
Hitachi Astemo, Ltd. Business Strategy

Brice Koch
President & CEO
Hitachi Astemo, Ltd.
January 18, 2021

- **Hitachi Astemo aims at making our planet sustainable for future generations**
 - Building on the strength of its 4 founding companies
- **Hitachi Astemo a global leader to stay ahead of CASE**
 - Good balance among customers and regions
 - Leading market share in focused area
 - xEV, selected ICE, chassis, key motorcycle products and solutions
 - Concentrate R&D on growth area with leveraging Hitachi R&D capability
 - xEV, AD/ADAS, advanced chassis, next generation 2-wheeler
- **Hitachi Astemo creates value for stakeholders**
 - Synergy creation of 60BJPY in FY25
 - Sales CAGR at 2x the market and 15% EBITDA margin in FY25
 - Realize carbon neutrality in production lines by 2030
 - Reduce CO₂ emission from product usage by 50% by 2030

Introduction

Astemo

Advanced Sustainable Technologies for Mobility

Established

January 1, 2021

Consolidated number of employees

90,000

Global presence:

Locations in 27 countries

Shareholders

Hitachi, Ltd. 66.6% Honda Motor Co., Ltd. 33.4%

**Contribution to
Society**

Improve safety, comfort and quality of life with AD/ADAS systems and advanced chassis

**Contribution to
Environment**

Electrification systems with efficient and sustainable technologies

**Economic
Contribution**

**FY2021: ~1.6 TJPY of sales and >10% EBITDA
FY2025: ~2.0 TJPY of sales and ~15% EBITDA**

Accelerating towards carbon neutrality

- Governments promoting policy to achieve NetZero CO₂ emission

CASE technologies demand increasingly large investment in R&D, especially software

- Dramatic rise in R&D expense among OEMs

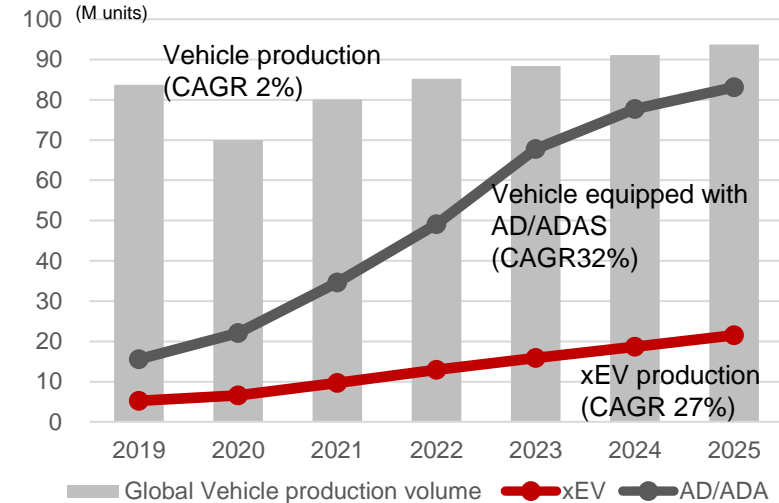
COVID-19

- Unprecedented impact on the Auto industry
- Decline in global production expected to continue at least until end of FY2020
- China recovered, U.S. recovery from FY2021, Europe and ASEAN recovery from FY2022
- Vehicle production approx. 2% CAGR* with xEV & AD/ADAS expected >25% CAGR*

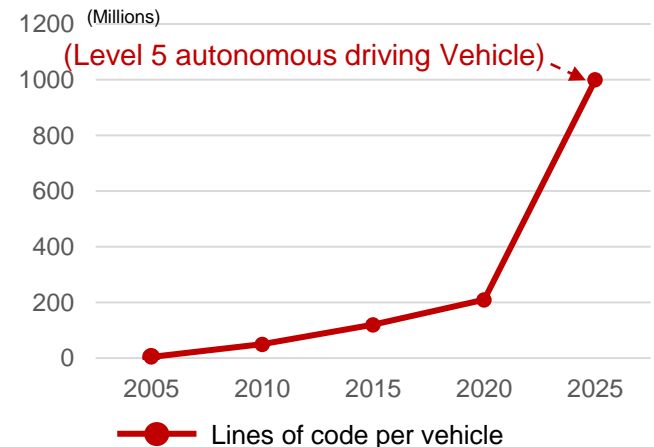
*Compound Average Growth Rate (2019-25), Source: IHS, McKinsey & Company

CASE: Connected, Autonomous, Service/shared, Electrified, , xEV: Electric Vehicle, AD: Autonomous Driving, ADAS: Advanced Driver Assistance System, CAGR: Compound Average Growth Rate

Global vehicle production vs xEV AD/ADAS



Dramatic increase in vehicle software



Source: https://www.volkswagenag.com/presence/investorrelation/publications/presentations/2020/01-januar/January_2020_VWAG_Investor_Roadshow.pdf

Built to succeed as an independent, global supplier driving innovation, contributing to a greener world and improving quality of life

Astemo

KEIHIN

SHOWA

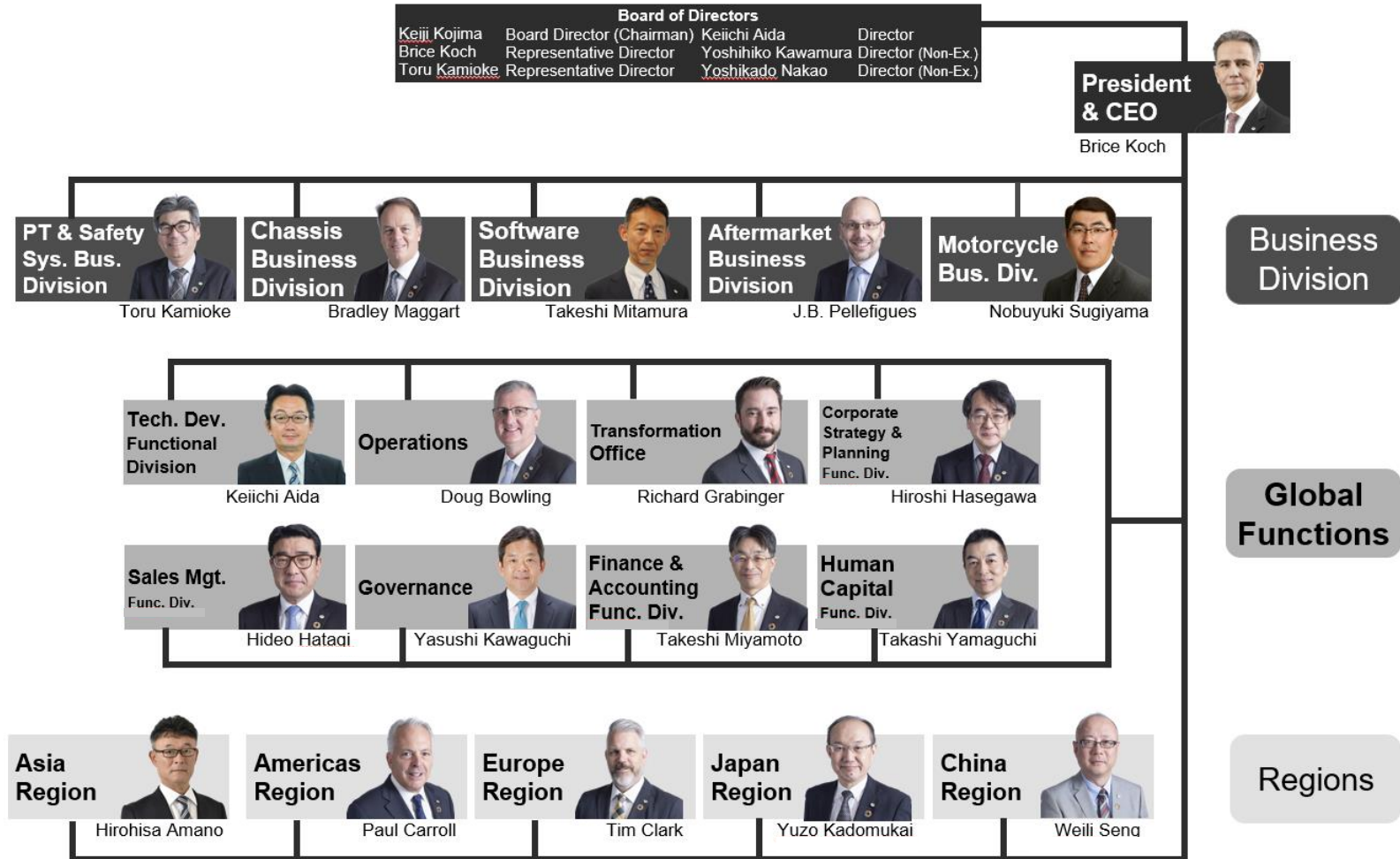
NISIN

 **Hitachi Automotive Systems**

- **Advanced technologies** that define tomorrow's mobility solutions
- **Market leadership** in selected core products and solutions
- **Business scale and comprehensive footprint** to better serve customers

Best partner for our customers globally

Hitachi Astemo leadership



- Optimal talent from 4 companies
- Composed of American, Austrian, Chinese, French, Japanese and Swiss nationals

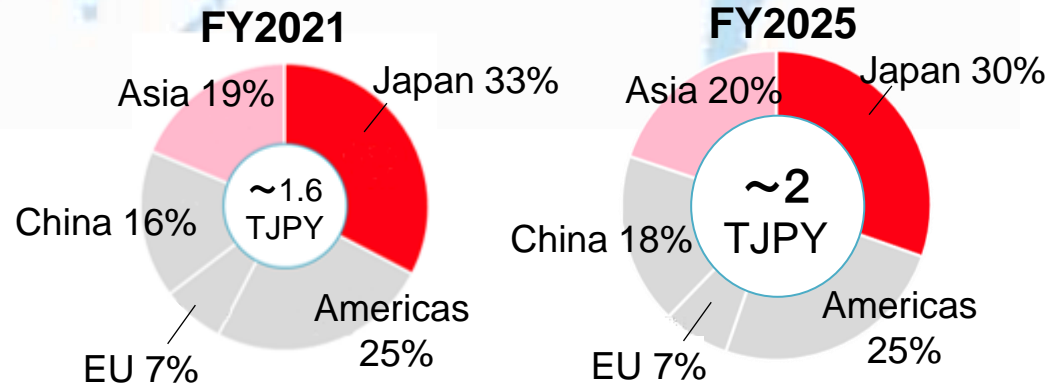
Strategy

Serving customers around the world



141 sites worldwide	
Americas	29
Asia	37
China	24
Europe	13
Japan	38

Regional sales ratio



Leverage scale and technology to achieve and upgrade global leadership

Region	Strategy
Americas	<ul style="list-style-type: none">• Expand sales of xEV through the existing delivery programs expected to grow• Leverage alliances between global OEMs for horizontal expansion
Asia	<ul style="list-style-type: none">• Propose attractive 2W products with each company's strengths combined• Promote 4W xEV & ADAS for India responding to increasing needs for advanced technologies
China	<ul style="list-style-type: none">• Expand sales of xEV products to customers including local independent OEMs on the basis of existing programs• Pursue opportunities for alliances in e-Axle sub-system for growing EV demands
Europe	<ul style="list-style-type: none">• Promote as more reliable partner for OEMs leveraging assets of seneos & CBI• Expand xEV businesses with global horizontal expansion with the strategies of EU customers
Japan	<ul style="list-style-type: none">• Leverage our position as a global mega supplier with innovative technologies to promote further alliances• Combine capabilities of Hitachi group and partners in focused business areas

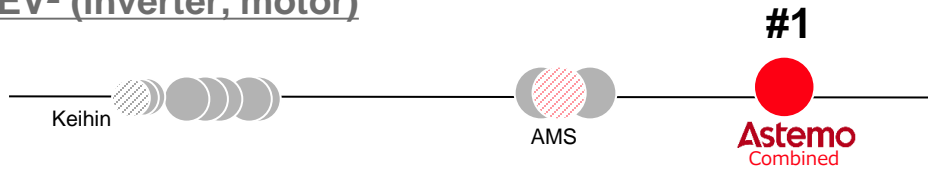
Leading market share in focused areas

Percentage of sales from global top 3 products:

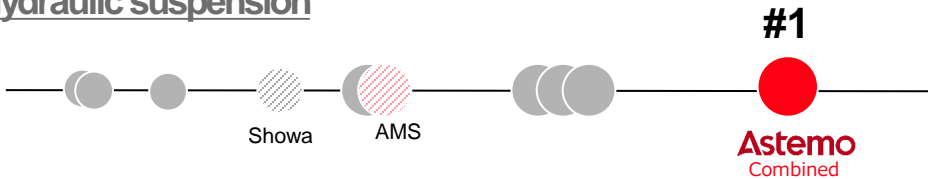
2018¹ 20% 2020¹ 40% 2021 50% 2025 >60%

4W Relative market share of focused products
0.0 0.2 0.4 0.6 0.8 1.0 1.2

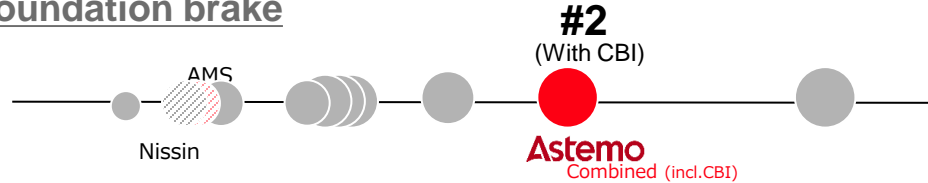
xEV² (inverter, motor)



Hydraulic suspension



Foundation brake



Engine / AT control unit



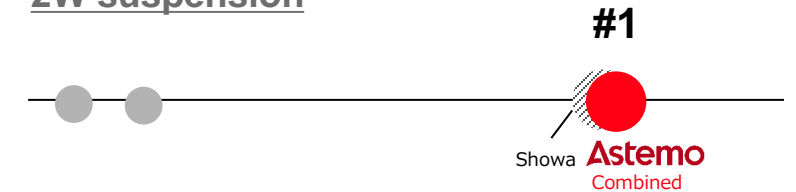
2W Relative market share of focused products

0.0 1.0 2.0 3.0 4.0

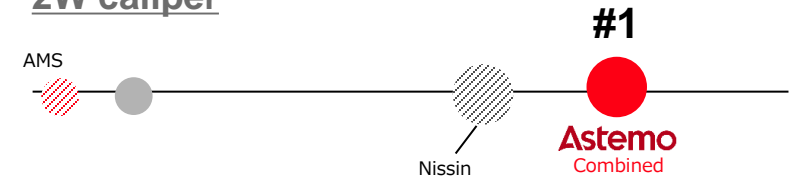
2W throttle body



2W suspension



2W caliper



1. Pro-forma figures of each company's results combined. 2. Based on FY25 sales value basis; inverter + motor; excluding in-house players.

Note: Relative market share : market share against that of its largest competitor (against No.1 or in case of No.1, against No.2), based on FY18 volume (except xEV).

Source: Companies IR documents; Company websites; IHS

Shifting to growth areas

Position	Category	Direction	Growth '20→30
Leverage full potential <i>Optimized investment</i>	Selected ICE	Invest selectively in last-man-standing offerings <ul style="list-style-type: none"> Focus on fuel efficiency technologies combined with HEV 	
	Chassis components	Maximize synergies <ul style="list-style-type: none"> Global leadership with scale, footprint and technologies 	
	2-wheeler	Strengthen market positioning <ul style="list-style-type: none"> Leverage 4-wheel technologies 	
	Aftermarket	Leverage growth potential <ul style="list-style-type: none"> Broaden product portfolio 	
Concentrate R&D on growth area with fully leveraging Hitachi R&D capability			
Prioritized investment Future growth engines	xEV	Prioritized investment to capture market growth <ul style="list-style-type: none"> Sustain global leader position for motors, inverters & software 	
	AD/ADAS	Focused investment in high potential products <ul style="list-style-type: none"> Leadership in ECU & software collaborating with Hitachi, Ltd. 	
	Advanced Chassis	Create new value for safety & comfort <ul style="list-style-type: none"> Integrated control of Brakes, Suspension and Steering 	
	Next gen. 2-wheel	Propose new technologies and solutions <ul style="list-style-type: none"> Enhance electrification and attitude control 	

ICE: Internal Combustion Engine, HEV: Hybrid Electric Vehicle, AD: Autonomous Driving, ADAS: Advanced Driver Assistance System, xEV: Electric vehicle, 2W: 2-wheeler, ECU: Electronic Control Unit

Redefine mobility for social innovation

- Eliminate mobility restrictions and contribute to the goal of zero traffic accidents
- Contribute to environmental sustainability with zero emissions of carbon dioxide

Enhance the higher level of Integration for Environment, safety and comfort

- Multi-modal transport solutions
- Mobility as a service
- Energy management system



- Cyber security
- Data accumulation and AI analysis
- OTA

Astemo

Connected car technologies
Onboarding device and software

AD/ADAS
Advanced environment recognition
Integrated electronic control

xEV
Advanced electric powertrain package

Advanced Chassis
Integrated vehicle movement control

Leverage 4-wheel technologies in motorcycles

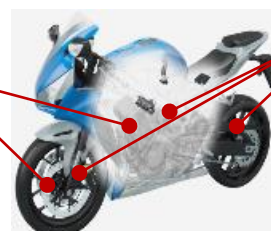
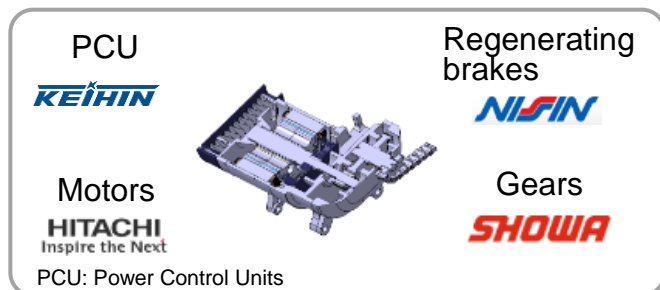
- Engine control for tighter emission regulation
- Chassis control technologies
- Electrification

Further improve competitiveness leveraging leadership position

- Optimize customer pipeline, manufacturing technologies, local suppliers, etc.
- Component and technology integration, in-house production

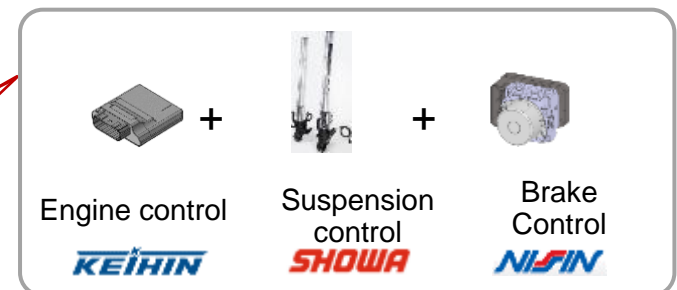
Technologies

Electrification (e-Axle)



Investment

Attitude control technology for safety



Create new value for next generation motorcycle components / systems

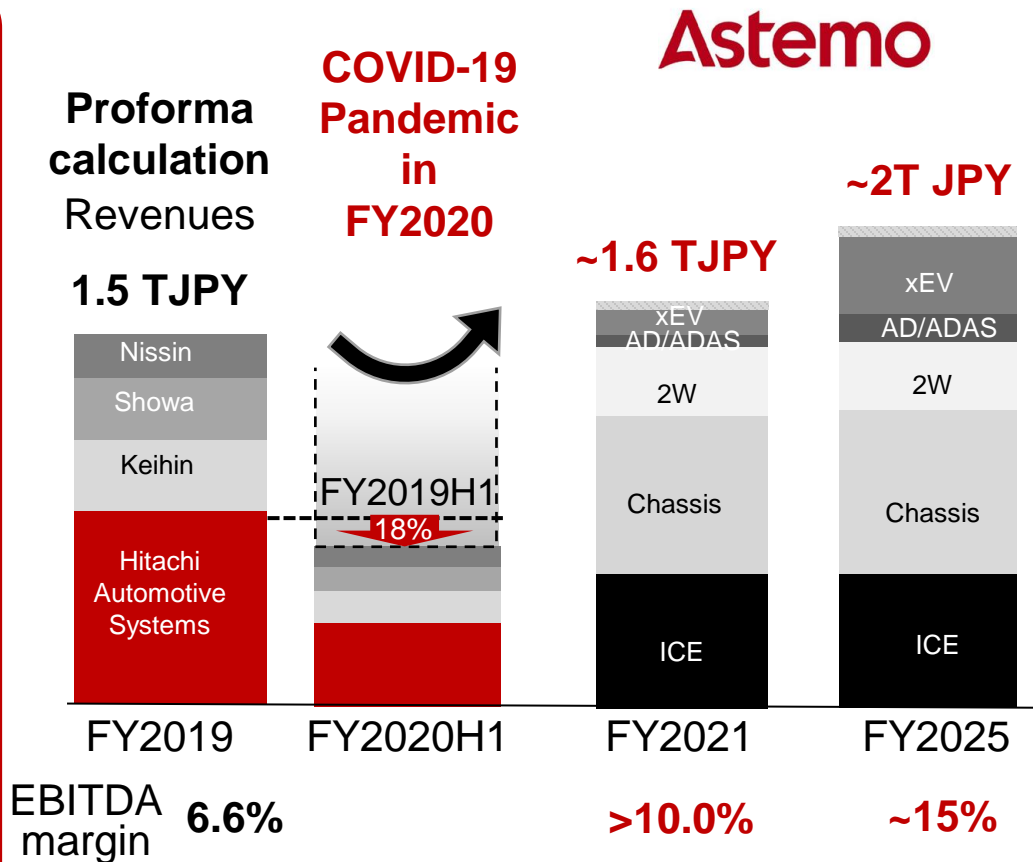
Value

Building a solid future

From pre-merger to Astemo and beyond

Internal initiatives

- Strengthen portfolio**
- Enhance competitive advantages**
- Invest in critical enablers**
- Address risks and growth**



Anticipated results

- #1 - #3**
Market position
- Sales**
~2x CAGR
- Vehicle production**
- Industry-leading**
~15%
EBITDA margin

xEV: Electric vehicle, AD: Autonomous Driving, ADAS: Advanced Driver Assistance System, 2W: 2-wheeler, ICE: Internal Combustion Engine
EBITDA: Earnings Before Interest Taxes Depreciation and Amortization

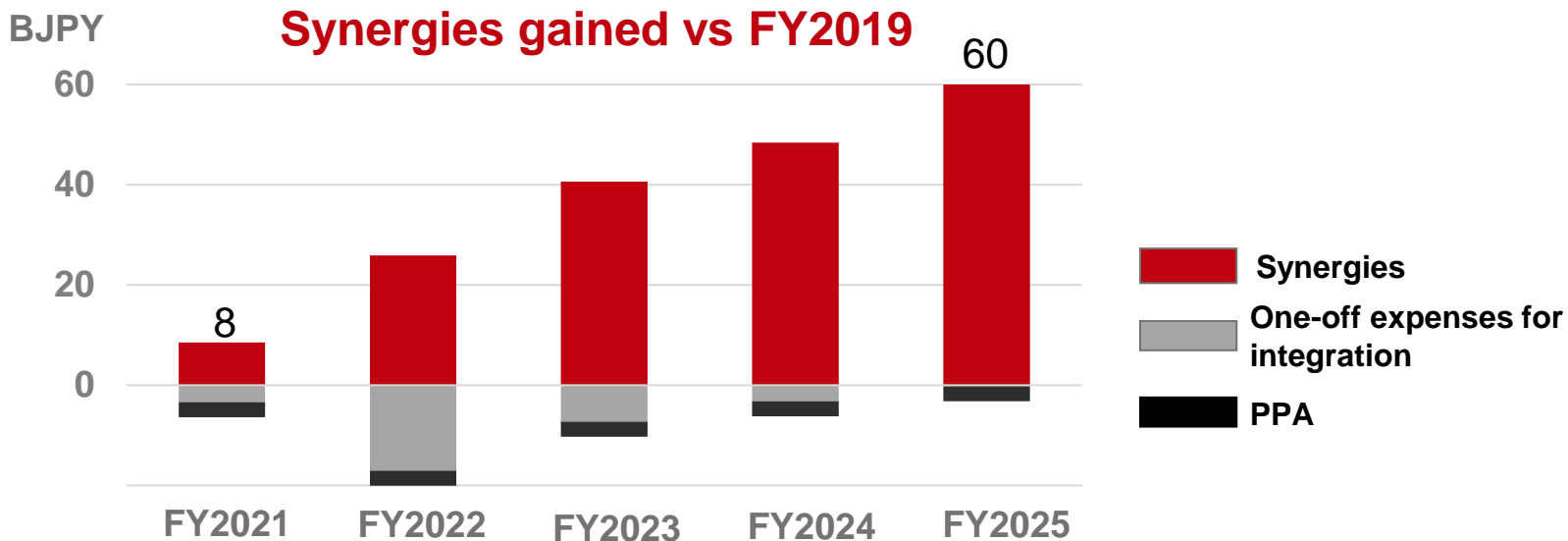
Key components of Astemo transformation activities

Strengthen portfolio	Enhance competitive advantages	Invest in critical enablers	Address risks and growth
<ul style="list-style-type: none"> • Global leadership in xEV, ADAS and advanced chassis • Refocus on selected ICE • Motorcycle expansion, leveraging footprint and CASE solutions 	<ul style="list-style-type: none"> • Supply Chain savings • Optimized plant ops/ footprint • Lean SG&A • Quality: Further improve quality 	<ul style="list-style-type: none"> • Superior visibility and efficiency thanks to BI & digitalization • Integrate quality in all processes • Enhance Software capabilities further • Optimal Global Operating Model supporting business • HR & Culture 	<ul style="list-style-type: none"> • M&A risk • Implementation and mobilization risk • Sales excellence: grow with focus OEM & CASE

Fully capture the value of Hitachi Astemo

xEV: Electric vehicle, ADAS: Advanced Driver Assistance System, ICE: Internal Combustion Engine, CASE: Connected, Autonomous, Service/shared, Electrified, SG&A: Selling, General and Administrative Expenses, BI: Business Intelligence, HR: Human Resources

Synergy plan summary (FY2021-2025)



Supply Chain

- Best-of prices
- “Make or Buy”
- Optimize supplier base
- Leverage scale

R&D

- Product/program overlap integration and optimization

Sales

- Optimize sales synergies across OEMs
- Leverage sales footprint and structure

Footprint

- CAPEX and logistics optimization

G&A

- Simplify and enhance efficiencies

Quality

- Leverage best-practice

CAPEX: Capital Expenditure, PPA: Purchase Price Allocation

Astemo for a greener future

Governments trending towards NetZero policy

EU

NetZero by 2050

China

NetZero by 2060

Japan

NetZero by 2050

USA

NetZero by 2050

Target

Factories: Realize “carbon neutrality” in production lines by 2030

Products: Reduce CO₂ emission from product usage by 50% by 2030


Carbon neutral in factories

- Improve production efficiency including optimization of manufacturing sites
- Retrofit and renew equipment for energy savings
- Maximize renewable energies



Dong Guan Keihin

50% CO₂ emission reduction from products

- **Provide highly efficient electrification components** 
- Contribute to improved fuel consumption
 - Engine management technologies
 - Fuel saving through AD/ADAS
 - Weight saved chassis components

AD: Autonomous Driving, ADAS: Advanced Driver Assistance System

Built to make the world a better place



Society

Astemo contributes to a safer and sustainable society

- Efficient and sustainable technologies
- Products with reduced emissions
- Improving safety, comfort and quality of life for all

Customers

Astemo is a unique partner in redefining mobility

- Collaborating on increasingly advanced solutions
- Increased scale
- Global leadership
- Global footprint

Astemo

Employees

Astemo provides the opportunity to create next generation technologies

- Career opportunities
- Diverse and global
- Working together to create next generation technologies

Investors

Astemo persistently increases value for stakeholders and improves ROI

- Social value
- Environmental value
- Economic value

Hitachi Social Innovation is

POWERING GOOD

HITACHI
Inspire the Next 

Reference: About Dr. Brice Koch



Dr. Brice Koch

Apr 2018	President & CEO, Hitachi Automotive Systems, Ltd.
May 2017	Executive Advisor to Group CEO (Strategy), Hitachi, Ltd.
Jan 2014	CEO, OC Oerlikon Group
Feb 2012	Member of Group Executive Committee, ABB, Ltd. Executive VP, Head of Power Systems Division
Jan 2010	Member of Group Executive Committee, ABB, Ltd. Executive VP, Head of Marketing & Customer Solutions
Jan 2007	ABB North Asia President Chairman & President of ABB (China) Ltd.
Jan 2002	Business Area Mgr. for Transformers & Components Group SVP & Member of Power Technology Global Div. Mgt. Team
Jan 1999	Business Unit Manager for Railway Systems, ABB, Ltd.
Feb 1994	Joined ABB, Various Mgt. Positions until Jan. 1999
Aug 1993	PhD in Material Science Swiss Federal Institute of Technology (ETH), Zurich, Switzerland
Feb 1990	Assistant Professor Swiss Federal Institute of Technology (ETH), Zurich, Switzerland
Sep 1984	Moved to Switzerland
May 1964	Born in Mulhouse, France

Cautionary Statement

Certain statements found in this document may constitute “forward-looking statements” as defined in the U.S. Private Securities Litigation Reform Act of 1995. Such “forward-looking statements” reflect management’s current views with respect to certain future events and financial performance and include any statement that does not directly relate to any historical or current fact. Words such as “anticipate,” “believe,” “expect,” “estimate,” “forecast,” “intend,” “plan,” “project” and similar expressions which indicate future events and trends may identify “forward-looking statements.” Such statements are based on currently available information and are subject to various risks and uncertainties that could cause actual results to differ materially from those projected or implied in the “forward-looking statements” and from historical trends. Certain “forward-looking statements” are based upon current assumptions of future events which may not prove to be accurate. Undue reliance should not be placed on “forward-looking statements,” as such statements speak only as of the date of this report.

Factors that could cause actual results to differ materially from those projected or implied in any “forward-looking statement” and from historical trends include, but are not limited to:

- exacerbation of social and economic impacts of the spread of COVID-19;
- economic conditions, including consumer spending and plant and equipment investment in Hitachi’s major markets, as well as levels of demand in the major industrial sectors Hitachi serves;
- exchange rate fluctuations of the yen against other currencies in which Hitachi makes significant sales or in which Hitachi’s assets and liabilities are denominated;
- uncertainty as to Hitachi’s ability to access, or access on favorable terms, liquidity or long-term financing;
- uncertainty as to general market price levels for equity securities, declines in which may require Hitachi to write down equity securities that it holds;
- fluctuations in the price of raw materials including, without limitation, petroleum and other materials, such as copper, steel, aluminum, synthetic resins, rare metals and rare-earth minerals, or shortages of materials, parts and components;
- estimates, fluctuations in cost and cancellation of long-term projects for which Hitachi uses the percentage-of-completion method to recognize revenue from sales;
- increased commoditization of and intensifying price competition for products;
- uncertainty as to Hitachi’s ability to attract and retain skilled personnel;
- uncertainty as to Hitachi’s ability to continue to develop and market products that incorporate new technologies on a timely and cost-effective basis and to achieve market acceptance for such products;
- fluctuations in demand of products, etc. and industry capacity;
- uncertainty as to Hitachi’s ability to implement measures to reduce the potential negative impact of fluctuations in demand of products, etc., exchange rates and/or price of raw materials or shortages of materials, parts and components;
- credit conditions of Hitachi’s customers and suppliers;
- uncertainty as to Hitachi’s ability to achieve the anticipated benefits of its strategy to strengthen its Social Innovation Business;
- uncertainty as to the success of acquisitions of other companies, joint ventures and strategic alliances and the possibility of incurring related expenses;
- uncertainty as to the success of restructuring efforts to improve management efficiency by divesting or otherwise exiting underperforming businesses and to strengthen competitiveness;
- general socioeconomic and political conditions and the regulatory and trade environment of countries where Hitachi conducts business, particularly Japan, Asia, the United States and Europe, including, without limitation, direct or indirect restrictions by other nations on imports and differences in commercial and business customs including, without limitation, contract terms and conditions and labor relations;
- the potential for significant losses on Hitachi’s investments in equity-method associates and joint ventures;
- uncertainty as to the success of cost structure overhaul;
- the possibility of disruption of Hitachi’s operations by natural disasters such as earthquakes and tsunamis, the spread of infectious diseases, and geopolitical and social instability such as terrorism and conflict;
- uncertainty as to the outcome of litigation, regulatory investigations and other legal proceedings of which the Company, its subsidiaries or its equity-method associates and joint ventures have become or may become parties;
- the possibility of incurring expenses resulting from any defects in products or services of Hitachi;
- uncertainty as to Hitachi’s ability to maintain the integrity of its information systems, as well as Hitachi’s ability to protect its confidential information or that of its customers;
- uncertainty as to Hitachi’s access to, or ability to protect, certain intellectual property; and
- uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its employee benefit-related costs.

The factors listed above are not all-inclusive and are in addition to other factors contained elsewhere in this report and in other materials published by Hitachi.