

# Battery storage

Improvements in battery technology will benefit:-

- Cost of Electrical Vehicles (EVs), where batteries are currently about 50% of the cost
- The usability of EVs by lengthening the time that is required to recharge.
- Being able to supply electricity in buildings when solar & wind are not operational
- Devices that are reliant on batteries e.g. mobile phones & laptops will become cheaper & last longer between charges.

The good news here is that Lithium ion battery storage, which is the primary way that rechargeable batteries use today, continues to decrease in price which means that EV total cost of ownership (TCO) is already below that of petrol & diesel equivalents, and it is expected that the purchase cost of EVs will match that of their equivalents by 2022 or 2025 at latest.

## Lithium-ion battery price survey results: volume-weighted average

Battery pack price (real 2018 \$/kWh)



Source: BloombergNEF

As improvements in battery tech which have primarily been driven by EVs continues, this tech can be used within houses e.g. [Tesla's Powerwall](#)