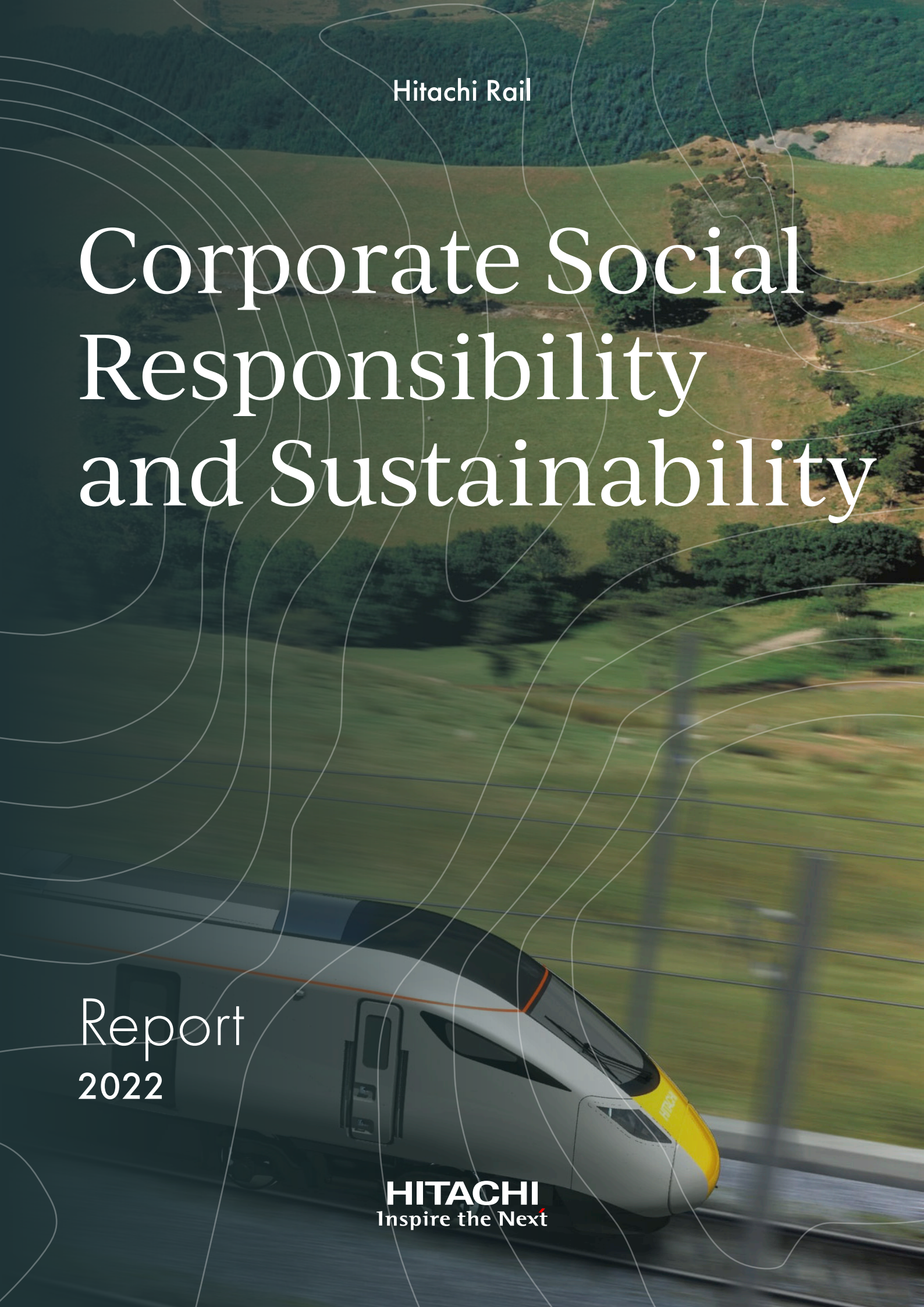
Hitachi Rail

Corporate Social Responsibility and Sustainability

Report
2022



HITACHI
Inspire the Next

Hitachi Class 800

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Foreword from CEO, Andrew Barr

Chief Executive Officer

The fiscal year 2021 (FY21) was a year defined by the dynamics of global crises. Both Covid-19 and the war in Ukraine continue to impact global supply chains and international politics, while cost of living pressures people on all continents.

In addition to these challenges, we cannot forget the persistent threat of climate change, which is already affecting billions around the world.

Through our participation in the global environment conference COP26 in Glasgow, UK, Hitachi Group had a front row seat for the commitments being made by governments, cities and corporations around the world to limit global temperature increases to 1.5° C, implementing challenging decarbonisation targets.

Environment: Hitachi Ltd.'s participation in COP26 allowed us to demonstrate our commitment to become a Climate Change Innovator

It was at COP26 that I revealed our Decarbonisation pathway for Hitachi Rail. As part of the Hitachi Group, we are committed to achieving the carbon neutrality in our own operations by 2030, and 100% across the value chain by 2050 (compared to a 2010 or nearest subsequent baseline year for sites not operational in 2010). Our strategy is simple – drive a modal shift away from fossil fuelled cars and planes, decarbonise rail with batteries now and hydrogen later, and decarbonise ourselves using the Science Based Targets guidelines. You can read more about our activities on page 37.

This commitment became operational reality through 2021, impacting the way that we design our products for customers, assess the merits of our suppliers, invest in facilities, and how our executives are incentivized.

I am pleased to say that in 2021 we continued our progress to reduce emissions by another 3.5% percent compared to 2020. The full breakdown of our emissions reduction activities can be found on page 147.

Social: Covid-19 vaccines programmes continued; community programmes restart

Decarbonisation is not our only goal: in this report you can read updates regarding a full range of activities across environment, social and governance issues.

For example, as Covid-19 restrictions around the world began to ease we were able to shift our community support activities away from the vaccination programs that dominated FY20 and return to initiatives more closely related to connecting with our communities.

In that regard, we partnered with local schools on the "Move Oahu Forward" program to help local school children access new robotics technology, and in Japan we were proud to celebrate the 100-year anniversary of a factory in Kasado. Around the world we continued to promote diversity within our workforce, in particular Women in STEM activities such as global support for International Women's Day with events in the UK and the USA.

Governance: New strategy, new structure

In 2021 we also announced an organizational change to improve governance and operational efficiency. Hitachi Rail is organized around its core lines of business - rolling stock, signalling and a planned team dedicated to smart mobility. Through the future acquisition of Thales GTS, Hitachi Rail will significantly expand its global reach in turnkey signalling activities and technologies.

The acquisition also takes Hitachi Rail a step

closer to becoming a full mobility provider through the combination of Thales' ticketing business and Hitachi's Lumada-powered Smart Mobility capabilities. Together we have an opportunity to move into an exciting new era for Hitachi Rail and our partners.

This is very relevant for our decarbonisation approach, because we believe that the best way to decarbonise society's transportation emissions is to encourage a modal shift away from fossil fuel cars and towards public transport. Passengers and cities need this to be seamless as well as sustainable - which is where our growing investment in digital capabilities is paying off. Our digital strategy is designed to drive both commercial and green growth for Hitachi Rail and its customers.

FY21 was a challenging year in many ways, but despite this, Hitachi Rail made solid progress on its commitments and some significant steps towards sustainable growth. I am immensely proud of the work of our teams across the entire business for continuing to make these issues part of everyday decision-making. The strategy has been set, now we need to focus on continuously improving our execution.

Photovoltaic plant at Hitachi Rail's Tito Scalo factory in Italy

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

Andrew Barr
Group CEO Hitachi Rail

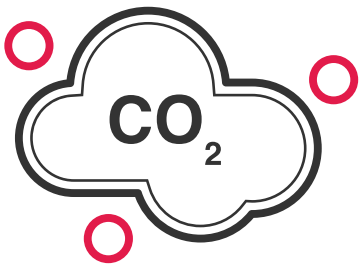
Highlights FY21

38
countries

5
continents

6%
reduction

in total water withdrawal (FY21 on FY20)



100%
reduction

targeting a 100% reduction of Scope 1 and Scope 2 CO_2 emissions at business sites by 2030, and a 100% reduction through the entire value chain by 2050 (compared to baseline)

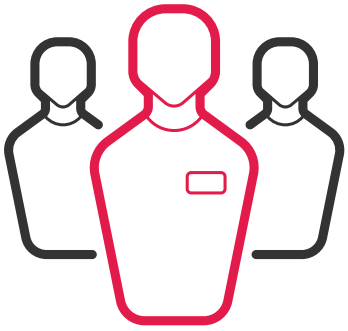
3.5%
reduction

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

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

[1]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) Conversion factor 2021 revised January 2022 and Annual mileage of cars by ownership and trip purpose: England, since 2002.



13,978
employees

96%
employees
hired with open-ended contracts

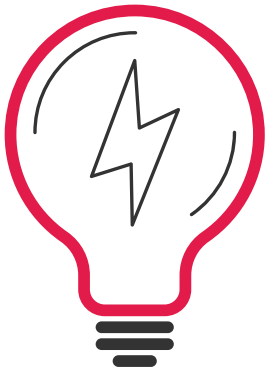
31
total hours
of training average per employee

0.74
lost time injury frequency rate

80.8%
hazardous waste recycled

+64%
FY21 on FY20

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



Hitachi Rail manufactures **world-leading high-speed trains** to transform passengers' journeys, continuing a proud heritage 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 Rock Train, also named "Caravaggio") or the ETR1000 high-speed train (the Italian Frecciarossa) which releases fewer emissions compared to its predecessor.

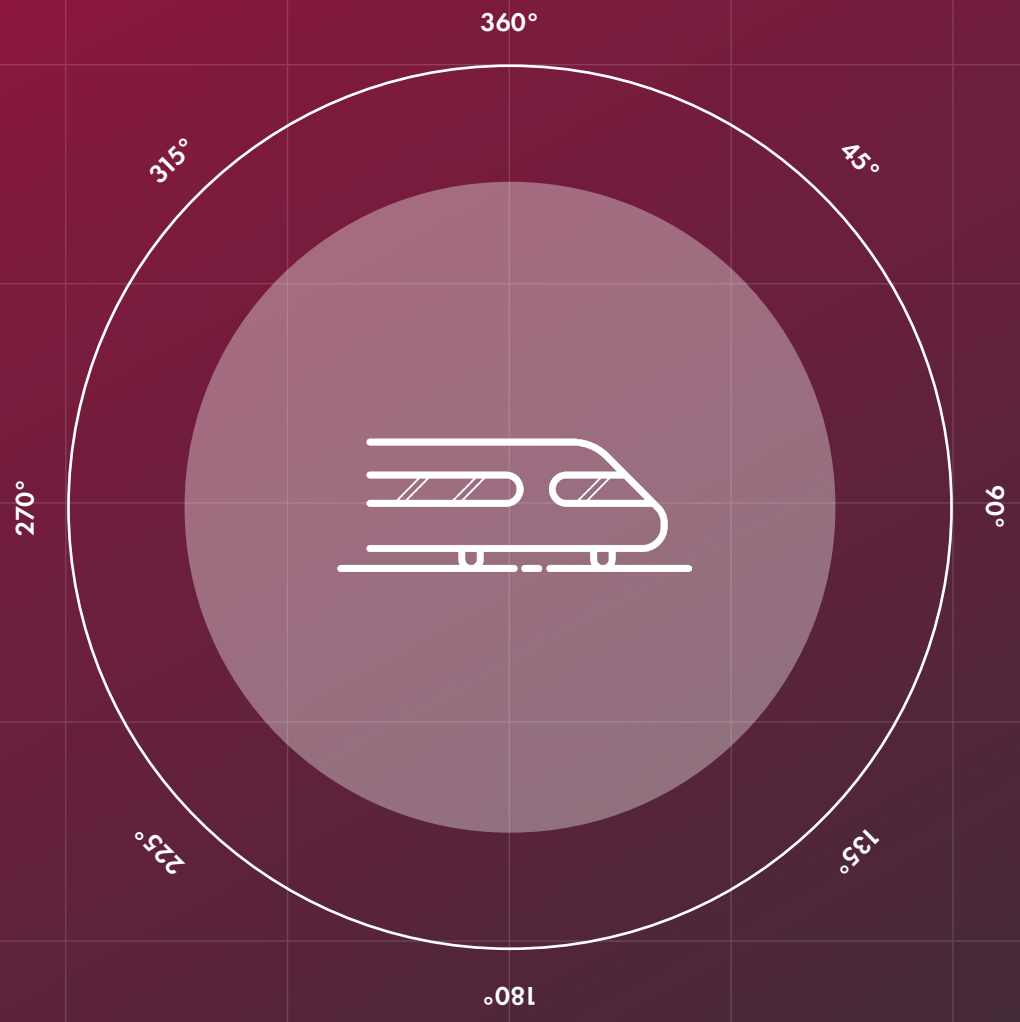
Hitachi Rail is also building lighter trains (50% of the weight), with a double-deck regional train ("Caravaggio") weighing only 120 tonnes compared to the 280 tonne 6 double-decker cars and E464 locomotive train ("Vivalto") it replaced.

50%
of the weight

95%
of materials suitable for recycling

- 1.0 -

Context and Identity



1.1 The global sustainability scenario

1.2 The transport sector scenario

1.3 Hitachi Rail Identity and Business

1.3.1 Introduction

1.3.2 Business, Products and Solutions

1.3.3 Mission, Vision and Values

1.3.4 Global Presence

1.3.5 Economic performance

1.4 Partnership for Sustainable Development

1.4.1 Commitment to the UN Global Compact

1.4.2 Industry Associations and Certifying Authorities

In the last few years, the world has witnessed a sudden change in the value creation logics - pursuing sustainable development - because of the shared awareness of belonging to an ecosystem which is to be protected and respected. **The core of this paradigm shift is the UN 2030 Agenda and the 17 Sustainable Development Goals (SDGs).**

The SDGs describe the major challenges humanity will have to face to ensure a sustainable, peaceful, prosperous, and equitable life on earth for all, in the present and the future. In this context, the role of rail transport is crucial in achieving the goals of decarbonisation and in emphasizing its contribution to bringing people, territories, and relationships closer together for social and economic well-being. These assumptions are also **the basis of Hitachi Rail's idea of sustainability**, as further described in paragraph 2.1.3, to offer an integrated and sustainable mobility ecosystem, capable of contributing to the achievement of prosperity and quality of life in balance with natural capital.

1.1 The global sustainability scenario

The theme of sustainability has reached global relevance, in particular during the emergency that has affected the entire planet, with effects that have determined and continue to determine significant repercussions on the behaviour of companies, people, and institutions. The push towards this contextual evolution found concrete expression at the United Nations Summit held in New York in September 2015, with the signing of the 2030 Agenda by the 193 member countries. The Agenda identified 17 Sustainable Development Goals (SDGs), divided into 169 specific targets, established around the fundamental, urgent issues for the planet. Fighting poverty, limiting inequality, combating climate change and sustainable growth are just some of the goals that the governments of the signatory countries have committed to achieving by 2030.

Organizations have begun to make strong efforts to identify and activate new practices to combine sustainable growth objectives and economic performance. The intensification of extreme events has contributed, even more so in the context of the global pandemic emergency, to making the effects of climate change universally clearer. In continuity with COP26 in Glasgow, a 'step change' in commitments to reduce environmental impacts was demonstrated *inter alia*:

in the G7, through the confirmation of the pursuit of the carbon neutrality targets by 2050;

in the G20 in Rome, with the definition of three action-pillars (People, Planet and Prosperity), aimed at adopting effective measures in the fight against the pandemic that can also provide fertile ground for long-term sustainable development.

In this context, companies that are truly committed to making progress in the area of sustainability have understood the need, on the one hand, to evolve their corporate culture in this direction and, on the other, to undertake strategies and structures that also place at the centre of their objectives the ability to create value by seeking ways to minimize negative impacts.

This commitment is also strengthened by the development of public policy and regulation by control bodies, aimed at engendering the adoption of ESG (Environmental, Social and Governance) standards capable of fostering a unified approach (e.g. Value Reporting Foundation) in disclosing impacts, promoting greater comparability of information. Although many of these standards are used voluntarily (e.g., TCFD - Task Force on Climate-Related Financial Disclosure), they are increasingly present in different country regulatory systems.

The community, and young generations in particular, are also increasingly aware of the need not only to safeguard, but also to improve living conditions through the fight against global warming, environmental protection, the adoption of clean energy and sustainable consumption, and the reduction of social and economic inequalities.

The consciousness of these dynamics, combined with the regulators' increasingly stringent intervention, has enabled the European Economic and Social Framework to confirm its position as a world leader in policies for sustainable development. At the level of the European Union, an initial positive effect came from the adoption of EU Directive 2014/95 on the disclosure of non-financial information. These efforts have set the stage for the systemic intervention, introduced in the

form of the European Green Deal in 2019 to make the Union a more equal and prosperous society with a modern, efficient, competitive, and climate-neutral economy by 2050.

Among the most recent and formidable actions of the European Commission is the release of the EU Regulation 2020/852 ('EU Taxonomy') and its new strategy for sustainable finance, which highlight the intention of EU institutions to strengthen the quantity, quality, and comparability of the non-financial information provided by the private sector. In this context, further progress was made with the introduction of the Next Generation EU, an emergency instrument that was developed in the different national contexts through National Recovery and Resilience plans.

Photo credit: Andy Hoare

Sustainability evolution

Increasing attention at political and, consequently, regulatory level

Public policy agenda

1987

«Sustainable **development** is development that **meets the needs of the present without compromising the** ability of **future** generations to meet their own needs.»

(Brundtland Commission)

2001

«Corporate Social Responsibility (CSR) is the voluntary **integration of social and environmental concerns of companies in their business operations** and in their relations with stakeholders.»

(European Commission)

2015

2030 Agenda for Sustainable Development and 17 **Sustainable Development Goals**

(United Nations)

2019

The European Commission launches the **Green New Deal**, a new growth strategy aimed at transforming the EU into a carbon-neutral society.

(European Commission)

2020

The European Commission launches the **Next Generation EU**.

(European Commission)

Regulatory framework

2014

The European Parliament and the Council approve **Directive 2014/95/EU** ("Barnier Directive"), which binds certain types of oganizations to provide a non-financial statement (NFS) on an annual basis.

2018

The European Commision launches the **Action Plan on Financing Sustainable Growth**.

2020

Publication of **EU Reg. 2020/852 on Taxonomy** a single classification system for sustainable economic activities.

2021

Proposal for an **EU Directive on Corporate Sustainability Reporting** (CSRD)

1.2 The transport sector scenario

The world's growing population, particularly in cities and given the indisputable challenges of climate change, the cost of living, congestion and Covid-19 recovery, has brought about the necessity to think differently about transport in the 21st century.

In order to adapt to the challenges of climate change and sustainability, a strategy for change must be adopted, and rail transport in particular will provide a major contribution. Sustainable infrastructure and mobility are elements of the desired transition to just and environmentally responsible growth scenarios. Hitachi Rail is leading excellence in the railway industry and has chosen to commit itself to promoting increasingly integrated, inclusive, collective and environmentally low-impact mobility solutions.

By improving the share of travel with lower carbon performance, such as rail transport, collective road transport or shared systems, it is possible to make a significant difference in reducing the numerous negative impacts, such as pollutant emissions and climate impacts. Increased energy efficiency and the use of renewable energy, redesign of production cycles and a modal shift towards environmentally friendly means of transport are necessary measures for the sector.

For Hitachi Rail and its customers, the challenge will increasingly be not only to get the economy moving again, but also to combine the traditional economic-financial objectives of the Business Unit with the general principles of Sustainable Development. In this sense, the seamless, sustainable movement of people and goods within and between cities has never been more important.

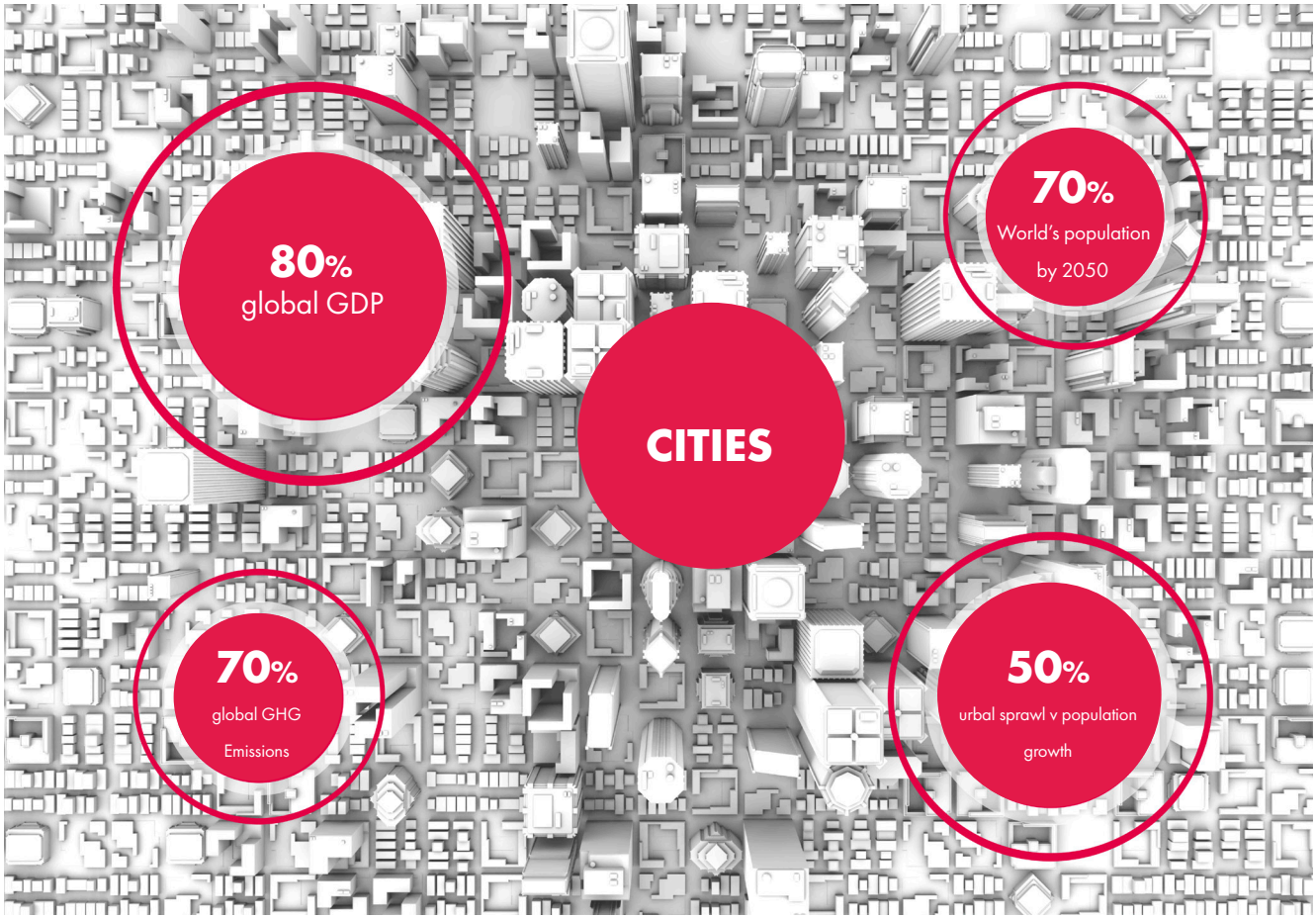
Covid-19 continues to impact shape of transport recovery

Public transport is still in recovery following two years of Covid-19. As a result, congestion and CO_2 emissions have grown, a trend which needs to be reversed. Share of trips taken by public transport in 2020 dropped 14% compared to 2019, while car use remained high – during the Covid-19 pandemic, public transport use plummeted by 95%. At the core of these issues is road-traffic congestion: congestion costs cities billions each year and while recovery is coming, the shape of demand is changing, leaving cities with challenging new questions. More recently, the volatility in fuel prices is driving shifts in consumer behaviour – away from cars and towards buses, while increasing energy costs for operators whose fare pricing is less elastic than that of petrol and diesel.

According to MaaS Alliance[2] research of more than 100 global cities in March 2022, 61% of the cities indicated road-traffic congestion as their primary challenge in terms of mobility, followed by pollution and noise, lack of budget/resources, and resistance

[2]MAAS-Alliance – The Mobility as a Service Alliance, https://maas-alliance.eu

to change by their citizens. Unsurprisingly, similar challenges are reflected in the mobility goals shared by all cities interviewed, the top three being: improving the public transport system (79% of the cities), improving air quality (68%) and decarbonising mobility in the city (68%).



Moving from local challenges to global ones, transportation is today the number one source of GHG emissions in many economies. Carbon emissions – and other pollutants impacting air quality such as NOx and SOx – are creating massive public health issues which are increasingly being regulated due to the knock-on impact to society – both in terms of public health and climate change. The challenge for cities, is not only to build and maintain mass transit infrastructure, but to connect all services together in a way that creates more sustainable journeys for every passenger. Hitachi Rail is working hard to bring new 'mobility as a service' solutions to cities, transport operators and passengers to help address these challenges - and more.

1.3 Hitachi Rail Identity and Business

1.3.1 Introduction

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 was founded in Japan in 1910, but in the Americas the Company also drew from the original Union Switch & Signal business established by early pioneer George Westinghouse in 1881. Similarly, the Italian business draws from the firm established by Giovanni Ansaldo in Genoa in 1853. The focus on high quality trains of the Japanese railways has continued in the Group's expansion in Europe in the past decade. Indeed, the inclusion of Ansaldo Breda's rolling stock business in 2015 and Ansaldo STS' international signalling and turnkey railway capabilities in 2018 were key milestones to power Hitachi Rail to become a global leader in total rail solutions.

Passengers can enjoy new levels of convenience and connectivity – meaning faster, smoother and easier journeys – but also a smart mobility system that works together as one, bringing cars, buses, trains, bicycles and more together into one well-orchestrated dynamic system. The goal is to help cities, transport operators and passengers achieve lower carbon, lower cost and more convenient transport by making public transport the first preference for travel, whether travelling within cities or between them. By putting the passenger first through connected mobility, Hitachi Rail is moving people away from cars and planes and onto trains.

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 and the Company has delivered products and solutions of the highest quality for 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 is a pioneer at heart, with a culture that emphasizes solving complex challenges through dedication. Yet, it is the partnerships – the deep and longstanding relationships with the businesses and public transport authorities served – that remain critical to the success. Their trust in Hitachi Rail means it is possible to work and innovate together to find solutions to some of the world's most complex challenges.

From its origins in Japan, Hitachi Rail operates in 38 countries, with strong roots in Europe, Asia-Pacific and the Americas. Its technology 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.

Hitachi Group manages several business areas and is consequently divided into business units. Therefore, the term "business unit" is integrated into Hitachi internal nomenclature and it is, hereafter, used to refer to the Hitachi Rail organisation.

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.

Copenhagen Autonomous Metro

1.3.2 Business, Products and Solutions

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 Hitachi Rail's sister companies, like GlobalLogic, Hitachi Energy or Hitachi Vantara, are set to develop joined-up digital solutions to meet customers' different needs. Hitachi Rail is a world leader in autonomous metro and creates solutions to overcome every type of mobility challenge; from autonomous freight lines that traverse the vast distances of the Australia Outback to intercity fleets that switch seamlessly between power sources to best use century-old infrastructure. Also, as experts in signalling and traffic management systems, Hitachi Rail goes from managing busy metro systems to freight lines that span Arabian, Australian and

American landscapes, and are helping European countries to accelerate progress against their interoperability challenges.

Hitachi Rail manufactures world-leading high-speed trains to transform passengers' journeys, continuing a proud heritage having built the first Shinkansen bullet trains in 1964, and develops operational control systems (called, "ATOS") to manage the movement of thousands of trains per day. Hitachi Rail is creating whole new railways to improve transportation and reduce congestion in locations as diverse as Hawaii and Saudi Arabia, following the mission to create a business that can solve the world's mobility challenges and looking at ways to expand the capability and the solutions offered in this sense.

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 improvethe passenger experience across all rolling stock products. The designs aim at being accessible to all, positively impacting society, and improving 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 customers' operations and 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. With the expertise of building and maintaining every part of the rail systems, Hitachi Rail is uniquely positioned to run the day-to-day operations of railways on behalf of transit authorities, which is exactly what the Company is doing in Copenhagen, Honolulu and Riyadh.

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.

The acquisition of Perpetuum delivers digital condition monitoring, helping operators to identify and fix faults before they occur, while in terms of Infrastructure Perpetuum Rough Ride (track) project is underway together with Intelligent Asset Management Strategies (IAMS) catenary monitoring and Network Rail catenary monitoring

Signalling: 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. For example: Rio Tinto in Australia, Copenhagen and Milan Metros, HyperloopTT, (European Interoperability for VHST).

Digital Workforce: an important improvement which introduces smartwatches for lineside workers (SNCF), a Trackside Guardian (HICSE) and, of course, a Smart Working Policy (Italy).

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. Hitachi Rail has the capability to work as a special contractor or as a leader in joint ventures with civil work companies and other rolling stock manufacturers. Hitachi Rail works with a wide range of global suppliers in partnership to solve each project's challenges to meet the expectations of the client and achieve a high level of customer satisfaction throughout.

1.3.3 Mission, Vision and Values

Hitachi Rail's mission is to contribute to society by developing a 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 teams partner with customers, cities and communities to design, engineer, operate and maintain fully integrated transport infrastructure. The Business Unit 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 its 110-years history.

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

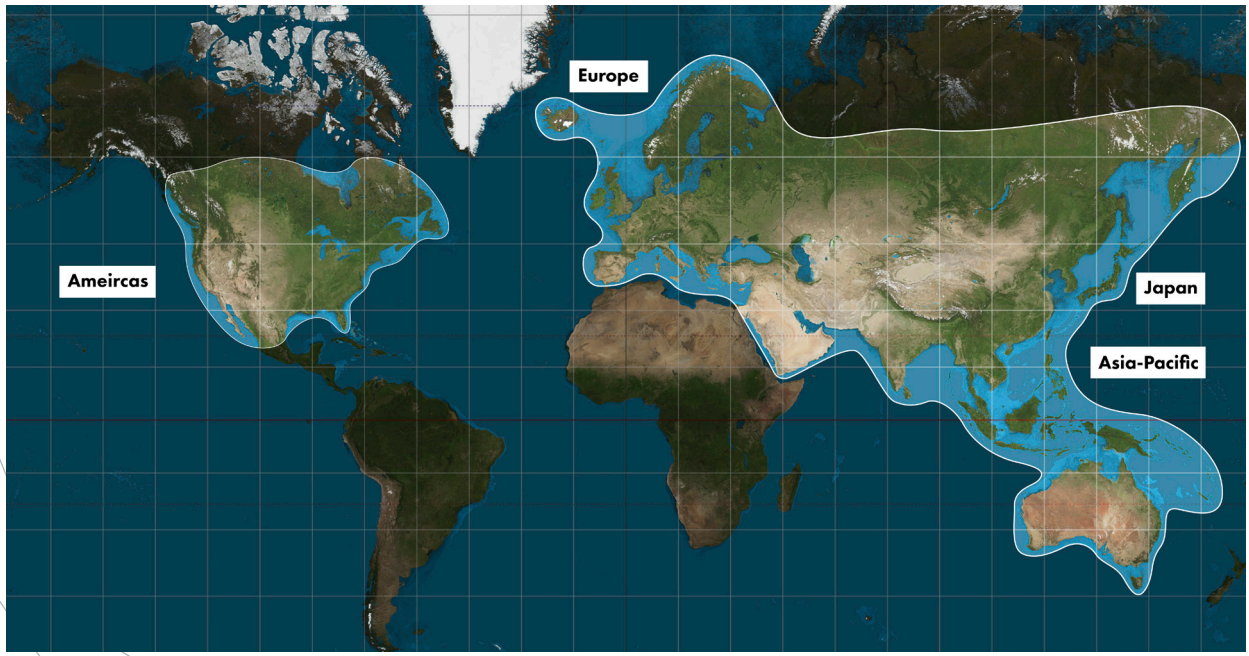
Wa (*Harmony*) – (和) – The need to show respect to colleagues, suppliers, clients, and Stakeholders.

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

1.3.4 Global Presence

Hitachi Rail is present in 38 countries and six continents. With around 14,000 employees, Hitachi Rail believes that a culture of sustainability is best practice; combining clear goals and plans for the development of the business with staff's personal and professional growth.



Global Head Office

- Hitachi Rail Global Head Office London

Main Regional Offices

- Hitachi Rail STS SpA – Italy (Genova, Naples, Torino, Roma)
- Hitachi, Ltd. Railway Systems Business Unit – Japan (Tokyo)
- Hitachi Rail STS - Canada Inc. (Toronto, Missisangua)Hitachi Rail STS - USA, Inc. (Honolulu JV, Pittsburgh)
- Hitachi Rail STS - UK Ltd. (London, Ludgate)
- Hitachi Rail España
- Hitachi Rail STS Deutschland
- Hitachi Rail STS France
- Hitachi Rail STS Sweden AB
- Hitachi Rail STS Malaysia
- Hitachi Rail STS India Private Ltd. – (Noida, Kolkata, Bangalore)
- Hitachi Rail STS Australia Pty Ltd. – (Karratha, Perth, Brisbane)
- Hitachi Rail STS Hong Kong Ltd.
- Hitachi Rail STS Railway Signalling Technology Company Ltd. – Beijing

Plant and maintenance

- Hitachi Rail USA – Miami
- Hitachi Rail STS USA, Inc. – Batesburg
- UK - Newton Aycliffe Manufacturing Facility
- UK Train Maintenance Centres (Ashford, Stoke Gifford, Doncaster, Craigentinny, Swansea, Bounds Green, North Pole)
- Hitachi Rail STS – France
- Hitachi Rail STS SpA – Italy Train Maintenance Centres (Tito Scalo, Pistoia, Reggio Calabria, Napoli)
- Hitachi Rail STS SpA – Greece
- Hitachi Rail STS SpA – Denmark PE.
- Hitachi Ltd. – Japan (Kasado Works, Mito Works)

1.3.5 Economic performance

The prospectus for the calculation of the economic value generated and retained[3] is constructed by aggregating, in scalar form, items in the income statement in line with the representations shared with Corporate, and represented in JPY, with the aim of highlighting the formation process of added value and its distribution to the various stakeholders.

Direct economic value generated and distributed	Unit	Apr 21 - Mar 22 (FY21)	Apr 21 - Mar 22 (%)
Economic value generated			
Revenues (net sales plus revenues from financial investments and sales of assets)	mn JPY	467,298	100
Economic value distributed			
Operating costs (payment to suppliers, non-strategic investments, royalties and facilitating payments)	mn JPY	307,443	65.8
Employee wages and benefits (total employee expenses - current payments, not future commitments)	mn JPY	102,356	21.9
Payments to provider of capital (e.g., investors)	mn JPY	2,252	0.5
Payments to government (tax expenses)	mn JPY	32,685	7.0
Economic value retained			
"Direct economic value generated" less "Economic value distributed"	mn JPY	22,562	4.8

The table shows the development path that is characterizing Hitachi Rail's business activities. The solidity of financial performance, the activities expansion and the internal reorganization processes to foster increasingly effective governance, have a significant impact on the analysis in the Report, both qualitatively and quantitatively. The analysis of these data, which will be further expanded to include year-on-year trends, is therefore a necessary support in contextualization, reflecting Hitachi Rail's objectives and its desire to increasingly act as an ambitious and solid player in its market.

[3]Please note that the following data reported will refer to the legal entities consolidated Hitachi Rail Ltd. and its subsidiaries - STS Group, Perpetuum Group, STS UK. Japan sites and offices are not included.

1.4 Partnership for Sustainable Development

New Corporate efforts are needed to increase stewardship of natural resources, implement innovative solutions, and contribute to sustainable development. Once again, this year, **Hitachi Rail has confirmed its support to the Global Compact**, the voluntary United Nations initiative: a framework for companies to embed sustainability into their strategy and take action to secure a resilient future that encourages respect for human rights, labour, and the environment, fighting against anti-corruption through a series of 10 principles. The Group's membership in the initiative reiterates its commitment to the Global Compact and its main principles as an integral part of the Hitachi Rail's strategies and workplace culture.

In the fiscal year 2021 **Hitachi Ltd. re-confirmed its commitment to address climate change** by strengthening its own climate target to contribute to a Net Zero society. In this framework, Hitachi Rail pledged to **achieve carbon neutrality throughout its entire value chain, including production, procurement the use of products and services by FY50 (compared to FY10)**. This bolsters the existing commitment of reaching carbon neutrality at its business sites globally by FY30.

This new target revises Hitachi Rail's previous target of 80% reduction by FY50 which was set in 2016. Hitachi Rail will contribute to the reduction of its customer's CO_2 emissions and continue to reduce environmental impact from the design stage in all its products to help develop world-class energy efficiency, recycling and recovery rates. Hitachi Rail is also committed to working with partners in its supply chain, through its sustainable procurement guideline, issued in July 2021. 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 identifies the environmental impact that may cause climate change, resource depletion, and ecosystem degradation across the entire life cycle of products and services, assess the reduced environmental load through its business activities in multifaceted ways and strives for further reductions.

The second half of 2021 was a crucial time to define the global strategy to safeguard the planet. From September to November, two major events took place, the 26th Conference of the Parties to the United Nations Convention on Climate Change (COP26) in Glasgow and the Pre-COP summit in Milan.

Hitachi Ltd. was a principal partner of COP26 and has committed to becoming a climate change innovator, helping governments, cities and companies cut their greenhouse gas emissions.

Through Hitachi Ltd.'s sponsorship, Hitachi Rail has joined to contribute to the achievement of global goals to reduce environmental impact and ultimately help create a more sustainable future, through the power of Social Innovation. The Business Unit has been strengthening its

climate target by achieving carbon neutrality through its entire value chain including production, procurement and the use of products and services by 2050, as the Group Environmental Vision states:

> **We will resolve environmental issues and achieve both a higher quality of life and a sustainable society, in collaborative creation with stakeholders.**
>
> Group Environmental Vision

Hitachi took part in several events during the two weeks of COP26:

- On Transport Day, it joined "What Comes after the Tipping Point? Opportunities from the ZEV Transition";
- Hosted "Powering Good: Recharging Rail to Power Economies and Connect Communities";
- Hitachi Rail's Chief Diversity & Inclusion Officer spoke about Hitachi's work to decarbonise in the plenary session "Presidency Event: Building Back Better: Accelerating deep collaboration for Built Environment climate action";
- Hosted an event called "Towards Net Zero – Greening Cities Through Low Carbon Connected Urban Transport". The Chief Environmental Officer gave the keynote, and it was chaired by the Chief Digital Officer for Europe.

Pre-COP

The Conference of the Parties to the United Nations Framework Convention on Climate Change – according to the procedure – may be preceded by a preparatory meeting held about a month earlier and hosted by another country involved in the plan, called Pre-COP.

This meeting aimed to create a shared an informal moment where a selected group of countries debated and exchanged views on some key political aspects of the negotiations to develop a political guide for the subsequent negotiations, anticipating the topics that will be further discussed at the COP itself. The Pre-COP was held in Milan, Italy, from 30 September to 2 October 2021. The conference was attended by 40 countries, representatives of the UNFCCC Secretariat, and several stakeholders who play a key role in the fight against climate change and the transition to sustainable development.

Hitachi Rail's contribution to Pre-COP

To create greater visibility and awareness for COP26, **two virtual events and a communication campaign were organized to give visibility to the Pre-COP26 plan**.

In the autumn of 2021, the first event entitled *'Race to Zero: how to define a sustainability plan for Italy'* was held, broadcast via live streaming on a dedicated online platform. The event aimed to foster a proactive and concrete dialogue between top executives and key players on the corporate and institutional scene on the issues of sustainability, mobility, green infrastructure, and the transformation

of cities into sustainable ecosystems.

The second event, *"Youth Cooperation on Climate Change"* was held in October and was dedicated to a youth audience, including high school and university students, one of Pre-COP's main targets. At this event, five under-30 opinion leaders active in the field of sustainability shared their examples and positive actions for the planet. Three of Hitachi Rail's young talents joined the conversation, illustrating high-impact projects they have been working on. The event was broadcast online and made accessible to all registered guests; the audience was selected from universities with STEM faculties, and undergraduates in scientific disciplines, and therefore closely connected to the Hitachi world with potential prospects for future involvement.

Furthermore, at this year's global Partners Day, with the theme 'Sustainable Together', Hitachi Rail underlined the importance of sustainability and decarbonisation for over 3,000 of its suppliers around the world, including recognizing some key suppliers for their outstanding contributions to the sustainability and decarbonisation agenda in FY21. By making its 'strategy' problem into a 'shared opportunity' with its partners, Hitachi Rail will engage the full innovative power of the value chain to drive positive action. The Business Unit plans to work with its suppliers over the coming years, with a particular focus on those who have the greatest impact on carbon emissions, on collaborative ways to reduce GHGs in the value chain. This is a journey which will take time and require a significant contribution from Hitachi Rail and its partners, but through the use of the Normative Carbon Accounting Engine, Hitachi Rail has a data-based starting point to help shape the approach and prioritize resources.

Hitachi Rail's Kasado site in Japan celebrated its 100 year anniversary in 2021

1.4.1 Commitment to the UN Global Compact

Hitachi Rail supports and promotes the UN Global Compact Network initiative as a reference framework to create and develop an economic, social and environmental framework which promotes a healthy and sustainable world economy for all. As every year, **in November 2021 Hitachi Rail has published its Communication on Progress which has been certified by the UNGC as "Advanced level" for its commitments** to decarbonisation and forward-looking roadmap in the application of the 10 principles.

Previously, during the fifth Italian Business & SDGs Annual Forum, held in Rome in October 2020, Hitachi Rail won the Promoting Founder Award by Global Compact Network Italy, the local branch of the UN initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies. Hitachi Rail and 11 other companies and non-business entities won this award, which recognized the Business Unit's position among the founding members of the Italian Network in 2009, as well as its commitment to supporting the network's sustainability and CSR principles and initiatives.

This award is further proof of the commitment of Rail business in sustainability and Corporate Social Responsibility (CSR), but also of the entire Hitachi Group: Hitachi Ltd. is also an active member of the UN Global Compact Network as from 2009.

Inside the framework of the Italian Network for the Global Compact (GCNI) Hitachi Rail has also been a promoter and contributor to the publication: *"Italian companies towards decarbonisation: a fair and inclusive transition*[4]*"*.

[4]Originally: "Le imprese italiane verso la decarbonizzazione: una transizione giusta e inclusiva".

1.4.2 Industry Associations and Certifying Authorities

Hitachi Rail is a member of...

- UNIFE (Association of European railway builders)
- UNISIG (Association of European Railway Signalling Companies)
- UITP (International Public Transportation Association)
- ANIE (National Federation of Electro technical and Electronic Companies)
- AICQ (Italian Association for a Quality Culture)
- The Italian partner of EFQM (European Foundation for Quality Management)
- Cosila (consortium for safety in the workplace)
- Unione degli Industriali/ Confindustria (Industrialists' Union/Italy's main organization representing Italian manufacturing and service companies)

Within the scope of UNIFE, Hitachi Rail collaborates to promote the extension of the use of railway transportation through the implementation of technological standards (ERTMS and TSI) and by proposing European research projects to improve safety, energy efficiency, and environmental protection in the field of railway transportation. Specifically, SHIFT2RAIL, a project proposed as a Joint Undertaking in the railway sector to reduce emissions and promote a modal shift in transportation, is in line with the indications of the transportation white book published by the EU Commission. Furthermore, as part of UNIFE, Hitachi Rail sits on the Sustainable Transport Committee, which aims to define a common, consistent and effective consensus in the railway industry with respect to environmental issues and, particularly, energy efficiency (reliable standards to measure energy consumption), the evaluation of the life cycle as one of the main criteria in the decision-making process, eco-procurement, and noise and emission reduction. Within this European initiative, Hitachi Rail contributes to the work required of the group of experts (TEG) in its sector, both through the European association (UNIFE) and in the context of Hitachi, providing their evaluations and experiences to identify the metrics that the European Community will use to assess the performance and possibly financial support.

Inside the Sustainability Transport Committee, Hitachi Rail has contributed and helped to define the position paper on *"Key aspects for a successful Taxonomy implementation in the rail sector"* which will be soon presented at the next general assembly in Paris.

Caravaggio

Hitachi Rail is constructing a new factory in Maryland, USA to support new activity in North America

UITP

UITP (Union Internationale des Transports Publics) is the International Association of Public Transport and a passionate champion of sustainable urban mobility. Established in 1885, with more than 135 years of history, it is the only worldwide network that brings together all public transport stakeholders and sustainable transport modes. Everyday across the globe, people rely on public transport to bring them to school, work, sports clubs, and cafés. In using public transport, millions travel more sustainably and safely, while actively bringing economic benefit to their community. UITP supports the entire sector to ultimately guarantee that public transport and its workers continue to bring cities to life.

As a passionate champion of sustainable urban mobility, Hitachi Rail is an enthusiastic member of the UITP. Hitachi Rail actively participates in the Working Bodies (Committees), contributing to several technical and non-technical agendas and working closely with the other members of the Associations belonging to Industry, PTO (Public Transport Operators), and PTA (Public Transport Authorities). Demonstrating the strong commitment of Hitachi Rail, for two consecutive mandates (2019 – 2023), a representative of the Company is the Chairman of the ITT Committee.

Information & Telecommunication Technology Committee

In the new era of public transport, the «Digital Industry» is playing a significant role in reshaping the transport system entirety, in the way how the transportation systems are operated and maintained, and in the implementation of new business models toward a fully integrated mobility serving smart travellers inside and outside the cities. Nowadays, the "intelligent components" – whether they are physical devices or software – represent the core of modern transportation systems, widely distributed in all parts of the system: from the intelligent data processing and analysis through the adoption of broadband communication technologies, achieving an even more advanced level of automation for both fleets and control centres, ultimately, to the tangible value creation for travellers and citizens around the entire world. Moreover, all this is taking place and continuously evolving within public transport.

In this context, the Information & Telecommunication Technology (ITT) Committee brings together Industry members to serve as active role-player in this era of significant transformation for the sector. To anticipate the introduction of new technologies, evaluate their impact and benefit, and understand how to improve existing systems and their evolution. To promote innovation and move favourable developments forward, suggesting recommendations, disseminating technical knowledge, and good practices in information and telecommunication systems. Within UITP, the ITT Committee maintains a permanent exchange on these topics with the operators, the organizing authorities, and the other sector actors. There are currently approximately 30 active members. The Information and Communication Technology Committee meets twice yearly. Each meeting features a joint session bringing together the industry members of ITT, and the Information Technology & Innovation Committee (IT&I) made up of IT experts from public transport operators and authorities.

IT-TRANS

IT-TRANS is UITP's flagship event on IT held every two years in Karlsruhe, Germany. It comprises an exhibition of over 250 stands with 6000+ visitors, as well as an international conference counting 550+ delegates.

Recent Publications

IT-TRANS is UITP's flagship event on IT held every Among the reference publications for the operational context, it is interesting to mention the following documents:

- Distribution Ledger Technology in Public Transport: Use Cases for Blockchain (2022);
- Demystifying ticketing and payment in public transport (2020);
- The Internet of Things in Public Transport (2020);
- Digital preparedness in public transport (2018);
- Stakeholder cooperation on data in Public Transport (2017);
- Digitalization in Public Transport (2017);
- Cyber Security in Public Transport (2017);
- The Benefits of Open Data (2014).

LNER Azuma, UK

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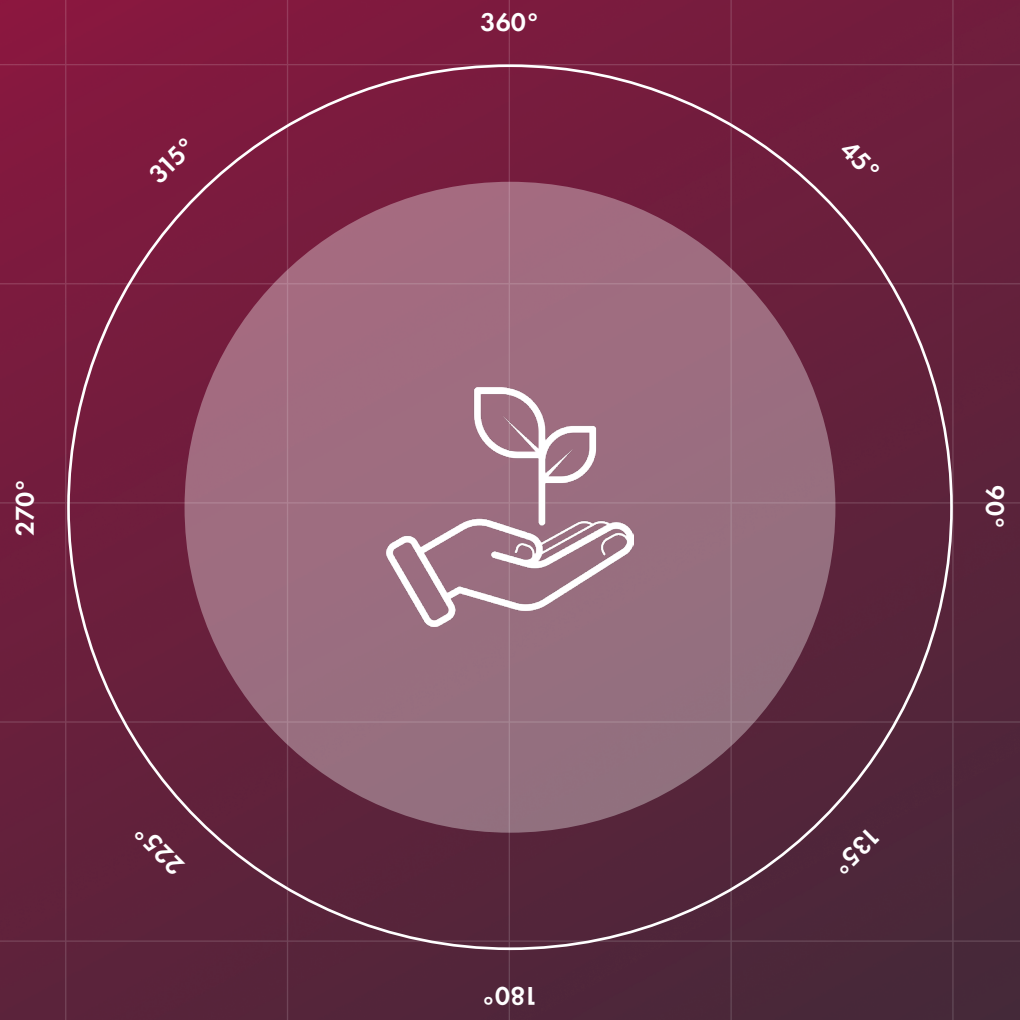
[ESG Framework and Roadmap]



2.1 Hitachi Rail's ESG Roadmap

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

2.1.2 New horizons and perspectives on Sustainability and Decarbonisation

2.1.3 Sustainability topics and contribution to SDGs

2.2 Stakeholder engagement

2.2.1 Our stakeholders and their involvement process

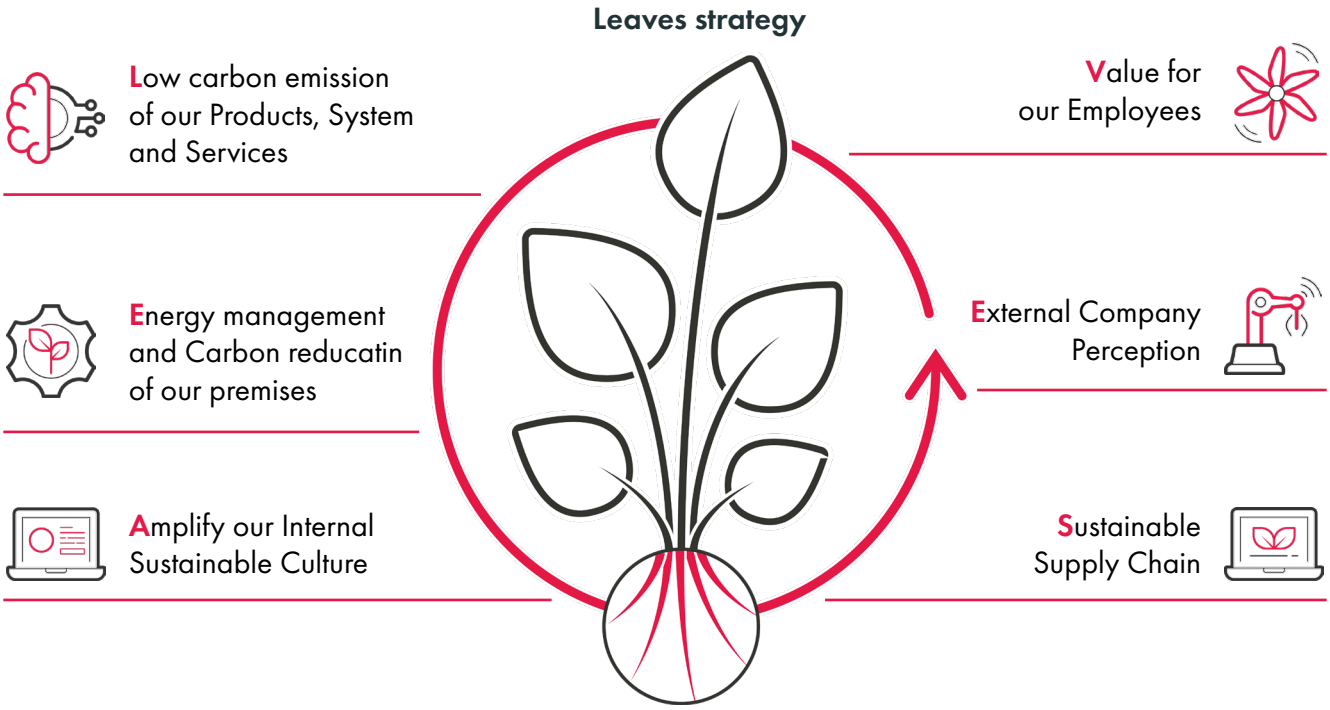
2.2.2 Hitachi Rail and local communities

2.3 Materiality Analysis

2.3.1 Materiality Matrix

2.1 Hitachi Rail's ESG Roadmap

Key elements of Sustainability strategy to be developed with several Company Stakeholders



Community gardens at Hitachi Rail's Tito Scalo factory, Italy

Hitachi Rail aims to become an influencer and leader of CSR and Sustainability, thanks to its capability to identify future business opportunities. To that end, the Business Unit has set several goals:

- 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 (Hitachi Ltd. #1 priority), skills development and training on CSR & Sustainable goals and 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'. Linking its activities with the SDGs and their specific targets, Hitachi Rail has identified **four ways in which it can contribute**:

- products and solutions;
- managing the activity and its asset responsibly;
- continuous engagement with people and suppliers;
- the measurement of its performance against the Sustainability targets.

Copenhagen Metro

Hitachi Rail is pledged to reducing the negative impact of its activities on the environment and to enhance the positive ones, also through **its engagement to follow Science Based Targets initiative** ("SBTi", see paragraph 5.1) after Hitachi Group's formal commitment. Hitachi Rail aims to influence the impact of its value chain, its own operations, and the products and services it offers to its customers. Within the framework of these long-term objectives and in the direction of implementing a framework capable of consistently fulfilling these activities in compliance with the main goals of Sustainable Development, Hitachi Rail has outlined a prioritization of objectives responding directly to its values the Environmental area (E), the Social one (S), and the Governance one (G), as follows:

Environmental values

- a decarbonised society;
- adopting circular economy principles within products and services.

Social values

- health and well-being;
- safe and secure society;
- effective engagement (i.e., internal communication and skills).

Governance/Economic values

- increase customer's economic values (as for example, through an 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.

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_2e) 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 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, assure decent work conditions, support the transition to clean energy, combat climate change, social inequalities and protect human rights.

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

A reduction of Greenhouse Gas (GHG) emissions is Hitachi Rail's overarching target which charts its path to environmentally sustainable business operations. The Business Unit has updated the mid-term roadmap by setting concrete targets, establishing performance measurements, and transparent disclosure which, together, drive the day-to-day activities.

Being sustainable is a huge responsibility and a stimulating challenge. It means being able to say that you really make a difference, which will last for generations to come! Hitachi Rail has culture and skills development coordinated and integrated by the Corporate Social Responsibility and Sustainability Department (CSR&S), functionally reporting to Head of SHEQ Department.

Copenhagen Airport

The CSR&S team evaluates, launches, and coordinates global and local initiatives and the governance necessary to achieve Hitachi Rail's targets with the highest efficiency. Inside Hitachi Rail, the SHEQ Department (Safety, Health, Environment and Quality) is responsible for all aspects of CSR&S through the Sustainable Committee. Hitachi Rail defines the Sustainability and Corporate Social Responsibility pathway based on innovation and aims to stay at the forefront of a set of fundamental changes, notably including:

Technological, as the world experiences a continuous flow of changes in the context of digital innovation and 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. While some countries are facing rapid population ageing 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.

For Hitachi Rail's customers, the latest innovations focus on reducing life cycle consumption of material and energy by the 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, digital technologies are used 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.

Moreover, 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[5]. Hitachi Rail promotes the reduction and the re-use of waste material and the use of recycled materials, the innovation of the processes of recycling products, and the design of increasingly efficient products and solutions in terms of reducing GHG emissions.

The new electric LUMO fleet of Hitachi Rail trains in the UK are already displacing air travel between London and Edinburgh

2.1.2 New horizons and perspectives on Sustainability and Decarbonisation

The UN Environment Program's Emissions Gap Report 2021 shared that following an unprecedented drop of 5.4 % in 2020, global carbon dioxide emissions are bouncing back to pre-Covid-19 levels, and concentrations of Greenhouse Gases (GHGs) in the atmosphere continue to rise[6].

Particularly, a closer look at GHG emissions breakdown by economic sector reveals that:

- 2021 placed exceptional demands on electricity markets around the world and power production today generates the largest share of GHG emissions (30%). About 63.1% of electricity still comes from burning fossil fuels, mostly coal and natural gas;
- the industry sector accounted for 38% (156 EJ) of total global final energy use in 2020, burning fossil fuels for energy;
- transport demand in 2021 is rebounding, with demand for passenger and cargo transport expected to continue increasing rapidly. Even with anticipated growth in transport demand, the carbon neutrality scenario by 2050 requires transport sector emissions to fall by 20% to 5.7 Gt by 2030[7]. The **transport sector** as a whole accounts for approximately **25%**[8] of the EU's greenhouse gas (GHG) emissions, emitting more pollutants than any other sector except for energy production. Yet, **rail** stands out as the mobility exception as it is the greenest mode of mass transportation, responsible for **less than 0.4%**[9] of transport related GHG

[5]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.
[6]UNEP, Copenhagen Climate Centre (UNEP-CCC), Emissions Gap Report 2021, 26 OCTOBER 2021 REPORT, 2021.
[7]IEA, International Energy Agency, Tracking Transport 2021, IEA, Paris, 2021- https://www.iea.org/reports/tracking-transport-2021.
[8]EC, European Commission, A European Strategy for low-emission mobility, 2021- https://ec.europa.eu/clima/eu-action/transport-emissions_en#ecl-inpage-555.
[9]EC, European Commission, Seventh monitoring report on the development of the rail market under Article 15(4) of Directive 2012/34/EU of the European Parliament and of the Council, 2021- https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0005&from=EN.

emissions, and it has managed to steadily improve its energy efficiency since 1990[10].

Should this pattern continue, the world is projected to warm by 3°C to 5°C by 2100, with catastrophic effects on the planet and on human civilization. To prevent this risk, a major turnaround in emissions trajectories is needed in all sectors (reduction of approximately 3-6% per annum between today and 2030) to limit the rise in surface temperatures and avoid catastrophic climate change effects. In 2015, world leaders met in Paris (COP21) and agreed to limit the global temperature rise by the end of the century to well below 2°C and to pursue efforts to limit the temperature increase even further to 1.5°C. According to the Intergovernmental Panel on Climate Change (IPCC), limiting global warming to 1.5°C requires net human-caused carbon dioxide emissions to fall by 45% by 2030 and to reach net-zero by 2050[11]. Even limiting the temperature rise to 2°C will need CO_2 emissions to fall by 25% by 2030, requiring a turnaround of the present trend and approximately $75 trillion in investment.

The Hitachi Rail independently developed Environmentally Conscious Design Assessments for all vehicle products and services involving a design process to steadily improve environmental performance throughout the Group.

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 approach based on the following principles:

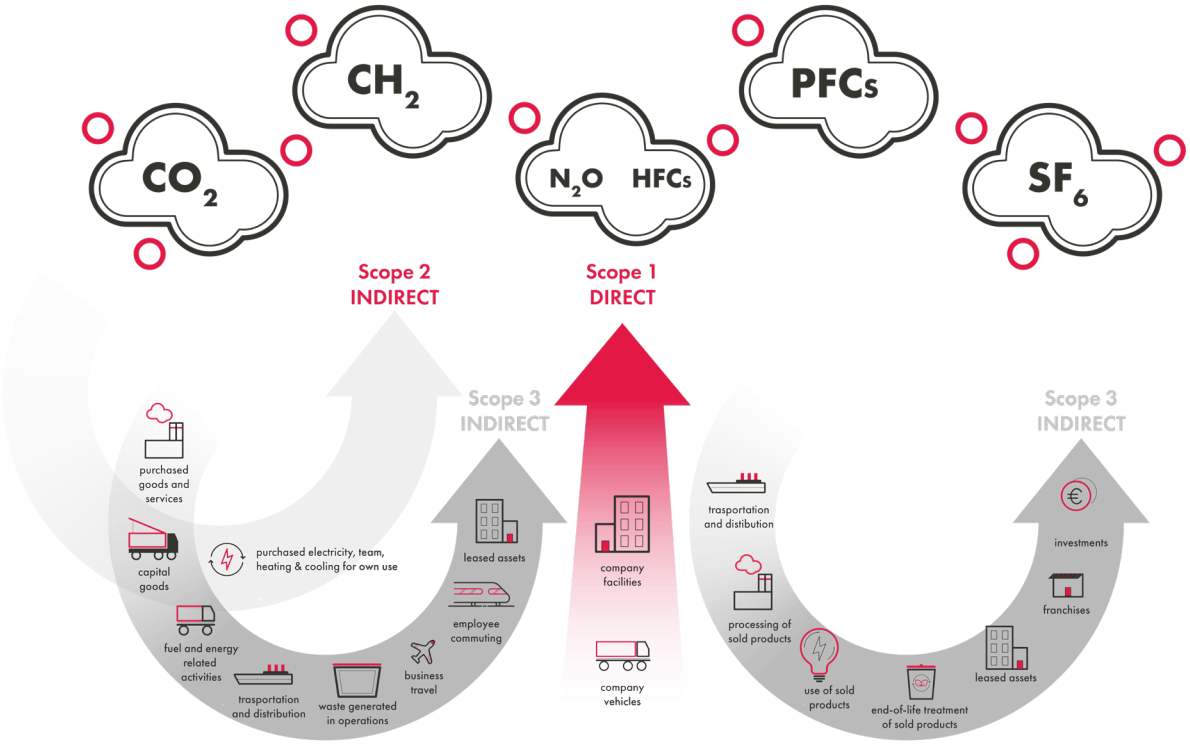
- global approach: the development of mechanisms to increase commitment in all offices and production sites;
- reasonable and feasible long-term objectives: the establishment of a clear and realistic vision for the steps to be taken;
- support for the development of technologies: the development of advanced technological solutions;
- effort in order to train a broader base of employees in the LCA process;
- covering methodological developments, including impact assessment methodologies type I and II and interpretation phase;
- recognizing a plurality of established approaches, since 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.

[10] See figure 2, https://www.eea.europa.eu/ims/greenhouse-gas-emissions-from-transport.

[11] Intergovernmental Panel on Climate Change, Special Report Global Warming of 1.5 ºC, www.ipcc.ch.

Overview of GHG Protocol scopes and emissions across the value chain

This approach focuses mainly on three spheres of influence, as envisaged by the GHG Protocol[12]



- Scope 1 (direct GHG emissions) – emissions resulting from operations under an organisation's ownership or control;
- Scope 2 (indirect GHG emissions) – emissions from the usage of electricity, steam, heat and/or cooling purchased from third parties;
- Scope 3 – upstream and downstream value chain emissions, including procured products, transport of suppliers and business travel, usage of sold products and product disposal.

In order to establish a carbon management system, 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.

[12]Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard

These interventions have been studied and implemented on selected manufacturing facilities, which have the greatest energy consumption and 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 is creating 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 focused on these selected Hitachi Rail construction/production sites following Hitachi Ltd. criteria for Environmental classification.

For the aforementioned sites Hitachi Rail has engaged to reach carbon neutrality within 2030 (compared to baseline year 2016), so a set of initiatives and key objectives to reach that have been planned in the next years, such as:

- to implement photovoltaic panel technologies;
- to provide maintenance centres with insulation systems to isolate system with different thermal-acoustic conditions and prevent the two systems from exchanging heat;
- to introduce solar thermal offices;
- to implement pyro-gasification, technology aimed at the gasification of the biomass while simultaneously producing biochar;
- to introduce Thermal Power Unit;
- to exhaust fume extraction;
- to provide offices and other facilities with new air conditioning systems;
- to relamp and replace the lighting system (traditional lamps) with LED bulbs, 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 carbon credit purchasing.

2.1.3 Sustainability topics and contribution to SDGs

In 2015, the 193 Member States of the United Nations officially signed the Agenda 2030, presenting the 17 Sustainable Development Goals (SDGs), articulated in 169 specific targets, based on a set of fundamental and urgent issues for the planet to be achieved by 2030. Combined with the mission to contribute to society through the development of superior, original technology and products that power sustainable connectivity, Hitachi Rail is well-positioned to make a meaningful contribution to achieving the SDGs. Sustainability is at the heart of core business; **Hitachi Rail has an obligation to inspire and build a better and more sustainable future for employees, customers, and all users of products**. This attitude is exemplified by the initiative *'Think Responsibly and Act Sustainably'* which is at the heart of the way Hitachi Rail designs and plans products and defines the solutions to develop with partners and deliver to customers.

Hitachi Rail has identified from among the UN Sustainability Goals the specific targets to which it contributes most through its business activities:

- directly, through management models which enable the Business Unit 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.

Sustainable Development Goals and Target on which Hitachi Rail can effectively act as a business.

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons;

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory integrated and sustainable human settlement planning and management in all countries;

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

9.1 Develop quality, reliable, sustainable and resilient infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all. Promote inclusive and sustainable industrialization;

9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries;

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities;

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.

16.4 Substantially reduce corruption and bribery in all their forms;

16.5 Develop effective, accountable and transparent institutions at all levels.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services;

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead;

8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms;

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed;

17.18 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university;

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

5.1 End all forms of discrimination against all women and girls everywhere;

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life;

5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix;

7.3 By 2030, double the global rate of improvement in energy efficiency.

12.2 By 2030, achieve the sustainable management and efficient use of natural resources;

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse;

12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities;

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

6.4 Increase water-use efficiency and ensure freshwater supplies;

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

2.2 Stakeholder engagement

For Hitachi Rail, Social Responsibility translates into the daily focus and care of its relations with Stakeholders. The understanding of their needs and expectations is achieved through the definition and implementation of specific tools for dialogue and interaction. The stakeholder engagement process is an activity to which Hitachi Rail devotes considerable attention, with the outlining of various dialogue and decision-making strategies in caring for different stakeholder categories.

2.2.1 Our stakeholders and their involvement process

In this CSR & Sustainability Report, Hitachi Rail has aimed to present the different ways in which it interacts with its Stakeholders. The stakeholder engagement strategy is based on the principle of inclusiveness and receptiveness to the needs of workers, customers, suppliers and numerous categories with which the Hitachi Group interacts. With a view to constantly improving its approach, Hitachi Rail aims to identify common priorities and to pursue them transparently through three lines of action, distinguishing between:

- Opportunities for information: one-directional communications from Hitachi Rail to its Stakeholders;
- Consultation/dialogue: when the Company asks for Stakeholders' opinions (e.g., through surveys, polls, focus groups, etc.) or sets up permanent discussion groups;
- Partnerships: specific projects implemented and/or managed jointly with Stakeholders.

The description aims to provide a clear understanding of the margins for improvement in the methods of Stakeholders engagement, aiming to progressively intensify dialogue and partnership opportunities to create shared value.

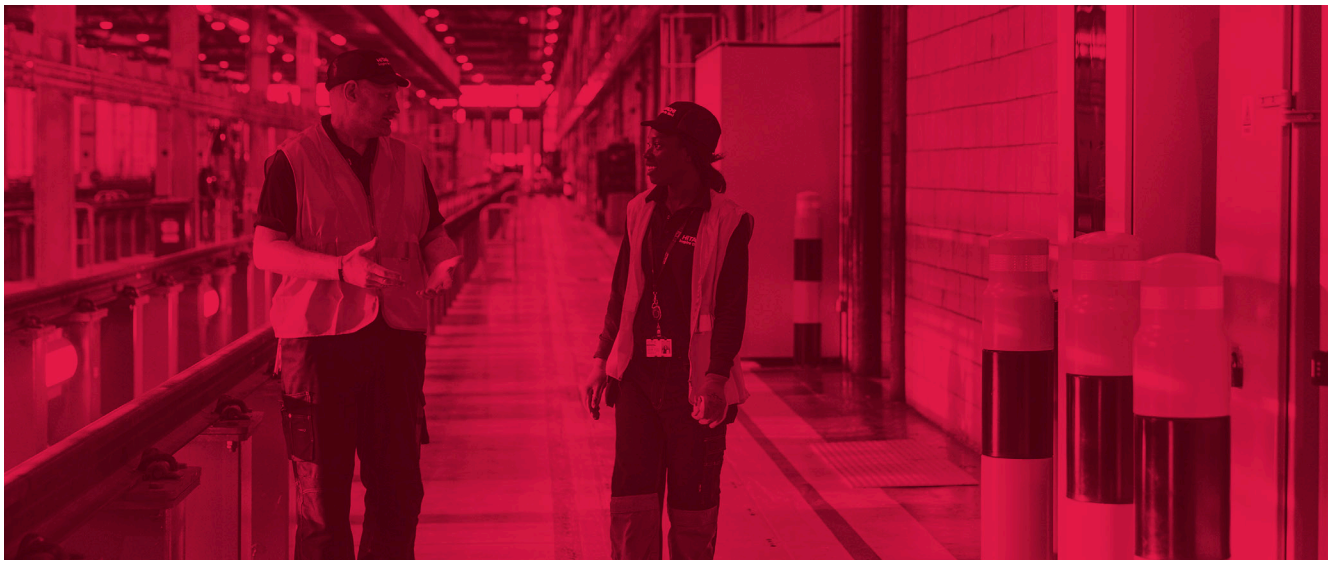
2.2.2 Hitachi Rail and local communities

Hitachi Rail plays a leading role in managing relations with local communities, be they municipal authorities, resident 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.



2.2 Materiality Analysis

To define which sustainability topics are considered "material", Hitachi Rail has confirmed the 2021 Materiality analysis, which was conducted in line with the provisions of the GRI Sustainability Reporting Standards published in 2016 by the GRI (Global Reporting Initiative).

In 2022 the relevance attributed to material issues during the materiality analysis process carried out in 2021 was reaffirmed, therefore there were no changes in either topics or of priorities. This choice was also motivated by the fact that the relevant legislation on methodologies is currently being updated, which will lead to a different approach to reporting (so-called double materiality). Hitachi Rail will closely monitor technical and methodological developments in order to set up the materiality review for the next reporting period in line with developments in the standards.

For the 2021 materiality analysis Hitachi Rail considered internal factors such as mission, values, risk assessment activities, Quality, Safety and Environmental Management Systems, climate change strategies, and research and development activities into increasingly safe and environmentally

friendly products and solutions. The analysis carried out assessed the level of the materiality of various issues along with the Hitachi Rail's performance as well as the possibility of improving both its competitive advantage and reputation.

Hitachi Rail reached out and performed a Stakeholder engagement in order to give the chance to both its employees and external Stakeholders to assess priorities in terms of Sustainability, Welfare, and compliance with SDGs targets. The analysis was developed with an online tool and in full compliance with GRI Standards and guidelines.

A total number of almost 400 people were involved in the engagement process, including both top management and external Stakeholders (suppliers, clients, partners etc.) with a detailed questionnaire – available in different languages – asking for their opinion on matters ranging from energy efficiencies to through air quality, data protection and protection of diversity and equal opportunities. The materiality analysis was composed of a set of 20 questions for the internal Stakeholders and 15 for the external ones. Some examples of asked questions are:

Energy Efficiency

ENERGY EFFICIENCY – How do you evaluate the investments on the topic of energy efficiency of buildings, plants and equipment (e.g., renewal of boiler park, insulation of roofs, search for leaks of compressed air or water, etc.) for Hitachi Rail?

Electric Energy Production from RES

SUPPLY AND PRODUCTION OF ELECTRICITY FROM RENEWABLE SOURCES – How do you evaluate the investments to increase the share of electricity from renewable sources (such as the use of electricity guaranteed 100% green by the supplier or photovoltaic from plants installed on roofs) Hitachi Rail is carrying out?

Climate Change Mitigation and GHG Emissions

MITIGATION OF CLIMATE CHANGE (GREENHOUSE GASES EMISSIONS) – How do you judge actions taken to reduce the environmental impact of activities and products (as sharing, Green Parking areas, Green Mobility e fleet policy, optimizing business travel, encouraging plug-in hybrid and electric cars, optimizing production processes in terms of reducing impacts, etc.) for Hitachi Rail?

Protection of diversity and equal opportunities

DIVERSITY AND EQUAL OPPORTUNITIES – What priority do you assign to the interventions aimed at avoiding discrimination in the workplace based on sex, country of origin, belief, sexual orientation, socioeconomic background, disability and the promotion of social inclusion for Hitachi Rail?

Support for local communities

LOCAL COMMUNITIES – How important is it, to Hitachi Rail, to give direct support to events and projects aimed at the economic and social development of the area?

The Materiality Analysis was developed to ensure that different geographical areas in which Hitachi Rail operates were evenly and properly represented and an even involvement of internal Stakeholders from different line of work (Rolling Stock, Signalling, Turnkey, OS&M and Support functions).

2.3.1 Materiality Matrix

The material topics resulted from the analysis were associated with the Sustainable Development Goals, for **their representation on the Materiality Matrix**. Since each material topic can cross multiple SDGs, the criterion for arranging the latter was to first associate them with the most significant topic as defined by the materiality analysis.

Material Topics and their association with the SDGs

CUSTOMER FOCUSING

R&D AND PRODUCT INNOVATION

R&D E PRODUCT INNOVATION

SUPPLY CHAIN ETHICAL MANAGEMENT

ANTI-CORRUPTION

DATA PROTECTION SECURITY

OCCUPATIONAL HEALTH AND SAFETY

EMPLOYEE WELFARE

HYBRID WORKING MODELS

SUPPLY CHAIN ETHICAL MANAGEMENT

COMPANY CULTURE

TRAINING AND CAREER DEVELOPMENT

SUPPORT FOR LOCAL COMMUNITY

PROTECTION OF DIVERSITY AND OPPORTUNITY

ENERGY EFFICIENCY

SUPPLY AND PRODUCTION OF ELECTRICITY FROM RES

RECYCLE AND REUSE

ECO-DESIGN

WASTE MANAGEMENT

AIR QUALITY

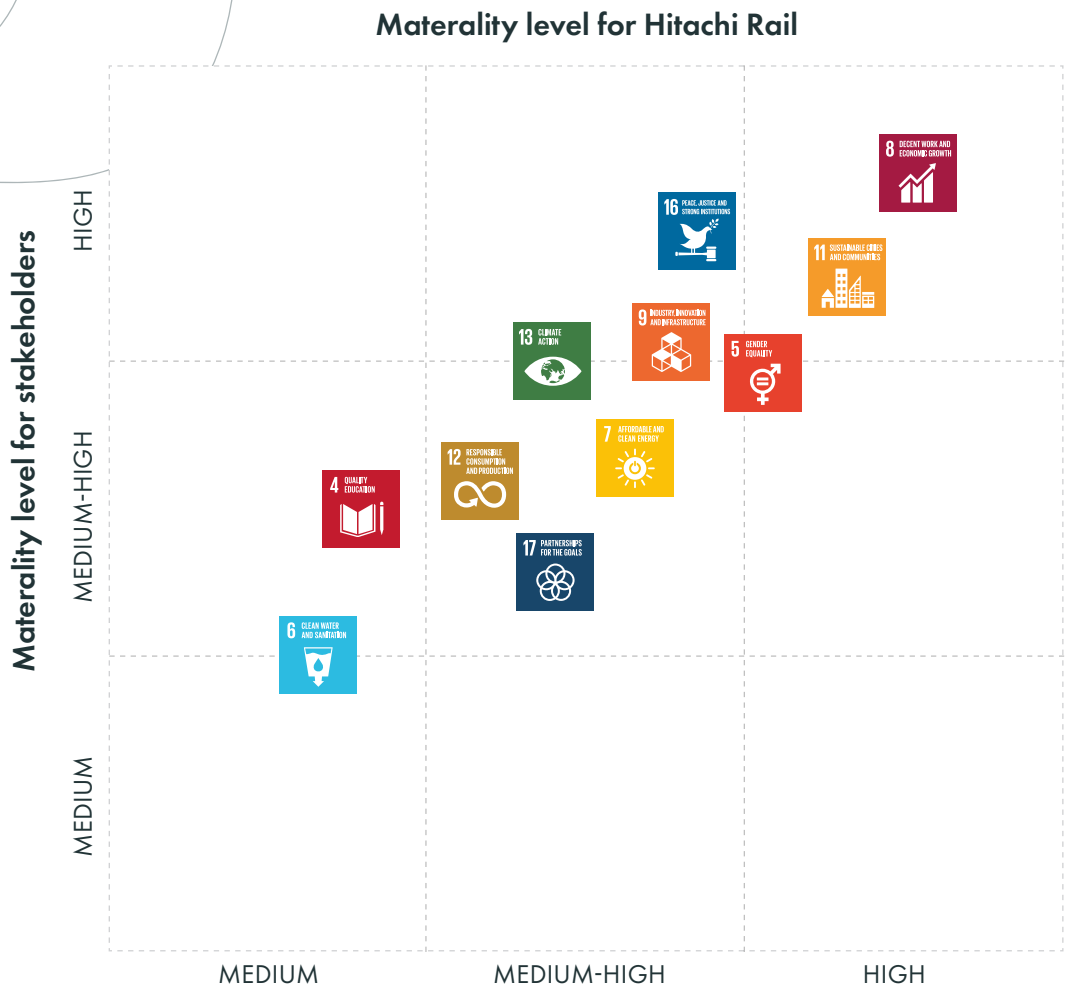
CIRCULAR ECONOMY

MITIGATION OF CLIMATE CHANGE

WATER CONSUMPTION OPTIMISATION

MANAGEMENT OF EFFLUENTS

The resulting graphical representation, which, as required by common reporting practices and the provisions of the Standards, sees on the Y axis the weight of the topics for external stakeholders and on the X axis that for Hitachi Rail, is shown below:



The table shows the ranking of material topics for Hitachi Rail, according to the materiality analysis; these are linked to the Sustainable Development Goals (SDGs) of the UN Agenda 2030, highlighting the Group's contribution to their achievement. In addition, Hitachi Rail is starting a comprehensive materiality review process to promptly respond to the regulatory requirements. Among the highly 'relevant' activities in the representation, most of those included in the social topics are priorities or to be improved for Hitachi, including pursuing high labour standards, economic development through sustainable infrastructure, and principles of social and gender equality. The environmental topics, which are the actions that Hitachi Rail undertakes in terms of responsible consumption and emissions generated by its businesses, are undoubtedly considered necessary and materially relevant to contribute to the climate change adaptation and mitigation objectives promoted by EU.

- 3.0 -

[Wa]

Harmony

3.1 Our people

3.1.1 Internal communication

3.1.2 Talent acquisition

3.1.3 Employee Relations Management

3.2 Diversity, Inclusion and Multiculturalism

3.2.1 Approach to Human rights

3.2.2 Protected categories

3.3 Training and Career Development

3.3.1 CSR&S e-learning

3.3.2 Amplify the internal Culture as Climate Change Innovator

3.3.3 Think responsibly, act sustainably

3.4 Occupational Health and Safety

3.4.1 Activities and results

3.5 Employee Walfare

3.5.1 People Care

3.5.2 Employee Engagement

3.5.3 Employee Initiatives

3.54 Mobility

3.5.5 Parental leave

3.5.6 Remuneration systems

3.1 Our People

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 in cultivating 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.

Taking care of its people is a very important aspect for Hitachi Rail, given that the success in terms of the quality of the product offered is entirely dependent on the professional skills of the resources employed, even more so in a dynamic sector like transport and mobility. Within this framework, Hitachi Rail's policies are oriented towards enhancing the value of human assets, with the aim of achieving a continuous improvement in the level of satisfaction. 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 and 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-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.

The Hitachi Rail workforce is shown in the following tables, where employee categories are broken down by gender, geographical location, professional categories, education, age, seniority and types of contracts.

Hitachi Rail's total workforce

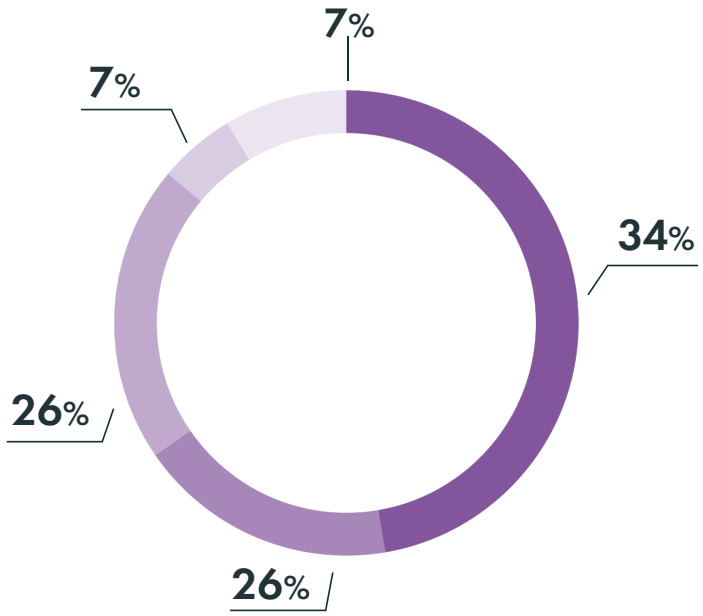
13,978
employees

as of 31st March 2022, an increase of 2% compared to last year

People by region

Hitachi Rail employees are all over the world, with 34% of the workforce concentrated in Italy, 26% in Japan and 25% in the EMEA (Europe, Middle East and Africa) region. The remaining workforce is located in the US and Canada and APAC (Asia Pacific) regions.

	31.03.2020				31.03.2021				31.03.2022			
	Men	Women	Total	%W	Men	Women	Total	%W	Men	Women	Total	%W
Italy	3,768	634	**4,402**	14%	4,004	705	**4,709**	15%	4,056	735	**4,791**	15%
Japan	3,145	296	**3,441**	9%	3,294	309	**3,603**	9%	3,359	317	**3,676**	9%
EMEA	2,788	522	**3,310**	16%	2,883	560	**3,443**	16%	2,979	571	**3,550**	16%
USA & Canada	608	212	**820**	26%	751	239	**990**	24%	762	238	**1,000**	24%
APAC	686	160	**846**	19%	753	174	**927**	19%	793	168	**961**	17%
TOTAL	10,995	1,824	12,819	14%	11,685	1,987	**13,672**	15%	11,949	2,029	**13,978**	15%



Employees % at 31.03.2022

- Italy
- Japan
- EMEA
- USA&Canada
- APAC

Professional Categories

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.

Seniority	31.03.2020				31.03.2021				31.03.2022			
	Men	Women	Total	%W	Men	Women	Total	%W	Men	Women	Total	%W
Executives	133	10	**143**	7%	159	9	**168**	5%	171	13	**184**	7%
Middle Management	1,279	102	**1,381**	7%	1,290	117	**1,407**	8%	1,382	118	**1,500**	8%
White Collar	7,202	1,547	**8,749**	18%	6,134	1,552	**7,686**	20%	6,303	1,571	**7,874**	20%
Blue Collar	2,381	165	**2,546**	6%	4,103	309	**4,412**	7%	4,093	327	**4,420**	7%
TOTAL	10,995	1,824	12,819	14%	11,686	1,987	13,673	15%	11,949	2,029	13,978	15%

Age

As far as the age distribution is concerned, 62% is aged between 31 and 50; 27% over 50, while the remaining 12% are employees under 31 years old.

Age	31.03.2020				31.03.2021				31.03.2022			
	Men	Women	Total	%W	Men	Women	Total	%W	Men	Women	Total	%W
< 30 years	1,256	254	**1,510**	17%	1,362	280	**1,642**	17%	1,362	264	**1,626**	16%
30-50 years	6,787	1,161	**7,948**	15%	7,259	1,269	**8,528**	15%	7,309	1,293	**8,602**	15%
> 50 years	2,952	409	**3,361**	12%	3,065	438	**3,503**	13%	3,278	472	**3,750**	13%
TOTAL	**10,995**	**1,824**	**12,819**	**14%**	**11,686**	**1,987**	**13,673**	**15%**	**11,949**	**2,029**	**13,978**	**15%**

Seniority

Hitachi Rails monitors its ability to retain talent by tracking the years of seniority of its employees, i.e., the number of years they spent within the Group.

Roughly 45% of Group's workforce has been employed by more than 10 years.

Seniority	31.03.2020				31.03.2021				31.03.2022			
	Men	Women	Total	%W	Men	Women	Total	%W	Men	Women	Total	%W
< 5 years	4,236	775	**5,011**	15%	4,399	855	**5,254**	16%	4,097	773	**4,870**	16%
5-10 years	1,548	308	**1,856**	17%	1,730	405	**2,135**	19%	2,256	501	**2,757**	18%
11-15 years	1,584	273	**1,857**	15%	1,709	250	**1,959**	13%	1,552	243	**1,795**	14%
16-20 years	1,188	189	**1,377**	14%	1,392	222	**1,614**	14%	1,458	243	**1,701**	14%
21-25 years	610	41	**651**	6%	629	46	**675**	7%	696	66	**762**	9%
> 25 years	1,829	238	**2,067**	12%	1,827	209	**2,036**	10%	1,890	203	**2,093**	10%
TOTAL	**10,995**	**1,824**	**12,819**	**14%**	**11,686**	**1,987**	**13,673**	**15%**	**11,949**	**2,029**	**13,978**	**15%**

Employee Contract Types

Confirming the importance, the Group attaches to a long-term relationship with its employees, the quota of employees with an open-ended contract has reached 96% in 2021. Moreover, 98% of the employees have a full-time contract.

In addition, Hitachi Rail also employs workers with different contracts in the various regions in which it operates.

Hitachi Rail's employees with full-time contract

96%

the quota of employees with an open-ended contract in 2021

Employees contract types	As of 31.03.2022												
	Italy		Japan		EMEA		USA & Canada		APAC		TOTAL		
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
No. of employees with open-ended contracts	4,055	735	3,141	286	2,833	537	762	238	738	152	11,529	1,948	**13,477**
No. of employees with fixed term contracts	1	-	218	31	146	34	-	-	55	16	420	81	**501**
TOTAL	4,056	735	3,359	317	2,979	571	762	238	793	168	11,949	2,029	**13,978**

Full-time and part-time	As of 31.03.2022												
	Italy		Japan		EMEA		USA & Canada		APAC		TOTAL		
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
No. full-time employees	4,045	678	3,322	313	2,947	508	761	238	787	158	11,862	1,895	**13,757**
No. part-time employees	11	57	37	4	32	63	1	-	6	10	87	134	**221**
TOTAL	4,056	735	3,359	317	2,979	571	762	238	793	168	11,949	2,029	**13,978**

Other contract types	As of 31.03.2022												
	Italy		Japan		EMEA		USA & Canada		APAC		TOTAL		
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
Temporary workers	206	27	752	107	16	18	-	-	1	-	975	152	**1,127**
Workers with a project contract	-	-	273	-	-	-	-	-	-	-	273	-	**273**
Trainees	19	9	3	5	23	11	-	-	-	-	45	25	**70**
Employee with contracts of different categories	1	-	-	-	231	35	-	-	-	-	232	35	**267**
TOTAL	207	27	752	107	247	53	-	-	1	-	1,207	187	**1,394**

3.1.1 Internal communication

Hitachi Rail's internal communication strategy is linked directly to the strategic objectives of the Global Rail Strategy. It is set up to connect employees with their shared direction and purpose and keep them up to date with business achievements. It also recognizes and celebrates the part that employees play in business success. Its role is to enable employee engagement by promoting health and wellbeing, recognition and reward, professional development and demonstrating that the business acts on employee feedback. There are many activities supported by the internal communication team at global and regional level:

- Ongoing HR engagement campaigns: such as Hitachi Insights Survey, Diversity and Inclusion, Innovation, Learning and Development, Organization Development, Hitachi Rail Values Awards and Employee Wellbeing;
- Senior leader announcements to all employees: they mainly consist of leadership meetings, reactive and planned, and project updates, where news about contract wins, project milestones and delivery to customers are shared;

Multiple channels are used, in up to five languages, recognizing the diversity of Hitachi Rail's people. They are:

- COSMO: A global intranet accessible to all Rail employees: updated regularly with one site dedicated specifically to Sustainability and CSR topics;
- This Week on COSMO: Weekly email to all employees with links to latest COSMO news;
- Regular video announcements and written messages about Strategic and Engagement themes;
- Screens at production sites for employees without regular access to PCs;
- Large scale video conferences with senior leaders;
- Employee App: two-way communication with polling and real time alerts mechanism.

3.1.2 Talent acquisition

Hitachi Rail continued 2021 on the wave of transforming and improving its recruiting processes by pushing them more and more toward simplification and digitalization. The Business Unit achieved two very important objectives in one: in terms of candidate experience a smarter candidate interface to apply to the open opportunities, on the other side a simplified selection process, directly connected with Social Media tools and channels, that grants a smarter and friendlier usability to both recruiter and hiring manager.

Following Corporate guidance, Hitachi Rail worked in the Talent Acquisition Team to move to the new ATS platform (Applicant Tracking System), in UK from the Taleo platform and from Deltek in the rest of the Hitachi Rail world (Japan will join the platform in the near future). This process involved all Hitachi Rail recruiters and all Hiring Managers in specific in-depth courses to acquire the skills needed to use the new platform. A simple methodology that involved business colleagues and the Recruiting Team together in dedicated sessions where they could spontaneously ask for insights. The firm achieved another important success: in addition to the implementation of a more modern platform, it began to raise awareness among business colleagues to actively work together on recruitment searches. Involvement to identify the best resources with a 50/50 responsibility approach in such a competitive market climate.

The benefits of this new platform also extend to system-generated reporting that can be delivered each quarter to share regional or global recruiting status, time to hire of candidates and more. To continue the mission of Global Talent Acquisition investment to be closer to the business needs and to enhance the recruiting team's technical knowledge, Hitachi Rail academy repeated the training done in 2020 to the new recruiters that joined Hitachi Rail TA Team and upgraded it adding a dedicated section about the Project Manager and Contract Manager reaching a great upskill of the recruiter's competencies. With the goal of attracting and increasing applications from qualified personnel and improving collaboration between recruiters and hiring managers, Hitachi Rail Talent Acquisition launched a pilot project to invest in LinkedIn training for EMEA (Europe, Middle East and Africa) recruiters and hiring managers. Currently, Hitachi Rail is working to increase the skills of its recruiters, focusing on the recruiters' need to improve their skills using LinkedIn and the need to improve collaboration between recruiters and hiring managers to the enable the Company to better attract talent and extend the reach of its job postings to a sufficient number of useful candidates. This pilot project will be extended in 2022 to the US and possible the APAC (Asia Pacific) region as well.

With the aim of promoting an inclusive culture, thus accelerating the inclusion of persons with disabilities, Hitachi Rail designed and delivered, together with its learning team, training the objective of which is to guideline managers using an interactive and innovative processes, involving them actively in the training-orientation processes of Hitachi Rail continued 2021 on the wave of transforming and improving its recruiting processes by pushing them more and more toward simplification and digitalization. The Business Unit achieved two very important objectives in one: in terms of candidate experience a smarter candidate interface to apply to the open opportunities, on the other side a simplified selection process, directly connected with Social Media tools and channels, that grants a smarter and friendlier usability to both recruiter and hiring manager.

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On October 20th, 2021, Hitachi Rail contributed to the event *Global Inclusion 2021 - The Horizon of Equity*, promoted by Il Sole 24 Ore and the Global Inclusion Committee in partnership with AIDP, the Italian Association for HR Directors, sponsoring a workshop focused on kindness in the workplace: "Kindness pays off: diversity of thought, harmony and psychological safety". Lorena Dellagiovanna, Vice President and Executive Officer, Chief Diversity & Inclusion Officer (CDIO), Deputy Chief Environmental Officer and Deputy General Manager of Government & External Relations of Hitachi Group brought her contribution to the event by explaining how kindness can have an impact on the new way of working and on a more inclusive candidate and employee experience.

To continue to strengthen Hitachi Rail's image in the talent market, the implementation of its strategy is based on attracting, hiring and retaining the best people. The Talent Acquisition Department launched in June 2022 the EVP (Employee Value Proposition) Project. Also, to engage the best talent, Hitachi Rail needs to express what makes the Company unique as an employer through a compelling proposition and narrative. To do so, the firm is developing an Employee Value Proposition. The EVP will explain why the people Hitachi Rail needs to hire should want to work there. What culture, capabilities and behaviours someone might think Hitachi Rail needs to be successful in the future and what, in return (and beyond salary), does the Business Unit want to offer to employees? To launch this Project Hitachi Rail is partnering with external employer brand consultancy TMP Worldwide. This initiative will be built on all the work Hitachi Rail has already

Hitachi Rail hired

1,409
employees

maintaining the trend of the previous year with a rate of employee hire of 10.2

done in setting up leadership model as well as it is naturally connected with its learning, talent and development HR processes.

During FY21, Hitachi Rail hired a total of 1,409 employees, maintaining the trend of the previous year with a rate of employee hire of 10.2.

Hires[13] — As of 31.03.2022

		Italy		Japan		EMEA		USA & Canada		APAC		TOTAL		
		Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
< 30 years	n	106	33	68	5	88	13	28	5	61	14	351	70	**421**
	%	2.6	4.6	2.0	1.6	3.0	2.3	3.7	2.1	7.9	8.2	3.0	3.5	**3.0**
30-50 years	n	236	44	37	5	215	44	34	21	94	19	616	133	**749**
	%	5.9	6.1	1.1	1.6	7.3	7.8	4.5	8.8	12.2	11.1	5.2	6.6	**5.4**
> 50 years	n	33	4	20	4	59	12	63	22	21	1	196	48	**239**
	%	0.8	0.6	0.6	1.3	2.0	2.1	8.3	9.2	2.7	0.6	1.7	2.1	**1.7**
TOTAL	n	375	81	125	14	362	69	125	48	176	34	1,163	246	1,409
	%	9.3	11.3	3.8	4.5	12.4	12.2	16.5	20.1	22.8	19.9	9.8	12.3	10.2

Turnover[14] — As of 31.03.2022

		Italy		Japan		EMEA		USA & Canada		APAC		TOTAL		
		Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
< 30 years	n	18	6	28	6	54	13	15	5	20	15	135	45	**180**
	%	0.4	0.8	0.8	1.9	1.8	2.3	2.0	2.1	2.6	8.8	1.1	2.2	**1.3**
30-50 years	n	96	17	35	2	154	28	65	25	83	22	433	94	**527**
	%	2.4	2.4	1.1	0.6	5.3	5.0	8.6	10.5	10.7	12.9	3.7	4.7	**3.8**
> 50 years	n	130	16	65	5	54	15	44	10	27	2	320	48	**368**
	%	3.2	2.2	2.0	1.6	1.8	2.7	5.8	4.2	3.5	1.2	2.7	2.4	**2.7**
TOTAL	n	244	39	128	13	262	56	124	40	130	39	888	187	1,075
	%	6.1	5.4	3.8	4.2	8.9	9.9	16.4	16.8	16.8	22.8	7.5	9.3	7.8

[13]The rate is calculated as the ratio of new hires to the average number of employees at 31.03.2021 and at 31.03.2022 by region, gender and age group.

[14]The rate is calculated as the ratio of new hires to the average number of employees at 31.03.2021 and at 31.03.2022 by region, gender and age group

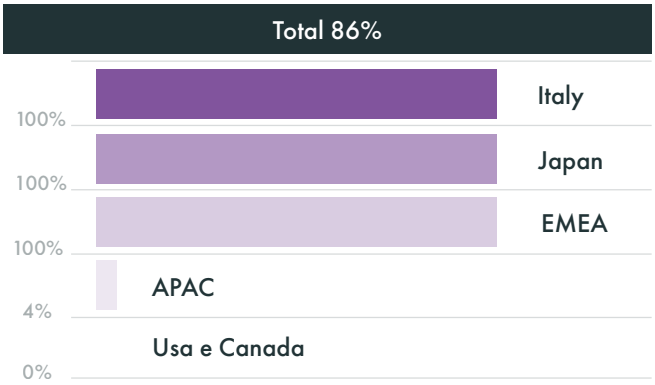
3.1.3 Employee Relations Management

At Group level Hitachi Rail has various existing formal agreements with the trade unions in the countries where it operates, and the relationship is generally positive in every site.

This context often leads to the resolution of any issues with employees internally, in a cohesive cooperation with trade unions, maintaining a context of general cooperation.

The percentage of employees covered by national labour agreements, where different types of trade union negotiation is applicable, is shown below:

The percentage of employees covered by national labour agreements at aggregate level is equal to 86%, with a coverage of 100% in the region of Italy, Japan and EMEA region. The percentage in the other regions is much smaller due to different local legislation. Hitachi Rail's effort to invest in a fair working environment remain transversal in all regions.



3.2 Diversity, Inclusion and Multiculturalism

Diversity, equality 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. Considering the global nature of its business and its internationally widespread presence, Hitachi Rail considers enhancing diversity indispensable making 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 respects human rights and protection of human rights. Hitachi Rail will also 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, rejecting all forms of discrimination.

With reference to 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 experience, and an inclusive culture Hitachi Rail can meet its customers' needs and drive consistent 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 equality, also addressing gender pay gap. In this respect, in recent years a series of actions have been implemented to pursue these specific objectives. A long-term ambition is to have equality in the percentage of female managers and female employees. Relevant highlights on the matter, considering the last 12 months, include:

- having reached higher rates of employment for women;
- 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;
- a recruitment system and process embedded for transparent and objective hiring.

3.2.1 Approach to Human Rights

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. Hitachi Rail respects all human rights, the dignity of every human being and contributes to the welfare of people and local communities as part of Hitachi Rail's identity and approach to do business.

In 2021, Hitachi Rail STS SpA has embarked on an SA 8000 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 labour 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 SA 8000 certification will help to improve working conditions for all its employees worldwide. The SA 8000 certification guarantees stakeholders (competitors, public bodies, customers, suppliers, institutions, associations) Hitachi Rail respects workers' rights and commits to an ethical management of its business.

Hitachi Rail STS SpA's journey towards SA 8000 certification started at the end of 2021 in Italy. The decision to start from the offices of Naples, Genoa, Tito Scalo, Turin, Reggio Calabria, and Pistoia stems from the need to involve a vast and diverse workforce across roles. In addition, following the initial drafting by Hitachi Rail STS SpA of the policies and reference manuals for the SA 8000, all other legal entities of the Hitachi Rail Group will be required to be compliant with the standard even if not directly certified. The export of best practices to each site is essential for the continuous development of a safe working environment for all employees.

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. Furthermore, it is important to note that SA 8000, as a crucial objective recognized and shared by Hitachi Rail in its wholeness, will be a group-wide goal to be pursued in other Legal entities as well.

The body responsible for managing SA 8000 issues is the Social Performance Team (SPT). The SPT is a "mixed" working group, consisting of workers' representatives, union representatives and management representatives who have specific roles and responsibilities to be adopted in any working circumstance and relationship with stakeholders of various kinds and in line with the SA 8000 standard. The constitution of this team ensures numerical balance between managers and workers as local staff representatives for the different sites.

3.2.2 Protected categories

In this perspective of accomplishing a full integration of principles such as Diversity, Equality, and Inclusion, diversity becomes an added value 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 roles 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. 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	As of 31.03.2022									
	Italy		JAPAN		EMEA		USA & Canada[15]		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	-

3.3 Training and Career Development

In FY21 Hitachi Rail progressed on the activity aimed at building an integrated framework of learning processes. The consolidated global learning needs analysis process that was undertaken the year before, was completed and has captured the competence demand, and generating a global training plan including main competences areas to be developed as a priority.

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 this aspect, 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.

This was done with the aim of addressing the global business targets and requirements following Hitachi Rail global integration. Through 2021, the pandemic has continued to affect several activities in the learning plan, reducing access to face-to-face opportunities. Despite this challenge, a significant effort in virtualizing learning initiatives allowed Hitachi Rail to continue to maintain a training agenda for people working remotely in the new global/matrix environment. This is also why FY21 was dedicated to developing new process design. The first Global Hitachi Rail Learning Plan has been delivered. Some of the initiatives implemented have focused on Diversity & Inclusion, Business Continuity, Compliance and Remote Working.

The "Remote Working" training, started in the previous fiscal year, was improved with some additional modules aimed at strengthening the sense

[15]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.

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. For this purpose, Hitachi Rail launched initiatives aimed at spreading the Company culture and supporting people in dealing with the virtual environment.

Among these new projects, upskilling is currently performed based on the inputs from the business through the Learning Needs Analysis process and through ad hoc requests (e.g., digital skills). A focus will be dedicated to Digital Business evolution where a deeper analysis is being conducted in order to upskill employees working in the digital portion if the business.

FY21 also saw the development of activities 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 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 Localization of Key Competences (LKC) programme was launched in July 2020 through a global internal job posting open to all employees. A contingency plan was developed due to the pandemic, adopting a modular/flexible approach. LKC makes strategic, hard-to-find, competences available to business, thus increasing the global internal skills and effectiveness and expanding a knowledge sharing culture and it based on an approach called "learning through project work", where resources will have the chance to develop and strengthen skills identified by the Programme through direct observation, practical experience, experimentation and active contribution to project teams of which they will be an integral part.

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. Through the mapping of skills available and those required by the main projects, by customers and by the market itself, an initial area of strategic skills was identified to be developed internally, namely that of competences linked to Signalling and Turnkey; System Engineer, Project Engineer, RAMS Engineer, Signalling System Engineer, Operations and Maintenance Engineer, Operations and Readiness Manager and Project Manager.

In collaboration with an international team composed of managers and human resources located in various geographic areas, participants are placed on a path to develop specific skills on Hitachi Rail's projects already in progress. The human resources identified were allocated to the projects starting from the second half of the 2021 financial year and have overcome the challenges presented by the global pandemic, becoming assets to the assigned projects.

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 training hours per employee

+6%
total training hours

average training hours per employee is 32 for men and 25.2 for women

Total hours of training by gender and region

	Italy		Japan		EMEA		USA & Canada		APAC		Total		
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Total
31.03.2022	50,166	8,746	269,689	31,619	49,114	6,882	4,094	1,618	9,518	2,330	**382,581**	**51,195**	**433,776**
31.03.2021	42,862	9,065	241,867	39,912	37,044	5,566	14,665	4,523	9,987	1,296	**346,425**	**60,362**	**406,787**
31.03.2020	54,700	8,162	166,401	21,589	50,138	7,319	10,258	3,225	6,505	1,980	**288,002**	**42,275**	**330,277**

Average hours of training by gender and region

	Italy		Japan		EMEA		USA & Canada		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 were "Technical-specialist training" (49.8%), "Language training" (26.6%), "Human Rights and Ethical Aspects" (9.5%) and "HSE Quality" (9.8%).

Hours of training per content	31.03.2021		31.03.2022	
Technical-specialist training	166,848	41.0%	215,962	49.8%
Language training	85,351	21.0%	115,447	26.6%
Managerial training	11,332	2.8%	11,737	2.7%
HSE Quality	12,903	3.2%	42,460	9.8%
Mandatory/institutional training	27,307	6.7%	6,676	1.5%
Refresher training	14,851	3.7%	457	0.1%
Human Rights and Ethical Aspects	14,518	3.6%	41,033	9.5%
Other (induction paths)	73,677	18.1%	-	-
TOTAL	**406,787**	**100%**	**433,776**	**100%**

The Performance Appraisal process is conducted for each employee and line manager, facilitated by the HR department. The aim of the Performance Management process is to:

- give a clear vision of Hitachi Rail's strategy;
- empower people through simply defined goals, clear and shared performance expectations,

continuous feedback and coaching;

- assure performance planning and, at the same time, ensure a flexible approach to the changing context;
- support a culture of continuous improvement, with regards to both results and productivity, on the basis of current and future business needs;
- consistently support other areas including professional growth, career development, succession planning and compensation.

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 the 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 at:

- promoting a performance and a development-oriented culture in the organization;
- identifying suitable actions to be implemented for the enhancement of people's talents;
- identifying talented people at all organizational levels;
- developing people by defining adequate Development Plans / Actions to support their growth;
- retaining talents, ensuring continuous improvement of skills and supporting motivations;
- evaluating: each eligible employee is evaluated on the basis of the overall performance and their overall potential;
- calibrating: rating distribution so as 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;
- creating Development Plans: aimed at enhancing people's growth.

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

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 "biases" was started and a first digital course was made available to employees. Other specific training such as "Manager series" were also provided. "On board Hitachi Rail" programme has been promoted to new starters, through the curation of content and e- learning resources, to improve their awareness of the full group, its capabilities and ambition.

In support of the Business Continuity (BC) process, several workshops have been organized, involving in the colleagues responsible for working on the activity, who are part of the Regional Emergency Boards (REB). BC is the ability to continue to conduct its business against adverse events that could affect it.

It is the process that defines activities, tools and responsibilities to predict critical scenarios that threaten the organization to increase resilience and organizational responsiveness in order to safeguard stakeholder interests, production activities, reputation, brand and value creation activities. The workshops were based on experience and simulation of critical situations to be managed. Technical and professional training also follow the

same path when possible. Some of the initiatives carried on have been: the G-PLM Training (e-learning on the basic functions of the GPLM system for the visualization of products managed by Windchill); American Welding Specification (AWS) training (face-to-face training on the AWS international standard for the construction of carbon and stainless steel railway carriages and on heterogeneous welds between carbon steel / stainless steel) and Digital Investment Management System training (online training on the use of the newly implemented system that digitalizes the authorization process of investment requests by eliminating the completion of paper documents and their related forwarding by email). The completion rate for the GPM Process is 98% of eligible employees. Finally, the approach to retirement and continuous employability is structured in some countries. In France a structured process is in place to transfer competencies internally from the retiring employee to their replacement, supported by Human Resources.

The following table shows the percentage of employees by gender and professional category who received a regular performance management review during the reporting period. At aggregate level the share reaches a 91% coverage, with even higher percentages for the categories of top and middle management.

As of 31.03.2022

Percentage of employees receiving regular performance feedback	%		
	Men	Women	Total
Executives	100	100	100
Middle Management	100	100	100
White Collars	94	89	93
Blue Collar	85	91	85
TOTAL	**91**	**90**	**91**

3.3.1 CSR&S e-learning

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 everyone 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 "I**ntroduction to Climate Change**" has been designed and delivered across all geographies with the objective to inform all employees of the importance of getting a proactive approach and sense of responsibility toward climate change.

3.3.2 Amplify the internal Culture to become a Climate Change Innovator

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 the daily life and for business activities. But that's not all – Hitachi Rail was also granted 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 e-learning is in six languages and Andrea, Taro and Helen are the presenters and characters who explain the course.

3.3.3 Think responsibly, act sustainably

For Hitachi Rail, Sustainability is embedded in its heritage and, through the accomplishment of its work, it shares its mission of wanting to leave a better society for future generations. For this reason, Hitachi Rail continuous to explain the meaning of the fundamentals of Sustainability, SDGs and CSR. The course is available in four languages, for all Hitachi Rail employees. It has an intriguing and engaging approach that leads to furthering the understanding and discovery of the needs and commitments for a real change in the way of thinking and living.

3.4 Occupational Health and Safety

At Hitachi Rail, safety is the #1 priority, and the Business Unit is committed to ensuring that activities are undertaken by considering the Safety and Health of the employees, contractors and individuals 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:

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

The two greater-than signs between "Safety" and "Quality" 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 ensuring continuous improvement of the suitability, adequacy and effectiveness of the Health Safety Environment Management System (HSEMS) to enhance its performance. As part of that commitment, the HSEMS incorporates objectives and targets which are designed to maintain continuous improvement.

The annual HSE objectives and targets are approved by the top Management level during the Annual Management Review and are cascaded to all legal entities, whether applicable, to define improvement plans as well. Hitachi Rail management is committed to protecting the Safety and Health of individuals, the environment, and the communities in which Hitachi Rail operates. Senior Management drives the process for the 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 their intended outcomes;

h. engaging, directing, and supporting persons to contribute to the effectiveness of the HSEMS;

i. developing, leading, and promoting a culture in 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 representatives are identified in each legal entity of the Company, in line with legal requirements in order to participate to 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, as follows:

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, consulting, and making a record of the hazards/environmental aspect identified.

Step 2 – Do: Assess Risks

Using the defined risk matrix when assessing and prioritizing the risks; dealing with the highest priority risks first and dealing with lower-risks 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.

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.

This policy is shared with all Hitachi Rail personnel and all Stakeholders online and via the Business Unit intranet. The initiatives adopted by Hitachi Rail to promote employee welfare in the workplace are adequate for risk assessment (e.g., analysis and monitoring of working activities, including the nature of the work, equipment, workspaces, personal and collective protective measures, technical infrastructure, and contractual issues, both for internal and contracted tasks).

3.4.1 Activities and results

Performance measurement is an essential part of the HSE Management System (HSEMS) able to ensure adequacy of the HSEMS and promoting its continual improvement. Purposes of performance measurement are to:

- determine whether HSE policies, objective and targets have been implemented and achieved;
- check that risk-control measures have been implemented and are effective;
- learn from HSEMS failures, including hazardous events (actual incidents, near misses and ill-health cases);
- promote better implementation of plans and risk controls by providing feedback to all parties;
- provide information that can be used to review and, where necessary, improve aspects of HSEMS.

HSE performance monitoring is conducted through the collection of HSE data and information from the digital solution for HSE reporting available to Hitachi Rail employees. Data availability to support informed decision-making is one of the most important aspects of the HSEMS. Using this data for HSE performance monitoring and measurement are essential activities that generate the information necessary for safety risk decision-making. Every year, relevant HSE KPIs are identified based on the strategic plan of Hitachi Rail.

In the last two years, Hitachi Rail moved the HSE performance approach from reactive to proactive, identifying an increasing number of 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[16]	0.59	0.74

For internal purposes of performance monitoring, the number of near misses and unsafe situations is evaluated. 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.

3.5 Employee welfare

Hitachi Rail, in order to improve the possibility of reconciling work with personal needs, **to increase the individual and family wellbeing of workers, is aware of the importance of a system that protects health, including workers' mental health**, as well as promoting their sense of belonging to the BU.

In order to meet these crucial needs, there are forms of benefits and incentives for all employees that range from Health Care to supplementary social security, from occupational and non-occupational accident policies The welfare system envisages the presence, in all locations, of a canteen or, where absent, affiliated restaurants for those without a canteen), from medical care to banking services present in the main Business Unit's locations, to which conventions to support employees' purchasing power are added, for services at favourable conditions.

In this sense, considering the specific differences from country to country, **Hitachi Rail has adopted a strategy that aims to make employment with Hitachi Rail a functional tool to promote the worker's work-life balance and enhance family leisure time**. But that's not all: implementing a Corporate Welfare Plan increases the purchasing power of families without increasing their taxable income. In this sense, home-to-work and sustainable mobility, supplementary healthcare, and smart working are other effective examples of initiatives that have been introduced and are currently increasingly considered a benefit within Hitachi Rail's Corporate welfare.

[16]No. Injuries/h. worked x 200,000

3.5.1 People Care

The "People Care" concept applies to employees' wellbeing as both professionals and individuals. Generally, People Care is linked to Hitachi Rail's "Total Reward" strategy, based on tangible and intangible measures to improve staff satisfaction and to create a working environment where employees can continuously gain experience, develop skills, forge relationships and find motivation.

The programme aims to guarantee a comfortable and motivational working environment by actively supporting relationships between managers and employees and relationships between colleagues. Furthermore, there are various support services available in different countries for both part time and full-time employees and, in some cases, their families as well. For example, schedules flexible enough to grant work-life balance, special arrangements with local entertainment and sports centres, benefits such as health insurance, accident insurance, company-car, employee scholarships, corporate welfare, canteen and breakfast areas, and celebrations of successful projects are just some of the tools used and they vary across regions.The last few years have been unique in terms of ensuring the maximum wellbeing of employees during the Covid-19 pandemic, requiring the concept of 'People Care' to be improved. The pandemic affected everyone all over the world, to different degrees and at different times but as a global Company with a presence in many countries, Hitachi Rail ensured robust and consistent measures to safeguard employee welfare, while at the same time responding to each country's Covid-19 challenge and complying with government guidelines/laws on Covid-19.

A global task force was put in place consisting of senior representation from key functions - the aim was to achieve business continuity whilst ensuring not only significantly enhanced health and safety, but also wellbeing measures that would protect all employees as much as practicably possible. The most obvious measure was for employees to work from home, where possible. However, this was not where it ended. Resources and guidance were established to support employees/managers in making this transition with a focus on mental health and assuring more than ever that sufficient rest/breaks were taken as a concerted effort to ensure that a distinction between work and home was achieved.

Hitachi Rail takes a holistic approach to its focus on people, in which welfare and care initiatives are also linked to total remuneration policies. In fact, Hitachi Rail is committed to providing a reward system that recognises employees' performance against both individual and global objectives. Also, Hitachi Rail encourages participation in the wider success of global business objectives and financial results.

3.5.2 Employee Engagement

As a way of measuring levels of employee engagement, every year around September/ October, Hitachi conducts a Group Survey, which is called Global Hitachi Insights Employee Survey. The survey is administered online via an external vendor. It is available for all Hitachi employees to take in 14 different languages and individual responses are anonymous. Some of the main focus areas are: clarity of direction, manager effectiveness, empowerment, pride, continuous improvement, teamwork, recognition and reward, recourses and support, development and opportunities for advancement, leadership, communication, engagement, mid-term management plan, culture.

The aim is to identify key strengths and opportunities, to improve productivity and help leaders analyse and communicate the results, as well as working together with team members to develop and implement plans that will lead to enhancing employee engagement and ultimately improve team performance.

In 2021, approximately 14,000 Hitachi Rail employees were invited to participate across all legal entities with an average response rate of 82% achieved.

The results indicated among the top five strengths, similar results from the previous year:

Covid-19 response

78.5%

Pride

71.4%

Engagement Index

71.4%

Teamwork

71.2%

Diversity & Inclusion index

66.8%

Following the analysis of results, almost 900 managers across the Group have received their reports and worked on action planning at team-level.

3.5.3 Employee Initiatives

The Company organises both global and local employee initiatives to better engage its people on common issues and topics of specific interest to certain regions. Below are, by way of example, some initiatives for all employees and for specific geographical areas.

- World Suicide Prevention Day 2021: In September 2021, Hitachi Rail joined the event. According to the World Health Organization (WHO), one in every 100 deaths worldwide is the result of suicide. Each year, this day is observed to remember those who died by

suicide, to raise awareness and share ways to foster prevention. Raising awareness reduces stigma and promotes compassion;

- "Creating Hope Through Action" has been the theme, with the idea that everyone can take action to help prevent suicide, encouraging others to talk. People may not know what someone else is going through but acts of kindness like a compliment from a stranger, giving up a seat on public transit, or just saying hello with a smile can make all the difference;
- Women in Rail Survey: in November 2021, more than 800 colleagues took part in the "Women in Hitachi Rail Survey" to share their career aspirations and views on advancement opportunities offered by Hitachi Rail. The survey is one of several activities planned to foster greater understanding about the diversity in the workplace and help create an inclusive work environment where all employees can thrive. Results showed that 72% of women surveyed consider their relationship with their manager to be "very good" or "good" with 79% describing their relationship with colleagues as "very good" or "good". A total of 70% of survey participants are interested in advancing in their careers at Hitachi Rail, but on average, one in two women (51%) believe their gender could limit their career advancement opportunities. In the following months, the results of the survey will be used to further inform Diversity, Equity and Inclusion work across Hitachi Rail. Detailed planning is underway with the Learning & Development Team in charge of presenting training opportunities for all, focusing on unconscious bias. The ongoing commitment is to improve Diversity, Equity and Inclusion throughout Hitachi Rail, to further build an environment that supports personal development and business success;
- Hitachi Rail celebrates Womanhood: in March 2022, this year again and as part of Hitachi Rail's efforts towards diversity, Hitachi Rail celebrated International Women's Rail on social media via a range of posts introducing some of the brilliant talent across the global business. This year's theme of "Break the Bias" fits perfectly with the launch of Unconscious Bias training last week. The CEO Andrew Barr says:

> **Diversity is absolutely core to enabling us to deliver into the future. International Women's Day recognises the contribution that women make to our business. We recognise that, and as we grow, make sure that contribution continues to be a key part of the development of all of our teams and at all levels across the Company.**
>
> Andrew Barr, Group CEO Hitachi Rail

- Inclusive Culture Unconscious Bias (04 March 2022): a message from Andrea Luzinat: "We are a diverse collection of colleagues, representing over 70 nationalities, with a huge potential for different opinions and ideas. But we need more than diversity - we also need inclusion. Inclusion creates a sense of belonging, encourages people to speak up and share new ideas - and allows all that creative potential to be realised. Building an Inclusive

culture is vital to the success of our business strategy - and the more each of us improves how we engage with others, at any level, the better our personal and collective performance will be. Launching this week is a series of learning materials, resources, and workshops to help you understand what we mean by inclusive and how you can play your own very unique part in building that culture. It's the result of research with a wide range of colleagues from across the business, including feedback from both Hitachi Insights Survey and Women In Rail as well as conversations from across the business in all of our regions".

Asia Pacific – Employee initiatives (Australia)

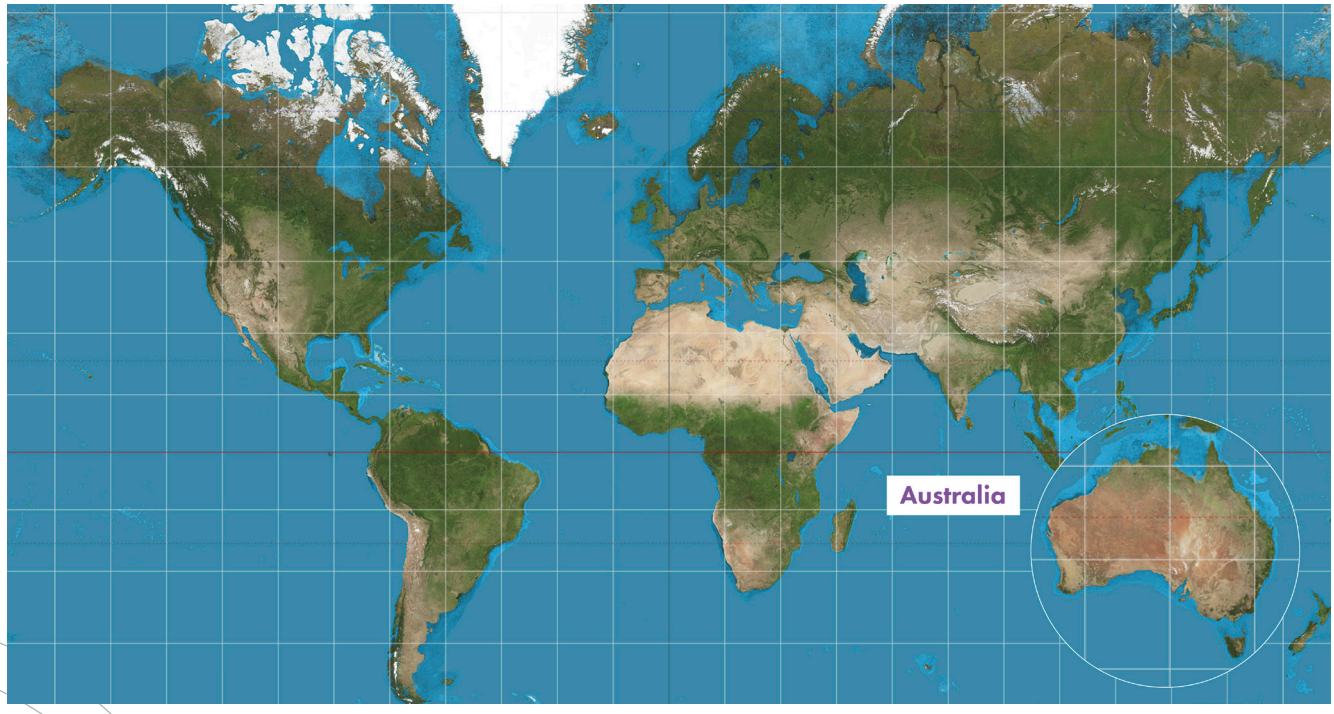
In Australia, the creation of the Health and Wellbeing Committee has led to significant improvements in employees' work-life balance. The Committee – a work group formed of volunteers from various departments and supervised by a local HSE manager and the local HR Manager – meets once a month to discuss initiatives and measures to improve employees' wellbeing and, with the support of the Company (including the provision of a budget), promotes events and initiatives on health issues in connection with local traditions.

Some of the initiatives are:

- "R U OK?": Australian Day to raise awareness on the importance of mental health and to remind of the importance of caring for each other's wellbeing. The event in particular was designed to remind employees how dialogue with colleagues, friends and family can help to overcome difficulties;
- National Harmony Day: celebration of cultural diversity as a wealth of Australia. Virtual and Covid-19-safe site activities where employees were encouraged to wear their traditional dress and share fun facts about their cultural heritage. Posters were also displayed in the office to encourage exchange and engagement. Work Life Balance workshop organised by the Health and Wellbeing Committee in collaboration with Learning and Development and the EAP provider on the reconciliation of life and work balance initiatives;
- The "MCG" Program (Mindfulness, Care and Gratitude): a wellness initiative that involves toolbox talks, whiteboards placed at office sites for staff to share their experiences/ideas, amongst other initiatives and competitions aimed at providing staff with hands-on strategies to take personal action for improving wellbeing and happiness, focusing on the pillars of Mindfulness, Care and Gratitude;
- White Ribbon Day: awareness and fund-raising initiative in aid of violence against women;
- Wear Red Day (Brisbane): fundraising day for heart disease research;
- Cancer Skin Checks (Karratha): Australia has one of the highest rates of skin cancer in the world. More than 50 employees underwent a medical check-up;
- Bike to Workday (Brisbane / Perth): staff who were interested in fitness, health and wellbeing took part in Bike to Workday;
- Fitness Challenge: staff were encouraged to walk, run, swim or cycle to reach the 1,000 km goal in 31 days;
- Table Tennis Tournament (Brisbane / Perth);
- In addition, the Australian Offices provide dedicated office space in their facilities for people care. The room serves as a mixed faith/ silent space. Staff are welcome to use the space for silent prayer, meditation, yoga, to rest if feeling unwell and to perform first aid if ever needed. These facilities are also used as the location for employees to have their annual skin and health check;
- Launched a Corporate Discount Fitness Program: every employee has the opportunity to sign up

the membership paid by Hitachi Rail and enjoy up to 50% off for gyms, studios, active wear, healthy meals, supplements, beauty recover and more;

- Arranged Flu Vaccination Clinics in the offices to provide free flu vaccines to interested employees;
- Engaged an external expert to provide Health and Wellbeing Information Sessions (Topics including Effective Intercultural Communications, Apply Emotional Intelligence, Self-care to Prevent Burnout and Fatigue, Managing Challenging Behaviours, Adopt a Growth Mind-set etc.). These information sessions attracted on average 150 participants per session;
- Provide "Take Charge Wellbeing" Program to the "Fly-In-Fly-Out" workers in Western Australia. Several workshops were held to provide practical tools to assist workers to manage their feelings, emotions and thoughts, build resilience and to help them find their sense of purpose;
- "10,000 Steps Challenge": staff were encouraged to participate in a challenge to walk/run to achieve at least 10,000 steps every day for a month;
- A "Sit Less and Move More" campaign: toolbox meetings and posters were developed on the health risks of a sedentary lifestyle and the strategies that the business and the individual workers can implement to achieve the goal of sitting less and moving more in the workplace;
- A "Social Day" were arranged to provide an opportunity for staff members and their families to enjoy some fun activities and network with each other.



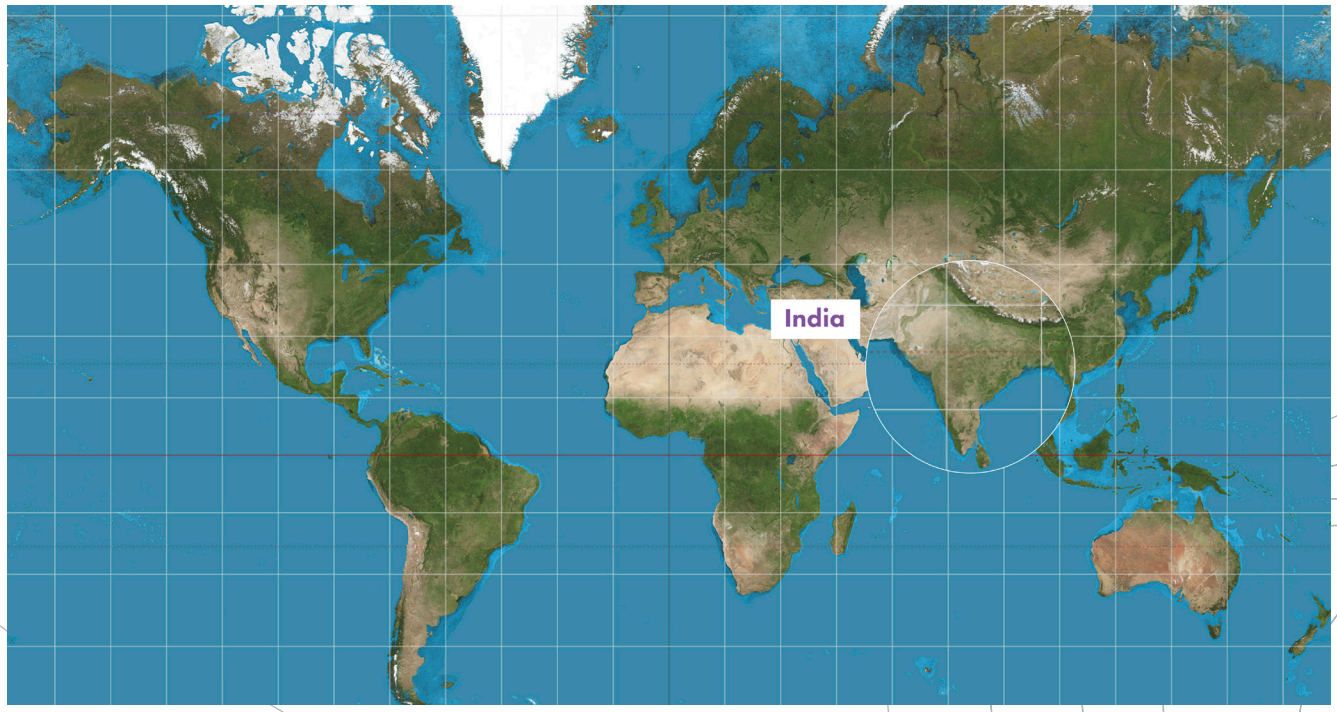
Asia Pacific – Employee initiatives (India)

Hitachi Rail's India Social Committee is an employee engagement initiative that aims to plan, organise, and implement social events for the Company throughout the year. Their mission was to bring more engagement and enthusiasm to the workplace, ensuring entertainment and participation in staff events, enriching employee interactions, networking between different office locations in India and much more.

- World Environment Day celebration by carpooling to office.

In India, where Covid-19 pandemic effects were rather severe, additional efforts and attention was given to improve the already existing Group Insurance coverage (which among others provides employees access to funded health and medical services), with the provision of additional Group Term Life specific Corporate Insurance Plan, covering employees for a range of services including Death Benefit etc. In addition, oxygen concentrators were purchased and made available for staff use, when required by their Medical Practitioners and support was offered to staff members willing to join the Country Vaccination campaign, via the reimbursement of vaccination costs incurred by staff and family members. During pandemic the HR team telephoned to every employee and enquired their health and wellbeing status and guided them to take care of themselves and family. Some initiatives are the following:

- Work from Home Facility to Staff is given;
- Hitachi Rail STS Organised Vaccination Drives in Kolkata/Noida and Bangalore Offices for its employees/families to get Covid-19 Vaccination;
- Covid-19 Vaccination Reimbursement to Staff and Families (spouse and 2 Kids if eligible for vaccination);
- Arrangement of Oxygen Concentrators across Hitachi Rail STS offices for its use in emergency considering Covid-19 (staff and family);
- Free of Cost Telemedicine Facility for Staff/ Families with 24 Hour Medical Support across all Office locations/Sites;
- Term Insurance Provided to Staff (50 Lakh for each employee);
- Separate Covid-19 Insurance for Staff/Family (Amount Covered 3 Lakh/person in Family for Employee, Spouse and 2 Kids);
- Annual Medical Insurance of Staff Increased from 3 Lakh to 5 Lakh for Staff and Family (Spouse and 2 Kids of age up to 25 years);
- Celebration of Global Safety Day (28th April)



across the Projects/offices to motivate staff/ contractors' team on following the Safety Requirements;

- 1 Week Celebration (4th March to 10th March 2022) of National Safety Week Celebration at sites to develop Safety Culture among the team.

Asia Pacific – Employee initiatives (Malaysia)

Just like in every other country of operation, in Malaysia, Hitachi Rail's employees' Health and Safety is paramount. Hitachi Rail Malaysia employees are covered under a range of "top market" people insurances. Corporate Plans which not only offer employees and family members the chance to enjoy high level medical & hospital care, but also covers staff members for more stringent cases under the Group Term Life Policy (including Total Permanent Disability & Partial Permanent Disability), Accidental Death & Disablement Policy and Critical Illness Policy.

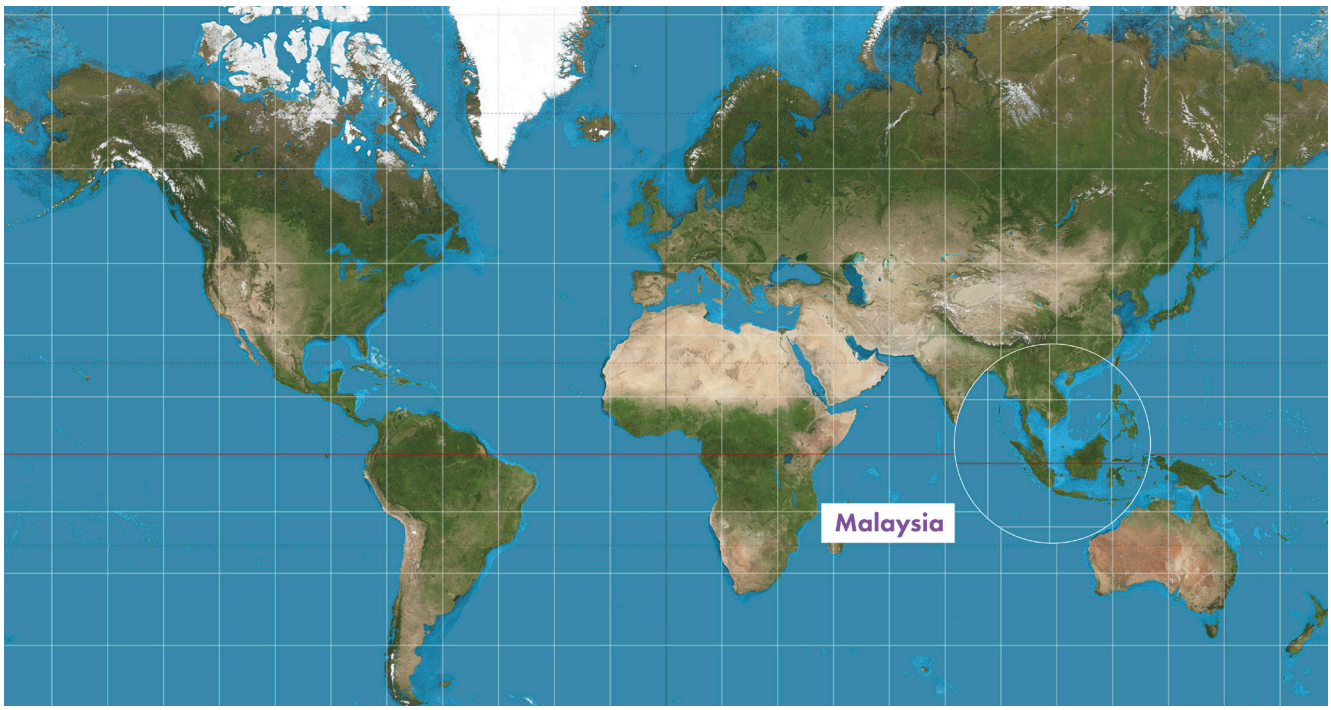
In addition, a number of staff engagement and people care initiatives are performed every year. Among them in the past period, focus was given to the "In house screening program" which was offered to employees on a strictly voluntary basis. The screening included full blood / urine test, ultrasound scan, body composition analysis and dietary briefing. The objective was to ensure employees understand their personal health condition and how to eat properly.

The Malaysian office provides outpatient medical reimbursements to the employees and families besides a medical hospitalization and surgery insurance coverage for employees and immediate family members. This medical plan also incorporates personal accident and funeral coverage for the employee. HR is always the first point of contact whenever an employee is hospitalized, and a fruit basket is delivered timely to the employee's bedside to show that Hitachi Rail cares for their Health and Safety.

The HR Department also assist employees in all documentations in events such as deaths, funeral and statutory claims and compensations from the related authorities. Annually, a dinner is organized for the employees and spouse to enhance togetherness between employees and families. During the dinner, long service awards plus a certificate of appreciation for employees who has served more than 10 years are given to thank them for the loyalty to Hitachi Rail. Among the initiatives are the following:

- Staff WhatsApp group: Communication and sharing on HSE Matters and latest update (e.g., Covid-19, influenza, current SOP, etc);

- Staff social WhatsApp group: Social communication and sharing (e.g., Birthday wishes);
- HSE staff support: related to their illness and day-to-day progress of recovery. Either via phone call, email or WhatsApp;
- Covid-19 Control:
  a. Provide 2 units saliva test kits as a standby unit for all staff in Malaysia.
  b. Pcs facemask provided at the beginning of the week to all staff;
  c. Installation of workstation separator in between two workstations;
  d. Installation of additional air purifier within KL office, to improve air ventilation;
  e. Internal deep cleaning / sanitization done by internal cleaner, activity will be launch if there is any internal case;
  f. Wipe tissues & alcohol-based cleaner provided nearby to staff workstation, just in case staff need to do their own cleaning activity;
  g. Hand sanitizer provided at the front door, washroom, near to photocopier machine; for office used.

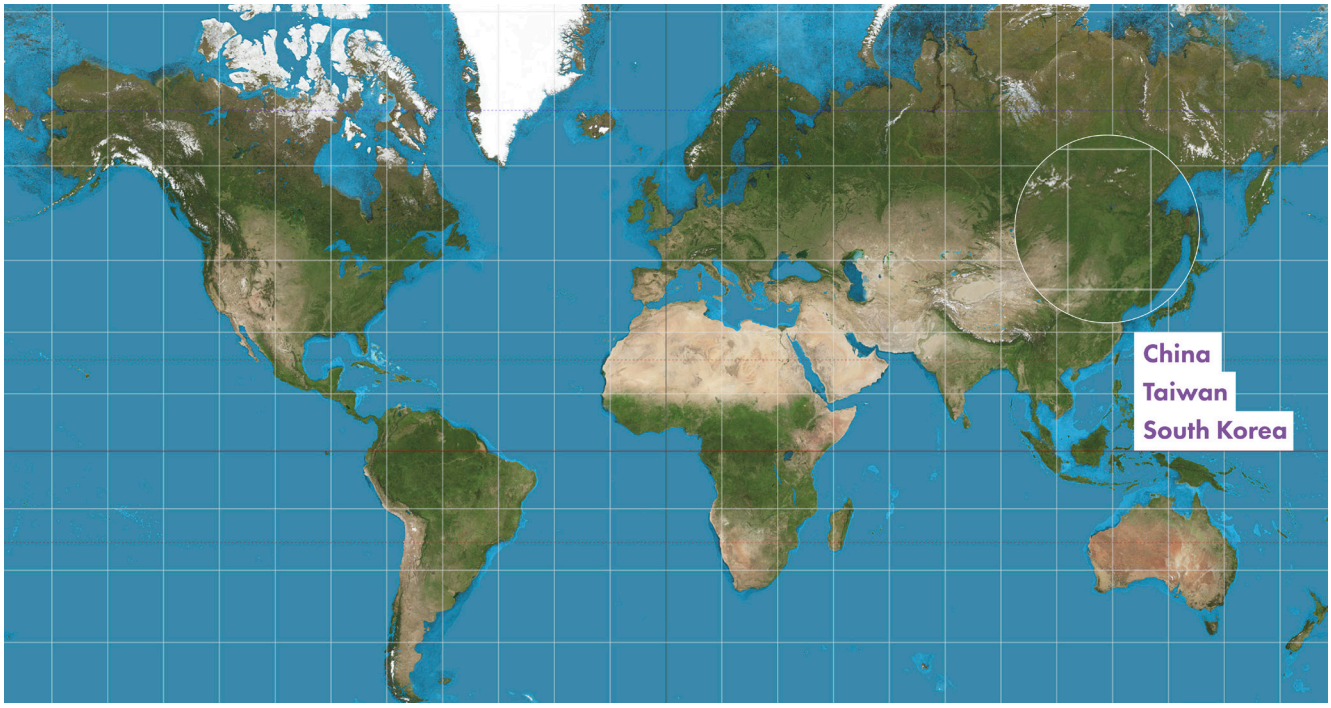


Asia Pacific – Employee initiatives (China, Taiwan and South Korea)

In China, Taiwan and South Korea Hitachi Rail sponsored some initiatives in 2020/21 aimed at benefiting employees, their family and society. Below are the main initiatives:

- Employee Social Committee: where employees discuss initiatives/ measures and perform monthly activities to improve employees' wellbeing (book reading / chess context / etc.);

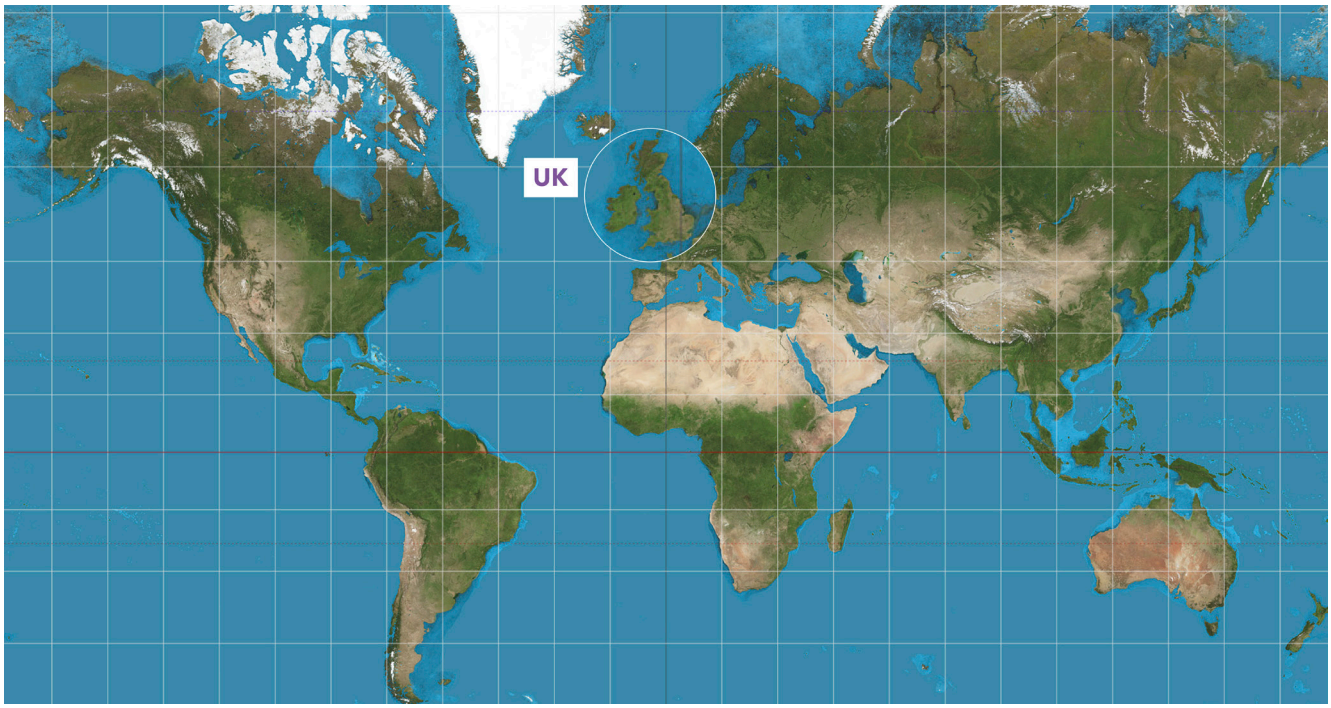
- Annual all employees' meetings: Functional Managers / Department Heads share overall status of the activities being performed in their department, their current projects and future strategy. Employees are given the opportunity to ask questions and engage with and participate in the business plan. The event was held physically under a Covid-19 safe plan and remotely with staff attending from various locations;
- Christmas Lunch: Team-building event to celebrate team efforts and accomplishments in the year;
- Support staff who were in Covid Lockdown – Send them food and supplies;
- Welfare checks on staff who were sick from Covid-19.



Europe & Middle East – Employee initiatives (UK)

In the EMEA Region, Hitachi Rail sponsored many initiatives in 2020 to benefit employees, their families and their local communities, below are just some of the main actions in UK:

- Mental health awareness week: focused on a different area of wellbeing each day with links to internal and external resources;
- Male Health workshops: run on site and virtually, male-oriented workshops focusing on the five biggest preventable killers of men;
- Responder workshops: delivered both on site and virtually – manager mental health training that also explores own stressors, triggers and coping strategies;
- Thrive workshops: delivered on site and virtually – open to all. Help you to thrive inside and outside of work. Explores stress and resilience, triggers and strategies;

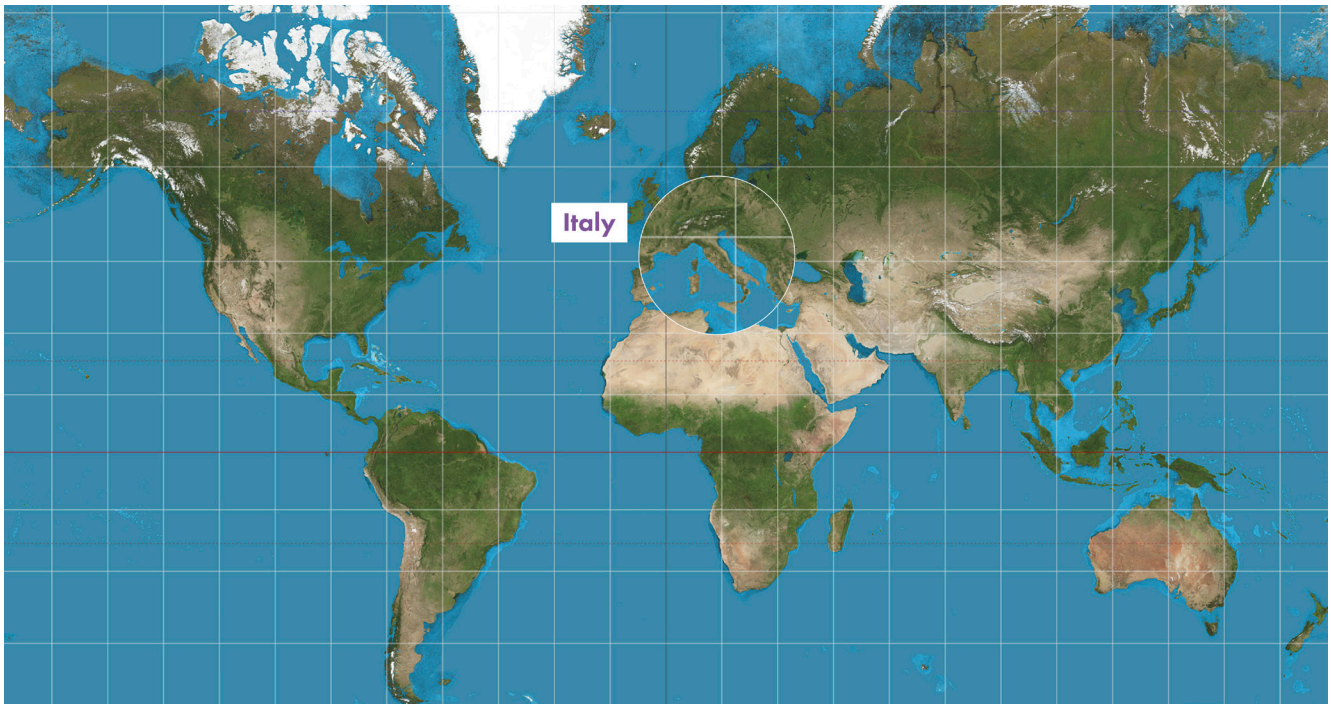


- World Mental Health Day: encouraged teams to start the conversation with 'this week I have felt....' cards. Sign posted to support services available. Also delivered a workshop where two senior leaders talked about their own mental health battles.

Italy – Employee initiatives

In FY21 Hitachi Rail has carried on many initiatives to benefit employees, their family and the society, below are the main examples:

- Corporate Wellbeing - a wellbeing plan is provided to all employees through a dedicated portal, called "Easy Welfare". In line with the provisions of the national labour agreement for the industry, it offers numerous services and possibilities to choose from including some tax advantages and social security benefits;
- Recreation Centres - employees have recreation centres, referred to as "CRAL". These are a form of free association for workers and are separate to the BU. Employees who join as members may participate in several activities and take advantage of discounts at partnering companies (e.g., bookshops, theatres etc.);
- Women's day: March 8th is Women's day and to celebrate this day, Hitachi Rail donated to a non-profit association that takes care of women in need.
- KIVA Donation: Before the Christmas holiday, the Company usually organises a Christmas party across all sites for employees to celebrate the BU's achievements and receive some gifts. 2021 was different due to Covid-19 in that employees could not come together in the same way and as such, the budget for this celebration was donated to the KIVA foundation, an organisation that provides loan funds to under-served communities;
- Around the world, helping small businesses strengthen their communities, create jobs, scale innovative social solutions, and drive sustainable economic growth;
- Work-life balance: the concept of "smart working" continues to be successful in Italy with all sites participating. During the fiscal year, a new way of working was set up to advantage cultural development and maximise flexibility according to both people and business needs. Smart working took on a completely new



meaning due to Covid-19 with more employees working remotely and of those that could work from home, adjusting to doing so full-time with the support Hitachi Rail and its managers;

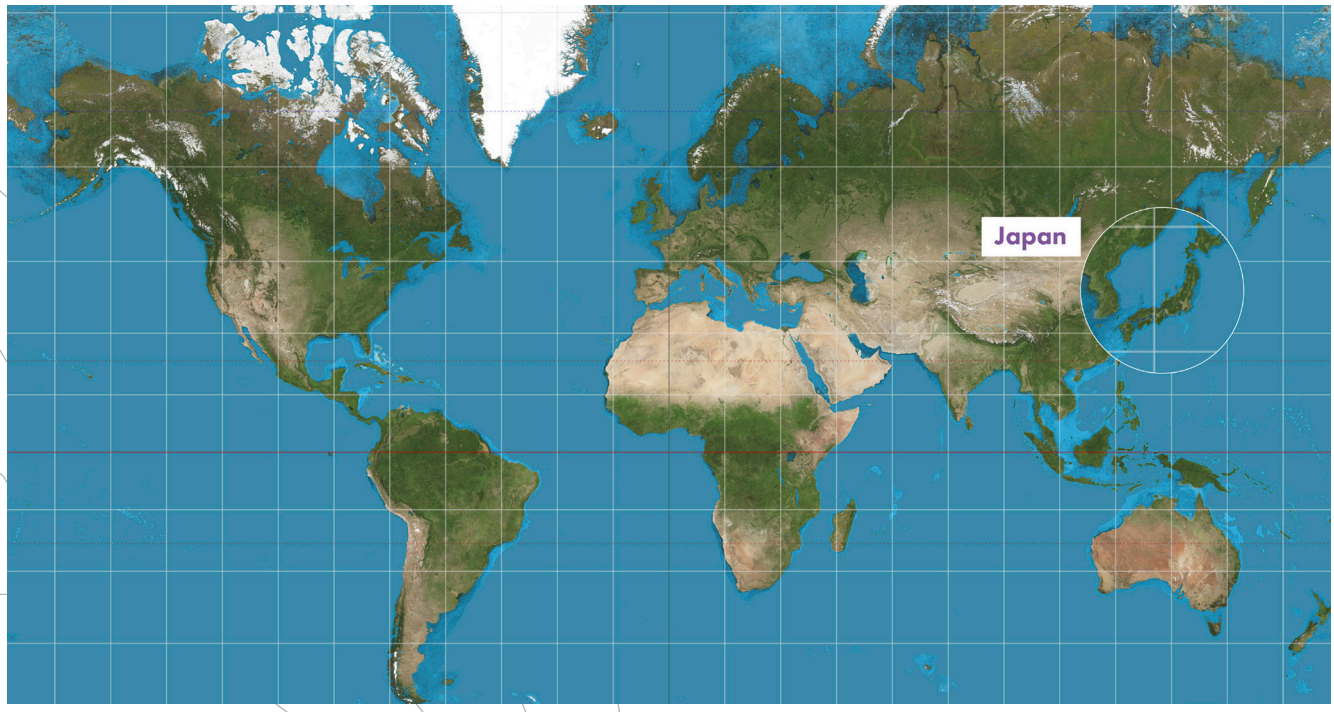
- Service awards given to senior employees with over 25 years;
- Every year Hitachi Rail joins in the "*Stelle a merito*" award programme in recognition of employees with long service and great achievements.
- Project "*Va.Bene.*": designed during the fiscal year, aims to give 360-degree support to employees and their families, offering a wide range of services from counselling to tax and legal advice;
- Celebrating women in manufacturing: in March 2021, following on from the showcase of brilliant women throughout the business last week to mark International Women's Day, from April Hitachi Rail will be hosting an exhibition for employees in the Genoa Facility - celebrating the history of women working in manufacturing. The exhibition has been done in partnership with Fondazione Ansaldo and promotes the belief that diversity and equality is key to the success of every business;
- Supporting Telefono Rosa: in March 2021, to mark International Women's Day, Hitachi Rail in Italy donated €3,000 to the *Associazione Nazionale Volontarie del Telefono Rosa*. Telefono Rosa was founded in 1988 as a temporary project to carry out research aimed at highlighting domestic violence against women and became an association in 1990. It aims to provide women who are experiencing domestic abuse with services, including counselling, free legal advice and assistance, support groups and anti-stalking shelter. The association manages, on behalf of the Municipality of Rome, the "International House of Human Rights of Women" and since December 2012, the Anti-violence and Stalking number "1522", promoted by the Italian Presidency of the Council of Ministers, which offers a multilingual phone service, active 24/7, 365 days a year, for victims of all forms of violence;
- Global Inclusion 2021: Italian Association of Personnel Management Workshop: in 2021, Hitachi Rail has been in active partnership with Global Inclusion 2021; a non-profit initiative aimed at promoting an inclusive leadership model in the business and social environment. The theme chosen for 2021 is *"The Horizon of Equity"*: from generational exchange and

the alliance between colleagues, to the links between inclusion and innovation. In October 2021, Lorena Dellagiovanna, Chief Diversity & Inclusion Officer Hitachi Rail represented with Katja Gallinella, EMEA Talent Acquisition Leader, Hitachi Rail at the workshop entitled "*Kindness agrees*" where diversity of thought, harmony and psychological security were discussed.

JAPAN - Employee initiatives

In Japan the initiatives for 2021 to benefit employees, their family and the society were as follows:

- Corporate Museum "Hitachi Origin Park" Opens at Hitachi's Birthplace;
- On November 5, 2021, Hitachi, Ltd. opened Hitachi Origin Park, a corporate museum, in Hitachi City, Ibaraki Prefecture, the place where Hitachi was founded. This facility introduces the spirit of Hitachi's foundation and its history;
- Work life balance. Hitachi Rail introduced flexible measures for Work life balance as described below;
- Eliminate unaccompanied relocation, trial for location-free work for discretionary work employees, work style support points, E-Learning on balancing work and nursing care;
- Covid-19: in addition to continuous measures (staggered work hours and remote work), Hitachi Rail held vaccination for Covid-19 three times;
- Awards: Hitachi Rail has year-end awards and monthly Most Valuable Player (MVP) awards to continuously recognise employees who have contributed to projects and the business every year.



3.5.4 Mobility

One of the consequences of Covid-19 was that customers around the world accelerated their desire to decarbonise and digitize their transport systems. To meet these demands, Hitachi Rail is currently pursuing a pioneering strategy for sustainable digital connectivity.

Hitachi Rail's updated medium-term roadmap, concrete targets, performance measurements and transparent disclosure are the driving factors behind its daily activities, and it has set targets based on achieving emission reductions through direct action both within operations and throughout the value chain to produce high quality products, solutions and operations, service and maintenance.

Hitachi Rail supports these goals, along with the Corporate vision, through its Decarbonisation pathway:

- Mobility as a Service: make already sustainable rail travel even more attractive by integrating Hitachi Rail's services with other modes of transport using data from the Internet of Things;
- Creating new electrified railways or powering trains with batteries and decarbonising the industrial footprint in line with UN science targets;
- Reducing employee-commuting emissions.

A single Mobility Manager has been appointed for the Italian Hitachi Rail plants. The mission is to promote initiatives aimed at reducing emissions related to the home-work journey of employees by encouraging alternative forms of mobility such as the use of local public transport, the use of green means of transport and vehicle sharing.

Hitachi Rail Travel/Corporate car sharing

Corporate car sharing is the sharing of electric cars between employees of the same Business Unit. This helps to reduce CO_2 emissions related to employee travel.

To further reduce emissions from car travel, Hitachi Rail is launching a programme to combine car sharing with the use of electric vehicles. It is one choice, among others, that meets Hitachi Rail's commitments to the Sustainable Development Goals. Starting from a pilot project that took place in the Naples site, Hitachi Rail is working to make electric cars available to all employees for travel and business trips between Hitachi Rail sites and other local mobility points (Airport, Railway Station, Hub car parks).

Based on the Company's pilot project in Naples, the service will eventually be offered to all Hitachi Rail employees and will be designed for specific local needs. An enlargement of the fleet and expansion to other Hitachi Rail locations will be implemented.

This ability to integrate and coordinate means that a project like this not only achieves environmental impact goals in reducing emissions, but also improves corporate welfare, cost containment and facilitation of travel services and service activities. Ultimately, it completes the objective of improving the quality of life for employees and the local communities in which they work. It is also a project that offers an alternative to other services and costs. Hitachi Rail corporate car sharing generates savings in terms of the total cost of mobility and the use of non-fleet vehicles.

Mobility (Travel for Business)

Covid-19 had a devastating impact on travel. The year 2021 saw a drastic reduction in business travel, thus decreasing volumes and transactions. Despite the reduction in travel, progress was still made in terms of digitalization during 2021: Hitachi Rail has finalized the implementation of the self-booking tools in France, US and Australia.

At the same time, in the UK Hitachi Rail has started implementing these tools and in the coming years the aim will be to implement smaller markets to complete homogeneity in the travel sector as well. When travel increases, the opportunity to have this tool will make it more efficient and sustainable and provide cost savings. Moving people away from cars and planes and onto trains.

Hitachi Rail places great importance on sustainability. Hitachi Rail also prioritizes sustainability in its fleet management: this year it concluded a pilot project in Italy with a new car policy focusing on green cars (hybrid and electric), green benefits, incentives for those who choose green cars and next year every Hitachi Rail site is currently implementing electric charging points (updated to 31/03/22). Important incentives for employees with company-cars to switch to an electric and hybrid model have been included in the Company's policy.

The safety and protection of travellers was a key issue accentuated by the pandemic. All travellers are covered by health insurance and provided with the necessary assistance in understanding and assessing risks related to social, political and health situations in all countries. This ensures the immediate protection and safety of employees.

MaaS (Mobility as a Service): Digital Innovation and Smart Mobility

MaaS is an integrated transport system aimed at optimizing urban mobility through modular, more coordinated and efficient solutions. The aim is to respond flexibly to the increasingly emerging need for mass transport in the ecosystem of sustainable mobility. MaaS is the new frontier of mobility; it is based on a technology capable of integrating different modes of transport by making them available to the passenger in a single platform where the journey can be planned, integrating different public and private services and payment for their use. All this presupposes the transformation of a city's transport network into an ecosystem that has at its centre a control unit capable of coordinating all services: the MaaS Operator.

But from theory it is essential to move onto practice: understanding the real needs of citizens, what characteristics the technology platform should have, and the management issues of the whole ecosystem of service providers involved.

Hitachi Rail, in cooperation with the Municipality of Genoa and ATM in Milan, has launched the trial of a MaaS system with highly innovative features, which will provide fundamental indications for the sustainable mobility of the future. This new MaaS App will allow access to several mobility services through a single tool that will connect the citizen, who needs to get around, with the entities in the area that meet this need.

Sustainable mobility (home-to-work) - Hitachi Rail sites

The Mobility Manager Hitachi Rail STS Italy, appointed in November 2021, prepared and launched the first multi-site survey on mobility in the six Italian sites surveyed.

The main topic of the survey was the mobility habits of employees related to the home-work-home journey and the main objective was to hypothesize alternative mobility solutions on the basis of the results of the tests administered through the platform.

The participation in the survey was successful and allowed Hitachi Rail to estimate CO_2, NOx, PM10 and VOC emissions related to employees' home-work journeys.

The COPERT method (Computer Program to calculate Emissions from Road Transport) was used to estimate the amount of pollutants released into the atmosphere due to the systematic home-work journeys of employees, with the results shown in the table below:

Home-work journeys emissions	As of 31.03.2022	
	u.m	Tot. Emissions
Emissions CO_2	[ton/year]	3,707.41
Emissions CO	[ton/year]	57.45
Emissions VOC	[ton/year]	6.92
Emissions NO_x	[ton/year]	11.02
Emissions PM_{10}	[ton/year]	0.95

The CO_2 data gives an emission ratio for the surveyed Italian employees of 0.84 tCO_2e/year per capita.

Consequently, the main actions that will be considered to be implemented in order to reduce the above-mentioned emissions are:

1. Contacts with individual local mobility companies (LPT);
2. Verification of framework agreements for incentivized purchases of electric bicycles;
3. Car-pooling apps;
4. Checking the feasibility of structural improvements to encourage the use of bicycles (e.g., increasing the number of bike racks with possible electric recharging)
5. Gamification (virtual competition between employees regarding mobility habits).

A pilot project is also underway with CSR&S on the Naples site for a Mobility HUB with sharing services for employees in collaboration with local institutions. It should be noted that the use of smart working has undoubtedly had a positive impact on the reduction of pollution by employees travelling to work and back to their homes at Hitachi Rail sites around the world.

3.5.5 Parental leave

In its focus on protecting the rights of the individual and its workers, Hitachi Rail recognizes the need to establish a system that protects the family and the ability to lead a balanced family life. Parental

leave is recognized and guaranteed to workers throughout all of Hitachi Rail.

Hitachi Rail grants parental leave in accordance with legislation, collective agreements and Business Unit's policy. Beyond the limits imposed by law and in line with Sustainable Development Goals 5 (Gender Equality) and SDG 8 (Decent work and Economic growth), Hitachi Rail supports its employees when they become parents and promotes work-life balance in daily activities.

At a Business Unit level, a total of 270 employees took parental leave in the reporting period. There has been an increase of 28% in the number of employees that were entitled to parental leave (from 10,554 in 2021 to 13,535 in 2022, of which 11,536 men and 1,999 women). The variation is connected to the refinement of the monitoring processes in Japan and the US, which have been reporting this data starting from the current Report.

Parental leave[17,18]	**31.03.2021**		**31.03.2021**		**31.03.2022**	
	Men	Women	Men	Women	Men	Women
Total number of employees that took parental leave	87	105	141	63	170	100
Total number of employees that returned to work in the reporting period after parental leave ended	84	92	138	60	171	80
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work	68	87	134	64	152	83

Hitachi Rail, as part of the continuous improvement of its reporting systems, has started some evaluations aimed at elaborating an in-depth methodology for the representation of parental leave metrics.

3.5.6 Remuneration systems

Hitachi Rail manages employment relationships with its employees in accordance with the laws in place in the various countries in which it operates. The employment terms set forth in individual contracts are usually more favourable to employees than those defined under general labour legislation or collective agreements.

Furthermore, Hitachi Rail periodically evaluates organizational positions. This is done through the contribution of specialist companies in the field and compares its own remuneration policies with those of the reference market. Hitachi Rail considers the weight of the positions following its outlined approach.

Hitachi Rail has defined a total reward framework strategy to include the design, standardisation, implementation and communication of pay and benefits. This is to ensure it is embedded in the BU's ways of working and organizational culture. Hitachi

[17]The number of employees who took parental leave during the year may not coincide with the number of employees who returned to work during the same year or with the sum of the latter plus the number of employees still on leave at the end of the reporting period, as in some cases the leave may have started and ended in two different reporting years.

[18]All table data related to US & Canada region are not available due to privacy national requirements.

Rail includes market analysis and best practices from a governance and digital standpoint.

The purpose of the Hitachi Rail Rewards strategy is to deliver outstanding business performance and superior capabilities through an engaged and motivated workforce. Its aim is to attract people to the organization by clearly differentiating its employment offering, delivered at an affordable and sustainable cost, in line with business goals and

Hitachi Rail's long-term objectives. 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. 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 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.

Hitachi Rail guarantees equal pay for all its workers. Differences in pay between men and women, occupational categories and age groups are therefore attributable to the roles held and market trends and are not related to the gender or any other characteristic of the employees. The following table shows for FY21 the ratio between women's and men's remuneration, highlighting a substantial alignment, especially for top and middle management lines.

Ratio of basic salary of women to men[19]	As of 31.03.2022				
	Italy	Japan	EMEA	USA & Canada	APAC
	Women/Men	Women/Men	Women/Men	Women/Men	Women/Men
Executives	1.07	-	-	1.05	1.02
Middle Management	1.02	0.95	1.03	0.90	1.01
White Collar	1.04	0.77	0.92	0.83	0.81
Blue Collar	0.98	0.76	0.92	0.86	0.94

The reported data show different trends for the regions and are by their nature conditioned by multiple factors over time. Compared to the figure reported for the previous fiscal year, however, there is a widespread improvement in the Middle management category across all regions. Also, slighter improvements are seen in the Executives category.

[19](Basic salary W / basic salary M).

- 4.0 -

[Makoto]

Sincerity

4.1 Corporate Governance

4.1.1 ESG Management System

4.1.1.1 Health, Safety and Environment (HSE) Management System

4.1.1.2 Quality, Health, Safety and Environmental certifications

4.2 Ethics, transparency and integrity

4.2.1 Code of Ethics

4.2.2 Whistleblowing

4.2.3 Legal and Anticorruption

4.2.4 Data protection

4.2.5 Fiscal Transparency

4.2.6 Organisational, Management and Control Model

4.2.7 Competition Law

4.2.8 Modern slavery

4.2.9 Export and trade compliance

4.3 ESG Risks

4.3.1 Sustainability Risks and Opportunities

4.4 Towards a sustainable Value Chain

4.4.1 Supply Chain & Procurement Overview

4.4.2 Sustainable Supply Chain Strategy

4.4.3 Supplier Governance & Guidelines

4.4.3.1 Supplier Code of Conduct

4.4.4 Digital Supplier management

4.4.5 Our customers

4.4.5.1 Customer engagement

4.1 Corporate Governance

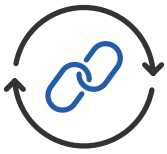
Hitachi Rail's mission is to contribute to society through Sustainable Development of innovative and superior technologies and products.
The Business Unit has committed to doing so in an environmentally and socially responsible manner.
To ensure equality through the Organization and pursuing the medium-to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

Regarding how Sustainability is embedded in the governance of Hitachi Rail, the Corporate Social Responsibility & Sustainability (CSR&S) Department manages and coordinates the work for the four strategic areas of sustainability:

Sustainability of products

Sustainability of sites

Sustainable culture



Sustainable value chain

Each topic needs the involvement of specific functions, each of which is supported by the CSR&S team in the integration and along the process. The mission of the CSR&S function is to interface with the lead managers, to report to them and all other stakeholders on the impact of the sustainability roadmap.

Sustainability Committee

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

The Committee has been operational since the end of 2020. In the FY21, it held five strategic and operational meetings to develop its mission of addressing, evaluating activities and correcting strategies. On these occasions, the leading CSR and Sustainability issues are discussed, both from a strategic and development and implementation point of view.

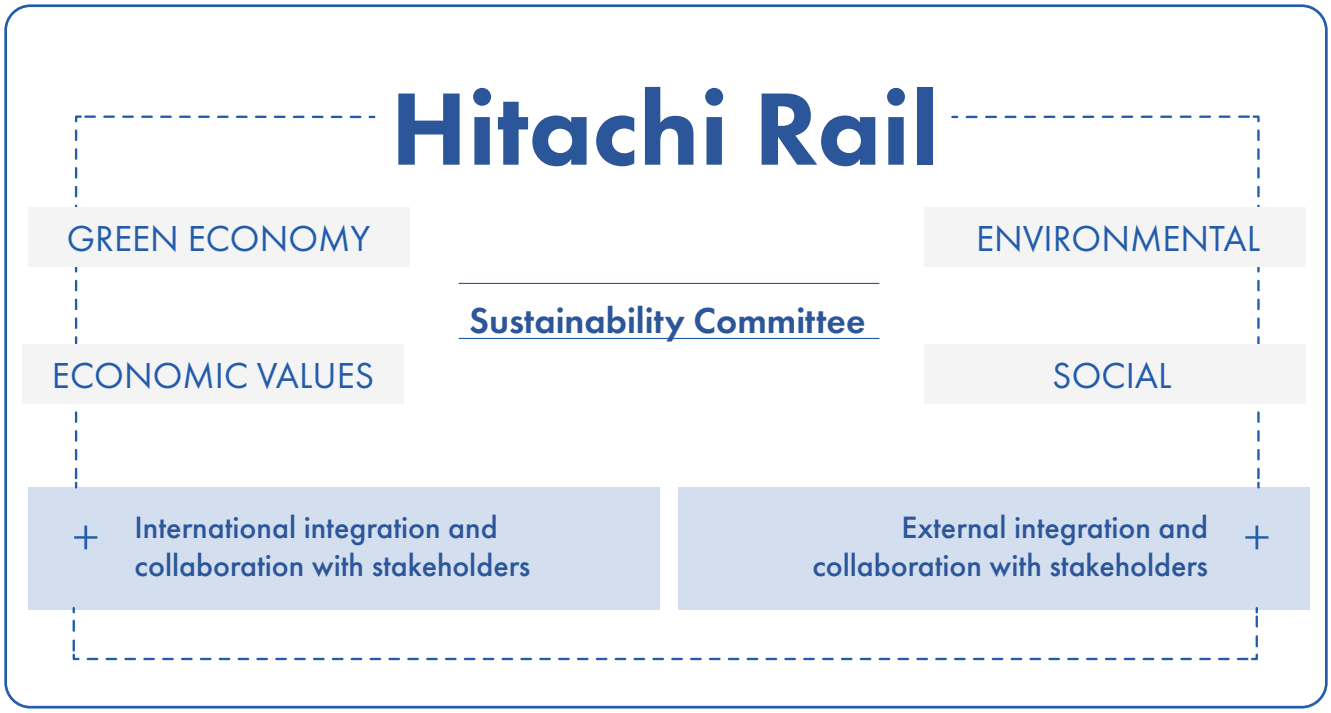
Hitachi Rail is committed to understanding the needs and expectations of its people and involve them in capacity and skills development projects. Its focus is on the constant monitoring of the satisfaction of its customers and of all Stakeholders, and it plays an active role in the management of relationships with local communities.

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 and Corporate Social Responsibility (CSR). The Sustainability Committee gives the mandate to the specific organizational group unit (SHEQ/R&D) to implement and 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).



ESG Rating: EcoVadis

EcoVadis aims to improve the environmental and social practices of businesses by leveraging the influence of the global logistics chain. It has defined a methodology to assess Corporate Social Responsibility through analysing their policies and their implementation and the results achieved.

The assessment focuses on 21 topics divided into four categories: Environment, Employment and Human Rights, Ethics, and Sustainable Procurement. Hitachi Rail's CSR&S department has taken over the complete management of the sustainability ratings.

After years of collaboration with EcoVadis and, following Hitachi Rail's new structure, for the first time the EcoVadis rating reflects the commitments and approach to sustainable topics of the whole Business Unit. The EcoVadis Sustainability Rating, which is based on Hitachi Rail's Non-Financial Reporting is highly requested by most important clients and has reached a new higher level.

EcoVadis has awarded to Hitachi Rail the Platinum medal with the score of 79/100 (+6 points compared to the previous one of the STS).

This result places the business of Hitachi Rail in the top 1% rank of most sustainable companies in the line of business. It is yet another recognition of Hitachi Rail's commitment to develop and implement a vision of a Company that cares about the wellbeing of its people, the environment and the prominent role it has in the decarbonisation of the transport sector.

This result comes from the dedication and perseverance of a team focused on all transversal aspects integrated with the business by optimising resources, with foresight in management and a correct analysis and development strategy.

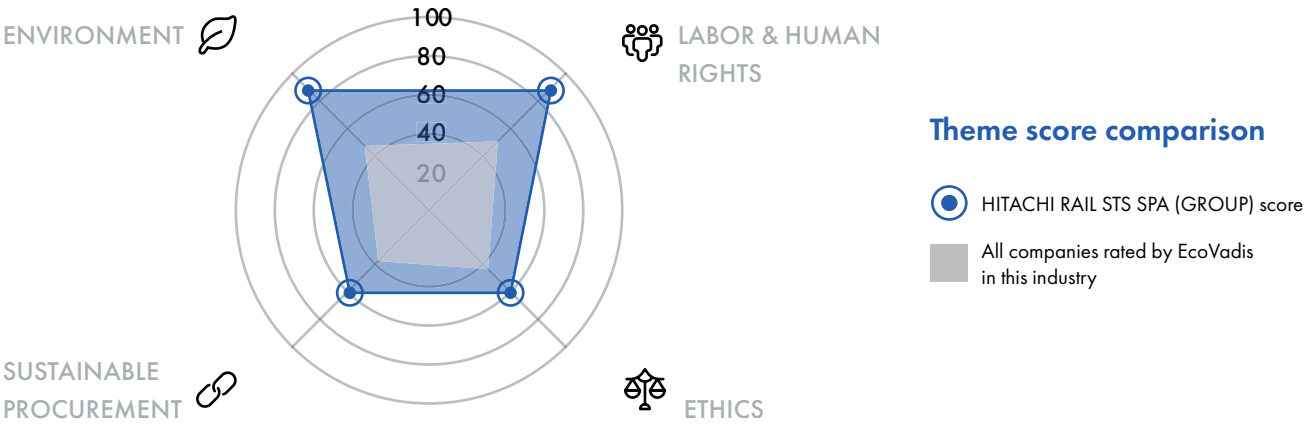
PLATINUM Top 1% 2022 ecovadis Sustainability Rating

79/100

99th percentile

Overall score

Hitachi Rail is in the top 1% of companies rated by EcoVadis in the Manufacture of railway locomotives and rolling stock industry.



4.1.1 ESG Management System

The Global Business Management System (GBMS) is the unique set of rules common to the whole Hitachi Rail organization. It is designed to cover, with the same approach and methods, the activities of all the Hitachi Rail entities. The GBMS is the core element of a Business Model that combines all related components of a business into one system for an easier management and monitoring in a continuous improvement approach.

Four are the GBMS sections:

- governance: high level manuals, global objectives and policies (strategy execution);
- organization: organization's structure, roles and mandates (accountabilities for each organizational role), project team structure;
- process Excellence: complete sets of operation practices, procedures, rules and detailed instructions;
- enterprise architecture: the Business Unit IT platforms and tools.

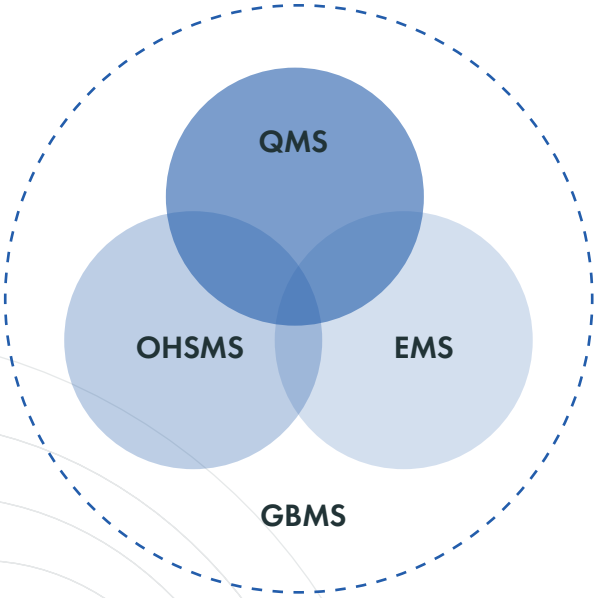
The implementation project started in April 2020, and it showed excellent progresses during FY21, with most of the global processes published on COSMO GBMS area and completely deployed (manuals, Global Policies, Strategy and Governance, Support functions, several Execution processes), in addition to the Organizational Area (lead by HR) with the Organization Chart, Roles & Mandates and the Project Organization Structure.

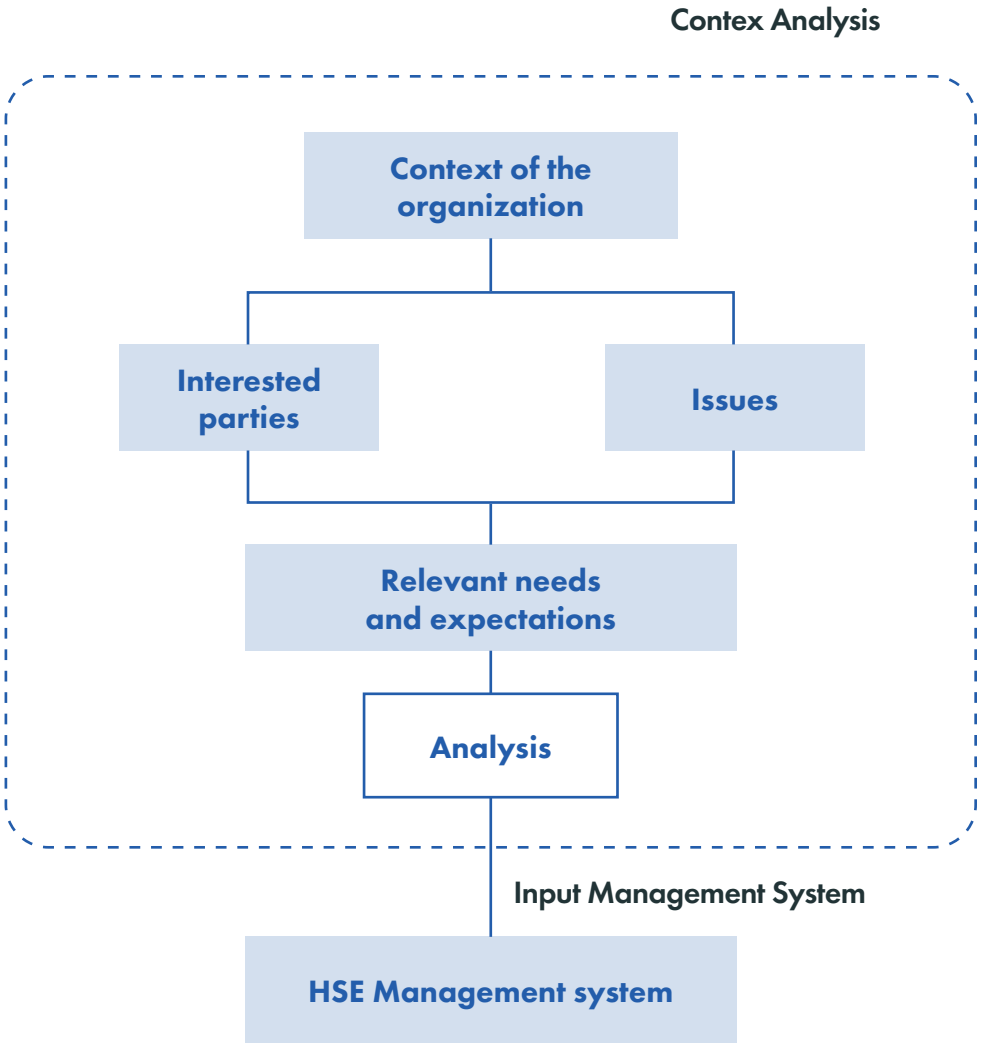
4.1.1.1 Health, Safety and Environment (HSE) Management System

Hitachi Rail uses an integrated approach to Health, Safety, and the Environment to ensure that all work practices are carried out in a manner that mitigates the risk of injury or harm to personnel and the environment.

The need to provide a common approach to HSE Management of the entire Business Unit is crucial, while also permitting, at same time, individual requirements applicable at each Legal Entity and according to line of business peculiarities. That's why the Hitachi Rail HSE management system includes a set of global documented procedure and template, constituting the backbone of the system.

Each Country/Legal Entity/Branch and site/project can develop, according specific legal and regulatory requirements and operational controls process needs, Local GBMS Instruction (G-INS) or project documents. The legal representative for each Country/Legal Entity/Branch ensures that such procedures are developed in accordance with the obligations within their area.





The main actor in the preparation and implementation of the HSE management System is the HSE Unit. The mission of the HSE Unit is to ensure the planning, implementation, coordination and monitoring of HSE processes and policies that drive compliance with the Global Business Management System, relevant local regulations and, where applicable, customer requirement. Their function is also to support legal representatives ensuring that HSE Risk Management and the analysis of HSE issues that could have a high potential impact on the Company are performed in a timely manner.

Strong and competent HSE management system also helps to ensure a tight control on procedures and processes, aimed at putting in place a safeguard system as managing prevention and ensuring the safety of its workers is, first and foremost, a responsibility and a demonstration that the protection of workers is the top priority in the value chain. In this sense, Hitachi Rail does not just want to check that its parameters comply with legal regulations but also wants to organize itself through a management system based on prevention and continuous improvement of the performance towards the environment, as also required by ISO 14001.

Demonstrating commitment to the cause of social responsibility towards all stakeholders, Hitachi Rail should implement control and HSE management activities aimed at preventing criminal, civil or administrative sanctions:

- the Enterprise Risk Map identified HSE failure as Hitachi Rail's key risk. Those strategic key

risks are reported to the CEO and monitored by Board of Directors;

- the HSE department interacts with and influences Executives and the Country legal Representative to drive the continuous improvement of HSE Culture.

4.1.1.2 Quality, Health, Safety and Environmental certifications

Manufacturing Sites							
COUNTRY	**SITE**	**IRIS[20]**	**ISO 9001**	**ISO 45001**	**ISO 14001**	**ISO 50001**	**SA 8000**
USA	Batesburg (Rail Control)	✓	✓	✓	✓	–	–
France	Riom (Rail Control)	✓	✓	✓	✓	–	–
Italy	Tito Scalo (Rail Control)	✓	✓	✓	✓ + EMAS	✓	✓
	Naples (Vehicles)	✓	✓	✓	✓	✓	✓
	Pistoia (Vehicles)	✓	✓	✓	✓	✓	✓
	Reggio Calabria (Vehicles)	✓	✓	✓	✓	✓	✓
United Kingdom	Newton Aycliffe (Vehicles)	–	✓	✓	✓	✓	–

[20]ISO TS 22163 Standard (IRIS Certification) is promoted by UNIFE, the Association of European Railway Industries, which guarantees its supervision and control. The IRIS standard was developed starting from the ISO 9001 standard, integrating it with specific railway sector requirements.

Train Maintenance Centres

COUNTRY	SITE	IRIS[21]	ISO 9001	ISO 45001	ISO 14001
United Kingdom	All the Depots: Doncaster, London Swansea, Craigentinny, London-North Pole, London Bounds Green, Stoke Gifford	✓	✓	✓	–
Italy	All the Service and Maintenance activities	✓	✓	✓	–
Spain	Madrid - Operation, Service and Maintenance site	✓	✓	✓	–

Official Sites

COUNTRY	SITE	ISO 9001	ISO 45001	ISO 14001	SA 8000	ISO 27001	CMMI[22]
	London - Head Office	✓	✓	✓	–	–	–
United Kingdom	London	✓	✓	✓	–	–	–
France	Les Ulis	✓	✓	✓	–	–	✓
Spain	Madrid	✓	✓	✓	–	–	–
	Zaragoza	✓	✓	✓	–	–	–
Sweden	Stockholm	✓	✓	✓	–	–	–
Denmark	Copenhagen	✓	✓	✓	–	–	–
Italy	Genoa	✓	✓	✓	✓	✓	✓
	Naples	✓	✓	✓	✓	–	✓
	Piossasco	✓	✓	✓	✓	–	–
Saudi Arabia	Riyadh	✓	✓	✓	–	–	–
Peru	Lima	✓	✓	✓	–	–	–
Taiwan	Taipei	✓	✓	✓	–	–	–
Malaysia	Kuala Lumpur	✓	✓	✓	–	–	–
USA	Pittsburgh	✓	✓	✓	–	–	✓
Australia	Brisbane	✓	✓	✓	–	–	–
	Newcastle	✓	✓	✓	–	–	–
	Perth	✓	✓	✓	–	–	–
	Sidney	✓	✓	✓	–	–	–
	Kerratha	✓	✓	✓	–	–	–

[21] ISO TS 22163 Standard (IRIS Certification) is promoted by UNIFE, the Association of European Railway Industries, which guarantees its supervision and control. The IRIS standard was developed starting from the ISO 9001 standard, integrating it with specific railway sector requirements.

[22] Maturity level 2

Official Sites							
COUNTRY	**SITE**	**ISO 9001**	**ISO 45001**	**ISO 14001**	**SA 8000**	**ISO 27001**	**CMMI[22]**
India	Kolkata	✓	✓	✓	–	–	–
	Noida	✓	✓	✓	–	–	–
	Bangalore	✓	✓	✓	–	–	–

Additional specific local certifications:

- ISO 27001 certification in Genoa site (information security management);
- CMMI registration (Capability Maturity Model Integration) for Engineering & Design sites (Vehicles and Rail Control Lines of Business);
- SA 8000 (Social Responsibility) at present covering all the Italian sites, soon to be extended to the rest of the BU;
- ISO 44001 (collaborative Business relationship) certification in London – UK;
- ISO 50001 (energy management) - Italian sites.

4.2 Ethics, transparency and integrity

Hitachi Rail is aware that the creation of sustainable economic value, in the broadest sense of the term, must also be supported by policies, practices and information processes to ensure and the robustness of an internal control systems that guarantee ethics, integrity and transparency in the day-to-day activities.

In this sense, by confirming the robustness of the implemented controls specifically described below, to date, Hitachi Rail has not received any significant fines and/or non-monetary sanctions for non-compliance with social and economic related concerns, with regulations and voluntary codes concerning the health and safety impact of products, or with environmental laws and/or regulations.

4.2.1 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 employee prevails. This document defines the social and ethical standards

[22]Maturity level 2

to be followed by all employees, identifies the reference principles of the organization, and identifies practical paths and attitudes for respecting and pursuing them.

Ethical HR governance pursues the purpose of building a positive and proactive climate in Hitachi Rail, which promotes interaction and integration between people and departments, facilitates workflows, and improves business performance. One way to achieve this goal requires putting people at the centre of the organization, ensuring equal treatment of all stakeholders, and recognizing and respecting their cultural, gender, and opinion diversity.

The Hitachi Group Code of Ethics 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 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.

4.2.2 Whistleblowing

The Hitachi Group whistleblowing program and policy is applicable to Hitachi Rail and provides for numerous Speak Up channels through which employees and other stakeholders can raise concerns. Hitachi Rail maintains a culture of openness and is committed to the highest standards of sincerity, accountability, and ethical conduct. An essential characteristic of this open culture is the availability of appropriate channels for employees and other stakeholders to report concerns in good faith, and the ability to do so without fear of retaliation. Hitachi Rail employees and other stakeholders can report concerns anonymously, where permitted by law, through the hotline if they wish to do so.

Speak Up channels available to all employees and stakeholders include:

- the Hitachi Group hotline – online or through dedicated local hotline phone numbers available in multiple languages. Navex, an independent third party receives, manages, and processes hotline concerns in a secure and confidential manner. The online reporting tool and local phone numbers are available 24/7;
- the relevant Supervisory Body for STS Group Companies via a dedicated email address OdV@hitachirail.com;
- directly to members of the Legal and Compliance Department, Human Resources Department, or to Managers at Hitachi Rail.

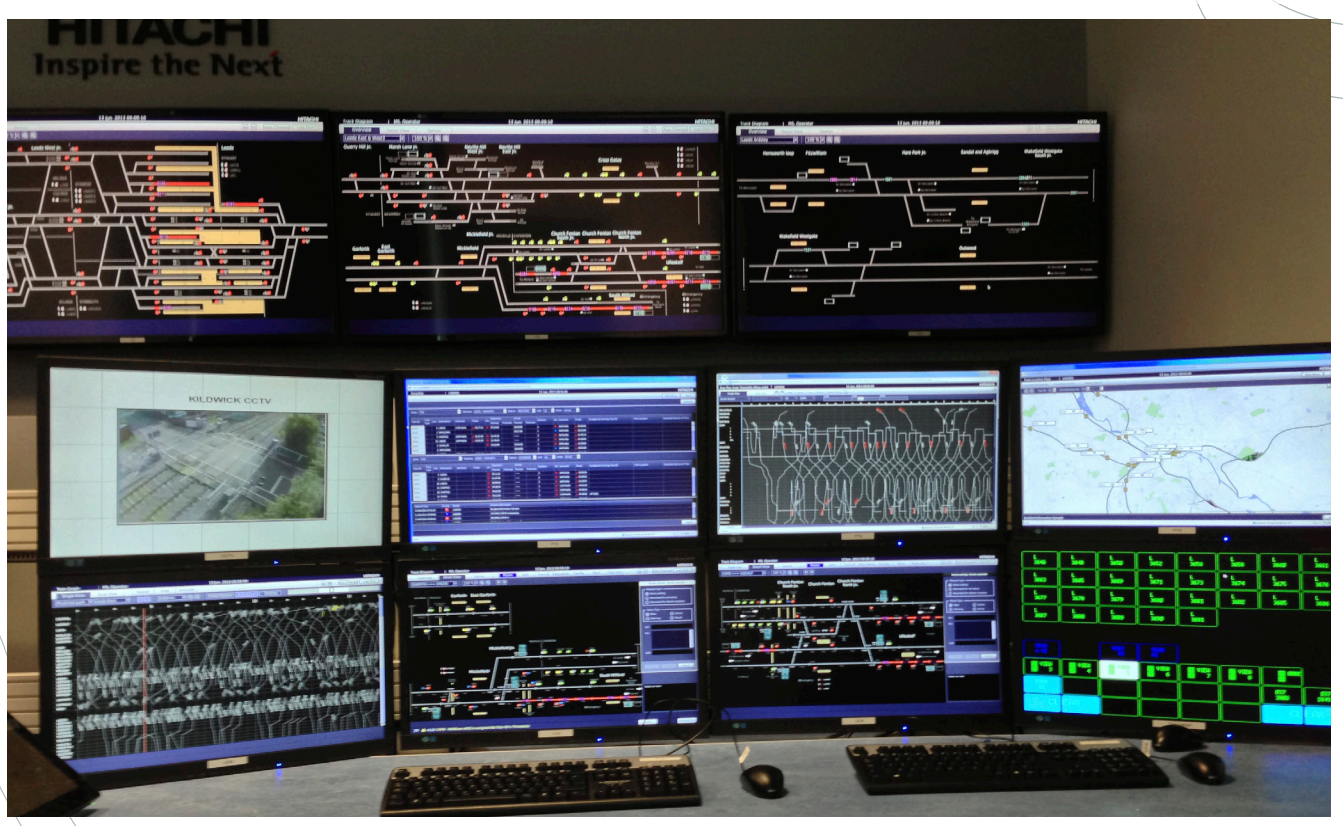
Hitachi Rail ensures whistle-blower protection and that no-one in the workplace is subject to any direct or indirect retaliation, illegal conditioning and/or discriminating treatment of any kind, for having reported in a good faith an alleged or perceived violation to any Speak Up channels.

4.2.3 Legal and Anticorruption

The Hitachi Group promotes and implements a corporate culture inspired by responsibility, sincerity, fairness and ethics. The Hitachi Group's Anti-Bribery and Corruption Policy provides the foundation for all Group companies to ensure the strictest compliance with all anti-bribery and anti-corruption laws. On this basis, Hitachi Rail is committed to tackling corruption and preventing the risk of unlawful practices by ensuring full adherence with Group-level requirements and that all business activities are carried out ethically and legally.

Within the Hitachi Rail Compliance program, a dedicated Anti-Corruption Manual for STS Group Companies and a Policy for Hitachi Rail Ltd. enact provisions for ensuring compliance with anti-bribery and anti-corruption laws. Both the Manual and Policy provide for due diligence of third parties, management of gifts and entertainment, and whistleblowing channels for employees and other stakeholders to confidentially report concerns related to bribery or corruption, and to mitigate and manage associated risks. Hitachi Rail is fully committed to investigating any reported concerns of bribery or corruption and enforces non-retaliation for concern reporting.

During fiscal year 2021/2022, Hitachi Rail did not confirm any incidents of corruption. Through the speak-up channels, two concerns related to violations of internal purchasing procedures were reported and duly investigated, but no instances of corruption or bribery were confirmed. Future objectives include further strengthening and harmonizing all anti-bribery and anti-corruption procedures across Hitachi Rail and reinforcing frequent training and communications to employee base as the first line of defence against corruption risks.



Traffic control desk

4.2.4 Data protection

At Hitachi Rail, the topic of data protection is of great importance. Ensuring the surveillance and guarantee of personal data and the efficient operation and management of the Business Unit 's IT protection system is crucial, and in this sense, data protection is aimed at protecting Hitachi Rail from the risk of unlawful data processing and non-compliance with applicable legislation and shared practices. Data is a corporate value for Hitachi Rail to secure its assets, the Company develops and safeguards data protection along two lines.

The Group has developed distinct approaches to managing data protection: on the one hand, Corporate Data Protection, including GDPR and cybersecurity, and on the other hand, a Customer Data Protection strategy. Both approaches are explored as follows.

Focus on: Privacy and GDPR

Hitachi Rail takes the protection of personal data seriously and proactively manages personal data lawfully and ethically in compliance with current local privacy laws and best international practices. In this perspective, Hitachi Rail, refers to the NIS Directive, Network and Information Security Directive (see EU 2016/1148) or EU Cybersecurity strategy. In consists in the first piece of legislation on cybersecurity at the European level, whereby the European Commission promotes a directive on network and information security at EU level with the aim of improving cybersecurity among EU countries.

The privacy policies and procedures across Hitachi Rail entities, notices, and other customer agreements clearly define the data collected, why it is being collected, who has access thereto, and for how long. Hitachi Rail seeks to process only the minimum data required. Personal data processed in the systems is secured appropriately and treated maintaining the privacy of employees, partners, and customers globally. Hitachi Rail implements its Personal Data Protection governance model, aligned to GDPR principles and international best practices, in all countries in which Hitachi Rail operates, standardizing personal data processing processes and granting the highest level of compliance with local laws. Hitachi Rail's governance model provides for the appointment of a Data Protection Leader, Committee, and Data Protection Officer where required.

In the event of data transfer to third parties or in the context of projects execution, Hitachi Rail data protection and privacy specialists work closely with teams across the Company to maintain compliance with data privacy standards and to ensure that any data is used in an ethical manner.

Moreover, the second guideline introduced by Customer Data Protection concerns the security process in the business area. Critical Infrastructures (CIs) are the physical and virtual assets essential for the effective functioning of Society and the National economy. For Transportation systems and telecommunications, as CIs, damage or destruction by natural disasters, terrorism and criminal activity may have negative consequences for the security of the entire Community. For this reason, a Transportation System needs of a holistic approach for the protection of physical, virtual assets and people, by the combination of the multiple aspects of security, in a unique security framework.

The Cyber Security activities are aimed at protecting the System minimizing risks related to misuse of data and abuse of confidential information by authorized/ unauthorized personnel having malicious intents, exposing passengers and personnel to risk of harm and/or impacting the continuity of operations.

In order to reduce security risks for the System and to achieve an acceptable level of protection, the

security activities will be managed in a structured manner by a Security Management Systems, based on IEC 62443 standards, published on the Hitachi Rail's Global Business Management System (GBMS) with specific Process Description and Process Procedures.

The Security Process is implemented during all the phases of the Project lifecycle, following the general principles of Prevention, Detection and Reaction:

- prevention: aimed at identifying security risks and defining mitigation measures before threats occur;
- detection: aimed at identifying when security incidents occur to ensure the activation of the reaction phase;
- reaction: aimed at managing security incidents after occurrence to ensure the mitigation of their impacts. This phase also includes the Recovery and structured on the principles of the segregation of duties.

The Security Process consists in the following phases:

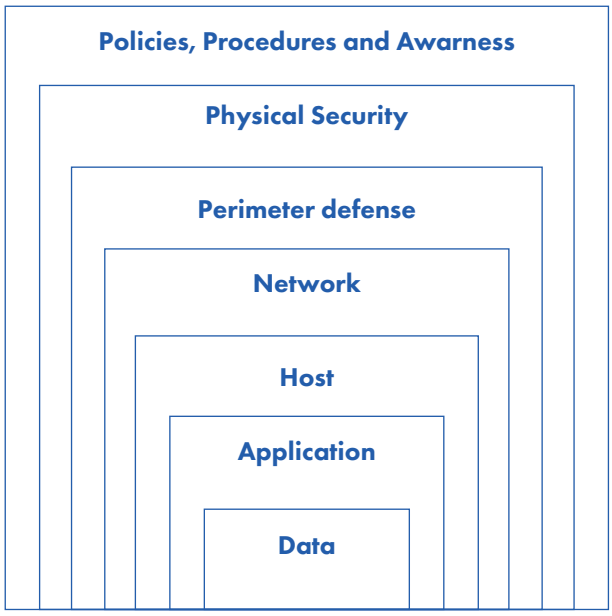
- strategy phase: responsible for policies and procedures management to implement the security framework;
- execution phase: responsible for managing all the Cybersecurity-related activities to achieve an acceptable Cybersecurity Risk Level from Design to delivery of the System to the Customer;
- control phase: responsible for verifying that all the previous phases are correctly implemented;
- operation phase: security policies and procedures will be defined and applied during the operation of the System.

The Process evaluates and monitors the Cybersecurity Risk Level by managing all the cybersecurity activities, in accordance with the contractual requirements, best practice, standards and laws. The aim of the Cybersecurity Risk process consists in protecting transportation system information, minimizing risks related to Data Confidentiality, Integrity and Availability as defined below:

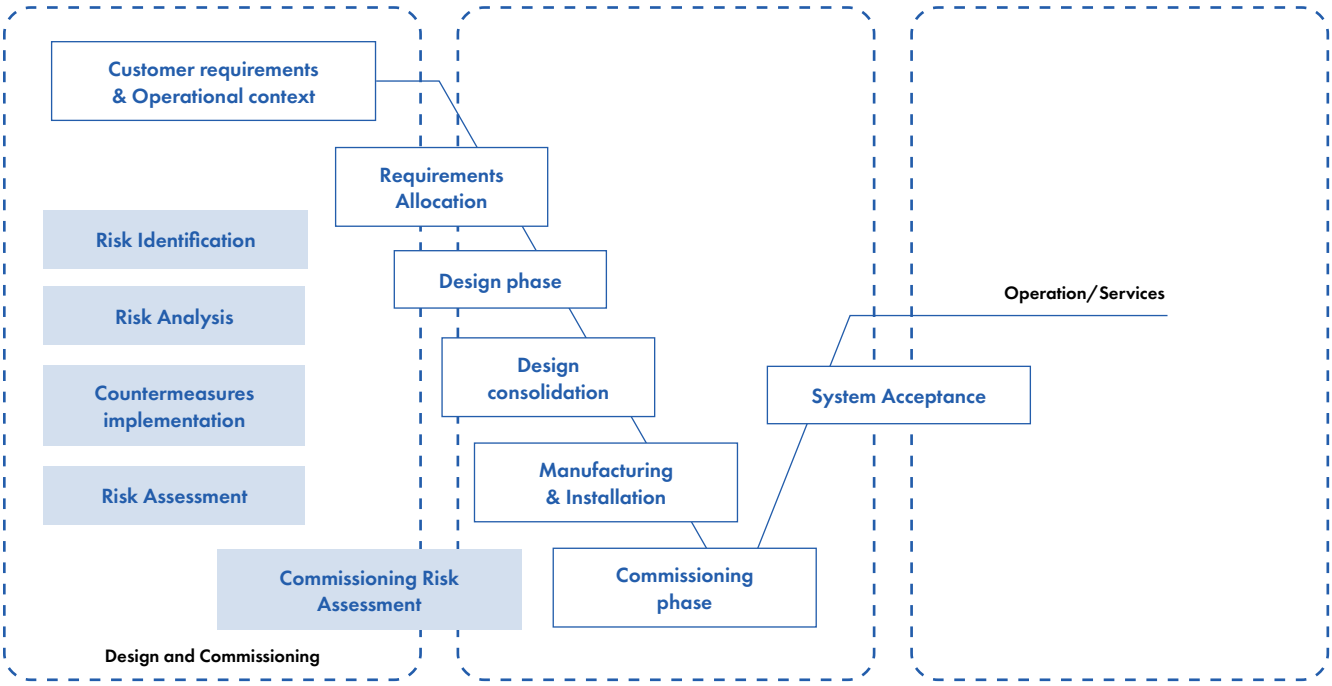
- confidentiality: property that information is not made available or disclosed to unauthorized individuals, entities, or processes;
- availability: property of being accessible and usable upon demand by an authorized entity;
- integrity: property of accuracy and completeness.

The design of the solution is based on the Defence in Depth approach, where concentric domains are identified and protected:

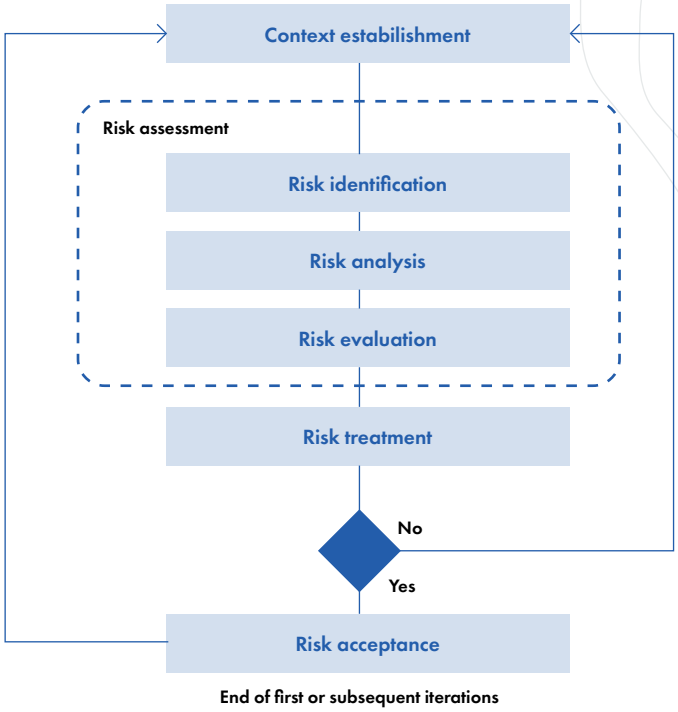
- Policies, Procedures and Awareness;
- Physical Security;
- Perimeter Network Defence;
- Internal Network Defence;
- Host Security;
- Application Security;
- Data Security.



In particular, a Hitachi Rail dedicated team - Security & Control System (S&CS) unit - plans, executes, monitors, and controls Cybersecurity protection of the delivered System/Projects, Signalling Generic Products (GP), Signalling Generic Applications (GA), Signalling Specific Application (SA).



Cybersecurity Risk Assessment



Cybersecurity strategy

Based on the laws, applicable International Standards, Customer/product requirements, the Security & Control System (S&CS) unit defines Cybersecurity strategy to apply, the level of detail of the Security Risk Management activities, and any learning needs. Output of this activity is the Cybersecurity Management Plan.

The S&CS performs a Cybersecurity Risk Assessment of GP/GA for achieving the tolerable risk level and an Assessment of SA for achieving the tolerable risk level in this sense, too.

Finally, the S&CS develops the System Risk Assessment to demonstrate the tolerable System Risk Level including all the other technologies (SCADA, Platform Screen Doors, Communications, Power Supply, Vehicles and so on).

Cyber Security Risk Management, performed during the lifecycle Project phases, requires the following activities:

- security-oriented analysis of proposed communication networks and related subsystem interfaces;
- data flow analysis with related supporting protocols;
- security-oriented analysis of adopted hardware/software solutions;
- countermeasure implementation into the project design (system hardening, network perimeter defence, network internal defence, etc.);
- configuration & commissioning;
- finally, S&CS provides all the operational recommendations and Operation & Maintenance (O&M) procedures to permit O&M organization to ensure the day-by-day operation. In addition, if required by the Contract, any security incident notified/recognized is reported to O&M Organization and managed with respect to contract requirements (Security Incident Management).

4.2.5 Fiscal Transparency

Hitachi Rail follows rules for transfer pricing management and also manages transfer pricing in accordance with the Organization for Economic Co-operation and Development (OECD) Transfer Pricing Guidelines and the laws and regulations on transfer pricing in each country or region where Group companies are located.

In particular, for Intercompany projects, the margin allocation between Group companies, decided at contract award, has to comply with Arm's Length principle and other transfer pricing principles provided by OECD.

Each Group legal entity involved in Intercompany projects is remunerated in accordance with the functions performed, assets used, and risks assumed in the transaction. The "commercial route" for the Projects is decided also taking into consideration the tax implications. During the contracts execution the monitoring is also aimed at identifying possible adjustments, where appropriate.

4.2.6 Organizational, Management and Control Model

In relation to the entry into force of Legislative Decree no. 231/01, as amended and supplemented, which introduced a specific regime of liability for the companies in regards to certain types of crimes, Hitachi Rail has adopted the appropriate measures to prevent such liability from arising for the Business Unit, with the implementation of specific protocols and supervision systems designed to prevent the commission of the crimes included in the Decree and which may potentially be committed by Directors, Statutory Auditors, executives, employees or by any person who has a contractual, financial or commercial relationships with the BU.

For this purpose, different legal entities of the Business Unit have adopted an Organization, Management and Control Model pursuant to Legislative Decree no. 231/01 (the Model), which has been subsequently updated following regulatory and organisational changes.

4.2.7 Competition Law

The Hitachi Group Compliance Program's Fair Competition policy applies to Hitachi Rail. The policy reflects and expands on the fair competition provisions of the Code of Ethics. All employees receive annual Code of Ethics training which reinforces expected behaviours to ensure fair competition.

Hitachi Rail engages in business across the world based on principles of adherence with the law and business ethics as well as fair and open competition in compliance with EU competition laws, and those of other regions in which Hitachi Rail conducts business. In 2022, Hitachi Rail appointed a figure dedicated competition law to manage fair competition promotion and adherence to competition requirements across the business.

4.2.8 Modern slavery

As a member of society, Hitachi Rail can contribute to creating an environment in which human rights are respected. Meeting the responsibility to respect human rights issues, e.g., modern slavery, is key to operating as a responsible business and is accepted to be a baseline expectation.

Hitachi Rail Limited recognizes the importance of identifying and preventing the action and causes of modern slavery in business and supply chain. In its fifth statement, published under Section 54 of the UK Modern Slavery Act 2015, Hitachi Rail has detailed the steps it has taken to address modern slavery and human trafficking in the business and supply chain. A separate Modern Slavery Statement that complies with the Australian Modern Slavery Act 2018 has been lodged with the Australian Government for the reporting period from April 2020 to March 2021.

4.2.9 Export and trade compliance

The failure to comply with regulations on export, import, re-export or re-transfer of products (tangible or intangible), technologies, information, and services (hereinafter "goods") classified as "Dual-Use" has exposed several Companies to administrative and criminal sanctions, reputational damage risks, as well as significant financial losses.

Hitachi Rail shares the concerns of the international community on the proliferation of weapons of mass destruction and the excessive accumulation of conventional weapons. Therefore, Hitachi Rail does not deal in military products and is committed to complying with all applicable export and trade compliance laws and regulations.

Hitachi Rail has developed an efficient and effective Export and Trade Compliance Program, including Export Control procedures, policies and a Manual. The program is applicable to all Lines of Business (LoB) and Hitachi Rail Companies to prevent, manage, and monitor the risk of non-compliance with applicable legislation and regulations on export, import, re-export, or re-transfer of goods classified as "Dual-Use". The above-mentioned Export and Trade Compliance meets the standard

controls required by the Regulation in force and the best practice (here included the European Commission Recommendation) and based on the following seven pillars:

- top-level management commitment to compliance;
- organization structure, responsibilities and resources;
- training and awareness-raising;
- transaction screening process and procedures;
- performance review, audits, reporting and corrective actions;
- recordkeeping and documentation;
- physical and information security.

In order to reach this target, Hitachi Rail exercises Export and Trade Compliance due diligence against any possible illicit transactions and ensured that no products are provided, and no trade is carried out in any country or any entity in violation of laws and regulations.

In 2019, Hitachi Rail started the classification of all products manufactured in each Hitachi Rail factory. The Classification of all Signalling & Turnkey products manufactured in Italy was completed in 2020, and the Business Unit has currently completed the classification of remaining products manufactured in US and France factories. Some products manufactured by S&T have been classified Dual Use (i.e., typological Racks, boards and software). With reference to the products manufactured by the Rolling Stock/Vehicles Line of Business, classification of products is ongoing and near completion.

All Hitachi Rail Employees – especially those directly involved in trade, export, transfer, re- export and re-transfer activities/processes – are requested to operate in full compliance with the Laws and Regulations in force. In order to create an Export and Trade Compliance Culture, various training opportunities have been organized (an e-learning has been launched for all employees and specific training sessions have been organized for the Employees directly involved in the activities related to Export and Trade compliance).

4.3 ESG Risks

The integration of ESG factors is assured through structured processes at both Group and Business Unit levels, which include analysis of the sustainability context, identification of priorities for Hitachi Rail and Stakeholders, implementation of specific actions in support of sustainability goals, and reporting. At each stage of the process, alignment on respect for human rights is considered a fundamental element in pursuing sustainable success.

A central aspect of the mentioned approach is the adoption of ESG (Environmental, Social, and Governance) sustainability indicators within the entire value chain, not only to report on the results achieved but above all to anticipate decisions and guide actions. Hitachi Rail is constantly striving to always manage and measure performance on all relevant aspects, considering economic, business, and ESG issues when reporting on activities and defining the objectives underlying the strategy.

4.3.1 Sustainability Risks and Opportunities

In terms of Risk Management, Hitachi Rail aims at implementing policies to improve its environmental, social and governance performance. Opportunities are identified by setting techniques and tools to help to understand possible improvements to the management of ESG objectives, with the idea that understanding the full range of possible threats is a functional activity for recognising risks and structuring operational strategies to guard against each specific sustainability risks identified.

Through the following tables, the risk descriptions, and consequent courses of action to cover them can be seen. Addressing ESG opportunities also means listening to the needs of its stakeholders and consequently represent value-creation opportunities: by improving risk & opportunity management, Hitachi Rail can consistently achieve global best practices, manage awareness and yield fruitful insight into:

- potential opportunities for which innovation may be appropriate;
- which risks should be mitigated.

Topic	Risk description	Risk management
Direct and Indirect GHG Emissions	• Environmental impact of production processes, product composition and increase in energy consumption; • Possible negative effects on the activities to be carried out influenced by climate change; • Potential impacts on product design and modifications due to regulation of greenhouse gas use and emissions; • Increased energy consumption costs.	• Analysis and assessment of risk to climate change at the international level; • Legislation, standards and professional information sources are pro-actively monitored; • Implementation of operational control procedures; • Definition of environmental objectives.
Energy consumption	• Growth in costs related to energy consumption; • Uncertainty around energy security and resilience; • Lessened ability to compete with market competitors.	• Investments to reduce consumption by verifying potential profitability; • Adoption of projects aimed at reducing energy consumption in factories by increasing equipment energy efficiency and using energy from renewable sources; • Analysis and assessment of energy market trends, and associated energy procurement activities.
Effluent and waste	• Failure to comply with regulations and/or environmental permits by the Business Unit and suppliers on projects/ activities • Potential to adversely impact environmental receptors through non-compliant release or disposal of effluent or waste. • Changes to the legislation with sanctioning risks.	• System for monitoring the evolution of regulations worldwide; • Monitoring and assurance activities relating to release or disposal of effluent or waste; • Adoption of projects aimed at reducing the production of factory waste and wastewater management.

Raw material consumption and recycling	• Failure to comply with Regulations by the Company or suppliers in the sourcing, use, declaration, and disposal of materials; • Failure to anticipate changes which can impact material use.	• Legislation, standards and professional information sources are pro-actively monitored; • Compliance with existing regulatory, customer and Hitachi Rail requirements are assured through the HSE Management System; • Increased use of life cycle assessment during eco-design activities to minimize raw material consumption, recyclability and recoverability of products.
Polluting air emissions	• Environmental impact of production processes, product composition and the need to reduce or eliminate the use of hazardous substances; • Increase in technology investment costs; • Changes to laws that involve risks of penalties.	• Implementation of monitoring systems for processes and plants; • Designing better solutions; • Specific training on Hitachi Rail standards and changes in terms of process/product.
Water consumption	• Increase in technology investment costs; • Changes to laws that involve risks of penalties.	• Implementation of monitoring systems for processes and plants; • Specific training on Business Unit standards and changes in terms of process/product.
Health and safety	• Failure to comply with Regulation contractual requirements or Hitachi Rail procedures in identifying occupational health and safety hazards; • Incorrect or inadequate assessment of the risks which the hazards identified create in particular cicumstances of use; • Failure to re-assess following changes to hazard or risk requirements.	• Risk identification and mitigation in bidding phase; • Engineering controls identification during early stages (Design phase) for risk management; • Compliance with the BU's HSE Risk Management System; • Horizon scanning of regulatory changes, contractual changes and technical journals.
Diversity and equal opportunity	• Attracting right talent; • Discriminating.	• Ensuring equal opportunity by easing global mobility of talents and cross-cultural fertilization; • Explore solutions for supporting gender equality; • Continuing to offer competitive and equitable benefits and compensation; • Promote opportunity and career development; • Ongoing provision of accessible development opportunities; • Further enhance coaching and training on diversity and inclusion topics.
Employee well-being	• Work and home life pressures and events may result in the poor mental health of employees; • Employees may from time to time suffer from medical conditions or have long-term conditions which could affect their ability to carry out their role.	• Increase continuous communication and institute employee well-being programmes; • Develop programmes to support employees mental and physical well-being; • Continue to monitor employees's engagement through an annual survey.
Respect of Human Rights	• Increasing legislation on businesses to be held accountable for human rights related violations within its own business and operations, as well as by companies within its supply chain.	• Hitachi Rail will promote the understanding of internationally recognized human rights and will respect and not infringe on the human rights of all those involved in business activities; • Hitachi Rail will assess and prevent potential violations of human rights. In the event of such a violation, Hitachi Rail will promptly take internal and external actions to correct and remedy the situation; • The Company will respect individual human rights in the recruitment and treatment of employees and during all other Hitachi Rail's activities and will not engage in any acts that may impair individual dignity or discriminate on bases such as sex, sexual orientation, age, nationality, race, ethnicity, ideology, belief, religion, social status, family origin, disease, disability;

Respect of Human Rights		• Hitachi Rail will strive to resolve issues through sincere and constructive discussion between management and employees, in compliance with the laws, regulations, and labour practices of each country and region, and in accordance with international norms and standards; • Where Hitachi Rail identifies that it has caused or contributed to a negative human rights impact, it will provide for, or cooperate in, legitimate processes to provide remediation; • The Company also adheres to national law and regulation in each market in which it operates. If Hitachi Rail faces conflict between internationally recognized human rights and national laws, it will follow processes that seek ways to honour the principles of international human rights; • Hitachi Rail will provide appropriate training and capacity building in order to embed this policy commitment and will engage with relevant external Stakeholders about addressing potential and actual human rights impacts.
Ethical management of Supply Chain	• Risk of reputational damage due to business partners' conduct not in line with ethical and compliance requirements for Supply Chain	• Compliance with the Supplier Code of Conduct is mandated and required of all suppliers at contracting stage and monitored throughout the lifecycle of the contract; • Implementation of human rights due diligence appropriate to the social circumstances of the countries and regions where Hitachi Rail has operations and the nature of its businesses, products, and services there; • Development and implementation of ongoing human rights due diligence to include identifying and assessing potential and actual human rights impacts and taking appropriate action to prevent or mitigate risks. The Company will track these processes to ensure the effectiveness of its actions to address impacts and risks and develop mechanisms to report these findings externally; • Completion of risk assessments to identify key vulnerabilities in the supply chain; • Transformation of supply chain to enhance and improve ESG footprint whilst simultaneously managing against future risks; • Remediation and management of incidents through internal governance frameworks; • Continued surveillance to verify on going compliance; • Escalation process for non-compliance.

Another risk category covered by Hitachi Rail concerns anti-corruption. Hitachi Rail is committed to Enterprise and Compliance Risk Management, including identifying opportunities to strengthen controls and mitigation plans to lower risk exposure. Hitachi Rail has proactively taken steps to conduct risk assessments related to projects being executed based on selection criteria to determine where risks may be higher.

Hitachi Rail is committed to ensuring all employees receive annual refresher training on the Hitachi Group Codes of Ethics and Compliance, which include dedicated sections on expected behaviour and standards for doing business to ensure anti-bribery and anti-corruption measures are satisfied. This annual training is mandatory for all Hitachi Rail employees globally, and execution thereof across the business was concluded in March 2022.

4.4 Towards a sustainable Value Chain

Hitachi Rail is continuing to progress with the ambition of becoming a leader on ESG responsibilities and to align policies and practices to the wider Hitachi Group standards in this space.

To address this challenge, Hitachi Rail, started to collaborate with Normative and suppliers to provide a digital Carbon Accounting Engine which uses the Greenhouse Gas (GHG) Protocol to estimate total carbon footprint through a spend-based methodology. 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.

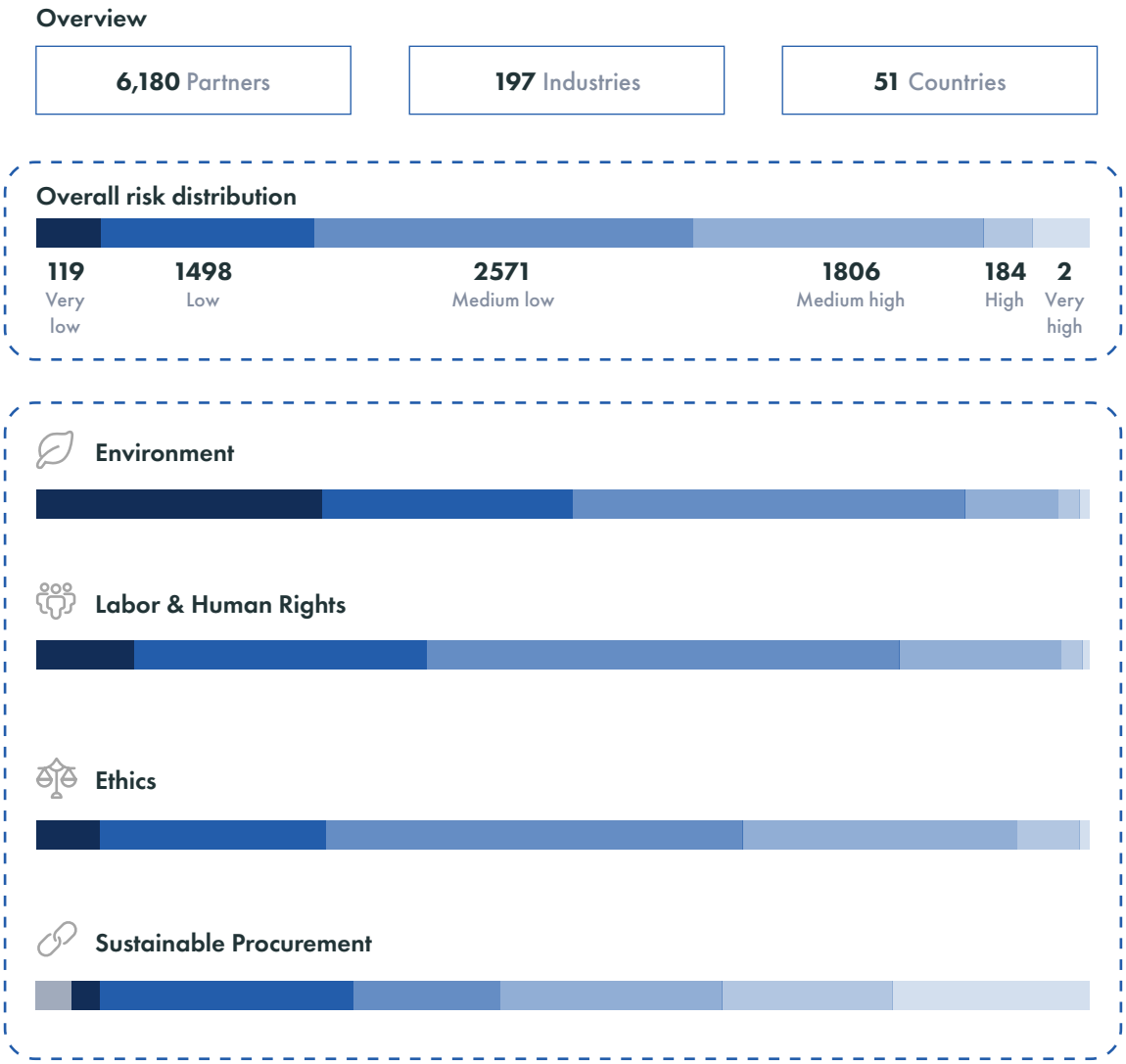
The methodology adopted takes the cost of the purchased goods and services to estimate the corresponding GHG emissions. This approach has enabled Hitachi Rail to significantly expand the understanding of categories and suppliers that represent the most significant impact from a GHG / Carbon perspective and prioritise activities to address these impacts with suppliers, amounting to almost 96% of the total Scope 3 GHG emissions for the reporting period.

The Company has also been able to determine the categories of spend with the highest levels of carbon intensity. This gives a clear opportunity to focus the efforts in collaborating with top supply chain partners to address their emissions as well as a way to track and monitor the progress towards carbon neutrality over time.

Meanwhile, all suppliers are being encouraged to register in the EcoVadis Ratings platform and the Business Unit is using the EcoVadis Carbon Action Module functionality to engage suppliers in climate action, build capability and collect primary data. This will provide a better understanding of suppliers' sustainability and decarbonisation practices, strengths, and areas for improvement.

Hitachi Rail has uploaded and assessed the potential risk posed by over 6,000 suppliers using the EcoVadis platform which has enabled Hitachi Rail to create a CSR & Sustainability risk profile for suppliers against 4 key criteria: Environment, Labour & Human Rights, Ethics and Sustainable Procurement. This represents well over 90% of the total annual 3rd party spend and provides critical insights on the inherent risks profile of suppliers in terms of the industries they work in and the countries in which they operate. This allows Hitachi Rail to have a holistic CSR & Sustainability risk profile and enables Hitachi Rail to focus on resources and prioritise the highest potential risks.

Company risk distribution per theme



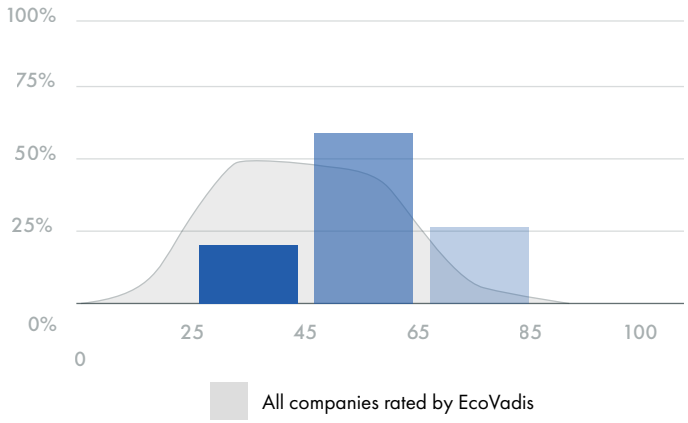
Through a defined implementation plan based on risk and supplier materiality, Hitachi Rail today has over 475 top suppliers fully registered (with over 100 additional suppliers in progress) in the EcoVadis ratings platform, providing detailed visibility of their CSR & Sustainability performance. Over the year, it will continue to expand the number of suppliers invited to join the platform, providing essential information on the performance of supply base and forming a basis for a broader Sustainable Procurement strategy.

These suppliers represent over 30% of annualized Procurement spend with a goal to increase this to over 50% by end of FY22. The Business Unit has also deployed the EcoVadis Carbon Action module which provides Hitachi Rail with access to detailed performance and emissions data related to Carbon and other GHGs. This module was introduced in 2021 by EcoVadis with Hitachi Rail as one of the early adopters of this technology.

Sustainability performance

Rated	In progress
478	**107**

Overall score distribution



Environment
6 low theme scores

Labor & Human Rights
1 low theme score

Ethics
4 low theme scores

Sustainable Procurement
19 low theme scores

More than 2 million rows of supplier and expense data were uploaded to the identified platform to feed the platform's Scope 3 calculation engine. For the first time, Hitachi Rail has a view of the total Scope 3 emissions for suppliers which typically represents 80%+ of overall upstream emissions for a Business Unit. The solution enables the Company to visualize the overall Scope 3 emissions, the highest impacting categories of spend and the highest impacting suppliers which enables Hitachi Rail to prioritize interventions and improvement actions with supply base. This data is forming the basis for Scope 3 emissions reporting in global Hitachi Rail Sustainability Report – greatly enhancing the coverage of what Hitachi Rail is able to report against Scope 3 versus previous years.

In FY22 Hitachi Rail plans to continue to enhance the data in the platform through engagement with suppliers who have the highest impact on GHGs and carbon for Hitachi Rail to gather primary data on their Scope 1 & 2 where available and collaborate on initiatives to help reduce carbon intensity in the value chain.

4.4.1 Supply Chain & Procurement Overview

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 the 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 Company 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.

An overview of the regional distribution of supplier base can be found below:

As of 31.03.2022

Supplier distributions	n.	% on total
Europe	4,257	55.1%
Asia Pacific	1,841	23.8%
Americas	1,420	18.4%
Africa	24	0.3%
Middle East	187	2.4%
TOTAL	**7,729**	**100%**

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 the 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.

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.

4.4.2 Sustainable Supply Chain Strategy

Strategy

Sustainability will be the next big game changer of industry and business; it has to be placed at the heart of supply chain strategy if Hitachi Rail is using it to address the climate crisis and transition to an economic model that is regenerative and fair. The latest Intergovernmental Panel on Climate Change (IPCC) report demonstrates there is no time left for incremental progress and complete systems change is needed to grapple with the enormous challenges that face planet and the people who live on it.

The vast majority of a business's social and environmental impact occurs in the supply chain. It is through Sustainable Supply Chain Strategy that Hitachi Rail will drive positive intentions, deliver sustainable change and ultimately empower the achievement of its Sustainable Development Goals promises.

What Hitachi Rail has done

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

Where Hitachi Rail is going

In the next reporting period, Hitachi Rail's current sustainable procurement strategy will be updated. New sustainability criteria will be introduced in all procurement processes. A gradual approach will be introduced to achieve specific sustainable procurement standards. This will include the integration of procurement cross-country standards and/or country risks related to various environmental, social, and governance (ESG) impact factors. The EcoVadis platform will be used to guide, manage, and report on sustainable performance, including the management of corrective action plans where improvements are needed. In addition, existing know-how on ESG issues will be displayed to strengthen risk mitigation to involve the entire supply chain.

Next year Targets and KPI's

Hitachi Rail's target for the next reporting year is to introduce and deploy the Sustainable Procurement Strategy and select key projects to pilot and develop KPIs and an action plan. This will be parallelly done to an enhancing of suppliers' EcoVadis IQ registration in order to account, monitor and act toward a more sustainable supply chain.

4.4.3 Supplier Governance & Guidelines

Hitachi Rail operates under the governance and guidance of key documents that outline the expectations for all employees and third parties.

The Code of Ethics and Supplier Code of conduct set out specific requirements which must be followed by everyone working for or with Hitachi Rail and the key aspects of each are detailed below. The Code of Ethics is fully deployed across all areas of Hitachi Rail, while the Supplier Code of Conduct is in place for the UK and Japan business areas with deployment in Italy planned during FY22.

Also, with the objective of maintaining high ethical standards and working in compliance with the applicable laws and regulations, whilst also promoting a safe environment to report potential or suspected violations, Hitachi Rail has a dedicated SPEAK UP channel whereby anyone can report any suspected violations of the Group Code of Ethics or any violation of laws and regulations during the procurement process.

The Company ensures whistle-blower protection also in the supply chain and that no-one among suppliers is subject to any direct or indirect retaliation, illegal conditioning and/or discrimination ng treatment of any kind, for having made reported in a good faith report of a violation.

4.4.3.1 Supplier Code of Conduct

Hitachi Rail's Supplier Code of Conduct highlights the way to do business and the expectations of suppliers.

The Code of Conduct is aligned to core business values and reinforces the group-wide commitment to achieve carbon neutrality by 2050. Hitachi Rail is committed to having all its suppliers conform to the Business Unit's standards, as well as to the agreed business conditions. This is important because it promotes customer trust and confidence with products and services and shows them that suppliers are valued partners in this process. Encompassing human rights, health and safety, environmental management, ethics, supplier commitment, product quality and data protection, policy and expectations are clearly explained in this document.

This Code of Conduct is derived from principles of the UN Global Compact, of which Hitachi Ltd. is a proud member. For Hitachi Rail's business, the Code of Conduct also reflects the commitment to becoming a climate change innovator and product solutions and integration with international Sustainable Development Goals have been central for Hitachi Rail's business strategy for a number of years.

Hitachi Rail calls on all suppliers to act as ethical and responsible companies, to commit to the sustainability of their supply chains, and to promote innovation and excellence for the rail industry. Following the publication of the Code of Conduct, Hitachi Rail, in partnership with all suppliers, is committed to doing its part to provide the best for the millions of passengers who travel the world's rail networks every day, for the benefit of a more sustainable society.

4.4.4 Digital Supplier management

As part of the overall strategy for Supplier Management, Hitachi Rail has been increasingly driving an agenda of digitization in supply chain to help manage and mitigate risks, drive Sustainability and increase focus on carbon neutrality.

In FY21, Hitachi Rail in the UK significantly improved the scope of its Supplier Due Diligence program by identifying potential operational risks facing the supply chain in terms of financial stability and compliance with human rights, ethics, and other social factors. Leveraging digital tools offered by third-party data providers, including Bureau Van Dijk, to pre-emptively examine risks related to these areas before engaging other entities as potential suppliers to Hitachi Rail. In FY22, this approach will be extended globally through the implementation of a supplier on boarding process which will be facilitated by the Jaggaer eProcurement digital platform. Over the past year, Hitachi Rail had also 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 can prioritize the investigation on how suppliers operating in high-risk industries and/or high-risk countries manage these risks through specific CSR & Sustainability practices. Based on an assessment by EcoVadis analysts, a Supplier CSR & Sustainability Scorecard is created which provides a rating for the supplier, identifies key strengths, weaknesses and areas for development.

Hitachi Rail will use this information to inform supplier engagement strategies with suppliers, to review current performance on CSR & Sustainability and work in a collaborative manner to define improvement over time. Suppliers themselves can leverage the EcoVadis platform to map and track their decarbonisation journey over time as well as to access in-platform e-learning to build the capacity necessary to make the critical changes required to reduce GHG emissions.

4.4.5 Our customers

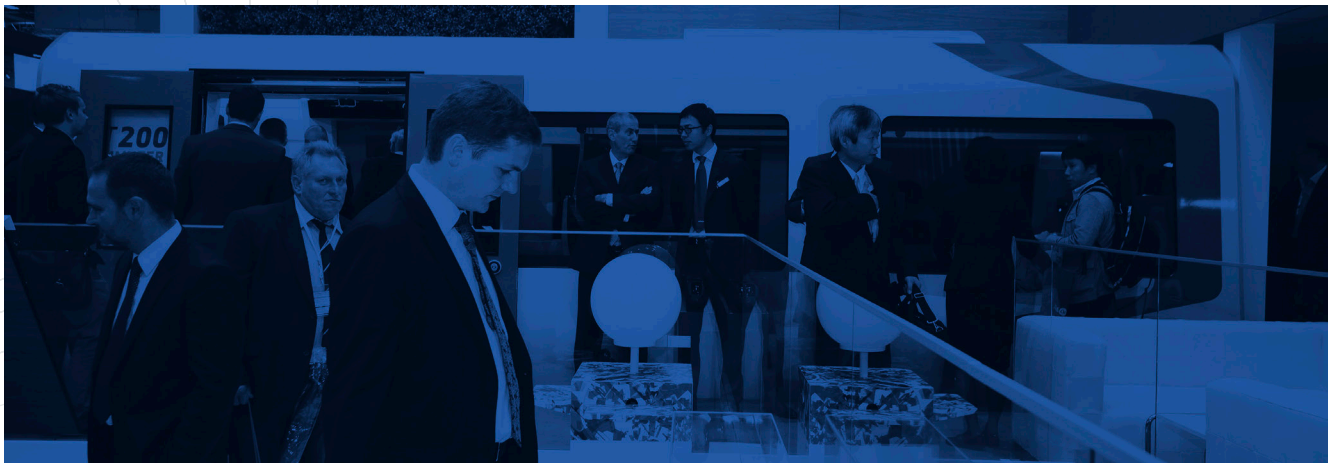
Hitachi Rail's breadth of rail experience and research and development programmes has created new, innovative trains and infrastructure, meeting the demands of passengers, operators and governments all over the world for rolling stock, traffic management systems, signalling and much more. Its global expertise means that the Company 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 Company relies on its global supply chain partners to help Hitachi Rail provide the most reliable and innovative solutions to its customers 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 works 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.

Hitachi Rail's partnership with Hitachi Power Grids allows the firm to offer leading fast battery charging technology and electrification solutions. The strength of Hitachi's IT and AI capabilities, with GlobalLogic, Hitachi Vantara, alongside the Lumada platform, creates great opportunities to deliver a digital mobility solution for customers.



4.4.5.1 Customer engagement

Hitachi Rail's Social Innovation unit is composed by experts a co-creating with customers to help develop new solutions to real world challenges, working closely with the extensive international supply chain to promote innovation, resilience, and sustainability. Hitachi Rail knows its ability to deliver for customers depends on its suppliers. Alongside project management customer communication, Hitachi Rail actively engages with customers proactively to ensure they are aware of business news, updates and developments to support the wider brand.

This is achieved through virtual and face-to-face conferences, trade shows, press releases, editorial content and through the group website – www.hitachirail.com. Advertising publications and online advertising support these efforts, especially through the use of social media channels, to reach decision makers, media and industry associations.

Customer surveys are also undertaken as part of a 360-degree feedback loop to fully understand customer needs and requirements. These surveys are actively undertaken with new and existing customers – allowing communication plans and tactics to be adjusted as appropriate based on qualitative feedback. Industry awards further support these initiatives and the Hitachi Rail team submit projects for consideration to a wide range of industry bodies and awards covering mobility and sustainability excellence. These combined communication tactics are essential to how Hitachi Rail develops existing customer relationships and supports bidding activity to ensure new customers have a deep understanding of Hitachi as a business, as well as the solutions it can provide.

Customer Satisfaction activities are handled by a team made of the managers of the various departments: Safety, Health Environment, Quality, EMEA Business Unit, Americas & APAC Business Unit, Operation & Maintenance Business Unit and Operations Units. These activities take place at various stages and are carried out using different tools to accurately monitor the level of customer satisfaction and project status until the completion of the project.

- 5.0 -

[Kaitakusha - Seishin]

Pioneering Spirit

5.1 Be a Climate Change Innovator

5.1.1 Facing Society's New Challenges Through Innovation

5.1.2 A team dedicated to Innovation

5.1.3 Towards a harmonized Society with Nature (Resource management)

5.1.3.1 Circularity: New Circular Economy Business Model Project

5.1.3.2 Eco-Design in Hitachi Rail

5.1.3.3 Social Life Cycle Assessment of products: the first train application

5.2 Environmental Policy

5.3 Materials and Energy

5.3.1 Consumption of Substances and Materials

5.3.2 Energy consumption

5.3.3 Energy consumption trends

5.3.4 Renewable Energy

5.4 Emissions

5.4.1 Direct and indirect greenhouse gas emissions

5.4.2 Polluting emissions and Air quality

5.5 Waste

5.6 Water and Effluents Management

5.1 Becoming 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 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 the Business Unit in the right direction as it delivered a 3.5% reduction year-on-year in tCO_2e emissions between FY 2020 and 2021.

To put this data into perspective, considering the average diesel car mileage per year (2021) and the average diesel car CO_2e emission factor (2021) as per the UK Ministry of transport[23], the tCO_2e 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 of 2021.

In order to pursue such an ambitious goal in continuity with its growing business, Hitachi Rail has permeated its Environmental roadmap with the goal of decarbonisation through various actions involving selected production sites and running along the entire value chain, with the consequent adoption of the circular economy model for its product lines.

In December 2020, Hitachi Ltd. received validation of its emission reduction targets from the Science Based Targets initiative (SBTi), the international organization that helps companies setting emission reduction targets in line with the Paris Agreement goals of keeping mean global temperature to well below 2°C and preferably limit the increase to 1.5°C above pre-industrial levels. Corporate made a commitment to reduce its absolute Scope 1 and 2 GHG emissions by 100% by 2030 and absolute Scope 3[24] GHG emissions by 40% by 2030, considering a 2010 baseline.

Reflecting the spirit of the SBTi commitment from Corporate, Hitachi Rail set two intermediate goals to monitor Scope 1 and 2 reduction progress at selected sites. Also, in order to structure a pathway applicable to all its facilities, Hitachi Rail is conducting a Pilot Analysis on seven key facilities, monitoring their year-on-year emission trends and the effectiveness of the applied solutions against baseline year emissions. This will allow the Business Unit to delineate the most efficient emission reduction roadmap for the remaining sites.

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

[23]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) Conversion factor 2021 revised January 2022 and Annual mileage of cars by ownership and trip purpose: England, since 2002.

[24]To find out more about Scope 3 calculation method please refer to the Methodological Note.

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 cutting carbon in the mobility sector. Hitachi Rail manages its innovation projects as plans or proposals aimed at providing solutions. 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:

1. using technology to decarbonise its own industrial footprint and contributing to carbon neutrality targets following Corporate adoption of Science-Based Targets;
2. driving a modal shift by making rail an attractive alternative and enhancing with Mobility as a Service;
3. 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).

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) 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 equivalent per passenger km[25].

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, as of today the global non-electrified rail transport relying on diesel amounts to no more than 25%.

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.

Therefore, innovation for Hitachi is the way to:

- Reflect on the impact that the technological innovations are making on society, by developing new solutions in the world of transport, industry, infrastructure, health, and energy;
- Understand how advanced technologies can affect the development of smart communities by creating new and dynamic business models;
- Evaluate how the new technological solutions improve the management by adopting integrated processes thanks to the availability of additional data and information together with the customer and the Stakeholders;
- Discover how Hitachi Rail is taking part in virtuous systems to guide businesses, institutions, and towns by adopting a collaborative approach and by integrating IT and Operational Technologies.

[25]Hitachi Rail Caravaggio Train Environmental Performance Declaration.

5.1.1 Facing Society's New Challenges Through Innovation

To meet the SBTi commitments made by Hitachi Ltd., Hitachi Rail prepared a roadmap for decarbonisation, which, among other elements, also deals with infrastructure and the development of the mobility sector as municipal conglomerates and urbanization rise.

While accounting for Scope 1,2 and 3 emissions and their reduction in Hitachi Rail, innovation and technology crucially step in with the aim of improving energy efficiency, increasing the use of renewable sources and adapting new, innovative solutions to the existing designs.

1. Scope 1 reduction in direct emissions from energy sets out the objective of enhancing efficiency, through the adoption of systems which enable the planning, implementation and measurement of targets for the reduction of GHG emissions;
2. Scope 2 emissions reduction includes purchasing electricity from renewable sources (in line with market-based calculation methodologies), and generating Hitachi Rail's own electricity with solar photovoltaic (PV) on Hitachi Rail's Facilities;
3. Emissions from the Scope 3 category reduction logically involve decarbonising suppliers, products and services, before and after being provided to Hitachi Rail's B-to-B customers. Here, as it will be further discussed, circular economy and eco-design solutions play a crucial role.

Decarbonising existing facilities is among the key priorities for Hitachi Rail, given the high number of sites the Business Unit has in 38 countries. In particular, as already suggested in Chapter 2, Hitachi Rail has implemented innovative interventions in selected key sites that have the highest carbon impact in the Company. Choosing to take a progressive approach towards carbon neutrality for the most polluting sites with high production rates and intensities underlines Hitachi Rail's commitment to a long-term transformative approach.

In addition to reducing carbon emissions, decarbonising buildings also offers improved benefits such as energy affordability and contributing to green jobs. Hitachi Rail is empowered by the accountability of its worldwide Facility department achieve the main targets defined inside its approach of Scope 1 and 2. Starting from last year, the Facility management of Hitachi Rail assets has been favouring a facility management focalized on adding value to Environmental and Energy Management System.

Main strategic objectives (integrated in the two pillars "Energy efficiency management" and "Resource's efficiency") of Sustainable Facility are:

1. Implementing at a global level Energy management optimization plans according to the sustainability roadmap, covering the period 2020-2030;
2. Leading worldwide partnership with an expert on the matter (Hitachi Europe) to implement one energy optimization strategy and approach inside Hitachi Rail starting already in 2020;
3. Ensuring a continuous efficient and effective global Real Estate properties management with the aim to maintain their suitability;
4. In order to develop a holistic approach to achieve the decarbonisation target Hitachi Rail is committed to, each investment, equipment enhancing and initiatives, are evaluated through the 3R approach: Reuse, Recycle, Reduce.

5.1.2 A team dedicated to Innovation

In January 2019, Hitachi Rail created a team explicitly and exclusively dedicated to the theme of innovation, with a plan for development covering the next few years, aimed at building a group of people working on innovation projects with dedicated budget and resources.

This definition highlights how, in Hitachi Rail, innovation is based on a structured process that requires a rigorous approach, relevant needs and requirements, clear objectives and a well-defined set of activities to achieve them. Starting from the customer need, Hitachi Rail identifies a business opportunity that can be fulfilled. The best solutions (ideas) are identified, and alongside them, new technologies and competences required for their development are acquired. According to the logic of 'open innovation' the prototypes of these new solutions are developed to demonstrate their effectiveness in fulfilling the need. This creates a positive impact on the business and the community.

Hitachi Rail's innovation team has become a collector of opportunities, ideas, and skills, delving into new technologies. The final objective is to create prototypes of new products and solutions that, transferred to the engineering and development departments together with the related new skills, can enrich the Hitachi Rail's product portfolio of tomorrow.

The Innovation team gives priority to those projects that best meet the sustainability requirements and the most innovative needs of Hitachi Rail's customers and their own customers. From this process, two important framework projects were created: "Zero Infrastructure" and "Services for Mobility (S4M)."

The "Zero Infrastructure" framework encompasses projects aimed at eliminating parts of the physical infrastructure such as servers and power and telecommunications cables alongside railway lines.

This will allow Hitachi Rail to provide solutions with less equipment and consequently that consume less. In the case of physical equipment still needs to be powered, green alternative sources of energy are used together with batteries and capacitors.

In addition, this solution also reduces the cost of operating and maintaining the railway.

The projects within the "Zero Infrastructure" framework are:

- The creation of alternative green power sources to power the signalling systems along the line;
- The study and design on the use of cloud computing in signalling and automation systems, including the implementation of Verification and Validation laboratories on the Cloud;
- The use of wireless communications to connect the signalling systems installed along the line with the central station.

The S4M (Services for Mobility) framework consists of projects with the objective to develop services aimed at improving the management of the public transport traffic, consequently increasing its attractiveness towards the passengers. S4M was designed to enable the migration from private to public transport and so reduce the environmental contamination.

The projects inside S4M framework are:

- The study and design of a multimodal traffic management system in order to improve the management of the public transport traffic analysing in real time the information coming from technologies that monitor the passenger flow;
- The design of door-to-door, multimodal services for passengers, which provide real- time information about the position and occupancy of the public transport vehicles, including the occupancy of the stations. With this information, passengers will be able to plan the trip in a more flexible way, which is a necessary condition of safe travel during the Covid-19 pandemic;
- Finally, the application, which will also integrate

other services such as seamless ticket payment methods for public transport and parking.

While the Zero Infrastructure program can be regarded as addressing some of the most relevant SDGs, such as Goal 9, building resilient and sustainable infrastructures reducing waste, use of raw materials, energy consumption and, indirectly, use of land by reducing the need at Hitachi Rail clients' sites for dedicated space for its equipment, on the other hand, the S4M program on the other hand mainly focuses on Goal 11, by making transport systems more attractive, reliable, convenient and safe for passengers.

A partnership established with HTT (Hyperloop Transportation Technologies) will allow Hitachi Rail to test the applicability of high-speed railway signalling systems in an innovative context, contributing to the implementation of the "fifth mode of transportation". Hyperloop systems are largely powered by alternative sources of energy, and this cooperation will foster the adoption of the Zero Infrastructure paradigm by providing a real use case for an innovative signalling and communication architecture for the European Rail Traffic Management System, ERTMS.

The Innovation Team also launched a pilot crowdsourcing initiative (Hinnova Pilot) asking Hitachi Rail's colleagues from the UK and Italy to propose innovative ideas; Proof Of Concept of the winning ideas, selected by a panel of senior experts in the Business Unit, will be implemented by the Innovation Team. This initiative encourages the active participation of colleagues, fostering a corporate culture of innovation, exploiting Hitachi Rail's intellectual potential and encouraging the sharing of ideas.

5.1.3 Towards a harmonized Society with Nature (Resource management)

The governance of natural resources following the preservation of ecosystems and biodiversity is one of today's most significant challenges, especially concerning population growth and the increasing effects of climate change.

Hitachi Group has established targets to minimize its impact on natural capital as part of its long-term environmental targets. In Hitachi Rail this approach accounts for two types of activity: positive and negative; positive activities include providing products and services that contribute to ecosystem preservation and undertaking social contribution activities to protect the environment through the preservation of biodiversity and ecosystems. Negative activities, on the other hand, even considering the constant efforts to reduce the environmental impacts resulting from their performance, are still mitigated but cannot be discontinued in the short term, as transitional activities.

Resources are increasingly consumed and transformed, progressively collected, extracted, used, and eventually emitted as waste. Hitachi Rail is responding to the shift from linear to circular economy by working with customers and society to create higher economic value designing and promoting use of less and pursuing products and solutions, as well internal processes and activities, with a reduced environmental burden.

The enabler for achieving this is, again, technology: Hitachi Rail's knowledge transfer between research and business is a priority in ensuring responsible resource management that balances the use of traditional and alternative sources according to their availability, renewability, affordability, sustainability, and environmental impact.

5.1.3.1 Circularity: New Circular Economy Business Model Project

Keeping resources in use for as long as possible, and using them efficiently, are particularly important in the rolling stock industry. The aim is to monetize waste to eliminate it from value chains – making businesses both environmentally and financially more sustainable. This means a strong commitment to avoiding premature obsolescence of parts and material. For example, if Hitachi Rail can use digital technologies to predict and prevent unnecessary maintenance on a bogie, it is possible to keep that bogie safely operating for longer and avoid wasteful maintenance activities that require to spend time, money and material maintaining it 'just in case.' In fact, Hitachi Rail already manufactures highly recyclable trains (above 95% in some cases), recovers a high percentage of materials during maintenance operations, as well as refurbishing and reusing components from older products to fit new products. But more can be done.

Hitachi Rail deals with the management of the train's end of life from a reverse - logistic point of view: manufacturing highly recyclable trains, recovers high percentage of materials during maintenance operations, refurbishes and reuses components from older products to fit new products. For this reason, and to maintain its leadership role as responsible innovator, Hitachi Rail has developed a project to analyse its degree of circularity and evaluate it with respect to a model of maturity in the implementation of the Circular Economy.

Circular Economy means going beyond the traditional "take-make-waste" that is typical of the linear economy, where natural resources are extracted, transformed, used by suppliers, combined in a product, and discarded at end of life[26]. Today's linear economy cannot deliver a sustainable world, where finite natural resources and the ability of the environment to absorb waste leads to a remarkable increase of resource cost and uncertainty of supply[27].

As a result, Hitachi Rail has begun to incorporate the concept of the Circular Economy within its Environment and Quality Management Systems at production sites in which the relevant certifications are managed. Life Cycle Analyses are now part of all new projects, and Environment Product Declaration certification processes are ongoing across the portfolio.

The Circular Economy Project allows Hitachi Rail to evaluate the opportunity-cost of alternative business models in terms of socio-economic (Life Cycle Cost,

[26]Andersen, 2007

[27]Ellen MacArthur Foundation, 2012

Social Life Cycle Assessment) and environmental impact (Environmental Life Cycle Assessment). Hitachi Rail's Circular Economy Project consists of 3 methodological steps and 10 main activities:

The Project Manager is responsible for ensuring the customer is satisfied, responding to any issues that might arise over the course of the contract. The organization of bidding and project management activities is fundamental to carrying out a project that meets the quality requirements of the products and services offered and ensures their provision according to deadline and budget restrictions.

To this end, the objective of project management is to protect the interests of Hitachi Rail's Stakeholders, including shareholders and its customers, who want to receive top quality responses according to established schedules in line with the transportation needs of a city or the community at large. To this end, the objective of project management is to protect the interests of Hitachi Rail's Stakeholders, including shareholders and its customers, who want to receive top quality responses according to established schedules in line with the transportation needs of a city or the community at large.

In this area, the most significant development in market dynamics in recent years has entailed the progressive shift from the provision of products and technologies to the increased customer demand for turn-key transportation solutions that efficiently meet the needs of local and national institutions. This new type of offer requires the ability to support the customers, who are increasingly considered less as buyers and more as partners, in the management of a project throughout its entire life cycle.

Downstream of this assessment and of the gaps that emerged, a development plan was created, divided into medium and long-term objectives and into three different levels of maturity, capable of analysing in detail all the business processes impacted by the implementation of circularity.

The initial perimeter, referring to Hitachi Rail Italy but contextualized at a global and European level with regards to the analysis of the market and regulations referring to the Circular Economy, will also be extended to Hitachi Rail UK and Hitachi Rail Japan, in a process that it will end in the first half of 2023. The implementation of the actions that will allow the achievement of the medium and long-term maturity objectives will concern, in a non-exhaustive form:

- the organization, policies and responsibilities;
- the phases of design, purchase of materials, production, logistics and maintenance of the product;
- training, communication and stakeholder engagement processes;
- tools for technological innovation or the management of valuable materials stored in the warehouse.

In the growth process, the basic approach remains to reduce the withdrawal of virgin raw materials in favour of secondary raw materials, to increase the disassembly, selection and recoverability solutions of the train parts at the end of their life, to transmit detailed information on the content of materials of each single part to facilitate the recovery and recycling operations by the owner of the asset to be divested.

In terms of actions, Hitachi Rail has published several Environmental Product Declarations (EPDs) and Carbon Footprint Disclosure which demonstrates the progress made to date towards product recyclability and recovery (as well as other environmental impacts). The production and maintenance processes are equipped with procedures that aim to valorise waste or spare parts that have reached the end of their life.

In some cases, it is the suppliers themselves who request in their contracts the return of the resulting materials (for example the aluminium resulting from the cut of the windows along the side of the train) upon payment of the corresponding value, in order to reuse them in their production processes. In other cases, through tender procedures, disposers are selected and employed with whom negotiate the purchase price of the resulting materials: it mainly occurs in maintenance processes, where spare

parts such as the contact strips of pantographs or batteries, at the end of their regenerative cycles, are alienated retaining the economic value of the rare and precious materials contained in them.

The current business model that characterizes the railway sector, from which products with an average life of around 30 years come out, provides for the transfer of ownership of the asset to the operator of the railway transport service, who will have to enhance the materials at disposal and facilitate their recycling and recovery.

It is evident how the shortening of the value chain, leaving the ownership of the railway asset to the manufacturer, would facilitate the management of the second life of the materials, but until the rolling stock industry will have the possibility to implement different forms of business, it will have to work at its best to act as an intermediary in the transmission of information useful for a decommissioning of the train with a view to circularity. Obviously, an equally important role is played by the design of the product and the technical possibilities of increasing the content of materials coming from recycling, to avoid natural resources depletion, as well as establishing the recyclability rate of the same materials at the end of their life.

5.1.3.2 **Eco-Design in Hitachi Rail**

As intelligent rail systems strive to deliver environmental, economic and social value to customers, whether they are passengers, operators or the public sector, Hitachi Rail plays a crucial role as Climate Change Innovator, in partnership with these three critical groups of stakeholders, as its industry continues to conceive, design, build, co-create, implement and otherwise offer solutions that relieve congestion and reduce pollution.

Life Cycle Assessment (LCA) is an internationally standardised methodology (regulated by ISO 14040, 14044) that helps to quantify the environmental pressures related to products and services, the environmental benefits, the trade-offs and areas for achieving improvements considering the full life cycle of the product.

Hitachi Rail's Life Cycle Assessment consists of four main phases:

- definition of the objectives and the field of application, where the objectives of the study, the system boundaries and the functional unit (of reference to which to link the outgoing flows) are declared.
- life Cycle Inventory is the collection and analysis of environmental interventions data (e.g., emissions into air and/or water, waste generation and resource consumption) which are associated with a product from the extraction of raw materials through production and use to final disposal, including recycling, reuse, and energy recovery.
- life Cycle Impact Assessment is the estimation of indicators of the environmental pressures in terms of climate change, eutrophication resource depletion, acidification, human health effects, etc. associated with the environmental interventions attributable to the life cycle of a product.
- interpretation and improvement where the results of the previous phases are summarized, analysed and discussed aiming of identifying possible areas for improvement, ensuring a final mitigation of environmental impacts.

The data used in LCA should be consistent and their quality assured to reflect actual industrial process chains. Eco-design is defined by the ISO 14006 standard, whose objectives are:

- to establish a systematic methodology to ensure continuous environmental improvement during the design and development process of products / services;
- to carry out an approach based on all phases of the product / service life cycle, and which refers to the environmental aspects and the impacts related to each of them;
- to facilitate communication to improve companies'

environmental performance by issuing a certificate certifying compliance with the required requirements;

- to raise awareness on the market and make consumers aware of the environmental impact of products / services.

Hitachi Rail has completed the project for the integration of ISO 14006 "Eco-design guidelines" within its own management systems. The structure of the ISO 14006 standard consists of the standards relating to the quality management system (ISO 9001) and the environmental management system (ISO 14001). This approach was chosen to facilitate the integration of the standard in the management systems mentioned; it is made on the concept of "continuous improvement": "PDCA Cycle" or "Deming Cycle" and consists in the planning, execution, control and intervention aimed at the continuous improvement of the management system implemented, pursuing the improvement of the resulting environmental impacts from products and services throughout their life cycle.

The key elements of the life cycle analysis aim to minimize the overall environmental impact of the product; it is therefore necessary to identify, qualify and, where possible, quantify the significant environmental aspects of the product and consider the trade-offs between the environmental aspects and between the different phases of the life cycle.

The design process should follow these steps: specify the functions of the product, define the significant environmental parameters from the analysis of the environmental requirements of the interested parties, inputs and evaluation of environmental aspects. The next step is to identify the relevant environmental improvement strategies for the product, develop environmental objectives and targets, based on improvement strategies. Finally, establishing a product sheet that defines its characteristics and peculiarities (very often it is the development of the concept), and develop technical solutions along to achieve the environmental objectives / goals, taking into account all design considerations.

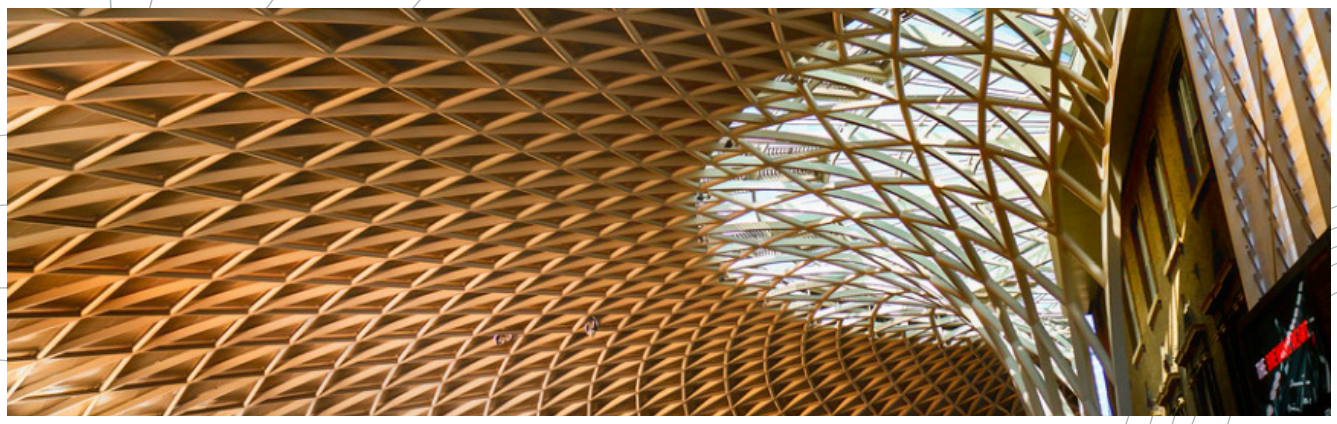
At Hitachi Rail, specific eco-profiles or light LCA studies are performed on different solutions in order to verify corresponding environmental effect on the trainset footprint. This allows the Business Unit Design Department to consider environmental impacts like any other constraints that need to be met. Design solutions aimed at reducing environmental impact of trainset quickly turn into design best practices to be implemented, whenever applicable, on all future projects.

This has happened for high efficiency HVAC and lighting systems, for super capacity energy recovery systems, for aerodynamics test carried out on bogies and car bodies and so on. Adopting this approach Hitachi Rail succeeded in selecting a list of eco-design best practices that can be applied on each project whenever possible. Truly integration between traditional design competence and environmental protection commitment find in Hitachi Rail an actual, effective application, keeping in mind that the "80% of environmental impact generated by products services and infrastructures around is determined at project stage[28]".

Also, speaking of rolling stock, most environmental impacts related to Hitachi Rail value chain are connected to the rolling stock life cycle, which the activities carried out in Hitachi Rail plants are just a part of. Information concerning production of parts, components and raw materials that are used to assemble stocks in Hitachi Rail plants, are required by HR as specific clauses included in contracts with all suppliers. Suppliers shall provide to the Eco-Design Engineering Dept. a detailed materials composition of each supply.

Commercial software used by Hitachi Rail to develop an LCA study allows to consider not only the industrial process required to produce each material, but the processes applied to basic materials too, like moulding, stamping, wire drawing and so on. All information concerning production of raw materials and components assembled in Hitachi Rail's plants, transportation of supplies, processes carried out in Hitachi Rail plants

[28]J. Thackara, 2008.



and trainset operational data are collected and internally checked.

Transport information (from suppliers to Hitachi Rail's plants, from one HR plant to another one, for product delivery as well as for waste transport are generally estimated considering the distance covered, the weight of material delivered and using specific transportation processes (by road, sea, rail, air) included in software used for LCA modelling. Information concerning energy, auxiliaries and water consumption, as well as emissions in air, water discharge and wastes due to activities carried out in Hitachi Rail plants involved in Trainset production are collected by environmental office.

Moreover, Hitachi Rail developed a tool to calculate trainset operational energy consumption according to CLC/TS 50591:2013. Each LCA carried out considers the most appropriate electric energy mix for plants involved in rolling stock assembly and for energy consumption during operational phase. According to relevant Product Category Rules (PCR), mix residual approach is used for electric energy consumption in European countries.

Most of the environmental impacts of rolling stock are due to energy consumption during operation phase. An energy consumption simulator tool allows calculation of rolling stock energy consumption considering hypothesis and constraints concerning following parameters:

- mission profile supplied by customer (lengths of the routes, differences in altitude, expected duration of the routes, number of stations, acceleration-deceleration curves, etc.);
- number of passengers;
- HVAC use;
- internal and external lighting;
- other auxiliaries;
- energy recovery system adopted;
- weight of the rolling stock;
- trainset aerodynamic parameters;
- friction resistance;
- power unit and transmission system;
- drive assistance systems.

Finally, not only do LCAs carried out by Hitachi Rail always consider impacts due to preventive maintenance in operational phase, but also impacts due to management of those wastes raised during rolling stock dismantling at end of life. According to Hitachi Rail Service & Maintenance process, feedback coming from the field is generally considered to solve possible problems raised on the first rolling stock produced but also to tune predictive maintenance activity. As a result, predictive maintenance scheduled by Hitachi Rail are very detailed and assure an efficient, reliable service life of Trainset.

5.1.3.3 Social Life Cycle Assessment of products: the first train application

S-LCA is defined as "a social and socio-economic Life Cycle Assessment (S-LCA) is a social impact (and potential impact) assessment technique that aims to assess the social and socio-economic aspects of products and their potential positive and negative impacts along their life cycle" according to the UNEP/SETAC Guidelines 2009 and 2020 and to measure the contribution to the SDGs. Indeed, aspects such as education level, working conditions for employees, contribution to improve local community conditions are all aspects included in the S-LCA.

As part of its LCA projects, and in particular Social Lifecycle, a study was initiated to analyse which S-LCA practices contribute to the Sustainable Development Goals. Thus, a series of SDGs were identified towards which this specific topic contributes in a prospective way.

In fact, the social impacts related to the labour conditions and human rights are getting more and more important for Hitachi Rail as well as their communication. Example of directive and norms on this topic which request a report on it are the Social Minimum Safeguards introduced by the European Taxonomy Regulation, the due of diligence introduced in sector such as Aluminium Stewardship Initiative[29] and national initiative such as the German Supply Chain Due Diligence Act for all companies. Social Life Cycle Assessment measure in a quantitative and qualitative way all aspects included in the previous initiatives.

Agenda 2030 and its SDGs - those which contribute to the social dimension of sustainability

[29]Aluminium Stewardship Initiative ASI developed a Performance Standard which defines environmental, social and governance principles and criteria, which address a broad range of sustainability issues in the aluminium value chain.

As highlighted by the Figure, 10 out of 17 SDGs are related to the social impacts and the contribution to those SDG from a company or a product can be measured by applying the Social Life Cycle Assessment (S-LCA).

At Hitachi Rail, the S-LCA has been applied to assess positive and negative performance of products/services and/or organizations in several cases (see pilot projects of UNEP 2022[30]), but until today Hitachi Rail is the first Company that has been applying it to the railway industry, to a train and its life cycle. The main aim of this project is after the first implementation of S-LCA to Blues Train and its life cycle, develop a communication scheme for social impact according to the product declaration ISO 14025: a Social Product Declaration.

Sustainable Development Goals

10/17 SDGs

10 out of 17 SDGs
are related to the social impacts

This project will pose an important milestone in the future of the sustainable product communication, and it will strongly contribute to the SDG 12 on sustainable production and consumption. The SPD scheme will also allow other businesses and consumers to understand the social positive and negative impacts with its compensation life cycle to workers, local communities and users. It will be possible with it also measure the contribution to other SDGs such as SDG 8.

The S-LCA to Hitachi Rail Train Blues has been implemented with the support of Circular S.r.l and its team by Eco-design dept of Rolling Stock BU, and all interested departments of Hitachi Rail. Starting from the system boundary of the Environmental Product Declaration of Blues train, all unit processes as well the material and energy flows have been listed and were considered as the starting point for defining the system boundary of a S-LCA. An important element of the S-LCA is the definition of the main stakeholders involved in the product life cycle. For the S-LCA of Blues three main stakeholders have been considered: workers, local communities, and potential user in the use phase of the train.

The results of the S-LCA and its report (project finalized in March 2022) is the base to develop the first Social Product Category Rules for the first Social Product Declaration of a train in the world. Hitachi Rail has planned to release the SPCR within the end of 2022 and to Certify the SPD within the end of FY22.

[30]Life Cycle Initiative, Pilot projects on guidelines for social life cycle assessment of products and organizations, 2022.

5.2 Environmental Policy

To contribute actively and responsibly to combating the challenges posed by climate change, Hitachi Rail complies with the current regulations and applies best practices to achieve better results, continuously improving its environmental management in an economically effective way. To this end, Hitachi Rail has developed an approach based on analysis of the aspects and impacts of its operations on the environment. In addition to identifying and implementing mitigation for environmental risks, this approach has allowed the Business Unit to identify environmental opportunities and improvements.

Hitachi Rail is provided with a systematic framework for integrating environmental management practices by supporting environmental protection, pollution prevention, waste minimisation, as well as energy and materials consumption reduction. The ISO 14001 Environmental Management System identifies the most significant environmental aspects and impacts and the adoption of the most effective management and mitigation measures through a structured and assured approach.

Hitachi Rail Environmental Management System is fully compliant with applicable national and international regulations and embodies its continuous improvement as protecting the environment is part of Hitachi Rail's Corporate Responsibility and is a key element in its business approach. Aiming at promoting the long-term growth of the BU's value, Hitachi Rail has responded positively to the requirements and the standards set along its path towards sustainability. In fact, acting in respect of environmental values leads to the creation of lasting value and the wider living community can benefit.

Four strategic objectives have been established:

1. The Environmental Management Systems are applied across the entire Organization, driven by the principle of continuous improvement and the definition of environmental indicators to measure the environmental performance of the Organization, Hitachi Rail has drawn:
   - annual preservation of ISO 14001 certifications;
   - nationalization and simplification of the certifications in the various organizational areas.
2. Reporting to citizens, institutions and other Stakeholders on the management and environmental performance of the Business Unit:
   - publication of the Sustainability Report and open access given to the key environmental parameters;
   - communication with analysts and participation in various Sustainability indices.
3. Promotion of sustainable environmental practices with suppliers, contractors and customers:
   - use of environmental performance-based supplier qualification criteria;
   - informative/training meetings on the important environmental aspects at the commencement of works through the diffusion of the Environmental Policy and exploring the ways in the impacts generated by the activities carried out (waste, emissions, discharges, etc.) are to be managed;
   - assessment of the suppliers based on the environmental performance of the activities carried out on Hitachi Rail's behalf.
4. Observance of the legal obligations of compliance and voluntary commitments:
   - ensure that the activities are carried out in compliance with said obligations and commitments;
   - assess observance of the subscribed obligations and commitments;

- correct any non-conformities on observance of subscribed obligations and voluntary commitments.
- development areas to deliver specific measures to meet today's requirements and the future needs.

Hitachi Rail has adopted an Environmental Policy focusing on safeguarding the environment at the heart of its management and development strategies, with a constant and targeted commitment to preventing pollution and pursuing continuous improvements in its environmental services.

The policy is shared with all Hitachi Rail personnel and all Stakeholders through the BU's intranet.

The key principles of Hitachi Rail's commitment are:

to prevent environmental pollution and to the protection of the environment relevant to its context

to identify significant environmental impacts of its activities, products and services in order to control and monitor impacts on the environments as appropriate to its purpose and context

to improve its activities also for the purpose of reducing its overall impact in terms of climate altering emissions in the atmosphere

to involve staff, suppliers and contractors in the environmental issues, raising their awareness on this subject

to improve environmental performance through the achievement of increasingly ambitious targets and objectives, consistently with the technological progress of the sector and with the budgeted expenses

to define indicators for straightforward performance monitoring

to start an open dialogue with the Public Authorities, the communities and the public, aimed at raising awareness of the real environmental impacts and cooperating to update environmental regulations.

5.3 Materials and Energy

The issues of resource scarcity, triggered by rising demand and population growth, are common concerns for the entire world. As populations grow and living standards improve, there are higher volumes of resources collected, extracted, used, and eventually emitted as waste.

Hitachi Rail is responding to these issues by working with customers and society to help build a society that uses resources more efficiently. Hitachi Rail creates higher economic value designing and promoting use of fewer and pursue products and solutions, as well internal processes and activities, with a reducing environmental burden.

5.3.1 Consumption of Substances and Materials

Hitachi Rail is very aware of the contribution that efficient consumption of raw materials can give, in terms of contribution for CO_2 reduction. The Company promotes the reduction of intensive use of raw materials in line with the OECD Council principles and its sustainability roadmap.

This commitment is reflected through the definition of a reliable evaluation of raw material uses in different activities, which is sometime difficult to establish for some specific businesses like for electronic and electromechanical components. However, as described in this document, Hitachi Rail search for increasingly standardized designs innovation can lead to an overall reduction in the direct or indirect consumption of raw materials.

As of 31.03.2022		
MATERIALS AND SUBSTANCES[31]	**31.03.21**	**31.03.22**
Aluminium	5,254.00	5,570.22
new material [t]	5,254.00	5,426.75
recycled material [t]	-	2.47
scrap [t]	-	141.00
Paper (not including packaging materials)	83.15	80.63
new material [t]	42.24	28.64
recycled material [t]	40.91	52.00
Plastics (not including packaging materials)	8.21	33.83
new material [t]	7.97	14.49
recycled material [t]	0.24	19.34
Paints (water based) [t]	80.37	173.80
Thinner (organic solvent) [t]	157.22	94.81
Catalyst [t]	18.07	25.94
Putty [t]	24.29	42.24
Oil [t[	67.45	7.27
Degrasing agents [t[	5.53	6.67
Glues and adhesives [t]	14.63	3.76
Sewage treatment agents [t]	2.50	4.83

[31] Data regarding 2021 differs from the one represented in the previous CSR&S Report due to a methodological refinement in data collection and processing.

5.3.2 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, the Company 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.

5.3.3 Energy consumption trends

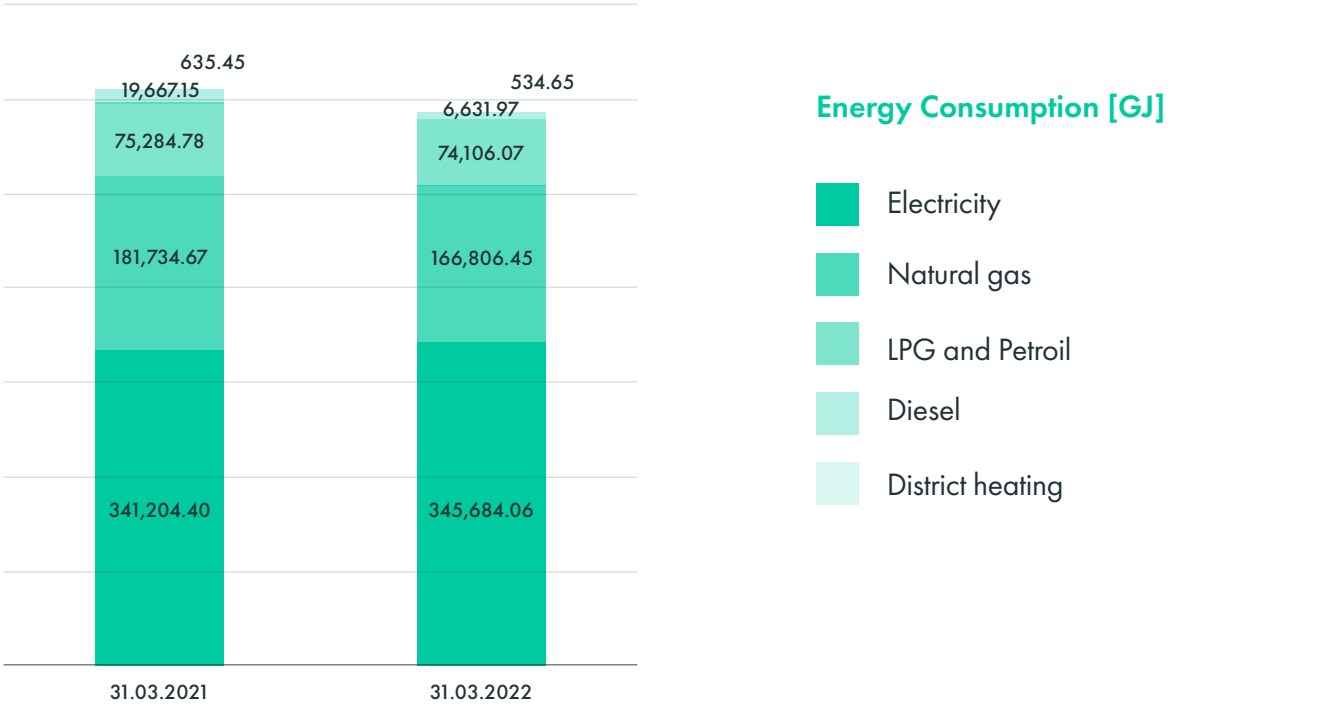
In the year ended 31.03.22, total energy consumption - natural gas, electricity, diesel, LPG and Petrol, District heating - amounted to 593,763.20 GJ, down 4 % compared to the previous year. It is possible to observe a shift from fossil fuels to electrical energy used, which reached +1.3% in the period against an overall decrease in fossil fuels used[32].

Total energy consumption

-4%

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 compared to the previous year.

[32]Data regarding 2021 differs from the one represented in the previous CSR&S Report due to a methodological refinement in data collection and processing.



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][33]	As of 31.03.2022					
	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
TOTAL	**539,796.98**	**514,822.60**	**78,729.47**	**78,940.60**	**618,526.45**	**593,763.20**

[33]Data regarding 2021 differs from the one represented in the previous CSR&S Report due to a methodological refinement in data collection and processing.

5.3.4 Renewable Energy

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%.

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

		As of 31.03.2022			
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 Mainentance 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%

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%

5.4 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 target 100% reduction in its own CO_2e 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. Hitachi Rail has re-confirmed its engagement to address climate change by strengthening its own climate target by achieving carbon neutrality 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. has set emission reduction targets which have been validated by the 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 within the activities of the Company 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 starting to look into its Scope 3 emissions which typically account for over 90% of the CO_2e emissions from a given company. That's why Hitachi Rail is working to build a clear view of carbon emissions generated by its value chain by calculating its Scope 3 emissions in line with the Greenhouse Gas Protocol methodology.

Hitachi Rail reports direct and indirect GHG 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.

5.4.1 Direct and indirect greenhouse gas emissions

Total emissions - direct and indirect - of GHG fell in absolute terms from 941,533.41 tCO_2e in Fiscal Year 2020 (from 01.04.2020 to 31.03.2021) to 908,599.86 tCO_2e in Fiscal Year 2021 (from 01.04.2021 to 31.03.2022), with a reduction of 32,933.55 tCO_2e (-3.5%).

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 FY21. 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 FY20 determining the aforementioned stated reduction of emissions.

Total emissions

-3.5%

Total emissions - direct and indirect - of GHG fell in absolute terms, with a reduction of 32,933.55 tCO_2e (-3.5%).

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

As of 31.03.2022			
Greenhouse gas emissions[34]	**Unit**	**FY20**	**FY21**
Emissions due to Energy Production (Natural Gas)	tCO_2e	10,418.85	9,556.82
Emissions due to Energy Production (Diesel)	tCO_2e	1,424.21	434.96
Emissions from Air Conditioning Systems (Fugitive Emissions)	tCO_2e	3,619.05	2,446.00
Emissions due to Internal Handling (Lorries and Forklifts)	tCO_2e	53.98	59.96
LPG	tCO_2e	4,794.60	4,749.42
Total Scope 1 Emissions (-15%)	**tCO_2e**	**20,310.68**	**17,247.16**
Emissions due to Electricity Consumption	tCO_2e	21,486.24	21,240.46
Emissions due to District Heating	tCO_2e	84.55	25.36
Total Scope 2 Emissions (-1%)	**tCO_2e**	**21,570.79**	**21,265.81**
Total Scope 3 Emissions (-3%)	**tCO_2e**	**899,651.94**	**870,086.88**
Total GHG Emissions	**tCO_2e**	**941,533.41**	**908,599.86**

[34]Data regarding 2021 differs from the one represented in 2021 CSR&S Report due to a methodological refinement in data collection and processing.

The following table shows the total emissions for the Scopes (1, 2, 3) and their year-on-year changes over the previous reporting year.

As of 31.03.2022				
Greenhouse gas emissions[35]	**Unit**	**FY20**	**FY21**	**var. %**
Scope 1 – Direct GHG Emissions	tCO_2e	20,310.68	17,247.16	-15%
Scope 2 - Electricity indirect GHG emissions	tCO_2e	21,570.79	21,265.81	1%
Scope 3 – Other Indirect Emissions	tCO_2e	899,651.94	870,086.88	-3%
Total GHG Emissions	tCO_2e	**941,533.41**	**908,599.86**	**-3.5%**

5.4.2 Polluting emissions and Air quality

For Hitachi Rail, pollutant emissions related to the consumption of non-renewable resources used to run thermal plants (methane and diesel) and to the production processes that emit volatile organic and inorganic compounds.

As of 31.03.2022	
Air emission[36]	**31.12.2022[37]**
NOx [Kg]	13,958.14
SOx [Kg]	692.72
CO [Kg]	5,072.84
Volatile Organic Compounds [Kg]	220,235.47

[35]Data regarding 2021 differs from the one represented in 2021 CSR&S Report due to a methodological refinement in data collection and processing.

[36]SOx, NOx and CO values were estimated from the consumption of natural gas and diesel for energy production, using EEA emission factors. The emission factors used were those of "Commercial/institutional plants" (1.A.4 Small combustion 2019) for offices and those of "Manufacturing industries and construction" (1.A.2 Combustion in manufacturing industries and construction) for production sites and maintenance center Volatile Organic Compound (VOC) values were aggregated from direct measurements at the Batesburg, Pistoia, Reggio Calabria and Kasado production sites.

[37]Due to a methodological change in data collection and processing, it is not possible to make a comparison with the previous year, which will therefore be presented from the next reporting period.

5.5 Waste

The production of waste is an environmental aspect that is assessed and measured at all Hitachi Rail sites and offices together with the analysis of work sites and construction of civil and technological products.

Hitachi Rail's policy is to reinforce the principle of re-use, recycling, and recovery of waste. All its sites have waste collection areas based on the type of waste and site layout. External specialist companies collect and process hazardous and non-hazardous waste. The most prominent waste at production sites relates to paper, cardboard and wood packaging, metal, and end of life equipment.

The following table provides details on the waste produced at the production sites and offices, with specification of disposal method.

Waste production	As of 31.03.2022					
	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
Non-hazardous [t]	**9,609.50**	**11,289.99**	**802.10**	**1,125.64**	**10,411.60**	**12,415.63**
% recycled	91.7%	92.1%	87.0%	50.2%	91.3%	88.3%
% incinerated (mass burn)	6.6%	6.3%	1.5%	0.9%	6.2%	5.8%
% disposed of in landfill	1.7%	1.6%	11.5%	48.9%	2.5%	5.9%
Hazardous [t]	**679.90**	**755.53**	**6.80**	**6.60**	**686.70**	**762.14**
% recycled	48.9%	80.7%	88.3%	95.2%	49.3%	80.8%
% incinerated (mass burn)	43.9%	8.7%	0.0%	0.0%	43.5%	8.6%
% disposed of in landfill	7.2%	10.6%	11.7%	3.3%	7.2%	10.6%

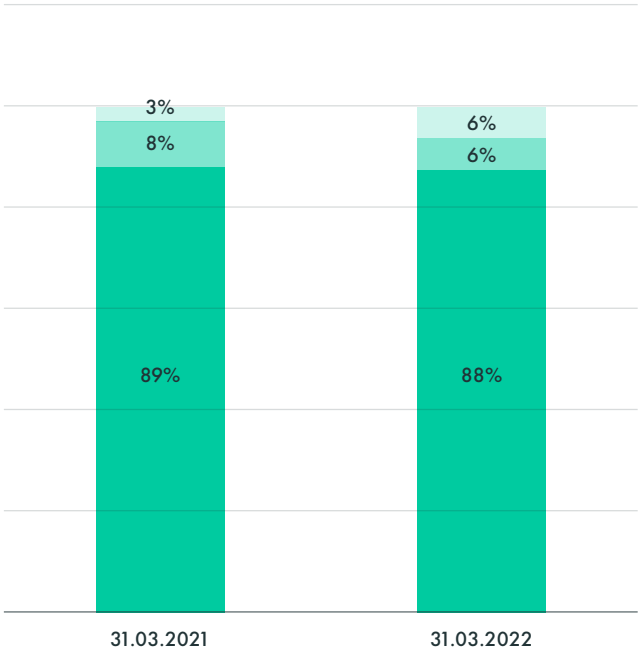
As of 31.03.22, the total waste production amounted to 13,177.76 tonnes, an increase of about 20%. During the reporting year, special attention was paid to packaging waste, whether paper, plastic, wood or mixed packaging. A dedicated analysis showed that the total packaging waste amounted to 8,285.79 tonnes of which 97% was recycled.

Total waste recycled

88%

With peaks of 92.1% in the case of non-hazardous waste from the production plants.

Total waste by disposal method



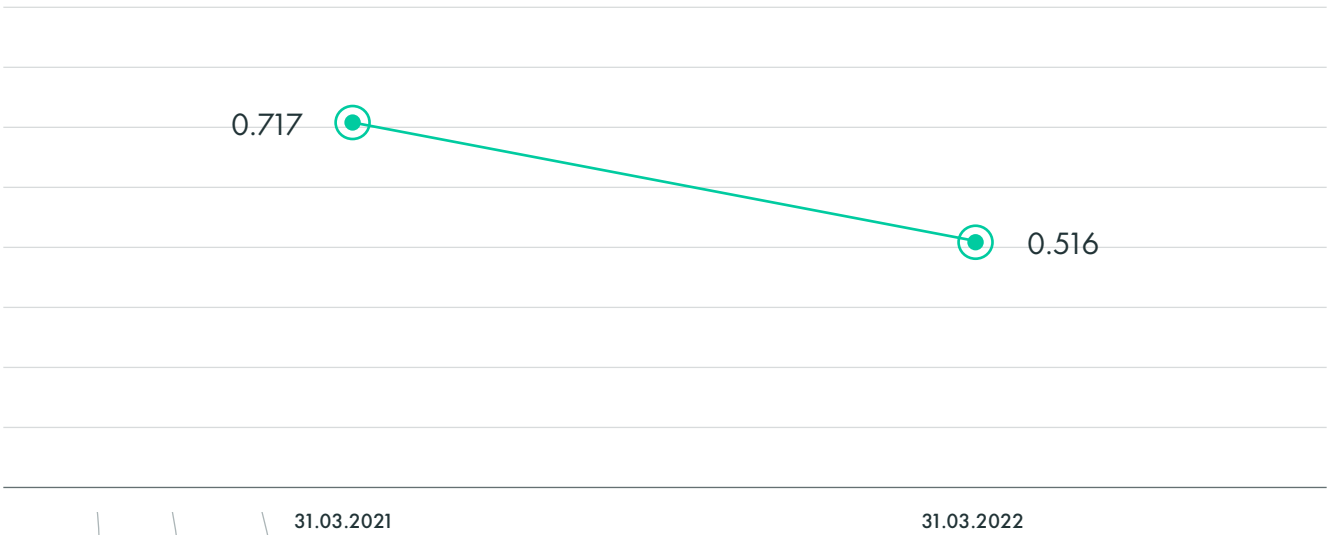
Total waste recycled

Total waste incinerated (mass burn)

Total waste disposed of in landfill

The KPI concerning the kg of waste produced per hour worked, shown in the graph below, highlights a decreasing trend, of about 28%, in view of the increase in hours worked.

Kg of waste produced per hour worked



5.6 Water and Effluents Management

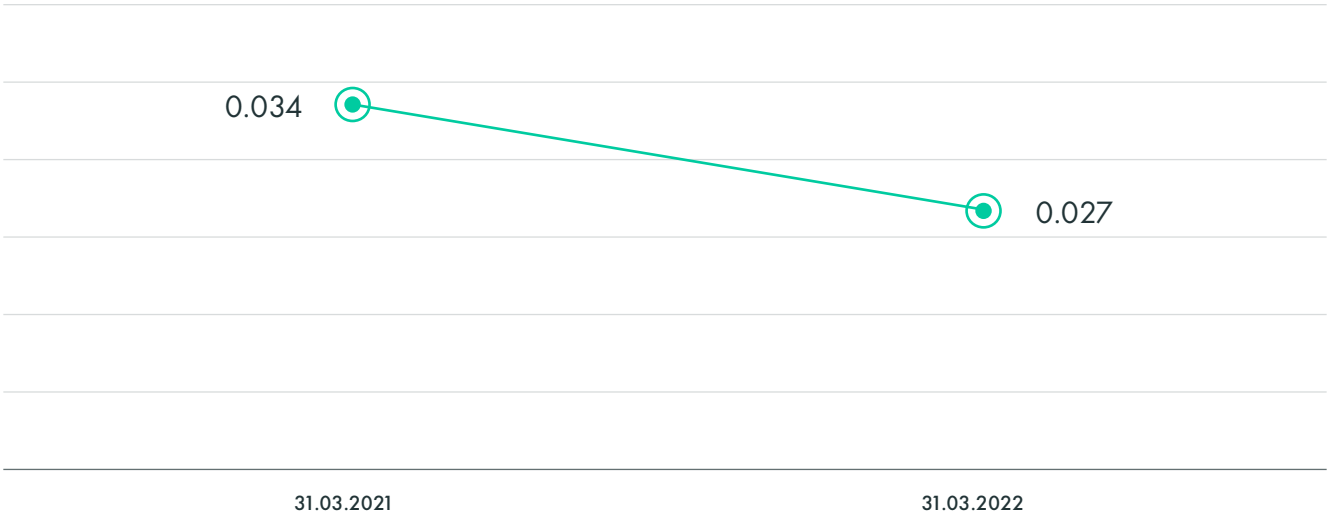
The sustainable management of water during withdrawal and use favours the maintenance and improvement of the use of this precious resource, ensuring less waste and a reduced environmental impact. Hitachi Rail is aware that it can continually improve water quality by reducing pollution, eliminating waste and fighting the release of chemicals and hazardous materials, halving the percentage of untreated wastewater and substantially increasing recycling and safe reuse.

Hitachi Rail's core business does not critically highlight the use of this resource. **However, the commitment in the control and management of this resource is always very high, even in related indirect activities.** During the 2021/2022 reporting period, the downward trend in water consumption is confirmed, with a decrease in total water withdrawn of 6% (47,954 cubic meters) compared to the previous year.

As of 31.03.2022						
Water withdrawal by source	**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
Water drawn from public main [mc]	264,109.40	213,468.20	79,813.80	92,254.91	343,923.20	305,723.11
Natural gas	395,637.00	373,982.00	120.00	12,021.50	395,757.00	386,003.50
Total water withdrawn [mc]	**659,746.40**	**587,450.20**	**79,933.80**	**104,276.41**	**739,680.20**	**691,726.61**

The KPI – Total water withdrawal per hour worked shows a reduction of 20% due to a combination of water use reduction and a slight increase in hours worked.

Total water withdrawal per hour worked



The water discharged can be classified on the basis of its use upstream from disposal, as domestic (or similar) and industrial. The period under analysis was characterised by an increase in the amount of water discharged in production plants and maintenance centres, partly due to more precise monitoring at local level.

Water discharge	As of 31.03.2022					
	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
Total volume of domestic or sanitary wastewater inflow in the wastewater stream before treatment [m³]	172,276.00	243,265.63	27,059.00	27,184.01	199,335.00	270,449.64
Total volume of industrial wastewater produced on site [m³]	1,890.00	1,690.00	–	–	1,890.00	1,690.00
Total water discharged [m³]	174,166.00	244,955.63	27,059.00	27,184.01	201,225.00	272,139.64

Glossary and Main Acronyms contained in the documents

This glossary aims to facilitate understanding of the terminology used both for sustainability issues and for those more specific to the business sector.

ANIE (Associazione Nazionale Industrie Elettrotecniche ed Elettriche)

It is one of the largest trade organizations in the Confindustria system in terms of weight, size and representativeness. ANIE is joined by 1,500 companies in the electrotechnical and electronic sector. The ANIE Regulatory Technical Environment Area follows both transversally and vertically the environmental and energy issues of interest to the Italian electrotechnical and electronic sector, from national and EU product or process legislation to product technical regulations.

AICQ (Italian Association for a Quality Culture)

AICQ is a non-profit association, which aims to spread the Culture of Quality in Italy and the methods for planning, building, controlling and certifying the quality of products, services, organizations and related disciplines. Aicq aims to achieve its goal through training (national and local courses) and information (the Quality magazines, the Quality Online web magazine, periodical publications), seminars, round tables and conferences in the main Italian cities.

Cosila (Consortium for safety in the workplace)

The Cosila, Consortium for the safety and health of workers in the workplace, established in 1995 under the aegis and sponsorship of the Union of Industrialists of the Province of Naples, is a consortium of companies whose purpose is to provide, non-profit, consultancy services, assistance and training on safety and health in the workplace, as designed by current legislation.

COP26

The 2021 United Nations Climate Change Conference of the Parties, more commonly referred to as COP26, was the 26th United Nations Climate Change conference, held in Glasgow, Scotland, United Kingdom, from 31 October to 13 November 2021. The result of COP26 was the Glasgow Climate Pact, which finalizes the Paris agreement, through the completion of the Paris Rulebook and keep the goal of limiting the rise in global temperature to 1.5C alive thanks to increased ambition and action from countries.

Circularity

Circularity, other name to refer to circular economy, is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

CMS (Carbon Management System)

The system comprises 10 essential elements from four broad perspectives: carbon governance, carbon operation, emission tracking and reporting, and engagement and disclosure. The proposed new approach focuses on cross- functional integration, enforcement of proactive strategies and group rather

than individual accountability. Many organizations are taking actions to reduce their carbon footprints. Carbon-reducing initiatives in organizations are varied: they range from green product innovations to encouraging behavioural changes by customers and employees. Carbon management systems (CMS), can be designed and used in order to persuade employees to perform ecologically responsible behaviours.

CSRD (Corporate Sustainability Reporting Directive)

The Corporate Sustainability Reporting Directive (CSRD) is currently a proposal that will require all large companies to publish regular reports on their environmental and social impact activities. It helps investors, consumers, policymakers, and other stakeholders evaluate large companies' non-financial performance. Thus, it encourages these companies to develop more responsible approaches to business. It changes companies' scope and type of sustainability reporting. With the CSRD, the European Commission defines a common reporting framework for non-financial data for the first time.

EU Ecolabel

EU Ecolabel or EU Flower is a voluntary ecolabel scheme established in 1992 by the European Commission. The label includes a green flower with inclined green "€" (Greek epsilon) as the flower, surrounded by 12 blue stars. On EU Ecolabelled products, it must always be used together with the license number. Because of the logo, the label has a nickname EU Flower.

EcoVadis

EcoVadis is a worldwide provider of business sustainability ratings. Organizations rely on EcoVadis to monitor and improve the sustainability performance of their business and trading partners managing networks both upstream and downstream, either by sharing their performance with the stakeholders or monitoring the performance of their own upstream value chain.

GHG (Greenhouse gas)

It is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Without greenhouse gases, the average temperature of Earth's surface would be about −18 °C (0 °F), rather than the present average of 15 °C (59 °F). Human activities since the beginning of the Industrial Revolution have produced a 45% increase in the atmospheric concentration of carbon dioxide, from 280 ppm in 1750 to 415 ppm in 2019. This increase has occurred despite the uptake of more than half of the emissions by various natural "sinks" involved in the carbon cycle.

The vast majority of anthropogenic carbon dioxide emissions come from combustion of fossil fuels, principally coal, petroleum (including oil) and natural gas, with additional contributions coming from deforestation and other changes in land use. The leading source of anthropogenic methane emissions is agriculture, closely followed by gas venting and fugitive emissions from the fossil-fuel industry.

Eco-design

Environmentally sustainable design (also called environmentally conscious design, eco design, etc.) is the philosophy of designing physical objects, the built environment, and services to comply with the principles of ecological sustainability.

EFQM (European Foundation for Quality Management)

European Foundation for Quality Management is a not-for-profit membership foundation in Brussels, established in 1989 to increase the competitiveness of the European economy. The initial impetus for forming EFQM was a response to the work of W. Edwards Deming and the development of the concepts of Total Quality Management.

The foundation was formed in 1989, with 67 members. The first version of the EFQM Excellence Model was created by a group of experts from various sectors and academic institutions and launched in 1992. It acted as the framework for assessing applications for the European Quality Award, the transnational quality awards of Europe.

EMAS (EU Eco-Management and Audit Scheme)

The (EMAS) is a premium management instrument developed by the European Commission for companies and other organizations to evaluate, report, and improve their environmental performance. EMAS is open to every type of organization eager to improve its environmental performance. It spans all economic and service sectors and is applicable worldwide.

EPD (Environmental Product Declarations)

The International EPD® System is a global programme for environmental declarations. EPDs signal a manufacturer's commitment to measuring and reducing the environmental impact of its products and services and report these impacts in a hyper-transparent way. With an EPD, manufacturers report comparable, objective and third-party verified data that show the good, the bad and the evil about the environmental performance of their products and services.

GRI (Global Reporting Initiative) Standards

The GRI Standards create a common language for organizations – large or small, private or public – to report on their sustainability impacts in a consistent and credible way. This enhances global comparability and enables organizations to be transparent and accountable. The Standards help organizations understand and disclose their impacts in a way that meets the needs of multiple Stakeholders. In addition to reporting companies, the Standards are highly relevant to many other groups, including investors, policymakers, capital markets, and civil society. The Standards are designed as an easy-to-use modular set, starting with the universal Standards. Topic Standards are then selected, based on the organization's material topics – economic, environmental or social. This process ensures that the sustainability report provides an inclusive picture of material topics, their related impacts, and how they are managed.

HSE (Health Safety Environment)

HSE is an acronym for the methodology that studies and implements the practical aspects of protecting the environment and maintaining health and safety at occupation. In simple terms it is what organizations must do to make sure that their activities do not cause harm to anyone. Commonly, quality - quality assurance & quality control - is adjoined to form the Company division known as HSQE. From a safety standpoint, it involves creating organized efforts and procedures for identifying workplace hazards and reducing accidents and exposure to harmful situations and substances. It also includes training of personnel in accident prevention, accident response, emergency preparedness, and use of protective clothing and equipment. Better health at its heart, should have the development of safe, high quality, and environmentally friendly processes, working practices and systemic activities that prevent or reduce the risk of harm to people in general, operators, or patients. From an environmental standpoint, it involves creating an approach to complying with environmental regulations, such as managing waste or emissions all the way to helping site's reduce the carbon footprint.

IPCC (Intergovernmental Panel on Climate Change)

The Intergovernmental Panel on Climate Change is an intergovernmental body of the United Nations created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options. The IPCC prepares comprehensive Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impacts and future risks, and options for reducing the rate at which climate change is taking place. It also produces Special Reports on topics agreed to by its member governments, as well as Methodology Reports that provide guidelines for the preparation of greenhouse gas inventories.

IRIS (International Railway Industry Standard)

IRIS Certification is a global system enabling the rail sector to benefit from a strong and recognised evaluation method. Established as a UNIFE working group in 2005, IRIS Certification aims to secure higher quality in the rail sector through developing

and implementing a global system for the evaluation of companies supplying to the railway industry. Uniform language, assessment guidelines and mutual acceptance of audits create a high level of transparency and trust towards IRIS Certification throughout the supply chain enhancing competition and increasing the quality of rail products. The standard was developed starting from the ISO 9001:2015 and integrated to include specific requirements tailor-made for the high-quality business management in the sector.

ISO (International Standards Organization)

ISO is an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial, and commercial standards. It is headquartered in Geneva, Switzerland, and works in 165 countries. It was one of the first organizations granted general consultative status with the UN Economic and Social Council.

LoB (Line of Business)

Line of business (LOB) is a general term which refers to a product or a set of related products that serve a particular customer transaction or business need. In some industry sectors, like insurance, "line of business" also has a regulatory and accounting definition to meet a statutory set of insurance policies. It may or may not be a strategically relevant Business Unit. "Line of business" often refers to an internal Corporate Business Unit, whereas the term "industry" refers to an external view that includes all competitors competing in a similar market. A line of business will often examine its position within an industry using a Porter five forces analysis (or other industry-analysis method) and other relevant industry information.

MaaS (Mobility as a Service)

MaaS is an integrated system of transport aimed at optimizing urban mobility through modular solutions, which are more coordinated and efficient. The goal is to answer in a flexible way to the increasingly emerging transport necessity of mass transport in sustainable mobility ecosystem.

Non-renewable sources

A non-renewable resource (also called a finite resource) is a natural resource that cannot be readily replaced by natural means at a quick enough pace to keep up with consumption.[1] An example is carbon-based fossil fuel. The original organic matter, with the aid of heat and pressure, becomes a fuel such as oil or gas. Earth minerals and metal ores, fossil fuels (coal, petroleum, natural gas) and groundwater in certain aquifers are all considered non-renewable resources, though individual elements are always conserved (except in nuclear reactions). Conversely, resources such as timber (when harvested sustainably) and wind (used to power energy conversion systems) are considered renewable resources, largely because their localized replenishment can occur within time frames meaningful to humans as well.

OECD (Office of Economic Cooperation and Development)

OECD is an intergovernmental economic organization with 37 member countries, founded in 1961 to stimulate economic progress and world trade. It is a forum of countries describing themselves as committed to democracy and the market economy, providing a platform to compare policy experiences, seek answers to common problems, identify good practices and coordinate domestic and international policies of its members.

PPE (Personal Protective Equipment)

PPE is protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter. Protective equipment may be worn for job-related occupational safety and health purposes, as well as for sports and other recreational activities. "Protective clothing" is applied to traditional categories of clothing, and "protective gear" applies to items such as pads, guards, shields, or masks, and others. PPE suits can be similar in appearance to a cleanroom suit.

Renewable energy

Renewable energy is useful energy that is collected from renewable resources, which are naturally replenished on a human timescale, including carbon neutral sources like sunlight, wind, rain, tides, waves, and geothermal heat. The term often also encompasses biomass as well, whose carbon neutral status is under debate. This type of energy source stands in contrast to fossil fuels, which are being used far more quickly than they are being replenished. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services.

PCR – Product Category Rules

A PCR is a copyrighted document that is part of the EPD "cookbook" and contains the recipe to create a high- quality EPD for the product category you are interested in. The PCR provides the instructions for how the life-cycle assessment should be conducted. It sets out what you need to consider, including but not limited to:

- System boundaries, i.e., which processes, and stages of the product's life cycle need to be considered.
- Declared/functional unit: the amount, weight and service life of the product being assessed.
- How to define e.g., the use phase and end-of-life options.

What impact categories need to be assessed in addition apart from the standard set as described in the General Program Instructions (GPI).

SA 8000 (Social Accountability 8000)

SA 8000 is an auditable certification standard that encourages organizations to develop, maintain, and apply socially acceptable practices in the workplace. It was developed in 1989 by Social Accountability International, formerly the Council on Economic Priorities, by an advisory board consisting of trade unions, NGOs, civil society organizations and companies. The SA 8000's criteria were developed from various industry and corporate codes to create a common standard for social welfare compliance. SA 8000 certification is a management system standard, modelled on ISO standards. The criteria require that facilities seeking to gain and maintain certification must go beyond simple compliance to the standard. Prospective facilities must integrate it into their management practices and demonstrate ongoing compliance with the standard. SA 8000 is based on the principles of international human rights norms as described in International Labour Organization conventions, the United Nations Convention on the Rights of the Child and the Universal Declaration of Human Rights. It measures the performance of companies in eight areas important to social accountability in the workplace: child labour, forced labour, health and safety, free association and collective bargaining, discrimination, disciplinary practices, working hours and compensation.

Stakeholder engagement

Stakeholder engagement is the process by which an organization involves people who may be affected by the decisions it makes or can influence the implementation of its decisions. They may support or oppose the decisions, be influential in the organization or within the community in which it operates, hold relevant official positions or be affected in the long term. It is a key part of corporate social responsibility (CSR) and achieving the triple bottom line. Companies engage their Stakeholders in dialogue to find out what social and environmental issues matter most to them and involve Stakeholders in the decision-making process. Stakeholder engagement is used by mature organizations in the private and public, especially when they want to develop understanding and agreement around solutions on complex issues and large projects. An underlying principle of Stakeholders engagement is that Stakeholders have the chance to influence the decision-making process. This differentiates Stakeholders engagement from communications processes that seek to issue a message or influence groups to agree with a decision that is already made.

SDGs (Sustainable Development Goals)

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in- hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve oceans and forests.

S4M (Services for Mobility)

S4M – The drive-to-store platform. S4M delivers advertising that drives more customers to stores, dealerships and restaurants. Its drive-to-store platform, Fusio, delivers incremental customer visits which are always independently verified. Founded in 2011, S4M's platform is available globally, and used by over 1,000 brands worldwide to drive customers to physical locations.

UNIFE (Association of European railway builders)

Operating in Brussels since 1992, UNIFE represents European train builders and rail equipment suppliers. The association advocates on behalf of more than 100 of Europe's leading rail supply companies – from SMEs to major industrial champions - active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. UNIFE also brings together national rail industry associations from 11 European countries. The members account for 84% of the European, and 46% of the global, market for rail equipment and services. Hitachi Rail communicates members' interests at the European and international levels while actively promoting rail equipment and standards worldwide.

UNIFE's membership reflects all segments of Europe's rail supply industry from rolling stock manufacturers and infrastructure suppliers to system integrators and engineering companies. Members are committed to collaborating on common challenges facing the sector. They are also providing the innovative technology needed to meet the growing demand for sustainable transport. Hitachi Rail works to help shape interoperability standards and the coordination of EU-funded research projects that contribute to the technical harmonization of railway systems. This broad spectrum of work has established UNIFE as a trusted partner for EU institutions interested in rail and transport matters. This reputation has allowed to cooperate closely with the EU Agency for Railways, European Standardisation Organizations (e.g. CEN and CENELEC, ETSI), and other organizations representing rail sector Stakeholders.

UITP (The International Association of Public Transport)

UITP (Union Internationale des Transports Publics) is the International Association of Public Transport and a passionate champion of sustainable urban mobility. Established in 1885, with more than 135 years of history, it is the only worldwide network to bring together all public transport Stakeholders and all sustainable transport modes. UITP represents an international network of 1,800 member companies located in more than 100 countries and covers all modes of public transport – metro, light rail, regional and suburban railways, bus, and waterborne transport. It also represents collective transport in a broader sense. UITP's network counts one main and EU office in Brussels and fifteen regional and liaison offices worldwide (Abidjan, Astana, Bangalore, Casablanca, Dubai, Hong Kong, Istanbul, Johannesburg, Moscow, New York, Rome, São Paulo, Shenzhen, Singapore and Tehran).

UNI ISO 9001:2015

The ISO 9000 family of quality management systems (QMS) is a set of standards that helps organizations ensure they meet customer and other Stakeholders needs within statutory and regulatory requirements related to a product or service. ISO 9000 deals with the fundamentals of QMS, including the seven quality management principles that underlie the family of standards. ISO 9001 deals with the requirements that organizations wishing to meet the standard must fulfil.

Third-party certification bodies provide independent confirmation that organizations meet the requirements of ISO 9001. Over one million organizations worldwide are independently certified, making ISO 9001 one of the most widely used management tools in the world.

UNI EN ISO 14001:2015

UNI EN ISO 14001 is internationally recognized as the reference standard for EMS Environmental Management Systems and is applicable to organizations of all sizes and sectors. The ISO 14001 standard provides a management structure for the integration of environmental management practices, pursuing environmental protection, pollution prevention, as well as the reduction of energy and resource consumption. Many organizations choose to go further, combining ISO 14001 certification with registration with respect to the European EMAS regulation. This is an option applicable to companies that intend to report to Stakeholders on their environmental performance using a scheme defined at European level and designed to make the performance of similar companies comparable through specific indicators. The ISO 14001 standard (implemented in Italy in the UNI EN ISO 14001: 1996 standard and subsequently UNI EN ISO 14001: 2004) is a certifiable standard, i.e. it is possible to obtain, from an accredited certification body operating within certain rules, certificates of conformity the requirements contained therein.

UNI EN ISO 45001:2018

ISO 45001:2018 is an internationally recognised standard that specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance. It is applicable to any organization that aims at establishing, implementing and maintaining an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities.

UNEP (United Nations Environment Programme)

The United Nations Environment Programme (UNEP) is responsible for coordinating responses to environmental issues within the United Nations system. It was established by Maurice Strong, its first director, after the United Nations Conference on the Human Environment in Stockholm in June 1972. Its mandate is to provide leadership, deliver science and develop solutions on a wide range of issues, including climate change the management of marine and terrestrial ecosystems, and green economic development. The organization also develops international environmental agreements; publishes and promotes environmental science and helps national governments achieve environmental targets. As a member of the United Nations Development Group, UNEP aims to help the world meet the 17 Sustainable Development Goals.

TCFD

The Task Force on Climate-Related Financial Disclosure (TCFD) was created by the Financial Stability Board (FSB) to develop recommendations on the types of information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing a specific set of risks—risks related to climate change.

In 2017, the TCFD released climate-related financial disclosure recommendations designed to help companies provide better information to support informed capital allocation. Since the publication of the TCFD recommendations, the Task Force has continued its work—promoting adoption of the TCFD framework, providing further guidance, supporting educational efforts, monitoring climate-related financial disclosure practices in terms of their alignment with the TCFD recommendations, and preparing annual status reports.

Methodological Note

For years, Hitachi Rail has set itself the objective of sharing its culture of sustainability with all stakeholders, highlighting the results achieved in a structured and comprehensive annual document, aware of the growing importance that ESG issues have at a global level.

The CSR & Sustainability Report 2022, relating to the FY21 (1 April 2021 - 31 March 2022), identifies the main step forward made by Hitachi Rail and like the previous version of which was published in November 2021, is drafted in accordance with GRI Standards. In order to ensure an understanding of Hitachi Rail's activities, its performance, its results and the related impacts, further information are disclosed in accordance with the general disclosure principle of maximum transparency.

The Report contains information related to environmental, social and personnel issues, respect for human rights and the fight against bribery and corruption.

In line with the GRI Standards provisions, the full list of disclosures reported is presented in the GRI Content Index at the end of the document. The content index is designed by reconciling GRI General disclosures by material subject area, and in the next reporting year will incorporate the provisions of the new GRI Standards, which will be mandatory from 2023.

Unless specified otherwise, under the individual topics and in the GRI Content Index, the scope of reporting of the data and of the qualitative and quantitative information contained in the CSR&S refers to the performance of all sites of the 38 Countries in which Hitachi Rail operates.

The contents of the Report were identified through a materiality analysis process finalized in 2021 and incorporated in this report, which made it possible to identify the most relevant sustainability issues for Hitachi Rail and its stakeholders through a process of engagement and discussion with them, as described in sections 2.2 and 2.3.

Hitachi Rail also wanted to underline the close link between these topics and the Sustainable Development Goals of the UN (SDGs) and the related Targets, both by inserting them directly in the materiality matrix and through a specific table that highlights the existing connection (see paragraph "Sustainability topics and contribution to SDGs"). The criterion that allowed the positioning of the SDGs within the matrix was the overlapping of each Goal with the most relevant topic related to it.

The Report has been prepared in accordance with the GRI Standards, Core option, as set out in the Global Reporting Initiative Sustainability Reporting Standards defined by the GRI - Global Reporting Initiative ("GRI Standards"), and follows the principles defined in the manual "GRI Standards: 101 Principles of Reporting". In particular, the 2016 version was used except for Disclosure GRI 403: Occupational Health and Safety, Disclosure GRI 306: Waste, Disclosure GRI 303: Water and Effluents or which the most recent versions have been taken into account.

The drafting of this Report was carried out at the same time as an in-depth technical and methodological refinement that led to a clearer representation of the data, as well as to the identification of the need to restate data from previous years. The FY20 data subject to restatement are clearly marked within the document.

Consumption and emissions

The conversion factors used for translating energy consumption into GJ are those of ISPRA "Tabella parametri standard nazionali".

Scope 1

Scope 1 Direct GHG Emissions are of primary

importance for Hitachi Rail due to its commitment of reducing them 100% by 2030. For this reason, the Company is doing its best to track the Year-on-Year trend to identify the main sources of emissions and the best solutions to mitigate them. The calculation structure and methodology follow the guidelines provided by the GRI 305-1, considering emissions conversion factors recognised by the international community and consistent Global Warming Potential (GWP) rates.

Scope 1 emissions are calculated using the factors provided by the UK government's Department for Environment, Food and Rural Affairs (DEFRA).

Scope 2

Scope 2 Energy Indirect GHG Emissions are of primary importance for Hitachi Rail due to its commitment of reducing them 100% by 2030. Hitachi Rail is doing its best to track the Year-on-Year trend to identify which facilities are responsible for the highest energy consumption. This is necessary to prioritize future interventions (e.g., green energy production, phase-out of polluting technologies, modernization of the plants, etc.).

The calculation structure and methodology follow the guidelines provided by the GRI 305-2, applying a market-based calculation method which reflects emissions from electricity that companies have purposefully chosen. The methodology considers contractual instruments (e.g., Power Purchase Agreements) and energy attribute certificates (RECs, GOs, etc.).

Scope 2 emissions are calculated adopting the market-based methodology using the emission factors defined by Corporate at a Group level.

Scope 3

With respect to last year's methodology, FY2021 calculation of Scope 3 Indirect Emissions changed radically. The first main difference is related to the reporting structure: all values have been classified under the 15 categories provided by the GHG Protocol, which are compliant with the GRI Standard 305-3. Moreover, in order to account for the highest number of categories as possible, a hybrid calculation method has been adopted. This follows the hierarchic order provided by the GHG Protocol Guidelines, which has been applied following this logic:

- Whenever the internally gathered values allow for an in-depth calculation methodology (e.g., distance-based method, waste-type specific method, etc.), more precise methods have been selected,
- If not available, the spend-based method has been selected. This provides a high-level analysis based on the costs of purchased goods and services.

The study has been supported by the experts from Normative, a primary consultancy firm operating in emissions calculations.

By applying the mixed method approach, it was possible for Hitachi Rail to expand the perimeter of its analyses and to better identify the main sources of emissions, prioritizing future activities necessary to address them.

Contacts

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GRI Content Index

General Information

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102-5	Ownership and legal form	1.3 Hitachi Rail Identity and Business 1.3.1 Introduction	
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102-8	Information on employees and other workers	3.1 Our People	Workers who are not employees are not included.
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102-17	Mechanisms for advice and concerns about ethics	4.2 Ethics, transparency and integrity 4.2.2 Whistleblowing	
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		REPORTING PRACTICE	
102-45	Entities included in the consolidated financial statements	Methodological Note 1.3 Hitachi Rail Identity and Business 1.3.5 Economic performance	
102-46	Defining report content and topic Boundaries	Methodological Note 2.3 Materiality Analysis	
102-47	List of material topics	2.3 Materiality Analysis	
102-48	Restatements of information	Methodological Note 5.3.1 Consumption of Substances and Materials 5.3.3 Energy consumption trends 5.4.1 Direct and indirect greenhouse gas emissions 5.4.2 Polluting emissions and Air quality	Restatements are due to methodological and perimeter refinements and are indicated in the text through footnotes in correspondence with the reference tables.
102-49	Changes in reporting	Methodological Note 2.3.1 Materiality Matrix	There were no changes in the list of material topics compared to the previous reporting year.
102-50	Reporting period	Methodological Note Foreword from Andrew Barr, Chief Executive Officer	

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103-3	Evaluation of the management approach	5.1.3 Towards a harmonized Society with Nature (Resource management) 5.3.1 Consumption of Substances and Materials	
301-1	Materials used by weight or Volume	5.3.1 Consumption of Substances and Materials	The data disclosed were subject to restatement.
		ENERGY	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 5.3 Materials and Energy	
103-2	The management approach and its components	2.1.1 Delivering a sustainable, safe and high-quality railway business 2.1.2 New horizons and perspectives on Sustainability 4.3.1 Sustainability Risks and Opportunities 5.1.3 Towards a harmonized Society with Nature (Resource management) 5.2 Environmental Policy 5.3.2 Energy consumption	
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302-4	Reduction of energy Consumption	5.3.2 Energy consumption 5.3.3 Energy consumption trends	The data disclosed were subject to restatement.
302-5	Reduction in energy requirements of products and services	5.3.2 Energy consumption 5.3.4 Renewable Energy	The data disclosed were subject to restatement.
		WATER	
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303-1	Interactions with water as a shared resource	5.6 Water and Effluents Management	
303-2	Management of water discharge-related impacts	5.6 Water and Effluents Management	

303-3	Water withdrawal	5.6 Water and Effluents Management	
303-5	Water consumption	Highlights (FY21) 5.6 Water and Effluents Management	
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305-2	Energy indirect (Scope 2) GHG emissions	Highlights (FY21) 5.4.1 Direct and indirect greenhouse gas emissions	The data disclosed were subject to restatement.
305-3	Energy indirect (Scope 3) GHG emissions	Highlights (FY21) 5.4.1 Direct and indirect greenhouse gas emissions	The data disclosed were subject to restatement.
305-5	Reduction of GHG emissions	Foreword from Andrew Barr, Chief Executive Officer Highlights (FY21) 5.1 Be a Climate Change Innovator 5.4.1 Direct and indirect greenhouse gas emissions	The data disclosed were subject to restatement.
305-7	Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	3.5.4 Mobility 5.4.2 Polluting emissions and Air quality	
		WASTE	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.1 Delivering a sustainable, safe and high-quality railway business 2.1.3 Sustainability topics and contribution to SDGs 5.1.3 Towards a harmonized Society with Nature (Resource management) 5.5 Waste	
103-2	The management approach and its components	2.3 Materiality Analysis 4.3.1 Sustainability Risks and Opportunities 5.1.3 Towards a harmonized Society with Nature (Resource management) 5.1.3.1 Circularity: New Circular Economy Business Model Project 5.1.3.2 Eco-Design in Hitachi Rail 5.2 Environmental Policy 5.5 Waste	
103-3	Evaluation of the management approach	5.1.3 Towards a harmonized Society with Nature (Resource management) 5.1.3.1 Circularity: New Circular Economy Business Model Project 5.1.3.2 Eco-Design in Hitachi Rail 5.2 Environmental Policy 5.5 Waste	

306-1	Waste generation and significant waste-related impacts	5.1.2 A team dedicated to Innovation 5.1.3 Towards a harmonized Society with Nature (Resource management) 5.1.3.1 Circularity: New Circular Economy Business Model Project 5.5 Waste
306-2	Management of significant waste-related impacts	5.1.2 A team dedicated to Innovation 5.1.3 Towards a harmonized Society with Nature (Resource management) 5.1.3.1 Circularity: New Circular Economy Business Model Project 5.5 Waste
306-3	Waste generated	5.5 Waste
306-4	Waste diverted from disposal	Highlights (FY21) 5.5 Waste
306-5	Waste directed to disposal	5.5 Waste
	ENVIRONMENTAL COMPLIANCE	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 4.1 Corporate Governance 5.2 Environmental Policy
103-2	The management approach and its components	4.1.1.2 Quality, Health, Safety and Environmental certifications and Decarbonisation 4.4.2 Sustainable Supply Chain Strategy 5.2 Environmental Policy
103-3	Evaluation of the management approach	5.2 Environmental Policy
307-1	Non-compliance with environmental laws and regulations	4.2 Ethics, transparency and integrity
	SUPPLIER ENVIRONMENTAL ASSESSMENT	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 4.1 Corporate Governance 4.4 Towards a sustainable Value Chain 4.4.2 Sustainable Supply Chain Strategy 4.4.3.1 Supplier Code of Conduct 5.2 Environmental Policy
103-2	The management approach and its components	4.4 Towards a sustainable Value Chain 4.4.2 Sustainable Supply Chain Strategy 5.2 Environmental Policy
103-3	Evaluation of the management approach	4.4 Towards a sustainable Value Chain 4.4.2 Sustainable Supply Chain Strategy
308-1	New suppliers that were screened using environmental criteria	4.4.1 Supply Chain & Procurement Overview 4.4.4 Digital Supplier management

Social

GRI Disclosure	Par. Reference	Omission/Notes
	EMPLOYMENT	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 3.1 Our people 3.1.2 Talent acquisition 3.2 Diversity, Inclusion and Multiculturalism 3.5 Employee welfare 4.1 Corporate Governanc
103-2	The management approach and its components	3.1 Our people 3.1.2 Talent acquisition 3.2 Diversity, Inclusion and Multiculturalism 3.5 Employee welfare

103-3	Evaluation of the management approach	3.1 Our people 3.1.2 Talent acquisition		
401-1	New employee hires and employee turnover	3.1.2 Talent acquisition		
401-2	Benefits provided to fulltime employees that are not provided to temporary or part time employees	3.5 Employee welfare 3.5.1 People Care		
401-3	Parental leave	3.5.5 Parental leave		
		LABOR/MANAGEMENT RELATIONS		
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 3.1.3 Employee Relations Management		
103-2	The management approach and its components	3.1.3 Employee Relations Management		
103-3	Evaluation of the management approach	3.1.3 Employee Relations Management		
402-1	Minimum notice periods regarding operational changes	–		In the event of particularly significant organizational changes, specific communications initiatives targeting broad categories of employees are envisaged to explain the reasons for the changes.
		OCCUPATIONAL HEALTH AND SAFETY		
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 3.4 Occupational Health and Safety		
103-2	The management approach and its components	3.4 Occupational Health and Safety 4.1.1 ESG Management System 4.1.1.2 Quality, Health, Safety and Environmental certifications 4.3.1 Sustainability Risks and Opportunities		
103-3	Evaluation of the management approach	3.4 Occupational Health and Safety		
403-1	Occupational health and safety management system	3.4 Occupational Health and Safety 4.1.1 ESG Management System 4.1.1.2 Quality, Health, Safety and Environmental certifications		
403-2	Hazard identification, risk assessment, and incident investigation	3.4 Occupational Health and Safety 4.3.1 Sustainability Risks and Opportunities		
403-3	Occupational health services	3.4 Occupational Health and Safety 3.5 Employee welfare 3.5.1 People Care 3.5.3 Employee Initiatives		
403-4	Worker participation, consultation, and communication on occupational health and safety	3.4 Occupational Health and Safety		
403-5	Worker training on occupational health and safety	3.3 Training and Career Development		
403-6	Promotion of worker health	3.4 Occupational Health and Safety 3.5 Employee welfare 3.5.1 People Care 3.5.3 Employee Initiatives		
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	3.4 Occupational Health and Safety 3.4.1 Activities and results		
403-9	Work-related injuries	3.4.1 Activities and results		
		TRAINING AND EDUCATION		
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 3.3 Training and Career Development		

103-2	The management approach and its components	3.3 Training and Career Development
103-3	Evaluation of the management approach	3.3 Training and Career Development
404-1	Average hours of training per year per employee	3.3 Training and Career Development
404-2	Programs for upgrading employee skills and transition assistance programs	3.1.2 Talent acquisition 3.3 Training and Career Development 3.3.1 CSR&S e-learning 3.3.2 Amplify the internal Culture as Climate Change Innovator 3.5.1 People Care 3.5.3 Employee Initiatives 4.2 Ethics, transparency and integrity 5.1.3.1 Circularity: New Circular Economy Business Model Project 5.2 Environmental Policy
404-3	Percentage of employees receiving regular performance and career development reviews	3.3 Training and Career Development
	DIVERSITY AND EQUAL OPPORTUNITY	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 3.2 Diversity, Inclusion and Multiculturalism
103-2	The management approach and its components	3.2 Diversity, Inclusion and Multiculturalism
103-3	Evaluation of the management approach	3.2 Diversity, Inclusion and Multiculturalism
405-1	Diversity of governance bodies and employees	3.1 Our People 3.2 Diversity, Inclusion and Multiculturalism
405-2	Ratio of basic salary and remuneration of women to men	4.2.5 Remuneration systems
	HUMAN RIGHTS ASSESSMENT	
103-1	Explanation of the material topic and its boundary	1.4 Partnership for Sustainable Development 2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 3.2.1 Approach to Human Rights 4.1 Corporate Governance 4.3 ESG Risks 5.1.3.3 Social Life Cycle Assessment of products: the first train application
103-2	The management approach and its components	3.2.1 Approach to Human Rights 4.3.1 Sustainability Risks and Opportunities
103-3	Evaluation of the management approach	3.2.1 Approach to Human Rights
412-2	Employee training on human rights policies or procedures	3.3 Training and Career Development
	LOCAL COMMUNITIES	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 2.2.2 Hitachi Rail and local communities 3.5.3 Employee Initiatives
103-2	The management approach and its components	2.2.2 Hitachi Rail and local communities
103-3	Evaluation of the management approach	2.2.2 Hitachi Rail and local communities
413-1	Operations with local community engagement, impact assessments, and development programs	2.2.2 Hitachi Rail and local communities 3.5.3 Employee Initiatives

	SUPPLIER SOCIAL ASSESSMENT	
103-1	Explanation of the material topic and its boundary	2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 4.3.1 Sustainability Risks and Opportunities 4.4 Towards a sustainable Value Chain
103-2	The management approach and its components	4.4.4 Digital Supplier management
103-3	Evaluation of the management approach	4.4.4 Digital Supplier management
414-1	New suppliers that were screened using social criteria	4.4.1 Supply Chain & Procurement Overview 4.4.4 Digital Supplier management
	CUSTOMER HEALTH AND SAFETY	
103-1	Explanation of the material topic and its boundary	1.3.3 Mission, Vision and Values 2.3 Materiality Analysis 2.1.3 Sustainability topics and contribution to SDGs 4.4.5 Our customers 4.4.5.1 Customer engagement
103-2	The management approach and its components	4.4.5 Our customers 1.3.3 Mission, Vision and Values
103-3	Evaluation of the management approach	4.4.5 Our customers
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	4.2 Ethics, transparency and integrity 4.4.5 Our customers 4.2.4 Data protection