



November 2019

# LITHIUM INDUSTRY PRIMER

## Why Lithium? Best Battery Technology



**Energy Dense**

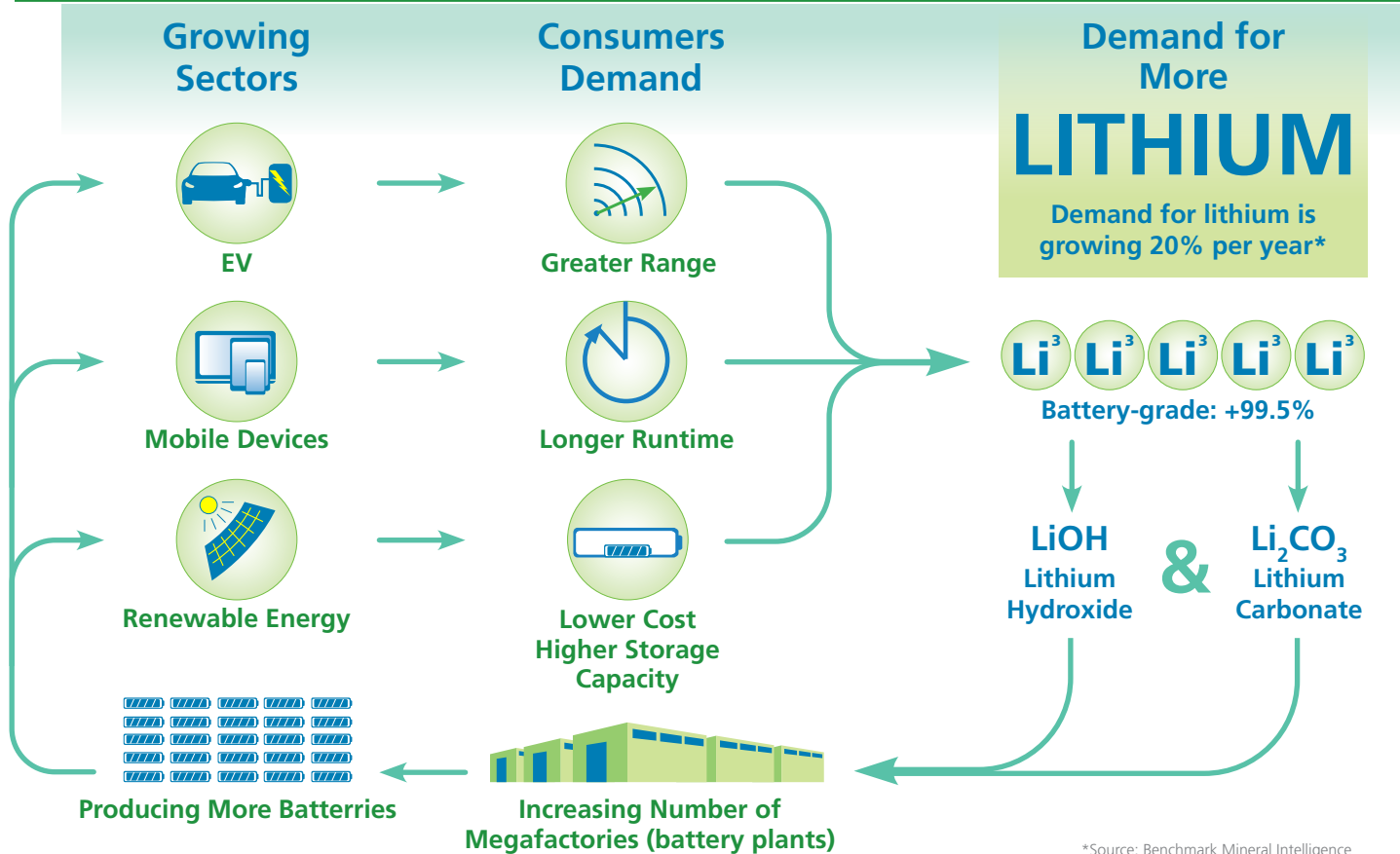
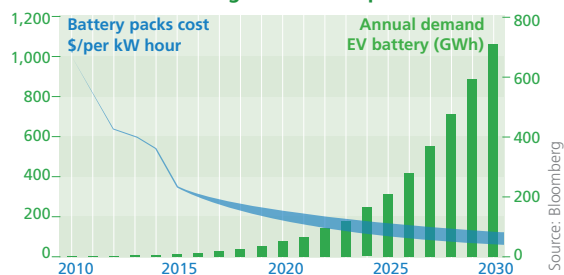


**Lightweight**

Lithium-ion batteries are essential in EV's, smart phones and battery storage systems as the world becomes greener.

### Lower Battery Costs = Mass Adoption

Since 2010, +80% reduction in cost per kWh, and with 25% of the cost of an electric vehicle (EV) being the battery, more affordable EV's will hit the market, leading to mass adoption.



\*Source: Benchmark Mineral Intelligence

# Supply

Lithium produced from brine deposits or hard rock deposits



## Hard Rock Deposits

- Lithium hard rock is mostly from spodumene deposits
- Majority of spodumene projects today produce a spodumene concentrate (target 6%  $\text{Li}_2\text{O}$ )
- Spodumene concentrate requires conversion to a cathode product (lithium hydroxide or lithium carbonate)
- Not climate dependent, depends on low cost power for conversion
- Lithium from hard rock deposits are cost competitive for lithium hydroxide compared to brine deposits

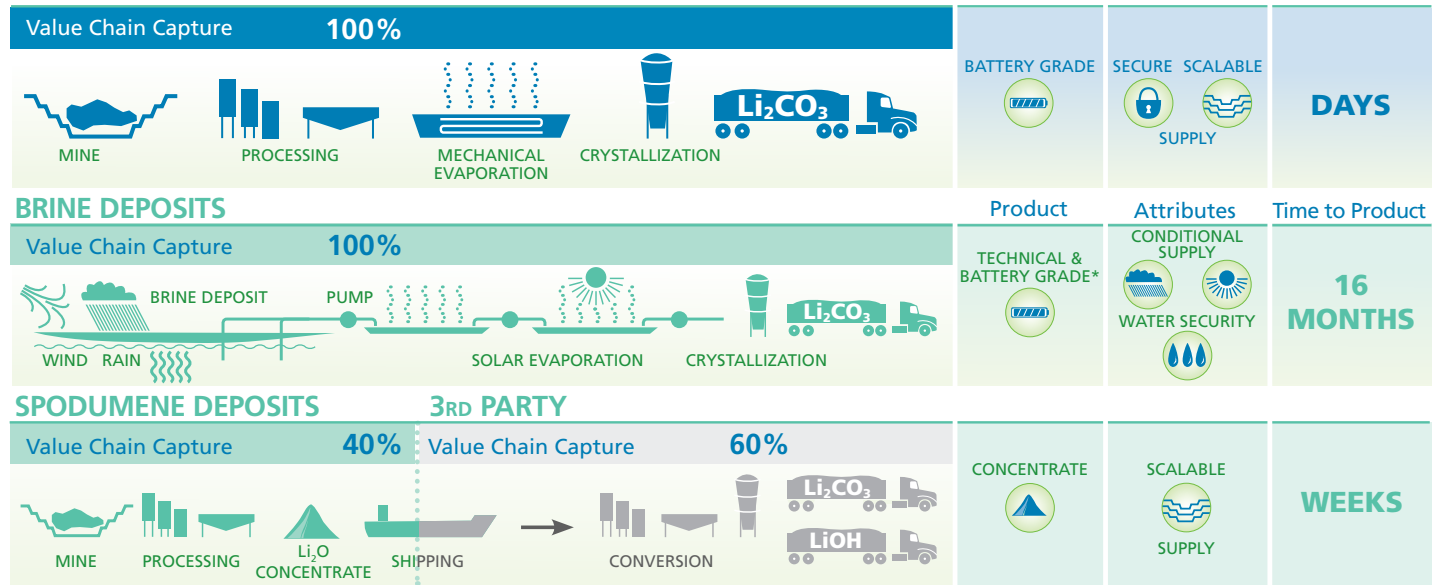


## Brine Deposits

- Brine deposits have been primary source of lithium production for years
- Easier to explore, challenging to predict grade due to depletion and aquifer recharge
- Less upfront capital
- Shorter timeline to initial production, but longer ramp-up to full production, long working capital cycle +16 months
- Climate dependent, requires solar concentration and dry climate

## Falchani's Lithium Project compares favourably to Spodumene and Brine Deposits\*\*

### FALCHANI LITHIUM PROJECT



\*Technical grade is <99.5  
\*\*For illustrative purposes only

# Plateau's Falchani Lithium Project

## Falchani meets all the keys to success

Hard rock from Falchani, a lithium-rich tuff, similar in ways to brine source rocks which have not been leached yet.



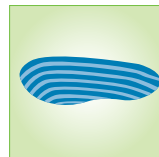
### Supply Security

Located in Peru, a mining supportive jurisdiction, with responsible industry practices



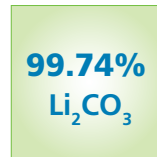
### Growth Potential

Resource estimate based on ~30% of target area<sup>1</sup>



### Development Potential

Amenable to open pit mining



### Quality

Potential for battery grade Lithium Carbonate 99.74% with low impurities<sup>2</sup>



### Infrastructure

Easy transport  
Low cost power

**As OEMs and mega-factories seek long-term, stable production sources of lithium, Plateau's Falchani project is strategically positioned.**