Jack Lifton on why President Biden's EV Plan for America simply does not add up

written by Jack Lifton | August 6, 2021

American President Biden has decreed that by 2030 one-half of all new American car/truck production shall be EVs. If 2030 is a 20 million car/truck build year this would mean that it would also be a 160,000 tons of lithium (10,000,000 x 16kg Li/car/truck =160,000 tons) utilization year in and for the USA just for batteries for those cars. **This is twice as much lithium as was produced globally in 2020.** China, of course, has already committed to producing that number of EVs in 2030, but, unlike the free market USA, it, China's industrial policy long-term planning has already accumulated 60% of current global lithium production and an even higher percentage of lithium processing capacity for battery materials. Although it is very likely that Chinese BEVs will be sold in the USA by 2030 it is very unlikely that domestic American lithium-ion battery makers will fare well in price or volume with their Chinese competitors.

The increasing costs of maintaining global lithium production even, if possible, at twice current levels and the decline of resource grades that is inevitable combined with the increasing proportion of lithium necessary for even a low percentage conversion of the existing global ICE fleet are the reasons that the world's largest EV battery maker, China's CATL, is developing a sodium-based rechargeable battery for mass production and use. It will be used for stationary storage especially in China where vast spaces and large populations are still off the grid and where China plans to use wind and solar to feed the grid during the day and will conserve precious

lithium by using sodium for stationary storage batteries to be able to maintain consumer electric power around the clock.

America's Global Environmental Elites (GEEs) do not understand China's long-term planning for the production of energy, its use, or distribution, so they cover their ignorance by simply declaring China to be the world's biggest "carbon" emitter, and ignore the reasons for China's long-term plan to reduce its dependence on fossil fuel energy production not to eliminate it! This ignorance is making America and the west increasingly unlikely to be able to compete industrially with China much longer.

The production of base, structural metals, such as iron(steel) and aluminum and the key technology metal, copper, require uninterrupted high-density baseload, which cannot be supplied by wind or solar even with battery storage. It is the same for heavy (cars, trucks, large scale machines) industrial manufacturing. The Chinese are now leading the world in these categories and in their maintaining and even increasing their baseload superiority. **Chinese electricity production is today twice that of the USA, and China alone produces 1/3 of the globe's electricity. This is not by chance.**

Nearly 10% of all of the electricity generated within China goes to the production of iron and steel, aluminum, and copper. To compete in volume production would require 20% of all of the power generated in the USA as well as a massive increase in mining. Economically, of course, this makes no sense. I note also that the Chinese steel industry produces enough steel each day and a half to build an entire American navy. Do we really want to decrease our capacity to make structural metals?

Be careful what you wish for.