

ENABLING EV CIRCULARITY

TOBY GROOM - DHL
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To enable circularity, there must be a shift between a linear to a circular economy, and this is essential for sustainable growth





Source: Frost & Sullivan, DHL

Within the Auto-Mobility Industry there is a clear drive towards circularity



MANAGING EOL VEHICLES

In the European Union (EU), end-of-life vehicles generate 7 to 8 million tons of waste every year

MANAGING EOLTIRES

Globally, at least a billion tires reach their end-of-life each year

CREATING NEW JOBS

The World Bank estimates that remanufacturing of vehicle parts can increase skilled jobs by 120%

MANAGING EOL BATTERIES •

The European Commission expects end-of-life electric vehicle batteries to exceed 1 million units by 2030

CREATING GREEN
MANUFACTURING PRACTICES

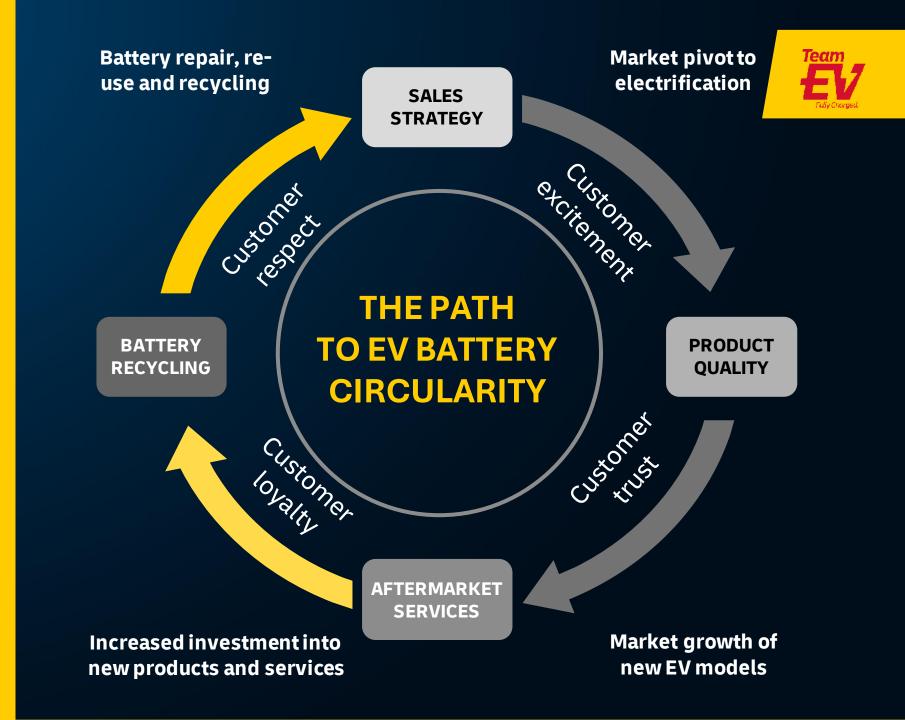
In the UK, manufacturing cars and components consume about 5.2 billion liters of water annually

CREATING GREEN FREIGHT ◆
FOR A SUSTINABLE FUTURE

Freight accounts for 60% of pollution caused by urban road transport

Source: Frost & Sullivan, DHL

In this path to circularity and carbon neutrality, an efficient and scalable battery recycling solution is essential



The partnership between DHL and Enviroserve has created a unique, and unparalleled, end-to-end EV battery circular solution for the Middle East





The value of a single solution



Truly Sustainable

Safety and Compliance

Fostering a Sustainable And Resource Efficient Future Through Reuse, Recycling and Recovery Solutions





→ 19 Years of Service Excellence

Largest Integrated Recycler and Processorin the MEA

400,000 square foot facility

Annual Processing Capacity of 106,000 tons

CLOSING THE LOOP



Offers a truly circular economy solution to create sustainable supply chain for EV batteries

Our Solutions:

Sorting and Inspection

Safe Discharging and
Deactivation

Mechanical Processing I

Dismantling

4 Hydrometallurgical Process

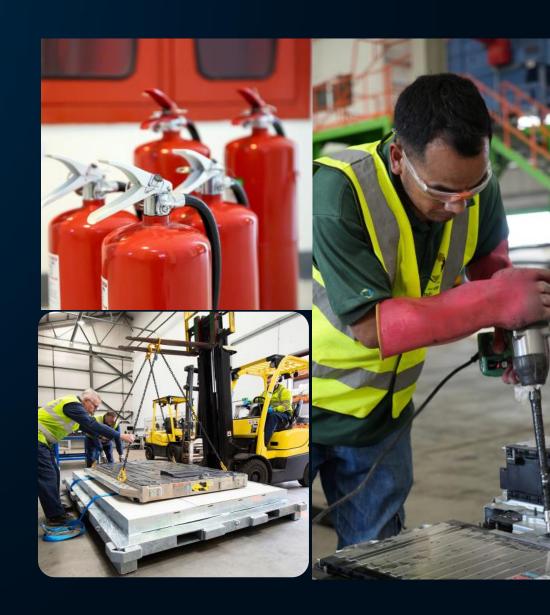
Extraction of Valuable Metals

Quality Control and Compliance



HEALTH AND SAFETY

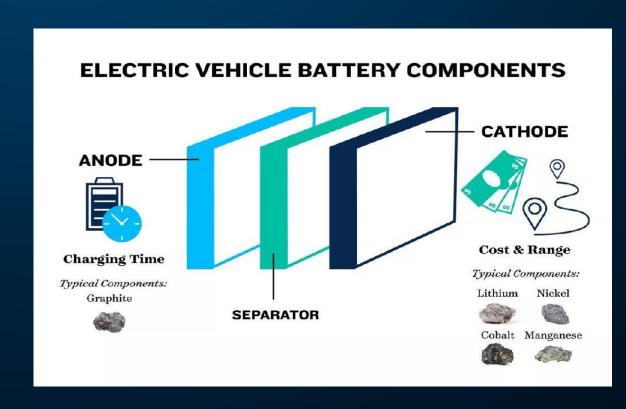
- Upkeep of secure equipment and the implementation of safe operational procedures.
- Safeguarding the handling, storage, and transport of components and materials.
- Delivering necessary information, guidance, training.
- Secure workplace, including safe entry and exit points.

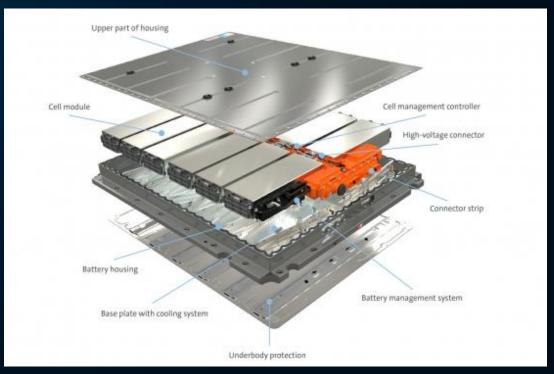


EV BATTERY COMPONENTS



EV battery supply chains are tied to extracting and processing of five minerals used in many of today's leading electric vehicle (EV) batteries: lithium, nickel, cobalt, manganese, and graphite.





Demonstrate Regulatory **Adherence & Environmental Stewardship**

Enviroserve Gold Certificate with access to detailed information on sustainability performance.

Serves as a mark of excellence and dedication to responsible and sustainable practices







JTS No: **PRODUCT DETAILS**

Date of Issue: DD/MM/YY

Received From:

Official Name

P O Box

City

United Arab Emirates





Emissions Saved

2222

2222

The above figure is a hearest estimation

This is your Enviroserve Gold Certificate (ESG) for Recycling that confirms the listed items have been received, recycled and processed by Enviroserve. With maximum material recovery and within secure chain of custody procedures, the recycling was completed in accordance with local and international regulations and compliance, including R2v3 standards. Offtake material will continue to certified downstream treatment facilities or direct to refiner.

Quality Assurance Officer

Director - Operations











United Nations environmental Programme United states Department of Defense Electronic Waste Transportation & Recycling License

ISO 14001 - EMS ISO 9001 - QMS 150 45001 -OHSMS

R2V3- Sustainable Electronic Recycling

Dubai DED License #564052

Abu Dhabi DED License # CN-2071402













In this evolving landscape, circular and sustainable EV Logistics is non-negotiable for the Auto-Mobility industry



Enabling New Mobility

Circular Solutioning

Compliant Returns



Through our Dubai EV Centre of Excellence, we enable modular and fully integrated Circular EV Logistics solutions



EV Logistics Centre of Excellence Dubai



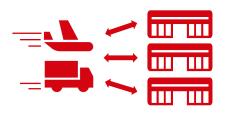




Global Inbound Replenishment to Dubai from suppliers



Warehousing and Valueadded services in EV **Logistics hub Dubai**



Handling of outbound deliveries to regional dealers



Reverse Solution & Recycling

- Fully integrated **inbound** shipment flow
- Ownership of **import** processes for all EV related Aftermarket services

- **Certified location** following regional **compliance** & safety standards
- **Oualified DHL team** managing all warehousing activities incl. EV related value added
- **Consistent & integrated** sustainable transport network
- **Compliant transportation** networks to provide optimized solutions
- **Recycling solution with Enviroserve** to enable circularity for EV batteries in the region
- Reverse solution enabling circularity through compliant solutions



DHL & ENVIROSERVE PARTNER TO CREATE A CIRCULAR MODEL FOR



EV BATTERIES







