

# Most promising disruptive technologies on smart grids and technology transfer success stories

## New technology of batteries based on Aluminium electrodes

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26<sup>th</sup> October, Madrid

# New technology of batteries based on Al electrodes

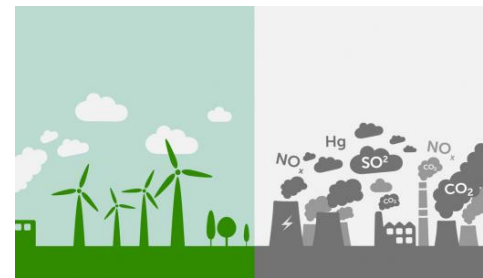
- Current scenario.
- Aluminium batteries advantages.
- Conclusions.

We are an expert company in the design and supply of battery systems of various technologies for energy storage.

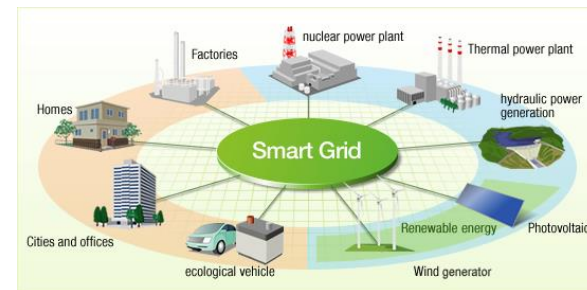


The energy landscape will be increasingly driven by the 3D of the energy.

**D**ecarbonization



**D**ecentralization



**D**igitalization



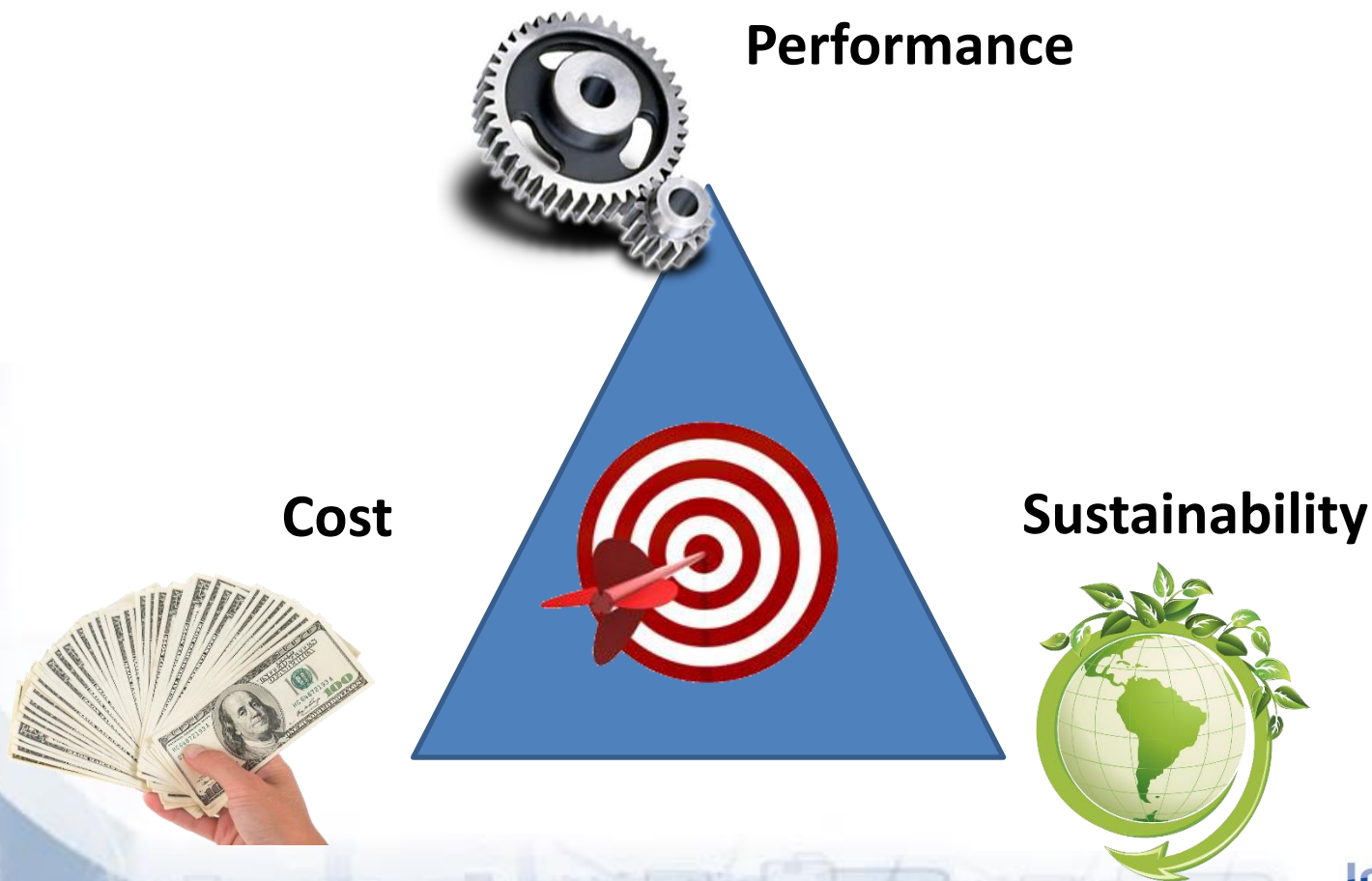
Global energy investment is expected to grow by 3.3% in 2017 and reach 376.242 million €.

Energy storage will become an increasingly important factor in future growth.



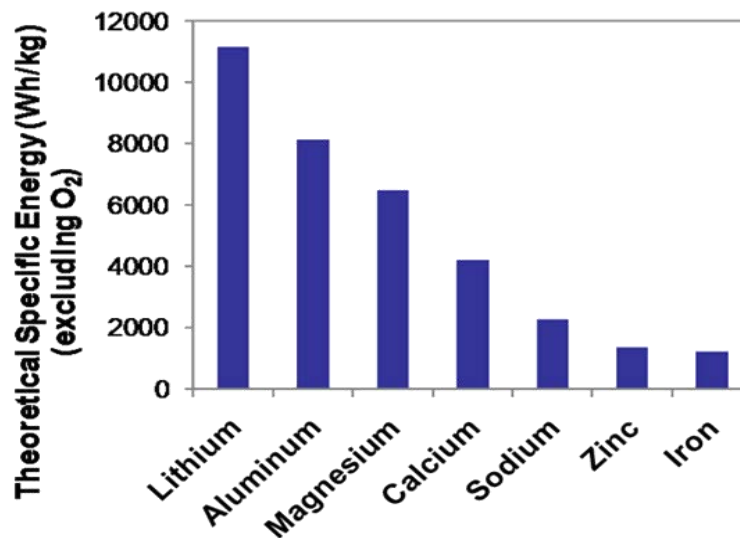


## *Era Post-Lithium = New Challenges*





- Similar performance to Lithium technologies, without complicated electronic management



- Better behaviour to low and high temperatures.



- Aluminium is the third material most present on the Earth's crust.
- Much industry is already deployed in Europe around the aluminium materials (even the recycling process).
- Below the target price expected for the EC (100-150 €/kWh)

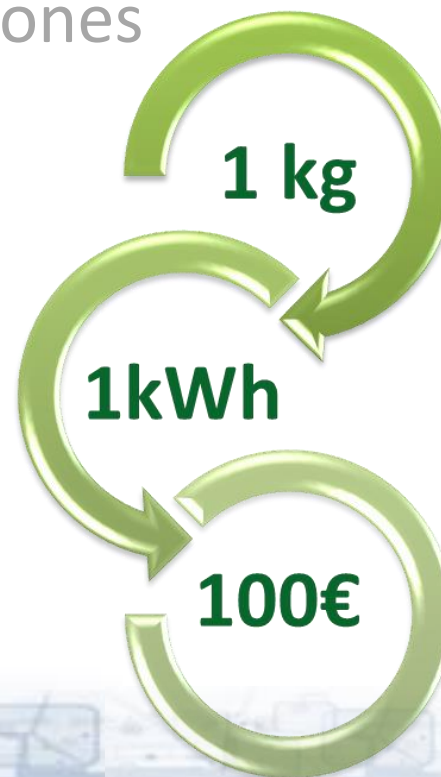




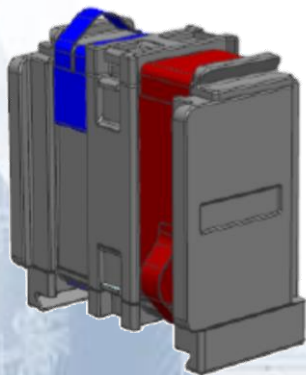
- Safety batteries & Environmental Friendly
- Well known recycling process. Even around the 85% of current Aluminium used are made with recycled product.



- Aluminium batteries are one of the references at the Advanced Batteries for the near future.
- Aluminium batteries are able to provide similar performance to the Lithium ones with until 5 times less price.



- EC is promoting battery manufacturing for new technologies in Europe.



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## TR@NSENER Project

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