
TRATON
Capital Markets Day 2022
Presentations Teach-ins (selection)
Södertälje, 5-18-2022
SCANIA
MAN
Truck
Bus
NAVISTAR
RIO

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The percentage figures shown may be subject to rounding differences. Due to different proportions and scaling in graphs, data shown in different graphs are not comparable.

Agenda

1. Modular System
2. Electrification View
3. Decarbonization

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1. MODULAR SYSTEM

Claes Erixon
CTO, Scania

It starts and ends with the customer

TAILORED SOLUTIONS

TRUCKS

BUSES

POWER SOLUTIONS

Cabs

Charging interface

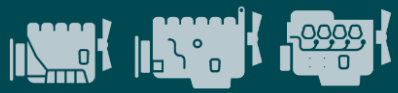
Axles

Frames

Batteries

Gearboxes

Engines



Electric machines

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Tailor-made transport solutions for each customer

Lower cost for Scania

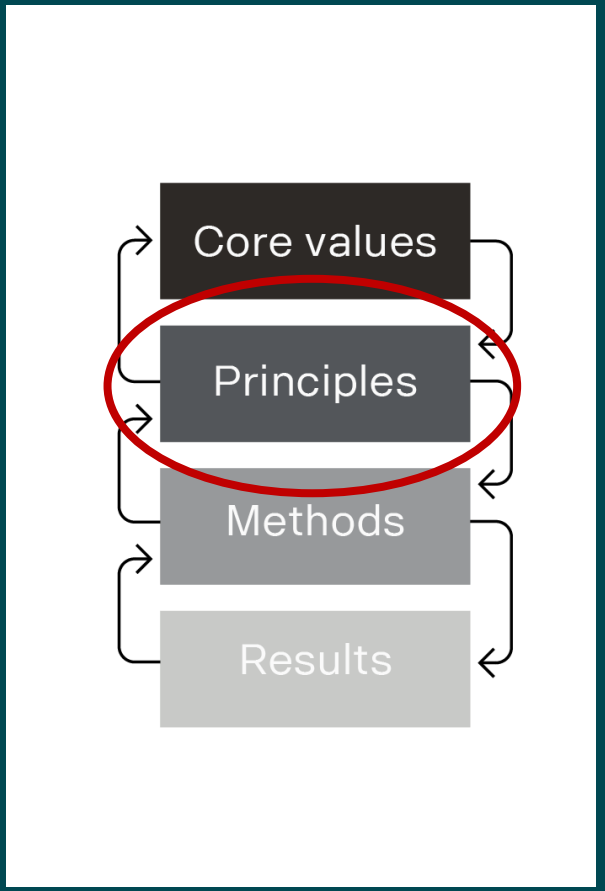
Reduced time to market

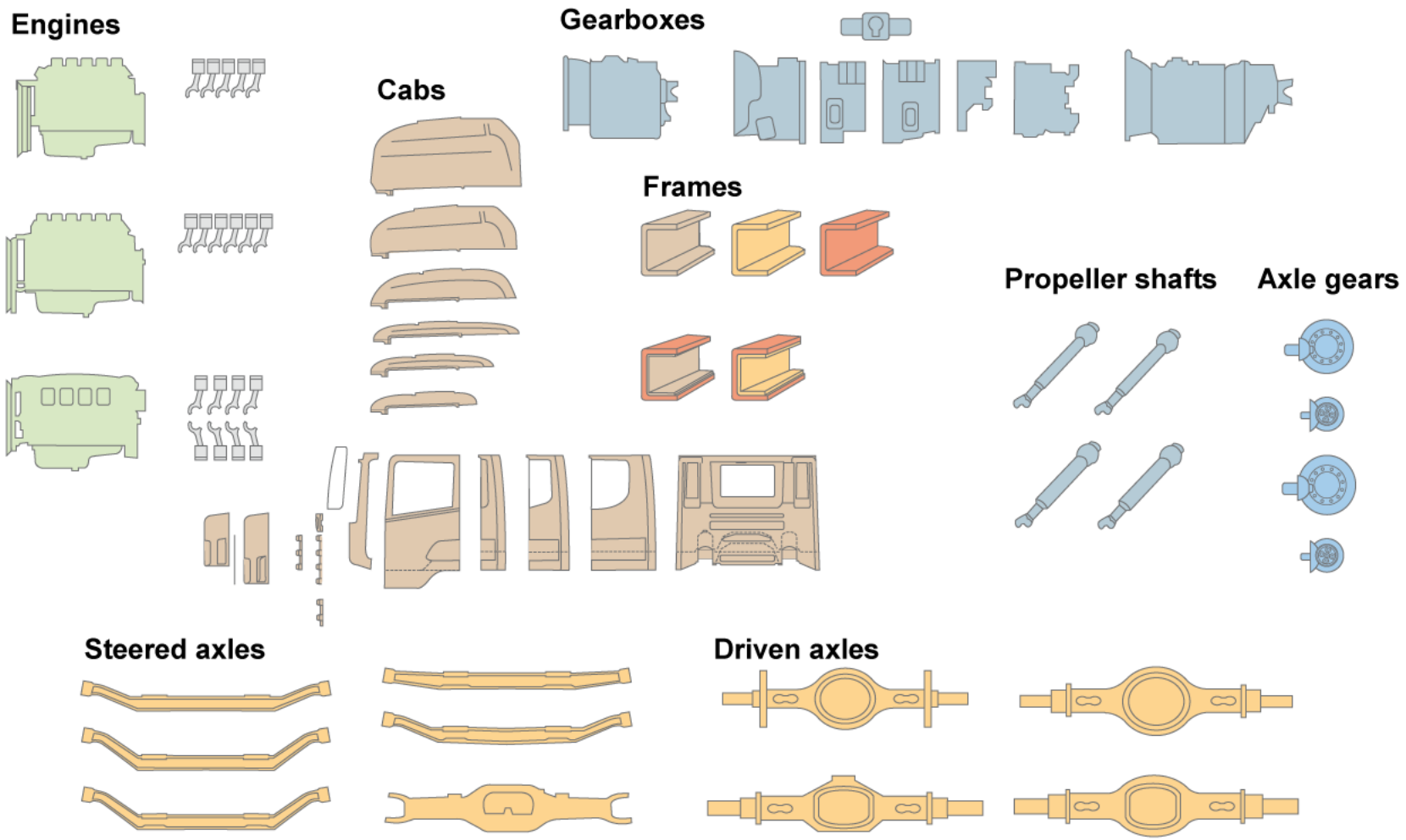
Modularisation Principles

Well-balanced performance steps

Standardized interfaces over time

Same need – identical solution




Engines
Cabs
Gearboxes
Frames
Propeller shafts
Axle gears
Steered axles
Driven axles

LEVERAGE BYGGLÅDAN

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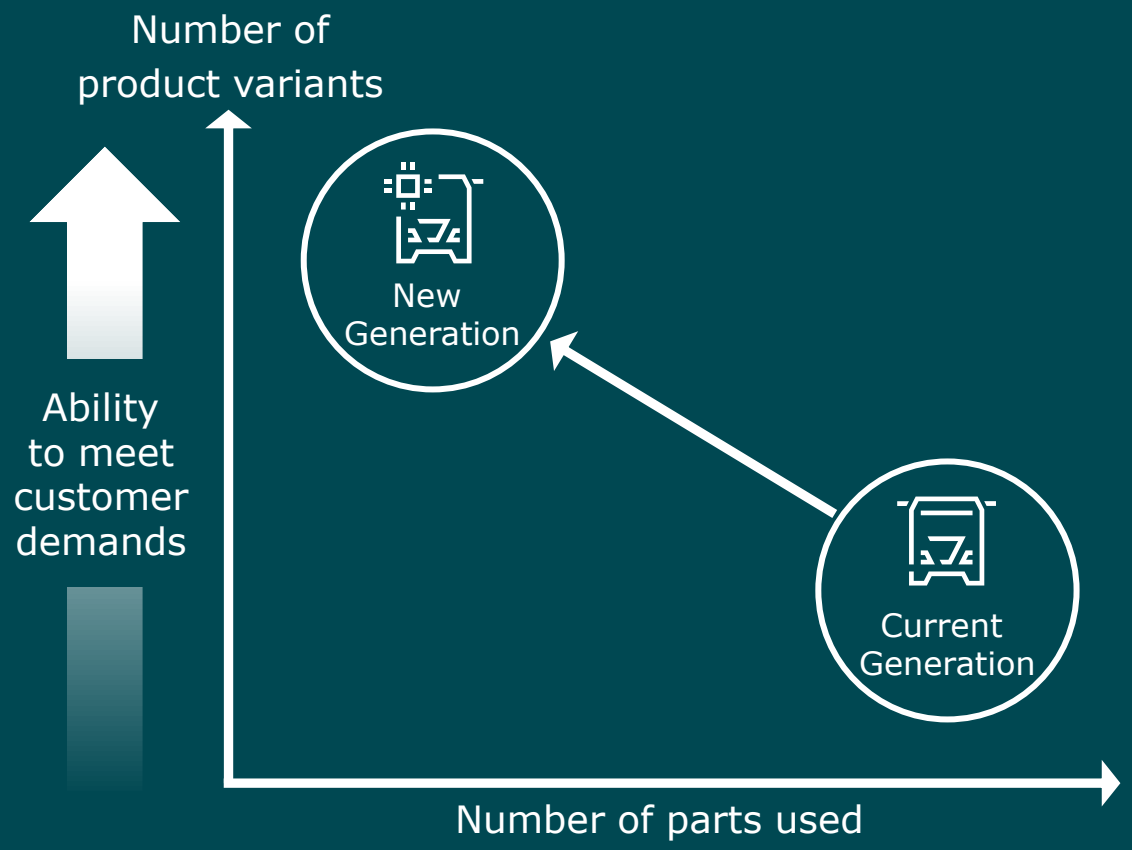
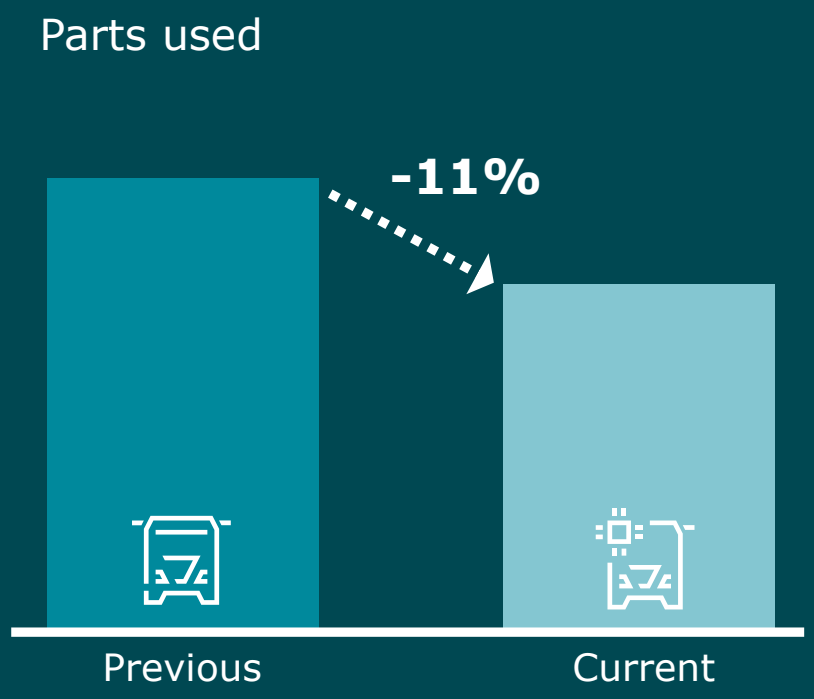
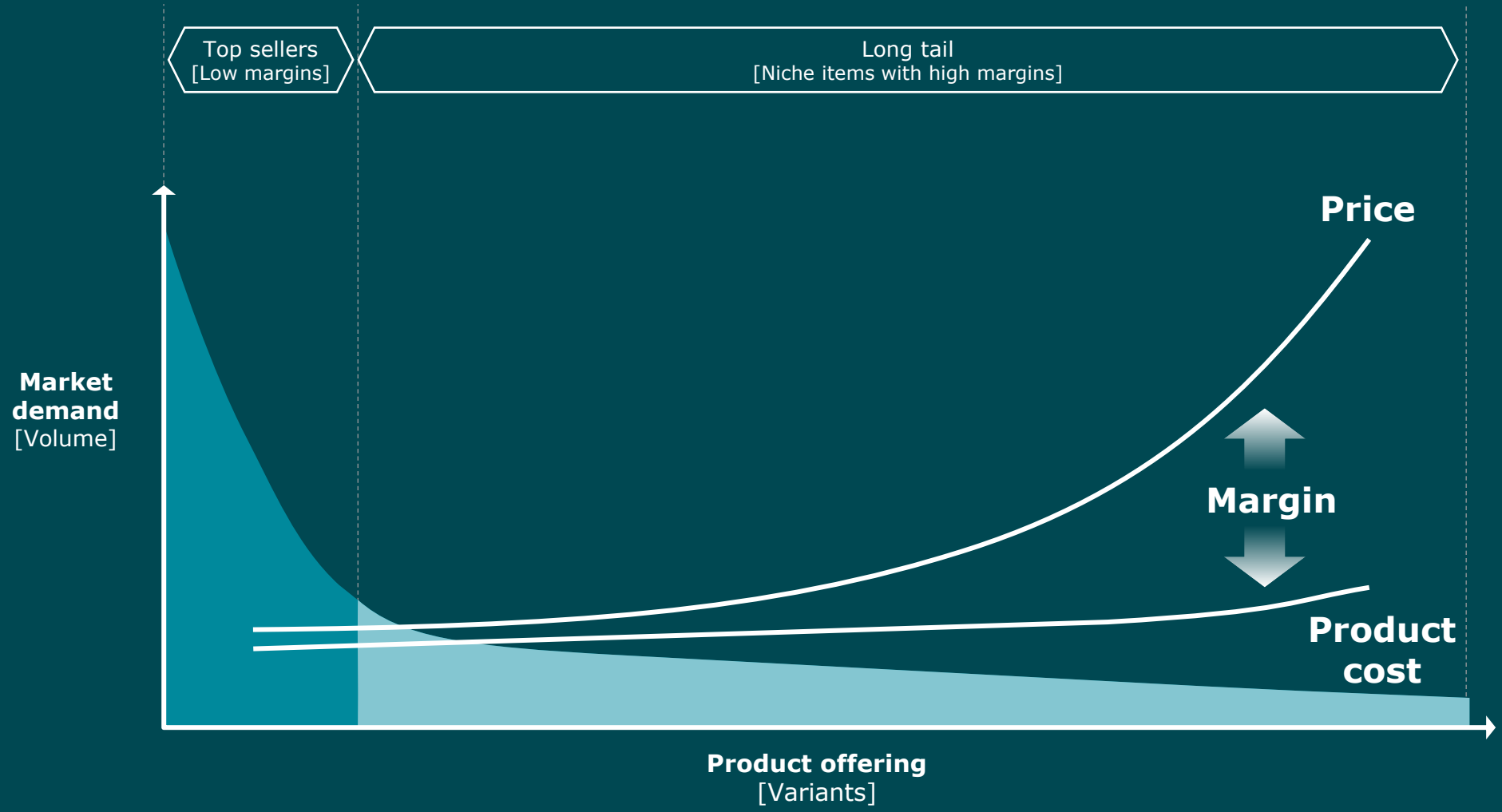

Number of
product variants
Ability
to meet
customer
demands
New
Generation
Current
Generation
Number of parts used


Parts used
-11%
Previous
Current

Long tail business model



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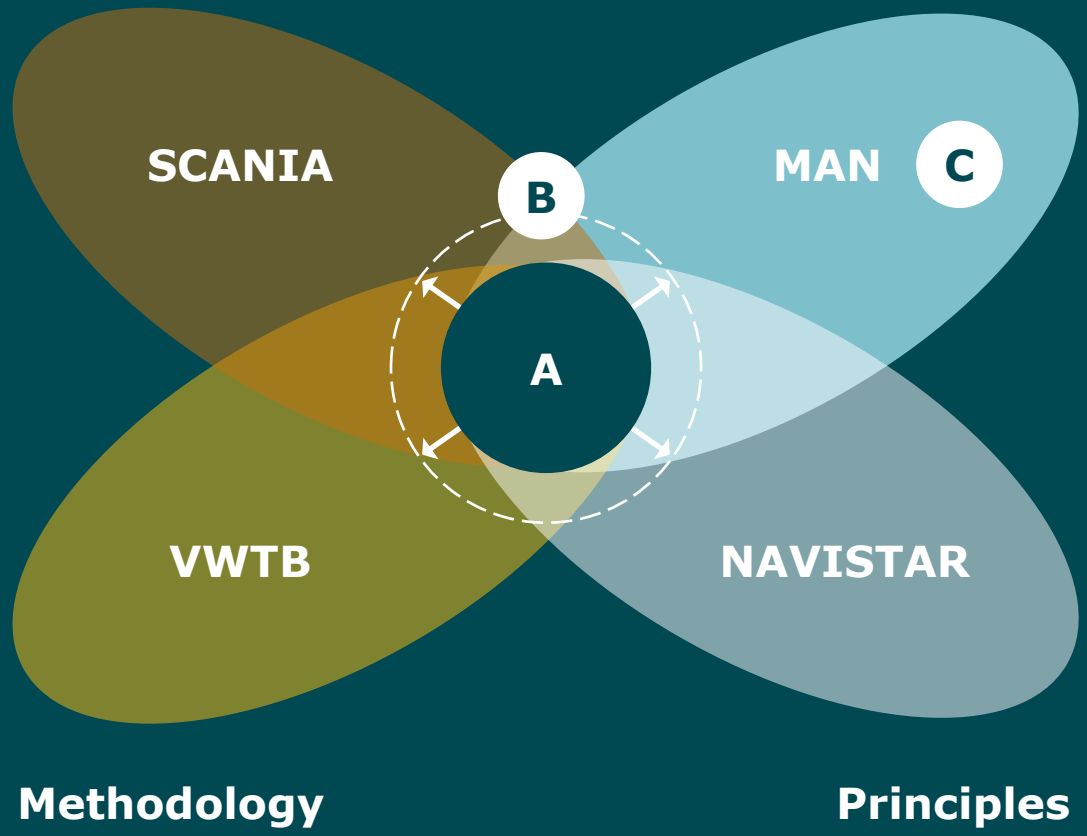
Note: Illustrative presentation

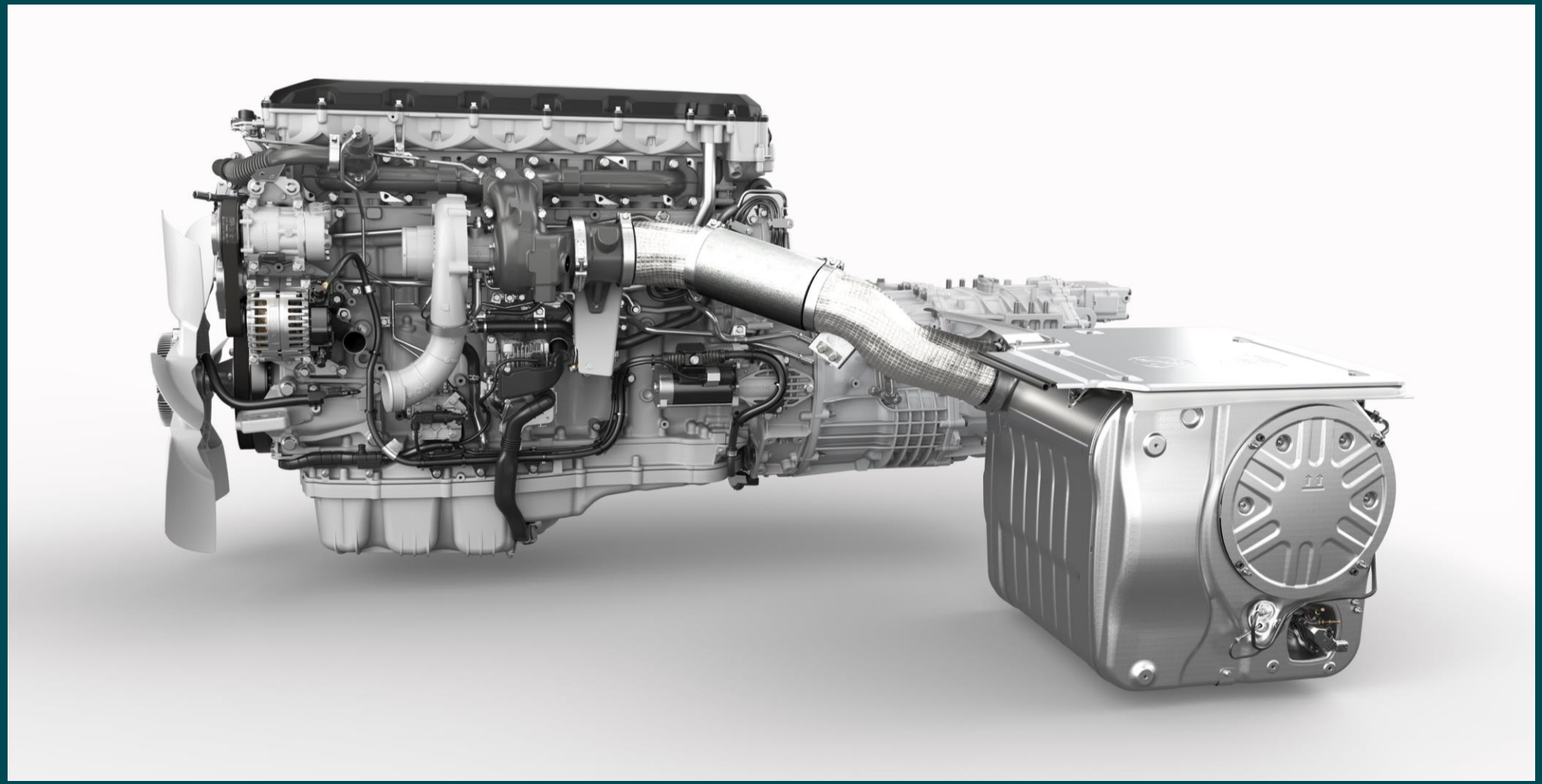
One TRATON GROUP Modular System



Modular System consists of components/platforms shared by:

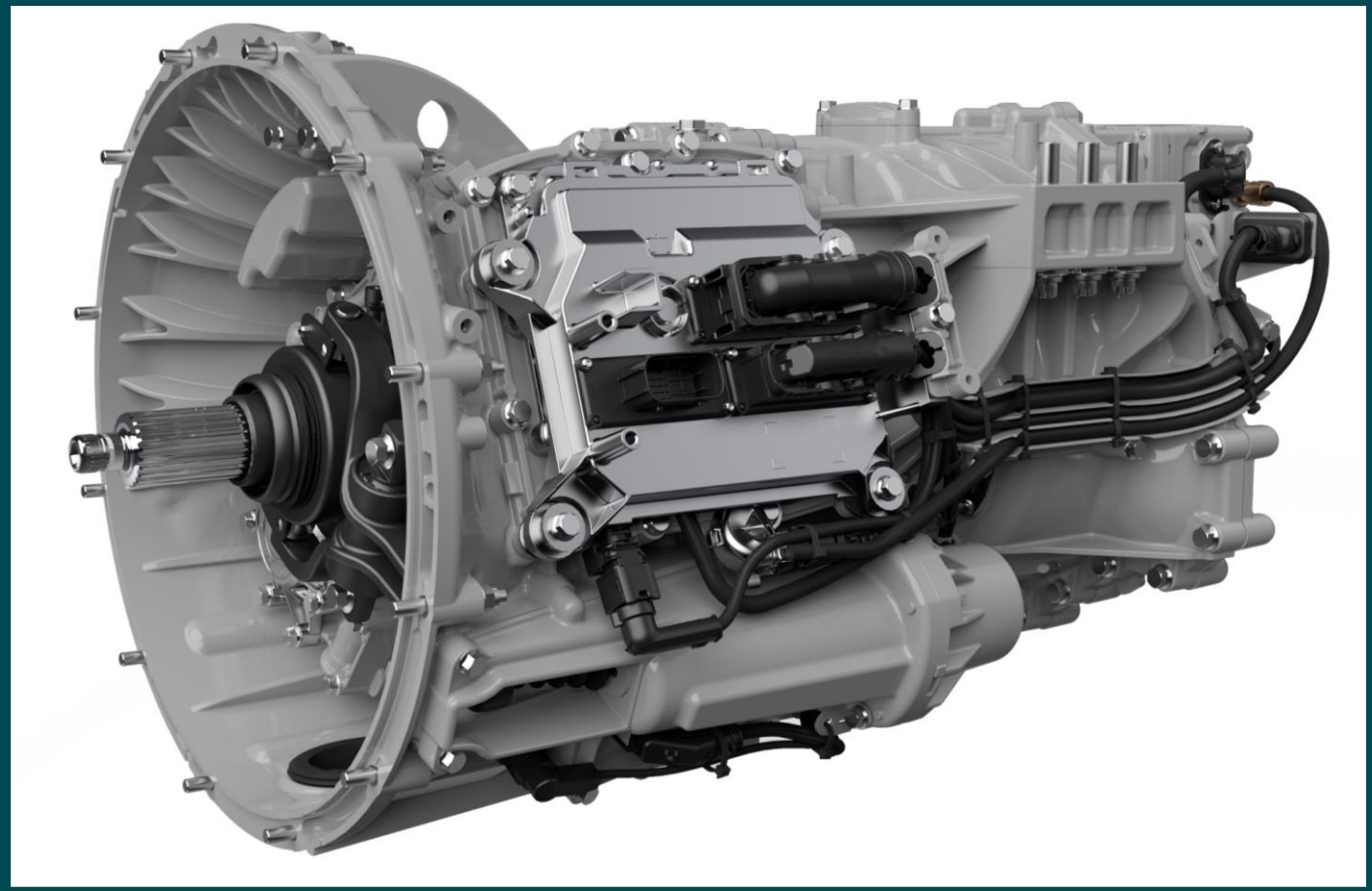
- **A** **All brands globally** – Common capabilities
- **B** **Selected brands or regions**
- **C** **Single brands**

Scania SUPER powertrain



New modular AMT gearbox range

- Improved fuel consumption
- Reduced weight
- Reduced cost
- A modular plattform



Modularization in transmissions
Strategies to increase torque capacity

Base line

Wider gears

Increased axle distance

Better material

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2. ELECTRIFICATION VIEW

Dr. Atif Askar
Head of Business Development
Strategy & M&A

Malte Schmitz
Head of Strategy &
Business Opportunities

Today trucks are intensively used capital goods with high running costs

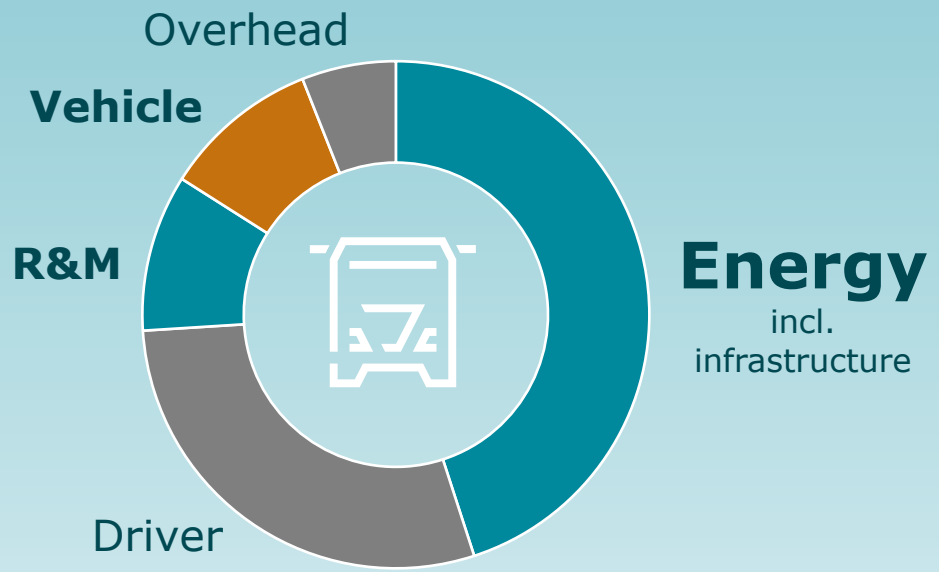
Trucks are Capital Goods – TCO is essential

- Customer focus **Total cost**
- Usage pattern **Regular, intensive**
- Annual mileage **~130,000 km**
- Fuel consumption **~30-35 l/100 km**
- Product lifecycle **>10 years**
- Typical margins **3 %**

Today’s truck running costs with high share of energy and driver

Running costs dominate Total Cost of Ownership (TCO)

Cost distribution of a typical long-haul heavy-duty truck

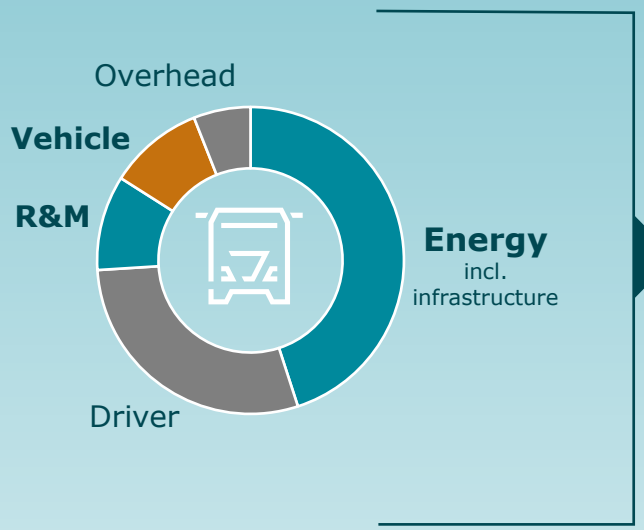


Cost increasing with e-mobility

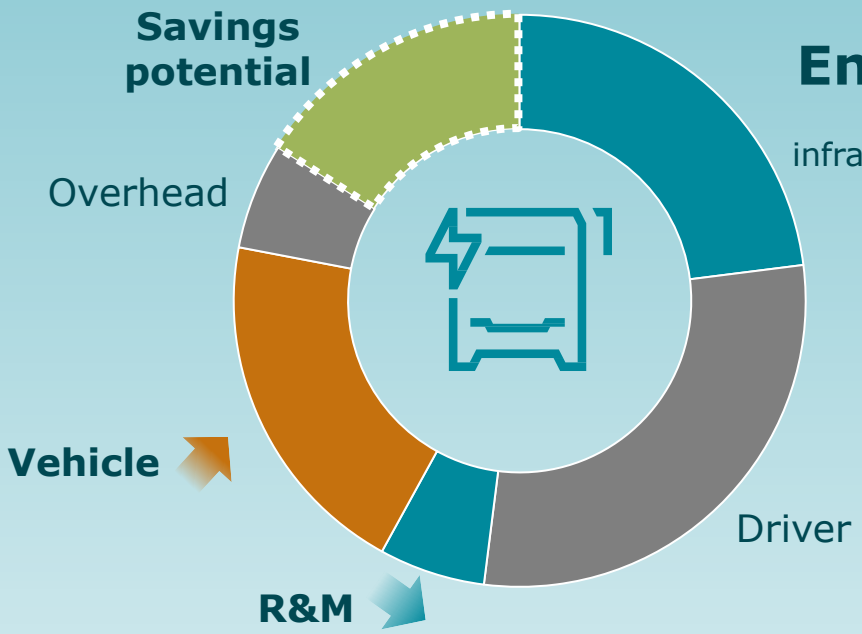
Cost decreasing with e-mobility

The cost distribution will change significantly with fully electric trucks

Cost distribution of a typical long-haul heavy-duty truck - today



Cost distribution electric long-haul heavy-duty truck ~2025-30



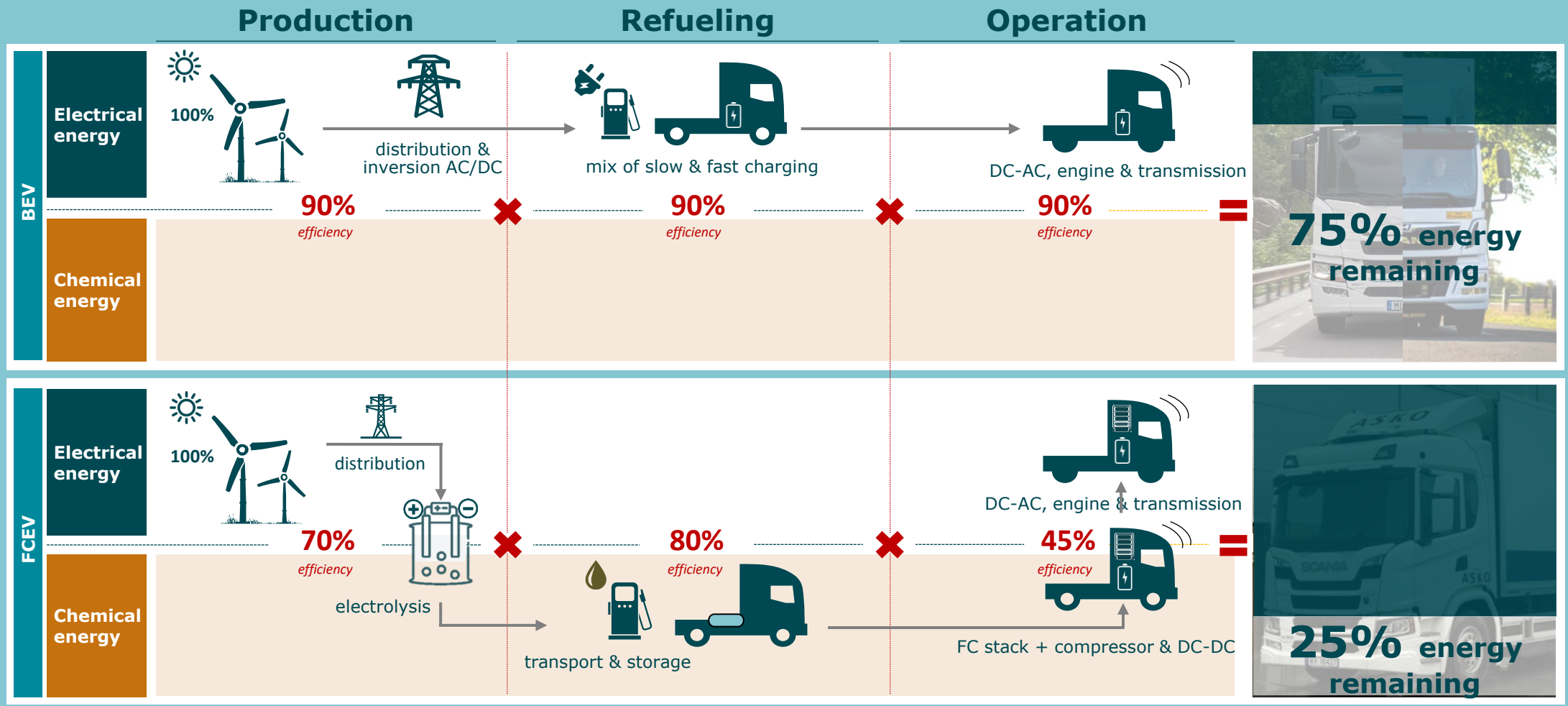
Electric trucks yield strong reduction in energy

Cost increasing with e-mobility

Cost decreasing with e-mobility

Energy is the most crucial cost driver – energy cost advantage is the key to quick market ramp-up of electric trucks

A comparison of system efficiency between BEV and FEV underlines the focus on BEVs



The prospects of commercial BEV vehicles have improved markedly, specifically on the battery side

View on BEV in long-haulage, mid 2010s

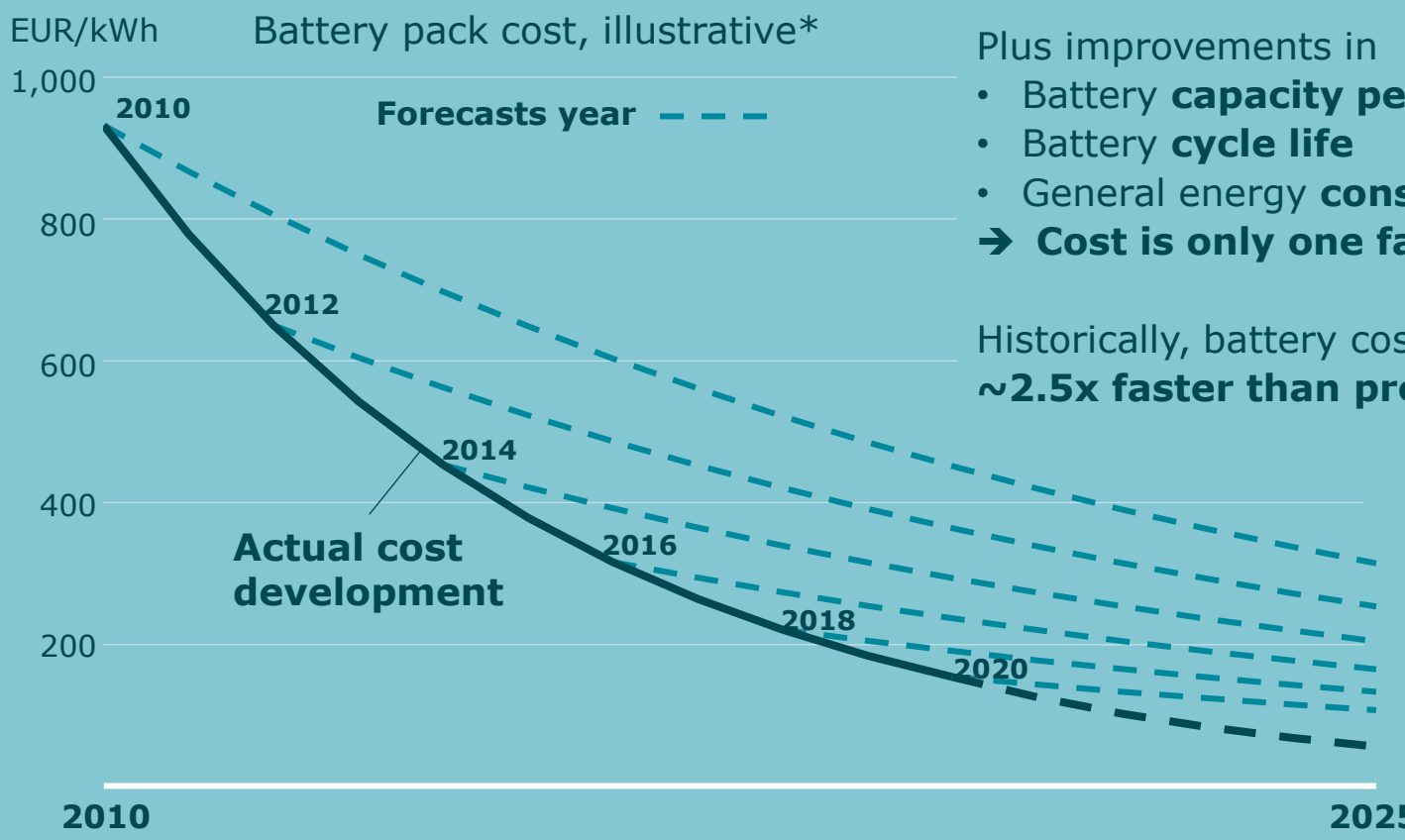
"A truck capable of going **1000km** hauling 27t […] would need a **battery weighing 25t**, and could only carry about 2t of cargo.

And because a heavy-duty truck battery is so heavy and large, charging takes too long – typically **12 hours or more**."

www.energyskeptic.com, 2016

5 years ago, few expected **BEV concepts to apply in long-haulage**

Battery cost development over time



Plus improvements in

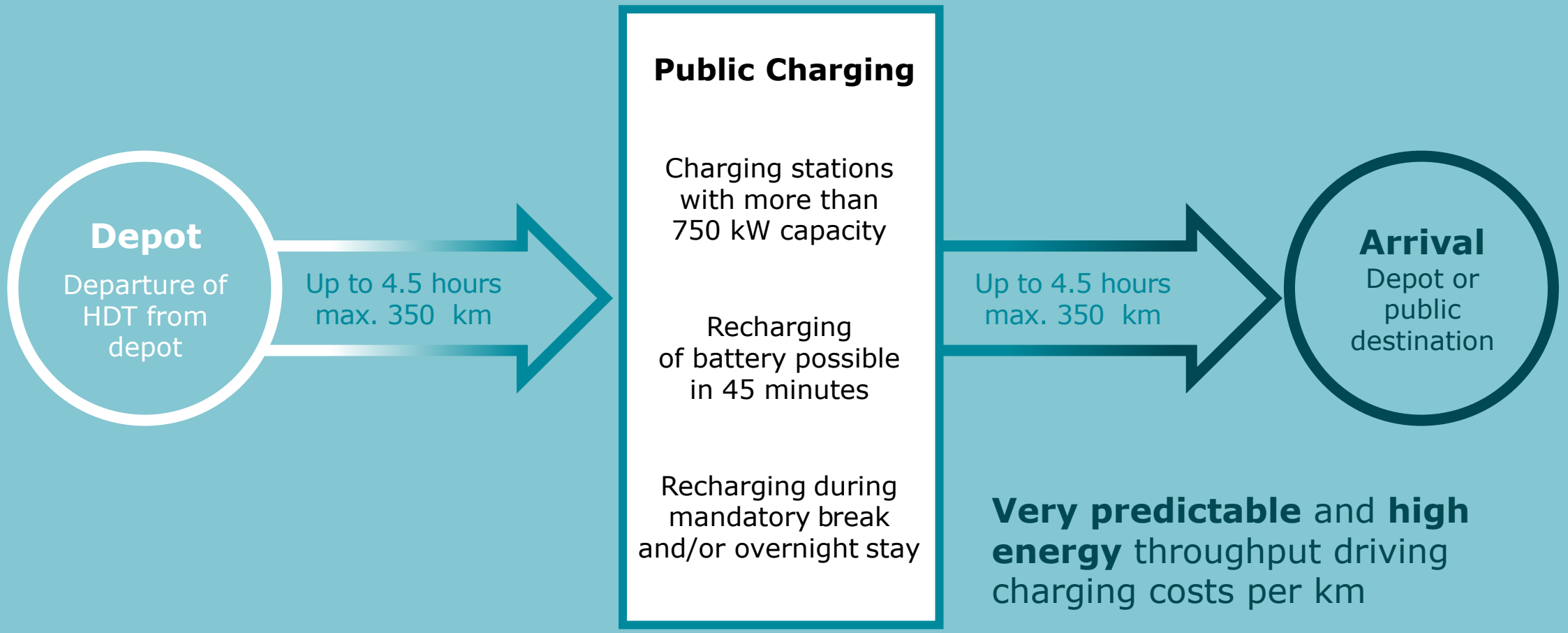
- Battery **capacity per weight**
- Battery **cycle life**
- General energy **consumption**

➔ **Cost is only one factor**

Historically, battery cost has fallen **~2.5x faster than predicted**

*best-in-class, CV equivalent, simplified representation

How would a long-haul operation with a BEV look like?



Very predictable and **high energy** throughput driving charging costs per km

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3. DECARBONIZATION

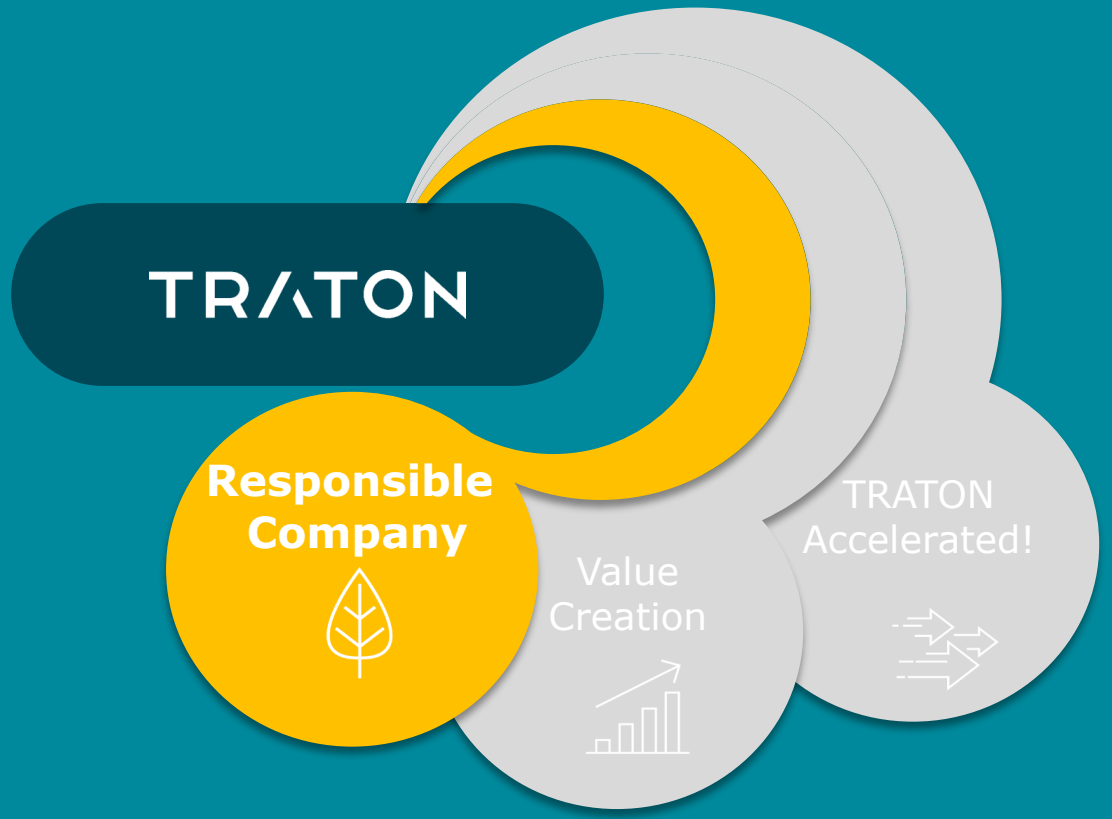
Andreas Follér
Head of Sustainability,
Scania

Erik Nellström
Technical Manager,
Product Sustainability Scania

Nina Vikkula
Senior Business Developer,
Supply Chain Decarbonisation
& Circularity Scania

Fabian Heidinger
MAN Sustainability Lead

Christopher P. Perzan
Vice President, Environment and Sustainability Navistar



Responsible Company

Make responsible behavior a top priority in everything we do

- Decarbonization & Circularity
- People & Diversity
- Governance & Ethics

Science-based targets (SBT)

<1.5°

Paris agreement 2015

f(x)

Aligning corporate carbon reduction targets with climate science

Targets approved as "science-based" – in line with what is necessary to meet the goals of the Paris Agreement

No. 1

Scania

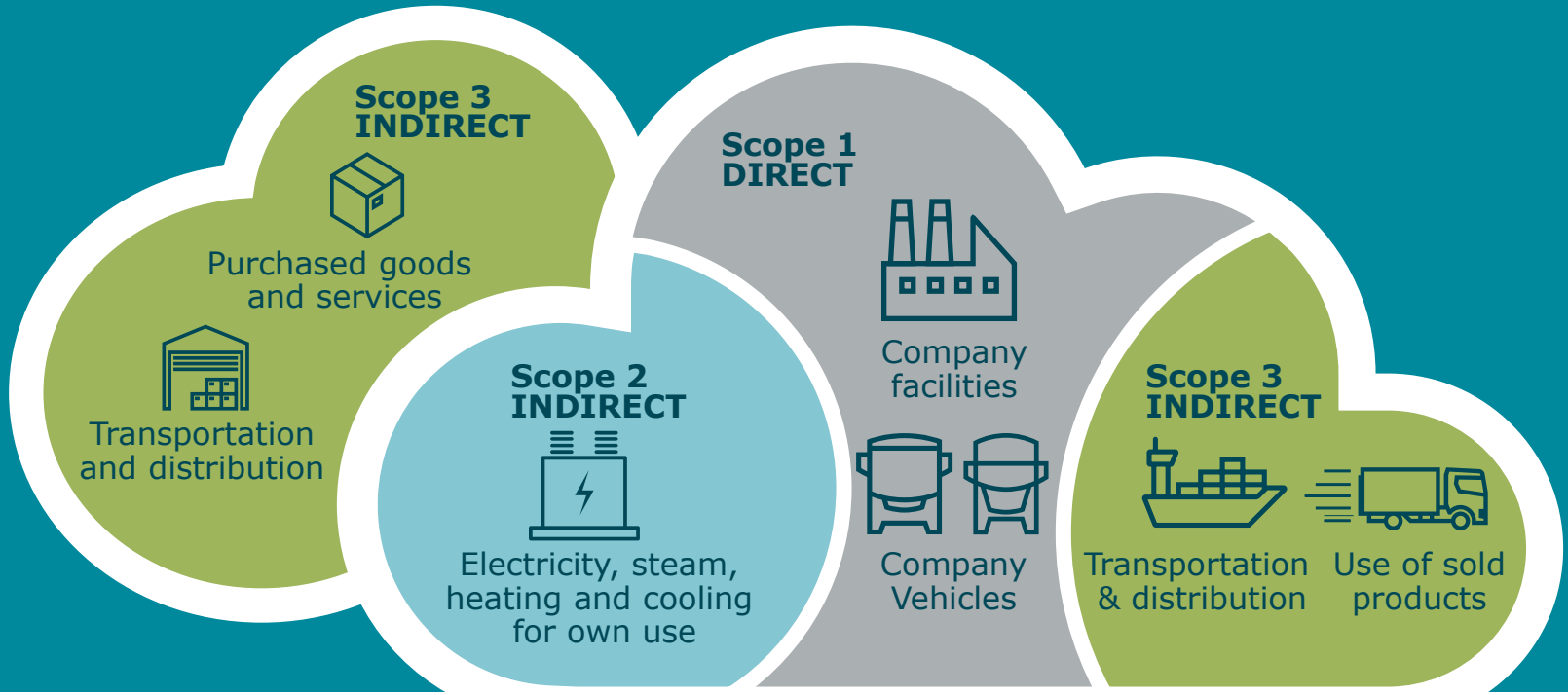
In 2020, **Scania became the first** heavy goods vehicle manufacturer to set SBT

CDP DISCLOSURE INSIGHT ACTION

UN GLOBAL COMPACT

WORLD RESOURCES INSTITUTE

WWF


Scope 3
INDIRECT
Purchased goods
and services
Transportation
and distribution
Scope 1
DIRECT
Company
facilities
Company
Vehicles
Scope 2
INDIRECT
Electricity, steam,
heating and cooling
for own use
Scope 3
INDIRECT
Transportation
& distribution
Use of sold
products

OWN OPERATIONS

SCOPE 1&2

50%

absolute CO_2 reduction from Scania operations

Energy waste

Energy efficiency

Renewables

Scania SBT

2025

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LOGISTICS

SCOPE 3

Biodiesel blend-in

Logistical efficiency

Renewable fuels

Alternative modalities

Electrified vehicles

50%

CO_2 reduction per transported ton from land transport

Scania target

2025

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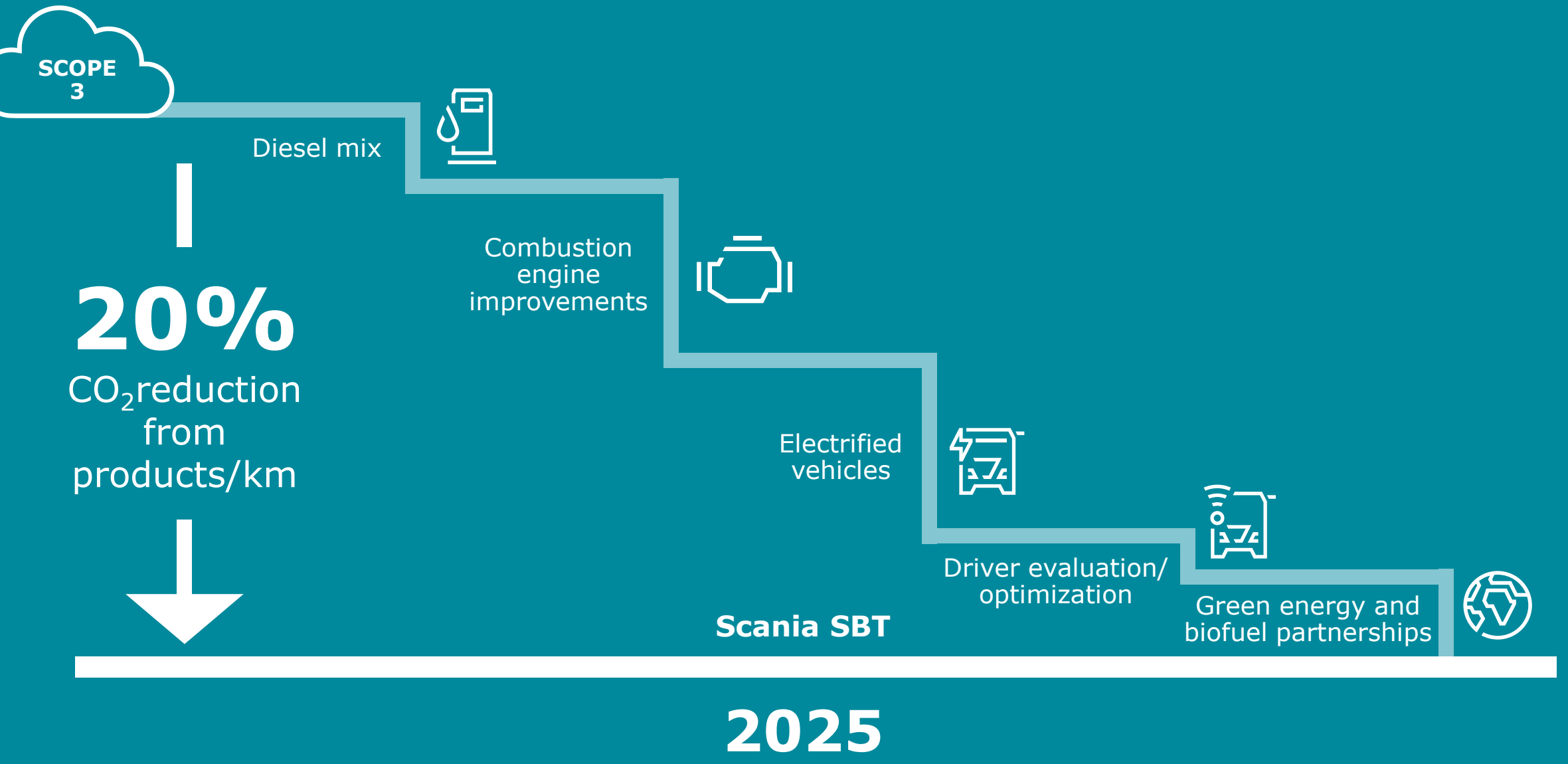
USE PHASE

>90%

of all Scania emissions come from when
our customer use Scania trucks and buses.


SCOPE 3
Diesel mix
Combustion engine improvements
Electrified vehicles
Driver evaluation/ optimization
Green energy and biofuel partnerships
20%
CO_2reduction from products/km
Scania SBT
2025

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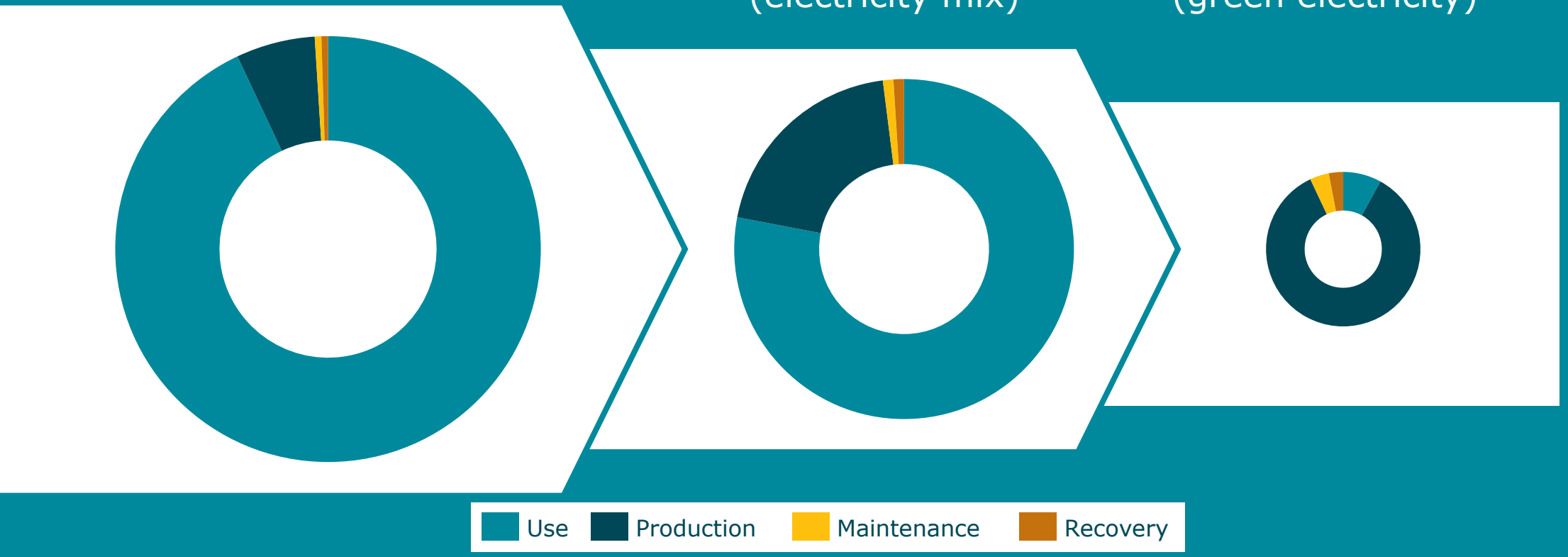
Our CO_2 impact stems almost exclusively from our products' use phase – but will change in the future

Combustion engine

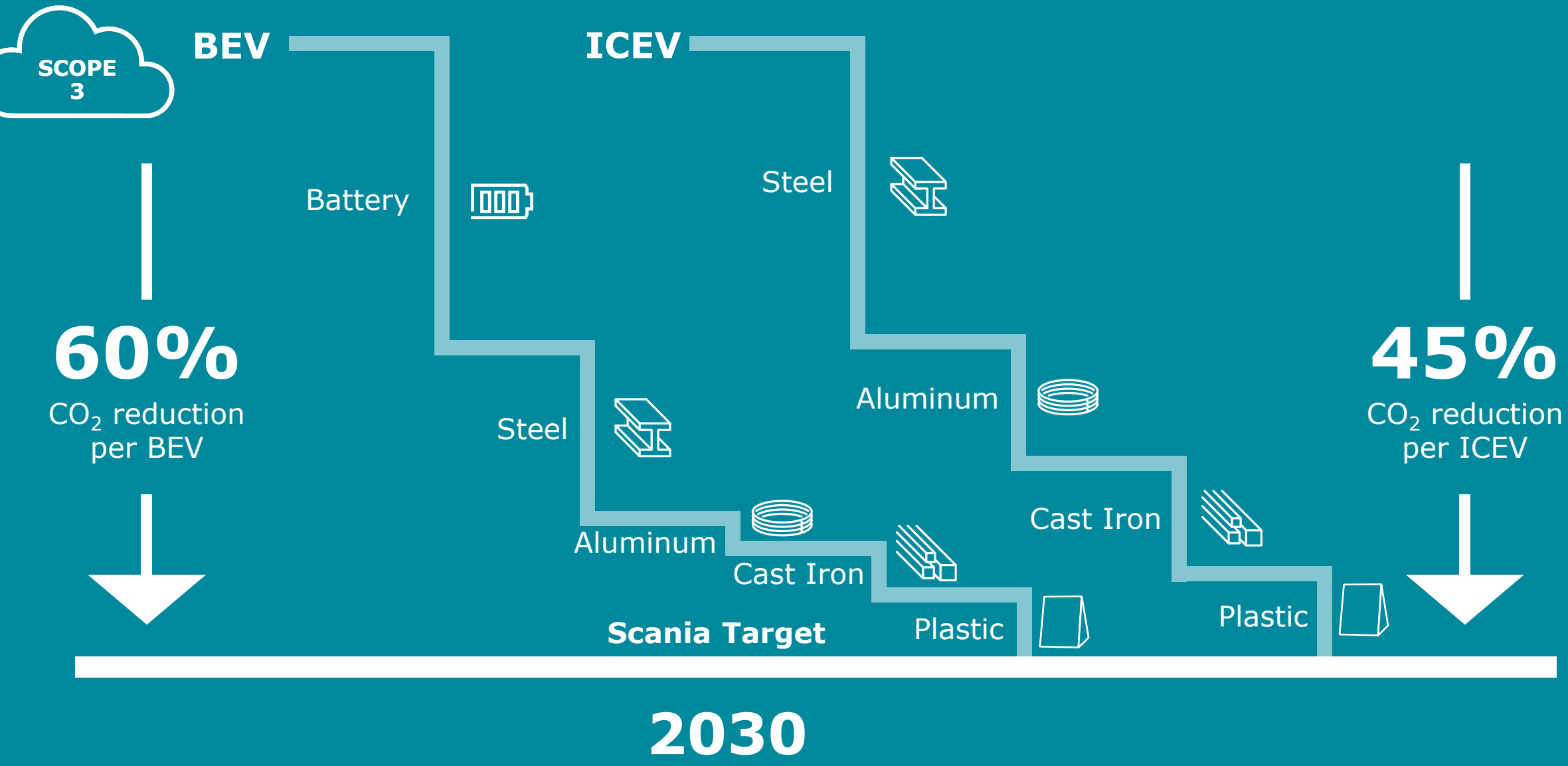
BEV
(electricity mix)[1]

BEV
(green electricity)[2]



1 Based on EU 2016 electricity mix 2 Based on prognosed EU 2030 electricity mix Source: Scania estimates

SUPPLY CHAIN


SCOPE 3
BEV
ICEV
Battery
Steel
Aluminum
Cast Iron
Plastic
Steel
Aluminum
Cast Iron
Plastic
60%
CO_2 reduction per BEV
45%
CO_2 reduction per ICEV
Scania Target
2030

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TRATON – Exciting pathway ahead