Sean Cleary on Strategic's plans to revitalize former producer of 10% of the world's vanadium

written by InvestorNews | March 11, 2024

In a recent interview with InvestorNews, Sean Cleary, Chairman and CEO of [Strategic Resources Inc.](#) (TSXV: SR), discussed the company's latest developments and strategic direction amidst their attendance at PDAC 2024. Cleary highlighted the fully permitted BlackRock Project in Quebec, which enjoys support from notable backers including the Quebec government, Orion Mine Finance, Ross Beatty, and the Alumina Group. He announced the imminent release of an engineering study for phase one of the project at Port Saguenay in Quebec, emphasizing the company's efforts in engaging with investors and potential partners. Cleary also shed light on the company's involvement in the European Union's vanadium and titanium study through its project in Finland, marking a significant step towards securing a non-dilutive pathway for its vanadium, titanium, and magnetite deposits. Strategic Resources' acquisition of the project through a merger with Black Rock Metals was noted as a pivotal move in securing its flagship venture, further underlined by its ambition to revitalize a former producer of 10% of the world's vanadium.

Strategic Resources' innovative approaches to sustainability and carbon emission reduction were also a focal point of the discussion. Cleary detailed a collaboration agreement with Levidian, a British climate technology firm, to explore the application of Levidian's patented LOOP decarbonization technology at the BlackRock Project's metallurgical facility in Saguenay, Québec. This partnership aims to produce near emissions-free iron products, leveraging the conversion of natural gas into hydrogen and graphene as a byproduct. The conversation also touched upon the company's financial health, with a market cap of $45 million, 60 million shares outstanding, and nearly $8 million in cash reserves, emphasizing the project's robust backing and future prospects. The interview underscored Strategic Resources' strategic positioning and forward-looking initiatives in the critical minerals sector, reflecting its commitment to innovation, sustainability, and strategic partnerships in advancing its projects in Canada and Finland.

To access the complete interview, click here

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About Strategic Resources Inc.

Strategic Resources Inc. (TSXV:SR) is a critical mineral exploration and development company focused on high-purity iron and vanadium projects in Canada and Finland. The Company is developing its flagship BlackRock Project, which is a fully permitted and ready to construct mine, concentrator and metallurgical facility located at a seaport in Québec with full access to the St. Lawrence Seaway. The Company's Head Office is in Montreal, Québec.

Lifton challenges the Green Elite Environmentalists to provide real evidence of an industrial park powered solely on alternative energy

written by Jack Lifton | March 11, 2024

Following the Engineering as well as the Science: Misrepresenting the Type of Energy Production Needs for the Supply of and the Demand for Basic as well as Critical Materials

Our civilization, the age of steel, cannot continue without fossil-fueled or nuclear-fueled baseload electricity generation. So when some ask why are the Chinese building a new fossil fuel fired baseload electrical generation plant on a biweekly basis, and why are they building dozens of nuclear plants for the same purpose? It's because they know that for maintaining their heavy industrial raw material and manufacturing industries unreliable, intermittent power plants cannot be used and battery storage cannot be engineered to supply the needed continuous heavy industrial loads.

The popularization of science gives cover to many journalists, who simply don't know what they're talking about, to rely on a recent neologism known as "settled science," which is an oxymoronic contradiction in terms. It would be more realistic to speak of "settled engineering," but that would require quite a bit of physics, chemistry, metallurgy, and mathematics to comprehend. Be aware that once an engineering design is completed, erected, and operational a great deal of time and money has been expended and any changes can only be made at the margin without having to scrap the operation. This is why so-called “disruptive technologies” don’t matter to existing basic and critical metals operations nearly as much as getting settled engineering to work efficiently. This, in fact, was one of the reasons that Molycorp failed financially. The engineering of chemistry, for example, that allows the mass production of iron, steel, aluminum and copper has been essentially the same for nearly a century and a half. The engineering of the production of the raw materials to manufacture rare earth permanent magnets was “settled” a half-century ago when the magnets and the demand for them became large enough to require commercialization.

I do not consider someone to be dumb because they don’t know or even know of the second law of thermodynamics. I don’t consider them dumb if they know of the law but don’t understand its applications to the mining, ore beneficiation, extraction, separation, purification, transformation into metals and alloys, and the fabrication from those metals and alloys of forms suitable for the manufacturing of consumer and military goods; I do, however, consider those who ignore the needs for and types of energy production required for each and every one of the aforementioned steps in the supply chain just detailed here, but pontificate upon green energy anyway, as if the need for fossil/nuclear fueled baseload wasn’t a consideration, as dumb.

Every step in the production of a metal from its ores is an application that produces negative entropy. This means that the forms in which we find every natural resource on the earth, both fuel and nonfuel minerals is, when found, already in its natural, highest energy, state for its environment. In order to change that state into one in which we can use the materials requires that we temporarily alter the natural state of the resource by chemically and electrochemically rearranging its energy status and therefore making it metastable in our environment but useful in human terms.

Let’s look at the production of steel, the most produced metal (annually) on the planet for the past 150 years, which is, in fact, an alloy of iron.

In its natural state on and near the surface of the earth iron occurs as fully oxidized chemical compounds, the highest energy form of iron that the earth’s crust, oceans, and atmosphere allow to be stable at STP (standard temperature and pressure).

For each chemical element, there is only one total energy path that can be taken to put it temporarily into its lowest energy form as a pure chemical element at STP. To achieve that path chemical, metallurgical, and mechanical engineers must cooperate and always compromise with nature’s rules.

For the use of iron, and every other chemical element, that path begins with economic considerations: How much iron, proportionately, and measured as metal, at STP, is in the mineral chosen for its entry into the steel supply chain? The higher the iron content (grade) the less overall energy will be required to convert it to a metallic form. Simultaneously it must be determined how much tonnage of iron bearing mineral of this grade is in the deposit (This is known as the “resource” in mining jargon).

Miners then determine by a Techno Economic Analysis (TEA) (An academic acronym for figuring out if something can be done economically with known technologies) whether developing the deposit into a mine is feasible (I.e., is a profitable venture) in the (mining) near term.

To do a TEA miners must consider not just the amount of iron that can be produced annually but also the projected “life of the mine,” which is a measure of the total amount of iron that can be economically recovered from the project over time. This is measured as how long the mine can produce sufficient output annually to be profitable.

Whether an iron ore deposit can be economically turned into a mine depends not only upon the grade and total tonnage but upon its accessibility and amenability to the machines needed to dig out the ore, the chemical engineering necessary to beneficiate (concentrate) the ore to as high an iron content as possible, and the chemical engineering necessary to process the ore concentrate into crude metallic iron.

With the last step (there are many more) mentioned above comes a dilemma for the Green Elite Environmentalists (GEEs). The conversion of iron ore to pig iron requires a large amount of continuous heat energy. For a blast furnace, the type typically used to reduce iron ore to crude metallic iron, this heat can be supplied by the combustion of coal or natural gas or by electricity. In all cases, the heating must be constant (uninterrupted). The idea of using wind or solar for this is ridiculous. It gets even more ridiculous when the next stage, the conversion of iron into steel is examined. In the USA today 70% of steel is produced by Electric Arc Furnaces using scrap. The arc in those furnaces is maintained at 10,000 to 20,000 amperes, for sometimes more than a day. What solar, wind, or battery field, or any combination of them can supply this without massive costly (and pointless, economically, if alternatives are available) engineering

Thermodynamics requires that to produce a ton of steel requires 440 kwh of energy. Today in the United States that costs around $50.00.

As soon as the switch to alternate energy impacts the cost of baseload fuels and the price of electricity so much that even politicians can understand it the great unthinking public may realize that baseload electricity for air conditioning and water pumping is a small price to pay to adapt to any small increase in temperature, if it ever occurs. I doubt that any culture will allow a return to the thirteenth century BC, when steel was more valuable than gold.