



NAIAS 2018

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CEO Schaeffler AG
January 15, 2018

- 1** Overview Schaeffler Group
- 2** Strategy "Mobility for tomorrow"
- 3** Technology competence as a key growth driver
- 4** Summary

Schaeffler Group – 2017 another successful year

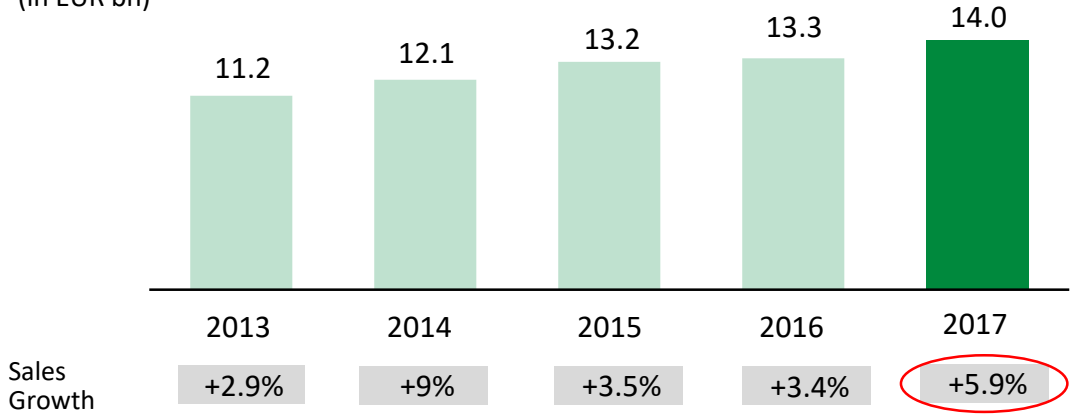
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2017 at a glance

- ▶ Schaeffler Group sales increased by 5.9% to EUR 14.0 bn in 2017
- ▶ Automotive sales increased by 5.9% to EUR 10.9 bn in 2017
- ▶ Strategy "Mobility for tomorrow" in progress
- ▶ 3 Divisions from January 1st onwards (Automotive Aftermarket becoming a separate division)
- ▶ "One Schaeffler" approach to be further strengthened

Global Sales growth 2013-2017

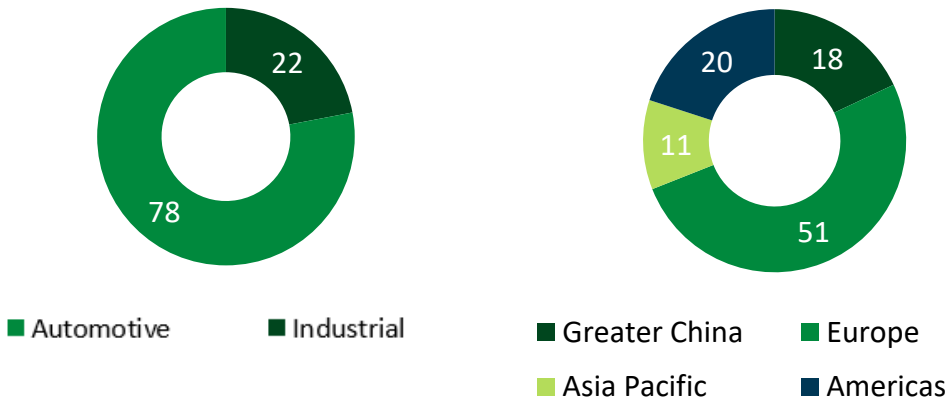
(in EUR bn)



Preliminary Figures
FY 2017

Sales by divisions and regions FY 2017

(in %)



Innovation

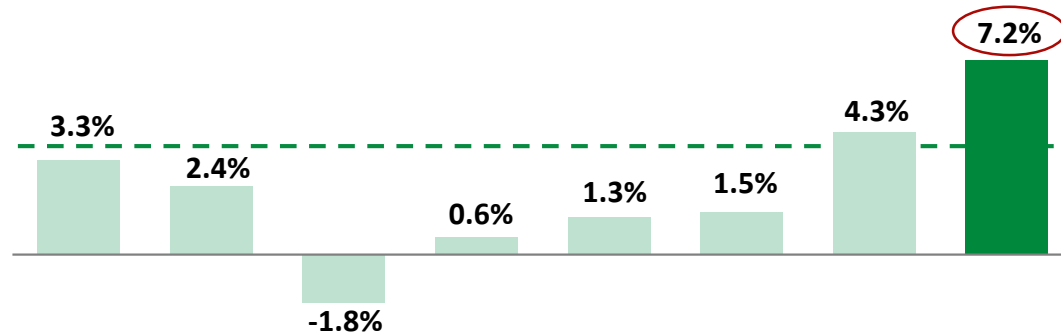
- ▶ More than 2,300 patents filed in 2017
- ▶ PACE awards- mechatronic active roll control and transmission one way clutch assembly (Americas, 04/17)
- ▶ Automotive innovations award for the hybrid CVT transmission (Europe, 05/2017)
- ▶ China Automotive and Parts innovation award for the e-clutch (Greater China, 09/17)

Automotive business – Strong 4th quarter with 7.2%-pts. outperformance

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Preliminary Figures
FY 2017

Outperformance Q1 2016 - Q4 2017



	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17	Q3 17	Q4 17
Growth rate Automotive ¹⁾	5.0%	5.8%	5.1%	8.2%	7.0%	1.6%	6.7%	8.3%
Light Vehicle Production ²⁾	1.7%	3.4%	6.9%	7.6%	5.7%	0.1%	2.6%	1.1%
Growth rate Automotive OEM ^{2,3)}	4.0%	4.7%	3.9%	7.3%	6.5%	3.5%	7.3%	8.9%

1) FX adjusted

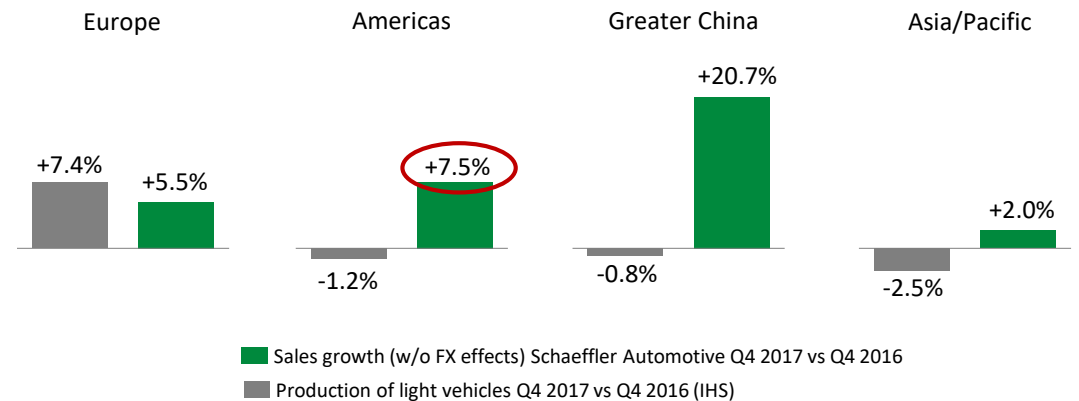
2) Source: IHS; January 2018

3) FX adjusted without Automotive Aftermarket

Key aspects

- Sales growth Automotive Q4 2017 +8.3% leading to outperformance of 7.2% globally
- Key drivers are China (+21.5%) and Americas (+8.7%)
- Automotive OEM Business outperformed the market by 4.3% in FY 2017

Regional outperformance Q4 2017



Schaeffler Americas – 2017 another year of expansion

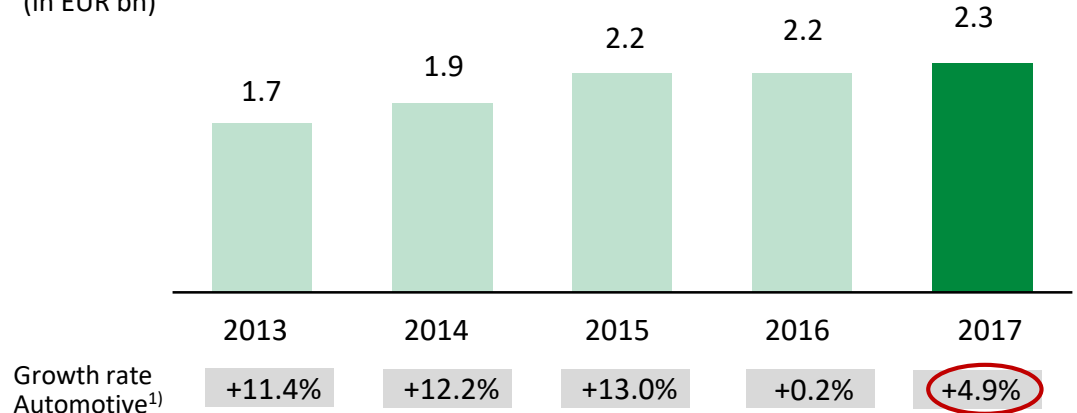
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2017 at a glance

- ▶ Automotive sales grew by 4.9% to EUR 2.3 bn in 2017
- ▶ High level of innovative accomplishments
- ▶ E-Mobility projects initiated with first series production SOP 2018
- ▶ USD 100 million invested in Ft. Mill, SC and Wooster, OH to support growth

Automotive Americas Sales growth 2013-2017

(in EUR bn)



1) FX adjusted

Preliminary Figures
FY 2017

North America Expansions



Innovation Awards



Vision / Mission

Mission

"Guided by the values of a global family business, we work closely together with our customers as true partners to deliver a compelling value proposition through our best-in-class expertise in manufacturing technology and systems know-how. In doing so, we contribute to the success of our customers, the advancement of our employees, and the prosperity of our society."



Vision

1 We want to be the preferred technology partner for our customers.

4 Focus areas

Eco-friendly drives



Urban mobility

- Two-wheelers
- Inner-city railways
- Micro mobiles

Mobility tomorrow



Energy chain

- Wind power
- Solar power
- Conventional power generation

8 Strategic pillars

1 We want to be the preferred technology partner for our customers.

2 We are an Automotive and Industrial supplier.

3 We want to be an attractive employer.

4 We live by the values of a global family business.

5 We view E-Mobility, Industry 4.0, and Digitalization as key opportunities for the future.

6 We strive for the highest possible quality, efficiency, and delivery performance.

7 We want to be an attractive employer.

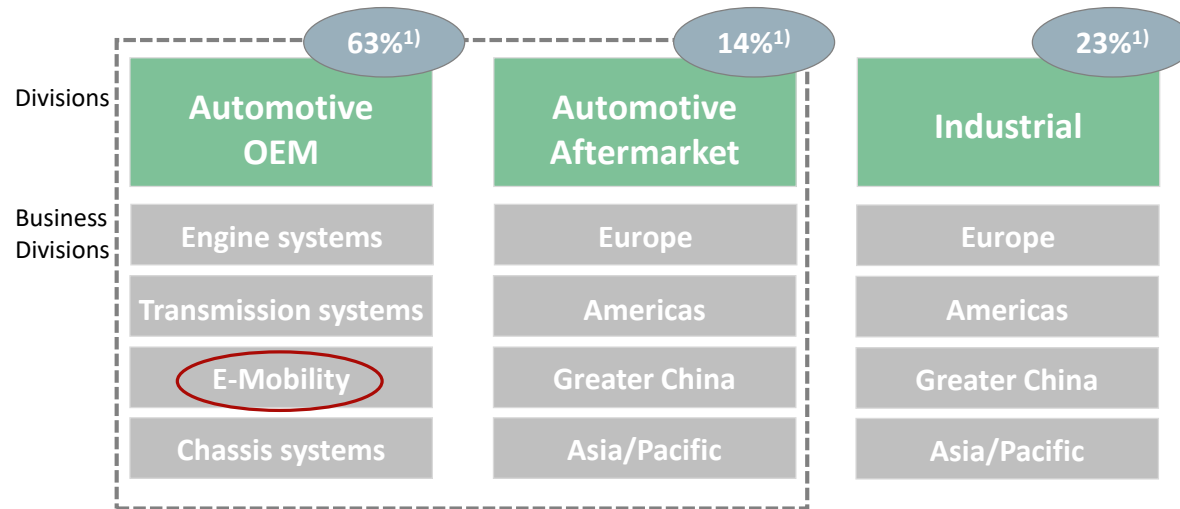
8 We live by the values of a global family business.



Initiatives	Sponsor
1 Customer Excellence	Prof. Pleus / Dr. Spindler
2 E-Mobility	Prof. Gutzmer
3 Industry 4.0	Dr. Spindler
17 Global Supply Chain	Divisional CEOs
4 Quality for Tomorrow	Rosenfeld
5 Global Footprint	Rosenfeld
6 Factory for Tomorrow	Jung
7 Shared Services	Heinrich
8 Process Excellence	Rosenfeld
18 AKO	Soeding
9 Working Capital	Heinrich
19 Global Reporting	Heinrich
10 Leadership & Corporate Values	Schittenhelm
11 Qualification for Tomorrow	Schittenhelm
12 New Work	Schittenhelm
13 Program CORE	Dr. Spindler
14 Digital Agenda	Prof. Gutzmer
15 IT 2020	Prof. Gutzmer
16 Global Branding	Rosenfeld
20 Focus	Rosenfeld

Moving to 3 divisions – New business division E-Mobility

New business structure as of January 1, 2018

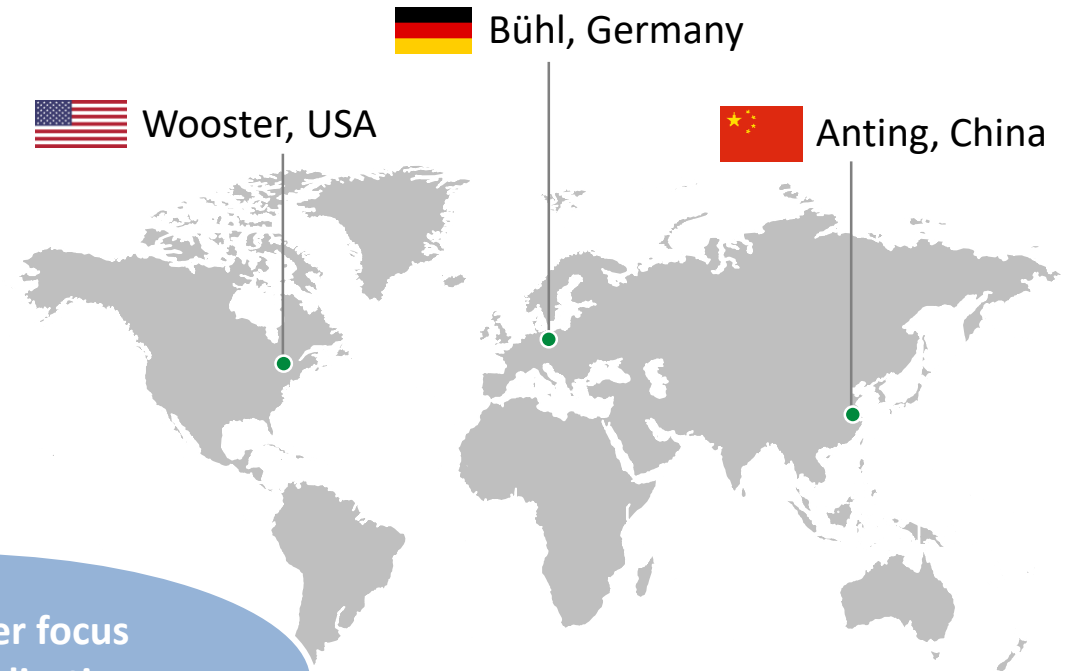


Key aspects

- ▶ As of January 1, 2018 will report as 3 divisions²)
- ▶ New division Automotive Aftermarket headed by Michael Söding
- ▶ Automotive OEM established separate business division E-Mobility

More customer focus
More decentralization
More transparency

Three regional E-Mobility competence centers



1) Revenues based on proforma 2016 figures

2) Each division with 4 business divisions each (Sales only)

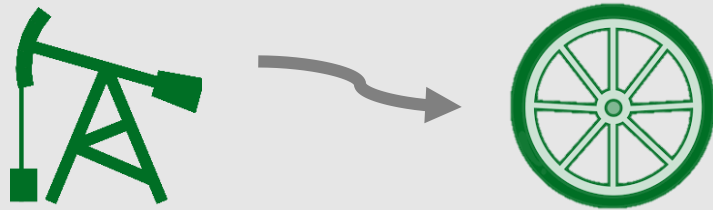
Key market drivers – Transformation is accelerating

Change Drivers

Regulations



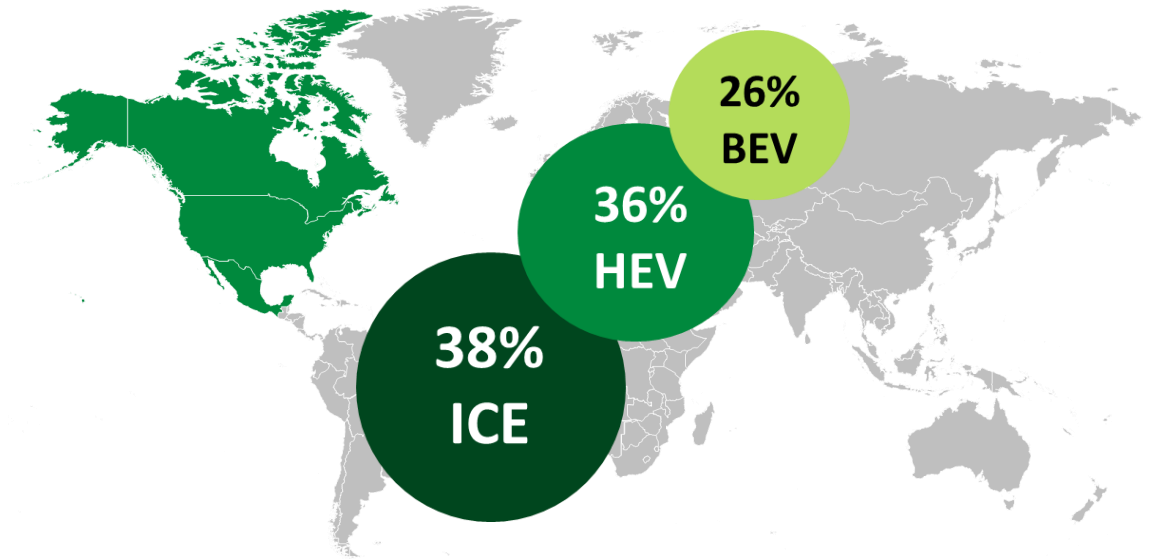
Well to Wheel



Future Mobility



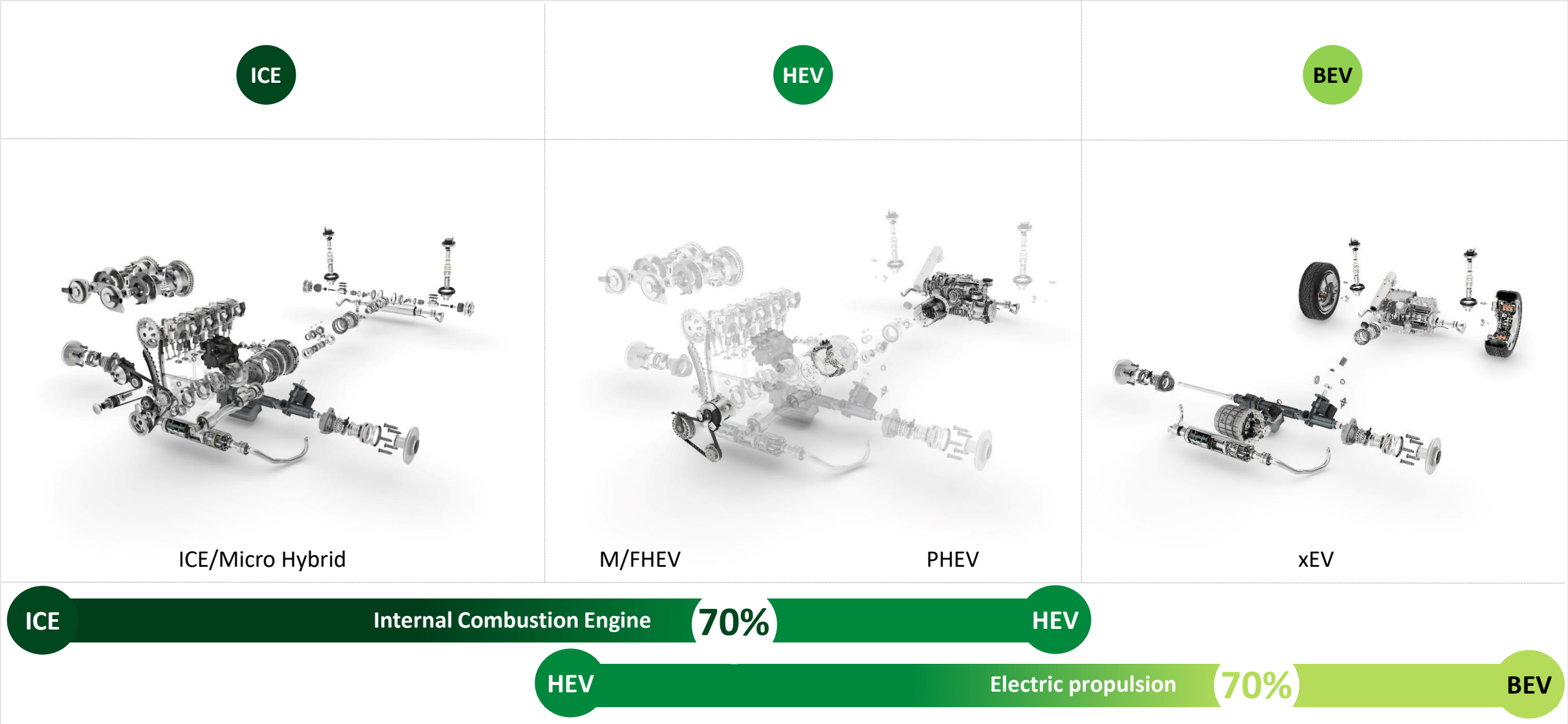
North American Powertrain Scenario 2030



Regional key drivers

- ▶ Higher SUV and light truck demand
- ▶ Extended range requirements
- ▶ Stronger trend to autonomous driving

Schaeffler product spectrum – Innovation across all powertrain concepts



1 Engine systems – Thermal Management Technology

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Thermal Management Module (TMM)

ICE



North America SOP Q3 2018

Today

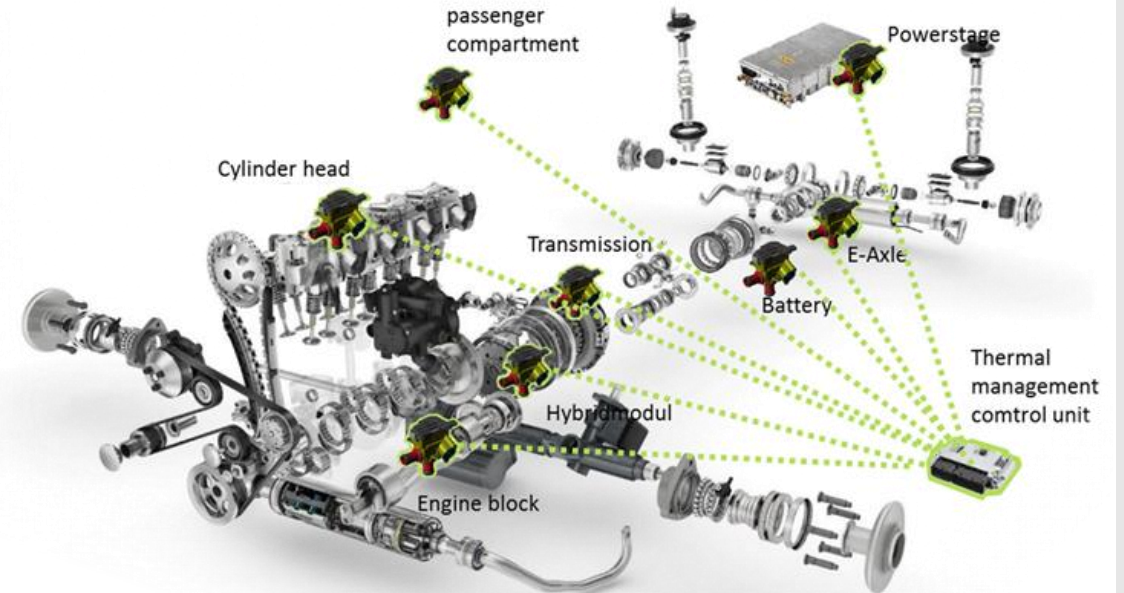
- ▶ Up to 4% fuel saving¹⁾
- ▶ Reduced engine and transmission drag due to optimal temperature
- ▶ Increased comfort through faster heating of passenger compartment

¹⁾Source: GM, Vienna Engine Symposium Presentation)

Thermal Management with Smart Valves

HEV

BEV



Tomorrow

- ▶ Vehicle thermal management required for HEV and BEV¹⁾
- ▶ Increased efficiency
- ▶ Thermal control unit with decentralized smart valves

¹⁾Source: IHS Markit, Thermal Management of HEV and BEV)

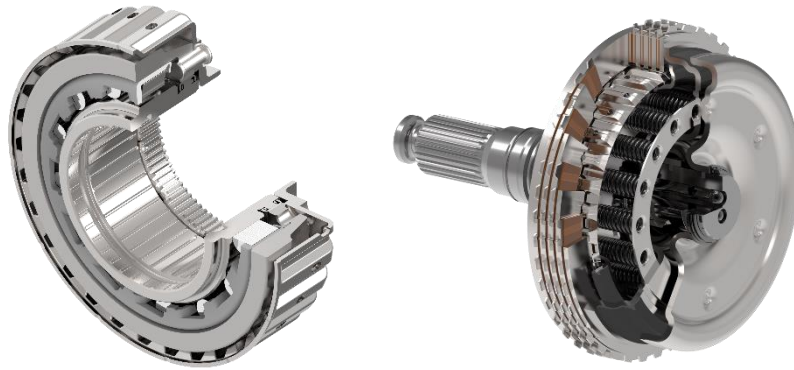
2 Transmission system – Inside Transmission Technologies

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Clutch modules



HEV



North America SOP Q3 2018

Today

- ▶ One-way clutch assembly
- ▶ Lightweight, high speed assembly enables smooth shifts
- ▶ Wet shifting clutch module

EM Switchable clutches

HEV

BEV

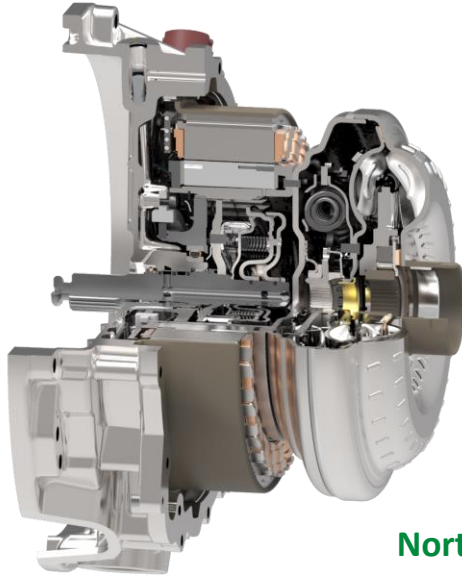


Tomorrow

- ▶ Technical competence center established in the Americas
- ▶ Added functionality to achieve future requirements
- ▶ Component expertise yields smaller, lighter packages

eTC Modular Hybrid Unit

HEV



North America SOP Q3 2018

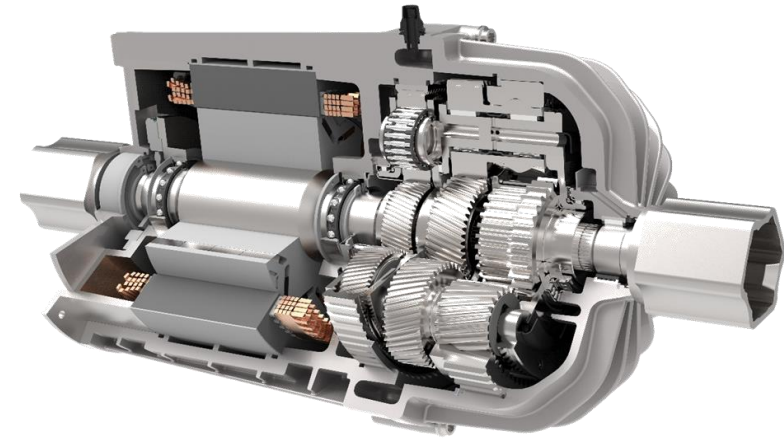
Today

- ▶ Space optimized with Schaeffler components and E-Motor
- ▶ P2 architecture (RWD or FWD), High voltage or 48V
- ▶ Utilized as a full hybrid or plug-in hybrid
- ▶ Launch device flexible: torque converter or launch clutch

HV E-Axle

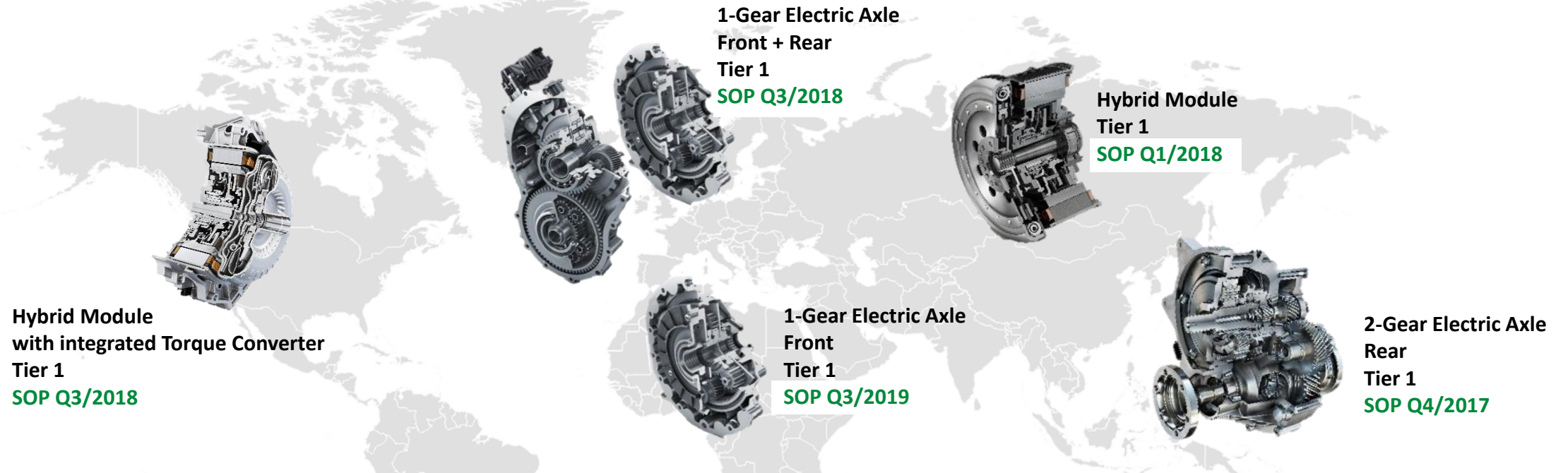
HEV

BEV



Tomorrow

- ▶ E-Mobility Competence Center established in the Americas
- ▶ Component expertise yields smaller, lighter packages
- ▶ Can be integrated with Schaeffler E-Motor and Power Electronics



Hybrid Module

- ▶ 2 series contracts
- ▶ **More than 15** ongoing customer projects

E-Axle

- ▶ 6 series contracts
- ▶ **More than 10** ongoing customer projects

Autonomous Driving



New Fields



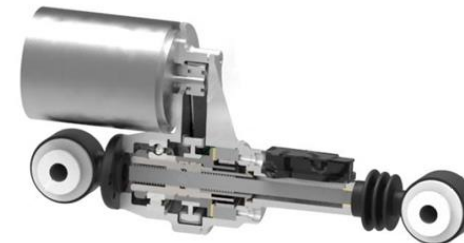
Intelligent Active Roll Control



Ride Height Adjustment



Steering Actuation



Grand Opening Silicon Valley – Schaeffler Colloquium 2018

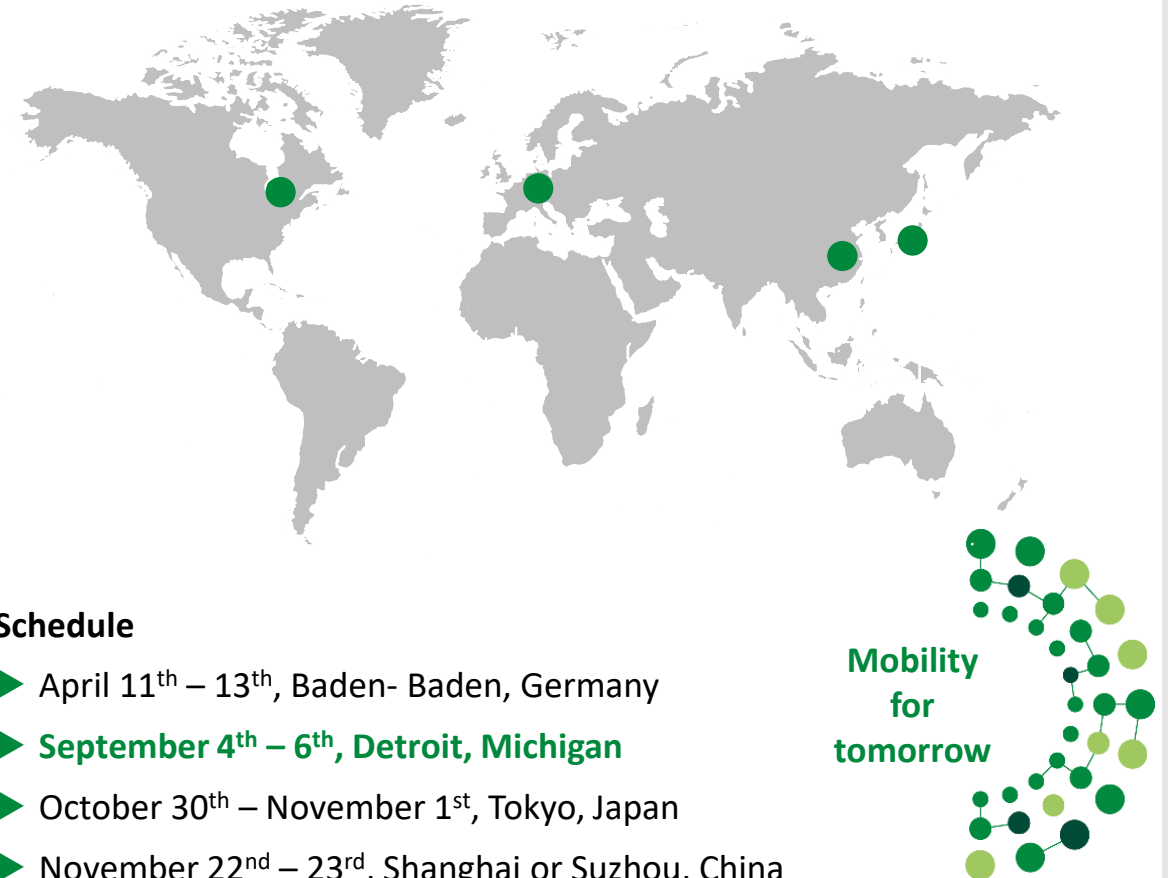
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Silicon Valley

- ▶ Close proximity to customers
- ▶ Staff onsite as of December 4, 2017
- ▶ **Official Opening in spring, 2018**



Schaeffler Colloquium 2018



Schedule

- ▶ April 11th – 13th, Baden- Baden, Germany
- ▶ **September 4th – 6th, Detroit, Michigan**
- ▶ October 30th – November 1st, Tokyo, Japan
- ▶ November 22nd – 23rd, Shanghai or Suzhou, China

1

Successful 2017: Continued growth and innovative accomplishments

2

E-Mobility business division established

3

Future growth secured through E-Mobility initiatives, production and new projects

4

2018 Focus: E-Mobility, ICE and Transmission optimization, Chassis mechatronics

5

Silicon Valley presence: Technology office Opening Spring, 2018

6

New technology to be highlighted at 2018 Schaeffler Colloquium

**Preferred
technology
partner**

Thank You!

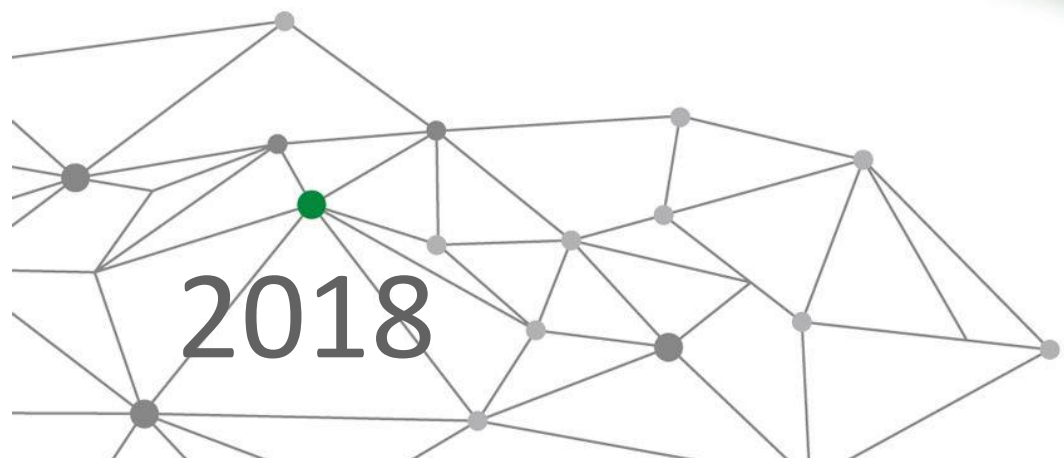
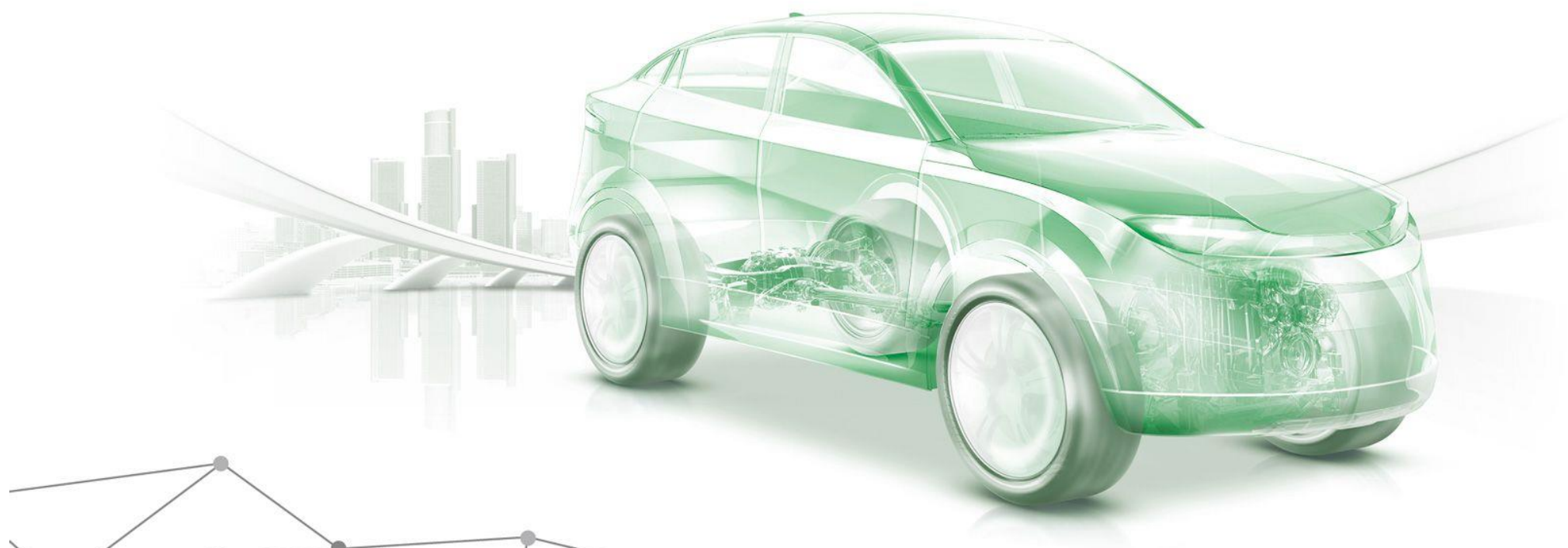


2018 Formula E

Feb 3	Santiago de Chile (CL)
Mar 3	Mexico City (MX)
Mar 17	São Paulo (BR)
Apr 14	Rome (IT)
Apr 28	Paris (FR)
May 19	Berlin (DE)
Jun 10	Zurich (CH)
Jul 14	New York City (US)
Jul 15	New York City (US)

MOBILITY FOR TOMORROW

SCHAEFFLER



NORTH AMERICAN INTERNATIONAL
AUTO SHOW®