Molycorp Update

TREM 2012

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President and CEO, Molycorp

SAFE HARBOR STATEMENTS

This release contains forward-looking statements that represent Molycorp's beliefs, projections and predictions about future events or Molycorp's future performance. In particular, certain statements in this release regarding the proposed acquisition of Neo Material Technologies, including those relating to the definitive arrangement agreement, the closing of the proposed acquisition of Neo Material Technologies and receipt of necessary approvals, the expected consequences of the proposed acquisition of Neo Material Technologies and estimates regarding future results and financing plans, are forward-looking statements. 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: the time required to consummate the proposed acquisition; the satisfaction or waiver of conditions in the arrangement agreement; any material adverse changes in the affairs of Neo Material Technologies; the ability to obtain required shareholder, regulatory, court or other third-party approvals and consents and otherwise consummate the proposed acquisition; Molycorp's ability to achieve the strategic and other objectives related to the proposed acquisition; Molycorp's ability to successfully integrate Neo Material Technologies and achieve the expected results of the acquisition, including, without limitation, the acquisition being accretive; Molycorp's ability to successfully obtain permanent financing to replace the bridge financing in connection with the acquisition; Molycorp's ability to secure additional capital to implement its business plans; Molycorp's ability to complete its initial modernization and expansion efforts, including the accelerated start-up of the Mountain Pass facility, which management refers to as Project Phoenix Phase 1, and the second phase capacity expansion plan, which management refer to as Project Phoenix Phase 2, and reach full planned production rates for REOs and other planned downstream products, in each case within the projected timeframe; the final costs of the Project Phoenix Phase 1, including with accelerated start-up of the Mountain Pass facility, and Project Phoenix Phase 2, which may differ from estimated costs; 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 reach definitive agreements for a joint venture to manufacture neodymium-iron-boron permanent rare earth magnets; 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" of the Company's Annual Report on Form 10-K for the year ended December 31. Any forward-looking statement contained in this press release or the Annual Report on Form 10-K reflects Molycorp's current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to Molycorp's operations, operating results, growth strategy and liquidity. You should not place undue reliance on these forward-looking statements because such statements speak only as to the date when made. 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.

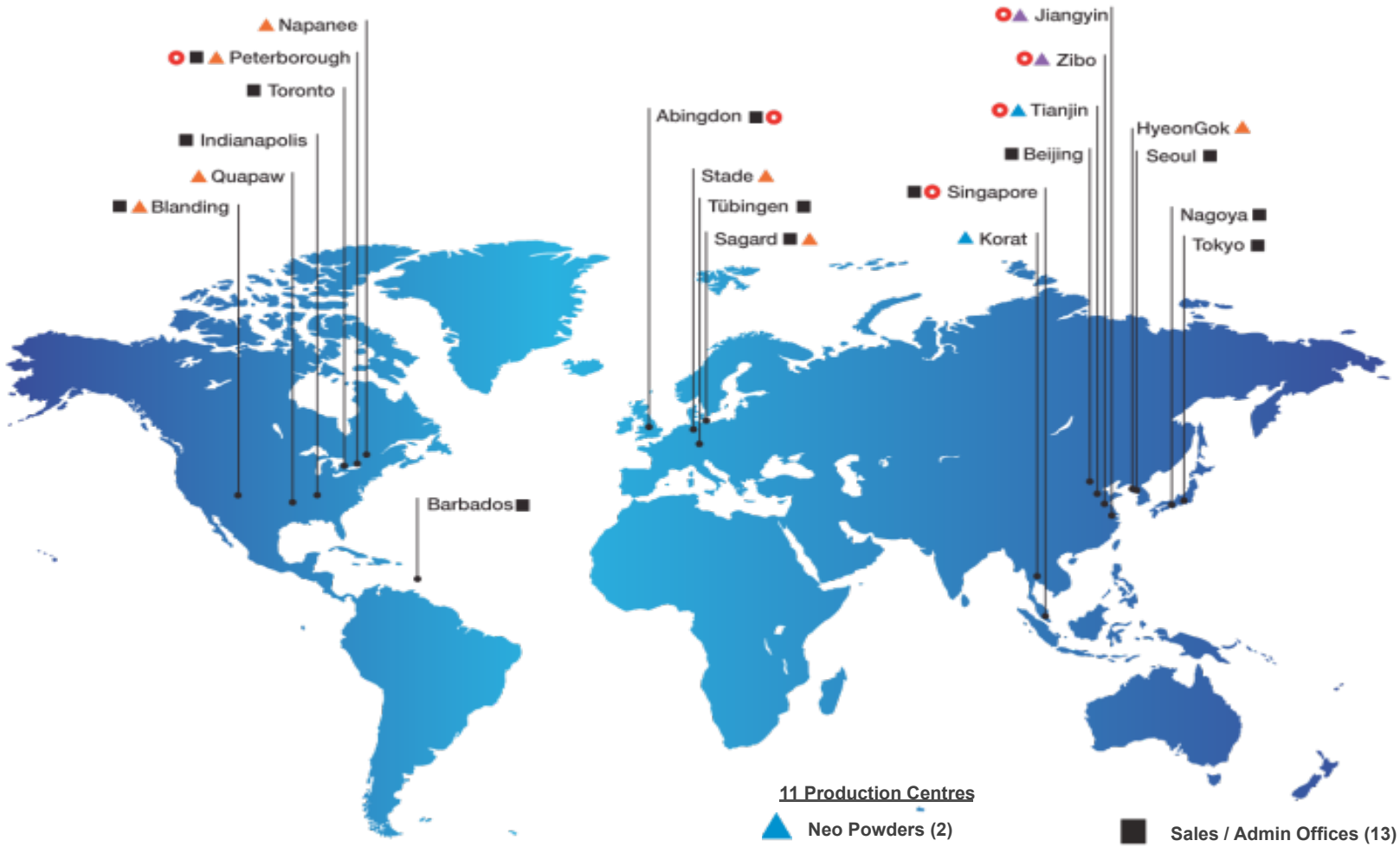
AGENDA

1. Combination Overview
2. Introduction to Neo Materials
3. Combination Rationale
4. Questions and Answers

KEY TAKEAWAYS

- Highly advanced high-purity rare earth separations technologies.
- Can meet customer demand in the U.S., Japan, EU, and Asia.
- Will not reduce what Molycorp plans to produce at Mountain Pass, which will remain the company's lowest cost-of-production facility.
- Neo's under-utilized capacity allows Molycorp to send 3,000 to 5,000 mt of rare earth concentrate – or 7-12% of Phase 2 production – from Mountain Pass.
- Include's Neo Materials' Magnequench patented magnet powder portfolio used to produce neodymium-iron-boron (NdFeB) bonded rare earth magnets.
- Enables a U.S. company to immediately produce and export to customers outside of China high purity heavy rare earth elements and materials.
- Expands Molycorp's strategic rare metals portfolio to include gallium, rhenium, and indium.

Neo Materials' Global Presence



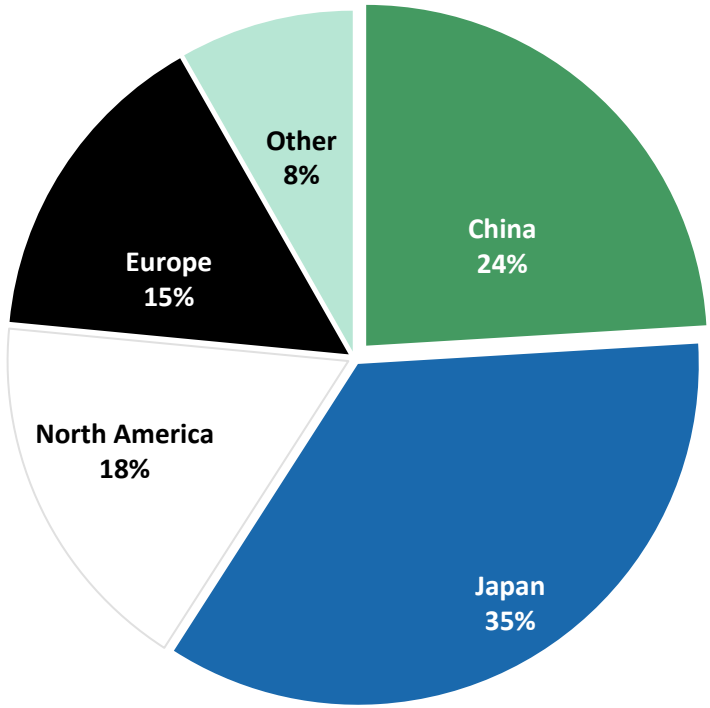
Neo Materials Operating Segments

- Neo Materials engages in the production, processing and development of permanent magnet powders, rare earths and other metals
- Headquartered in Toronto and operates in 10 different countries

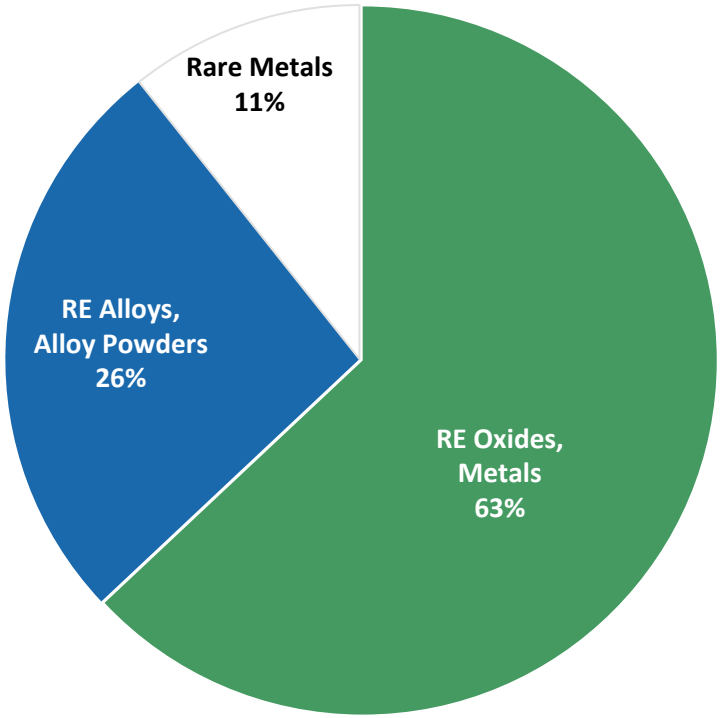
Division	Products	FY 2011 Revenues	Longer Term Market Growth	Key Applications
neo PERFORMANCE MATERIALS	**Rare Earths** **Zirconium** **Rare Metals** • Gallium • Indium • Rhenium	**$514 million** (61%)	**10 – 15%**	  **Electronics & Automotive** • Catalytic Converters • Displays / Lighting • Electronic Ceramics **Solar PV, Aerospace, LED**
Magnequench Leading Magnet Innovation	**Magnetic Neo Powders** (Nd-Fe-B)	**$323 million** (39%)	**15 – 20%**	**Magnets** • Small motors • Sensors  

COMBINED COMPANY OVERVIEW: PRE-SYNERGIES

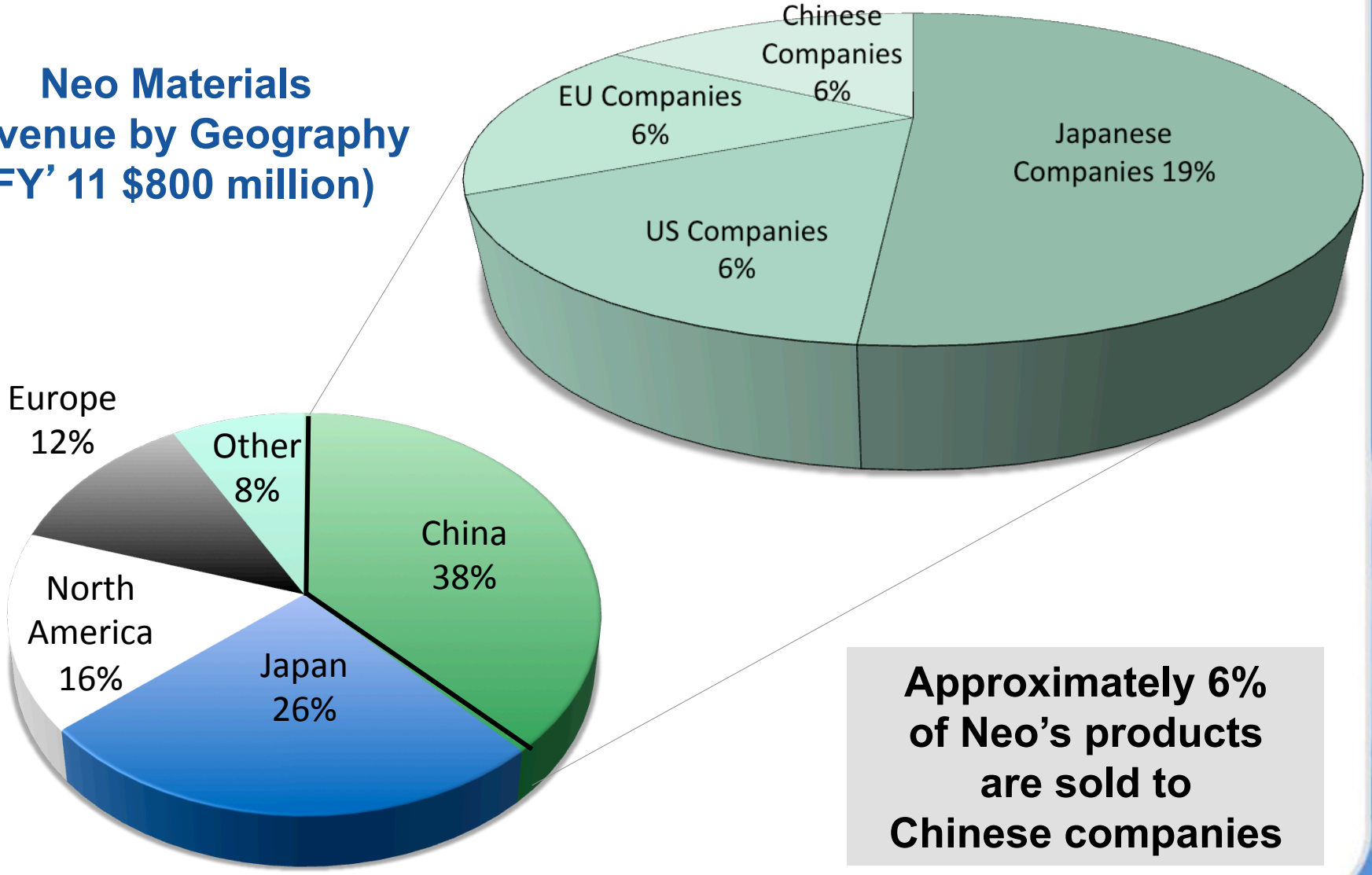
Geographic Diversification



Product Diversification

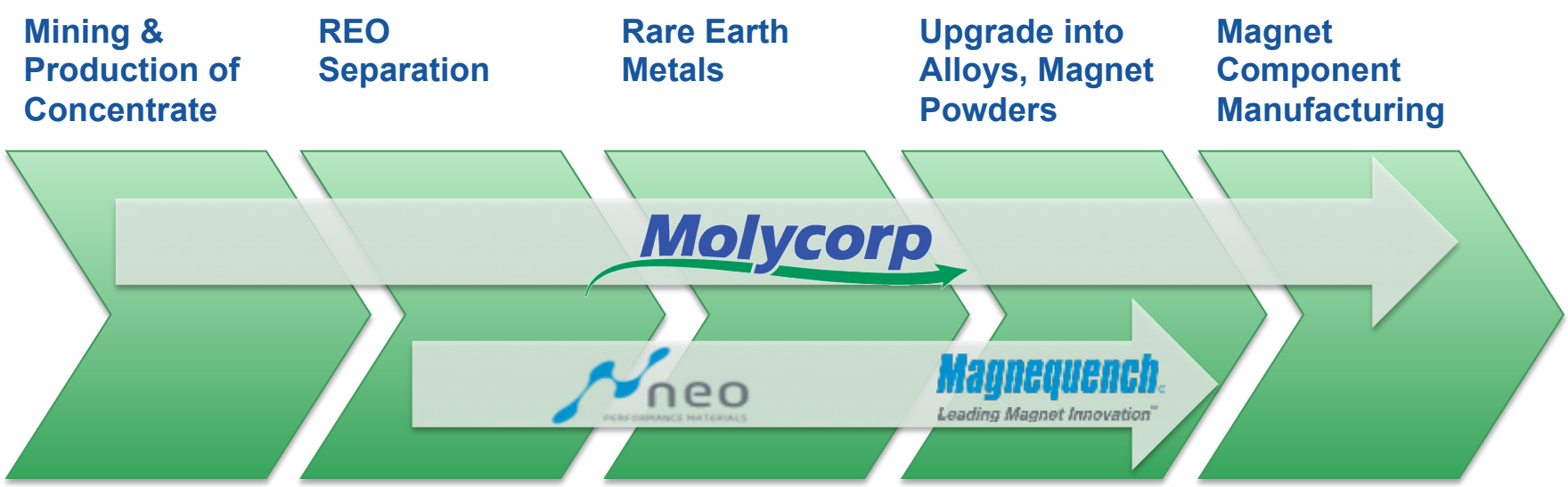


Neo Materials Revenue by Geography (FY'11 $800 million)



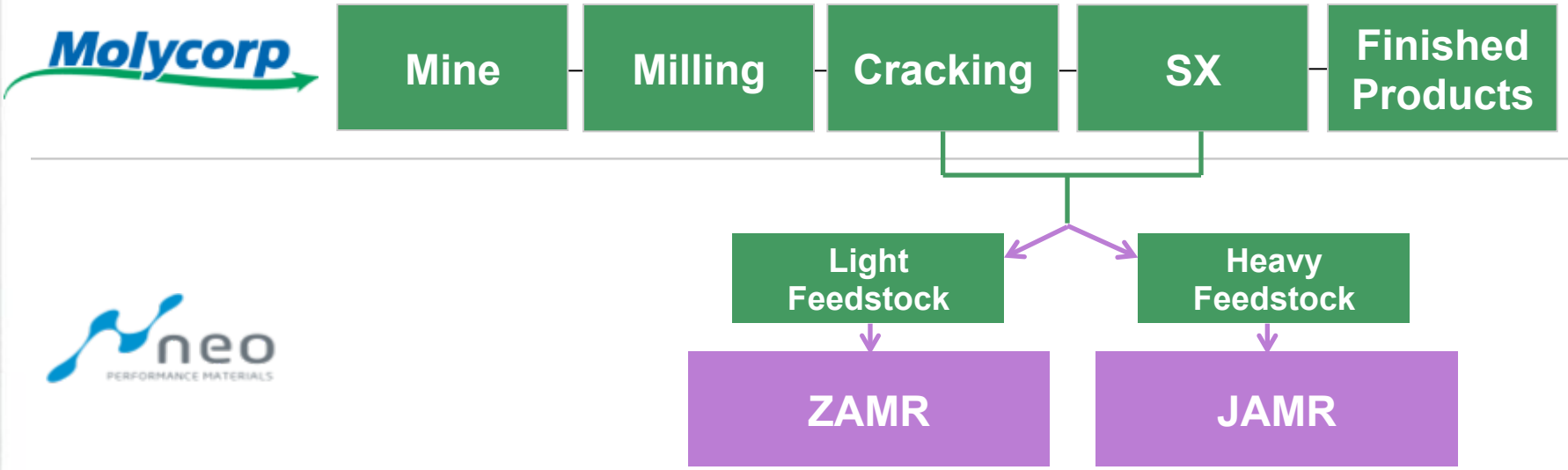
Approximately 6% of Neo's products are sold to Chinese companies

MINE-TO-MAGNET EXPANSION



- Rare Earth Oxide separation capabilities expanded into higher purity, value added products
- Expands Molycorp into NdFeB bonded magnet powders, which complements the Company's current sintered NdFeB magnet joint venture

PERFORMANCE MATERIALS INTEGRATION

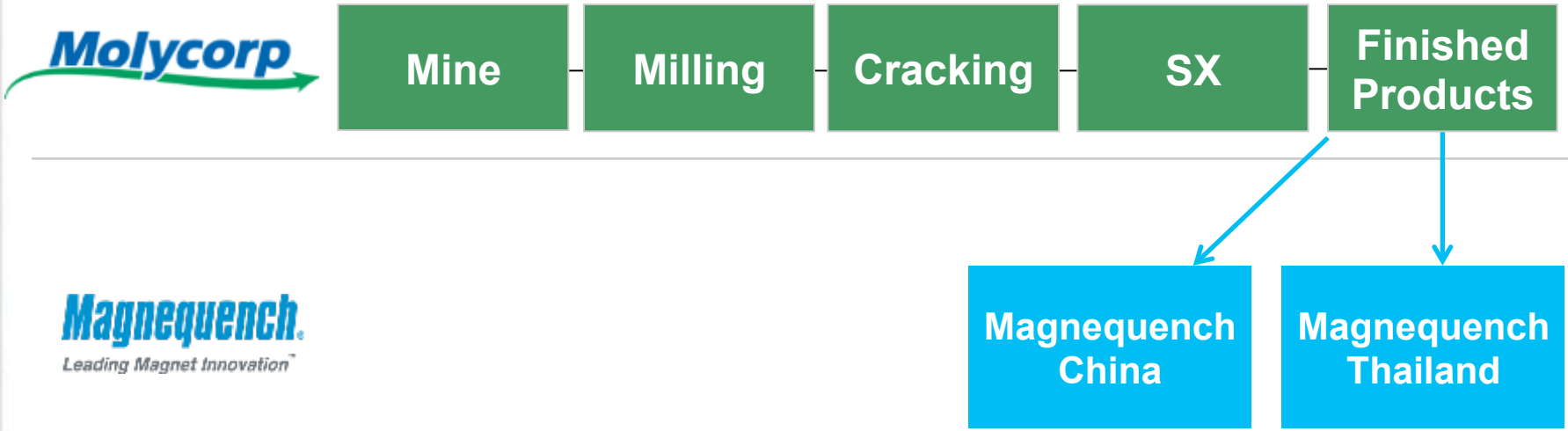


- Rare earth feedstock material to ZAMR and JAMR facilities
- Potential to leverage available capacity
- Molycorp to supply SEG concentrate from Mountain Pass and Sillamäe

Knowledge Share

- SX capabilities
- High purity products
- Sales & Distribution
- R&D technologies

MAGNEQUENCH INTEGRATION



- NdPr (Didymium) material supplied from Molycorp to Magnequench facilities in Thailand and China
- Growth in powdered magnet businesses with stable feedstock supply
- Potential for increased production at both Magnequench facilities

Knowledge Share

- Alloy production
- Bonded & Sintered magnet feedstocks
- R&D product development
- Sales & Distribution

TECHNOLOGICAL EDGE: EXPANDED CAPABILITIES AND IP

Technologies

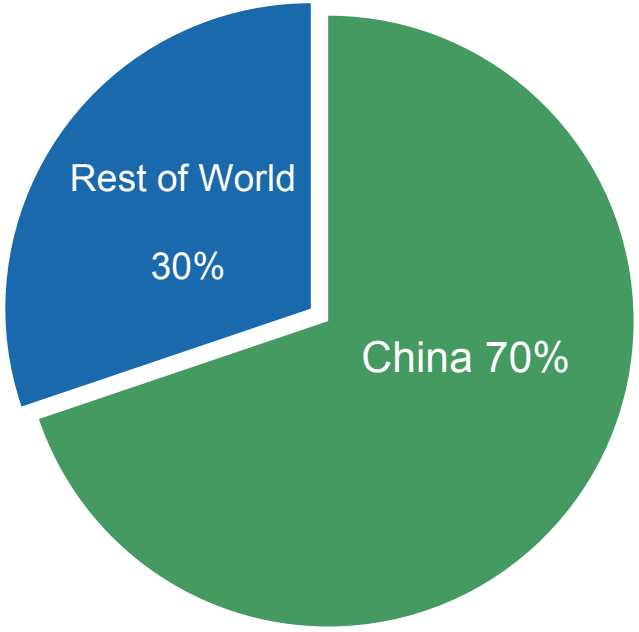
- High-purity rare earth and rare metal separations technologies that no U.S. company – and few anywhere – now possess.
- Ability to manufacture these strategic materials to purity levels of up to 7Ns (99.99999%).
- Expands Molycorp's strategic metals portfolio to include gallium, rhenium, indium & zirconium.

Intellectual Property

- Will own the intellectual property behind these technologies; 28 patents, with 4 pending in the US.
- Can deploy the technology wherever it makes business sense, anywhere in the world.

EXPANDED MARKET OPPORTUNITY: CHINA

Est. 2012 Rare Earth Demand



Key Takeaways

- Access to Chinese rare earths market
- Outlet for incremental Mountain Pass production
- World class 5N Lanthanum production for optical glass
- Existing “heavies” separation expertise
- Ultimately provides supply chains both in and out of China

Marketing & Distribution

- Ability to compete in China
- Access to the world’s fastest growing rare earth consumption market – China
- Largest growth of auto and HEVs, electric bicycles and wind turbines – China
- Expanded market intelligence within China
- Provides 100% market access for Molycorp products

Accessing the Chinese Market

Improves Competitiveness

- Reality: 70% of the market for rare earth products is in China; remains the largest and fastest growing in the world.
- Access to the Chinese market improves Molycorp's long term competitiveness.
- Access to more and better information about the Chinese rare earth industry, pricing, and exports.

Limited Material Provided

- Neo's facilities receive Chinese feedstock and will continue to do so.
- Modest amount of material – roughly 3 – 5,000 metric tons or 7-12% of our full Phase 2 production level.

Export Quotas

- Products have significant value-added and are largely outside of the export quota system.
- Export quotas totaling nearly 3,000 metric tons; highly confident that those quotas will remain in place

PROJECT PHOENIX UPDATE

- **Launched sequential start-up in February**
  - 2,800 short tons of fresh rare earth ore mined per day
  - Mechanical completion of the Crushing Facility
  - Mechanical completion of the initial Cracking Facility
- **Continuing construction and testing**
  - First firing of the turbines in our combined heat and power (CHP) plant to be conducted this week
- **All timelines have been met or exceeded since 2010**
- **Over the next 8 months, the completion of construction, testing and commissioning of:**
  - Milling and mineral extraction
  - Paste Tailings processing and storage
  - Remaining portion of the Cracking Facility
  - Rare Earth Oxide separations
  - Product finishing

PROJECT PHOENIX

PROGRESS ON PROJECT PHOENIX

KEY TAKEAWAYS

- Access to new technology, IP, and specialized skillsets that are in very limited supply.
- Access to the production of high purity materials that are in high demand.
- Additional production capacity.
- Direct access to the China market.
- Sales channels in new vertical markets that might have taken us years to penetrate.
- Bonded magnet powder technology and high purity rare earth and rare metal processing capabilities.

Molycorp

QUESTIONS?