

*Together with Passion*



**RHENUS AUTOMOTIVE SE**  
**COMPANY INTRODUCTION**  
MARCH 2023



# AGENDA

1

Rhenus Company Introduction

2

International Growth

3

The Battery Lifecycle Company (BLC)



# A STRONG FAMILY: RHENUS IS PART OF A SERVICE GROUP

You are in good company when you work with us. We belong to the international RETHMANN Group – a family-owned business well-known for its future-oriented solutions, whether it be in logistics, recycling, the agriculture, food and energy sectors or mobility and public transport.



The full range  
of logistics services



 42,000 employees

€ 8.8bn



Working for the future:  
A recycling, service and  
water company



 38,000 employees

€ 11.4bn



Sustainable solutions:  
Reliable services and high-  
quality products made from  
organic resources



 10,500 employees

€ 3.0bn



Well connected:  
Local public transport  
services



 83,000 employees

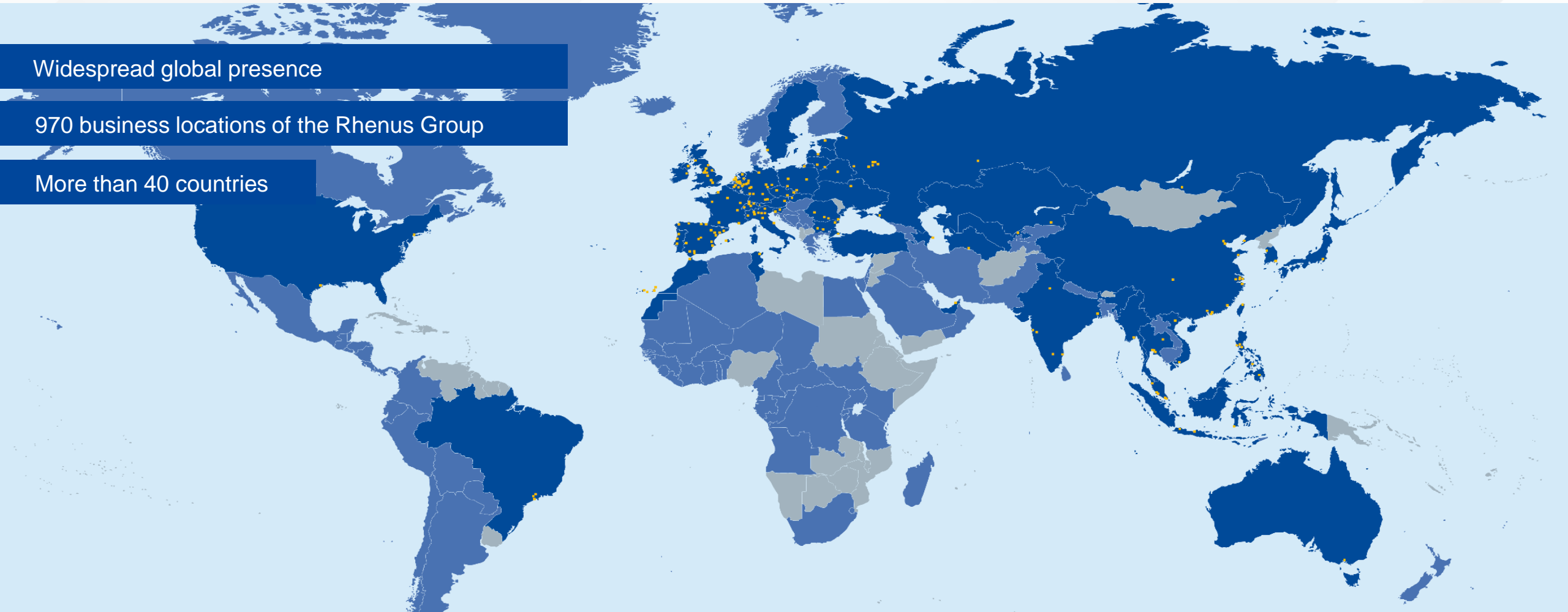
€ 7.0bn

# OUR GLOBAL RHENUS NETWORK

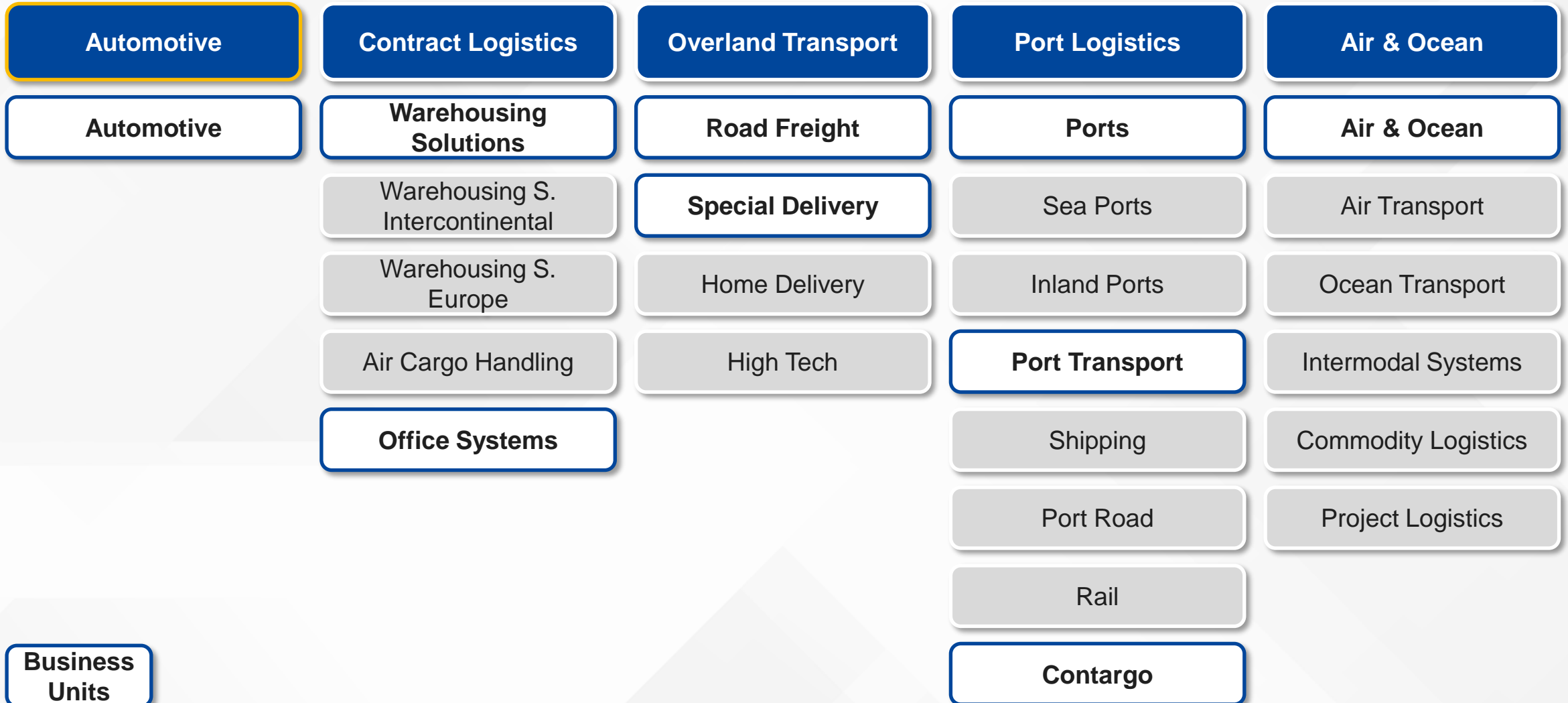
Widespread global presence

970 business locations of the Rhenus Group

More than 40 countries



# RHENUS GROUP – GLOBAL LOGISTICS SERVICES



**Business Units**

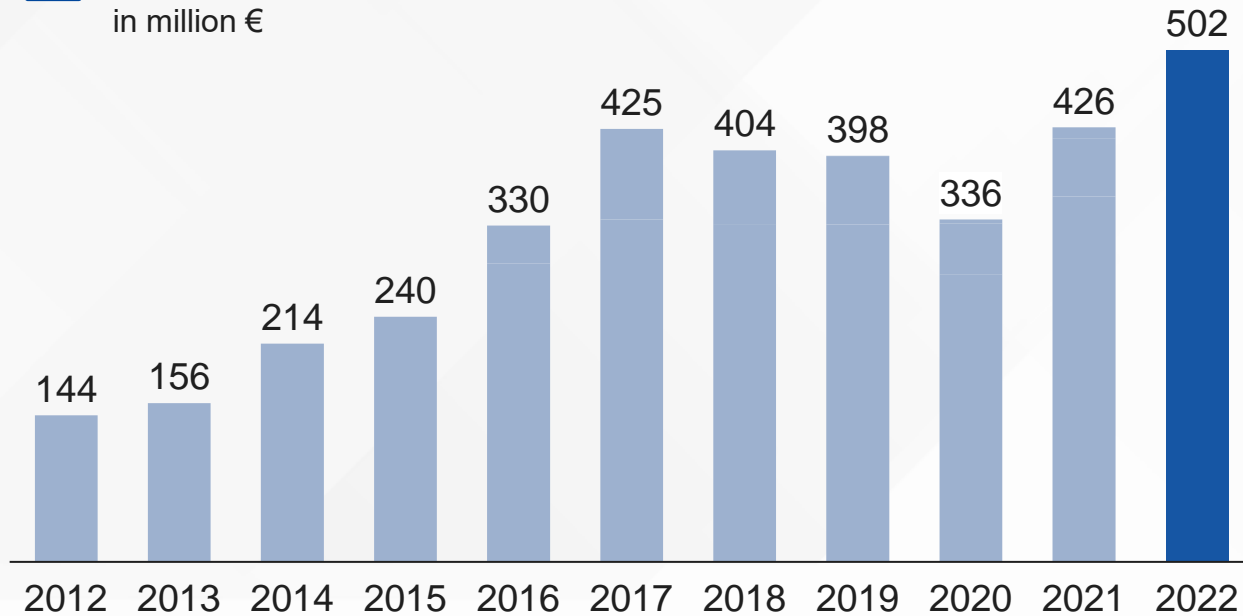


# SERVICE PORTFOLIO & GLOBAL GROWTH

## RHENUS AUTOMOTIVE EXPANDED SERVICE PORTFOLIO & GLOBAL FOOTPRINT

### Sustainable Gross Margin Growth

in million €



**+40 locations worldwide**



**+7000 employees**



# VALUE ADDED BUSINESS SERVICES

## LOGISTICS SERVICES

### Inbound Logistics



e.g. Domestic & international transportation

### Distribution Logistics



e.g. Warehousing Services

### Logistics Center



e.g. JIT/JIS Commissioning

### Plant Logistics



e.g. Line feeding and empties handling

## ASSEMBLY SERVICES

### Chassis Module Assembly



e.g. Axle Assembly @ BMW

### Drive Train Assembly



z.B. Engine Dress @ Ford

### Interior Assembly



e.g. Cockpit Assembly @ Opel

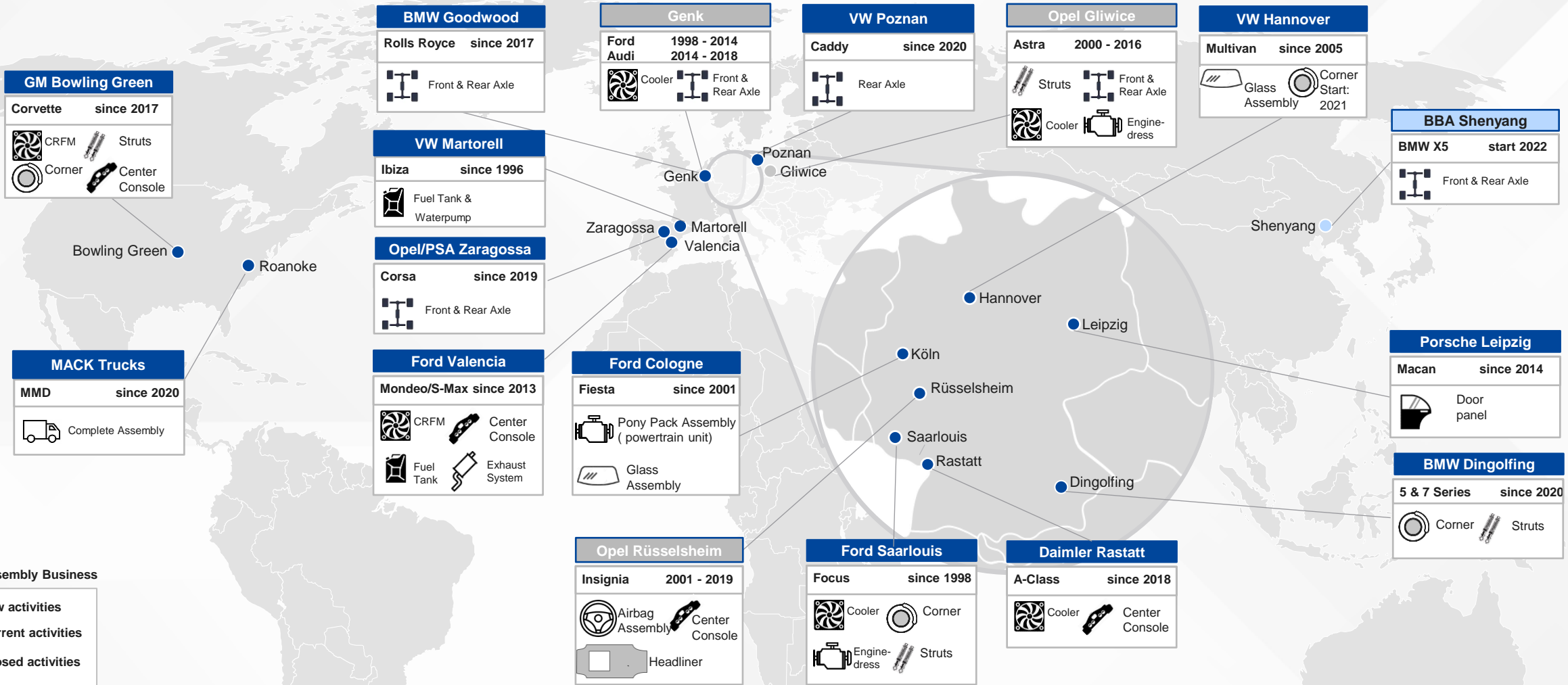
### Complete Truck Assembly



e.g. Mack Plant Operation

# SERVICE PORTFOLIO & GLOBAL GROWTH

## VALUE ADDED ASSEMBLY – CUSTOMER REFERENCES





# SERVICE PORTFOLIO

## LOGISTICS – CUSTOMER REFERENCES

### North Germany

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- › Bremen  
(Mercedes-Benz)
- › Hamburg  
(Mercedes-Benz)
- › Hafen-Harburg  
(Mercedes-Benz)
- › Berlin  
(BMW)

### East Germany

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- › Chemnitz  
(Volkswagen)
- › Kölleda  
(MDC Power /  
Mercedes Benz)
- › Zwickau  
(Volkswagen & SMP)
- › Leipzig  
(BMW & SMP)
- › Kamenz  
(Plant Logistics for MBE)

### West Germany

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- › Wittlich  
(Goodyear)
- › Steel Warehousing  
(diverse customers)
  - › Saarlouis
  - › Köln
  - › Kaiserslautern
  - › Gustavsburg
  - › Hannover Seelze

### South Germany

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- › Rastatt  
(Mercedes Benz)
- › Sindelfingen  
(Mercedes Benz)
- › Ladenburg  
(Mercedes Benz)
- › Iffezhiem  
(Mercedes Benz)
- › Regensburg  
(BMW)
- › Stuttgart  
(Plant Logistics for MB)
- › Heilbronn  
(Audi)
- › Neckarsulm  
(Audi)
- › Neckarau  
(John Deere)

### International

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- › Valencia  
(Ford)
- › Genk  
(diverse customers)

# SERVICES PORTFOLIO – RHENUS AUTOMOTIVE SE

## Products

SUPPLY CHAIN  
MANAGEMENT



VALUE ADDED  
ASSEMBLY



DIRECTED  
BUY



BATTERY LIFECYCLE  
MANAGEMENT



CORE COMPETENCY  
OF THE OEM

R&D

MARKETING  
SALES

## Core Competencies



INFORMATION  
TECHNOLOGY



QUALITY  
MANAGEMENT



ENGINEERING



INNOVATION



PEOPLE  
MANAGEMENT

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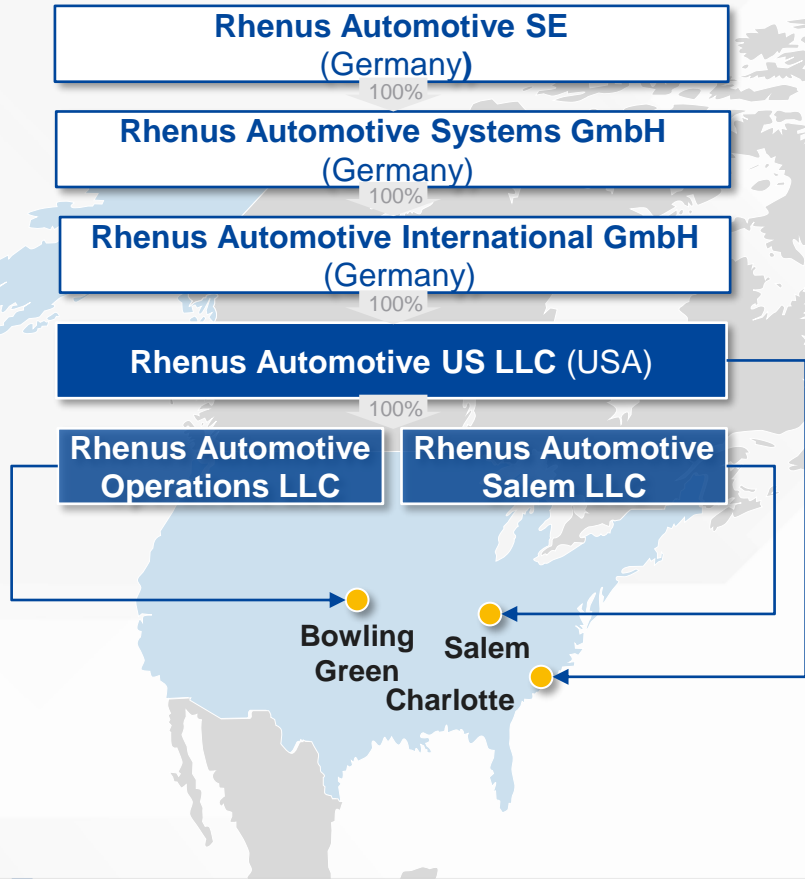
3

The Battery Lifecycle Company (BLC)





# RHENUS AUTOMOTIVE US ESTABLISHMENT OF STRUCTURES AS A BASIS FOR GROWTH IN THE MARKET



## Rhenus Automotive US LLC (USA)

- › Local presence for all North American customers
- › Development of customized solutions for assembly, production and logistics

## Rhenus Automotive US LLC (USA)

- › VAA services in the sports car market segment since 2018
- › Total number of employees: 65 (2 shifts)
- › Partial assembly of 4 modules:
  - › Brake corner module
  - › Condenser/radiator/fan module
  - › Center console
  - › Coil over shock absorber
- › Certification: IATF 16949:2016

## Rhenus Automotive US LLC (USA)

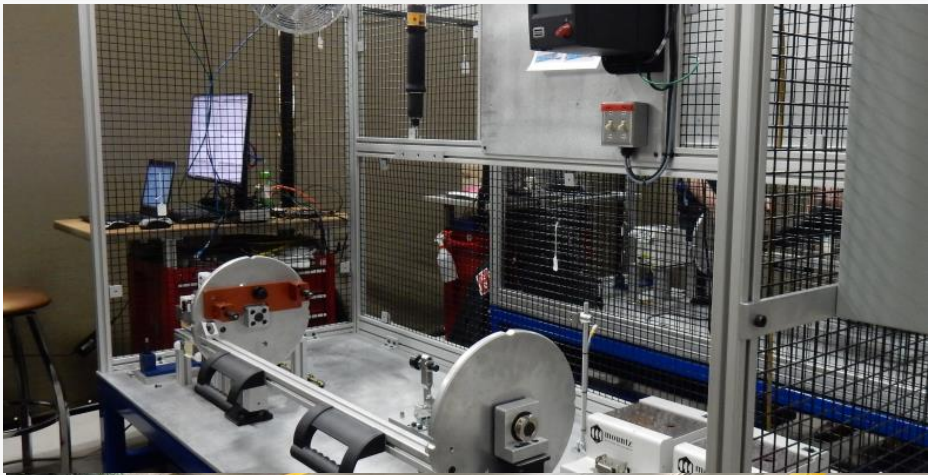
- › Complete vehicle assembly and internal logistics since 2019
- › Complete vehicle assembly as follows including process testing & end of line repair:
  - › Cabin assembly
  - › Drive train assembly
  - › Axle assembly
  - › Chassis/complete vehicle assembly
  - › Mounting tires and rims
- › Certification: IATF 16949:2016 (aspired)



**Expansion of structures & competencies planned in the USA** to enable sustainable growth ambitions

# BOWLING GREEN, KENTUCKY

## VALUE ADDED ASSEMBLY OF VARIOUS PARTS FOR GENERAL MOTORS



### Scope

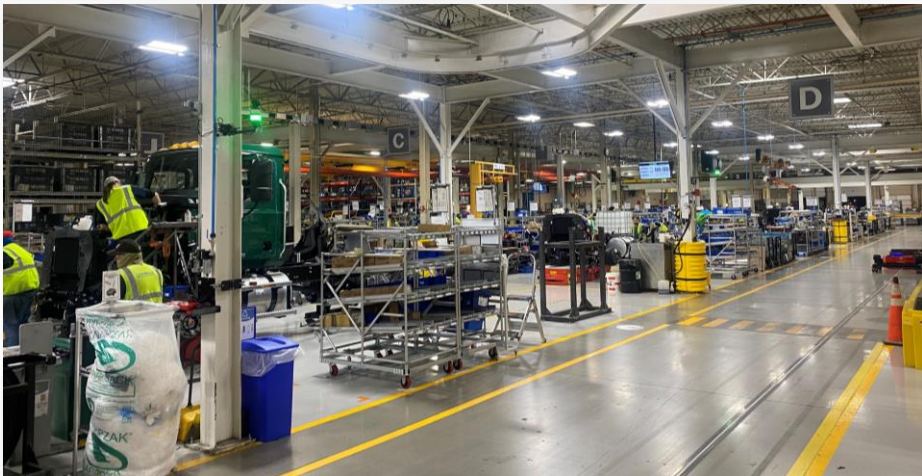
- › Start in 2018, operations in two shifts with more than 60 employees
- › VAA (Value Added Assembly) services in the sports car market segment
  - › Sub-assembly of 4 modules as follows:
    - › Brake corner module assembly
    - › Front and rear condensor/radiator/fan module assemblies
    - › Center console assemblies
    - › Coil over shock assemblies.

### Setup

- › Operation of 4 sub-assembly modules on 4 assembly lines
- › Monitoring and control of all safety relevant assembly processes through Rhenus owned IT system
- › 100% traceability of all safety relevant assembly process results
- › Continuous improvement of station layout and process design using 3D printing concepts for poke yokes, tool holders, brackets and other appliances

# SALEM, VIRGINIA

## FULL VEHICLE ASSEMBLY OF MMD TRUCK FOR MACK (VOLVO TRUCKS)



### Scope

- › Start in 2019, operations with two shifts and more than 220 employees
- › Receiving, storing and lineside delivery of all incoming parts
- › Full vehicle assembly (including in process testing and end of line repair):
  - › Cab assembly
  - › Drive line assembly Axle assembly
  - › Chassis/complete vehicle assembly
  - › Tire and rim assembly

### Setup

- › Receiving and storage of material in Co-pilot (customer SAP system)
- › Assembly of MMD truck on 3 assembly lines
- › Monitoring and control of all safety relevant assembly processes through Rhenus owned IT system
- › 100% traceability of all safety relevant assembly process results
- › Continuous improvement of station layout and process design in cooperation with the customer



# RHENUS AUTOMOTIVE US ESTABLISHMENT OF STRUCTURES AS A BASIS FOR GROWTH IN THE MARKET



### Rhenus Automotive (Shanghai) Holding Co., Ltd

- › Established in Jan. 2020
- › Registered capital 30mio. USD, full injected
- › Central functions: finance, supply chain management, sales, business development, quality (supplier development), procurement, government relationship
- › Total headcounts (by 2022): 20

### Rhenus Automotive Operations Shenyang

- › Established in May 2020, 100% subsidiary of Shanghai Holding
- › Operation functions: production, logistic, maintenance, quality, IT
- › Total headcounts (by Mar. 2022): 185

# EXPANSION TO THE CHINESE MARKET OFFERS HUGE POTENTIALS SUCCESSFUL PROJECT RAMP-UP IN SHENYANG DESPITE LOCAL LOCKDOWNS



**Assembly of the front rear axle for the BMW X5 CN**



**Duration: 04/2022 – 12/2026**  
(established: May 30th, 2020)



**185 Employees**  
on > 15.000 m<sup>2</sup>



**>110.000 cars p.a.**  
with 4 hours lead time





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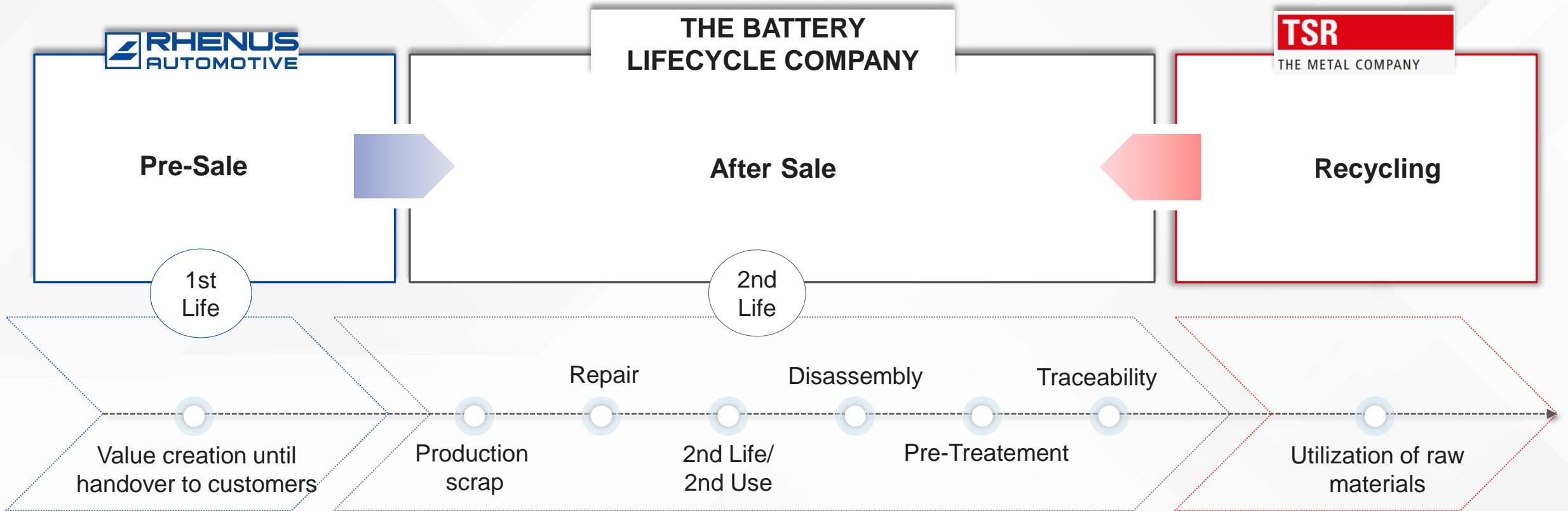
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**The Battery Lifecycle Company (BLC)**



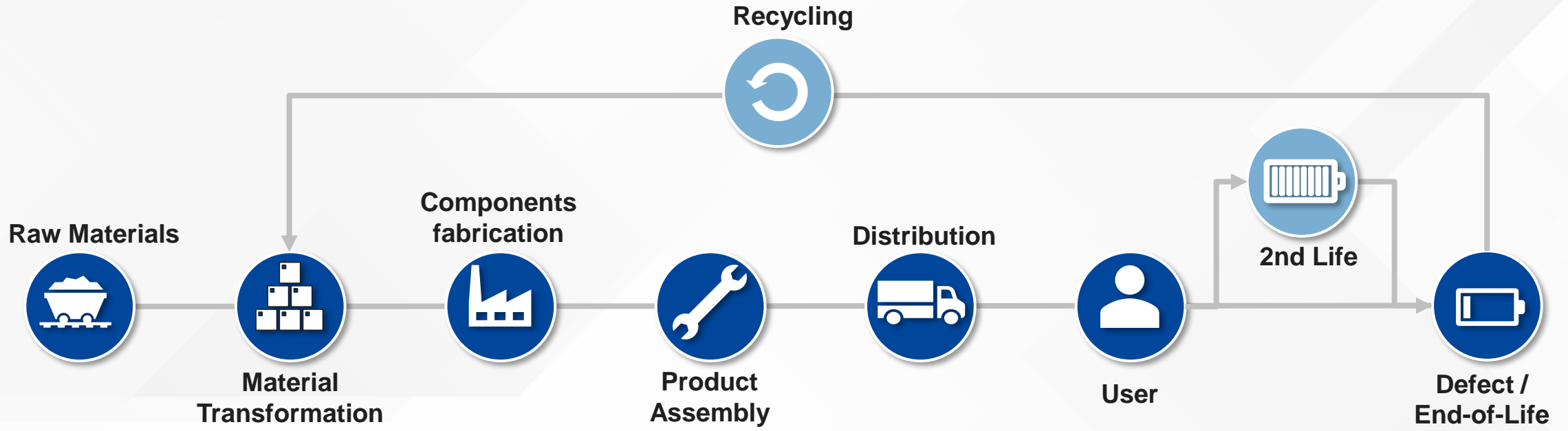


# WHO WE ARE FOUNDATION OF A DEDICATED JOINT VENTURE



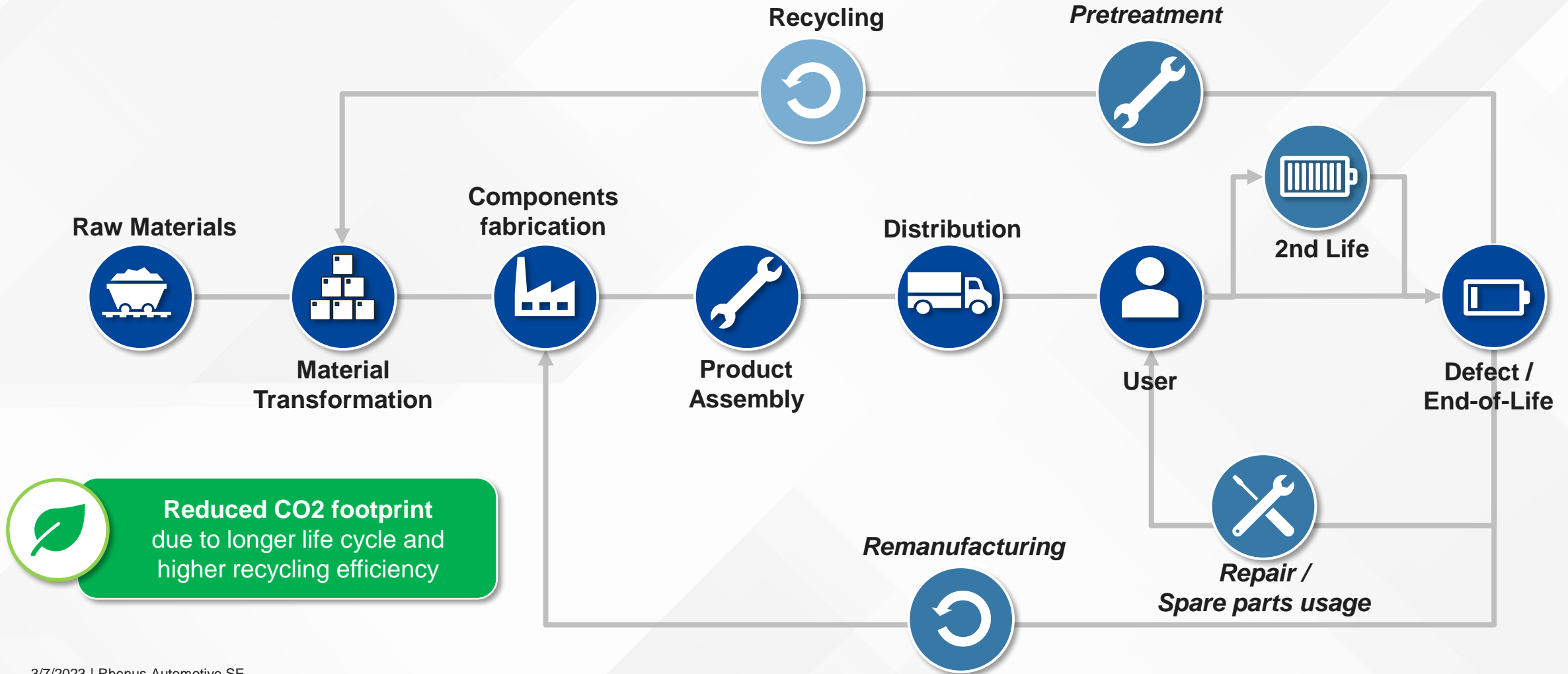
# PROBLEM

## THE CURRENT BATTERY LIFECYCLE MISSES SOLUTIONS FOR A CIRCULAR ECONOMY



# SOLUTION

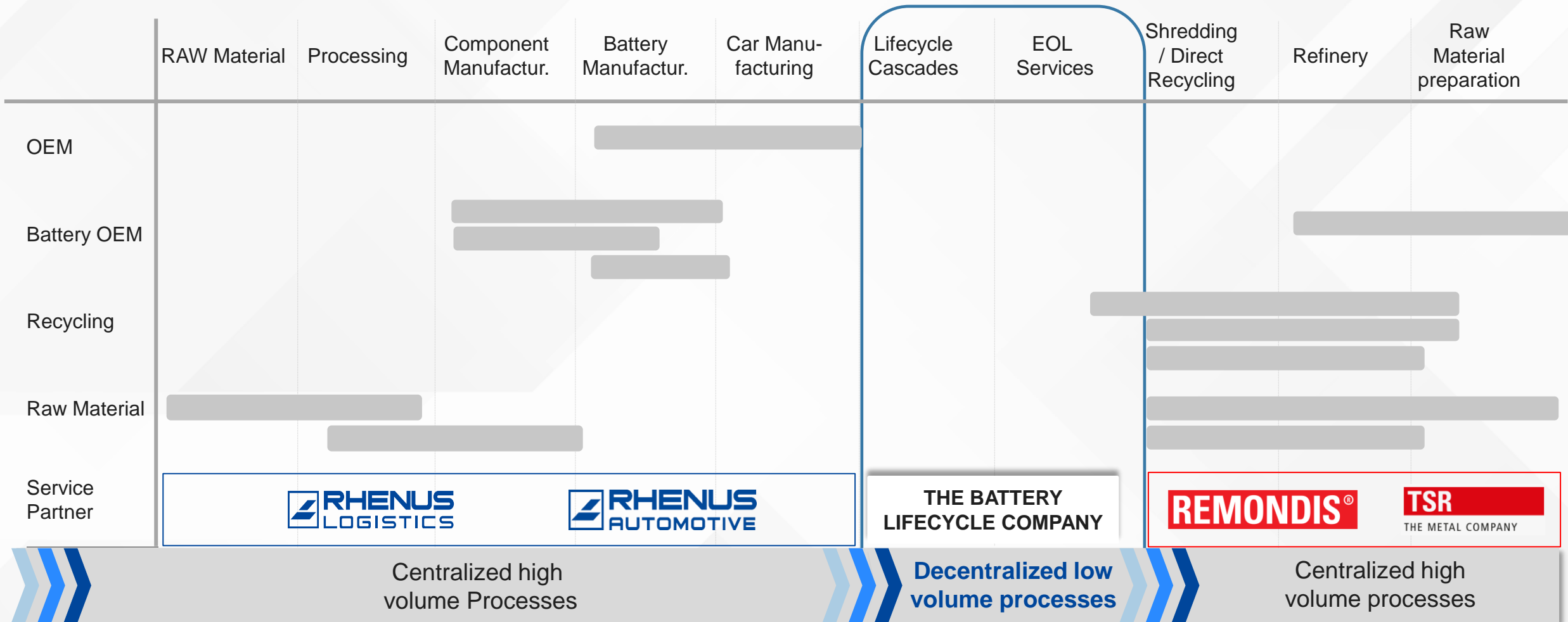
## ADDITIONAL SERVICES EXTENDS & DIVERSIFIES THE BATTERY LIFE CYCLE





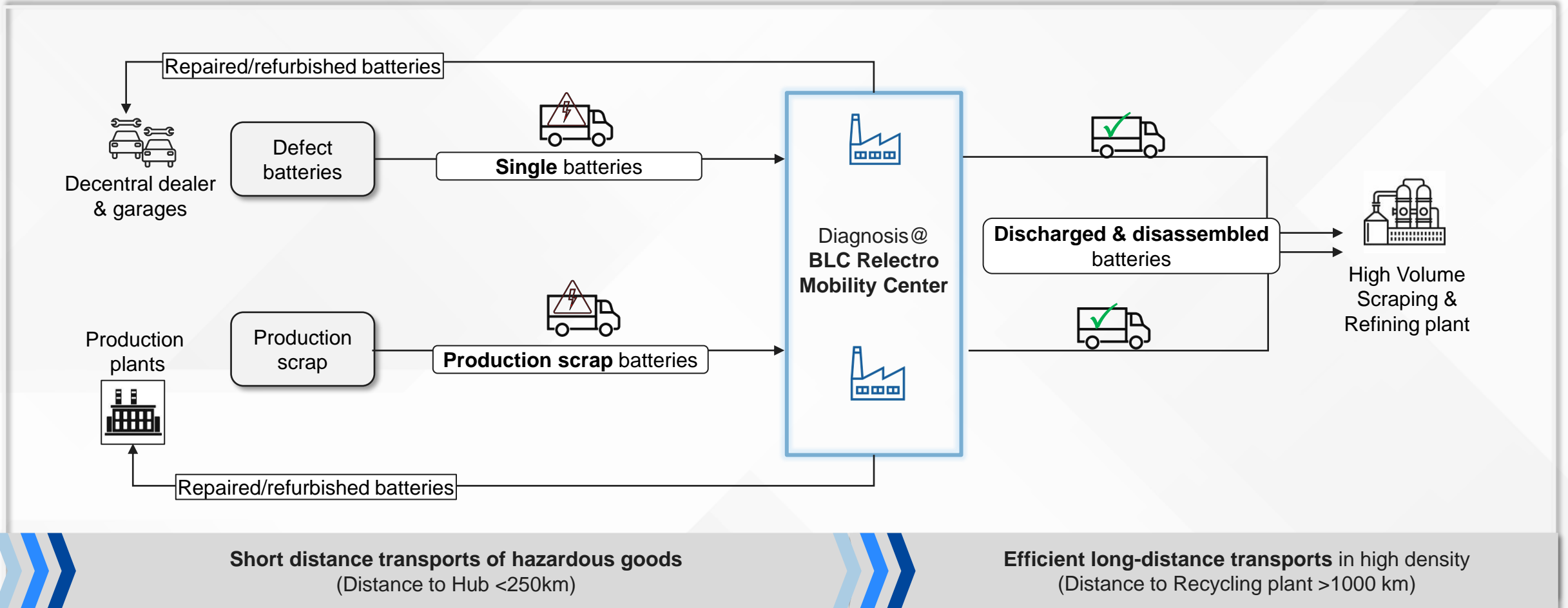
# MARKET OVERVIEW

## KEY IS THE ABILITY OF HANDLING DECENTRALIZED PROCESSES



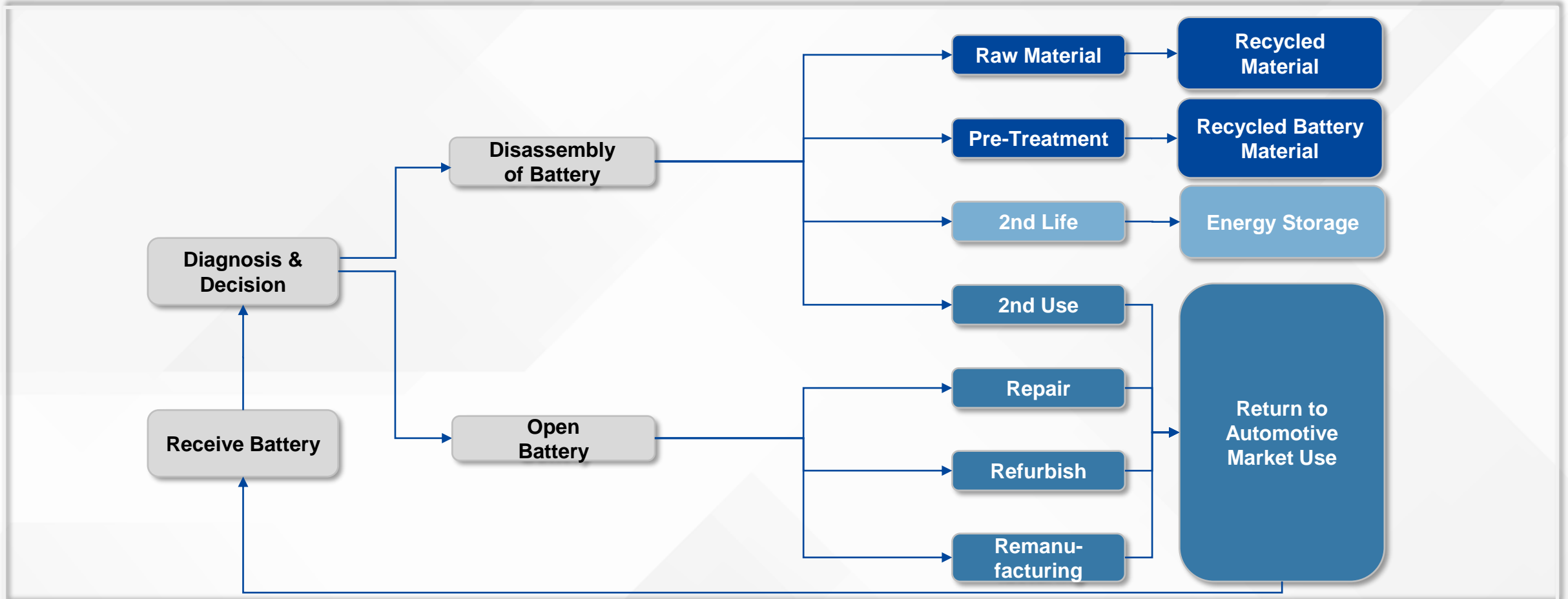
# OUR SERVICES

## HUB CONCEPT ALLOWS INCREASED EFFICIENCIES & SCALING OF PROCESSES



# OUR SERVICES

## A WIDE RANGE OF SERVICES ADDRESSES DIVERSIFIED VALUE STREAMS





## STATUS QUO

# PILOT LOCATION STARTED OPERATIONS, 2ND PLANT WILL BE READY IN Q3 2023



### Assembly site construction

- › Dismantling site in Rheda Wiedenbrück in operation
- › Further locations in Germany and internationally already being implemented

### Customer oriented solutions

- › Joint venture for remanufacturing solutions
- › Preparation for second-life use
- › Spare parts acquisition
- › Production of single-variety recycling raw materials
- › Preparation for Black Mass generation

Creation of individual processes  
adapted to our customer requirements

**THANK YOU  
FOR YOUR ATTENTION**