

**NTN**

Make the world **NAMERAKA**

# 2021 STATEMENT OF EXTRA-FINANCIAL PERFORMANCE





# contents

## NTN vision

Brand manifesto	5
Commitments	6
What is a bearing?	8
What do we do?	9
Outline of our history	10
NTN Group around the world	12
NTN Corporation	14

## Strategy

NTN strategy	16
Our main NTN-SNR strategies	17
NTN-SNR's 4 major challenges	18
Business model	20

## Methodology & scope

Stakeholder consultation	25
NTN Corporation Materiality matrix	26

## Strategic lines & kpis

Business	31
Innovation	35
Social	39
Environment	45
Energy efficiency of bearings	52
Ethics	55

## ECOVADIS assessment

Ecovadis assessment	59
---------------------	----

## Green taxonomy

Green taxonomy	61
----------------	----

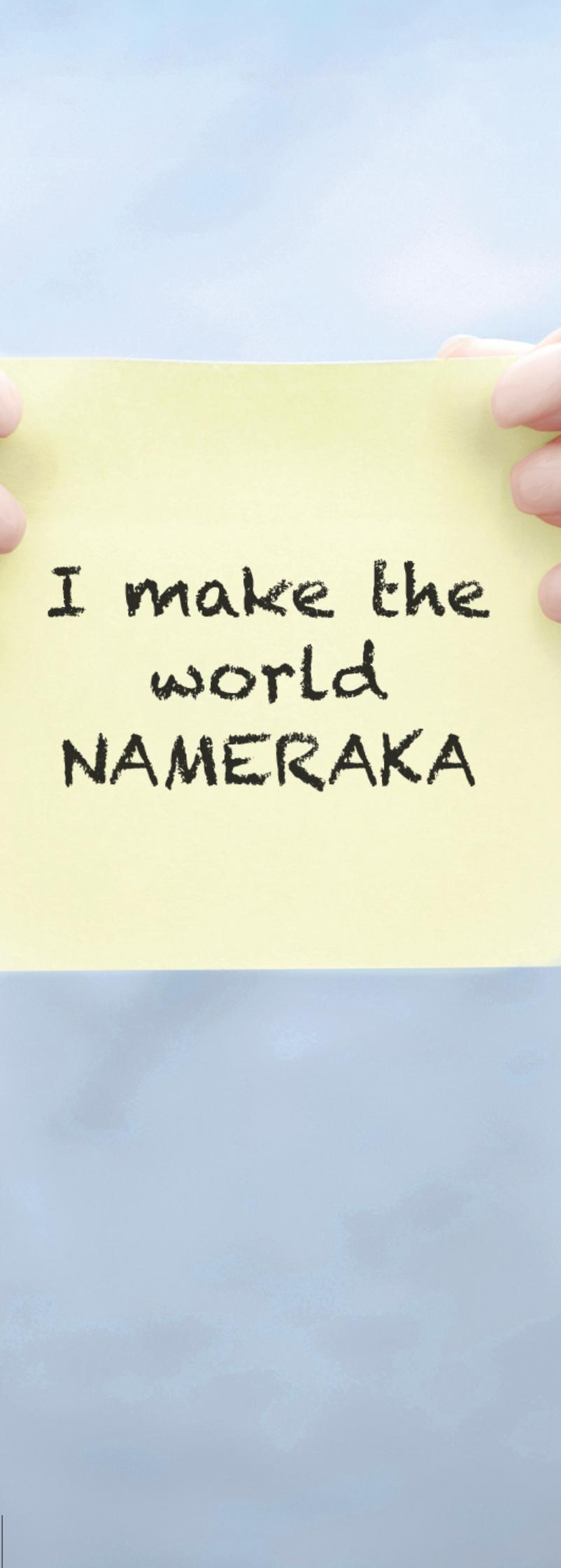


The year 2021 was marked by opposing dynamics depending on our activities. Growth was sustained in all our markets except for the automotive sector, which was strongly impacted by the pandemic waves and semiconductor shortages.

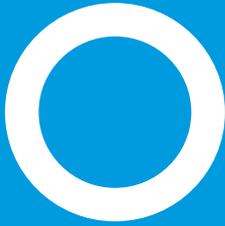
We launched our new business plan in this troubled and uncertain environment. We must meet the challenges ahead, prioritise our actions to meet the expectations of our stakeholders and do so through the commitment of all our team members.

Supporting the new forms of mobility, the new modes of consumption and offering our customers increasingly efficient products, striving for decarbonisation of our activities, working with a network of responsible partners, offering a welcoming environment at all our sites, are all exciting challenges that will enable our company to continue to develop in the coming years. Our CSR policy covers these areas, which contribute to the global strategy of the NTN group worldwide.

**Dominique Lavilla**  
**General Manager of NTN-SNR Roulements**



I make the  
world  
NAMERAKA



# BRAND MANIFESTO

NTN VISION

## **FOR MORE THAN 100 YEARS, NTN HAS HELPED THE WORLD TO MOVE AND GROW.**

With a strong presence in many sectors (industry, aerospace, automotive), we have always needed to adapt in order to meet our customers' expectations and provide them with the best technical innovations. This is why at NTN, **innovation is at the heart**

**of our concerns.** Today, more than ever, we are convinced that our role consists of **being an instrument of change.** It is our duty to accompany our partners towards **a future that is more fluid, more mobile, more harmonious** and based on better energy efficiency. NTN in Europe is proud to be at the service of movement.

**WE ARE THE WORLD LEADERS IN HIGH-PRECISION PRODUCTS FOR MOVEMENT,** and our expertise in mechatronics and engineering know-how enable us to offer premium high-tech solutions tailored to the needs of the market. In the face of global changes and challenges, we are fully committed to energy efficiency and friction reduction.

## **OUR HIGH STANDARDS HAVE NO LIMIT.**

Our customers are business partners whose needs we embrace. We cultivate a balanced relationship with them based on proximity and trust. Whether in the design, development or supply of motion solutions, we innovate at their side.

## **OUR WILL TO COOPERATE IS BOUNDLESS.**

Guided by our combined European and Japanese identity and our pioneering spirit, we are constantly seeking solutions for progress, combining rigor and creativity and by mixing cultures and skills.

## **WE ARE FULLY COMMITTED.**

We want to be co-developers of safer, more sustainable and more efficient mobility.

## **POSITIVE MOBILITY.**

We want to contribute to a more fluid, more mobile, more harmonious society, based on better energy efficiency.

**Together, let's continue to make the world Nameraka\***

\* No friction, fluidity, harmony in Japanese

# COMMITMENTS

NTN-SNR Group's identity has been built over the past 100 years around our stakeholder's expectations. They are at the heart of our concerns and our Corporate Social Responsibility strategy (CSR).

In line with the NTN Group's philosophy and to make the world smooth (Nameraka); we commit to listening to our stakeholders, to ensuring the performance of our Company, to managing our risks and taking our opportunities, according to the following drivers:



## SAFETY IS MORE THAN A PRIORITY. IT IS A FUNDAMENTAL VALUE.

We want everyone to go home safe and **healthy** after work.

To make this possible, our actions are driven by safety, on a daily

basis, with the objective of **controlling risks** better.

We commit to providing safe working conditions for our employees and contractors.

We share this value with all actors within the company.

**Safety is everyone's business!**



## SATISFACTION OF OUR CUSTOMERS AND THE STAKEHOLDERS ENSURES OUR SUSTAINABILITY.

**Satisfaction of all interested stakeholders** is our purpose. We manage

this by providing conform products, by managing risks and opportunities, to meet customers, legal and regulatory requirements.

We develop Customer focus within our company. We have an **acute awareness of quality** to meet their expectations. Our objective is to ensure product integrity: product **conformity and safety**, at any time during our activity. We aim to « **get it right first time** ».

We commit to developing fair and sustainable

**Quality is our future - Everybody, Every day, Everywhere.**





## ENVIRONMENTAL PROTECTION AND IMPACT CONTROL ARE AT THE HEART OF OUR ACTION.

Each day, we improve our **environmental impact**, reducing our resource consumption, our discharge, our waste and our energy consumption.

We aim to contribute to **ecological mobility** by improving the energetic performance of our products.

**Our procurement and design activities** take into consideration the energy and environmental performance and contribute to its improvement.

We choose to put **reduction of Greenhouse Gas Emission** at the centre of our organisations to reach carbon neutrality.



## WE ARE COMMITTED TO HIGH ETHICAL STANDARDS.

We are committed to conducting our business with **integrity and fairness**, respecting the rules and regulations which apply to us.

We **reject all forms of corruption** and any attempt to **circumvent the rules of fair** and open competition.

We work to ensure the **accuracy of the financial information** we disclose.

We make every effort to protect the data and the know-how in our possession.

We **fight discrimination**, from hiring and throughout the career path of our employees. We promote equal rights for women and men. We commit to

respecting working regulations concerning trade-union freedom and the ban of forced and child labour. We condemn all types of harassment and all types of behaviour which are contrary to **human dignity**.

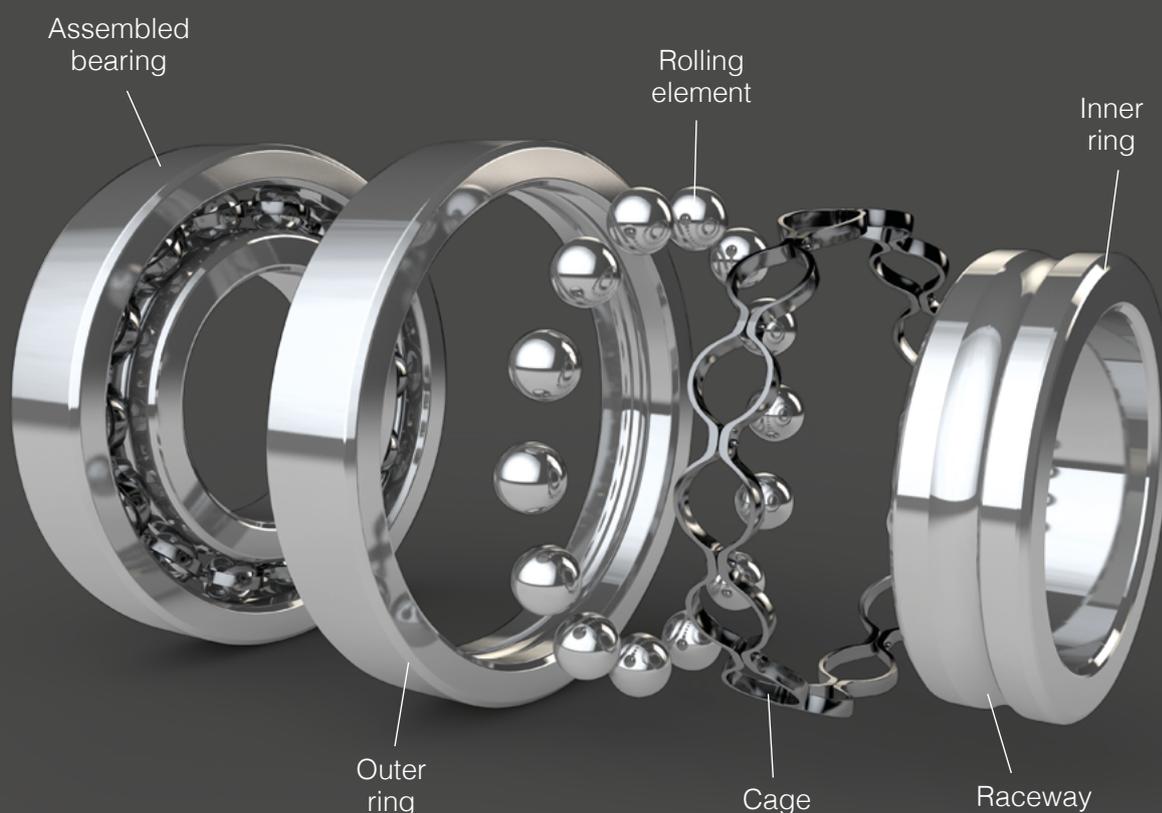


**Dominique Lavilla**

Deputy General Manager of NTN Europe & Africa region  
CEO of NTN-SNR Roulements

## WHAT IS A BEARING?

The bearing is a basic element that ensures a mobile link between two elements of a mechanism rotating in relation to each other. Its function is to enable the relative rotation of these elements, under load, with precision and with minimal friction.



As vehicles and equipment continue to improve, becoming lighter and more economical, our bearings must follow suit: increasing life and accuracy, reducing friction and cutting costs.

Invisible and often forgotten, bearings are present everywhere in our daily lives: domestic appliances, transport, leisure, office automation, industry, etc. They are also present in specialised industries, aeronautics and space, railways.

**The design of our bearings and the choice of certain markets are part of an environmental approach to improve energy efficiency.**

# WHAT DO WE DO?

## We \*design precision engineering.

We develop, industrialize and offer **high-precision** application solutions and products. Friction reduction is part of our mission. **Perfect movement** is our obsession. **Innovation** is at the heart of our concerns. Today we develop and supply for all our customers the **solutions of tomorrow** in terms of product, **digitalization** and **services**.

*Our  
high standards  
have  
no limits.*

1916

Creation of **SRO** in Annecy.  
France

1918

Creation of **NTN** in Osaka.  
Japan

1946

Purchase of **SRO** by Renault.  
Creation of « Société  
Nouvelle de Roulements »  
(**SNR**).

## OUTLINE OF OUR HISTORY



France



Japan

2007

Entry of **NTN** into the  
**SNR Roulements**  
equity.

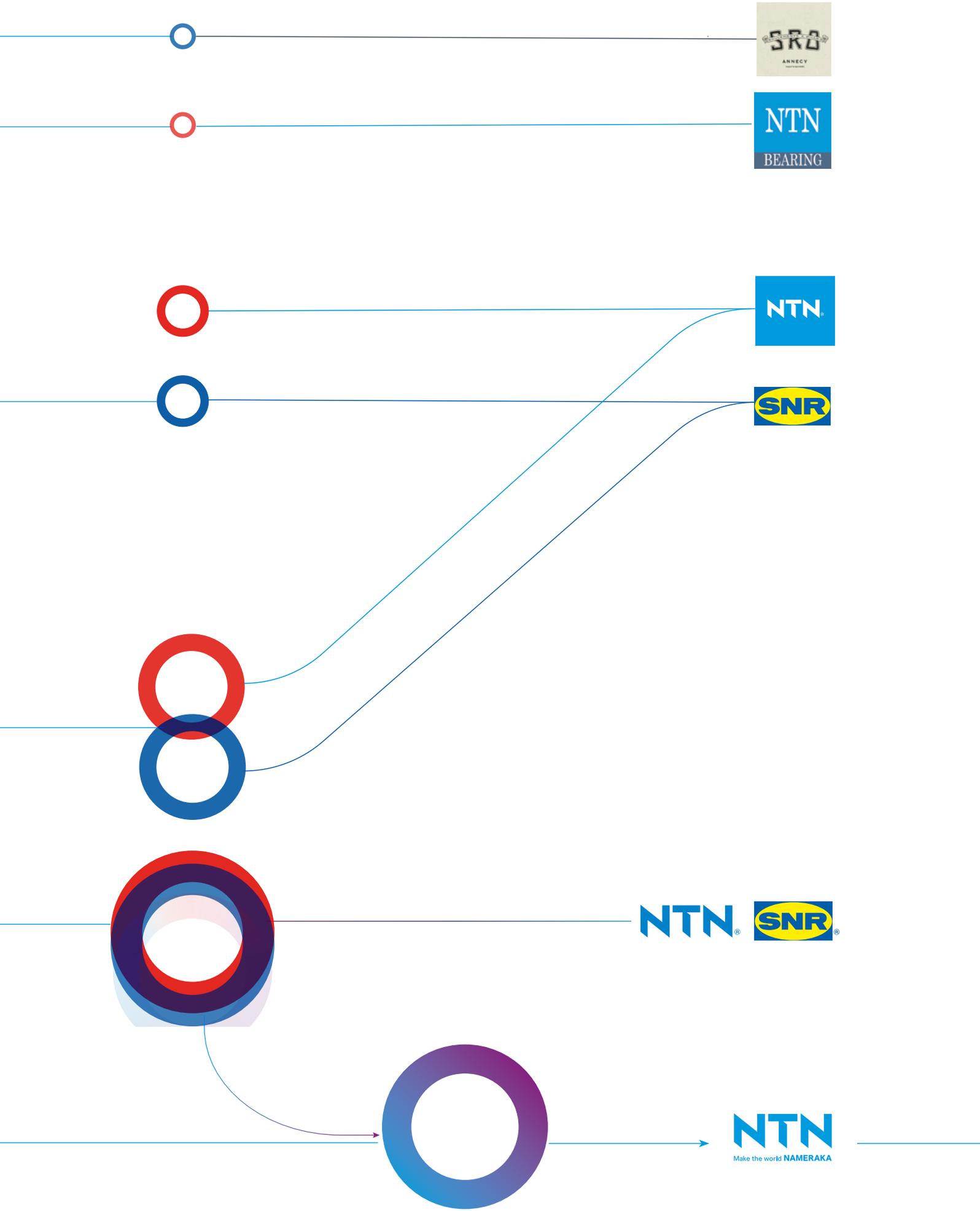
2010

**NTN France** absorbed  
by **SNR Roulements**.  
Creation of **NTN-SNR**

Towards global communication for the group

2022

**NTN** confirms its identity through the  
slogan: **Make the world Nameraka**  
**SNR** remains a strong brand for the group.



# NTN GROUP AROUND THE WORLD



**Company name**

NTN Corporation  
(NTN : New Technology  
Network)

**Founded in**  
**President**  
**Head office**

March 1918  
Eiichi Ukai  
Osaka in Japan



Eiichi UKAI



Satoshi UEDA

### NTN Europe and Africa

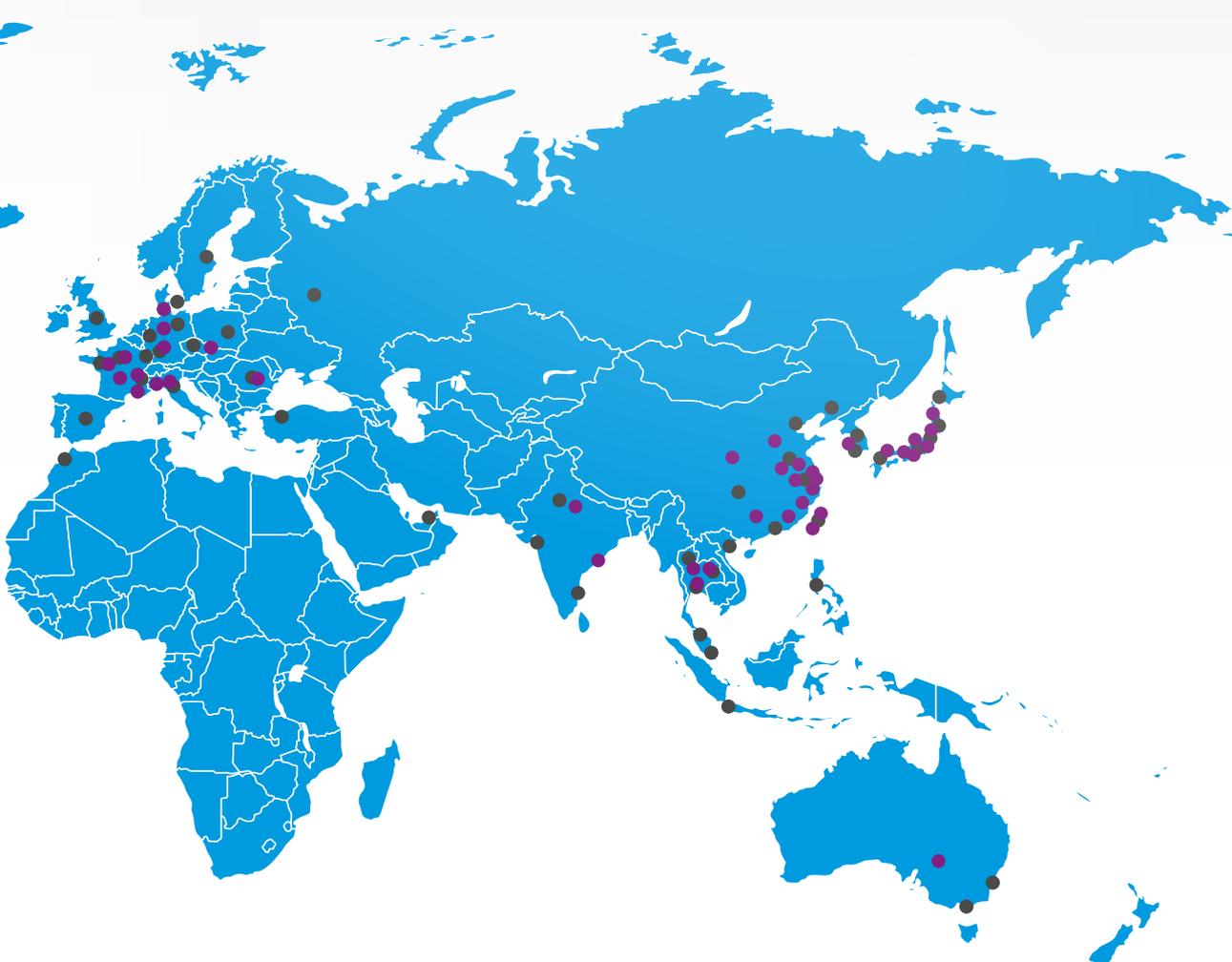
#### European branch of the NTN

**Corporation Group** headed by Satoshi UEDA, manages and develops all the activities of the NTN group in Europe, Brazil, Africa and the Middle East.



The NTN Group designs and manufactures high quality products.

They are marketed under the trademarks:



**OUR KEY MARKETS**

**Automotive**

- Wheel bearings
- Gearbox bearings
- Suspension thrust bearings
  - Clutch release bearings
  - Transmission joints
  - Tensioners

**Aeronautics**

- Aircraft engines
- Rotors and transmissions for helicopter
- Special products and equipment
- Aerospace

**Industry**

- Agricultural equipment
- Construction machinery
  - Machine tools
  - Railway
  - Wind turbine
- Mines and quarries
- Steel industry



**+ de 23 000**  
EMPLOYEES



**73** production  
SITES



**15** RESEARCH  
CENTRES



**118** COMMERCIAL  
SUBSIDIARIES



## NTN Corporation

To understand the scope of action  
of NTN Europe and Africa and to  
gauge where we stand in relation to  
the NTN Group

### NTN Europe and Africa

Management of NTN subsidiaries in Europe

#### NTN-SNR Group

##### DMF

(Germany)

##### NTN Wälzlager

(Germany)

##### NTN AT

(Germany)

##### NTN Bearings

(UK)

##### NDB

(Brazil)

##### NTE

(Allonnes & Crézancy  
in France)

**NTN-SNR Group**  
subsidiaries

**NTN-SNR ROULEMENTS**

**ICSA**  
(Italy)

**NTN-SNR  
Iberica**  
(Spain)

**NTN-SNR**  
Rulmenti  
(Romania)

**NTN-SNR**  
(Italy)

**NTN Rolamentos  
do Brasil**  
(Brazil)

**NTN-SNR**  
(Marocco)

**SNR Cévennes**  
(Alès)

**NTN-SNR  
Polska**  
(Poland)

**SNR Wälzlager**  
(Germany)

**NTN-SNR Rus**  
(Russia)

**NTN-SNR ROULEMENTS**  
French sites

**Annecy**

**Argonay**

**Cran-Gevrier**

**Vaise / Lyon**

**Meythet**

**Seynod**

**Montrouge / Paris**

# DRIVE NTN100<sup>Phase 2</sup>

## NTN STRATEGY

strategy



### DIGITILIZATION

Latest digital technologys

D

### RESSOURCES

NTN's resources and skills  
management

R

### INNOVATION

Development of  
innovative technologies  
products and services

I

### VARIABLE COST REFORMATION

Productivities, added  
values and procurement

V

### EFFICIENCY IMPROVEMENT

Be world's N°1 in  
performance and quality

E

# OUR MAIN NTN-SNR STRATEGIES



**EXPLORE**  
NEW HORIZON



**TRANSFORM**  
OUR ORGANIZATION



**DEVELOP**  
AFTERMARKET



**CAPTURE**  
NEW BUSINESS



**CONSOLIDATE**  
OUR OEM BUSINESS

## TO REMEMBER

- ↳ **Reaching a critical size in the Aftermarket**
- ↳ **Strengthening our competitiveness**
- ↳ **Capturing new business in the field of electric vehicles with cutting-edge technology**
- ↳ **Successfully diversifying our products and services**
- ↳ **Making our company a pleasant and environmentally friendly place to work**

# NTN-SNR'S 4 MAJOR CHALLENGES



Adapting to the characteristics of the European market in the next 3 years



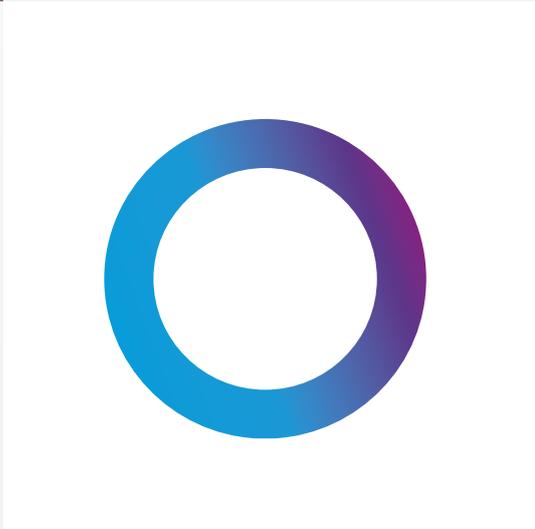
Becoming part of the European Green Pact



Supporting the increase in the share of electric vehicles



Intensifying the digitalization that will profoundly change markets



# NTN's Key business domains

## Automotive



We are present with all the leading players on the market and work with the world's leading manufacturers and equipment suppliers. We are historical specialists and world leaders in the automotive industry. Suppliers, technology developers, original equipment manufacturers and multi-specialists (engine, chassis and transmission) for spare parts. At NTN, we are present throughout

the life of a vehicle. We provide sustainable solutions with high energy and environmental performance. These innovative and personalised products and services are created for every driver in the world. Our durable aftermarket service ensures extended use and reliability for these millions of vehicles. Together with leading manufacturers and suppliers of equipment, we develop the new and future generations of products that equip and will equip the vehicles of today and tomorrow. Our technological advances address the challenges of electrification, connectivity, autonomy, carpooling and subscription for more efficient, safe and sustainable cars.

## Aerospace



We have been a partner for over 40 years in the largest aeronautical and space programmes. We are currently one of the leaders in this field. As engineers and technicians at the heart of the aerospace industry's innovation process, our quality standards are very high. At NTN, we are present from the design

to the production of high precision parts. We develop for and alongside each of our partners the products specific to their applications (engines, helicopters, aircraft, space, etc.). Aware of climate challenges, we are constantly exchanging and collaborating to find solutions to make the airspace more respectful and sustainable for all.

## Industry



We are present with many of the world's leading manufacturers, equipment manufacturers and users. We share our expertise in many fields of application. We are the shadow actors in everyone's daily life. As recognised manufacturers and suppliers, experts in precision mechanics, we share our expertise with about thirty application sectors (railways, wind power, steel industry, construction machinery, machine tools, agricultural machinery, robotics, etc.).

At NTN, we are present from the manufacturing to the maintenance of the machines. We offer a very wide range of reliable, highly technical products and solutions that are essential to facilitate the daily work of our partners. Every day, we help maintain millions of machines throughout the world. This is why the efficiency and reliability of our products are a key part of our engineering work. All our expertise is put at the service of high-performance products, participating in a world being continually created.

# BUSINESS MODEL

## RESOURCES



### HUMAN CAPITAL

4,128 staff in the NTN-SNR Group  
 Strong ties with local authorities  
 Training: 4.5% of the wage bill



### INTELLECTUAL CAPITAL

1 R&D centre in Europe – Annecy  
 400 employees  
 4 local expertise services in Europe  
 A CREA LAB Innovation organisation  
 4 trademarks



### FINANCIAL CAPITAL

Sole Japanese shareholder since 2013  
 Investments = €20 million



### INDUSTRIAL CAPITAL

10 production sites in Europe in 5 countries



### ENVIRONMENTAL CAPITAL

ISO 14001 certification  
 ISO 50001 certification

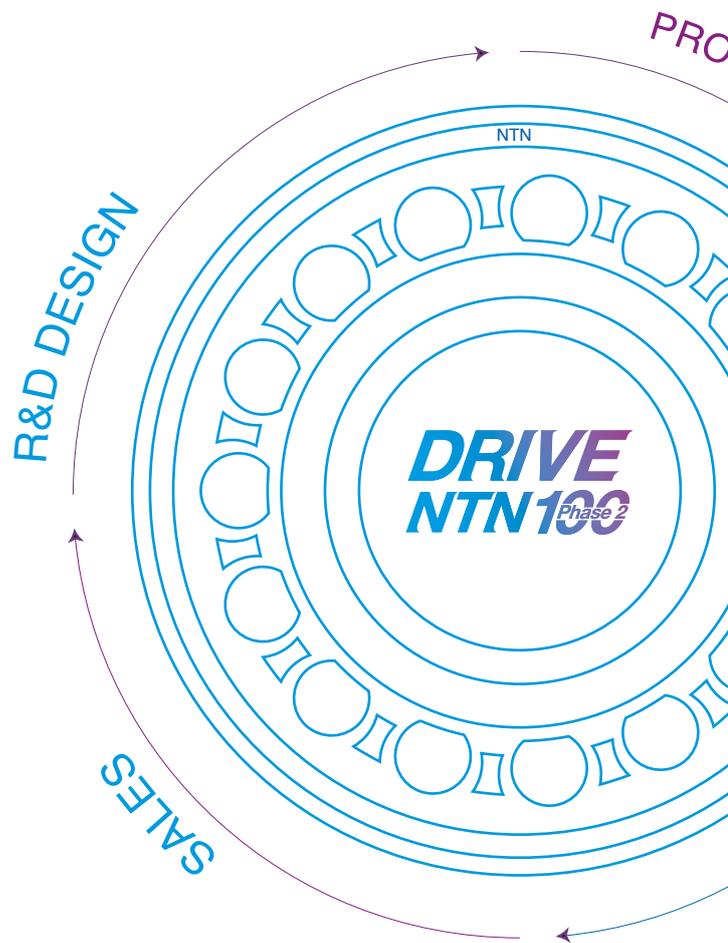


### PARTNER CAPITAL

Over 2000 suppliers  
 A network of partners

## VALUE CREATION

As part of the NTN Group, a world leader in its business sectors (no. 3 bearings manufacturer globally, world no. 1 in automotive wheel bearings, and world no. 2 for CV joints), we create products by applying the resources we have built up in the 100 years since our Company was established, employing a value creation process that incorporates R&D, design, sourcing, manufacturing and sales.



## 3 AREAS OF ACTIVITY

Automotive

Industry

Aeronautics

### DEVELOPMENT

#### BUSINESS

Expanding our expertise into the markets of the future in a bid to make current and future changes in society more harmonious.

#### INNOVATION

Challenging the way we do things and our new projects, thanks to our ecosystem of partners, in order to continue growing and innovating

#### 2021 TURNOVER

€750 million

#### FUTURE HEAD QUARTER

Future head quarter and European R&D centre

### SUSTAINABILITY

#### SOCIAL

Attracting and retaining a variety of talented staff to ensure the development of NTN-SNR by drawing on a strong employer brand.

#### WOMEN ON THE WORKFORCE

in 2021  
30,6%

#### PROMOTIONS

274

#### MOBILITIES

77

#### ENVIRONMENT

Develop products and services and manage our activities from an environmentally responsible perspective.

#### ETHICS

Setting an example in our business practices.

#### ECOVADIS RATING

75%, platinum level

Make the world **NAMERAKA**

PROCUREMENT



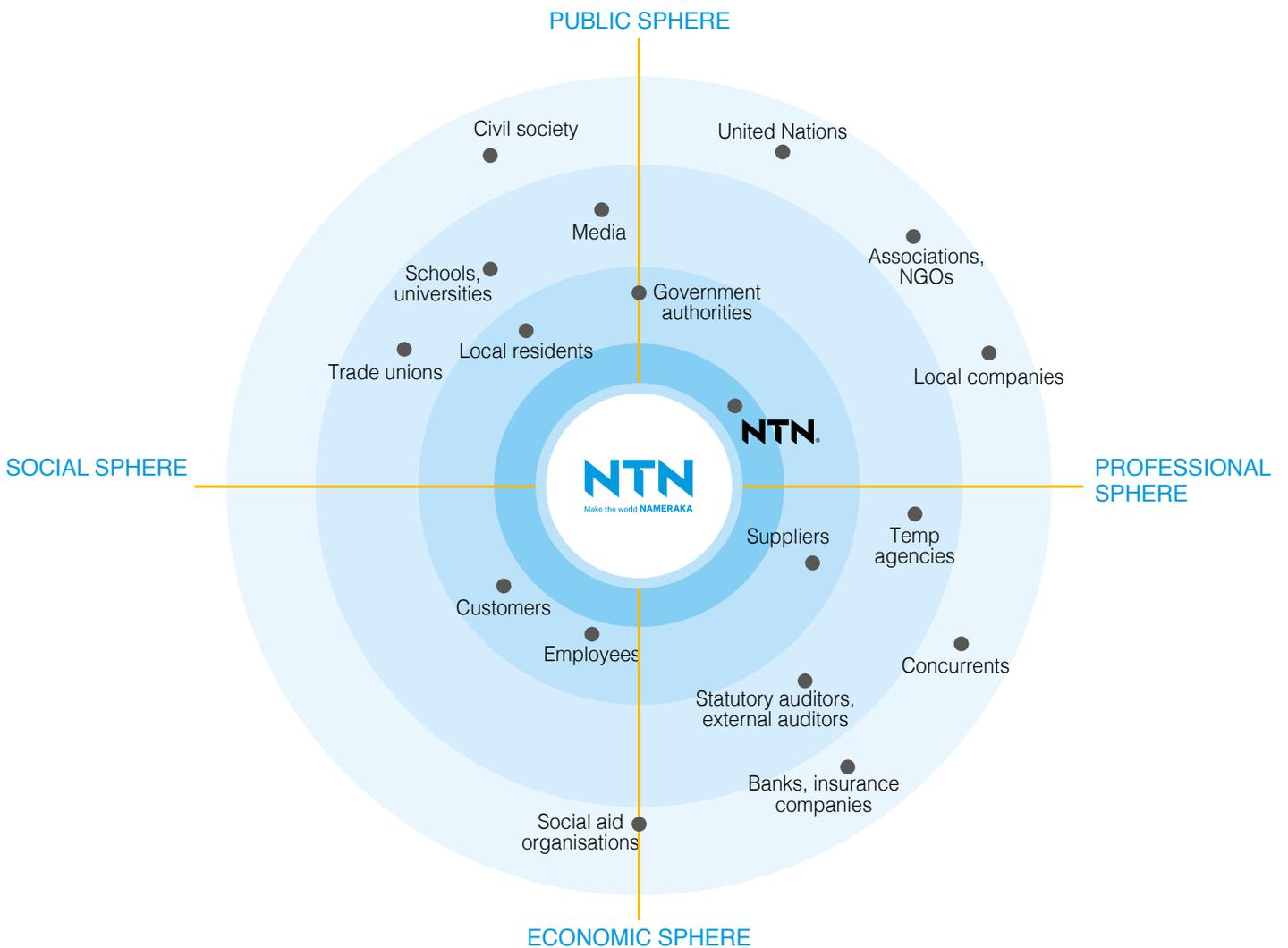
MANUFACTURING

## OUR COMMITMENTS

- Safety is more than a priority. It is a fundamental value.
- Environmental protection and impact control are at the heart of our actions.
- Satisfaction of our customers and stakeholders ensures our sustainability.
- We are committed to high ethical standards.

# O Methodology & scope

Since 2013, when NTN-SNR embraced Corporate Social Responsibility, shareholders have not been the only ones considered as stakeholders in the Company. Now all parties that NTN-SNR interacts with in the course of running its business are viewed as stakeholders, including employees, customers, suppliers, local communities, etc. Stakeholder dialogue has since become a priority, creating value above and beyond corporate profits. NTN-SNR has strategic values and objectives, and, as for the stakeholders, they have expectations: NTN-SNR has thus developed a CSR strategy designed to meet its own objectives and adapt to the priority needs of stakeholders



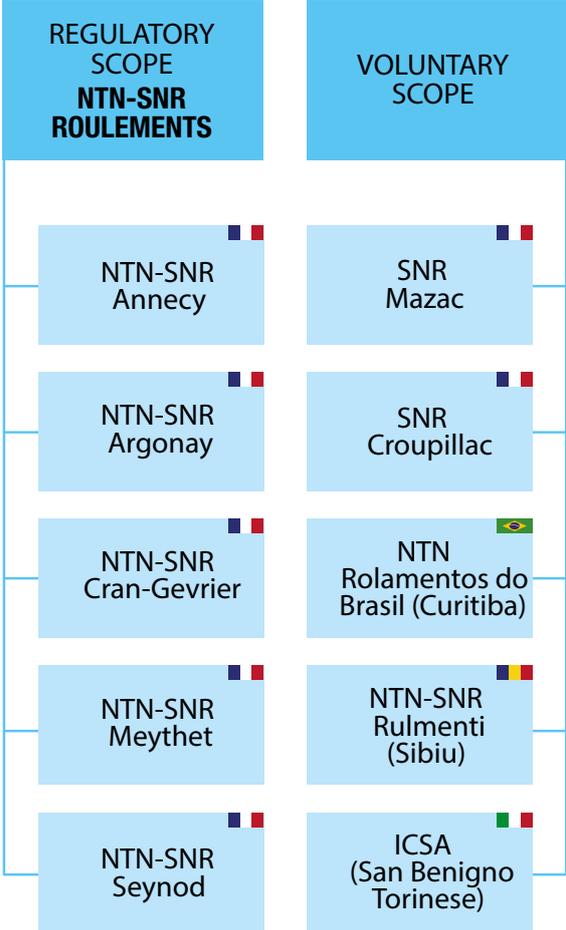
## REPORTING SCOPE

This report presents data on NTN-SNR ROULEMENTS and other NTN-SNR Group subsidiaries (production sites) that paints a picture of the Group’s operations in action. No changes were observed this year in comparison to the previous reporting period.

The sales offices in Lyon and Vanves are included in all social data, but are excluded from other sections (particularly the environment) because their business has very little impact given the nature of our production activities. The voluntary reporting scope of each KPI (Key Performance Indicator) is once again specified in the 2020 report. This report covers more than 90% of the NTN-SNR Group workforce. 100% of the regulatory reporting scope is covered.

Data collection is organized by KPI, either centrally or by on-site contributors abroad.

In this report, KPIs are presented for two reporting scopes: NTNSNR Roulements, legal entity (regulatory reporting scope), requiring the validation of the Board of Directors, as well as NTN-SNR Group (voluntary reporting scope for certain indicators).



## REPORTING PERIOD

This report presents data obtained during the fiscal year ended 31 March 2022, i.e. the period from 01/04/2021 to 31/03/2022 (fiscal year 2021).

# STAKEHOLDER CONSULTATION

NTN-SNR organised a consultation with its stakeholders in February and March 2019 in order to best determine their expectations. Almost 400 people expressed their expectations over the course of the six-week consultation. As a result, NTN-SNR was able to pinpoint the issues viewed as a priority by its stakeholders.

NTN-SNR began by identifying its stakeholders with a view to establishing enduring relationships of trust.

Our 6 top-tier stakeholders are our NTN shareholder, our customers, our employees, local residents, government authorities and our suppliers.

Based on our stakeholder consultation, a materiality matrix was established, i.e. an analysis that assigns a weighting and classification to the various CSR issues. The NTN-SNR stakeholders highlighted 19 key issues.



The matrix highlights 9 priority issues (shown in grey area) perceived by stakeholders as important for the Company and needing to be addressed promptly. These issues fall into the **social** and **environmental** categories, alongside issues specific to our **business**.

**Ethical** issues did not emerge among the priority expectations of our stakeholders. Our determination to

set the example in our business practices naturally inspires us to continue improving in this area and to establish ethics as one of the priorities of our strategic objectives.

We are determined to better include our stakeholder expectations in the input data of our future business plans, in particular through upcoming consultations

# NTN CORPORATION MATERIALITY MATRIX

Over the course of 2020, the NTN Head Office in Japan surveyed its companies and regions of operation to get an idea of their objectives and expectations for the purpose of structuring the CSR strategy for the Group as a whole. NTN-SNR took part in the survey.

The NTN Group, a member of the UN Global Compact since 2015, reaffirmed its commitment to build a more harmonious world by basing its CSR strategy on certain UN Sustainable Development Goals (SDGs). NTN-SNR's strategic objectives are fully aligned with the following materiality targets set by NTN:

ENVIRONMENT	Contribute to carbon-free society	1. Reduce energy loss		
		2. Realize a sustainable society using natural energy		
	Realize carbon neutrality	3. Respond to climate change		
	Environmental protection	4. Resource recycling and pollution prevention		
SOCIETY	Contribute to prosperous lives	5. Provide safety and comfort		
	Sustainable supply chain	6. Improve the reliability of products and services		
		7. Procurement activities with an emphasis on the environment and society		
	Prosperous human development	8. Respect for human rights		
		9. Promote safety and health		
		10. Human resources development		
		11. Promote diversity		
GOVERNANCE	12. Thorough compliance			
	13. Strengthen governance			





# Strategic lines & KPIs

## 9 PRIORITY ISSUES, 5 CSR STRATEGIC LINES

**As a measure of our progress and the effectiveness of the work done to achieve these 5 strategic objectives, the 15 KPIs** presented further in the report were calculated, whenever possible, in accordance with the two established reporting scopes - NTN-SNR Roulements (regulatory scope) and NTN-SNR Group (scope chosen for our CSR approach). KPIs falling under the regulatory reporting scope were audited for FY2021.

## STRATEGIC LINES

Axes	Indicators	FY 19	FY 20	FY 21
Business	% new customer references:	14,6%	10,7%	11,9%
	Aftermarket rate	33%	35,3%	38,1%
Innovation	New relations added to our network	15	27	31
	Number of partners	12	13	14
	Number of patents	29	20	11
Social	Turn-over rate in France	9,2%	6,5%	11,8%
	Turn-over rate for NTN-SNR Roulements	9,9%	6,9%	12,75%
	Number of followers on LinkedIn	16 598	20 296	23 302
	Number of followers on Facebook	15 867	15 807	15 752
	Percentage of the population that participated in the MSD survey (NTN-SNR Roulements)	39%	68%	96%
	Frequency rate of reported accidents at work (NTN-SNR Roulements)	15,6	13	12
	Frequency rate of reported lost-time accidents at work (NTN-SNR Roulements)	12,5	11,5	8,4
	Severity of work accidents (NTN-SNR Roulements)	0,62	0,61	0,61
Environment	Percentage of waste recovered at the NTN-SNR Roulements sites	97%	97%	97%
	Percentage of energy efficiency gain at the NTN-SNR Roulements sites	4,9%	8,1%	-0,5%
	Percentage of energy efficiency gain in France	5,3%	7,7%	-2,2%
	Atmospheric emissions (kg/h) NTN-SNR Roulements		10,7	10,2
	Carbon footprint NTN-SNR Roulements scopes 1,2 (tCO2 eq)	7763	7148	7638
	Percentage of R&D hours dedicated to the CO2 performance of bearings	24%	28,6%	30,8%
Ethics	Percentage of our non-executive and executive staff trained in the code of ethics within the Group	94%	93%	95,2%
	Percentage of our non-executive and executive staff trained in the code of ethics within NTN-SNR Roulements	91%	93,5%	95,6%
	Percentage of turn-over covered by the sustainable sourcing charter	82%	86%	87%



**11,9 %**

NEW PRODUCT  
REFERENCES

**38,1 %**

AFTERMARKET RATE

# BUSINESS

**Expanding our expertise into the markets of the future in a bid to make current and future changes in society more harmonious.**

Developing new products is a prerequisite to building the loyalty of existing customers and winning new customers. Contributing to the development of the markets of the future is a clear and obvious choice, and one that informs all of our business strategies. Developing alternative activities and distribution is also a major challenge that calls for a very broad range of solutions, excellent product availability and strong brand recognition among end customers. Our businesses were deeply disrupted by the health crisis in 2020, with responses varying depending on the markets of our five Business Units and their business segments.

## ORIGINAL AUTOMOTIVE EQUIPMENT

Guaranteeing mobility that respects the environment thanks to energy efficiency and contributing to the development of electric vehicles.

NTN supports European automotive customers for the rapid electrification of the market: several electric vehicles going into production in 2021 are thus equipped with NTN solutions and contracts have been signed with our major customers for the development and supply of solutions for new electric programmes from 2024 and beyond.

Solutions proposed include low-friction torque wheel bearings (reduced by 50% over the last 10 years), whose internal design, seals and grease are optimised to reduce energy consumption and CO2 emissions, as well as bearings specially designed for electric motors (with specific treatments to withstand the passage of current), hybrid transmissions and reducers.

Finally, we have successfully collaborated on specific European customer projects aimed at pushing the limits of electric vehicle autonomy, which remains one of the major challenges for this type of application.

More broadly, we are committed to meeting environmental challenges by offering efficient solutions that consume fewer resources. For example, we are developing products that use more recycled or more easily recyclable materials for suspension thrust bearings. We will roll out third generation wheel bearings with increasingly optimised frictional torque to meet growing customer and regulatory requirements.

NTN is also developing solutions for applications closely linked to electrification: braking, steering, transmission functions, etc. or self-driving cars. NTN's expertise

thus extends beyond bearings to include mechanical modules for actuators and mechatronic products such as magnetic sensors and encoders.

## AUTOMOTIVE AFTERMARKET

Transitioning from a "European bearings manufacturer" to an "automotive equipment manufacturer" by offering new ranges and services, and ramping up digitisation.

Range renewal activity was strong in 2021 with 220 references launched (up 40% from 2020). Our ranges now cover over 100 hybrid and electric models to support current and future aftermarket requirements. We also support our customers with a range of services: more than 100 professionals and CFA students trained this year, technical partnership for tooling, creation of 8 e-learning training modules for the automotive aftermarket players.

We are continuing to develop our range of electric water pumps for the new engines and we are working on the use of recycled materials for our range of suspension thrust bearings.

New markets are also being explored to develop our activity (geographical expansion, new services, circular economy).

## ORIGINAL EQUIPMENT AND DISTRIBUTION INDUSTRY

Stepping up operations in the European industrial market by drawing on our technical expertise and a range of competitive solutions, serving the most demanding applications in the fields of mobile equipment, industrial processes and renewable energy, targeting leading markets in various geographic regions, supporting major distributors and further digitising our business.

Agriculture is the top market of the OEM Business Unit in 2021, with an increase of 13% compared to 2020.

The OEM BU is showing its determination to take a position on the soft mobility market, particularly e-bikes, with several projects underway in France. A long-standing partner of the cycle industry since the 1970s, NTN's new offer includes not only bearings, but also mechatronic solutions that contribute to the development of high-performance and optimised engines.

As far as distribution is concerned, 2021 saw the launch of the Sentinel range dedicated to the food-processing market: stainless steel bearing units and bearings lubricated with Lubsolid technology, which reduces the risk of grease leaks during operation and completely eliminates relubrication operations during use, thus drastically reducing the quantity of grease used and the associated maintenance costs, and therefore significantly reducing the environmental impact of products.

We are continuing to develop this technology for the two Industry Business Units, in the food-processing, as well as textile and agricultural markets. Agriculture is one of the most promising markets for this technology, which simplifies life for users by reducing maintenance operations and eliminating the risk of soil pollution from grease.

We are also continuing to relocate the manufacture of these bearing ranges to different production sites within the group in order to optimise production plans.

Digital solutions continue to support our service to customers (NTN Partnership program platform).

## AERONAUTICS

Ensuring sustainable development by improving customer satisfaction and seizing new opportunities arising from technological change in the sector

The aviation sector is gradually recovering from the Covid crisis. The recovery remains mixed with various stakeholders weakened.

Improving the environmental performance levels of current engines and helping customers develop future planes are priorities for the Business Unit.

To support our engine manufacturer customers, NTN-SNR has developed a new blade root bearing technology for Open Rotor which has been successfully tested on engines.

Another area of focus is the development of hybrid bearings, with ceramic rolling housings, making them lighter and thus more efficient as well as improving the service life. After qualifying hybrid ball bearings, NTN-SNR developed hybrid technology for roller bearings through the HEROe BEARING project funded by the Cleansky programme and the EU.

In the context of carbon-free aviation and new mobility, NTN-SNR is setting up partnerships with various stakeholders using electric motors.

In addition, NTN-SNR has long been involved in repair activities (MRO).

We have been inspecting and repairing CFM56 engine bearings since 1993. Over 20,000 bearings have already been treated.

We are also working to develop our activity in new engines and in the helicopter market.

Thus, we contribute to the continuation in service of bearings, while guaranteeing the safety of users.

## INDUSTRY



## AERONAUTICS HEROe BEARING



## AUTOMOTIVE



**31**

NEW RELATIONS  
ADDED TO OUR  
NETWORK

**14**

PARTNERSHIPS

**11**

PATENTS



# INNOVATION

## Challenging the way we do things and our new projects, thanks to our ecosystem of partners, in order to continue growing and innovating.

We are living in an increasingly fast-paced world, where many technological changes are taking place and the very way that products and businesses are created is evolving, directly impacted by the new technologies on offer as well as by the need to provide rapid answers to climate change.

Today it is no longer possible to claim to know everything, to perfectly command every minute aspect of the business, if we have any hope of succeeding in our innovations with the right market timing, especially if they clearly diverge from our historical products and expertise.

Of course, there will always be wheels, suspensions, transmissions, engines, gearboxes, pumps, turbines, and therefore bearings and transmission joints (CVJ), equipment, tools for lubrication and various other products.

But we are going to be seeing a host of new disruptive applications bring extensive changes to our specifications. This will be particularly the case with the massive electrification of vehicles, the emergence of new forms of mobility and the development of green energy. We will also have to contend with new arrivals on an already weakly-consolidated market.

Our products will incorporate more and more intelligence in sensors, actuators, electronics and software, a feature that ultimately captures more than half of the perceived value of the product. But above all, they must be environmentally friendly both in their manufacture and in the impact they will have in their use or at the end of their life.

Price competition is no longer enough and continuous product improvements are no longer sufficient; we also need to be able to offer new technologies and services.

## RESEARCH AND NETWORKS

**In this context and to support the company's global strategic plan, the mission of the Research & Networks department is clearly to facilitate the opening of our Research and Innovation teams to external collaborations.**

### RESEARCH

Creating the “technological building blocks” that will make the Company stand out. Rooted in our DNA, our areas of expertise revolve around materials, lubricants, the science of contact and of course bearings and their applications.

### NETWORKING AND RESOURCING

To move fast and access the right skills, the “building blocks” will have to be co-produced by different Company teams, but with the help of partners outside the Group. This work can be done under straightforward partnership agreements between two companies or through a consortium of different public and private-sector partners (funded or unfunded). For technological building blocks

that already exist, the terms and conditions for accessing these building blocks will need to be negotiated.

*The prerequisite for establishing such partnerships is quite clearly our ability to build and maintain a network of potential partners in alignment with the fields we want to address.*

### Innovation

Innovation is at the heart of the DRIVE NTN 100 Phase 2 business plan. 10% of Company revenue in 2027 will be based on innovative products. With that in mind, we need to define our areas of focus in line with market expectations both present and future, starting now.

**The Innovation Department is working on 4 market objectives:**

- ↳ Mobility
- ↳ Industry and Services
- ↳ Digitalisation and Services
- ↳ Green Business

## STRATEGIC LINES

These objectives show that we are taking the needs and expectations of our customers into account, as well as our changing environment and our social responsibility.

Our portfolio of Innovation projects is composed of incremental projects and disruptive projects, and projects allowing us to operate our current manufacturing facilities and to create new industrial blueprints. The challenge is to balance all of our activities through collective and efficient leadership, within and outside the Company, to build the world of tomorrow.

### Networks

Networking is the creation, development and renewal of a Company eco-system. It is made up of universities, research laboratories and businesses (from start-ups to very large corporates) and must be perfectly aligned with the fields the Company aims to address and capable of offering added value to the search for partners. Accelerating our partnerships means taking a structured approach to our network in order to guarantee that we can rapidly identify the right partner(s).

The KPI we used to measure the effectiveness of our networking approach is the number of new relations created over the course of the year and contractualised in a confidentiality agreement.

In 2021, we continued to grow our network, going from 27 to 31 new relations added to our innovation ecosystem.

### Partnerships

A partnership is defined as an active collaboration between various members of the public or private sphere, businesses or research bodies which, while maintaining their independence, agree to pool their efforts with a view to achieving a common objective associated with a problem or a clearly identified need and in which, in accordance with their respective aims, they have a vested interest, responsibility, motivation or obligation.

The goal of the collaboration can vary, ranging from access to new knowledge and new technology to access to new markets or businesses. These partnerships may also receive public or private-sector funding depending on their content.

A company that systematically operates through partnerships is a network company.

In 2021, we have gone from 13 to 14 partnerships, our partnership renewal is satisfactory, 40% of our major Research & Innovation projects are now carried out in collaboration.

### Patents

The number of patents is not an objective in itself, but rather an outcome. It is a measure of our creativity and inventiveness. Patents also protect our inventions. A patent is in equal parts an offensive and a defensive weapon and ultimately serves as a negotiating instrument.

In order to boost our inventiveness and avoid seeing it focused too predominantly in the innovation or engineering teams, NTN-SNR created a Fab-Lab (Créa'lab) whose objectives are:

- To create a community to guide anyone in the Company with an idea, helping them transform that idea into a Proof of Concept (POC) in a short period of time (3 months maximum) by providing them with the appropriate skills, methods and tools
- To promote innovation in the Company and thereby encourage as many initiatives as possible

This 2020 KPI was very strongly impacted by the decline in activity observed in usually top-contributing sectors, due to the health crisis, despite robust momentum achieved in terms of creative approaches .

## SUSPENSION THRUST BEARINGS: An eco-responsible innovation

**The axle weight of vehicles is increasing and the recyclability constraints are constantly being tightened. To respond to this situation, the RID Department's Innovation team is developing a new suspension thrust bearing with an aluminium spring support that is more efficient and easily recyclable.**

While manufacturers are mainly using plastic to offer lighter and more flexible parts, NTN-SNR's innovation team takes the opposite approach and develops a suspension thrust bearing with an aluminum spring support, which is stiffer and easily recyclable. As the axle weight of vehicles increases, the recyclability constraints continue to be reinforced, targeting plastics and elastomers in particular. NTN-SNR, aware of these constraints, has chosen aluminum for the interface part between the bearing and the suspension spring of its new suspension thrust bearing.

- Stronger and stiffer than plastic parts, aluminum allows this new bearing to be less sensitive to spring manufacturing dispersion.
- More easily recyclable and recoverable, aluminum thus provides a real response to environmental challenges and European standards setting a high rate of component recyclability.

### An innovation ready to reach the market:

The suspension thrust bearing with aluminum support has now reached a degree of technical maturity and a level of customer interest that will soon allow NTN-SNR to consider moving into the development phase.



**11,8 %**

TURNOVER IN  
FRANCE

**12,75 %**

FOR NTN-SNR  
ROULEMENTS

**23 555**

FOLLOWERS ON



**15 807**

FOLLOWERS ON



## SOCIAL

Attracting and retaining a variety of talented staff to ensure the development of NTN-SNR by drawing on a strong employer brand.

### THE CHALLENGES

Work on the employer brand is a high-stakes objective. This carries our social DNA and is responsible for conveying our HR ambitions, values, culture and differentiating factors. The targets are unlimited: current and future employees, customers, suppliers, partners and institutions. We want our DNA to be perceived consistently and authentically both inside and outside the Company. We ultimately aim to achieve multiple goals: attract people with the skills to consolidate and develop our businesses, and retain our employees and, in so doing, our stakeholders.

### OUR AMBITIONS

Based on the aforementioned strategic objectives, and in keeping with our values, we are investing substantial human and financial resources in order to enhance our appeal as an employer and build the loyalty of our talented staff. We have built and implemented a comprehensive strategy centred on promising initiatives:

- Integration and support of trainees and work-study apprentices (in initial or ongoing training)
- An HR policy focused on the needs of the workforce (internal mobility, co-opting, orientation process, etc.)
- Communication in line with our DNA, to promote our activities and our businesses
- A comprehensive training programme for all employees to continue expanding their skill set

We are continuing to conduct concrete initiatives to cultivate our employer brand every day, internally as well as externally.

### OUR ACTIONS

#### An HR policy focused on the workforce

We want to enable everyone to progress and develop their skills. We therefore attach special importance to promoting internal mobility within the group. Several positions are open each month specifically for employees of the group, allowing them to change site, sector of activity, or to evolve towards management or expertise functions. Support is provided for these changes of job, so that they take place under the best possible conditions.

Each employee of the group can also become an ambassador, by welcoming young people in training, by participating in our operations in schools or universities, or by co-opting our future employees.

#### Hosting young people as interns and in workstudy programmes

Today's juniors may well turn out to be tomorrow's talents! The development of work-study programmes and internships is a powerful driver for recruitment. Depending on each person's skills and the needs of the Company, interns and work-study placements at the Company are the primary job applicants of the future.

We strive to offer rich and varied subjects, where everyone can express their potential, and learn alongside us. The care we provide with this support has resulted in the HappyIndex® Trainees recertification by Choose My Company, which is particularly important in our eyes because over and above the HR policy implemented, this certification is based solely on the opinions of students who have joined our teams.



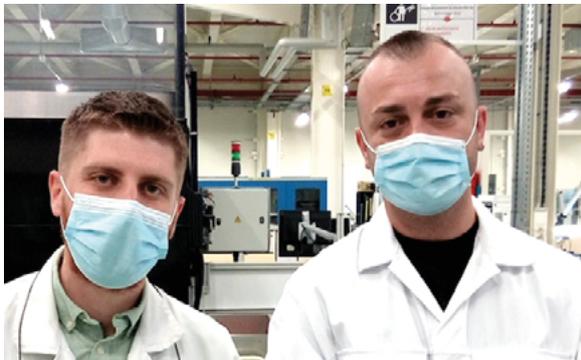
## STRATEGIC LINES

### Communication around our business lines

We are still dedicated to engaging in broad communication in order to spread the word about industry careers, which are extremely rich and varied. To that end, we launched multiple communication campaigns, both inside and outside the Company, in order to lift the veil on little-known specialisations. Interviews, mini-portraits, job descriptions posted in the in-house newsletter, broader communication with our partners in advertising media, newspapers, etc. we wish to expand our communication to reach as many people as possible and teach them about the employment opportunities available in the industrial sector. Another aim is also to integrate people alienated from employment or our professions through CV-less recruitment schemes, partnerships with regional and local authorities, local initiatives, etc.

**Specific actions were carried out during the year 2021 to make our Learn training scheme better known to our regional partners supporting people with disabilities.**

**The national Duoday event** was also an opportunity to showcase our businesses to people with disabilities for a day, hosted in pairs by our employees.



**These ambitions are of course supported by all our subsidiaries**

**The Sibiu site, in Romania**, has long been involved in partnerships with schools in order to introduce future graduates to the industry careers and support them in their projects.

**The support for the children of the Sibiu orphanage** has been going on for several years now, providing them with well-being and introducing them to the world of work and technical occupations, even going so far as to recruit them into the teams.

**The ICSA site in San Benigno**, Italy, is also part of these efforts to attract the skills to support the site's development. It describes itself as a "permeable factory" through actions such as:

- Cooperation with a school in San Benigno (CNOS) to develop training programmes in our line our work (Proftec), with periods of immersion of students on the site, supported by experienced operators and instruction in mechanical occupations, maintenance, design (CAD, modelling, etc.)
- Cooperation with the University of Turin
- Hosting school visits
- Open house

### Occupational health and safety

Safety is a strong Group value, part of the Company policy and the commitments made by our senior management. Accordingly, our managers take all necessary measures to protect the health and safety of our employees, and in general of anyone who works for or visits the Company. They are supported by a central HSE department, which recommends an improvement plan and oversees its operational deployment, and also by an internal medical team, which takes a preventive approach to practising medicine with the help of a dedicated ergonomist in the central HSE Department. The Company is committed to making safety and working conditions a permanent priority, with the aim of improving results and building a robust and sustainable culture of safety. The workplace accident and illness prevention programme is currently based on an internal Safety Management System. The year 2021 is marked by an improvement in safety results.

	FR1	FR2	SR
NTN-SNR Roulements	12	8,4	0,61
NTN-SNR Group	8,8	6,4	0,47

**FR1** = (frequency rate 1) = number of accidents x 1.000.000 / number of hours worked.

**FR2** = (frequency rate 2) = number of lost time accidents x 1.000.000 / number of hours worked.

**SG**= (severity rate) = number of lost days x 1.000 / number of hours worked

NTN-SNR has set and plans to maintain its strong ambition for the future, with a 30% reduction in the number of accidents resulting in work stoppage by end-2023 compared to the average over the 2018-2020 period.

To achieve this goal, a 2020-2023 safety improvement plan was launched in 2020. The idea is to bolster the level of safety requirements, so as to boost improvement momentum through “TOB” (technique, organisation and behaviour) initiatives. The areas of focus for 2020-2023 are:

- Encouraging changes in behaviour
- Deploying standards on primary risks (e.g. working in high places, moving around, etc.)
- Simplifying and digitising tools and training
- Expanding safety leadership (management

- and communication
- Monitoring steering indicators
- Changing the management system, aiming for ISO 45001 certification

This improvement plan is implemented through concrete initiatives at all our sites and is followed up on a quarterly basis.

In FY2021, we developed a new safety timetable to communicate every month in a structured way on the 12 Safety Fundamentals, launched a “safety leadership for managers” training course, implemented a new “prevention plan” tool, and monitored precise objectives for safety audits on behaviour and 1/4h safety.

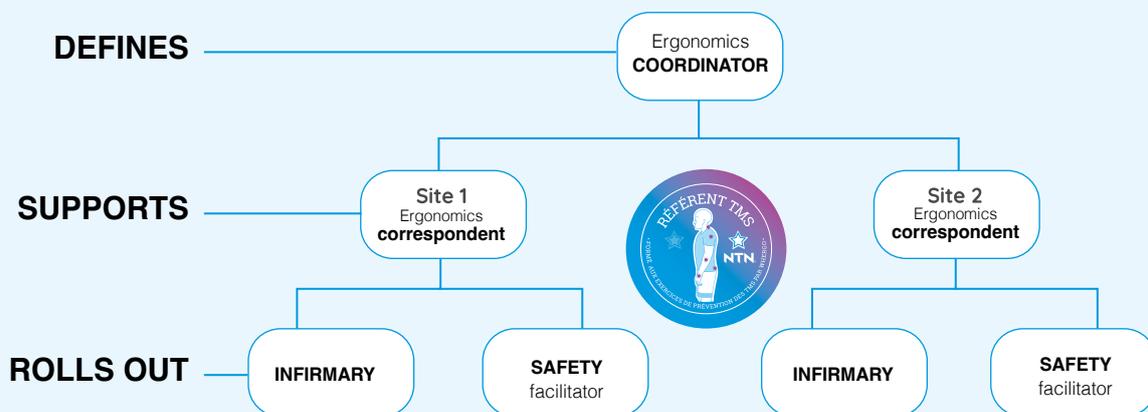
After 9 years of existence, the Sibiu site has evolved its collaborative event on these subjects into “HSEE days” to involve even more people and develop activities.

### Closer look at ergonomics

In line with the group's health and safety directives, ergonomics is a major focus for the analysis of work situations that can lead to the development of musculoskeletal disorders (MSD) until the declaration of occupational illnesses. The ergonomics programme is currently focused on two main areas of discussion:

- **Corrective ergonomics** : suggesting improvements to existing resources and/or organisation based on an analysis of operator activity (ratings grid, mapping of operator positions, local action plans).
- **Preventive ergonomics**: this is about factoring in, right from the design stage, human “capabilities and limitations” in order to aptly address any future work situations or practices encountered.

With the launch of a structured Ergonomics roadmap, since FY2019, we have embarked on a reinforced approach to combat MSDs with the aim of reducing the number of high-risk situations. In collaboration with the medical team and with a structured organisation, each year we renew a research programme targeting production staff in order to catch preliminary symptoms of upper limb disorders as early as possible. This represents about 2,000 respondents. Deployed in the field by the medical service and



## STRATEGIC LINES

”

In FY2021, 64% or 801 persons were interviewed. In total, since FY2019 this represents the equivalent of about 96% of the working population having been interviewed at least once.

after 3 consecutive studies, we were able to undertake targeted actions for the sectors and workstations identified as priorities. Some examples of actions undertaken::

- Technical modifications to the means of production
- New methods of organising tasks for operators
- New means of behavioural awareness-raising regarding risks (visualisation of muscular efforts)
- Creation of a “health” programme for a workshop.

In parallel, on the basis of this study, we were able to offer consolidated and personalised medical monitoring for the most vulnerable people thanks to the European SALSTA protocol validated by the INRS. This tool enables a clinical examination to diagnose 12 types of MSDs according to a certain level of development in the patient. Depending on the people and their medical situation, osteopathy/chiropractic sessions were offered to reduce the pain and joint discomfort associated with their disorder(s).

This study, which extends over 5 financial years (FY2019-FY2023), plays an essential role in the constant adjustment of technical and organisational actions

## OTHER INITIATIVES

### Humanitarian action in favour of the Ukrainian people

NTN-SNR has chosen to mobilise all the employees of the group's various entities in Europe to help the Ukrainian refugee population and provide them with basic necessities. Thanks to them, a total of:

- 254 kg of blankets
- 387 kg of hygiene products
- 658 kg of food products

Were collected and transported to our site in Sibiu, Romania, which then coordinated with the local Red Cross. The company also took part in a humanitarian collection initiated by manufacturers in the Arve Valley by providing company equipment (school supplies, clothing, blankets, lamps, etc.) and transporting it to Poland.

### Action against hunger in Brazil

NTN Brazil, in Curitiba, has strengthened its partnership with the local association CADI which helps families, young people and children. The pandemic has left many families food insecure. A fund-raiser was therefore organised among the employees and matched by the company. In this way, 5 tonnes of basic foodstuffs were distributed to needy families in 6 months.





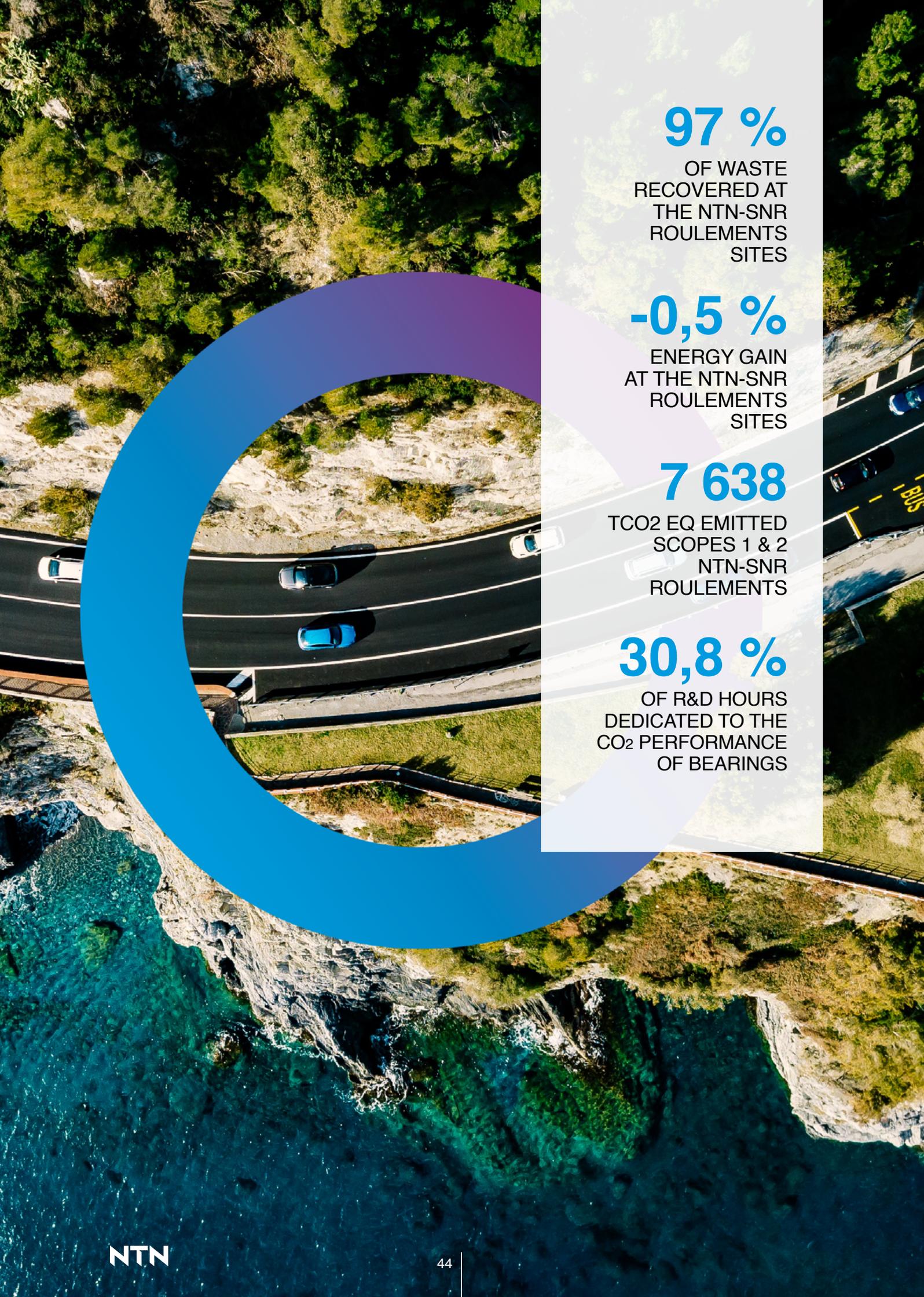
CURITIBA  
Brazil



SIBIU  
Romania



SAN BENIGNO  
Italy

An aerial photograph of a winding road along a rocky coastline. The road has several cars driving on it. A large, semi-transparent blue circle is overlaid on the left side of the image, partially obscuring the road and the sea. The sea is a deep blue color, and the rocks are grey and jagged. The sky is not visible.

**97 %**

OF WASTE  
RECOVERED AT  
THE NTN-SNR  
ROULEMENTS  
SITES

**-0,5 %**

ENERGY GAIN  
AT THE NTN-SNR  
ROULEMENTS  
SITES

**7 638**

TCO2 EQ EMITTED  
SCOPES 1 & 2  
NTN-SNR  
ROULEMENTS

**30,8 %**

OF R&D HOURS  
DEDICATED TO THE  
CO<sub>2</sub> PERFORMANCE  
OF BEARINGS

# ENVIRONMENT

Developing products and services and managing our business from an eco-responsible standpoint.

## Our ambitions in terms of environment, energy and eco-design:

In order to answer to this strategical line, NTN-SNR has rolled out three policies: an Environment policy, an Energy policy and a Eco-Design policy. Overall, mindful of the today's major environmental issues, NTN-SNR's senior management has made the following commitments:

- We are working to reduce our impact on the environment, in particular our consumption of resources, our emissions and our waste, and to better manage our energy consumption.
- We aim to contribute to more environmentally-friendly mobility by improving the energy performance of our products..
- We strive to manage the risks and impacts in terms of Quality, Safety, the Environment and Energy from the outset with new products, resources, infrastructure or services.

## OUR STRATEGIC AXES

### Air emissions, towards zero VOC emissions

Since 2019, NTN-SNR has been working on reducing its air emissions. This helps to reduce air pollution, especially ozone (VOC) in periods of high temperatures, as well as to reduce the greenhouse effect caused by other emissions.

As our emissions are mainly composed of Volatile Organic Compounds (VOC), our R&D teams are studying several areas of focus on this subject:

- Substitutions of products containing VOC.
- Reduction of our solvent consumption.
- Development of laundry processes.
- Filtration of our discharges.

Today, these studies are producing results and have enabled us to reduce our consumption of VOC solvents in 2021.

In 2021\*, the NTN SNR Alpes sites emitted 10.2 kg/h of VOC, NOx, dust and fog oil smoke\*\*. This value represents a decrease of 4% compared to the 2020\* value for all measured parameters.

The objective for 2022 is of course to continue the actions undertaken on VOCs, and also to work on reducing our NOx emissions (2nd pollutant) by modernising our heating systems and reducing our gas consumption (waste heat recovery).

(\* ) rolling average of the last 3 years

(\*\*) value for a commitment of 100% of our production capacity.



Between 2019 and 2021, the NTN-SNR Alpes sites have limited their VOC emissions, NOx, dust and fog oil smoke to 10.2 kg/h.

STRATEGIC LINES

**Committed to the climate**

NTN-SNR, which has been committed for many years to reducing its greenhouse gas emissions, is now intensifying its action in favour of the climate.

In 2021, we updated our carbon footprint by extending the study to the entire group, including our French and foreign subsidiaries. Scopes 1, 2 and 3 were thus analysed for the 2019 fiscal year, which becomes our new reference.

**Scope of our carbon footprint**

Year of the report: FY2019 (01/04/2019 to 31/03/2020).

Geographic scope: NTN-SNR GROUP (22 sites, including 11 sites within the mandatory reporting scope).

Industrial sites	Logistic sites	Commercial subsidiaries
		
<ul style="list-style-type: none"> <li>↳ Alès (2 sites), France</li> <li>↳ Annecy (Headquarters), France</li> <li>↳ Argonay, France</li> <li>↳ Cran Gevrier, France</li> <li>↳ Meythet, France</li> <li>↳ Seynod, France</li> <li>↳ Curitiba, Brazil</li> <li>↳ Sibiu, Romania</li> <li>↳ ICSA, Italia</li> <li>↳ SNR Wälzlager, Germany</li> </ul>	<ul style="list-style-type: none"> <li>↳ Chambéry, France</li> <li>↳ Glaisin 1, France</li> <li>↳ Glaisin 2, France</li> <li>↳ Saint-Vulbas, France</li> </ul>	<ul style="list-style-type: none"> <li>↳ Vaise, Fance</li> <li>↳ Vanves, France</li> <li>↳ Russia</li> <li>↳ Polska</li> <li>↳ Morocco</li> <li>↳ Italia spa</li> <li>↳ Iberica</li> </ul>

Regulatory scope: greenhouse gas emissions of French perimeter (same SIREN)

No data collected: minor impact on overall emissions (<5%)

↳ See details of the scope p. 24.

Supplies		Upstream transport		Production		Downstream transport		Waste treatment	
SCOPE 3 - "Upstream" activities			SCOPE 1				SCOPE 3 - "downstream" activities		
	8 - Upstream Energy 14 - Upstream leased assets		1 - Stationary combustion sources 2 - Mobile combustion sources			17 - Downstream freight transport			
			3 - Non-energy processes 4 - Fugitive emissions (leaks)		11 - waste 19 - End of life of products sold				
	9 - Purchase of products and services 10 - Depreciations		5 - Biomass (soils and forests)			18 - Use of products sold			
			SCOPE 2		20 - Downstream deductible 22 - Commuting				
	15 - Investments				6 - Electricity consumption				
	12 - Upstream freight transport		7 - Consumption of steam, heat, cold						
	13 - Business trips 16 - Transport of visitors and customers 22 - Commuting								

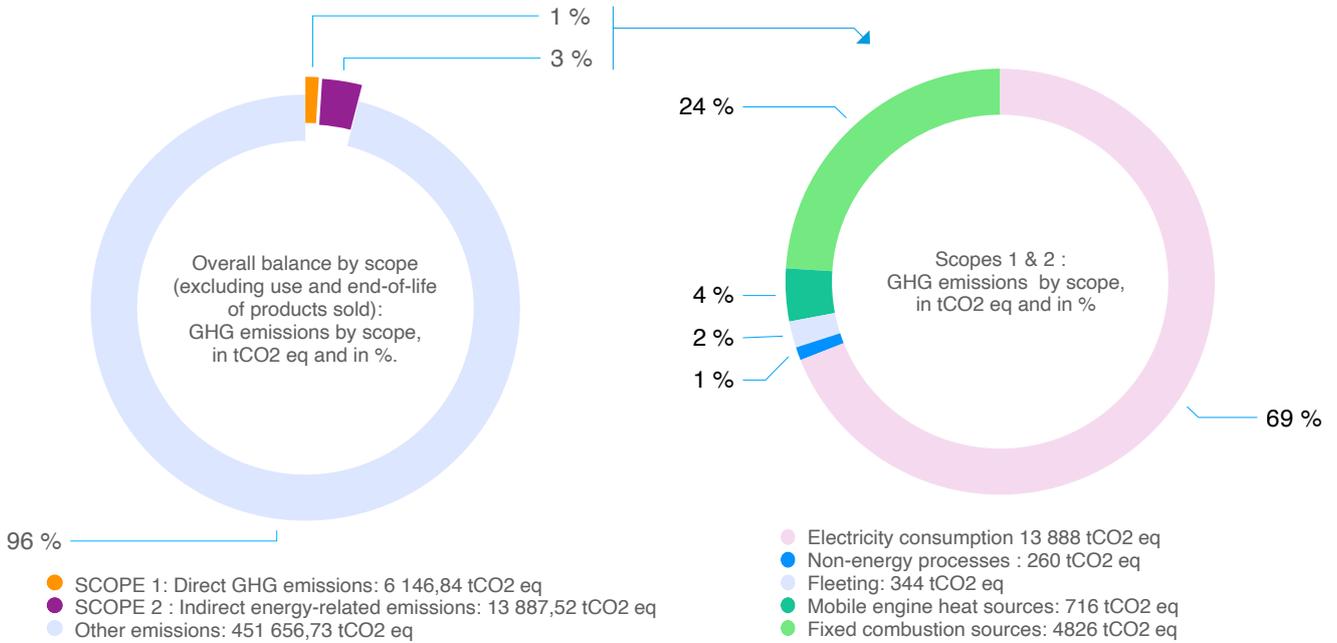


We have selected scopes 1, 2 and 3 with the exception of the use and end of life of our products.

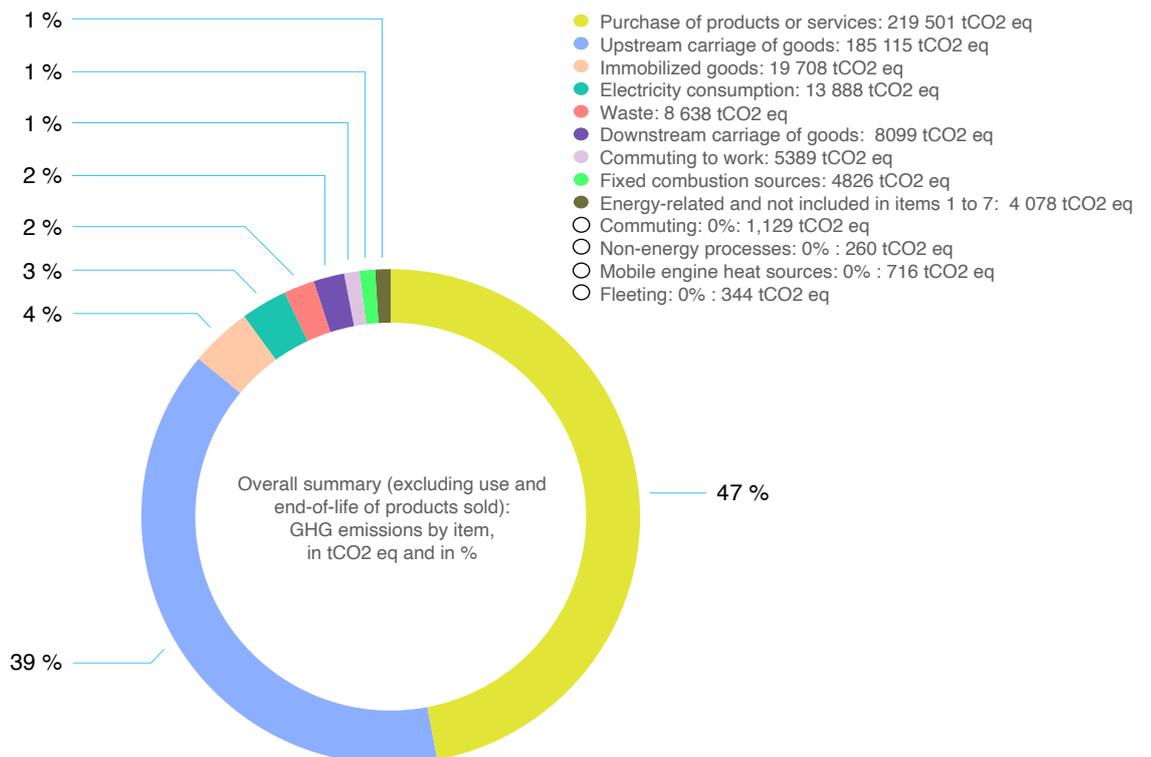
In FY 2019, NTN-SNR Group's greenhouse gas emissions on scopes 1, 2 and 3, without taking into account the use or end of life of our products are 471,691 tCO<sub>2</sub> eq.

# FY19 CARBON FOOTPRINT

## Emissions by scope



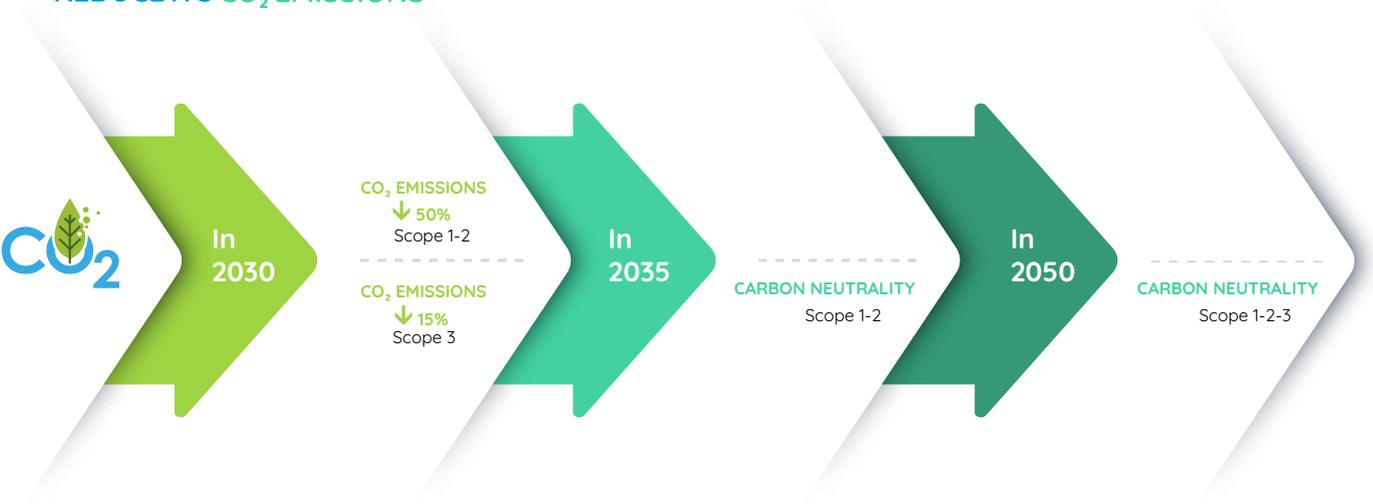
## Emissions by post



This study allows us to implement a carbon strategy that meets the climate challenges and the expectations of our stakeholders.

The result led us to define our roadmap to carbon neutrality.

## OBJECTIVES OF NTN-SNR GROUP REDUCE ITS CO<sub>2</sub> EMISSIONS



An action plan built around our processes with the most significant impacts mobilises the entire company around 3 areas of focus:

- Our energy consumption
- Transport
- Purchases



**Energy, a vital issue**

**In an uncertain health, economic and geopolitical context, our energy performance improved for gas and showed a slight decline in electricity consumption, the adjustment of our consumption to our activity being limited by the minimum electricity consumption of our sites.**

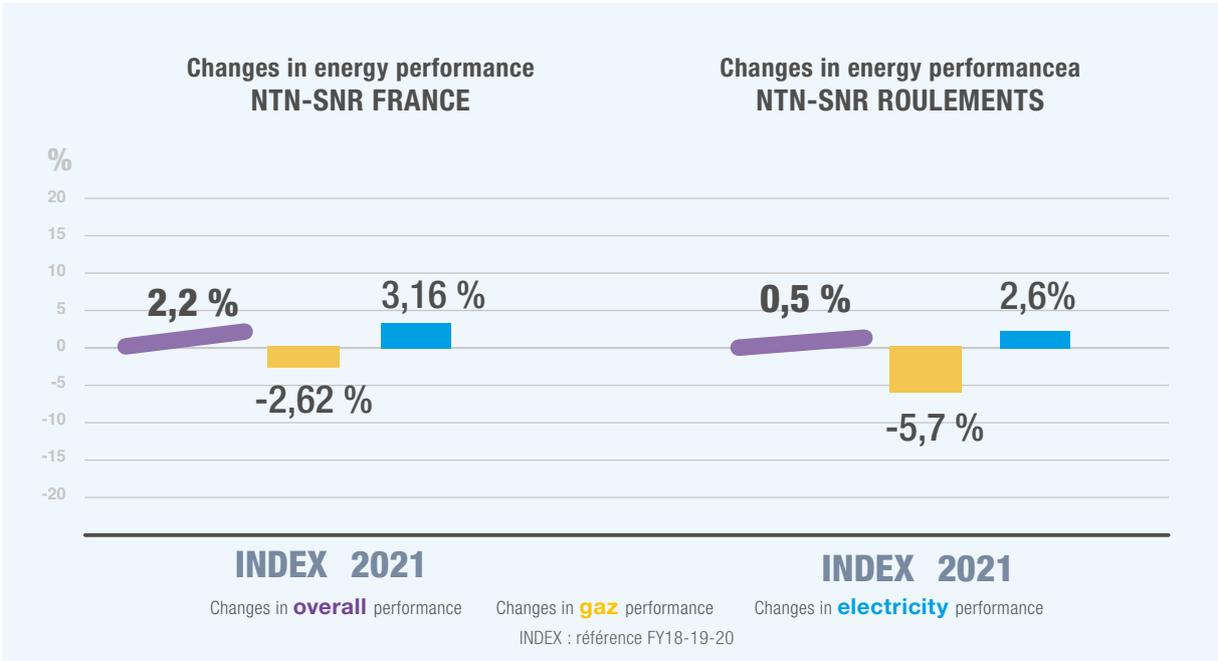
The continuous rise in raw material and energy costs, supply difficulties and carbon issues make our energy efficiency a priority issue and we are intensifying our efforts to improve our performance.

The achievement of our objectives is based on 3 pillars:

- Consume less through management (reduction of the energy heel) and the operational control of our installations. Mobilise all staff to consume usefully.
- Digitise to provide our teams with the appropriate tools for management. The Cactus software package is now operational and enables us to analyse our consumption in real time.
- Consume less, consume better by developing “low carbon” energy through technological progress: Develop speed variation, generalise LED lighting, recover heat from our cooling towers and compressors, etc.

**2021 KPIs:**

These KPIs do not take into account the Annecy site, which is being de-industrialized.



### Managing our waste recovery efforts

In an industrial market disrupted by a global health crisis, NTN SNR has maintained its level of control in the production and treatment of its waste. This year we have continued to work with our partners, who have once again been able to provide us with genuine and virtuous solutions. It is with them that we try every day to optimise the qualification of our waste flows, in order to minimise their environmental footprint.

Through our industrial plans, we seek to reduce our activities that generate waste with major impacts, by favouring the use of newer technologies that produce less waste or more recoverable waste. One of the major phases of our industrial strategy will lead us to reduce our production of used salts, currently intended for landfill. Regulatory and technological monitoring has enabled us to keep up with government initiatives such as the digitisation of the traceability of our waste or the implementation of eco-organisations, in order to best meet our extended producer responsibility (EPR).

This year, we have again achieved our recovery target by remaining above 95%: 97% of waste was recovered in fiscal year 2021.

Based on our strong experience in waste management, we will continue to explore sustainable avenues that will enable us to maintain our ambition to reduce our waste production and optimise the environmental impact of our activities.

# 97%

OF WASTE WAS RECOVERED  
IN FY2021



# ENERGY EFFICIENCY OF BEARINGS

## Challenges of man-made GHG emissions

The Intergovernmental Panel on Climate Change (IPCC) has confirmed mankind's influence on the climate. Furthermore, current man-made GHG emissions are the highest ever observed. The resulting global warming will have direct or indirect consequences for human and animal health, economic activities, biodiversity and more. Reducing GHG emissions is thus necessary to limit climate change and its consequences.

## As applied to the automotive industry

The automotive industry is taking part in this effort through commitments by geographic region. For example, in Europe, under the Clean Air for Europe (CAFE) 2021 programme, some manufacturers who did not meet their target of contributing to the 95g/km CO<sub>2</sub> average were financially penalised by Europe. Efforts will continue, in particular with the extension of the carbon balance to the entire "well to wheel" life cycle by 2025. In addition, a target of zero "tank to wheel" emissions by 2035 has been announced.

## As applied to bearings

NTN is indirectly though significantly affected through its customers and its environmental responsibility. Bearing technology is used to smooth the rotation of parts in all types of machines. With more precise bearing technology, the shafts can rotate more smoothly, minimising energy loss. This technology is gradually changing the future of electric vehicles, robots and even society, thanks to renewable energies.

The improvement in energy efficiency produced represents a clear and unifying objective for NTN Europe. It is also a means to generate innovation, competitiveness and customer value.

It is a sustainable and structurally effective direction for automotive R&D activities.

## ► Closer look at car wheel bearings

At the heart of NTN Europe's business, wheel bearings boast real potential to reduce CO<sub>2</sub> emissions. They are the focus of the latest in low-friction technologies aimed at significantly improving performances. For example, a new generation wheel bearing grease was co-developed by NTN and one of its suppliers. All functional and industrial validations have been successfully completed. Its production start-up in 2022 guarantees the lowest friction levels on the market.

For electric vehicle motors and associated transmissions, we develop solutions to meet the particular demands of these bearings: high rotation speeds, resistance to current flow. The control of lubrication conditions is also the key to energy-efficient operation.

The automotive technologies already mass deployed by the NTN group enable to reduce CO<sub>2</sub> emissions by several thousand tonnes every day.

## ► Top resources and tools

NTN Europe is rolling out new resources to further improve the energy efficiency of its products. Innovation projects are under way with the aim of constantly exploring disruptive solutions to meet the market's growing efficiency requirements. New methodologies for characterising our components have been introduced in 2021, and will be the subject of scientific publications in 2022.

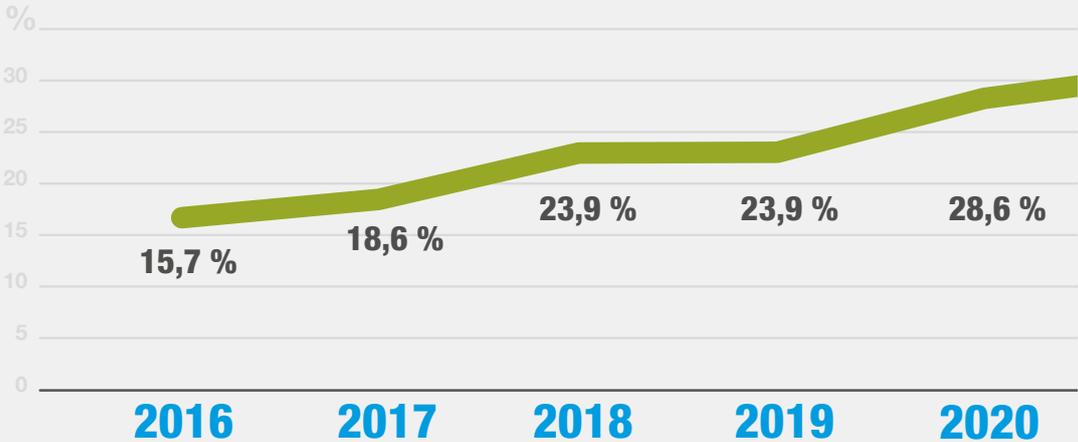


**BEARING MATERIALS:**  
Genesis of the NTN-SNR innovation

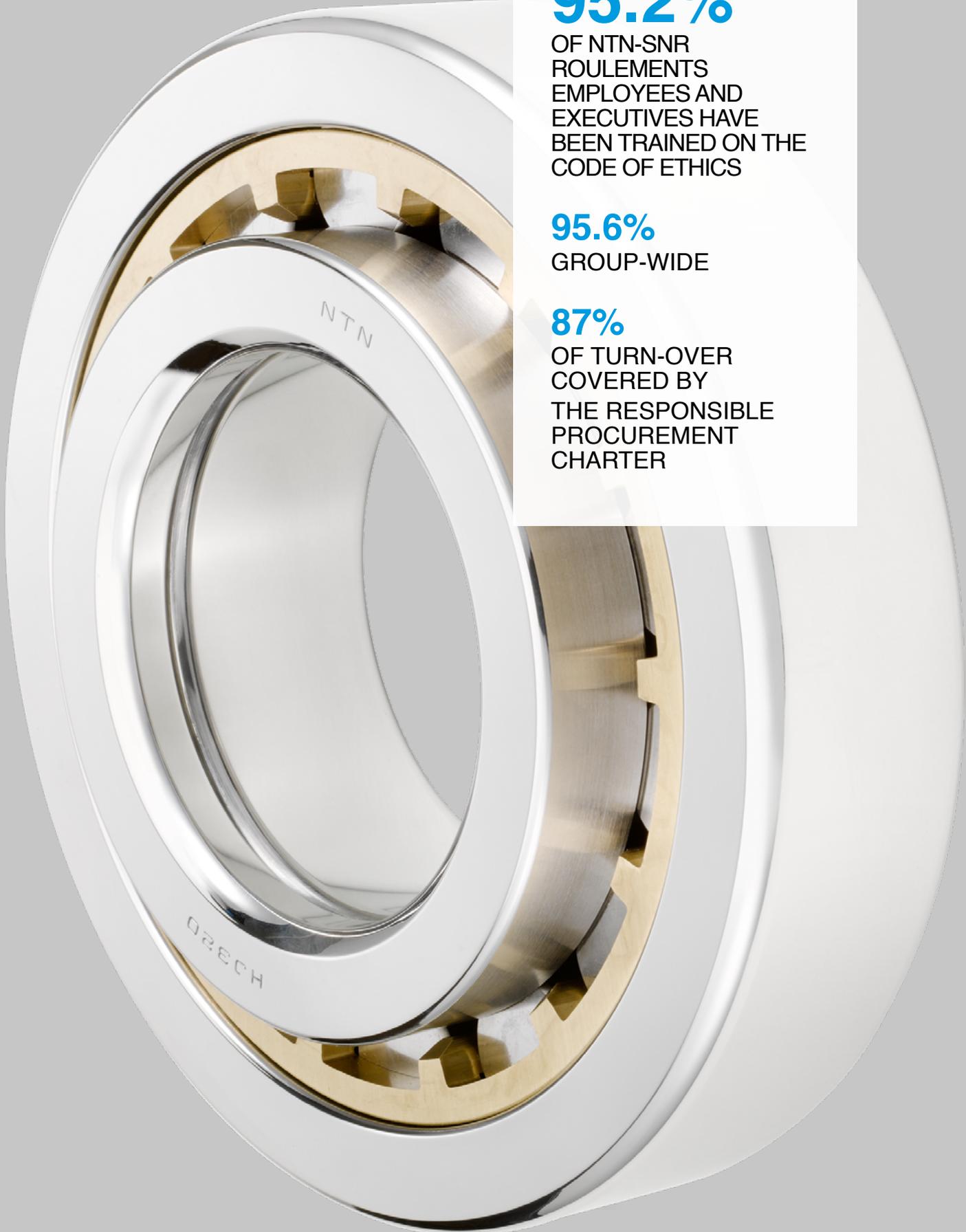
**2021 KPI:**

The chosen KPI is defined as the percentage of R&D hours dedicated to CO<sub>2</sub> emissions reduction. It is based on total hours eligible for research tax credits.

**% of R&D hours devoted to the reduction in CO<sub>2</sub> emissions\***



\*based on hours eligible for research tax credits, excluding management & steering



**95.2%**

OF NTN-SNR  
ROULEMENTS  
EMPLOYEES AND  
EXECUTIVES HAVE  
BEEN TRAINED ON THE  
CODE OF ETHICS

**95.6%**

GROUP-WIDE

**87%**

OF TURN-OVER  
COVERED BY  
THE RESPONSIBLE  
PROCUREMENT  
CHARTER

# ETHICS

## Setting an example in our business practices

In a world of ever-important and constantly changing requirements, rising risks and partners with more demanding expectations, preserving their trust and our reputation is only possible through exemplary and responsible professional behaviour.

During the challenges created by the 2021 health crisis, we focused on keeping our ethical commitments in the forefront of our efforts.

## we are committed to high ethical standards

We are committed **to conducting our business with integrity and fairness**, respecting the rules and regulations which apply to us.

We **reject all forms of corruption** and any **attempt to circumvent the rules of fair and open competition**.

We work to ensure **the accuracy of the financial information we disclose**.

We make every effort to **protect the data and the know-how** in our possession.

## Our Code of Ethics

**Our Code of Ethics** was created in 2010. It describes our fundamental ethical principles and the way we wish to conduct our relations across the Group, in our markets and in our environment.

This code is implemented in the interest of continuous improvement and, accordingly, we published a new, more comprehensive version in early 2020 with more examples.

The main topics addressed by our Code of Ethics include protection of individuals, group assets and the environment, compliance to laws and regulations, relations with partners, and prevention of fraud and corruption.

Despite the difficult circumstances of the last two years, we have endeavoured to continue to increase the level of training of our employees in our Code of Ethics, notably by means of a remote learning module.

## Protection of individuals

Above and beyond the physical protection addressed by our safety policy, the protection of individuals also covers:

- ▶ **The prevention of discrimination** in any form whatsoever, starting with recruitment and continuing on through the entire professional career

## ▶ Gender equality

- ▶ Rejection of **harassment** in any form, as well as any conduct that fails to respect human dignity
- ▶ **Respect for national:** trade union freedom, prohibition of forced labour and child labour.
- ▶ **Protection of personal data** belonging to employees and our partners (customers, suppliers, etc.)

## Prevention of external fraud and cybercrime

The world embraces telework on a massive scale. forcing employers and employees alike to adopt new working methods. On the downside, this gave criminals the opportunity to put new fraud practices into circulation.

That is why we stepped up communications with our employees, calling for greater awareness as they work remotely. We are continuing to roll out our e-learning module on cyber security to our teams, which was launched in 2020.

Through regular awareness-raising and team training initiatives, we plan to strengthen our vigilance and adopt the right reflexes to protect our employees and assets, and thus limit our exposure to cyber risks.

## Respect for competition law

A “compliance with competition law” programme has been in place since 2014. We are continuing our efforts to train and raise awareness among our employees, thanks in large part to the “competition law” e-Learning module launched in 2019.

## Anti-corruption programme

A programme and action plan have been rolled out under the Sapin II Act for several years.

In addition to continuing training on our Code of Ethics and updating our corruption risk map, we focused our efforts this year on:

- ▶ Continuation of roll out of an ongoing integrity evaluation process targeting our partners.
- ▶ The redefinition of our gifts and invitations policy and its roll out.
- ▶ The review of our accounting inspections and the implementation of audits.

## SUSTAINABLE SOURCING

Company purchases are centralised for the most part for Europe and based in Annecy.

The plants themselves manage operational sourcing (and some production sourcing) in accordance with delegated authorisations. NTN-SNR incorporates the principles of collaborative and sustainable sourcing in its relations with suppliers. To that end, the Company uses a Collaborative and Sustainable Sourcing Charter to reiterate its commitments in the field of business relations, ethics and the environment and to specify its requirements towards its suppliers

### Observing human rights guidelines

NTN-SNR expects each of its suppliers (and their own suppliers), regardless of their country of establishment, to implement the principles of the International Labour Organization: elimination of all forms of forced or compulsory labour, effective abolition of child labour, elimination of discrimination in respect of employment and occupation, freedom of association and the right of collective bargaining..

### Level of dependence of local suppliers on the Company

In order to limit the risk of dependence on the part of our suppliers, we consider the proportion of their activity that we account for when awarding contracts. We are careful to remain under the established thresholds for dependency.

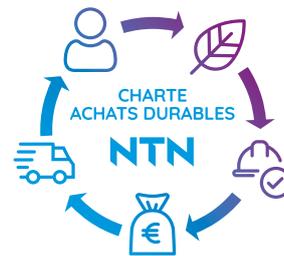
### Sustainable development criteria

**Preparation of a CSR/Carbon/Purchasing roadmap with 6 areas:**

- ▶ Implement a “Sustainable Procurement” plan.
- ▶ Update the Sustainable Procurement Charter to detail the following points::
  - ↳ Working conditions and Human Rights: wages and employee benefits, working conditions, harassment.
  - ↳ Health and safety: Emergency preparedness, workplace ergonomics, chemical handling, fire protection.
  - ↳ Business ethics: Privacy, financial accountability (accurate records), responsible information

management, anti-competitive practices and anti-trust, conflicts of interest, counterfeit goods, export controls and economic sanctions, whistleblowing and protection against retaliation.

- ↳ Environment: Greenhouse gas emissions, Water quality and consumption, Air quality, Biodiversity, Consumer safety.

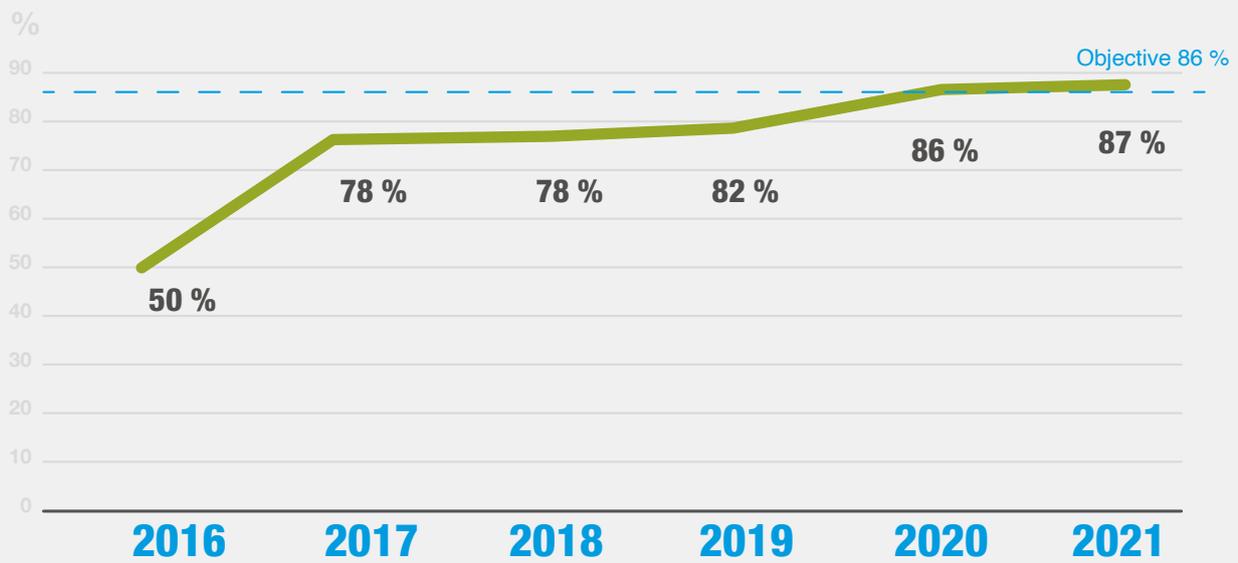


- ▶ Assessment of suppliers with CSR/carbon impact, verification of their involvement and incentives: selection of the NQC Supplier Assurance solution.
- ▶ Integration of CSR/Carbon criteria in our Supplier Panels strategies (including for transport)..
- ▶ Tracking the percentage of recycled material in purchased bearing products (steel/plastic) and associated weights.
- ▶ Sustainable packaging management and recycling (Europe Purchases)
- ▶ **Analysis of the purchase of carbon-free energy.**

### NTN-SNR CARES ABOUT THE QUALITY OF ITS COLLABORATIVE RELATIONSHIPS WITH SUPPLIERS

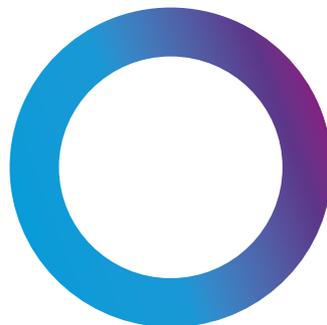
NTN-SNR is committed to maintaining a sustainable and balanced relationship with suppliers as a pledge of sustainable performance. Any new company that joins our pool of suppliers is asked to sign the Sustainable Sourcing Charter.

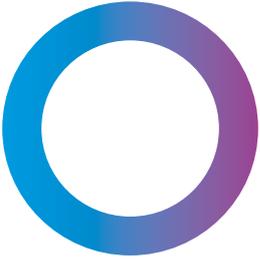
Turnover rate NTN-SNR Roulements covered by the responsible procurement charter



**Turnover rate \***  
covered by the responsible procurement charter

\*This indicator does not take into account delegated purchases in very specific activities, which represent less than 7% of NTN-SNR Roulements turn-over.





# ECOVADIS assessment



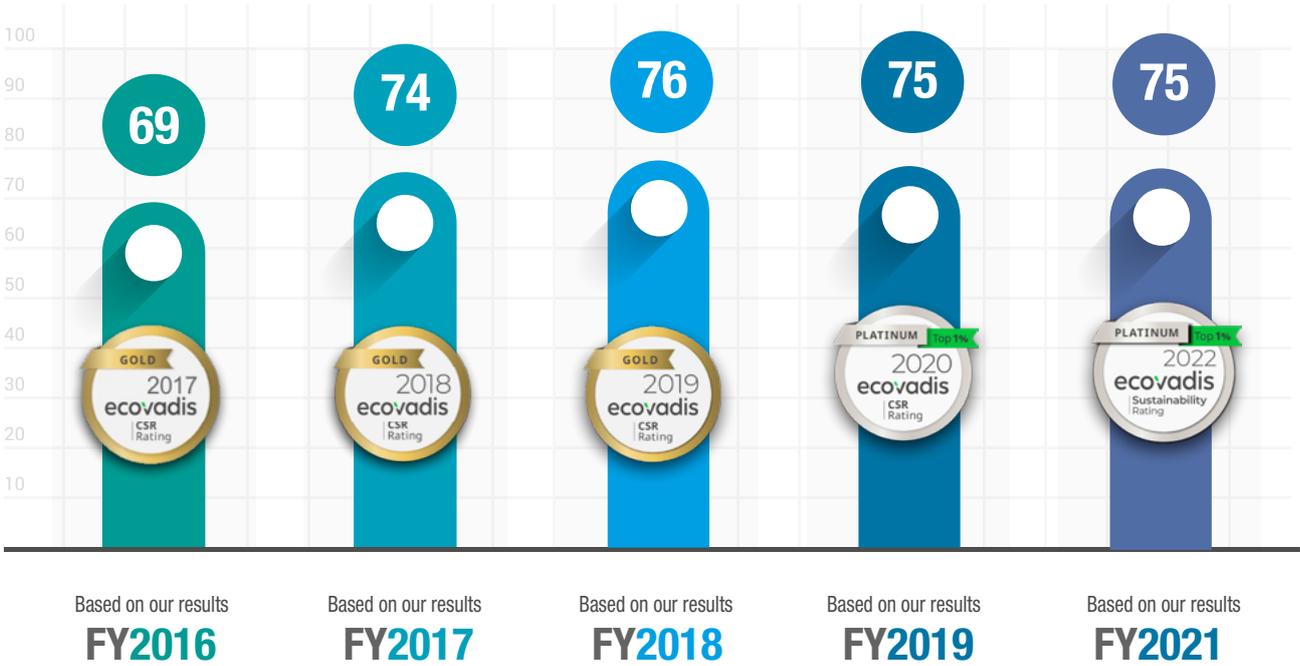


# ECOVADIS ASSESSMENT

In order to assess our CSR performance as objectively as possible, we work closely with the online discussion and assessment platform EcoVadis. This online platform is an interface between customers and companies for sharing and circulating information on social responsibility. The ECOVADIS assessment helps us identify areas in which we can further improve our performance, capitalise on our approach and gauge where we stand in relation to other companies in our sector.

For instance, we complete an annual questionnaire to assess our CSR performance. Our latest assessment, obtained in February 2022, was 75/100, which places us in the top 1% of the companies assessed in our business sector. With its Platinum level of commitment, NTN-SNR remains listed as an “advanced” supplier in terms of CSR.

More and more, our customers, partners and suppliers are asking us to access this platform in order to know our results and our actions.



**75/100**

**TOP 1% OF ASSESSED COMPANIES**

- ▶ Integration of eco-design features in product design
- ▶ Improving the energy efficiency of industrial facilities
- ▶ Advanced policies on the majority of societal and human rights issues
- ▶ Specific measures targeting discrimination issues
- ▶ Advanced policies on ethical issues

# O Green taxonomy



# GREEN TAXONOMY

**Let's objectively identify our sustainable activities in order to give ourselves the means to ensure our environmental transition while respecting social guarantees.**

The European "green taxonomy" regulation, or classification of the sustainability of activities and investments based on environmental and social criteria, requires us to publish our turnover, capital expenditure and operating expenses for our activities considered sustainable according to these criteria.

Initiated this year, it concerns the activities of some of our suppliers (e.g. steel and plastics manufacturers), and some of our customers (manufacturers and operators of renewable energy, manufacturers and operators of 100% electric means of transport). We have taken over the technical criteria for these activities in order to contribute to our purchasing and turn-over strategy to support the transition to a more sustainable economy.

Our activity of development, manufacturing and marketing of bearings relates to NACE code 28.15, manufacture of gears and mechanical transmission components. The eligibility criteria for this activity will be made public in the coming year. As soon as they are published, we will endeavour to identify our activities that meet these criteria in order to publish the associated turnover, capital and operating expenditure in our next SEFP.

Knowledge of these criteria will enable us to advance our strategy to better contribute to the transition towards a more sustainable economy and to structure our investment strategy in order to give us the means to support the environmental transition while respecting social guarantees.



**Our Statement of Extra-Financial Performance  
is available online at [NTN-SNR.fr](https://www.ntn-snr.fr) under CSR.**

**Contact NTN-SNR**

LAURENT LEBRUN-DAMIENS  
+33 (0) 4.50.65.99.41  
[laurent.lebrun-damiens@ntn-snr.fr](mailto:laurent.lebrun-damiens@ntn-snr.fr)

