Hitachi Astemo, Ltd. Business Strategy

Brice Koch
President & CEO
Hitachi Astemo, Ltd.
January 18, 2021
Summary – Launched to make the world a better place

• 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
What Astemo stands for

**Astemo**

**Advanced Sustainable Technologies for Mobility**

- **Established**
  January 1, 2021

- **Global presence:**
  Locations in 27 countries

- **Consolidated number of employees**
  90,000

- **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

AD: Autonomous driving, ADAS: Advanced Driver Assistance System, EBITDA: Earnings Before Interest Taxes Depreciation and Amortization
Industry & market dynamics

**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

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**Global vehicle production vs xEV AD/ADAS**

**Dramatic increase in vehicle software**

- Levels 3-5 autonomous driving Vehicle

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Opportunity to create next generation solutions

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

- 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

PT: Powertrain
Strategy
Comprehensive global coverage

Serving customers around the world

Regional sales ratio

FY2021
- Asia 19%
- Japan 33%
- China 16%
- EU 7%
- Americas 25%

~ 1.6 TJPY

FY2025
- Asia 20%
- Japan 30%
- China 18%
- EU 7%
- Americas 25%

~ 2 TJPY

141 sites worldwide

<table>
<thead>
<tr>
<th>Region</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Americas</td>
<td>29</td>
</tr>
<tr>
<td>Asia</td>
<td>37</td>
</tr>
<tr>
<td>China</td>
<td>24</td>
</tr>
<tr>
<td>Europe</td>
<td>13</td>
</tr>
<tr>
<td>Japan</td>
<td>38</td>
</tr>
</tbody>
</table>
## Global synergies and opportunities

**Leverage scale and technology to achieve and upgrade global leadership**

<table>
<thead>
<tr>
<th>Region</th>
<th>Strategy</th>
</tr>
</thead>
</table>
| Americas | • Expand sales of xEV through the existing delivery programs expected to grow  
• Leverage alliances between global OEMs for horizontal expansion |
| Asia    | • Propose attractive 2W products with each company’s strengths combined  
• Promote 4W xEV & ADAS for India responding to increasing needs for advanced technologies |
| China   | • 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  | • 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   | • 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 |

xEV: Electric Vehicle, ADAS: Advanced Driver Assistance System, 2/4W: 2/4-wheeler, CBI: Chassis Brakes International
Leading market share in focused areas

Percentage of sales from global top 3 products:

<table>
<thead>
<tr>
<th>4W</th>
<th>2018</th>
<th>2020</th>
<th>2021</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>4W</td>
<td>20%</td>
<td>40%</td>
<td>50%</td>
<td>&gt;60%</td>
</tr>
</tbody>
</table>

4W: 4-wheeler, 2W: 2-wheeler, xEV: Electric vehicle, AT: Automatic Transmission,
AMS: Hitachi Automotive Systems, CBI: Chassis Brakes International

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

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

<table>
<thead>
<tr>
<th>Position</th>
<th>Category</th>
<th>Direction</th>
<th>Growth</th>
</tr>
</thead>
</table>
| Leverage full potential   | Selected ICE        | Invest selectively in last-man-standing offerings<br>
|                           |                     | • Focus on fuel efficiency technologies combined with HEV                   |        |
|                           | Chassis components  | Maximize synergies<br>
|                           |                     | • Global leadership with scale, footprint and technologies                  |        |
|                           | 2-wheeler           | Strengthen market positioning<br>
|                           |                     | • Leverage 4-wheel technologies                                            |        |
|                           | Aftermarket         | Leverage growth potential<br>
|                           |                     | • Broaden product portfolio                                                |        |
| Optimized investment      |                     |                                                                            |        |
|                           |                     | Concentrate R&D on growth area with fully leveraging Hitachi R&D capability|        |
| Prioritized investment    | xEV                 | Prioritized investment to capture market growth<br>
|                           |                     | • Sustain global leader position for motors, inverters & software           |        |
|                           | AD/ADAS             | Focused investment in high potential products<br>
|                           |                     | • Leadership in ECU & software collaborating with Hitachi, Ltd.             |        |
| Future growth engines     | Advanced Chassis    | Create new value for safety & comfort<br>
|                           |                     | • Integrated control of Brakes, Suspension and Steering                     |        |
|                           | Next gen. 2-wheeler | Propose new technologies and solutions<br>
|                           |                     | • 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
Ready for the CASE era

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

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

Creating the next generation motorcycle

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

Investment

Electrification (e-Axle)

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

Proforma calculation

COVID-19 Pandemic in FY2020

1.5 TJPY

Nissin
Showa
Keihin
Hitachi Automotive Systems

18%

FY2019H1

FY2019

EBITDA margin 6.6%

6.6%

FY2020H1

FY2020

>10.0%

FY2021

~1.6 TJPY

~2T JPY

xEV
AD/ADAS
2W
Chassis
ICE

xEV
AD/ADAS
2W
Chassis
ICE

FY2025

~15%

~15%

Anticipated results

#1 - #3

Market position

Sales

~2x CAGR

Vehicle production

Industry-leading

~15%

EBITDA margin


EBITDA: Earnings Before Interest Taxes Depreciation and Amortization

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### Key components of Astemo transformation activities

<table>
<thead>
<tr>
<th>Strengthen portfolio</th>
<th>Enhance competitive advantages</th>
<th>Invest in critical enablers</th>
<th>Address risks and growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Global leadership in xEV, ADAS and advanced chassis</td>
<td>• Supply Chain savings</td>
<td>• Superior visibility and efficiency thanks to BI &amp; digitalization</td>
<td>• M&amp;A risk</td>
</tr>
<tr>
<td>• Refocus on selected ICE</td>
<td>• Optimized plant ops/ footprint</td>
<td>• Integrate quality in all processes</td>
<td>• Implementation and mobilization risk</td>
</tr>
<tr>
<td>• Motorcycle expansion, leveraging footprint and CASE solutions</td>
<td>• Lean SG&amp;A</td>
<td>• Enhance Software capabilities further</td>
<td>• Sales excellence: grow with focus OEM &amp; CASE</td>
</tr>
<tr>
<td></td>
<td>• Quality: Further improve quality</td>
<td>• Optimal Global Operating Model supporting business</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• HR &amp; Culture</td>
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**Fully capture the value of Hitachi Astemo**

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

Economic contribution

Synergies gained vs FY2019

<table>
<thead>
<tr>
<th></th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>BJPY Synergies</td>
<td>8</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>One-off expenses for integration</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PPA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

CAPEX: Capital Expenditure, PPA: Purchase Price Allocation
Governments trending towards NetZero policy

<table>
<thead>
<tr>
<th>EU</th>
<th>China</th>
<th>Japan</th>
<th>USA</th>
</tr>
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<tbody>
<tr>
<td>NetZero by 2050</td>
<td>NetZero by 2060</td>
<td>NetZero by 2050</td>
<td>NetZero by 2050</td>
</tr>
</tbody>
</table>

**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

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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

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

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