Hitachi Energy Investor Days 2023
November 13-15, 2023
Switzerland and Sweden
Hitachi Energy Investor Days 2023

Welcome & Introduction

Claudio Facchin
Senior Executive VP, Hitachi, Ltd.
and CEO, Hitachi Energy

Hitachi Energy – Advancing a sustainable energy future for all
Health & Safety

-60% Recordable injuries (since 2017)
-25% Severity rate (since 2017)

Ethics & Integrity

2021
- Ethisphere’s Compliance Leader Verification™ and Anti-Bribery Management System Verification™
- ISO 37001 Anti-Bribery Management System global certification

2022

Lean Six Sigma used across operations

~2k Ongoing continuous improvement projects

30k+ Employees trained in Lean Six Sigma
We are well-positioned in attractive markets to accelerate the clean energy transition in collaboration with customers and partners as a market and technology leader in power grids.

We drive profitable and sustainable growth with our Hitachi Energy 2030 strategy, in line with the Hitachi Mid-term Management Plan 2024.

We will continue to invest in energy and digital platforms, creating social, environmental and economic value for customers, employees, investors and other key stakeholders.

We are committed to deliver sustainable growth in earnings and cash.
Hitachi Energy – Power Grids global technology and market leader

Global leader in Power Grids technologies

- >40,000 employees
- 90+ countries with 200 offices
- ~250 years’ heritage combined

Customers
- Utilities
- Industry
- Transport & Infrastructure

Offering
- Products
- Systems
- Software & Automation
- Services

Geographies
- Europe
- Americas
- Asia, Middle East & Africa

Total Energy System:
- Generation
- Transmission & distribution
- Consumption

Transform through low-carbon technologies and digital solutions
Accelerate the shift to renewable power generation
Expand and strengthen the transmission and distribution grid
Decarbonize through electrification
Enable sustainable energy carriers

% split based on FY 2022 orders
Hitachi Energy – Technology and market leader across all business units

**Grid Automation (GA)**
- Supporting 50% of the top 250 global electric utilities
- Leading Grid Edge references & > 5,000 MW\(^1\) grid integrated (including Ėks Energy)
- $4 trillion+ critical infrastructure assets managed

**Grid Integration (GI)**
- Global leader in HVDC\(^2\)
- >150 GW\(^3\) of HVDC links integrated into the power system
- 4,000+ power quality systems operating globally, across 50+ countries
- ~15,000 systems operating globally, across 50+ countries

**High Voltage Products (HV)**
- Installed 1 out of 4 high-voltage switchgear in the world
- >500k high-voltage circuit-breakers installed globally
- Leading EconiQ SF\(_6\)–free high-voltage product portfolio

**Transformers (TR)**
- Global leader across complete range of transformers, components & services
- From distribution up to UHV\(^5\)
- 1,200 kV AC\(^6\) & 1,100 kV DC\(^7\)
- World’s largest installed base and largest portfolio/applications

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Driving innovation, pioneering digital technologies and leveraging the world’s largest installed base for service opportunities

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\(^1\) Megawatt \(^2\) High Voltage Direct Current \(^3\) Gigawatt \(^4\) In power conversion technologies \(^5\) Ultra-High Voltage \(^6\) Alternating Current \(^7\) Direct Current

BU market share based on internal estimates on unconsolidated market – indicative; BU FY2022 revenues
Pathway to a carbon-neutral energy system

Electricity will be the backbone of the entire energy system

01 Accelerated shift from fossil-based to renewable power generation

02 Growing electrification of Transportation, Industry and Buildings sectors

03 Sustainable energy carriers, complementary to direct electrification

Share of fossil-free energy:

2020 ~ 20% fossil-free energy supply

2050 ~ 80% fossil-free energy supply

Global electricity demand growth to 2050:

- Industries doubling to >20 PWh
- Buildings growing ~50% to >15 PWh
- Transportation growing >30x to ~10 PWh

Reference value: China electricity consumption 2022 approx. 8.6 PWh, US appr. 4 PWh, EU appr. 2.8 PWh

In the global power system of 2050, we need four times of today’s generation capacity and we will need to transfer three times as much electrical energy.

Source: Estimations based on Hitachi Energy analysis of recently published IEA Net Zero by 2050, 2022-2023 Energy Outlook studies such as IEA, BNEF, DNV and IRENA. 1 PWh = 1,000 TWh
IEA Grids report: Double grid investment to meet national climate targets

Dr. Fatih Birol
Executive Director IEA

“
We must invest in grids today or face gridlock tomorrow


1 Announced Pledges Scenario
We have streamlined the business and we are well positioned for growth

**Improved performance and resilience**

- Increasing size and quality of backlog
- Sustained demand across business and regions
- Proactively leverage tailwinds and mitigate headwinds

**Enablers**

- Operational excellence across the value chain
- Productivity and working capital enhancement
- Digital and IT transformation

**Investing for growth**

- Expand capacity and workforce to meet growing demand
- Digital & Service opportunities
- Innovation and R&D investment

**Business model, collaboration & innovation**

- Partnerships ecosystem
- Innovating with collaborative business models
- Selectivity in line with Strategic Plan

**Building synergies**

- Energy + Digital value creation synergies
- Global footprint, e.g., account management
- IT, ERP harmonization
Continuing our profitable and sustainable growth journey

~15% Revenue growth (CAGR FY 2021 - FY 2023 E)

Continuously strengthen core power grids business

Further invest in growth enablers: capacity, workforce, R&D, digital

7 BUSD+ Renewable integration with new business models (Orders FY 2021 - H1 2023)

Life cycle partner across the power value chain

Innovative business models and collaborations

~0.5 BUSD p.a. positive impact from enablers

Continue productivity and digital transformation

Proactively address commodity and inflationary headwinds

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Revenue, BUSD

- 15% p.a.
- 10
  - FY 2021
  - FY 2023 Estimate

Order backlog, BUSD

- 2x+
- 14
  - FY 2021
  - FY 2023 Estimate

Adj. EBITA %, Standalone

- 6.1%
- 9.2%
  - FY 2021
  - FY 2023 Estimate

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1 Excluding related cost and Hitachi internal fees
2 On a comparable basis, equivalent to 8.2%, as reported in Hitachi’s Web Conference on Q2 FY 2023 Earnings
Expanding capacity and workforce to meet demand for electrification

Since we started the journey with Hitachi in 2020, we have been able to accelerate our growth and expansion, also leveraging synergies across Hitachi Group.

$3 billion
Investments since 2020

8,000+
People hired

Our technologies enable the integration of 3 out of every 4 GW of installed offshore wind capacity.
Hitachi Energy 2030: purpose-driven strategic growth plan

**01 Strengthen the Core:** Continuously strengthening our power grids core business

**02 Expand Digital & Services:** Doubling efforts on Digital & Services. Expanding at the edge of the energy system

**03 Innovate & Collaborate:** Innovation, Synergies, Partnerships & M&A to accelerate growth

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**Utilities – Industry – Transport & Infrastructure**

- **Plan**
- **Build**
- **Operate & Maintain**

**IT, OT, IoT**

Energy Expertise & Digitalization enabling the Energy Transition at scale & speed

**Innovation & People**

<table>
<thead>
<tr>
<th>Transition</th>
<th>Strengthen &amp; Expand</th>
<th>Accelerate</th>
<th>Sustainable growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>2024</td>
<td>2027</td>
<td>2030</td>
</tr>
</tbody>
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Hitachi Energy 2030 - our commitment to advancing a sustainable energy future for all, delivering social, environmental and economic value, aligned with Hitachi’s vision and goals
Each clean GW that we add to the energy system needs to be balanced with an increase in grid capacity and flexibility to meet security, reliability and resilience.
Integrating power systems across countries and sectors

2020-2050: from some HVDC links to interconnected meshed offshore grid

TenneT 2GW: Long-term agreement with global standards & new collaborative business models

- 13 BEUR framework agreement
- Driving market and technology standards
- Enabling deployment of technology at scale
- Collaboration with partners

ADNOC – Project Lightning: Delivering clean power from shore

- 30% CO₂ emissions reduced in ADNOC’s operations
- 100% fossil-free power from shore
- 3,200 MW of system capacity
- 4 HVDC Light® converter stations

Hitachi Energy market and technology leadership with over 150 GW of HVDC links integrated into the power system globally
We are proud of what we have already developed with eks Energy, including one of the world’s largest battery projects in history, the Waratah Super Battery (WSB) where eks Energy’s unrivaled power conversion systems are able to meet the Australian grid operators’ high standards of performance.

Jeff Waters
CEO, Powin

Hitachi Energy adds advanced power electronics and energy management software capabilities to meet accelerated, global demand for battery energy storage solutions.
Synergies between Hitachi Energy, GlobalLogic & Hitachi Digital Services - An unparalleled competitive advantage

First of its kind system integrating nationwide grid and market operations, enabled by combining Hitachi & Hitachi Energy IT/OT world-leading capabilities

- Hitachi Social Infrastructure BU
- Hitachi Energy

Combining Hitachi unique IT, OT, products and services capabilities
Our approach to sustainability – engaging across stakeholders

01 Transparency, validation & recognition

02 Our 360° approach to ESG: beyond carbon neutrality

03 Maximizing positive impact through engagement & collaboration

Circularity

Biodiversity

-75% Scope 1 and 2 GHG Emissions equal to -269 ktCO₂e vs. baseline (2019)

100% fossil-free electricity in our operations

Updated Sustainability strategy: portfolio focus, aligned to our Hitachi Energy 2030 plan

Co-creation of social, environmental and economic value
Sustaining industry leadership in performance
Continue to grow above market and sustain margins, at upper end of range 2024+
Hitachi Energy will continue to create significant value.

- **Significant market tailwinds**
- **High growth**
- **High capital returns**
- **High value creating business**
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Hitachi Energy Investor Days 2023

Concluding Remarks

Claudio Facchin
Senior Executive VP, Hitachi, Ltd.
and CEO, Hitachi Energy

Hitachi Energy –
Advancing a sustainable
energy future for all
Well positioned for profitable & sustainable growth

Hitachi Energy global leader

- >10 BUSD Business volume¹
- >40,000 employees
- 90+ countries
- 120+ factories

World’s largest installed base

Well positioned in attractive markets...

Higher growth driven by electrification and decarbonization

2021 2030
+6-9%² CAGR

Digitalized portfolio & services

2021 2030

Synergies between Hitachi Energy, GlobalLogic & Hitachi Digital Services

...with a purpose-driven strategic plan...

Hitachi Energy 2030

Strengthen the Core:

01 Continuously strengthening our power grids core business

Digital & Services:

02 Doubling efforts on Digital & Services. Expanding at the edge of the energy system

Innovate & Collaborate:

03 Innovation, Synergies, Partnerships and M&A to accelerate growth

2 Foundations

Innovation

People

...to deliver profitable and sustainable growth

Revenues, BUSD

12-16% p.a.

Adj. EBITA %, Standalone³

ROIC⁴ %, Standalone³

Source: Internal Analysis, Consolidated Market
3 Excluding related cost and Hitachi internal fees
4 Return on Invested Capital

% split based on FY 2022 orders

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Hitachi Energy will continue to create significant value

- Significant market tailwinds
- High growth
- High capital returns
- High value creating business