

Hitachi Rail

# Corporate Social Responsibility and Sustainability

## Insights 2022

**HITACHI**  
Inspire the Next

Hitachi Class 800 series







## Contents

<b>Highlights</b> (FY2021)	5
-------------------------------	---

<b>Hitachi Rail Identity and Business</b>	7
---	---

Global presence	8
-----------------	---

Mission, Vision and Values	12
----------------------------	----

<b>Hitachi Rail's ESG Roadmap</b>	13
---------------------------------------	----

Delivering a sustainable, safe and high-quality railway business	15
---	----

New horizons and perspectives on Sustainability and Decarbonization	17
--	----



Makoto  
(Sincerity)  
Governance

Corporate Governance	20
Code of Ethics	21
Our suppliers	22
Our customers	23
Hitachi Rail and local communities	25

Kaitakusha-Seishin  
(Pioneering Spirit)  
Environment

Be a Climate Change Innovator	27
Energy consumption	28
Emissions	30

Wa  
(Harmony)  
Social

Our people	36
Diversity, Equity, Inclusion and Multiculturalism	37
Occupational Health and Safety	39
Training and Career Development	43

Coming soon

Contacts	51
----------	----

# Highlights

## Fiscal Year 21



**100%**  
Reduction

promoting a 100% reduction of Scope 1 and Scope 2 CO<sub>2</sub>e emissions at business sites by 2030, and a 100% reduction through the entire value chain by 2050 (compared to baseline year)



**3.5%**  
Reduction

reduction in total GHG emissions (FY21 on FY20), the equivalent of taking about 23,000+ diesel cars off the road for 1 year<sup>1</sup> (average data UK)



**+64%**  
Share of electric energy  
from renewable resources  
(FY21 on FY20)



**80.8%**  
Hazardous Waste  
recycled

**+64%**  
(FY21 on FY20)



**6%**  
Reduction  
in Total Water Withdrawal  
(FY21 on FY20)



**96%**  
Employees  
hired with open-ended contracts



**0.74**  
Lost-time injury  
frequency rate



**31.0**  
Total hours average of  
training per employee



**38**  
Countries



**5**  
Continents



**13,978**  
Employees



**360°**  
vision

to transform mobility for passengers, operators and cities.

The strategy brings together Hitachi Rail's 360° family of mobility services which offer cities, operators and passengers a new way to monitor, manage and navigate urban landscape

<sup>1</sup> Inputs resulting from the UK average car emission data collected through the UK Ministry of transport: "Transport and environment statistics", GOV.UK ([www.gov.uk](http://www.gov.uk)) Conversion factor 2021 revised January 2022 and Annual mileage of cars by ownership and trip purpose: England, since 2002.





Smart Mobility suite of Hitachi

Hitachi Rail manufactures **world-leading high-speed trains** to transform passengers' journeys, continuing a proud heritage, which started from the building of the first Shinkansen bullet trains in 1964. Another example of Hitachi Rail's innovation is represented by Masaccio's battery hybrid train testing at speeds of up to 160km/h ahead of passenger running in Italy.

Hitachi Rail also develops operational control systems to manage the movement of thousands of trains per day, including a system with East Japan Railway Company that helps **manage the timetable for the Tokyo metropolitan area**, which sees up to 10,000 train journeys per day.

The production design is based on eco-design principles, to build trains that are increasingly more energy efficient recyclable and recoverable – **with up to 95% of materials suitable for recycling at the end of a train's life**, in the case of ETR 421/521/621 (regional train Hitachi Rock, also named "Caravaggio") or the ETR1000 high-speed train (the Italian Frecciarossa) which also discharges fewer emissions compared to its predecessor.

Hitachi Rail is building **lighter trains (50% of the weight)**, with a double-deck regional train ("Caravaggio") weighing only 120 tonnes compared to 280 tonnes 6 double-decker cars and E464 locomotive train ("Vivalto") it replaced.



- 1.0 -

# Hitachi Rail Identity

and its Business



Overview of the context in which Hitachi Rail operates  
and explanation of its identity.

# Global Presence

In the last few years, the world has witnessed a sudden change in the logic of creating economic value - pursuing sustainable development - because of shared awareness of belonging to an ecosystem, which is to be protected and respected.

At Hitachi Rail, every passenger, customer and community can enjoy the benefits of more seamless, sustainable mobility. Hitachi Rail is strengthened by the collective heritage of organizations that have been brought together to create a global company.

Hitachi Rail is committed to becoming a Climate Change Innovator, creating low-carbon, sustainable solutions to decarbonise transport around the world in the transition towards a Net Zero society. Where railways are only partially electrified, new hybrid and battery-powered trains and trams are being designed and built to reduce diesel emissions and the cost and disruption of full electrification programs. Hitachi Rail's mission has always been to contribute to society through the development of superior technology.

Hitachi Rail operates in 38 countries, with strong roots in Europe, Asia-Pacific and the Americas. Its technology moves billion people and includes everything from commuter trains in Tokyo to signalling systems in the Arctic Circle. This global expertise means that Hitachi Rail can offer its customers solutions to every aspect of a

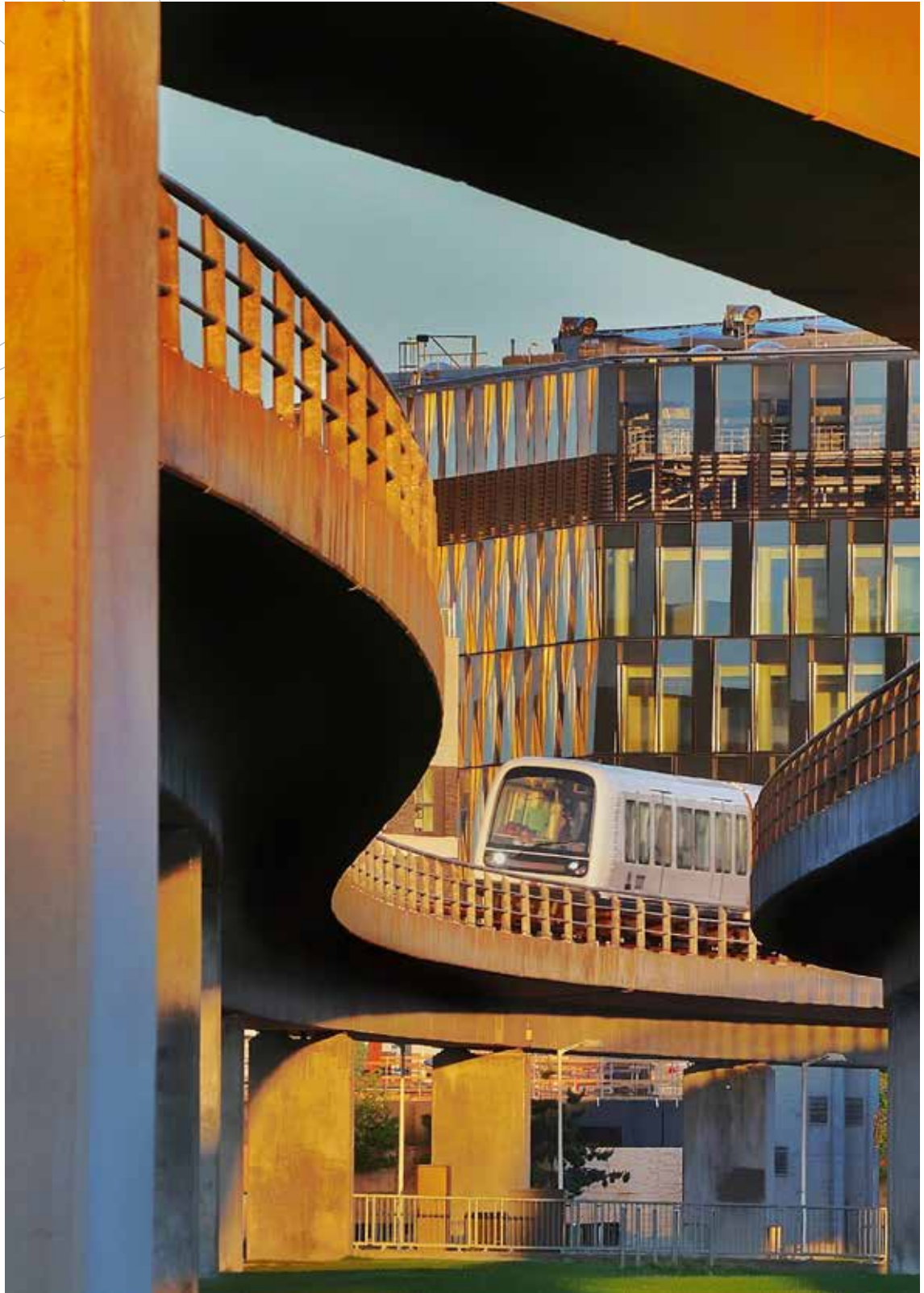
railway network. Hitachi Rail's pedigree as an innovator and provider of digital railway solutions is enhanced by the agreement to acquire Thales' Ground Transportation System business, combined with the deep IT expertise within the Hitachi Group. While its reach is global, Hitachi Rail's business is local. Its success is built around the communities that Hitachi Rail serves and that is why it works with its communities and is invested in their futures, from prioritizing local supply chains to developing new skills and apprenticeships. People are key in Hitachi Rail, a dynamic and caring employer dedicated to supporting a world-class, diverse workforce.

In terms of products and solutions, the future of transport is being driven by digitalizing and fully integrating the entire mobility system to improve the whole passenger journey. By digitally connecting everything – from trains, signalling and infrastructure, to operations, maintenance and passenger-interfaces – the complete system can be planned, managed and optimized in real-time – optimizing how passengers flow through the network and how operators invest in services and maintenance.

Hitachi Rail has a unique position as a global player in the railway sector: it is an integrated group capable of offering rail solutions across rolling stock, signalling systems and digital technology, service & maintenance activities, as well as building completely new railways internationally.



The strength of the Hitachi Group means that all partners, with sister companies, like Globallogic, Hitachi Energy or Hitachi Vantara, are set to develop joined-up digital solutions to meet customers' different needs.



Copenhagen driverless

## Rolling Stock

With over 100 years of experience in delivering for customers and passengers, Hitachi Rail and its engineering excellence and commitment to innovation works in partnership with customers to improve the passenger experience across all rolling stock products. The designs aim to be, accessible to all, positively impact society, and improve people's daily lives.

## Operation, Service & Maintenance (OS&M)

The central goal of the OS&M Department is to deliver best-in-class services designed to maximize product life cycle, support customer operations readiness processes, and enhance the customer experience with innovative digital solutions. Hitachi Rail provides pioneering solutions across a range of services from Service & Maintenance (S&M) for both rolling stock equipment and legacy signalling installations.

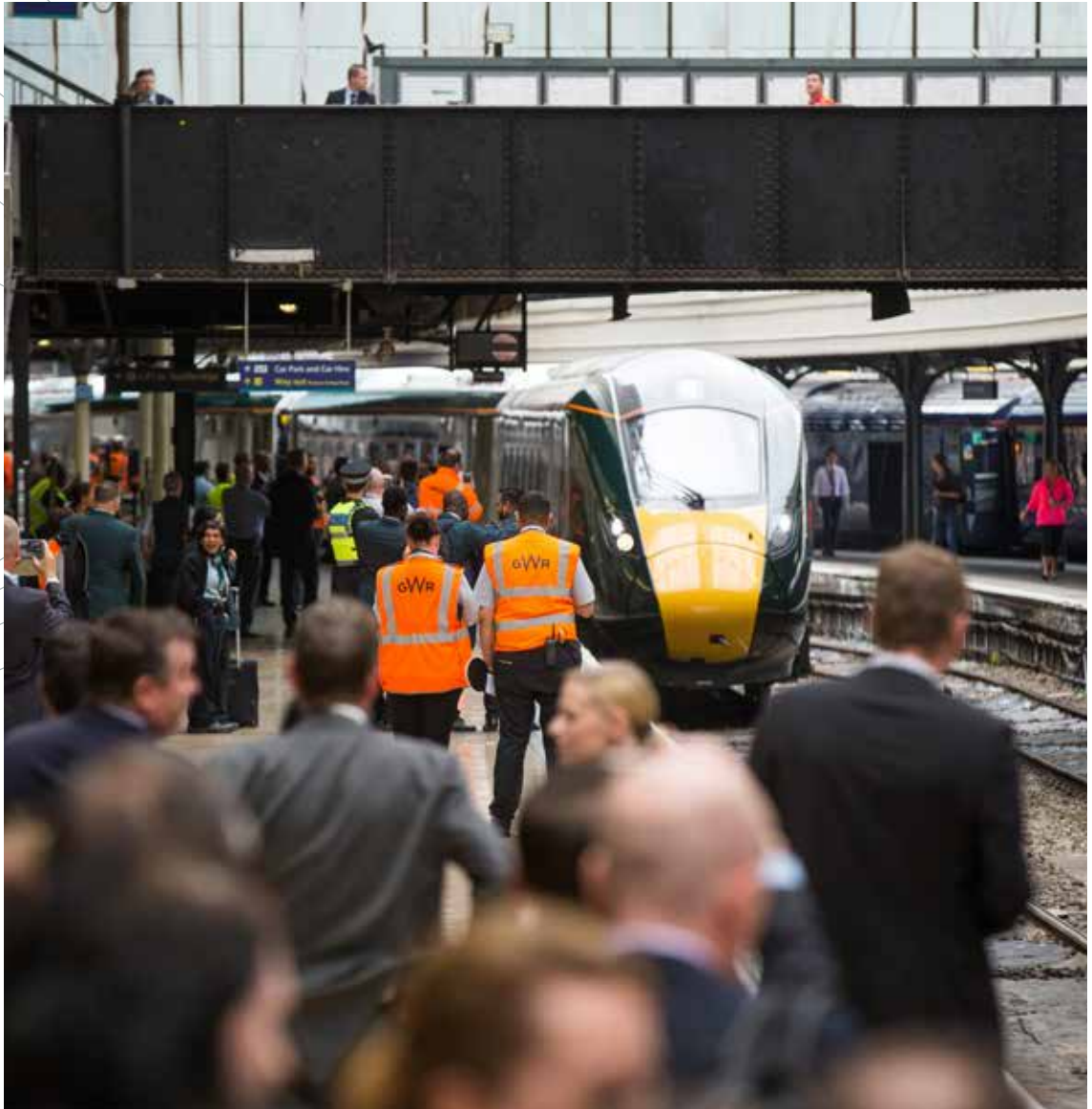
## Digital Signalling & Systems

Hitachi Rail designs, manufactures, installs and commissions signalling components, systems and integrated mobility solutions for the management and control of the new and upgraded railway, transit and freight lines. Globally, Hitachi Rail's teams support clients with every type of signalling solution, which allows Hitachi Rail to have a holistic view of a railway operation, improving performance and revenue efficiencies. Hitachi Rail's solutions offer the latest in signalling technology and have taken network safety, reliability and efficiency to new levels.

## New Digital projects

As mentioned above, Hitachi Rail is on track to acquire Thales' Ground Transportation Systems business to expand the global partnerships in terms of digital mobility and enhance Mobility as a Service and rail signalling offer around the world. Also the Lumada Intelligent Mobility Management suite is a new and unique offering from Hitachi Rail, built for public transport operators, cities, and passengers to help enable a lower carbon, cost-optimized and congestion-free world.

As far as Signalling is concerned, Hitachi Rail is innovating the next generation of technology to help trains move autonomously, safely and at speed across vast distances and within city centres.



Class 800 Train arriving at Paddington station

## Turnkey

Hitachi Rail is a leader in designing and building whole new railways – either individually or as part of a consortium – worldwide. Hitachi Rail has a particular specialism in delivering automatic and fully Automated Train Operations (“ATO”), having built the award-winning Copenhagen metro and currently delivering automated metro railways in Riyadh and Honolulu. Hitachi Rail’s automatic transportation systems are designed with the whole-life cost at the forefront, meaning the solutions provide high-performance levels, increased capacity, high levels of safety and service availability and improvements to passenger satisfaction.



# Mission,

# Vision and Values

Hitachi Rail's mission is to contribute to society by developing superior, original technology that enables more seamless, sustainable journeys for passengers around the globe. With the core values of *harmony*, Wa (和), *sincerity*, Makoto, (誠) and *pioneering spirit*, Kaitakusha Seishin, (開拓者精神) Hitachi Rail's teams' partner with customers, cities and communities to design, engineer, operate and maintain fully integrated transport infrastructure. Hitachi Rail is unique in how its pioneering partnerships brings innovation and expertise from the Hitachi Group and its wider partner ecosystem.

Hitachi Rail's beliefs and actions are guided by a clear mission, vision and values as the company takes pride in holding itself and its projects to the highest standards, and the values provide benchmarks to evaluate successes and opportunities for improvement. Initially set by Hitachi founder Namihei Odaira, the Hitachi Mission has been carefully passed on to generations of employees and Stakeholders throughout the Holding Company's 110-years history.

12

## Mission

Hitachi Rail's mission is to contribute to society through the development of superior, original technology that enables more seamless, sustainable journeys.

## Vision

The vision is that every passenger, customer and community around the globe can enjoy the benefits of more seamless, sustainable journeys.

## Values

**Wa (Harmony)** – (和) – The importance to show respect to colleagues, suppliers, clients, and Stakeholders.

**Makoto (Sincerity)** – (誠) – To act with integrity in all words and actions, exemplifying the fact that sincerity lies in holding to stated values.

**Kaitakusha Seishin (Pioneering Spirit)** – (開拓者精神) – This means to lead with ambition, to seek new challenges; and to be unafraid of flexibility and adaptability to the changing needs of the business.



HRE High speed first class

# Hitachi Rail's

# ESG Roadmap

13

Hitachi Rail aims to become an influencer and leader of CSR and Sustainability, thanks to its capability to identify future business opportunities. The Hitachi Rail business unit has set several goals to implement:

- To develop new market opportunities and solutions for green targets;
- To develop and adopt technologies and solutions;
- To deliver sustainability on projects product/services development;
- To have premises management for Environmental impact;
- To strengthen stakeholder relations for stable societies and markets;
- To implement projects on product/services development;
- To promote sustainable products referring to their social and environmental impacts;
- To use a common language and shared purpose;
- To adopt a consistent roadmap to every relationship with stakeholders (external and internal).

**Products / services:** providing safe, comfortable transportation systems and services. Increasing the efficiency of customer's Sustainable production and processing systems.

**People:** focusing on Health and Safety (including strong Covid-19 procedures) and skills development and training on CSR & Sustainable goals; promoting sustainable products referring to their social and environmental impacts during manufacturing and in use ("Think Responsibly, Act Sustainably" campaign).

Hitachi Rail is therefore well-positioned to make a meaningful contribution to achieving the **UN Sustainable Development Goals**, with a consistent approach to 'Hitachi Group's commitment to contributing to the SDGs'.

The Hitachi Rail commitment is developed both directly and indirectly: directly, through management models which enable the Company to follow a path of sustainable growth and guarantee a cohesive culture of responsibility and promote sustainable actions by individual collaborators; indirectly, through the achievement of Hitachi Rail's mission to develop railway and mass transit systems and create increasingly sophisticated products and solutions that are safe, convenient, efficient and environmentally sustainable. Linking its activities with the SDGs and their specific targets, Hitachi Rail has identified **four ways in which it can contribute**:

1. Products and solutions;
2. Managing the activities and assets responsibly;
3. Continuous engagement with people and suppliers;
4. The measurement of its performance against the Sustainability targets.

Within the framework of these long-term objectives and in the direction of implementing a framework capable of consistently fulfilling these activities, Hitachi Rail has outlined a prioritization of objectives responding directly to its values for the environmental (E), social (S) and governance (G) areas, like the following:

## Environmental values

- A decarbonised society;
- Adopting circular economy principles within our products and services.

## Social values

- Health and well-being;
- Diversity, Equity and Inclusion;
- Decent Work;
- Human Rights;
- Safe and secure society;
- Effective engagement (i.e., internal communication and skills).

## Governance/Economic values

- Increase customer's economic values (as for example, through increased efficiency in management systems and a reduction in energy consumption, which both are impacting the decarbonisation process);
- Improve operational efficiency;
- New Sustainable Value creation.





Shinkansen N700S

Particular attention is paid to operational site facilities management, decent work, responsible supply chain, Health and Safety, energy improvement of buildings, as well as for the introduction of increasingly high-performance processes in terms of reducing greenhouse gas (CO<sub>2</sub>e) emissions.

Besides being a key input for the definition of these areas of engagement, the SDGs are also one of the essential instruments to best analyse the findings of stakeholder engagement activities related to ESG issues; in this sense, in line with the path undertaken in previous years, Hitachi Rail has started a process of revising its Materiality Matrix, which will be finalised in the near future and will take into strong consideration the Sustainable Development Goals consistent with the Group's Business Strategy and Corporate Commitment.

Hitachi Corporate and Hitachi Rail will continue to further encourage collaboration with governments, companies, non-governmental organizations, and consumers around the world to support policies to strengthen environmental protection, transition to clean energy, and fight climate change.

## Delivering a sustainable, safe and high-quality railway business

While greenhouse gas emission reduction is one of Hitachi Rail's most important targets, it is not the only target that must be achieved to accelerate Hitachi Rail's sustainable and environmental business operations. Hitachi Rail's has updated the mid-term roadmap, setting concrete targets, establishing performance measurements, and transparent disclosure which drives day-to-day activities. Following a Corporate approach, Hitachi Rail has set targets based on achieving emission reductions through direct action both within operations and throughout the value chain for manufacturing high quality products, solutions and Operations, Service & Maintenance.

Hitachi Rail defines the Sustainability and Corporate Social Responsibility pathway based on innovation to confirm itself to be the frontrunner of a great wave of sustainable change:

- Technological, because the world experiences a continuous flow of changes in the context of digital innovation for which Hitachi Rail has been developing the necessary know-how, skills and solutions;
- Economic, considering the geopolitical changes and the centre of gravity of the global economy moving from the West to the East of the world<sup>2</sup>. While some countries are facing rapid population aging due to an extremely low birth rate, the global population is growing. Consequently the supply and demand axis is shifting towards those countries where growth rates are higher;
- Cultural, following a change in mentality and in habits in order to address global environmental issues and social inequalities. In 2015 this led the United Nations to set the Sustainable Development Goals (SDGs).

For its customers, the latest innovations focus on reducing life cycle consumption of materials and energy by its own products, through life cycle analysis activities using recycled or otherwise sustainable materials and adopting new solutions from renewable energy sources for traction (e.g., battery trains). Across Hitachi Rail's portfolio of rolling stock, signalling and turnkey solutions, the company is using digital technologies to achieve better outcomes for customers with less impact on the environment.

Hitachi Rail's signalling solutions team is pioneering new 'Zero-Infrastructure' train control technologies which replace line-side equipment with cloud-based solutions connected through satellite communications. The operations teams acquired the remote condition monitoring Company Perpetuum, whose analytics technology extends safe service life – further reducing industrial and financial waste of inefficient maintenance regimes.

Hitachi Rail encourages its suppliers to participate in energy efficiency and other similar programs to reduce their own emissions. Material Recovery is an innovative technological practice that must be further developed and tested for the recycling of electronic equipment and the use of materials<sup>3</sup>. Hitachi Rail continues to promote the reduction and the reuse of waste material and the use of recycled materials, low greenhouse gas emissions (GHG), the innovation of the processes of recycling products, and the design of increasingly efficient products and solutions in terms of reducing GHG emissions.

<sup>2</sup> ESPAS (2019) Global Trends to 2030, Challenges and Choices for Europe, April 2019 - [ESPAS - Global Trends to 2030 \(europa.eu\)](https://ec.europa.eu/espas/)

<sup>3</sup> In compliance with the legal requirements arising from the EU Directive 2012/19, Waste from Electrical and Electronic Equipment (WEEE) and other internationally relevant legislation.



Photovoltaic plant of Tito Scalo in Italy

## New horizons and perspectives on Sustainability and Decarbonisation

17

In May 2020 the Hitachi Group committed to CO<sub>2</sub> reduction targets of achieving carbon neutrality at business sites (factories and offices) by 2030 (compared to the baseline) in support of the achievement of a Net Zero society.

The value chain for Hitachi Rail products and services encompasses all stages, from the procurement of raw materials and parts to production, transportation, use, disposal, recycling and recovery. Hitachi Rail has identified the environmental impact that may cause climate change, resource depletion, and ecosystem degradation across the entire life cycle of products and services and has assessed the reduced environmental load through its business activities in multifaceted ways while striving for further reductions.

Hitachi Rail analyses the possible impacts of its strategic decisions to reduce greenhouse gas emissions over the short, medium and long term, in order to identify business development opportunities, improve efficiency and reduce environmental risks. The approach is to accelerate the switch to renewable energy, improve energy and process efficiency in own operations, and leverage their buying power to mobilize the overall decarbonisation of the economy, thus significantly reducing their emissions and those of their partners.



Actions to reduce greenhouse gas emissions are part of the environmental management system that Hitachi Rail has established at a global level, defining a carbon management roadmap based on the following principles:

- global approach: the development of mechanisms to increase commitment in all offices and production sites;
- reasonable and feasible long-term objectives: the establishment of a clear and realistic vision for the steps to be taken;
- support for the development of technologies: the development of advanced technological solutions;
- effort in order to train a broader base of employees in the LCA process;
- covering methodological developments, including impacts assessment methodologies type I and II and interpretation phase;
- recognizing a plurality of established approaches, indeed the social life cycle impact assessment methodologies include different approaches developed in literature;
- developing areas where minimum guidance prevails;
- integration of Social Organizational Life Cycle Assessment (S-LCA) to extend the focus from products to the organization.

In order to establish a carbon management improvement path, Hitachi Rail reports direct and indirect greenhouse gas emissions, engaging to reduce them through policies on the mobility of people and goods, programmes for reducing consumption and improving energy efficiency, use of renewable energy sources, waste and water management.

These interventions have been studied and implemented on selected manufacturing facilities, key sites that result to have the greatest impact in terms of GHG and pollutant emissions. It is precisely from these sites that Hitachi Rail intends to start its change of course in emission policies. It is also from these sites that Hitachi Rail creates a change of mentality, above all, in practical terms, in order to ensure a conscious, orderly transition, useful for economic development and responsible towards the environment in terms of impacts.

Consistently with the commitment of the Group, the decarbonisation pathway on premises is mainly focused on selected Hitachi Rail construction/production sites following Hitachi Ltd. criteria for Environmental classification.

For these aforementioned sites, Hitachi Rail has engaged to reach carbon neutrality by 2030, so to implement a set of initiatives and key objectives to reach that have been planned in the next years, such as:

1. The introduction of photovoltaic panel technologies;
2. To provide maintenance centres with insulation systems to isolate systems with different thermal-acoustic conditions and prevent the two systems from exchanging heat;
3. To introduce solar thermal offices;
4. To implement pyrogasification technology aimed at the gasification of the biomass while simultaneously producing biochar;
5. To introduce Thermal Power Unit;
6. Improving exhaust fume extraction systems;
7. To provide offices and other facilities with a new air conditioning system;
8. Relamping and replacing the lighting system (traditional lamps) with LED ones, thus moving in the direction of further energy efficiency.

The carbon neutrality goal will be reached by also increasing the use of renewable power and policies of energy savings and thermal credit purchasing.



Passengers use Intercity train



- 3.0 -

# [Makoto]

## [Sincerity]

### Governance

360°

315°

315°

90°

135°

081°

225°

270°

誠

To act with integrity in all words and actions,  
exemplifying the fact that sincerity lies in holding  
to stated values.



# Corporate Governance

Hitachi Rail's mission is to contribute to society through the sustainable development of innovative and superior technologies and products. The company has committed to doing so in an environmentally and socially responsible manner. To ensure equality through the Organization and pursuing the medium-to long-term growth of corporate value, Hitachi Rail defined the Midterm Management Plan (FY22-FY24).

Regarding how sustainability is embedded in the governance of Hitachi Rail, the CSR&S department manages and coordinates the work for the four strategic areas of sustainability:

- Sustainability of Products;
- Sustainability of Sites;
- Sustainable Culture;
- Sustainable Supply Chain.

Each topic needs the involvement of specific functions, and the CSR&S team supports this kind of integration and process. The mission of the CSR&S function is to interface with the lead managers, reporting to them and all other stakeholders on the impacts of the sustainability roadmap.

## Sustainability Committee

The Committee oversees, approves, and provides input to Hitachi Rail's on its policies, strategies and programs related to sustainability and corporate responsibility issues, assessing their KPIs and risks.

The Committee's mission is to manage Hitachi Rail's vision and long-term environmental goals, while respecting and protecting social relations, in pursuing continuous improvement of governance through a global structure, incorporating effective decision-making and implementation. It has a scope of action that includes all locations and all employees of Hitachi Rail, creating an ever-greater value proposition for customers and Stakeholders.

The Sustainability Committee has the task of directing the strategic business guidelines for governance practices for Sustainability e Corporate Social Responsibility (CSR). The Sustainability Committee gives the mandate to the specific organizational group unit (SHEQ/R&D) to implement and to achieve the objectives of continuous improvement, environmental protection and social respect, in the interest of the various Stakeholders and communities in which the business is delivered. The SC reports directly to the CEO of Hitachi Rail and works in partnership with Hitachi Ltd.'s Sustainability Promotion Division (SusD).



# Hitachi Rail

GREEN ECONOMY

ENVIRONMENTAL

Sustainability Committee

ECONOMIC VALUES

SOCIAL

STAKEHOLDERS

Internal integration and  
collaboration withExternal integration and  
collaboration with

## Code of Ethics

The Corporate Code of Ethics is the document that summarizes all the good practices for the ethical management of human resources and the development of a work environment where respect and consideration for each figure prevails. This document defines the social and ethic standards to be followed by all employees, identifies the reference principles of the organization, and identifies practical paths and attitudes for respecting and pursuing them.

The document is a crucial pillar of the Hitachi Group Compliance Program, providing rules, values and principles that are required to be followed by employees, executives and directors, and third parties engaging in business with Hitachi Rail. The same rules, values and principles are also intended to assist officers and employees in making business decisions and acting in alignment with Hitachi's Group Identity.

The management of Hitachi Rail continuously confirms the commitments and ethical responsibilities, setting an example and promoting a culture of ethics that allows the Business Unit to preserve a good reputation amongst clients, partners, Stakeholders and the community. Every year, Hitachi Rail provides Hitachi Group Code of Ethics training to all employees. It is also a critical part of onboarding training provided to all new joiners. The Hitachi Rail Code of Ethics, serving as the Group Code, is available internally and externally on the Hitachi Rail website.

# Our suppliers

Supply Chain Management & Procurement are key areas within Hitachi Rail to drive the performance of business including the effective management of risk, cost, quality, delivery sustainability and innovation. The relationships with third-party suppliers are a critical part of the delivery of the key business objectives and Hitachi Rail works collaboratively with all suppliers to support these goals.

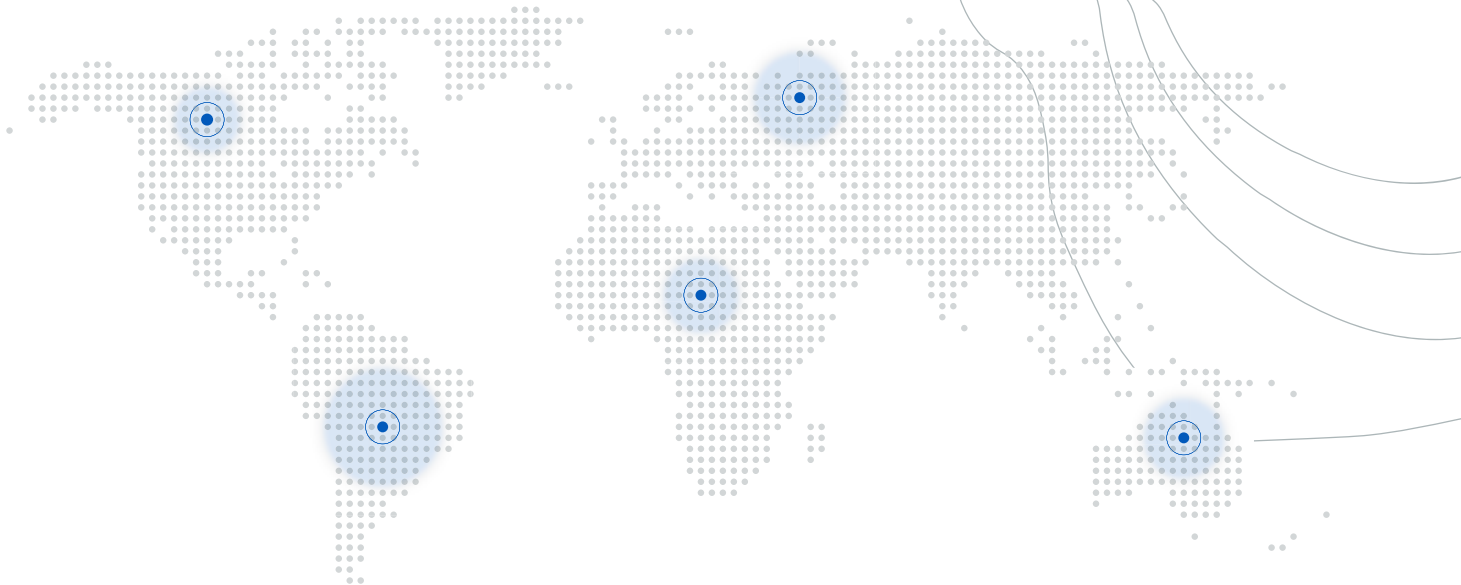
The Hitachi Rail Supply Chain & Procurement teams work within the framework of the Code of Ethics and Supplier Code of Conduct to responsibly and effectively source, procure and contract with suppliers based on its Procurement Strategy and in line with its Supplier Quality procedures.

Given the nature of Hitachi Rail's global business presence, the Business Unit manages a large and diverse supply base covering multiple areas of spend including:

- **Materials** – purchase of circuit boards, mechanical and plastic parts, wayside equipment, cables, racks, cabins, industrial PCs, on-board equipment and electromechanical components;
- **Services** – facility management and HSE, payroll services, professional and ICT services, logistics services and travel;
- **Business services** – engineering and development services and RAMS activities (reliability, maintenance, availability and security);
- **Turnkey projects and subcontracts** – systems such as installation systems, telecommunications systems, auxiliary braking systems, power supply and systems, supervision and control systems, depots for equipment, signalling systems, rails and civil works.

Hitachi Rail is continuing with a program, initiated last year, to transform Supplier Management capabilities as part of a broader Procurement improvement agenda including designing and building enhanced capabilities for Supplier Management with a specific focus on improving visibility, monitoring and defining improvement actions on key risks in supply chain with a particular focus on CSR & Sustainability and decarbonisation. As part of this, Hitachi Rail is striving to:

- Implement and operate a global supplier qualification process for Rail to qualify supply base against a defined set of criteria, improve visibility of key risks (including Sustainability) and enable the on-going tracking and management of suppliers against these criteria and risks;
- Support the improvement of quality and risk management of the supply base;
- Drive more effective performance management with suppliers with a particular focus on tracking performance against key sustainability metrics;
- Working collaboratively with suppliers to define and implement innovative solutions that support sustainability.



Hitachi Rail has been designing and building enhanced capabilities for Supplier Management with a specific focus on improving visibility, monitoring and defining improvement actions on key risks in supply chain with a particular focus on CSR & Sustainability and decarbonisation.

Over the past year, Hitachi Rail has implemented solutions to drive Sustainability in the supply chain including the EcoVadis IQ, Ratings and Carbon Action solutions. These innovative solutions allow to understand the CSR & Sustainability risks of suppliers, track the overall CSR & Sustainability performance and evaluate the actions being taken by suppliers on carbon and GHG emissions through a standardized online assessment.

Hitachi Rail has also partnered with Normative who provide a digital Carbon Accounting Engine which uses the Greenhouse Gas (GHG) Protocol to estimate total carbon footprint. This is an innovative and tailored approach for Hitachi Rail to solve the challenge of understanding the true volume of Scope 3 emissions of suppliers without, typically, having direct access to the Scope 1 and 2 emissions data for these suppliers. This is a first step Hitachi Rail has been implementing so far in the direction of comprehensive calculation of the Scope 3 inventory.

During the reporting period Hitachi Rail has run various stakeholder engagement sessions throughout the business promoting the values and benefits of sustainable procurement. Hitachi Rail introduced the model of our Sustainable Procurement Strategy, based on externally recognized frameworks i.e. OCED, UNGPs. This will be aligned to deliver the Hitachi Corporate Sustainable Procurement Policy and wider Sustainable Development Goals and Agenda 2030 commitments.



# Our customers

Hitachi Rail's breadth of rail experience and research and development programmes has created new, innovative trains and infrastructure, meeting the demands of passengers, operators and governments all over the world for rolling stock, traffic management systems, signalling and much more. Its global expertise means that Hitachi Rail can offer to customers solutions to every aspect of a railway network.

Hitachi Rail's customers operate multiple types of transport, so the Business Unit is expanding its capability to support them in other modes beyond traditional areas of strength in rail. The strength of the Hitachi Group means that partner with other sister companies, like GlobalLogic, Hitachi Energy or Hitachi Vantara, to develop joined-up digital solutions to meet customers' different needs.

Hitachi Rail relies on its global supply chain partners to help providing the most reliable and innovative solutions to its customer's challenges. Whether as a leader or part of consortia, Hitachi Rail innovates and collaborates to deliver projects that meet customers' needs, providing advanced solutions in every aspect of rail travel, including traction equipment and heating, air conditioning and ventilation (HVAC), signalling (ETCS) and traffic management systems (TMS), commuter trains, metro / underground and intercity trains.

Across the world Hitachi Rail work and partners with customers, large and small, private and public, to deliver transport products and solutions. From the Japanese Railway companies to city and national transport providers, Hitachi Rail aims to be an innovative, reliable partner to its customers.



Azuma Virgin train event



# Hitachi Rail

26

## and local communities

For Hitachi Rail, Social Responsibility translates into the daily focus and care of its relations with Stakeholders. Understanding of their needs and expectations is achieved through the definition and implementation of specific tools for dialogue and interaction.

Hitachi Rail plays a leading role in managing relations with local communities, be they municipal authorities, residents' associations, metro and rail service users, businesses or local workers, adopting different methods depending on the type of commercial project. Hitachi Rail is actively involved in programs to communicate and interact with the communities affected in various ways:

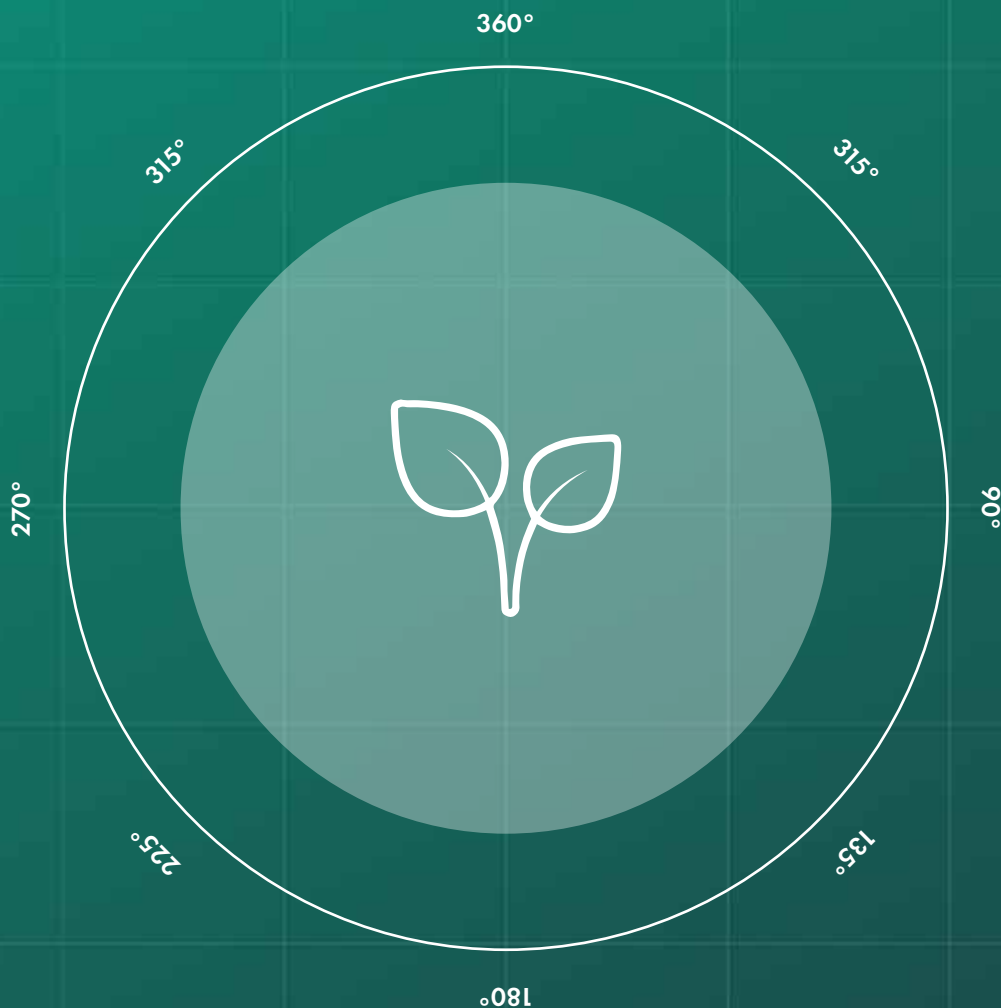
- Participation in committees that represent local Stakeholders;
- Promotion of communication between the local authorities and citizens;
- Engagement in direct communication;
- Participation in programmes to develop local communities.

Corporate Social Responsibility in Hitachi Rail manifests itself in different ways, with general coordination given by its strategy and mission, but even more so through the direct relationship with local communities. Respect for diversity and attention to equal opportunities, therefore, has different interpretations in the territories where the Hitachi Rail operates.

- 4.0 -

# [Kaitakusha - Seishin]

## [Pioneering Spirit] Environment



This means to lead with ambition, to seek new challenges;  
and to be unafraid of flexibility and adaptability to the changing  
needs of the business.

# Be a Climate Change Innovator

In September 2021, Hitachi Group set new targets to achieve carbon neutrality throughout its entire value chain by 2050 - bolstering the existing commitment to achieve carbon neutrality across all its business sites by 2030. Following the Group's commitment, Hitachi Rail pledged to achieve carbon neutrality by removing carbon not just from its own operations, but from the products and services it buys, and the products and services it sells. Such challenging undertaking is to be achieved in partnership with Hitachi Rail's customers and suppliers alike.

Hitachi Rail's approach so far has been taking in the right direction as it delivered a 3.5% reduction year-on-year in tCO<sub>2</sub>e emissions between 2020 and 2021. To put this data into perspective, considering the average diesel car mileage per year (2021) and the average diesel car CO<sub>2</sub>e emission factor (2021) as per the UK Ministry of transport<sup>4</sup>, the tCO<sub>2</sub>e reduction performed by Hitachi Rail (FY21 vs FY20) amounts to a total of over 23,000 cars taken off the road, for the whole year 2021.

In order to pursue such an ambitious goal in continuity with its growing business, Hitachi Rail wants to permeate its Environmental roadmap with the goal of decarbonisation through various actions involving selected

production sites and running along the entire supply chain: the pursuit of the Science Based Target initiative (SBTi) approach, with the consequent adoption of the circular economy model for its product lines, mark precise targets for Hitachi Rail.

Realising these ambitions and developing a decarbonisation pathway does not only mean adopting low-carbon choices oneself, but rather creating solutions that are sustainable and compatible with these goals. Creating innovative solutions compatible with these very targets means working as a Climate Change Innovator: Hitachi Rail intends to position itself as capable of developing innovative technologies and solutions that mark an alternative path to sustainable mobility, to help cities, governments and customers cut carbon in the mobility sector.

Hitachi Rail manages its innovation projects as plans or proposals aimed at providing efficient and proper solutions that can work. It creates a prototype with the project and demonstrates how to implement the idea and achieve the expected results. Using a scientific approach allows it to assess the feasibility, costs, market, and value of the solutions.





Innovation at Hitachi Rail meets these needs with a new pioneering approach towards technologies for designing solutions that can create a tangible and positive impact and a visible and persistent change. Following this idea, new consistent directions are:

- A Using technology to decarbonise its own industrial footprint and contributing to carbon neutrality targets following SBTi methodology and approach
- B Driving a modal shift by making rail an attractive alternative and enhancing with Mobility as a Service;
- C Accelerating the decarbonisation of rail by creating new electrified railways or powering trains with batteries.

Science-Based Targets provided Hitachi Ltd. with a clearly defined pathway to reduce greenhouse gas emissions (GHG), also helping Hitachi Rail to model Science-Based Targets for direct and indirect transport emissions.

29

Another pillar that makes Hitachi Rail a Climate Change Innovator is making rail technology the key element to drive through a comprehensive modal shift from air and automotive transport to railway system, a shift that remains one of the most impactful in terms of decarbonisation. Across the world new railways (Honolulu, Riyadh, Lima, Panama, Ontario) or improved railways are encouraging people to switch from their cars. In Italy, travelling on a regional ETR 421/521/621 train (Hitachi Rock, also named "Caravaggio") generates approximately 5.1 grams of carbon dioxide per passenger/km<sup>5</sup>.

Finally, as pioneers in the rolling stock and digital systems, Hitachi Rail aims at accelerating the decarbonisation by creating new electrified railways or powering trains with batteries. The acceleration of electrification and the central role of technological innovation make rail transport an environmental frontrunner.

Driving innovation also in this direction, Hitachi Rail is aware that the cost of electrification can be reduced by up to 50% if battery hybrid trains are used. With the aim of developing a global platform of battery-electric-diesel hybrids in Italy with 50% lower emissions, Hitachi Rail is also working on a project to make state-of-the-art battery trams. The use of batteries is the most effective way to achieve the benefits of decarbonisation before electrification as it has a performing level of carbon efficiency.

<sup>4</sup> Inputs resulting from the UK average car emission data collected through the UK Ministry of transport: Transport and environment statistics, GOV.UK ([www.gov.uk](http://www.gov.uk)) Conversion factor 2021 revised January 2022 and Annual mileage of cars by ownership and trip purpose: England, since 2002.

<sup>5</sup> Hitachi Rail Caravaggio Train Environmental Performance Declaration.

# Energy consumption

The majority of energy used is electricity for lighting, plant operation and building temperature control. Hitachi Rail also uses fossil fuels, mainly natural gas, and district heating to heat workplaces. In order to reduce electricity consumption, Hitachi Rail carries out constant work on its real estate assets, to increase their eco-efficiency. Energy-saving lighting and heating/cooling technologies are used as much as possible, such as:

- LED lighting systems.
- Building envelopes and thermal insulation for windows and doors.
- Direct-expansion heating/cooling systems (heat pumps).
- Presence detectors or clocks/timers to control the on and off switching of the systems.
- Improvement in the data centres' energy efficiency.
- Affixing of signs to remind personnel about energy saving projects, such as turning off lights, laptop computers and devices that consume energy.

30

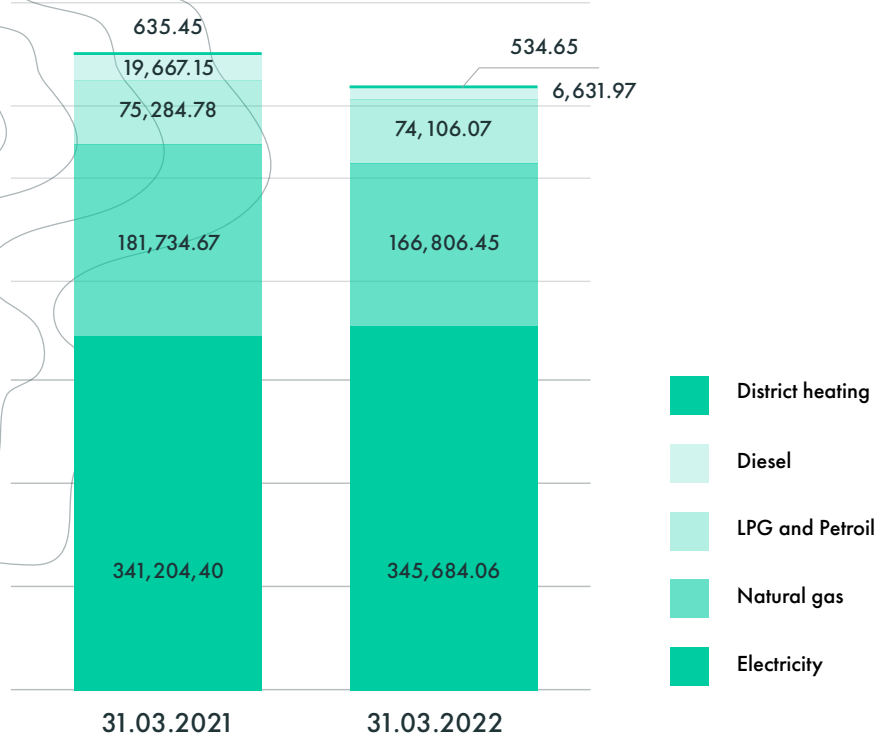
In the year ended 31.03.22, total energy consumption - natural gas, electricity, diesel, LPG and Petrol, District heating - amounted to 593,763.20 GJ, down 4 % compared to the previous year. It is possible to observe a shift from fossil fuels to electrical energy used, which reached +1.3% in the period against an overall decrease in fossil fuels used.



Daegu Urban Railway Line 3

## Energy Consumption

[GJ]



31

The energy consumption trend of the two-year period at the production sites and train maintenance centres and office sites is illustrated in the following table.

ENERGY BY SOURCE [GJ]	PRODUCTION SITES AND TRAIN MAINTENANCE CENTRES		OFFICES		TOTAL	
	31.03.2021	31.03.2022	31.03.2021	31.03.2022	31.03.2021	31.03.2022
Electricity	278,703.40	283,027.74	62,501.00	62,656.32	341,204.40	345,684.06
Natural gas	168,108.19	154,495.21	13,626.47	12,311.25	181,734.67	166,806.45
LPG and Petrol	75,163.97	73,891.91	120.82	214.16	75,284.78	74,106.07
Diesel	17,821.43	3,398.20	1,845.73	3,233.77	19,667.15	6,631.97
District heating	-	9.54	635.45	525.11	635.45	534.65
<b>Total</b>	<b>539,796.98</b>	<b>514,822.60</b>	<b>78,729.47</b>	<b>78,940.60</b>	<b>618,526.45</b>	<b>593,763.20</b>

Hitachi Rail recognizes that achieving Sustainable Development Goal 7 ("Ensure access to affordable, reliable, sustainable and modern energy for all") will benefit billions of people all over the world, using its products and transportation solutions: compared to 2021, in aggregate terms, the share of energy consumed and generated from renewable resources has increased by 64%.

ELECTRICITY CONSUMPTION FROM RENEWABLE SOURCES	Unit	31.03.2021	31.03.2022	var.	var.%
Electricity from renewable sources (e. g. Renewable Energy Certificates)	kWh	14,247,048	23,302,571	9,055,523	64%

In the following table, electric energy consumption is divided by type of site and the % which derives from renewable and nuclear sources.

ELECTRICITY CONSUMPTION	Unit	31.03.2021	31.03.2022	var.	var.%
MANUFACTURING					
Electricity purchased from the National Power Grid	kWh	60,464,499	64,883,130	4,418,631	7%
From renewable sources (e.g. Renewable Energy Certificates)	kWh	13,906,633	22,147,560	8,240,927	59%
% From renewable sources	%	23.0	34.1	11.1	48%
From nuclear source	kWh	1,324,786	1,416,803	92,017	7%
% From nuclear sources	%	2.2	2.2	- 0.0	-1%
TRAIN MAINTENANCE CENTRES					
Electricity purchased from the National Power Grid	kWh	16,953,111	13,735,687	- 3,217,424	-19%
From renewable sources (e.g. Renewable Energy Certificates)	kWh	71,809	46,637	- 25,172	-35%
% From renewable sources	%	0.4	0.3	- 0.1	-15%
From nuclear source	kWh	-	-	-	0%
% From nuclear sources	%	-	-	-	0%
OFFICES					
Electricity purchased from the National Power Grid	kWh	17,361,389	17,404,534	43,145	0.3%
From renewable sources (e.g. Renewable Energy Certificates)	kWh	268,606	1,108,374	839,768	313%
% From renewable sources	%	1.5	6.4	4.8	312%
From nuclear source	kWh	2,644,410	2,384,236	- 260,174	-10%
% From nuclear sources	%	15.2	13.7	- 1.5	-10%



# Emissions

Hitachi Rail is developing low-carbon, sustainable solutions to decarbonise transport around the world. Where railways are not only partially electrified, Hitachi Rail is also designing and building new battery and hybrid trains and trams to cut diesel emissions - and reduce the cost and disruption of electrification programmes.

Hitachi Rail thinks responsibly, and acts sustainably, in order to deliver a **100% reduction in Hitachi Rail's own CO<sub>2</sub>e emissions by 2030, and a 100% reduction through the entire value chain by 2050.**

Hitachi Rail has delivered products and solutions of the highest quality for its customers for over a century. Whether it is the iconic Shinkansen bullet trains, innovative battery trains or brand-new railways, the modern transport solutions aim to enhance and improve travel, while better linking journeys together. Hitachi Rail has re-confirmed its engagement to address climate change by strengthening its own climate target to contribute to a Net Zero society by achieving carbon neutrality throughout its entire value chain, including production, procurement the use of products and services by FY50. This bolsters the existing commitment of reaching carbon neutrality at all its factories and offices globally by FY30. As explained, Hitachi Ltd. is working on its value chain using Science Based Targets initiative (SBTi) (scope 1,2,3) and Hitachi Rail is currently focusing its attention on improving energy and resource management, having reduced its carbon footprint by 3.5% in FY21. With different contractual agreement and implementations, Hitachi Rail carries out a solar panel installation program at various facilities in Italy (Tito Scalo, Reggio Calabria), Australia (Perth) and the United Kingdom (Newton Aycliffe, Doncaster and Stoke Gifford). At the same time, it encourages travel by introducing electric car sharing schemes for its employees and supports the use of electric vehicles at all Hitachi Rail sites.

The value chain for Hitachi Rail products and services encompasses all stages, from the procurement of raw materials and parts to production, transportation, use, disposal, and recycling. Hitachi Rail has identified the environmental impact that may cause climate change, resource depletion, and ecosystem degradation across the entire life cycle of products and services and has assessed the reduced environmental load through its business activities in multifaceted ways and strives for further reductions.

As part of Hitachi Rail's Sustainable Procurement Strategy, the Business Unit is focusing, with an upstream approach, on its Scope 3 emissions which typically account for 90%+ of the CO<sub>2</sub>e emissions from a given company. Overall, Hitachi Rail's Scope 3 emissions account for 96% of the total Scope 1, 2 & 3 CO<sub>2</sub>e emissions. That's why Hitachi Rail is building a clear view of carbon emissions generated by its supply chain using an innovative digital platform aligned to the Greenhouse Gas Protocol.

The Business Unit reports direct and indirect greenhouse gas emissions, engaging to reduce them through:

- Policies on the mobility of people and goods;
- Programmes for reducing consumption and improving energy efficiency;
- Use of renewable energy sources;
- Waste and water management.

With respect to the data reported last year, it is important to highlight that the sharp increase in absolute terms is due to the extension of the Scope 3 upstream perimeter performed in FY2021. Nevertheless, in line with the commitment of Hitachi Rail to provide consistent and comparable data year-on-year, the same perimeter has been applied also to FY2020 determining the stated reduction of emissions.



Total emissions - direct and indirect - of GHG fell in absolute terms from 941,533 tCO<sub>2</sub>e in in Fiscal Year 2020 (from 01.04.2020 to 31.03.2021) to 908,599 tCO<sub>2</sub>e in Fiscal Year 2021 (from 01.04.2021 to 31.03.2022), with a reduction of 32,934 tCO<sub>2</sub>e (-3.5%).

Scope 1, 2 and 3 emissions are shown in the table below, along with details of their related sub-items.

GREENHOUSE GAS EMISSIONS	Unit	FY 2021	FY 2022
Emissions due to Energy Production (Natural Gas)	tCO <sub>2</sub> e	10,418.85	9,556.82
Emissions due to Energy Production (Diesel)	tCO <sub>2</sub> e	1,424.21	434.96
Emissions from Air Conditioning Systems (Fugitive Emissions)	tCO <sub>2</sub> e	3,619.05	2,446.00
Emissions due to Internal Handling (Lorries and Forklifts)	tCO <sub>2</sub> e	53.98	59.96
LPG	tCO <sub>2</sub> e	4,794.60	4,749.42
<b>Total Scope 1 Emissions -15%</b>	<b>tCO<sub>2</sub>e</b>	<b>20,310.68</b>	<b>17,274.16</b>
Emissions due to Electricity Consumption	tCO <sub>2</sub> e	21,486.24	21,240.46
Emissions due to District Heating	tCO <sub>2</sub> e	84.55	25.36
<b>Total Scope 2 Emissions -1%</b>	<b>tCO<sub>2</sub>e</b>	<b>21,570.79</b>	<b>21,265.81</b>
<b>Total Scope 3 Emissions -3%</b>	<b>tCO<sub>2</sub>e</b>	<b>899,651.94</b>	<b>870,086.88</b>
<b>Total GHG Emissions -3.5%</b>	<b>tCO<sub>2</sub>e</b>	<b>941,533.41</b>	<b>908,599.86</b>



- 5.0 -

# [Wa]

## [Harmony]

### Social

360°

315°

315°

90°

和

270°

225°

135°

180°

The need to show respect to colleagues,  
suppliers, clients and Stakeholders.  
The company shows respect to earn respect.



# Our People

In this fast paced, global, and digital world, diverse talent is a driver for innovation and value-creation. Hitachi Rail aims to build an environment where talent from diverse cultural backgrounds, experiences, and ideas plays an active role to cultivate a common identity in all employees worldwide, so they may share the values of Harmony, Sincerity, and Pioneering Spirit that comprise Hitachi Rail's core mission.

Within this framework, Hitachi Rail's policies are oriented towards enhancing the value of human assets, with the aim of achieving a continuous improvement. Hitachi Rail works with constant commitment to ensure, on the

one hand, the continuity of service and, on the other, the protection of the health safety of all workers engaged in various capacities in the various activities. The care of people ranges from technical knowledge and safety in production sites to occupational development, from ensuring respect for diversity to building a whole system that enhances people's well-being, family life and professional development.

Hitachi Rail seeks to attract, develop, and organize employees by building good relationships with them. It does so by acknowledging their fundamental rights, providing equal opportunities, and optimizing work-



Kasado worker

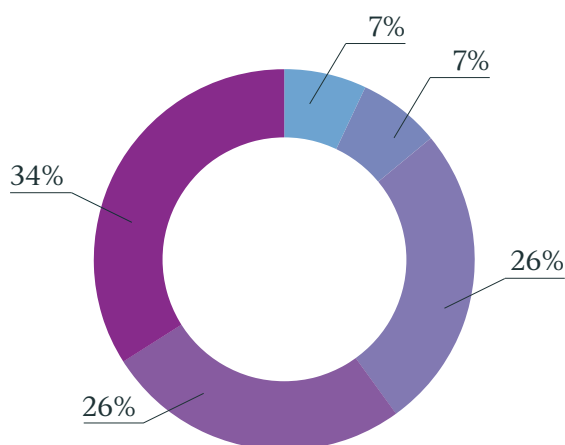
life balance. The Business Unit also actively engages in regular dialogue with employees regarding compensation and career development through its Global People Management System as well as through regular dialogue between managers and employees. In the pursuit of its objectives, Hitachi Rail's people are aware that ethics are of immense value to the Business Unit and accordingly, no conduct in violation of the law, current regulations, Code of Ethics and organizational, management and control model, is tolerated.

## Hitachi Rail's total workforce

as of 31.03.2022 was 13,978 employees,

an increase of 2% compared to last year.

Hitachi Rail employees are spread all over the world, with 34% of the workforce concentrated in Italy, 26% in Japan and 25% in the EMEA region. The remaining workforce is located in the US and Canada and APAC regions.<sup>6</sup>



■ Italy ■ Japan ■ EMEA ■ USA & Canada ■ APAC

Employees % at 31.3.2022

The majority of Hitachi Rail's employees (56% of the total) fall into the white-collar category. Women account for 15% of the workforce at Group level, with 20% in white collar roles. Despite the small number of female executives, the proportion in this category increased by 44% (specifically with an increase of 4 people) compared to the previous financial year.

<sup>6</sup> The internal employee regional distribution refers to the EMEA region as comprised of the following perimeter: UK, France, Belgium, Denmark, Germany, Greece, Morocco, Spain, Sweden, Turkey, UAE, Saudi Arabia and to APAC region as: Australia, India, China, Malaysia, Taiwan.

# Diversity, Equity, Inclusion and Multiculturalism

Diversity, Equity and Inclusion are the source of innovation and growth. Within the framework related to the importance of people, Hitachi Rail reserves a particularly important role for the topic of diversity. Especially considering the global extension of its business and the highly international nature of its presence, Hitachi Rail considers indispensable the ability to enhance its diversity to make it, to all intents and purposes, an essential asset in the conviction that it is a collective responsibility to ensure respect and equal opportunities. Hitachi Rail welcomes differences in background, age, gender, sexuality, family status, disability, race, nationality, ethnicity and religion,

values passion and commitment and protection of human rights. Hitachi Rail will consider additional standards to respect the individual rights of vulnerable groups including indigenous peoples, women, national or ethnic, religious and linguistic minorities, children, persons with disabilities, migrant workers and their families thus rejecting all forms of discrimination.

With reference to the issues of diversity, inclusion and combating inequality, the focus on gender equality, another essential objective in the development and growth of Hitachi Rail's mission, is fundamental. With a diverse workforce, broad



Bethnal Green Ashford visit

experience, and an inclusive culture Hitachi Rail can meet its customers' needs and drive a consistent BU's sustainable growth.

The ongoing commitment is to improve diversity, equality and inclusion for the benefit of all, specifically with a current focus on increasing gender diversity. Relevant highlights on the matter, considering the last 12 months, include:

- Having reached higher rates of employment for women where not assured before;
- Total visibility and transparency on internal jobs;
- Launch of the 1st survey on internal perceptions on equal opportunities at Hitachi Rail (45% response rate) – which informed future strategy;
- Launch of "Building an Inclusive Culture" learning program – 1st workshops on "Unconscious Bias" fully subscribed;
- One recruitment system and process embedded for transparent and objective hiring.

Hitachi Rail's actions to pursue its ambitious vision to "embed and advance respect for Human Rights in all its activities, operations and Value Chain" follows the relevant regulatory standards generally shared by the entire international community. The vision is based on the dignity of every human being and the responsibility of business to go well beyond the mere respect of all human rights legislation, but to contribute to the welfare of people and local communities as part of Hitachi Rail's identity and approach to do business.

In December 2021 Hitachi Rail has embarked on an SA8000 certification journey as it believes that the ethical certification correctly and transparently addresses and governs the social impact of its organization and highlights to all stakeholders how they apply labor and human rights legislation and actions to manage risk along the supply chain. Hitachi Rail strongly believes that following the path towards a Company-wide SA8000 certification will help to improve working conditions for all its employees worldwide. The SA8000 certification guarantees stakeholders (competitors, public bodies, customers, suppliers, institutions, associations) that Hitachi Rail is a Business Unit that has respect for human and workers' rights and an ethical management as its way of doing business and not just as a legal requirement.

With the aim of maintaining high ethical standards and working in compliance with applicable laws and regulations, while promoting a safe environment to report potential or suspected violations, Hitachi Rail has organized and made available dedicated channels through which anyone can report any suspected violations of the Group Code of Ethics or any violation of laws and regulations in terms of Corporate Social Responsibility.





Hitachi Rail's mission is also focused on the social dimension. In this area, the organization's efforts focus on the integration and inclusion of principles such as Diversity, Equality, and Inclusion at all levels. In this perspective, diversity becomes an opportunity in terms of creativity, innovation, and business, being an enriching asset to be enhanced.

The policies for the inclusion of people with disabilities are defined by relevant country laws. In Italy, Law no. 68/99 introduced the key concept of "targeted" employment, defined as "a set of technical and support tools which make it possible to adequately assess the working capabilities of people with disabilities. Successful appointments are made by analysing positions, forms of support,

positive actions and solutions to issues related to the work environment, tools and interpersonal relations that a person would experience in the role. In Japan, the law mandates that a certain percentage of the workforce must constitute people with disabilities. Hitachi Rail provides opportunities and positions both in office-based and in Production. In the United States, it is common practice for customers to require the mandatory allocation of a percentage of the contract to DBEs (Disadvantaged Business Enterprises), which are regulated by federal and state departments.





HS2 Rolling Stock Contract Award

Each DBE must be certified by the relevant Transit Authority. To meet its contractual obligations in the US, Hitachi Rail has identified and vetted various DBEs with which it may directly operate in order to meet the quota required by the contractual targets. In general, this includes training employees of DBEs to carry out the work usually performed by Hitachi Rail employees in line with labour standards.

The table below shows the total number and percentage of the workforce represented by people with disabilities in Central and Eastern Europe, the Middle East and Western Europe.

People with disabilities by region										
	ITALY		JAPAN		EMEA		USA&CANDADA <sup>7</sup>		APAC	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
People with disabilities	65	27	32	14	7	10	N/A	N/A	1	-
% of total workforce	4.83	7.61	0.95	4.42	0.23	1.75	N/A	N/A	0.10	-

<sup>7</sup> Data for specific geographic areas must be interpreted taking into account the local regulatory environment. In the US case, recruitment of staff with disabilities is not direct but formalised through DBEs; the table format is to be understood as referring to on payroll employees.



# Occupational Health and Safety

At Hitachi Rail, safety is #1 priority and the Company is committed to ensuring that activities are undertaken by considering the Safety and Health of the employees, contractors and individual who may be impacted by daily operations. The Hitachi Rail HSE Policy gives everyone with clear understanding of Hitachi Rail's expectation in relation to HSE Management, in line with Harmony, Sincerity, and Pioneering Spirit Values and according to the following order of priorities:

43

S (Safety) >> Q (Quality) > D (Delivery) > C (Cost).

The two greater-than signs between S and Q indicate

that Safety is Hitachi Rail's highest priority. Safety within the context of this statement incorporates the Health and Safety of people and management of Environmental impacts and aspects.

Hitachi Rail is committed to ensure continuous improvement of the suitability, adequacy and effectiveness of the Health Safety Environment Management System (HSEMS) to enhance its performance.

Hitachi Rail Top management is committed to protect the Safety, Health of individuals, the Environment, and the communities in which Hitachi Rail operates.



Doncaster Carr TMC

Top Management drives the process for the Company's HSE excellence and demonstrates full-range theory of leadership to create a positive safety culture and commitment with respect to the HSEMS by:

- a) taking accountability for the effectiveness of the HSEMS;
- b) ensuring that the HSE Policy and HSE objectives are established for the HSEMS and are compatible with the context and strategic direction of the organization;
- c) taking overall responsibility and accountability for the prevention of work-related injury, ill health, provision of safe and healthy workplace as well as management of environmental harm;
- d) ensuring the integration of the HSEMS requirements into the Hitachi Rail business processes;
- e) ensuring that the resources needed to establish, implement, maintain, and improve the HSEMS are available;
- f) communicating the importance of effective HSE management and of conforming to the HSEMS requirements;
- g) ensuring that the HSEMS achieves its intended outcomes;
- h) engaging, directing, and supporting persons to contribute to the effectiveness of the HSEMS;
- i) developing, leading, and promoting a culture in the Hitachi Rail that supports the intended results of the HSEMS;
- j) protecting workers exercising their rights in matter of Health and Safety as established as per example reporting incidents, hazard, risk and opportunities;
- k) ensuring the establishment of process of Consultation and Participation of Workers and establishing the HSE Committees as required.

For this purpose, employee representative are identified in each company entity and as deemed by legal requirements in order to participate decision-making process in Health and Safety matters. One of the main tasks where management and workers' representatives collaborate is risk management. The Health and Safety Risk Assessment and Environmental Aspect Evaluation follows concept of ISO 31000 Risk Management, considering the Plan, Do, Check, Act cycle.

## Step 1

### Plan: Identify hazards / aspects

Considering the organizational internal and external context, identify the hazards and environmental aspects associated with the tasks, activities, working areas, environment, and personnel to be assessed. This process should involve observing, inspecting, investigating, communicating, and consulting; and making a record of the hazards/environmental aspect identified.



## Step 2

### Do: Assess Risks

Using the defined risk matrix assessing and prioritizing the risks; dealing with the highest priority risks first; and dealing with lower-risk or least significant risks last. Risk is managed following the hierarchy of risk control, implement appropriate measures that adequately manage the hazards and environmental impacts.

## Step 3

### Check: Monitor & Review

Considering the following: to ensure that control measures have been implemented as intended and are adequate; to implement control measures which do not create other hazards, environmental impacts or increase risks. Also, no further changes have been implemented, risk-control is reported to be working effectively and risk management process are effectively conducted.



Hitachi Class 395 in Ashford Train Maintenance Centre

## Step 4

### Act: Improve and Adjust

Hitachi Rail's Health and Safety policy is based on the application of the requirements of relevant standards, namely UNI ISO 45001 in compliance with national and international regulations. Hitachi Rail's plan is focused on continuously improving Health and safety standards.

For Health and Safety, Hitachi Rail undertakes to:

- Ensure and maintain a safe and healthy workplace environment and prevent injuries, illnesses or damage to the health of employees, suppliers, customers and visitors;
- Continuously improve the management systems' performance, not only with respect to the prevention of injuries and work-related illnesses, but also in terms of more general employee wellbeing;
- Adopt risk assessment criteria for all hazards relating to work activities which, in compliance with national and international legislation, also consider best practices;
- Provide training and information for all employees in order to make them more aware of the risks related to their activities;
- Continue developing activities to spread a culture of safety with all suppliers and concerned parties.

Every year, relevant HSE KPIs are identified based on the strategic plan of Hitachi Rail. In the last 2 years, Hitachi Rail has moved the HSE performance approach from reactive to proactive, identifying more and more leading indicators that have replaced the lagging ones.

In particular, performance evaluation is based on number of lost time incidents (ratio in the table below calculated on recordable injuries, therefore excluding first aid cases):

HEALTH AND SAFETY - KPI INDEXES	31.03.2021	31.03.2022
Injury frequency index <sup>8</sup>	0.59	0.74

For internal purposes of performance monitoring, are also evaluated number of near misses and unsafe situations. The consequent result of this strategy is to focus primarily on prevention of serious incidents by eliminating the causes identified for close calls and near misses. Furthermore, injuries are not counted as absolute numbers but related to worked hours in order to consider in the performances the increase or decrease of business activity.

<sup>8</sup> no. Injuries/h. worked x 200,000



# Training and Career Development

Hitachi Rail, with its Learning & Development Department, has started a process to collect, analyse and prioritize learning needs across the Organization in order to get a consistent approach to learning. FY21 has focused on that, and a first activity has been launched to gather the main priorities connected to the BU's objectives and evolutions. A more detailed process has been defined and will be introduced in order to have a more consistent approach across geographies and lobs.

47

A first Global Hitachi Rail learning plan has been delivered. Some of the initiatives implemented have focus on D&I, Business Continuity, Compliance and Remote Working.

The "Remote Working" training, already started in the previous fiscal year, has been improved with some additional modules aimed at strengthening the sense of belonging to Hitachi Rail and the effectiveness of remote working. Getting the tools, resources, and culture to support remote working, today and in the future, is critical to ensuring that everyone feels included, valued and able to work and manage teams effectively. At this purpose, some initiatives have been built to widespread the Company-culture and support people in dealing with the virtual environment.

FY21 also saw the development of activities also related to the Localization of Key Competences (LKC) project, with the objective of defining and implementing a new global process focused on



structured mapping, analysis and development of certain “strategic” skills for the business, in order to make them available (“localize them”) in the geographic areas in which they are required for the implementation of project activities.

The Programme is based on structured competency mapping, cross-analysis and has a “On the Job” approach to learning which encompasses a combination of learning by doing, traditional learning formats, direct observation, practical experience, as well as conducting testing and providing active support to project teams.

Confirming the trend observed in the previous reporting cycle, the provision of training services showed further growth (+6% total training hours, average training hours per employee is 32 for men and 25.2 for women).

#### AVERAGE HOURS OF TRAINING BY GENDER AND REGION

	ITALY		JAPAN		EMEA		USA		APAC		TOTAL		
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
31.03.2022	12.4	11.9	80.3	99.7	16.5	12.1	5.4	6.8	12.0	13.9	32.0	25.2	31.0
31.03.2021	10.7	12.9	73.4	129.2	12.8	9.9	19.5	18.9	13.3	7.4	29.6	30.4	29.8
31.03.2020	14.5	12.9	52.9	72.9	18.0	14.0	16.9	15.2	9.5	12.4	26.2	23.2	25.8

Hitachi Rail, as part of its integrated framework of learning activities, provides its employees with a wide range of training activities covering various topics and business areas. The main areas covered by training appear to be “Technical-specialist training” (51.8%), “Language training” (21.6%), “Human Rights and Ethical Aspects” (8.4%) and “HSE Quality” (7.3%). The Performance Appraisal process is owned by each employee and line manager and facilitated by the HR department.

The process consists of three phases: goal setting; mid-term review and final review that, in FY21 was managed in the same tool (HiNext) for the whole Business Unit. Furthermore, for FY21, the Final Review phase was globally calibrated to ensure alignment amongst the evaluation process whilst taking observing cultural peculiarities. This new phase gave the opportunity to the next-level managers to review the performance ratings of their own teams, supported by their regional HR referent.





A common and integrated Hitachi Rail Performance Appraisal process represents one of the main pillars of the new Talent Management Framework, as does the launch of the Group Talent Review Process, both of which aim to align business' goals with the characteristics, behaviours and aspirations of each individual with both current and future business challenges in mind. The Talent Review process aims to:


- Promote a performance and a development-oriented culture in the organization;
- Identify suitable actions to be implemented for the enhancement of people's talents.
- Identify talented people at all organizational levels;
- Develop people by defining adequate Development Plans / Actions to support their growth;
- Retain talents, ensuring continuous improvement of skills and supporting motivations.
- Evaluate: each eligible employee is evaluated on the basis of the overall performance and their overall potential;
- Calibrate: enables the distribution of ratings to be balanced at global level. This phase has been managed in order to provide managers with the opportunity to focus and discuss the accomplishments (and strengths and development needs of their collaborators and teams (Talent Review) at the same time;
- Create Development Plans: aimed at enhancing people's growth.

49

The completion rate for the Talent Review Process was 92% of eligible employees.



2020 Azuma event in Doncaster



Under a less technical but equally important lens, building an Inclusive Culture is also key for the success of Hitachi Rail's strategy. Improving the way people interact with each other's, at any level, is a lever to increase personal and collective performance. At that scope, during the year the analysis and design of the training course aimed at building an inclusive culture and overcoming the "biases" has started and a first digital course has been made available to employees. Hitachi Rail believes that the impact on culture and training for the issues of sustainability and corporate social responsibility must be continuously cultivated. Sensitivity, personal progression on the issues of climate change, and the ways in which each of us can contribute directly, are a precious value both for individuals and for the whole community and BU. In continuity with this approach, the e-learning "Introduction to Climate Change" has been designed and delivered across all geographies with the objective to sensitize everyone on the importance of getting a proactive approach and sense of responsibility toward climate change.

In March 2022 Hitachi Ltd. launched the first global course on environmental impact to become a Climate Change Innovator. Hitachi Rail's CSR&S Department was commissioned to prepare the course, which was then disseminated worldwide and introduced as mandatory training for all Hitachi Group employees. This training is mandatory for all employees. It is also an opportunity to provide ideas or proposals on how to support the fight against climate change, in day life and for business activities.

But that's not all – Hitachi Rail also recognizes a special gift:

Hitachi Rail collaborated up with Treedom, the first platform in the world that allows everybody to plant a tree from a distance and follow its growth and story online. The first 1000 colleagues that completed the course shared their idea for a climate change action or project and got a tree planted with their name on a developing region of the world.

# Coming soon

This is the Insights of the 2022 Hitachi Rail CSR&S Report, which underwent an exhaustive and comprehensive review, which affected the integrity of the document, in line with Hitachi Rail's new ambitions and increasingly challenging targets.

In addition to going into more detail on the reporting of Scope 1, 2 and 3 emissions, the narrative includes new focuses in the area of governance - in terms of e.g., fiscal transparency, anti-corruption, economic value generated and suffered - but also in the social sphere - ethical supply chain management, positions on respect for and protection of human rights.

The Report, soon to be published, will be available in its full version at <https://www.hitachirail.com>

## Contacts

CSR&S contacts global team: [csr@hitachirail.com](mailto:csr@hitachirail.com)

