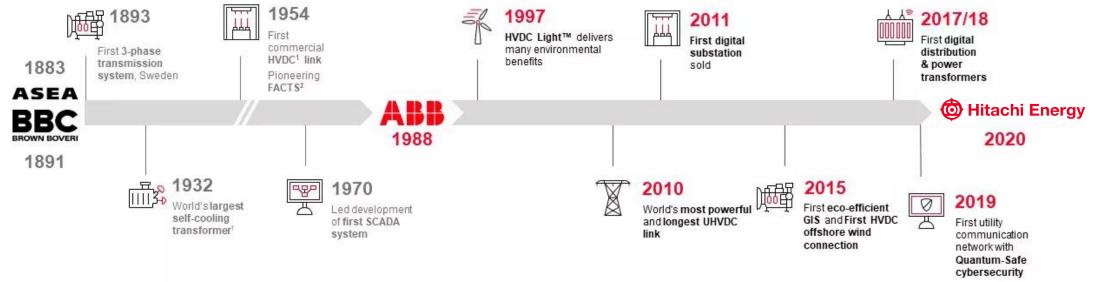


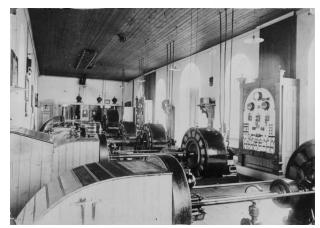
Hitachi Energy WISE Networking Day 2025



Our History











Internal © 2024 Hitachi Energy. All rights reserved.

What do we do?





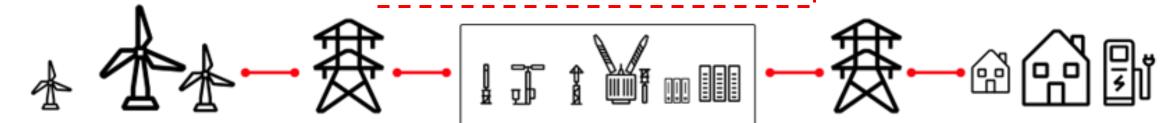
We are not an energy producer!



We enable energy to be transferred in an efficient and clean manner!



We are not an energy consumer!



About Hitachi Energy











Offering



- Services
- Software & Automation
- Systems
- Products

50,000 employees

90+
countries with
200 offices

~250
years' heritage combined

5,500 sales employees & field engineers

13,000 engineers & R&D scientists

Four Business Units

Grid Automation High Voltage Products

Grid Integration

Transformers

Geographies



- Asia, Middle East & Africa
- Americas
- Europe

Customers

- Transport & Infrastructure
- Utilities
- Industry

Internal © 2024 Hitachi Energy. All rights reserved.

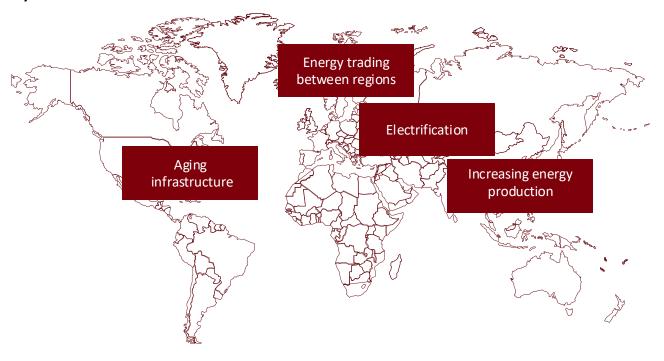


The Market - The Future



Global drivers

- Load increases and need for improved grid reliability
 - Aging infrastructure
 - Energy trading
 - Electrification
 - Increasing energy production
- Renewable energy sources
- Continuing deregulation and privatization
- Safety and greener manufacturing/operations



Material Research and Sustainability



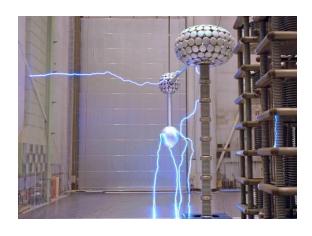
Materials

Electrical Insulation

- Cellulose
- Polymers
- Composites

Conductive Materials

- Magnetic Steel
- Electrical Connections



Testing and Analysis

Dielectric testing

DC Physics

Analysis and Detection

- Analysis of process in situ
- Neutron Scattering
- Advanced X-ray



Process and Optimization

Processes

- Drying of Cellulose
- Composite Manufacturing
- Cellulose Laminate
- Polymer Casting

Optimization

- Physical Modelling
- ML to optimize





Examples of Collaboration in Material Research



Strategic Partnerships

- Luleå University of Technology
- Uppsala University
- KTH
- Chalmers





Research Programs

- DCC
- NEXT



Digital Cellulose Center



Innovation Programs

- Collab Composite
 - Scouting for startups
 - Commercialization of Research



Collaboration is essential for success!



@Hitachi Energy

HITACHI Inspire the Next