

# SAVANNAH

ENABLING EUROPE'S ENERGY TRANSITION

AN OPPORTUNITY FOR PORTUGAL IN EUROPE'S  
NEW LITHIUM BATTERY VALUE CHAIN



# Europe needs lithium to tackle climate change

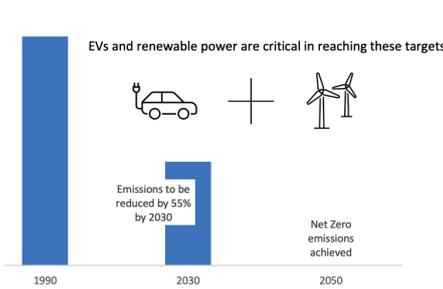
The world must address the challenge of limiting climate change by creating net zero carbon economies using innovation and technology to transition away from consumption of fossil fuels.

On its way to a net-zero economy by 2050, The European Commission is targeting a 55% reduction in total greenhouse gas emissions by 2030 vs. 1990 levels.

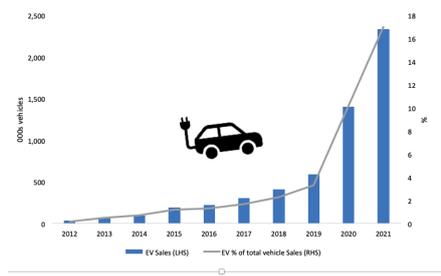
To achieve this goal, the production and sale of millions of low/zero emission electric vehicles (EVs) and the provision and storage of greater amounts of power from renewable sources will be key.



## The European Commission's climate goals

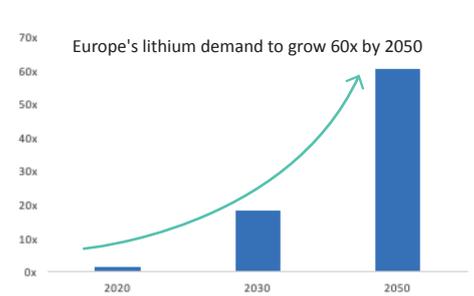


## Europe is the world's 2nd largest EV market already



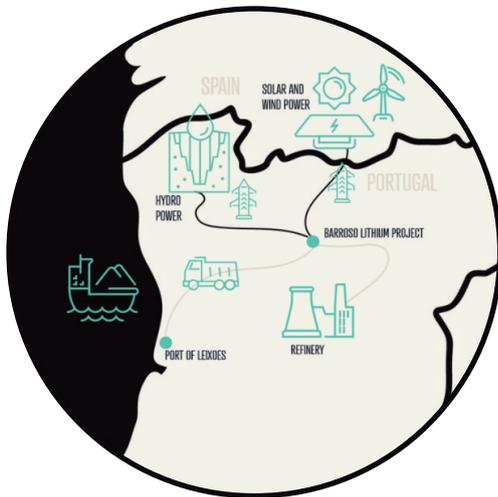
Source: European Commission, ev-volumes.com

## European lithium demand growth



# The Barroso Lithium Project and the Lithium industry in Portugal

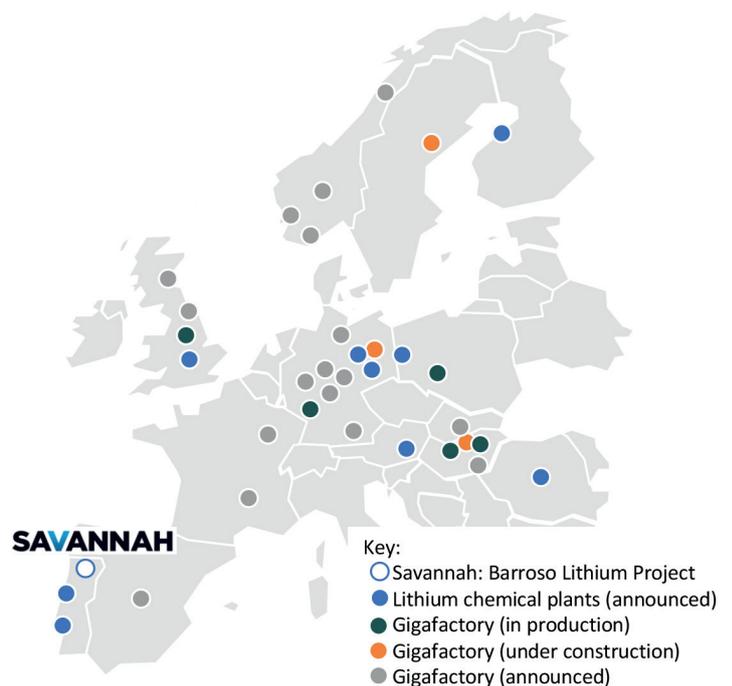
## The Barroso Lithium Project is ideally placed to supply lithium to Portuguese and other European customers



The Project will generate enough lithium for approximately 0.5 million EV battery packs per year.

The lithium value chain is being established across Europe and is already starting to grow in Portugal itself. In December 2021 two Portuguese lithium chemical projects were announced.

## The Lithium Value Chain in Europe



Some locations are indicative  
Source: Public filings

## Savannah's role in Europe's rapidly growing lithium & EV market

Savannah's Barroso Lithium Project represents a big opportunity for Portugal to play a key part in Europe's lithium value chain. It is the most significant deposit of spodumene lithium in Western Europe.



# Responsible operation – environmental stewardship

- Savannah is committed to responsible operation of the Barroso Lithium Project so that the maximum environmental benefit can be derived from the lithium raw material it produces once it is deployed in lithium-ion batteries. We are committed to being a national and international reference point in this industry.
- In 2020 Savannah submitted an Environmental Impact Assessment ('EIA') to the Portuguese regulator which featured 238 measures to eliminate, mitigate or minimise the impact of the operation.
- The EIA passed through the public consultation phase in 2021 and Savannah is hopeful that the EIA will be approved by the regulator during 2022.
- The Mitigating measures designed cover a wide range of environmental considerations.

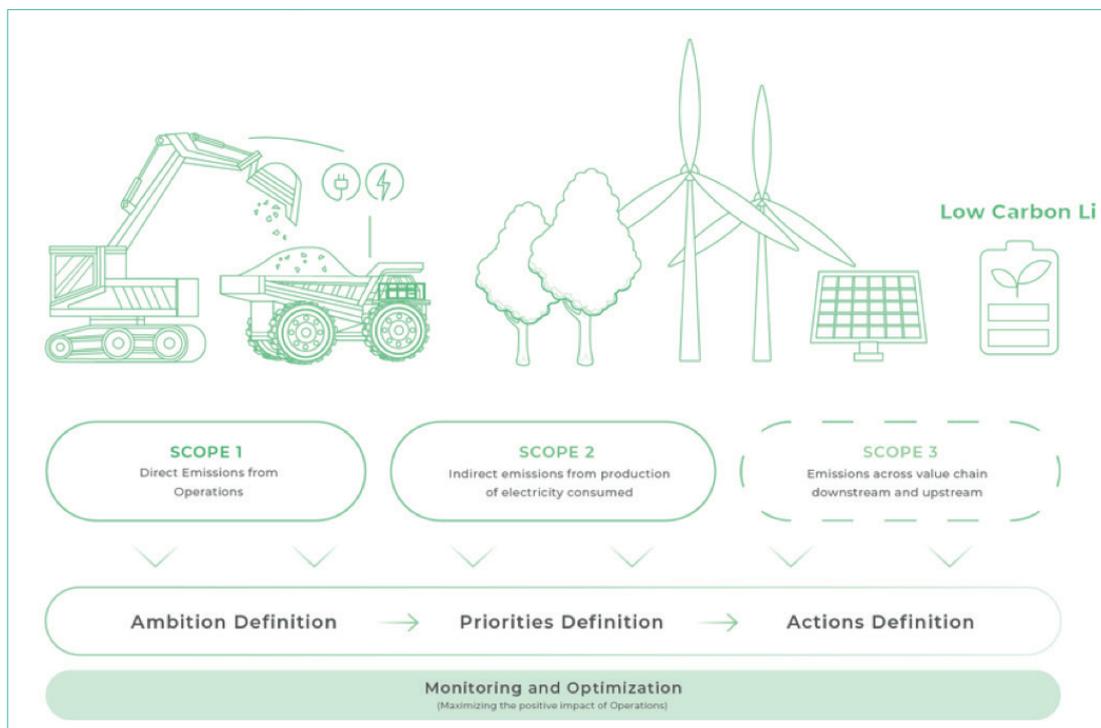
- **Positive Climate action:** Savannah's lithium could help to remove 100Mt of CO<sub>2</sub> from the EU's transport sector
- **Impact mitigation:** 238 individual mitigating measures contained in the EIA to eliminate, mitigate or minimise impacts
- **Carbon abatement:** Project Decarbonisation strategy initiated
- **Water usage:** Project to be self-sufficient through on-site water harvesting and storage, & wastewater recycling
- **Waste Management:** Actively minimised through sale of multiple products; dry waste storage & no tailings dam
- **Land Rehabilitation:** Comprehensive rehab during and after operating phase
- **Biodiversity:** Active management to monitor, protect and encourage
- **Smart design:** Impact of transport, noise & light pollution minimised
- **Real time monitoring and public reporting of environmental KPIs**

One of our project innovations, which technology has allowed us to develop, is the installation of a network of sensors in the concession area to permanently monitor parameters such as noise, and air and water quality. An App with real-time information about our operations will be available for consultation by all stakeholders.

## **And Savannah is focused on decarbonisation too...**

Savannah estimates that the lithium it will produce could help to remove 100Mt of emissions (CO<sub>2</sub> equivalent) from the European transport sector when operating in EVs.

Savannah has also committed itself to moving towards net zero emissions for Scope 1 and 2 over the life of the Project through measures including the use of renewable energy and a zero/low emission mining vehicle fleet.



# Sharing the economic & social benefits further

The Project would represent a big investment in the Barroso region and a big opportunity for numerous local stakeholders including communities, businesses, and local authorities.

**€34.5m**

invested in the Project to date

**€110m**

minimum further investment

**300+**

construction jobs created

**200+**

direct jobs created

**500-600**

indirect jobs created

The Project will generate significant tax and royalty revenues for the local authorities but Savannah would like to share the Project's social and economic benefits with local community members and groups too. We would have a special focus on valuing local traditions and values.

Our 'Sharing' and stakeholder engagement programmes have been underway since we first became involved with the Project in 2017 - supporting local firefighters, sponsoring local teams and events, and paying for repairs to homes in the local villages.

In collaboration with local stakeholders, we will create a tailored Benefit Sharing Plan which will formalise our commitments to the local community across such areas as education & training, infrastructure (energy & communications), support for local businesses and agriculture, health, and leisure activities.

At the heart of this commitment will be a foundation which will receive €0.5m per annum from the Project which can be put towards community-beneficial projects as selected by community representatives.



The Barroso project will act as a major income generator for municipalities through taxes and royalties



Committed to community programs such as the Benefit Sharing Plan and other active community engagement initiatives



The Barroso Lithium Project will preferentially source from local suppliers, which could also create hundreds of additional indirect jobs



The Barroso Lithium Project will be a catalyst to reverse the depopulation trend in the area



Land in the project area will be handed over to the community to use after the completion of the operation



When lithium production is achieved at the Barroso Lithium Project, Portugal will be placed at the centre of the new European lithium battery supply chain which the European Commission is so keen to establish as part of its efforts to combat climate change



Savannah hopes to receive the regulator's decision on its EIA in 2022. Savannah is looking forward to being able to make a final investment decision in 2023, and potentially moving into the construction phase in 2024 with full production achieved at the Project in 2025.



## CONTACT INFORMATION



[info@savannahresources.com](mailto:info@savannahresources.com)



Savannah Resources PLC



@SavannahRes