The Hitachi Group's Initiatives for Carbon Neutrality

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1 Hitachi’s Business

The figures are based on the new segment classifications effective from FY2022.

* Hitachi Construction Machinery was deconsolidated on August 23, 2022. Hitachi Metals are scheduled to be deconsolidated in FY2022.

Source: Aibel

Revenues 10,264.6 Billion yen (FY2021)
Support people’s quality of life with data and technology that fosters a sustainable society

Revenues growth: 5%-7% (FY2021-FY2024 CAGR)

Adjusted EBITA Margin: 12%

EPS*1 growth: 10%-14% (FY2021-FY2024 CAGR)

Core FCF*2 (3-year cumulative): 1.4 trillion yen

Approx. 50% of this returned to shareholders

*1 Share buybacks included  *2 Core FCF = Cash flows from operating activities – CAPEX

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3 What is Lumada?

Managed services

**MAINTAIN**
- Operate, maintain and assess for the next step
- Understand customers’ management challenges
  - Predictive Maintenance

**PLAN**
- Design Thinking
  - Develop solutions with IT/OT/Products
  - AI tools/Methodologies/Use Cases/Solutions
  - Remote/Automation
  - Digital Twin

**BUILD**
- System integration

**OPERATE**
- Connected products

DIAGRAM:
- Lumada cycle: Understand, Plan, Build, Operate, Maintain
4 Hitachi’s GX Strategy

Decarbonize Hitachi activities through Scope 1 & 2 net zero commitment by 2030 and Scope 3 by 2050
- Invest in energy saving and renewable energy generation projects
- Accelerate scope 3 reduction, through supplier management, product redesign and engagement targets with key clients

Enable other companies to reduce CO2 emissions through enhanced product offering
- Shift toward a greener product portfolio (to reduce emissions during product operation)
- Offer E2E solutions (e.g., carbon management platform, XaaS services)
- Invest in new green technologies to extend current product portfolio
Lead decarbonization globally with Hitachi Energy to foster a sustainable society

**FY2024 Target**

**Contribution to CO2 reduction:**
- **Approx. 100 million tons/year**
  - (Equivalent monetary value\(^2\): **Approx. 1.1 trillion yen**)

### Customers

<table>
<thead>
<tr>
<th>Sector</th>
<th>T&amp;D</th>
<th>Non-fossil energy</th>
<th>Oil</th>
<th>Gas</th>
<th>Transport</th>
<th>Automobile (car/motorcycle)</th>
<th>Building</th>
<th>Industry</th>
<th>Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifecycle CO2 avoided emission in annual products shipped (^{1}) (equivalent monetary value breakdown)(^{2})</td>
<td>(\text{Approx. 89 million tons (Approx. 980 billion yen)})</td>
<td>(\text{Approx. 6.5 million tons (Approx. 72 billion yen)})</td>
<td>(\text{Approx. 7.2 million tons (Approx. 80 billion yen)})</td>
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### Value provided

- **Energy Transition**
  - **Green Energy & Mobility**
    - Carbon-free solution (HVDC systems)
    - Carbon-free mobility (Battery-powered tram)
    - R&D investment 200 billion yen

- **Electrification**
  - **Hitachi Astemo**
    - xEV components (EV motor/EV inverter)
    - R&D investment 300 billion yen

- **Energy Savings**
  - **Connective Industries**
    - Logistics (Ecosystem services connected by CPS)
  - **Digital Systems & Services**
    - Visualization of energy management (EcoAssist)

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\(^{1}\) Base year FY2013

\(^{2}\) Estimate carbon price as 11,000 yen per ton-CO2 and convert CO2 avoided emission by decarbonization solution into monetary value
World-class integrated system factory

Selected as a Lighthouse of the World Economic Forum

Established: 1969
Location: Omika-cho, Hitachi City, Ibaraki Prefecture
Site area: 200,000 m² (the area of about four Tokyo Domes)
On-site workers: About 4,000 (including Hitachi employees and staff from associated companies)
Business overview: Manufacturing, operation, and maintenance of information control systems focusing on social infrastructure
Data visualization and prediction of electricity demand
- Utilization of renewable energy from solar power and storage batteries.
- Suppression of peak demand by linking EMS with the production plan.
Co-create with stakeholders for realizing a decarbonized society with making growth possible

- Omika GX model
  - Decarbonization expertise
  - Green energy management
  - Ecosystem building

- Regional energy management platform
- Environmentally trusted digital platform

- Social infrastructure ecosystem

- Providing advice and technologies
- Education and research institutions
- Hitachi City
- Regional network formulation
- Renewable energy generation business
- Offsite PPA
- Financial institutions
- Supporting finance
- Green energy procurement
- Data linkage & Integration
- Technology cooperative creation
- Supplier
- Customers
- Companies

Hitachi City