2017 Investor Day

New York City | December 12, 2017

Sensata Technologies



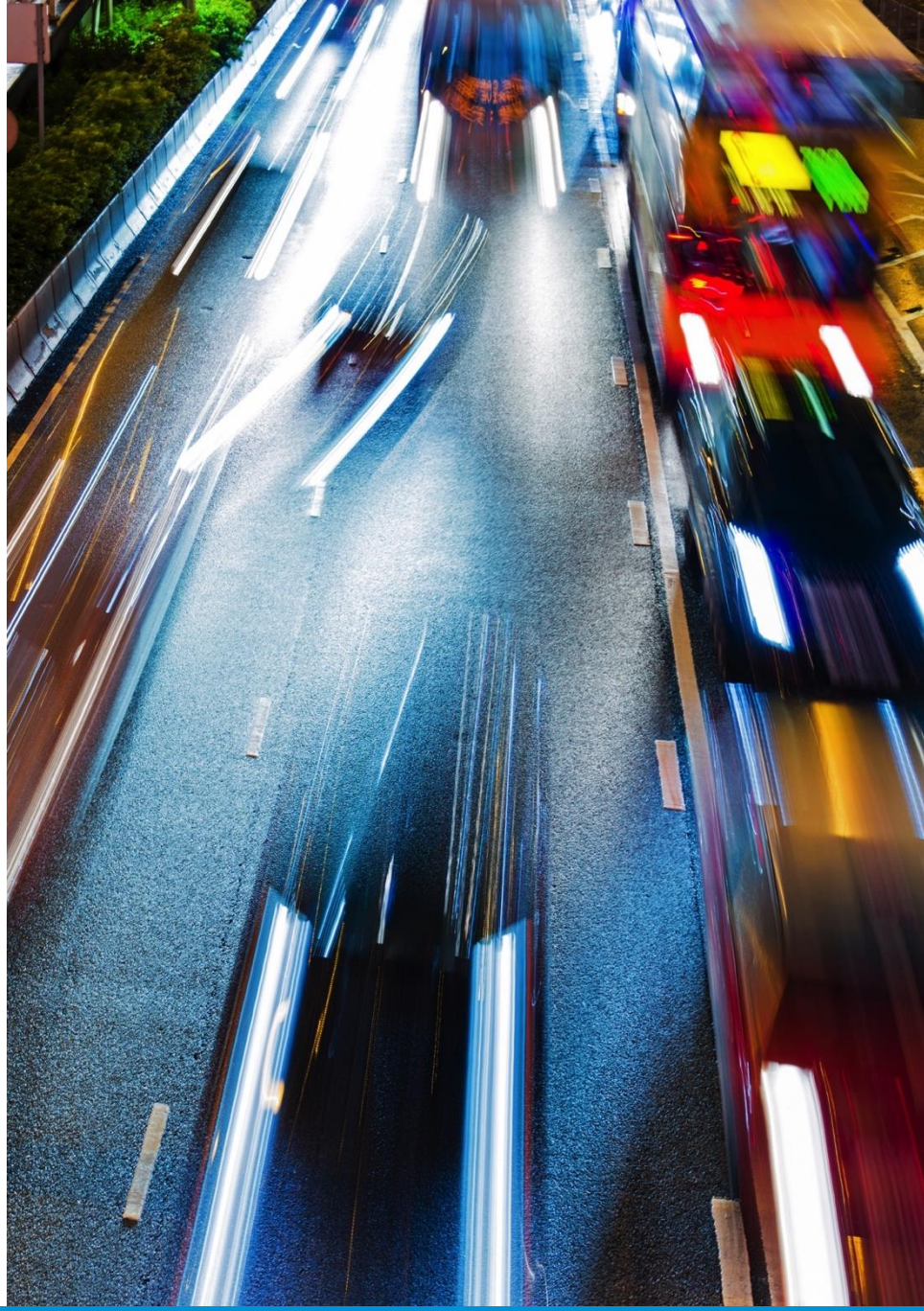
ACCELERATING GROWTH, WHILE INVESTING FOR LONG-TERM TRENDS IN ELECTRIFICATION & AUTONOMY

Steven Beringhause

CTO and EVP of Performance Sensing

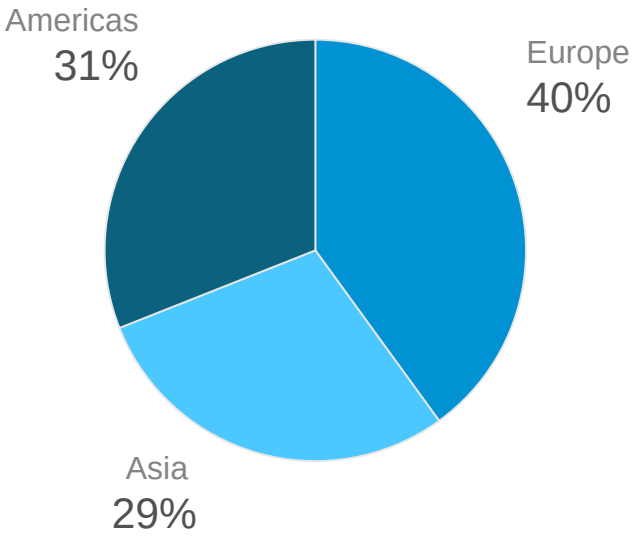
Overview of Auto Business

- ✓ Global leader in the largest end market for sensing, enabling scale and strong customer positions
- ✓ Mission-critical, hard–to–do, stringent-specification sensing applications
- ✓ History of successfully capitalizing on discontinuities in the marketplace

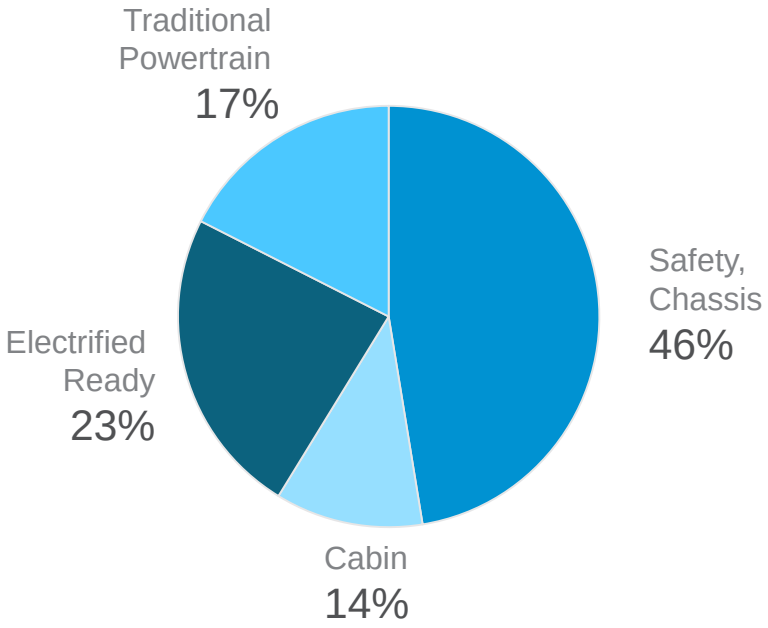


Today's Auto business is well-positioned with customers and technologies to deliver future growth

FY-17E REVENUE BY GEOGRAPHY



FY-17E REVENUE BY VEHICLE SEGMENT



Global and Regional Customers:

- OEMS
- System Suppliers
- Tier 1 Assembly Suppliers
- Direct engineer relationships

Technology/Competencies:

- Systems
- Application-Specific Integrated Circuits
- Wireless
- Software

We expect that three key trends will drive mid-single digit organic revenue over the next three years, already secured 90% of 2020E revenue

Next 3 Years



CLEAN & EFFICIENT

Mandates for cleaner, more efficient vehicles



ELECTRIFICATION

Further expansion of electrification



CHINA

Sustained vehicle modernization in China

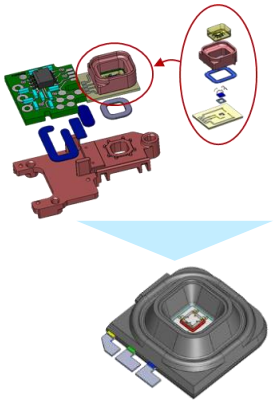


CLEAN & EFFICIENT

Building cleaner, high-efficiency powertrains drives significant growth over the next three years



Better On-Board Diagnostics
Sensors diagnose fuel vapor leakage



Low Pressure Focus
Leveraging the Schrader acquisition low pressure MEMS technology

Better Combustion
Tighter control of amount and location of fuel injection

8 & 9 Speed Transmission
Sensors to control higher speed transmission



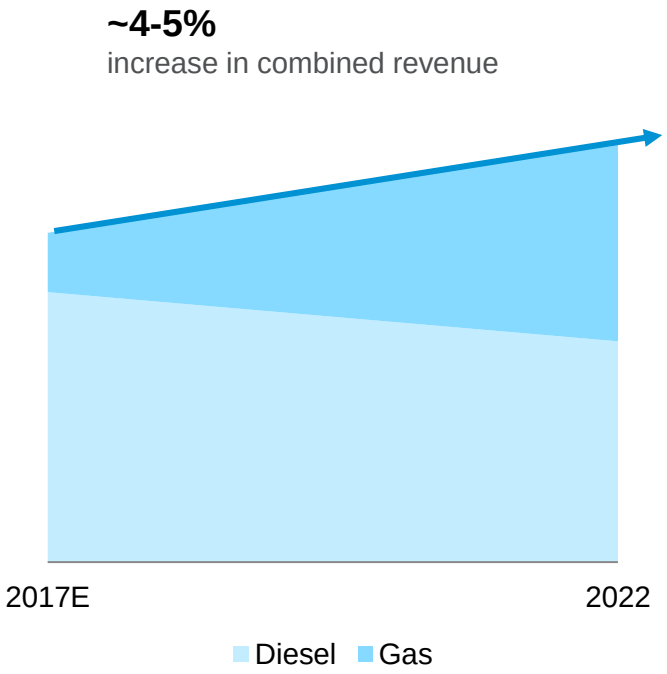
Reduced Tailpipe Emissions
Need for reduced combustion temperatures, controlled by sensors



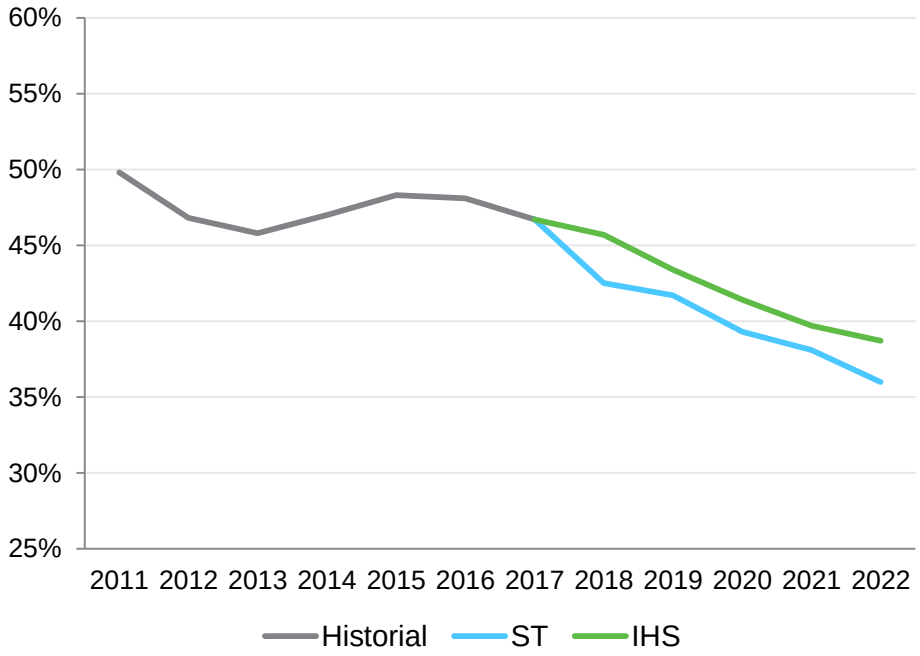
Lower Particle Counts
Gasoline Particulate Filters in the exhaust, enabled by pressure and high temperature sensors

We are planning for a more prominent drop of diesel share in Europe, but this is more than offset from content gains on gasoline engines

EUROPE ENGINE/EXHAUST REVENUE



EUROPE DIESEL PRODUCTION MARKET SHARE





ELECTRIFICATION

Electrification continues to be a tailwind adding opportunities to “measure” as vehicles further electrify







	Fleet Modernization, Electric Subsystems	More Efficient Hybrids	Generation 1 and 2 Battery Electric
NEED	Cleaner combustion engines, better passenger comfort and safety	Efficiency without sacrificing performance; work split between engine & electrified powertrain	Transition powertrain entirely to battery-powered electric motor
APPLICATION	Air conditioning systems; variable speed pumps; multispeed transmissions; outputs from on/off to continuous function	More efficient electrified subsystems, hybrid transmissions	Full thermal management, advanced braking systems

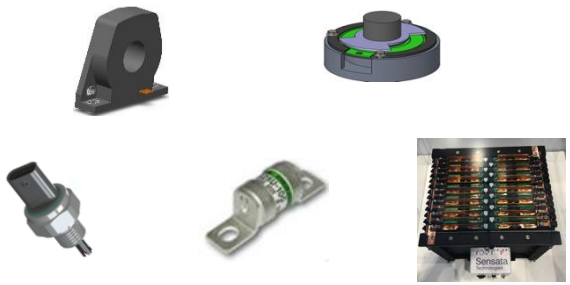


Future generation Electric Vehicles (EV) will drive increased opportunity

- ✓ **Hybrid Electric Vehicle (HEV)**
- ✓ **Plug-In EV**
- ✓ **Battery EV**

Battery/Fuel Cell
- Electrical Protection
- Current Sensing
- Battery Cell Management
- Battery Temperature Control
- Fuel Cell Pressure and Temperature

Engine/E-motor
- Electrical Protection
- E-Motor Position
- Electric Motor Cooling



> "The electric motor and control strategies are in their infancy. The engineers are just starting to figure out what they want to measure."
>
> *–VP Powertrain at an EV leading OEM 2017*

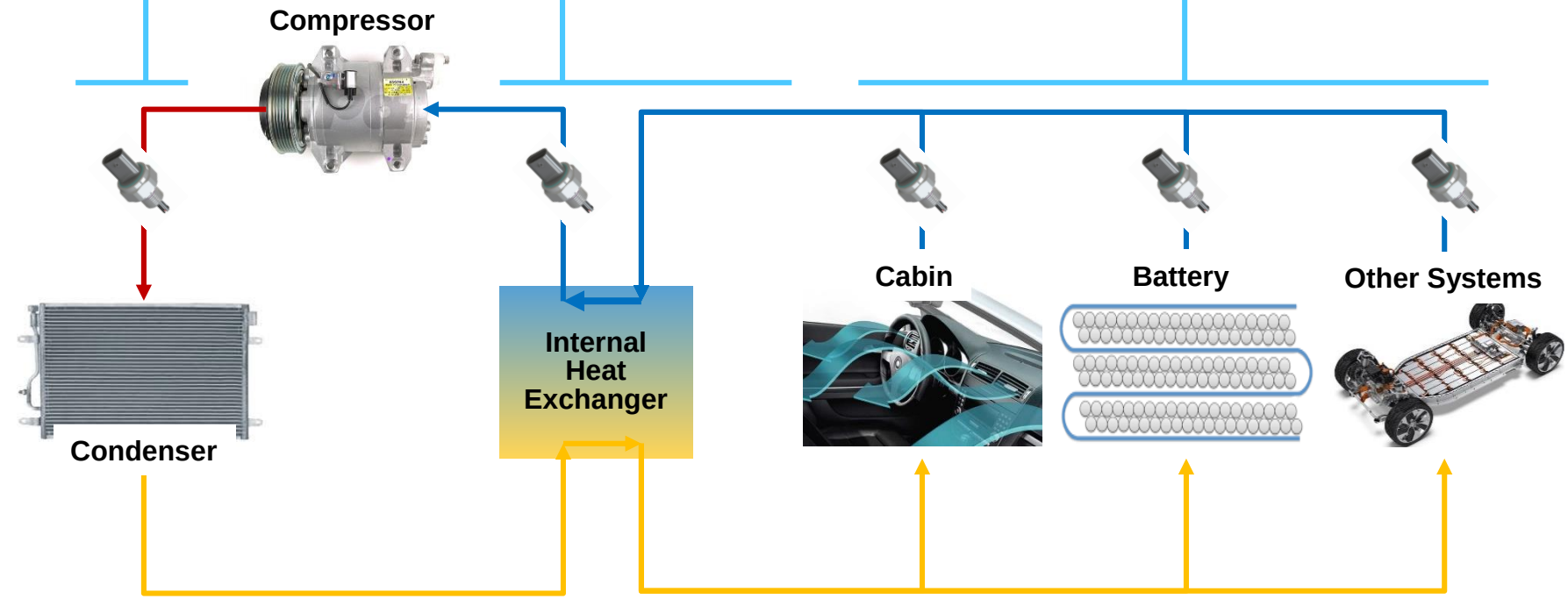


Case Study: HVAC transforms from one sensor to two – five sensors on a Battery Electric Vehicle

Conventional Vehicle
Air Conditioning only – **one** Sensor

Hybrid/Gen 1 Electric Vehicle
Heat plus Air Conditioning – **two** Sensors

Gen 2+ Electric Vehicle
Additional Cooling Loops – up to **five** Sensors





SLIDE 13 EXCLUDED FROM THIS DECK. SLIDE SHOWN AS PART OF LIVE, IN-ROOM PRESENTATION ONLY



CHINA

Our Auto Sensor Content per vehicle in China will increase 50% by 2020 as fleet modernization and electrification happen simultaneously

Electrification

- Electronic Stability Control System Pressure Sensor
- Air Conditioner Pressure and Temperature Sensor



Tire Pressure Monitoring System

- Tire Pressure Sensor
- Receivers

High Efficient Clean Powertrain

- Oil Pressure Sensor
- Fuel Pressure Sensors
- Fuel Vapor Pressure Sensors
- Exhaust Pressure and High Temperature Sensors

Strong value proposition to Chinese customers helps drive growth

We look like a local Chinese company and have had a local presence for more than 20 years

- Local engineer to engineer contact – products for China are developed in China
- Local management with local decision-making responsibility
- Local manufacturing in China

Gives customers confidence Sensata is there to support them

We leverage our global products and global team for support

- We can take technology/products developed around the world and apply them in China
- Leverage application experience and learning from solving customer problems in other regions

Gives customers confidence our parts will work in their applications

Strong local team

- Local decision-making with global support is also a unique value proposition for employees
- Results in a strong local team with low single-digit turnover

Results in a high growth rate at high margins

Autonomy adds an additional longer-term growth driver



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ELECTRIFICATION

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CHINA

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AUTONOMY

Enabling autonomy and operational efficiencies

Sensata is well-positioned to capitalize on a large, attractive market for autonomous vehicles



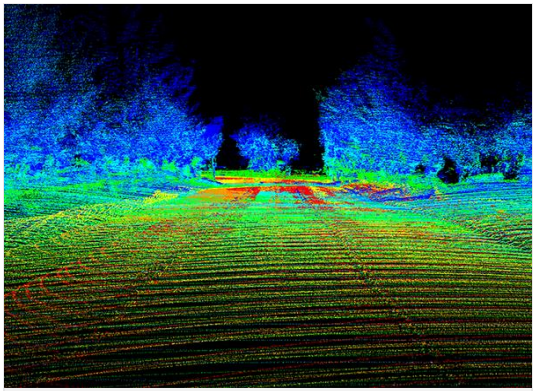
WHAT'S THE HEALTH OF MY VEHICLE?

Monitoring the health of the vehicle for better fleet management



WHERE AM I?

Providing additional inputs to enable more accurate and timely decisions into the automated driving ecosystem



WHAT'S AROUND ME?

Providing an understanding of the environment around the vehicle

Sensata and Quanergy as partners are taking a differentiated approach to LiDAR sensors

SENSATA has well-established automotive credibility

QUANERGY is a leader in Solid State LiDAR

CES INNOVATION AWARDS 2017 BEST OF INNOVATION



Technology includes

- no moving parts – meets automotive reliability and quality requirements
- **Software** configurable scanning

Key takeaways

- ✓ Clean and efficient gasoline engines, electrification and China will accelerate near-term growth in the auto business
- ✓ Discontinuities of electrification and autonomy drive huge opportunities for Sensata
- ✓ Auto business, through strong customer engagements and technology competencies, is well positioned to capitalize on these opportunities

