

#### **DISCLAIMER**



GROUP

The following presentation contains forward-looking statements and information on the business development of TRATON GROUP. These statements and information may be spoken or written and can be recognized by terms such as "expects", "anticipates", "intends", "plans", "believes", "seeks", "estimates", "will" or words with similar meaning. These statements and information are based on assumptions relating to the company's business and operations and the development of the economies in the countries in which the company is active. TRATON GROUP has made such forward-looking statements on the basis of the information available to it and assumptions it believes to be reasonable. The forward-looking statements and information may involve risks and uncertainties, and actual results may differ materially from those forecasts. If any of these or other risks or uncertainties materialize, or if the assumptions underlying any of these statements prove incorrect, the actual results may significantly differ from those expressed or implied by such forward looking statements and information. TRATON GROUP will not update the following presentation, particularly not the forward-looking statements. The presentation is valid on the date of publication only.

The financial information and financial data included in this presentation are preliminary, unaudited and may be subject to revision upon completion of ongoing audit processes for the years 2016, 2017 and 2018. It is anticipated that TRATON GROUP will report its financial results using two segments. Its Industrial Business is comprised of Scania Financial Services. Due to their preliminary nature, statements contained in this presentation should not be unduly relied upon and past events or performance should not be taken as a guarantee or indication of future events or performance. Return on sales as used in this presentation is defined as operating profit margin (operating profit divided by revenue). Where TRATON GROUP-specific figures are not available, operating profit and revenue at the level of TRATON GROUP have been calculated as the sum of MAN Commercial Vehicles and Scania as reported by Volkswagen AG and it should be noted that operating profit reported by Volkswagen AG (i) excludes special items and (ii) at the level of TRATON GROUP excludes purchase price allocation (PPA) effects from acquisitions and TRATON GROUP holding costs. Financial figures in relation to Scania (i) include financial services (unless denoted otherwise) and (ii) when expressed in EUR have been translated from SEK into EUR, using the exchange rate prevailing at the relevant date or for the relevant period that the relevant financial figures relate to. References to Scania before 2014 refer to Scania AB. Operating and financial data relating to alliance partners are as publicly reported by the relevant partner. Unless otherwise indicated, financial information presented in the text and tables in the following presentation is rounded to a whole number. Percentage changes and ratios in the text and tables of the presentation are calculated based on the respective underlying numbers and then commercially rounded to a whole percentages may not exactly equal 100%. Furthermore, these rounded figures may vary marginally from unrounded fi

When describing TRATON GROUP and its operating units for periods before 2016, and unless designated otherwise, all references in the following presentation to MAN are references to MAN Truck & Bus (reported as "MAN Truck & Bus" by MAN SE) and all references to Volkswagen Caminhões e Ônibus are references to "MAN Latin America" as reported by MAN SE. As of December 31, 2018, MAN SE is approximately 87% owned by TRATON SE. All references to sales of buses and coaches also include chassis. While prior to December 31, 2018, the Power Engineering business was legally a part of TRATON GROUP, it is not included as an operating unit as described in this presentation and is shown as discontinued operations in the preliminary financial information for TRATON GROUP. While the TRATON GROUP holds 100% of the voting rights in Scania, its economic interest in Scania is less than 100% due to partial ownership through TRATON's majority stake in MAN SE.

To the extent available and unless denoted otherwise, the industry and market data contained in this presentation has been derived from official or third party sources and all market and market share data has been derived from data published by IHS Markit Global Sàrl for heavy duty trucks (>15t) and heavy/medium duty trucks (>6t), McKinsey & Company, LMC Automotive, Transparency Market Research, Verband der deutschen Automobilindustrie (VDA), Worldbank, International Monetary Fund (IMF), International Council on Clean Transportation (ICCT) and Kraftfahrt-Bundesamt. Third party industry publications, studies and surveys generally state that the data contained therein have been obtained from sources believed to be reliable, but that there is no guarantee of the accuracy or completeness of such data. While TRATON GROUP believes that each of these publications, studies and surveys has been prepared by a reputable source, TRATON GROUP has not independently verified the data contained therein. In addition, certain of the industry and market data, if not labelled otherwise, contained in this presentation are derived from TRATON GROUP's internal research and estimates based on the knowledge and experience of its management in the markets in which it operates. TRATON GROUP believes that such research and estimates are reasonable and reliable, but their underlying methodology and assumptions have not been verified by any independent source for accuracy or completeness and are subject to change without notice. Accordingly, undue reliance should not be placed on any of the industry or market data contained in this presentation.

This presentation has been prepared for information purposes only. It does not constitute or form part of any offer or invitation to sell or issue, or any solicitation of any offer to purchase or subscribe for, any securities of Volkswagen AG, TRATON SE or any company of TRATON GROUP in any jurisdiction. Neither this presentation, nor any part of it, nor the fact of its distribution, shall form the basis of, or be relied on in connection with, any contractual commitment or investment decision in relation to the securities of Volkswagen AG, TRATON SE or any company of TRATON GROUP in any jurisdiction, nor does it constitute a recommendation regarding any such securities.





TOPIC	PRESENTER	PAGE
01. INTRODUCTION	A. Renschler	6
02. COMPANY HIGHLIGHTS	A. Renschler	13
03. INDUSTRY AND MARKET ENVIRONMENT	C. Schulz	26
04. INTRODUCTION TO TRATON GROUP	A. Renschler	41
BRAND PERFORMANCE SCANIA	H. Henriksson	49
BRAND PERFORMANCE MAN T&B	J. Drees	72
BRAND PERFORMANCE VWCO	A.R. Cortes	90
Q&A SESSION I	R. Woller, All Presenters	
COFFEE BREAK		





TOPIC	PRESENTER	PAGE
COOPERATIONS & SYNERGIES	C. Schulz, C. Levin	105
GLOBAL EXPANSION	C. Schulz	115
CUSTOMER FOCUSED INNOVATION	C. Levin	122
05. FINANCIALS	C. Schulz	142
06. WRAP UP	A. Renschler	173
Q&A SESSION II	R. Woller, All Presenters	



#### **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**
- 04. TRATON GROUP
- 05. **FINANCIALS**
- 06. WRAP UP

#### **TODAY'S SPEAKERS**





Andreas Renschler CEO



Christian Schulz CFO



Christian Levin CTO



**Dr. Carsten Intra**CHRO



Henrik Henriksson CEO Scania



Joachim Drees CEO MAN



Antonio Roberto Cortes CEO VWCO

#### **CLEARLY DEFINED STRATEGIC GOAL**



# Creating a GLOBAL CHAMPION IN THE TRANSPORTATION INDUSTRY











# TRATON GROUP HAS CONTINUOUSLY DELIVERED ON ITS STRATEGIC GOAL SINCE THE INCEPTION OF VOLKSWAGEN TRUCK & BUS



Collaboration among brands in Volkswagen T&B fully on track



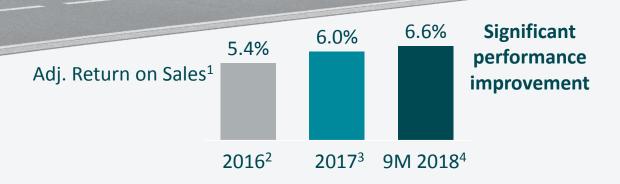




Successful creation and implementation of strategic alliance partnerships



#### **New corporate identity**



Note: TRATON GROUP including Financial Services.

1 Calculated as the ratio of adj. operating profit to sales revenue. Adj. operating profit includes PPA (from Scania and VWCO), VGSG operations (sold as of Jan-2019) and consolidation effects (MAN T&B − VWCO). 2 Including €403m adjustment for provision in relation to Scania antitrust fine and €58m adjustment for restructuring expense at VWCO. 3 Including (€50m) adjustment for release of restructuring provision at MAN T&B. 4 Including €115m adjustment for expense in relation to Indian market exit at MAN T&B.

#### LEADING GLOBAL BRANDS AND STRATEGIC ALLIANCE PARTNERS



### TRATON

G R O U P

#### **FULLY CONSOLIDATED**











Leader in core markets with differentiated brands

#### **ASSOCIATES**

16.8%1

 $25\% + 1 \text{ share}^2$ 







#### **STRATEGIC PARTNER**





Powerful strategic alliance partners enabling leading global scale



# UNIQUE GLOBAL TRUCK AND BUS PLATFORM WITH FOCUS ON HEAVY DUTY TRUCKS



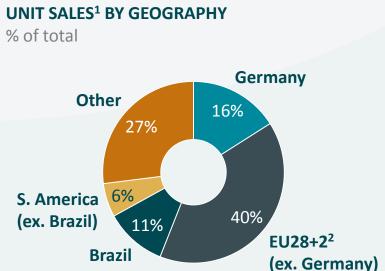
		TRATON GROUP		ASSOCIATES		STRATEGIC PARTNER	
		SCANIA	MAN	Caminhões Ônibus	中国重泛 SINOTRUK	NAVISTAR	HINO
Home base		<b>Europe and Brazil</b>	Europe	Brazil	China	North America	Japan
	Trucks	82	84 <sup>2</sup>	21	264 <sup>3</sup>	57	n/a
Unit sales (k) <sup>1</sup>	Buses	8	6	5	0	11	n/a
	Total	91	90	26	264	68	1844
Heavy duty trucks	80%						Control of the Contro
Medium/ Light duty trucks	11%						OHINO
Bus and Coach	9%						

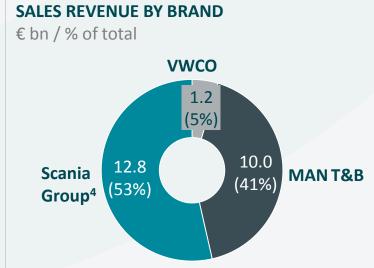
Note: Trucks >6t, VWCO trucks ≥ 5t; all figures as per company reporting / company information; pictures denote presence in respective area; figures are financially rounded.

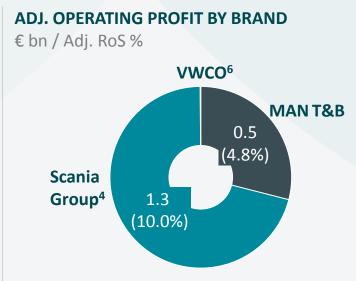
1 Unit sales per fiscal year (Scania, MAN T&B, VWCO, and Sinotruk year-end 31 December 2017; Navistar year-end October 2017 and HINO year-end March 2018). Navistar unit sales include sales volume of 10.8k primarily related to export trucks / Mexico. 2 Including c. 2k MAN TGE vans. 3 Including c. 108k in LDT unit sales. 4 Unit sales split not disclosed; excl. Toyota unit sales.

#### **SNAPSHOT TRATON GROUP 2017**









205k Units sold<sup>1</sup>

€ 24.4bn³ Sales Revenue

€ 1.5bn<sup>5</sup> Adj. Operating Profit

 $6.0\%^5$  Adj. RoS

#### **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**
- 04. TRATON GROUP
- 05. **FINANCIALS**
- 06. WRAP UP

#### **KEY COMPANY HIGHLIGHTS**







1 GLOBAL CHAMPION

- Scale and global reach through leading brands and strategic alliance partners
- Unique platform enabling growth and positioning us for best-in-class profitability

<u>1</u> 2

GROWTH

- Customer value focused product and service offering
- New product generations
- Further expansion in key geographies



PROFITABILITY AND SYNERGIES .

- Concrete path to profitability improvement
- Stand-alone brand performance plus synergies
  - Earnings growth and cash generation potential





- Strong team with industry-leading track record
- Committed to Global Champion strategy





### TRATON GROUP WITH #1 TRUCK MARKET POSITION IN EUROPE AND SOUTH





Core markets of TRATON GROUP brands



TRATON GROUP truck market share in 2017 (>15t)



#### Europe<sup>1</sup>

- Market leader with 32% market share
- Market leader in Germany with 37% market share



TRATON GROUP

#### South America<sup>2</sup>

- (1) Market leader with 30% market share
- Market leader in Brazil with 39% market share



Source: IHS Markit.

Note: Smaller presences in additional countries not highlighted (TRATON GROUP active in >120 countries worldwide, including bus activities).

**ASSOCIATES** 

**PARTNER** 

STRATEGIC

**ALLIANCE PARTNERS** 





### EXPANDING GLOBAL REACH THROUGH ALLIANCE PARTNERS TO ADDRESS

**ALL MAJOR PROFIT POOLS** 

Core markets of TRATON GROUP brands

Alliance partners



Truck market share in 2017 (>15t)



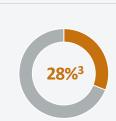














#### North America – Partnership since 2016

- Technology cooperation: first SoPs by 2020/21
- Synergies in **procurement JV** achieved, further potential

# China – Partnership since 2009

- Intention to localize MAN heavy-duty truck in world's largest market
- Evaluation of technology/procurement cooperation

### Japan & South East Asia – Cooperation since 2018

- Cooperation: Future logistics/transportation, technology and e-mobility
- Lol for **procurement JV** signed with global synergy potential

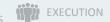
Source: IHS Markit.

1 Market share of Navistar Canada and USA. 2 Market share of CNHTC (parent company of Sinotruk) in China (including Hong Kong). 3 Market share of Hino in Japan and South East Asia (Indonesia, Australia, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam).









# LEADING HEAVY DUTY PLATFORM AS BASIS FOR FURTHER EXPANSION AND



Potential heavy duty platform reach of top OEMs incl. associates and strategic partner

Sales volumes >15t in 2017, in k units

SYNERGY REALIZATION



#### Leverage technologies and expertise through global brands



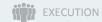
Source: IHS Markit. Note: Truck volumes (>15t) including selected strategic alliances.

1 Top 3 players with alliance partners. 2 Including partnerships with Dongfeng (45% ownership) and Eicher. 3 Dongfeng including Dongfeng-Volvo JV sales volume. 4 Including partnerships with Foton (50% ownership) and Kamaz. 5 Foton including Foton-Daimler JV sales volume.





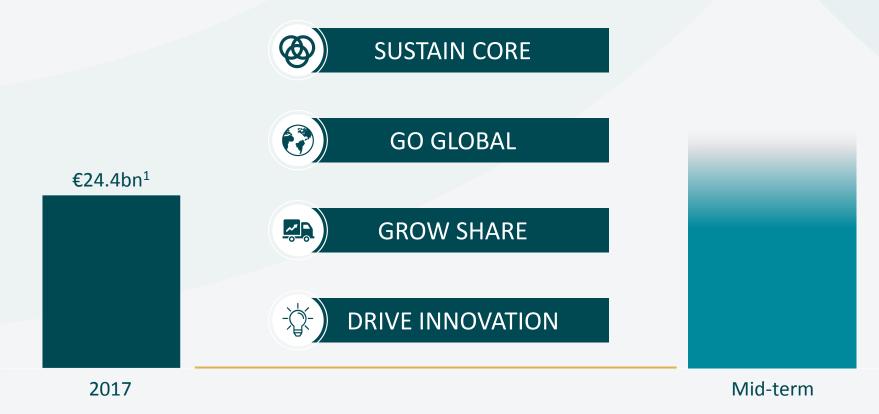




#### TRATON GROUP WITH MULTIPLE STRATEGIC LEVERS FOR GROWTH



#### TRATON GROUP SALES REVENUE



1 Including VGSG operations (sold as of Jan-2019) and consolidation effects (MAN T&B – VWCO).





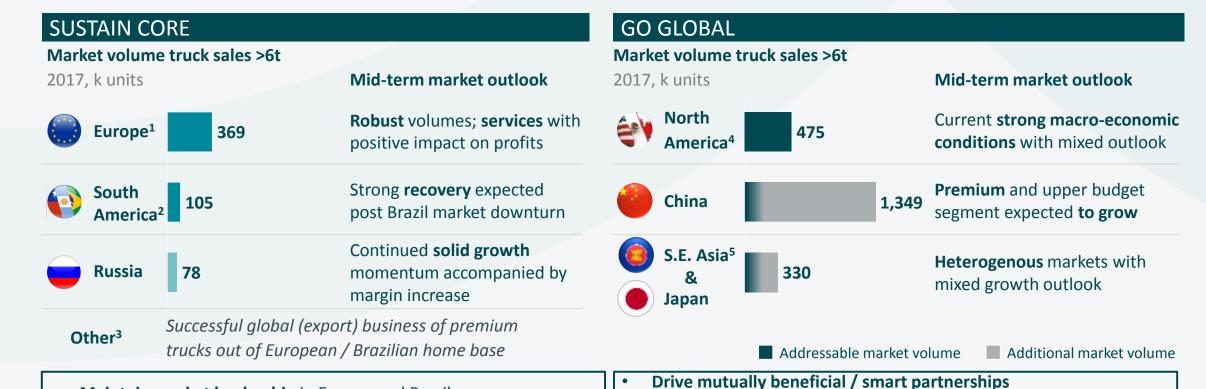
**Expand profitable segments** in China, South America and other





# SUSTAIN CORE AND GO GLOBAL — STRONG CORE MARKETS AND INCREASING EXPOSURE TO GLOBAL MARKETS FORM THE BASIS FOR FUTURE TOPLINE GROWTH





Source: IHS Markit (market volumes).

Maintain market leadership in Europe and Brazil

**Grow service sales revenue** on existing rolling fleet

1 EU28+2 region consisting of EU member states plus Norway and Switzerland. Cyprus, Malta, and Luxembourg excluded, as no IHS Markit data available. 2 Including Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, Venezuela; excl. Mexico (part of North America); excl. Paraguay, Uruguay, as no IHS Markit data for trucks >6t available. 3 Including e.g. Australia, China, SEA, South Africa, South Korea. 4 Canada, Mexico, United States. 5 Australia, Indonesia, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam.

emerging markets

Current /

upcoming launch





~60%





#### **GROW SHARE – BENEFIT FROM HIGHLY ATTRACTIVE PRODUCT PIPELINE**





% of truck units of respective brand affected post full production ramp-up



**NEW DELIVERY TRUCK** 

# SCANIA

#### NTG



New generation for all trucks (R, G and P trucks as well as newly introduced S and L trucks)

2016 - 2019e

1995 (4-Series)

2019 - 2021e

2000 (TGA)

#### **NEW TRUCK GENERATION**



New state of the art truck generation / Model year 2019

2005

(Delivery)

Modern truck for urban logistics

tailored to emerging markets

2017 - 2019e

(targeted)

Launch / ramp-up

preceding truck generation1

1 Previous key launch of respective product range.

Launch of









#### **DRIVE INNOVATION – TRATON GROUP IS TRANSFORMING TRANSPORTATION**





Autonomous transport system in customer operation<sup>1</sup>

**Autonomous Mining System** 

CONNECTIVIS www10

**Large connected fleet** 

450k+3

Connected vehicles on the road

Broadest range of alternative fuel technologies<sup>2</sup>

**BEV** Ethanol **Biogas** 

**Automated L4 safety truck** tested under real conditions

MAN aFAS – Driverless safety vehicle

**Utilization of collected** data for service offering

RIO, Scania Flexible Maintenance, Solera

**Sold electric solutions** 

**VWCO e-Delivery** 



21



Hybrid **Natural Gas** HVO

Here and now solutions

WRAP UP

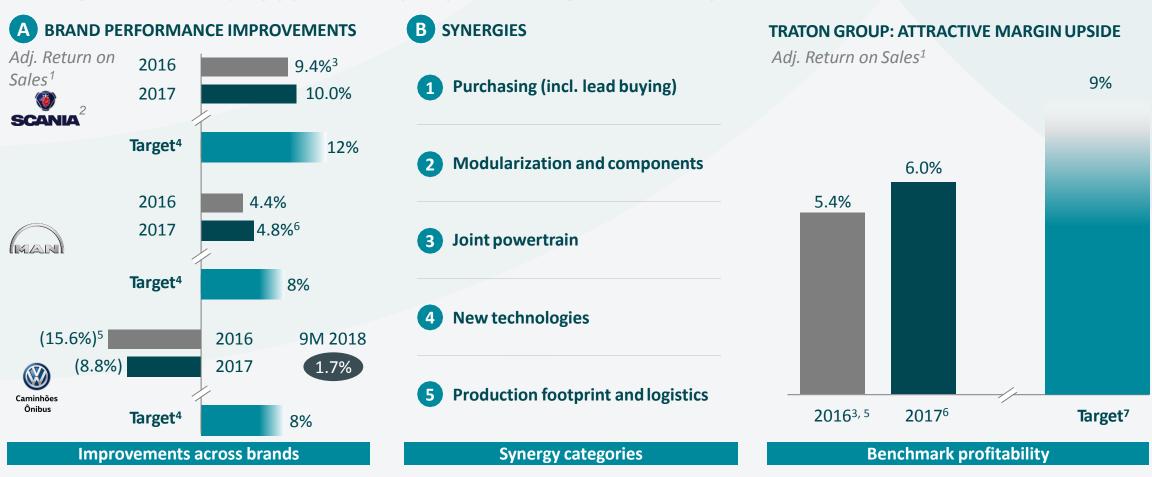






### TRATON GROUP WITH STRONG TRACK RECORD OF PERFORMANCE IMPROVEMENT ACROSS BRANDS. FURTHER POTENTIAL TO BE REALIZED



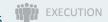


1 Based on adj. operating profit including PPA (from Scania and VWCO), VGSG operations (sold of Jan-2019) and consolidation effects (MAN T&B – VWCO). 2 Scania Group including Financial Services post Scania consolidation effects; excl. PPA. 3 Including €403m adjustment for provision in relation to Scania antitrust fine. 4 Strategic target brands want to achieve over the cycle. 5 Including €58m adjustment for restructuring expense at VWCO. 6 Including (€50m) adjustment for release of restructuring provision at MAN T&B. 7 Strategic target TRATON GROUP wants to achieve over the cycle, including consolidation effects and others.





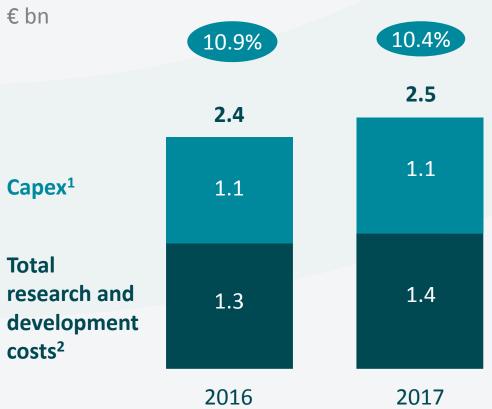




### WITH THE INTRODUCTION OF THE NEW TRUCK GENERATIONS, TRATON GROUP VERY WELL POSITIONED TO FUND NEW TECHNOLOGIES



Significant total research and development costs and capex over past years (total funding)



Significant funding of new truck generations across brands in order to be prepared for the future

> Free up cash flow for future funding of new technologies

Target to cap absolute amount of primary R&D going forward

Capex in 2017 includes purchase price for 16.6% stake in Navistar<sup>3</sup>

#### TRATON GROUP - CREATING A GLOBAL CHAMPION







#### **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. INDUSTRY AND MARKET ENVIRONMENT
- 04. TRATON GROUP
- 05. **FINANCIALS**
- 06. WRAP UP

# TRUCKS ARE CAPITAL GOODS: PURCHASE DECISIONS ARE BASED ON RATIONAL FACTORS – TOTAL COST OF OWNERSHIP (TCO)



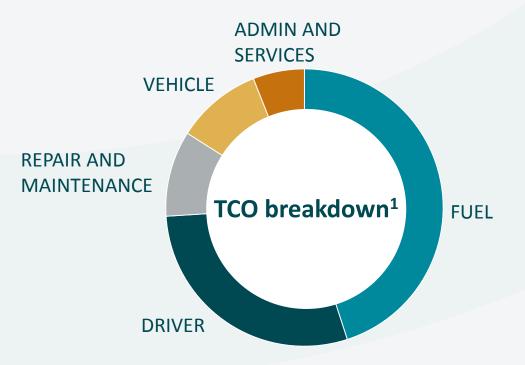
		TRUCKS	PASSENGER CARS	
Sector		Capital goods	Consumer goods	
Customer expectations	Customer focus	Total cost of ownership	Costs   Emotion   Prestige	
	Annual mileage (km)	~130,000	~14,000¹	
	Fuel consumption (I/100 km)	~30-35²	~4-7³	
Product	Product lifecycle (years)	>10	~4-5	
	Vehicles sold annually	~3 m <sup>4</sup>	~90 m⁵	

Source: IHS Markit, ICCT, Kraftfahrt-Bundesamt.

<sup>1</sup> Average mileage driven in 2017 by passenger vehicles registered in Germany. 2 Fuel consumption for tractor-trailers over long-haul operation. 3 Fuel consumption for passenger cars in EU28+2 (urban and extra-urban). 4 IHS Markit 2018 forecast for total global market figure. 5 VDA data for total global market figure.

### TRUCK INDUSTRY DRIVEN BY TOTAL COST OF OWNERSHIP (TCO)





#### **KEY ELEMENTS<sup>2</sup>**

### **FUEL**

Annual mileage, driving behavior, powertrain efficiency



#### **DRIVER**

Driver salary, related costs



#### REPAIR AND MAINTENANCE

Usage pattern, cost/frequency of repair & maintenance, uptime



#### **VEHICLE**

Purchasing costs, vehicle specification, residual value



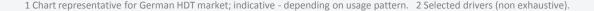
#### **ADMIN AND SERVICES**

General & administrative processes, driver & vehicle and fleet management

Purchasing cost

Operational cost

Residual value



**Key value drivers** 

# TRUCK INDUSTRY CHARACTERIZED BY A LIMITED NUMBER OF OEMS COMPETING GLOBALLY



# Customization & regulation

- Trucks are highly customized products given heterogeneous customer requirements
- Products need to meet strict regulatory standards

#### **Service network**

- Large and dense service network important given high uptime requirements for trucks
- Need for high service quality

#### **Technology**

- Competitive R&D and innovation capabilities
- Continuous innovation for brand positioning and to reduce TCO

#### LIMITED NUMBER OF GLOBAL PLAYERS



Source: IHS Markit.

1 EU28+2 region consisting of EU member states plus Norway and Switzerland. Cyprus, Malta, and Luxembourg excluded, as no IHS Markit data available. 2 Canada, Mexico, United States. 3 Incl. Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, Venezuela; excl. Mexico (part of North America); excl. Paraguay, Uruguay, as no IHS Markit data for trucks >15t available. 4 Incl. TRATON GROUP, Volvo Truck & Bus, Daimler. 5 Incl. Daimler, Paccar, Volvo Truck & Bus. 6 Incl. TRATON GROUP, Daimler, Volvo Truck & Bus.

#### **EVOLVING TRUCK MARKET OFFERS NEW OPPORTUNITIES**



### **NEW TRUCK + SERVICES**

#### "TRADITIONAL" TRUCK BUSINESS



- Truck sales
- Used vehicles

Vehicle



- Repair & maintenance
- Vehicle, financial & driver services

Total cost of ownership



**TRANSPORT SOLUTIONS** 

- End-to-end logistic solutions/ fleet management
- Proactive maintenance

End-to-end logistics solutions

#### **3 MEGATRENDS INFLUENCING THE TRANSPORTATION SECTOR**





#### **GLOBALIZATION**

FUNDAMENTALLY GROWING INDUSTRY, GLOBALLY

EUROPE & SOUTH AMERICA (CORE MARKETS OF TRATON GROUP) AS WELL AS NORTH AMERICA ARE ATTRACTIVE

ADDRESSABLE MARKET FOR
TECHNOLOGY LEADERS WILL INCREASE,
E.G., IN CHINA



#### **DIGITALIZATION**

#### CONNECTIVITY

 Penetration rising rapidly, enabling efficiency increases in transportation value chain and new business models

#### **AUTONOMOUS**

- Near-term impact for selected applications
- Full impact of autonomous technologies likely to materialize only in the long term



#### **SUSTAINABILITY**

#### TRANSITION TO ELECTRIFICATION

- Industry transition to electrification complex (e.g., infrastructure, transport processes)
- Electrification driven by TCO as well as regulation

#### **ALTERNATIVE POWERTRAINS**

Alternative fuels/hybrids
 intermediate solutions and based on
 application



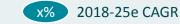






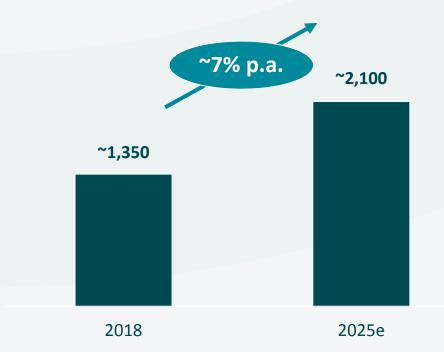
### STRONG GROWTH IN GLOBAL ROAD TRANSPORTATION





### GLOBAL ROAD TRANSPORTATION MARKET

\$ bn



#### **DRIVERS**

**Global GDP** is expected to **continue to grow** 

**Continuous strong rise of online business** 

**Good existing road infrastructure** and lower cost solution

**Urbanization** driving increased **demand for flexible transportation** 

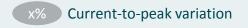




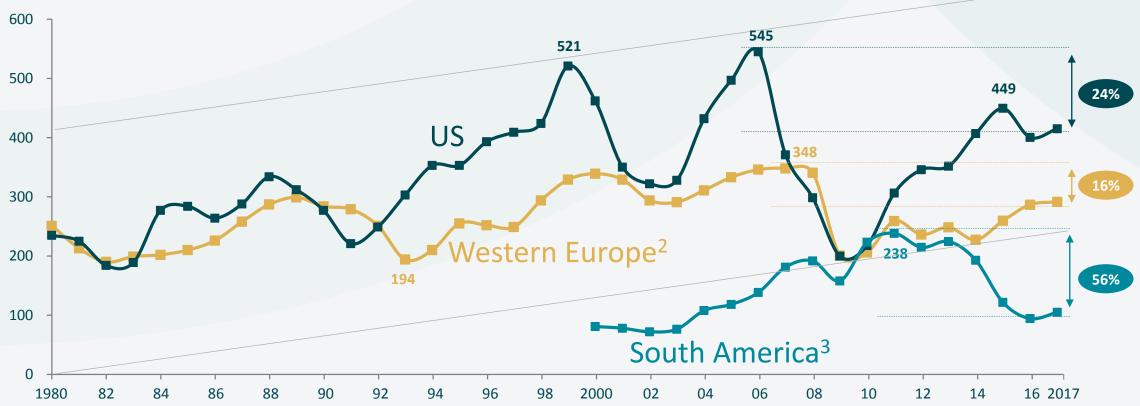


# SALES VOLUMES IN TRATON GROUP'S CORE MARKETS AND THE US ARE STILL FAR FROM HISTORICAL PEAKS









Source: Verband der deutschen Automobilindustrie (VDA data); IHS Markit.

1 Western Europe and US data based on VDA, South America data based on IHS Markit. 2 EU15 + EFTA: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom + Iceland, Liechtenstein, Norway and Switzerland. 3 Incl. Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, Venezuela; excl. Mexico (part of N. America); excl. Paraguay, Uruguay, as no IHS Markit data for trucks >6t available.



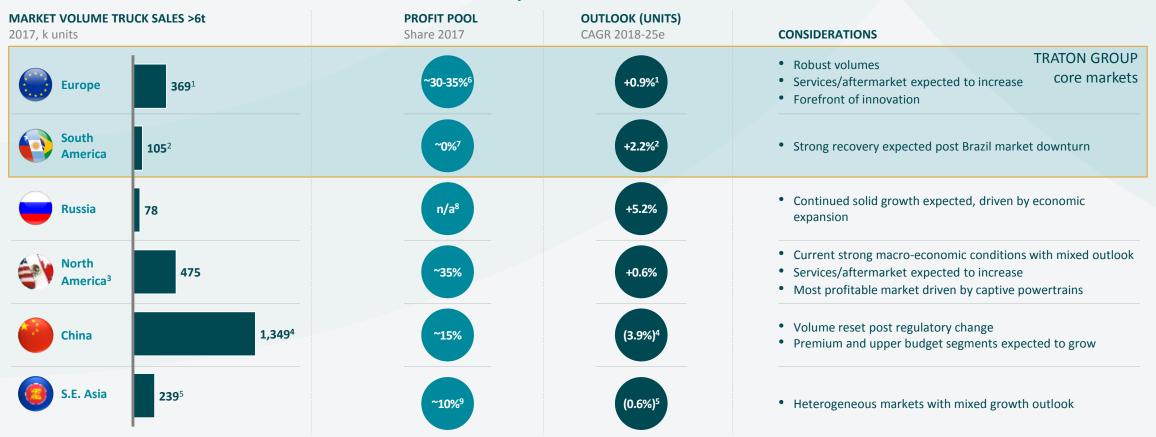






# OUTLOOK FOR TRATON GROUP'S CORE MARKETS POSITIVE – EUROPE PROFITABLE AND INNOVATION DRIVEN, SOUTH AMERICA RECOVERING





Source: IHS Markit, McKinsey.

1 EU28+2 region consisting of EU member states plus Norway and Switzerland. Cyprus, Malta, and Luxembourg excluded, as no IHS Markit data available. 2 Incl. Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, Venezuela; excl. Mexico (part of N. America); excl. Paraguay, Uruguay, as no IHS Markit data for trucks >6t available. 3 United States, Mexico, Canada. 4 Incl. Hong Kong. 5 Incl. Indonesia, Australia, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam. 6 Incl. Western Europe and CEE regions. 7 As footnote two and incl. Belize, Caribbean, El Salvador, Paraguay, Uruguay. 8 Incl. in CEE region (part of EU28+2 profit pool share). 9 As footnote five and incl. Japan, Pakistan and excl. Taiwan



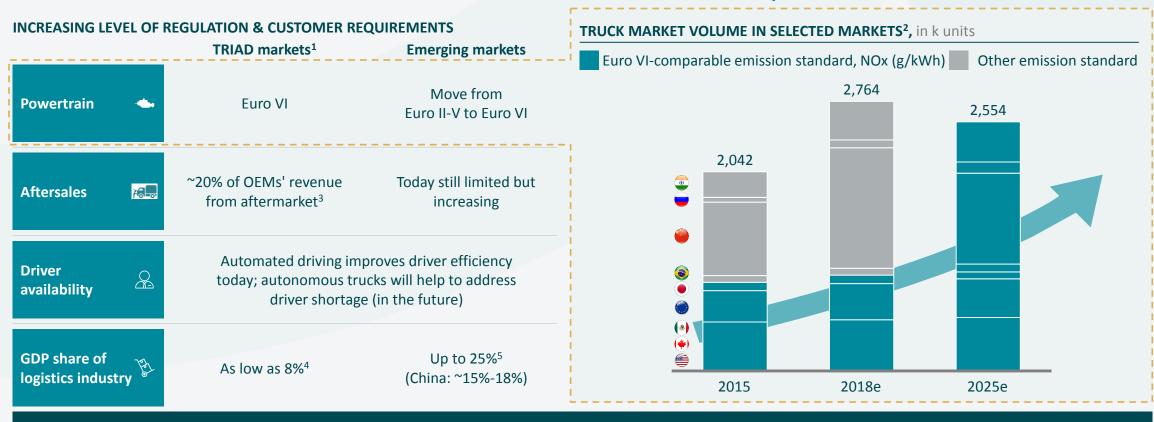






# ADDRESSABLE MARKET FOR TECHNOLOGY LEADERS EXPECTED TO INCREASE – DRIVEN BY EVOLVING REGULATORY AND CUSTOMER REQUIREMENTS





Euro VI-comparable share increases from ~30% in 2017 to ~85% in 2025e globally leading to a higher share of attractive markets

Source: IHS Markit, McKinsey, World Bank.

1 North America, Europe, Japan. 2 Mexico standards not in line with the US and Canada, currently Euro IV-comparable in place, Euro VI-comparable to be implemented by 2020e. 3 Based on Scania and MAN figures for FY2017. 4 Based on countries classified as most efficient by the World Bank, such as the US and the Netherlands. 5 Based on countries classified as least efficient by the World Bank. 6 National standards; selected cities with stricter emission regulations; based on McKinsey analysis.





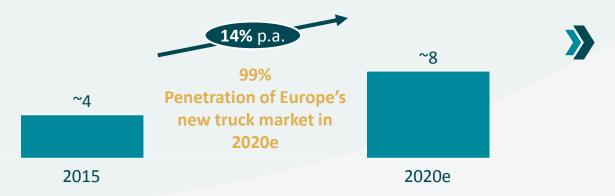


## **CONNECTIVITY – MONETIZING CONNECTED SERVICES AND SOLUTIONS**



#### CONNECTED TRUCKS BECOMING STANDARD IN EUROPE

Commercial vehicles with fleet management systems installed in Europe,  $\boldsymbol{m}$ 



# VARIOUS VALUE DRIVERS STEMMING FROM CONNECTED SERVICES

Optimization of transport processes at customers (e.g., utilization)

Improved OEM processes (e.g., R&D feedback loops)

Higher penetration/impact of services (e.g., flexible maintenance)

New services/ business models



# Penetration rising rapidly enabling new business models



# TAKEAWAYS

OEMs need to offer holistic platforms for connectivity and solutions



Hardware as enabler for connected services – no driver of profitability

Source: McKinsey.







# AUTONOMOUS DRIVING – NEAR-TERM IMPACT FOR SELECTED APPLICATIONS, WHILE FULL IMPACT OF AUTONOMOUS DRIVING LIKELY TO MATERIALIZE ONLY IN THE LONG TERM



#### **EXPECTED DEVELOPMENT OF AUTONOMOUS DRIVING AND IMPACT ON TCO**

2018-20

Highly automated

driving in

geo-fenced areas<sup>1</sup>

Autonomous trucks driving

in convoys on highway (with driver in leading truck)

2022+

Full autonomy on highway and selected roads (driver only for pick-up/drop-off)

2025+



Full autonomy (no driver)

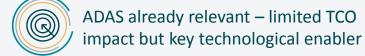
2027+

~45% TCO savings











Use cases starting to hit the market



Truck OEMs to capture significant value

Source: McKinsey, Bader & Di Stefano & Schares (2017) Reutlingen University and MAN Design. 1 Safety driver present in truck.

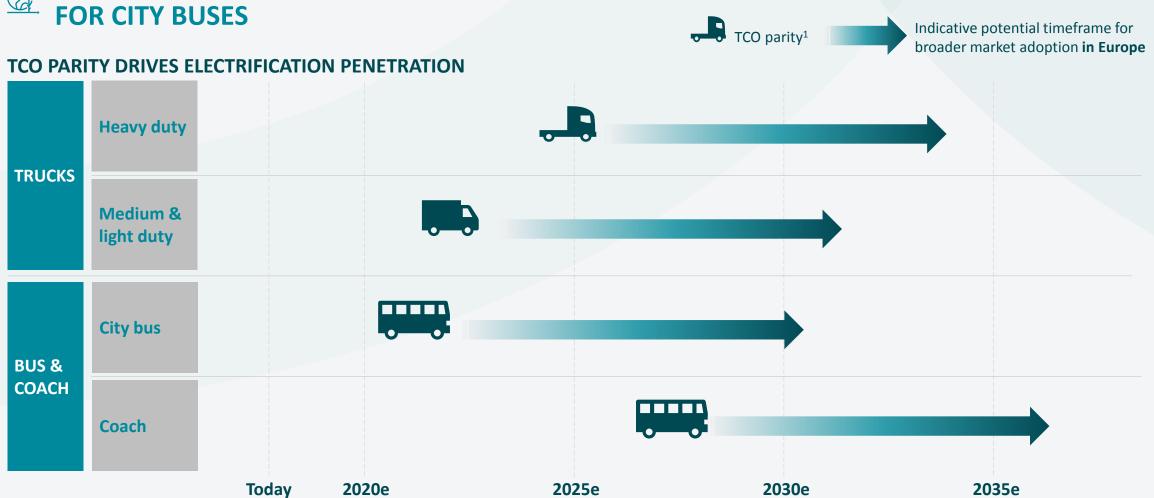






## **ELECTRIFICATION DRIVEN BY TCO AND REGULATION – FASTEST ADOPTION**





# TRATON GROUP WELL POSITIONED TO BE AT THE FOREFRONT OF NEW TECHNOLOGIES











## **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**

## 04. TRATON GROUP

Brand Performance | Cooperations & Synergies | Global Expansion | Customer Focused Innovation

- 05. **FINANCIALS**
- 06. WRAP UP

## **OUR HERITAGE: A GROUP OF THREE LEADING INNOVATIVE BRANDS**

















## AT PRESENT: READY FOR THE FUTURE









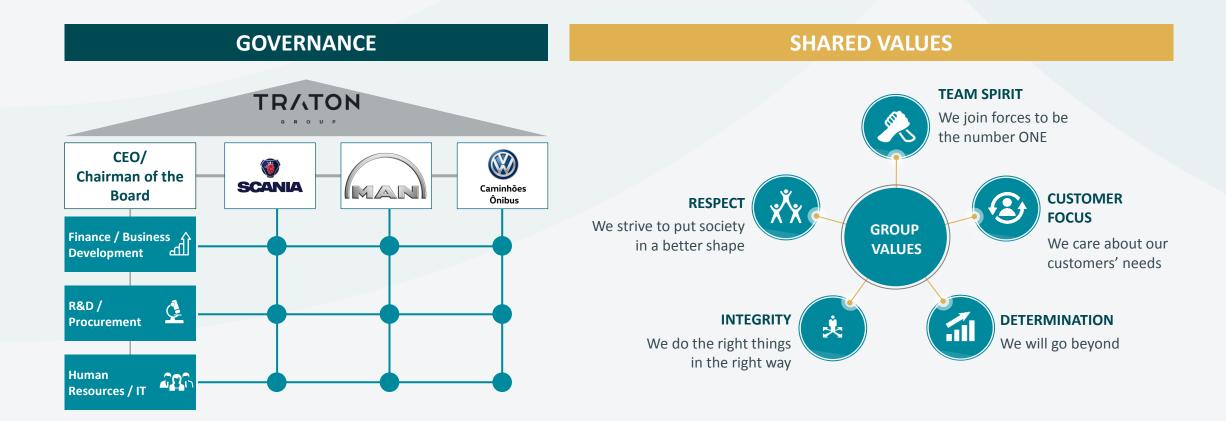








# ESTABLISHED GOVERNANCE STRUCTURE AND SHARED VALUES ARE FUNDAMENTAL PILLARS THAT SECURE SUCCESSFUL BRAND COOPERATION



### WAY TO GLOBAL CHAMPION BASED ON FOUR PILLARS





## **Creating a Global Champion**

Leader in Profitability | Global Presence | Innovation



## Brand Performance

Increase performance of brands with individual identity, strength and clear positioning



## Cooperation & Synergies

Increase cooperation and exploit synergies between brands



## Global Expansion

Leverage scale through global footprint



## Customer Focused Innovation

Transforming transportation

**Creation of Sustainable Shareholder Value** 

### **CLEAR POSITIONING OF BRANDS**







Driving the shift towards a sustainable transport system



**Premium** customer-focused **innovation leader** for **sustainable** transport solutions



Simplifying business by being the most reliable business partner



Reliable business partner with value package and full-line offering



Less you don't want more you don't need



Best value for money and tailor-made products

## **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**

## 04. TRATON GROUP

**Brand Performance** | Cooperations & Synergies | Global Expansion | Customer Focused Innovation

- 05. **FINANCIALS**
- 06. WRAP UP





TRATON GROUP

PERFORMANCE SCANIA

BRAND

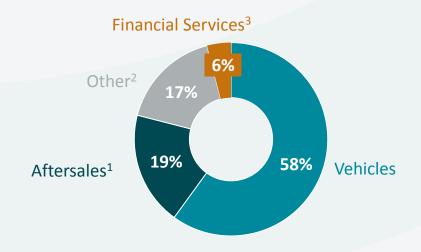
FINANCIALS

WRAP UP

### **OVERVIEW**



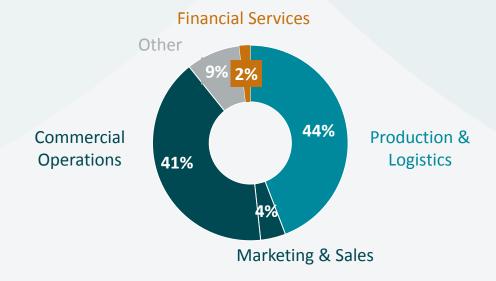
### SCANIA GROUP SALES REVENUE BY OFFER (FY2017)



€12.8bn<sup>4</sup> Sales revenue

### Scania is a world leading provider of transport solutions

### **SCANIA GROUP EMPLOYEES BY FUNCTION (FY2017)**



47.2k Employees<sup>5</sup>

### >20,000 employees in the customer facing part of the organization<sup>6</sup>

1 Including genuine parts and workshop services. 2 Including used vehicles, engines, powertrains and parts deliveries, leasing business and other sales revenue from hedging transactions. 3 Reflecting lease income and interest income. Corresponds to group sales revenue (i.e. after intersegment consolidation) of TRATON GROUP's financial services segment. 4 Includes Vehicles and Services; post consolidation effects; excl. PPA. 5 Headcount disclosed in Scania 2017 reporting deviates as it includes apprentices and permanently ill. 6 Commercial Operations (excluding its central staff) and Financial Services represent integral parts of Scania's customer facing organization, involved with selling vehicles, services and financing solutions to customers.

TRATON GROUP

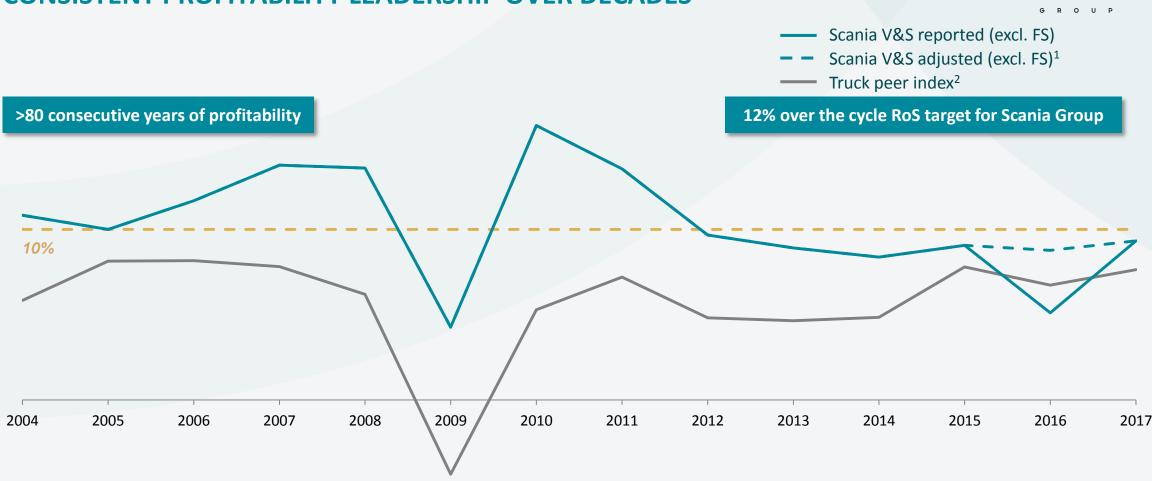
**FINANCIALS** 

WRAP UP

BRAND PERFORMANCE SCANIA

## **CONSISTENT PROFITABILITY LEADERSHIP OVER DECADES**

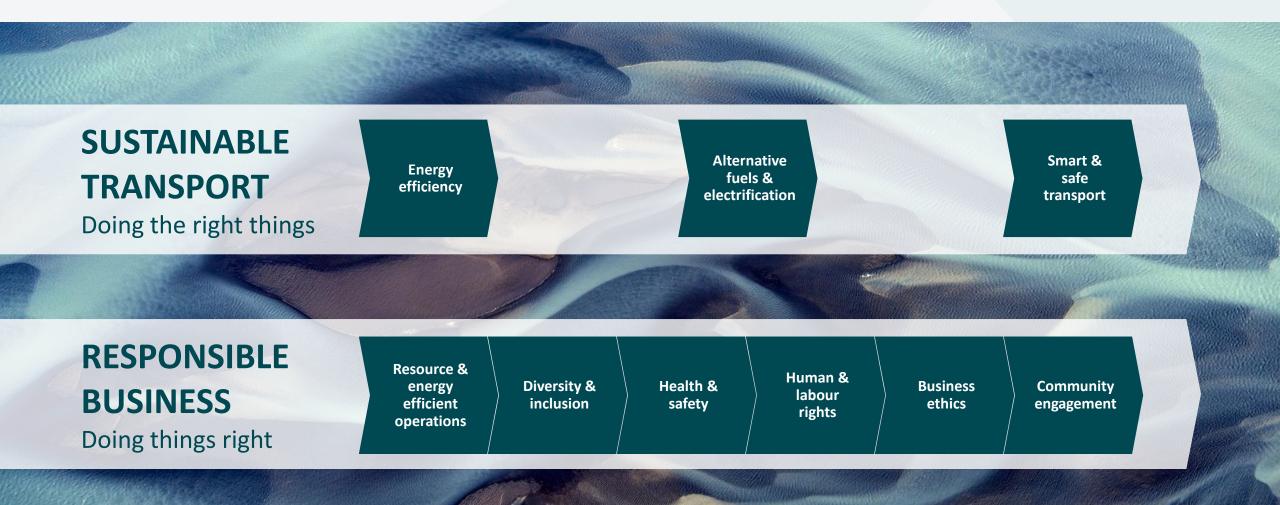




<sup>1</sup> Including €403m adjustment for provision in relation to Scania antitrust fine. 2 Truck Peer Index denotes weighted return on sales and includes Daimler Truck and Bus, Volvo Truck and Parts; Scania as per Scania company reporting.

# OUR PURPOSE: DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM





### DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM







- Ramp-up New Truck Generation
- Broadest range of alternative fuel technologies
- Strong captive network and expanding connected fleet
- Accelerated service growth expected
- Regional expansion



- Premium pricing through unique customer understanding
- Leverage Byggladan, Scania's modular toolbox, across technologies
- Optimize product cost through flexible and lean global production system
- Expansion of service offering



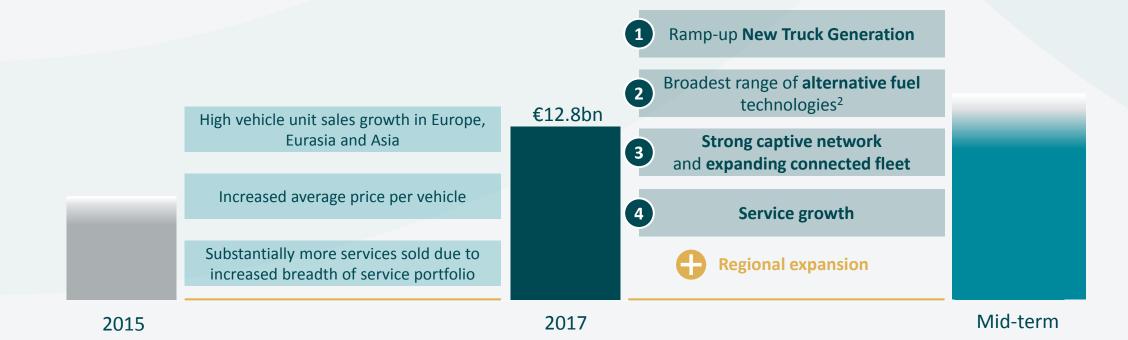
- Customer-centric culture of continuous improvements
- Partnerships in the ecosystem of transport and logistics
- Highly experienced and open-minded leadership



## TRATON

## CONTINUE SUCCESSFUL GROWTH PATH

## Scania Group¹ sales revenue



<sup>1</sup> Includes Vehicles and Services and Financial Services; post consolidation effects excl. PPA. 2 Based on a company comparison with other offerings in the market.

PERFORMANCE SCANIA

**BRAND** 



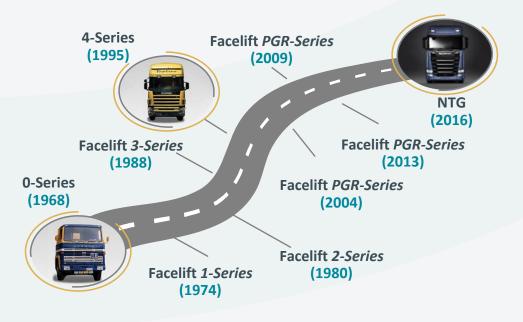


## TR/TON

### **RAMP-UP NEW TRUCK GENERATION**

#### PREVIOUS BODY IN WHITE GENERATIONS AND FACELIFTS

New Body In White and facelifts over time



#### **SELECTED AWARDS FOR NTG**



Green Truck Award 2017 & 2018 Winner of tests across Europe >40 tests 2017-2018

>**€2bn** Total investment¹

**NTG IN FIGURES** 

ACTIONAL TOWNS

International Truck of the Year 2017 at IAA 2016 Superior quality directly post launch

**45%** Share of 9M 2018 Scania truck sales<sup>2</sup>

AWARDS 17/ WINNER

OEM of the Year 2017, Connected services Best-in-class truck on the market **5%** Target truck price increase<sup>3</sup>

NTG is the first new truck generation since 1995 NTG to fully replace PGR generation by 2019 Track record of outstanding performance

Significant investments NTG redefining premium

<sup>1</sup> Relates to time period 2010 to 2017. 2 Time period: January to September 2018. Remaining share relates to previous generation. 3 Compared to PGR generation.





# BROADEST RANGE OF ALTERNATIVE FUEL TECHNOLOGIES COMPETITIVE EDGE FOR DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM

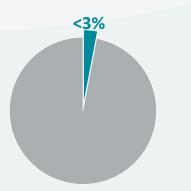
## WHEN THE SHIFT TO ALTERNATIVE FUELS HAPPENS $\dots$

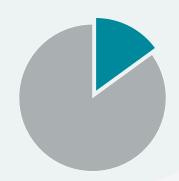
Share of market of alternative fuels (incl. BEV)

Share of market of alternative facis (incl. blv)

Today<sup>2</sup>

Mid-term (2025e)<sup>3</sup>





## ..

### ... SCANIA WILL BENEFIT FROM ITS BROAD RANGE OF ALTERNATIVE FUEL SOLUTIONS

Scania vehicles displayed at IAA 2018: alternative fuels only<sup>5</sup>



- Scania has pioneered in the use of alternative fuels for more than 30 years
- Broadest range<sup>1</sup> of alternative fuel technologies in the market to meet all customer demands even the most ambitious when they come

Theoretical CO<sub>2</sub> reduction potential of Scania vehicles

up to 90% Biogas

up to 90% HVO

up to 85% Biodiesel FAME

up to **15%** Natural gas

>90% Hybrid with HVO

up to **90%** Ethanol

 Alternative fuel offering today matches CO<sub>2</sub> targets of tomorrow

- Breadth of Scania portfolio provides flexibility in light of limited visibility of future technology mix
- Moving towards low carbon solutions is a prerequisite to be in line with Paris agreement<sup>4</sup>

Source: OECD, European Commission. Note: HVO = Hydrogenated Vegetable Oil. LNG = Liquefied Natural Gas. CNG = Compressed Natural Gas. BEV = Battery Electric Vehicle.

1 Based on a company comparison with other offerings in the market. 2 Reflects European share of alternative fuel technologies (incl. BEV) in HDT segment. 3 Relates to long-haul. 4 Agreement within the UN on climate change dealing with greenhouse-gasemissions to keep global temperature rise this century below 2°C. 5 Including newly launched plug-in hybrid. 6 Also compatible with biodiesel FAME and ethanol engines.

Scania's sales share today above market





## STRONG CAPTIVE NETWORK AND EXPANDING CONNECTED FLEET



#### **CAPTIVE NETWORK**

>20,000

Employees in the customer facing part of the organization<sup>1</sup>

>550

Captive service points<sup>4</sup>





>50% of vehicles sold through captive network<sup>6</sup>

Captive network with direct contact to customers and their needs in the markets enables Scania to offer tailored products / services

### **CAPTIVE FINANCING**

~€6.1bn

Size of customer finance portfolio<sup>2</sup>

### **Flexible**

**Financing and insurance solutions** 





>40% of vehicles sold with Financial Services solutions<sup>7</sup>

Local specialist support to offer tailored solutions ranging from subscription models to vehicle sales

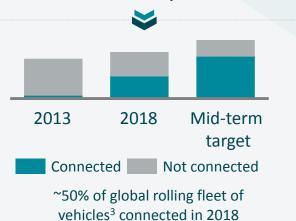
### **EXPANDING ROLLING FLEET**

>350k

Size of connected fleet<sup>3</sup>

~ 3bn

Kilometres tracked per month<sup>5</sup>



Size of connected fleet growing daily and platform for more customized services

1 Commercial Operations (excluding its central staff) and Financial Services represent integral parts of Scania's customer facing organization, involved with selling vehicles, services and financing solutions to customers. As of 31-Dec-2017 2 As of Dec-2017. 3 As of Nov-2018. Based on 10yr global rolling vehicle fleet. 4 As of Jan-2019. 5 As of Nov-2018. 6 Based on FY2017.

PERFORMANCE SCANIA

**BRAND** 



### **SERVICE GROWTH**

### ALL BUILDING BLOCKS IN PLACE FOR SERVICE GROWTH AHEAD



CAPTIVE NETWORK & CAPTIVE FINANCING



DIGITALIZATION DRIVES
BUSINESS



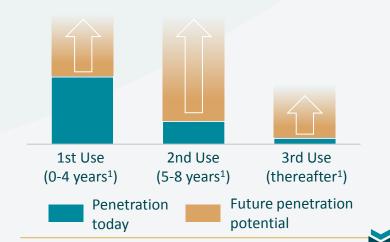
BEST-IN-CLASS TRUCK ON THE MARKET

## Continued service growth targeted

with

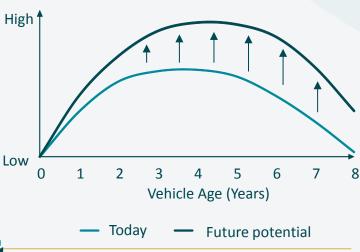
Higher penetration of subscription-type service contracts globally

Share of vehicles with subscription-type service contract



Higher average service sales revenue per vehicle over vehicle lifetime

Service sales revenue per vehicle



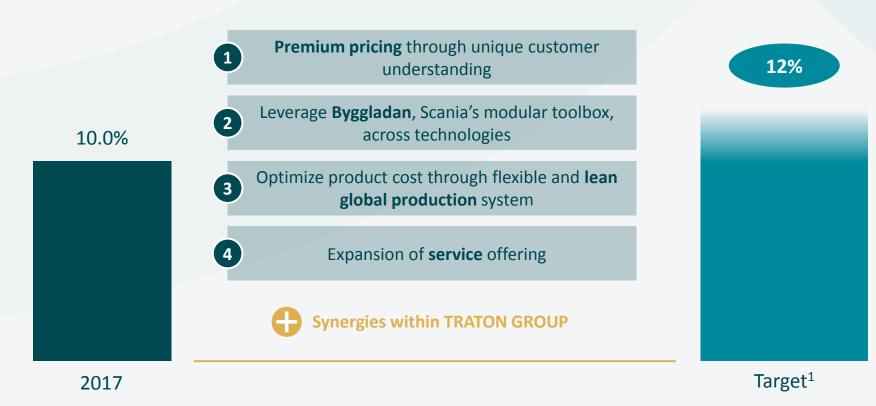
Service sales revenue growth targeted to outpace vehicles sales revenue growth



## TRATON

## TARGET TO INCREASE PROFITABILITY TO 12% RETURN ON SALES<sup>1</sup>

## Scania Group<sup>2</sup> adj. RoS



1 Strategic target Scania wants to achieve over the cycle. 2 Includes Vehicles and Services and Financial Services; post consolidation effects excl. PPA.





# PREMIUM PRICING THROUGH UNIQUE CUSTOMER UNDERSTANDING FACILITATED BY THE SALES OF HOLISTIC CUSTOMER SOLUTIONS



### **SCANIA BUSINESS MODEL**

Optimized customer value through tailored solutions

**Premium pricing** 

Strong sales revenue at beneficial margins

- + Customer sales revenue
- Customer cost
- = Customer operating income



- + Scania sales revenue
- Scania cost
- = Scania operating income



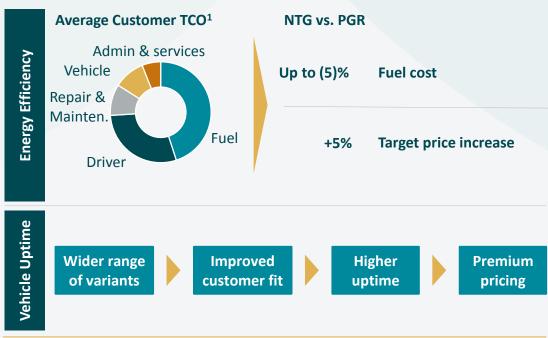
(lternativ

Alternative fuels and electrification

Smart and safe transport

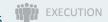
Business model aims to maximize customer value as point of departure for Scania's own profitability

## EXAMPLE NTG – SELECTED IMPROVEMENTS VS. PREVIOUS GENERATION



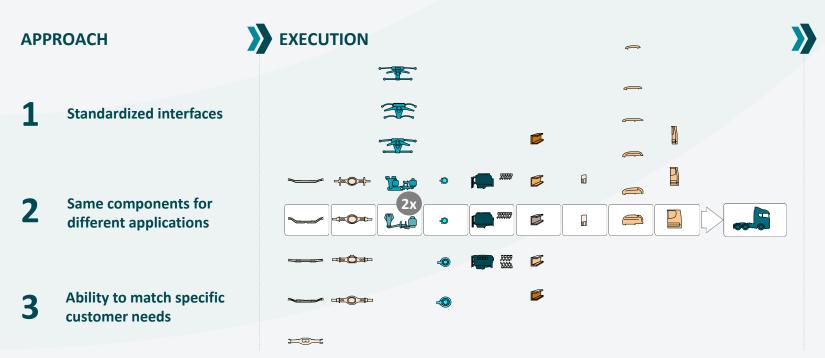
NTG further maximizes customer value enabling Scania to become more profitable





## LEVERAGE BYGGLADAN, SCANIA'S MODULAR TOOLBOX, ACROSS TECHNOLOGIES TRATON MORE TAILORED PRODUCTS WITH FEWER COMPONENTS





### **BENEFITS**

#### Premium price...

- **Broader** customer offering
- Increased customer value due to tailor made solutions – even for niche applications<sup>1</sup>
- **Shorter time to market** due to flexible product structure

#### ... at low internal cost

- **Shared components** between trucks / buses
- One global product, enabling a flexible production system
- **Lower operational costs** in the whole value chain
- Scale benefits from 'one need, identical solution' logic

- >50 years of experience and a fully modularized vehicle range since 1980
- · Continuously improved Byggladan, Scania's modular toolbox, as backbone to enable profitable mass customization of broad variant offering and as a key lever for having a long-term competitive advantage in electrification

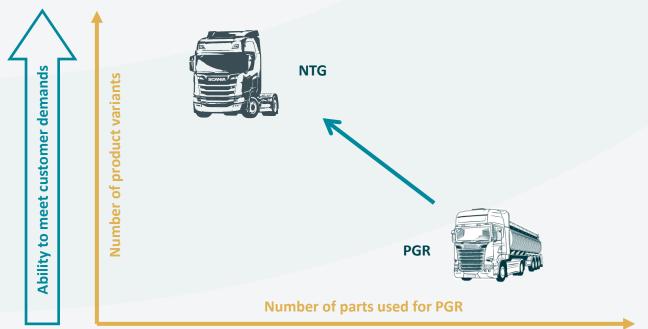




## LEVERAGE BYGGLADAN, SCANIA'S MODULAR TOOLBOX, ACROSS TECHNOLOGIES TRATON TAILORED PRODUCTS WITH LIMITED COMPONENTS

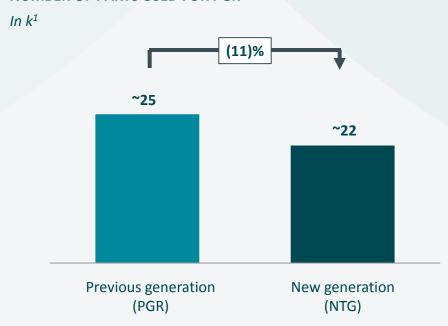


#### COMPARISON OF PRODUCT VARIANTS AND NUMBER OF PARTS ACROSS TRUCK GENERATIONS



Roll-out of NTG generation increases the ability to tailor-make customer solutions through broad application offering

#### **NUMBER OF PARTS USED FOR PGR**



Significant reduction in the number of parts used in NTG while increasing the customer offerings

<sup>1</sup> Estimated number of parts extrapolated from 77 vehicles in 2016. Analysis based on P-G-R-C cab types (S-L cab types of NTG generation not considered).



# LEVERAGE BYGGLADAN, SCANIA'S MODULAR TOOLBOX, ACROSS TECHNOLOGIES AS ENABLER TO PROFITABLY OFFER APPLICATIONS FOR NICHE CUSTOMERS



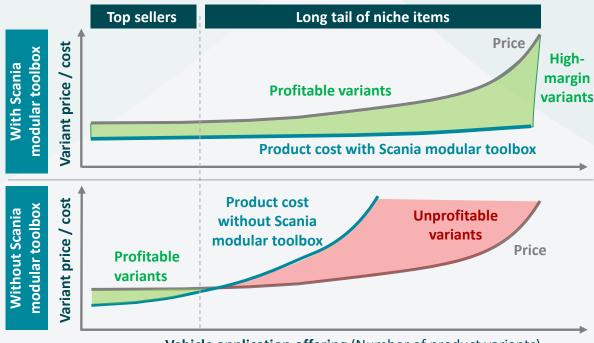
### PRICE / DEMAND CURVE OF APPLICATION SPECTRUM



Vehicle application offering

- Few top sellers with more competitive pricing
- · Long tail of specialized vehicles with low quantities / premium pricing

#### PROFITABILITY ACROSS PRODUCT OFFERING



- Vehicle application offering (Number of product variants)
- In normal set-up not possible to cater to low volume / highly specialized market
- Scania modular toolbox allows the production of individual vehicles and thereby to profitably cater for the entire application spectrum<sup>1</sup>



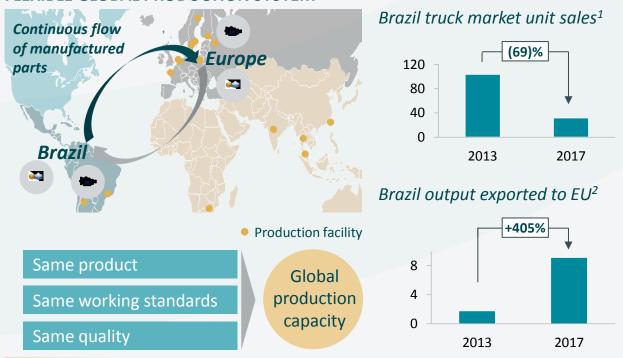


## PERFORMANCE SCANIA

## TION TRATON

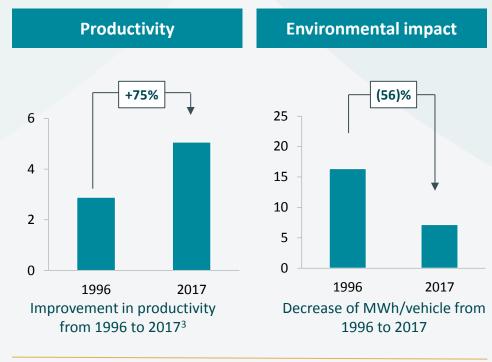
# OPTIMIZE PRODUCT COST THROUGH FLEXIBLE AND LEAN GLOBAL PRODUCTION SYSTEM (1/2)

#### FLEXIBLE GLOBAL PRODUCTION SYSTEM



Exporting whole product spectrum within global system to counter regional cyclicality

#### **LEAN GLOBAL PRODUCTION SYSTEM**



Continuous global improvements across multiple dimensions enabled Scania to retain lean production set-up



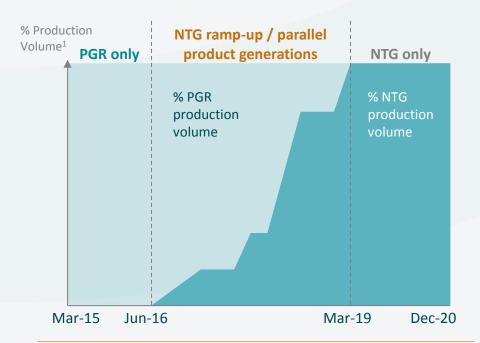


## PERFORMANCE SCANIA DETIMIZE DECENION COST THEOLIGH ELEVIR

## TRATON

# OPTIMIZE PRODUCT COST THROUGH FLEXIBLE AND LEAN GLOBAL PRODUCTION SYSTEM (2/2)

## PARALLEL PRODUCT GENERATIONS DURING NTG RAMP-UP



Elevated cost levels throughout the organization while producing parallel product generations

### **DETAILS ON COST OPTIMIZATION PLAN CURRENTLY IN IMPLEMENTATION**

	Scope	Status
Release of resources	Shift from launch-focused to efficiency-focused organization	Under implementation
	Realization of <b>continuous</b> improvements	Expected to be finalized during 2019
Product cost program	Fully dedicated cost-optimization initiative at Scania  Embedded into the Focus & Ambition program	Initiated in Q4 2018

Performance programs in place to rebound profitability post end of parallel production





## PERFORMANCE SCANIA EXPANSION OF SERVICE OFFERING THROUGH SMART AND CONNECTED SERVICES TRATON



### SCANIA HAS A LARGE AND CONTINUOUSLY **GROWING DATA BASE...**

### Selected examples of collected vehicle data

**Vehicle** status

- **Current location**
- Mileage status

Route information

- **Driving route**
- **Driving conditions**

Driving characteristics

- **Driving time**
- Speed
- Fuel

### Collected data is basis for Scania's tailored and comprehensive service offering

#### ... AND KNOWS HOW TO CAPITALIZE ON IT – EXAMPLE: FLEXIBLE MAINTENANCE

# Who is using flexible maintenance? Trucks on the road Verkstadsvägen Vehicle alarm (06:33) OK

~60% contract penetration in vehicles sold through captive distributors<sup>1</sup>

### Who benefits from flexible maintenance? Win / Win Customer Scania Higher uptime Higher service point utilization Demand-driven service point Optimized net visits working capital Higher Feedback loops to R&D predictability Peace-of-mind Proactive cusplanning tomer contact Potential for upselling

Customer can realize reduced TCO -Scania benefits as well

PERFORMANCE SCANIA

**BRAND** 





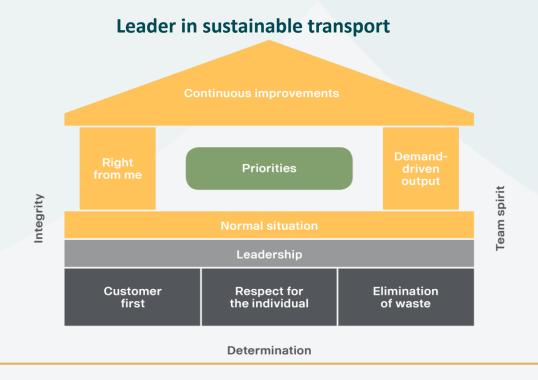
## TR/TON

### **EXECUTION - THE "SCANIA WAY"**

CUSTOMER-CENTRIC / CONTINUOUS IMPROVEMENT

PARTNERSHIPS IN THE ECO-SYSTEM
OF TRANSPORT AND LOGISTICS

EXPERIENCED AND OPEN-MINDED LEADERSHIP



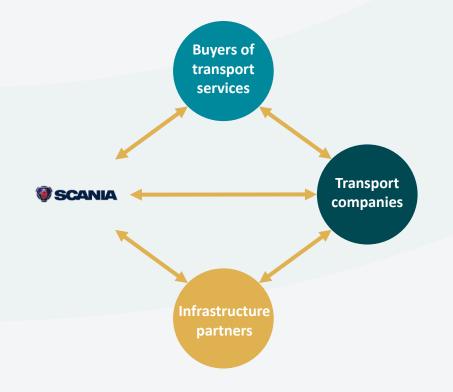
- Since 1996, the "Scania way" has been formalized in the "Scania House"
- The "Scania House" establishes Scania's common company language and problem-solving culture – which is embraced by every single employee



### PERFORMANCE SCANIA PARTNERSHIPS IN THE ECO-SYSTEM OF TRANSPORT AND LOGISTICS



## CREATING VALUE FOR CUSTOMERS WITH PARTNERSHIPS FOR HOLISTIC SOLUTIONS



**Buyers of** transport services



Coalition to accelerate the decarbonisation of heavy transport



Pilot fleet of four 26t distribution vehicles electrified from fuel cells using hydrogen

**Transport** companies



Tests of battery electric buses



Testing semiautonomous platooning in realtraffic conditions

Infrastructure partners

### **SIEMENS**

**NETTBUSS** 



**Electrically-powered** trucks using conductive technology by Siemens

### **NORTHVOLT**

**AHOLA** 

**ASKO** 

northvolt

Partnership on development and commercialization of battery cell technology

<sup>1</sup> Collaboration with E.ON, H&M and Siemens to accelerate decarbonisation of heavy transport.

PERFORMANCE SCANIA

Years of experience relate to automotive / commercial vehicles industry



## HIGHLY EXPERIENCED AND OPEN-MINDED LEADERSHIP – STRONG TRACK **RECORD: DELIVERING ABOVE INDUSTRY AVERAGE MARGINS**

**BRAND** 



## SCANIA EXECUTIVE BOARD MEMBERS



**Henrik Henriksson Chief Executive Officer** 



Johan Haeggman **Chief Financial Officer** 



**Christian Levin** Head of Sales and Marketing<sup>1</sup>



**Kent Conradson** Head of **Human Resources** 



**Anders Williamsson Head of Purchasing** 



**Mathias Carlbaum Head of Commercial Operations** 



**Ruthger De Vries** Head of Production and Logistics

### STRONG CORPORATE CULTURE

Flat hierarchy structures and respect for the individual as enabler for an open-minded working environment and strong team spirit



The open office space of Scania's Executive Board

Development

**Claes Erixon** 

Head of Research and

PERFORMANCE SCANIA

BRAND

### **SCANIA – KEY TAKEAWAYS**



## **EXECUTION - THE "SCANIA WAY"**

3

### **PROFITABILITY AND SYNERGIES**

2

PREMIUM PRICING THROUGH UNIQUE CUSTOMER UNDERSTANDING

LEVERAGE BYGGLADAN, SCANIA'S MODULAR TOOLBOX, ACROSS TECHNOLOGIES

OPTIMIZE PRODUCT COST THROUGH FLEXIBLE AND LEAN GLOBAL PRODUCTION SYSTEM

**EXPANSION OF SERVICE OFFERING** 

CUSTOMER-CENTRIC / CONTINOUS IMPROVEMENT

PARTNERSHIPS IN THE ECOSYSTEM OF TRANSPORT AND LOGISTICS

HIGHLY EXPERIENCED AND OPEN-MINDED LEADERSHIP

### GROWTH

1

**RAMP-UP NEW TRUCK GENERATION** 

BROADEST RANGE OF ALTERNATIVE FUEL TECHNOLOGIES

STRONG CAPTIVE NETWORK AND EXPANDING
CONNECTED FLEET

**SERVICE GROWTH** 

**REGIONAL EXPANSION** 

DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM





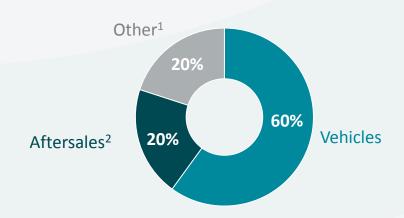
PERFORMANCE MAN T&B

BRAND

## **OVERVIEW**



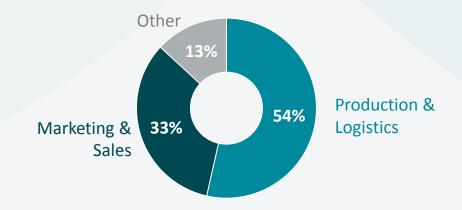
## MAN T&B SALES REVENUE BY OFFER (FY2017)



## €10.0bn Sales revenue

- Truck sales are the key revenue driver
- Aftersales and services with significant sales revenue contribution

## MAN T&B EMPLOYEES BY FUNCTION (FY2017)



35.2k Employees<sup>3</sup>

Majority of employees in Production & Logistics

Note: Figures are financially rounded.

<sup>1</sup> Including used vehicles, engines, powertrains and parts deliveries, leasing business and other sales revenue including sales revenue from hedging transactions. 2 Including genuine parts and workshop services. 3 Total employee number includes MAN T&B India, not accounting for market exit / plant closure in 2018.

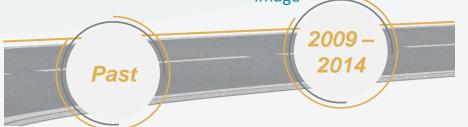


# STRONG ROOTS

- MAN T&B's roots date back to the 18<sup>th</sup> century
- Remarkable history of innovation

# PERIOD OF CHANGE

- Global financial crisis
- High leadership fluctuation and lack of strategic continuity
- Unsuccessful investments into geographic expansion
- Lack of investment in product & infrastructure, markets, processes
- Deteriorating brand image



# **EXECUTION OF FUTURE LION STRATEGY**



## STRONG ROOTS

- MAN T&B's roots date back to the 18<sup>th</sup> century
- Remarkable history of innovation

**Past** 

# PERIOD OF CHANGE

- Global financial crisis
- High leadership fluctuation and lack of strategic continuity
- Unsuccessful investments into geographic expansion
- Lack of investment in product & infrastructure, markets, processes

2009 -

2014

 Deteriorating brand image

# PLANTING SEEDS

- Setup of Future Lion strategy
- Investment into product renewal, sales organization, infrastructure and processes
- Introduction of strict cost control projects
- Adj. RoS increase to 4.8%¹ in 2017

# **PROFITABILITY STABILIZATION**

- Launch of new truck generation
- Focused market share growth
- Expand aftersales and service business

# NEW ERA OF PROFITABILITY

- Fully benefit from renewed product portfolio
- Realize synergies
- Deliver target of 8% RoS<sup>2</sup>



2015 – 2018





Execution of Future Lion strategy

## SIMPLIFYING BUSINESS BY BEING THE MOST RELIABLE BUSINESS PARTNER







- Replicate German market success story in European Focus Markets
- Execute launch of high quality product portfolio
- Expand aftersales and service offering
- Exploit growth opportunities in selected international markets
- Focus on electrification going forward

PROFITABILITY
AND
SYNERGIES

- Significantly improve profitability and cash flow through operating enhancement program "Operational Excellence" and higher margin service offering
- Benefit from synergies and best practices through ongoing integration into TRATON GROUP

3 WINDERSTON

- Benefit from strong leadership with commitment, vision and execution focus
- Nurture a continuous performance improvement culture
- Establish position as employer of choice and industry leading reliability champion with simplifying business mindset



## MAN T&B – STRONG PLATFORM WITH SUBSTANTIAL GROWTH POTENTIAL



## **MAN T&B sales revenue**



PERFORMANCE MAN T&B

**BRAND** 

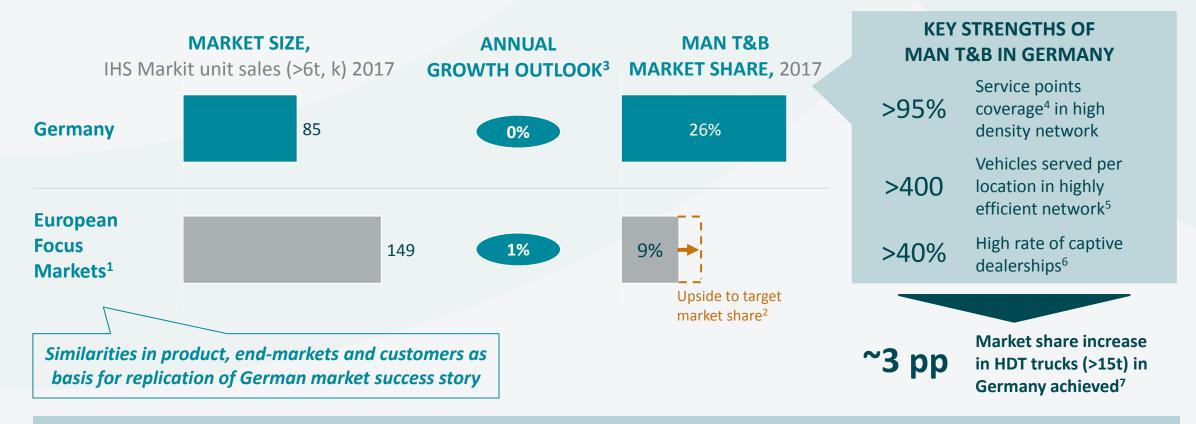






## REPLICATE GERMAN MARKET SUCCESS STORY IN EUROPEAN FOCUS MARKETS





Material upside potential can be realized by transferring elements of MAN T&B's German market success story into other European Focus Markets

Source: IHS Markit.

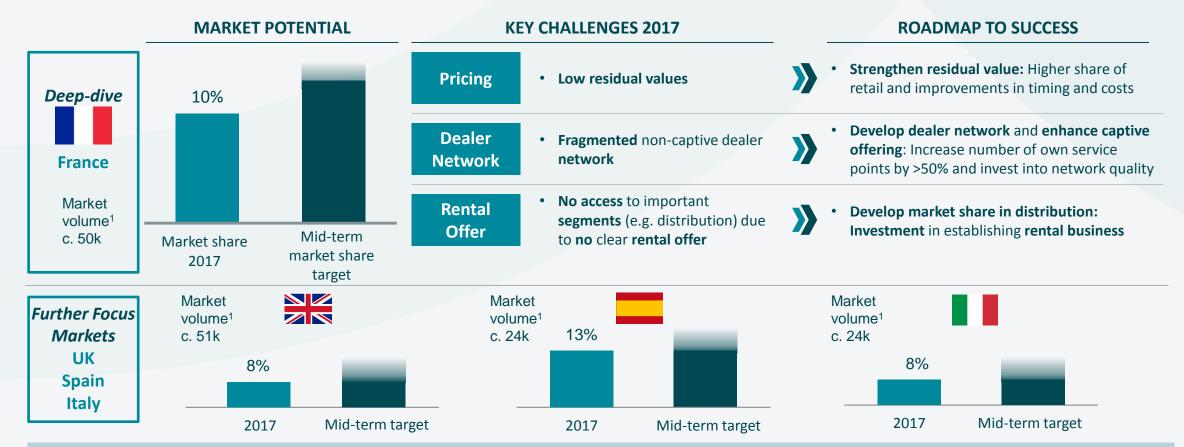
1 Includes France, Spain, UK, Italy. 2 Only illustrative. 3 Refers to period 2017-25. 4 Reachable within 45min as of Sep-2017. 5 As of Sep-2017. 6 < 20% in European countries with MAN national sales companies, ex. Germany as of Nov-2018. 7 From 2014 to 2017 for > 15t.





# **REPLICATE GERMAN MARKET SUCCESS STORY IN EUROPEAN FOCUS MARKETS**SELECTED CASE STUDIES – HOW CAN WE EXPAND OUR MARKET SHARE?





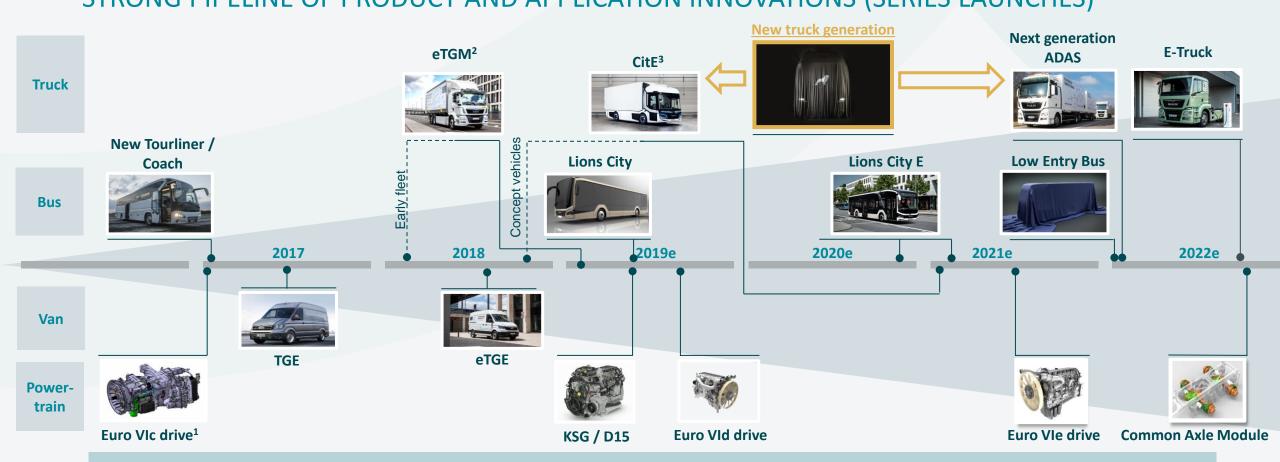
Clearly defined roadmaps based on executable measures in place to replicate German market success factors in other European markets under new leadership



TRATON

#### BRAND PERFORMANCE MAN T&B

# LAUNCH HIGH QUALITY PRODUCT PORTFOLIO STRONG PIPELINE OF PRODUCT AND APPLICATION INNOVATIONS (SERIES LAUNCHES)



Full pipeline of new products and application innovations in place, spearheaded by the launch of a new truck generation

**BRAND** 



## TRATON

# LAUNCH HIGH QUALITY PRODUCT PORTFOLIO (CONT'D) NEW TRUCK GENERATION KEY HIGHLIGHT OF INNOVATION PIPELINE

PERFORMANCE MAN T&B

## 2000 LAUNCH OF TGA



- Heavy duty cab with new levels of comfort and ergonomic design
- Setting new technology and safety standards in the industry

## 2007





- Replacing TGA in 2007
- Most powerful truck series in Europe at the time with V8 engine with 680 HP

#### 2019-2021

LAUNCH NEW TRUCK GENERATION



- New truck generation as major midterm milestone
- Cutting-edge digitalization of new truck generation

First fully new truck generation after 20 years will be a key portfolio milestone to further drive growth

New truck generation will enable new ways of connectivity and efficiency accompanied by digital service offering

PERFORMANCE MAN T&B

**BRAND** 





## TRATON

# LAUNCH HIGH QUALITY PRODUCT PORTFOLIO (CONT'D) KEY PRODUCT HIGHLIGHTS AND FEATURES

### **PRODUCT HIGHLIGHTS**



**Powerful** exterior **design** and unique interior living design



New standards for **usability** and **connectivity** 



Highly **efficient** and **reliable powertrain** 



Fuel consumption reduction<sup>1</sup>

Price increase<sup>2</sup>

## **Deep dive: Cabin**

### **Safety improvements**

- New assistance systems
- Highest crash safety requirements

## **Technology**

- Integration of new electronicarchitecture
- Infotainment system

## **Driver's workplace**

- Ergonomically optimized
- Rest-time comfort improvements

#### **Human Machine Interface**

- Priority: optimal accessibility and visibility
- Structured and intuitive control layout for maximum safety

## New truck generation will enable new ways of connectivity and efficiency

PERFORMANCE MAN T&B

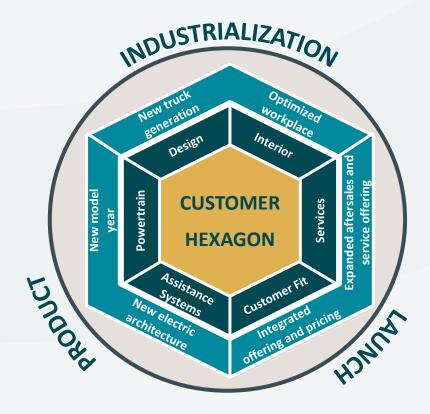




## TRATON

# LAUNCH HIGH QUALITY PRODUCT PORTFOLIO (CONT'D) NEW TRUCK GENERATION COMES WITH SIGNIFICANT OPERATIVE IMPROVEMENTS ACROSS THE WHOLE ORGANIZATION

**BRAND** 



Integrated offering with value chain approach focused on TCO

Highly flexible configuration

New product logic allowing for lean sales process

Highly automated concentrated body shop

New logistic system to ensure parallel run

Increase production efficiency





# EXPAND AFTERSALES AND SERVICE OFFERING AS THE MAIN LAYER OF GROWTH MATERIAL UPSIDE POTENTIAL THROUGH ENHANCED SERVICE OFFERING



#### AFTERSALES REVENUE EXPECTED TO GROW



#### **SELECTED KEY DRIVERS**

- Network development
  Increase density and efficiency
- Retail efficiency improvement
  Process improvements and spend optimization
- Unit sales growth
  Increase penetration and sales efficiency
- New aftersales products
  Increase penetration and extend portfolio
- Parts pricing
  Pricing opportunities

#### **KEY BENEFITS OF SERVICE OFFERING FOR MAN T&B**

**HIGHER CUSTOMER LOYALTY** 

**INCREASED PROFIT POOL** 

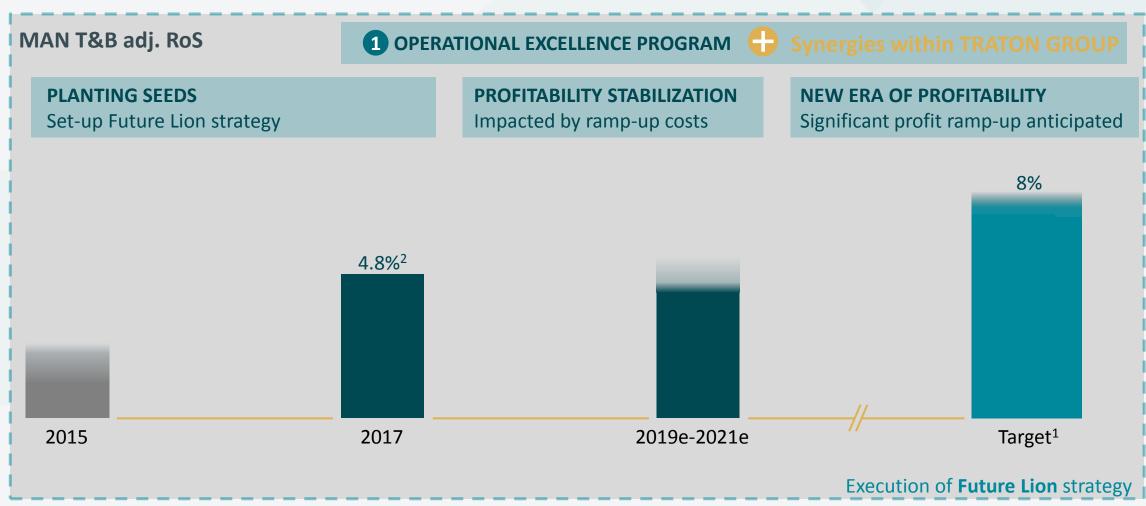
**FORWARD INTEGRATION** 





## TARGET TO INCREASE PROFITABILITY TO 8% RETURN ON SALES<sup>1</sup>







## OPERATIONAL EXCELLENCE IS AIMING TO MAKE MAN T&B "FIT FOR THE FUTURE" AND TO STRIVE FOR THE NEXT LEVEL OF PERFORMANCE



	MODULES	SELECTED TARGET EFFECTS	ARGETED GROSS IMPACTS <sup>3</sup>
Profitability Impact	Sales effectiveness	Price increase for new truck generation; integrated offering and cost reduct	ion <b>+++</b>
	Product cost / PKO+1	Implement cross-functional and cross-company cost optimization approach	
	Production efficiency	Increase productivity	++
	R&D transformation	Reduction of R&D ratio	+
	Indirect spend optimization	Reduce indirect spend	
	Personnel cost reduction		+
	Portfolio complexity	Reduce complexity in product portfolio	No P&L target <sup>2</sup>
Cash Flow Impact	Cash & invest	Reduction of Capex ratio	No P&L target
Ü		+++ Significant ++ Strong + Moderate	
• Ho	olistic program focusing on top-line a	nd bottom-line improvements of the P&L and addressing also Cash Flow Statement and E	Balance Sheet

- C. 2k initiatives with close monitoring and control mechanisms in place

**DELIVER EXECUTION** 

BRAND

Years in the automotive / truck industry<sup>1</sup>



## PERFORMANCE MAN T&B



## HIGH QUALITY TEAM IN PLACE TO DEFINE STRATEGY AND CONTINUE TO

## MAN T&B EXECUTIVE BOARD AND MANAGEMENT BOARD MEMBERS



**Joachim Drees Chief Executive** Officer



Jan-Henrik Lafrentz **Executive Board** Member for Finance, IT and Legal



**Dr. Carsten Intra** Chief Human **Resources Officer** 



Dirk Große-Loheide **Chief Procurement** Officer



Michael Kobriger **Executive Board** Member for Production and Logistics



Göran Nyberg **Executive Board** Member for Sales and Marketing



Dr. Frederik Zohm **Executive Board** Member for Research and Development



STRONG TEAM CULTURE GEARED FOR SUCCESS

PERFORMANCE MAN T&B

BRAND



## **EXECUTION**

## **PROFITABILITY AND SYNERGIES**

**OPERATIONAL EXCELLENCE AND ENHANCED SERVICE OFFERING** 

> **PROFITABILITY REBOUND AND STABILIZATION**

STRONG LEADERSHIP - COMMITMENT VISION **AND EXECUTION FOCUS** 

> STRONG TEAM CULTURE **GEARED FOR SUCCESS**

**EMPLOYER OF CHOICE AND** INDUSTRY LEADING RELIABILITY CHAMPION

**EXPAND AFTERSALES** AND SERVICE OFFERING

**LAUNCH HIGH QUALITY** 

**PRODUCT PORTFOLIO** 

**GROWTH** 

**REPLICATE GERMAN MARKET SUCCESS** STORY IN EUROPEAN FOCUS MARKETS

A KEY PILLAR OF TRATON GROUP'S GROWTH AND PROFITABILITY UPSIDE





INTRODUCTION

COMPANY HIGHLIGHTS

MARKET ENVIRONMENT

TRATON GROUP

PERFORMANCE VWCO

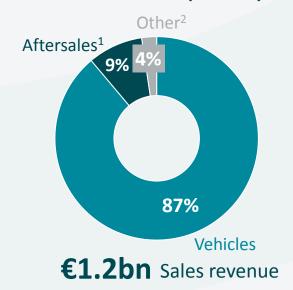
**BRAND** 

WRAP UP

## **OVERVIEW**

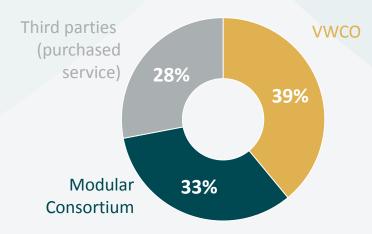


## **VWCO SALES REVENUE BY OFFER (FY2017)**



- 2017 sales revenue heavily negatively impacted by Brazil's major economic recession (2015-2017)
- 2017 truck sales volume in Brazil 61% below last 7-year average sales volume<sup>3</sup>

## **VWCO EMPLOYEES BY FUNCTION (FY2017)**



**1.4k** VWCO employees / **3.6k** total employees<sup>4</sup>

- Highly innovative production system with "Consórcio Modular"
- Streamlined direct employee base allowing high flexibility and reduced fixed cost

Source: IHS Markit. Note: FTE data as per year-end 2017.

1 Including genuine parts and workshop services. 2 Including used vehicles, engines, powertrains and parts deliveries, leasing business and other sales revenue from hedging transactions. 3 Average sales volume (>6t) of VWCO in Brazil from 2010 to 2016 as per IHS Markit. Incl. MAN-branded sales volume. 4 Including employees of Consórcio Modular and other third party employees.

91

17%

BRAND PERFORMANCE VWCO

# WELL-POSITIONED TO BENEFIT FROM THE ONGOING MARKET RECOVERY IN BRAZIL



## **PRE-CRISIS**

- Benchmark performance
- Strong RoS of 11-12%¹ in 2010/11

## **TURNAROUND PERIOD**

- Deteriorating profitability
- Flexible production system
- Cost initiatives executed

## **FUTURE**

- Market recovery
- Aim to return to target performance levels





















28%

VWCO truck market share in Brazil



2017/2018e

+45%

Truck market growth

2018e-2021e

2018e-2023e

+6%

+18%

Near-term annual truck market growth

GDP-derived annual truck market growth potential<sup>2</sup>

1998 2000 2009 2010 2011 2012 2013 2014 2015 2016 2017

Source: IHS Markit, IMF. Note: VWCO market share data post 2000 based on IHS Markit truck sales volumes >6t including MAN-branded sales and pre 2000 based on company estimate (no IHS Markit data available).

1 As per MAN SE Annual Report 2011. 2 Annual growth potential under the assumption that the ratio "number of trucks sold to GDP (BRL bn)" returns from 2018e (39x) level to the 2008-2014 historical average of 78x in the next five years (Real GDP forecast based on IMF).

## LESS YOU DON'T WANT MORE YOU DON'T NEED





1 \_\_\_\_ GROWTH

- Well-positioned to benefit from ongoing market recovery in Brazil
- Expand export business (South America, Mexico, Africa and Middle East)
- **Expand product portfolio** (entry into light commercial cab chassis and extra heavy segment)
- Expansion of aftersales and additional innovative services
- PROFITABILITY
  AND
  SYNERGIES
- Leverage "Consórcio Modular" (flexible production at low costs and exposure)
- Execute **additional cost control measures** through discipline developed in turnaround period (2015-2017)
- Leverage synergies from Group components utilization

3 EXECUTION

 Management team with longstanding experience in the regional markets and proven track record BRAND







## **VWCO – STRONG PLATFORM WITH SUBSTANTIAL GROWTH POTENTIAL**

PERFORMANCE VWCO



## **VWCO** sales revenue



PERFORMANCE VWCO

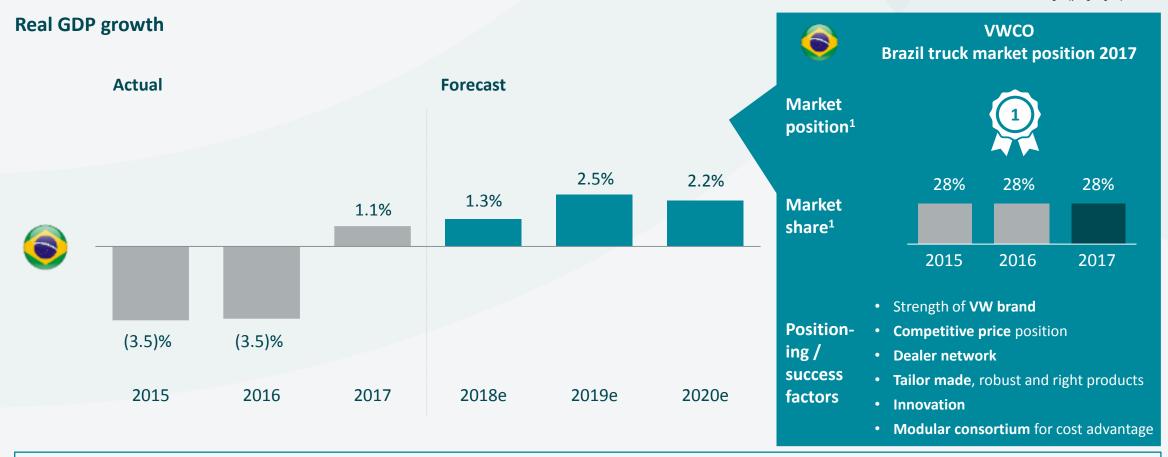
**BRAND** 





## BRAZIL: LARGE MARKET WITH SIGNIFICANT GROWTH POTENTIAL





Economic recovery in core market Brazil with strong growth trajectory ahead

PERFORMANCE VWCO

**BRAND** 





## **DETAILED ROADMAP IN PLACE TO BECOME #1 IN SOUTH AMERICA AND GROW**



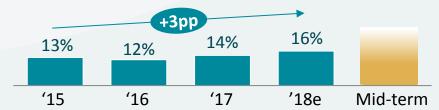
## IN MEXICO, AFRICA AND MIDDLE EAST

## SELECTED FOCUS COUNTRIES IN SOUTH AMERICA/MEXICO

Mexico (buses)







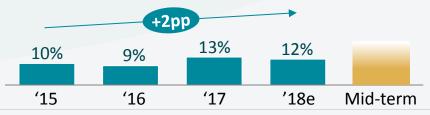
## Selected initiatives

- Introduction and consolidation of exclusive city bus Huracán
- New sales structure dedicated to buses
- Set-up of new structures and resources for growth

**Argentina** (trucks<sup>1</sup> and buses)



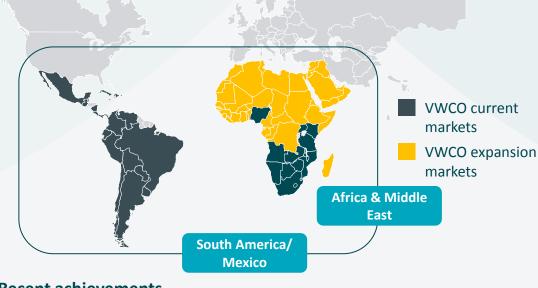




## **Selected** initiatives

- Marketing and sales initiatives; expansion of dealer network
- Local sourcing and production
- Reinforcement of sales and aftersales structures at importer

#### **EXPANSION MARKETS IN AFRICA AND MIDDLE EAST**



## **Recent achievements**

**Emerging markets<sup>2</sup>** entered in last 5 years

+19

New dealers in last 5 years

+6

**New importers** in last 5 years

**BRAND** 



## PERFORMANCE VWCO



## STRONG PIPELINE OF PRODUCTS TO FURTHER STRENGTHEN VWCO'S TAILORED **SOLUTIONS PORTFOLIO**

## **TYPE OF INNOVATION**

## **New Delivery** (New truck generation/ portfolio extension)

#### **DESCRIPTION**

Previous generation introduced in 2005

Entry to <5t segment (new Delivery truck)

### **KEY PRODUCT LAUNCHES**

#### **New Delivery (Diesel)**



- Launch year:
- · Completely renewed light-duty family
- Attractive price/performance ratio

2017

2020

Weight range: 6.0-13.0t

#### **New Delivery (Diesel)**



- Launch year: 2018
- New segment for VWCO
- Complete vehicle including load platform
- Weight range: 3.5-4.4t

**Extra Heavy** (Portfolio extension) Entry to heavy weight/ off-road segment

#### **Extra Heavy-Constellation**



- Launch year:
- New extra heavy model (GCW<sup>1</sup> up to 125 tons)
- Off-road applications

#### New model



- New extra heavy model
- Further strengthening heavy segment offering

**Electric/Alternative Fuels** (Efficiency)

New models with alternative e-Delivery fuel/electrification technology



- Launch year: 2020-21
- Electric distribution truck
- Single purchase intention of 1,600 units received

#### e-FLEX Bus



- Launch year: 2022-23
- Plug-in hybrid bus
- E-flex solution running with any mix of ethanol and gasoline or gas

1 Gross combined weight.

97



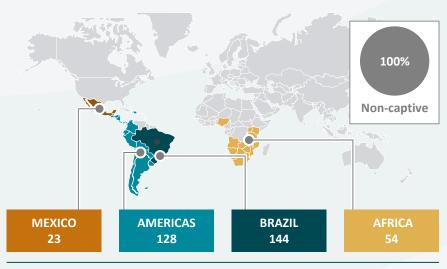


## BRAND PERFORMANCE VWCO

# EXPANSION OF SERVICE OFFERING THROUGH FOCUS ON SERVICE AVAILABILITY AND STRONG RELIABILITY



#### **GLOBAL SERVICES FOOTPRINT**



#### **Key KPIs**

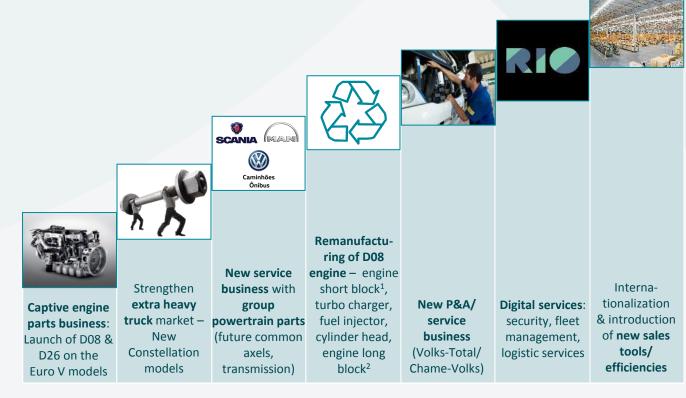
94% 90% 75 %

Overall customer satisfaction related satisfaction of owners (QASC Survey) 2017 2017

Overall customer satisfaction related bealer satisfaction – general performance (Fenabrave) ard best in industry 2017

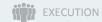
Leading dealer network satisfaction among manufacturers offering a full-line of product

### **EXPANSION OF SERVICE & AFTERSALES BUSINESS**



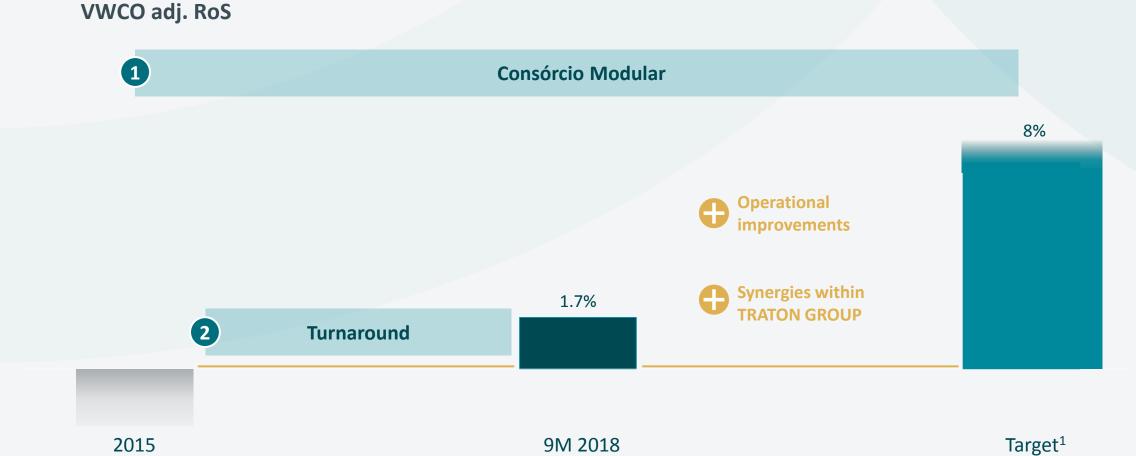
Numerous service expansion measures to be executed in mid-term

BRAND



# CLEAR PATH TO ACHIEVE 8% OVER THE CYCLE RETURN ON SALES TARGET<sup>1</sup>

## TRATON



PERFORMANCE VWCO

**BRAND** 





## "CONSÓRCIO MODULAR" – HIGHLY FLEXIBLE PRODUCTION AT LOW COSTS



### "CONSÓRCIO MODULAR" ...

#### **VWCO**

- Product concept
- Product development
- Certification
- Quality assurances
- Sales & aftersales

## **Partners/Suppliers**

- 100% of Consórcio Modular production system operation
- 100% of direct labour

### ... 100% OPERATED BY SUPPLIERS - "PARTNERS" ...



Leveraging from what we have and what others have built

#### ... DRIVING PROFITABILITY

- Competitive direct labour cost
- Low investment and fixed cost
- Low down-cycle exposure
  - High flexibility to cope with volatility
  - Low capital employed
  - Low breakeven



Significant impact since 2016 achieved

**BRAND** 



2017 total headcount significantly below 2011 level

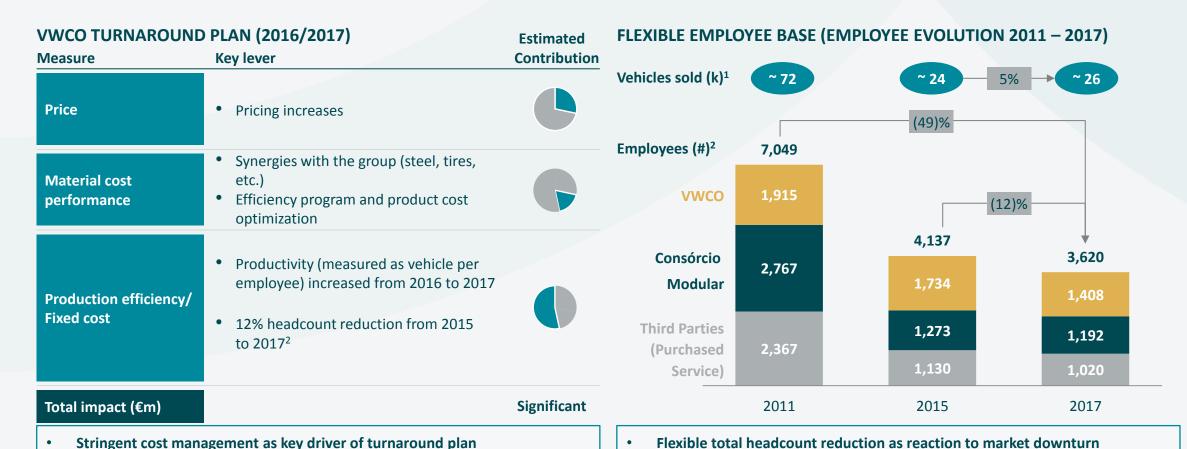




# VWCO TURNAROUND SHOWING SIGNIFICANT IMPACT SUPPORTED BY STRINGENT COST MANAGEMENT AND FLEXIBLE PRODUCTION SYSTEM

PERFORMANCE VWCO





1 VWCO trucks ≥ 5t; all figures as per VWCO company information; Unit sales per fiscal year (31 December 2017). 2 Including employees of Consórcio Modular and other third party employees.

TRACKING PROCESS



BRAND PERFORMANCE VWCO

## CLEARLY ASSIGNED RESPONSIBILITIES COMBINED WITH RIGID CONTROL AND



## **VWCO MANAGEMENT BOARD MEMBERS AND KEY VICE PRESIDENTS**

### **VWCO Management Board Members**



**Lineu Takayama** Human Resources



Adilson Dezoto
Production & Logistic



Leandro Siqueira
Product Planning, Corp. Strategy
& Digitalization



President & CEO

Paulo M. Barbosa Finance, IT & Legal Affairs



José Richardo
Alouche
Sales, Marketing &
Aftersales



Marcos Vinicius Forgioni International Sales & Marketing



Luiz Alvarez Supply



Rodrigo Chaves Engineering

### **OUTSTANDING EMPLOYEE MOTIVATION**

Years of experience relate to automotive/truck industry

## Highly motivated workforce as basis for company success



INDUSTRY AND
MARKET ENVIRONMENT

TRATON GROUP

PERFORMANCE VWCO

BRAND

FINANCIALS

WRAP UP

**VWCO – KEY TAKEAWAYS** 



**EXECUTION** 

3

**PROFITABILITY AND SYNERGIES** 

2

HIGHLY FOCUSED MANAGEMENT TEAM

**GROWTH** 

1

**CONSÓRCIO MODULAR** 

**GREAT PLACE TO WORK** 

**BENEFIT FROM BRAZIL RECOVERY** 

**EXPAND FOOTPRINT OUTSIDE BRAZIL** 

EXPAND IN ENTRY LIGHT COMMERCIAL CAB
CHASSIS AND EXTRA HEAVY SEGMENT

**GROW SERVICES** 

**DRIVE TURNAROUND** 

**GROUP COMPONENTS SYNERGIES** 

**OUTSTANDING EMPLOYEE MOTIVATION** 



## **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**

## 04. TRATON GROUP

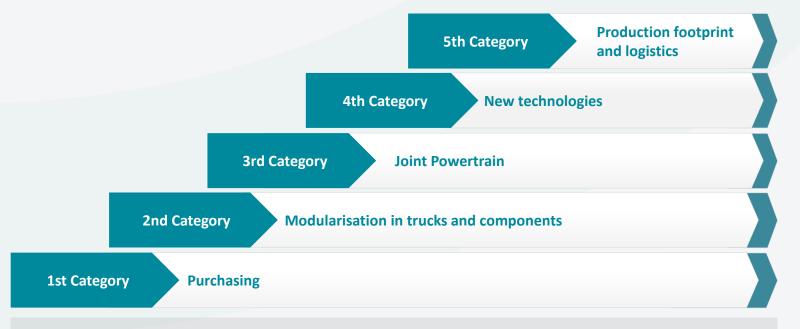
Brand Performance | Cooperations & Synergies | Global Expansion | Customer Focused Innovation

- 05. **FINANCIALS**
- 06. WRAP UP

& SYNERGIES

# TRATON GROUP SYNERGIES RAMPING UP ON THE BACK OF FIVE INDIVIDUAL CATEGORIES





- Synergies executed on the back of five individual categories, which are leveraging the common platform potential and technological edge of TRATON GROUP
- All operating units collaborating in order to drive successful synergy realization
- Moving from opportunistic synergy projects to more systematic approach to synergy identification and realization



AND VISIBLE SYNERGIES AHEAD

INTRODUCTION

& SYNERGIES

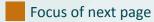
## TRATON GROUP WITH STRUCTURED APPROACH TO SYNERGY EXPLORATION



**CUMULATIVE SYNERGY CONTRIBUTION** 

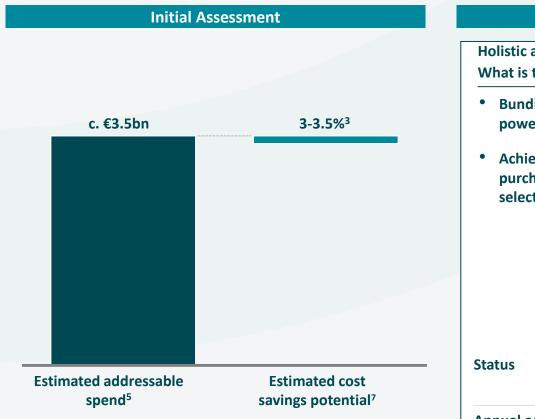
#### **SCHEMATIC TARGETED TARGETED DESCRIPTION** TIMING OF SYNERGY IMPACT CONTRIBUTION<sup>1</sup> **Purchasing Lead buying of parts/components** c. 60-65% (incl. lead buying) **Shorter term** Longer term Modularization **Common components** c. 5-10% and components **Shorter term** Longer term Common base engine, after Joint powertrain c. 25-30% treatment, transmission and axle **Longer term Shorter term** Common electric powertrain, and **New technologies FURTHER POTENTIAL Autonomous/ADAS BEYOND** *In particular related to new technologies,* **Production** Optimized global footprint and production footprint and logistics footprint and logistic **logistics**

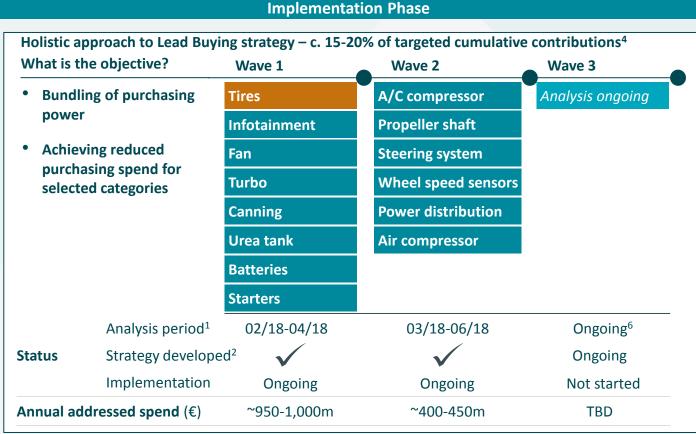
& SYNERGIES



## A PURCHASING/LEAD BUYING IS THE GLOBAL COLLABORATION MODEL WITHIN PROCUREMENT







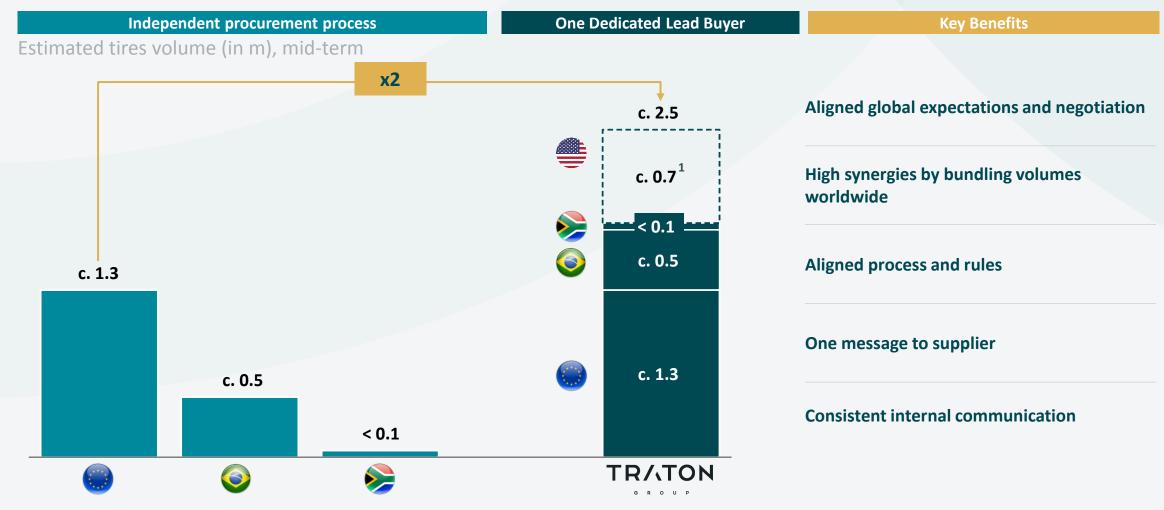
1 Period in which savings potential is determined. 2 Strategy on the basis of which respective teams commit to realizing the savings potential. 3 Includes 3% on Lead Buying on modularized components (c. €3bn) and 5% on further addressable spend (c. €0.5bn). 4 Remainder of c. 60-65% targeted cumulative contribution in Purchasing (incl. lead buying) relates to ongoing commercial collaborations. 5 Analysis based on 2017 figures. Includes c. €3bn addressable spend for components in Modularization and Components scope and additional c. €0.5bn outside the Modularization and Component scope. 6 Targeted to be finalized in February 2019. 7 Mid-term potential. 108

INTRODUCTION

& SYNERGIES

## A DEEP DIVE: JOINT COMMERCIAL COLLABORATION/LEAD BUYING - TIRES



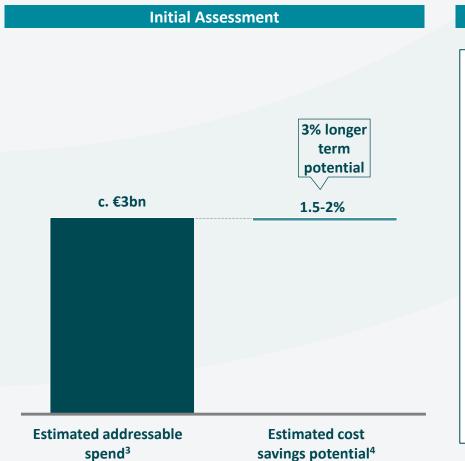


INTRODUCTION

& SYNERGIES

## **B** MODULARIZATION AND COMPONENTS





<ul> <li>What is the objective?</li> <li>Reducing complexity</li> <li>Reducing material cost</li> <li>Optimizing customer offer</li> <li>Free-up R&amp;D resources</li> <li>Vision</li> <li>Byggladan for the Group</li> </ul>		Wave 1	Wave 2	Wave 3  Braking system  Air compressor  Power distribution	Wave 4  Cooling system  Seats  Tow hitches						
		Urea tank  Batteries  Starters	Propeller shaft Steering system A/C compressor								
							Wheel speed sensor				
							Analysis period <sup>1</sup>	11/17- 03/18	03/18-07/18	08/18-12/18	01/19 - Ongoin
						Status	Strategy developed <sup>2</sup>				Ongoing
		Implementation	Ongoing	Ongoing	Ongoing		Not started				
Annual addressed spend (€)		~100-150m	~200-250m	~175-225m	~200-300m						

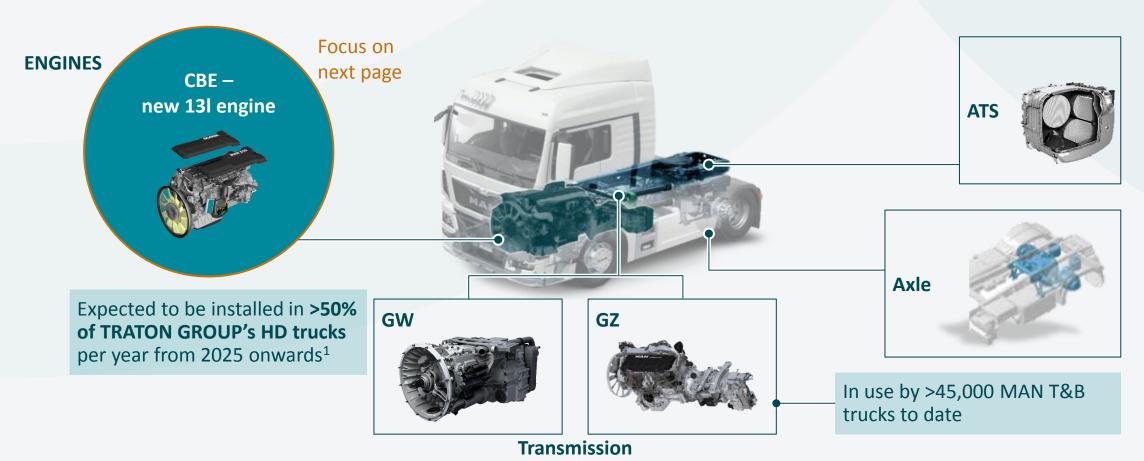
**Implementation Phase** 

1 Period in which savings potential is determined. 2 Strategy on the basis of which respective teams commit to realizing the savings potential. 3 Analysis based on 2017 figures. 4 Mid-term potential.

& SYNERGIES

# C A NUMBER OF JOINT POWERTRAIN PROJECTS ARE CURRENTLY BEING IMPLEMENTED OR DEVELOPED





& SYNERGIES

# C DEEP DIVE CBE: JOINTLY DEVELOPED BEST-IN-CLASS ENGINE SOLUTION TO OPTIMIZE CUSTOMERS' TCO



#### **CBE – NEW 13L ENGINE**



#### **SYNERGY AREAS**

**Annual** 

material cost



#### **P&L IMPACT**

- Savings on targeted 80% common parts (doubled volume)
- Direct P&L effect with reduction of material cost based on brand-specific SOPs/volume ramp-up

Tooling, testing, and certification



- Reduction of supplier cost driven by higher tooling volumes across the group
- P&L effect through reduced depreciation, starting from brand SOP date

**Production investment** 



- Reduction of production setup costs due to similar production line setup in Södertalje and Nuremberg, similar suppliers, learning effects and startup cost savings
- P&L effect through reduced depreciation, starting from brand SOP date

R&D cost



- Reduction of R&D and engineering costs from high level of commonality
- Freed-up resources to be used for other areas, e.g. new technologies

**Alliance partners** 

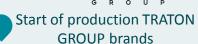


Direct P&L effect from licensed units

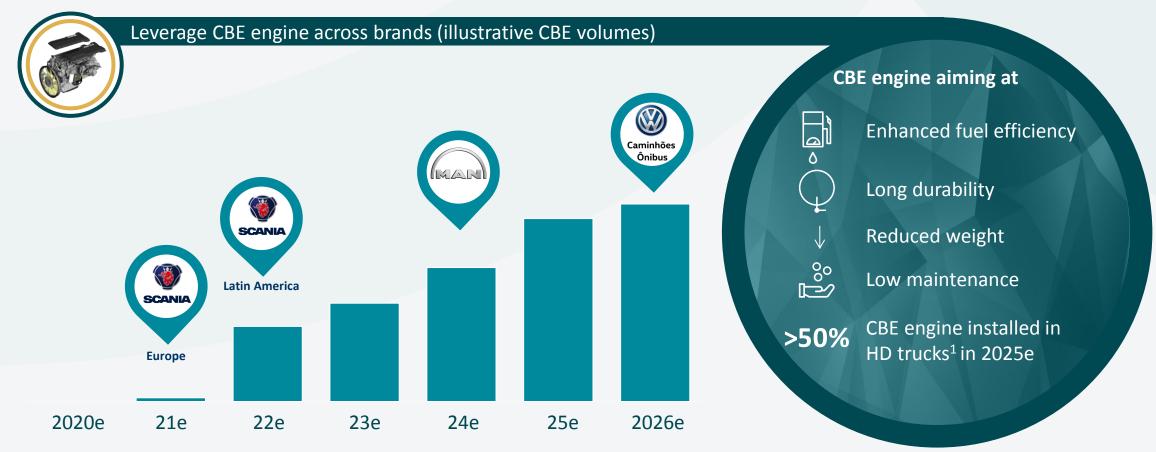
INTRODUCTION

& SYNERGIES

# C DEEP DIVE CBE: LEVERAGING ENGINE ACROSS BRANDS ENSURES SIGNIFICANT SYNERGY RAMP-UP OVER YEARS TO COME



TRATON





## **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**

## 04. TRATON GROUP

Brand Performance | Cooperations & Synergies | Global Expansion | Customer Focused Innovation

- 05. **FINANCIALS**
- 06. WRAP UP

## GLOBAL EXPANSION THROUGH STRONG ALLIANCE PARTNERS

## TRATON

ROUP



## Associates



Technology cooperation and procurement JV



#4 Market position 12% Market share<sup>1</sup> in North America (2017)

Largest network of ~1k dealers in North America<sup>2</sup>





**#3** Market position **17%** Market share<sup>3</sup> in **China** (2017)

One of the leading truck manufacturers in the People's Republic of China

## **Strategic partner**





e-mobility, procurement and technology cooperation



#1 Market position 28% Market share<sup>4</sup> in Japan & South East Asia (2017)

Top position in heavy and medium duty truck sales in Japan

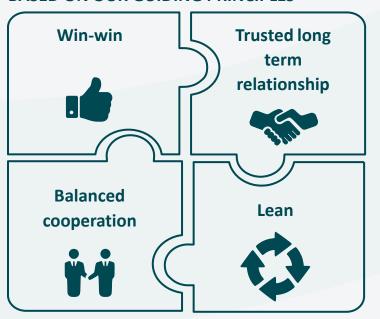
Source: IHS Markit. Note: Market share data based on trucks >15t.

1 Truck market share of Navistar in North America (Canada and USA). 2 Information according to Navistar. 3 Truck market share of CNHTC in China (incl. Hong Kong). 4 Truck market share of Hino in Japan and South East Asia (Indonesia, Australia, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam).

## STRONG GOVERNANCE STEERING AMONG ALLIANCE PARTNERS



#### **BASED ON OUR GUIDING PRINCIPLES**



#### COMPRISING THREE GOVERNANCE LEVELS TO EFFICIENTLY ORCHESTRATE ALLIANCE ACTIVITIES<sup>1</sup>



#### **Alliance board**

Board members from both sides incl. CEOs



## **Alliance management**

Coordination of relevant alliance activities on both sides



## Joint working groups

Staffing as required per working group

#### SPANNING THE ENTIRE SCOPE OF THE ALLIANCE











## A OVERVIEW AND OBJECTIVES OF ALLIANCE AGREEMENT WITH NAVISTAR



## **OVERVIEW**

## NAVISTAR



Strategic alliance with Navistar established in 2016

TRATON GROUP currently holds 16.8%<sup>1</sup> in **Navistar** 

TRATON GROUP CEO and CFO have a seat in **Navistar's Board of Directors** 

## **OBJECTIVES**



## **Technology cooperation: joint powertrain**

Common powertrain systems give Navistar access to excellent powertrain technologies and allow TRATON GROUP to benefit from higher volumes



## **Technology cooperation: future technologies**

Cooperation in many aspects of future commercial vehicle development



#### **Procurement JV**

Fully operational procurement JV to pursue joint global sourcing opportunities



### **Access to North American market**

Cooperation and equity stake allow TRATON GROUP to capture a share of North American profit pool

1 As of 30-Nov-2018. 118

## **B** OVERVIEW AND OBJECTIVES OF COOPERATION AGREEMENT WITH SINOTRUK



## **OVERVIEW**





Long-term strategic partnership between MAN and Sinotruk established in 2009

MAN TGA Truck technology including powertrain localized under SITRAK brand

MAN holds 25% + 1 share<sup>1</sup> in Sinotruk

## **OBJECTIVES**



#### **Localization of MAN truck**

Intention to localize MAN heavy-duty truck in world's largest market



## **Technology cooperation**

Joint efforts in areas of powertrain, new technologies



## **Procurement synergies**

Sourcing synergies targeted through joint scale

INTRODUCTION

## **C** OVERVIEW AND OBJECTIVES OF COOPERATION AGREEMENT WITH HINO



#### **OVERVIEW**





Strategic long-term partnership agreed in April 2018

**Alliance Board based on Strategic Cooperation Framework Agreement** 

September 2018: Lol to establish procurement joint venture

## **OBJECTIVES**



## **E-Mobility cooperation**

Shared development efforts and combined marketing of products – Hino with largest running fleet of hybrid commercial vehicles in the world



## **Procurement joint venture**

Planned joint venture aims at realizing synergies in global procurement for existing parts and new technologies



## **Technology cooperation**

Focus on possibility of joint utilization of existing technologies such as powertrain and joint development of innovative technologies



## **Utilize complementary know-how**

Hino with focus on light- and medium duty trucks complements TRATON GROUP's innovation power in heavy-duty segment



## **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**

## 04. TRATON GROUP

Brand Performance | Cooperations & Synergies | Global Expansion | **Customer Focused Innovation** 

- 05. **FINANCIALS**
- 06. WRAP UP

## AN INNOVATION LEADER FOR OVER A CENTURY

## TR/\TON

Consórcio 1893 - 1897 1932 1961 1996 2004 2010 World's most MAN's first Modular **Hybrid city** World's first powerful **D20 Common** modular bus implemented in Diesel engine **HDT truck** bus goes into Rail engine series Resende plant by introduced (140/150hp) serial introduced vwco production V8 engine First auxiliary **First industrial** Among the first Scania's first introduced braking system engine delivered to introduce Euro modular engine Europe's with automated to fire brigade IV, Euro V & Euro launched downhill speed strongest Stockholm VI (incl. gas) truck engine control 1905 1939 1969 1993 2005 & 2007 & 2013

## WE CONTINUE TO BE READY FOR THE NEXT WAVE OF TECHNOLOGICAL TRENDS











## TRATON GROUP focuses on applications with clear customer value proposition



Solutions to all ACE<sup>1</sup> trends on the way



Customer centric innovation approach with clear business case



Smart innovation leader – disciplined capital spend

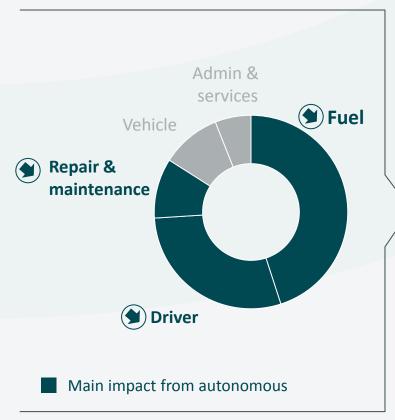




# FULL AUTONOMOUS DRIVING FOR THE NEAR FUTURE ONLY IN DEFINED AREAS. DRIVER ASSISTANCE SYSTEMS TO GROW FURTHER



## EXPECTED IMPACT ON TCO BREAKDOWN<sup>1</sup>



#### **EXPECTED CUSTOMER VALUE<sup>2</sup>**

## Partly autonomous (next 5 years)

- Lower repair and maintenance costs due to fewer accidents
- Higher utilization of vehicles due to extension of operating hours
- Lower fuel usage from optimized driving

## Fully autonomous (5+ years)

Significantly lower driver cost

## CUSTOMER DRIVEN INNOVATION EXAMPLES



Scania project in mining system



MAN aFAS – Driverless Safety Vehicle



MAN platooning project with DB Schenker



# ALREADY TODAY TRATON GROUP HAS MULTIPLE SOLUTIONS FOR AUTONOMOUS DRIVING ON THE WAY...





## Scania project in mining system

• Autonomous vehicle operates in real life conditions at Rio Tinto's mining operations in Australia since August 2018



## MAN project with German Federal Ministry for Economic Affairs and Energy

- Automatic driverless safety vehicle<sup>1</sup> tested under real conditions
- Winner of the Truck Innovation Award for 2019





## MAN project with DB Schenker and Hochschule Fresenius

 Platooning pilot in live traffic (145km road on Autobahn A9; up to three drives per day)

<sup>1</sup> Developed with seven partners: BASt – Federal Highway Research Institute, Hessen Mobil – Road and Traffic Management, Karlsruhe University of Applied Sciences – Technology and Economics, Technical University of Braunschweig – Institute of Automatic Control, ZF TRW, WABCO and Bosch Automotive Steering.



## ... AND THE PIPELINE IN AUTONOMOUS TECHNOLOGIES IS STRONG



## COMPREHENSIVE PLATFORM TO ENABLE AUTONOMY

Integration with Customers

Offboard Platform and Functions

Autonomous driving Onboard Functions

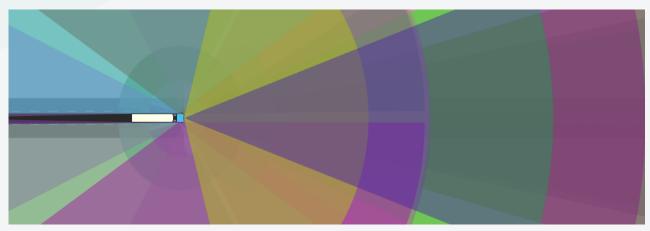
Onboard Platform (Technical Roadmap)

Autonomous Transport System

#### **OVERVIEW - ENVIRONMENTAL PERCEPTION**

## The sensor setup is:

- Multimodal for redundancy safety and reliability in focus
  - Sensor set: Radar, Lidar, Camera, etc.
  - Handling of various difficult environmental conditions
  - Fail safe operation and fail operational
- Modular and scalable for fulfilling multiple scenarios and customer demands



Multimodal sensor coverage

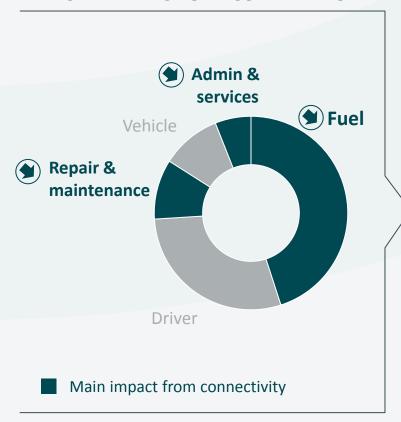




# CONNECTIVITY IS ALREADY A REALITY TODAY – VISIBLE UPSIDE FOR CUSTOMERS AND FOR TRATON GROUP



### EXPECTED IMPACT ON TCO BREAKDOWN<sup>1</sup>



## **EXPECTED UPSIDE FOR CUSTOMERS<sup>2</sup>**

**Higher uptime** (e.g., fleet management solutions)

Lower repair & maintenance costs (e.g., predictive maintenance and extended emergency assistance)

**Lower fuel usage** (e.g., optimized routing and real-time driver coaching)

## EXPECTED UPSIDE FOR TRATON GROUP<sup>2</sup>

Better understanding of customer needs

Optimization of sales and service network

Opportunity to connect trucks and build service offering across brands

Live feedback loops for R&D

**Enabler** for autonomous driving technology



## **VARIETY OF CONNECTED SERVICES SOLUTIONS INTRODUCED**



#### SCANIA SERVICE OFFERING – SELECTED EXAMPLES

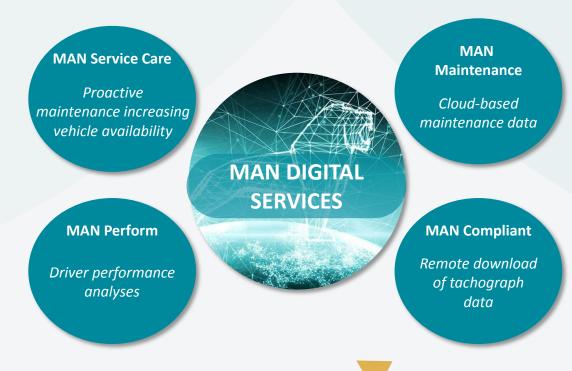








#### MAN T&B SERVICE OFFERING – SELECTED EXAMPLES



Number of connected trucks in operation

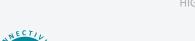
450,000+

Almost every Scania truck and MAN T&B Euro
VI heavy-duty and medium-duty truck¹ will be
connected from 2019e onwards

2020e

>1m 2025e+

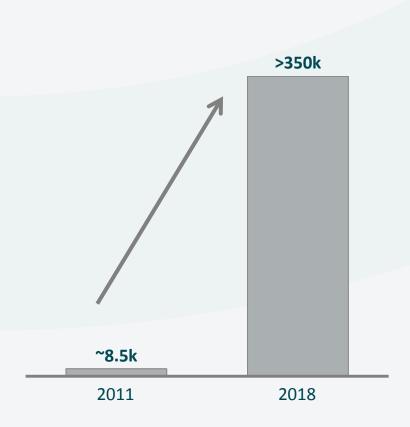
Today<sup>2</sup>



## RECAP: CONNECTIVITY AT SCANIA



## Connected vehicles on the road



## What data does Scania have?



## Selected examples



Location

Mileage status

Speed

**Driving time** 

Fuel

Maintenance interval

## How can Scania monetize the data?

- Customers pay for reduced TCO... and Scania benefits...
- Scania knows...
  - ...when a truck needs service
  - ...where a truck can be serviced
  - ...what service a truck needs

# Customer Scania Higher uptime Demand-driven workshop visits Higher predictability Feedback loops to R&D



# MULTIPLE PARTNERSHIPS ESTABLISHED TO EXPLORE NEW BUSINESS MODELS & LOGISTICS SOLUTIONS AND ACQUIRE CRUCIAL KNOW-HOW



### **RIO**

## TRATON GROUP connectivity platform collecting customer data to offer better services



- Venture launched in 2017
- Cloud-based digital fleet platform
- Offers significant efficiency benefits

## **SOLERA PARTNERSHIP**

## US provider of digital solutions for logistics players<sup>1</sup>



Insurance and other digital solutions data

- Strategic partnership since 2018
  - Solera's "Digital Garage" joint aftersales app integrated into existing TRATON GROUP connectivity services
  - Focus on smart and secure solutions,
     e.g., workshop optimization

#### **SELECTED INVESTMENTS**



- Co-founded in 2016 by MAN
- Leverages algorithms to optimize capacity
  - Fewer empty runs, higher margins
  - Increased resource efficiency



- Investment in mid-2017
- Digital freight forwarder connecting large shippers with small carriers
- Offers opportunity to move closer to customers



**ENVIRONMENT** 

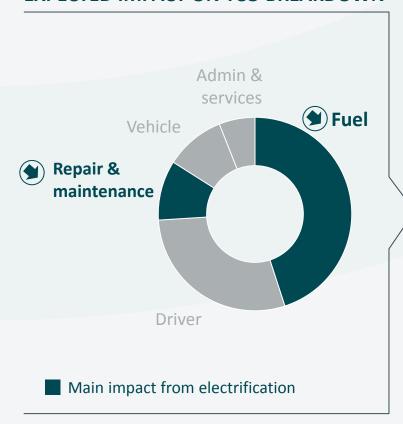
INNOVATION



## ADOPTION OF E-MOBILITY DRIVEN BY TCO CONSIDERATIONS AND REGULATORY



#### EXPECTED IMPACT ON TCO BREAKDOWN<sup>1</sup>



## **EXPECTED CUSTOMER VALUE<sup>2</sup>**

Reduction of CO<sub>2</sub> footprint in line with potential future emission targets

**Zero noise emission** in sensitive areas

Gain experience and capabilities in operating e-mobility vehicles by getting access to first successful solutions across applications

Lower fuel consumption and (depending on application) better TCO in the mid-to-long-term

## CUSTOMER DRIVEN INNOVATION EXAMPLES



MAN Lion's City E



VWCO e-Delivery



MAN CitE (concept truck)



Scania e-highway trials in Sweden & Germany

<sup>1</sup> Chart representative for German HDT market; indicative - depending on usage pattern. 2 Non exhaustive.



# ELECTRIC SOLUTIONS ARE ALREADY IN OPERATION TODAY AND NEW PROTOTYPES ARE REGULARLY TESTED IN COLLABORATION WITH CUSTOMERS



#### **VEHICLES IN REGULAR OPERATION OR IN PRACTICAL TRIALS**



## **Scania Citywide Low Floor**

• Buses in regular operation in Östersund, Sweden



#### **VWCO e-Delivery**

- First vehicles delivered to test customers in 2018
- Start of production in 2020
  - World's biggest order of clean energy-powered vehicles (Ambev, 1,600 vehicles)



## MAN & CNL<sup>1</sup> cooperation on eTrucks

- First nine electric trucks handed over to CNL member companies in 2018
- Small series production to begin in late 2019

## **PROTOTYPES/CONCEPT VEHICLES**



## **MAN Lion's City E**

- Close-to-series prototype
- Development partnerships formed with Munich, Hamburg, Wolfsburg and Luxembourg
- Series production to start shortly after 2020 demo fleet test



## **MAN CitE** (concept truck)

- Lowest entrance height,
   "bird eye" view, digital cockpit
- High-performance engine
- Powerful Li-Ion battery (up to ~200 km range)



## Scania FCEV pilot projects<sup>2</sup>

- Ongoing pilots to produce fuel cell electric trucks (FCEV)
- First truck delivered to Asko; further deliveries to take place in Q2 2019

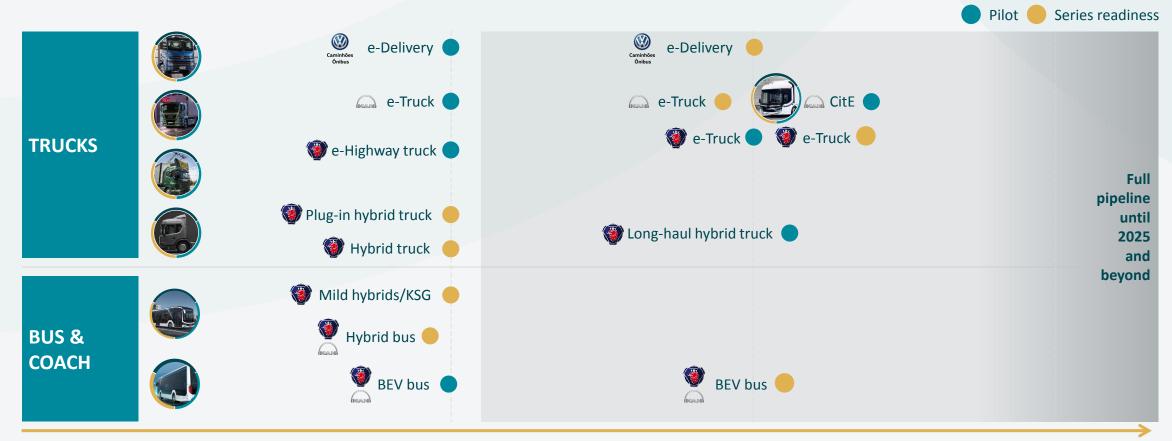


## TRATON GROUP E-MOBILITY PORTFOLIO CONTINUOUSLY BEING DEVELOPED



WITH FULL PIPELINE UNTIL 2025 AND BEYOND

Various undisclosed prototypes



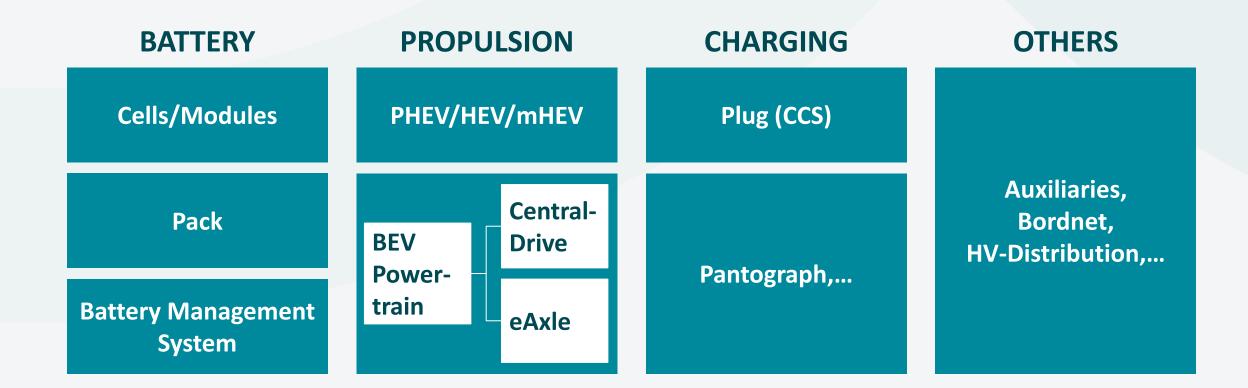
Today 2020e 2025e+

137



## **COOPERATION IN ELECTRIFICATION – SYSTEMATIC APPROACH TO GAIN A** MODULAR KIT FOR ALL SEGMENTS AND ALL BRANDS







# COMMON BASE ENGINE (13L) COMPATIBLE WITH CONVENTIONAL AND ALTERNATIVE FUELS



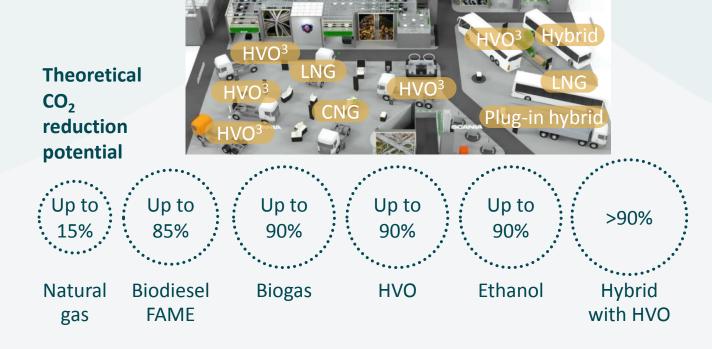
COMMON BASE 13L ENGINE (CBE) – PART OF OUR JOINTLY DEVELOPED HD POWERTRAIN PLATFORM



IN THE SHIFT TO ALTERNATIVE FUELS TRATON GROUP EXPECTS TO BENEFIT FROM ITS BROAD RANGE OF ALTERNATIVE FUEL SOLUTIONS Scania vehicles displayed at IAA 2018<sup>2</sup>



- More than 50% Brake Thermal Efficiency<sup>1</sup>
- Designed to address expected future emission legislation
- Expected to be installed in >50% of TRATON
   GROUP's HD trucks per year from 2025e onwards

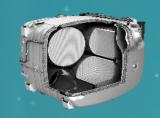


Note: HVO = Hydrogenated Vegetable Oil. LNG = Liquefied Natural Gas. CNG = Compressed Natural Gas. BEV = Battery Electric Vehicle.

## Common conventional powertrain





















WRAP UP

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. **INDUSTRY AND MARKET ENVIRONMENT**
- 04. TRATON GROUP
- 05. **FINANCIALS**
- 06. WRAP UP

## THREE PILLARS FOR SUCCESS



## **Realising growth**



## 2 Enhancing performance

**FINANCIALS** 

INTRODUCTION



(3)

## **Leveraging synergies**



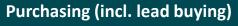
TRATON



Full upgrade of truck product range implemented by 2019



Launch costs for new truck absorbed, upside potential from service growth expected to be realized









**Joint Powertrain** 



**New Technologies** 



**Production Footprint and Logistics** 



Full upgrade of truck product range by 2021



Detailed operational excellence program across entire value chain



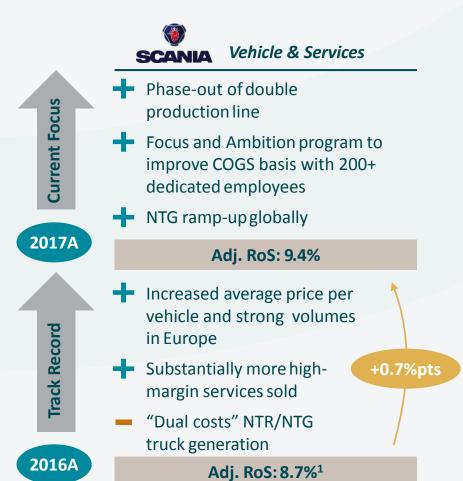
Participate in market recovery with new and broader product range



Further lever lean operational setup with rigid cost control

# OPERATIONAL PERFORMANCE IMPROVEMENTS IN PLACE ACROSS ALL THREE BRANDS







- Ramp-up/"dual costs" for new
- truck generation

INTRODUCTION

- Market shares in Europe ex-Germany
- Operational Excellence performance program

## Adj. RoS: 4.8%<sup>2</sup>

- PACE performance program (mainly production, material costs and aftersales)
- → Fixed cost degression from higher volumes driven by strong European market

Adj. RoS: 4.4%



- Leverage recovering Brazilian market
- New delivery truck generation
- + Strengthen plant/logistic efficiency

## Adj. RoS: (8.8)%

- Increased average price per vehicle
- Headcount reduction

+0.4%pts

 Weak demand due to Brazilian crisis



Adj. RoS: (15.6)%<sup>3</sup>

**FINANCIALS** 

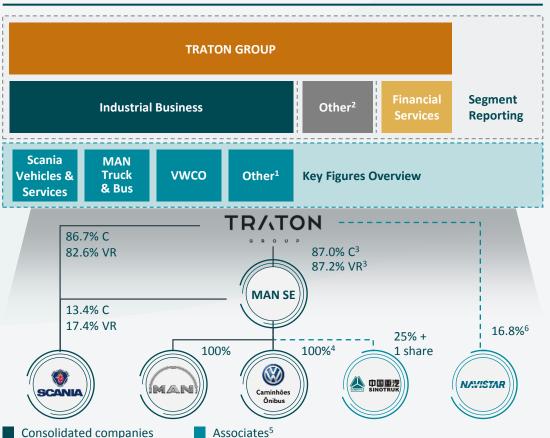
INTRODUCTION

#### **FUTURE REPORTING ALONG TWO SEPARATE SEGMENTS**



#### **Reporting structure**

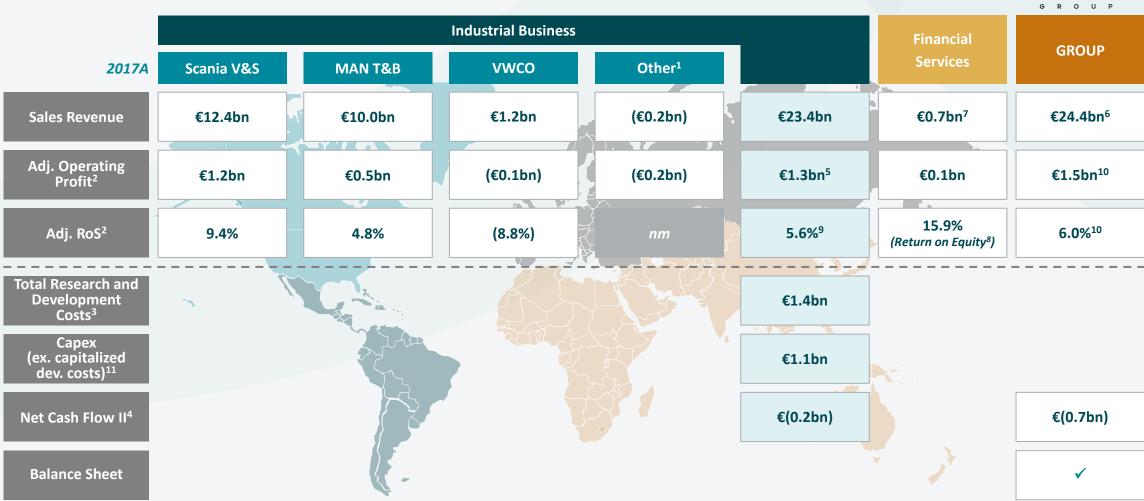
INTRODUCTION



- TRATON GROUP is a 100% subsidiary of Volkswagen AG
- TRATON GROUP with three consolidated subsidiaries (Scania Group, MAN Truck & Bus and Volkswagen Caminhões e Ônibus)
- Investments in associates (i.e. Navistar and Sinotruk) not included in operating profit
- Financial information derived from audited consolidated financial statements and internal group accounting systems
  - Financial data for 2016, 2017 and 2018 in accordance with IFRS as applicable on 31 December 2018
  - No optional exemptions from retrospective application of IFRS applied
- Segment reporting comprises:
  - Industrial Business (includes operating units Scania Vehicles and Services, MAN Truck & Bus and Volkswagen Caminhões e Ônibus)
  - Financial Services (represents Scania Financial Services)

## RELEVANT CORE KPIS DISCLOSED AT GROUP AND OPERATING UNIT LEVEL





1 Includes holdings and participations (MAN SE: holding companies, Sinotruk participation; TRATON Holding: holding companies, Navistar participation, TB Digital Services), PPA (VWCO PPA – MAN Origin; Scania PPA – VW Origin) as well as consolidation effects. 2 Overview of individual adjustments reflected on page 147. 3 Reflecting total research and development costs from continuing operations comprising capitalized R&D plus period expensed R&D. 4 Net Cash Flow II is defined as cash flows from operating activities reduced by cash outflow from investing activities from continued operations adjusted for "changes in securities" and "change in loans and time deposits". 5 Including aligned PPA (VWCO PPA – MAN Origin; Scania PPA – VW Origin).

6 Including operations no longer held by TRATON GROUP as of Jan-2019 (VGSG), consolidation effects (MAN – VWCO), other segments and reconciliation. 7 Reflecting lease income and interest income bed on Adj. Operating PPA (from Scania and VWCO), operations no longer held by TRATON GROUP as of Jan-2019 and consolidation effects (MAN – VWCO). 11 Including Investments in intangible assets (excluding development costs), Property plant and equipment, and investment property, acquisition of subsidiaries and acquisition of other equity investments.

# LIMITED AMOUNT OF ADJUSTMENTS TO HISTORICAL OPERATING PROFIT FOR TRATON GROUP

#### **Operating Profit to Adj. Operating Profit table (€m)**

in €m	2016A	2017A	9M 2017A	9M 2018A
Operating Profit	727	1,512	1,135	1,108
RoS in %	3.3%	6.2%	6.4%	6.0%
Provision for Scania antitrust fine	403	-	-	-
Release of restructuring provision at MAN T&B	-	(50)	-	-
Expense in relation to Indian market exit at MAN T&B	-	-	-	115
Restructuring expense at VWCO	58	-	+	-
Adj. Operating Profit	1,188	1,462	1,135	1,223
Adj. RoS in %	5.4%	6.0%	6.4%	6.6%

- Scania provisioned €403m in relation to the European Commission's antitrust fine in 2016A
- Lower than expected restructuring expenses at MAN T&B leading to €50m reversal of respective provision in 2017A
- **>>** 
  - Adjustment of €115m reflected in 9M
     2018 period with regards to the market exit/plant closure of MAN T&B in India

# PERFORMANCE IMPROVEMENTS AND SYNERGIES POTENTIAL ACROSS ALL OPERATING UNITS PROVIDING A BASIS FOR PROFITABILITY INCREASE ON GROUP LEVEL

Scania V&S: Consistent profitability leadership with renewed product portfolio MAN T&B: Profitability improvement through Operational Excellence Program and strong market performance

**FINANCIALS** 

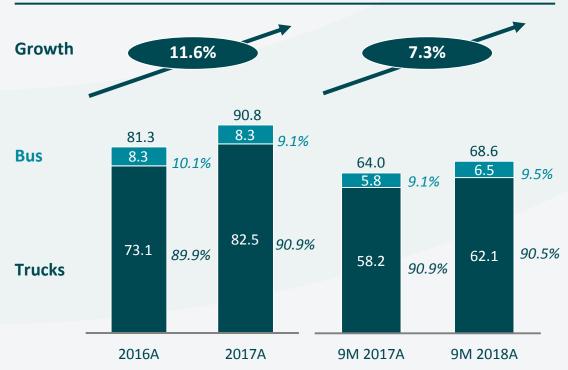
INTRODUCTION

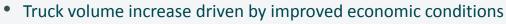
- VWCO: Ideally positioned to benefit from expected market recovery
- **Industrial Business: Substantial synergy potential across operating units**
- Financial Services: Quality portfolio with solid RoE
- TRATON GROUP: Top line growth and profitability improvement



# SCANIA VEHICLES & SERVICES: STRONG TRUCK VOLUME GROWTH

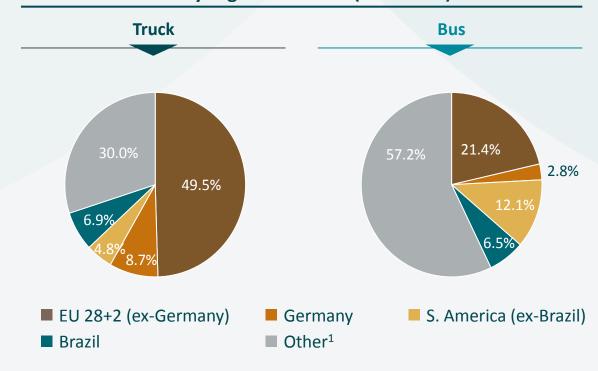
#### Volume delivered (k units and % of total)





- Further uplift from introduction of the NTG
- Bus segment stable across years

#### Volume delivered by region in 2017A (% of total)



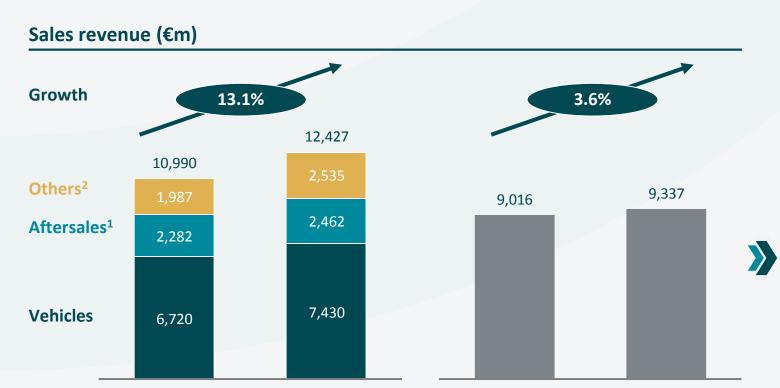
2016A

SCANIA V&S

9M 2018A

# 1 SCANIA VEHICLES & SERVICES: SALES REVENUE GROWTH ON THE BACK OF STRONG TRUCK SALES





2017A

#### **Commentary**

- Sales revenue in 2017A driven by:
  - Growth across almost all products
  - Increase in average prices per vehicle within the trucks segment
  - Increased component sales to MAN
     T&B from common platform parts
- Continuous expansion of service revenues due to growing vehicle fleet across all regions and preventive service program from connected fleet base

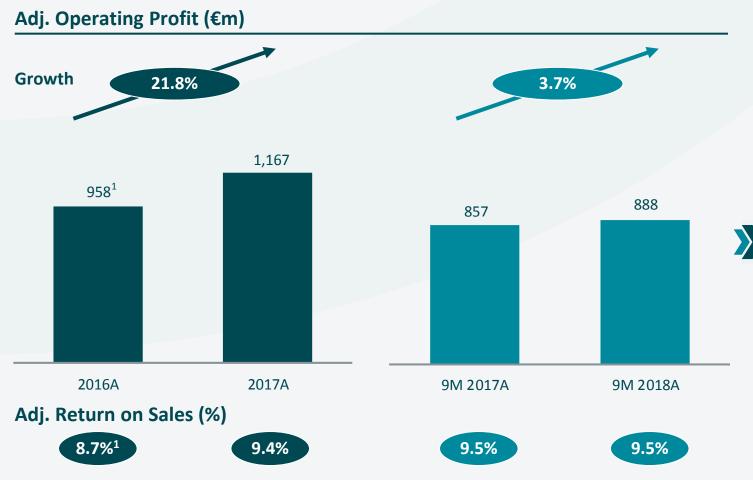
9M 2017A

SCANIA V&S





# SCANIA VEHICLES & SERVICES: INCREASE IN VOLUMES ENHANCING ADJ. OPERATING PROFIT



- Increase in Return on Sales through greater operating leverage in 2017A, reflected by 13.1% increase in sales revenue at stable operating expenses
- Higher cost base due to development and introduction of NTG line, relating to logistics, production methods and temporarily required parallel production
- Service growth positively impacting margins in 2017A
- Increase in export share of Brazil production

MAN T&B

# 2 MAN TRUCK & BUS: VOLUMES DRIVEN BY POSITIVE ECONOMIC DEVELOPMENT



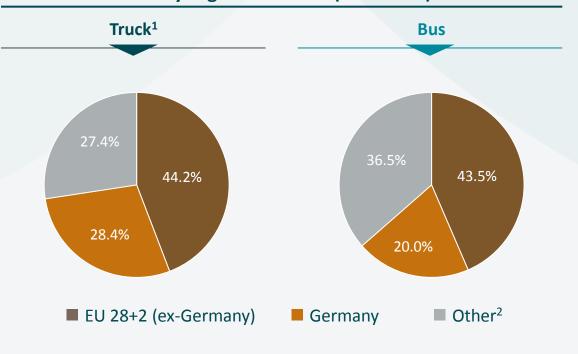
#### Volume delivered (k units and % of total)



#### Better market conditions and increased market share driving truck volumes in 2017A

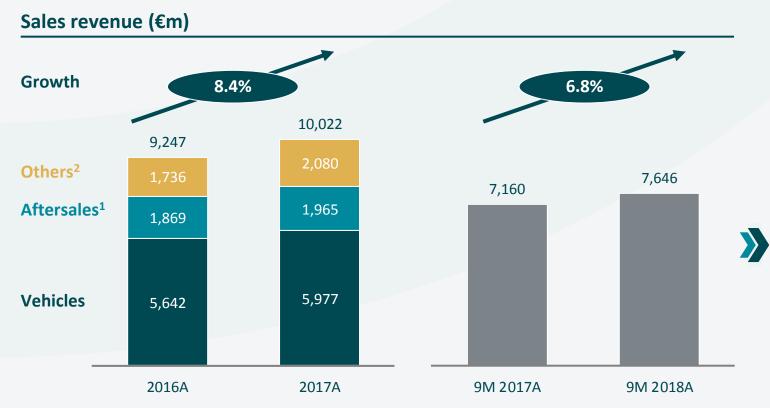
 Bus volumes with expansion in 2017A, driven by introduction of new Intercity bus models

#### Volume delivered by region in 2017A (% of total)



# 2 MAN TRUCK & BUS: PARTICIPATING IN STRONG EU MARKET AND MARKETING CAMPAIGNS CONTRIBUTING TO SALES REVENUE



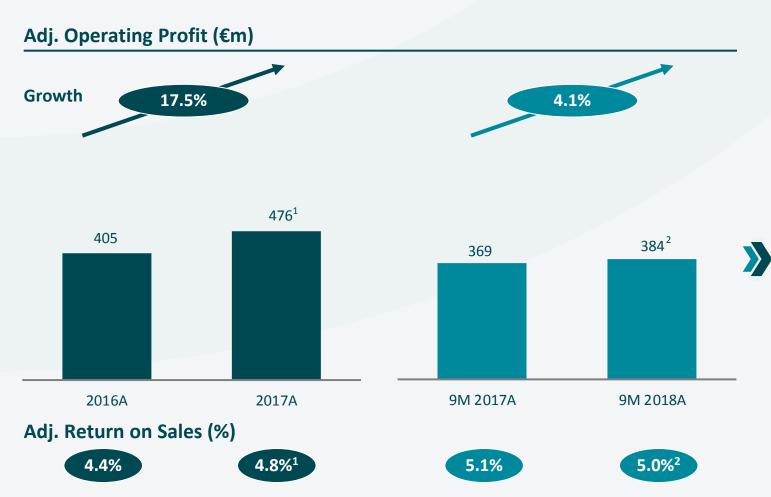


- Positive European economic environment in 2017A
- Successful marketing campaigns and improved distribution approach in Germany for TGS and TGX trucks in 2017A
- Introduction of the new MAN TGE van and new Intercity bus models in 2017A

**IN 2017** 

# 2 MAN TRUCK & BUS: STRONG SALES INCREASE DRIVING ADJ. OPERATING PROFIT





- Positive effects from the PACE2017 efficiency program coming through
- Benefit from HDT assembly shift to Munich, concentrating cab production in Munich, bundling logistics, increasing efficiency and optimising IT costs in 2017A
- Adj. Return on Sales expansion through fixed cost degression from higher volumes
- Restructuring expense of €115m as adjustment in 9M 2018 due to market exit/plant closure at MAN India

**VWCO** 





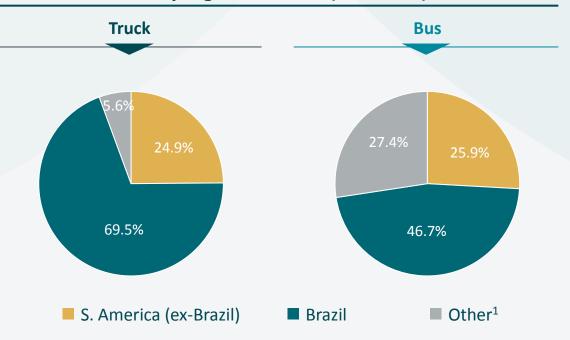
### 27.1% INCREASE IN VOLUMES ON THE BACK OF AN ECONOMIC RECOVERY

#### Volume delivered (k units and % of total)



Strong expansion in truck segments alongside market recovery

#### **Volume delivered by region in 2017A (% of total)**

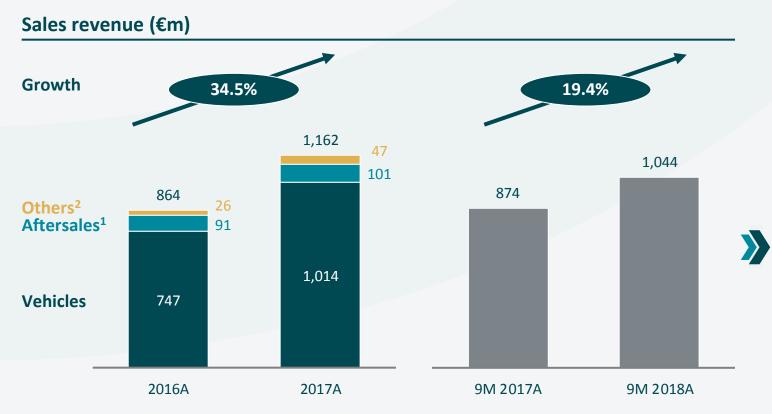


**VWCO** 



## TR/TON

### SUBSTANTIAL SALES REVENUE GROWTH ON THE BACK OF VOLUME AND PRICE RECOVERY



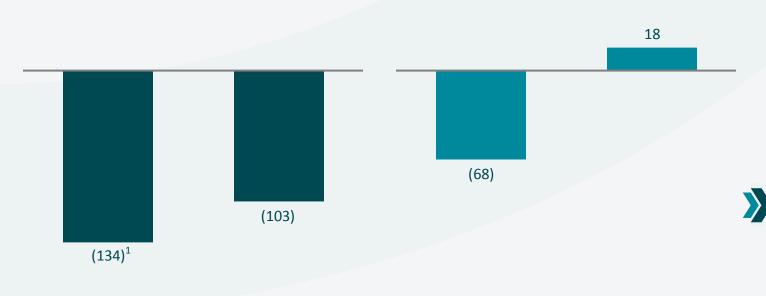
- Post-recession of the Brazilian economy recovery of vehicle sales revenue in 2017A and in 9M 2018A
- Successful pricing strategies, lower dealer stock and a change in mix towards higher priced heavy trucks leading to significant sales revenue growth

TRATON



### **BREAK-EVEN REACHED IN 9M 2018**

#### **Adj. Operating Profit (€m)**



• 6--1

**Commentary** 

- Cost measures showing visible results
  - Successful turnaround measures (e.g. headcount reduction) leading to significantly lower cost base
  - Reduction in full-time employees
- Significant expansion of contribution margins across product portfolio

2016A

2017A

9M 2017A

9M 2018A

#### Adj. Return on Sales (%)



(8.8%)

(7.8%)

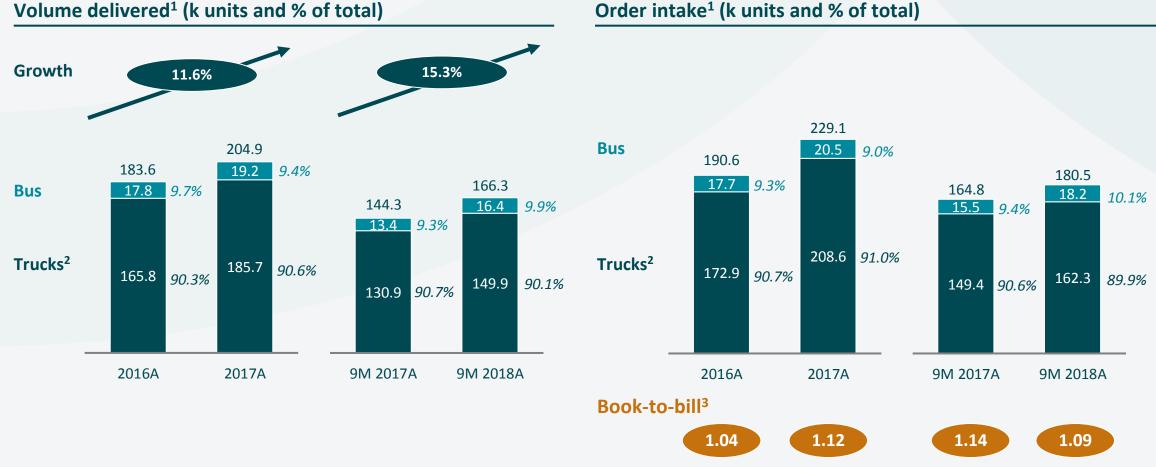
1.7%

IND. BUSINESS





# **INCREASING VOLUMES AND STRONG ORDER INTAKE**

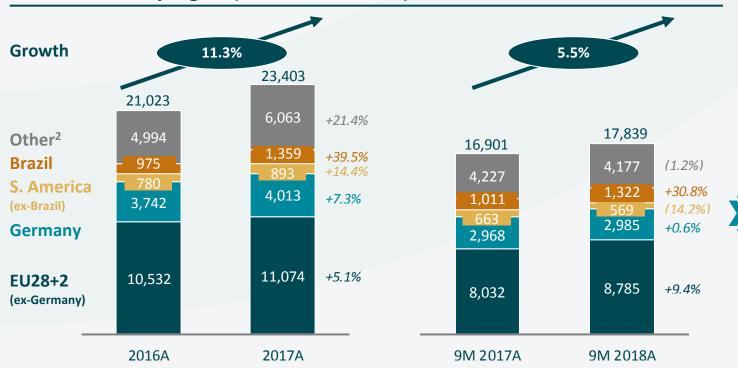


IND. BUSINESS



## GLOBAL NETWORK CONTRIBUTING POSITIVELY

#### Sales revenue¹ by region (€m and % of total¹)



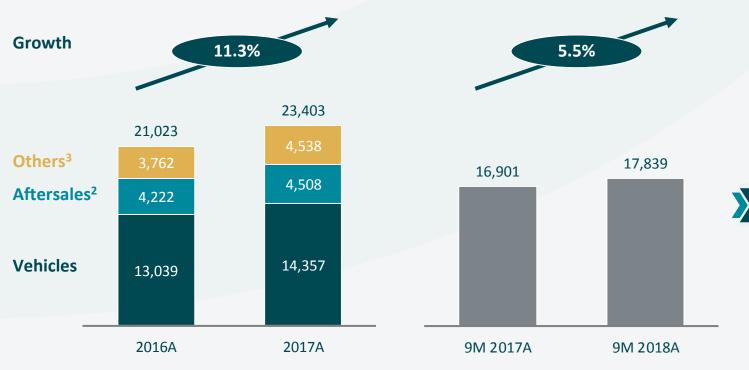
- Industrial Business' sales revenue increased by €2,380m, reflecting positive developments across core markets in the period from 2016A to 2017A
- €385m sales revenue expansion in the Brazilian market on the back of an overall economic recovery in the period from 2016A to 2017A
- Successful improvement in sales approach of MAN T&B in Germany as main driver of the €272m sales revenue growth in the period from 2016A to 2017A



# 4 INDUSTRIAL BUSINESS: GROWTH BEYOND CORE MARKETS







#### **Commentary**

- Sales revenue driven by all three operating units on the back of a positive economic development and new product launches with successful pricing strategies
- Significant expansion of truck volumes as main contributor to sales revenue growth in 2017A





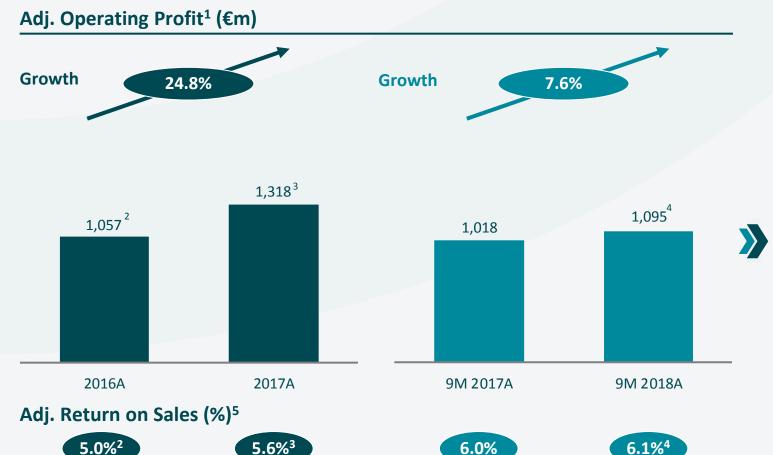
19.3%

TRATON



# **INDUSTRIAL BUSINESS:**





- Profit expansion through increased volumes and stable contribution margins from 2016A to 2017A
- Increase in solid margin aftersales business
- Adj. Return on Sales increase through fixed cost degression from higher volumes



IND. BUSINESS

TRATON





## **INDUSTRIAL BUSINESS: INCOME STATEMENT OVERVIEW**

in €m	2016A	2017A
Sales revenue <sup>1</sup>	21,023	23,403
Cost of sales	(17,026)	(18,985)
Gross Profit	3,997	4,418
SG&A <sup>2</sup>	(2,983)	(3,100)
Other operating income/expenses <sup>7</sup>	$(419)^3$	51
Operating Profit	596	1,368
RoS in %	2.8%	5.8%
Adjustments	461 <sup>3</sup>	(50)4
Adj. Operating Profit	1,057	1,318
Adj. RoS in %	5.0%	5.6%
		,
Financial result	(156)	(196)
Earnings before tax (from continued operations)	440	1,172
Income tax income/expense	(245)	(418)
Result from continuing operations, net of tax	195	754
Result from discontinued operations, net of tax <sup>5</sup>	(123)	85
Earnings after tax	72	839

## **Commentary**

- SG&A<sup>2</sup> as % of revenue with positive effect from 2016A to 2017A, reducing from 14.2% to 13.2%
- Direct labor costs with expansion in 2017A, driven by headcount increases in relation to the higher production volumes at Scania V&S and MAN T&B and the introduction of the NTG at Scania V&S in 2017A

### Industrial Business Adj. EBITDA<sup>6</sup>

2016A	€1,911m³
2017A	€2,107m <sup>4</sup>

1 Reflecting sales revenue before intersegment consolidation. 2 Reflecting distribution expenses and general and administrative expenses. 3 Including €403m adjustment for provision in relation to Scania antitrust fine and €58m adjustment for restructuring expense at VWCO. 4 Including (\$50m) adjustment for release of restructuring provision at MAN T&B. 5 Reflecting non-recurring consolidation effects with Power Engineering. 6 Adj. EBITDA defined as Adj. Operating Profit plus D&A of, and impairment losses on, intangible assets, PP&E and investment property, amortization of and impairment losses on capitalized development costs and impairment losses on equity investments plus share of the result of equity-accounted investments plus other financial result. 7 Including net impairment losses on financial assets.

**FINANCIALS** 

IND. BUSINESS

163

# INDUSTRIAL BUSINESS: NEW PRODUCT DEVELOPMENT DRIVING RESEARCH AND DEVELOPMENT COSTS

#### Total research and development costs¹ (€m; % of sales revenue)



### Total research and development costs as % of sales revenue



- Total R&D costs driven by:
  - Ramp up for new product development, including the new truck generation at MAN T&B and the New Delivery model at VWCO introduced at year-end 2017
  - Development of adaptions for all alliance partners
  - Connectivity solutions
  - New technologies, ADAS/autonomous driving, electrification
- R&D spending expected to stay in line with absolute historical levels
- R&D spending to be increasingly shifted from being product related to new technologies

**FINANCIALS** 

IND. BUSINESS





# INDUSTRIAL BUSINESS: SUSTAINED INITIATIVES TO OPTIMIZE INVESTMENTS

#### Capex spending¹ (€m, % of sales revenue)



- Decrease in prepayments for construction in progress relating to the completion of the NTG project at Scania V&S in 2017A
- Other position mainly reflecting acquisition of Navistar stake in 2017A
- Capex spending expected to stay in line with absolute historical levels (including capitalized development costs)







## **INDUSTRIAL BUSINESS: NET CASH FLOW EVOLUTION**

		2017
in €m	2016A	2017A
Earnings before tax	440	1,172
Income taxes paid	(81)	(217)
D&A of, and impairment losses on, intangible assets, PP&E, and inv. property <sup>4</sup>	552	585
Amortization of and impairment losses on capitalized development costs <sup>4</sup>	237	225
Impairment losses on equity investments <sup>4</sup>	0	1
Depreciation of and impairment losses on lease assets <sup>4</sup>	1,085	1,155
Change in pensions	23	13
Gain/loss on disposal of noncurrent assets and equity investments	(14)	(13)
Share of profit or loss of equity-accounted investments	(12)	(63)
Other noncash expense/income	134	30
Change in inventories	(364)	(456)
Change in receivables (excluding financial services)	(114)	(615)
Change in liabilities (excluding financial liabilities)	1,714	1,012
Change in provisions	408	(69)
Change in lease assets	(1,865)	(1,439)
Change in financial services receivables	3	(11)
Cash flows from operating activities - discontinued operations	(123)	80
Cash flow from operating activities	2,024	1,392
Investments in intangible assets (excluding dev. costs), PP&E, and inv. property	(1,054)	(839)
Additions to capitalized development costs <sup>3</sup>	(400)	(416)
Acquisition of subsidiaries	(4)	4
Acquisition of other equity investments	(7)	(272)
Other cash from investing activities <sup>1</sup>	(293)	(88)
Cash flows from investing activities – discontinued operations	Ú	(4)
Cash flows from investing activities	(1,758)	(1,615)
Net Cash Flow I <sup>2</sup>	266	(223)
Adjustment to Net cash flow definition Volkswagen AG <sup>5</sup>	336	137
Adjustment to discontinuing operations <sup>6</sup>	123	(76)
Net Cash Flow II <sup>7</sup>	724	(162)



- Earnings before tax in 2017 offset by working capital increase
- Change in working capital in 2017 is mainly driven by changes in:
  - Inventories of €(456)m
  - Receivables of €(615)m, including trade receivables of €(237)m
  - Liabilities of €1,012m, including trade payables of €249m
  - Lease assets €(1,439)m
- Working capital is a key focus area; task force in place to implement identified optimization potential



## FINANCIAL SERVICES: SCANIA HAS ITS OWN FINANCIAL SERVICES UNIT WHILE VW FS PROVIDES FINANCIAL SERVICES FOR MAN T&B AND VWCO





- Scania Financial Services is a fully integrated captive FS provider
- Scania FS operates **independent** of VW Financial Services with its own back-office



**FINANCIALS** 

FIN. SERVICES

 MAN branded Financial **Services** front-end (part of VW Financial Services)



 VWCO directly via VW Financial Services – no separate branding



TRATON GROUP is currently assessing whether to have a captive and integrated Financial Services unit to be implemented at TRATON GROUP level

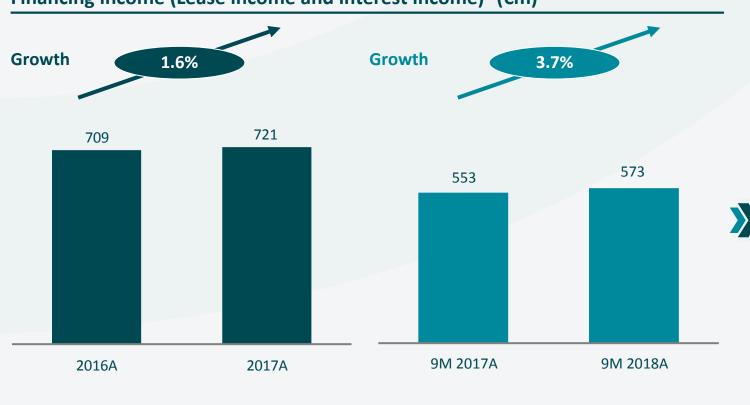
**FINANCIALS** 

FIN. SERVICES

# **FINANCIAL SERVICES:** FINANCIAL SERVICES AS SOLID CONTRIBUTOR AND CATALYST FOR NEW TRUCK SALES

# TRATON

### Financing income (Lease income and interest income)¹ (€m)



#### **Components of financing income**

 Increase in gross interest margin from 2016A to 2017A

 Portfolio mix and price increases as main drivers

 Interest margin down from 4.4% in 2016 to 3.1% in 2017A from higher competition in Europe

Arising from cash deposits held in Brazil and internal loans in the Nordics for regulatory purposes

Other interest

**Finance** 

leases

**Operating** 

leases

FIN. SERVICES

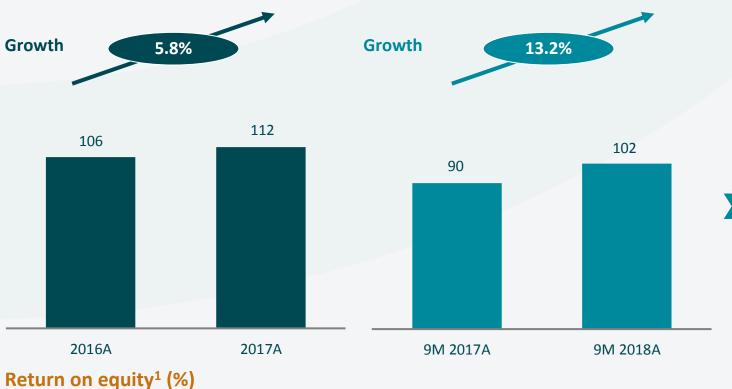


168



# **STRONG RETURN ON EQUITY OF 15.9%**





- Strong increase in earnings before tax in 2017A driven by:
  - Increase in net interest income
  - Increase in net insurance income, driven by loan volume increases and profit sharing
  - Lower other expenses
  - Increase in operating expenses for the support of the servicing of new lending



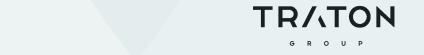




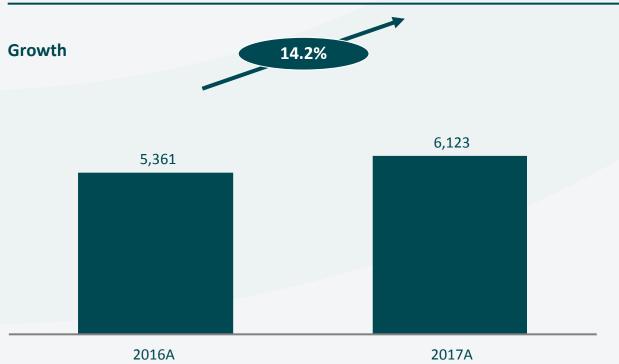


FIN. SERVICES





### Net portfolio¹ development (€m)



- 14.2% increase in Financial Services net portfolio in 2017A impacted by:
  - Increase in number of trucks sold by Commercial Operations
  - Increased focus on improved penetration rate generating new lending



- Significant expansion of c. 19% in new lending in Emerging Markets
- Favorable FX movements

# **TRATON GROUP: INCOME STATEMENT OVERVIEW**

in €m	2016A	2017A
Sales revenue	21,915	24,366
Cost of sales	(17,649)	(19,653)
Gross Profit	4,266	4,713
SG&A <sup>1</sup>	(3,105)	(3,226)
Other operating income/expenses	(434)	25
Operating Profit	727	1,512
RoS in %	3.3%	6.2%
	4642	(50)3
Adjustments	461 <sup>2</sup>	(50) <sup>3</sup>
Adj. Operating Profit	1,188	1,462
Adj. RoS in %	5.4%	6.0%
Financial result	(234)	(132)
Earnings before tax	493	1,379
Income tax income/expense	(297)	(489)
Result from continuing operations, net of tax	196	890
Result from discontinued operations, net of tax	22	149
Earnings after tax	219	1,039



- Cost of sales impacted by high depreciation arising from investments and roll-out of Scania NTG
- Change in financial result from €(234)m in 2016A to €(132)m in 2017A, primarily driven by the inclusion of results from investments in Navistar as well as positive developments in results from Sinotruk and RMMV<sup>4</sup>
- Historical tax rate of 59% in 2016A and 35% in 2017A

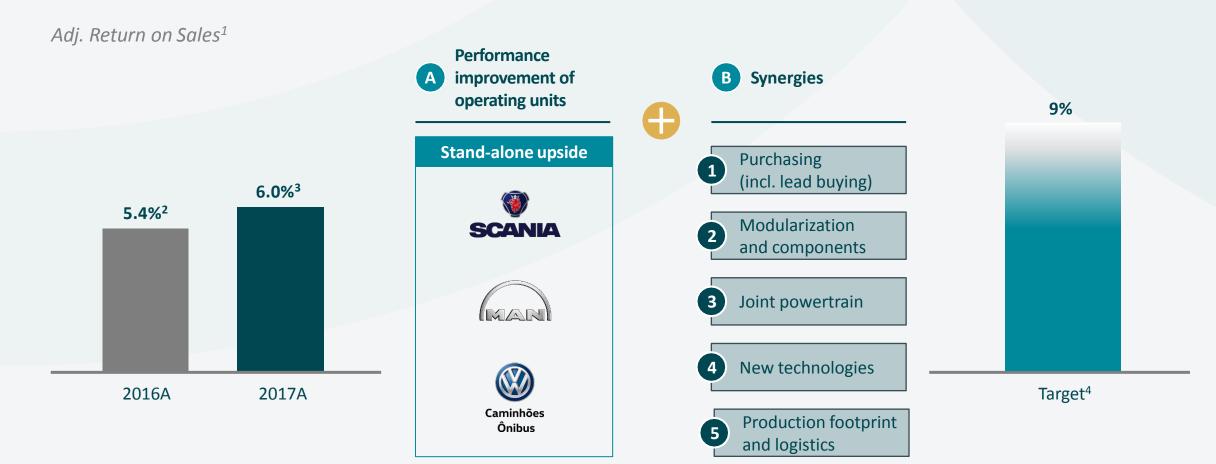
**FINANCIALS** 

TRATON GROUP



# TRATON GROUP: STRONG TRACK RECORD OF PERFORMANCE IMPROVEMENT AND FURTHER POTENTIAL TO BE REALIZED







## **TODAY'S AGENDA**

INTRODUCTION



- 01. **INTRODUCTION**
- 02. **COMPANY HIGHLIGHTS**
- 03. INDUSTRY AND MARKET ENVIRONMENT
- 04. TRATON GROUP
- 05. **FINANCIALS**
- 06. WRAP UP

## TRATON GROUP - UNIQUE PROFITABLE GROWTH PROFILE



#### Three strong brands...







- Scania: Enters harvesting period on New Truck Generation, profits from shortterm improvement of cost base and attractive aftermarket and service growth
- MAN: Achieved profit stabilization, enters new era of profitability post rampup of new truck generation
- VWCO: Benefits from Brazil market recovery and broader product pipeline



#### ...creating a Global Champion...



- Exceptional synergy potential among TRATON GROUP brands and with alliance partners
- Smart partnership approach creates scale and access to global profit pools
- Monetize on customer focused innovation and ensure efficient capital allocation



#### ...with highly experienced team

# ~175 years

of cumulative industry experience

- Longstanding industry experience
- Proven track record
- Commitment to deliver the Global Champion Strategy





# **APPENDIX**

### TRATON GROUP CORPORATE SUSTAINABILITY - OVERVIEW





- Ability to contribute to leading the transport sector towards sustainability is a prerequisite for TRATON GROUP's long-term success
- Transparent sustainability reporting according to GRI standards<sup>1</sup>
- Corporate sustainability is firmly anchored throughout the organizations at Scania and MAN T&B/VWCO
- **Scania:** Driving customer profitability through sustainable solutions and pursuing responsible business
- MAN T&B/VWCO: Responsibility for product, production, supply chain, human beings as well as society and integrity
- Commitment to UN Sustainable Development Goals as common basis
- Scania and MAN T&B/VWCO are participant and signatory of UN Global Compact<sup>2</sup>, respectively

<sup>1</sup> The global reporting initiative (GRI) is an international independent standards organization that sets out principles and indicators for measuring and reporting economics, environmental and social performance. 2 Non-binding United Nations pact to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation

### **CORPORATE SUSTAINABILITY AT SCANIA**



#### DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM

#### Sustainable transport: Doing the right things

#### **Sustainable transport KPIs**



Energy efficiency

- Ecolution by Scania
- Driver training and coaching
- Maintenance with flexible plans



Alternative fuels and electrification

Sales of alternative fuels and electrification



Smart and safe transport

Size of connected fleet

Enable partnerships in the Eco-system of transport and logistics

Deliver full service offering that improves lifecycle profitability

#### Responsible business: Doing things right

#### **Business** area

## 1 Environmental footprint

- 2 Diversity and inclusion
- **3** Business ethics
- 4 Health and safety
- **5** Human and labor rights
- 6 Community engagement

#### **Selected targets**

/FN\0/	Reduction in CO <sub>2</sub> emission from land transport in 2016-2025
(30)/0	land transport in 2016-2025

Reduced energy consumption
in industrial facilities per
vehicle in 2010-2020

Reduction of un-recycled waste material in industrial operations in 2015-2020

100% Of operations to run on fossil free electricity by 2021

Create a capable and innovative organization

Attract and retain talent

Eliminate waste and achieve cost savings

## **CORPORATE SUSTAINABILITY AT MAN T&B/VWCO**



# STRUCTURED APPROACH APPLIED TO DERIVE SUSTAINABILITY ACTION FIELDS

- 1 Identification of potential action fields for MAN T&B/VWCO
- Focus on global challenges
- Concrete objectives
- High business impact
- Alignment with corporate strategy
- Assessment by dedicated corporate sustainability council
- Analysis and prioritization of potential action fields

Assessment by stakeholders

- Alignment of action fields with stakeholders
- Stakeholders include suppliers, customers,
   NGOs, universities, auto OEMs, representatives of cites and insurance companies
- Alignment of sustainability topics with corporate strategy
- Sustainability action fields linked to existing / future programs of corporate functional strategy

MAN T&B/VWCO employs a structured multi-step approach to derive sustainability action fields

#### MAN/VWCO SUSTAINABILITY ACTION FIELDS

- Reduce greenhouse gas emission in production & logistics
- Reduce pollutant emission
- Reduce greenhouse gas, pollutant emission
- Improve traffic safety
- Sustainable mobility services

Responsibility for Products

- Allocation relevance of CS standards
- Responsible use of conflict minerals
- Review human, employee rights
- CO<sub>2</sub> footprint of supply chain

Responsibility for Supply Chain

Responsibility for Human beings Responsibility for Society and Integrity

Holistic health management

**Responsibility for** 

**Production** 

- Need-based, future-oriented education
- Future of work
- Sustainable talent management

- Best practice compliance / risk management
- Transparent stakeholder dialogue
- Fact-based, constructive dialogue with politicians

Corporate sustainability strategy fully integrated into the corporate functional strategy

Note: MAN comprises MTB and VWCO. CS = Corporate sustainability.

PERFORMANCE SCANIA



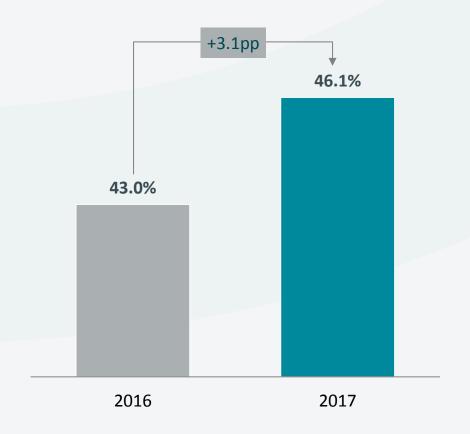


## SCANIA – DEEP DIVE: SCANIA'S CAPTIVE FINANCING NETWORK

BRAND



#### SHARE OF VEHICLES SOLD WITH FINANCIAL SERVICES SOLUTIONS<sup>1</sup>



#### **FINANCIAL SERVICES PRODUCT OVERVIEW**

Finance lease	<ul> <li>Vehicle ownership remains with Scania but material risk and reward transferred to lessee</li> <li>Final payment to transfer legal ownership to lessor</li> </ul>
Hire purchase	<ul> <li>Vehicle ownership transferred to customer on date of sale but Scania FS receives collateral in form of a lien on vehicle</li> <li>Offered with monthly fee based on initial vehicle value</li> </ul>
Operating lease	Ownership and substantial risks, primarily represented by a guaranteed residual value, remain with Scania
Other	<ul> <li>Lending to dealers which is a short term credit facility to finance floorplan stock</li> </ul>

<sup>1</sup> As per company reporting. Relates to penetration in those markets where Scania has its own financing operations. Note: Supplementary information to page 57

# MAN T&B: REPLICATE GERMAN MARKET SUCCESS STORY IN EUROPEAN FOCUS TRATO MARKETS – SELECTED CASE STUDIES – HOW CAN WE EXPAND OUR MARKET SHARE?



#### HISTORICAL STRENGTH

- Direct sales model
   Own salesforce with
   direct customer contact
- Viable franchise model
   Network with owned
   branches and private
   capital dealers
- High technical competence
   Leading in special applications

#### **HEADWINDS POST CRISIS**

- Weak network
   Low representation in key high density areas
- Technical issues
   Temporary customer
   dissatisfaction
   resulting in poor
   brand appearance

# CLEAR PATH TO REGAIN HISTORICAL STRENGTH

Captive retail
 New branch management team recruited (>50% of branch managers replaced)



- Close white spots
   5 new own retail locations with significant network investments
- Branch appearance
   Investments in refurbishments and training

Following period of market share deteriorating, improvement of network key in order to regain customer recognition





# MAN T&B: REPLICATE GERMAN MARKET SUCCESS STORY IN EUROPEAN FOCUS MARKETS – SELECTED CASE STUDIES – HOW CAN WE EXPAND OUR MARKET SHARE?



#### **KEY CHALLENGES 2017**



MAN behind competition in crucial customer experience dimensions



#### **ROADMAP TO SUCCESS**

- **Invest** in **own retail network** (€16m) and support of newly appointed dealers
- **Increase headcount** (more than double) and professionalize through investment in training
- **Improve brand reputation** by cleaning the network from low quality partners, offering customer events, implementation of MORE (Retail excellence)



potential in dealer and service network



Clear defined measures in terms of brand reputation, investment in captive dealers and professionalization of sales organization

# MAN T&B: REPLICATE GERMAN MARKET SUCCESS STORY IN EUROPEAN FOCUS TRATON MARKETS – SELECTED CASE STUDIES – HOW CAN WE EXPAND OUR MARKET SHARE?



#### **KEY CHALLENGES 2017**

- OEM's market share gain through national key account manager strategy Short term and unsustainable growth strategy
- Difficulties to attract private capital dealers
   Low running population (investment not profitable)



#### **ROADMAP TO SUCCESS**

- Sales reorganization
  Reorganized sales regions to follow market development and get closer to customer (2FTE), Operative marketing/ retail coordinator/ sales force (1FTE), international vehicle return coordinator (1FTE)
- Close white spots
   Restructuring and improvement of sales/
   service network requires €5m (CAPEX €2m,
   OPEX €3m)
- Improve cooperation with Volkswagen
   Financial Services
   €2.0m Volkswagen FS, €3.5m MAN yearly
   budget for tactical campaigns

Clearly defined measures in terms of sales reorganization, investment in dealer network and improvement of FS offering

PERFORMANCE MAN T&B

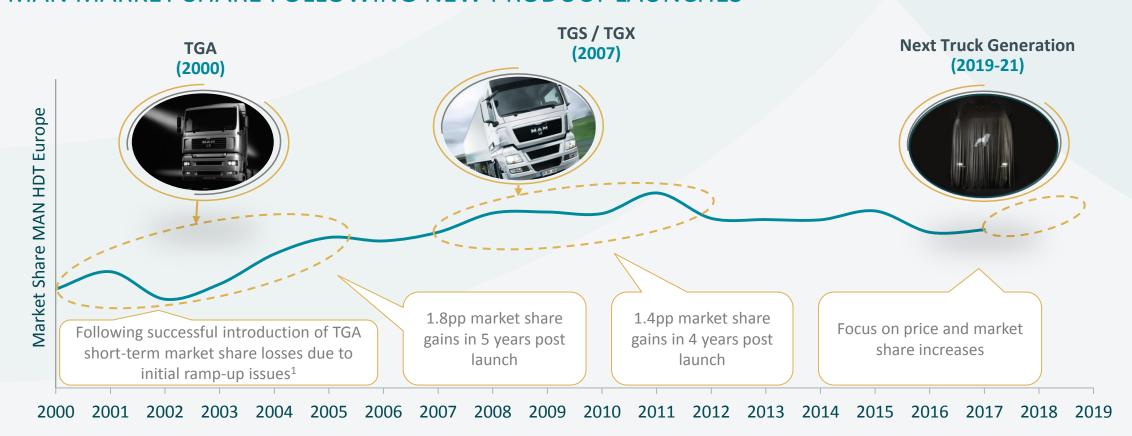


TRATON

# AND SYNERGIES \*\*\*

# MAN T&B – LAUNCH HIGH QUALITY PRODUCT PORTFOLIO MAN MARKET SHARE FOLLOWING NEW PRODUCT LAUNCHES

**BRAND** 



- New product launches historically acted as a catalyst of market share gains and give room for future price increases
- New truck generation launched with target to lift profitability





# MAN T&B – EXPAND AFTERSALES AND SERVICE OFFERING AS THE MAIN LAYER OF GROWTH: SPECIFIC MEASURES IN PLACE DRIVING FURTHER POTENTIAL



# Network development

## INCREASE DENSITY AND EFFICIENCY

 Enhance captive network

### Retail efficiency

# ACHIEVE EXCELLENCE IN OWN RETAIL OPERATIONS

 Process improvements and spend optimization (Point of Service)

### **III** Unit sales growth

## INCREASE SALES EFFICIENCY

Sales Boost
Professionalization of
the Sales Organization
After Sales

# New after sales products

# INCREASE PENETRATION AND EXTEND PORTFOLIO

- Increase market penetrationMarket roll-out
- Increase efficiencies

### V Parts pricing

#### **IMPROVE PRICING**

- Adaptions on competitive level by generating overall price increase
- Exhaustion of opportunities with higher qualities, new technologies, increasing complexity and exclusivity

#### **Target**

Growth

plan

- Planned installation of 16 new service points (captive and third party) to close white spots in focus countries ('18/19E)
- Rollout of Own Retail
   After Sales Toolbox
   with levers for
   performance
   improvement
- Deep Dive / Task Force
   360°- KPI based
   identification of fields
   of action on branch
   level

- Data driven market penetration
- Introduction of After Sales Salesman
- Key Account Initiative
- Improvement of Sales Skills

- Portfolio extension
- Approach new customer segments
- Economies of scale for MAN Genuine Oil

Five key levers for aftersales and services growth identified and targeted with detailed growth plans

Note: Supplementary information to page 84



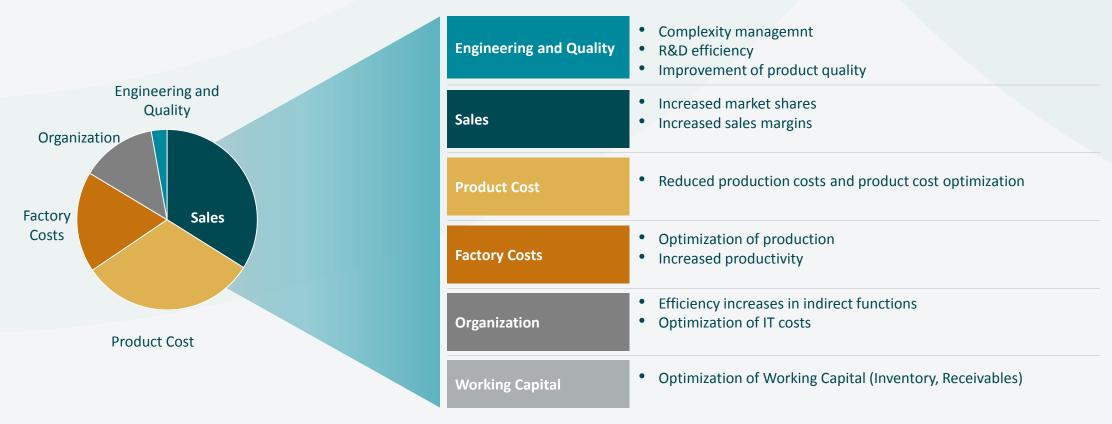


### PERFORMANCE MAN T&B TRATON

# MAN T&B – MAN TURNAROUND WITH VISIBLE EFFECTS FROM **OPERATIONAL IMPROVEMENT PROGRAM**

**BRAND** 

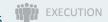
PACE2017 – TARGETS PER MODULE



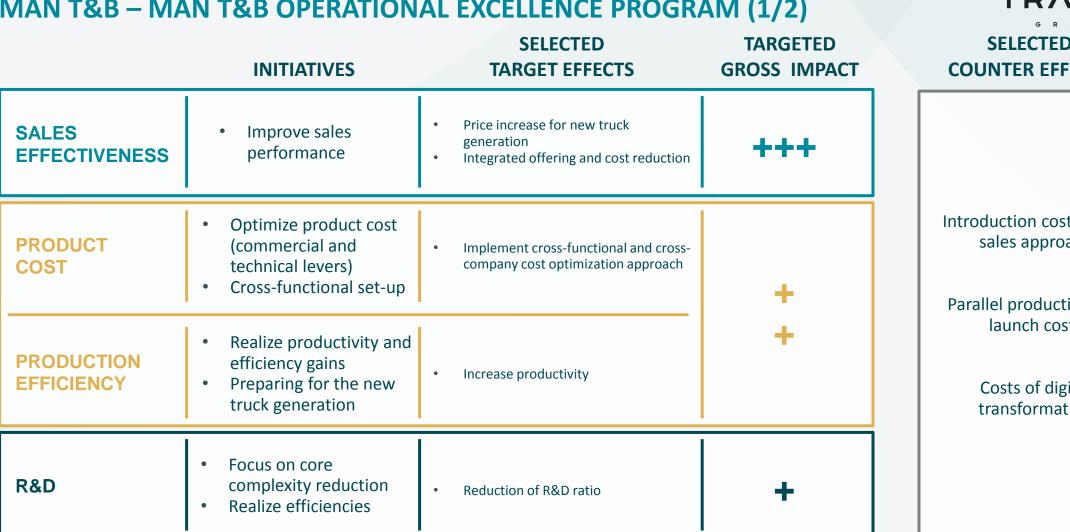
1 Separate target setting,

Note: Supplementary information to page 85





## MAN T&B – MAN T&B OPERATIONAL EXCELLENCE PROGRAM (1/2)



TRATON

### **SELECTED COUNTER EFFECTS**

Introduction cost of new sales approach

Parallel production and launch costs

> Costs of digital transformation



## MAN T&B – MAN T&B OPERATIONAL EXCELLENCE PROGRAM (2/2)



	INITIATIVES	SELECTED TARGET EFFECTS	TARGETED GROSS IMPACT	SELECTED COUNTER EFFECTS
INDIRECT SPEND OPTIMIZATION	<ul><li>Reduce overhead costs</li><li>Implement guidelines to drive cost discipline</li></ul>	Doduce indirect chand	•	
PERSONNEL COST REDUCTION	<ul> <li>Improve efficiency in indirect areas</li> </ul>	Reduce indirect spend	+	Wage and raw material price increases
PORTFOLIO COMPLEXITY	Align project portfolio with strategic priorities	Reduce complexity in product portfolio	No P&L target	Technical changes and increased depreciation
CASH AND INVESTMENTS	<ul> <li>Optimize working capital management</li> <li>Optimize capex budget and investment process</li> </ul>	Reduction of Capex ratio	No P&L target	

## **GLOSSARY**



ACE	Autonomous driving, connectivity, electrification/alternative fuels
Alliance Partner	Commercial vehicles player which has partnership with TRATON GROUP
Associate	Investment with non-controlling shareholding (e.g. Navistar, Sinotruk)
BEV	Battery electric vehicle
Byggladan	Scania's modular toolbox
СВЕ	Relates to Common base engine, TRATON GROUP's 13I common powertrain platform
CNG	Compressed natural gas
CNL	Consortium of Austrian companies equipped with eTGM
Consórcio Modular	VWCO's asset light production system in which partners/suppliers operate the production whereas VWCO retains responsibilities such as product development and quality assurance
EBIT	Operating profit plus share of the result of equity-accounted investments
Euro Emission Standards	Regulation defining acceptable limits for exhaust emissions
EU28+2	EU member states plus Norway and Switzerland.
FAME	Fatty Acid Methyl Ester – biodiesel made from various sources
GZ	Scania gearbox used, also used in MAN T&B vehicles
Heavy Duty Truck (HDT)	Comprises trucks with weight above 15 tons
HVO	Hydrogenated vegetable oil
Industrial Business	TRATON GROUP excluding Scania Financial Services
Light Duty Truck (LDT)	Comprises trucks with weight below 6 tons
LNG	Liquefied natural gas

MAN T&B	MAN Truck & Bus
Medium Duty Truck (MDT)	Comprises trucks with weight between 6 and 15 tons
NTG	Scania's new truck generation
OEM	Original equipment manufacturer
Operating Profit	Income from operations as reported by TRATON GROUP
Paris Agreement	2016 UN agreement on climate goals
PGR	Truck generation preceding Scania's NTG
RoE	Return on equity, defined as operating profit divided by equity
RoS	Return on Sales, defined as operating profit divided by sales revenue
Truck sales / truck sales revenue	Truck sales: units of trucks sold; Truck sales revenue: revenue generated with sold trucks
Scania V&S	Scania industrial vehicles and services business
South America	Incl. Argentina, Brazil, Bolivia, Chile, Colombia, Costa Risa, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela (excl. Mexico)
South East Asia	Australia, Indonesia, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam
Strategic Partner	All companies which have a partnership with TRATON GROUP
TCO	Total cost of ownership over product life cycle
North America	Includes Canada, Mexico and United States.
Vehicles	Includes trucks and buses
VGSG	Volkswagen Gebrauchtfahrzeughandels und Service GmbH (sold as of Jan-2019)
vwco	VW Caminhões e Ônibus, also referred to as MAN Latin America in MAN SE reporting
VW T&B, TRATON AG	Preceding company names of TRATON SE