



**POWER UP THE
SUPPLY CHAIN(S)
FOR NEW-ENERGY
VEHICLES**

GEFCO

Partners, unlimited



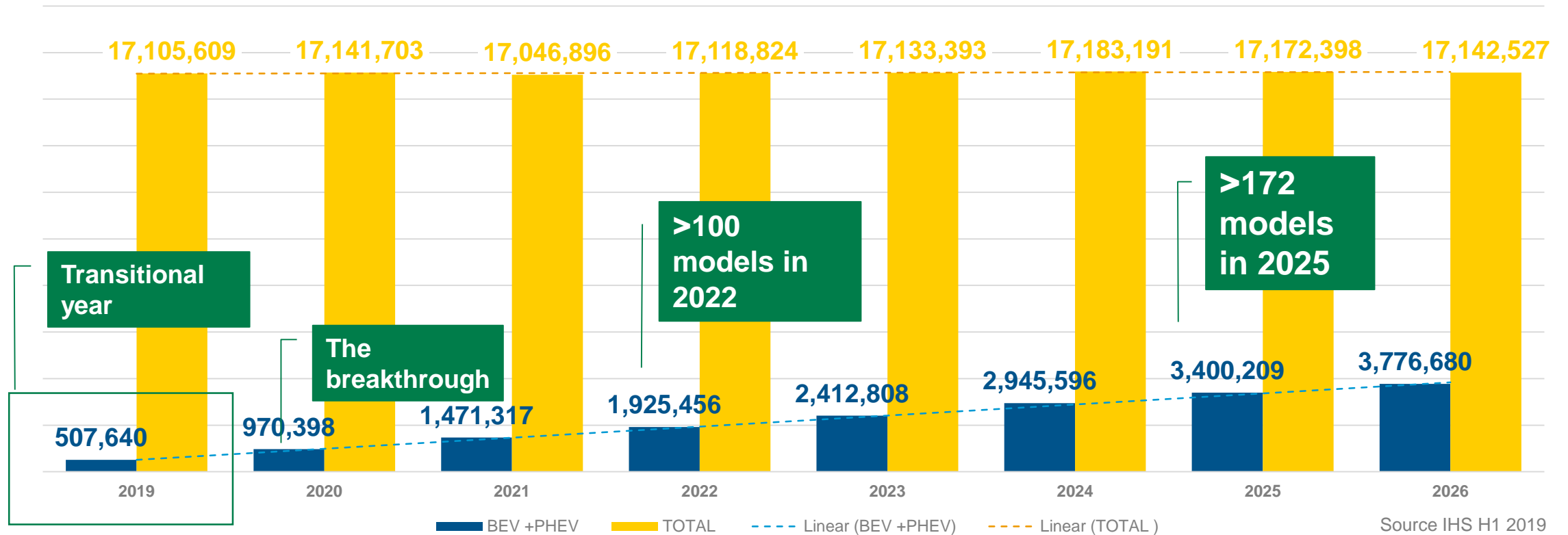
**It's not an evolution
but a revolution**

A futuristic cityscape at night, featuring several illuminated skyscrapers and a wet cobblestone plaza. The scene is dominated by blue and white light, with a prominent blue beam of light shining down from a central tower. The foreground shows a wet, reflective surface, likely a plaza or walkway, with a glass railing on the right side. The overall atmosphere is modern and technological.

Technology

Mobility experiences

TOTAL EV SALES IN EUROPE

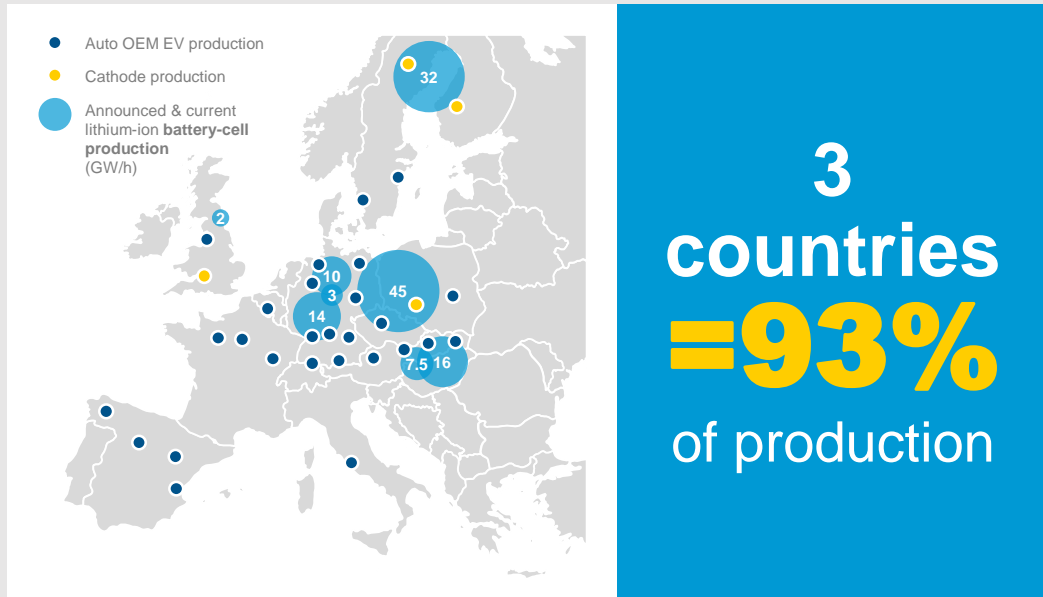


Global trends
SLOWDOWN

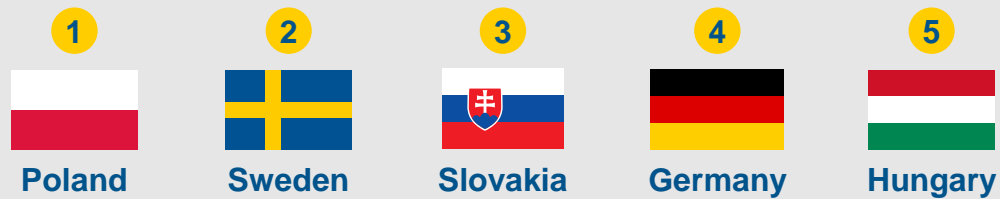
Between 2020 and 2022, the share
of EV will be between **6%** and **11%**

PRODUCTION & SALES IN EUROPE

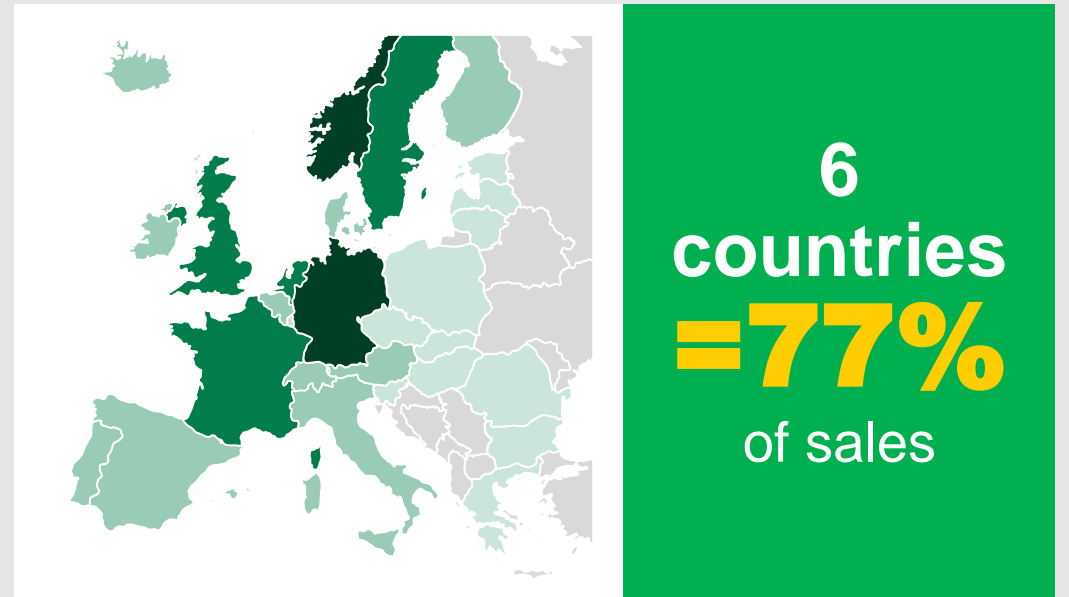
Battery & vehicle Production by 2025



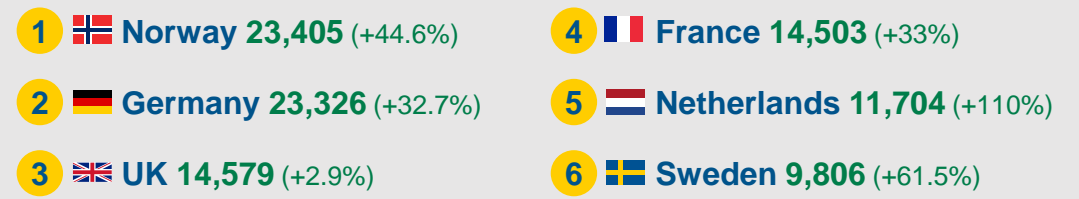
Top 5 markets for Production



EV Sales Q1 2019



Top 6 markets by volume Q1 2019/2018



Electric vehicles challenges

Invent new production and retail models
compliant and **customer centric**



Regulation
Pressure



City
Mobility



Production

Charging
Equipments

Supply chain challenges

More **complexity** to manage
while reaching **cost & green** efficiency.

**Cohabitation
of 2 models**

EV vs thermic

**Batteries
& Charging**

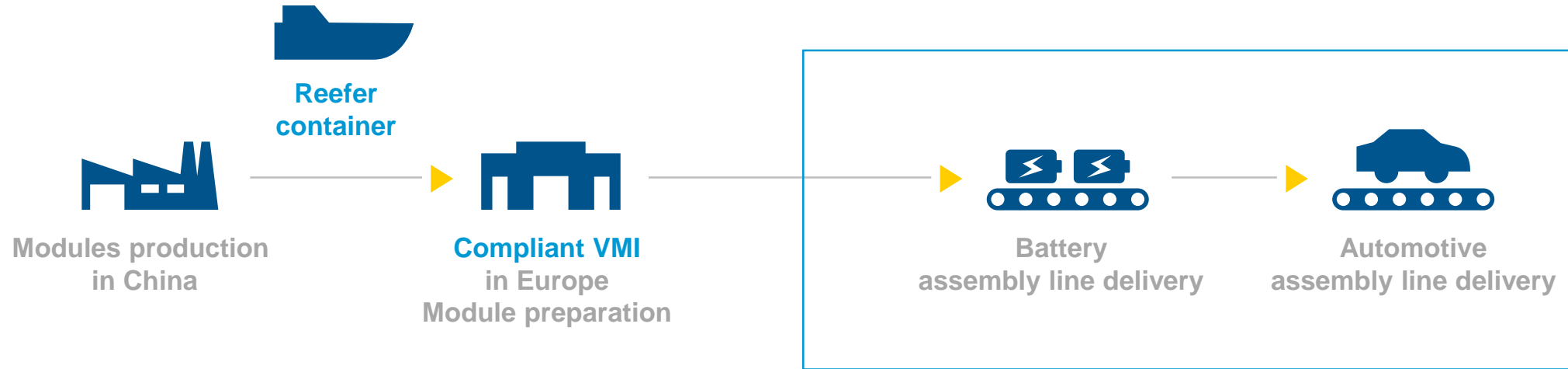
Omnichannel

**Batteries
end of life
management**

AN INTEGRATED LOGISTICS PERIMETER

| Inbound Cell/module/BMS/ pack supply | Outbound Vehicles transport, storage & distribution | Aftermarket Spare parts storage & distribution & vehicle movement | Battery end-of-life management |
|---|---|--|---|
| <ul style="list-style-type: none">■ Dangerous good compliant Transportation■ Compliant VMI■ Compliant VAS (Kitting ...)■ Compliant line side deliveries | <ul style="list-style-type: none">■ Multimodal transportation■ Storage■ PDI: Charging options■ Mobility fleet preparation and maintenance■ B2B & B2C deliveries | <ul style="list-style-type: none">■ Regional compliant hub■ Compliant Economic & express deliveries■ Compliant reverse logistics product & packaging (new & critical)■ Waste management■ Doorstep pick-up & delivery | <ul style="list-style-type: none">■ From repair center to recycling center■ From Recycling center to manufacturers |

BATTERY ASSEMBLY LINE DELIVERY END-TO-END INTEGRATED LOGISTICS OFFER



End to end tracking



CELL/MODULE/BMS PLANT SUPPLY



Key figures

Products: **Modules and BMS**
135 container form China to Europe (year): Modules & BMS
5% air – **85%** ocean

Business challenges

- Strict DG guidelines & procedures with no standards for batteries handlings
- Limited choice of carriers & supply of equipment DG capacities in Fuzhou port
- Short leadtime requirement to supply car plant

GEFCO solution

Implementation of an European Road Control Tower in France to synchronise flows

- Synchronise all the players to ensure that all documents & loading requirements are in full compliance
 - *customer, terminal authorities at pol / pod, ocean carriers, vessel owners and ship captain*
- Use reefer containers 25°C
- Provide volume forecast to carrier to ensure sufficient equipment supply

Select compliant carriers

- Identify the best POL & Ocean Carriers (CMA, OOCL, MAERSK & COSCO) who accepts Car Batteries
- Use HK & SIN as an alternative for better space protection

End to end transportation

- Minimizing the numbers of transit ports to avoid refusal of DG bookings and to meet customer's transit time requirements
- Obtained the pre-approval of DG shipment from the Ocean Carriers /Terminal Authorities to shorten the application time
- Advance document preparation before shipment arrival to shorten the processing time and expedite the delivery

Multi modal transportation

- Ocean
- Air
- TCS

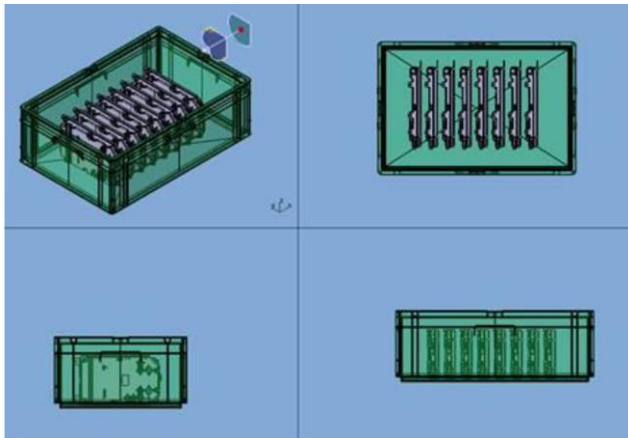
Client Benefits

COMPLIANT

AGILITY

shorter & reliable
TRANSIT TIME

BATTERY PLANT SUPPLY: VMI



Key figures

- Products: Modules & BMS
- In the **high level racks by 3**
- **Ambient storage** 12° – 30°
- **FIFO** respecting (by pallet ID)

Business challenges

- Stock and Prepare the module to supply the battery plant

GEFCO solution

Set up a VMI Inbound

- Reception Visual control of the pallets, qualitative checking of packaging & quantitative of goods
- Store in to stock into high racks
- Registration of pallet in IS by RF scanner

Repacking

- Repacking piece by piece from carton to Reusable packaging
- Labelling

Outbound

- Picking pallets from preparation zone storage positions

- Labelling pallet with label
- Loading pallets into truck by counterbalance truck
- Shipping administration
- IT removal from storage
- Issuing of transport documents

Data Flow

- EDI or email communication between Client & GEFCO
- Daily reporting about movement in warehouse stock

Line side delivery

Waste management

Client Benefits

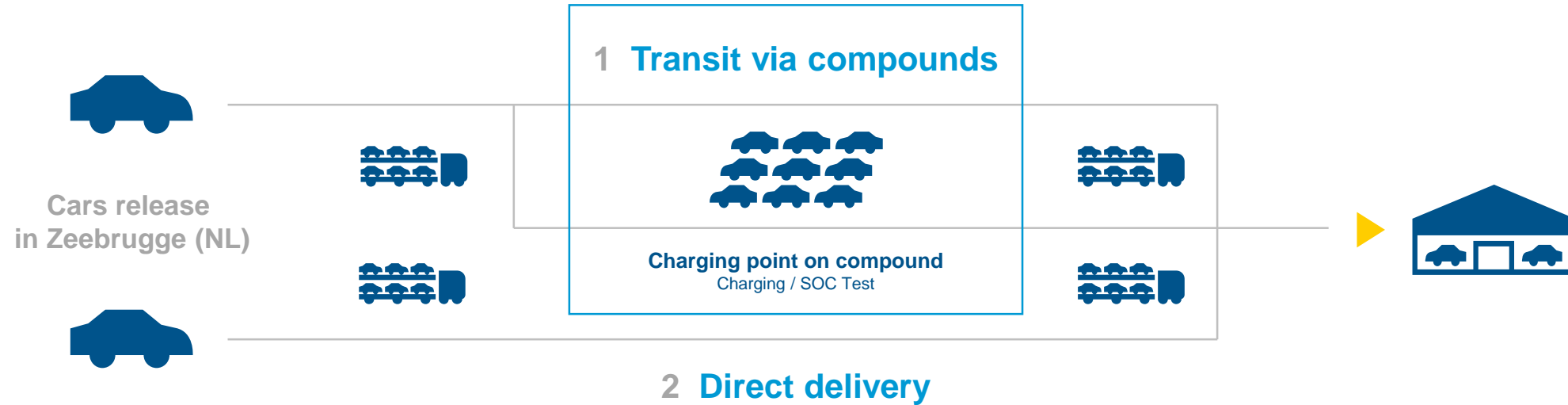
COMPLIANT



AGILITY

SMOOTH SUPPLY

EV TRANSPORT & DISTRIBUTION

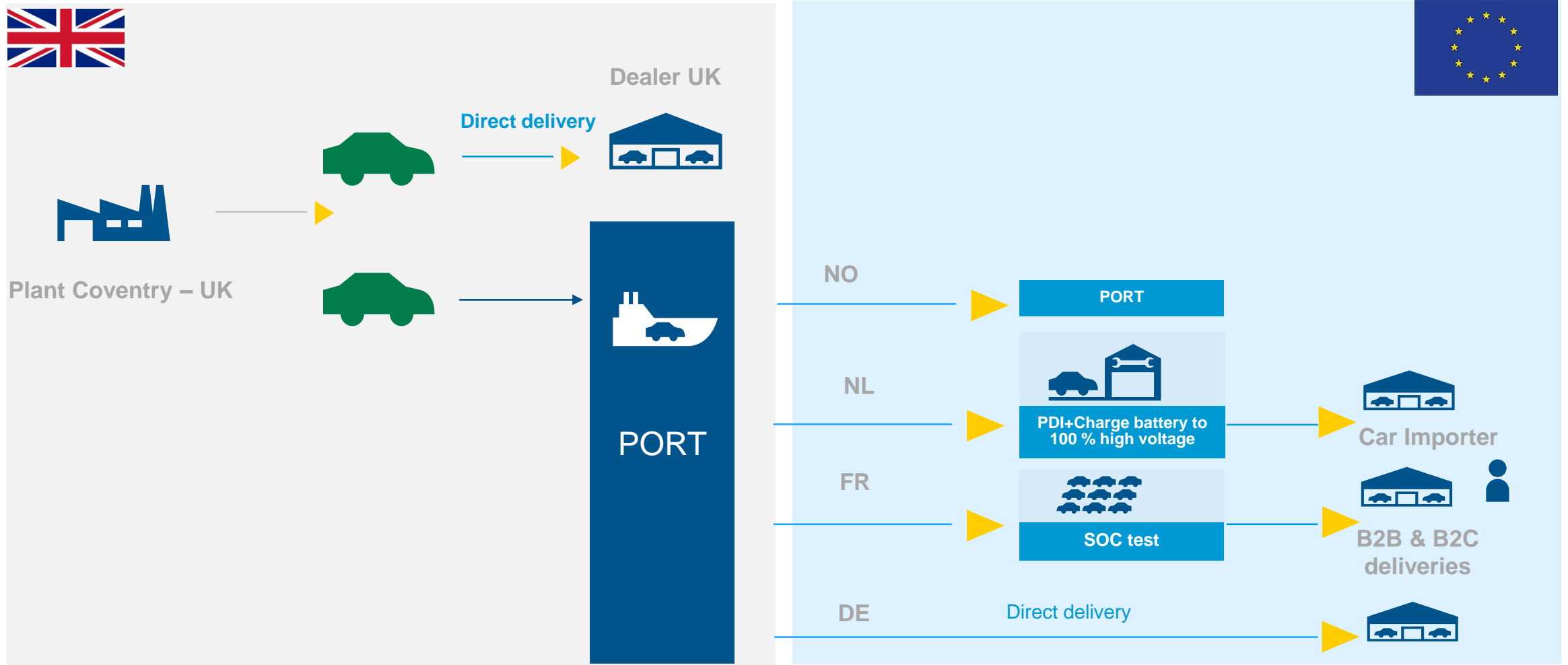


CONTROL TOWER
(Bulgaria)

CHARGING IN COMPOUND GREEN & FAST

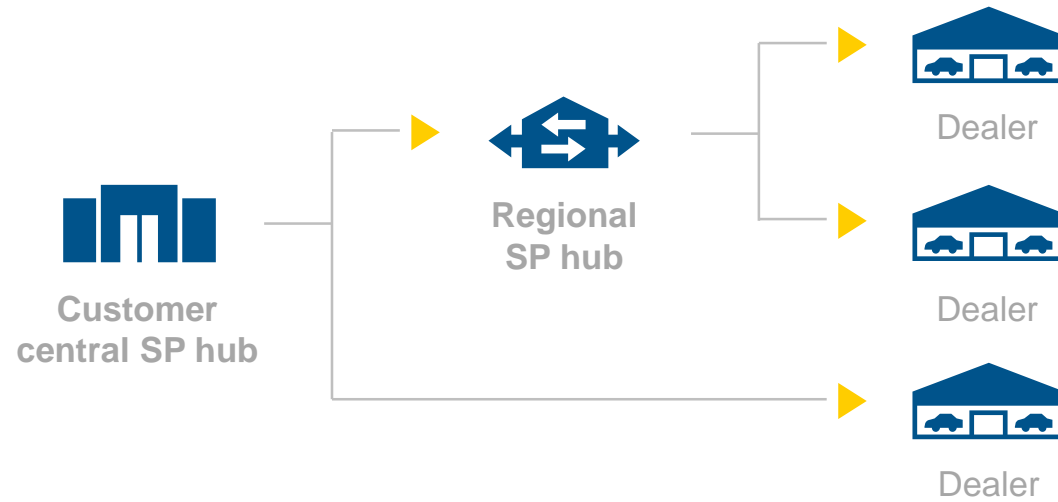


EV EUROPEAN TRANSPORT & DISTRIBUTION



End to end tracking

SPARE PARTS DISTRIBUTION IN EUROPE

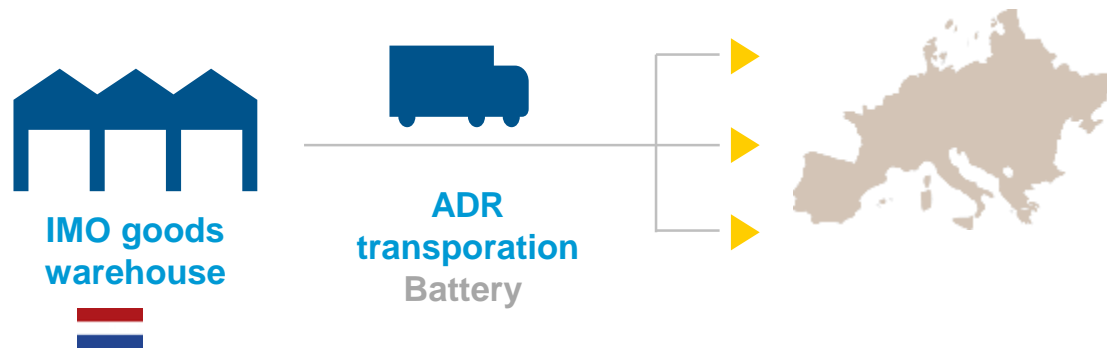


End to end
ADR compliant
transport

Dedicated
customer
service

End to end
tracking

BATTERY STORAGE & DISTRIBUTION OVER EUROPE





MOBILITY

with GEFCO

Contact us



TOLGA ORAN

Regional Sales & Marketing Director
Central Europe/Balkans/Turkey/Middle East
GEFCO

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Partners, unlimited