

COMBINE FORCES



#SHORT OVERVIEW

VOLKSWAGEN GROUP LOGISTICS

NEW WAYS

Team Vehicle Logistics on the ECG Conference.
WE'RE LOOKING FORWARD TO THE EXCHANGE



- OLIVER BRONDER -
VEHICLE LOGISTICS

- KARSTEN REHME -
USED CAR LOGISTICS

- MIRNA GARIBAY -
NETWORK PLANNING

- BENEDICT BAYER -
**OUTBOUND
ORDER BOOK**

- TORBEN STADTAUS -
PORT CAPTAIN

**MEMBER OF MANAGEMENT
BOARD VOLKSWAGEN GROUP
LOGISTICS**

#short overview

VOLKSWAGEN GROUP LOGISTICS



#GROUP LOGISTICS



#COLLABORATION



#SUSTAINABILITY



#GROUP LOGISTICS



#COLLABORATION



#SUSTAINABILITY

Since September 1st, Oliver Blume has been at the helm.
CHAIRMAN OF THE BOARD OF MANAGEMENT OF VOLKSWAGEN AG



*"I am part of the team and
do not sit in the stands"*

My personal five principles to lead a company

- 1 BRANDS
- 2 PRODUCTS
- 3 PEOPLE
- 4 ENTREPRENEURSHIP
- 5 SUSTAINABILITY

The logistics tasks are organized into plant, brand and group functions.

STRUCTURE OF LOGISTICS WITHIN THE GROUP



VOLKSWAGEN
KONZERNLOGISTIK

120 plant logistics

IN-PLANT FUNCTIONS

12 brand logistics

**CROSS-PLANT
FUNCTIONS & SYNERGIES**

1 group logistics

**CROSS-BRAND
FUNCTIONS & SYNERGIES**

Logistics processes of 12 brands, 120 plants and 365 models require an optimized management.

CORE BUSINESS FIELDS OF GROUP LOGISTICS

Production Network



120 plants

Material Logistics



> 200 m. parts per day

Vehicle Logistics



~ 5.6 m. vehicles per year

Vehicle Logistics plans, optimises and coordinates the worldwide vehicle transport network.

KEY FACTS OF VEHICLE LOGISTICS



> 150 Markets
130 Importers

5.6 m
Vehicles p.a.



ca. 1.400
Transport relations Europe

**22 NSC/
NSO**



Oversea transport

2.8 m vehicles p.a.

200 ports

9 Ships

2 Port Capt.



11



Vehicle dispatchments

300.000 rail coach loads p.a.

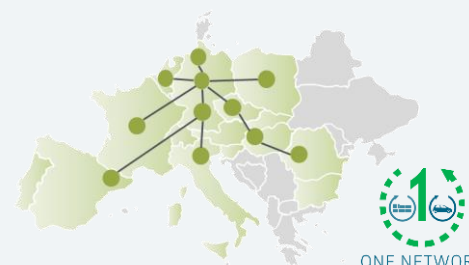


400.000 truck loads p.a.



Used Car Logistics

incl. services as
eg. refurbishment



**Worldwide cross-brand
transport network**

> 2 m

**COC documents
in Europe**





#GROUP LOGISTICS

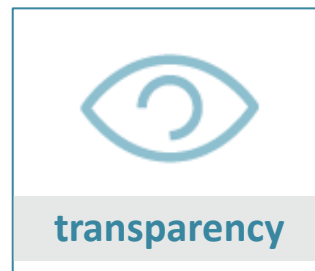


#COLLABORATION



#SUSTAINABILITY

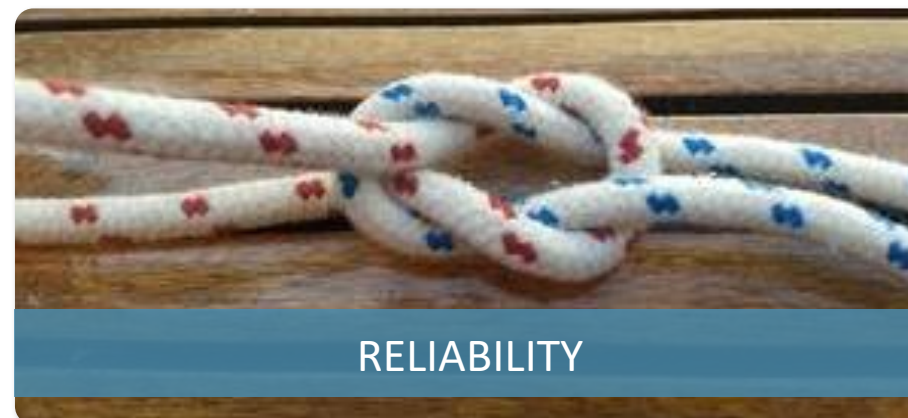
Challenges from VUCA-World. THE NEW STANDARD



In the past flexibility was mostly expected on the part of logistics service providers.

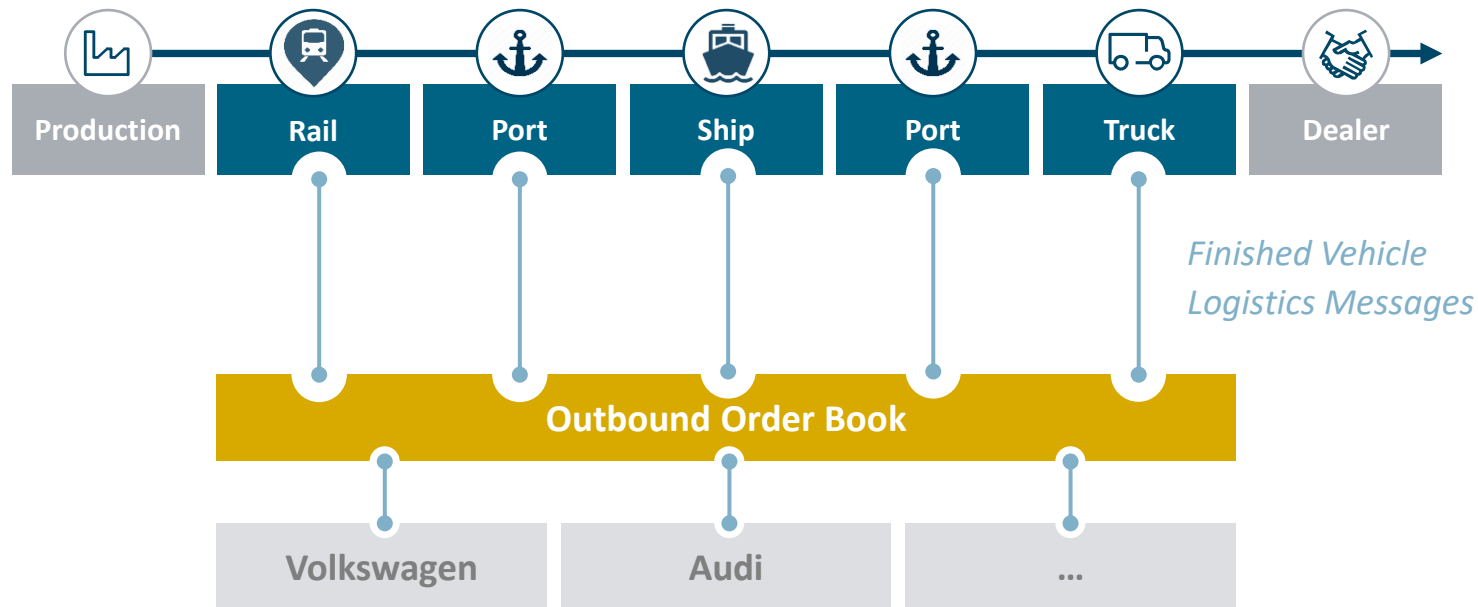
Let's answer challenges from VUCA-World with communication, transparency and reliability.

ENHANCE FUTURE COLLABORATION AND STRONG PARTNERSHIPS



In the future we will only have one access point for carriers, yards and other logistics partners.

THE OUTBOUND ORDER BOOK



One communication channel for all brands within the group

Standardized communication with FVL message standard

Enhanced transparency for all parties in the distribution chain



#GROUP LOGISTICS



#COLLABORATION



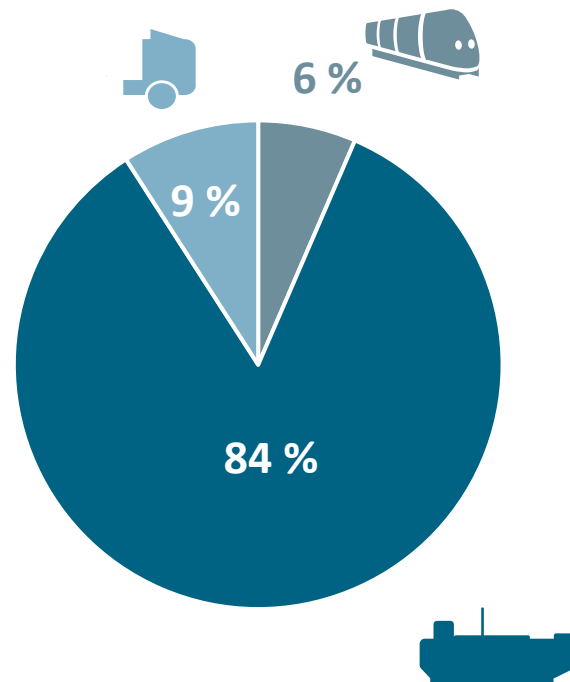
#SUSTAINABILITY

#CO₂ footprint

Transport volume Vehicle Logistics

Σ >40bn tkm p.a.

≈ 200 times the distance to the sun

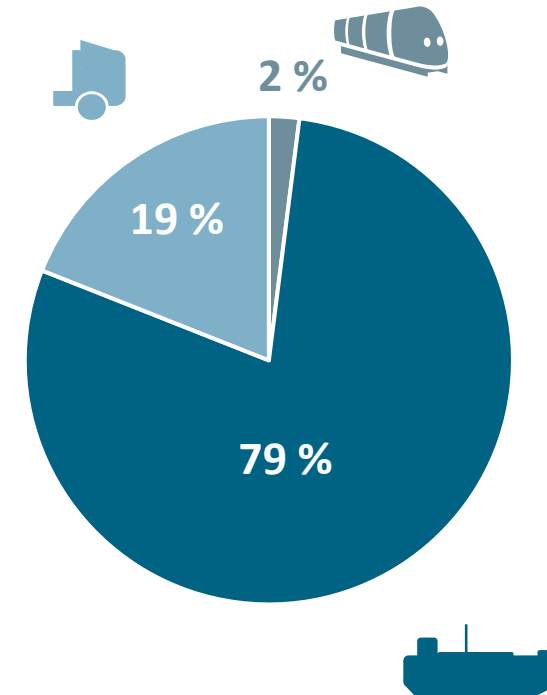


> 5m Fzg. p.a.



Emissions Vehicle Logistics

Σ >2m t CO_{2e} p.a.



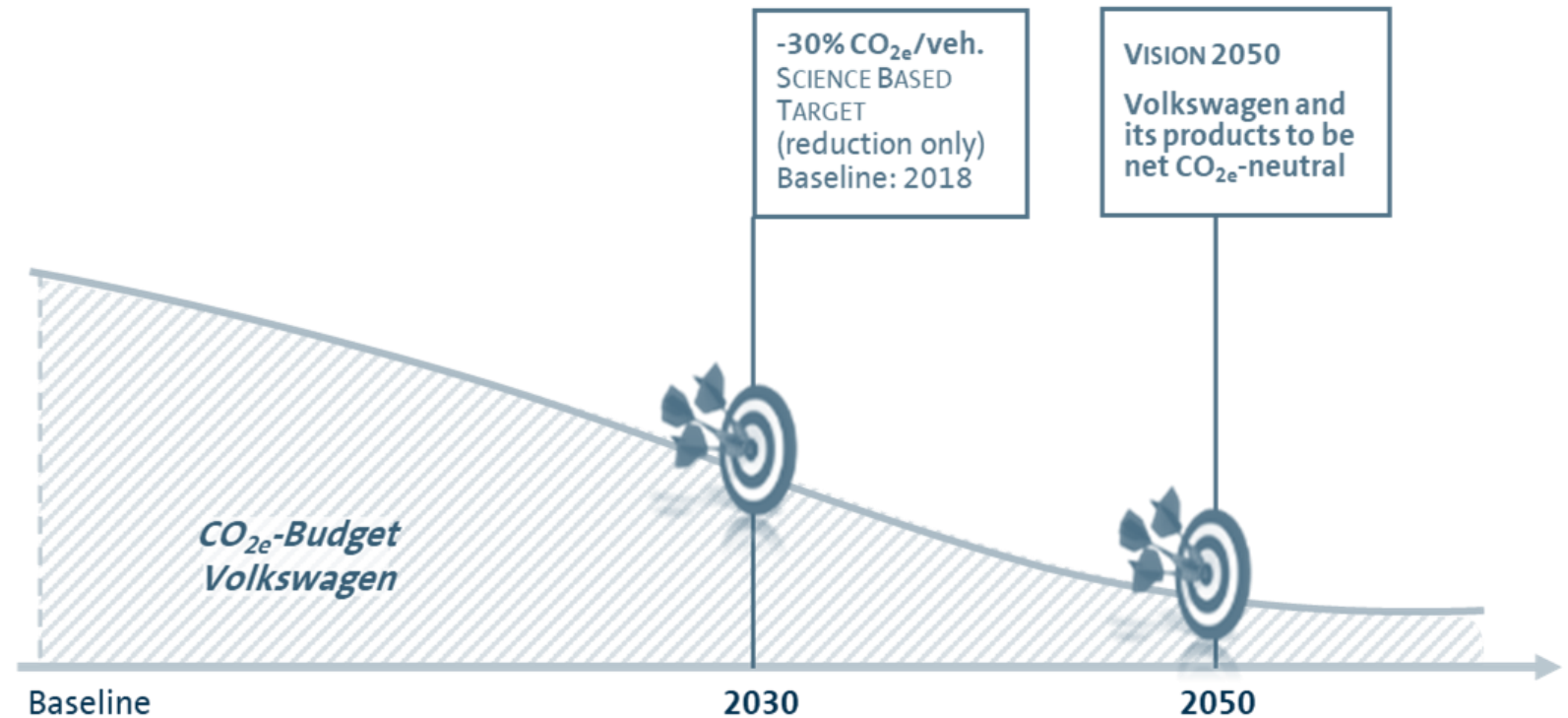
The decarbonization targets of the Group require deep changes in every business segment.

COMMITMENT TO THE PARIS CLIMATE AGREEMENT

Paris Agreement

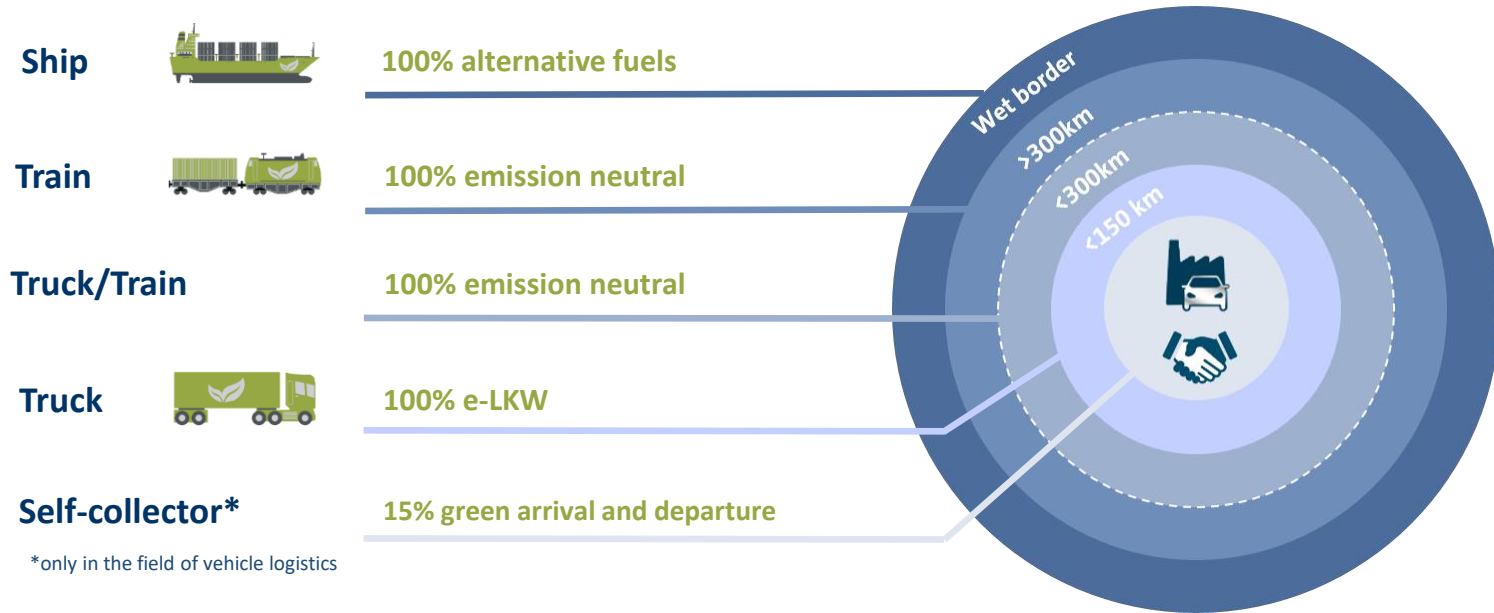


Volkswagen Group decarbonization path until 2050



We combine the right choice of transport modes with the overall strategy of material and FBU.

#ONE.NETWORK



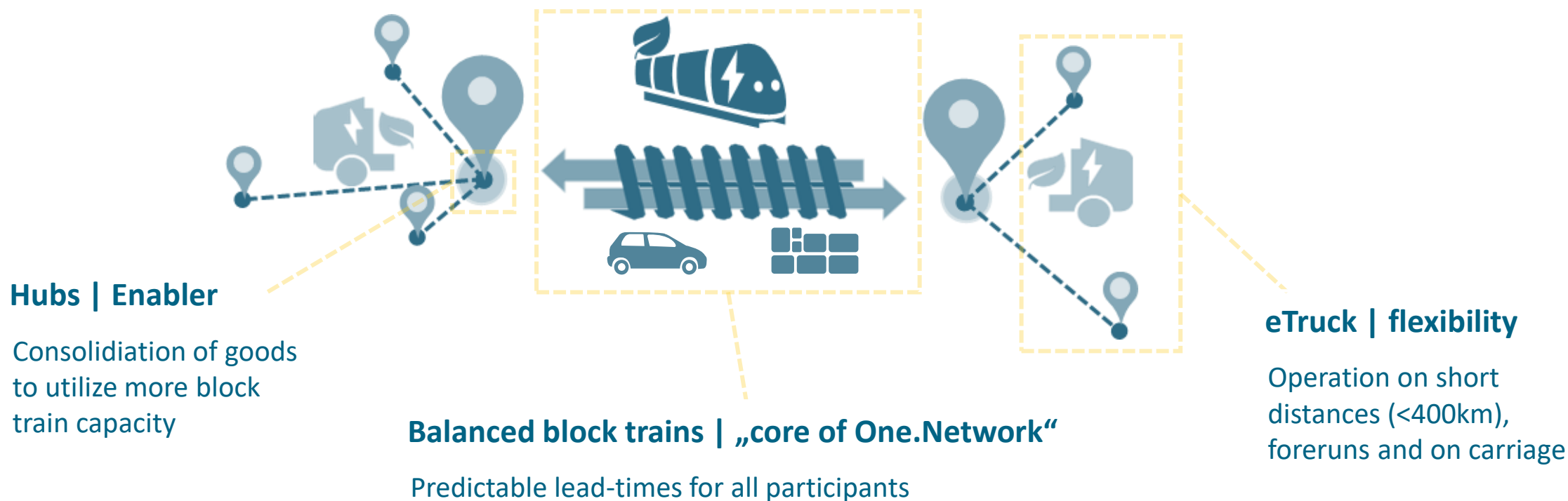
The overall strategy reduces **costs**, **emissions** and **complexity**
- it also optimizes **capacities** on the market.



Vision of a sustainable
european network
for the transportation
of material and
fully built-up units

More resource efficiency, flexibility and resilience in one network for material and FBU volume.

#ONE.NETWORK



We extend our fleet of LNG-powered ships and the use of non-fossile fuels in overseas transport.

#GREEN SHIPPING

- Extending number of vessels with **fossil LNG** and use of **BioFuel** where available

2022-2024

2024-2030

- Transition from fossil to Bio-LNG
- Continuing use of **BioFuel** where available and no LNG-vessels in trade

after 2025

- Transition to non-fossile, synthetic “green” fuels (Synthetic Liquified Gas, Ammonia)



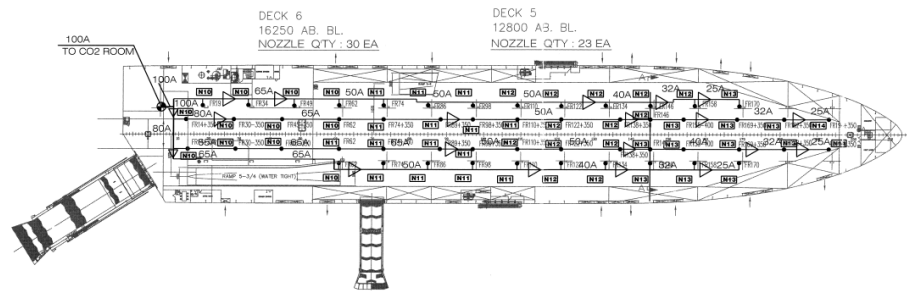
6 LNG-powered ships from 2023
(Dual-Fuel-Engine)

Emission savings per vessel per year:

CO2 up 26%; NOx up to 30%; particulate matters up to 60%; SOx up to 100%.

All critical situations on vessels are manageable – despite the kind of involved cargo.

#VESSEL SAFETY



Fixed firefighting systems (drencher, CO₂, foam) can prevent the spread of fire despite the kind of involved cargo.



In case of fire the fixed firefighting system should be released as soon as possible.



Legislative Assessment for Safety Hazards of Fire
and Innovations in Ro-ro Ship Environment

**Facts and Myths About
Fires in Battery Electric
Vehicles**



No enhanced risk
from transport of BEVs!

Volkswagen Group logistics is in close cooperation with relevant parties (also for technical details) and acts as a hub for knowledge transfer.

A key success factor will not change - we can only do it together!



> 300 Players



[...]

#ONE.TEAM - #ONE.MATCHFIELD