

Father of “Technology Metals” Jack Lifton joins InvestorIntel Founder Tracy Weslosky to Launch the Technology Metals Show

CEOs, Scientists and Thought Leaders Discuss the Global Hunt for Critical Materials on an Exclusive Members Only Site

Toronto/Detroit, April 20 13, 2020 – Did you know that the U.S. Department of Defense is committing millions of dollars to bring rare earth manufacturing back to the United States, which makes this the most aggressive U.S. government intervention into the rare earths market in history?

And its not just rare earths, the uranium market has surged over 30% in just the last month – the race for critical materials is on. A global hunt is heating up to source a qualified hit list of 35 critical materials recognized by the U.S. Government that fuels international markets and global politics is the driver for the new Technology Metals Show.

Watch industry leaders in conversation with world-renowned rare earths expert Jack Lifton who coined the term “technology metals” go head-to-head through debate and discussion...or, catch a hard-hitting interview with critical materials’ consultant and investment banker Tracy Weslosky with questions no one else is asking! The TechnologyMetals.com site is your

one-stop site for behind the scenes discussions, interviews and debates with industry leaders, investors, scientists and government officials.

In 2008 Jack Lifton and Tracy Weslosky went head to head on the issues relating to sustainability, rare earths and critical materials on **CNBC's Squawk box** – only to discover, they were on the same side. Click here to find out **Why Subscribe?** or **Subscribe Here**

Aware of the increasing prioritization to secure the supply of 35 recognized critical materials by the U.S. Government, COVID-19 (the coronavirus) has kicked the sourcing mandate into overdrive. What was as one investor described as a “five minutes to midnight” scenario for savvy investors, has evolved into a reprioritization from the industry to the development and buildout of a critical materials supply chain, the clock is ticking...

The **Technology Metals Show** addresses 3-priorities that must now be set in the race for critical materials:

1. The identification and prioritization of the individual critical materials necessary for our economic health;
2. What steps are required to establish supply chains of enough of these critical materials to achieve a secure, readily accessible supply of critical materials for the consumer products' industry as well as the defense industry; and,
3. How we secure the skilled and experienced professionals (managers, engineers, and scientists) to implement and maintain total domestic supply chains for critical materials and the products they enable.

Led by Detroit-based critical materials expert and U.S. Government consultant Jack Lifton in regular conversations with critical materials' leaders, along with investment banker Tracy Weslosky who follows our capital market drivers – the

Technology Metals Show is committed to providing regular updates for industry and investors as we track these 35 qualified critical materials and the supply chains we need to achieve sustainability.

Click here to subscribe to the **Technology Metals Show** and get exclusive access to member only content through this exclusive site! Or Log-In Here for the latest conversations, debates, updates and interviews with the leaders, thought leaders and investors focused on issues relating to sustainability in the critical materials sector.

For more information on the **Technology Metals Show** email us at info@technologymetals.com or reach us direct at +1 (416) 546-9233

Lynas positioned well with increased market attention on rare earths.

As most investors already know, rare earths are not really rare. Despite this it is hard to find large scale rare earth projects at economic grades, the CapEx to get a new rare earth project into production can be very costly, and rare earth projects typically take a long time to go from discovery to production. This means new supply is constrained. Furthermore China dominates rare earth production, with about 80% market share.

On the demand side the electric vehicle and clean energy boom

is causing a large increase in rare earths demand, in particular for neodymium (Nd) and praseodymium (Pr) – the magnet metals. Rare earths already play a critical role in the electronics, automotive, environmental protection, and petrochemical sectors. Industry analysts expect demand in key end use markets to grow well ahead of global GDP, creating strong demand for rare earth materials.

Examples of products using rare earths

- **Wind turbines.** NdFeB magnets enable direct drive wind turbines technology providing better electrical yield, reduced maintenance and improved reliability (no gear box).
- **Automotive catalysts.** Cerium-based new technology enables Lean NOx Trap – a very compact catalytic system that allows diesel compact cars to match with NOx emission regulation
- **Hybrid electrical vehicles.** A fast growing segment which contributes to controlling pollution at its point of emission.
- **Electric Vehicles (EVs) (magnets for electric motors).** NdFeB magnets enable substantial weight reduction contributing to overall energy savings and reduction of CO2 emission. A key growth area for the rare earths industry is the use of permanent magnets (using neodymium (Nd) and praseodymium (Pr)) in the electric motors of EVs. Each EV uses ~ 1 to 3 kilograms of rare earth permanent magnets, of which ~33% is contained rare earth oxides, or about 1kg on an EV.

Lynas Corporation Limited (ASX: LYC) is an Australian integrated producer of rare earths from mine to customer. Lynas owns the Mt Weld rare earth mine which is one of the world's highest grade rare earths mines, and the Mt Weld Concentration Plant, both located 35 km south of Laverton in Western Australia.

Lynas Corporation's Mt Weld rare earth mine in Western Australia



Lynas Corporation's Mt Weld rare earth mine in Western Australia

Lynas Advanced Materials Plant (LAMP)

Lynas also owns the Lynas Advanced Materials Plant (LAMP) which is an integrated manufacturing facility, separating and processing rare earths materials, located near the Port of Kuantan in Malaysia. The LAMP produces NdPr oxide, Ce carbonate, Ce oxide, LaCe carbonate and LaCe oxide, and SEG oxide. LAMP is now supplying rare earths products to customers in Japan, China, Vietnam, South Korea, Europe and North America. The company's Japanese customer base continues to grow strongly and currently represents about 60% of all sales.



Lynas Corporation's Malaysian rare earths Advanced Materials Plant (LAMP)

Rare earths are impacting us by already playing a pivotal role in greenhouse gas reduction through their unique application in automotive catalytic converters, electric vehicles, wind turbines, and energy efficient compact fluorescent light bulbs.

Many analysts see 2019 and 2020 to be the years when the investment world wakes up to the rare earths story of growing demand and constrained supply, in particular for the battery rare earths NdPr driven by demand from the EV boom.

Lynas is in a unique position of being the only rare earth miner and producer globally that operates completely outside of China. This gives them a rapidly growing demand from OEMs to secure reliable (non-political) supply of vital rare earths, essential in the new green economy. There has been some environmental challenges with their Malaysian plant that still need resolving, but overall Lynas looks to be a strong global rare earth producer with generally solid production volumes in key rare earths. In fact, Lynas is the second

largest NdPr producer in the world.

Lynas Corporation Limited is headquartered in Australia; and has a market cap of A\$ 1b.

Arafura's Brescianini on the growing demand for magnet metals

"We are dealing in a sector that is really starting to grow in the magnet space. Of course our rare earths go into magnets. With all of the changes that are going on in the technology space, we are very well positioned to be able to feed that particular sector. As you know we are completing our definitive feasibility study. That will be out in the next couple of months. I guess investors would really start to understand the value proposition that Arafura offers." States Richard Brescianini, General Manager of Exploration & Development at Arafura Resources Ltd. (ASX: ARU), in an interview with InvestorIntel Corp. CEO Tracy Weslosky.

Tracy Weslosky: Richard this is extremely timely that we are speaking to you with all of the current conflict between the U.S. and China and now with the Chinese conflict with the Canadians, everyone is looking to Australia for magnet metals. Would you agree?

Richard Brescianini: I would agree. We are a very, very stable country. We have been saying that for many, many years now. I guess what we are seeing play out in the geopolitical sphere really begins to reinforce that fact.

Tracy Weslosky: We just did a piece actually on how the U.S. Defense law has everyone also looking at Australia. We have got investors around the world looking at you. Would you not say now is the time to be looking at a company like Arafura?

Richard Brescianini: I think it is. We are dealing in a sector that is really starting to grow in the magnet space. Of course our rare earths go into magnets. With all of the changes that are going on in the technology space, we are very well positioned to be able to feed that particular sector. As you know we are completing our definitive feasibility study. That will be out in the next couple of months. I guess investors would really start to understand the value proposition that Arafura offers.

Tracy Weslosky: For those of you out there in InvestorIntel land and you are going, what are these rare earths? What are these metal magnets? I will tell you what they are. They are currently controlled by the Chinese and especially with the processing aspect. Of course, Arafura is well on your way with your processing techniques. Is that correct?

Richard Brescianini: That is correct. Just recently we put a statement out there that told the market that our entire processing operation will be located in Australia. We are not mucking about with having it in multiple countries or anything like that. We really want to be able to focus our operations in Australia for stability purposes. I guess your hearers or your listeners will know about some of the things that are playing out in Malaysia right now, which really reinforces our decision to keep it all in Australia....to access the complete interview, [click here](#)

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