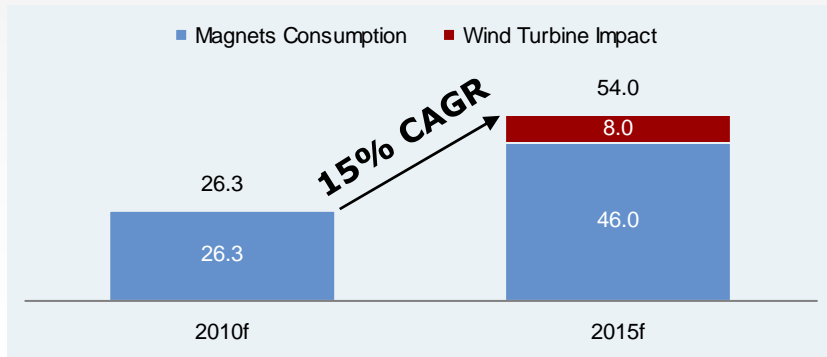
Wind turbine production (GW)



Source: Energy Information Administration

¹ IMCOA estimates each megawatt requires 0.4 tons of NdFeB magnets

REO consumption for magnets (ktpa)



Source: IMCOA

Note: Both magnet consumption and wind turbine impact are middle of IMCOA range

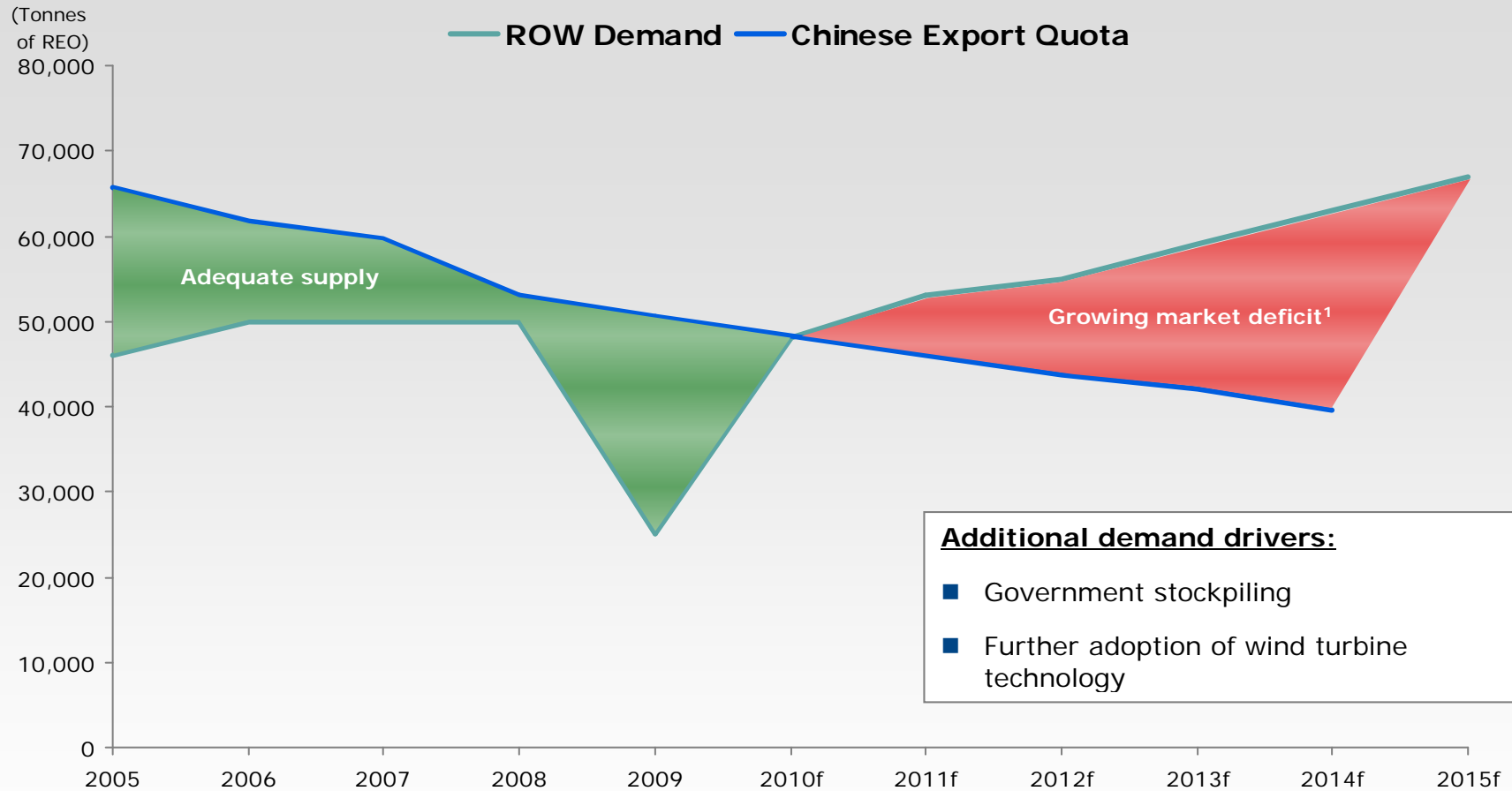
Global Demand on Pace To Exceed Existing Supply by 2010/2011

Rare Earths Supply & Demand 2005 - 2015



Looming supply shortage absent new supply from Molycorp and others

Sustained Market “Pinch Point” Looms for Rare Earths



**Chinese supply continues to be constrained by government quotas
China taxes REO exports at up to 15-25%, giving ROW producers increased competitiveness**

Source: Roskill, press releases

¹ Absent existing ROW production and new production by Molycorp and other new producers

² Forecast quotas assume a continuation of historical 5% annual decline (based on quotas between 2002 and 2008) in Chinese export quotas



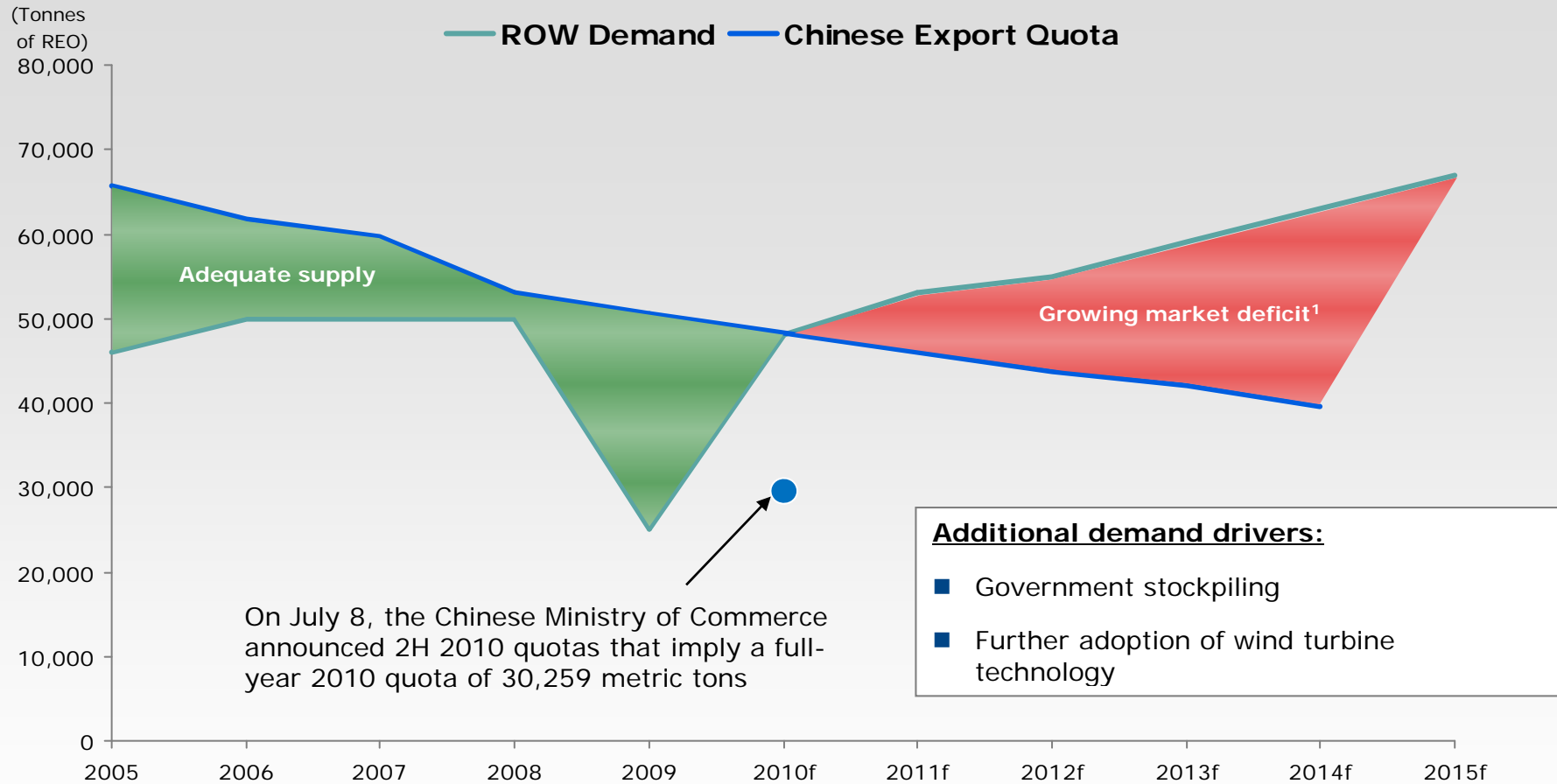
**“The
Middle
East has
oil. China
has rare
earths.”**

Deng
Xiaoping





Sustained Market “Pinch Point” Looms for Rare Earths



**Chinese supply continues to be constrained by government quotas
China taxes REO exports at up to 15-25%, giving ROW producers increased competitiveness**

Source: Roskill, press releases

¹ Absent existing ROW production and new production by Molycorp and other new producers

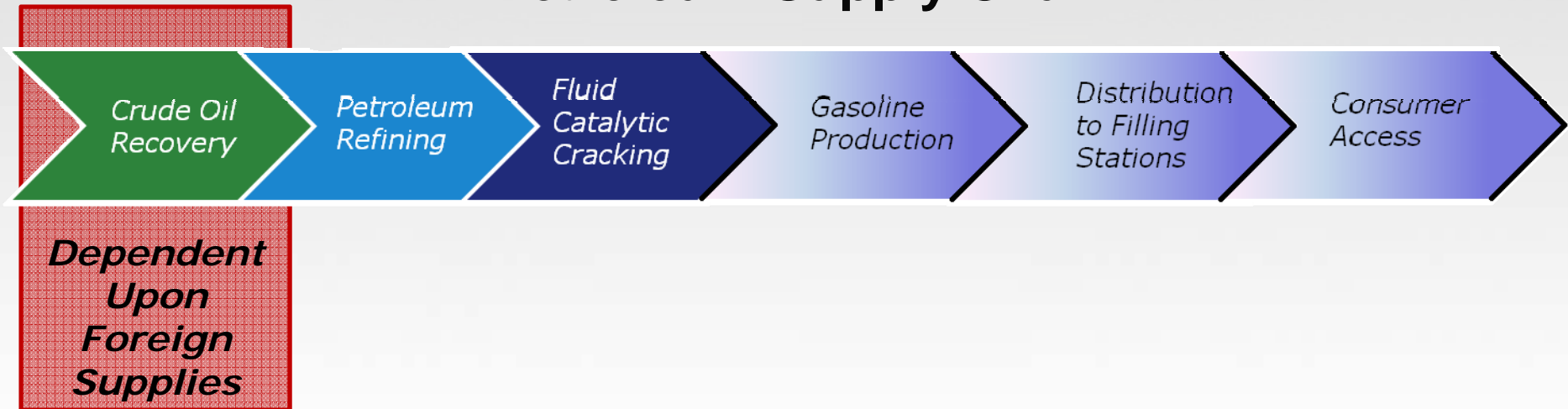
² Forecast quotas assume a continuation of historical 5% annual decline (based on quotas between 2002 and 2008) in Chinese export quotas

Mountain Pass Rare Earth Facility

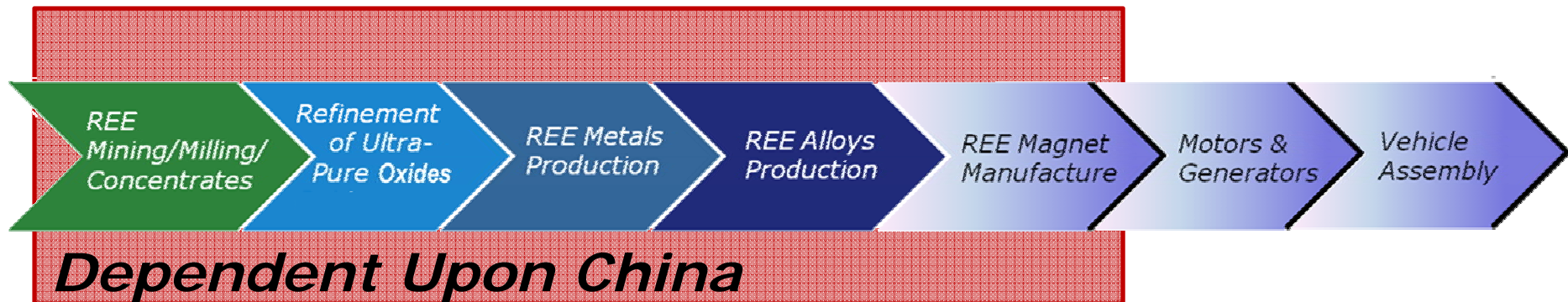


Why The Supply Chain Matters

Petroleum Supply Chain



Hybrid Vehicle Supply Chain



Mountain Pass Rare Earth Facility



Rare Earths: Heartbeat of Clean-Tech





Q&A