Cobalt Free



Cobalt has very few reserves and faces unethical mining (the mistreatment of workers and land).

Batteries researchers want to stop using cobalt due to these concerns.

Create a battery without:

Cobalt

Electric Car



In 2030, the sale of new petrol and diesel cars will be banned, so there is a lot of effort to create electric cars that can travel long distances.

Create a battery with:

Capacity
Cyclability



A major issue facing battery technology is recycling. Batteries are complex which makes recycling and reusing materials difficult. They need to be disposed of and recycled separately.

Create a battery with:

Sustainability





Mobile phones are a staple device to modern day life and are used to connect people around the globe.

Create a battery with:

Cyclability

Sustainability



Sodium Battery



A possible alternative to lithium-ion batteries is sodium-ion batteries. Sodium is far more abundant than lithium.

Create a battery with:

A Sodium Cathode



Tablets are a popular digital device. Users want a tablet that has a long battery life, so it can run different programs for a long time. Another important feature is safety, since it is a household application.

Create a battery with:

Cyclability Safety





Affordable Battery



Batteries will need to become more affordable as the UK transitions to Net Zero carbon emissions. This can be through cheaper manufacturing

processes or improved selection of materials.

Create a battery with:

Cost



Children's Toy



Many children's toys have batteries inside of them. These need to be safe and sustainable to protect children and the environment.

Create a battery with:

Sustainability

Safety

