

Defense Metals' Wicheeda compares favorably with the leading global rare earths projects

President Biden's defense plan is to shift investments away from "legacy systems that won't be relevant" to "smart investments in technologies and innovations – including in cyber, space, unmanned systems and artificial intelligence." Biden's \$2 trillion green infrastructure and jobs plan focuses on electrifying the US transport system (electric vehicles) and for the US grid to produce carbon-free electricity by 2035 (smart nuclear, solar, wind). To achieve all of these goals there will be a surge in North American supply for the so-called green energy metals – rare earths (particularly Nd-Pr (neodymium and praseodymium)), battery metals, and light-weighting alloys.

One company that looks well placed to capture some of this growing market in future years is Defense Metals Corp. (TSXV: DEFN | OTCQB: DFMTF | FSE: 35D) ('Defense Metals').

Defense Metals is a mineral exploration company focused on the acquisition of mineral deposits containing metals and elements commonly used in the electric power market, military, national security and the production of 'green' energy technologies, such as high strength alloys and rare earth magnets.

North American rare earths will be needed to help support the defense forces secure a safe supply chain

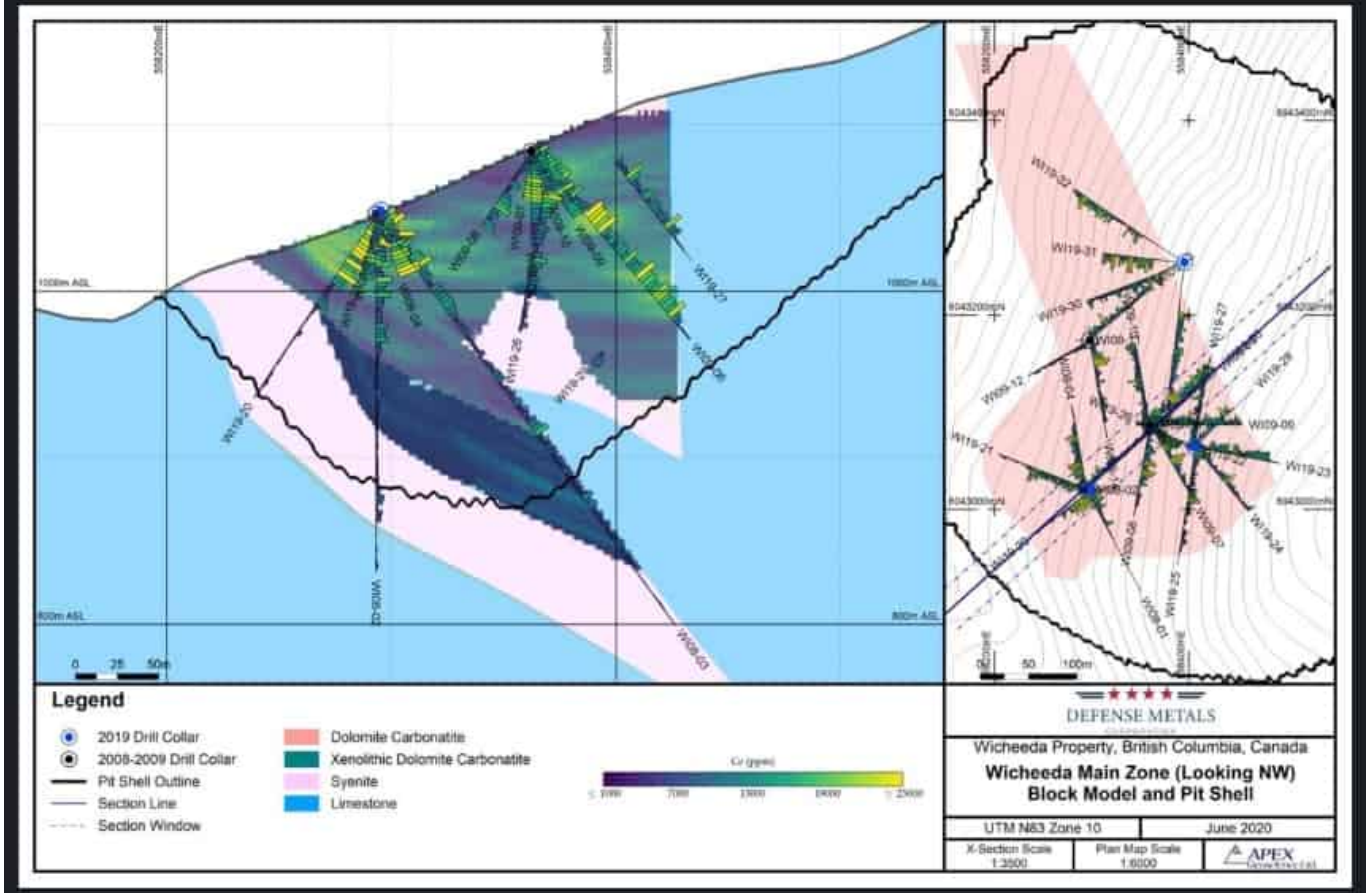


Source

Defense Metals flagship project is the 1,708 hectare Wicheeda Rare Earth Element (REE) Project (option to acquire 100%) located 80 km northeast of Prince George, British Columbia, Canada. The Project has an Indicated Mineral Resource of 4,890,000 tonnes averaging 3.02% LREO (Light Rare Earth Oxide), and an Inferred Mineral Resource of 12,100,000 tonnes averaging 2.90% LREO. The ore is favorable with a mix between monazite and synchysite/parasite-bastnaesite contained in approximately equal proportions. Key rare earths contained include neodymium (Nd) and praseodymium (Pd), as well as cerium (Ce) and lanthanum (La). Another big advantage is that the resource is amenable to an open pit project, as shown below.

The Wicheeda REE Project resource block model showing conceptual open pit shell

UPDATED WICHEEDA RESOURCE BLOCK MODEL AND LERCHS-GROSSMAN CONCEPTUAL PIT SHELL



Source: Company presentation

Defense Metals has achieved positive flotation and hydrometallurgical test work results, including a high-grade 50% LREO concentrate at >85% recovery. Hydrometallurgical test work demonstrated 90% REE extraction with opportunities for further improvement. Flotation pilot-plant processing of a 26-tonne bulk sample of Wicheeda REE material yielded a mineral concentrate averaging 7.4% NdPr oxide critical magnet metals. The success of the metallurgical flowsheet optimization process has demonstrated Wicheeda REE mineralization is amenable to relatively simple treatment via well-established methods of flotation, and hydrochloric acid leach/ caustic crack REE extraction.

Defense Metals is targeting a potential >15 year mine life at 2 million-tonne/year throughput.

Defense Metals' Wicheeda REE Project compares favorably with the leading global rare earth projects

WICHEEDA METALLURGY COMPARED TO WORLDWIDE REE MINES ⁽²⁾⁽³⁾					
PROJECT	COUNTRY	DEVELOPMENT STAGE	GRADE (% LREO)	CONCENTRATE GRADE (% LREO)	UPGRADING RATIO
Wicheeda	Canada	30 Tonne Bulk Sample	4.81	48.7	10.1
Mountain Pass	USA	Care and Maintenance	8	65	8.1
Mt. Weld (Lynas Corp.)	Australia	Operating	15.4	40	2.6
Bayan Obo	China	Operating	6	50	8.3

Source: Company presentation

Local infrastructure is reasonable with the Project being positioned alongside a major forestry service road connected to Highway 97. There is a major hydroelectric power line, major gas pipeline and a Canadian National railway line at the nearby village of Bear Lake. There is a trained nearby workforce at Prince George which is a strategic mining center.

Next steps include a study of the potential of low-cost front-end upgrading of Wicheeda REE mineralization via X-Ray transmission (XRT) sorting using the Saskatchewan Research Council (SRC).

Closing remarks

Defense Metals Corp. currently trades on a market cap of C\$35 million. The Company is still in the development stage with feasibility studies not yet completed. Based on the grades so far, the metallurgy, and the open pit potential we could potentially expect a solid Preliminary Economic Assessment (PEA) or Pre-Feasibility Study (PFS) to follow in the near term.

The future need for North American sourced rare earths looks to be very strong which should prove to be a strong tailwind for companies such as Defense Metals Corp. One to follow as they continue to progress.

Biden's defense plan and some stocks set to benefit

Yesterday marked a turning point in US history as President Joe Biden was inaugurated as the 46th President of the United States. Much of the focus has been on Biden's policies regarding an American Rescue Plan and Biden's \$2 trillion green infrastructure and jobs plan; however today I take a look at Biden's defense plan and what it means for the sector, including the defense metals companies.

Biden was a member of the Senate Foreign Relations Committee for 12 years. In that time Biden helped shape U.S. foreign policy on terrorism, weapons of mass destruction, the Middle East, Southwest Asia, and the end of apartheid. Biden favors nuclear de-escalation and has promised to renew New START, the New Strategic Arms Reduction Treaty. A key summary of what Biden will do is stated by Defense News:

"To affordably deter Russia and China, Biden said he would shift investments from "legacy systems that won't be relevant" to "smart investments in technologies and innovations – including in cyber, space, unmanned systems and artificial intelligence."

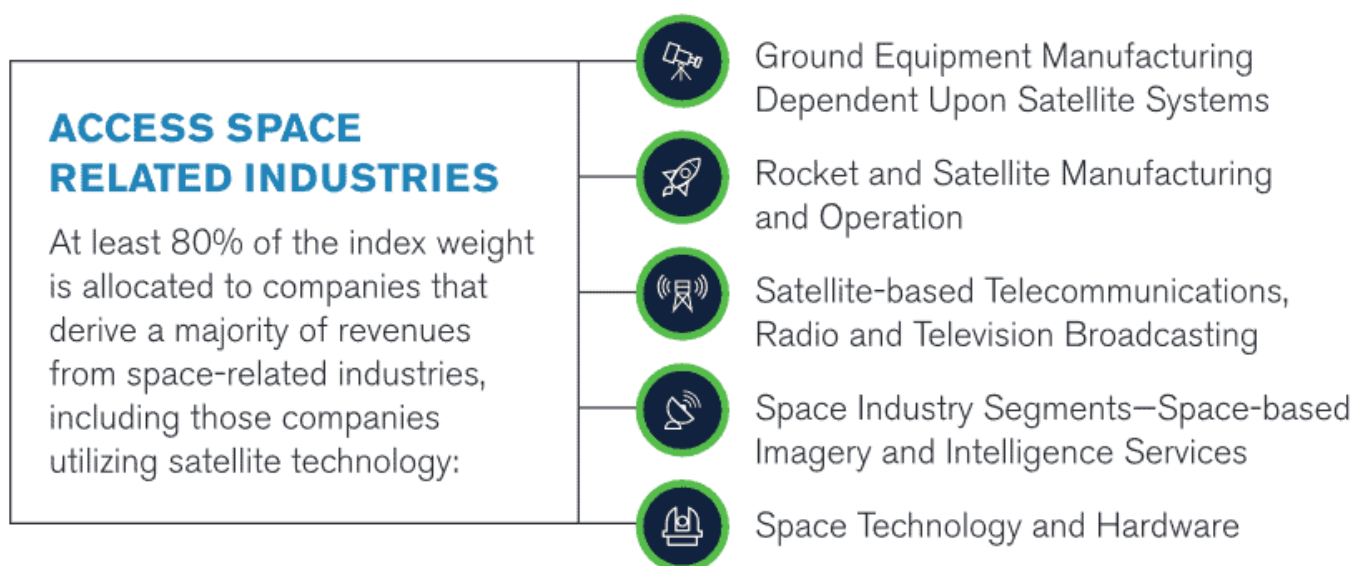
US cybersecurity

The leading cybersecurity ETF is the ETFMG Prime Cyber Security ETF (NYSE Arca: HACK). Top holdings of interest include CrowdStrike Holdings (NASDAQ: CRWD), Zscaler (NASDAQ: ZS), and FireEye (NASDAQ: FEYE).

Space

The iShares U.S. Aerospace & Defense ETF (CBOE: ITA), SPDR S&P Aerospace & Defense ETF (NYSE Arca: XAR), Procure Space ETF (NASDAQ: UFO) and the SPDR S&P Kensho Final Frontiers ETF (NYSE Arca: ROKT) are four ETFs that broadly cover aerospace and some defense stocks. Maxar Technologies (NYSE: MAXR) is a key holding in three of these ETFs. Maxar specializes in manufacturing communication, earth observation, radar, and on-orbit servicing satellites, satellite products, and related services. Some other key aerospace and defense stocks include Northrop Grumman (NYSE: NOC), Lockheed Martin Corporation (NYSE: LMT), and Boeing (NYSE: BA).

The Procure Space ETF (UFO) summary of exposure to space related industries



Source

Unmanned systems (including unmanned aerial vehicles (UAVs))

UAVs are increasingly being used by the military for surveillance and other operations such as border patrolling, combating terrorism, and intelligence gathering ('spying'). The largest UAV companies by market share include Northrop Grumman Corporation, General Atomics Technologies Corp. (private), Boeing, Textron Inc. (NYSE: TXT) and AeroVironment Inc. (NASDAQ: AVAV). Boeing is growing in military drones/UAVs

with several US Defense contracts including the Airpower Teaming System (“Loyal Wingman”) military UAV. It will use artificial intelligence to fly alone or with other aircraft.

An unmanned Aerial Vehicle (UAV) patrolling the earth



Source: iStock

Artificial intelligence (AI)

AI stocks involved in security (facial and voice recognition etc), UAVs/drones, autonomous vehicles, space technology, and the defense sector in general stand to be the winners. Elon Musk’s SpaceX and Tesla (NASDAQ: TSLA) are rapidly becoming global leaders in AI.

Defense metals stocks

Generally speaking the rare earth magnet metals, uranium (for nuclear weapons etc), and key critical materials companies (cobalt for jet engines, scandium for lightweighting) have potential to do well.

Defense Metals Corp. (TSXV: DEFN | OTCQB: DFMTF) is an

advanced mineral exploration company focused on metals and elements (including rare earths) commonly used in the electric vehicle (EV) market, military, national security and in green energy technologies; such as high strength alloys and rare earth magnets.

IBC Advanced Alloys Corp. (TSXV: IB | OTCQB: IAALF) makes mission-critical metal alloys and produces parts for use in U.S. defense systems, such as the F-35 jet and next-generation nuclear submarines, as well as in multiple commercial applications.

Neo Performance Materials Inc. (TSX: NEO) manufactures advanced industrial materials with a focus on magnetic powders and magnets, specialty chemicals, metals, and alloys. You can read more on them [here](#).

Closing remarks

It is always good to have some defense stocks in your portfolio just in case we get a terrorist event or a deterioration in relations between the USA and some recent adversaries such as China, Russia, Iran, or North Korea.

Under President Biden defense spending will move towards smarter high tech methods of protecting US security. This means cybersecurity, space (satellites etc), unmanned systems (UAVs) and greater use of AI.

While global tensions are calm it may be the right time to buy into some new economy defense sector names or defense metals suppliers. What's your favorite Biden defense stock?