

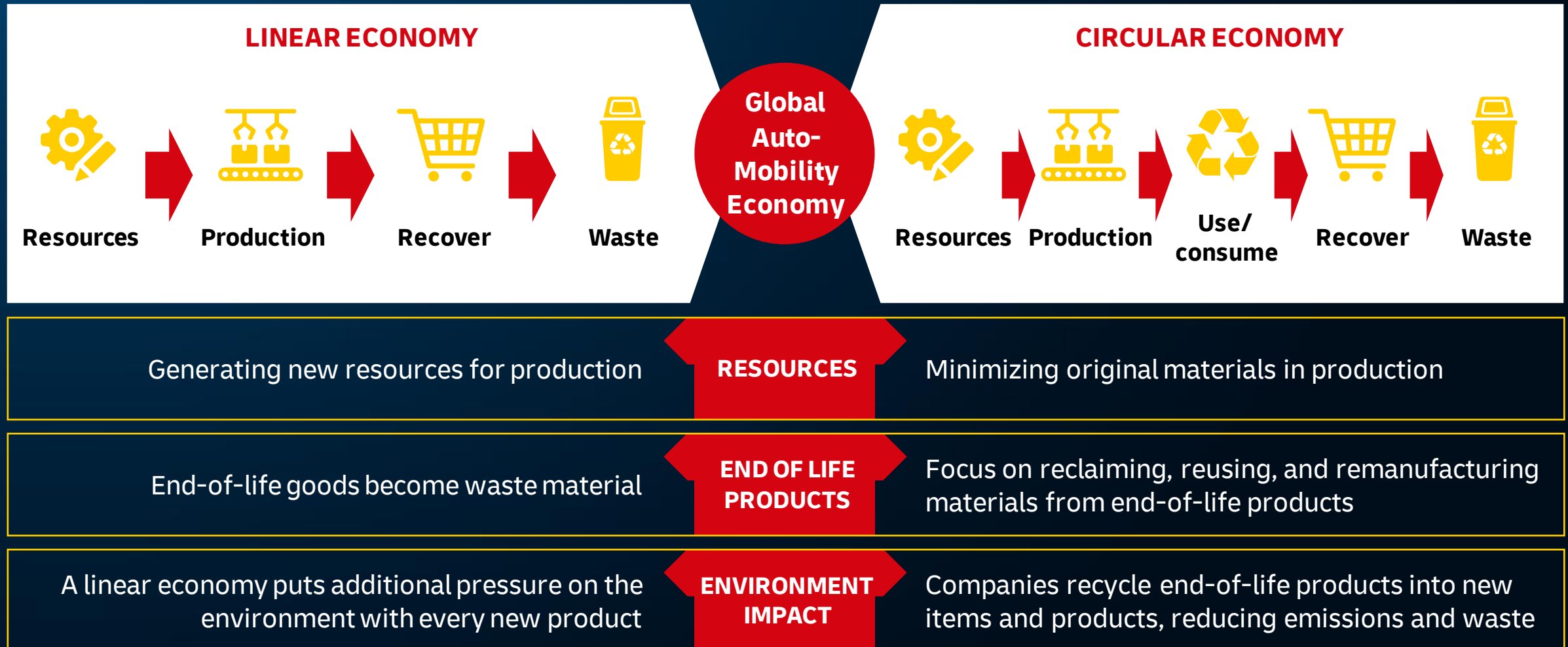
ENABLING EV CIRCULARITY

TOBY GROOM - DHL

DUSTIN CHERNIAWSKI - ENVIROSERVE



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



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 EOL TIRES**

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

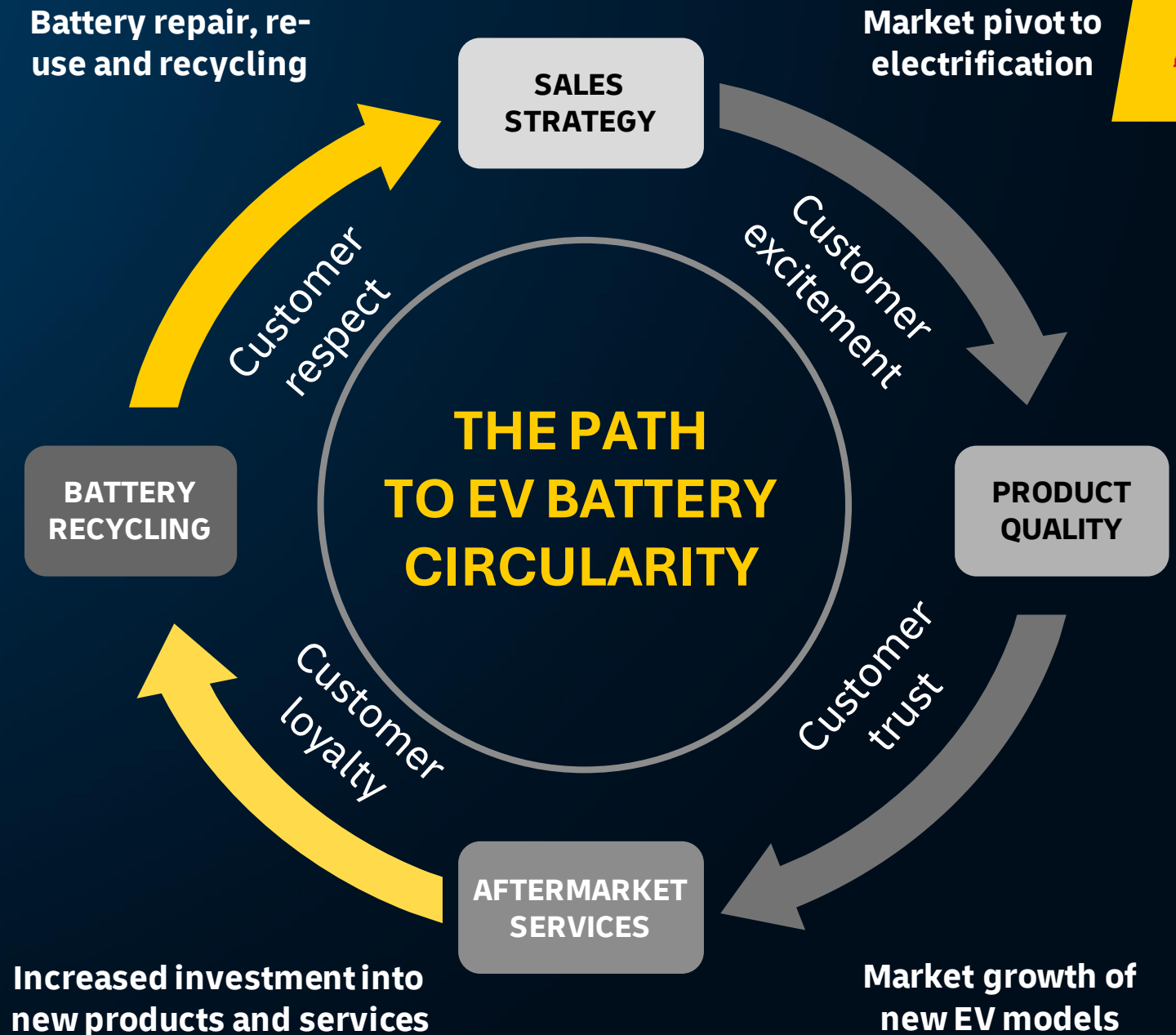
◆ **CREATING GREEN MANUFACTURING PRACTICES**

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

◆ **CREATING GREEN FREIGHT FOR A SUSTAINABLE FUTURE**

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

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



**Full Visibility
and Control**

**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 Processor in 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:

1

Sorting and Inspection

2

Safe Discharging and
Deactivation

3

Mechanical Processing |
Dismantling

4

Hydrometallurgical Process

5

Extraction of
Valuable Metals

6

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.

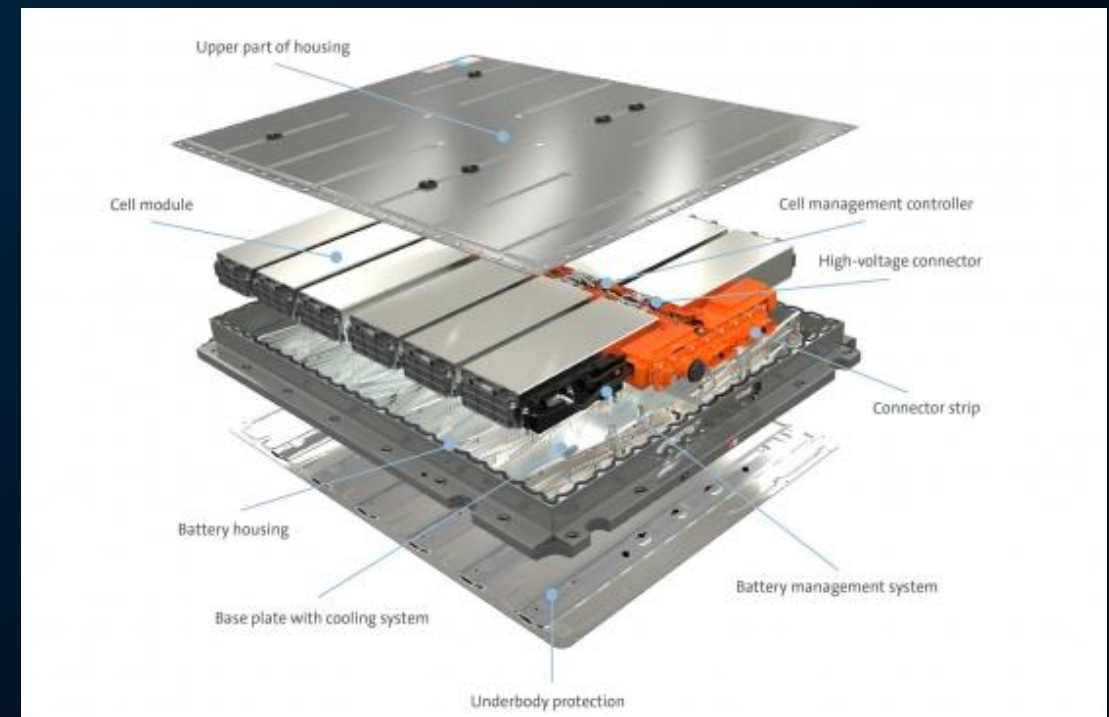
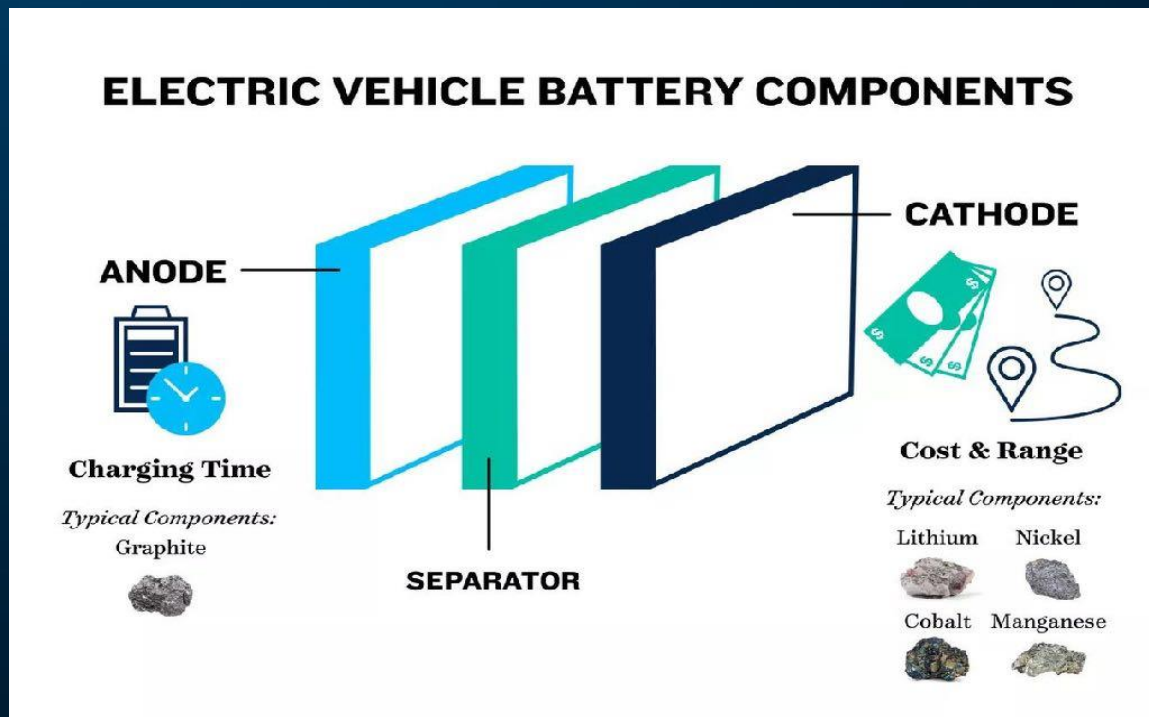
Delivering necessary information, guidance, training.

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

**GOLD CERTIFICATE
FOR RECYCLING**

**انفيروسرف**
enviroserve
Saving the planet. Naturally.

JTS No:

PRODUCT DETAILS

Date of Issue: DD/MM/YY

Received From:
Official Name
P O Box
City
United Arab Emirates

DATA PLACED HERE


Emissions Saved Trees Saved
2222 2222
kg

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



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

ISO 14001 - EMS
ISO 9001 - QMS
ISO 45001 - OHSMS
R2V3- Sustainable Electronic Recycling

Dubai DED License #564052 Abu Dhabi DED License # CN-2071402

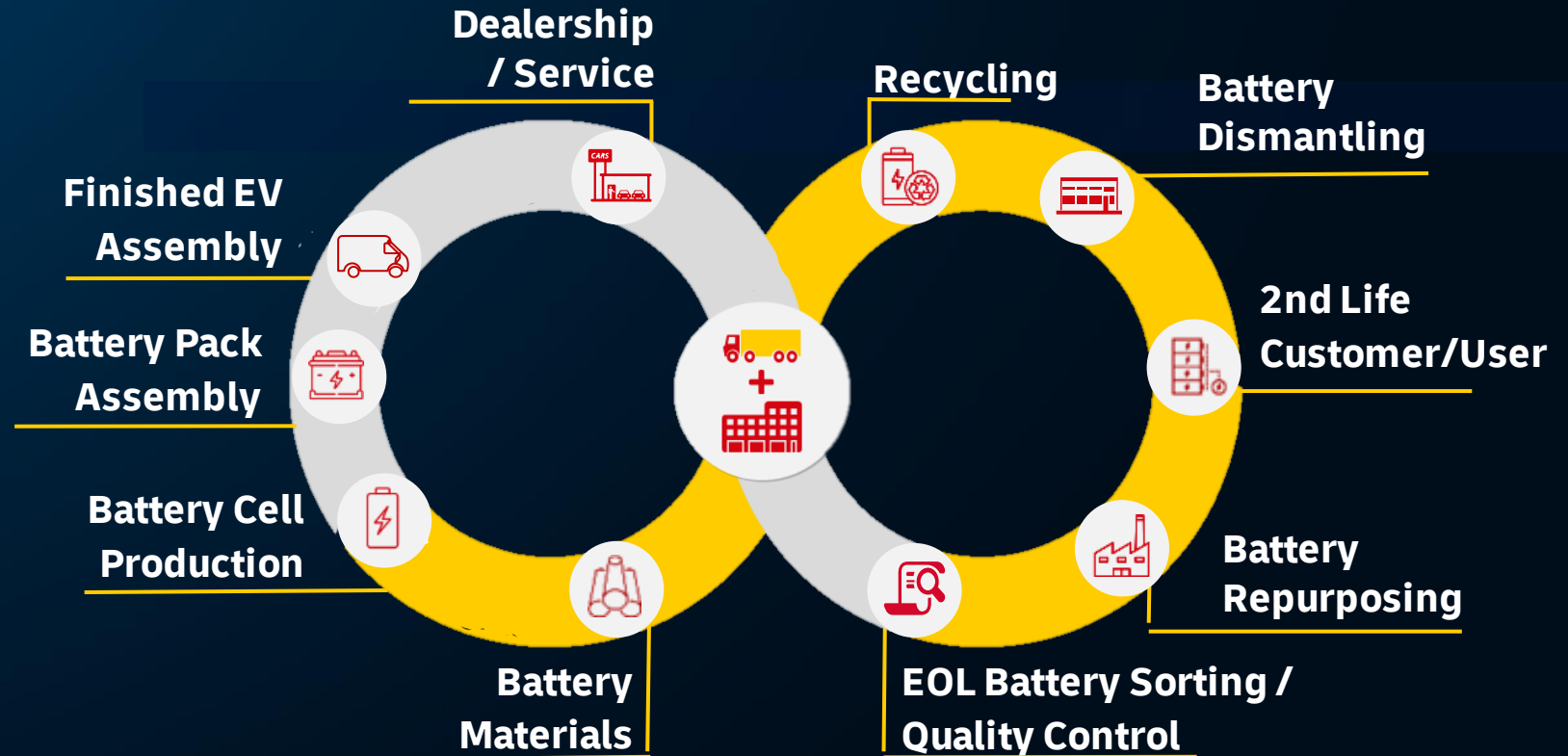


In this evolving landscape, circular and sustainable EV Logistics is non-negotiable for the Auto-Mobility industry

⚡ 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



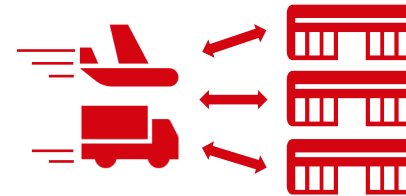
Operation



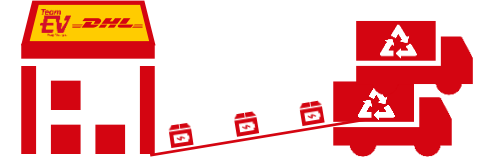
Global Inbound
Replenishment to Dubai
from suppliers



Warehousing and Value-
added services in EV
Logistics hub Dubai



Handling of outbound
deliveries to regional
dealers



Reverse Solution &
Recycling

Value

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

- **Certified location** following regional **compliance & safety standards**
- Qualified 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***

