



Driving sustainable aluminium

**16**

Project partners

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Pilots in Europe

**5**

Case Studies

The SALEMA project combined the strategies of decreasing the use of critical raw materials and creating a sustainable economy in the aluminium manufacturing industry of Europe. The electric automotive sector needs high-performance, sustainable aluminium sources, which is only possible by generating a new aluminium ecosystem.



16 Partners from six countries united to create brand new, sustainable aluminium alloys and demonstrate their suitability in automotive applications. Meanwhile, they developed and put into practice a circular economy model that integrates scrap aluminium materials into the process of manufacturing aluminium car parts.

## GOALS and RESULTS:



SALEMA implemented and validated a fully circular economy model in the car manufacturing industry for aluminium, thus opening a new era of sustainable aluminium manufacturing.



Developed two brand new aluminium alloys for each pilot manufacturing technique.

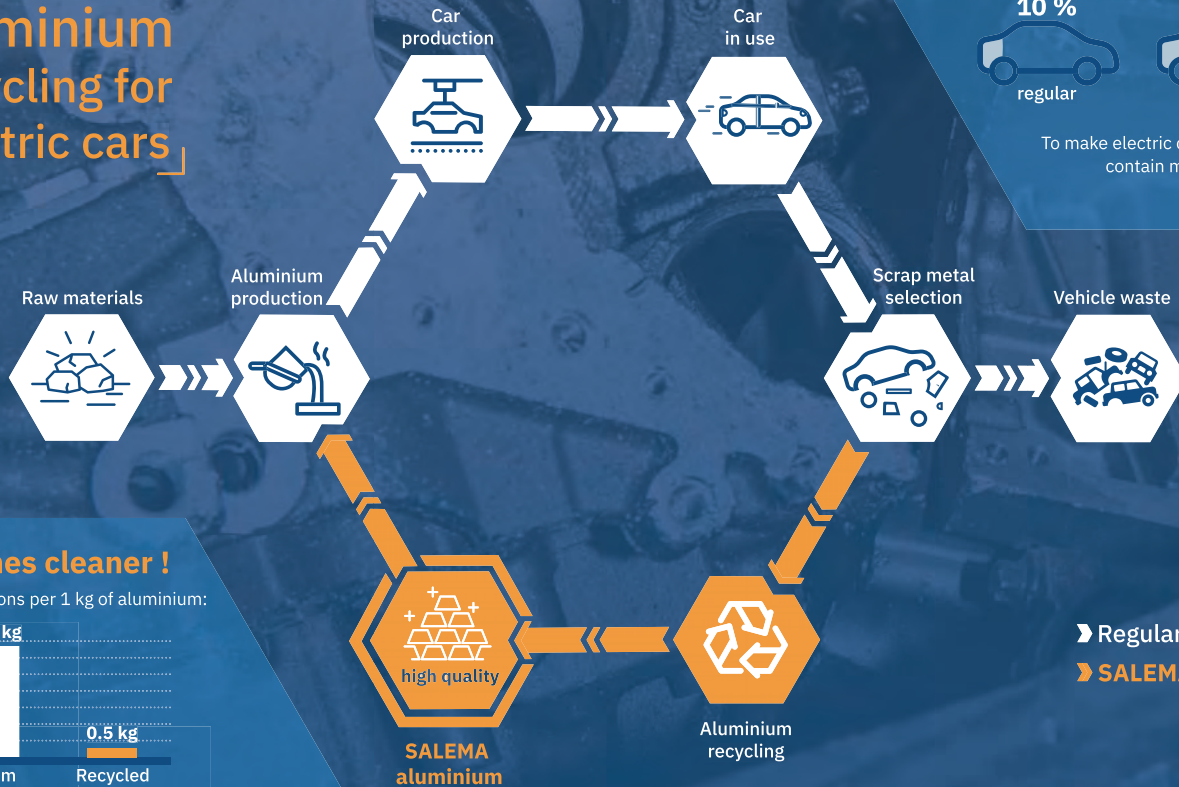


These alloys contain significantly more recycled aluminium or less critical raw materials (silicon, magnesium) compared to previously available aluminium alloys.



Demonstrated the feasibility of using the SALEMA alloys for electric vehicle parts by manufacturing 5 parts.

# Advancing aluminium recycling for electric cars



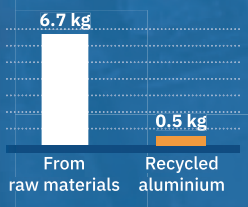
## Aluminium content in a car



To make electric cars lighter they contain more aluminium.

## 13 times cleaner !

CO<sub>2</sub> emissions per 1 kg of aluminium:



► Regular process  
► **SALEMA's process**

## Circular Economy

A circular economy is an economic system of closed loops in which raw materials, components and products lose their value as little as possible and systems thinking is at the core. The three key points of circularity:

**Reduce**  
Minimum use of raw materials

**Re-use**  
Maximum re-use of products and components


**Recycle**  
High-quality re-use of raw materials


SALEMA implemented such strategies to further sustainable growth with recycled aluminium alloy production for the automotive sector.




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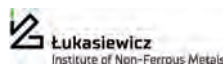
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## Partners



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