



## SUMMIT AGENDA

### Day One: Thursday, April 8, 2010

8:00 – 9:00 **Registration & Continental Breakfast**

9:00 – 9:10 **Welcome & Introduction by the Chairman**  
**Jack Lifton**, *Independent Consultant/Editor & Publisher*,  
THE JACK LIFTON REPORT; *Senior Fellow*,  
INSTITUTE FOR ANALYSIS OF GLOBAL SECURITY

9:10 – 10:00 *Keynote Panel:*  
**U.S. Perspectives & Initiatives**  
*As U.S. policymakers focus on the growing demand for rare metals in a variety of commercial and military applications, the supply chain for these metals is fast becoming a focal point, as prompted by the recent Critical Minerals Studies by the National Academy of Sciences and an ongoing GAO study due to be completed in April of 2010.*

*This Keynote Panel, featuring representatives from various federal departments and offices, will compare and contrast their perceptions on the economic and strategic implications of rare metals and the contributions the federal government can provide to mitigate the looming supply shortage and insure a reliable supply chain.*

Moderator: **Jack Lifton**, *Independent Consultant/Editor & Publisher*,  
THE JACK LIFTON REPORT; *Senior Fellow*, INSTITUTE FOR  
ANALYSIS OF GLOBAL SECURITY

Panelists:

**David Cammarota**, *Director -Office of Materials Industries*,  
U.S. DEPARTMENT OF COMMERCE

**Keith Long, PhD**, *Mineral Research Analyst*,  
U.S. GEOLOGICAL SURVEY

**Gal Luft, PhD**, *Executive Director*  
INSTITUTE FOR THE ANALYSIS OF GLOBAL SECURITY

**John Neumann**, *Assistant Director*,  
U.S. GOVERNMENT ACCOUNTABILITY OFFICE

10:00 – 10:40 *Presentations:*

**International Perspectives & Initiatives**

*Confronting a looming shortage of rare earth oxides coming out of China, both corporations and governments are making moves to restructure their supply chains. Sumitomo and Toshiba have signed a deal with Kazakhstan; Toyota is working with a Vietnamese mine; the Japanese quasi-governmental organization JOGMEC is surveying prospects in North America and begun funding. The South Korean government announced a plan to localize the majority of the rare metals supply chain internally, and is putting hundreds of million dollars towards that purpose. The European Commission has a study group underway, on top of its existing REACH initiative. This trio of presentations will profile a variety of international initiatives.*

10:00 – 10:20 *The Japanese Perspective*

**Yasushi Watanabe, PhD**, *Leader, Minerals Resources Research Group, Institute For Geo-Resources & The Environment, AIST*

10:20 – 10:40 *The European Perspective*

**Seppo Nurmi**, *Deputy Head of Trade,*  
EUROPEAN UNION DELEGATION OF THE EUROPEAN COMMISSION

*(Note: Dr. Chen Zhanheng, the Deputy Director of the Office of the Chinese Society of Rare Earths was committed to presenting at the Summit but could not secure a visa. His presentation will be included in the course materials)*

10:40 – 11:00 *Networking Break*

11:00 - 11:45 *Panel:*

**OEM Perspectives**

*Many global OEMs have multiple product lines, each incorporating any number of 'at risk' metals, often in relatively small quantity or dollar value, but, at least for the short term, not easily replaceable. Such OEMs have a long history of dealing with complex supply chain dynamics, materials science and product design challenges. This panel will profile a handful of sourcing and technology leaders from OEMs across different sectors -- aerospace, automotive, electronics, chemicals -- to help decision-makers understand their broad philosophy for dealing with critical supplies, and the range of strategies they use to minimize strategic risk.*

- *How do leading OEMs view the rare metals value chain? More specifically, the results of the GAO study?*
- *What are the key assumptions and drivers behind projections for demand growth in technologies. How are people thinking differently about them to come up with widely varying projections?*
- *Their take on recent developments in the OEM-Supplier alliance model*

- *Reducing need for at risk metals by improving product design, and manufacturing efficiencies and recycling manufacturing waste*
- *Recycling materials from products at the end of their lifecycle*
- *Should there be a "rare metals" R&D Initiative incorporated into current DOE funding?*

Moderator: **Jack Lifton**, *Independent Consultant/Editor & Publisher, THE JACK LIFTON REPORT; Senior Fellow, INSTITUTE FOR ANALYSIS OF GLOBAL SECURITY*

Panelists:

**Deborah Albers**, *Sustainable Governance Strategist, DELL, INC.*

**Steve Duclos**, *Chief Scientist and Manager, Material Sustainability, GENERAL ELECTRIC GLOBAL RESEARCH*

**Ivan Herring**, *Former Senior Sourcing Expert, GENERAL MOTORS; Rare Metals Sourcing Consultant, DELPHI AUTOMOTIVE PRODUCTS*

11:45 – 1:00 *Presentations:*

**Reports from the Supplier Front-Lines: Quantities, Time-Frames, and How Purchasers Can Help Accelerate New Supply**

*This session will feature a series of fifteen-minute, "frontline" presentations from companies within 1-5 years of production of at risk technology metals, including the rare earths and tantalum/niobium. They will provide a brief description of their resources, stage on the timeframe to production, status of their refining process, and needs for funding and partners.*

- *Stages and timing from Discovery to Production - Where are they on the chart?*
- *Timing in the mining world - some things can't be sped up*
- *Role of North American government assistance in getting mines to production*
- *How are mineral resource financing arrangements structured? What are the key points on the timeline at which outside parties can get involved?*

**Gary Billingsley, CA PEng PGeo**, *Executive Chairman, GREAT WESTERN MINERALS GROUP, LTD.*

**James Clark, PhD**, *Vice President-Exploration, RARE ELEMENT RESOURCES*

**Christopher Grove**, *Director of Corporate Communications, COMMERCE RESOURCES CORP.*

**Robert Mackay**, *President & CEO, STANS ENERGY CORP.*

**Nick Vermeulen**, *Vice President Corporate Development, UCORE URANIUM*

1:00 – 2:30 *Group Luncheon*

**Exploring Supply & Price Risk Perspectives  
Across The Technology Metals Value Chain**

2:30 – 3:30

*Panel:*

**Advanced Energy Storage: Strategies for Managing Supply Risk**

*Advanced batteries and other forms of energy storage, including fuel cells, use a large number of rare metals, in some cases also in large volume (NiMh batteries, for example). Energy storage is increasingly expected a key enabling role in massive scale-up of intermittent resources (solar and wind), as well for its role in hybrid electric vehicles. This panel of battery vendors and component suppliers will explore the various approaches they are taking to cope with their dependency on constrained supplies, whether through new materials research, improving manufacturing process, or recycling. Panelists will highlight where they see gaps and opportunities in the value chain for new products or players, and their respective views on the level of market growth for renewable energy systems and electric transport.*

Moderator: **Jack Lifton**, *Independent Consultant/Editor & Publisher, THE JACK LIFTON REPORT; Senior Fellow, INSTITUTE FOR ANALYSIS OF GLOBAL SECURITY*

Panelists:

**Kevin Beaty, PE**, *Manager – Manufacturing Operations and Strategic Sourcing, Hybrid Systems Division, Vehicle Group, EATON CORPORATION*

**Jeff Chamberlain, PhD**, *Energy Storage Initiative Leader, ARGONNE NATIONAL LABORATORY*

**Ted J. Miller**, *Senior Manager, Energy Storage Strategy & Research, FORD MOTOR COMPANY*

**Dirk Naumann**, *President, JUNIPER ASSOCIATES*

**Novis Smith, PhD**, *Vice President of Technology, LITHCHEM ENERGY*

3:30 - 4:00

*Networking Break*

4:00 - 5:00

*Panel:*

**Magnets & Magnetic Materials: Strategies for Managing Supply Risk**

*Few functional materials have been as pivotal to the development of modern technologies, and are as susceptible to pressure on the supply chain, as those found in permanent magnets and magnetic media for data storage. Rare earth-based Nd-Fe-B and Sm-Co alloys are used in high tech magnets for motors and generators and play a strategic role in both current and future technology development needs. Panelists will discuss a range of associated topics, including methods of securing long term supply chain stability, the trade offs to be considered when designing new systems that utilize magnets and magnetic materials, and the role of new materials development in dealing with potential future restrictions on supply.*

Moderator:

**Gareth Hatch, PhD CEng FIMMM**, *Director of Technology*,  
DEXTER MAGNETIC TECHNOLOGIES, INC. and *Editor-In-Chief*,  
RAREMETALBLOG

Panelists:

**Karl Gschneidner, PhD FASM FTMS FAPS** *Anson Marston Distinguished Professor*, IOWA STATE UNIVERSITY/AMES LABORATORY &  
*Member*, NATIONAL ACADEMY OF ENGINEERING

**Hanif Mashal**, *Power Systems Technical Lead*, CLIPPER WINDPOWER, INC.

**Irving Mintzer, PhD**, *Principal*, MEG LLC

**Tony Morcos**, *Principal*, ACM MAGNETICS

**Rob Strahs**, *Vice President & General Manager*,  
ARNOLD MAGNETIC TECHNOLOGIES

## **Day Two: Friday, April 9, 2010**

8:00 – 9:00 **Registration & Continental Breakfast**

9:00 - 9:05 **Welcome & Recap of Day One by the Chairman**  
**Jack Lifton**, *Independent Consultant & Editor/Publisher*,  
THE JACK LIFTON REPORT; *Senior Fellow*,  
INSTITUTE FOR THE ANALYSIS OF GLOBAL SECURITY

9:05 - 9:45 *Presentation:*  
**Innovative Business Models for OEM-Supplier Cooperation**  
*The prospect of OEMs reaching upstream to mines or refiners is a somewhat new activity, at least in recent years in North America. Overseas developments provide some examples of how this is being done by countries that have never had their own resource base. This session will look at how such business arrangements have been structured in the past, and what forms they might take in the future.*

**Gene Slowinski**, *Director, Strategic Alliance Program*,  
RUTGERS UNIVERSITY

9:45 – 10:00 *Networking Break*

10:00 – 10:45 *Panel Discussion:*  
**Sustainable Mining - Taking Responsibility for the Source**

- *Political risk as a general challenge for all technology metals*
- *How will environmentalists reconcile their desire for wind and solar with new rare earth and other mines?*
- *How does the ‘conflict minerals’ issue map to other ‘at risk’ metals supply challenges?*
- *Carbon footprint of mining operations?*
- *How are leading electronic OEMs dealing with supply chain*

- transparency and ethics around tantalum – status on bill in Congress*
- *Stimulus money for rare metal mining juniors to help accelerate their production and reduce the environmental impacts associated with extraction and refining?*

Moderator: **James B. Hedrick**, *President*,  
HEDRICK CONSULTANTS, INC. & *Mineral Commodities Specialist*,  
U.S. GEOLOGICAL SURVEY (RET.)

Panelists:

**Danielle Harder**, *Senior Manager of Supply Chain Social & Environmental Accountability*, MICROSOFT CORPORATION;  
*Member*, GLOBAL E-SUSTAINABILITY INITIATIVE (GeSI)  
**Ron MacDonald**, *President*, CANSOURCE INTERNATIONAL, INC.  
**David Sullivan**, *Research Associate*, ENOUGH!

10:45 - 11:00 *Networking Break*

11:00 – 11:30 *Panel:*

**Investment Opportunities Across the Rare Metals Value Chain:  
Comparing Notes from Different Sides of the Equation**

*Rare metals are not traded as indexed commodities, and tend to interest only certain types of investors. This panel will bring together investors representing the resource community, corporate strategics and venture capital to share their insights on the potential for long term growth of value in the rare metals value chain, and which players are most well positioned to profit from such growth.*

- *Investor responses to Copenhagen, the GAO report*
- *Assessing various analysts' projections of the global need for clean energy technologies*
- *Strategic investors role in filling gaps or improving the strength of intermediate links in the supply chain, as well as supporting direct production at the mine source*
- *Unique challenges to financing intermediate links in the rare metals value chain*
- *Supply challenges as a risk factor across cleantech investment portfolios*

Moderator: **Tracy Weslosky**, *Managing Partner*,  
WESLOSKY & COWANS LTD., (WESCOW)

Panelists:

**Robert Mackay**, *President & CEO*, STANS ENERGY CORP.  
**Alastair Neill**, *President*, TRINITY MANAGEMENT LTD & *Executive Vice President*, DACHA CAPITAL and *former VP/GM Rare Earth Division*, AMR(NEO-MATERIALS)

11:30 *Summit Adjourns*