

STRENGTHENING GLOBAL INDIA

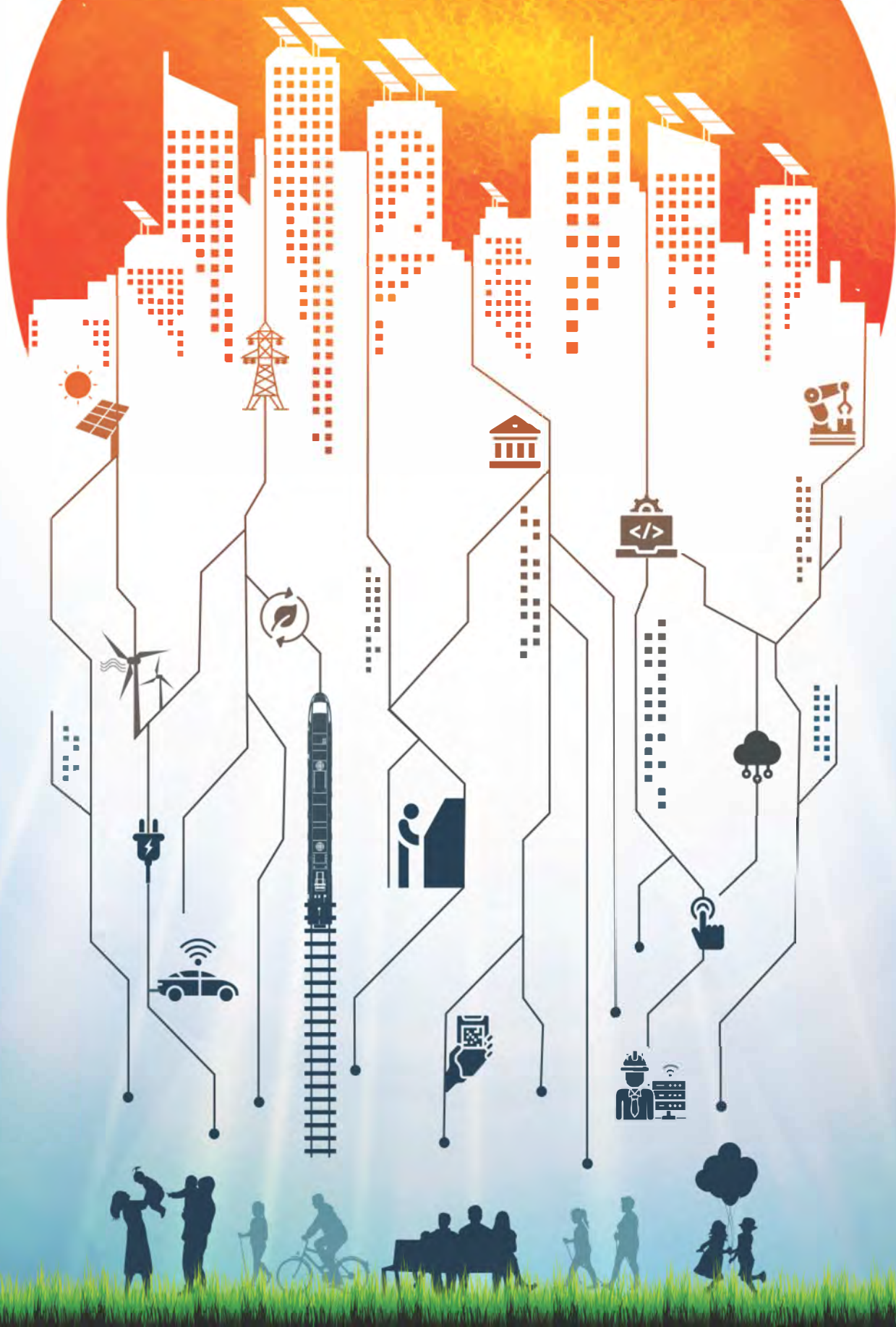


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Message from the Chairman

Committed to Making Sustainability an Integral Part of Business –
Hitachi is Accelerating Global Transformation for the Wellbeing
of the Society



In recent years, the world has witnessed extraordinary and foundational shifts. Greatly amplified capabilities for connection and collaboration are not only transforming our economy through the growth of ecosystems, but also significantly strengthening cohesive models of progression. Even though the business environment has been dynamic in the last couple of years, Hitachi has not only persistently displayed resilience, but has been consistently accelerating its business expansion and growth.

The dynamic business environment while is witnessing stabilization but is also induced by multiple disruptions across the world. Fundamental challenges being witnessed by some of the leading economies universally, are creating paradigm shifts for organizations to charter a business blueprint that is agile, works in harmony with nature and is infused with distinctive yet adaptable technologies. Hitachi is at a momentous transformational phase of building and developing a business ecosystem that is not only colossal but encompasses the proficiency of being able to sustain under any rapidly varying environments.

The world is witnessing a rather unrealistic evolution that is being conjured by solutions and technologies impelled by keeping Customer Centricity into contemplation. The environment around us is not conducive and is precipitously necessitating novel solutions that are centred around the wellbeing of citizens and societies. There is a pressing compression around our surroundings that is creating an ecological imbalance. These radical transferences will need to be addressed and technology will play a catalyst in bridging this gap.

Hitachi has been instrumental in revolutionizing the landscape of some of the leading nations, from Mobility to Healthcare to Digital, covering the length and breadth of solutions that are auxiliary in cementing the foundations of its undisputed credibility and trust built over a century. **"Society changes and Hitachi responds to the change."** Our visionary business acumen has been instrumental in canvassing our core strengths across varied business peripheries.

In financial year 2022, Hitachi announced its forward-looking visionary Mid-term Management Plan 2024 that emphasizes the role of Social Innovation Business to "Support people's quality of life with data and technology that fosters a sustainable society" The strategic and evolved Mid-term Management Plan 2024 effectually integrates Digital, Green, and Innovation to drive the transformation of the world aimed at the wellbeing of the people. These growth drivers will serve as the core of Hitachi's growth strategies while strengthening our business portfolio. Our new business structure which combines five existing sectors into three fields, i.e., Digital Systems & Services, Green Energy & Mobility, and Connective Industries, adding Hitachi Astemo as a fourth business entity, will further increase the progression and profit potential by positioning Digital, Green, and Innovation as the axis of growth.

Advances in digitization, datafication, connectivity, and specialization are steadily dissolving conventional structures by enabling cross-industry and cross-firm collaboration and co-creation. Distinct industries are converging to form dynamic, human-centric ecosystems that addresses fundamental human and societal needs in possible and more effective, precise, accessible, and sustainable ways.

Hitachi places accent on "Innovation" as the growth driver, which supports in two endeavours: "Generating digital service business with the Lumada Growth Model" and "Backcasting from 2050 to create radical innovation." With these two tasks we aim to provide support to customers' future growth enabling a sustainable world for citizens and the society at large!

Additionally, through digital engineering, system integration, connected products, and managed services, we will establish a growth model in the Social Innovation Business that is based on a data-driven cycle of co-creation with customers. The Social Innovation Business stems from an understanding of the customers' issues; that fuels the inception of planning, building, operating and maintaining the customers through a continuous business and solutions driven life cycle.

With climate change, rapid economic development, and surge in the population, the environment is put under threat and there is a critical need for action. Hitachi envisions becoming a sustainable organization by 2030 and there is a collaborative effort that is required towards achieving this goal and making it a reality. We endeavour to provide value to the customers and the society at large through enhancing the human capital with a focus on Diversity, Equity, and Inclusivity as part of our business ethos.

Further nurturing and strengthening our belief of "Hitachi Social Innovation is POWERING GOOD" and utilizing Green Technologies, Digital Technologies, and Innovation at the core of our business philosophy and contributing towards solving the societal challenges that are persistent in different parts of the world due to various foreseen and unforeseen situations. The future is what and how we shape it for us and for the future generations. Hitachi has always led the growth of nations through building cohesiveness and would continue in this endeavour by offering superior technology products and solutions – TODAY and for the FUTURE!

Mr. Kojin Nakakita

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

Message from the Managing Director

Driving Growth, Touching Billions of Lives – Hitachi India is Leading the Progress of the Nation through its Unparalleled Technological Prowess



Transformation and progression of nations are often fuelled by the vision to ensure Customer Centricity becomes inherited and embodied across solutions that are originated to empower society and its people at large. India has not only been driving the exceptionally expansive yet successful journey of charting an agile and heightened growth but is also revolutionizing the landscape of business evolution using Technology as the catalyst. The nation has been incepted with unparalleled maiden development led voyages spanning across Financial Inclusion, Health, Education, Infrastructure, with Digital as the enabler.

Hitachi India has been the Partner in Progress, Partner in Prosperity with India for more than nine decades. Our resilient deep-rooted foundations, culturally rich values and ethos have been helping India accelerate its colossal journey of becoming one of the leading economies in the world. India sets the foundation, and the world follows it, this has been not only instrumental in constituting a world where all live in harmony but has also set forth the visionary roadmap of establishing an ecosystem that is responsive and forward looking.

Hitachi's business acumen is often complemented and reflected in the prophetic business driven prescient that is effectually synergized with the varying necessities arising out of the dynamic business environment. Hitachi has been consistently aligning its strategic evolutionary mid-term management plans to augment and charter a cosmic yet agile roadmap that is accelerating growth. In 2022, Hitachi embarked on a forward-looking growth-oriented business proliferation through its Mid-term Management Plan 2024 coinciding with 70 years of flourishing Indo-Japan relationship, it is a momentous phase and Hitachi India is proud to be affiliating with the nation to build a buoyant customer driven, customer empowered ecosystem.

Hitachi India has showcased many achievements and credentials that have accrued over the years. From establishing Electronic Interlocking system across 1000 railway stations to ensure journey of people become convenient, safe, and seamless to lighting up billions of lives through bi-directional Renewable Energy solution from Pugalur to Chhattisgarh. The Digital mission which started in India and the strides we made – from online transactions to India's ranking in per capita data consumption. Interestingly, rural per capita data consumption is higher than urban is being supported by the fortifying Financial landscape through further cementing our partnership with the State Bank of India (SBI) for offering unparalleled financial solutions, helping India lead a healthy life through Bluetooth-enabled Telemedicine solutions that can help patients be treated at any corner of India to extending the length and breadth of e-Education up to Ladakh, these are some of the voyages that have helped India steer and accelerate towards becoming a developed economy.

The digital transformation in India, over the last decade, is a symbolic testimony to the nation emerging as a global leader. Technology has taken the power of choice to the last mile and continues to push the limits through its dynamism and its ability to constantly upgrade itself. In recognition of the disruptive potential of technology, our core pillars resting on Digital, Green, and Innovation will lead the future of change for India as we become an environmentally conscious driven organization. Our key aspiration is to emphasize on how we inherit Sustainability through cross functionality within business.

For the next couple years India will remain both the product and solutions market. More important in a big geography like India, physical infrastructure will remain vital and integral to India's growth as much as digital infrastructure. The Government's Digital India, Make in India, Gati Shakti National Master Plan, Unified Logistics Interface Platform are a clear representation of growing India. In the Digital Infrastructure, Hitachi is identifying the digital competencies, right from very basic systems solutions all the way to analytics, payments, and AI all under one digital hub. Lumada, Hitachi's undisputed data enabler has the capacity and capability to utilize and integrate multi-varied, multifarious solutions across the initiatives outlined by the nation on to an integrated platform, this is going to drive our future disruption and respond to the speed of change, as well.

Hitachi India has been instrumental in envisaging a prophetic future that will ensure India precipitously strengthen its position as a Global Leader. A journey fuelled by the distinctive technological prowess that inspired to effectually determine an India for Today, an India for Tomorrow has now grown exponentially. From touching hundreds of lives to Millions to Billions, the journey to achieve the vision and mission of a NEW INDIA has accelerated and Hitachi India is revered to be an integral part of this exertion. Hitachi aims to STRENGTHEN GLOBAL INDIA for the citizens of TODAY and the citizens of TOMORROW. Let's continue Powering Good!

Bharat Kaushal

Managing Director, Hitachi India Pvt. Ltd.

Progressing Towards Building a Sustainable Society

Through its Social Innovation Business, Hitachi is harnessing the power of technologies to overcome the biggest challenges faced by society today and improve people's quality of lives.

Social Innovation Business



Internet of Things



Big Data Analytics



Artificial Intelligence



Watch the Video

Hitachi's Growth Drivers



Digital



Green



Innovation

OT

Physical processes
(machine/assets controls)



Our Strengths

Our core strengths in IT x OT x Products enable us to address the most pressing social challenges in the recent times.



IT

Data, information flow, data storage systems



Products

Hardware, materials, engineering/procurement/construction, system integration

Bringing Value to Customers and Society

At Hitachi India, we strive to provide value to customers and society through the enhancement of human capital.



Enhancement of Human Capital

- Harmonious Coexistence of People and Nature
- DEI (Diversity, Equity and Inclusion)
- Integrity in Management
- Enhancing Quality of Life



Value to Customers & Society

- Environment
- Resilience
- Safety & Security
- Healthcare

Building a Greener, Healthier Future for People and Society

Driven by the new Mid-term Management Plan (MMP) 2024, Hitachi aspires to: Support people's quality of life with data and technology that fosters a sustainable society. Hitachi has identified four business areas to drive change - Digital Systems & Services, Green Energy & Mobility, Connective Industries, and Automotive Systems Business.

Business Areas

Support the energy shift for decarbonization and provide safe, comfortable, and clean mobility

Create a resilient supply chain and innovate industries and cities



Digital Systems & Services

With cutting-edge Cyber-Physical Systems (CPS), improve the efficiency of systems which underpin society



Green Energy & Mobility

Co-Creation for Society

Growth

Green
Digital
Innovation

LUMADA



Connective Industries

Contribute to electrification and autonomous driving of vehicles



Automotive Systems Business

Mid-term Management Plan 2024 - Targets

	FY 2021 Results	FY 2022 Forecast	FY 2024 Targets
Revenues	10,264.6 billion yen	10,400.0 billion yen	10 trillion yen
Adjusted Operating Income Ratio	7.20%	7.20%	—
ROIC	7.70%	7.20%	10%
Net Income Attributable to Hitachi, Ltd stakeholders	583.4 billion yen	600.0 billion yen	—
Adjusted EBITA Margin (Ratio)	8.30%	8.40%	12%

As of December, 2022

The Founding of Hitachi

Unwavering Focus on the Monozukuri Spirit



Namihei Odaira

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.

1910

In 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.



The original repair shop in Ibaraki, founded in 1910

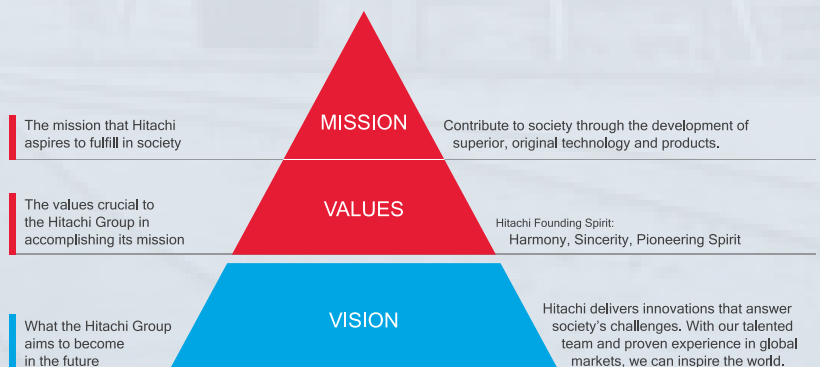
1906

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 water turbine generator and a power station around 1906 and then succeeded in developing a five-horsepower electric motor.

Hitachi Group Identity

Originally set by Hitachi founder Namihei Odaira, the Mission has been carefully passed on to generations of employees and stakeholders throughout the company's 100-year history.

The Values reflect the Hitachi Founding Spirit, which was shaped by the achievements of our company predecessors as they worked hard to fulfill Hitachi's Mission. The Vision has been created based on the Mission and Values. It is an expression of what the Hitachi Group aims to become in the future as it advances to its next stage of growth.



History

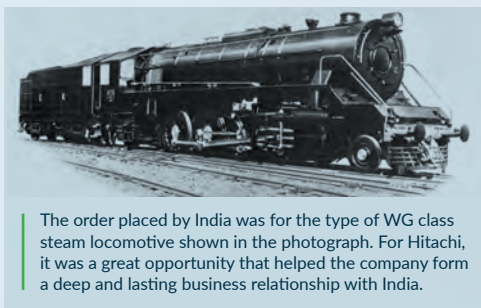
Chronology of Hitachi in India

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 Railway.

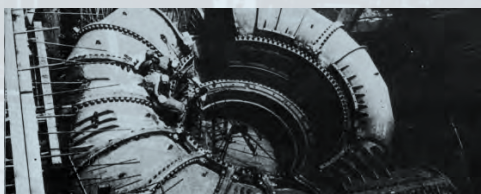


The order placed by India was for the type of WG class steam locomotive shown in the photograph. For Hitachi, it was a great opportunity that helped the company form a deep and lasting business relationship with India.

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.

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.

2008 • Establishment of Hitachi Lift India.

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.

2015 • Establishment of Hitachi Terminal Solutions India. Hitachi Solutions Acquired Ignify. Acquired Capital of Ansaldo STS S.p.A.

2017 • Establishment of Hitachi Vantara India Pvt. Ltd.

2018 • Formed Hitachi MGRM Net Limited. Formed Joint Venture with SBI – SBI Payment Services Pvt. Ltd.

2020 • Acquired ABB Power Grids. Formed Hitachi Astemo, and renamed 7 entities in India.

2021 • Acquisition of GlobalLogic India Pvt. Ltd. Renamed Hitachi ABB Power Grids to Hitachi Energy

2022 • Renamed Hitachi Systems Micro Clinic Pvt. Ltd. to Hitachi Systems India Pvt. Ltd.

Hitachi's Network in India

Making Valuable 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 / Services



Manufacturing Sales Service



Corporate Office



NEW DELHI | NOIDA



AHMEDABAD



HYDERABAD



KOLKATA



CHENNAI



GURUGRAM | MANESAR | NEEMRANA



PUNE



MUMBAI | NAGPUR

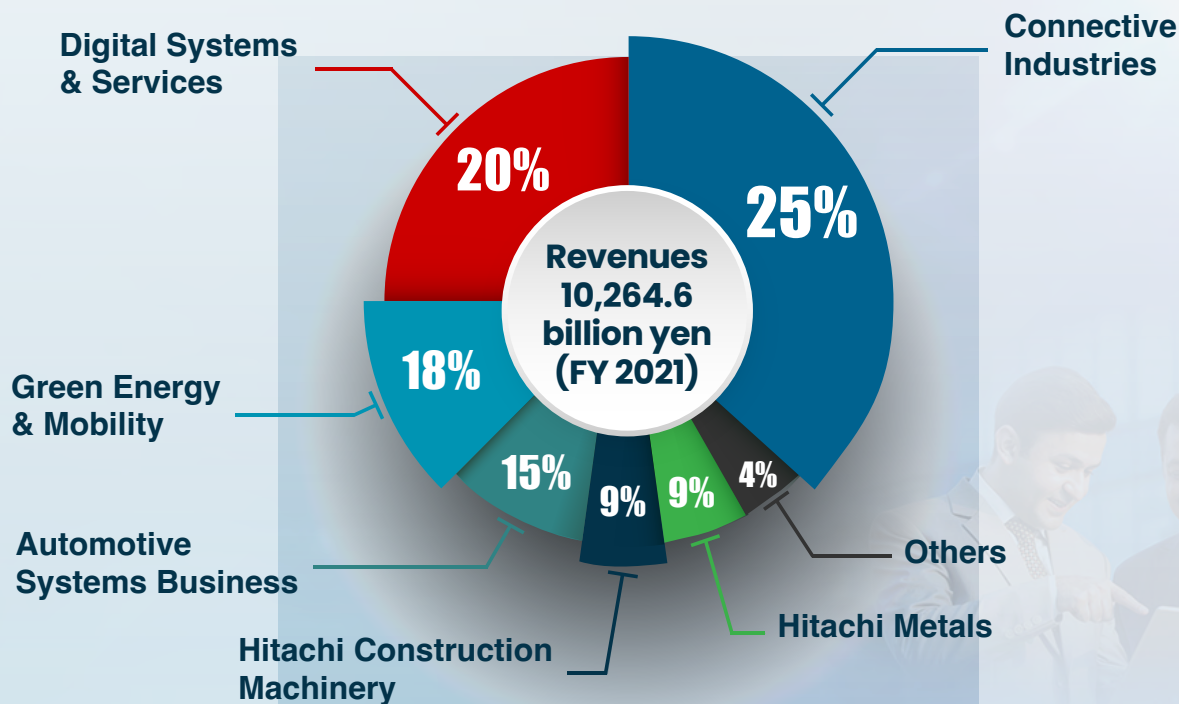


BENGALURU

As of December 31, 2022

Segment Constitution

Hitachi Group's Consolidated Revenues



As of January, 2023

Hitachi Construction Machinery was deconsolidated on August 23, 2022. Hitachi Metals is scheduled to be removed from the scope of consolidation in March 2023.

Strengthening Global India Through Co-Creation and Collaboration

Inspired by the mission to build a resilient and sustainable India, Hitachi is aligning its Social Innovation Business and offering its array of green technologies, digital technologies, and innovative capabilities to support India in taking the global leadership mantle.

Keeping the citizen at the centre of this metamorphosis, Hitachi is leveraging its global credibility in both OT and IT technologies across significant sectors like Mobility, Energy, Finance, Industry, and e-Governance in India to digitally empower and touch lives of billions making it more fulfilling.



At the same time, Hitachi is committed towards strengthening global India by bringing empowering transformations across 4 key areas- **Digital Systems & Services**, **Green Energy & Mobility**, **Connective Industries** and **Automotive Systems Business**.



Digital Systems & Services

- Hitachi India is energizing the nation's IT infrastructure, extending digitization to the Public Service Delivery System for the success of e-Governance initiatives and citizen empowerment.
- For instance, Hitachi MGRM Net's ICT-enabled e-Governance platform is laying a pervasive foundation for e-Learning infrastructure while its Bluetooth-enabled Telemedicine solutions and e-Governance platform for health are invigorating India's authority as a global pharma hub and building a robust healthcare infrastructure in the remotest areas.
- On the agriculture front too, Hitachi's Connected Farmer Ecosystem solutions are digitally empowering farmers and supporting India in becoming a global player in agri export.



Connective Industries

Integrating OT and IT technologies, Hitachi is creating a thriving ecosystem for emergence of India as a global manufacturing hub. The advent of Industry 4.0 and Industry 5.0, Supply Chain 4.0, Water 4.0, and a Gas-based economy are becoming a reality with Hitachi's smart solutions.



Green Energy & Mobility

With a complete portfolio of avant-garde green energy solutions, Hitachi India is catalyzing India's green energy transition to significantly reduce carbon emissions and fortify India's position to become a green energy superpower.

Meanwhile, Hitachi India's integrated rail solutions are accelerating digital rail transformation to usher Green Railways and support the Indian Railways in becoming a global leader in passenger and freight operations.

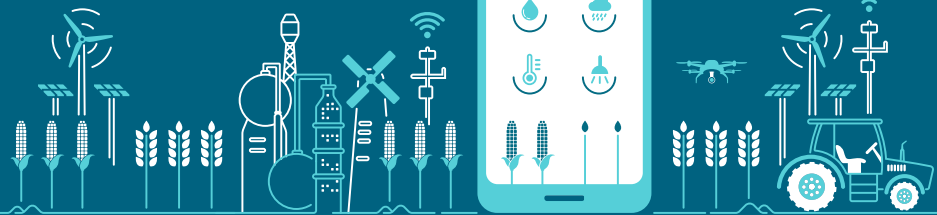


Automotive Systems Business

A leading worldwide supplier and technological contributor in the automotive and mobility industry, Hitachi India is coalescing its Electric Vehicles (EV) charging solutions and battery knowhow to boost India's EV transition and power the automotive industry's resurgent growth for leadership on the global stage.

Through Collaborative Co-Creation, Hitachi India is steadfast on enriching Digital India, Make in India, Skill India, Gati Shakti, and Atmanirbhar Bharat to power a sustainable Global India – a nation that prospers in harmony with nature and reassures people's wellbeing.

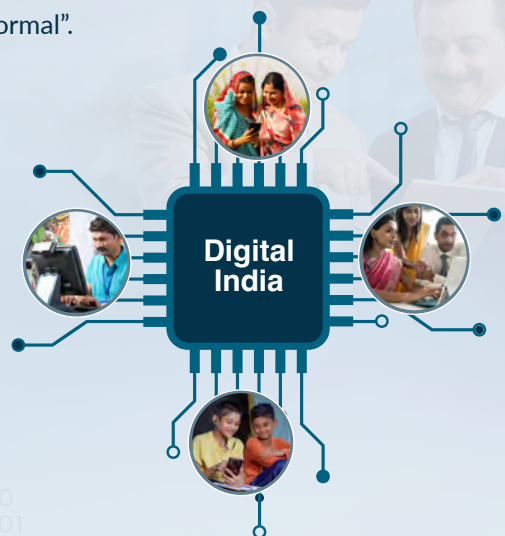
Digital Systems & Services



Digital Transformation (DX) is no longer a luxury for businesses, but an absolute necessity to stay ahead of the curve, drive future growth, and deliver a superlative customer experience. Hitachi India, which brings decades of expertise in advanced information technologies, is actively supporting organizations across industry verticals to reorient, reinvent, and redesign their processes, strategies, and structure in tune with the “Digital New Normal”.

The Government of India’s flagship scheme to transform India into digital empowered society and knowledge economy

By helping organizations embed the latest technologies into their DNA, Hitachi India is facilitating increased business efficiencies, resilience and agility, data-driven growth, enhanced innovations, real-time visibility into company data, and improved workflows for exceptional customer service.



The Vision

Promote digital transformation (DX) for the customer’s business and social infrastructure to contribute to a sustainable society

Digital Systems & Services: Focus Areas



Front Business

Develop mission-critical social infrastructure with advanced IT and digital systems



IT Services

Support DX for customer business in each industry with solutions and services



Services & Platforms

Provide the methods and latest digital technologies required for DX

GlobalLogic India Pvt. Ltd.

A Digital Product Engineering Leader

Visit Website



GlobalLogic, a digital engineering leader, helps brands across the globe design and build innovative products, platforms, and digital experiences for the modern world. By integrating experience design, complex engineering, and data expertise — we help clients imagine what's possible, accelerating their transition into digital businesses. GlobalLogic is a Hitachi Group Company.

Service Offerings

GlobalLogic extends its deep expertise to customers in the automotive, communications, financial services, healthcare & life sciences, media and entertainment, manufacturing, semiconductor, and technology industries. Its offerings include:

Digital Advisory & Assessments

Whether ideating on a new concept, looking for new revenue streams, or attempting to transform an existing product or service, GlobalLogic experts assist digital natives and digital migrators alike to build the roadmap of their digital future.

Software Engineering Services

With its global talent pool, mature processes (Agile, QA), and development tools, GlobalLogic gives customers' software project the boost that it needs. Whether the software is on a chip, on a physical device, or in the cloud, the team helps clients design, build, and accelerate their software lifecycle.

Content Engineering

GlobalLogic provides customers with end-to-end content engineering services to support their content journey and support businesses in developing insightful content and data solutions based on artificial intelligence and machine learning technologies.

Experience Design

Using design-thinking, the team helps customers to build the best user experience (UX) and ensures the experiences are as strong as the technology behind them. We delve into Brand and Futurecasting, Market Research & Ethnography, and Customer Journey Mapping among others to get consumer-first perspective.

Labs

When time and talent are in short supply, GlobalLogic's Engineering Labs help clients to achieve their ambitions in a turnkey fashion. They provide organizations with capabilities, experiences, connections, and innovation to deliver Product Lifecycle Management (PLM) solutions.



Digital Accelerators

Digital Accelerators are pre-built technology that enable GlobalLogic to deliver solutions in a fast and repeatable way. Our Accelerators help to deliver quality at speed through application of engineering best practices and process for faster time to market.

Data & Analytics Services

GlobalLogic helps businesses accelerate their data and analytics solutions through its proprietary IPs, data platform accelerator, and consulting partnerships with AWS, Google Cloud, Microsoft, and Splunk®.

Contact Center Experience Services


As an AWS Service Delivery Partner for Amazon Connect, GlobalLogic can help organizations deliver proactive, predictive customer experiences that utilize the right channels and adapt quickly to their customers' needs.

Cloud Adoption Services

With a dedicated Cloud Center of Excellence; in-house digital accelerators; and advanced consulting partnerships with Amazon Web Services (AWS), Microsoft, and Google Cloud, GlobalLogic enables customers to rapidly adapt, scale, and optimize their cloud solutions.

Atlassian Services

As a certified Atlassian Platinum Solution Partner, GlobalLogic helps businesses select, customize, and implement the right Atlassian tools to make their project a success.

Explore
the Offerings 



“

The passion, expertise, and deep commitment to our clients' success demonstrated by our employees has created an invigorating, creative institution. As we enter our third decade, we have a unique opportunity to accelerate enterprise digital transformation backed by Hitachi's incredible heritage, global reach, and trusted brand.

— Nitesh Banga, CEO, GlobalLogic India Pvt. Ltd.

”

Sustainability Recognitions

Achieved a Green rating via the NQC Supplier Assurance platform a cloud-based solution used by suppliers to determine their sustainability performance level.



Earned a silver rating from EcoVadis. When compared to other technology services businesses, GlobalLogic ranks in the top 27th percentile.



Hitachi Payment Services Pvt. Ltd.

Supporting India's Vision of a Global Payments Powerhouse

Visit Website



Hitachi Payment Services Pvt. Ltd. is a leading payment solutions provider, offering technology-led cash and digital payment solutions while building a robust payment infrastructure for India.

Mounting Footprints

1Bn+
digital transactions
processed annually

1.9Mn+
POS machines
under management
(including mobile
POS & QR)

65,000+
ATMs under
management
including 27,500
Cash Recycling
Machines

8,000+
White Label ATMs
under the brand
Hitachi Money Spot

**Nos as of October 2022

End-to-End Solutions

Cash Payment Solutions

Hitachi Payment Services' trusted and secure cash solutions include ATM Services, Cash Recycling Machines, ATM Software Platforms, E-Surveillance Solutions, White Label ATM, and Digital Banking Unit Solutions.



Cash Recycling Machines

Hitachi's Cash Recycling Machines (CRMs) are further enabling financial institutions to offer 24 X 7 cash deposit, cash withdrawal and other banking services, while making ATM operations more efficient and smarter.

Digital Banking Unit Solutions

From customer onboarding to servicing, its end-to-end Digital Banking Unit Solutions enable banks to offer top-of-the-line services in line with changing customer expectations.

Explore Hitachi Cash Payment Solutions

White Label ATMs

Hitachi Payment Services is one of the select non-bank entities in India licensed by the Reserve Bank of India (RBI) to deploy White label ATMs across the country. It is the only White Label ATM operator to offer cash deposits (for select banks at select locations). With a strong focus in Tier 3 to Tier 6 towns, Hitachi Money Spot ATMs are driving "Financial Inclusion for All". Hitachi's network is spread across **29 states, 6 union territories, 518+ districts & 4300+ towns, with over 75% of the 8,000+ ATMs present in semi-urban and rural locations.***

**Nos as of October 2022



Watch the
Video

Digital Payment Solutions

Supporting the progressive Digital India mission and Government of India's initiatives to usher a "Less Cash Economy", Hitachi Payment Services offers a wide array of Digital Payment solutions such as POS Solutions, Digital Payment Platform, Merchant Services, Payment Gateway Solutions, Toll and Transit Solutions, Back Office services & Card Issuance Solutions.



Leading Digital Payment Innovations

With an aim to drive digital payments penetration in the country, accelerate merchant acceptance of digital payments, and empower citizens with secure, convenient, and multiple payment options, Hitachi Payment Services has introduced several innovations such as:

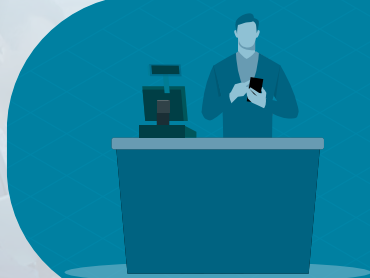
SoftPOS Solution

- SoftPOS is a disruptive software-based technology solution that converts a regular smartphone into a payment acceptance device
- Secure, convenient, and cost-effective, SoftPOS simplifies payment acceptance for merchants
- Offers multiple payment options – Tap on Mobile, PIN on Glass, Bharat QR, Link based payments



Digital-Onboarding for Merchants

- Enables banks/aggregators to onboard merchants in real time
- Entire onboarding process done in 30 mins!
- Digitalization of processes improves merchant experience, enables instant KYC and reduces workload and paperwork



E-Rupi Solution

- e-RUPI is a prepaid UPI e-Voucher that can be redeemed either through QR code or an SMS string
- Beneficiaries using smart phones or feature phones can be enabled on this platform
- Helps Government of India to facilitate payments for vaccination, fertilizers, education scholarships and other direct benefit transfers



Advanced Technology Enabling End-to-End Digital Payment Solutions

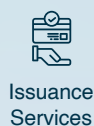
CHANNELS



FORM FACTORS



PAYMENT TYPES



SERVICES

Explore Hitachi Digital Payment Solutions



“

Through our innovative and secure payment solutions, we are contributing towards building a robust and inclusive payment infrastructure, while driving financial empowerment for millions across India.

– Rustom Irani, Managing Director, Hitachi Payment Services Pvt. Ltd.

”

PROJECT HIGHLIGHTS IN INDIA

SBI Payments: A Joint Venture with SBI

State Bank of India (SBI) and Hitachi Payment Services entered into a Joint Venture (JV) to build a state-of-the-art card acceptance and future-ready digital payment platform for India.

The JV provides a comprehensive suite of payment options to customers and merchants focusing on areas such as the roll-out of a nationwide card acceptance infrastructure, quick response (QR) code acceptance, UPI, mass transit sector, and e-commerce businesses.



Read the Complete SBI
Payments Case Study

Hitachi Systems India Pvt. Ltd.

Digitally Empowering India's Business Owners

Visit Website



Hitachi Systems India Pvt. Ltd. is a credible and recognized expert in offering Information Technology solutions that enable businesses to perform better while creating trusted partnership that assures value and reliability.

Key Solutions

With expertise across multiple industries and business functions, Hitachi Systems is partnering with stakeholders building a shared vision with the customers and partners to co-create solutions using Operational Technology, Information Technology, and Products.

Digital Workplace Solutions

Empowering collaboration, productivity, and workplace efficiency with Computing Solutions, Virtual Desktop Infrastructure, Enterprise Messaging & Collaboration, and Managed Print Services

Security Solutions

Offering a complete cyber security portfolio for impenetrable security with End Point & Server Security Solutions, Perimeter Protection, Data Security Solutions, Advanced Security Solutions, and more

Automation & Orchestration Solutions

Enhancing the strength of businesses with automation by providing Business Service Management, Cloud and Automation Management, and Service Portfolio Management

Cloud And Data Centre Solutions

Revolutionizing businesses with IT infrastructures like Hyper Converge Platform, Information Lifecycle Management, Data Protection, Storage, Microsoft Services, Networking, and more.

Explore Integrated IT Solutions



Hitachi Cyber Security Portfolio

Managed Security Services

Security Services



Security Operations



Security Monitoring



Threat Management



Transformation Integration Services

Architecture and Design

- Design Architecture
- Define Specifications
- Solution Selection (Eval & POC)
- Deployment Road Map / Approach

Implementation & Integration

- Deployment of Solutions
- Integration of Solutions
- Production Rollout
- Customization (Alerts Reports Policies)
- Solution Go Live
- Finetune & Stabilization

Technology Refresh

- Migrate to Single Solution Platform
- Upgrade technology (Same Platform/Vendor)
- Deploy Solution with Different Solution Vendor



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Through our highly secure IT solutions, we are not only empowering organizations to thrive in the digital era but also emboldening Government's progressive Digital India mission for a well-versed economy.

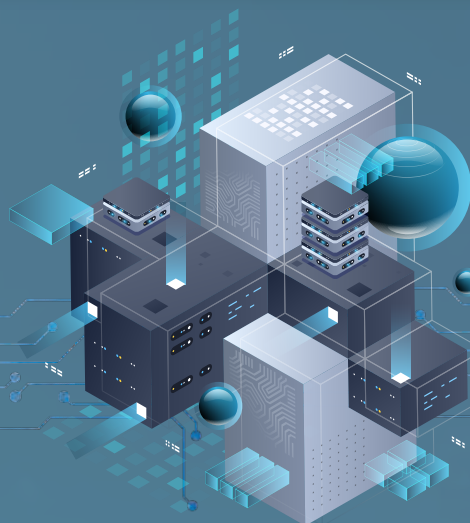
— Anuj Gupta, CEO & Director, Hitachi Systems India Pvt. Ltd.

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PROJECT HIGHLIGHTS IN INDIA

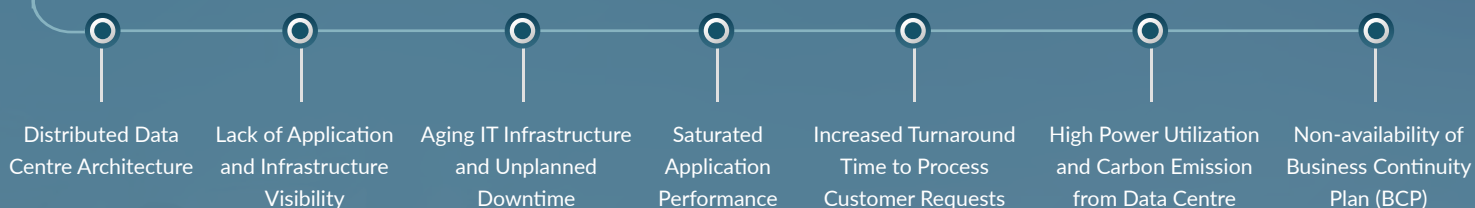
Upgrading Life Insurance Company's IT Infra

One of the largest life insurance companies in the world owned by the Central Government reached out to Hitachi Systems to digitally augment their infrastructure for improved customer experience.



Hitachi Systems implemented latest technologies like Data Relationship Management (DRM) Automation, Hyper-Converged Infrastructure with Network, Security, Storage & Backup solutions, Centre for complete visibility of applications/infra, among others which helped the company to speed-up the new policy generation and claim settlement process for its customers in rural areas, benefitting the lives of over **250 million people.**

Challenges Faced by the Customer



Benefits Achieved Post Transformation

Resilient IT infra for **99.9999% availability***

*All numbers as of FY2021

Reduced the customer data center footprint from **1,000+** servers across **113** data centers to **380** hyper-converged servers within **6 data centers**, thereby lowering power and cooling costs

Achieved end-to-end infra and application visibility



Company could serve **80%** of the rural population with the help of new IT infrastructure

60%-time reduction in processing the transaction which resulted in increased productivity

Simplified IT infra and application management and enhanced user experience

Transforming Insurance Operations with Automation

A leading public sector General Insurance Company and Hitachi Systems came together to transform the IT infrastructure of their organization which led this successful high value project to be nominated for the President Award for the Year 2021-22.

Challenges Faced by the Customer

- Frequent delays in onboarding & processing of policies
- IT resource allocation time of 3 days
- Exorbitant Account Maintenance Charges (AMC) costs

Benefits Achieved

- IT resources allocation time of 4 hours
- IT operations efficiency higher by 50%*
- Lower application processing time; higher efficiency for customer-centric employees
- Service-Level Agreement (SLA) speed increased, less unprecedented downtime and system failure

*All numbers as of FY2021

Augmenting Telecom Service Provider's Network for High-Speed Internet

Hitachi Systems partnered with India's oldest and largest Telecom Service Provider to bring high-speed, low-cost internet to the remotest areas. For this, Hitachi converted the service provider's low-speed network to high-speed Super-Core with state-of-the-art SDN Technology, which can handle internet traffic in multiples of terabytes per second. Citizens, businesses, and governments can now enjoy reliable, sustained, low-cost, and high-speed internet services, thus strengthening Digital India and providing people access to online services for a better Quality of Life.

Challenges Faced by the Customer

- Their Core IP-MPLS Network was running on 15-year-old technology which couldn't cater to high-speed Internet traffic
- As a result, citizens, especially those living in small districts, towns, and villages lacked good Internet connectivity and couldn't benefit from the Indian Government's digital initiatives

Benefits Achieved

- Digital banking services made available up to small villages
- School children and college students can now attend online classes
- Work-from-Home facilities are now extended to small villages also
- The coverage area of business-to-business and government-to-business activities has increased, directly improving the economy and quality of life of citizens in small towns and villages
- Made the COVID vaccination programme more efficient especially on platforms that are dependent upon the customer's network



Hitachi Vantara India Pvt. Ltd.

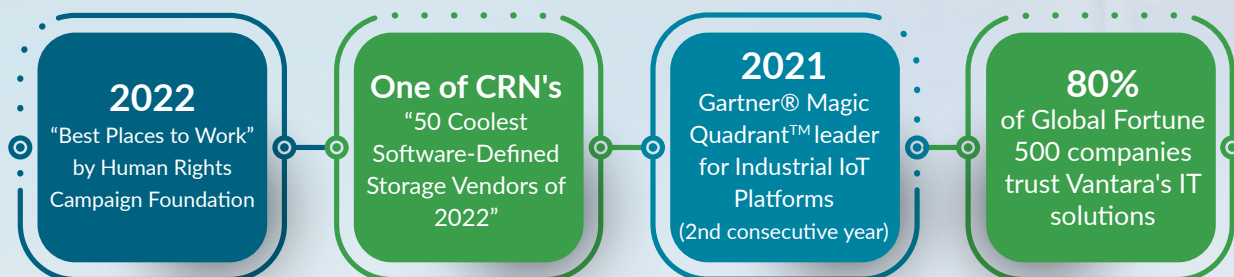
Leading India to Sustainability and Carbon Neutrality

Visit Website



Hitachi Vantara is a pioneer in making mission-critical digital and industrial environments go from data-rich businesses to data-driven ones. Hitachi Vantara delivers resilient digital end-to-end solutions, from intelligent data platforms to digital infrastructure systems.

Awards & Recognition



Solutions for the Digital Era

Hitachi Vantara envisions a carbon-neutral society by providing advanced Digital Technology solutions that will play a major role in being a social innovator. The key to this lies in going digital.

Modernizing the Digital Core

Combining data from three areas of business in one space that is accessible remotely, Hitachi Vantara gives organizations the power to innovate, evolve, and deliver exceptional experiences for their customers and partners.



Supporting Solutions

**Digital Operations**

Integrate all aspects of the business seamlessly by going completely digital with Hitachi's Health & Safety solution, Fleet solution, Factory solution, Retail solution, and Healthcare solution.

**Infrastructure Solutions**

Digital infrastructure accelerates digital transformation, making it agile, powerful, and resilient.

**Data Management**

Modernized data infrastructure assist business to move to cloud and enjoy the benefits of being data driven.

**Application Modernization**

Leverage advanced digital technologies to implement greater user experiences, speedier delivery, and a more agile working style.

AI-Driven Solutions

Make deep AI expertise work to the business's advantage and drive efficiencies, productivity, customer insights, and bottom-line impact.

**Smart Spaces**

Build a smart space to improve efficiency, maximize safety, and enhance user experience.

**Multicloud Acceleration**

Migrate and modernize cloud applications with agility, governance, and cost savings.

**Industry Solutions**


Empower the business with digital transformation, be it manufacturing, energy and utilities, transportation, government, financial services, retail, or healthcare.



With our proven digital leadership, innovative technology, and data solutions, Hitachi Vantara is playing a pivotal role in the fight against climate change and in making future proof, sustainable solutions.

— Gopikrishna Balijepally, India Leader, Hitachi Vantara India Pvt. Ltd.



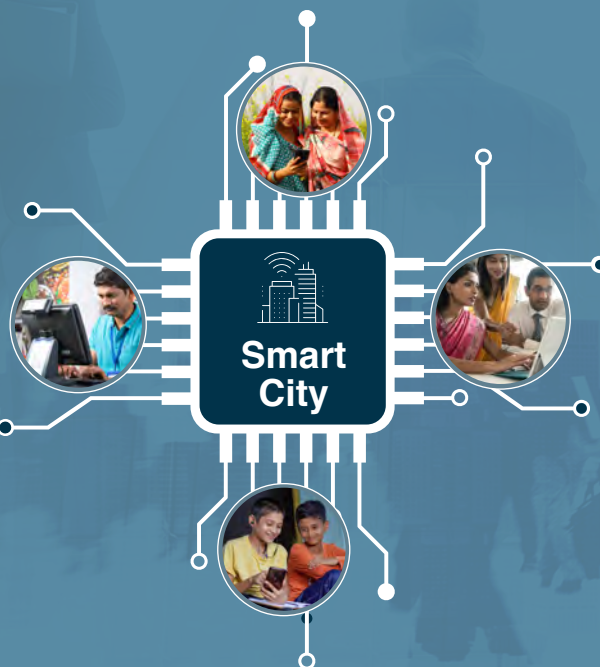
Learn More About Secure Digital Solutions 

PROJECT HIGHLIGHTS IN INDIA

Being an advocate of smart technology and social innovation for a sustainable future in governance, Chief Minister Shri. Chandra Babu Naidu envisaged a "Real Time Governance Center" in Velagapudi, Amaravati to benefit millions of people and support sustainable development in the state.



Watch the
Insightful Video



This Smart City program required a vast deployment of cameras, sensors, and integrated monitoring of department services. Hitachi Vantara delivered a diverse portfolio of projects across waste, water management, electric vehicles, and Smart City solutions.

This enabled faster and smarter decision-making capabilities through multiple data sources, government data analytics, and video analytics. The project is envisaged to benefit more than

53 million citizens*
of Andhra Pradesh.

*As of FY2020

Hitachi Solutions India Pvt. Ltd.

Inspiring Society with Digital Innovation

Visit Website



Hitachi Solutions delivers digital transformation through comprehensive industry solutions throughout the IT lifecycle. Hitachi Solutions is committed to solving complex challenges with cutting-edge solutions that transform business processes, empower employees, and enable growth that nurtures social innovation.

Key Solutions

Digital Compass™ | Hero Strategy

Digital Compass™ is Hitachi Solutions' distinguished inhouse solution that simplifies and speeds successful digital transformation and innovation for clients. Powered by Microsoft Cloud, the industry focused products and solutions help the customer at any point in their journey by:

- Understanding digital maturity and readiness
- Identifying challenges and focusing on priorities
- Assessing, strategizing, and planning
- Rapidly executing solutions with positive outcomes

The Core Digital Transformation Tracks of Digital Compass



Sales Automation Suite (SAS)

Hitachi Solutions solves business challenges by promoting innovative solutions and integrating social and environmental responsibility into business activities. SAS is designed to help organizations:

- Drive an effective data-driven sale
- Reduce CO2 emissions and fuel wastage

Microsoft Solutions

Supporting the entire Microsoft technology ecosystem, Hitachi crafts complex solutions that integrate seamlessly with one another to form a superior technology platform for clients.

POWER PLATFORM

Accelerate your business innovation with suite of low-code/no-code solutions.

SECURITY

Provide utmost safety and security to your data rich enterprise with Hitachi Solutions.

INSIGHTS TRACK

Manage data and create information that drives your business decisions.

AZURE

Achieve growth while simultaneously solving complex business challenges with Azure's secure and ever-evolving set of cloud services.

ENTERPRISE RESOURCE PLANNING (ERP)

Processes and systems that drive value and service for your customers and your partners.

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Manage all your company's relationship and interactions with prospects and customers.

DYNAMICS 365

Unify CRM and ERP capabilities into applications and connect your enterprise seamlessly together.



“

Guided by the Hitachi Values: 'Harmony,' 'Sincerity,' and 'Pioneering Spirit', Hitachi Solutions India will continue to play its part towards the growth of our Indian customers and the global community via social innovations based on reliable technologies.”

— Abinsam K.A (Abin), COO & EVP, Hitachi Solutions India Pvt. Ltd.

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PROJECT HIGHLIGHTS IN INDIA

Collaboration with Showa Denko Materials, India

Showa Denko Materials is a manufacturing company that produces more than

2.2 million pieces

of product materials per month, including electronics materials, printed wiring boards, mobility components, life science, and high-performance materials. Its Indian subsidiary needed a centralized ERP system to support the future growth.



Hitachi Solutions implemented Microsoft Dynamics 365 Finance and Supply Chain Management to centralize their operations across all departments and eliminate siloed applications.

“With everything online, we found a significant change in our processes such as less to no backlog entries, better control inventory level, real-time MIS reporting for efficient decision making, and centralized reporting in line with Showa Denko's standard reports,” says Ved Prakash, Asst. General Manager at Showa Denko Materials (India).



Watch the
Insightful Video

Hitachi Terminal Solutions India Pvt. Ltd.

Make in India for India

Visit Website



Hitachi Terminal Solutions is a leading terminal solutions provider that empowers India's financial infrastructure. Through layers of collaborative effort with our parent company, Hitachi Terminal Solutions has been steadily increasing local content in their ATMs in line with "Make in India" and "Atmanirbhar Bharat". Over the last few years, we have also been creating robust local supplier eco-system and sharing Hitachi's manufacturing best practices with them. We believe that our efforts will lower turnaround time, make our products more responsive to customer needs in addition to making it more cost effective.

Impact In Numbers

Manufactured and delivered **25,000+ Cash Recycling ATMs** in just **7 years**, becoming the largest local Cash Recycling Machine (CRM) manufacturing unit.

Made footprints in **South Asia, the Middle East, and Africa** now. **European** markets to be soon explored.



Key Solutions

Green Innovation Solutions

Hitachi Terminal Solutions is a green manufacturer and is 100% ROHS (Reduction of Hazardous Substances) compliant. Hitachi Terminal Solutions India is also ISO 14001 compliant and an advocate of carbon neutrality. The company is in the process of constructing a new green facility where there will be provisions for solar panels on rooftops.

OT x IT Solutions

- Moving from CRM => Next Gen ATM
- Moving from OPL (Operator Panel) screens in CRM => CRMs with Tablet based intuitive touch screens
- System Integration => for maximum operational efficiency (more notes dispensed per second with less cash jam)



“

Hitachi Terminal Solutions India Pvt. Ltd. is one of the largest manufacturing base for Hitachi Cash recycling ATMs worldwide. We plan to work in same synergy of Make In India Initiative by Govt. of India where we carry out production by Indian people, with Indian material and Indian way. We wish to take culture of Banknote Cash recycling across India.

— Nakatani, Yoshihiro, Managing Director, Hitachi Terminal Solutions India Pvt. Ltd.

”

PROJECT HIGHLIGHTS IN INDIA

Cassette Swap by Hitachi Terminal Solutions–

Scaling up of cassette production as a part of banking environment support – directive from RBI

The RBI instructed banks to implement Cassette Swap Operations on their ATMs and CRMs for better and secure cash management.



Acting fast, Hitachi Terminal Solutions localized Cassette production and ramped up production to support the banks' requirements, and promptly delivered **18200+** cassette kits in FY2021.

By localizing the sudden surge in demand for Cassettes, Hitachi reduced lead time and increased customer satisfaction while supporting the Make in India initiative.

Cumulus Systems Pvt. Ltd.

Tackling Data Tsunami

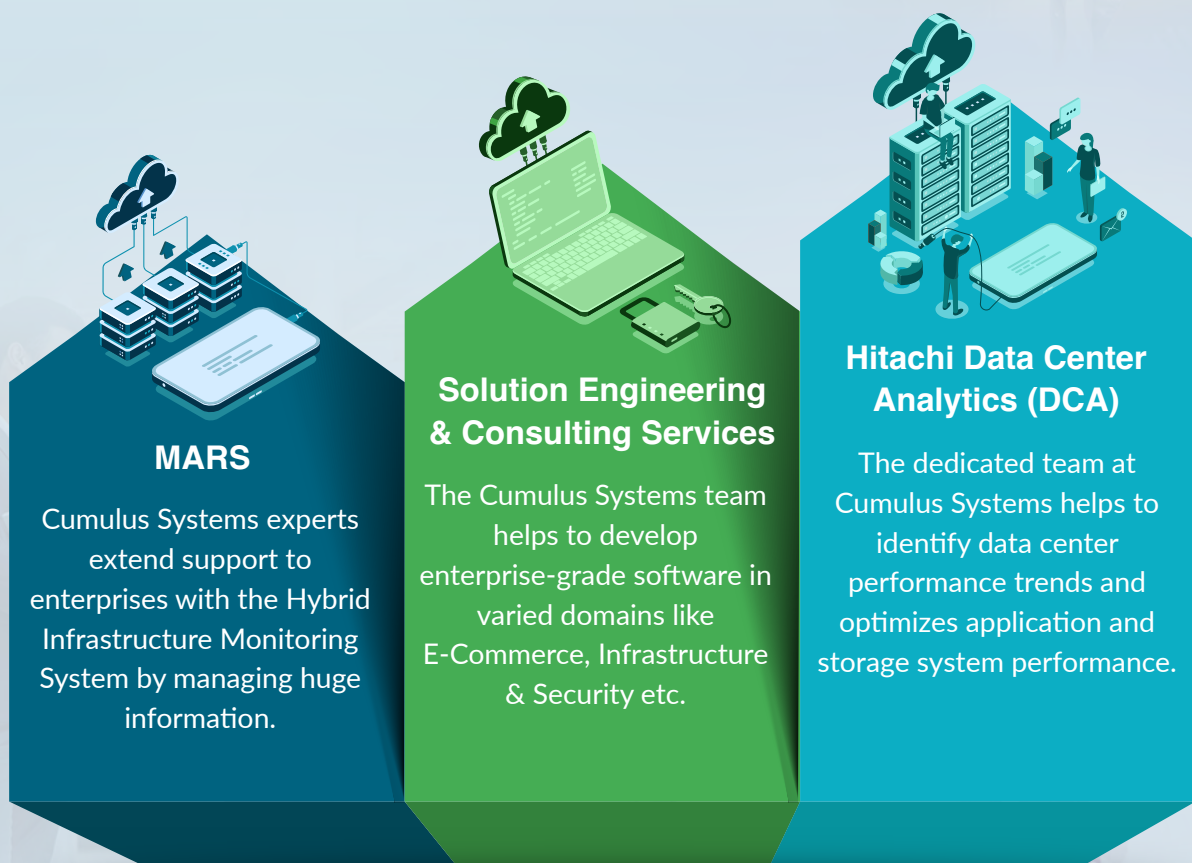
Visit Website



Cumulus Systems works towards effectively managing cosmic pool of data by connecting innovation and digitalization that help enterprises store, access, process, and interpret data for an informed decision-making.

Solutions for Right Data Environment

In today's data-driven digital world, bold ambition is required to be taken along with breakthrough innovation and flawless execution. As organizations need to deliver personalized experiences to customers, a robust data management infrastructure is needed to facilitate large-scale manoeuvres and better decision-making. Cumulus Systems is leveraging data's potential to accelerate the decision-making process and boost business growth through:



Explore the Solutions

Cumulus Systems aims to create value for its varied customer base by focusing on performance analytics tools, software engineering, and professional services. Our Software Development Process blends the strengths of a detailed design plan and iterative progressive elaboration to meet our customer needs.

Hitachi MGRM Net

Digitally Transforming Education, Healthcare & Agriculture for Inclusive Growth

Visit Website



A new India, with technology as the pivot, is rewriting its growth narrative. The Government of India is rolling out multitude of welfare schemes to democratize progress, bridge the rural-urban divide, and ensure “Sabka saath sabka vikaas”. Digital India is seen as a powerful catalyst in building the infrastructure that connects every Indian household to the digital economy, empowering them as a recipient as well as a participant in the inclusive growth model of the nation.

As a technology solutions provider, Hitachi MGRM Net is crafting innovative solutions under multiple domains covering the citizen life cycle such as e-Education and e-Healthcare. Its state-of-the-art e-Governance systems and services are based on unique proprietary technologies developed through years of research incorporating global best practices to address Human Lifecycle needs through products tools and services.

Hitachi MGRM Net has been successfully appraised for ISACA's Capability Maturity Model Integration (CMMI) at ML5 amongst other certifications.



Hitachi MGRM Net is partnering with the Government of India towards digitally transforming society and ‘Powering good’, by co-creating solutions that uplift the most underprivileged sections of society while building connected, unifying institutions that enrich citizen’s lifecycle.

— Bharat Kaushal, Managing Director Hitachi India & Hitachi MGRM Net Ltd.



E-Governance Solutions

Educational E-Governance

As India marches on its continued ascent, universal access to quality education becomes paramount to transforming the nation into a global knowledge superpower. Hitachi understands the power of technologies such as Artificial Intelligence, Data, Augmented Reality and Virtual Reality and a robust e-Learning infrastructure in creating a stimulating learning environment, identifying, and fostering the unique capabilities of each student, and delivering interactive, customized learning experiences that makes learning fun, dynamic, and a welcoming experience.



Integrating all academic and administrative divisions within an educational institution, M-Star™ Education Expert Systems by Hitachi MGRM Net is bringing transparency, accessibility, accountability, security, and compliance to the education system. The platform resides on a very advanced analytics engine and brings a fine blend of expertise, data, and intelligence to facilitate real-time tracking of a student's performance and their holistic development.



Exemplifying its technological prowess and the citizen-centric vision of powering good, Hitachi MGRM Net recently overcame all challenges to set up a robust e-learning infrastructure in the remote states of Manipur and Ladakh. By giving students and trainers ability to access to a pool of digital content customized in their respective language, Hitachi is enhancing the overall comprehension about relevant subjects, and helping create a student-centric adaptive learning ecosystem, as envisioned under National Education Policy (NEP) 2020.

Agriculture E-Governance

India is proactively deploying innovation and technology to foster a new green revolution. Precision farming is emerging as a popular feature of this transition.



The digital agri-transformation by Hitachi MGRM Net nurtures the Connected Farmer Ecosystem enabling the creation of crop portfolio, crop protection, crop insurance and access to Intelligent Market Channels helping farmers thrive, by optimizing price and best yield quality.



Hitachi MGRM Net is actively collaborating with both UNDP, NITI Aayog as well as various Governments and Governmental Bodies to ensure the right solutions reach India's citizens and a balanced development emerges out of the thriving digital transformation underway across the nation.



Healthcare E-Governance

Recognizing the urgent need for a resilient health infrastructure in the post-pandemic world, India is making concerted efforts to build a digital health-care under the National Digital Health Mission. The IoT and AI enabled comprehensive Advanced Analytics Solutions hold the key to revolutionizing digital patient care and building enterprise-class critical hospital applications.

Achieving path-breaking innovation in the telemedicine space, Hitachi MGRM Net's next-generation M-Star Telemed™ platform is digitalizing the process of healthcare management and information dissemination in both rural and urban areas.

Hitachi's Bluetooth-enabled telemedicine kit, equipped with blood pressure monitor, pulse oximeter, no contact thermometer, ECG, digital stethoscope, foetal doppler, spirometer, etc. is empowering the medical professionals in the remotest areas to capture a patient's critical health parameters and share with a physician sitting miles away in real-time, facilitating quality patient care anytime, anywhere.



This is showcased by the fact that M-Star Telemed has been deployed in Karnataka by one of the largest labor insurance providers, State Government of Bihar, and multiple sites of a large construction company.

Further, another component of Hitachi MGRM Net's healthcare e-governance platform M-Heal™ is an end-to-end comprehensive Hospital Information System that covers all aspects of a healthcare institution bringing operational excellence and enhancing patient care.

Hitachi MGRM Net's M-STAR HEALTH E-GOVERNANCE PLATFORM has been endorsed by National Health Authority (NHA) under the guidelines of Ayushman Bharat Digital Mission (ABDM), a collaborative initiative of the Government of India to support the integrated digital health infrastructure of the country. The product suite comprising of M-Heal (Hospital Information Management System), M-Star Telemedicine, etc. is now compliant with ABDM.

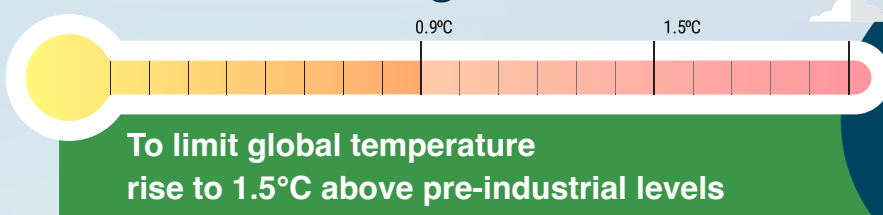
Hitachi MGRM Net's Health e-Governance platform has received certification from National Health Authority for Ayushman Bharat Digital Mission (ABDM) M1, M2 and M3 integration. The platform can be used for Ayushman Bharat Health Account (ABHA) ID creation, ABHA ID verification, share personal health records via a Personal Health Records (PHR) App and provide Electronic Medical Records (EMR) to healthcare workers with patient consent.

Spearheading Green Transformation

Decarbonizing India Through Green Technologies

Showcasing India's unwavering commitment towards sustainable development and leading the global mission against climate change, the Prime Minister of India made pledge at the COP26 in Glasgow to achieve Net Zero carbon emissions by 2070. Hitachi India stands firm with India in fulfilling this commitment and in laying and implementing an effectual, practical roadmap for achieving green growth through technological transformation.

Committed to Paris Agreement Goal



Hitachi has always been at the forefront of leading environmental sustainability.

Realizing its responsibility as the nation's partner-in-progress, Hitachi has put into action its deep expertise in Operational Technologies (OT) and Information Technologies (IT) to support the Government, industries, and businesses drastically to reduce carbon emissions.



Utilizing Digital Technologies, Green Technologies, and Innovation as key growth drivers, Hitachi India is developing sustainable solutions in areas such as clean energy, rail mobility, Electric Vehicles (EVs), and Smart Grids.

Hitachi's Green Technologies & Their Impact

Renewable Energy

Solar Power including Solar Inverters, Wind, Hydro, Green Hydrogen

Impact

Ensuring carbon-free, uninterrupted electricity for all citizens

EV Solutions

Battery Technologies, EV Components, Charging Systems, Digital Fleet Operation Platforms

Impact

Building a sustainable, connected and equitable mobility ecosystem

Digitalization

Digitizing City Gas Distribution, Water Systems, Digital & Green Hospitals, Power Grids

Impact

Achieving resource efficiency and energy savings through digitalization of infrastructure

Rail Mobility

Energy-Efficient Rolling Stock, Digital Signalling & Train Control Systems, Electrification of Railways

Impact

Lowering carbon emissions from the transport sector to usher Digital & Green Railways

Underpinning all green initiatives is Hitachi's Environmental Vision

"Hitachi will resolve environmental issues and achieve both a higher quality of life and a sustainable society through its Social Innovation Business in collaborative creation with its stakeholders."

Hitachi's Environmental Vision



Decarbonized Society

Climate Change Mitigation/Adaptation



Resource Efficient Society

Saving and Recycling Resources



Harmonized Society with Nature

Preservation of Ecosystems

Our Long-Term Environmental Targets

- Achieve carbon neutrality throughout our value chain by fiscal 2050
- Reduce CO2 emissions by 50% by fiscal 2030 (compared to fiscal 2010)
- Improving the usage efficiency of water and other resources by 50% by fiscal 2050 compared to fiscal 2010 levels

As climate change innovators, Hitachi India is committed towards powering good by supporting the Government of India in building a net-zero emissions future where citizens can lead a greener, healthier, and comfortable lives in harmony with nature.



Watch The Video

Green Energy & Mobility

Clean Energy and Mobility for a Decarbonized Society



At the United Nations Climate Change Conference (COP26) that took place in Glasgow in 2021, Prime Minister of India revealed India's Net Zero ambition by 2070¹ as a part of its Panchamrit pledge.

500 GW non-fossil energy capacity by 2030

50 percent of its energy requirements met from renewable energy by 2030

One billion tonnes reduction in the total projected carbon emissions from 2021 till 2030

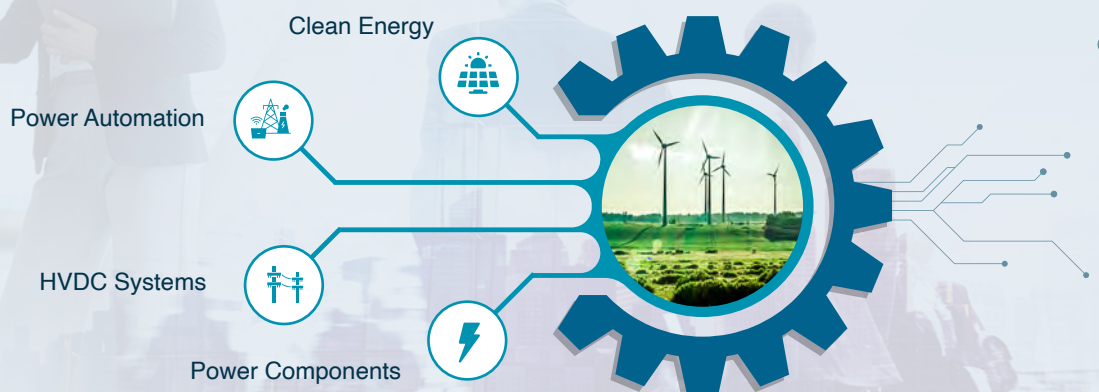


>45 percent reduction in the carbon intensity of its economy

By 2070, India will achieve the Net Zero target

Strengthening green transformation, India's leadership in the International Solar Alliance, announcement of National Hydrogen Mission, incentivizing the local development and manufacturing of renewable energy technologies, among others is creating a favorable ecosystem to build a strong decarbonized economy and sustainable society. Hitachi India, a global automation, and technology pioneer is partnering with the Government of India in this ambitious task by conglomerating its array of green and digital energy solutions.

Hitachi's Energy Portfolio



Together, with its partners, Hitachi India is advancing a sustainable energy future for all, where electricity is the backbone of the entire energy system.

On the mobility front, particularly rail mobility - the lifeline of India, the Government of India is building a sustainable rail infrastructure together with integral partners like Hitachi India. Hitachi has been a long-standing partner of the Indian Railways with Hitachi supplying the country's first steam locomotive in 1953. Hitachi has aligned its integrated rail solutions with ambitious National Rail Plan (NRP) for India - 2030 and Vision 2024² which will seek to increase the modal share of Railways to 45% in freight traffic, average speed of freight trains to 50Kmph, 100% rail electrification by 2024, and identification of new Dedicated Freight Corridors (DFCs) and High-Speed Rail Corridors.

Hitachi's Rail Portfolio



By digitally transforming the rail infrastructure, Hitachi India is ensuring improved passenger safety, punctual and reliable train operations, smooth management of rail traffic on congested corridors, speedy and seamless commutes for an enriched passenger experience. Hitachi's suite of digital rail technologies and expertise in green technologies put Indian Railways in a strong position to become Net Zero carbon emitter by 2030.¹

As crucial pillars of the nation's economy, Energy and Mobility systems are being rebuilt with sustainability at the heart of the transformation. Hitachi India is ready to take on the challenge together with its partners across the power and mobility ecosystem.

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=1768712>

2. <https://pib.gov.in/PressReleasePage.aspx?PRID=1806617#:~:text=Indian%20Railways%20have%20prepared%20a,Railways%20in%20freight%20to%2045%25.>

Hitachi Energy India Ltd.

Building a Sustainable Future for India with Green Energy

Visit Website



Hitachi Energy is leading the nation towards building a sustainable energy future. Offering innovative solutions and services in the utility, industry and infrastructure sectors, Hitachi Energy powers India's digital transformation with a portfolio of smart solutions that aims to create a greener future to build a resilient power infrastructure that is enhanced by social and digital innovation.

Recent Innovations

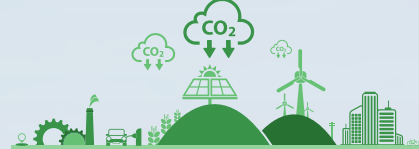
Grid eMotion™ portfolio;

a flash-charging technology that can top up a bus battery in seconds as passengers board and deboard.



EconIQ™, an eco-portfolio;

leaves a less carbon footprint, and reduces dependence on greenhouse gases, in line with Hitachi Energy's goal to becoming a carbon neutral operation by 2030 at business sites.



Key Solutions

Asset & Work Management

The Lumada Enterprise Asset Management (EAM), Asset Performance Management (APM), and Field Service Management (FSM) solutions help solve the toughest challenges and deliver unrivaled outcomes. It's an ecosystem that embraces your existing technologies and gives you the benefits of technological advances without foregoing the investments you have already made.





Digitalization

Information Technology/Operations Technology Convergence begins the digital transformation journey, providing visibility into the condition of assets remotely and in real-time, extending the ability to grab future opportunities and move toward becoming a digital business.



eMobility

Moving from small pilots to large-scale deployment across entire fleets, eMobility is the way to go if the aim is to electrify a large fleet and in need of a reliable, grid-code compliant and space-saving solution that can grow with the fleets and make them greener.



Grid Edge Solutions

A digital innovation ecosystem, Hitachi Energy's e-mesh™ portfolio of solutions combines advanced analytics, energy management software, and hardware systems with battery energy storage. Hitachi Energy integrates renewable energy into existing or isolated grids, reduces CO₂ emissions and dependency on fossil fuels.



Hydrogen Energy

To decarbonize India, where power is produced with renewable energy, hydrogen energy can be used as a clean fuel in many sectors, including transportation, agriculture, and various industrial processes and as a medium for energy storage.



Power Quality

Hitachi Energy offers technology leadership and a wide portfolio of products, systems, and solutions as well as maintenance and consulting services to meet the needs of the ever-evolving energy system for utilities, industries, and transportation operators.



Cybersecurity

An automated, evolving, and resilient cybersecurity solutions created by a strong industry-specific expertise to guard the businesses against imminent threats.

Key Sustainable Goals

Carbon-Neutral Future



- Hitachi Energy's OceaniQ aims to increase efficiency and safety in offshore operations while reducing cost and time.
- Hitachi Energy's EconiQ focuses on reducing the environmental impact while increasing energy efficiency to create technology that is future proof.

IdentiQ offers an ecosystem of advanced solutions that utilizes digital twin for sustainable, flexible and secure power grids. IdentiQ enhances the reliability and resiliency of the transmission grid, even during emergency situations.



Smart Energy

Resilience



By integrating the security service of the energy sector, Hitachi Energy offers high real time protection to vital infrastructures that exist within aging legacy systems.

Grid-eMotion offers a complete fix for major public and commercial electric transport, thus allowing operators to charge more for a lower cost.



E-mobility

Value to Society



With its advanced expertise in digital solutions and social innovation, Hitachi Energy is on the road to advancing the people's quality of life by creating a sustainable green energy future for all.

Hitachi Energy works towards bringing power to all. Our operations have grown manifold to deliver on the evolving needs of India's power sector with minimum environmental impact while facilitating safe, reliable, and efficient integration, transmission and distribution of bulk and distributed energy generated from conventional and renewable sources.

PROJECT HIGHLIGHTS IN INDIA

1000 Megawatts to Mumbai

Adani Electricity Mumbai Infra Limited needed a high-voltage direct current (HVDC) transmission system which will link Kudus to Mumbai, on India's west coast. This new HVDC link will:

Supply up to **1,000 MW** of electricity, increasing power from outside of the city by almost **50%**

Strengthen the existing transmission infrastructure and help Adani to ensure a reliable power supply in the region



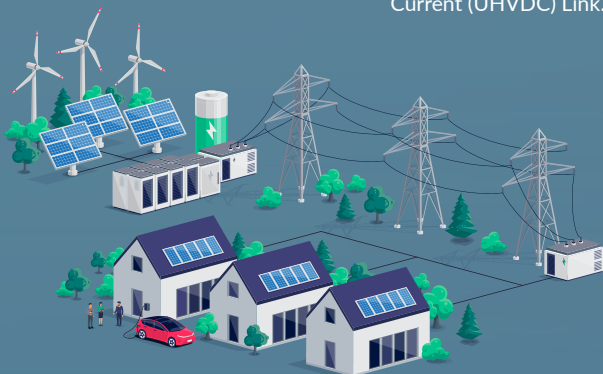
Enable large amounts of high-quality electricity to be delivered with complete control, and a very compact transmission system

Place **50 kilometres** of underground cables instead of overhead lines, thereby saving **2.3+ square kilometers** of land

PROJECT HIGHLIGHTS IN INDIA

Raigarh to Pugalur, a Transformative Connection

Helping the Government in taking a step closer to achieving its "Power for All" vision, Hitachi Energy marked a milestone in building smart, resilient grids for the future by delivering the ground-breaking Raigarh-Pugalur Ultra-High Voltage Direct Current (UHVDC) Link. This bi-directional link:



- Delivers clean electricity generated by wind turbines to more than **80 million** people, passes through **5 states**

- Transmits **6,000 MW** of reliable power over **1,800 kms**, between Raigarh in Central India and Pugalur of Tamil Nadu

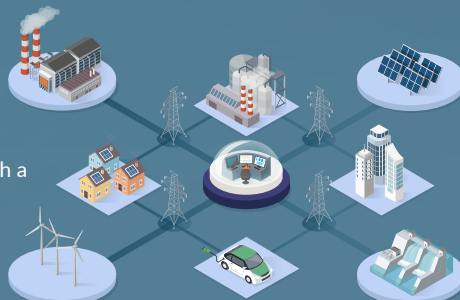
Watch the Landmark Project

The North-East-Agra Link

Hitachi Energy in partnership with Power Grid Corporation of India Ltd., delivered India's first ultra-high voltage direct current (UHVDC) project ± 800 KV North-East-Agra transmission link that:

- Connects North-East with North India, covering **1,728 km**

- Makes India the world's first country with a multi-terminal, ultra-high voltage direct current (UHVDC) transmission link



- Is one of the world's largest high voltage direct currents (HVDC) transmission projects

- Supplies clean electricity to **90 million** people

Learn More About the Collaboration

A Net Zero Campus - IIT Roorkee

IIT Roorkee, a leading technical institution in India collaborated with Hitachi Energy to build an intelligent and sustainable campus energy ecosystem. Hitachi Energy provided a:

- Smart Energy Management system
- Microgrid with battery energy storage
- Integrated Monitoring, Analytics, & Control Center to manage energy assets (renewable energy, electric mobility, water conservation, and waste management)



The data from all the different systems will be used for real-time monitoring and generating actionable insights, resulting in optimal performance management of all assets, cost savings, and reduced carbon footprint. Students, researchers, faculty, and industry partners can analyze and identify problems to create innovative solutions for the campus society.

Read the Complete Initiative

Hitachi Hi-Rel Power Electronics Pvt. Ltd.

Powering India through Social Innovation

Visit Group Company Website



Hitachi Hi-Rel Power Electronics Pvt. Ltd. is the leading manufacturer of power electronics products that safeguards against power disruption and reflects the best in process control. Envisioning a green future where solar power forms the backbone of India's energy security and independence, Hitachi Hi-Rel contributes towards the 'Power for All' vision of the Government of India initiative with sustainable, green solutions that meet mission-critical demands, using Operational Technology & Information Technology.

Impact In Numbers

Installed Capacity

More than **3 GW** capacity of Grid Tied Solar inverters installation base in various states in India

Reduced Carbon Footprint

Reduction of about **2.4 Million Metric ton** Carbon Dioxide emission every year



Key Products

UPS and Power Conditioning Back-Up Systems

An exceptional safeguard against power disruption and reflects Hitachi Hi-Rel's advanced technology with a proven track record in mission critical applications.

Variable Frequency Drives

An energy efficient means of process management, they control AC motor speed and torque by varying motor input frequency and voltage, from medium & high voltage multi-level IGBT drives up to 14,700 kVA and low voltage drives ranging from 0.2 kW to 450 kW.

Grid Tied Solar Inverters

This high-performance solar inverter generates more than 3 GW+ renewable power in Indian Solar Domain. Highly advanced, reliable, efficient, easy to install and safe, Hitachi Hi-Rel's inverters act as the heart of solar power generating system.

Air Compressors

Customers get optimized compressed air solutions through superior compressor technology, universally applicable design, outstanding craftsmanship and superior quality. Hitachi Hi-Rel's rotary screw compression and vacuum technology innovation provide an environmental, reliable, quiet compressor that performs excellently and is easy to maintain.

Railway Inverters

Hitachi Hi-Rel created an energy supply system for Railway rolling stock application that can be used to supply power to the AC Package Unit for air conditioning of AC Coaches.



“

“Hitachi Hi-Rel is on a mission to provide wide range of power electronics solutions required for social infrastructure projects that improve the quality of life of society while serving India's quest for Atmanirbharta (Self-Reliance) and sustainability.

— Darshan A Shah, Managing Director,
Hitachi Hi-Rel Power Electronics Pvt. Ltd.

”

PROJECT HIGHLIGHTS IN INDIA

Solarizing Gujarat, India

The SSDSP (Small Scale Distributed Solar Project) being installed at Jamnagar, Gujarat initiated Solar Photovoltaic project that required conversion with highly reliable and state-of-the-art Solar Inverters, equipped with superior conversion technology.



Hitachi Hi-Rel, with its superior conversion technology to generate green electricity, contributed towards the SSDSP Project:

12 MW installed base of Solar String Inverter

48 numbers of Solar String Inverters (1500 VDC) - rating each of 250/255KW

A reduced carbon emission footprint of 17,520 tons per year

Hitachi Rail STS India Pvt. Ltd.

Making Rail Journeys Memorable, Sustainable

Visit Website



Hitachi Rail is a fully integrated, global provider of rail solutions across rolling stock, signalling, operation, service and maintenance, digital technology, and turnkey. Its market-leading solutions in India and globally are augmenting safe and better ride comfort for improved Quality of Life and minimizing congestion in cities and the resultant pollution to tackle climate change and advance sustainable mobility.

Integrated Rail Solutions

Rolling Stock

- 100 years of Hitachi's extensive and credible track record of delivering energy-efficient and state-of-the-art rolling stock to power low-carbon sustainable rail transport
- Rolling stock for Mass Transit, Commuter, Intercity, Trams, High Speed including component as Propulsion System, Train Control & Management System
- Utilizes a combination of battery, 100% electric or hybrid to further reduce rail greenhouse gas emissions



- Hitachi Rail Intelligent Asset Management system maximizes rolling stock availability for a minimum whole-life cost and risk, reduces system downtime
- Hitachi Rail's Perpetuum on-board condition monitoring system combines with artificial intelligence and analytical tools to detect faults using vibrations, enabling high reliability, reduced maintenance, and increased availability of rolling stock

Digital Signalling and Systems

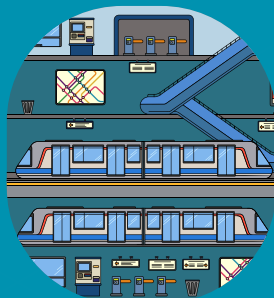
- **Traffic Management System-**
Designed to seamlessly synchronize and operate intricate vast operations at Railway hubs and stations
- **Signalling & Train Control System in ERTMS/ETCS-**
Allows trains to run closer together and to travel at their best speeds while maintaining safe braking distances



- **Satellite Positioning-**
Enables safer and more accurate rail traffic management
- **Communication Based Train Control (CBTC)-**
Enables Automatic, Driverless & Unattended Train operations, assures safe and better ride comfort, shortened and dynamic train headway to increase overall network capacity

Operation, Service & Maintenance Solutions

- Signalling system coupled with telecom system package for an entire gamut of operation and facilities - CCTV coverage, Access control, Passenger information display system, Passenger announcement system, etc.



- Operation & Maintenance of Railway and Transit Systems
- Rolling Stock Refurbishment & Maintenance
- Maintenance Services on Signalling Systems

Explore Products & Solutions 

PROJECT HIGHLIGHTS IN INDIA

Key Rail Projects Delivered

Greater Noida Metro Rail



Hitachi Rail partnered with Noida Metro Rail Corporation (NMRC) to deliver Noida Metro, enabling seamless connectivity across Noida, Greater Noida and India's capital New Delhi. Hitachi provided its proven Signalling & Train Control with CBTC System, Automatic Train Supervision, Passenger Information System, Platform Screen Opening Doors, Automatic Train Operations in Depot, and Data Communication Systems among others. The project is ensuring safe, affordable and convenient commute for millions and sustainable commercial, residential growth in NCR.



Activity

Design, Engineering, Interface, Manufacturing, Construction, Commissioning, System Integration, Verification, Reliability, Availability, Maintainability and Safety (RAMS)



Technology

IXL (Interlocking), CBTC, Onboard, Train Monitoring System (TMS) ATS Depot, CBTC Dev, TMS Automatic Train Supervision (ATS) Development



Nos. of Stations

21 elevated Stations, 1 Depot including Operational Control Centre (OCC), 38 Cabs



Route length

29.1 Kms between ends



Train Composition

19 trainsets



Watch the Video

PROJECT HIGHLIGHTS IN INDIA

Kolkata E-W Metro



Kolkata Metro Rail Corporation Limited (KMRL) has entrusted Hitachi Rail the task to deliver signalling and telecom system for 12 stations. Hitachi delivered the same for Phase 1 in a record time of 19 months. The Metro operations have enabled seamless connectivity across major hubs of the Metro city – Howrah, Sealdah and Sector V, bringing down travelling time for passengers from 45 minutes to a flat 10 minutes. Further, the headway regulation allows running more trains during peak hours, ensuring train availability after every 1.5 minutes.



Activity

Design, Engineering, Interface, Manufacturing, Construction, Commissioning, System Integration, Verification, RAMS



Technology

IXL, CBTC, Onboard, TMS ATS Depot, CBTC Dev, TMS ATS Development



Nos. of Stations

12 elevated Stations, 1 Depot including OCC, 1DCC,



Route length

16.6 Kms between ends



Train Composition

14 trainsets of 6 cabs each



Watch the Video

Navi Mumbai Metro Rail



Developed by City and Industrial Development Corporation (CIDCO) of Maharashtra, Navi Mumbai Metro mass transit system is bringing connectivity across the suburbs of the city of Navi Mumbai. Playing an instrumental role in the success of this project, Hitachi Rail is providing its state-of-the-art interlocking system and CBTC signalling for Automatic Train Supervision.



Activity

Design, Engineering, Interface, Manufacturing, System Integration, Verification, RAMS, Construction, Commissioning



Technology

IXL, CBTC, Onboard, TMS ATS Depot, Telecom, Cross Tech, CBTC Dev, TMS ATS Development, AFC



Nos. of Stations

11 Stations (Elevated) + 1 Depot



Route length

11 Kms between ends



Train Composition

8 Train X 3 Car each

PROJECT HIGHLIGHTS IN INDIA

Mumbai Metro Rail



Easing commute across the greater Mumbai, Hitachi is powering the Mumbai Metro Line 2&7 (MRS1) by supplying its robust Propulsion System, Auxiliary Power Supply (APS), and Train Control Management System (TCMS). The MRS1 Project is planned to introduce the unattended train operator (GoA4) operation, with high level technology and safety. With this, Hitachi has succeeded to emerge as committed Propulsion System, APS, and TCMS supplier in the Indian market.



Activity

Design, manufacturing, supplying, tests and commissioning Propulsion system and TCMS. Unattended train operation (GOA4) rolling stock system Integration and design support



Technology

Energy efficient IGBT based Traction Converter Inverter and Auxiliary Power Supply, Three phase asynchronous Traction motors, Safety Integrity Level 2 (SIL2) Train Control Management System with UTO capability



Nos. of Stations

50 stations



Route length

57.9 Kms



Train Composition

63 Trains X 6 cars each and additional 21 trains

Dedicated Freight Corridor (DFC)



Hitachi Rail collaborated with the Indian Railways in executing the landmark Western DFC project. Hitachi's advanced technologies for train protection are assuring security of freight operations, while contributing to increased train capacity, reduction in carbon emissions, and faster, cheaper, and more efficient movement of goods across the country.



Activity

Complete signalling and telecommunication system for the 915 route kms (Rewari in Haryana to Vadodara in Gujarat) line involving 31 freight stations and associated terminals. Also implementing a robust Train Protection and Warning System for 1,337 route km (Rewari, Haryana to JNPT-Port, Mumbai) line involving 43 freight stations and On-board system to be deployed on the first 200 electric locomotives manufactured by Chitranjan Locomotive Works.



Technology

Signalling, Train Monitoring System (TMS), Telecom System, and Automatic Train Protection system based on the worldwide proven European Train Control System (ETCS)



Watch the Video

PROJECT HIGHLIGHTS IN INDIA

Electronic Interlocking at Kharagpur & Juhi Yard



Hitachi Rail collaborated with Indian Railways to deliver India's largest Electronic Interlocking (EI) System at Juhi Yard with 973 routes. Earlier, Hitachi had also implemented EI system at Kharagpur railway station with 800 routes. Hitachi's in-house Microlok (MLK) II now controls more than 1,000 stations across India. The new system replaces the outdated mechanical gears and enormous relays & the use of coal and diesel for their regular maintenance, enabling cost savings and reduction in carbon emissions.



Activity

Design, Supply, Installation, Testing & Commissioning of MLK II based Electronic Interlocking System



Technology

Station Signaling & Train Control System



Watch the
Video

Tundla Railway Station



Hitachi Rail collaborated with Indian Railways in commissioning India's first Centralized Traffic Control (CTC) system at Tundla near Agra on the North Central Railway. This CTC system will automate the operations of freight and passenger trains in the High-Density Network of Kanpur-Ghaziabad section of Northern and North Central Railway. This ambitious project of Indian Railways brings planning, execution and supervision of the train movements under one roof, thus enhancing safety and reliability while building a high-speed transport system for improved and comfortable journey to the people.



Activity

Design (railway layout preparation, the configuration of the signalling interlocking rules, train graph, train identifier, alarm management, etc.), Testing (software and hardware in isolated and integrated environments), and Commissioning (installation and configuration of databases at site and integration with the existing system as well as at local station).



Technology

CTC based on cutting-edge technology of Sistema di Comando e Controllo (SCC), Firewall Protection, Network Management System, and Centralised Maintenance System.



Route Length and no. of Stations

The CTC controllable area covers total 47 stations covering up to ~423 Km. Out of 47 stations, CTC is commissioned over 31 stations covering ~300 Km.



Train Composition

The line carries passenger trains, freight trains, maintenance vehicles, high speed trains, and special trains.

Learn More About the Project

PROJECT HIGHLIGHTS IN INDIA

Rolling Stock - Onboard Condition Monitoring System

Activity

Hitachi Rail - Perpetuum's sensors are installed on Indian Railways LHB Smart Coaches for monitoring of wheel, bearing, ride and track.



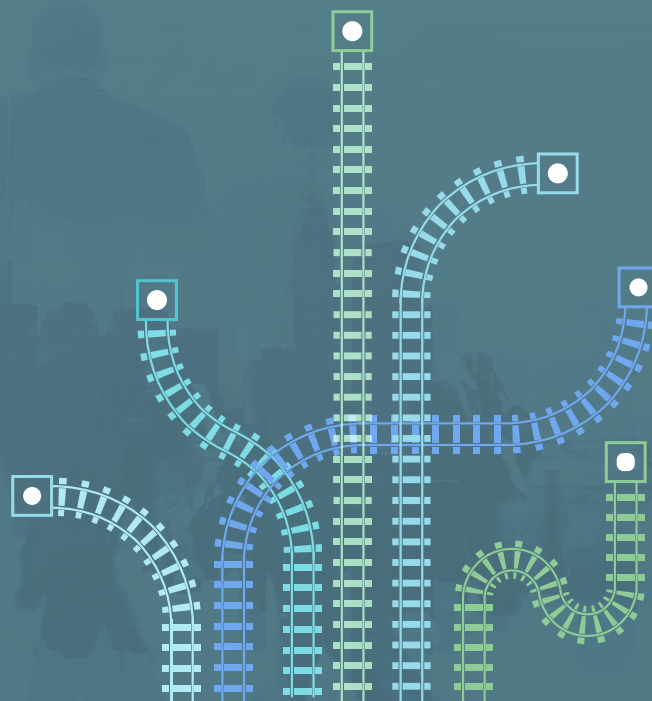
Technologies

Vibration based OBCMS (Onboard Condition Monitoring System) using energy harvester based self-powered sensors

Route length : 8600km

Train Composition : 100 LHB Smart Coaches

- Delhi – Mumbai: Smart Tejas Rajdhani (1500km)
- Delhi – Bangalore: Humsafar Smart Coaches (2400km)
- Delhi – Bhagalpur: Humsafar Smart Coaches (1300km)
- Delhi – Lucknow: Humsafar Smart Coaches (600km)
- Bangalore – Dhanapur: Humsafar Smart Coaches (2100km)
- Bangalore – Dhanapur: Humsafar Smart Coaches (2100km)



Connective Industries



Social Infrastructure correlates not only with a nation's prosperity but also people's ease of living. In Union Budget 2022-23, the Government of India has given a massive push to the infrastructure sector by allocating Rs. 10 lakh crore (US\$ 130.57 billion).¹ However, instead of treating each infrastructure component as a separate entity, India is striving to bring cohesiveness into infrastructural metamorphosis, which is evident through Gati Shakti National Master Plan.

Gati Shakti National Master Plan

Integration of multiple ministries and departments under a centralized portal, ending silos and building a unified blueprint for national development



Smart Cities Mission

Building sustainable and citizen-friendly cities through smart solutions that assure core infrastructure to every citizen for a good quality of life

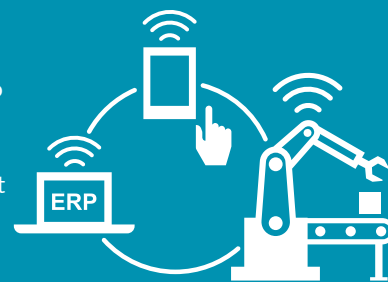
Towards Industry 4.0 & Society 5.0

The increasing interconnectivity and smart automation of industrial processes enabled by Industry 4.0 technologies have opened innumerable opportunities for the emergence of Connective Industries across verticals. This paves the way for a human-centered Society 5.0 where high degree of convergence between cyberspace (virtual space) and physical space (real space) brings new value to citizens for enabling comfortable lives.



Connected Industries offers resilient supply chains that contribute towards revitalizing industries and cities.

Hitachi is leading the Digital Transformation across multiple industries with the goal to accelerate sustainability and drive social change. For instance, the digitalization of water systems presents innovative solutions to the mounting water challenges India is facing. Leading the way for smart water management or Water 4.0, Hitachi's intelligent water solutions are ensuring optimum usage of the precious resource, equitable distribution supply to households, and quality drinking water supply for a healthier society. Smart water systems built by Hitachi India are ushering sustainable water management in line with progressive reforms initiated by Jal Shakti Ministry.



Jal Jeevan Mission

Functional household tap connection (FHTC) for every rural household by 2024



Similarly, the digitalization of City Gas Distribution (CGD) networks promises clean energy to millions of citizens, while playing a crucial role in building a low-carbon society. Natural Gas, the cleanest burning hydrocarbon, has attracted the Government of India's attention, which now sets to build a Gas-based economy with Natural Gas occupying double the share in the energy mix by 2030.



Hitachi India is coalescing its expertise in OT x IT technologies to empower CGD service providers scale their network, remote control entire operations through IoT-based sensors installed at sites and deliver safe and reliable gas supply to masses. Hitachi India through its Social Innovation Business is committed towards supporting India's "One Nation, One Gas Grid" mission and serving the nation in becoming self-reliant in energy production for continued sustainable industrial and economic growth.

Hitachi High-Tech India Pvt. Ltd.

Ushering in Innovation

Visit Website



In India, Hitachi High-Tech is ushering in a new era through breakthrough innovations in measurement and analysis technologies for industrial and research applications.

Solutions for Varied Fields

Hitachi High-Tech focuses on resolving customers' challenges by leveraging core technologies in 'Observation, Measurement and Analysis.' The company offers various types of analytical instruments for adding value to the customers' products.

Electron Microscopes

The Hitachi High-Tech expert team helps in providing high-quality electron microscopes to meet diverse customers' needs in several fields such as semiconductors, material science, and life science.



Analytical Systems

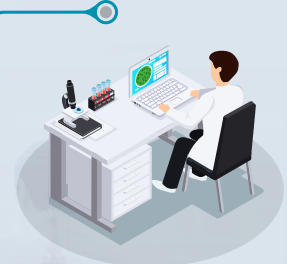
The team focuses on offering an array of high-sensitivity thermal analysis, X-ray Fluorescence, Optical Emission Spectrometers, UV-Spectrometer, High performance Liquid Chromatograph, and dedicated instruments for each industry for screening purposes.



IT Solutions

Hitachi High-Tech provides high end solutions with dedicated team for Manufacturing Execution System - HITPHAMS - for digitally managing operations at pharmaceutical production shop floor.

Also, it provides solution for predictive analysis for critical continuous process machinery which is suitable for various industries like steel, chemical, etc.



Explore the Solutions



“

Our constant endeavor is to meet the sophisticated needs in today's world through spectroscopic analytical technologies and electron beam technologies, thereby contributing towards rapid progress in diagnostic technology and Make-in-India and thereby improving the quality of life.

— Shiro Morishige, Managing Director, Hitachi High-Tech India Pvt. Ltd.

”

Hitachi India Pvt. Ltd. Infrastructure Systems Division

Building Resilient Social Infrastructure, the New India Needs

Visit Website



Hitachi India Pvt. Ltd. Infrastructure Systems Division is committed towards building a resilient and intelligent social infrastructure in India. From clean Oil & Gas solutions to intelligent water solutions, Hitachi is leveraging the group's OT x IT expertise to create secure, sustainable, and citizen-centric social infrastructure.

Water

Hitachi combines the expertise in Operational Technology x Information Technology (OT x IT) to power digital water systems for water treatment, optimization, and distribution across India. Green Technologies and Digital Technologies further empower Hitachi's goal to optimize the available potable water supply and sustainably meet India's ever-growing water requirements.



Explore Intelligent Water Solutions

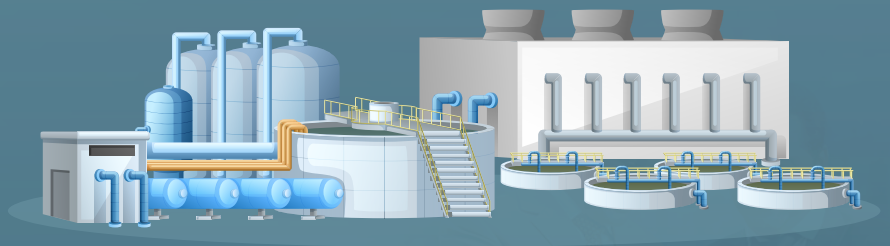



PROJECT HIGHLIGHTS IN INDIA

Digitalizing Delhi's Sewage Infrastructure

Once a thriving waterbody with marine life, today River Yamuna is one of the world's most polluted rivers, with domestically generated sewage accounting for more than 80%* of the total effluents choking the river. Hitachi Infrastructure Systems Division partnered with the Delhi Jal Board to digitalize the Sewage Pumping Stations (SPSs) for improved performance, prevention of sewage overflow into city's water bodies, and safe drinking water supply to millions of Indian households.

Hitachi delivered the automation of 116 Sewage Pumping Stations around the city by installing Internet of Things (IoT) devices for anytime, anywhere monitoring of plant operations, paving the way for a smart, robust, and sustainable urban sewage system.



Times of India 

Rapid Urbanization in Pitampura meets Smart Innovation

Manual data recording in Pitampura water distribution network was prone to errors, but with Hitachi, the nation's first of its kind successful 24x7 operation and management process paved the way for other Indian cities to implement smart water management systems too.

Key Hitachi Solutions



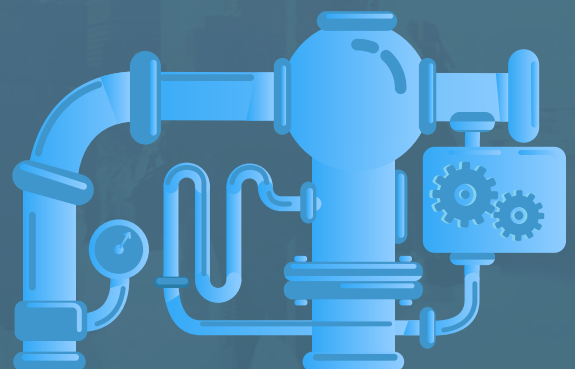
Pipe Network Management System (PNMS) which:

- Provides equitable water distribution to residents
- Remotely monitors 14 local control points

Supervisory Control and Data Acquisition (SCADA) systems which enable:

- Remote and real-time monitoring
- Control of plant operations
- Intelligent decision making
- Preventive maintenance
- Timely customer service delivery

Read About the Complete Project 



PROJECT HIGHLIGHTS IN INDIA

DLF Project “The Camellias”

The Camellias assimilates stunning architecture, breathtaking landscape design for a living experience far superior to anything experienced to date. Water Elements of Hitachi Water feature system added life to this Architecture and Landscape. Designed as a feature, the water element impresses, enhances and fascinates.



Key deliverables for the project were swimming pools, Water bodies at entrance gate, tower entrance lobby Water Features, water garden, clubhouse bio-ponds & reflecting pond, water features at lower ground, water features at clubhouse drop-off, rain mist water feature & hot & cold tubs.

All India Institute of Medical Sciences Delhi

Ushering Green & Digital Hospitals: Enabling Energy Saving through ICT

Aging infrastructure, high energy-consuming equipment and 24/7 operations make hospitals one of the most energy consuming public buildings. With a mission to save energy and transform the healthcare sector, the Government of India sought to introduce Green & Digital hospitals, starting from its premier hospital All India Institute of Medical Sciences (AIIMS), New Delhi. Hitachi India joined hands with AIIMS hospital and utilized its proficiency in Information & Communication Technologies (ICT) to implement a host of energy saving measures, resulting in 30% energy savings and successfully achieving an ICT-based Green & Digital Hospital at AIIMS.



Read About the Complete Project 

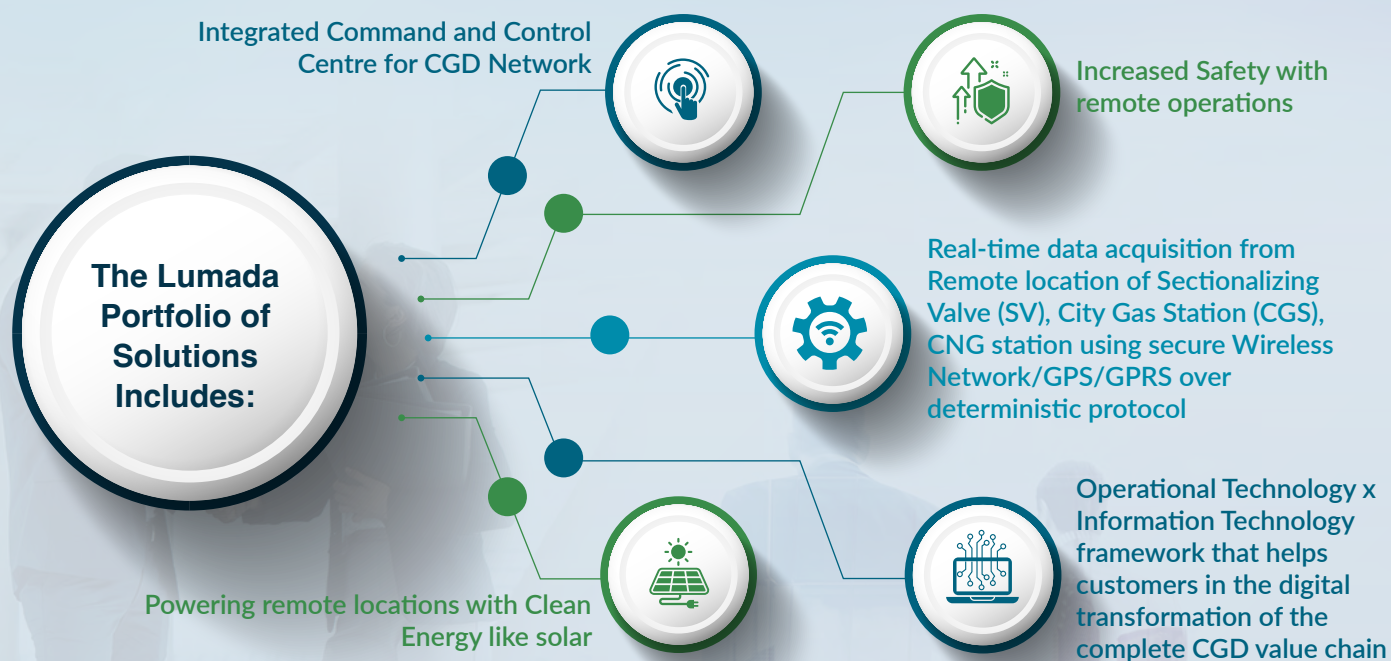
To harness the immense potential of Natural gas as a low carbon footprint resource, the Government of India wants to more than double the share of natural gas in India's energy mix. As an innovative partner, Hitachi India is collaborating with industry stakeholders to integrate the nation's gas infrastructure with the latest technologies and software such as SCADA (Supervisory Control and Data Acquisition) systems.

Hitachi's solutions are designed to meet the highest standards of safety, reliability, resiliency and maintainability, and are tailored to challenge harsh environments.



Key Solutions

Partnering with the Government of India, Hitachi India uses its Operational Technology x Information Technology expertise to deliver comprehensive IoT enabled Lumada platform solutions that enable digital transformation in the City Gas Distribution (CGD) networks.



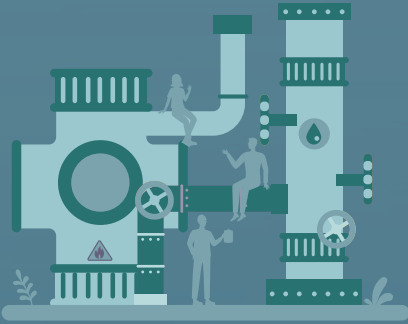
India is taking giant steps towards achieving Sustainable Development Goals and building a Sustainable India, and hence smart and resilient social infrastructure has become a key priority. Hitachi's globally recognized OT x IT solutions are laying a strong foundation of digital water systems, efficient steel systems, and accelerating India's transition to a gas-based economy.

PROJECT HIGHLIGHTS


IN INDIA

Empowering India's City Gas Distribution Network

Indraprastha Gas Limited (IGL) is one of the largest City Gas Distribution service providers in the country. Hitachi India was entrusted by IGL to co-create an efficient operations automation solution. After deep assessment of the customer's challenges and existing capabilities, Hitachi created a suitable solution architecture to meet IGL's vision of a low carbon footprint society by:



- Enabling the network to become more safe, robust, and responsive
- Using the converging data to help in recognizing the peak hour consumption patterns for differential pricing during peak hours to be introduced

Read the Complete Case Study 

Steel

Industrial Digital & IIoT Solutions

The Process Automation Engineering Group (PAEG), part of Hitachi Infrastructure Systems Division, Hitachi India Pvt. Ltd. provides sustainable solutions, with a possibility of high Return on Investment (RoI), to the industry through the amalgamation of cutting-edge automation systems and digital solutions. Its Industrial Internet of Things (IIoT) platform accelerates industrial digital transformation for superlative output while its proven OT x IT proficiency makes it the preferred partner for end-to-end execution of industrial projects (new and upgradation) for various manufacturing processes and standalone applications.



Key Solutions

Using the vast industrial & user experience, PAEG can develop the price competitive offerings that match the customer's requirements.

PAEG is an expert in creating data connectivity pipelines and edge computing capabilities using Hitachi's Lumada Product HX-Hybrid Gateway cum Controller, cloud capabilities, data visualization, and analytics capabilities. The solution portfolio includes:

Composite package of OT x IT x Products in the areas of Level-1, Level-2 Automation



Value added Digital solutions for improving process monitoring and efficiencies



Smart Business Insights

Process Insights, Energy Insights, Utility Insights, Maintenance Insights, Safety Insights, Effluent Insights, Real-Time Location Tracking

Solution Areas



Composite Automation & Digital Solutions

Level-2 Customer Experience (CX) and User Experience (UX) visualization, Power monitoring and scheduling system, Management Information System (MIS)

Explore Steel Systems

PROJECT HIGHLIGHTS IN INDIA

SAIL with Hitachi

The Steel Authority of India Limited (SAIL), Rourkela, Odisha worked closely with Hitachi India and Hitachi Japan BU (Social Infrastructure Systems Business Unit) along with other consortium partners, to successfully commission a new hot rolling mill project in Rourkela, Odisha amidst the COVID-19 pandemic period. PAEG contributed towards making a positive economic, environmental, and social impact on the project by participating in commissioning of L1, L2 & L3 (MES, SYC, CYC) systems, without OEMs physical presence at site, thus providing SAIL with automation systems and digital solutions that allow them to:



Optimize efficacy and resources



Deliver high-quality products



Add economic, environmental, and social value to the nation



Enter niche markets

Integrated with environment-friendly new technologies, Rourkela Steel Plant (RSP) has been conferred with Greentech Environment Award-2022 and Greentech Export Award-2022 for its contribution to environmental sustainability.

Tata Steel, Kalinganagar

The Tata Steel, Kalinganagar plant is one of the largest green field projects in steel. Currently, PAEG is commissioning PLTCM plant along with Hitachi Japan BU (Social Infrastructure Systems Business Unit). This project will help Tata Steel in achieving their goal of capacity expansion and further enhance their product basket.



JCAPCPL, Jamshedpur | Tata Steel, Khopoli

The Jamshedpur plant and Khopoli plant require separate digital makeovers and PAEG is presently executing the projects at said plants with a focus on the RoI benefits for the end user. After completion, each plant's respective unit will have improved process & operational efficiency.



Hitachi Lift India Pvt. Ltd.

Lifting India Up, One Step at a Time

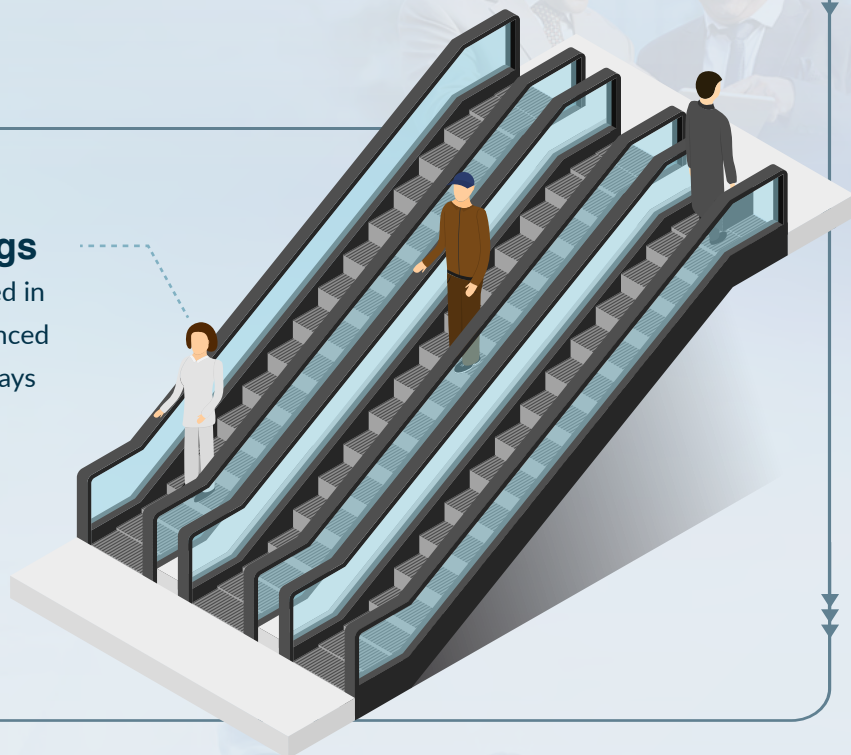
Visit Group Company Website



Hitachi Lift India Pvt. Ltd. provides safe, secure, comfortable, and high-quality elevators and escalators to meet the growing need for highly efficient vertical transportation solutions in India. Hitachi Lift has a strong existing customer base and is expanding its footprints in the Indian market with a mission to make India ready for a sustainable and effortlessly transportable future.

Impact In Numbers

Approx. 30% energy savings achieved by the regenerative system used in Machine Room-Less Elevators and enhanced drive mechanism used in Moving Walkways



Products

Elevators

As buildings become larger and taller, Hitachi Lift strives to achieve improved safety and energy-saving solutions. Hitachi Lift produces the most efficient, economical, and reliable elevators that can be installed easily, including Machine Room-Less Elevators, Machine Room Elevators, Home Elevators, and Freight Elevators.

Explore More



Escalators

Hitachi's innovative Escalators provide efficient operation and maintenance with energy saving in mind. The passengers' convenience and comfort of use is priority, and Hitachi Escalators ensure reliable performance in the constantly changing conditions of operation.

Explore More 



Moving Walkways

Hitachi brings together its expertise in electrical and electronic technology to build slimmer, energy-efficient, and passenger-friendly Moving Walkways, both horizontal and inclined, equipped with comfort-driven and safety-first features.

Explore More 



“

Hitachi Lift India has been supplying and maintaining lifts and escalators in India since 2008. We want our passengers to move safely, comfortably and we strive hard to develop green, environment-friendly elevators with minimal carbon footprint through “collaborative creation.”

— Masaya Sakakibara, Managing Director, Hitachi Lift India Pvt. Ltd.

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PROJECT HIGHLIGHTS IN INDIA

Elevating “The Amaryllis”

On the process of being built by The Unity Group, The Amaryllis in Delhi is a 160,000 square-meter residential project that has 5 phases.



Phase 2 consists of 10 high-rise residential towers that will be 143 meters tall, with 35 floors. The building requires

40 elevators.

Hitachi Lift partnered to provide 40 elevators that have an earthquake emergency operation system which detects earthquakes and stops quickly on the closest floor so that people can get out without being stuck in the elevator.

Automotive Systems Business



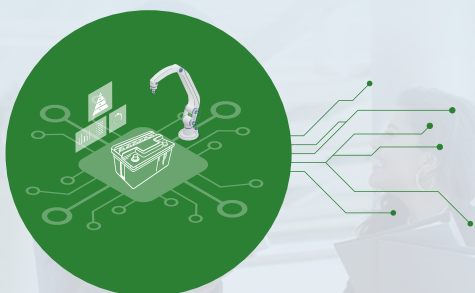
India's automotive sector is going from strength to strength, riding on strong production-linked incentives by the Government of India, opening of 100% FDI under the automatic route, and promising auto exports. Holding a strong position in the global heavy vehicles market, India is poised to become a global leader in the two-wheeler and four-wheeler segment soon.¹

Cognizant of its role in lowering carbon emissions, the sector is fast transitioning to Electric Vehicles (EV) with the Government aspiring to achieve 30% total car sales as EVs by 2030.²

FAME-II Scheme

Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME II) is a scheme to boost EV adoption. The Government of India has allocated Rs 10,000 crores for a period of 3 years from 2019 to 2022.³

Innovations in battery technology, thrust on strengthening the charging infrastructure, and increasing fleet electrification are transforming the entire EV ecosystem. As a leader in the supply of automotive components and technologies, Hitachi India is facilitating the rollout of eco-friendly vehicles on the roads to drive the sustainable growth of the industry and stimulate passenger safety. With Batteries constituting the heart of EV ecosystem, Hitachi's innovative battery technologies and solutions are accelerating the adoption of Battery-as-a-Service model to drastically reduce battery costs and overall EV costs for mainstream adoption.



Battery Swapping Policy

Consumers can replace their drained batteries with fully charged battery at charging stations or from an independent energy operator.



The emergence of Internet of Vehicles (IoV) owing to new-age technologies like Internet of Things will pave the way for a new future of mobility. Connected cars will revolutionize the way citizens interact with their vehicles to experience superior comfort and safety. Hitachi India's expertise in CASE (Connected, Autonomous, Shared, and Electric) technologies puts it in the front seat of building a clean mobility future in India.

Hitachi is actively partnering with the stakeholders across the automotive industry to usher new technologies that fuel the engines of sustainable growth and realize the vision of green mobility for building a Net Zero India.

Sources:

1. <https://www.ibef.org/industry/india-automobiles>
2. <https://www.thehindu.com/business/markets/aim-to-have-30-of-2030-car-sales-as-evs/article36905751.ece>
3. <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1883045>

Hitachi Astemo

Ensuring Safety through Innovation

Visit Website



Pioneering into the manufacturing and fast-growing automobile market, Hitachi Astemo provides advanced mobility solutions and technologies that are durable, efficient, and eco-friendly, thus helping create a low carbon footprint society.

Key Systems



Automotive Components

Central Gateway Controller ECU and Stereo Camera enhance safety of drivers, occupants, and pedestrians.

Plug Top Ignition Coil and Valve Timing Control contribute positively towards controlling emission regulations and environmental conservation.



Autonomous Driving

Autonomous driving senses and responds to an emergency, thereby handling the vehicle aptly in case an emergency arises.



Powertrain Systems

The electric powertrain systems and engine management systems provides high environmental sustainability and driving performance.



Aftermarket Products

Hitachi Astemo supports the entire lifecycle of automotive mechatronics products like Ignition Modules, Mass Air Flow Sensors, Exhaust Gas Pressure Sensors, Blow Fan, Regulators, Pump electric Modules, Differential Pressure Sensors, etc.



Connected

Connected car solutions aim to make human, mobility, and cargo transportation safer, smoother, and easier. The combination of accurate maps, cybersecurity monitoring and autonomous driving paves the way for a new mobility-driven society.



Chassis Systems

Hitachi Astemo develops integrated vehicle motion systems that include the latest electrification efforts in brakes, steering, and suspension ensuring high stability and comfort in driving.



Power Products & Industrial Equipment

The power products and industrial equipment aims to increase the overall stability of the vehicle while ensuring a safe and secure ride for the user.



Software

By applying automation technology in development and verification, Hitachi Astemo creates superior software that enables global collaboration on a cloud-based system.



Motorcycle Systems

Providing superior suspension systems and brake systems to motorcycles both big and small, Hitachi Astemo also meets emission regulations of countries around the world and contributes towards reducing the environmental impact.



Industry 4.0 IoT

Astemo India will be rolling out industry 4.0 IoT (ASHITA PJ) which will help every production site to come under one umbrella thereby enabling collaboration with each other, share information towards achieving an optimized manufacturing process, and spreading the innovation.

Hitachi India R&D

Promoting Sustainable Living with Enhanced Technology

Visit Website



For more than 100 years, Hitachi's R&D has been developing the most cutting-edge technologies and fostering innovations. The strength of Hitachi's R&D lies in its centralized ownership of the technology platforms and know-how integral to the Hitachi Group's operational technology (OT), IT, and products, allowing the Company to establish a value creation cycle that extends from collaborative creation to development.

Our Vision

Partnering in 'Digital India' and 'Make in India' Government initiatives, Hitachi India R&D utilizes Artificial Intelligence (AI), data and technology to deliver green, AI based digital solutions that support people's livelihood through a sustainable society.



Key Strategy

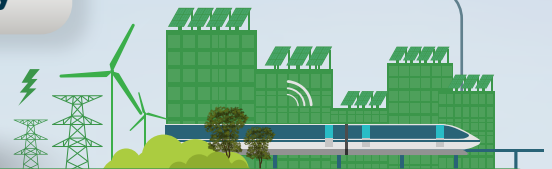
Global Strategy

Hitachi India R&D is working towards expanding Global AI engineering, thereby accelerating co-creation with customers across the world.

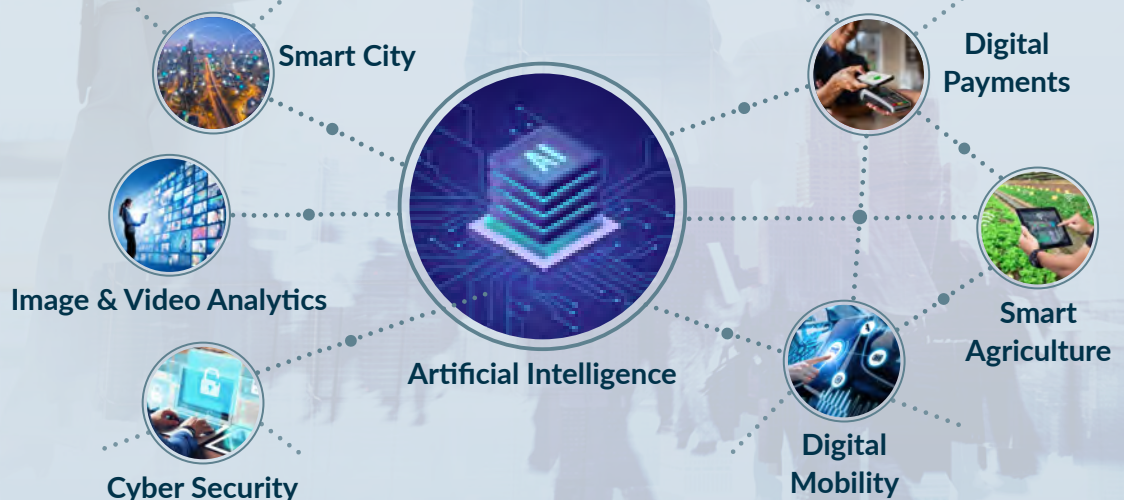


Regional Strategy

Hitachi India R&D's aim is to expand the Social Innovation Business by solving local problems with a focus on digital and green technology solutions.



Key Areas in Focus



Core Technologies

By establishing global centers of excellence, Hitachi R&D plans to leverage the technology to create a better living through a sustainable society with:



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Hitachi is focused on research and development of next-generation digital solutions combining information technology, operational technology, and products (IT x OT x Products). Hitachi India R&D is a key pillar of that vision.

— Kingshuk Banerjee, Director and Head of R&D Centre, Hitachi India Pvt. Ltd.

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PROJECT HIGHLIGHTS IN INDIA

Partnering with a Leading Public Sector Bank: Securing & Optimizing Digital Payments

Hitachi India R&D is working extensively on the banking and payments industry in India to drive the digital penetration as envisioned under Digital India and accelerate the nation's progression towards "Cash-lite Economy". For facilitating expansion of the digital payments landscape in India, Hitachi India R&D is partnering with Hitachi Payments in India to offer merchant-centric analytics solutions for a leading public sector bank. The solution aims to increase transaction revenue of payments business by delivering proactive value-add services to customers. Through this partnership, Hitachi India R&D has enabled offering of innovative products to suit the requirement of all segments of merchants.



Hitachi India R&D is committed towards optimizing the payments ecosystem and focuses its research activity on developing data analytics solutions targeting the operational improvement of different payment channels including ATM, Point-of-Sale (PoS) and other emerging channels. For instance, R&D researches on solutions to enhance the efficiency of merchant management services by analyzing merchant's behavior, while identifying suspicious payment transactions. Through demand forecasting, risk analysis, and performance monitoring, R&D supports financial institutions in achieving sustainable revenue growth.

Corporate Social Responsibility (CSR)



At Hitachi, contributing to the society is as paramount as creating superior products and advanced digital solutions. Hitachi India is no different and persistently strives to create a sustainable society that cultivates a healthy nation while meeting the combined social and environmental expectations of all Indians. Through multifarious initiatives undertaken, Hitachi India is well on its way helping India overcome pressing environmental issues, thereby advancing its mission to help build a more sustainable future. A prime example of such an initiative is Hitachi India's contribution towards strengthening the health infrastructure of the country during exigency.

Mission Oxygen

Mission Oxygen

Oxygen became a sparse resource during the COVID-19 pandemic and this placed hospitals worldwide, including India, under immense pressure. Understanding the need for a collaborative hand to aid the Government of India, Covid warriors and the public, Hitachi India stepped up, offering the strength and support needed to tackle oncoming pandemic waves, if any.

Partnering with Vimhans Nayati Super Specialty Hospital, Hitachi India set up a safe and sturdy Oxygen Plant of 150 nm³ (cube) in size at the hospital in Delhi. An automated technological marvel with in-built safety measures, this O₂ plant will supply high-quality medical oxygen to patients, as pure as oxygen found in natural environments, while making the hospital self-sufficient in meeting the oxygen needs of its patients.

This benevolent gesture by Hitachi India is yet another example of its commitment towards enhancing people's Quality of Life and creating a positive impact through its Corporate Social Responsibility (CSR) efforts.



Watch the Video



“

Our partnership with the renowned Vimhans Nayati Super Specialty Hospital to set up the much-needed Oxygen Plant is a gesture of solidarity, an accomplishment of human resilience, and an opportunity for us as a cohesive Hitachi family to do something good for our fellow citizens. By saving lives with Oxygen- the life-sustaining element, Hitachi is powering a healthier society and a robust self-reliant India for today and the times to come.

— Mr. Bharat Kaushal, MD, Hitachi India

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As part of its overarching commitment to leading the society with progressive, secure, and healthy values, Hitachi India is dedicated to aiding the people of India to live and breathe better. By doing so, Hitachi India is also contributing towards the Sustainable Development Goal 3: Good Health and Well-Being of all citizens.



Hitachi Social Innovation is
POWERING GOOD



Hitachi India
www.hitachi.co.in



Social Innovation Business
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