Control the supply chain, control the world – The battle for critical materials and rare earths begins…..

written by InvestorNews | July 10, 2020

To become a global power a country needs to have a great industrial production and be a leading exporter, particularly of high value items such as autos, tech (smartphones, PCs, online businesses etc), and services (tourism, education, IT etc). The UK led the industrial revolution only to be taken over by the USA, and today China threatens to be the next global super power. The one piece left in the puzzle for China is to lead the world in producing and exporting autos (especially electric vehicles) and high tech, including green energy, as these are the future industries of the 21st century.

China knows that to be a global super power it must control the supply chain of critical materials and rare earths, which it has now achieved due to sustained efforts over the past decade. China already dominates the supply chain for most of the key future industries – Electric Vehicles (dependent on Li-ion batteries and key materials lithium, cobalt, nickel, manganese, graphite, and rare earths), green energy such as solar panels and wind turbines (dependent on rare earths), and portable electronic devices (dependent on batteries and rare earths). Furthermore many of these components are critical for the military and aerospace industries.

Rare earths uses – Catalysts and magnets dominate. China dominates production with 84% share in 2016

Source

Some key facts

- Global auto manufacturers plan to spend US$300 billion over the next 5-10 years developing EVs and to procure EV batteries. The problem is that China is increasingly dominating lithium ion battery production capacity.
- Over 70% of all mined cobalt comes from the DRC, most of which is controlled by the Chinese.
- China dominates global rare earth production with ~80-90% market share.

Added together a common theme is emerging where China will end up controlling 70%+ of the EV supply chain. This can lead to major issues if China decided to prioritize supplying Chinese manufacturers ahead of overseas competitors. A similar potential threat exists with solar, wind, and most personal electronics production.

What is the rest of the world doing to take back control of the industrial supply chain?

The gradual closure of Western manufacturing factories and job transfer from West to East has been happening for decades. The recent US-China trade war and COVID-19 has shocked the Western world into the realization that they are heavily reliant on China's supply chain.

The US has a number of Acts currently in process through the US Senate that aim to restore the supply chain of critical materials and rare earths. But unfortunately the US is moving too slow. For example, the US has only 3 lithium-ion battery megafactories in planning compared to China which has 88. The

difference is staggering and only serves to further highlight the size of the problem.

Europe is at least making a greater effort to support the EV sector and to build up their battery supply chain. Benchmark Mineral Intelligence states: “China accounted for 69% of this total capacity while Europe increased its share to 17% yet North America lagged behind at 8%.”

China is winning the EV battery race as the West is being left behind

The critical materials and rare earths industry outside of China needs to be driven by demand, not handouts. For the Western world to sustainably regain the lost industrial power and jobs, they must rebuild the entire supply chain. So for an electric car that would mean investing and developing critical material mines in the Western world. It would mean building more anode, cathode, and Li-ion battery factories in the West, manufacturing magnets and electric motors in the West, and manufacturing EVs in Western factories. It has taken a South African born entrepreneur, Elon Musk, to act single handedly to propel the US forward, while most of America stood still the past several decades doing nothing.

To succeed Western governments will need to incentivize the private sector with various tax benefits to promote vertical integration and rebuilding of the supply chain. However, in the end the final product needs to be globally competitive and be able to stand on its own and compete with China on quality and price.

Closing remarks and investors takeaway

All major modern industrial powers have dominated industrial production of machinery and transport, particularly autos. Look

at the modern era where Germany, Japan, South Korea, and the US dominated auto production. Now look ahead and we see China is planning to dominate everything.

The message for investors is clear. Invest in Western companies that are expanding in key future industries such as EVs, green energy (solar & wind), and disruptive technology. Invest in Western companies that can support the supply chain for the above key industries. Additionally invest in Western miners with critical materials and rare earth resources on US or Western soil. Western consumers can also play a role by buying locally made products.

The winning investments for this next decade will be those that can succeed in the future economy and those that can supply its components and raw materials. Tesla's meteoric stock price rise the past year as they grew to dominate global EV sales is just the first example.

Put simply – "Control the supply chain, control the world". This will be a key thematic going forward as the West moves rapidly to regain control of its future this decade.

Further reading

- Investorintel's library of Critical Materials and Rare Earths articles and videos