

# How EV batteries live on!

Two big initiatives are under way to get the most from EV batteries and to recycle their materials

## (1) BATTERY RE-USE

“After 8 years, or 100,000 miles, 80% of the battery capacity will still be available” say VW. There is considerable potential for “2nd Life” of batteries



Renault announced its Advanced Battery Storage project in 2018 as “Europe’s largest stationary energy storage system with spent batteries from electric vehicles”

“Second Life” for EV batteries is being demonstrated as a practical solution for energy storage at ‘Grid Scale’ and in Local Communities

## (2) BATTERY RECYCLING

All manufacturers are planning 90+% recycling of battery materials  
Also, work is taking place to eliminate the use of Cobalt in EV batteries

Tesla claims recovery of 92% of battery cell material at their Nevada factory

In 2020 Tesla recovered 1,300T of Nickel, 400T of Copper, & 80T of Cobalt

Battery recycling is ‘work in progress’ internationally.  
Encouragingly, the processes have been shown to work and scaling up is in hand

VW has a recycling plant in Salzgitter, Germany that recovers Aluminium, Copper, Cobalt, Lithium, Nickel, Manganese and plastics

A pilot recovery plant started in Sweden in 2017 and plans to be full-scale by end-2022