KUEHNE+NAGEL

2022 Edition

Sustainability Report

Contents

CEO Message

Dear Readers,

As the new CEO of Kuehne+Nagel, it is an honour for me to share my thoughts on the importance of sustainability for our people, our planet, and our business. Today the logistics industry faces unprecedented challenges — from shifting consumer needs, increasing energy prices and the war in Ukraine, to post-pandemic adjustments, and a need to make our industry more sustainable.

Over the last few years, we have seen significant disruptions that resulted in increased customer service requirements. Challenges that our 80,000 colleagues managed with incredible commitment.

Dealing with complexity is what we do well, and a factor that has led the Kuehne+Nagel Group to close the year 2022 with record earnings for the eighth year in a row.

We successfully delivered four billion Covid-19 vaccines around the world, a reflection of the trust that customers place in our healthcare industry solutions. The company also made deeper inroads into e-commerce and successfully expanded its presence in Asia, in particular on the transpacific routes.

We also reduced greenhouse gas emissions for more customers and in new ways. Customers such as Lenovo can now offer sustainable fuel services to their customers through us. Novo Nordisk is collaborating with us to use only sustainable fuel for all their airfreight shipments as part of their zero CO_2 emissions commitment from operations and transport by 2030. And Vestas has put their trust in us to deliver their wind turbines and spare parts 24/7 all year round.

We achieved the goal of 100% renewable electricity across all our Contract Logistics fulfilment centres worldwide with a future ambition to produce more energy on site. We also started an important collaboration with suppliers to develop a much-needed road charging infrastructure.

Just as we closely monitor the voice of the customer, we also listen closely to our employees. We conducted an employee operations survey last year where we invited more than 25,000 colleagues to participate. We are now putting in actions and sharing best practices based on that survey — work that will become part of our new Great Place to Work programme that begins this year.

I am also pleased to share that 40% of our workforce today are women and I have made a personal commitment to double female representation in top leadership by 2030.

During the year we appointed a Human Rights Officer and provided pandemic guidance for employees working remotely, as well as, supporting employees with personal development plans.

These are some of the actions that are keeping us on track, in addition to, our commitment to the Science Based Targets initiative (SBTi) to reduce emissions and address climate change.

Together with my colleagues at the Management Board we are the decision-making body with respect to our sustainability approach and strategy.

Recently we announced our new Roadmap 2026. Our strategy consists of priorities that will set us on the path to achieve our longer-term Vision 2030, of 'becoming the most trusted supply chain partner supporting a sustainable future'.

Living ESG is one of the four material cornerstones of the Roadmap 2026 reflecting our ambition to be a frontrunner in sustainable logistics. Our aim is to reduce our environmental footprint, support customers on their sustainable journey, attract and retain top talent by being the best company to work for, and safeguard our future success through strong governance.

To support our Living ESG approach we have also made changes at Management Board level. Sarah Kreienbühl was appointed as the new Chief Human Resources Officer, the first female leader to join the Management Board, who brings along substantial prior ESG experience and will be taking over responsibility on management board level. And with Dr. Marc Pfeffer, Chief Legal Officer and longstanding Group General Counsel at Kuehne+Nagel, having been a Board Member since the beginning of 2023 with responsibility for Governance, we demonstrate the Board of Directors' and Management Board's ongoing commitment to integrity and compliance.

Supporting a sustainable future is at the core of our company's beliefs and integral to our Vision 2030. It is a journey that we invite you to join us on!

Stefan Paul
CEO

Sustainability highlights

100%
renewable electricity
at our Contract Logistics
fulfilment centres and

76%
LED footprint
covering 7,875,596m² of buildings

24%
female representation
in senior management
and

> 95%
of employees completed
our annual Code of
Conduct confirmation

99%
renewable electricity
at all locations

25%
employment rate
of interns into global
workforce

40%
female representation
in global workforce

4.66
out of 5 star rating
for our onboarding app

Our business

Creating added value

Offering global end-to-end logistics services, Kuehne+Nagel alleviates customers of any shipping concerns by managing the entire variety of services from warehousing and freight forwarding through to distribution and return logistics. Kuehne+Nagel is also specialised in managing complex supply chain solutions.

Transportation data is a key part of our business. By combining and synchronising supply chain data and making it easily accessible, our processes increase transparency and efficiency in the supply chain.

Equally, with most of our services — be it sea, air or road logistics — offered via subcontracted transport operators, we arrange handling of goods for our customers with those partners. This asset-light business model allows us the agility to continually evolve our value chain, optimising our services, be it on cost, time or environmental impact.

In short, we give our customers the edge in a highly competitive market. Moving forward, investments will be in markets where business can be made easier for our customers, in services that further extend our third-party logistics (3PL) value chain and we will champion logistics solutions that support a sustainable future.

98
countries
worldwide

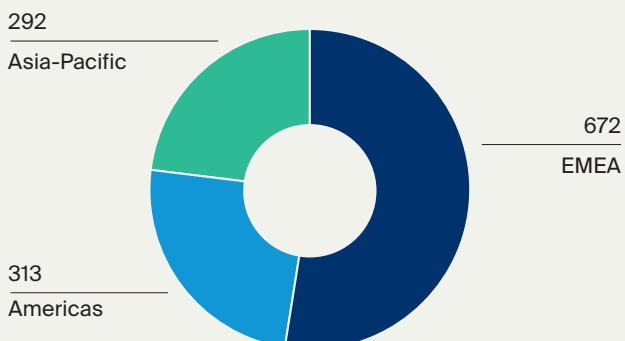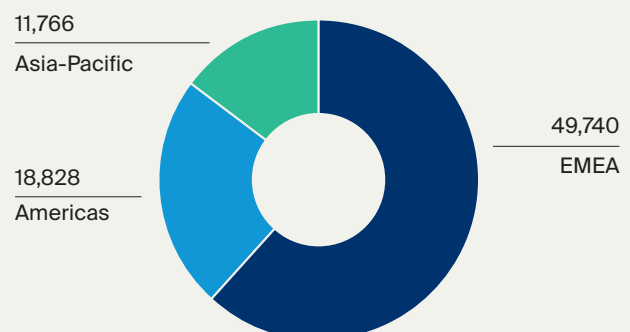**1,277**
sites
worldwide

80,334
employees
worldwide

39,398
million CHF
net turnover

Number of sites by region

292
Asia-Pacific

672
EMEA

313
Americas

Employees by region

11,766
Asia-Pacific

18,828
Americas

49,740
EMEA

ESG strategy and ambition

Striving to be a frontrunner in sustainable logistics

2022 was a pivotal year in the evolution of Kuehne+Nagel's corporate strategy: our five-year strategic Roadmap 2022 came to its conclusion, its primary focus having been the extension of our offering from supply chain to value chain services.

The latter half of the year was therefore dedicated to shaping the next iteration of our strategy: Roadmap 2026 and Vision 2030. Anticipating ever-changing market conditions and an often unpredictable supply chain, this new four-year strategy builds on our experience and achievements. At its heart is our ambition to become the most trusted supply chain partner supporting a sustainable future.

Contained within that overarching strategy, Living ESG resumes our sustainability approach for the coming years, its integration as a cornerstone of Roadmap 2026 reflecting our belief that an approach founded on solid environmental, social and governance (ESG) principles is paramount to moving forward.

Allowing us to integrate ESG topics into our everyday working and the wider culture of our organisation, Living ESG also continues to focus on the development of sustainable value chain services. Integral to our ambition to lead globally in the decarbonisation of transport solutions, our value chain sits at the core of everything we do and as such provides the introduction to the second part of this report.

Built from solid foundations

As a signatory of the UN Global Compact — a voluntary initiative encouraging businesses to adopt sustainable and socially responsible practices and report on their implementation — Living ESG seeks to contribute to the UN Sustainable Development Goals, as illustrated below and further linked to our material topics wherever possible in the document moving forward.

Another key influence on our ESG strategy continues to be our commitment to the Science Based Targets initiative (SBTi). A collaboration between the Carbon Disclosure Project (CDP), the UN Global Compact, World Resources Institute and the Worldwilde Fund for Nature (WWF), this has allowed us to set emission reduction targets and monitor progress. This and other environmental targets and initiatives are outlined in the Environment section of the second part of this report.

Fostering a sense of trust with our stakeholders is another key tenet of our strategy as we pursue notations with key ESG rating agencies, focusing on those most recognised and used by customers and investors. From 2023 onwards, this will also include our public response to the Carbon Disclosure Project CDP.

ESG framework

- Environment Policy
- Dangerous Goods Policy
- Diversity and Inclusion Policy
- Human Rights Policy
- Safety and Health Statement
- Code of Conduct
- Anti-Bribery Guideline
- Information Security
- Privacy Policy Centre
- Supplier Code of Conduct
- Security Statement

An approach split across three key pillars

Environment

As a supply chain leader, Kuehne+Nagel takes both its impact on the environment and its capacity to leverage industry change seriously. Setting ambitious, science-based emission reduction targets for our own operations, we also support – through our value chain — customers with their transition to net-zero logistics. As such, we invest in the electrification of our own fleet of trucks, as well as renewable energy for our offices and fulfilment centres, and offer a range of customer solutions such as emission measurement and sustainable fuels. We intend to build on numerous pilot programmes and initiatives moving forward, such as the reduction of waste and plastic materials in our contract logistics operations, the installation of solar panels on trucks and the use of electric vehicles for airport freight transfer.

Social

With a focus on both people and the planet, Kuehne+Nagel also seeks to be the best company to work for — and with — by creating a workplace where inclusion and equal opportunities are firmly anchored within our corporate culture. Ultimately, our strategy is shaped by the conviction that positive employees and customer expe-

riences are inextricably linked. Employees drive our strategy as they look for greater purpose, lend importance to health, safety and wellbeing and seek to manage their careers through continuous personal development. We are driven by respect for the uniqueness of everyone, believing in the innovative power of diversity within teams. Initiatives include increasing female leadership representation and the number of interns we welcome into the company.

Governance

Achieving our environmental and social ambitions requires corporate governance. Our policies and practices are centred on business integrity, accountability, fairness and transparency. Kuehne+Nagel is committed to establishing loyal, trustworthy, and non-discriminatory relationships with our customers, suppliers, employees and the communities in which we work. Furthermore, in a digital age, Kuehne+Nagel's responsibility includes secure data management, cyber security, and a commitment to open communication with our stakeholders, ensuring transparency around the products and services we offer and how we operate in line with applicable laws and regulations.

Our performance with ESG rating agencies

Rating Agency	Performance		Scoring Scale	
	2022	2021	Best	Worst
Ecovadis	72 (Gold Medal)	70 (Gold Medal)	100	0
Cybervadis	897	NA	1000	0
MSCI	AAA 'Leader'	AAA 'Leader'	AAA	CCC
Sustainalytics	17.8 (Low Risk)	17.9 (Low Risk)	0	50

Status December 2022
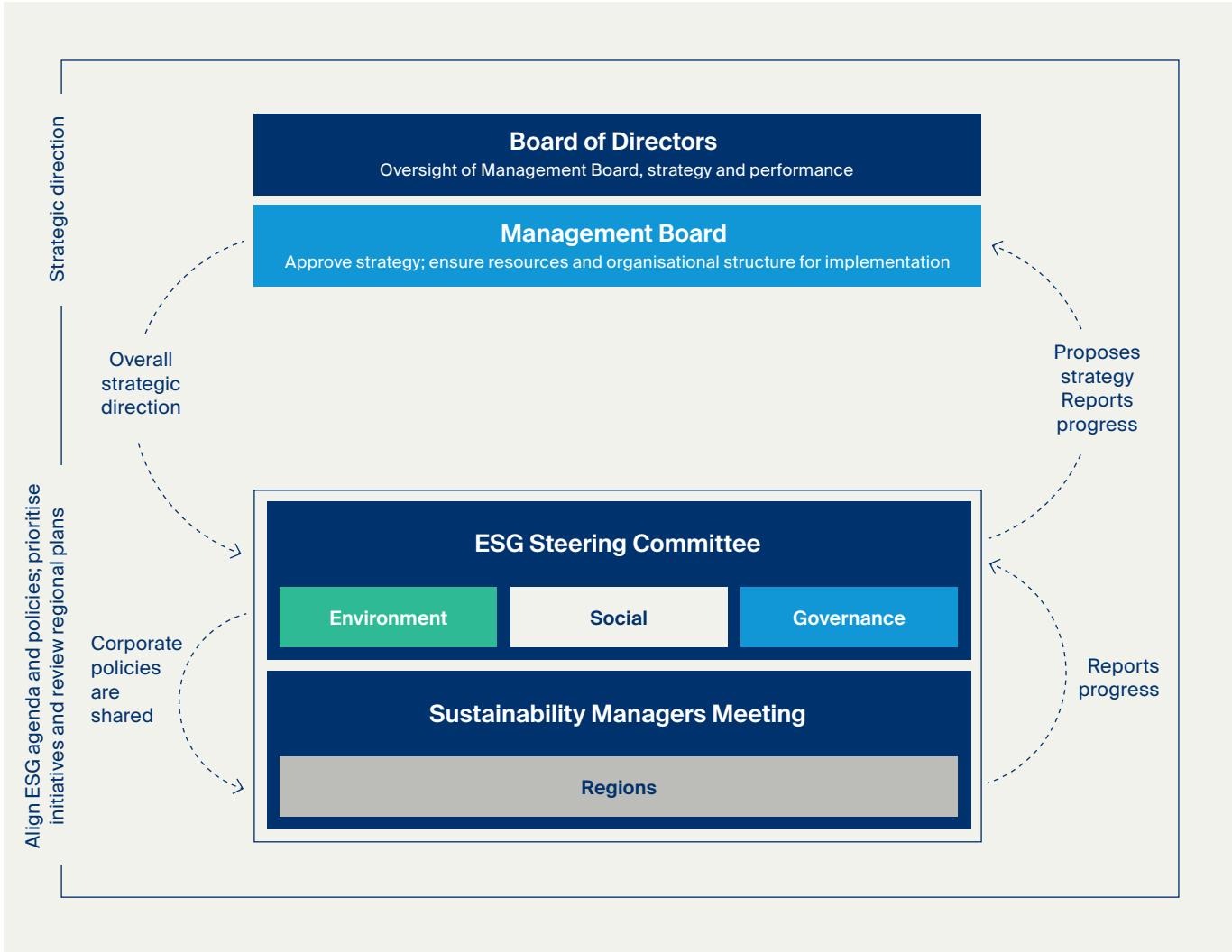
ESG coordination and alignment structure

ESG Management Oversight

As sustainability practices evolve in scope, complexity and importance, so are environmental, social and governance questions further integrated into both our management structure and corporate culture. Kuehne+Nagel has a two-tier management system consisting of a Board of Directors and a Management Board, the latter approving the ESG strategy and monitoring performance. Usually, both the Chief Executive Officer (CEO) and Chief Financial Officer (CFO) represent the Management Board at quarterly meetings of the Board of Directors, as well as the other functional and business unit executives.

The Management Board is regularly informed by the ESG Steering Committee — comprising representatives of the E, S and G cross-business units and cross functional working groups — and discusses ESG actions to meet the evolving needs globally. The ESG Steering Committee was estab-lished in 2022 and is responsible for, inter alia, performance monitoring and reporting, cross business unit coordination and regional and national strategy alignment.

In addition, reporting progress to the ESG Steering Committee, a Sustainability Managers' meeting is held every quarter, bringing together sustainability experts implementing corporate strategy on a regional or national level.

"Living ESG" is an integral part of our Roadmap 2026. Going forward, with our new Chief Human Resources Officer, the first female leader will join the Management Board, bringing along prior ESG experience and taking over responsibility for sustainability on management board level, effective April 1, 2023. The company's Chief Legal Officer and longstanding Group General Counsel was appointed a Board Member since the beginning of 2023 with responsibility for Governance.

The Board of Directors inter alia approves the Annual Report and oversees persons entrusted with the management. The Sustainability Report is issued by the Management Board. Significant or critical topics are communicated to the Board of Directors. For further information, including (Board) Diversity, Stakeholder Independence, Risk Management, measures and initiatives about Business Integrity, such as Code of Conduct, Anti-Corruption and Anti-Bribery, and Antitrust as well as Compensation and Remuneration, please refer to the Annual Report 2022.

Materiality approach

Kuehne+Nagel uses materiality analysis to identify and prioritise the issues that are most important to our organisation and stakeholders. To do this we undertake an assessment every two years, the most recent being in 2021, and the next scheduled for mid-2023.

During this process, actual and potential impacts are first identified with the Management Board and then assessed, grouped and evaluated with internal and external stakeholders. The approach also considers external trends — such as incoming regulations and voluntary frameworks —

Materiality matrix 2021

very important

Influence on stakeholders assessments & decisions

Significance of the reporting organisation's economic, environmental & social impacts   very important
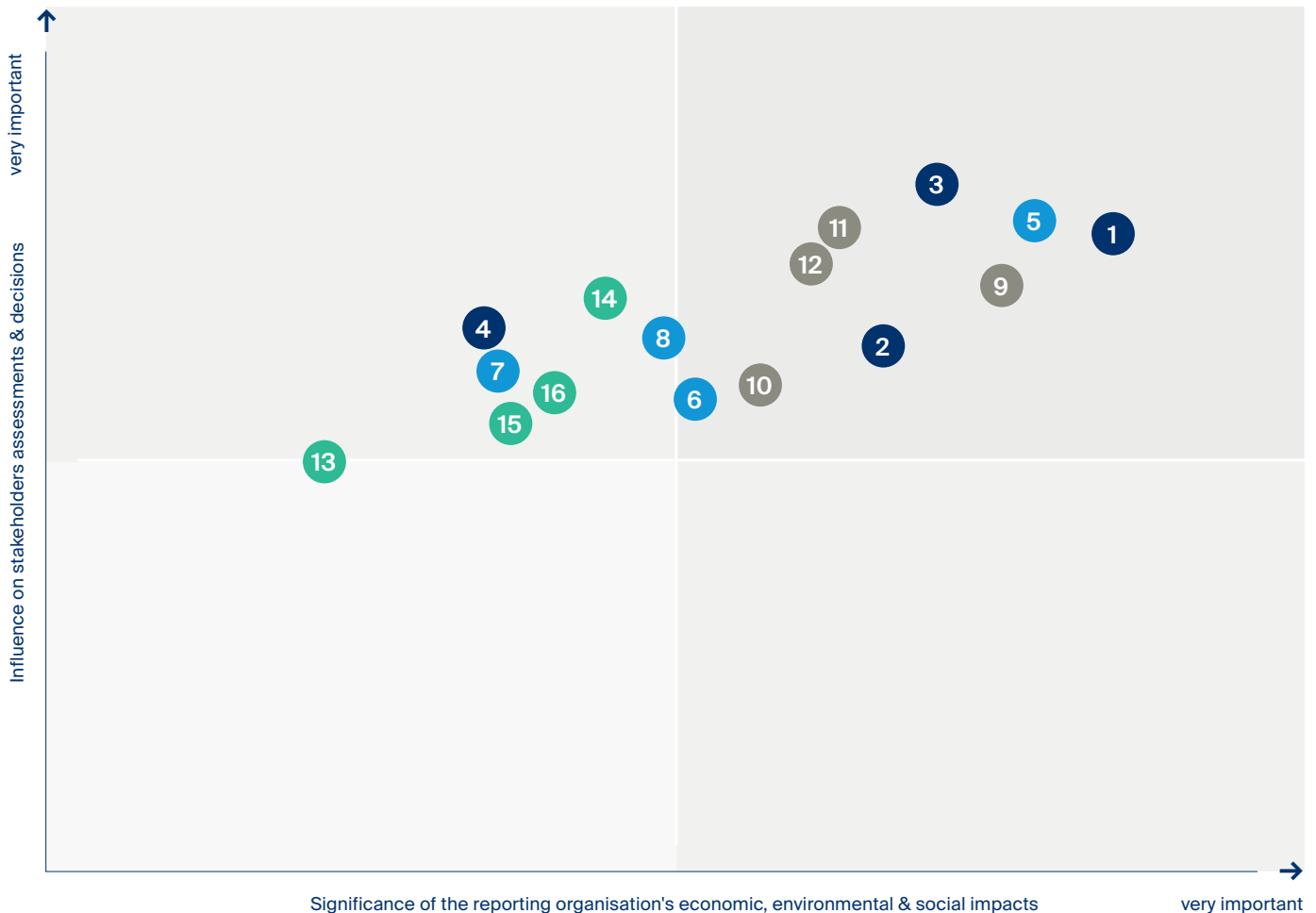
Governance
1 Business integrity
2 Business preparedness, resilience and disaster response
3 Data privacy and security
4 Responsible communication

Value Chain
5 Customer relations and satisfaction
6 Product and service innovation
7 Supplier engagement
8 Sustainable supply chain

Social
9 Employee satisfaction and retention
10 Employee development
11 Occupational health and safety
12 Human rights, diversity and equal opportunities

Environment
13 Waste management and recycling
14 Management of dangerous goods
15 CO_2 / Greenhouse gas emissions (GHG)
16 Efficient use of resources

maps macro trends in the transport and logistics industry and reviews industry peer research. The likelihood — as well as the severity — of potential and actual impacts is considered for each of the topics, with the final decision of material topics used for reporting lying with the Management Board.

For the 2021 materiality assessment, Kuehne+Nagel engaged via an internal survey with 75 senior executives and employees from all parts of the business (e.g. operations, compliance, procurement, corporate development and regional sustainability specialists). We also received 138 responses through a separate survey to external stakeholders, including customers, suppliers and non-governmental organisations (NGOs) such as industry and sustainability associations.

As the matrix indicates, in 2021 social topics — such as employee development and retention, diversity and equal opportunities — were all cited as most important to those surveyed, as were aspects of governance such as business integrity, preparedness and resilience and data privacy and security. Compared to two years prior, 2021 results also saw many environmental impacts recorded as less significant than had previously been the case.

The biannual frequency of such materiality assessments allows for the monitoring of fluctuations in circumstance that prevent a company like Kuehne+Nagel pursuing a dated impression of what has material impact and is important to our stakeholders. The fact that they capture, however, a unique moment in time equally leaves us with the responsibility of contextualising that inside-out snapshot within a complementary longer-term vision of sector activity and the wider factors at play.

2020 and 2021 were difficult years with a heightened interest in social concerns at a time when the future continued to feel uncertain. Conversely, global greenhouse gas emissions had fallen dramatically in 2020, pulling immediate attention away from climate change concerns. We believe these factors have markedly shaped the materiality assessment 2021.

At Kuehne+Nagel, however, we expected that supply chains would return to normal and throw light on the contribution of the transport and logistics sector to the global carbon footprint, ultimately provoking a strong call for long-term, sustainable solutions to accelerate our ambition to transport decarbonisation. As a supply chain leader, we have both the leverage and responsibility to bring momentum to that global ambition.

It is for this reason, that our Roadmap 2026 maintains a clear focus on long-term environmental concerns such as GHG emissions, renewable energy and waste management, in some way challenging the results of this 2021 assessment. This does not however equate with a dismissive attitude to the heightened awareness of the social aspects of sustainability as engendered by the pandemic. On the contrary, our future strategy seeks to also translate our social ambitions into key metrics, ensuring we are the best company we can be for our employees and the communities in which we operate.

Moving forward — and to be complete as possible in our analysis — we plan to introduce the concept of double materiality for our 2023 assessment. This will look at both the impact of our activity on the environment and people, as well as the implications of sustainability matters on our company. In consideration of applicable regulatory requirements, double materiality will also allow us to improve our understanding of ESG matters and provide solid foundations for the continued evolution of our strategy.

Climate-related risks and opportunities

Risk management is a fundamental element of the company's business practice. Embedded into business strategy, planning and controlling processes, it results from continuous dialogue between the Management Board, the Risk and Compliance Committee and the Audit Committee (more information about risk management can be found in the Annual Report 2022, p. 16).

Selected sustainability and climate-related risks are already considered in the risk assessment by the Management Board, but our appreciation of what constitutes a risk — and sometimes also an opportunity — is constantly evolving.

Climate-related risks including physical risks - such as extreme weather events or a rise in sea levels - and transition risks — like moving to a net-zero economy — are therefore important to take into consideration.

Consequently, starting in 2023, Kuehne+Nagel will develop and maintain a company-wide risk management program to identify, assess and respond to climate-related risks and further identify opportunities linked to climate change. Reporting will be undertaken in line with recommendations of the Task Force on Climate Related Financial Disclosures (TCFD).

ESG Progress

Value Chain

With 1,277 offices employing more than 80,000 people, Kuehne+Nagel is an established logistics provider, and one of the leading sea and air freight forwarder worldwide. Currently offering contract warehousing and transport solutions across almost 100 countries, we are witnessing the growing importance of sustainable supply chains.

In linking customers to transport and logistics solutions, Kuehne+Nagel's responsibility is therefore not to simply deploy an ESG strategy within our own immediate sphere of influence, but contibuting to the world's transition to

more sustainable supply chains via the services we offer our customers.
Our evolving service offering is guided by policies built on national and international ESG standards, frameworks and regulations. Equally, we listen to regulatory bodies — the International Civil Aviation Organisation (ICAO) governing international aviation and the International Maritime Organisation (IMO) shipping — who play their own role. We also develop in-house expertise in line with ESG regulations and sustainability needs.

Kuehne+Nagel was named the most visionary leader in the 2022 Gartner Magic

Quadrant for third-party logistics. Moving forward, ensuring evolution within our value chain is key. It forms an integral part of our Roadmap 2026 and Vision 2030 and feeds into our customer offering for decarbonisation that focuses on new, low-carbon transport technologies.

This section covers the interdependent material topics of customer relations and satisfaction, supplier engagement, product and service innovation and supply chain sustainability, all cited as important for both our internal and external stakeholders in the materiality matrix.

Value Chain material topics

Listening to our customers
Our business starts with our 400,000 customers.

Following on from work in 2021 to identify our customers' needs, 2022 was an important year for Kuehne+Nagel in the rollout of a new online customer feedback tool. Allowing customers to contact us easily and directly via a simple feedback service contained in our operational communications, we have been able to facilitate quicker response times. Piloted in more than 20 countries in the Americas and Europe in 2022, the tool will be extended to the Middle East, Asia and Africa and the rest of Europe in 2023.

A Contract Logistics customer survey was also undertaken in 2022, showing both an increase in levels of customer response and satisfaction and achieving the highest scores to date. The Net Promoter Score (NPS), a customer loyalty and satisfaction metric that measures how likely customers are to recommend a company's products or services to others, also increased by 2% compared to 2021.

Irrespective of where our stakeholders are on their sustainability journey, we engage in purpose-driven relationships, offering excellent sustainability solutions. Alongside this, work continued in 2022 to define customers who have — like us — committed to the Science Based Targets initiative (SBTi). Moving forward, we seek to define synergies with these companies and reinforce our partnership to meet common goals.

Embracing the power of data
To make greener choices, it is essential to know the carbon footprint generated along each step of the supply chain. Therefore, our "measure-avoid-reduce" approach to emissions starts with data.

Our Transport Emission Measurement (TEM) system, a component of our Carbon Management system, calculates carbon emissions for all transportation-related activities using the globally applicable EcoTransIT software. The methodology we use covers all transport modes, common emission factors and accounting scopes such as Well-to-Wheel (WtW[1]). The resulting emissions are then connected to our client interface, myKN.

Empowering our customers to make more sustainable choices
This mass of client emission data also offers enormous analytical potential. In 2022, we continued to build upon this data management and analytics capacity, with the launch of the Essential Emission Suite. Within the Emission Suite we provide customers with a comprehensive overview of their shipments and emissions, visualising the effects of transport mode and volume across trade lanes. Our emissions analytics goes further to support our customer's own emission reduction efforts by offering the ability to set emissions targets and track performance against these targets, offering tools to make informed transport decisions – such as transport mode shift from Air to a combined SeaAir option - that balance shipment time, cost, and emissions.

Kuehne+Nagel also leverages emission data to expand and improve our service offering with solutions that avoid or reduce CO_2e[2] emissions. This includes operational optimisation and consolidation, as well as new transport technologies and low carbon fuels (more details can be found in the Environment Section).

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1 Well-to-Wheel WtW is being used for a full life cycle assessment of transport fuels from extraction of raw materials to use.

2 A carbon dioxide equivalent, abbreviated as CO_2e is a metric measure used to compare the emissions from vaiours greenhouse gases on the basis of their global warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential (source EEA).

Engaging with our suppliers

With a complex supplier landscape —
Sea Logistics comprising a handful of pos-
sible partners but Road Logistics tens
of thousands — we engaged with 38,356
suppliers that were evaluated through our
Supplier Management System (SMT) in
2022.

Suppliers are required to adhere to the
Supplier Code of Conduct and use reason-
able efforts to ensure that their own suppli-
ers also comply with these principles.
This includes compliance with applicable
legal requirements and health and safety
standards, as well as recognising human
rights, such as the prohibition of child and
forced labour and the right to freedom

of association and collective bargaining
(more information on this can be found in
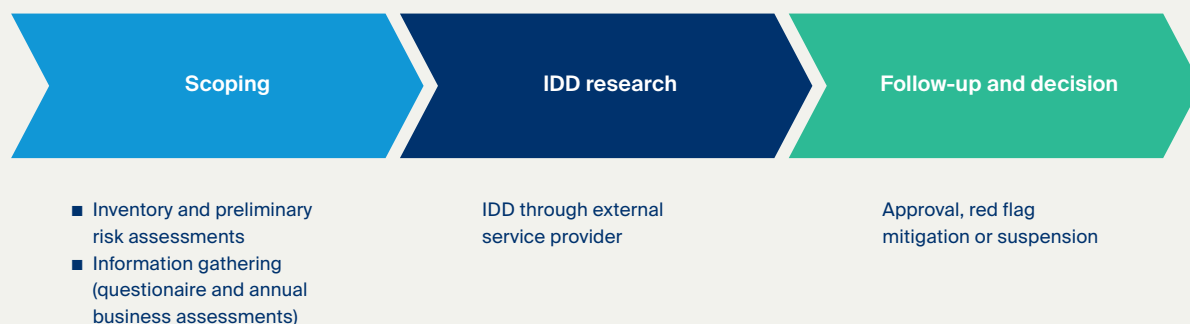the Social section).

Kuehne+Nagel operates a risk-based
Integrity Due Diligence (IDD) process
to safeguard Kuehne+Nagel's business
managers' decisions over appointing
and confirming the compliance risk of
collaboration with third parties. High-risk
suppliers are required to be approved
by Kuehne+Nagel and must undergo
online anti-bribery and anti-corruption
training. Inter alia, the IDD process focuses
on suppliers interacting with government
officials on behalf of our customers' busi-
ness, such as is the case of customs
brokerage services.

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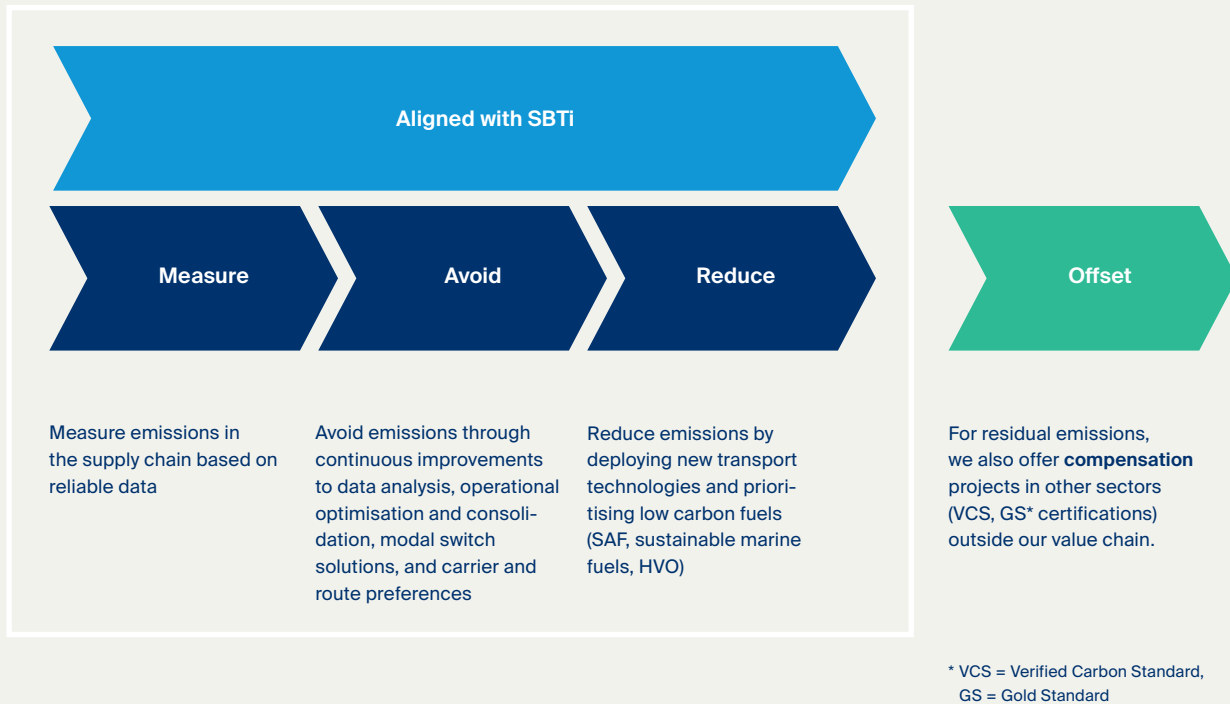
approved high-risk suppliers
year-end 2022 (evaluated with Integrity
Due Diligence)

Integrity Due Diligence Process

Scoping	IDD research	Follow-up and decision
▪ Inventory and preliminary risk assessments ▪ Information gathering (questionaire and annual business assessments)	IDD through external service provider	Approval, red flag mitigation or suspension

Aligned with SBTi

Measure	Avoid	Reduce

Offset

Measure emissions in the supply chain based on reliable data

Avoid emissions through continuous improvements to data analysis, operational optimisation and consolidation, modal switch solutions, and carrier and route preferences

Reduce emissions by deploying new transport technologies and prioritising low carbon fuels (SAF, sustainable marine fuels, HVO)

For residual emissions, we also offer **compensation** projects in other sectors (VCS, GS* certifications) outside our value chain.

* VCS = Verified Carbon Standard,
  GS = Gold Standard

Our responsibility to act as a technology enabler

As asset-light company, Kuehne+Nagel has a limited fleet of proprietary vehicles. We therefore engage suppliers to perform logistics services we organise for our customers. As such — and as outlined in the Environment section — more than 98% of our total carbon emissions are generated via our supplier network and at the service of our customers.

This places Kuehne+Nagel at an interesting crossroad as we are not an industrial partner in a position to develop sustainable technologies for the transport industry. We do however have the ability to work with a variety of partners and suppliers to offer the most sustainable and non-carbon intensive solutions available on the market. These solutions align with our Measure-Avoid-Reduce approach, which in turn aligns with our SBTi targets.
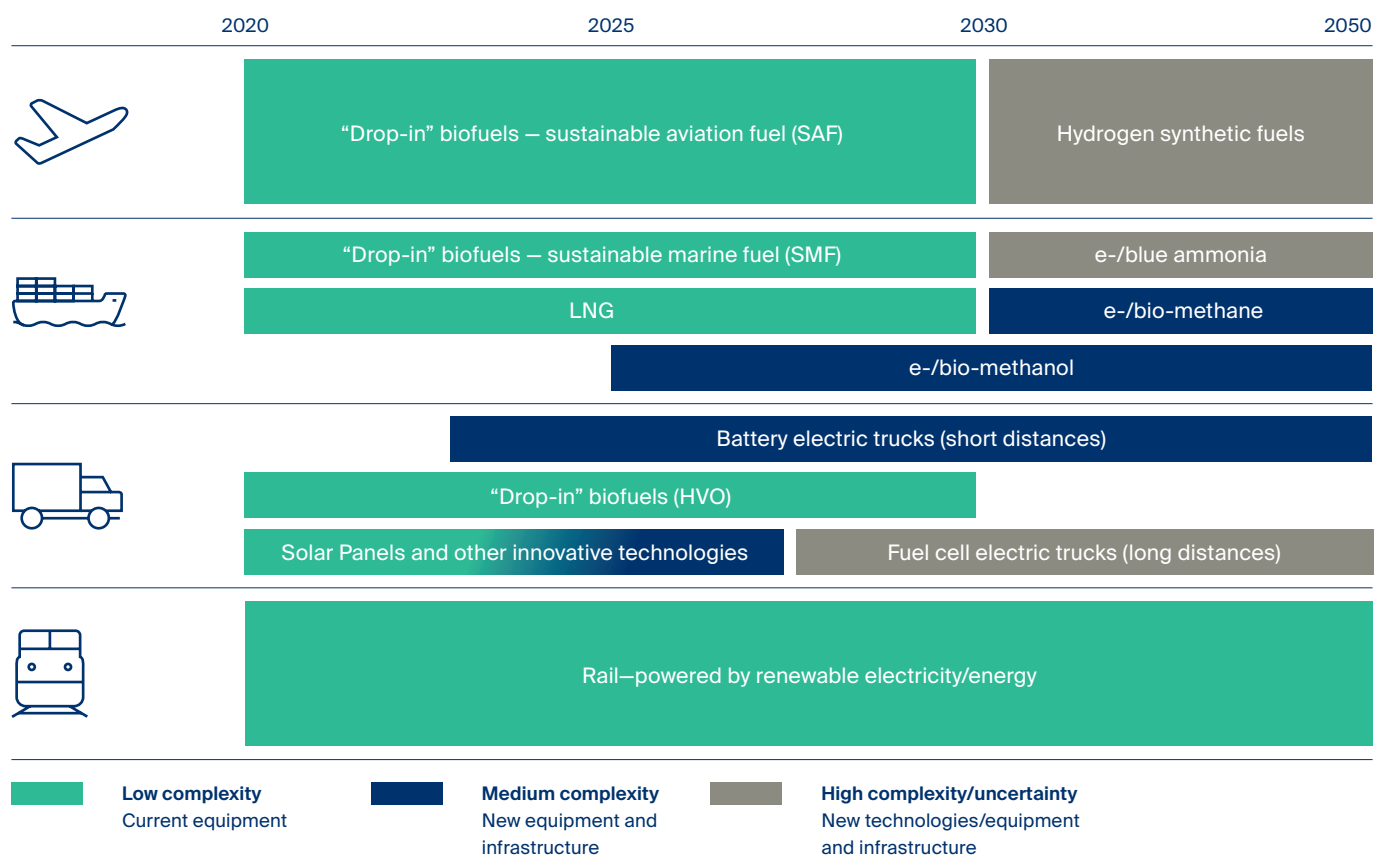
When the market is ready before the technology

Maybe the most important — and perpetually evolving — aspect of our value chain is product development and innovation. With transport — and the movement of freight — accounting for a large percentage of global emissions, much political and public attention is currently focused on both the electrification of transport and the development of low-carbon fuels.

As the alternative fuels market continues to evolve, Kuehne+Nagel is playing a key role in enabling the use of biofuels for maritime transport, Hydrotreated Vegetable Oil (HVO) fuel for road transport and sustainable aviation fuel (SAF). Our strategy around this subject is based on the Green Technology Roadmap.

Green Technology Roadmap

	2020	2025	2030	2050

Aviation
- "Drop-in" biofuels — sustainable aviation fuel (SAF) *(2020–2030, Low complexity)*
- Hydrogen synthetic fuels *(2030–2050, High complexity/uncertainty)*

Marine
- "Drop-in" biofuels — sustainable marine fuel (SMF) *(2020–2030, Low complexity)*
- e-/blue ammonia *(2030–2050, High complexity/uncertainty)*
- LNG *(2020–2030, Low complexity)*
- e-/bio-methane *(2030–2050, Medium complexity)*
- e-/bio-methanol *(2025–2050, Medium complexity)*

Road
- Battery electric trucks (short distances) *(2025–2050, Medium complexity)*
- "Drop-in" biofuels (HVO) *(2020–2030, Low complexity)*
- Solar Panels and other innovative technologies *(2020–2027, Low complexity)*
- Fuel cell electric trucks (long distances) *(2027–2050, High complexity/uncertainty)*

Rail
- Rail—powered by renewable electricity/energy *(2020–2050, Low complexity)*

Legend:
- **Low complexity** — Current equipment
- **Medium complexity** — New equipment and infrastructure
- **High complexity/uncertainty** — New technologies/equipment and infrastructure
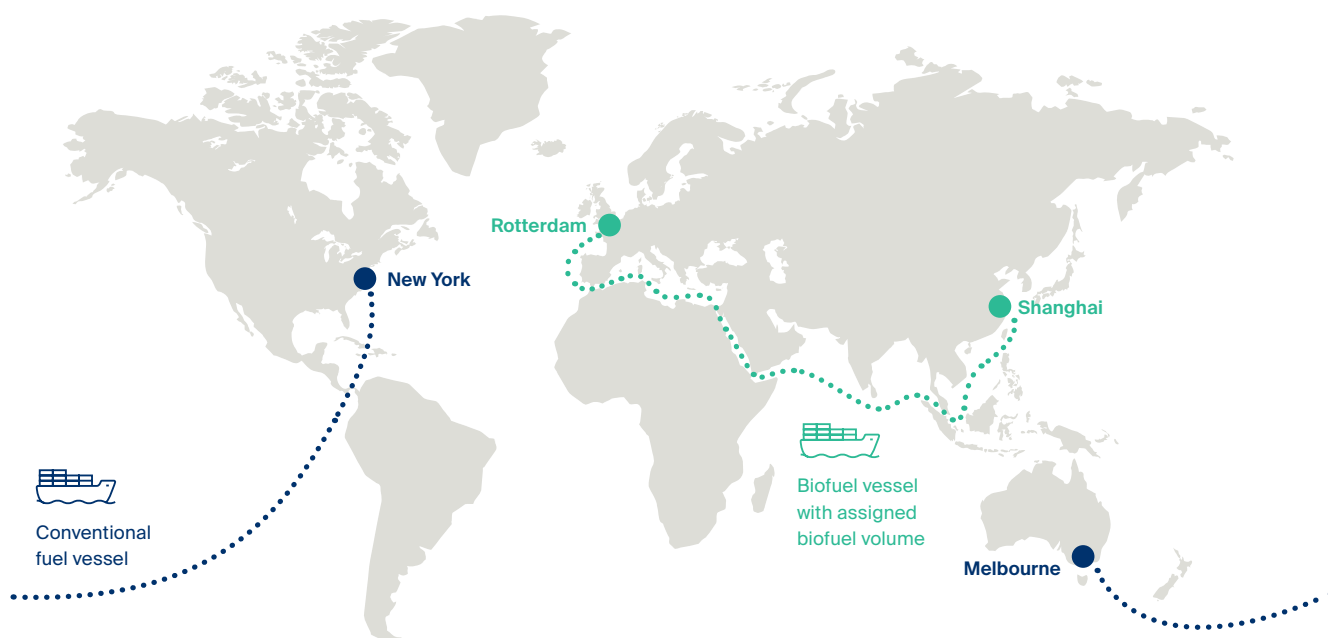
Alternative fuel, by air or by sea

As Kuehne+Nagel continues to invest in the adoption of alternative aviation fuels and expand its offering, one company who chose to partner with them in 2022 was leading healthcare company, Novo Nordisk.

With air freight accounting for most of the company's product distribution emissions as they provide life-saving medicines to patients around the world, Novo Nordisk used 12 million litres of Kuehne+Nagel SAF in 2022, avoiding direct emissions of around 30,000 tonnes of CO_2e.

Reinforcing its attention to sea freight, Kuehne+Nagel also secured enough volumes of a waste-based next generation biofuel to save 40,000 TEUs of carbon dioxide equivalent (CO_2e) emissions. Announced in August 2022, and the first of several high-volume options, a number of customers have already benefited and reduced CO_2e emissions from their own shipments on any trade or service worldwide.

Rotterdam

New York

Shanghai

Conventional fuel vessel

Biofuel vessel with assigned biofuel volume

Melbourne

Step 1 → Step 2 → Step 3

The customer selects any trade lane or service with a conventional fuel vessel on.

The biofuel required for the CO_2e reduction is consumed by a vessel on another lane using biofuel.

The reduction is allocated to the customer's cargo, who receives documentation of low-emission transport.

Tomorrow's sustainable supply chain
Kuehne+Nagel is proud of its role as one of the world's most important logistics companies. Keen to use our leverage where possible to help drive forward the net-zero supply chain of tomorrow, we partner with our suppliers but also participate in numerous industry and supply chain initiatives.

Noteworthy in 2022 was Kuehne+Nagel's active independent involvement in an initiative launched by the Smart Freight Centre and the World Business Council for Sustainable Development (WBCSD). Working towards transparent carbon emissions and a net-zero logistics sector, Kuehne+Nagel contributed with 30+ other companies to develop the 'End-to-End GHG Reporting of Logistics Operations Guidance'. The actionable guidance suggested by the consortium — designed to quantify the impact of logistics emissions from supplier to final customer — was launched at the World Economic Forum meeting in Davos in January 2023.

Key partnerships and memberships

Smart Freight Centre

Science Based Targets

Global Maritime Forum

World Economic Forum / Clean Skies for Tomorrow

GLEC Global Logistics Emissions Council

Stiftung Allianz für Entwicklung und Klima

clean Cargo Sustainable Transportation

CLECAT

Road Freight Zero

Coalition for the Energy of the future

Environment

The effects of climate change have become a daily reality and our impact on the planet and its growing population at the forefront of many discussions.

In November 2022, the 27th Conference of the Parties of the UNFCCC (COP27) in Sharm El-Sheikh, Egypt, reaffirmed a commitment to the Paris Agreement: keeping the rise in mean global temperature to well below 2 °C above pre-industrial levels, and preferably limit the increase to 1.5 °C. Greenhouse gas (GHG) emission reduction is the path to reaching 'net zero' by 2050 and COP27 notably built upon COP26's Glasgow Climate Pact, in which a particular focus was accorded to transport.

According to the International Energy Agency (IEA), transport — sea, air and road combined — represents the highest reliance on fossil fuels of any sector and accounted for 37% of GHG emissions from end-use sectors in 2021, with trade-related freight playing an important role. Transport may have been one of the sectors most affected by the Covid-19 pandemic, but 2022 saw it rebound.

A shift to low-emission vehicles is underway but the implications of a net-zero — or more ambitiously a truly circular supply chain where we seek to reuse, recycle and reduce consumption of all natural resources such as energy and water — are wider.

What it means to Kuehne+Nagel

Over the last 130 years, Kuehne+Nagel has evolved from a traditional forwarding company to a global logistics partner, offering specialised solutions for major industries worldwide. As a key actor, we have a responsibility to both lead by example and use, wherever we can, our industry leverage to enable a sustainable supply chain.

Testament to this is our Environment Policy and the ISO 14001 Environmental Management System, which all sites must comply to and under which 70% of our sites are currently certified.

In 2021, Kuehne+Nagel was one of the first companies in the logistics industry to set science-based targets, based on an absolute reduction method. The Science Based Targets Initiative (SBTi) has since developed a Net-Zero Standard — and sectoral guidelines — and we will be adapting our targets to meet these evolving international frameworks moving forward.

As outlined in the Value Chain Section of this report, Kuehne+Nagel's ultimate role is to then bring these solutions — via a service offering that champions the latest in data-driven, low-carbon technologies — to the wider supply chain. Using our Green Technology Roadmap, we use four levers to stimulate the uptake of decarbonised transport solutions, as and when they are market ready. Detail of how we partner with our suppliers to deliver this vision to our customers is contained in the Value Chain section.

Our 2030 environmental targets

Working to evolving international frameworks and aligning to the targets to which we have committed via the Science Based Targets initiative (SBTi), we have set the following tangible targets for 2030:

- 33% absolute reduction of total emissions (scopes 1, 2 and 3) against 2019 baseline
- 100% renewable energy, maintain 100% renewable electricity in all Contract Logistics locations
- Zero Waste to landfill
- Maintain 10% water consumption reduction (vs. 2019)

The four key levers to decarbonise

Customer engagement

Supplier collaboration

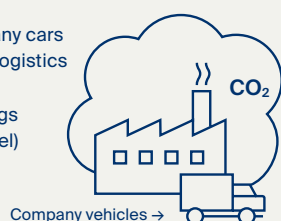Low-carbon fuels, renewable energy and technology

Data and analytics

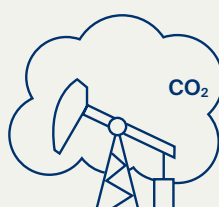# Our goal: reduce emissions across all scopes in line with SBTi

Direct emissions	Indirect emissions	Other indirect emissions
■ Company cars ■ Road Logistics trucks ■ Buildings (gas/fuel)	Electricity for buildings (our offices and operated fulfilment centres)	Suppliers' emissions for Air, Road and Sea Logistics
Company vehicles →		business travel →
Scope 1	**Scope 2**	**Scope 3**

These targets also reflect those environmental topics highlighted in our materiality index as important to both internal and external stakeholders, and are illustrated by way of example throughout the rest of this section:

■ CO_2 / Greenhouse gas emissions (GHG)
■ Efficient use of resources
■ Waste management and recycling
■ Management of dangerous goods

Progress towards these targets is documented as this section continues.

Measuring greenhouse gas (GHG) emissions
Reduction of carbon emissions starts with data capture and this data is collected and analysed by dividing it into three different scopes.

The reduction of emissions across all scopes is a priority at Kuehne+Nagel and translates tangibly as a target of 33% absolute reduction of total emissions (scopes 1, 2 and 3) against a 2019 baseline, comprising a 5.5 million tonnes emission reduction in our value chain (scope 3).

To support this, a rigorous accounting system is in place. Our emission methodology is verified and validated by an external third party in accordance with the Greenhouse Gas Protocol, ISO 14064-3 and the European EN 16285. Through our active participation in the Global Logistics Emissions Council (GLEC) we also contribute to the establishment of common industry standards and transport specific guidelines.

**Starting at home:**
Reducing scope 1 and 2 emissions

Emissions coming from our own fleet of trucks or the natural gas or electricity used to operate our offices and fulfilment centres are both the easiest to measure and reduce as they are in our direct sphere of control.

As higher levels of transport sector activity resumed in 2022, so did scope 1 emissions from Kuehne+Nagel's company cars and own trucks increase by 22% to 137,000 tonnes CO_2e. At the same time, emissions from offices and fulfilment centres decreased significantly thanks to Renewable Energy Certificates and on-site photovoltaic (PV) installations. With the electrification of our own fleet of trucks and investments in renewable energy, described in more detail as the report continues, this positions us on a trajectory to meet 2030 targets.

Scope 1 and 2 emissions

in tonnes CO_2e

Buildings (gas and electricity)
Road Logistics (trucks)
Company cars
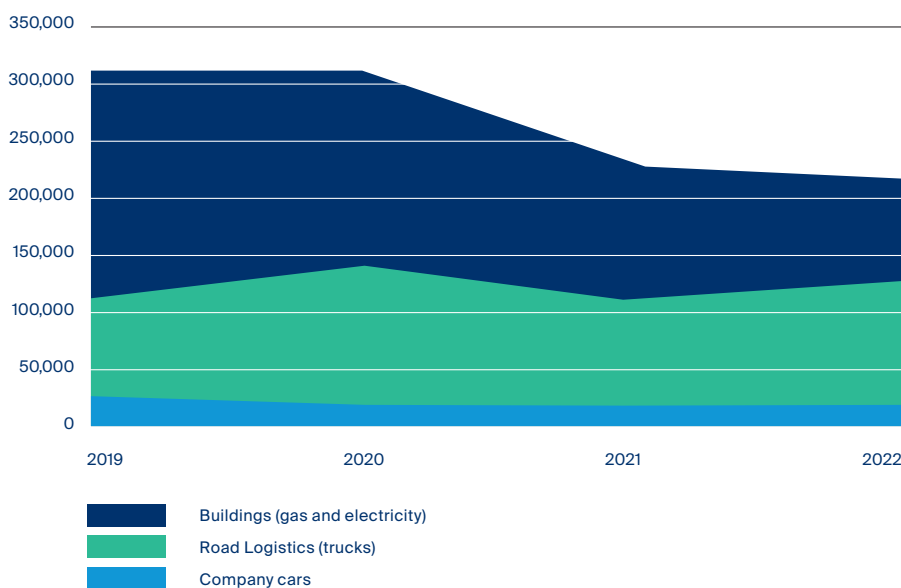
Combined scope 1 and 2 emissions have decreased thanks to investments in Renewable Energy Certificates and on-site photovoltaic installations.

60% electrification
of own fleet by 2030

Primarily offering a partnership model for its logistics services, Kuehne+Nagel also owns a fleet of delivery trucks. With customers looking to road freight transport as a means of reducing their scope 3 emissions, for the past two and a half years Kuehne+Nagel has been piloting the use of electric trucks in that fleet, gaining insights on how to best optimise their usage.

Heavy-duty trucks still have hurdles to cross before fully penetrating the market. Current technology means that only short-haul journeys (up to 250 km) can be easily done with a medium-sized battery electric vehicle (BEV) of up to 18 tonnes, as charging times, distance range and payload parameters are all at play. Availability of the charging infrastructure and the supply of low-emission vehicles in the market are also essential for the shift.

Recognising the transition to a low-emission fleet as a journey with several steps — but with short-haul transports constituting a large part of road freight journeys — Kuehne+Nagel committed in December 2022 to the intermediate milestone of 60% electrification of their own fleet by 2030. As an interim goal, Road Logistics will reduce its own (Scope 1) emissions by 10% by 2026 versus the 2019 baseline.

When it comes to longer distances, bridging technologies — such as hydrotreated vegetable oil (HVO) fuel — have been introduced to several customers in Europe already. Until a technology pathway is clear, Kuehne+Nagel adopts and trials all low carbon solutions available on the market. A further transition will be made as and when promising future technologies — such as fuel cell electric vehicles (FCEVs) powered by hydrogen — become available. Kuehne+Nagel also continues to engage actively with the World Economic Forum's Road Freight Zero project, around policy areas of charging infrastructure and payload allowance.

100%

renewable electricity in Contract
Logistics fulfilment centres

76%

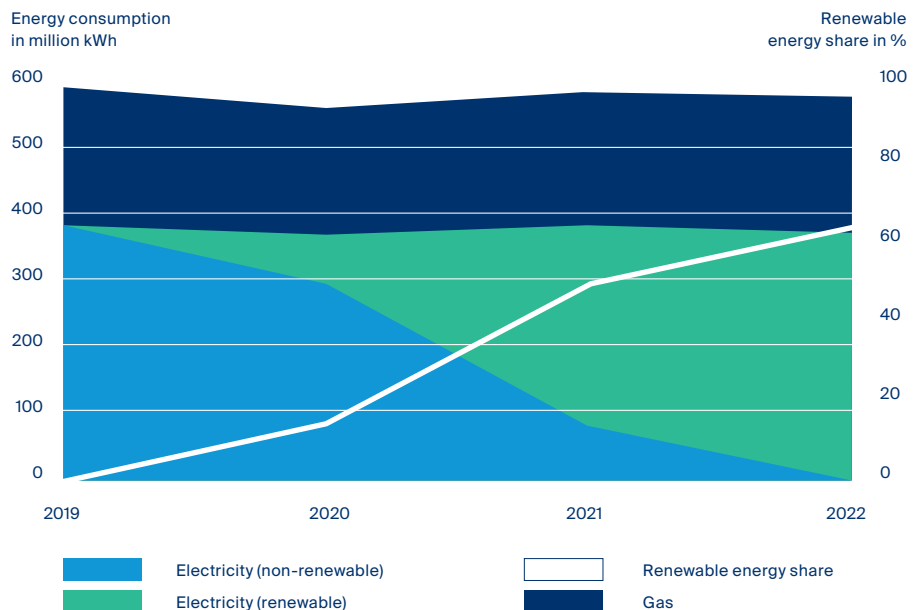LED footprint covering 7,875,596 m²
(increase by 6% in 2022)

Sustainable and efficient
energy initiatives

Both evaluation and management of
energy performance play a key role in
the reduction of building emissions and,
as such, are coordinated on a corporate
level, with collection and analysis of energy
consumption data (gas and electricity) at
all sites. Locations report monthly con-
sumption (along with water usage, waste to
landfill and recycling efforts) in the Global
Facility Carbon Calculator (GFCC). A major
achievement of 2022 was the replacement
of the GFCC 1.0, enabling strategic target
setting, more transparent, more accurate
and automated reporting.

While overall electricity consumption de-
creased by 1% in 2022, electricity intensity
(electricity consumption per FTE and per
100m²) decreased by 4%. Natural gas
consumption also decreased 7% com-
pared to 2021.

Making the transition from fossil fuels,
Kuehne+Nagel continues to favour a
cleaner electricity mix thanks to Renew-
able Energy Certificates (RECs) and
on-site photovoltaic (PV) installations and
is proud to report that 100% of Contract
Logistics fulfilment centres globally were
powered by renewable electricity in 2022.
All sites combined, this figure sits at 99%.
Contributing to this are 69 sites with PV
modules, allowing for a peak capacity of
50MWs. Together, these measures allowed
significant progress towards the company-
wide transition to 100% renewable energy
for all sites by 2030. Given the fact that
energy sources such as Natural Gas and
LPG are not considered 'renewable' as
per GHG Protocol, the overall renewable
energy share currently sits at 64%,
seeing a further increase of 15% com-
pared to 2021.

Energy consumption

Energy consumption
in million kWh

Renewable
energy share in %

| | 2019 | 2020 | 2021 | 2022 |

Legend:
- Electricity (non-renewable)
- Electricity (renewable)
- Renewable energy share
- Gas

Our renewable energy share has increased to 64% due to investments in
renewable electricity (RECs and on-site PV installations).

Sustainable businesses need sustainable warehousing

With Kuehne+Nagel's service offering covering both transport and warehousing, the contract logistics side of the business also offers the company an opportunity to partner with its clients to meet common emission reduction goals.

Expanding its cooperation in 2022 with the Danish renewable energy leader, Vestas, Kuehne+Nagel added 60,000 sqm to its existing fulfilment centre in Hodenhagen, Germany. From 2023 onwards, around 135,000 different items will be stored annually in the spare parts centre, ranging from small electronic components to hazardous goods — such as batteries, paints or lubricants — and larger parts for workshop operations.

The expansion ensures a scalable foundation to provide sustainable energy across the globe, with the fulfilment centre meeting the latest standards in terms of energy efficiency, including roof-mounted solar panels, LED lighting with motion sensors and charging stations for electric vehicles.

Our ambition is to support customers and suppliers with the right solutions

98.4% of Kuehne+Nagel's emissions are created in our value chain (scope 3)

Direct emissions

- Company cars
- Road Logistics trucks
- Buildings (gas/fuel)

CO_2e

Company vehicles →

Indirect emissions

Electricity for buildings (our offices and operated fulfilment centres)

CO_2e

Other indirect emissions

business travel →

Suppliers' emissions for Air, Road and Sea Logistics

CO_2e

Scope 1

↓

Scope 2

↓

Scope 3

↓

Kuehne+Nagel scope 1+2:
0.22 million tonnes CO_2e | (2022)

Kuehne+Nagel scope 3:
13.95 million tonnes CO_2e | (2022)

Kuehne+Nagel scope 1+2+3 emissions:
14.17 million tonnes CO_2e (2022)

Emission data from recent mergers and acquisitions (incl. Apex Logistics) not included. Consolidation and re-setting of baseline to be conducted in 2023.

Scope 3 emissions —
Our journey to decarbonisation

Asset light, Kuehne+Nagel's business model is one that partners with a global network of suppliers to offer the most sustainable solutions on the market at any one time, as outlined in the Value Chain section. That means more than 98% of our GHG emissions fall into the scope 3 — other indirect emissions — bracket.

While Sea and Air Logistics are the main contributors to Kuehne+Nagel's financial results, they are also the largest source of scope 3 emissions, with approximately 12.3 million tonnes of CO_2e being generated by logistics services via sea and air during 2022 (accounting for more than 85% of total emissions). Scope 3 emissions from Road Logistics accounted for almost 12% total emissions in 2022.

Overall, emissions decreased during the reporting year compared to 2021. A combination of factors contributes to this, including a slight decrease in total volumes in Sea Logistics and a slowing of the air logistics market during the second half of the year. In addition, data from recent mergers and acquisitions (including emission data from Apex Logistics, one of the leading Asian freight forwarders being renowned for their air logistics services) have not been integrated in the 2022 emission reporting. These data gaps will be closed during the 2023 reporting year.

Furthermore, improvements in our CO_2e emission calculation methodology for Road Logistics where we have moved from a high-level towards a more granular approach using the latest standards and frameworks, have led to a decrease in Road Logistics emissions.

Resetting our baseline

The full integration of emission data from recent mergers and acquisitions will be a priority for the 2023 reporting year, in order to fully account for our total carbon footprint. Consequently, and as we will continue to align with the Science Based Targets initiative (SBTi) this will require resetting our baseline. Once all the sectoral guidance from SBTi is available, this may also include re-assessing our long-term targets.

Promoting low-carbon technologies

As a third-party logistics provider, Kuehne+Nagel cannot force technology readiness in the industry. We can however act as an enabler, driving the market in the adoption of lower carbon-intensive solutions.

As the transport industry transitions to a net-zero future, transformative low-carbon technologies are in development but have not fully penetrated the market, particularly in areas such as sea and air freight which represent the mainstay of international trade. To make a real impact on GHG emission reductions, our role is to therefore work with supply chain partners to offer our customers the most sustainable transport solutions.

Combining the best features of air and sea

A good example of this is our Sea-Air product. Existing for a long time and offering multimodal sea and air freight transport solutions, it was designed to save our customers time and money. From 2019 onwards, however, a dedicated team of experts was established to promote and manage this hybrid service from end to end. Generating on average 50% less emissions than a pure air freight solution, many customers see Sea-Air as a key value proposition when looking for more sustainable transport options.

Investing in the future of aviation fuel

Kuehne+Nagel also invests in new technologies, as outlined in the Value Chain section. With air freight being the most carbon-intensive of all transport solutions, one of those technologies is sustainable aviation fuel (SAF). In line with the signing of the Clean Skies Initiative's 10% SAF by 2030 ambition paper in 2021, Kuehne+Nagel saw a 10-fold increase in the number of litres sold to customers in 2022.

Carbon compensation

As technology evolves and comes to market, carbon compensation nevertheless offers a complimentary way to address the environmental impact of shipments. Since 2020, Kuehne+Nagel has offset all remaining scope 1 and 2 emissions and has systematically offered customers the opportunity to be included in the initiative. Nature-based compensation projects not only remove carbon from the atmosphere, but also contribute to the UN Sustainable Development Goals (SDGs) and the communities involved in the projects. The projects we support are certified through the Verified Carbon Standard (VCS) or Gold Standard (GS). A selection of products from our Sea Logistics Portfolio integrates carbon compensation in its service offering.
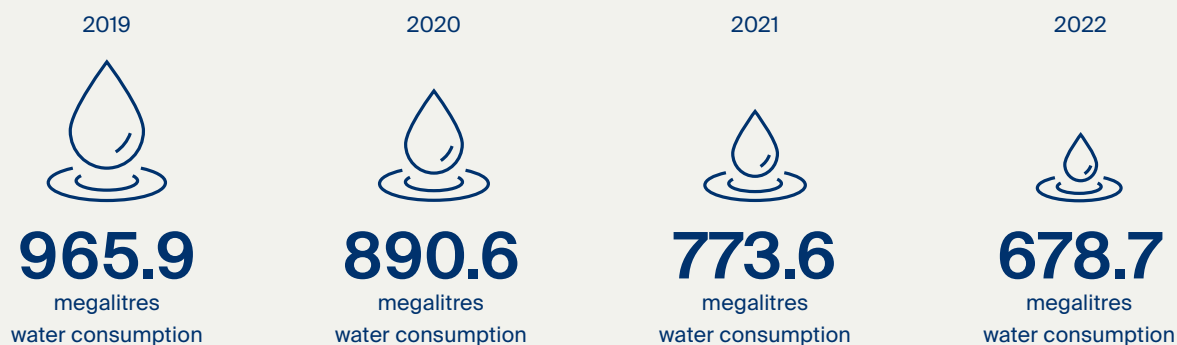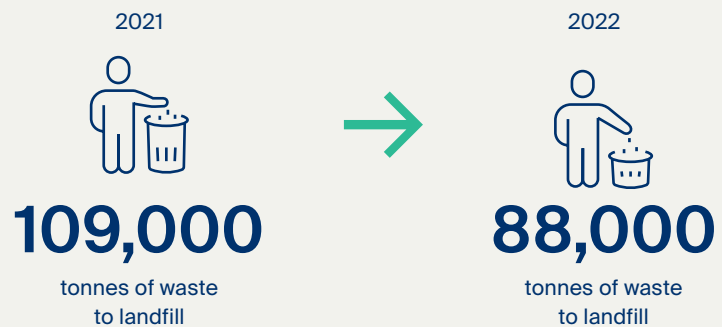
Water conservation

Water is recognised as a precious utility at Kuehne+Nagel. As such, its usage is tracked and reported across sites and most of our water intensive operations are located in the US and Europe in areas that are not subject to water stress or water scarcity.

Cleaning of crates for re-use, along with domestic cleaning and washing of vehicles represent some of the heaviest water usages. Water conservation efforts are in place to reduce and reuse water consumed, allowing the company to report an overall reduction of 30% since 2019.

Kuehne+Nagel can report an overall 30% reduction of water consumption compared to 2019

2019	2020	2021	2022
965.9	**890.6**	**773.6**	**678.7**
megalitres water consumption	megalitres water consumption	megalitres water consumption	megalitres water consumption

In 2022, we reduced waste sent to landfill by 10%

2021

109,000
tonnes of waste
to landfill

2022

88,000
tonnes of waste
to landfill

Zero Waste

As a contract logistics service provider, Kuehne+Nagel offers freight forwarding services, but also operates warehousing activity on behalf of its clients. Divided into 'inbound' and 'outbound' activity, packaging — be it made from wood, cardboard or plastic — represents potential for waste generation.

As such, waste management is another key component of our environmental programme. Waste data is collected on site and recorded in a central database on a monthly to bi-monthly basis. Whilst our activities in sustainable packaging for outbound activities were reinforced (see the following section), this year saw our attention also turn to internal waste in the form of inbound packaging.

In 2022, we continued to move towards our 2030 target of zero waste to landfill with 75% of all waste being either recycled (58%) or recovered (17%), and an overall decrease in waste volume of 19%. Overall, waste sent to landfill decreased by a further 10% compared to 2021.

In 2023, and with the global roll-out of Global Facility Carbon Calculator (GFCC) 2.0, we are going to further improve our data collection system to capture waste data and waste composition more accurately.

Recycle, but also reduce and reuse: A Sustainable Packaging Roadmap
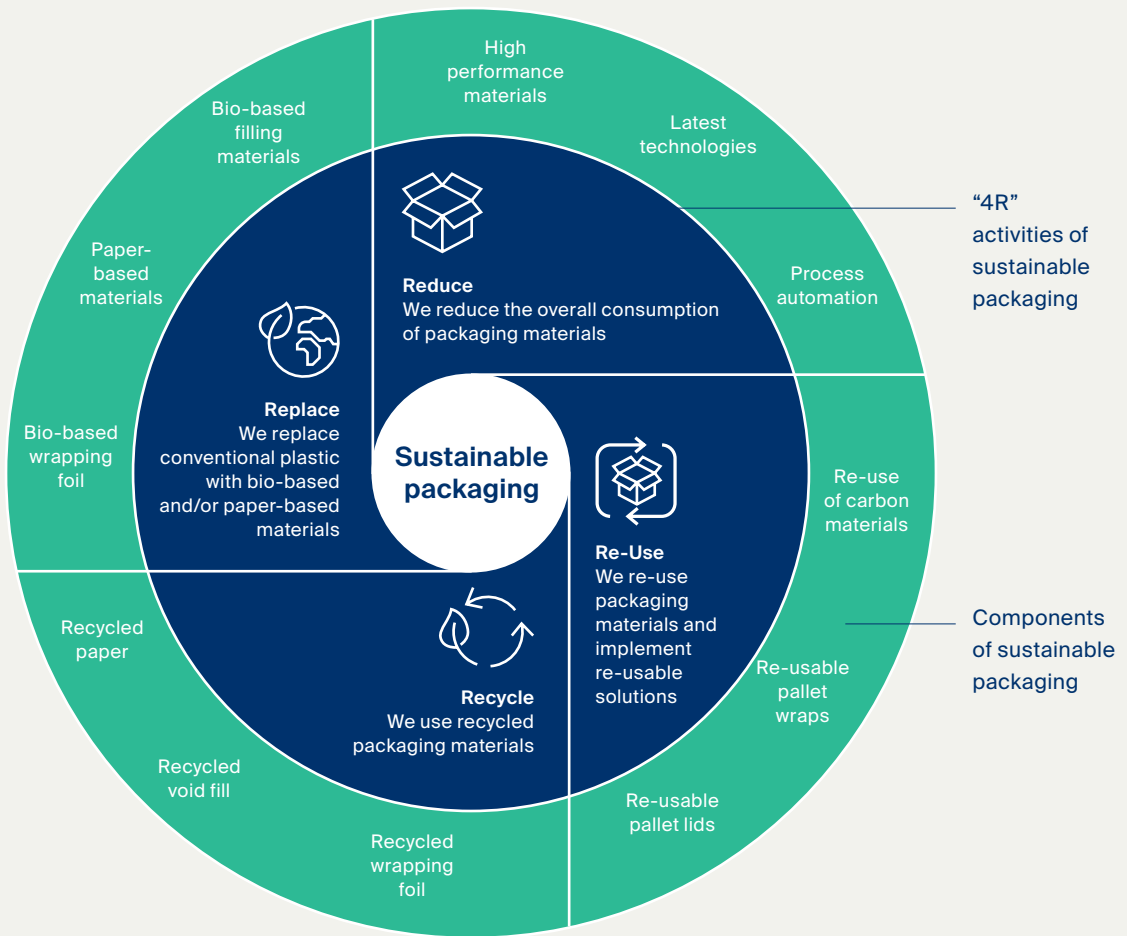
The majority of waste at Kuehne+Nagel facilities lies out of our immediate sphere of influence, meaning it mostly concerns the packaging accompanying our outbound activity. That is why we turned our attention to this area in 2022. We see recycling as

one pathway to zero waste but are also exploring other circular concepts of reducing and reusing across all our business.

The simplest way to achieve circularity when it comes to inbound waste is to not only recycle inbound packaging but reuse it where possible for our outbound services. In 2022, the Contract Logistics business unit took this one step further and developed a Sustainable Packaging Roadmap. With Phase One of the programme establishing a standardised approach across several sites, it covered 152 individual, outbound packaging processes. Using the principals of reduce, reuse, recycle and replace, the use of stretch film and plastic filling materials was optimised in line with the company's 'Zero Plastic' vision. Moving forward, the roadmap will consider new materials such as paper wrap and high-performance foil.

How to achieve sustainable packaging?

"4R" activities of sustainable packaging

- High performance materials
- Latest technologies
- Process automation
- Re-use of carbon materials
- Re-usable pallet wraps
- Re-usable pallet lids
- Recycled wrapping foil
- Recycled void fill
- Recycled paper
- Bio-based wrapping foil
- Paper-based materials
- Bio-based filling materials

Components of sustainable packaging

Sustainable packaging

Reduce
We reduce the overall consumption of packaging materials

Replace
We replace conventional plastic with bio-based and/or paper-based materials

Re-Use
We re-use packaging materials and implement re-usable solutions

Recycle
We use recycled packaging materials

To date, we optimised 152 packaging processes by applying the Sustainable Packaging concept

586
tonnes plastics

Identified annual reduction by the usage of thinner high-performance foil, paper based materials, reusable solutions and/ or process automation

1,573
tonnes CO_2e

Identified annual savings by the usage of high-performance materials, reusable solutions and/or recycled materials

37%
CO_2e savings

On average, 37% CO_2e emissions were reduced at each packaging process optimisation

Forging a new direction in supply chain waste management

Leveraging its position in the industry, Kuehne+Nagel proactively moved towards offering services in supply chain waste management in 2022 with several clients. From the automated production of outbound parcels in the US to electric powered shuttle transport in Germany, teams across the world worked with clients to offer more sustainable contract logistics solutions.

On a larger scale, development also went into a full waste reduction program with one client in Spain, entailing the reduction of overall packaging consumption, the removal of as much plastic as possible and the reuse of inbound cardboard, all the while enhancing employees' notion of well-being at work.

Work also started in 2022 on the development of what will become Kuehne+Nagel's largest CO_2e-neutral fulfilment centre. The 130,000 m^2 facility in Italy for our customer, Adidas, is Leadership in Energy and Environmental Design (LEED) Gold Level certified and powered by 100% renewable energy. Only the most sustainable packaging materials and processes will be deployed.

Managing dangerous goods

Kuehne+Nagel transports all types of goods around the world, some of them potentially hazardous. With dangerous goods estimated to represent 3% of all cargo we transport, its successful management not only safeguards the environment but also people's health and safety.

Our Global Dangerous Goods policy promotes the safe and compliant transportation of dangerous goods throughout our network. It assists in risk elimination or mitigation — from storage through to all modes of transportation — and is implemented through the establishment and maintenance of national or local processes, work instructions, training and monitoring systems.

A key achievement in 2022 was the roll-out of the Dangerous Goods Info Tool to more than 90% of countries, allowing for a centralised system to track training status and monitor staff changes for Dangerous Goods Supervisors and Approvers across all business units. In addition, applicable rules and regulations are regularly monitored on a country-by-country basis to ensure regulatory compliance.

Mandatory reporting is also in place so that all dangerous goods incidents are reported and fully investigated. Incidents must also be communicated internally if they require the involvement of emergency services or cause personal injury or environmental damage and are therefore classified as 'severe'. In the reporting year, only one case that required medical treatment was recorded. In addition, six incidents caused by spills or leakages in Germany, France, Mexico, and Belgium were reported and communicated internally. None of these cases caused any harm or negative impact to people or the environment as immediate action was taken.

For more information on dangerous goods, read our HSE app makes a difference case study in the Social Section.

Dangerous Goods incidents requiring medical treatment

Location	Country	Date	Description	Estimated cost CHF	Spill Volume	Damage to Environment	Damage to Persons
Oberkrämer	Germany	May 17th	Gas emanation from a container	N/A	N/A	No	Medical treatment case (non-severe)

Social

The world of work has radically changed in the last half-decade, not least due to the Covid-19 pandemic. Hybrid working is now the norm; a 2021 McKinsey survey, for example, found that nine out of ten organisations plan to combine remote and on-site working in the post-pandemic world. Even before the pandemic, digital transformation was already changing the workplace. For employees to embrace this change, new skills are required — skills such as agility and the willingness to grow and take control of one's personal development. At the same time, health, safety and wellbeing have moved up the agenda for many companies, with employees' safety becoming a top priority.

Furthermore, it has become accepted that companies with high diversity and successful inclusion achieve higher goals, attract and retain talent and benefit from great teamwork, which leads to better ideas and results. These factors are reflected in our materiality assessment that has seen a marked increase in the importance of social topics in 2021 (compared to the previous assessment in 2019).

Finally, we see that employees are clearer than ever in their expectations; they want to contribute to a greater purpose and are looking for tasks that are meaningful, which is especially true for young talent. This means that companies that are guided by purpose (such as meeting the UN's Sustainable Development Goals), and that offer the chance to grow and a feeling of belonging, will be more attractive in the future.

What it means to Kuehne+Nagel
All these factors shape Kuehne+Nagel's vision driving the social topics laid out here — and demonstrate that people are essential for achieving the environmental targets in the previous chapter. Our company goal is therefore to be the best

company to work for and with. Equally, our ambition to create a unique candidate and employee experience remains unchanged.

Furthermore, our belief is that customer experience and employee experience are inextricably linked: if our people are satisfied, they go above and beyond to deliver the best to our customers. This supports our role as a customer-centric company, a visionary, and an accessible and human partner for our customers.

These beliefs also reflect those social topics highlighted in our materiality index as important to both internal and external stakeholders, and are illustrated by way of example throughout the rest of this section:

- Employee satisfaction and retention
- Employee development
- Human rights, diversity and equal opportunities
- Occupational health and safety

The management of these material topics and progress made is documented as this section continues.

Attracting and onboarding talents
Reflecting wider workplace trends, and an overall more dynamic working environment, Kuehne+Nagel has seen a slight increase in employee attrition in recent years — moving from a white-collar unwanted attrition rate of 8.7% in 2019 to 10.4% in 2021 and 2022. This continues to shape our goal of being the best company to work for — and the related activities below.

In order to take an internal pulse check, we conducted an Employee Operations survey in Q3 2022. We invited more than 25,000 colleagues to participate and received 11,700 responses. In a next step,

Employee benefits and assistance

Benefits such as life insurance, healthcare, disability and invalidity coverage, parental leave and retirement provision are provided to our full-time employees. Additionally, the benefit of stock ownership is offered to selected high performers across the ranks. In some countries (e.g. US and Brazil), these benefits are provided to temporary or part-time employees according to applicable local laws and regulations.

Kuehne+Nagel's worldwide benefit offering also includes an Employee Assistance Programme, which provides confidential assessments, counselling, referrals and follow-up services to employees with personal and/or work-related challenges. Through this programme, employees can receive career transition support in the event of termination and advice on retirement.

25%

of interns converted to the
global workforce (2022)

Contract Logistics and Human Resources will jointly analyse the results and agree on actions to implement as well as best practices to share with our global community. Close progress monitoring and regular voice of the employee initiatives will support delivery of change.

In a further step, the Onboarding App that we introduced in 2021 was scaled up very quickly in 2022. This app allows us to communicate as early as possible with all new recruits, connect them with their teams and introduce them to our company culture — therefore supporting the aim of creating a workplace where everyone belongs. Feedback on the app that has been rolled out globally during 2022 has been extremely positive with an overall satisfaction of 4.66 of 5, exceeding the goal that we set ourselves in 2021, to achieve a satisfaction level of at least 4.5.

In addition, we have refreshed our employer brand, posting articles on our career website and promoting them on LinkedIn that showcase successful intern placements and our graduate programmes. We have also upgraded our Talent Sourcing Centres as well as shaping our recruitment baseline processes to be more inclusive and implementing succession planning without bias. This includes training of our HR managers around cultural sensitivity and awareness which ensures that individuals are treated on the basis of their relevant skills and competency merits and abilities. Job selection criteria are regularly reviewed to ensure an equitable recruitment and promotion process. From an external perspective, Kuehne+Nagel has

received a number of employee awards, including being named Top Employer in France and UK, a Great Place to Work in 15 countries in South and Central America, and Best Companies to Work for in Asia 2022 in Vietnam and Hong Kong.

**Developing people in
the new world of work**
We are proud of our organisation's speed of response to the changing world of work: for example, we have introduced workforce policy models, structured methodology for employee engagement and hybrid team guidance post-pandemic.

Kuehne+Nagel is also supporting the ways in which employees can drive their own development. We have built a diverse learning ecosystem that focuses on experimental learning, social learning and formal learning with tools available to our employees. This leverages our own and external providers' expertise to develop online learning platform content, and provides face-to-face programme delivery and virtual sessions, as well as leadership programmes and our Global Talent Programme.

During 2022, 697,788 completed internal and external training sessions were recorded through the company platform, an increase of 25% compared to 2021. Two noteworthy ways in which we are evolving our learning offering — and which further promote a feeling of belonging — are the introduction of cultural bias trainings, in particular for our HR community, and the continuation of our regional talent programmes (more info in box).

Fit for the future with our Regional Talent Programmes

The Regional Talent Programme (RTP) is a development programme for future leaders and is running across three regions in 2022-2023: the South and Central America programme was launched in 2022, the Asia-Pacific programme continued, and the Europe and Middle East regions started a joint programme.

RTP has been designed to empower high-potential employees to grow inside the business, as well as to equip them with the mindset, resilience, and courage to drive our strategy, develop their own career paths and handle the challenges of our dynamic world. Each participant is expected to bring high levels of engagement and ownership. While providing a platform for participants to build their cross-regional network, RTP offers learning activities such as virtual training, webinars, coaching and mentoring sessions which cover a period of up to 18 months depending on region. Focus topics include leading the transformation, customer excellence, future of work and key financial skills. The participants also engage in project assignments – with the teams in Europe and Middle East focusing on sustainability-related topics for 2022. In 2022, 198 talents from more than 40 countries benefitted from the programme.

Upgrading performance

The new world of work requires a shift of mindset on ways of working: elements of trust, discipline and self-awareness will play a pivotal role in our success. In 2022, we therefore introduced myBehaviours, which is a northern star for how we act and integrates these elements in our daily routine.

Furthermore, we have developed a new performance enablement process which is more proactive and has a focus on meaningful conversations between leaders and their teams. This will be rolled out in 2023. It builds upon our figures for 2022, in which more than 93% of white-collar employees with a performance plan received a performance review.

Moving the dial on DEI*

At Kuehne+Nagel, we recognise the value of diverse teams that represent society and inclusive and equitable conditions that enable everyone to contribute and belong. We are currently on a journey to strengthen DEI, moving beyond gender in terms of diversity aspects as well as working to balance the different levels of maturity in our organisation. To support this, we have developed our Diversity and Inclusion policy as a guiding document.

When it comes to gender, although almost 40% of our workforce is female, only 10% of our top management is. Hence the following goal: double female representation in top leadership by 2030 (from 2021).

To this end, we are focusing on improving our talent processes to decrease gender bias and continuing our Women in Logistics Leadership network (more info in box). Starting in 2023, diversity and inclusion awareness training are planned for delivery across the organisation.

When it comes to generational diversity, our goal is to increase our intern intake by 15% by 2030 (from 2021). We are happy to report that we almost reached this goal towards the end of 2022 with a 14% increase of intern intake by year-end 2022. Of these, 25% converted to the global workforce.

* DEI = Diversity, Equity and Inclusion

myBehaviours

Inspire	I demonstrate self-awareness.	I connect through integrity and respect.	I enable my team to achieve success.
Empower	I focus on our customers' goals.	I collaborate, anticipate and act.	I trust and am trusted.
Deliver	I take ownership.	I show courage and conviction.	I promote diverse perspectives.

32%

of our employees are
Generation X

46%

of our employees are
Generation Y

15%

of our employees are
Generation Z

We have over

100 Nationalities

40% of our workforce are

women

24%

of senior management
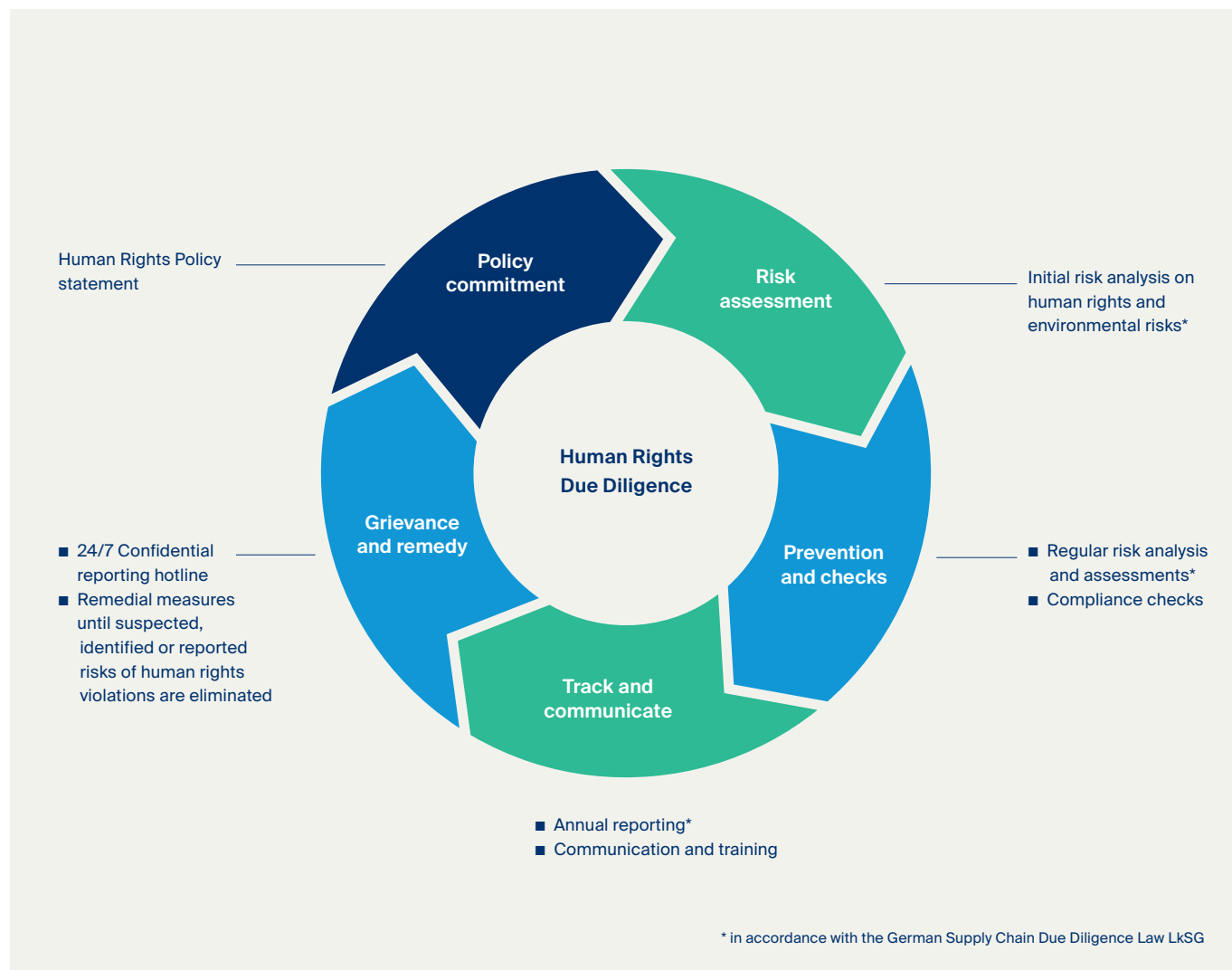are women

10%

of top management
are women

Where there's a WILL, there's a way!

Women in Logistics Leadership (WILL) is a network of colleagues who inspire and support each other, raising awareness and promoting gender equity and female representation at all levels of leadership at Kuehne+Nagel. Starting in North America, the programme has also been adopted in Europe and supports the company's target to double female representation in top leadership by 2030.

Furthermore, the programme aims to create awareness to inspire change for equal opportunities, building a network that champions the WILL mission and cultivates allies. The programme has four main pillars:

■ Monthly events to nurture personal and professional growth and a diverse mindset through networking, education, open dialogue, coaching, best practices, webinars and more.

■ In North America, a mentorship programme that provides individual support, based on monthly meetings to discuss specific topics.
■ A quarterly book club to keep the community engaged and gather new perspectives. Selected books vary from fiction to non-fiction, biographies, and business books.
■ A frequently updated internal blog offering the latest research, statistics, data and news around gender equality, equity, and best practices from the market.

All the community activities, with the exception of mentorship, are open to everyone who would like to have an open dialogue and be part of the journey.

Human Rights Policy statement

Initial risk analysis on human rights and environmental risks*

Policy commitment

Risk assessment

Grievance and remedy

Human Rights Due Diligence

Prevention and checks

Track and communicate

- 24/7 Confidential reporting hotline
- Remedial measures until suspected, identified or reported risks of human rights violations are eliminated

- Regular risk analysis and assessments*
- Compliance checks

- Annual reporting*
- Communication and training

* in accordance with the German Supply Chain Due Diligence Law LkSG

Human Rights Due Diligence

Human rights

Kuehne+Nagel is committed to respect and adhere to all Global Human Rights principles issued by the United Nations and to prevent, end and minimise any negative impact on compliance with human rights within our global business operations.

In 2022, the company developed a comprehensive Human Rights Policy that consolidated existing guidance and includes and supports the following principles:

1) Prohibition of child labour
2) Culture of diversity and inclusion, free from harassment and discrimination
3) Employee rights and fair labour practices, including the prevention of forced labour
4) Freedom of Association and right to collective bargaining

Our suppliers are also obligated to respect internationally recognised human rights. This forms an integral part for our suppliers and subcontractors to making a commitment to comply with the Supplier Code of Conduct and to maintain its compliance (for more info, see "Engaging with our suppliers" in the Value Chain section). In 2022, we also appointed a Human Rights Officer who coordinates the annual risk analyses and assessments in accordance with legal requirements in Germany.

A risk analysis was carried out in accordance with the German Supply Chain Due Diligence Law (LkSG) and questionnaires were addressed to a multitude of relevant suppliers. In addition, we conducted a child labour protection regulations and risk-based review of selected sites. Our short and medium-term aim is to accelerate work on Human Rights Due

Diligence (HRDD) and roll out an internal awareness and training campaign for our Human Rights Policy. We also plan to amend our supply chain management system and revise the Supplier Code of Conduct.

Collective bargaining agreements

Overall, 39% of our global workforce is affiliated with collective bargaining agreements. Kuehne+Nagel is proud of the relationship established with local workers' representatives and, in particular, the excellent cooperation with the European Works Council (EWC), representing the majority of our workforce. In particular, the regular exchanges and meetings with our regional Management Board and globally with our Chief Human Resources Officer (CHRO) show our firm commitment to creating a work environment where all employees feel they belong.

Labour rights

Kuehne+Nagel is committed to respect local laws and does not offer salaries below the local legal minimum wage. We also expect our suppliers to adhere to these standards, as outlined in the Supplier Code of Conduct. Where applicable, employees are entitled to parental leave. In our significant locations of operations, the share of male employees taking parental leave has increased in recent years but is overall below the share of women taking parental leave.

Further improving the health and safety culture

At Kuehne+Nagel, we remain consistent with our journey to NO HARM, implementing trainings, reporting unsafe situations and launching a new Safety Anchor during 2022. The safety anchors were developed to raise awareness of safety and health in our operations and prevent incidents, following an analysis of risks and previous incidents in our operations and the industry. Our safety performance has reached an all-time high and the Lost Time Injury Frequency (LTIF) continues to trend downwards.

In terms of training, 2022 saw our NO HARM Level 3 training launched in the US and Europe. This takes awareness of a NO HARM culture beyond HSE[3] staff and to an overall management level, expanding the scope of responsibility. This module focuses on the role leadership has in safety culture behavioural change. The target for 2023 is for every region to run this training. We will also be adding additional modules such as security and dangerous goods to the app. Regarding further goals, in the medium term we aim to include mental health and wellbeing within the company's occupational health activities and targets. In addition, no reported HSE violations or prosecutions were recorded in the reporting year.

Our health and safety goals are underpinned by our management system and our documentation. The Safety and Health Management System (SHMS) covers all Kuehne+Nagel entities worldwide and is certified to ISO 45001. We identify the hazards applicable to our operations and activities within our premises, assess their risks and identify and implement mitigations to manage them. We also conduct internal audits to ensure compliance with local and company regulations and certification requirements. Where there's a difference between legal requirements and Kuehne+Nagel requirements, the most stringent prevails. Finally, our Safety and Health statement underlines that the company is committed to maintaining a safe and healthy working environment for our employees, partners, customers and the communities we operate in.

Lost Time Incident Frequency

3 HSE= Health, Safety and Environment

Lost Time Incident Frequency (LTIF) trending down

2019	2020	2021	2022
13.22	**10.80**	**10.24**	**8.8**
LTIF	LTIF	LTIF	LTIF
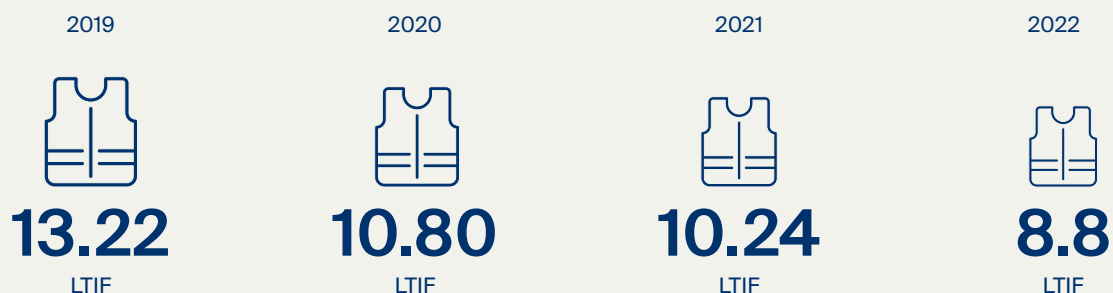
Health & Safety facts

	2022	2021	2020	2019
Number of fatalities in Head count (FAT)*	0 (1)	1 (1)	1 (2)	1 (3)
Lost time injury frequency (LTIF)	8.8	10.24	10.80	13.22
Total reportable case frequency (TRCF)	8.8	13.33	14.40	17.66
Lost workday cases (LWC)	1,468	1,688	1,834	2,434
Lost workday (LWD)	29,351	30,581	32,067	41,733
Unsafe act / Unsafe condition	63,730	44,302	36,271	43,522

* Fatality (x) is related to 3rd party accident on our premises

HSE app data makes a difference

2021 saw the global rollout of the HSE app, and its use through 2021 and 2022 can only be described as a success. At Kuehne+Nagel, we urge employees to intervene (STOP) when unsafe conditions are seen and report them — and the easy-to-use app has facilitated this activity, enabling fully anonymous reporting.

In 2022, we further acted on these reports. Analysis of 2021 data showed that there was an increasing number of incidents where ergonomics played a role. As a result, a new Safety Anchor (our eighth) focused on ergonomics has now been added. Furthermore, global awareness training is ready to be rolled out in 2023, and the medium-term vision is for the app to be enhanced to record all incidents that may have an impact on health and safety, occupational illness, damage to assets and dangerous goods (for more info, see "Managing dangerous goods" in the Environment section).

Safety Anchors

Driving Safely

Work Authorisation

Danger Zone

Safety Controls
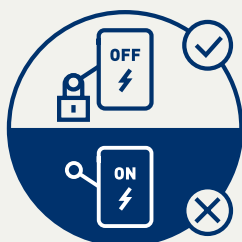
Energy Isolation
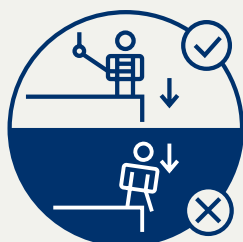
Working at Height
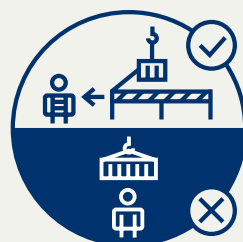
Lifting Operations

Ergonomics

Governance

Corporate governance implies practices and policies that ensure accountability, transparency, fairness. It shapes a company's relationship with employees, customers, and shareholders and ranges from setting and enforcing ethical standards to establishing effective communication channels. Not only serving as a preventive measure against misconduct or unethical behaviour, it often benefits a company's financial performance, reputation and social license to operate.

As digital platforms increase awareness of ethical and sustainable practices — and afford a powerful voice — companies are increasingly held accountable when it comes to the environmental and social impact of their activities.

The digital age has encouraged greater transparency but also brought new challenges. Cyberattacks present an increasing risk for companies of all sizes and industries and can result in information breaches, financial loss and damage to a company's reputation. Consumer trust goes hand in hand with adequate protection of both systems and data.

What it means to Kuehne+Nagel
As one of the world's leading logistics companies, Kuehne+Nagel is committed to establishing loyal and trustworthy relationships with its customers and suppliers, employees, and the communities in which they operate. Especially in times of global crises and supply chain disruptions, we strive to be a reliable and resilient business partner, who is prepared to prevent, mitigate or manage disruptions in supply chains.

Furthermore, in a digital age, Kuehne+Nagel's responsibility includes managing data securely and treating personal information with even higher care. A commitment to responsible communication enables an open dialogue with stakeholders as well as transparency about the products and services we offer. In an era of seemingly unlimited access to information and a constant flow of communication, ethical and truthful communication is essential, not only for a stock-listed enterprise.

As identified through the materiality assessment, the following governance topics have been determined as material to the company and are therefore described in more detail in the following section:

- Business integrity
- Business preparedness, resilience and disaster response
- Data privacy and security
- Responsible communication

Engaging with our stakeholders
Kuehne+Nagel fosters a transparent, close and equal dialogue with its stakeholders. This includes the evaluation of how our business impacts the environment and communities we work in as well as how the company can best respond to stakeholder interests. When it comes to communication with investors, 2022 saw a noticeable and consistent increase in communications around ESG topics.

Furthermore, in times of crisis, we proactively engage with internal and external stakeholders, including customers and central government, to align our response with stakeholder demands. Following the Covid-19 pandemic, we further improved our crisis communication system with monthly updates provided to the Management Board.

Relationship with stakeholders

Stakeholder groups	Key issues of interest	How we engage	How we respond
Employees	■ Training and development ■ Health and safety ■ Compensation and benefits ■ Diversity and inclusion	■ Employee survey ■ Townhall meetings ■ Internal communication ■ Workers Councils	■ Career development framework ■ Learning management system ■ Performance management process ■ Safety and health management system ■ Diversity and Inclusion programme
Customers	■ Climate change and GHG emissions ■ Customer service ■ Data privacy and protection ■ Quality, security and responsibility in delivery	■ Customer satisfaction survey and feedback tool ■ Customer meetings and events ■ Joint customer-tailored decarbonisation projects	■ Emission consultancy ■ Internal and external QSHE audits ■ Information security ■ ESG ratings
Investors	■ Economic performance ■ Responsible communication ■ Transparent and ethical corporate governance	■ Annual General Meeting (AGM) ■ Disclosure duties ■ Capital Markets Day ■ Management engagement ■ Road shows, investor and analyst meetings ■ Financial press releases	■ Integrity Due Diligence Process ■ ESG ratings ■ Reporting
Suppliers and partners	■ Ethical and social standards ■ Long term partnership ■ Fair payment terms	■ Business Associations ■ Partnerships	■ Audits and risk assessments ■ Supplier Management System (SMT) ■ Training
Communities/ Non-governmental organisations (NGOs)	■ Ethical, social and environmental practices ■ Community partnerships	■ Meetings and progress reports via industry organisations ■ Community service/ engagement	■ Human Rights Due Diligence ■ Emergency and Relief Logistics ■ Community Engagement initiatives
Governments/ Regulatory bodies	■ Regulatory compliance	■ Public Forums and Industry bodies ■ Transparent dialogue with tax authorities	■ Financial and sustainability reporting ■ External assurance and audits

Code of Conduct participation rates

in per cent	Target	2022	2021	2020
Live Induction Training	>95	86	90	91
Live Induction Training Top and Senior Managers	>99	98	98	98
Computer-based Training	>95	92	93	94
Annual Confirmation	>95	96	95	98

Ethics and Compliance

Based upon risk considerations, the Kuehne+Nagel Ethics and Compliance programme assumes a central role within the material topic of 'business integrity'. Reviewed annually, the programme transforms the essence from laws and regulations, as well as our ethical business principles into a comprehensive day-to-day manual for managers and employees. This includes, but is not limited to guidelines, trainings, processes and controls. It is supported by a comprehensive policy framework including the

■ Code of Conduct
■ Anti-Bribery Guideline
■ Antitrust Guideline
■ Gift and Entertainment Guideline
■ Conflict of Interest Guideline

Ongoing, risk-based and mandatory compliance trainings are a key element to ensure that members at all levels of the company are and remain adequately knowledgeable to act in line with the programme in their day-to-day work.

To highlight its importance to the company, the average results of their team's compliance knowledge tests form part of a team manager's performance rating for confirming their ability to demonstrate ethical leadership.

Further integrity-related training is carried out at Kuehne+Nagel. In 2022, Ethical Leadership awareness campaigns were held at regional levels including in-person and online sessions as well as computer-based trainings.

For a risk-based selected target audience of about 3,000 managers, a two-year dedicated online training campaign was concluded with an antitrust advanced course. Starting in 2023, a similar two-year online training campaign will be launched for around 7,000 managers with anti-bribery and anti-corruption basics and advanced courses. All employees are encouraged to prevent, detect and report any suspected breaches or violations of applicable laws and regulations or the principles of the Kuehne+Nagel Code

of Conduct through the anonymous Confidential Reporting Line that is available 24/7 in 50+ languages. The CRL can optionally be contacted anonymously. Submitted reports are assessed by the Independent Allegation Management Committee and as needed, independent investigations are initiated thereupon, prior to any form of remediation for

preventing reoccurrence. Cases with material impact are disclosed in the Annual Report. Any significant legal proceedings and main outcomes of completed legal actions are disclosed in the Annual Report, as well as significant confirmed incidents and public legal cases regarding corruption.

Facts and figures allegation management

for concerns related to the Code of Conduct
or potential violations of laws and regulations

	2022	2021	2020
Absolute number of cases	220	220	323
Cases per 1,000 employees	2.7	2.8	4.1
Percentage of incoming reports via Confidential Reporting Line	55	39	57
Percentage of incoming reports anonymously	41	35	53
Percentage of incoming reports of HR* vs. non-HR** matters	62	53	62
Percentage of closed cases with merit	51	41	40

* HR cases include e. g. employment term issues, inappropriate behaviour, discrimination, and conflicts of interest
** Non-HR cases include e. g. improper payments, fraudulent activities, and other issues such as in export controls, data privacy, or competition law

Executing responsible tax management
Taxes form a significant part of the economic contribution that Kuehne+Nagel makes to the countries in which it operates. The company believes that responsible tax behaviour is crucial for business integrity.

Our Tax Governance Framework is owned by the Group Chief Financial Officer (CFO) and overseen and reviewed by the Audit Committee. It ensures legal compliance, transparency and tax risk management. Our Head of Group Tax, who reports to the CFO, is responsible for its implementation.

Kuehne+Nagel acts according to applicable tax laws and complies with international standards, namely those of the Organisation for Economic Co-operation and Development (OECD) and the arm's length principle. Internal controls and escalation procedures are put in place to identify, quantify and manage key tax risks, such as tax reporting and compliance risks, transactional risks and reputational risks. Where appropriate, Kuehne+Nagel looks to engage proactively with tax authorities to disclose and resolve issues, risks and potentially uncertain tax positions. The 2021 Sustainability Report includes more details about responsible tax management.

Trade control
In order to comply with applicable trade control laws and regulations and mitigate trade control risks, Kuehne+Nagel has i.a. developed a robust trade compliance screening system that screens all transactions through our Transport Management System (TMS). When the screening application detects a potential issue, an investigation request is automatically triggered, and the situation is investigated further. This process is laid out in the company's Trade Control Guideline. Measurable tasks were dedicated to local trade control managers in 2022 and trade control related trainings performed, both live and CBT.

Developing business preparedness, resilience and disaster response
As a global company, we have a responsibility to be prepared for and manage a crisis at occurrence, aiming to ensure best practice for a continued operation of global supply chains. Kuehne+Nagel applies an emergency and disaster response that is outlined in our Emergency Preparedness and Response Guideline. All sites comply with ISO 22301 for Business Continuity Management.

Every national organisation is equipped with a business continuity plan (BCP) that is regularly reviewed and updated and managed on a national level. As part of this plan, risks are assessed and reviewed at least annually. The effectiveness of

BCPs is assessed by conducting annual audits and effectiveness checks, with every site being assessed at least once every three years, and crisis simulation trainings at corporate level. As part of this training, Kuehne+Nagel has taken preventative measures to ensure BCPs and critical data can be accessed even in the event of a cyberattack.

All our European sites were classified according to the type of energy supply and criticality during 2022. By November, BCPs for all our critical sites had been reviewed and updated and alternative back-up infrastructure was established.

As with many global companies, we have experienced challenging events throughout the reporting year. Yet, even during Covid-19, we did not experience any government-ordered shutdowns or penalties, thanks to the effectiveness of our response.

Ukraine war
The war in Ukraine offered our biggest challenge this year, and our thoughts remain with all those affected by this ongoing conflict. While it was particularly challenging to keep in contact with affected staff in the country, we are happy to report that our sites in Ukraine were kept operational whenever possible, despite the exceptionally difficult circumstances. Through our global network, we were also able to support and host affected staff.

Security incidents 2022

Other

Tobacco

Pharma

Industrial

High Value

F&B*

FMCG** & Retail

Hi Tech

4

16

59

2

6

3

2

8
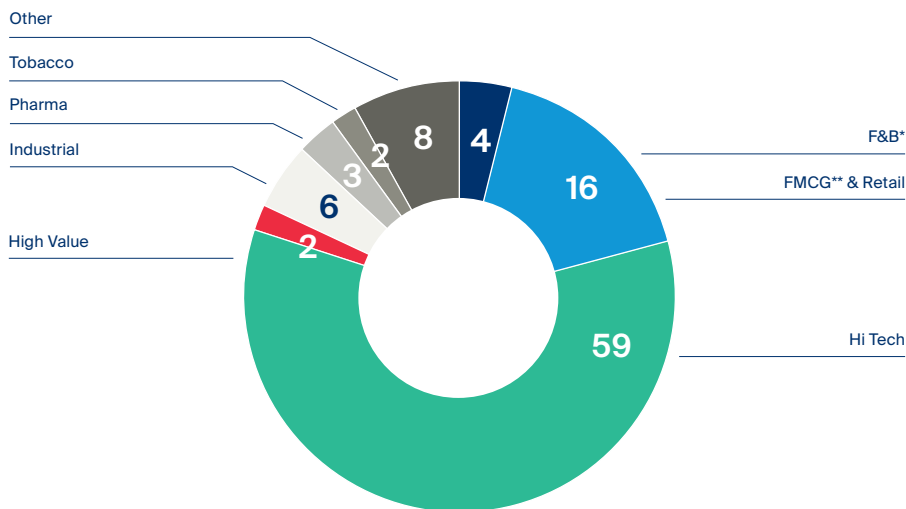
Cargo security

Kuehne+Nagel's security organisation strives to provide secure transport of our customers' freight and protect our employees, business partners and entrusted goods from acts of unlawful interference. To support this, Kuehne+Nagel is a member of the Authorised Economic Operator (AEO) supply chain security programme network in 41 countries.

We also collaborate with industry partners for designing suitable countermeasures to organised crime and make investments in research and development.

In relation to overall turnover and gross profit, value loss of customer assets

*F&B = Food and Beverages,
** FMCG = Fast Moving Consumer Goods

decreased slightly compared to pre-pandemic levels. In some regions, particularly in the Americas, new security measures have also led to an absolute decrease in security incidents and value loss.

Furthermore, we carry out internal training to contribute to greater cargo security. In 2022, the mandatory computer-based security awareness training for white-collar employees was updated and overhauled. For fulfilment colleagues, we developed an interactive training to preserve cargo security, including posters in several languages. The training is going to be rolled out globally in 2023.

Supporting data privacy and security
Our customers, employees and other stakeholders expect their personal information to be protected with the greatest possible care. We take this responsibility very seriously and manage this through our Data Protection Management System (DPMS) and our data protection management organisation.

We identify and manage privacy risks at the operational process level based upon an established and tailored data privacy framework to ensure risks are measured, monitored and mitigated across our core businesses. Privacy Compliance Assessments of high exposure systems and processes that use personal data enable the early identifica-tion of risks to ensure they are managed appropriately.

Incidents relating to data protection occurring in processes subject to the provisions of the General Data Protection Regulation (GDPR) are handled by the data protection department, which is supported in its investigations by local incident sources. During the year, a small number of cases were reported to the responsible data protection supervisory authorities. The authorities did not take any measures against the company in response.

To meet the GDPR standard globally, Kuehne+Nagel's Privacy Framework sets out six privacy principles that all employees must respect, wherever they are in the world: reasonable care, purpose limitation, reasonable restriction, transparency and openness about where personal information is stored and used, choice and consent, and privacy by design.

In 2022, we launched our Privacy Policy Center in which we clearly state the type of information we collect and process. In addition, we provided a refresher data privacy training for all employees involved in processing personal data, in line with regulatory requirements. As part of their onboarding process, new employees are required to participate in a global data privacy training. Altogether, these trainings aim to ensure that employees across the organisation have a thorough level of knowledge about principles of confidentiality and data privacy.

Information Security
Kuehne+Nagel has created a robust and mature information security governance framework that is aligned with international standard ISO 27001 and includes guidelines that apply globally.

In Germany, Kuehne+Nagel has been ISO 27001 certified since 2019 with a renewal of the certification in 2022. As part of this process, the global Information Security Management System undergoes a continuous improvement process that is monitored by the Chief Information Security Officer (CISO).

In addition, regional Information Security Officers (ISOs), managers and experts provide support to the functional and business units in the design phase of products and customer solutions.

In regard to Cyber Security, a special focus is the protection against ransomware. Several technical and organisational measures have been implemented to increase protection and decrease the vulnerability against this type of threat, mitigate the impact and have processes in place to react appropriately in case of an event.

Serving our communities and wider society

At Kuehne+Nagel, we are committed to deliver progress to society and give back to the communities we operate in. We do this through employee-led community engagement initiatives, which also positively impact our company culture, as well as our Emergency and Relief Logistics specialist department.

Community engagement
Blue for Green comes under the umbrella of Kuehne+Nagel's employee-led social responsibility program. Its goals are to raise environmental awareness and action in countries and branches, create a closer connection to candidates and customers, and ultimately support Kuehne+Nagel's goal to transition to a zero carbon future.

In 2022, 539 activities in 33 different countries were registered via the action tracker. The Blue for Green community also celebrated Earth Day by launching an 'Earth Week' campaign, hosting several live panel discussions and webinars with company leaders from around the world.

Community efforts and actions focus on six impact areas

Waste & Recycling	Energy Consumption	Travel & Commuting
152	**81**	**12**
Initiatives 2022	Initiatives 2022	Initiatives 2022
Education & Awareness	Community Engagement	Food & Agriculture
157	**114**	**23**
Initiatives 2022	Initiatives 2022	Initiatives 2022

Emergency and disaster response

For 40 years, Kuehne+Nagel's Emergency and Relief Logistics specialist department has been providing logistical support in disaster areas. From dealing with difficult terrain to complicated customs clearances, the team of 50 experts works closely with the United Nations and nongovernmental organisations, as well as local representatives around the world, 365 days a year, to provide assistance to those most in need. The transportation of emergency aid to places that no longer have access to general supplies is complicated. To help solve these challenges, Kuehne+Nagel has established several strategically located storage and warehousing facilities that support immediate dispatch of goods — all coordinated in the Control Tower in Copenhagen. The dedicated and passionate relief logistics specialists have expertise in handling both long-term humanitarian projects and unforeseen crises. They arrange reliable transport that best suits the need of the hour including sea, air, or road (both partial and full charter).

In 2022, Kuehne+Nagel provided emergency aid for Ukraine, which included a donation worth CHF 10 million. Coordinated by our Emergency and Relief Logistics team, we provided pro bono logistics services to leading aid organisations for the transport and storage of relief goods to Ukraine as well as Poland, Slovakia, Hungary and Romania. This included the delivery of off-road ambulances, equipment for building a health clinic, medical material, and erecting temporary crisis warehouses. The wider response also included support for affected employees, e.g., hosting or relocating colleagues that needed assistance.

Factbook, Data and Assurance

Summary of targets and progress across all issues

This table provides an overview of how our material topics are linked to the UN Sustainable Development Goals, our targets, and highlights progress and key achievements during the reporting year. The table also provides information about the functional responsibility of these topics.

Material topic	UN SDGs	Targets	2022 Progress and Achievements	Functional responsibility
Customer relations and satisfaction page 15		■ 2023/24: global rollout of customer feedback tool ■ 2023+: further increase of response rate and score of Net Promoter Score for customer satisaction surveys	■ Rollout of new customer feedback tool to 20+ countries ■ 2% increase of Net Promoter Score in Contract Logistics customer satisfaction survey from previous year	■ Sales and Marketing for customer feedback tool ■ Contract Logistics for CL customer engagement survey
Product and service innovation page 15, 18-19		■ 2023-2026: further develop sustainability commercial offering ■ 2023-2026: expand and improve our service offering with solutions that avoid or reduce CO_2e emissions	■ Launch of Essential Emission Suite (for GHG emissions visibility)	Environment Working Group 'Sustainability Core Panel' with support from functional units
Supplier engagement page 17		■ 2023: update the Supplier Code of Conduct ■ Ongoing: all suppliers adhere to the Supplier Code of Conduct	■ 38,356 suppliers evaluated through Supplier Management Tool (SMT) ■ 629 approved high-risk suppliers year-end 2022 (evaluated with Integrity Due Diligence)	■ Business units appoint high-risk suppliers into Integrity Due Diligence; a process facilitated by Compliance ■ Finance for SMT
Sustainable supply chain page 20-21		■ 2023-2030: engage with all customers on sustainability topics ■ 2023-2026: continue presence and collaboration with partners and industry associations	■ Joint customer-tailored decarbonisation projects started ■ Active participation in development of 'End-to-End GHG Reporting of Logistics Operations Guidance' by the Smart Freight Centre	ESG Steering Committee

Material topic	UN SDGs	Targets	2022 Progress and Achievements	Functional responsibility
CO₂e Greenhouse gas emissions (GHG) page 23-25, 28-30		■ 2026: 10% scope 1 emission reduction by 2026 (from our own trucks, compared to 2019, interim goal) ■ 2030: reduce absolute scope 1, 2 and 3 emissions 33% from a 2019 base year — this includes 5.5 Mt reduction in our value chain ■ 2030: 60% Low Emission Vehicles in our own fleet	■ Increase of sustainable fuels in all modes of transport ■ Electric truck pilots ■ Solar panels on trucks trial ■ Electric vehicle services at selected airports	Environment Working Group 'Sustainability Core Panel',
Efficient use of resources page 26-27, 31		**Renewable Energy** ■ 2023: global rollout of and training for Global Facility Carbon Calculator GFCC 2.0 **Water consumption** ■ 2030: 100% renewable energy ■ 2030: maintain 10% water consumption reduction (vs. 2019)	■ 100% renewable electricity for Contract Logistics fulfilment centres (99% renewable electricity in all locations) ■ Decreased electricity intensity (per FTE and m²) ■ Increase of LED footprint by 6% to 76% coverage ■ Increase of on-site Photovoltaic installations (to 50 MW peak capacity) ■ Development of GFCC 2.0 ■ Environment Policy updated ■ 30% reduction of water consumption achieved (compared to 2019)	Led by Contract Logistics
Waste management and recycling page 32-34		■ 2030: Zero Waste to landfill ■ 2030: no plastic materials (packaging and disposable) in contract logistics operations	■ Global assessment of waste recording process ■ Development of sustainable packaging roadmap ■ 10% reduction of waste to landfill (compared to 2021) ■ 152 packaging processes optimised to reduce outbound packaging	Led by Contract Logistics
Management of dangerous goods page 37		■ 2023: implementation of standardised monitoring and reporting system for staff replacement needs	■ Implementation of Dangerous Goods Info Tool ■ Comprehensive training for internal dangerous goods auditors	QSHE, regional/national DG coordinators

Material topic	UN SDGs	Targets	2022 Progress and Achievements	Functional responsibility
Employee satisfaction and retention page 38-40		■ 2023: development and implementation of follow-up actions from employee operations survey	■ Employee operations survey completed (45% response rate) ■ Completed global roll-out of Onboarding App for new employees ■ Exceeded goal of 4.5/5 star rating for onboarding app: 4.66 in 2022 ■ Employer branding refreshed, and Talent Sourcing Centres upgraded	Human Resources
Employee development page 40-42		■ 2023: global roll-out of new performance enablement process	■ Introduction of cultural bias training ■ Introduction of myBehaviours model ■ Development of new performance enablement process	Human Resources
Human rights, diversity and equal opportunities page 42-45		**Human Rights** ■ 2023: internal awareness campaign for Human Rights Policy (2023) **Diversity, Equity and Inclusion (DEI)** ■ 2030: double female representation in Top Leadership (2021 base year) ■ 2030: increase intern intake by 15% globally (vs. 2019)	■ Human Rights Policy developed ■ Initial risk analysis on human rights and environmental risks conducted (in accordance with the German Supply Chain Due Diligence Law LkSG) ■ Child Labour protection regulations and risk-based review of selected sites conducted ■ Development of internal DEI training ■ Further increase of women in Top Leadership (2022 status: 9.8%) ■ Increase of intern intake 13% and 25% conversion to full-time employment	■ Governance: Social and Governance Working Groups (including HR, QSHE, Legal, Compliance, Finance) ■ Implementation: HR lead
Occupational health and safety page 46-47		■ 2023: zero fatalities ■ 2023: occupational illness cases recordable in the HSE-app and global roll-out ■ 2023: NO HARM level 3 training rollout ■ 2023: reduce LTIF 10%	■ No company fatality (sadly one fatality by a supplier on Kuehne+Nagel premises) ■ Global rollout of HSE app in all countries, incl. Project Logistics sites ■ NO HARM leadership training development ■ Use of HSE-app for KPI reporting	QSHE [1], Project Logistics HSE

1   QSHE= Quality, Safety, Health, Environment, Security and Dangerous Goods

Material topic	UN SDGs	Targets	2022 Progress and Achievements	Functional responsibility
Responsible communication page 48-49		■ Meet annual engagement goals with investors ■ Continuous improvement of crisis communication system	■ Further improvement of crisis communication system	Corporate Communication, Finance, QSHE for crisis communication escalation
Business integrity page 50-52		Ethics and Compliance Programme: ■ Annual target: >95% participation in Code of Conduct training (>99% for Top and Senior Management) ■ 2023: launch of ABC online training campaign for ~7,000 managers	■ Annual confirmation participation rates in Code of Conduct training achieved (96%) ■ Two-year Ethical Leadership awareness campaign concluded	Ethics and Compliance Programme: Chief Compliance Officer
Business preparedness, resilience and disaster response page 52		■ 2023: upload all Business Continuity Plans (BCPs) to external cloud solution	■ No major or business critical deviations identified by our external certification body ■ Completion and end of COVID-19 crisis management in March 2022 ■ Energy crisis and mitigation concept on vulnerable sites executed ■ All sites comply with ISO 22301 for Business Continuity Management	Corporate Communication, QSHE for crisis communication escalation
Data privacy and security page 55		Data privacy: ■ Adopt a risk-based approach for the further development of privacy-related risk management Information Security: ■ 2023: continuous improvement of Cyber Defence ■ 2023: focus on risk management with employee awareness ■ 2023: KRITIS audit	Data privacy: ■ Launch of Privacy Policy Center ■ Refresher data privacy training for employees ■ Mandatory global data privacy training for new employees Information Security: ■ Re-certification of ISO27001 ■ Implementation of technical and organisational measures to increase protection against cyber security threats	Data privacy: Global Data Protection Officer (framework: Data Protection Management Framework) Information Security: Chief Information Security Officer

Reporting history, scope and basis

Reporting period

Kuehne+Nagel has published an annual Sustainability Report since 2016. The Sustainability Report 2022 covers our sustainability activities and performance in the 12-month period from 1.1.2022 until 31.12.2022.

Independent, external assurance

For the second consecutive year, external assurance for this report has been sought. For 2022, external limited assurance has been sought for gross scope 3, category 4 GHG emissions (upstream transportation and distribution, not including sustainable fuel purchases) from DNV Business Assurance Germany GmbH.

Reporting scope and basis for reporting

This report covers Kuehne+Nagel's global operations including activities occurring at all facilities, owned and leased, over which we have operational control unless otherwise noted. The scope of health and safety reporting includes facilities and operations over which Kuehne+Nagel has management control, including fulfilment centres and offices. For this report, facility data from 1,277 locations spread across 98 countries have been gathered.

Category 3.4 emissions are calculated through our Transport Emissions Measurements (TEM) system. In some cases, data from recent mergers, acquisitions and joint ventures were not integrated in the 2022 emission reporting. This includes emission data from Apex Logistics, which are estimated to account for approximately 14% of additional company emissions (predominantly air logistics emissions in scope

3). Furthermore, the current emission reporting for Road Logistics covers approximately 90% of shipments. We are in the process of closing these data gaps in time for the next sustainability report 2023.

Reporting standards
- We report in accordance with the Global Reporting Initiative (GRI) standards
- We have cross-checked requirements with the Sustainability Accounting Standards Board (SASB) for our industry and have reported relevant KPIs whenever possible, but do not report in full accordance with the standard
- Our 2022 Communication of Progress for the UN Global Compact will be completed via the UN Global Compact online platform and respective questionnaire
- We consider our contribution to the United National Sustainable Development Goals whenever possible

Restatement of information

Due to the continuous improvement or data collection system and processes, some information has been restated for 2021. Restatements of information are clearly marked in the ESG Performance Data table.

Additional KPIs and changes to previous years

As part of the continuous improvement for providing ESG data, several new KPIs have been added to the ESG Performance Data Table. Additional KPIs, and KPIs that have changed from the previous year are clearly marked in the ESG Performance Data table.

Calculation methodologies

Environment Data

Emissions

For reporting scope 1 and scope 3 CO_2e emissions from transport and logistics activities, Kuehne+Nagel is using the GLEC Framework — Smart Freight Centre (SFC) accredited EcoTransIT World software as a core emission calculation tool. The EcoTransIT World methodology includes EN 16258 and GLEC-compliant calculations and is also expected to meet the requirements of ISO 14083. All emission reporting is in line with the GHG Protocol.

The methodology for EcoTransIT is provided by independent scientific institutes (ifeu, INFRAS and Fraunhofer IML) and is continuously updated and validated. EcoTransIT World calculates the transport distances, energy consumption, greenhouse gases CO_2 and CO_2 equivalents, air pollutants such as Sulfur oxides (So_x), Nitrous oxides (NO_x), nonmethane hydrocarbons (NMHC), and particulate matter PM10 (particulate matter with a diameter of 10 micrometres (0.01 mm) or smaller), for global transport chains. For 2022, CO_2 equivalents include all greenhouse gases in line with EN 16258 requirements as calculated by EcoTransIT World. Emissions are calculated for activities which Kuehne+Nagel has operational control over unless otherwise stated.

Scope 1 emissions

Scope 1 emissions are emissions from company-controlled sources, including emissions from company cars, company trucks (owned or leased), and fuel consumption for buildings, such as gas for heating and cooling of company-controlled offices and fulfilment centres.

- Scope 1 emissions from company cars are calculated according to EN 16258
- Scope 1 emissions for company trucks (owned or leased) are calculated based on fuel consumption and using the EcoTransIT fuel emission factors from the shipment's country of origin. The reduced emission impact of purchased HVO is included in the calculation of scope 1 emissions.
- Scope 1 emissions from fuel consumption in buildings are derived from calculating CO_2e emissions from actual fuel consumption (gas, oil, and diesel) for heating/cooling, and using the International Energy Agency (IEA) emission factors. 2022 is the first year that direct fuel emissions from buildings were included in scope 1 emissions but were consequently re-calculated for 2021. For 2019 and 2020, direct emissions from fuel consumption for buildings were included in scope 2 emissions.

Scope 2 emissions

Scope 2 emissions are calculated in accordance with requirements from the GHG Protocol and the International Energy Agency IEA and include emissions generated from purchased electricity for Kuehne+Nagel buildings (owned or leased). Data for scope 2 CO_2e emissions are calculated and disclosed based on the location-based approach and managed via the Global Facility Carbon Calculator (GFCC) tool, which captures environmental data for all facilities.

For 2022, scope 2 CO_2e emissions include the emission reductions from the purchase of renewable energy certificates (RECs) in compliance with the GHG Protocol and the SBTI.

For scope 2 emission intensity metrics (CO_2e per 100 m^2, CO_2e per FTE), data from GFCC are calculated on a monthly basis. The yearly average of the monthly data is then reported in the sustainability report. Due to the monthly calculation, figures for FTE and m^2 may deviate from figures presented in the Annual and Sustainability Report showing year-end figures only.

Scope 3 emissions

Scope 3 emissions include indirect emissions from transporting our customer's freight via our suppliers (freight forwarding services for sea, air and road logistics), as well as emissions from business travel and employee commuting.

For freight forwarding services in our value chain (scope 3, category 4), routes are split into transport legs, and emissions are calculated for each leg based on shipment data from the Transport Emission Measurement (TEM) system. Calculations are performed using the EcoTransIT methodology and default values (including Clean Cargo values for Sea Logistics), unless more accurate primary data are available and directly passed to EcoTransIT via the TEM.

Emissions included in the calculation are from all shipments that were completed in the reporting year.

Due to recent mergers and acquisitions, the data presented cover approximately 90% of road shipments and 80% of air logistics shipments.

In addition, Kuehne+Nagel calculates emission reductions from sustainable fuel purchases in the year of purchase (SAF, maritime biofuels) and treats the use of sustainable fuel as emission reduction for reporting purposes (compared to using conventional fuel types). The metric 'CO_2e Scope 3 'net' emissions' therefore includes the deployment of purchased sustainable fuels for scope 3.

'Total CO_2e emissions (scope 1,2,3 'net')' calculates company emissions using scope 1 and 2 emissions, and 'net emissions' for scope 3. The overall figure includes emission reductions from HVO (scope 1), the use of Renewable Energy Certificates for scope 2, and the use of maritime biofuels and sustainable aviation fuel for scope 3.

In addition, following assumptions have been made in the respective modes of transport:

- Air Logistics: noteworthy for air logistics emission reporting is the fact that emission calculations do not consider the radioactive forcing index (RFI). The RFI considers the higher global warming potential from emissions at higher altitudes and is particularly relevant for the aviation sector. However, in the absence of global standards and frameworks and considering that the inclusion of the RFI for the calculation of CO_2e emissions for air traffic is not compliant with the European standard EN 16258, Kuehne+Nagel has not included the RFI in emission calculations yet (but is closely monitoring future developments).
- Road Logistics: Due to the proprietary fleet in Road Logistics, scope 3 emissions are calculated by subtracting scope 1 (trucks) and 2 emissions (low emission vehicles that use electricity) from the overall emission calculation derived from the EcoTransIT software.

Business travel

Emissions from business travel are produced according to the GHG Protocol Category 6 using the distance-based method. This method involves multiplying activity data (person-kilometers travelled by vehicle type – we considered only air travel) by the respective emission factors (taken from the UK Department for Business, Energy & Industrial Strategy).

Employee commuting

Emissions from employee commuting are calculated according to the GHG Protocol Category 7 using the average-based method. Kuehne+Nagel adopted this method because company-specific data is currently unavailable; therefore, average secondary activity data is used to estimate distance travelled and mode of transport information for calculating employee commuting emissions. Kuehne+Nagel collects average secondary data from sources such as national transportation departments, national statistics publications, and whenever available industry associations.

Facility Data (Waste, Water, Energy)

Environmental data from facilities is gathered in the Emex Global Facility Carbon Calculator (GFCC) system. The most common use of the Emex GFCC tool is the monthly recording of site data. Sites are encouraged to obtain and enter all available data for normalisers (FTE, facility space, throughput measure). Normalisers are used for reporting purposes allowing the organisation to show the usage of utilities and CO_2e emissions per site. Sites are required to track all parameters where possible using invoices and meter readings.

- Utilities category: reporting of CO_2e emissions within site boundaries.
- The waste and water category tracks inbound waste collected and processed on site as well as water consumption on site.

- Energy consumption within the organisation considers total electricity and gas consumption within the organisation.
- Transport category: tracks distance, fuel, efficiency, and costs for company operated vehicles.

Definition of terminology used

- **Sustainable fuels**

The term sustainable fuel refers to fuels that do not have a fossil origin and have a considerably lower environmental impact than their fossil-origin counterpart. They are either produced from biomass (such as maritime biofuels and bio-SAF) or synthetically (not commercially available yet).

- **Renewable energy**

As per definition of the GHG protocol, energy is only being considered 'renewable', if it is taken from sources that are inexhaustible (e.g. wind, water, solar, geothermal, and biofuels). Therefore, energy derived from sources such as natural gas and LPG is not considered renewable.

Social Data

Personnel attrition, unwanted

The Global Human Resources dashboards calculate attrition on a monthly basis, by dividing the number of exits by the number of headcounts in a given month. It also records workforce type (white and blue-collar) and exit reason (wanted or unwanted). The yearly attrition is calculated as a sum of the monthly attrition rates.

Definition of interns

Included in the definition of interns are trainees, intern/working student/postgraduates, as well as apprentices.

Training Hours

(($\sum$ course completions N * course duration + seminar duration)/active headcount).

Only hours that lead to course completion and are recorded through our internal platform are included in the final value.

Performance Reviews

Only data for white-collar employees is captured on a global level, with performance reviews for blue-collar employees being handled on a national and local level (and cannot be captured accurately through our systems).

In some cases, information required by GRI is not available on a global level as certain parameters (such as temporary, part-time, and non-guaranteed hours employees) are tracked on a regional/country level instead. We are, however in the process of improving systems and processes to be able to track these parameters more accurately in the future.

Health and Safety KPIs

Lost Time Incident Frequency (LTIF)

Lost time injuries are defined as work-related injuries resulting in a fatality or lost workday case (LWD), excluding Medical Treatment Cases (MTC) and/or First Aid Cases (FAC). For lost workday cases, incidents incurred by external parties present in our premises are also taken into account.

Incidents are recorded after they occur. Depending on the severity of the incident, reporting to (top) management takes place within 24 hours or every quarter. Internal auditing and due diligence checks assure the data quality at the national, regional, and global levels. LTIF is recorded as number of LTIs per 1,000,000 working hours over 12-month period.

Total reportable case frequency (TRCF)

TRCF is the sum of injuries resulting in fatalities, lost workday cases and medical treatment cases per 1,000,000 working hours.

Statement

Fatalities
A death, resulting from a work-related injury or illness regardless of the time intervening between the incident causing the injury or exposure or causing illness and the death.

Lost Workday (LWD)
The total number of calendar days on which the injured person was temporarily unable to work as a result of a Lost Workday Case (LWC).

Lost Workday Cases (LWC)
Any work-related injury that renders the injured person temporarily unable to perform their normal work on any day after the day on which the injury occurred. Any day includes rest day, weekend day, scheduled holiday, public holiday or subsequent day after ceasing employment. LWC's are also counted for temporary workers, working in our premises.

Violations
Number of cases where Kuehne+Nagel has received a violation resulting in any regulatory sanction by an enforcement authority for breach of any health and safety/dangerous goods regulations.

Temporary workers
When working for Kuehne+Nagel in premises that Kuehne+Nagel is responsible for and that are under supervision/direction of the company, the health and safety KPI's apply to full-time and part-time temporary workers as well.

Statement of the Management Board members
The Management Board members have received, and the CEO and CFO have approved the Kuehne+Nagel Sustainability Report for 2022.

The ESG Performance Data table in the Sustainability Report for 2022 has been prepared following the stated performance data accounting policies.

In our opinion, the Sustainability Report for 2022 gives an overview of Kuehne+Nagel's sustainability activities and the results of the company's sustainability efforts in the reporting period of January to December 2022.

Schindellegi, 31 March 2023

Management Board members
Stefan Paul, CEO
Markus Blanka-Graff, CFO
Lothar Harings, CHRO
Martin Kolbe, CIO
Dr. Marc Pfeffer, CLO
Dr. Hansjoerg Rodi, EVP Road Logistics
Yngve Ruud, EVP Air Logistics
Horst Joachim Schacht, EVP Sea Logistics
Gianfranco Sgro, EVP Contract Logistics

ESG Performance Data

Note: all environmental metrics reported in metric units (i.e. 1 tonne = 1,000 kg), all 2022 emission data rounded to three decimal places.

Please see page 62-65 for calculation methodologies and high-level assumptions.

Environment Data	Metric unit	2022	2021	2020	2019	Notes
Greenhouse gas emissions (WTW)						
CO_2e Scope 1						
Company cars	million tonnes	0.021	0.018*	0.02	0.03	
Road Logistics (own trucks)	million tonnes	0.116	0.094*	0.12	0.08	includes use of HVO
Buildings: fuel (incl. gas)	million tonnes	0.044	0.048*	–	–	Gas was reallocated to scope 1 for 2021
Total Scope 1	**million tonnes**	**0.181**	**0.160**	**0.14**	**0.11**	
CO_2e Scope 2 (location-based)						
Buildings: electricity	million tonnes	0.038	0.080*	0.17	0.20	For 2022, RECs were used to balance emissions
Total scope 1+2	**million tonnes**	**0.219**	**0.240***	**0.31**	**0.31**	
CO_2e Scope 3						
Transport and logistics (Scope 3, category 4) comprising of:	million tonnes	13.982	16.4	12.9	16.6	Limited assurance by DNV for Scope 3, category 4 for 2022 data
■ Sea Logistics	million tonnes	5.227	–	–	–	
■ Air Logistics	million tonnes	7.074	–	–	–	
■ Road Logistics	million tonnes	1.681	–	–	–	
Business travel	million tonnes	0.011	0.005*	0.2	1.2	
Employee commuting	million tonnes	0.013	0.008*	0.011	0.3	
CO_2e scope 3 'gross' emissions	**million tonnes**	**14.006**	**16.4***	**13.2**	**18.1**	
Scope 3 CO_2e reduction through the purchase of sustainable fuels comprising of	million tonnes	0.057	NA	NA	NA	Emission reductions only integrated from 2022 onwards.
■ SAF	million tonnes	0.038				Based on sustainable fuels purchased
■ Maritime biofuel	million tonnes	0.019				
CO_2e scope 3 'net' emissions	million tonnes	13.949	16.7	13.5	18.4	
Total CO_2e emissions	**million tonnes**	**14.168**	**16.7***	**13.5**	**18.4**	including the use of purchased sustainable fuels

Environment Data	Metric unit	2022	2021	2020	2019	Notes
Sustainable fuels purchased						
Air Logistics (SAF)	000' litres	13,978	4,985*	–	–	2021 restated to litres purchased. Most SAF from subsidised sources
Sea Logistics (SMF)	tonnes	6,750	500	–	–	
Road Logistics Scope 1 (HVO)	000' litres	589	–	–	–	**
Emission intensity (Scope 2)						
CO_2e total (reference value)	000' tonnes	61	128	173	201	Reference value based on electricity consumption (excl. emission reductions via RECs)
CO_2e per FTE	tonnes/FTE	1.3	1.6	2.1	2.7	
CO_2e per 100 m^2	tonnes/100 m^2	1.1	1.4	1.7	2.3	
Energy consumption within the organisation						
Electricity consumption total	million kWh	367	371	376	391	
	kWh/FTE	4,566	4,734	4,553	5,205	
	kWh/100 m^2	3,788	3,922	3,815	4,496	
Renewable electricity share	per cent	99	78	21	–	**
Natural gas consumption total	million kWh	204	220	192	201	
	kWh/FTE	2,497	2,807	2,331	2,676	
	kWh/100 m^2	2,067	2,326	1,954	2,331	
Total energy consumption	million kWh	571	591	568	592	**
Renewable energy share	per cent	64	49	14	–	**
LED coverage						
Building area covered by LED lighting	m^2	5,958,824	5,400,000	4,800,000	–	
	per cent	76	70	54	–	
On–site PV installations						
Number of sites	count	69	32	23	–	
Output	MWp	50	31	25	–	MWp= MW'peak', i.e. maximum energy installed capacity

 * restatement of information
** new disclosure/KPI (not present in 2021)

Environment Data	Metric unit	2022	2021	2020	2019	Notes
Waste						
Waste total	000' tonnes	88	109*	209	496	
Waste hazardous	000' tonnes	4	1*	21	22	
Waste recycled	000' tonnes	51	78*	135	332	
Recycling rate	per cent	58	72*	65	67	
Waste recovered	000' tonnes	15	10*	19	21	
Waste to landfill	000' tonnes	18	20	34	142	
Water						
Water consumption total	megalitres	678.7	773.6	890.6	965.9	
	cubic meters	678,659	773,576	890,615	965,879	
	cubic metres/ 100 m^2	7.3	8.1	9.0	11.0	
	cubic metres/ FTE	9	10	11	13	
Water consumption reduction	per cent	30	20	8	–	**; base year 2019

Social	Unit	2022	2021	2020	2019	Notes
Employees						
Total employees at year-end	headcount	80,334	78,087	78,249	83,161	
Female	per cent	39.5	38.9	35.8	35.0	
Male	per cent	60.5	61.1	64.2	65.0	
Female (white–collar)	per cent	49.5	49.6	48.3	48.1	
Male (white–collar)	per cent	50.5	50.4	51.7	51.9	
Female (blue–collar)	per cent	25.4	24.3	21.0	20.4	
Male (blue–collar)	per cent	74.6	75.7	79.0	79.6	
FTEs of employees at year–end	FTE	75,194	73,516	72,021	78,448	
FTEs at year–end including temporary staff	FTE	95,079	93,288	93,238	99,113	
Number of truck drivers	headcount	1,761	–	–	–	**
Interns						
Number of interns	headcount	1,705	1,494	–	–	
increase of interns	per cent	14	–	–	–	**
Conversion rate of interns to employment	per cent	25	–	–	–	

 * restatement of information
** new disclosure/KPI (not present in 2021)

Social	Unit	2022	2021	2020	2019	Notes
Age structure						
Under 30	per cent	22.6	22.5	21.0	23.0	
Under 30 (female)	per cent	44.7	44.7	42.2	41.4	
Under 30 (male)	per cent	55.2	55.3	57.8	58.6	
Between 30–50	per cent	58.1	58.6	58.9	56.0	
Between 30–50 (female)	per cent	40.4	39.1	36.3	35.2	
Between 30–50 (male)	per cent	59.6	60.9	63.7	64.8	
Over 50	per cent	19.3	18.9	20.2	21.0	
Over 50 (female)	per cent	31.7	31.1	27.9	27.3	
Over 50 (male)	per cent	68.2	68.9	72.1	72.7	
Representation of women						
Top management (men)	headcount	156	155	158	177	
Top management (women)	headcount	17	16	9	9	
	per cent	9.8	9.4	5.4	4.8	**
Senior management (men)	headcount	782	741	835	882	
Senior management (women)	headcount	250	222	228	222	
	per cent	24.2	23.1	21.4	20.1	**
Management Board						
Male	per cent	100				
Female	per cent	–				
Under 30	per cent	–				**
30–50	per cent	–				
Over 50	per cent	100				
Board of Directors						
Male	per cent	89				
Female	per cent	11				
Under 30	per cent	–				**
30–50	per cent	11				
Over 50	per cent	89				
Recruiting structure – applications						
White–collar	headcount	604,225	749,229	391,205	308,268	
Blue–collar	headcount	41,597	54,268	54,572	64,465	
Total	headcount	645,822	803,497	445,777	372,833	
Recruiting structure – hires						
White–collar	headcount	10,594	10,281	4,712	7,896	
Blue–collar	headcount	11,226	10,821	6,192	10,189	
Total	headcount	21,820	21,102	10,904	18,085	

Social	Unit	2022	2021	2020 [3]	2019	Notes
Recruiting structure – hires						
Male	per cent	58	–	–	–	**
Female	per cent	42	–	–	–	**
Under 30	per cent	46.2	–	–	–	**
30–50	per cent	46.5	–	–	–	**
Over 50	per cent	7.3	–	–	–	**
Attrition structure						
Unwanted attrition (white–collar)	per cent	10.4	10.4	6.6	8.7	
Total attrition (white–collar)	per cent	18.7	22.1	14.9	18.0	
Training sessions completed						
Online training	count	567,566	474,989	281,509	191,884	
Live training	count	130,222	79,486	69,579	105,413	
Total	count	697,788	554,475	351,088	297,297	
Training participation						
Female	per cent	52.9	52.5	49.4	45.0	
Male	per cent	47.1	47.5	50.6	55.0	
Manager	per cent	14.4	17.1	17.8	17.0	
Employee	per cent	85.6	82.9	82.2	83.0	
Average hours of training						
White–collar	hours	19.1	–	–	–	**
Safety and health						
Number of fatalities (FAT) Note: (x) related to 3rd party accident	count	0 (1)	1 (1)	1 (2)	1 (3)	
Lost time injury frequency (LTIF)		8.8	10.24	10.80	13.22	
Total reportable case frequency (TRCF)		8.8	13.33	14.40	17.66	
Lost workday cases (LWC)		1,468	1,688	1,834	2,434	
Lost workday (LWD)		29,351	30,581	32,067	41,733	
Unsafe act /Unsafe condition		63,730	44,302	36,271	43,522	
Reported HSE violations	count	0	4	NA	NA	

Critical business activities

In line with the Swiss Association for Responsible Investment's (SVVK-ASIR) aim to provide services to its members that enable them to act responsibly towards the environment, society, and the economy, Kuehne+Nagel reports 'critical business activities' on an annual basis.

'Critical business activities' are activities in sectors that may potentially jeopardise the aspects of good business practices and are therefore assessed on an annual basis. For the 2022 reporting year, none of the critical business activities reached a threshold of 5 per cent of Kuehne+Nagel's 2022 revenue.

Critical business activities	Unit	2022	2021	2020	2019
Alcohol etc.	per cent of revenue	0.8	0.7	1.8	NA
Defence / Weapons	per cent of revenue	0.8	0.8	1.3	NA
Tobacco	per cent of revenue	0.6	1.1	0.9	NA
Adultery entertainment, coal, firearms, gambling, GMO, nuclear energy, oil sands	per cent of revenue	0	0	0	NA

GRI index

Statement of use	Kuehne+Nagel has reported in accordance with the GRI Standards for the period 01.01.2022-31.12.2022
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	Not applicable

GRI Standard / Other Souce	Disclosure		Reference	Location / Page	Omission
General standard disclosures					
GRI 102: General disclosures	2-1	Organizational details	AR 2022 [2]	17, 18, 111-120	
	2-2	Entities included in the organization's sustainability reporting	SR 2022 [3]	62	
	2-3	Reporting period, frequency and contact point	Sustainability Report (1.1.2022-31.12.2022), published 31.3.2023 Contact point for Sustainability Report 2022: Isabel.Krauss@kuehne-nagel.com Annual Report 2022: 1.1.2022-31.12.2022, published 01.03.2023		
	2-4	Restatements of information	SR 2022	62, 66-68	
	2-5	External assurance	SR 2022	62, 66	
	2-6	Activities, value chain and other business relationships	AR 2022 SR 2022	3 6	
	2-7	Employees	SR 2022	68-69	
	2-8	Workers who are not employees	SR 2022	68	
	2-9	Governance structure and composition	AR 2022	17-36	
	2-10	Nomination and selection of the highest governance body	AR 2022	24	
	2-11	Chair of the highest governance body	AR 2022	20	

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GRI 102: General disclosures	2-12 Role of the highest governance body in overseeing the management of impacts	SR 2022	9	
	2-13 Delegation of responsibility for managing impacts	SR 2022	9	
	2-14 Role of the highest governance body in sustainability reporting	SR 2022	9	
	2-15 Conflicts of interest	AR 2022	18	Potential conflicts of interests are disclosed to shareholders
	2-16 Communication of critical concerns	SR 2022	9	
	2-17 Collective knowledge of the highest governance body	AR 2022	19-23	
	2-18 Evaluation of the performance of the highest governance body			Confidentiality constraints
	2-19 Remuneration policies	AR 2022	38	
	2-20 Process to determine remuneration	AR 2022	38	
	2-21 Annual total compensation ratio			Confidentiality constraints
	2-22 Statement on sustainable development strategy	SR 2022	3-4, 7	
	2-23 Policy commitments	SR 2022	45, 50-52	
	2-24 Embedding policy commitments	SR 2022	50-52	
	2-25 Processes to remediate negative impacts	SR 2022	45, 49-51	
	2-26 Mechanisms for seeking advice and raising concerns	SR 2022	45, 49-51	
	2-27 Compliance with laws and regulations	AR 2022	95, 100	
	2-28 Membership associations	SR 2022	21	
	2-29 Approach to stakeholder engagement	SR 2022	48-49	
	2-30 Collective bargaining agreements	SR 2022	45	

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Materiality assessment and list of material topics			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	SR 2022	10-11
	3-2 List of material topics	SR 2022	10
Customer relations and satisfaction			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	15
Product and service innovation			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	15, 18-19
Supplier engagement			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	17
Sustainable supply chain			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	20-21
CO_2e/Greenhouse gas emissions			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	23-25, 28-30
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	SR 2022	66
	305-2 Energy indirect (Scope 2) GHG emissions	SR 2022	66
	305-3 Other indirect (Scope 3) GHG emissions	SR 2022	66
	305-4 GHG emissions intensity	SR 2022	67
Efficient use of resources			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	26-27, 31
GRI 302: Energy 2016	302-1 Energy consumption within the organization	SR 2022	67
GRI 303: Water and Effluents 2018	303-5 Water consumption	SR 2022	68

Waste management and recycling			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	32-34
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	SR 2022	32-34
	306-2 Management of significant waste-related impacts	SR 2022	32-34
	306-3 Waste generated	SR 2022	68
	306-4 Waste diverted from disposal	SR 2022	68
	306-5 Waste directed to disposal	SR 2022	68
Management of dangerous goods			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	37
GRI 306: Waste 2016	306-6 Significant spills	SR 2022	37
Employee satisfaction and retention			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	38-40
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	SR 2022	69-70
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	SR 2022	39
	401-3 Parental leave	SR 2022	39
Employee development			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	40-41
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	SR 2022	70
	404-2 Programs for upgrading employee skills and transition assistance programs	SR 2022	38-40
	404-3 Percentage of employees receiving regular performance and career development reviews	SR 2022	42

Human Rights, diversity and equal opportunities			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	42-45
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	SR 2022	68-69
Occupational health and safety			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	46-47
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	SR 2022	46-47
	403-2 Hazard identification, risk assessment, and incident investigation	SR 2022	46-47
	403-5 Worker training on occupational health and safety	SR 2022	46-47
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR 2022	46-47
	403-9 Work-related injuries	SR 2022	46-47, 70
	403-10 Work-related ill health	SR 2022	47, 70
Responsible communication			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	48-49
Business integrity			
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	50-52
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	AR 2022	2

Business integrity				
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	SR 2022	50	
	205-3: Confirmed incidents of corruption and actions taken			If applicable, significant confirmed incidents and public legal cases regarding corruption are disclosed in the Annual Report.
GRI 206: Anti-competitive behaviour	206-1 Legal actions for anti-competitive-behaviour, anti-trust, and monopoly practices			If applicable, significant confirmed incidents and public legal cases regarding corruption are disclosed in the Annual Report.
GRI 207: Tax 2019	207-1 Approach to tax	SR 2022	52	
	207-2 Tax governance, control, and risk management	SR 2022	52	
	207-3 Stakeholder engagement and management of concerns related to tax	SR 2022	52	
Business preparedness, resilience and disaster response				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	52	
Data privacy and security				
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 2022	55	
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	SR 2022		No substantiated complaints concerning breaches of customer privacy and losses of customer data in the reporting period.

WHEN TRUST MATTERS

Independent Limited Assurance Report
to the Directors of Kuehne and Nagel Management AG

DNV Business Assurance Germany GmbH ("DNV", "us" or "we") were commissioned by Kuehne and Nagel Management AG ("Company") to provide limited assurance over Selected Information presented in the "Sustainability Report 2022 Edition" (the "Report") for the reporting year ended 31 December 2022.

Our Conclusion: Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria.

This conclusion relates only to the Selected Information, and is to be read in the context of this Independent Limited Assurance Report, in particular the inherent limitations explained overleaf.

Our observations and areas for improvement will be raised in a separate report to Company's Management. Selected observations are provided below. These observations do not affect our conclusion set out above.

- The Company's emissions calculation methodology for Scope 3 Category 4 is based on that applied by EcoTransIT, which is widely accepted and applied. EcoTransIT uses default values for fuel type and fuel efficiency, depending on the region, and vehicle or vessel involved in the transport of a given shipment. As the Company continues to improve and refine its own data collection capabilities, we recommend continued attention to collecting supplier-specific data.

Selected information

The scope and boundary of our work is restricted to the 2022 performance data included within the Report (the "Selected Information"), listed below:

- Scope 3, Category 4 GHG emissions, Upstream Transportation and Distribution (Million t CO2e)

Our competence, independence and quality control

DNV's established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.

Reported emissions benefits from purchases of sustainable fuels are expressly excluded from our scope and boundary of work.
To assess the Selected Information, we have referred to the calculation methodologies in the Company's Reporting Methodology (found on pages 62 and 63 in the Report).
We have not performed any work, and do not express any conclusion, on any other information that may be published in the Report or on the Company's website for the current reporting period or for previous periods.

Standard and level of assurance

We performed a **limited** assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 revised – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' (revised), issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance.

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2015 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement; and the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so that the risk of this conclusion being in error is reduced but not reduced to very low.

Basis of our conclusion

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information; our work included, but was not restricted to:

- Conducting interviews with the Company's management, to obtain an understanding of the key processes, systems and controls in place to generate, aggregate and report the Selected Information;
- Conducting teleconferences with data owners, business unit managers, and other technical and system experts within the Company and at the firm EcoTransIT to review processes and systems for preparing business unit level data consolidated at Company;
- Performing limited substantive testing on the most significant contributors (business unit level), to check that their data had been appropriately measured, recorded, collated and reported;
- Reviewing that the evidence, measurements and the context provided to us by Company for the Selected Information is prepared in line with the Criteria;
- Assessing the appropriateness of the Criteria for the Selected Information; and
- Reviewing the Reports and accompanying narrative to the Selected Information in regard to the Criteria.

DNV Business Assurance Germany GmbH

Essen, Germany
31 March 2023

Inherent limitations

All assurance engagements are subject to inherent limitations as selective testing (sampling) may not detect errors, fraud or other irregularities. Non-financial data may be subject to greater inherent uncertainty than financial data, given the nature and methods used for calculating, estimating and determining such data. The selection of different, but acceptable, measurement techniques may result in different quantifications between different entities. Our assurance relies on the premise that the data and information provided to us by Kuehne & Nagel Management AG have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Limited Assurance Report.

Responsibilities of the Directors of Kuehne & Nagel Management AG and DNV

The Directors of the Company have sole responsibility for:

- Preparing and presenting the Selected information in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the Selected Information that is free from material misstatements;
- Measuring and reporting the Selected Information based on their established Criteria; and
- Contents and statements contained within the Reports and the Criteria.

Our responsibility is to plan and perform our work to obtain limited assurance about whether the Selected Information has been prepared in accordance with the Criteria and to report to the Company in the form of an independent limited assurance conclusion, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the Reports.

DNV Business Assurance

DNV Business Assurance Germany GmbH is part of DNV – Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. https://www.dnv.com