

# Lithium

## in Argentina



Ministerio de  
Desarrollo Productivo  
Argentina

Secretaría de Minería

**"There are so many opportunities that mining in Argentina offers, that in truth what I feel is that we have a huge challenge ahead. For a country that also needs to produce, grow and export, mining has a very relevant role. "**



**Alberto Fernández**  
President of the Nation



Our administration has a strong  
**Federal approach and an Active Policy of Integrated Productive Development**

**Integrated vision of inclusive and sustainable development:**

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- ▶ Local productive chains
- ▶ Endogenous territorial development
- ▶ Innovation and Knowledge Economy

**Transition to a Green Industrialization:**

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- ▶ Electromobility and Renewable Energies
- ▶ Sustainable Development of Natural Resources

Argentina is a Federal Republic,  
**the resources are of provincial domain**



Mining  
is a federal state  
policy



One of the  
biggest copper  
project  
portfolios  
to develop



Presence in  
the country  
of the world's  
main gold and silver  
producers



One of the main  
exploration  
destination  
4th Producer  
3rd World  
lithium reservation



# Argentina is a Federal Republic, the resources are of provincial domain

	Federal Government	Provinces
Natural Resources (mineral deposit inclusive)	✗	✓
Mining Code	✓	✗
Mining Concession and Permits	✗	✓
Mining Investment Law	✓	✗
Environmental Regulations	✓	✓

## The Argentine Republic is organized:

1 Federal Government

23 Provinces and  
1 Autonomous City

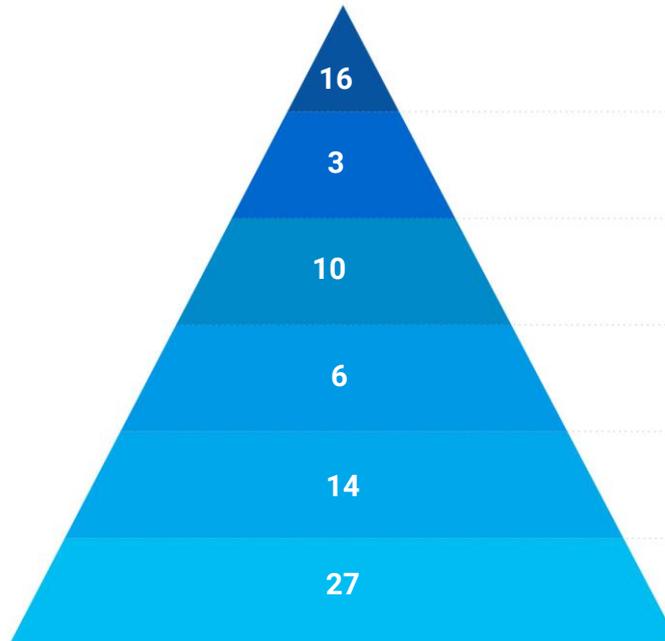
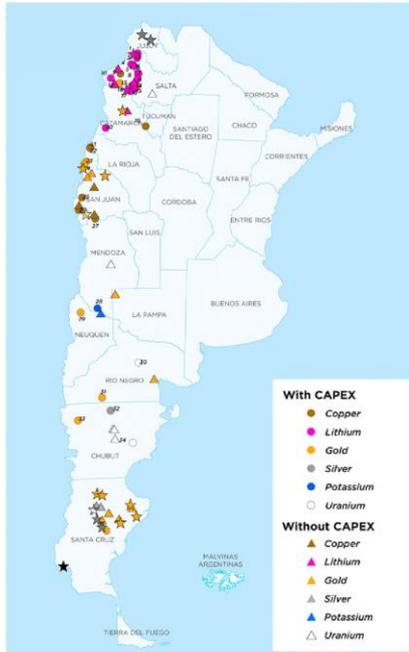
+2000 Municipality



# Argentina

## Mining Operations Li Cu Au Ag K U Fe C

### Advanced Projects Map



**Production**

**Construction**

**Feasibility**

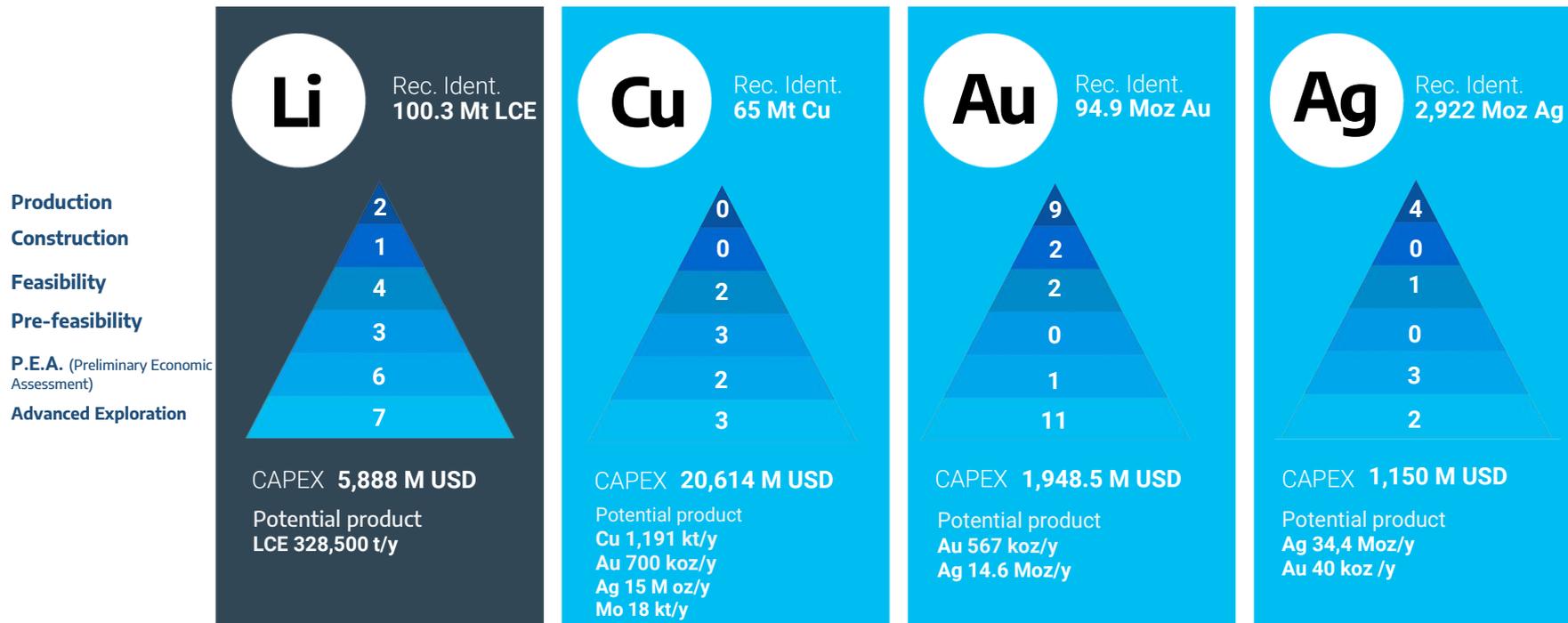
**Pre-feasibility**

**P.E.A.**  
(Preliminary Economic Assessment)

**Advanced Exploration**

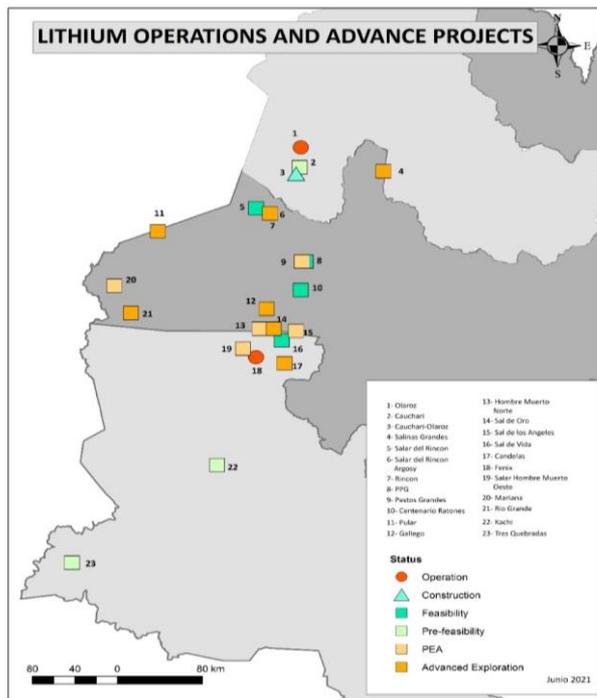
# Argentina

## Advanced projects



# Advanced Lithium Operations and Projects

## 21 Advanced projects and 2 operations



**Production**

2

Olaroz (Expansion underway)  
Fénix (Expansion underway)

**Construction**

1

Cauchari-Olaroz

**Feasibility**

4

Centenario Ratonés  
Pastos Grandes  
Sal de Vida  
Salar del Rincón

**Pre-feasibility**

3

Cauchari  
Kachi  
Tres Quebradas

**P.E.A.**

6

Mariana – PPG – Sal de los Ángeles – Salar del Hombre Muerto Norte – Salar del Hombre Muerto Oeste – Salar del Rincón – Argosy

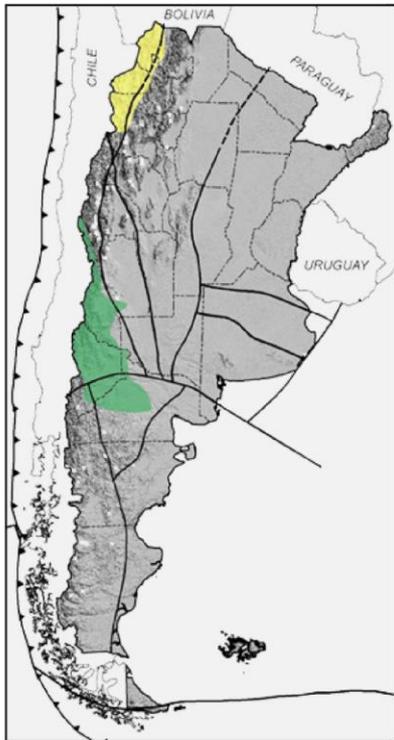
**Advanced Exploration**

7

Gallego – Pular – Rincón – Río Grande  
Sal de Oro – Salinas Grandes – Candelas

# Context. Geological Potential

## Lithium



### IDENTIFIED RESOURCES

100.3 M Tons

**23 projects**  
The 10 of largest scale  
account for 83% of the  
identified resources

### GEOLOGICAL POTENTIAL

188 M Tons

#### PROJECTS

Cauchari-Olaroz  
Salar de Centenario-Ratones  
Sal de los Ángeles  
Sal de Vida  
Salar del Rincón  
Pastos Grandes  
Tres Quebradas  
Sal de Oro  
Salar del Rincón (PM)  
Kachi  
Pozuelos  
Cauchari  
Mariana  
Salar del Hombre Muerto Norte  
Salar del Hombre Muerto Oeste

Additional Productive Potential \*

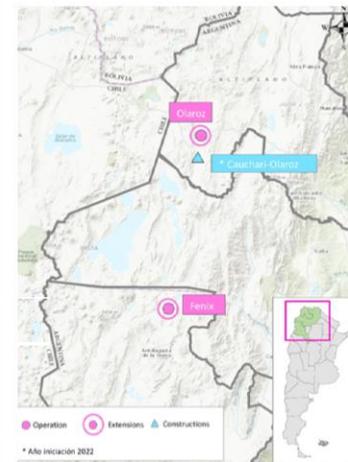
LCE  
328,500  
t/y

\*15 Projects



# Current Extensions, Constructions and Mining Operations in Argentina

	Project / Mining Operation	Holding Company	Location	Capacity (Tn/year LCE)
<i>Operations</i>	Mina Fénix	Livent Corporation	Salar del Hombre Muerto, Catamarca	20,000
	Salar de Olaroz	Orocobre   Toyota Tsusho   JEMSE	Susques, Jujuy	17,500
				<b>37,500</b>
<i>Extensions</i>	Mina Fénix	Livent Corporation	Salar del Hombre Muerto, Catamarca	20,000
	Salar de Olaroz	Orocobre   Toyota Tsusho   JEMSE	Susques, Jujuy	25,000
				<b>45,000</b>
<i>Construction</i>	Caucharí-Olaroz	Jiangxi Ganfeng Lithium Co., Ltd.   Lithium Americas Corp   JEMSE	Jujuy	40,000
				<b>40,000</b>



Total Ampliaciones  
**45,000**

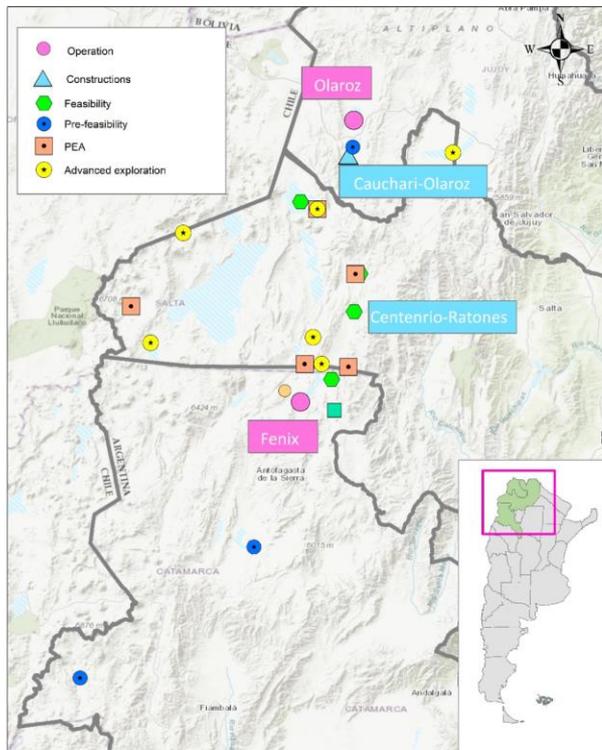
Total Construcciones  
**40,000**

Total  
**85,000**



# Argentina

## Advanced projects

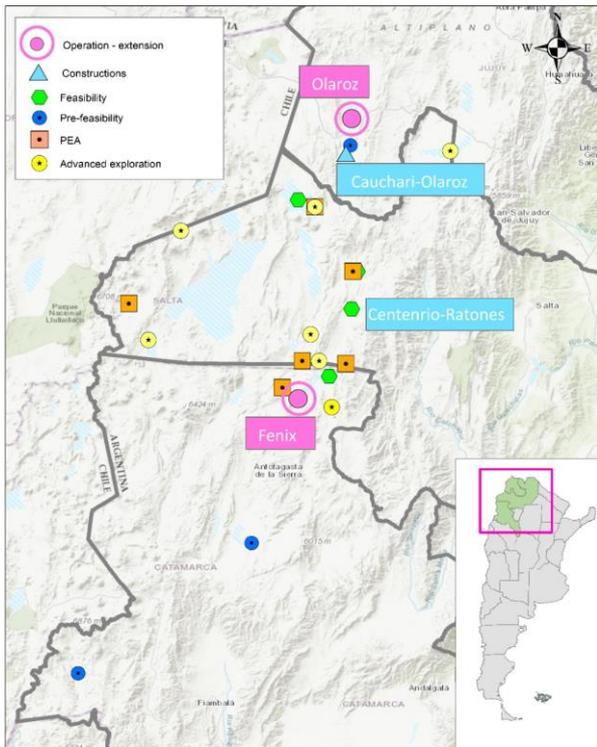


Project / Mining Operation	Current Status	Holding Company	Location	Capacity (Tn/year LCE)
Centenario-Ratones	Feasibility	Eramet	Salta	24,000
Pastos Grandes	Feasibility	Millennial Lithium Corp.	Salta	24,000
Salar del Rincón	Feasibility	Rincon Ltd	Salta	25,000
Sal de Vida	Feasibility	Galaxy Resources Ltd	Catamarca	25,000
Cauchari	Pre-feasibility	Orocobre Limited Pty Ltd.	Jujuy	25,000
Kachi	Pre-feasibility	Lake Resources	Catamarca	25,500
Tres Quebradas	Pre-feasibility	Neo Lithium Ltd.	Catamarca	20,000
Mariana	P.E.A.	Jiangxi Ganfeng Lithium Co., Ltd. 82,75%   International Lithium Corp. 17,25%	Salta	10,000
PPG	P.E.A.	PLUS PETROL	Salta	25,000
Sal de Los Ángeles	P.E.A.	Tibet Summit	Salta	25,000
Salar del Hombre Muerto Norte	P.E.A.	NRG Metals Inc.	Salta	5,000
Salar del Rincón - Argosy	P.E.A.	Argosy Minerals	Salta	10,000
Hombre Muerto Oeste	P.E.A.	Galan Lithium Limited	Catamarca	20,000
Sal de Oro	Advanced Exploration	Posco	Salta	25,000
Pular	Advanced Exploration	Pepinnini Lithium Limited	Salta	-
Rincón	Advanced Exploration	Pepinnini Lithium Limited	Salta	-
Río Grande	Advanced Exploration	PLUS PETROL	Salta	-
Gallego	Advanced Exploration	Everlight Resources	Salta	-
Salinas Grandes	Advanced Exploration	PLUS PETROL	Jujuy	-
Candelas	Advanced Exploration	Galan Lithium Limited	Catamarca	-



# Projects in initial exploration

## 36 Projets - 5 Provinces - 15 Salt Flats - 5 Pegmatitic Districts

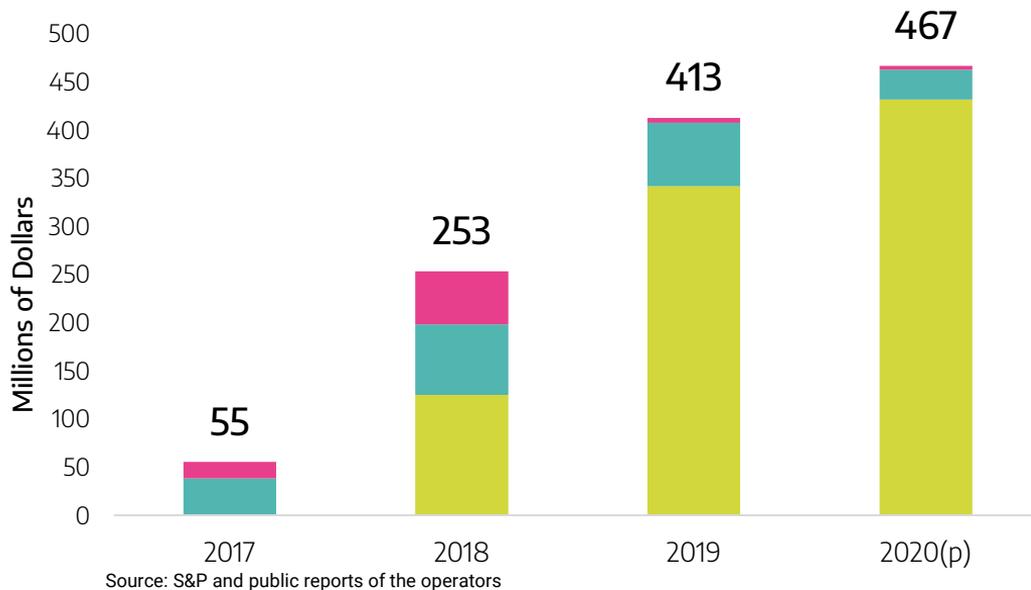


Project	Province	Salt flat Name/ Pegmatitic District
1. Salar de Diablillos	Catamarca	Salar de Diablillos
2. Antofalla	Catamarca	Salar de Antofalla
3. Salar Escondido	Catamarca	Salar Carachi- Pampa
1. Guayatayoc	Jujuy	Laguna Guayatayoc
2. Mina Teresa	Jujuy	Salinas Grandes
3. San José	Jujuy	Salinas Grandes
4. Navidad	Jujuy	Salinas Grandes
5. Olaroz/Cauchari	Jujuy	Salar de Olaroz-Cauchari
6. Paso	Jujuy	Salar de Jama
7. Jama	Jujuy	Salar de Jama
8. Salinas Grandes AdY	Jujuy	Salinas Grandes
9. Guayatayoc	Jujuy	Laguna Guayatayoc
10. Olaroz Minera Santa Rita	Jujuy	Salar de Olaroz
11. Cauchari de Pastos Grandes SA	Jujuy	Salar de Cauchari
1. Guadalquivir	Salta	Salar Rio Grande
2. Pocitos	Salta	Salar de Pocitos
3. Rio Grande	Salta	Salar Rio Grande
4. Centenario	Salta	Salar Centenario
5. Stella Maris	Salta	Salinas Grandes
6. Cauchari Sur	Salta	Salar de Cauchari
7. Cruz	Salta	Salar de Pocitos
8. Salar de Arizaro Brine	Salta	Salar de Arizaro
9. Arizaro	Salta	Salar de Arizaro
10. Salar de Arizaro	Salta	Salar de Arizaro
11. Salar de Arizaro 2	Salta	Salar de Arizaro
12. Tolillar	Salta	Salar Tolillar
13. Salar de Incahuasi	Salta	Salar de Incahuasi
14. Arizaro	Salta	Salar de Arizaro
15. Terra Cotta/Salar de Pocitos	Salta	Salar de Pocitos
16. Salar Tolillar ADY	Salta	Salar Rio Grande
El Quemado	Salta	Districto Pegmatítico El Quemado
Catamarca	Catamarca	Districto Pegmatítico Ancasti
Vilisman - Ancasti	Catamarca	Districto Pegmatítico Ancasti
Mina Las Cuevas	San Luis	Districto Pegmatítico Conlara
La Estanzuela - Conlara	San Luis	Districtos Pegmatíticos La Estanzuela y Conlara
Mina Las Tapias	Córdoba	Districto Pegmatítico Altautina/ Las Tapias



# Current situation and growth of Investments in the Lithium sector

## Accumulated investments 2017-2020: US \$ 1,188 millions



### Construction / Extension

The extensions and constructions mean important purchases of local goods and services.

### Exploration

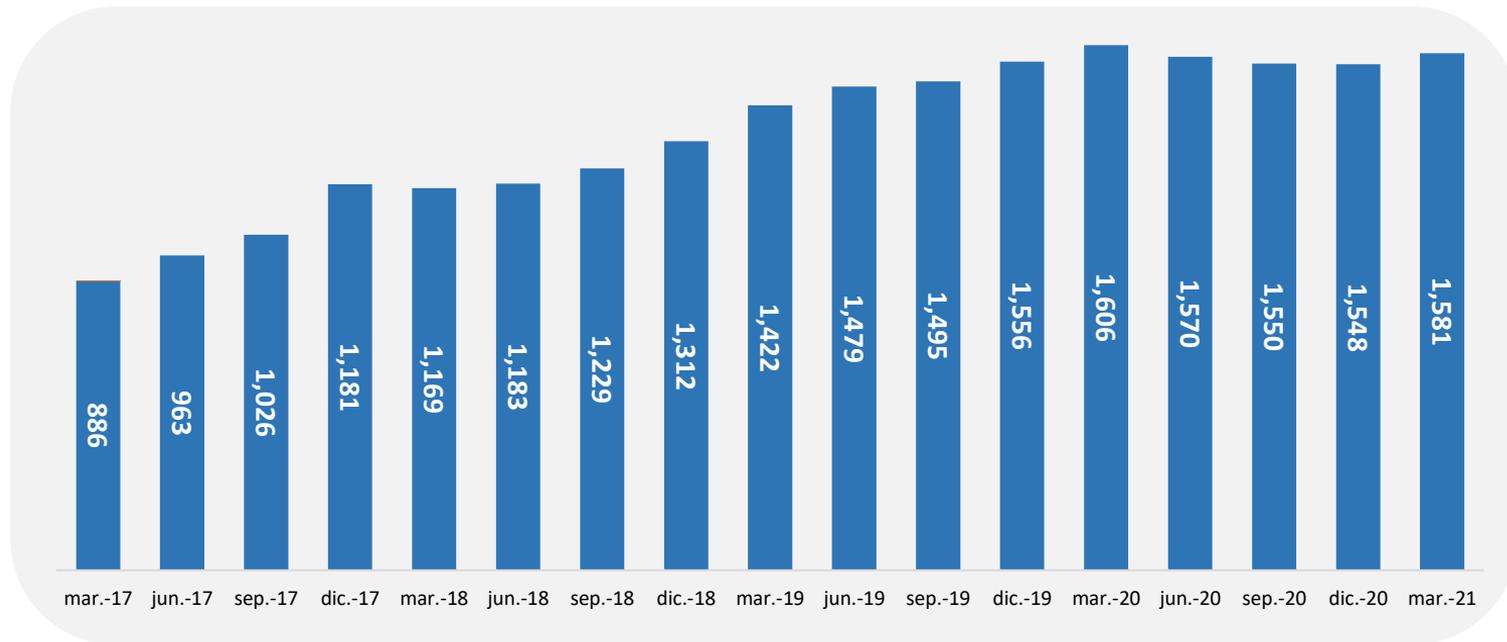
Argentina was the 1st global destination in exploration budgets for the last 2 years.

### Sustaining

Investments in support increase as operations mature.



# Current situation and growth of Employment in the Lithium sector



Source: Directorate of Transparent and Mining Information based data from SIPA (pension system).  
Indirect employment includes contractors and suppliers and is estimated here as 2 employees for each direct



# Growth path of the Lithium Exports in Argentina

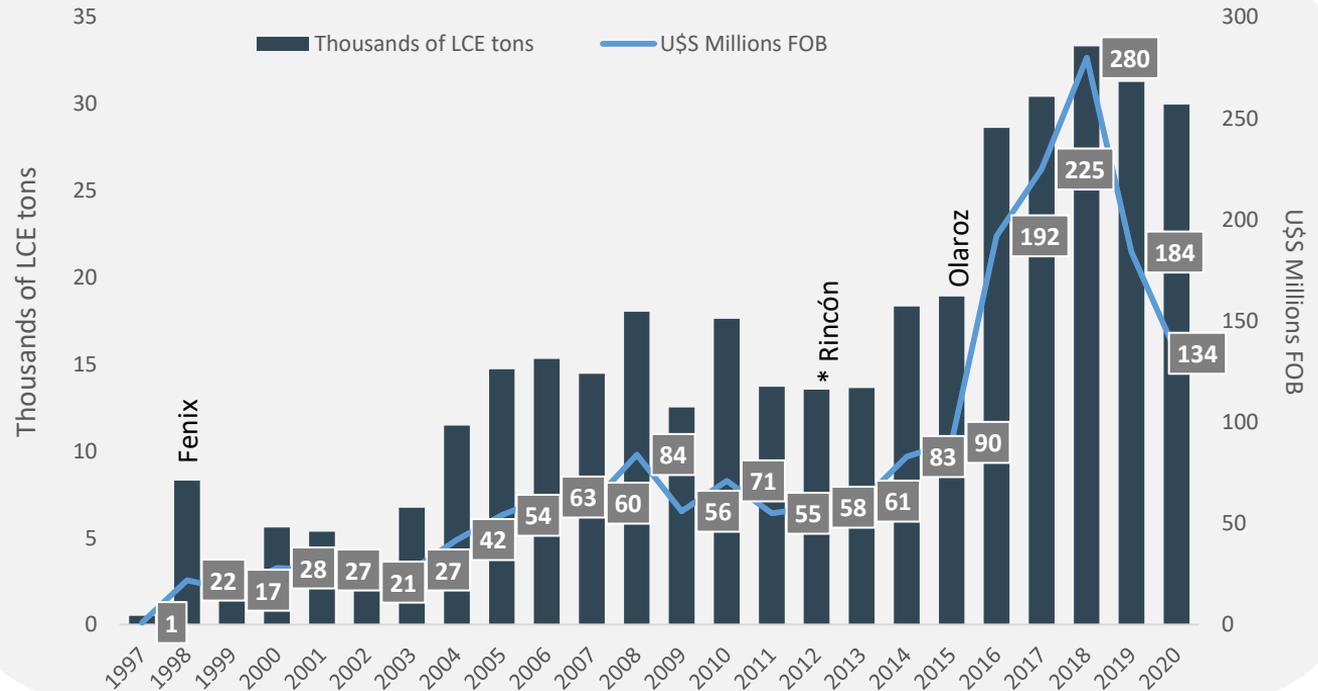
## Accumulated Exports

262

Thousands of LCE Tons

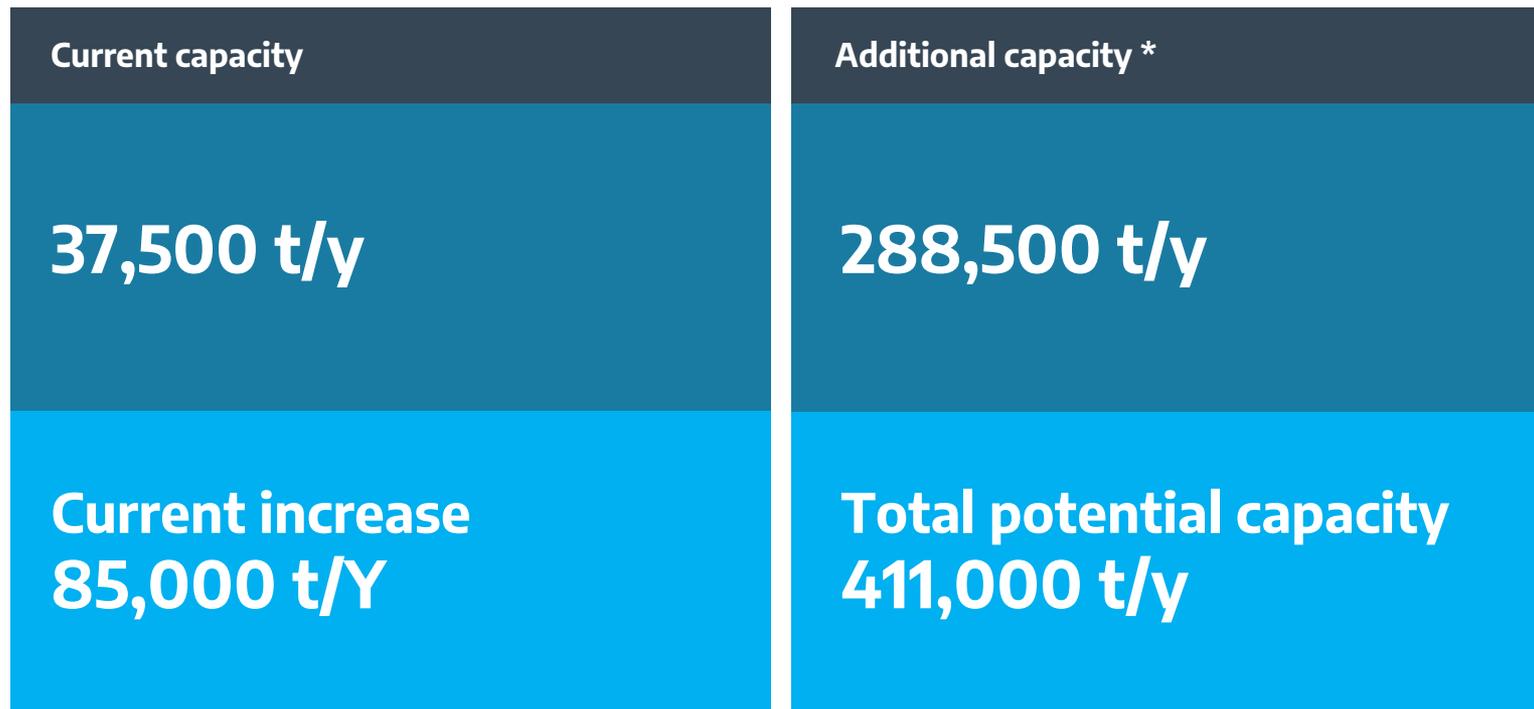
1,489

US\$ Millions FOB



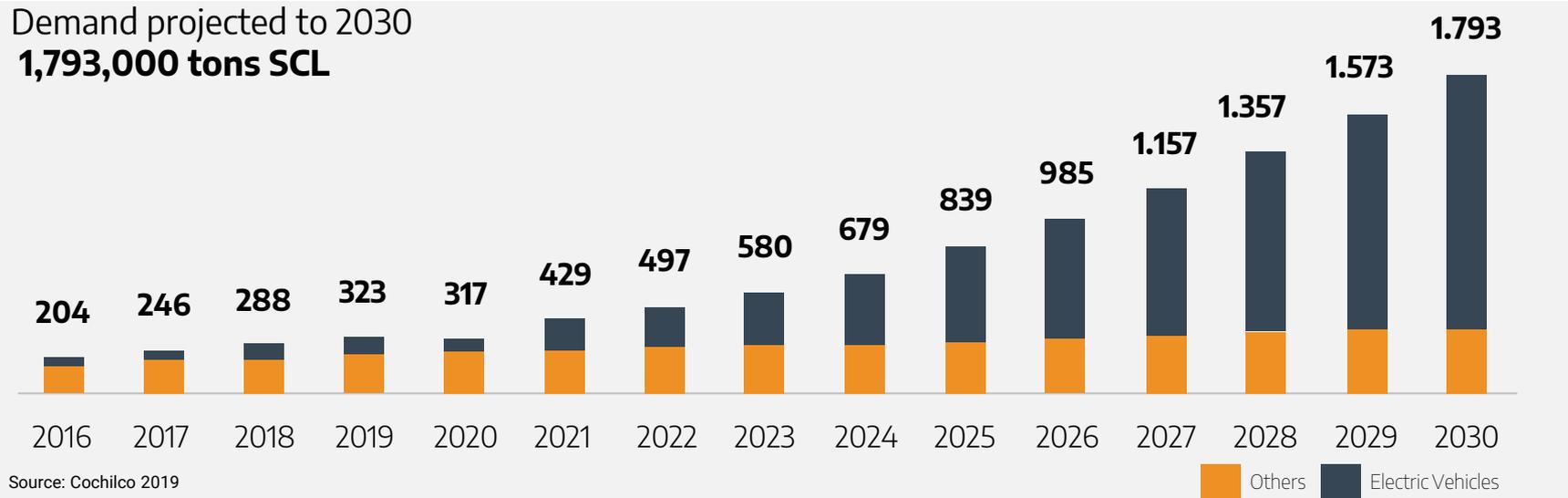
Source: Directorate of Transparent and Mining Information based data from INDEC

# Future projection of Argentina's global lithium position



# Projection according to current **Lithium demand**

Demand projected to 2030  
**1,793,000 tons SCL**



**Current lithium**  
Production and exportation

**2020 Production**

**31,125 Tons**  
(lithium carbonate + lithium chloride)

**Exports (FOB)**

**USD 134 million**



## Assets of the **XXI Century Argentinian Mining Industry**

Demand projections estimate that by **2030**, almost **80% of lithium demand** will be destined for the **electromobility industry**.

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Lithium mining contributes to **technological development**, the **development of electromobility** and **energy transition**.

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The political decision of the national and provincial governments is to take advantage of this opportunity offered by the international scene in order to **encourage investments, increase production, develop communities** and **generate employment opportunities strengthening the mining value chain**.



# Thank you

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