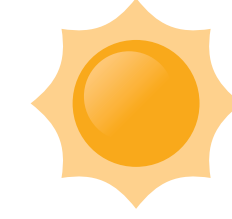
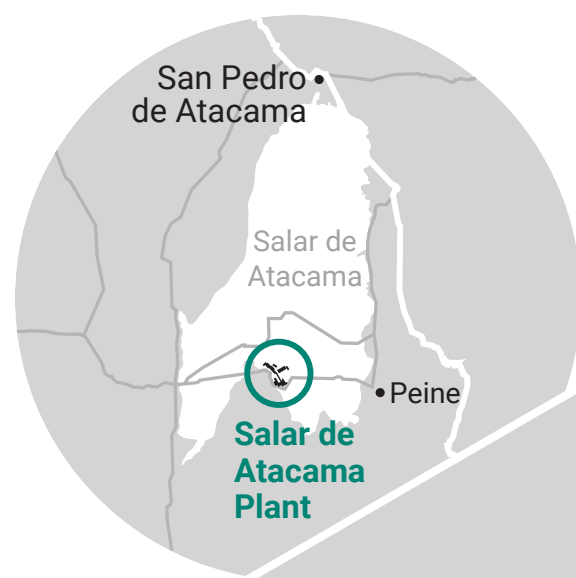


# SUSTAINABLE LITHIUM FOR THE WORLD

Albemarle is one of the world's leading lithium producers and strategic allies of Chile in the development of a high value-added industry and specialists in the delivery of chemical solutions to a wide range of customers.



## Solar energy

Solar energy accounts for **78% of Albemarle's total energy use**.

Solar energy is used to naturally concentrate the brine, and we use virtually no fresh water in the lithium production process.

The brine is **10 times saltier** than seawater.

We have a monitoring network of hydrological, hydrogeological, physicochemical and meteorological parameters with more than **150 points** that analyze the brine extraction flow in real time, which is reported to the authorities.

**40% of the workers at the the Salar Plant** belong to indigenous communities.



## Production Process: Salar de Atacama Plant

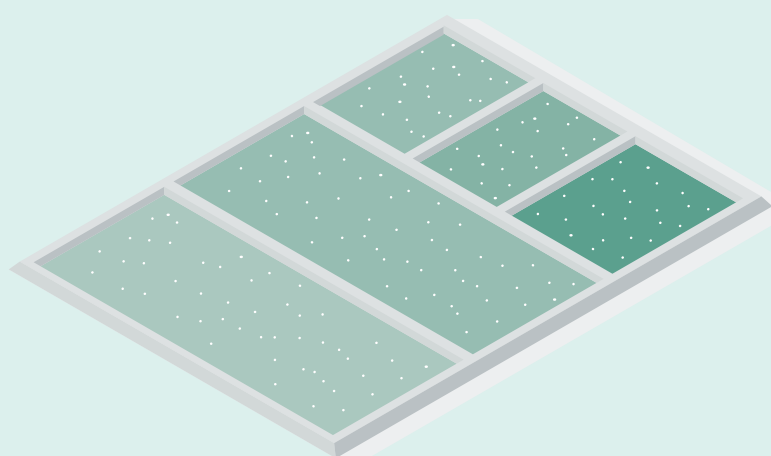
1

Extraction of natural brine from the Salar de Atacama with a concentration of **0.2% lithium**.



2

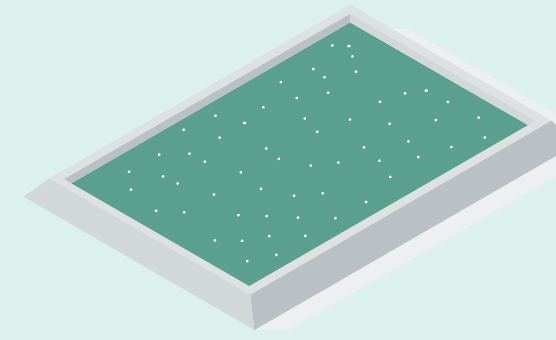
The brine is distributed in evaporation ponds to concentrate the lithium.



18 months

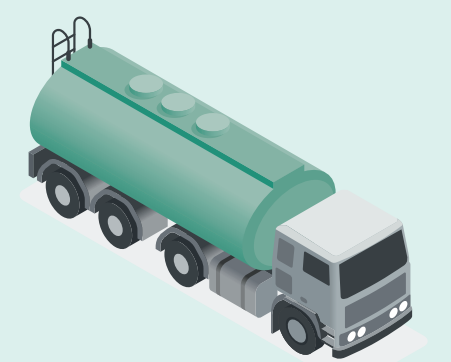
3

The brine is evaporated until it reaches a **concentration of approximately 6% of lithium**.



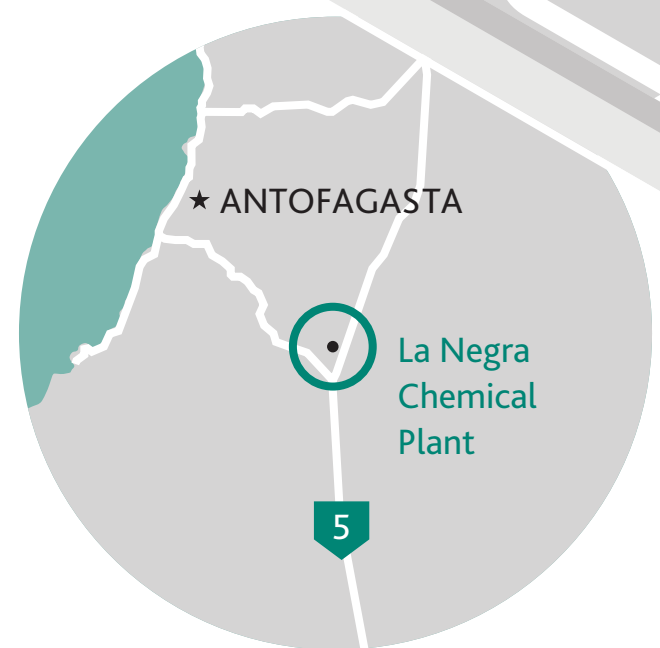
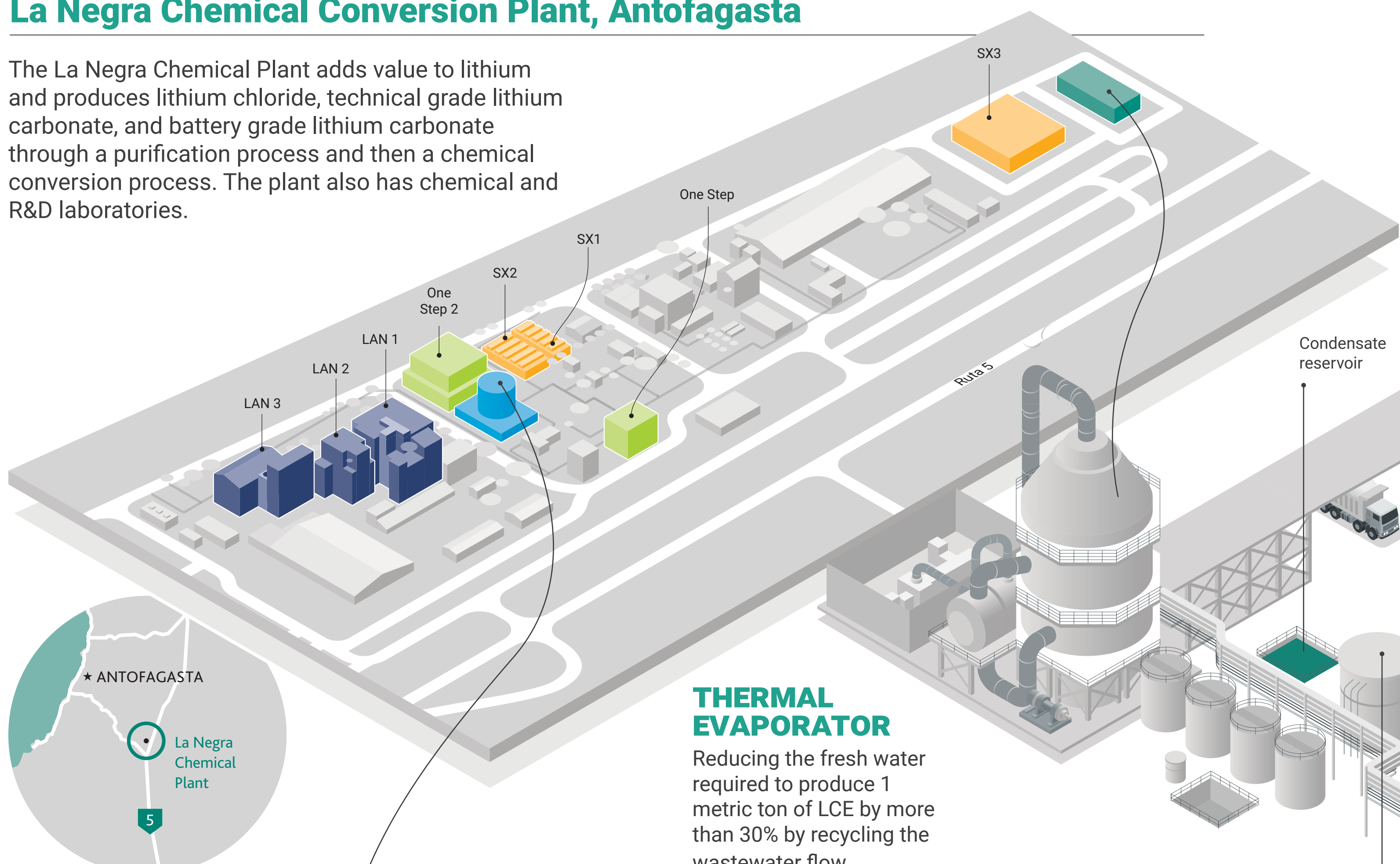
4

The brine travels to La Negra plant to be transformed into lithium carbonate and lithium chloride or derivatives.



## La Negra Chemical Conversion Plant, Antofagasta

The La Negra Chemical Plant adds value to lithium and produces lithium chloride, technical grade lithium carbonate, and battery grade lithium carbonate through a purification process and then a chemical conversion process. The plant also has chemical and R&D laboratories.



### THERMAL EVAPORATOR

Reducing the fresh water required to produce 1 metric ton of LCE by more than 30% by recycling the wastewater flow.

## Lithium in your life

Did you know that lithium is also in space satellites? There is a lot of lithium in our lives, from electric vehicles to medicines and technology such as cell phones.

- Automobiles**
  - Batteries
  - EV/HEV/PHEV
- Energy Efficiency**
  - Lithium batteries to store wind and/or solar energy.
- Electronics**
  - Phones/Pads
  - PCs
  - Tools
- Specialty glass**
  - Cooking stoves
  - Advanced Glass
  - Electronic cases
- Lubricants**
  - Machinery
- Automobiles**
  - Tires
  - Air bags
- Drugs**
  - HIV
  - High blood pressure
  - Mood disorders
- Health**
  - Vitamins
  - Zeolites
  - X-ray imaging
- Agriculture**
  - Fungicides
  - Herbicides

- SX** Removing boron from the concentrated brine.
- BORON REMOVAL** Removing boron from the waste water from SX1, 2 and 3 processes, to recycle it to the process.
- ONE STEP PLANT (one step)** Se remueve el magnesio y calcio de la salmuera refinada, además de diluir esta última.
- TWO STEP PLANT (two step)** Removing calcium and magnesium from the refined brine, in addition to diluting the brine.

- PLANTA ONE STEP 2 (one step 2)** Removing magnesium and calcium from the refined brine, in addition to diluting the brine.
- CRYSTALLIZATION** Obtaining lithium carbonate from the purified brine.
- THERMAL EVAPORATION** Condensate generation.
- PACKAGING AND DISTRIBUTION**

We invite you to learn more about lithium at [www.albemarlelitio.cl](http://www.albemarlelitio.cl)

