## Reckless Decisions May Wreck the OEM Automotive Industry

written by Jack Lifton | January 6, 2023

A decision to support alternate non fossil fueled energy technologies, which has been made by ideologically driven politicians reacting to voter polls, flawed models and end-of-the-world enthusiasts is upending the world's largest manufacturing industry, <u>OEM automotive</u>, and the financializers taking advantage of the turmoil have thrown the retail commodity metals markets into chaos. This cannot end well.

Should we accept the incompetence of those who ignore foreseeable consequences and are "surprised" and call them unintended consequences? Expertise is not just detailed factual knowledge of a subject; it is also the ability to reason out the consequences of ignoring that factual knowledge when planning.

Thus, the global "reserve" of lithium is not the amount of lithium in the earth's crust (so-called "earth abundance, a measure of availability wrongly used by many academics). It is that amount of <u>lithium</u> accessible to us *economically* as defined by current and foreseeable exploration, environmental, and technological capabilities of the mining and refining industries, globally.

You may have noticed that as the necessity for lithium has increased so has its price. Yet, all we hear from the "experts" is that the cost of lithium-ion batteries must and will decline as their use scales upward. The experts tell us that the lithium price increase is only a temporary effect caused by a temporary imbalance between supply and demand. The price, the experts tell us, reflects the high cost of opening new lithium sources, but it, the price, they assure us, will sharply decline when the

supply meets the demand. The negative effect that this prediction has upon mining finance, and thus commodity production and supply, seems to have been overlooked by the "experts."

The Chinese domestic economy accounts for 82% of the production of lithium-ion batteries and 60% of the global processing of lithium for all purposes. The price of lithium is thus set by Chinese demand and supply. Mining finance is thus dependent on Chinese industry to value the target product and revenue from a lithium mine and refinery, but the Chinese economy is based on a detailed and well-articulated industrial policy, which prioritizes government goals through subsidies and cheap loans to targeted industries. Thus, Chinese lithium prices are not market-driven, so that dependence upon them for investment planning by non-Chinese institutional investors is extremely risky. It is the same for any commodity under Chinese control.

This year, 2023, we will be told by the experts that any reduction in the lithium price is proof of the rebalancing of supply and demand, but, in fact, it is more likely that it is a move away from lithium as an asset class by financializers souring on commodities and returning their complex trading to the traditional usual "experts traders." Chinese entities and their government are notoriously opaque about production levels, inventories and balance sheets. Mandarin fluent experts make their living by reading Chinese "official" statistics and speculating from those along with fantasizing what's in the minds of Chinese officials who plan and execute industrial policy without any interest whatsoever in the welfare of the non-Chinese world.

An oxymoronically named "Intelligence" group of self-described "analysts" has "studied" the situation and has now decreed that 300 new lithium mines will be needed to reach the EV production

goals set by (well-named) "green experts" for 2030. Perhaps these "expert analysts" know so little of natural resource economics, mining costs and the staffing of mining companies that they believe that this is possible. It is not. Existing mines have lifetimes. Their output declines with age. New discoveries take decades to bring into production and are limited to lifetime output declines. It will take an enormous outlay of capital to increase annual lithium production much beyond current outputs and an enormous amount of capital to maintain that output. Does this bode well for decreased lithium pricing?

A sharp decrease in lithium pricing will mean not that supply and demand have balanced due to increasing demand but that miners have determined that demand is peaking, or, worse yet, that future demand goals cannot be reached and so that further discovery and development is a waste of shareholder value (I think that ESG was devised and has been adopted by financiers to head off this very issue).

For American durable goods manufacturing companies facing deglobalization, regionalization, and even national re-focusing on supply chains the real question is: Can the EV and magnet industries be vertically integrated within the political unit in which they operate? I'll save the acne-challenged experts the trouble of studying this complex question. The answer is assuredly NO. As usual, the markets will determine who are the winners and losers. The US government, also, as usual, can be counted upon to make uninformed, anti-free market, and poor choices.