

ENABLING THE EV (R)EVOLUTION

**FATHI TLATLI - GLOBAL SECTOR PRESIDENT
AUTO-MOBILITY SECTOR DHL**





1st



UAE is the first MENA country with a **carbon neutral** commitment

Source: u.ae

Dubai **top five** global commercial maritime **shipping hubs**



Top 5

Source: thenationalnews

UAE is committed to **net zero** by

2050

Source: WEF

The Transport & **Logistics** sector, contributes to 10% **GDP** in the **MENA** region



10%

Source: moec.gov.ae

Mobility

Autonomous

Digitalization

Electrification



MADE

Source: rolandberger

UAE to boost **electric** and **hybrid** vehicle in its fleet by **13%** until 2030.



13%

Source: zawya



ANCHORING ALTERNATIVE

ENERGY SOLUTIONS

IN OUR **SUSTAINABILITY** ROADMAP

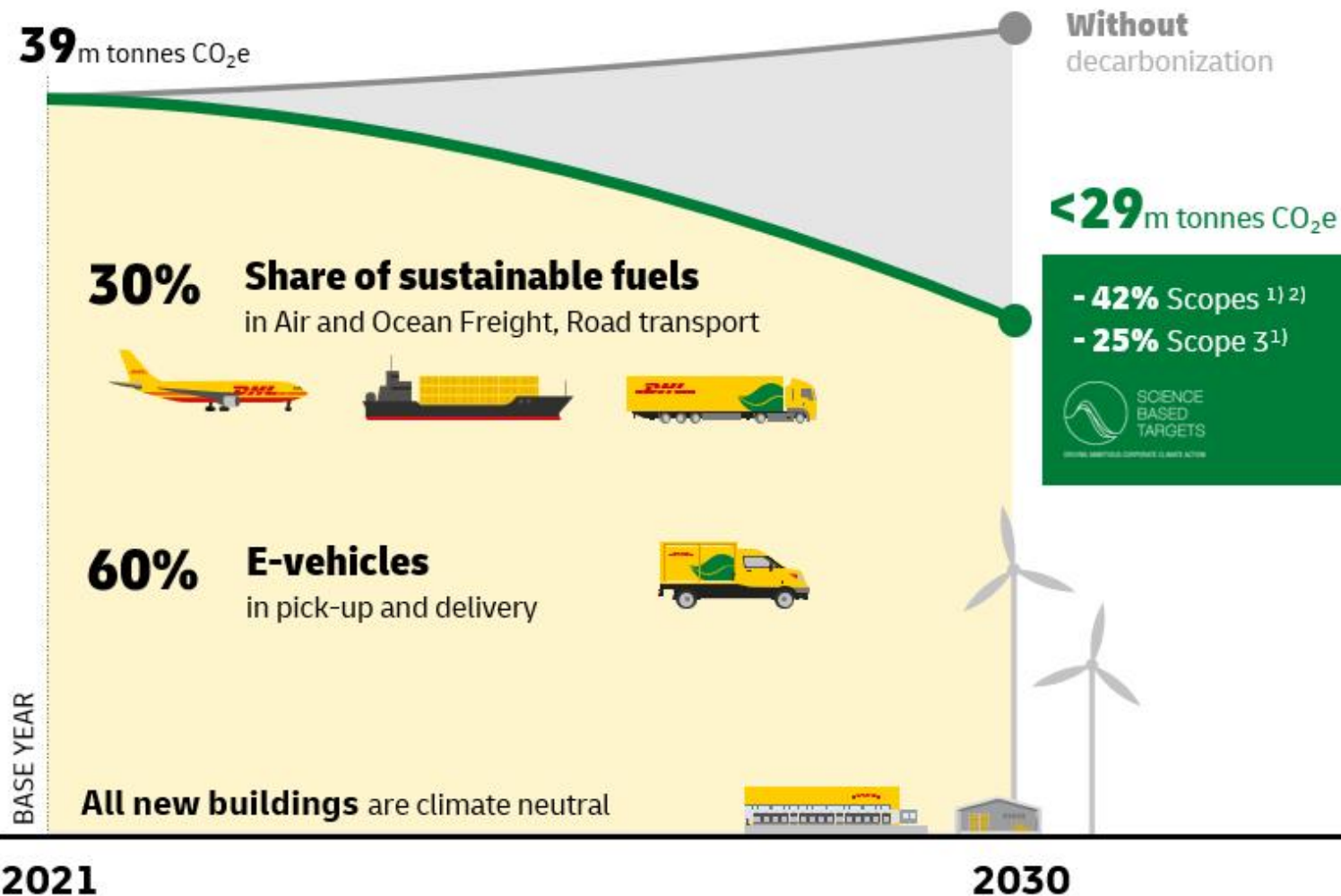




BY 2030

**REDUCE GHG
EMISSIONS
TO <29 MILLION
TONS WITH €7
BILLION
INVESTMENT**

We commit to invest **€7 billion** to reduce our Carbon Footprint by 2023



2) Logistics-related GHG categories; 3) (Upstream fuel and energy); 4) (Upstream transport and distribution); 6; (Business travel)

THE EVOLUTION FROM ICE TO ALTERNATE FUEL SOURCES IS WELL UNDERWAY

Conventional internal combustion

bioFuels eFuel

Fuel cell technology

PEM fuel cell

Solid-oxide fuel cell

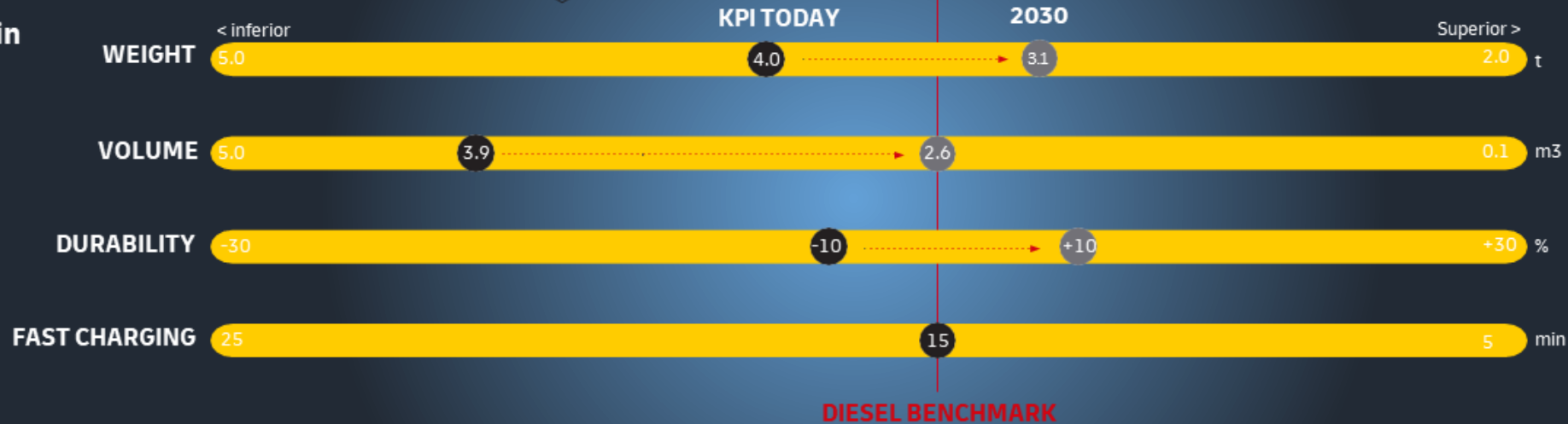
Battery technology

Lithium-ion

Solid-state

Lithium-sulfur

Powertrain KPIs



Industry & Products



Relevant technical parameters of a fuel cell powertrain in long-haul trucks will match those of a conventional diesel truck by 2030

Source: Porsche Consulting

THE EVOLUTION FROM ICE TO ALTERNATE FUEL SOURCES IS WELL UNDERWAY

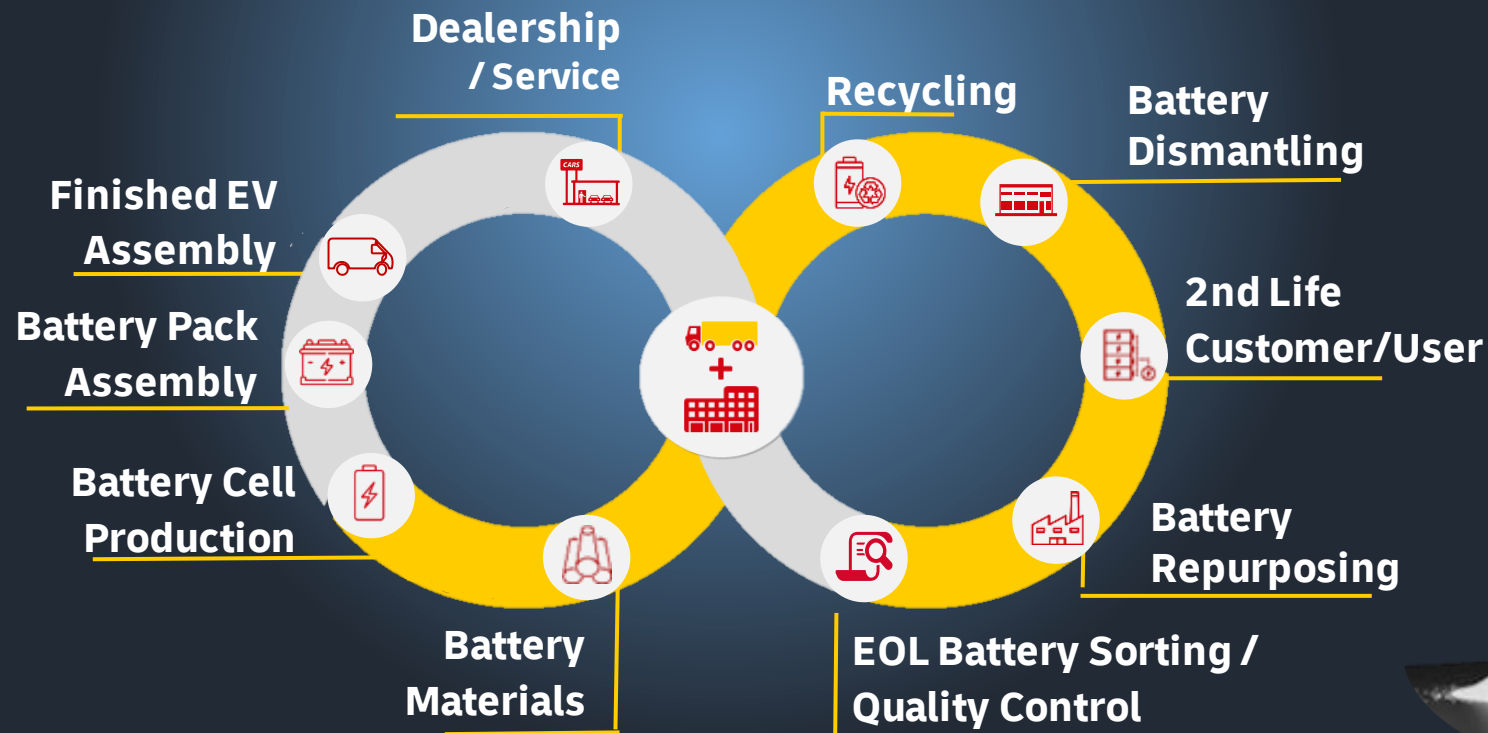


CIRCULAR AND SUSTAINABLE EV LOGISTICS SOLUTIONS FROM CRADLE-TO-CRADLE

⚡ Enabling New Mobility

⚡ Circular Solutioning

⚡ Compliant Returns



ACCELERATING AUTO-MOBILITY

SHIFT WITH END-TO-END

EV LOGISTICS SOLUTIONS



ELECTRIFICATION TOWARDS EXPONENTIAL GROWTH BEYOND PASSENGER VEHICLES

PASSENGER VEHICLE ELECTRIFICATION IS ON ITS WAY

23,8% CAGR

Passenger-car and light-duty vehicle global sales

2022

2030



>8 M

>>>>

>40 M

Unit sales Globally

10%

>>>>

40%

Global Market Share

Source: Deloitte analysis, IHS Markit *Source: International Energy Agency

OTHER INDUSTRIES ARE ENGAGED ON THE SAME PATH



>17mio e-Motorbikes
by 2030 (>27% CAGR)



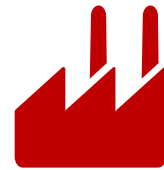
>3mio Commercial Vehicles
(31,4% CAGR) by 2030



Off Highway CAGR
>30% by 2030



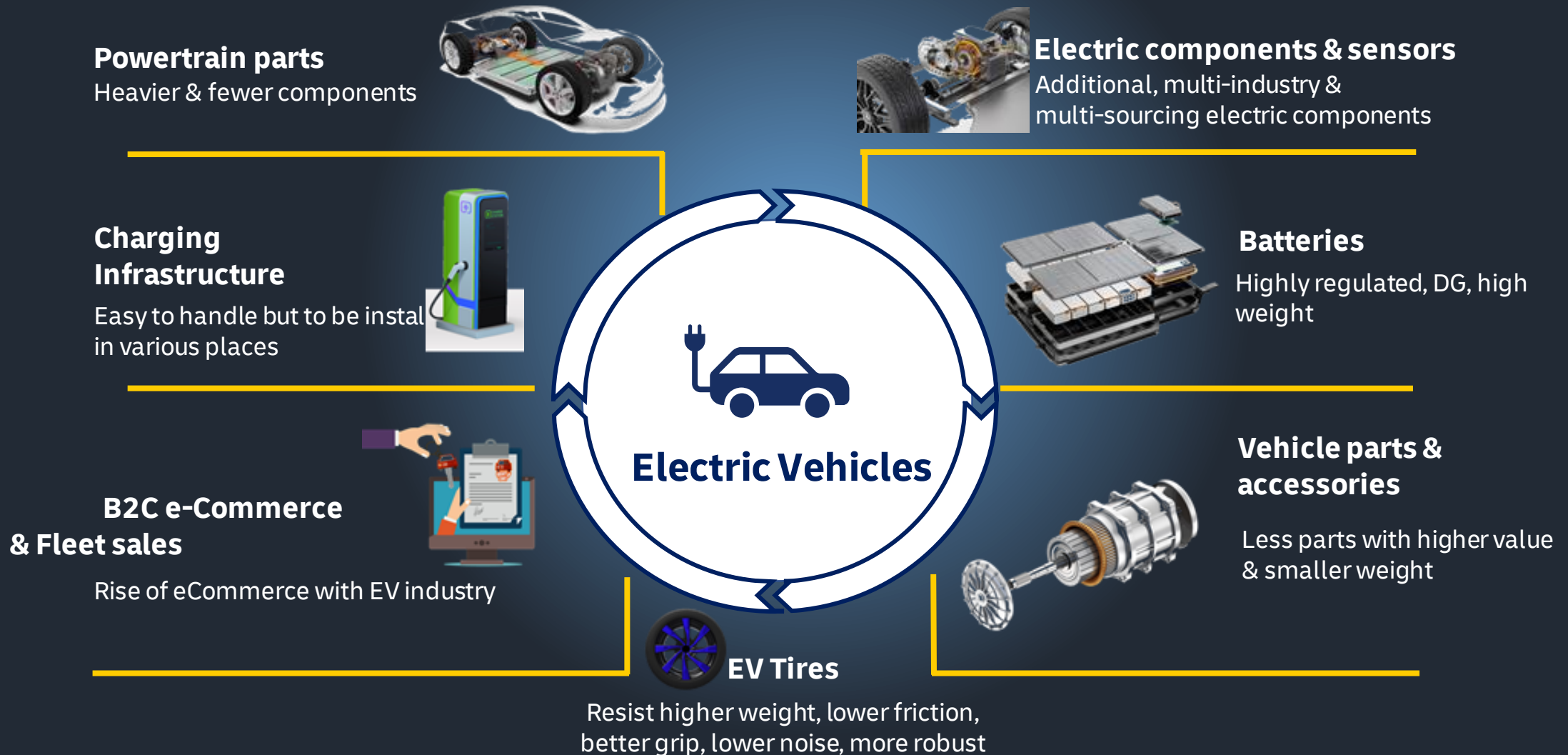
>400GWh of ESS by
2030 (tenfold growth)



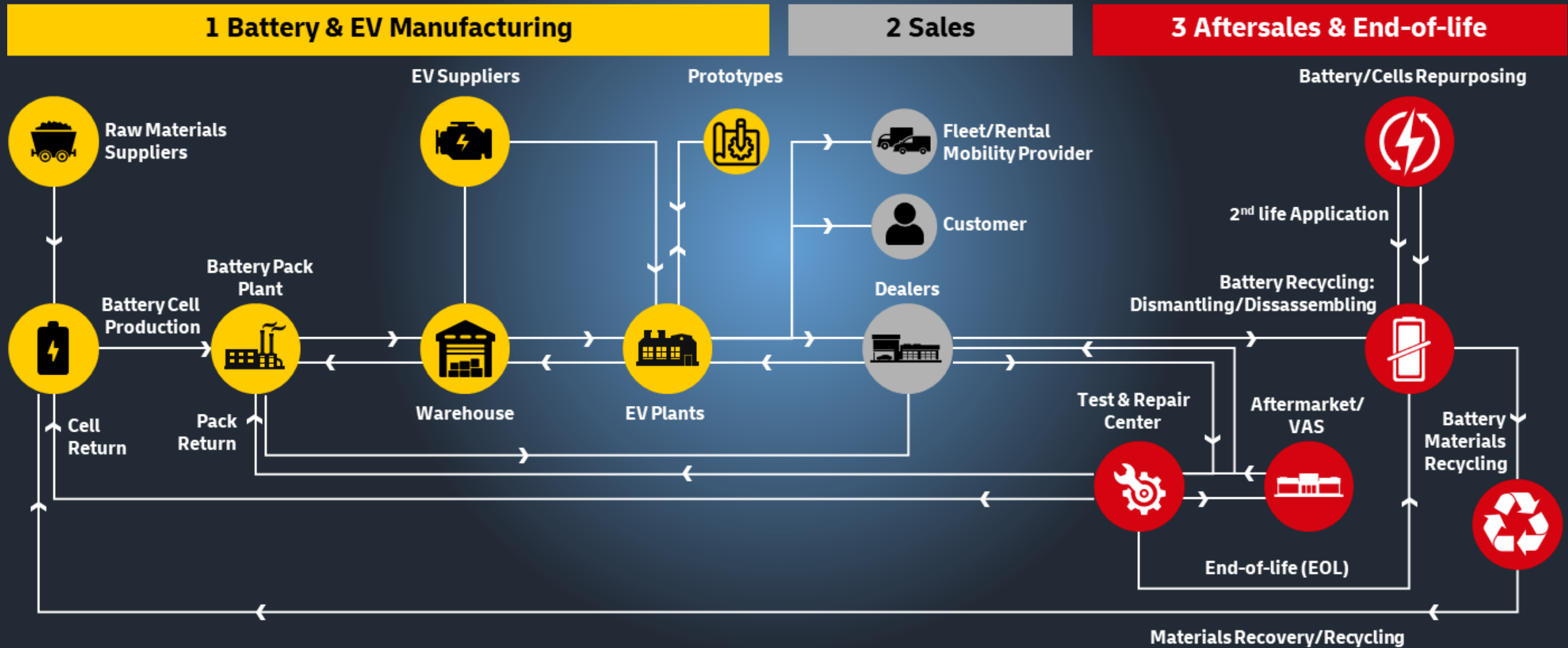
401
Gigafactories by
2030 (tenfold
growth)

Source: Bloomberg / NEF & Internal Study

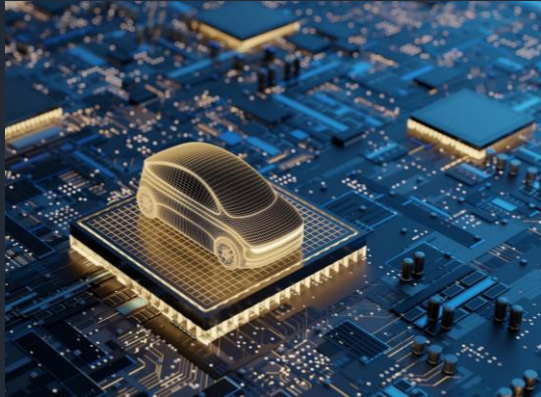
THE NEW EV ECOSYSTEM IS TRANSFORMING THE ENTIRE VALUE CHAIN



EV VALUE CHAIN COMPLIANT LOGISTICS NEEDS TO COPE WITH ADDITIONAL COMPLEXITY OF FLOWS



AUTO-MOBILITY TIER SUPPLIERS SUPPLY CHAINS ARE HEAVILY IMPACTED BY THE EV REVOLUTION



M&A & divestitures
to refocus core business

Change in the
product mix towards
more **electronics**



**Supply chain re-design and
consolidation after M&A**



**Semicon & electronics in
the product mix**



**Increased Visibility &
sustainability needs**



Network
(re)Design

Supply Chain
orchestration

Transport
management



Multi-Modal
Agility

Smart
inventory



IoT
technology

Predictive
analytics

Sustainable
solutions

OEMS MUST MANAGE EV BATTERIES FROM MANUFACTURING TO RECYCLING



Middle East EV market to grow at a **28.1% CAGR** from 2023 to 2030

Source: databridgemarketresearch

EV Battery market to grow at a **15% CAGR** from 2023 to 2028

Source: mordorintelligence



Compliant Transport
(Inbound & aftermarket)



Regional & Local Warehousing



Reverse Solution
& Recycling Design



Reefer OFR
capabilities



Customs
process
management



ADR road
transport



Certified
warehouse
network



Testing,
recharging,
diagnosis



Waste and
damaged battery
transport



Battery recycling
capability

ENERGY COMPANIES HAVE TO REINVENT THEMSELVES



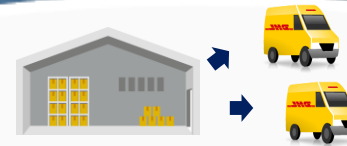
1000 Green Stations
to be installed in
Dubai by **2025**

Maintenance and
availability of
stations as a
business imperative

Source: mediaoffice.ae



**Distribution / Specialty
transport**



**Storage & Inventory
Management**



Onsite service logistics



Bulky
station
transport



Customs
process
management



ADR road
transport



Qualified
handling
crew



Bulky storage
area



On demand
availability



On site
installation &
maintenance

INNOVATION AT THE HEART OF BATTERY LOGISTICS



Full Supply Chain
transparency is one
 the **success factors**
 for a **resilient** EV
 battery supply chain

Source: McKinsey

Innovations in EV
 logistics improve the
efficiency &
reliability of the
 supply chain



Visibility



Analytics



Condition
monitoring



Asset
Tracking



Shipment
monitoring



Shipment
monitoring



Risk
Management



Network
Optimization



Warehouse
analytics

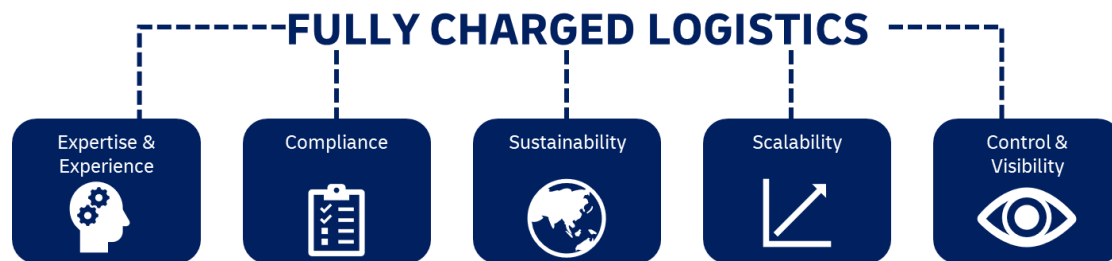


Digital twin/
What-if
Simulation



EV CENTERS OF EXCELLENCE: SEAMLESS & INTEGRATED SOLUTIONS MANAGED BY ONE TEAM OF INDUSTRY EXPERTS

- An EV COE is a **physical center of knowledge and know-how** concentrating existing EV logistics expertise, capability and trained resources to sustain world-class performance and value
- An EV COE is part of a **global network** delivering **added value**



OUR CERTIFIED MULTI-USER EV CENTRE OF EXCELLENCE IN DUBAI ENABLES MODULAR EV LOGISTICS SOLUTIONS TO DRIVE SUSTAINABLE AND CIRCULAR MOBILITY

Facility features



SIZE

Plot Area 60,000 m²

Built up 23,478 m²



CERTIFICATES

ISO 9001:2015, ISO 14001:2015



SECURITY

CCTV, perimeter fencing, access control, back to base fire alarms, gates. TAPA Compliant

Value Proposition



Global Inbound
Replenishment to
Dubai from
suppliers



**Warehousing &
Value-added
services** in EV
Logistics hub Dubai



Handling of
**outbound
deliveries** to
regional dealers



Reverse Solution
& **Recycling** with
Enviroserve





***“THE BEST WAY TO PREDICT THE
FUTURE IS TO CREATE IT.”***

Peter Drucker

THANK YOU

VISIT OUR EV
EXTERNAL PAGE



WATCH OUR
EV TV SERIES

