

Hitachi Social Innovation is
POWERING GOOD

www.hitachi.co.in

Delivering Social Innovation Business through a
Connected Citizen Ecosystem

Hitachi India



Social Innovation Business



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Message from the Chairman

We are Powering the Future by Collaborating with our Partners and Leading the Digital Transformation through Social Innovation Business.



Kojin Nakakita
Vice President and Executive Officer Regional Strategies (APAC), Hitachi, Ltd.
Chairman, Hitachi Asia Ltd. & Hitachi India Pvt. Ltd.

Transformative Collaboration: Scaling Up New Practices to Enhance Quality of Life through Social Innovation Business.

The dynamic business environment, characterised by rapid technological advancements and increased globalisation, is continually transforming. These collectively create convulsion, which describes a business environment where CHANGE is the new normal.

An adaptive approach to long-term strategy is more fitting for a world in which business models are transforming more frequently, and often more radically. An organisation that can envision new opportunities proactively and responds rapidly are the ones most likely to succeed in the dynamic digital world. We function in a volatile environment, wherein "The Future of Work" is about rethinking the way work gets performed. The pace of disruption and fundamental shifts in the business landscape are driving the need for a different approach to today's strategy. With these shifts, combining a human-centered approach with a business strategy rooted in data and analytics is the key to growth.

Hitachi during the first year of the 2021 Mid-Term Management Plan ('21 MTMP) strengthened its digital solution platforms and transformed the business portfolio with noteworthy acquisitions and mergers. **The societal changes and volatile business environment which we are witnessing in the five sectors i.e., Mobility, Smart life, Industry, Energy and IT are all being addressed through our Social Innovation Business solutions, built upon our expertise in OTxIT Products and Solutions.** In each of these sectors, we are introducing digital technologies as well as accelerating its implementation to achieve a society in which all citizens are dynamically engaged through a more human-centric approach, which allows us to remain agile in an unpredictable modern world.

The uncertainties around us on one end have confined the way we operate while on the other hand, these perplexing times have expanded our business horizons. Thus, enabling us to envisage a future that offers us not only sustenance but, allows us to collaborate more passionately with our stakeholders to offer solutions that are agile and adaptable. Thereby, addressing challenges presently and for the generations to come.

Fundamental shifts in the business landscape are driving the need for a different approach to today's strategy. The foremost shift is the pace of disruption today i.e., the impact of new technologies, disruptive unique business models, and the need to continuously innovate. The ultimate purpose of innovation is much more far-reaching; it is about creating a smart future where people can enjoy Quality of Life. We are focusing on identifying and leveraging insights about humans as innovators and as consumers in order to revolutionize human needs and accelerate the innovation process.

The dimensions of India-Japan relations have transformed in recent years into a robust and matured partnership based on convergence in their values and principals. It is imperative to highlight that we're now reaching a phase when a "sacred alliance" between Japan and India is building up as a force of good for the world - socially, environmentally and economically. Now, more than ever, Hitachi is combining its endeavours in achieving a sustainable society through collaborative creation with customers and partners and leading in enhancing the Quality of Life (QoL).

Built on Hitachi's advanced digital solutions, we will continue Powering Good to co-create a more inclusive, elated and secured environment.

Message from the Managing Director

The world around us is undergoing a paradigm shift, one that is driven by a New Normal. The vigorous business uncertainties have necessitated nations including India to resuscitate business growth models encompassing technologies and solutions that not only benefit the citizens but offer a robust progressive platform that is self-sustaining. **The New Normal is getting evolved to The Digital New Normal.** This is paving way for organizations to collaborate and co-create with the stakeholders including the government to orient and effectively structure a roadmap enabling economies steer through utilizing technologies that are transformative and resilient, focusing towards citizens enhancing the Social, Environmental and Economic Values.

Hitachi through its well-established and credible OT X IT technologies has been touching millions of lives through offering its technologies with Digital as the cohesive platform, combined with Social Innovation Business solutions in India that seamlessly connects with our sturdy presence across diversified technological business environment, a testimony of our burgeoning partnership with India. Hitachi India has been expanding its business boundaries offering solutions in the core sectors, including Urban Transportation, Information & Technology, Energy, Payments, Construction Machinery. Hitachi through Hitachi MGRM Net is Offering solutions across the gamut of e-Governance, e-Education, e-Health, Agriculture as part of our Connected Citizen Ecosystem. Our technologies and solutions are endless and so does our quest to support India become one of the leading economies in the world.

We have envisioned a dynamic forward-looking growth trajectory encompassing our customer driven digital solutions that touches the entire length and breadth of a Citizen Lifecycle enabling a journey that is not only buoyant but is adaptable to the capricious business environment. Hitachi India's competencies go beyond the bounds, to a System Solutions provider that encapsulates system integration capabilities including Information Communication and Telecommunication (ICT), Data Cloud, Analytics, Artificial Intelligence and Pentaho, supporting the multiple journeys of Digitalization India is witnessing.

In the Urban Transportation sphere, we have been actively and aggressively supporting the vision of India by connecting the disarrayed dots that define smart mobility. From rolling stock to infrastructure to operations, our array of solutions are endless. We are leading the 'Make in India' and 'Skill India' initiative from the front and bringing world-class manufacturing facilities by investing and expanding the production base across various sectors in the country, helping India emerge as a global industrial hub.

In the area of e-Education Hitachi through Hitachi MGRM Net is emerging as an ideal partner through offering ICT solutions ensuring children enter the most crucial part of their exploration with tenacity. In agriculture too, the comprehensive IT platform is changing the agrarian practices and helping farmers thrive to a new level of farming efficiently. Additionally, focusing on Tele-Medicine the digital Healthcare solutions platform is also contributing to build an inclusive Healthcare system at the very grass-root level.

Our partners in progress - Hitachi Payment Services, part of the Hitachi group and State Bank of India (SBI) have established a joint venture, SBI Payments, for the development of a state-of-the-art card acceptance and future ready digital payment platform for India. With this Hitachi aims to improve people's lives by providing digital solutions in India and other countries and accelerate movement of digitization around the world.

In the energy sector, by combining world-class power grids business with Hitachi's advanced digital technologies, Hitachi and Hitachi ABB Power Grids will provide innovative energy solutions spanning the Energy (utilities), Mobility, Smart Life (cities), Industry, and IT sectors.

In the automotive sector, Hitachi is expanding its horizons to move beyond just offering its expertise in the component business to providing holistic solutions that are going to not only enhance the environmental values for the citizens, but would pave way for a path breaking technological expansion. Hitachi aims to become one of the leading conglomerates to offer automotive solutions that are significant and can easily be adapted across varied automated auto platforms.

Hitachi is creating a Connected Citizen Eco-System by offering its solutions that are focused towards building a Sustainable India.



Hitachi India's Research and Development efficiencies are helping build a robust foundation for its technological offerings for nations like India, especially in the financial and smart city space that would support in further bolstering the Digital Framework of the nation. Our COVID-19 dashboard is an stellar example of how well we are helping the nation address and contain health pandemics that have flustered the world.

The journey to assimilate technologies that are human centric, driven by keeping the society as the epicentre is getting propelled more than ever before. Hitachi through its 110 years of legacy, will continue fuelling the vision of India through Powering Good and improving the lives of its people - Today and Tomorrow!

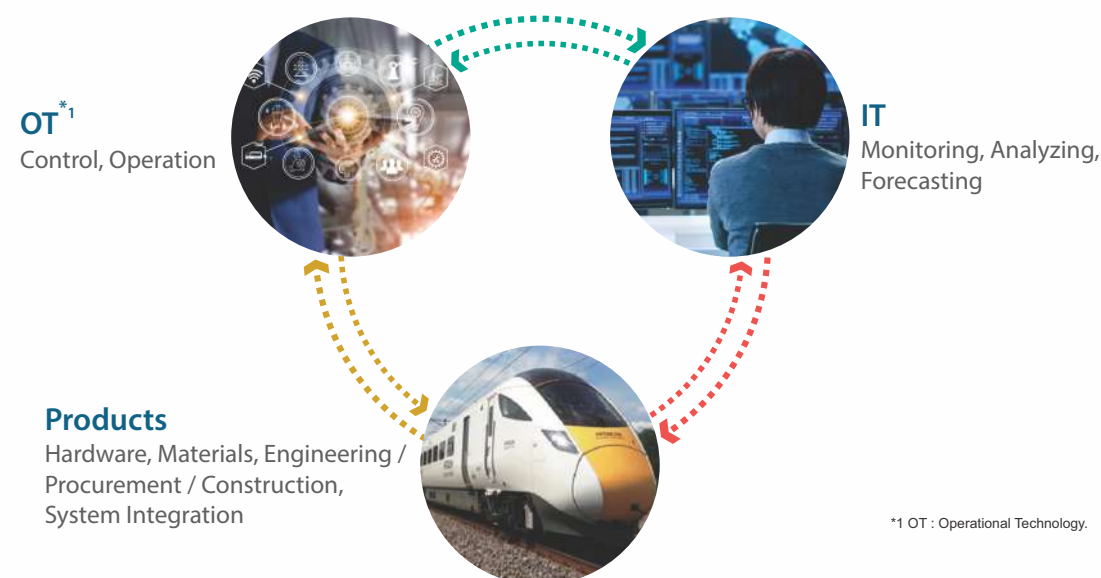
Bharat Kaushal
Managing Director, Hitachi India Pvt. Ltd.

Achieving a Sustainable Society through Social Innovation Business

The evolution of technologies such as the Internet of Things (IoT) and Artificial Intelligence (AI) are transforming enterprises and people's lives. Concurrently, societies are facing unprecedented challenges globally as they are becoming more advanced, complex and diverse. Collaborating with stakeholders, we are committed to promoting the Social Innovation Business by developing a common understanding of issues and help resolve by leveraging Hitachi's strengths in OT (Operational Technology) x IT x Products.

A New Business Plan to Make Hitachi an Innovation Partner for the IoT Era Hitachi's Strengths

Delivering innovations to customers and society through fusion of OT, IT, and products / systems



2021 Mid-term Management Plan Targets

Delivering innovations to customers and society through fusion of OT, IT, and products / systems

	Fy2019 Results	Fy2020 Forecast*	Fy2021 Targets
Revenues	8767.2 billion yen	7,880 billion yen	CAGR* more than 3%
Adjusted operating income ratio	7.5%	4.7%	Over 10%
ROIC	9.4%	5.7%	More than 10%
Net income attributable to Hitachi, Ltd. stockholders	560.9 billion yen	5,000 billion yen	More than 2.5 trillion (3-year cumulative)

*2 As of October 30th, 2019 *3 Compound average growth rate

Improving the Quality of Life and Providing New Value for Customers

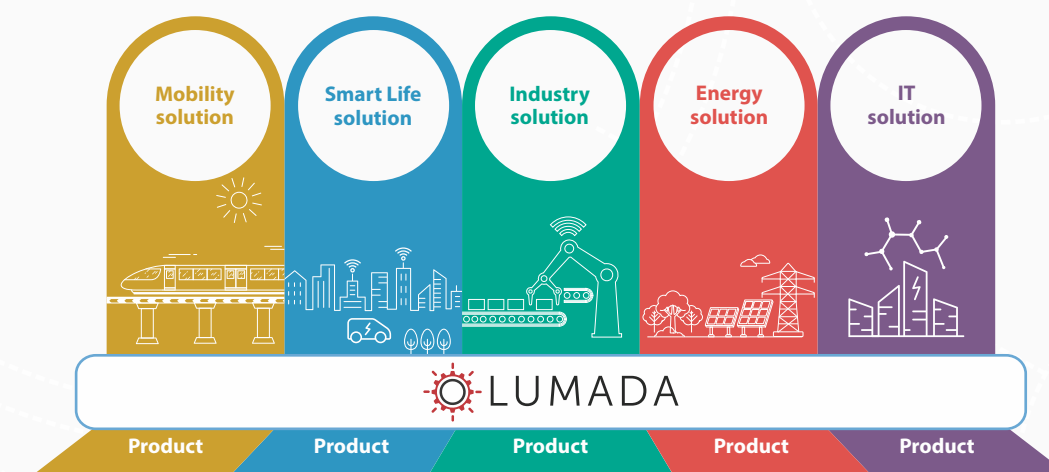
Under the 2021 Mid-Term Management Plan, we will operate business to create three value propositions for customers: Improving Social value, Environmental value and Economic value.

Hitachi has identified five areas where its solutions can help increase the customers' Social, Environmental and Economic Values: Mobility, Smart Life, Industry, Energy and IT.

To improve the Quality of Life and add values for customers

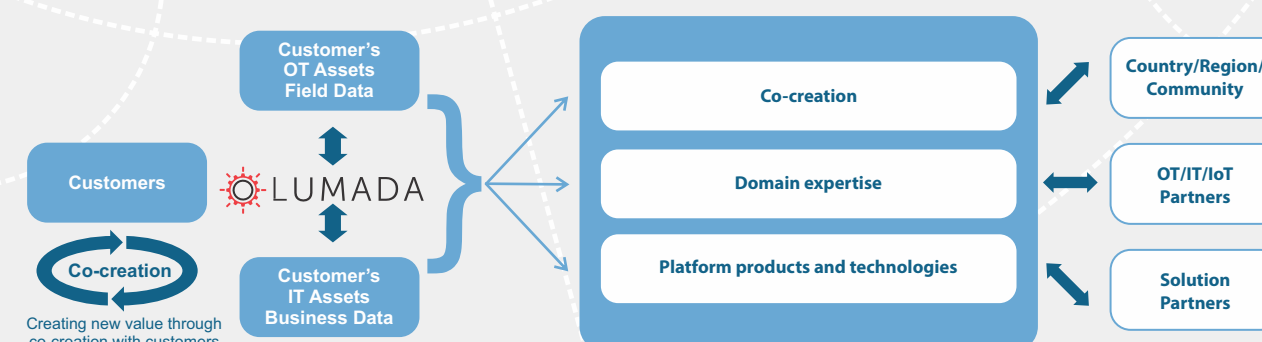


To increase the three values of social, environmental and economic by five-sector business and technology solutions



Hitachi Lumada

Creating value from customer data and accelerating digital solutions



The Founding of Hitachi

Unwavering Focus on the Monozukuri Spirit

Hitachi was founded in 1910 in Hitachi, Ibaraki Prefecture, by Namihei Odaira. Even during his school days, Odaira fretted over Japan's early reliance on imported technology and products. He wanted Japan to become self-reliant in its industrial development, and that became his overriding mission. At university he studied electrical engineering, and in 1906 joined the Hitachi Mine, where he was responsible for the construction of facilities and equipment, which included a power station and a smelter. In addition, Odaira repaired electrical mining equipment, while continuing to study and gain expertise in the production of electrical equipment. He built a power generator waterwheel and a transformer, and then succeeded in developing a five-horsepower electric motor. In November 1910, Odaira founded Hitachi. In those days, being self-reliant instead of depending on imported products meant taking on many challenges. One by one, Odaira overcame those challenges through a single-minded determination to improve quality, cultivate technology and engineers, and provide reliability that gained customers' trust. That belief lives on in our Mission: Contribute to society through the development of superior, original technology and products.

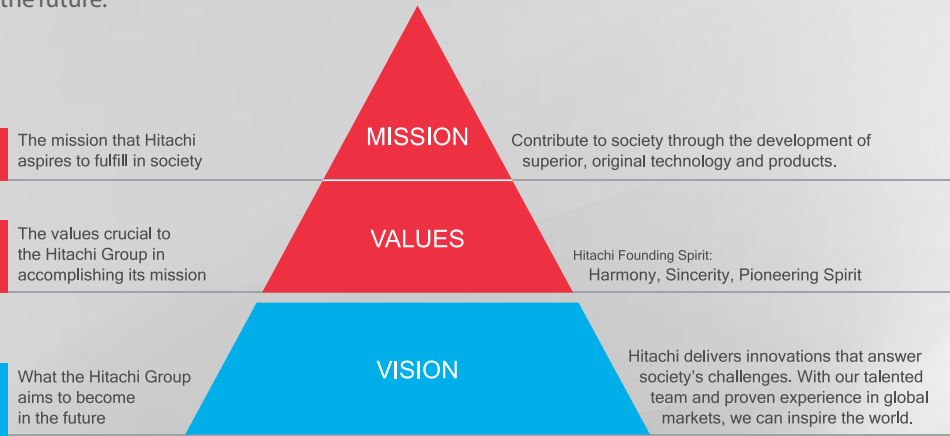


Namihei Odaira

The original repair shop in Ibaraki, founded in 1910.

Hitachi Group Identity

The Hitachi Group Identity articulates the MISSION, VALUES and VISION that are shared by the Hitachi Group worldwide. Bonded by this Identity, the Hitachi Group is able to demonstrate outstanding teamwork that transcends the boundaries of geographical regions and business fields. Throughout its 100 year history, the Hitachi Group has passed on its Mission and Values to generations of employees and external stakeholders. The Vision has been created based on the Mission and the Values. It is an expression of what the Hitachi Group aims to become in the future.

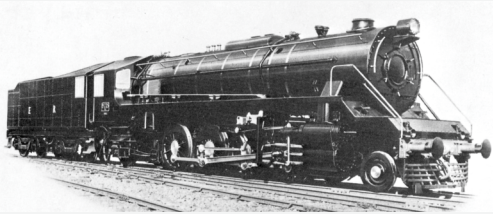


History

Chronology of Hitachi in India

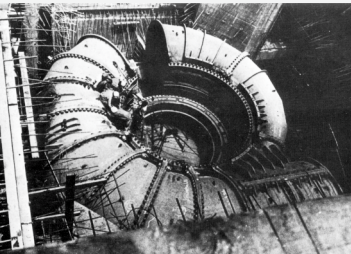
Hitachi's presence as a business partner in India has a long history that goes back all the way to 1933, when Hitachi began exporting fans for household use. Over the years Hitachi has expanded its range of operations to meet the emerging needs generated by India's economic growth. Today, India is one of the most important regions for Hitachi, and it aims to make a contribution to the development of Indian society through Social Innovation Business.

- 1933** Began exporting household fans, which became Hitachi's first major business in India.
- 1935** Inauguration of the Bombay (Mumbai) Office, Hitachi's first overseas office.
- 1953** Delivery of the first steam locomotive to Indian Railways.



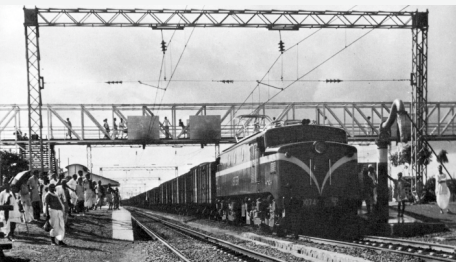
The order placed by India was for the type of WG class steam locomotive shown in the photograph. For Hitachi, it was a great opportunity that helped the company form a deep and lasting business relationship with India.

- 1954** Inauguration of the New Delhi Office.
- 1957** Inauguration of the Kolkata Office and the Bengaluru (Bangalore) Office.
- 1958** Delivered five Francis turbine waterwheels for the Bhakra Power Station.



A 150,000 HP Francis waterwheel and casing being installed. The orders for these products generated a dramatic rise in Hitachi's exports.

Delivered three DC 3,000 V 3,600 HP electric locomotives to Indian Railways.



This is one of the DC 3,000 V 3,600 HP electric locomotives that enjoyed extensive service in India. Two years later, Hitachi followed up by delivering the first of seven DC 1,500 V 4,050 HP electric locomotives.

- 1961** Delivered first thermal power plant equipment. Inauguration of the Chennai Office.
- 1977** Delivered the first public telephone exchange.
- 1987** Manufacturing of color picture tubes was started.
- 1996** Establishment of Hitachi Koki India.
- 1997** Establishment of Hitachi India. Outsourcing of offshore software development was started.
- 2000** Acquired Capital of Telco Construction Equipment.
- 2003** Establishment of Hitachi Home & Life Solutions (India).
- 2004** Establishment of Hitachi Data Systems India.
- 2006** Establishment of Hitachi Metals India Pvt. Ltd.
- 2008** Establishment of Hitachi Lift India.
- 2010** Acquired Capital of Flyjac Logistics. Establishment of joint-ventures with BGR Energy Systems.
- 2011** Acquired Capital of Sierra Atlantic. Acquired Capital of Hi-Rel Electronics. Establishment of Hitachi NeST Control Systems. Hitachi India R&D Centre was opened. Establishment of Hitachi Chemical India.
- 2012** Establishment of Hitachi Automotive Systems (India).
- 2013** Acquired Capital of Cumulus Systems. Establishment of Hitachi High-Technologies India. Establishment of Hitachi Solutions India.
- 2014** Acquired Capital of Prizm Payment Services. Acquired Capital of Micro Clinic. Acquired Capital of RPS Vikas and Garima Vikas (renamed - HNV Castings Pvt. Ltd.).
- 2015** Establishment of Hitachi Terminal Solutions India. Hitachi Solutions Acquired Ignify.
- 2017** Establishment of Hitachi Vantara India Pvt. Ltd.
- 2018** Formed Hitachi MGRM Net Limited.
- 2019** Establishment of SBI Payment Services Pvt. Ltd. (SBIPSPL)

(As on November, 2020)

Hitachi's Network in India

Making Valueable Contribution in a Variety of Fields of India's Infrastructure

The Hitachi Group is stepping up the expansion of its presence in India. This reflects the increasing importance of the region in Hitachi's business operations generated by the steady economic growth that is projected to continue in the future.

● Sales Service ■ Manufacturing Sales Service
*Subsidiary of equity-method associate

New Delhi

- **Hitachi India Pvt. Ltd.**
Regional Headquarters Information Systems / Social Infrastructure Systems / Digital Media Products / Railway Systems
- **Hitachi Lift India Pvt. Ltd.**
Elevators and Escalators
- **Hitachi Systems Micro Clinic Pvt. Ltd.**
IT Services & Solutions

Ahmedabad

- **Hitachi Hi-Rel Power Electronics Pvt. Ltd.**
Power Electronics Products (UPS / Drives / Solar Inverters / Air Compressors / Railway Inverters)
- **Johnson Controls-Hitachi Air Conditioning India Ltd.***
Air Conditioners and Refrigerators

Mumbai

- **Hitachi Vantara India Pvt. Ltd.**
IT Solutions and Services
- **Flyjac Logistics Pvt. Ltd.***
Logistics

Pune

- **Cumulus Systems Pvt. Ltd.**
Software
- **Hitachi Automotive Systems Pune (India) Pvt. Ltd.**
Automotive Maintenance Parts

Gurgaon / Manesar / Neemrana

- **Hitachi High-Tech India Pvt. Ltd.**
Various Components and Instruments
- **Quality Life Enterprise (India) Pvt. Ltd.**
Hotel Management
- **Hitachi Metals (India) Pvt. Ltd.**
Metal and Amorphous Metal Products
- **HNV Castings Pvt. Ltd.**
Ductile Iron Automotive Castings (Manufacturing Unit)

Chennai

- **Hitachi Solutions India Pvt. Ltd.**
Systems Integrator for Microsoft Enterprise Business Applications — ERP, CRM, Power Platform incl. BI, Cloud Solutions, GIS/Location Intelligence Systems
- **Hitachi Payment Services Pvt. Ltd.**
Secure, innovative and comprehensive cash and digital payment solutions
- **Vantec Logistics India Pvt. Ltd.***
Logistics
- **Hitachi Automotive Systems (India) Pvt. Ltd.**
Automotive Parts
- **Aloka Trivitron Medical Technologies Pvt. Ltd.**
Diagnostic Ultrasound Systems

Bengaluru

- **Hitachi Rail STS India (HSTS)**
Manufacturing / Engineering of Mainline & Mass-Transit Signalling
- **Tata Hitachi Construction Machinery Company Private Limited**
Construction and Mining Machinery
- **Hitachi Terminal Solutions India Pvt. Ltd.**
Manufacturing / Development / Maintenance and Service of Equipment for Financial Institutions

(As on November, 2020)



Delivering Social Innovation Business through a Connected Citizen Eco-System

Innovation and disruption in the world is accelerating at an unprecedented pace. And the foremost catalyst behind this transformation is the ubiquitous digitalization along with rapid innovations in Digital Technologies. Innovative use cases are creating a flutter in traditional businesses, with new use cases regularly surfacing across the globe. Combined with massive shifts in demographic, societal, economic, and technological trends, every aspect of our life and work is transmuting irrevocably.

Consequently, the future of work is increasingly becoming predictive and artificial intelligence along with machine learning are fundamentally changing the way organizations are engaging with both their customers and the workforce. Cumulatively, the evolving technologies are leading to focused roles and heightened productivity synchronizing with escalating demand generated through vast digital technology applications.

As digital capabilities improve and connectivity becomes omnipresent, technology is poised to change quickly and radically, every sector of India's economy.

Acknowledging the citizen's needs and demands, the government is focused on digitalization, a dominant conduit of innovations, optimizing resources and productivity in key sectors ranging from manufacturing, agriculture, healthcare, retail, financial services, banking, national defense, security to public utilities.

With over eight decades of robust partnership in India's growth journey and an over 110-year-old global legacy, Hitachi India through its Social Innovation Business is leveraging its vast and proven OT x IT based solutions and products to seize the burgeoning opportunities in a service-driven, aggressively digitalizing Indian economy.

The key to successful human-centric innovation originates by enabling connectivity amongst citizens, stakeholders and the government, that's where Hitachi Connected Citizen Solutions play a vital role, encompassing technology and solutions for e-Governance, e-Education, finance, mobility, infrastructure and IT. These solutions harness Hitachi's core platform technologies including OT x IT, Artificial Intelligence (AI), and Big Data Analytics, ensuring greater social, environmental, and economic sustainability.

Backed by more than 30 years of global research on human lifecycle, Hitachi MGRM Net sets the benchmark in creating an array of holistic solutions on a platform which encompasses the entire lifecycle of citizens starting from birth till the end of their journey. It brings inclusiveness to humans living in both urban and rural setting, touching every aspect of life and wellbeing.

Understanding the key to successful human-centered innovation originates from imbibing values that are created by enabling collaboration amongst society, stakeholders and the government. As one of the pioneers in Social Innovation Business solutions, Hitachi accomplishes a competitive edge in the world, by improving not only operational resilience, but enabling adaptability in a new reality, characterized by rapidly changing market dynamics. Thus, contribute towards improving Social, Environmental, and Economic values of the society.

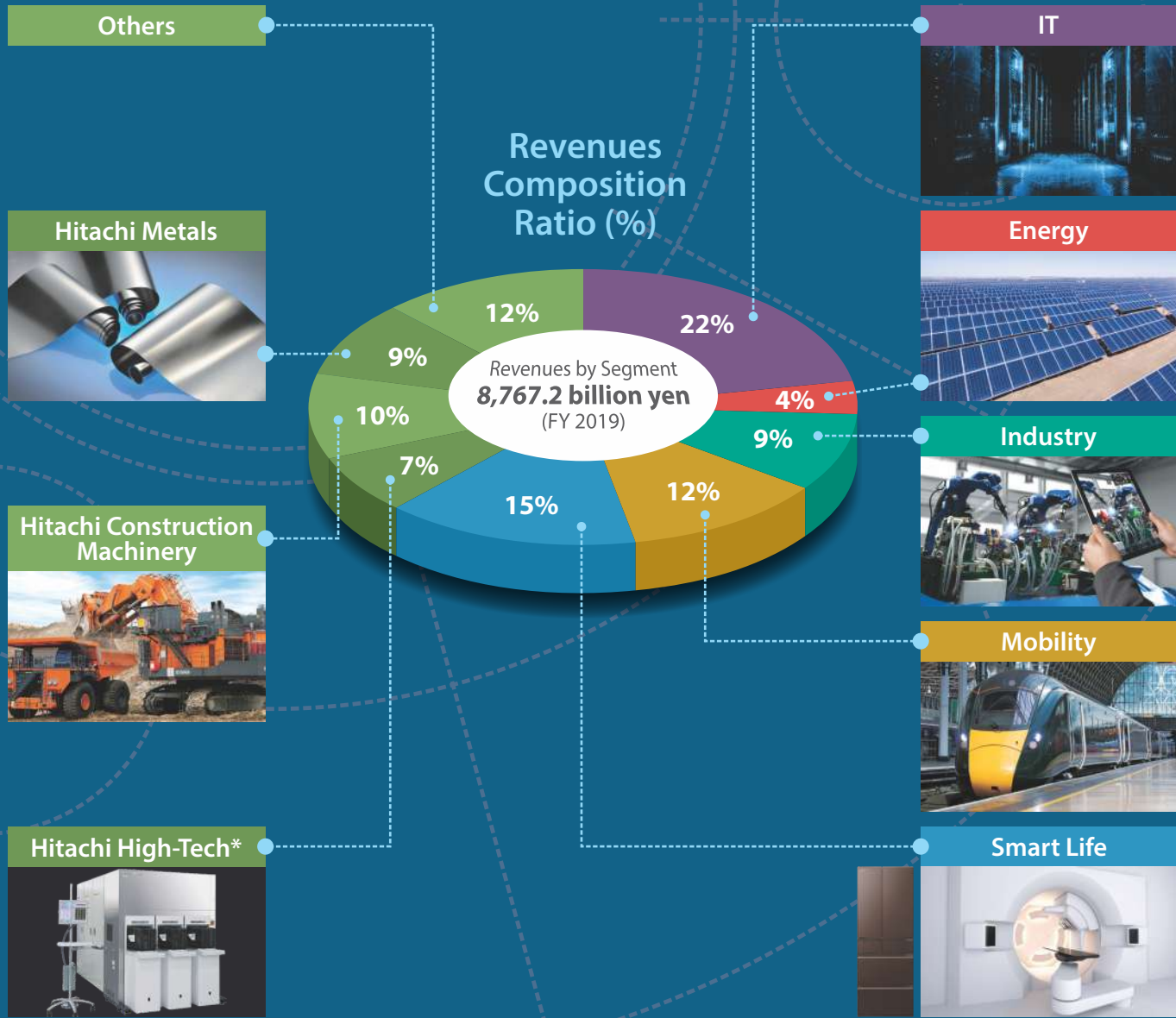
Business Areas In India

The Hitachi Group is active across a wide range of business sectors. From this technology and experience built up over many years come the synergies that feed new innovation.

IT | Mobility | Industry | Energy | Smart Life | Others

Segment Constitution (FY2019*)

Hitachi Group's Consolidated Revenues and Segment Constitution



*Hitachi High-Tech has been integrated into Hitachi's Smart Life sector since FY2020.

Note: Figures for each subsegment include intersegment transactions.

OVERVIEW

Collaborative Creation through Advanced IT

Information Technology (IT) is intrinsic to Hitachi's culture and hence makes us well prepared for today's world by providing cutting edge solutions which are crucial to assist in developing a smarter, safer, healthier society.

Combining rich industrial heritage with IT expertise, Hitachi is accelerating solution creation with Lumada – it's intelligent, composable, secure and open IoT platform. Lumada is helping both public and private enterprises, and institutions harness vast amounts of data to create solutions for high-value outcomes.



Hitachi Unified Compute Platform
Information & Communication Technology
Business Division, Hitachi, Ltd.



Enterprise Disk Array System "Hitachi Virtual Storage Platform G1500"
Information & Communication Technology
Business Division, Hitachi, Ltd.

ACTIVITIES IN INDIA

Through its Social Innovation Business solutions, Hitachi is improving people's Quality of Life and increasing value of its customers and partners by concentrating on three core values: Social, Environmental and Economic. Mobility, Smart life, Industry, Energy and IT will further fuel and drive these values.

Hitachi Vantara, a wholly-owned subsidiary of Hitachi, Ltd., guides our customers from what's now to what's next by solving their digital challenges. Working alongside each customer, we apply our unmatched industrial and digital capabilities to their data and applications to benefit both business and society. More than 80% of the Fortune 100 companies trust Hitachi Vantara to help them develop new revenue streams, unlock competitive advantages, lower costs, enhance customer experiences, and deliver social and environmental value. Visit us at www.hitachivantara.com

Hitachi Solutions specializes in business application consulting across Microsoft Enterprise Business Applications such as ERP, CRM, Power Platform including BI and GIS/Location Intelligence Systems. It is a trusted provider of vertical industry solutions built on Microsoft Cloud. Our mission is to develop solutions based on our technologies that deliver transformation through our Social Innovation Business and assist our clients compete with the largest global enterprises with our powerful, convenient and innovative industry solutions.

Hitachi Payment Services brings in innovation in cash and digital payments that drive customer convenience and accelerate adoption. Its offerings under cash platform include ATM Services, Cash Recycling Machines, White Label ATM & ATM Software Platforms. Similarly under digital platform the solutions include POS Solutions, Internet Payment Gateway Solutions, Toll & Transit Solutions, Digital Payment Platform (Bharat QR), Risk Management & Analytics, Reconciliation and Settlement Services, Merchant Services and Card Issuance Solutions. The organisation has been revolutionizing the payment channels in the country with over 54,000 ATMs (including 19,000 Cash Recycling Machines), 4,000 White Label ATMs and 1.35 Million POS devices* (including mobile POS & QR) besides Toll & Transit Solutions across the country under management.

* All figures as on October, 2020



Hitachi's Smart Cities and Public Safety Solutions are bringing together the tangible and digital worlds through IoT to make cities safer, more efficient and more vibrant.



Hitachi Vantara brings your DataOps advantage. It's the data practice for the AI era, connecting data consumers with data creators to accelerate collaboration and digital innovation.



Hitachi-Omron Terminal Solutions, Corp.



Hitachi Money Spot ATM:
Empowering Citizens Through Improved
Payment Infrastructure

[Read more](#)



Transforming
Education -
Empowering India

[Read more](#)

IT

Leveraging its proficiency in OT (Operational Technology) x IT based products and solutions, Hitachi India is contributing in the nation's growth. Its digital technologies are comprehensively transforming key areas like digitalization, e-Governance, Data Analytics, Infrastructure, Power Electronics, Energy and through its end-to-end solutions in mass urban transport like railways. Thereby, touching millions of lives every day.

Information & Telecommunication Systems

Hitachi Payment Services, through the JV – SBI Payments, is empowering government entities to go digital with Integrated POS solutions enabling customers across the country easy access to digital payments. Some of these include traffic violation offence fee collection through POS device for Delhi Traffic Police, collection of receivables for various state electricity boards, passport fees payment through POS device at Passport Seva Kendras and facilitating payment automation for Punjab Grains Procurement Corporation Ltd. (Pungrain).

Hitachi Systems Micro Clinic is Bridging the Educational Divide with Technology and igniting the economic development in the education industry. The integration of 1698 schools in rural Rajasthan with IT infrastructure, is an excellent example of how Hitachi's Social Innovation Business is contributing towards development of economy and equanimity in the society by taking quality education to the remotest parts of the state.

The recent collaboration with Tata Power Delhi Distribution Limited (TPDDL) has helped the leading DISCOM to leverage the Power of Analytics to ensure reliable power supply through predictive maintenance and better peak-hour assessment. The outcome has been more satisfied customers and higher revenue.

Hitachi India Pvt. Ltd.

Information & Communication Technology Systems Division

Regional Headquarters / Sales of Hitachi products



Hitachi Payment Services Pvt. Ltd.

Secure, innovative and comprehensive cash and digital payment solutions

SBI Tie Up

State Bank of India (SBI), the nation's largest commercial bank and Hitachi Payment Services entered into a JV to build a state-of-the-art card acceptance and future-ready digital payment platform. Through the JV, SBI Payments offers a comprehensive suite of payment options to customers and merchants focusing on the roll-out of a nationwide card acceptance infrastructure, quick response (QR) code acceptance, Unified Payments Interface (UPI), mass transit sector and e-commerce businesses.



Current Live Metro Projects

Hitachi Payment Services' electronic toll collection and transit payment solutions for Metros & Buses, provides commuters with a satisfying experience that seamlessly blends the convenience of travel with secured payments. For Noida & Nagpur Metros, the JV - SBI Payments, provides transaction processing & settlement services which enable safe, secure and seamless payments for a card based ticketing system. Customers can now conveniently make payments for metro tickets as well as passes through a contactless Rupay prepaid card or the NCMC card, thereby providing for cashless travel.



White Label ATM

Hitachi Money Spot ATM is a White Label ATM under license from the Reserve Bank of India. Present largely in semi-urban and rural locations, Hitachi Money Spot ATM is driving financial inclusion by providing convenient banking services to the masses. With over 4,000 ATMs* present nationally, Hitachi Money Spot ATM is an important touch point that facilitates easy access to cash and complements various government initiatives.



* Figures as on October, 2020

Cumulus Systems Pvt. Ltd.

Software Products

MARS, a trademark product, monitors and helps manage large-scale, heterogeneous IT infrastructure across an entire enterprise. It is based on an innovative and robust data platform which provides broad, vendor-agnostic coverage of storage, SAN fabrics, and virtual and physical servers. MARS provides a fast and interactive interface for reporting on data over a long period of time ranging months and years. Through detailed correlation of IT asset configuration and performance characteristics, users achieve end-to-end visibility and benefit from deep insights into operational issues.

Cumulus engages in providing End-to-End Software Development Lifecycle involving -

- Business & Requirements Analysis
- Solution Architecture & Design, Development and Testing
- Deployment and Production Support

Cumulus also has Domain Expertise in e-Commerce, Payment Gateway Integration, Customer Relationship Management (CRM), Auction Houses, Infrastructure & Security and accounting. Along with that, it also offers consulting services on these by working with clients to assess their processes helping define business requirements.



Hitachi Vantara India Pvt. Ltd.

Data Management, Analytics, IoT, Industrial Expertise, Technology and Outcomes rolled into one great solution provider.

Hitachi Vantara: Digital Solutions—Co-creating Digital Transformation

With extensive expertise in OT x IT, we co-create with organizations around the world to accelerate their digital transformation; bringing the power of Hitachi and expertise to invent Digital Solutions that are needed to prepare businesses for the future. Through a consulting-led approach, we are facilitating a seamless transition from traditional manufacturing systems to smart manufacturing systems; creating AI and IoT-enabled smart spaces; and applying analytics for fact-based decision making. Thus helping organizations innovate faster, maximize operational efficiency and deliver measurable, sustainable results.

Smart Manufacturing: Gaining greater insights across your industrial organization is more achievable than ever—to predict and prevent downtime, mitigate bottlenecks and defects, improve quality & productivity and position your company as a digital leader by effectively combining OT x IT to provide Social, Environmental and Economic value.

Smart Spaces: Hitachi Vantara's smart spaces and video intelligence solutions leverage video, IoT, secure data storage and management, along with data blending, analytics and digital tools to provide solutions for Smart Cities, Smart Campuses as well as manufacturing industries. The solution suite delivers insights using AI technologies, enables machines to automate tasks effectively and empowers people to make smarter decisions in diverse areas.

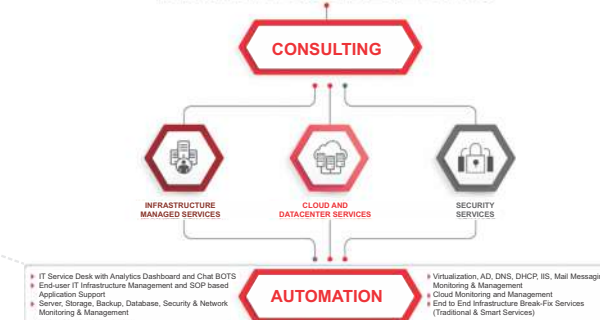


Hitachi Vantara, the global solutions and professional services organization of Hitachi, Ltd., is an IoT era business integrator and a catalyst for accelerating digital transformation. It is collaborating with our customers across industries to deliver best business outcomes and is helping governments implement smart and real time governance solutions.

Hitachi Systems Micro Clinic Pvt. Ltd.

Hitachi Systems Micro Clinic is driving digital change with spectrum of IT services and solutions across Digital workplace, Cloud solutions, Managed Services, Security and Data center solutions. Over the last two decades we have built resilient services which help businesses and governments realize the Social, Environmental and Economic Values to help overcome unprecedented challenges. Our strength lies in our agility to adapt to today's challenging and complex IT requirements for customers. Headquartered in New Delhi, our robust and efficient solutions help enterprises and governments optimize technology requirements as per their business strategy. We boast of well-experienced workforce of 2000+ employees; over 20+ offices PAN India and global presence in Middle East and South East Asia.

DIGITAL CAPABILITIES



Hitachi Solutions India Pvt. Ltd.

Hitachi solutions harnesses the power of Microsoft Technologies to drive digital transformation for its customers. The focus is on leveraging technology to solve business problems. An acknowledged leader in enterprise business applications, Hitachi Solutions has consistently been awarded by Microsoft.



| e-Governance



Transforming Governance Through Digitization

Digital transformation of government institutions as an outcome of 'Digital India' initiative, has been accelerated by confluence of multiple factors. These dominant factors include the widespread adoption of Internet-based services, increasing expectations for convenient access to government services bolstered by digital natives, the digital-aware citizens, a rising need to manage service delivery costs (both direct and indirect), and the inability of physical delivery channels to serve stakeholders at scale with efficiency.

The Government of India's transformative e-Governance Mission has initialized a human-centered approach in how the government engages with the citizens and imparts a varied bouquet of essential public services efficiently and comprehensively across all government departments.

Concurrently, the mammoth quantum of data generated through e-Governance initiatives is positioning the government at a vantage point to devise effective planning and decision making. Thereby, transforming citizen services, providing access to information to empower citizens, appreciating their participation in government led initiatives, and enhancing citizen's Social, Environmental and Economic Values. Thus, co-creating solutions that help realize better lives, for themselves and for the future generations, through the convergence of data technology and governance.

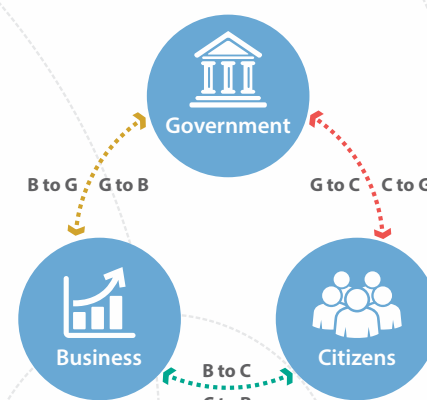
A global leader in Social Innovation Business solution Hitachi's digital technologies are ushering vision-inspired transformation from the grassroots level.

Hitachi's cutting-edge futuristic OT x IT technologies are making Real Time Governance Solutions a reality and demonstrating its enabling and catalytic proficiency in bringing this mammoth transmutation across all levels of Public Service Delivery and sectors like education, agriculture and healthcare, that paramount to the nation's sustainable growth.

At the forefront of driving, collaborating and supporting the government's mission to empower nation's farmers. Hitachi MGRM Net is partnering with the government, public and private sector in delivering end-to-end farmer-centric agri-solutions including educating farmers on the latest technologies in farming, Agriculture Extension, remote help for issues, promotion of agriculture as an enterprise, required knowledge sharing and training. By endowing the farmer with the right knowledge, resources and technology through its end-to-end integrated platform, Hitachi is committed to accelerate the digitalization of farming and augmenting farmers' income for an improved Quality of Life.

For a densely populated and digitally advanced country like India robust digitalization of Healthcare is imperative for a citizen's wellbeing. Leveraging its expertise in Operational Technology (OT) and Information Technology (IT), Hitachi MGRM Net has rolled out its state-of-the-art M-Star™ Health e-Governance Platform. Using the power of Information and Communication Technology (ICT), the e-Governance platform enables seamless collaboration between all hospital departments and automates and re-engineers the existing manual processes. Thereby bringing operational excellence and enhanced patient care. It offers single source of truth architecture and near real-time information for decision making and monitoring.

Hitachi's vision-led innovation and proficiency in digital technologies is partnering the government's endeavour to accelerate comprehensive social change and empower people through its myriad e-Governance initiatives. Thus, emerging as a trusted ally to India's story of sustainable transformation.



| e-Education



Reforming Education through Digitisation

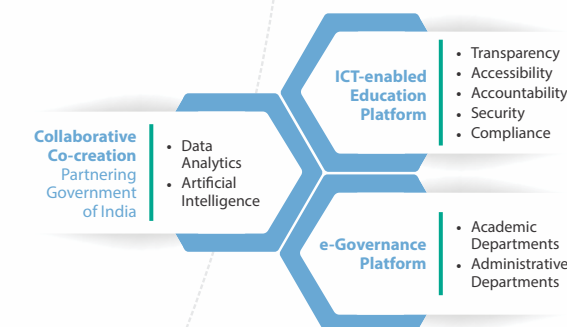
Digitalization has been at the epicentre of society's transformative journey through its limitless ability of delivering innovation-based solutions virtually anywhere. In doing so, it has extraordinarily accelerated modernization of sectors it has interacted with, to efficiently meet the evolving demands of the cutting-edge world.

Leveraging the robust technology framework developed under 'Digital India', the government is responding to the affinity of the advanced natives and digitally aware youth in the nation, by disseminating quality education through electronic mode. Such infusion of advanced digital technologies in e-Education is supporting the sector meet rapidly evolving learner's needs and the nation's vision of inclusivity in education.

Today, Artificial Intelligence & Big Data Analytics are paving the way for personalized learning, analysing students' performance and helping instructors identify the challenges. By making the student the epicentre of this new ecosystem, Hitachi through Hitachi MGRM Net is helping bring transparency, accessibility, accountability, security and compliance to the education system emerging as an ideal partner equipped with the technical and infrastructural readiness to spread the advantage of e-Education to millions.

Through collaborative co-creation, Hitachi is actively partnering with the Government of India to build a vigorous ICT-enabled e-Learning infrastructure in the country that is helping leading government and private institutions to devise data-based learning systems that would assist in creating highly customized, need-based educational material that appeals to the learner and fills the critical gap of pedagogy.

Hitachi MGRM Net's robust M-Star e-Governance platform for education integrates all academic and administrative departments within an educational institution, catering to the requirements of all stakeholders within the domain of education, viz., Student, Teacher, Alumni, Management and Parent. The platform allows near real-time sharing of relevant schemes, benefits and policies with all stakeholders of leading government and private institutions, enabling an effective monitoring and measuring foundation. The single source near real-time information for decision making and monitoring makes it a path-breaking platform for transforming the dynamics of education by building a constructive narrative through big data. Additionally, Hitachi MGRM Net has developed KV Shaala Darpan - an e-Governance platform for all Kendriya Vidyalayas in the country.



Through its integrated IoT-enabled solution platform, Hitachi is bringing Social Innovation in education to assure today's and tomorrow's learners are better accomplished. Thus, helping the nation build an inexhaustible pool of talent and skill, while enabling millions of students to live an improved Quality of Life.



Mobility

Railway Systems

Hitachi is committed to providing Social, Environmental and Economic Values by developing and integrating new innovations to transform passenger experience across mobility systems. Adapting to the trends and challenges of society, Hitachi is working to develop solutions for urban transport and Indian mainline railway to increase safety and reliability for commuters. Thereby shaping the way society will travel in the future. Urban transportation infrastructure in India can be enhanced and supported with the implementation of multi-modal networks, thus providing passengers and operators an integrated “Mobility as a Service”.

OVERVIEW

Hitachi Rail is a fully integrated and global provider of rail solutions across rolling stock, traffic management, & signalling, turnkey solutions, operation, services & maintenance, enabled by digital solutions.

Hitachi Rail has a long and proven track record of high reliability with operational efficiency in enhancing people's travel experiences. Hitachi is one of the top rail system providers having fully integrated railway systems solutions for its railway operators of Very High speed, High speed, intercity, mass transit as well as freight operations. We also partner with operators for enhancing value in operations services and maintenance enabled with our digital

solutions. Global achievements include world-famous 'bullet trains', driverless metro rail systems, innovative traffic management and signalling solutions, turnkey projects, and digital rail solutions. Drawing on the wider Hitachi Group's market-leading technology and research-and-development capabilities, the railway business strives for industry-leading innovations and solutions that can deliver value for customers and sustainable railway systems to benefit a far wider section of the society. Hitachi is committed to operating as a Social Innovation Business, striving to support the United Nations Sustainable Development Goals (SDGs).

Rolling Stock

Hitachi draws on over 100 years of experience in proving a full line-up of rolling stock solutions to match the needs of all mass rail transit; from eco-friendly, energy efficient trains for short distance commuting in cities to high speed trains that operate at commercial speeds of upto 360kph across cities. As a key industry partner in the development of the Shinkansen bullet train vehicles in Japan, Hitachi has a proven safety and delivery record for rolling stock and supports a full portfolio of solutions. These include the design, delivery, manufacturing and maintenance of Monorail, Mass Transit, comprising of driverless Metro systems, Tramway, Light Rail Transit, as well as commuter and intercity, high speed and very high speed trains around the world.

With the capacity to develop and manufacture all major on-board rolling stock components in-house, Hitachi can provide optimal solutions for reliability, efficiency and performance. On-board components typically manufactured in-house include Insulated Gate Bipolar Transistors (IGBT) and Silicon Carbide based propulsion systems, Train Control and Management systems (TCMS), Autonomous Decentralized Train Integrated Systems (ATI) as well as onboard Signalling systems.



*The train in the picture is only for Italy and not for sale in India

Traffic Management Systems & Turnkey Signalling and Train Control Systems

Hitachi's proven Traffic Management System, Signalling & Train Control System in ERTMS/ETCS, Satellite Positioning, Communication Based Train Control (CBTC) for Automatic, Driverless & Unattended Train operations Solutions. The components portfolio covers all aspects of signalling and systems solutions. This provides the global railway market with market-leading solutions for achieving safe and better ride comfort as well as shortened and dynamic train headway to increase overall network capacity.

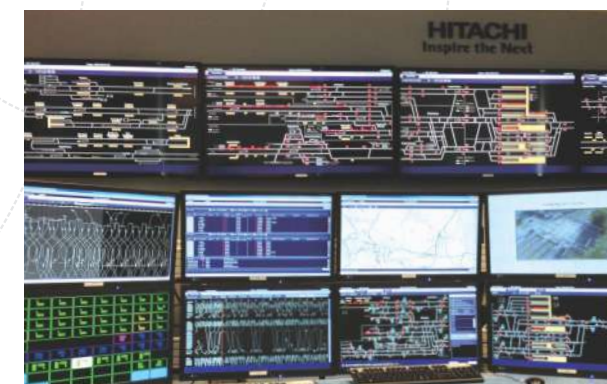
Hitachi's Traffic Management System handles complex operations at railway stations with ease enabling station staff to communicate a wide variety of information. At times of disruption, Hitachi's system automatically readjusts the train's operations to recover the planned timetable as quickly as possible. If there is a serious diagram disruption, Hitachi's system can also deal with such disruptions by interlinking updated train operation and automated passenger information with current line information. The system status is monitored to ensure prompt recovery in case of failure or an accident, and functions are included to give warnings to maintenance staff if problems arise.



Operation, Service & Maintenance Solutions

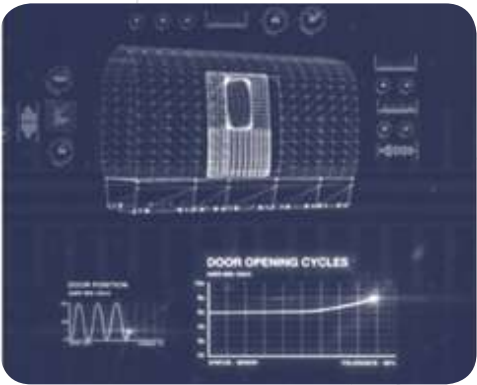
Hitachi has extensive experience in railway operations and maintenance engineering. Hitachi is working with customers to develop and deliver highly innovative technological solutions and is able to respond to evolving mobility needs in terms of safety, design, quality and comfort.

Hitachi has also developed a Control Room (CRHR) based on Internet of Things IOT platform for monitoring its fleets and providing improved Condition Based Maintenance approaches. Hitachi benefits from a long experience in the aftersales business, built through the integration of excellent competencies in operations and maintenance engineering, resulting in the optimization of fleet performances and availability across the globe.



Digital Products and Services

Hitachi contributes to the improvement of services for railway users and administrative efficiency for railway business operators by meeting various needs, in the new era by providing the latest passenger / information service solutions, seat reservation ticketing systems, smartcard management systems, station / on-board information delivery systems and advertising management system. These digital tools support the wider railway business and provide users and customers with a full "Mobility as a Service" solution.



ACTIVITIES IN INDIA

Hitachi Rail

1. Dedicated Freight Corridor Corporation

A Hitachi led consortium is currently executing a 950 km Signalling & Telecommunication contract for the prestigious Western Dedicated Freight Corridor along the Rewari-Vadodara corridor. Additionally, Hitachi is also executing a contract for Train Protection Warning System (TPWS) for the entire length of the Western Corridor from Rewari to Jawaharlal Nehru Port Trust (JNPT). For this, Hitachi is providing products & solutions for Automatic Block Signalling with Train Management System (TMS), GSM-R telecommunication system and the European Train Control System (ETCS).

2. Indian Railways

Hitachi Rail STS India is a market leader for mainline signalling and telecommunication having completed ~ 840 stations for computer controlled electronic interlocking including in Kharagpur, which is the longest and largest railways yard in Asia with 800 routes. By providing products & solutions for Microlock IXL and multi-section axle counters and Audio Frequency Track Circuits (AFTCs), Hitachi substantially completed the prestigious project of re-signalling of existing corridor of 410 km long electrified route from Kanpur to Ghaziabad. Funded by Kreditanstalt für Wiederaufbau (KfW), the corridor that is one of the busiest sections of Indian Railways is now equipped with Electronic Interlocking and Automation Signaling System, managed through Operational Control Centre at Tundla station. Additionally, Hitachi Rail STS India has executed two key projects of Train Protection Warning System (TPWS) in Chennai sub-urban MRTS network and for Indian Railway's first high speed train Gatiman Express trains from Delhi to Agra. HSTS is also pursuing project of ETCS L2, recently tendered by RailTel.

3. High Speed Rail

Ministry of Railway has set up a special purpose vehicle NHSCRL to implement the vast network of High speed rail in India. The Ministry of Railway is seriously pursuing the possibilities to introduce High Speed Rail services in a number of corridors for which, Hitachi is keen to deliver established and proven technologies.

4. Urban Transport including Mass Rail Transit (MRT), Light Rail Transit (LRT) and Monorail Systems

Hitachi is executing design, manufacture and supply of onboard high voltage propulsion system and TCMS for driverless operation for Mumbai Metro Line 2&7. Hitachi Rail STS India has recently implemented several MRTS, LRT/Monorail projects by providing Communication Based Train Control (CBTC) signaling and telecommunication for Noida Metro by Delhi Metro Rail Corporation Ltd. and for Mumbai Monorail by Mumbai Metropolitan Region Development Authority (MMRDA). Other projects under execution include Navi Mumbai Metro's electro-mechanical turnkey package for The City and Industrial Development Corporation of Maharashtra (CIDCO) and signalling and telecommunication package for Kolkata Metro Rail Corporation (KMRC).

Hitachi India is actively seeking to bring its Japanese and Italian technologies for the upcoming urban transport MRTS, Metrolite and Monorail opportunities across India. Some of the forthcoming key corridors cover the cities of Delhi, Chennai, Mumbai, Bengaluru, Kochi, Kolkatta, Patna, Ranchi, Bhopal, Indore, Vijayawada among others. In the South Asia region, Hitachi is also pursuing urban transport opportunities for Light Rail Transit, Mass Rail Transit systems in Colombo, Sri Lanka and Dhaka, Bangladesh.



On the Path to
Progress - The Rise of
Smart Mobility in India

Read more



Transforming Urban
Mobility in India

Read more



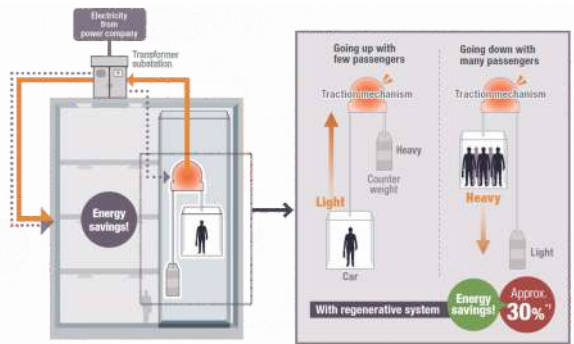
Elevators & Lift

OVERVIEW

Hitachi Lift India Pvt. Ltd., a Hitachi Group Company is bringing forth its global standard in vertical transit system along with ease of installation, durability, safety and energy efficiency. Hitachi Lift India contributes to this initiative in India by providing maintenance and services for installed elevators 24-hours/365-days. In addition to providing such superior equipment and service, we are educating riders by organizing "Be a safe rider" program, a fun and interactive sessions where basic safety protocols can be understood by everyone and ensure safety during vertical transportation.

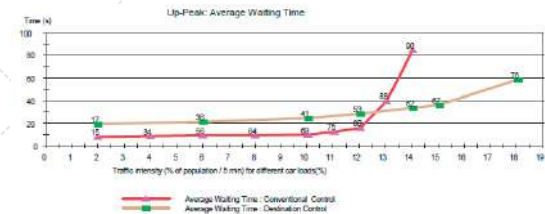
Hitachi Lift India has been awarded a contract for installation and maintenance of a total of 106 elevators for a large-scale office building to be constructed in Hyderabad, this is the largest order for Hitachi Lift India. These elevators are designed to facilitate comfortable passenger transportation by adopting a Destination Floor Reservation System (DFRS) which assigns elevator immediately to passengers on registering destinations in the lobby then indicating the assigned elevator. With the help of Future Reference-Trajectory Control, we aim to minimize waiting time by predicting future travel needs from learned operation patterns. Hitachi Lift India has operations in Delhi-NCR, Mumbai, Bengaluru, Chennai, Pune, Hyderabad and Ahmedabad.

Energy Efficiency



Traffic Intensity and Journey Time Optimization

- DFRS changes the optimization algorithm based on the traffic intensity
- During light traffic waiting times become shorter
- Handling Capacity increases



Operation of Destination Floor Reservation System (DFRS)

In DFRS, the conventional hall call buttons (Up and Down arrows) located at the elevator lobby are replaced by the registration devices. Passengers register their destination floor through this registration devices at the lobby instead of in the elevator.



- Passenger is required to register the desired destination floor through the registration device located at the elevator lobby.
- The registration device will display the elevator that has been assigned.
- Passenger will now move to the assigned elevator and wait for the elevator.
- Passenger enters the assigned elevator after its arrival.
- As the passenger has already registered the desired destination floor, there is no need to input the destination floor in the elevator.
- Elevator will bring the passenger to the registered destination floor.

Hitachi Lift India Pvt. Ltd.

Sales / Installation / Maintenance of Elevators and Escalators

Hitachi Lift India Pvt. Ltd. was established in 2008 to serve the growing demand from the increase in high-rise building and urbanization, and has been providing elevators including high-speed elevators for high-rise buildings, and luxurious lift cabins for premium residential spaces, hotels and business offices.





Industry

Water

Hitachi has impressive track record in the field of water technologies fusing its expertise with Information Technology to deliver Intelligent Water Environment Solutions. Thus, the company actively contributes in conserving natural resources while resolving water problems for the present and future generations to come.

OVERVIEW

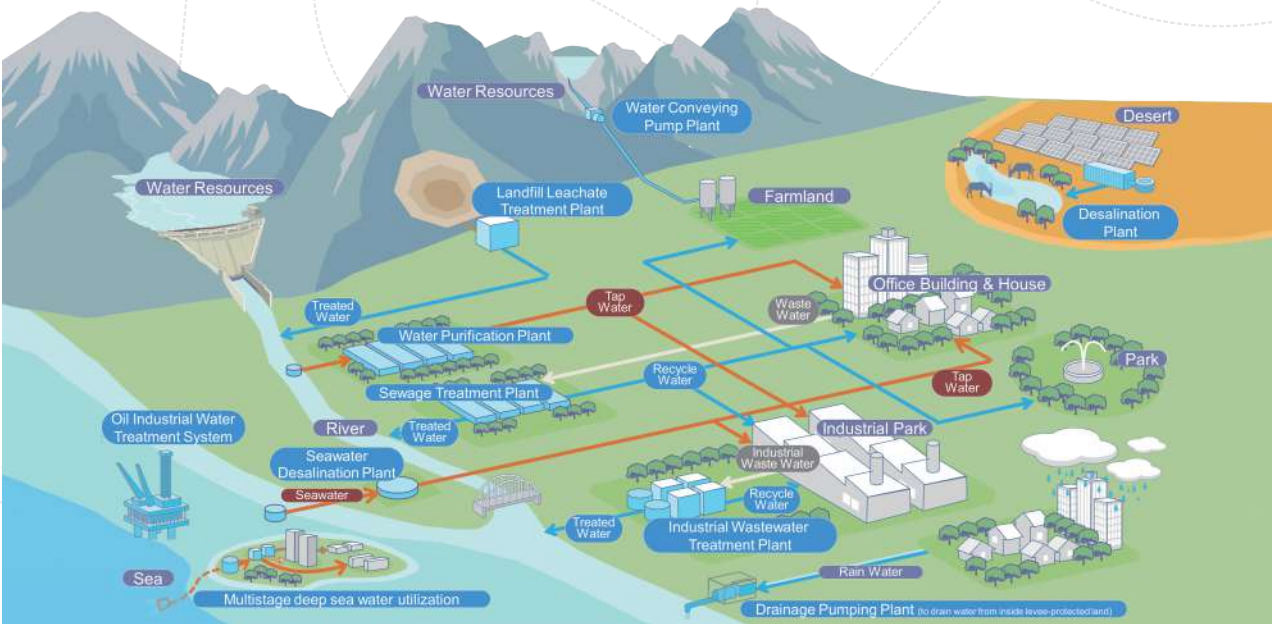
As an industrial group, Hitachi has built an impressive track record in the field of water technologies over many years. We integrate our facilities with Informational Technology (IT) for advanced and efficient Intelligent Water Environment Solutions.



Creating value for new Water Environment Solutions by fusing these technologies

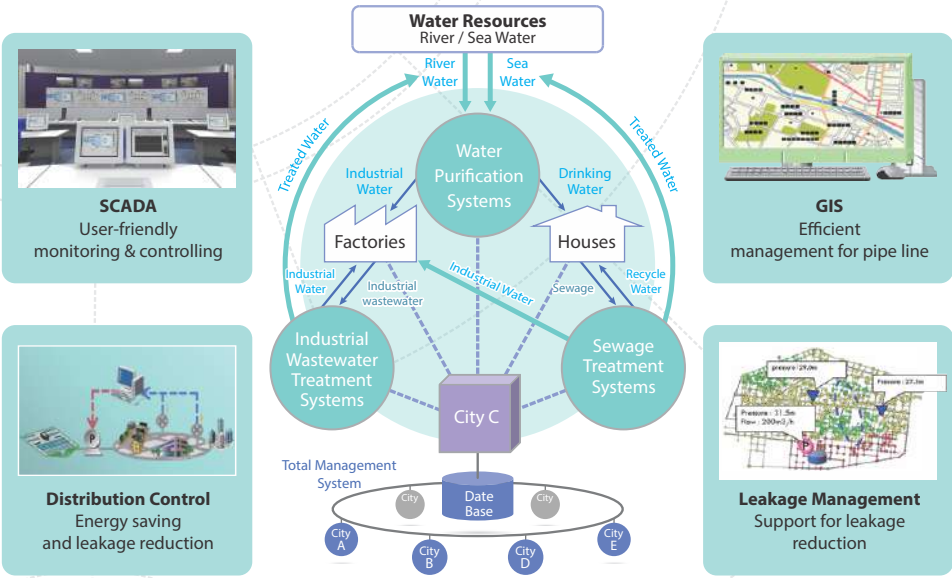
Water Environment Solutions

Hitachi provides sustainable Water Environment Solutions matched to the needs and characteristics of each region.



Intelligent Water System

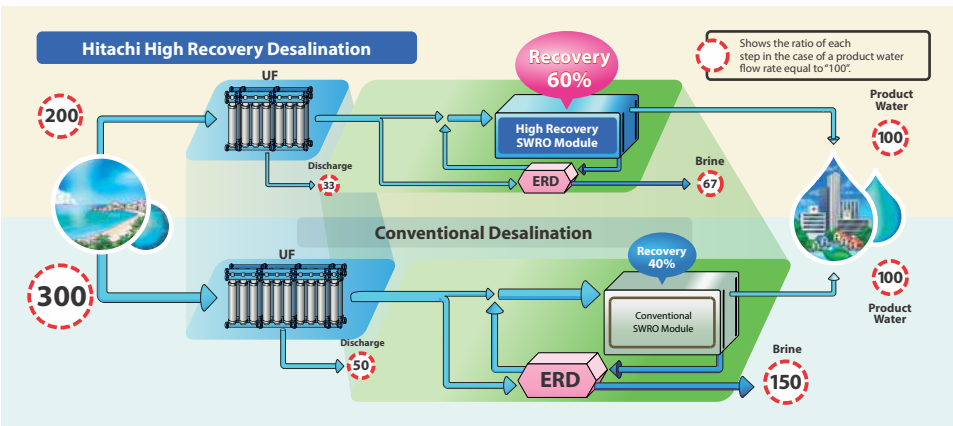
Integration of Water circulation system and Information control system region.



Intelligent Water: Intelligent Water is a trademark or a registered trademark of Hitachi, Ltd. in Japan.
SCADA: Supervisory Control And Data Acquisition

High Recovery Seawater RO System

Sustainable High Recovery achieved through Innovative membrane load balancing.



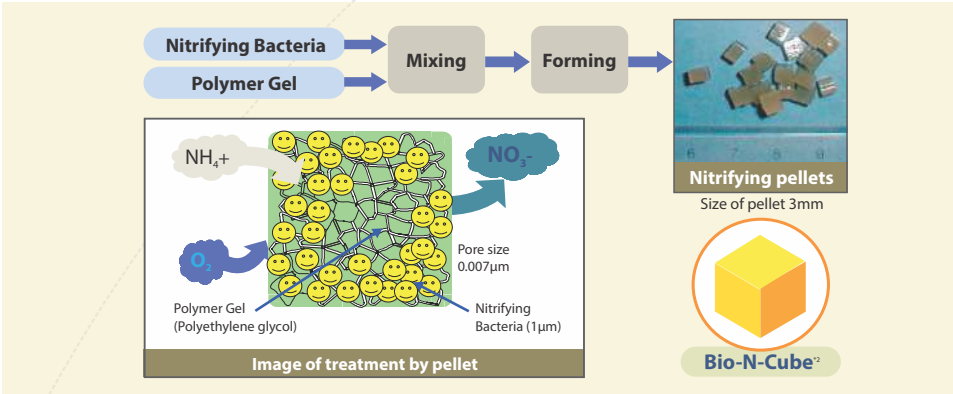
SWRO: SeaWater Reverse Osmosis membrane
ERD: Energy Recovery Device
UF: UltraFiltration membrane

We currently have over 20 patent applications pending both within Japan and overseas.
NOTE: These values depend on the particular conditions. This case study is TDS (Total Dissolved Solids) 35,000mg/L at 25 deg-C for reference.

PEGASUS

Advanced Nitrogen Treatment - Microbial Immobilization Technology

PEGASUS*1 is an advanced sewage treatment process that promotes nitrification and uses inclusive immobilization supports.



*1 PEGASUS is a Japan-registered trade mark of Hitachi, Ltd. and Japan Sewage Works Agency.

*2 Bio-N-Cube is a registered trademark of Hitachi, Ltd. in Japan.

Water Solutions

Since its establishment, Hitachi Aqua-Tech Engineering has built a strong reputation as a specialist in water management solutions. For four decades it has been the company's Mission to Improve Lives through engineered water solutions.

Design Innovation and Creative Engineering

Hitachi Aqua-Tech has a stellar reputation in the design innovation and creative engineering of pools & spas, fountains, water playgrounds and water features. It is also providing comprehensive EPC (Engineering, Procurement & Construction) services and maintenance to the customers and aims to provide a one stop solution for resorts, hotels, residential & commercial facilities and municipal developers.

Apart from our excellence as a water management solutions provider, we are continually committed to Corporate Social Responsibility (CSR) by managing our business operation with ethical standards and for the social good.

Redefining Impressive

Having been in the field for 30 years, Hitachi Aqua-Tech understands that there is more behind an impressive water feature that must be understood and addressed.

A Sense of Place

Hitachi Aqua-Tech considers/defines the purpose of the development when designing an icon of a place, striving to create an enduring heritage by using water as a medium to tell a story.

Designed for the Space

A considerate water feature would be well integrated with Architecture and Landscape, creating no negative impact to the space and users.

Built to Function

Maintenance and operating cost have often been overlooked. The designers and engineers at Hitachi Aqua-Tech design not only for aesthetics but, also for effectiveness and practicality.

Global Iconic Projects

Swimming Pools

Hitachi Aqua-Tech provides a comprehensive one-stop solution from Concept and Design to Build and Maintain. Over the years, Hitachi Aqua-Tech has been the market leader setting benchmarks on innovation, quality workmanship and reliability often exceeding our clients' expectations.



Sheraton Da Nang, Vietnam

Bio-Pond

Biological filtration keeps natural ponds clear and biologically clean. Our proprietary MARSsystem has been installed in hundreds of ponds and are still working after being more than 10 years in operation.



The Interlace, Singapore

Water Playground

Playing with human senses, Hitachi Aqua-Tech is driven to create joy, excitement and promote self-discovery and social interactions through our water play park concepts. We take pride in creating fun-filled and safe playgrounds that are guaranteed to keep children occupied all day.



Jurong West Sports Complex, Singapore

Hydrotherapy Spas

For centuries, water has been used as a form of relaxation and ancient healing for the body & mind. At Hitachi Aqua-Tech, we provide an array of possibilities in design and building of Hydro-massage spas and pools for wellness centres and hospitals.



Coco palm Condominium, Singapore

Water Feature Systems

Water Elements bring life to the Architecture and Landscape. Whether as the main or supporting element, water impresses, enhances and fascinates - a fact well illustrated by the varied nature of our completed projects.



Aalto, Singapore

Proposed Water Features and Pools in India



Rain Mist Courtyard



Tower Drop off

Steel

With an experienced team of professionals, Hitachi India Pvt. Ltd. has established PAEG (Process Automation Engineering Group) in Nagpur, India to generate price competitive solutions for the Indian market using Hitachi Japan products.

The major activities in the field of industrial electrical and automation systems and solutions are:

- Complete handling of industrial projects (new and revamping) for processing lines and standalone applications
- Sales of the latest Hitachi IoT automation and other industrial products.
- Digital Solutions offerings using the latest Hitachi IIoT- PAC controllers
- After sales service support to existing Hitachi customers in India for spares, maintenance, troubleshooting, regular training etc.
- Support to Hitachi Japan for software

development and engineering for worldwide steel projects.

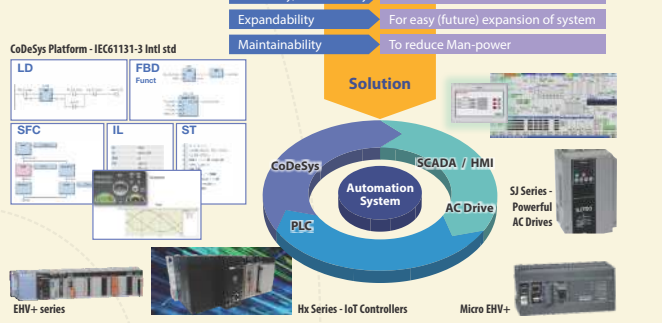
- Developmental activities to create price competitive offerings using latest Hitachi products from Japan and solutions from India.
- Support to Hitachi Japan in lowering overall project costs by offering local product supplies, engineering and commissioning services.
- With support and guidance from Hitachi Japan, building a strong engineering team by continuous knowledge sharing sessions, training and quality improvements.
- Offering Operational Technology (OT) expertise in the IIOT Platform (OT x IT) for the industrial digital transformation solution.

OVERVIEW

To meet the industry demand for reliable products and smart solutions, the Infrastructure Systems Division, Hitachi India Pvt. Ltd. is involved in offering complete Electrical and Automation systems and new IIoT digital solutions, using latest Hitachi products, technologies and Hitachi's vast experience in the industry.



Automation Solutions



Energy

Social Infrastructure & Industrial Systems

Being a part of every small yet significant transformation, Hitachi Hi-Rel Power Electronics Pvt. Ltd. is at the forefront of Social Innovation in India's power sector and helps bring in the nation's dream of clean and green power to realization.

Hitachi Hi-Rel's Industrial UPS equipped with latest DSP (Digital Signal Processor) based technology is emerging as an exceptional safeguard against power disruption by providing both uninterrupted Power Backup and Power Conditioning. Supporting the rapidly growing digital ecosystem in India, Hitachi Hi-Rel's advanced Online UPS or IT UPS for Enterprise and Commercial Applications is providing its customers with a highly stable power solution. Hitachi Hi-Rel's energy efficient Variable Frequency Drive (VFD) invaluable contributes through conserving energy spent on the motors by regulating the speed and torque output of an electric motor, which is an effective means of process control. This establishes that Hitachi's VFD has immense potential to contribute to a greener and low carbon footprint society. Hitachi Hi-Rel also offers highly reliable & high performing durable IGBT (Insulated-Gate Bipolar Transistor) based PWM (Pulse Width Modulation) Railway Inverter (25 kVA Under Slung Inverter) for Railway AC coaches, employing latest technology 8-bit microcontroller-a revolutionary development of energy supply system for Railway Application, supplies power and offers proper air conditioning for AC coaches.

OVERVIEW

Seeking to Realize a Reliable Supply of Electric Power and a Low-carbon Society

Hitachi develops and supplies an extensive range of highly efficient and reliable power generation systems that are used throughout the world.

It is also actively involved in the development and supply of power generation systems using natural energy resources, such as solar and wind power, that are expected to play an increasingly important role in creating a sustainable world.

Megasolar Power Plant for Power Company (Japan)
Ohgishima Solar Power Plant, Tokyo Electric Power Co., Inc.
[Power Business Unit, Hitachi, Ltd.]



OVERVIEW

Urban Development and Manufacturing based on Environmental Friendly Technology

Creating a society in which everyone can live in safety, with peace of mind and comfort requires a variety of social infrastructure solution. At the same time, to achieve a low-carbon-footprint society, it is also necessary to ensure that new and advanced social infrastructure gives rise to lower levels of carbon dioxide emissions. In the field of urban systems, through its smart city business, Hitachi is promoting the development of cities that reduce the impact on the environment in terms of electric power, water, transportation, disaster prevention, logistics and recycling, along with supplying water recirculation systems designed to help overcome water resource issues, and elevators and escalators that enable people to move around comfortably in urban spaces.

Hitachi also supplies systems that are basic to industrial operations, such as high-efficiency motors, the company's founding product, and inverters and transformers. Its transformers and power supplies are highly regarded for using less energy and reducing carbon dioxide emissions. It also supplies cogeneration systems and systems for utilizing waste heat, all this while being engaged in energy service company (ESCO) projects aimed at improving energy efficiency.

Hitachi is also contributing to ensure the safety of social infrastructure through its involvement in defence systems and emergency and disaster management operations.



Amorphous Transformer
[Hitachi Industrial Equipment Systems Co., Ltd.]



S-SBR Manufacturing Plant at Asahi Kasei Synthetic Rubber Singapore Pte. Ltd.
[Industry & Distribution Business Unit, Hitachi, Ltd.]

S-SBR: Solution Styrene-butadiene Rubber

ACTIVITIES IN INDIA

Hitachi Hi-Rel Power Electronics Private Limited was established in 2011 to strengthen Hitachi's power electronics business. It is contributing to new value creation in India by manufacturing an array of highly efficient power electronics products like UPS (Uninterruptible Power Supply), Drives (VFD – Variable Frequency Drives), Solar Inverters and Railway Inverters along with Air Compressors which are helping India meet the present and future Information Technology and Operational Technology requirements. It has state-of-the-art manufacturing facilities at Sanand and Gandhinagar in Gujarat and has established itself as a Pioneer in Power Electronics. It is also helping a wide array of industries and organizations meet escalating demands through low polluting and innovative Power Solutions.

Supporting a low-carbon-footprint society, Hitachi Hi-Rel is committed to fulfilling Government of India's initiatives to build the nation's green energy capability. Hitachi Hi-Rel's advanced Solar Inverters, with over 2GW installation base in India, have been instrumental in bringing renewable and abundant solar power to millions of homes, industries and factories in India. Thereby, meeting the surging energy demands of a burgeoning Indian society

Hitachi Hi-Rel India's contribution to Indian Society through its Medium Voltage - Variable Frequency Drive (MVVFD)

Hitachi Hi-Rel Power Electronics Private Limited a Hitachi Group Company is helping improve Social, Environmental and Economic values of the society in India. A case to the point is its state-of-the-art Medium Voltage Variable Frequency Drives (MV VFD) used by its Direct Valued Customer, Rashtriya Chemicals & Fertilizers Limited (RCF). Amongst the leading fertilizers and chemicals manufacturing companies of the country, this drive controls the speed of ammonia feed

pumps (P1). The technology ultimately supports the Indian Agriculture Industry - a core sector of India, by contributing to

- the national income, Government revenue contribution,
- employment generation,
- industrial development and
- poverty removal by cost effective & good quality fertilizer products for farmers



Medium Voltage VFD
[Hitachi Hi-Rel Power Electronics Pvt. Ltd.]



Central & String Solar Inverters
[Hitachi Hi-Rel Power Electronics Pvt. Ltd.]



Low Voltage VFD



Engineered Drive System



Air Compressors
[Hitachi Hi-Rel Power Electronics Pvt. Ltd.]



Industrial UPS

IT UPS



Powering India:
Renewable Projects
and Challenges

[Read more](#)



A Nation's Dream -
'Power for All'

[Read more](#)



Smart Life

Automotive Systems

To ensure adherence to BS-VI emission regulation, manufacturers need to use engines, which efficiently convert fuel energy to kinetic energy thereby, reducing CO₂ emissions from automobiles. Hitachi understands the technology and contributes to the cause by manufacturing key automobile components as an OEM in its global standard production facility of Hitachi Automotive Systems, Chennai.

OVERVIEW

Building a Better Relationship between Vehicles and Society

Hitachi's automotive systems business offers a wide range of technologies and products. For the environment, Hitachi's products extend from engine management systems that efficiently convert fuel energy to kinetic energy, to electric motors, inverters, lightweight iron castings and products for hybrid vehicles. In the safety field, it includes stereo cameras, a key technology for driving support systems, and preventive safety technologies such as brakes and suspension systems that improve both riding comfort and steering stability.

ACTIVITIES IN INDIA

Hitachi Automotive Systems (India) Pvt. Ltd. is a manufacturer of automotive components, having a manufacturing facility near Chennai. The technical sales office, located in Delhi, focuses on the entire South-Asian region covering India, Thailand and Indonesia. The primary focus of this facility is to offer prompt local technical support to its customers in India and the related region.

Additionally, Hitachi Automotive Systems Pune (India) Pvt. Ltd. is a leading manufacturer and exporter of high quality and durable automotive electronic parts.

As of December, 2020



Mobility Technology Vehicle
[Hitachi Automotive Systems, Ltd.]

Hitachi Automotive Systems
(India) Pvt. Ltd.

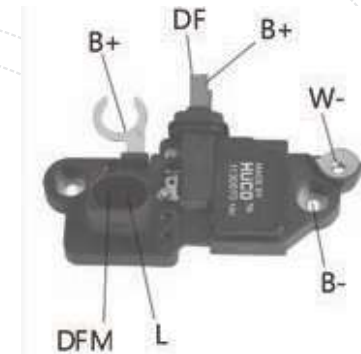
Manufacturing and Sales of Components
for Automotive



As of December, 2020

Hitachi Automotive Systems
Pune (India) Pvt. Ltd.

Manufacturing and Sales of Automotive
Electronic Products



As of December, 2020

Healthcare

On the onset of pandemic Hitachi supported the Healthcare program of Contributing towards COVID-19 relief through supporting deployment of testing kits in Government Hospital. Hitachi Contributed towards relief on Ground by funding preventive Healthcare infrastructure against COVID -19 through collaboration with United Way, a Mumbai based NGO.

OVERVIEW

Strong Support for Advancement in Products and Services

Hitachi's Magnetic Resonance Imaging (MRI) scanners and other medical equipment, systems and services are helping to meet diagnostic and healthcare needs around the world. Hitachi also manufactures equipment for producing the semiconductors and other devices that are key to providing today's electronic products with advanced functions, one of the key areas in which the company is able to utilize its proprietary microfabrication, measurement and inspection technologies. It also provides transmitters, receivers and other broadcasting system components used to ensure stable, high-quality relay of broadcasts. Its power tools are favoured by professional users around the world for their light and compact design with low-noise and low-vibration performance.



Field Emission Scanning Electron Microscope
[Hitachi High-Technologies Corporation]

ACTIVITIES IN INDIA

Healthcare group provides solution for the healthcare sector by utilizing Information and Communication Technology (ICT).

Aloka Trivitrion Medical Technologies Pvt. Ltd. is a joint venture between the Healthcare Business Unit, Hitachi, Ltd. and Trivitrion Healthcare.

For over 10 years the company has been manufacturing and providing world-class ultrasound systems to even the remotest locations across the country while delivering a unique combination of easy-to-use and reliable technology.

Diagnostic Ultrasound System
[Aloka Trivitrion Medical Technologies Pvt. Ltd.]



Medical Equipment (Ultrasound Scanning Machine)



Smart Life and Eco-friendly System

OVERVIEW

Supporting Comfortable Living in Home, Office, and Community

Hitachi's home appliances, which include room air conditioners, refrigerators, air purifiers, are designed not only to deliver better performance and energy efficiency, but also to make users' lives easy and comfortable by cutting the time and effort needed for housework. Its air conditioners bring a pleasant environment to homes, offices, factories, and community spaces. Hitachi also supplies a wide range of other consumer products.

The models, specifications, and functions described in the text refer to products available in Japan and may not be applicable to products supplied in other countries.



New 4DFBF 569L (R-WB640VND0)
[Hitachi Global Life Solutions, Inc.]



Big 2DTF 550L (R-VG660PND7)
[Hitachi Global Life Solutions, Inc.]



Air Purifier (EP-A7000 Premium Black (BK))
[Hitachi Global Life Solutions, Inc.]



Front-loading Washer-Dryer
[Hitachi Global Life Solutions, Inc.]

Johnson Controls-Hitachi Air Conditioning India Ltd.*

Manufactures Air Conditioners / Trading of Refrigerators and Air Purifiers



*Subsidiary of equity-method associate

Hitachi High-Tech India Pvt. Ltd.

Hitachi High-Tech provides high-tech analysers such as X-ray fluorescence, Optical Emission, Laser Induced Breakdown Spectrometers, Magnetic Induction / Measurement Instruments (Coating Gauges), and Electronic / Scientific and Medical Equipment used for quality control, process control and compliance across diverse range of industries.



*Hitachi High-Tech has been integrated into Hitachi's Smart Life sector since FY2020.

Others

Construction Machinery

Our construction machinery business not only delivers on infrastructure support but also on ecological parameters through reduced CO₂ emissions, low fuel consumption and near-zero exhaust emissions, making sure India's rapid urban development progresses effectively and sustainably.

OVERVIEW

A Diverse Range of Construction Machinery Satisfying Requirements from Around the World

Hitachi supplies hydraulic excavators, wheel loaders, compaction equipment, and a variety of other construction machines based on a philosophy of being active in the evolution of "machinery" and the synergy between "human" and "business" that combines to create rich living spaces, making them more comfortable and efficient. These machines are deployed throughout the world and meet global requirements simultaneously complying with the exhaust emission regulations in the countries where they are used. Hitachi is also actively working on technology development aimed at reducing load on the environment by contributing to the reduction of CO₂ emissions, with the use of hybrid systems.

As of December, 2020



Transforming Lives –
From Barren To Bloom

[Read more](#)



ZAXIS220LC Hydraulic Excavator
[Tata Hitachi Construction Machinery Co. Pvt. Ltd.]



EX8000-6 Ultra Large Hydraulic Excavator and EH5000AC-3 Dump Truck
[Hitachi Construction Machinery Co., Ltd.]

Tata Hitachi Construction Machinery Company Private Limited Manufacturing and Sales of Construction Equipment



As of December, 2020

Metals

OVERVIEW

Production of Original Materials and Components with Key Role in Innovation (High Functional Materials & Components)

High functional materials play an essential role, serving as the seeds that nurture new innovations. Examples of such materials include metals such as amorphous metals that can be used to build transformers and inductors that are small, light, and highly efficient. In addition to this, Hitachi manufactures wire and cable products such as cables used in rolling stock, and chemical materials such as anode material for high-capacity lithium-ion batteries having excellent discharge load characteristics. These materials are all based on original technologies built up by companies in the Hitachi Group, and are widely praised for their originality and innovation.



Amorphous Metals
[Hitachi Metals (India) Pvt. Ltd.]

ACTIVITIES IN INDIA

As part of Hitachi's Social Innovation Business initiative, Hitachi Metals (India) Pvt. Ltd. believes in the concept of multilateral collaboration between multiple organizations, minds and insights; effecting materials and ushering engineering driven transformation in business efficiencies, governance and consumers' lives, which is truly demonstrated in our Energy Efficient Amorphous Metal for distribution transformer business. Hitachi Metals (India) Pvt. Ltd. is a sales and marketing center and provides high grade metals products and materials, magnetic materials & applications, functional components & equipment, wire, cable & related products for expanding sales of Automotive, Infrastructural Steel & Allied Industries, Electronics and energy-saving-related Products and Materials. Hitachi Metals (India) also has a manufacturing setup for design, manufacturing & sale of Amorphous METGLAS® and Nano-Crystalline FINEMET® Soft Magnetic Electronic Cores. Our aim is to become the world's leading high-performance materials company by contributing to future innovations in the field of energy, infrastructure and automotive by continuously challenging ourselves to meet the changing society needs.

HNV Castings Pvt. Ltd. is a manufacturer of ductile iron castings for applications in the automotive industry, with plants in Palwal (Haryana) and Neemrana (Rajasthan).

Hitachi Metals (India) Pvt. Ltd.



Design, manufacturing and sales of Amorphous METGLAS® / Nano-Crystalline FINEMET® Soft Magnetic Electronic Cores / Sales & Services – High Grade Metal Products / Automotive Components / Local warehousing of speciality steel / Tool Steel / Amorphous Metals / Cable Products



HNV Castings Pvt. Ltd.

Manufacturing of Ductile Iron Castings



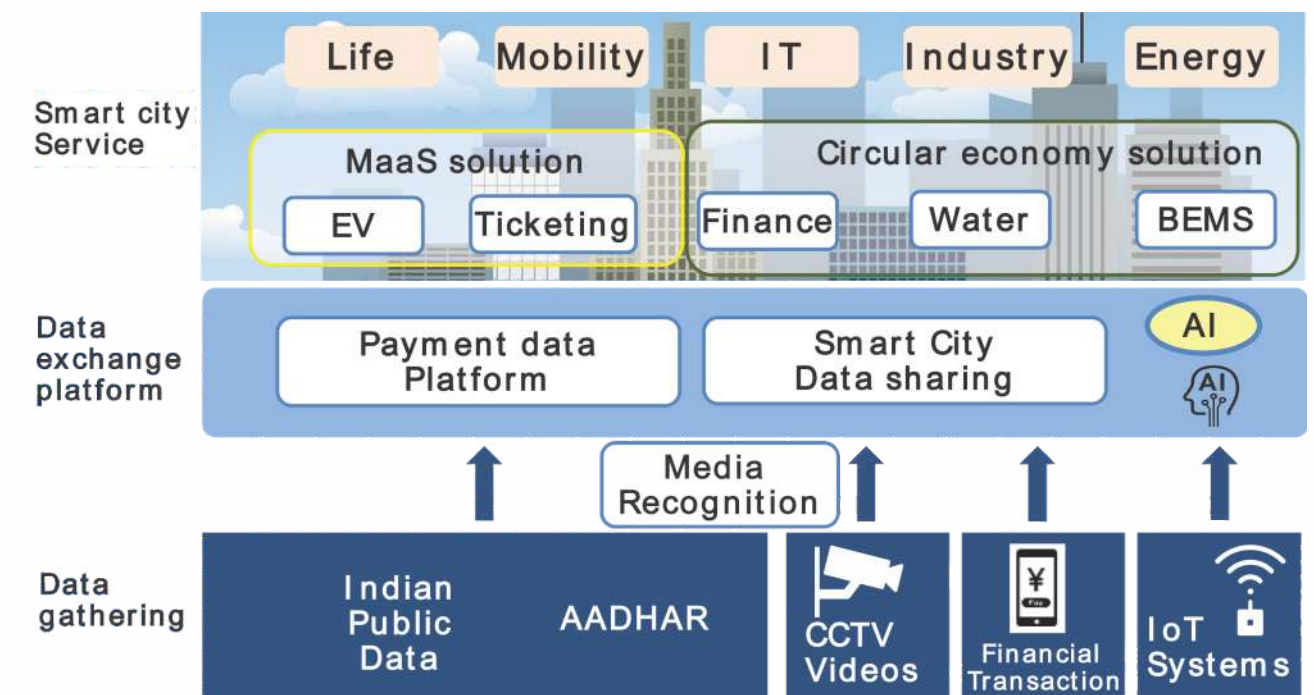
Others

Quality Life Enterprise (India) Pvt. Ltd. Hotel Management



Hitachi India Research & Development (R&D) Vision

Create digital business on data exchange platform enhanced by AI



Research & Development

Since the establishment of R&D centre of Hitachi India, in the year 2011, we have been striving towards a society that is more sustainable, progressive and prosperous. Such initiatives are realized by the sharing of technical expertise with global R&D labs and communicating with regional business units to understand customers' problems and provide effective solutions for them. The force behind the R&D Centre of Hitachi India is: 'Let's become bigger, stronger and more sustainable'.

We have a two-way approach to customer co-creation; towards the Indian market and towards the global market. In India, the Hitachi India R&D centre works in close collaboration with business units that are in direct contact with end users, thereby contributing to the Social Innovation Business in the country. We support this activity through research in the areas of finance, smart life in city and rural area by fully utilizing data and AI technologies.

With regards to the global market, we impart our technical expertise to the R&D labs in Japan to augment their research activity. Some of the assisted research fields include automotive and software platforms. Sequentially, these labs bring about innovative solutions to customers all over the globe through various business units of Japan. The successful completion of the process eventually fosters global customer co-creation.

The R&D centre of Hitachi India, with the best mix of Indian and Japanese researchers is covering a variety of areas such as Artificial Intelligence (AI), Internet of Things (IoT), software engineering, security, financial, mobility, and energy. Through our competency and effort in technological development and customer co-creation, we believe/commit to empower India, move the globe and, thereby, to consequently become what we want to be.



Skill Development – Ginou Prashikshan

Education – Ujjwal Mirai

Atal Innovation Mission (AIM) including Self-Employment and Talent Utilization (SETU) is Government of India's endeavor to promote a culture of innovation and entrepreneurship. Hitachi India's program aligned for second consecutive year with Niti Aayog's vision to 'Cultivate one Million children in India as Neoteric Innovators.' The objective was to serve AIM as a platform for promotion of world-class Innovation Hubs, Grand Challenges, Start-up businesses and other self-employment activities, particularly in technology driven areas. Through this initiative for second year Hitachi India Pvt. Ltd. provided access to technology and expertise in 2 Kendriya Vidyalaya School and 1 Government School in Delhi to reach more than 3000+ children. The program enables fostering of creativity and imagination among the Government school children and inculcated design thinking, problem solving and adaptive learning skills amongst them. Upon successful completion of the second year, approx. 60% students demonstrated improved learning outcomes in digital Literacy, robotics, coding and software. The students also created science prototypes as a part of the literacy project.

BRAND COMMUNICATION MESSAGE



<https://social-innovation.hitachi/en-in/>



 [linkedin.com/company/hitachi](https://www.linkedin.com/company/hitachi)