



Cochilco: global lithium demand to surge in next decade

by Andrew Thompson

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What happened?

Global demand for lithium for battery-powered electric vehicles (EVs) will surge from around 75,000 tonnes in 2020 to 1.4mn tonnes in 2030, according to a report by Cochilco, Chile’s state-owned mining agency.

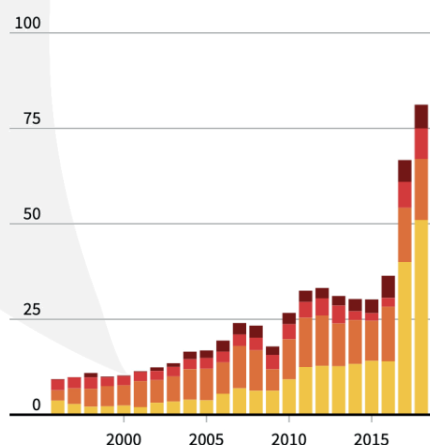
The details

At first glance this is great news for Chile. The country has the world’s largest lithium reserves, located mainly in the Atacama Desert. It has low extraction costs, and is the number two global producer, behind Australia and ahead of China. Cochilco also expects demand for other uses of lithium batteries such as mobile phones and other electronic devices to grow from 242,000 tonnes this year to 377,000t by the end of the decade. Lithium prices have been weak recently as new suppliers (including Brazil, Canada, the US and Zimbabwe) scramble to join the market and as the COVID-19 pandemic has hit short-term demand. What the report suggests is that despite all this the longer-term outlook is favourable for Chile with prices due to surge after 2025. If Joe Biden wins the US elections his promises to electrify US power as part of a “Green New Deal” might boost lithium demand even further. Even if Donald Trump is re-elected, the outlook global lithium demand is likely to remain encouraging.

PRODUCTION

In thousand tons

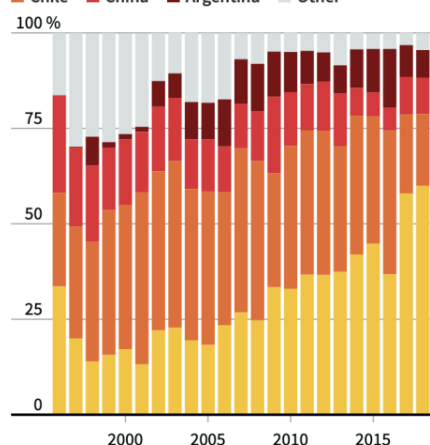
■ Australia ■ Chile ■ China ■ Argentina



TOP FOUR PRODUCERS

As a percentage of total world output

■ Australia ■ Chile ■ China ■ Argentina ■ Other



Source: US Geological Survey, Reuters

However, there are at least three reasons for caution. First, Chile has been slow to licence new lithium miners: only SQM and Albemarle are currently in production. SQM has delayed a major new investment project. This means that competitors such as the US and Argentina are set to seize market share. Cochilco thinks Chile's share of the global market will drop from 29% to 17% in the next decade. Second, the desire to move further up the value chain – from lithium mining to battery production – may be hard to fulfil. The more profitable parts of the value chain are already well developed in North Asia/China and in the United States, where Tesla has built its 'Gigafactory' in the Nevada desert. The economics of building batteries in Chile and then exporting them to EV production centres in the northern hemisphere will be problematic.

In third place the "green" credentials of Chilean lithium mining are open to question. Lithium is produced by pumping out brine from subterranean reservoirs under the Atacama, and baking it in the sun. Environmentalists say more brine is being pumped out than is being replaced from snow and rainfall in the Andes mountains. SQM says it uses about 47 litres of freshwater and brine to produce a kilogramme of lithium carbonate, which is more water-efficient than production is Australia. But local communities remain unconvinced and have challenged environmental permits.

What does it mean?

The underlying story is positive for Chile, an opportunity to diversify its largely copper based mining exports and take a stake in global renewable energy development. But the challenge will be to balance the pursuit of market share with environmental protection.

About the Author

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As well as being a Canning House Associate Fellow, Andrew is a former foreign correspondent (Buenos Aires, Mexico City, Rio de Janeiro) and a broadcaster for the BBC's Latin American Service. Working through La Rambla Research Ltd., he writes about economics, political risk, and business in Latin America.



These stories are also available on Andrew's blog site, [La Rambla Research](#).