

Bolivia charges up for lithium demand

Bolivia, among the poorest countries in South America, sits on one of the world's largest lithium reserves, beneath the vast *Salar de Uyuni* salt flat

LITHIUM: Can be mined from rock or, in this case, processed from *brine*

Wells: Lithium, dissolved in underground saline aquifers called "brines", pumped to surface

Pools: Brine moved to vast, shallow surface ponds to evaporate – leaving dry impurities behind



Whole process can take 18 months

Chemical plant: Sodium chloride, potassium chloride and magnesium chloride separated from mix to leave **99.5% pure lithium oxide** – industry standard for batteries

Lithium carbonate: \$10 per kg (approx.)

Salar de Uyuni
10,300km² (size of Jamaica)

Llapi lithium plant
eventual capacity:
15,000 tonnes per year

Uyuni

Lithium Triangle: Intersection of Chile, Bolivia and Argentina – known for high quality salt flats, including Salar de Uyuni, Chile's *Salar de Atacama* and Argentina's *Salar de Arizaro*. Contains over **75%** of known global lithium reserves

Issues: Salar receives more rain than counterparts in Argentina and Chile, which slows evaporation. Brine has four times magnesium content of Chile

USES: Electric cars raising need for li-on batteries

TOP PRODUCERS

Polymer production **5%** Air treatment **2%**
Lubricating greases **7%**

(tonnes, 2018)

Rechargeable batteries 46%

Ceramics/glass 27%

Australia	51,000
Chile	16,000
China	8,000
Argentina	6,200

Casting mould flux powders **4%** Other **9%**

Sources: Arab News, Reuters, National Geographic, Diálogo Chino, Investing News © GRAPHIC NEWS