TenneT Holding B.V.

Integrated Annual Report 2021

Responsible growth

TenneT

Key figures 2021

Overarching indicators

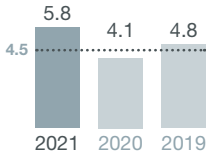
Internal Engagement Index 80%
2020: 82%

Reputation survey
Fairly strong to very strong

Energise our people and organisation

Safe workforce
TRIR group
(including contractors)

5.8



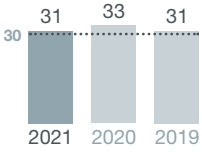
Healthy workforce
Absentee rate
Netherlands and Germany

NL 3.1
GE 2.6

2021: NL 3.1, GE 2.6
2020: NL 2.7, GE 2.5
2019: NL 3.4, GE 2.8

Diverse workforce
Diversity
(% female inflow of total inflow)

31%



Secure supply today and tomorrow

Onshore grid availability
(in %)

99.99999%

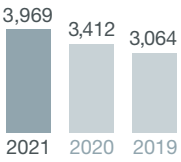
2021: 99.99999%
2020: 99.99995%
2019: 99.99982%

Grid utilisation
Grid loading

One of the ways to measure our grid utilisation is the degree of redispatch volumes we record. In 2021, we noticed higher volumes of redispatch, which is an indication that our grid is utilised more extensively.

Future proof grid
Investments
(in EUR million)

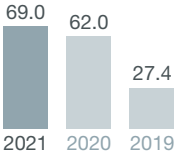
3,969



Drive the energy transition

Environmental impact % Greened of our carbon footprint

69.0%



Unlocked flexibility
Number of GW
of new flexibility

The progress made with respect to the Crowd Balancing Platform Equigy this year supported us in our efforts to increase the number of GW of new flexibility.

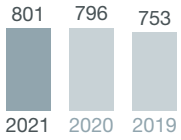
Impact on energy system
Number of scalable/scaled system initiatives

The completion of the InnoSys2030 and the launch of our Windstrom-Booster concept were key highlights with respect to the impact we have on the energy system in 2021.

Safeguard our financial health

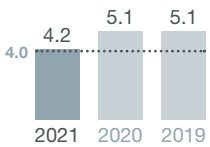
Healthy financial operations
Adjusted underlying EBIT group*
(in EUR million)

801



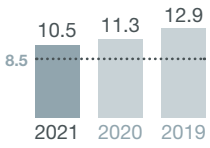
Satisfied capital providers
ROIC group* (%)

4.2



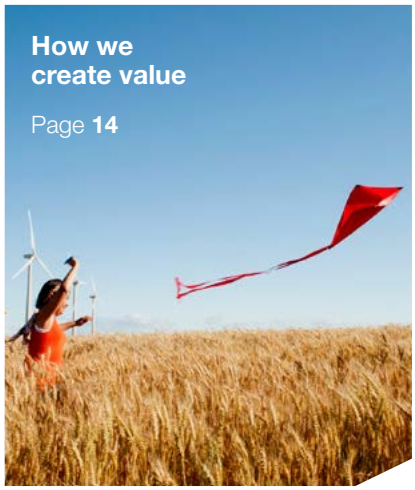
Safeguarded capital structure
Adjusted FFO/Net debt* (%)

10.5



* Reference is made to the chapter Secure sustainable financial performance and investor ratings.

In this year's report



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* These sections reflect the director's report as mentioned by Part 9 of Book 2 of the Dutch Civil Code.

At a glance 2021

Announcement of congestion areas

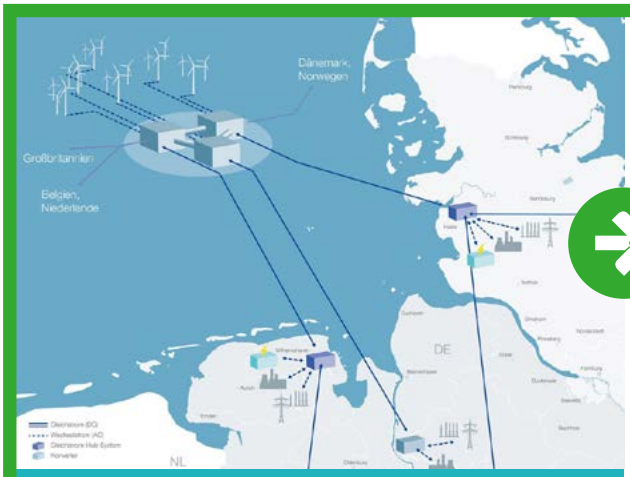
In several regions of the Netherlands, the maximum capacity to feed in electricity has been reached. TenneT is investing in the expansion of the grids and is investigating whether flexibility can be used to create more grid capacity.

Green Eurobonds

TenneT issued EUR 2.8 billion of senior Green Bonds in 2021. Proceeds will be used to invest in eligible green projects focused on connecting large-scale offshore wind farms to the onshore electricity grid and enhancing the onshore transmission capacity for renewable energy.

Diversity charter

Our CEO Manon van Beek and COO Tim Meyerjürgens signed a new diversity charter, a manifesto in which organisations declare their commitment to more diversity in the workplace, on behalf of TenneT in the Netherlands and in Germany.



Windstrom-Booster

TenneT presented a new technological innovation that can significantly accelerate the expansion of the offshore wind grid in the North Sea. With the Windstrom-Booster, 6 GW of offshore capacity can be realised 3 years earlier. In comparison, 6 GW of capacity corresponds to 6 large power plants.

New Chief Financial Officer

The Supervisory Board has appointed Arina Freitag as Chief Financial Officer (CFO). She succeeds Otto Jager, who has been TenneT CFO since 2013.

NordLink

In May, NordLink was officially inaugurated by Angela Merkel. NordLink is a 623 km long subsea cable for the exchange of Norwegian hydropower and German windenergy.

2,100-tonne offshore jacket installed

The jacket for TenneT's Hollandse Kust (Noord) platform has been successfully installed off the coast of North Holland. The 2,100-tonne construction was developed in Vlissingen.

Tender 2 GW project

Together with market parties, TenneT developed a new 2 GW (Gigawatt) standard to be able to accelerate offshore wind deployment. The tender for the new offshore connections IJmuiden Ver has started. Such a grid connection is not yet existing.

Safety Leadership Programme

Tragically, three fatal incidents occurred this year, which affected us deeply. TenneT is doing everything in its power to ensure that everyone gets home safely. A new Safety Leadership Programme started this year to improve safety.

Verbond van Brede Welvaart

Alliance of Prosperity

In order to emerge stronger from the pandemic, TenneT, together with other infrastructure companies, is taking steps towards a different society with a greater focus on ecology and social welfare in the new 'Verbond van Brede Welvaart'.

Electrical Sustainable Power Lab

To prepare the electricity grid for the future, TenneT, the government and Delft University of Technology have developed a brand new laboratory: the Electrical Sustainable Power Lab. In this laboratory, innovations are developed and tested which contribute to the future energy system.

New connection in Schleswig-Holstein

The new Westküstenleitung in Schleswig Holstein plays a central role in the Energiewende in Germany to secure both the regional supply and the transport of green electricity to the south. New parts of the 140 kilometer long connection went into operation. In 2023, the connection will be finished.

Manon van Beek
Chief Executive Officer

Tim Meyerjürgens
Chief Operating Officer

Maarten Abbenhuis
Chief Operating Officer

Arina Freitag
Chief Financial Officer

Letter from the Board

The publication of our annual report comes at a time of great uncertainty in the world due to developments in Ukraine. Apart from the consequences this may have for the European energy system, the war in Ukraine has a big impact on all of us, also on an individual level. We sympathise deeply with all those affected by the imposed violence.

Responsible Growth

2021 was what one might call a stop-and-go year for TenneT; exciting, surprising, strenuous, challenging and with several twists and turns. Navigating the COVID-19 pandemic required constant adjustment, while at the same time TenneT needed to work at full capacity to meet the demands of a dynamic and fast-growing sustainable energy system. Whatever the external circumstances, TenneT remained steadfast in our mission: keeping the lights on, today and in the future.

The Dutch and German governments have set ever more ambitious CO_2 reduction targets, requiring a steep increase in renewable energy. With grids being the backbone of the energy transition, TenneT needs to take the next leap in its growth agenda and corresponding transformative priorities. TenneT stepped up these efforts in 2021, as we work towards our goal of realising a green, integrated onshore and offshore grid for a zero CO_2 economy. Like a tree with strong roots, TenneT aims to build a system that is prepared for and can deal with the fluctuating supply of weather-dependent energy sources that change with the seasons.

To achieve this, TenneT is following a policy of responsible growth. Just as a tree or a forest is a vital part of the ecosystem, so TenneT's work is crucial for the energy system. Both flourish when they are firmly grounded on solid foundations. They need to stay connected with their roots and to be strong but also flexible, with branches that can bend but not break. TenneT has grown substantially in the past years, accelerating the energy transition and moving out of its comfort zone. But where comfort zones end, growth starts. And because growth and comfort do not co-exist easily, we need to innovate and collaborate in order to stay successful.

Growing safely

Safety is a top priority for us, and we are committed to ensuring our work is executed safely and with limited incidents. However, during 2021, three fatalities occurred among our contractors' employees while working on our projects. The loss of these colleagues deeply saddens us, and our sympathy goes out to their families. These tragic accidents re-emphasise the many risks associated with our daily work and further strengthen our belief that every safety incident is one too many. We strive for zero harm and want all our employees, and all the employees of our contractors, to come home safely, every day. To further embed a stringent safety culture at TenneT and maintain this focus for years to come, we introduced additional safety measures and rules during 2021 and also launched a new leadership programme, *Safety needs our energy*.

Green accelerators

Our strategy is rock solid. Based on the four pillars of energising our people and organisation, securing supply today and tomorrow, driving the energy transition and safeguarding our financial health, we believe we are well on track to connect everyone with a brighter energy future. The strategy underlines the importance of working collaboratively with partners across the European energy system and recognises that there are three accelerating external developments that affect TenneT at its core.

First, external expectations are rapidly increasing. The ambitious climate policy goals for fast decarbonisation have increased the pace of the energy transition. In short: this could implicate that we need to accomplish twice as much in half the time.

Second, the energy system is getting more complex, volatile and interdependent and with more renewable energy being fed into the grid, often in remote locations, planning and steering the system becomes more dynamic every day. Despite these challenges, our grid is still expected to meet a hard availability target of 99.99%.

Lastly, TenneT – along with other players in the energy system – faces increasing competition for people and materials. The energy transition requires the deployment of tens of thousands of new talents as well as a huge demand for raw materials, components and finished goods.

Choices for a feasible path

To double our output towards an annual investment level of at least EUR 6 billion by 2025 will require us to grow towards 10,000 employees. Annual investments could further rise if planning and approval periods are shortened and supply chain delivery and talent hires can be ensured. We are convinced this quantum leap can only succeed if we make responsible choices, for ourselves and for the people and industries we serve. That means building an organisation that is firmly rooted and well-grounded in society and is structured with the right delivery capabilities. With this approach, we can ensure a stable and secure supply of electricity in a system that will largely rely on weather-dependent energy sources. We are pleased that we were able to achieve a very high grid availability of 99.99999% in 2021.

We are convinced that responsible growth must be the guiding principle for TenneT and all stakeholders in our value chain. By making the right choices, TenneT will embark on an ambitious and feasible pathway so that we - together with partners, suppliers, policy-makers and colleagues - can build, maintain and operate a high-voltage electricity grid that supports a green energy future.

Together responsible for green growth

As CO_2 reduction targets become more ambitious, we must ensure that the electricity system can facilitate these developments. To achieve this, TenneT requires streamlined and modern planning and approval procedures, as well as political support for grid reinforcements and expansion at all levels. It is encouraging to see that the newly formed governments in Germany and the Netherlands are paying attention to this in their coalition agreements. Furthermore, we also need the right legislative and regulatory environment to transform the energy system: forward-looking regulation fostering innovation is instrumental to speed up progress. Market parties are waiting for frameworks that encourage them to invest heavily in renewables, flexible electricity supply and demand and other grid innovations.

Collaboration and collective responsibility will determine the success of the energy transition. TenneT may be an important link in the system, but sustainable growth, green jobs and investments in innovations will only be achieved together with our stakeholders, alongside European and national political decision-making and regulations. We are committed to advising our partners and stakeholders on technology and the systemic impact of the energy transition, on market integration and security of supply.

Proud of our sustainable progress

We are proud of our contributions to green growth in 2021. Never has TenneT invested so much in the expansion and maintenance of its grids. We were able to enlarge the onshore grid with 118 kilometres of high-voltage connections in close collaboration with our suppliers and contractors. Offshore, we realised 623 kilometres of new

connections and introduced impactful innovations to transport electricity to the shore faster and on a larger scale. Together with our suppliers, we are planning and developing offshore grid connection systems, each with a capacity of 2 gigawatts (GW). This is more than two or three times the size of our existing systems in Germany and the Netherlands, enabling the supply of electricity to the equivalent of two million households. We expect to build at least six of these 2 GW connections by 2030, three in Germany and three in the Netherlands.

We are already delivering critical projects to drive the energy transition in Europe. For example, commercial operations of our NordLink cable began in 2021, connecting Germany and Norway through a 623-kilometre subsea cable. When electricity prices in Germany are high, because of little wind or sun, consumers could profit from lower-priced hydroelectric power from Norway. This 'green link' can supply more than 3.6 million German households with renewable energy.

Green and sustainable financing

Our large-scale investment programme requires broad, sustainable and timely access to financing with a good balance between equity and debt to maintain our solid credit ratings. To that end, we are very pleased that the Dutch government announced to contribute EUR 4.25 billion of equity capital for our activities in the Netherlands. For TenneT's equity capital requirements in Germany the options are still being explored.

TenneT is confident that a solution will be reached in 2022 in coordination with its shareholder, the Ministry of Finance. The (social) benefits of TenneT as an integrated cross-border company are central to finding a solution.

During 2021, access to the debt financing markets remained exceptionally good. Last May, TenneT issued its largest ever (EUR 1.8 billion) and first green triple tranche Euro bond transaction, reinforcing TenneT's top-3 status as corporate issuer of sustainable, green debt financing in Europe, with currently around EUR 13 billion of green debt issued across different debt formats.

Thank you!

Our great appreciation goes to all our colleagues who gave their all in this extraordinary year. We will need them and many new colleagues in the coming years to build, maintain and operate a secure, affordable and sustainable high voltage electricity grid. 2021 was also the last year in TenneT for our Chief Financial Officer, Otto Jager. Throughout his career at TenneT, Otto not only ensured we remained a financially robust and stable company, but he was also a driving force behind the professionalisation and cultural transformation of the company, through his responsibility for our People agenda. We warmly welcome Arina Freitag as his successor as CFO, who will be vital in leading TenneT into the coming decade of record investments for the energy transition in Germany, the Netherlands and Europe.

Responsible growth

About TenneT

Our role in Europe

In years to come, 2021 could be seen as a turning point in the climate debate. In August, during a summer of wildfires, floods and other climatic extremes, UN Secretary-General António Guterres issued a “code red warning for humanity”, based on a stark assessment by The Intergovernmental Panel on Climate Change (IPCC), the world’s leading authority on climate science.

Two months later, the COP26 UN Climate Change Conference convened in Glasgow, resulting in the Glasgow Climate Accord aimed at intensifying global efforts to fight climate change worldwide. The agreement from this conference is expected to have far-reaching implications, as countries across the world come together to tackle global warming. As part of this journey, with its Green Deal, Europe aims to be the first climate-neutral continent by 2050.

The energy transition will require many changes in society. As the first cross-border European TSO, TenneT intends to play a pioneering role in the transition to a clean, circular decarbonised energy system. For many years, we have already demonstrated our active contribution to the transition towards a sustainable, reliable and affordable European energy system.

With approximately 25,000 kilometres of high-voltage connections, we ensure a secure supply of electricity to almost 43 million end-users. TenneT is also one of Europe’s largest investors in national and cross-border electricity transmission capacity on land and at sea, bringing together the Northwest European energy markets and efficiently unlocking large-scale renewable electricity sources.

We collaborate with a wide range of partners in the energy market to develop and apply new, smart technologies and contribute to integration of the energy transition in the future.

Our primary tasks are to provide electricity transmission services, system services and facilitating the energy market. These tasks follow from our appointment as grid operator under the Dutch 'Elektriciteitswet' (E-wet) and the German 'Energiewirtschaftsgesetz' (EnWG).

Challenges ahead

The urgency of climate action and the complexity of tackling this issue mean that TenneT is faced with a challenging context, consisting of interlinked and rapid developments.

Political developments

Governments are stepping up their ambitions to tackle climate change and accelerate the transition to a climate neutral economy. The European Green Deal, flanked by the “Fit for 55” package of 10 legislative proposals, is touching on a broad range of aspects that a TSO such as TenneT needs to consider. It includes the EU climate law, the EU offshore strategy, the EU sector coupling strategy and the EU taxonomy legislation.

Also the recently installed governments in the areas we serve have formulated more ambitious climate targets, as Germany aims to have 80% renewables in the electricity mix already in 2030, instead of the previous target of 65% and in the Netherlands the new cabinet announced that they are going to formalise the 55% reduction of carbon emission levels in 2030 compared to 1990 in line with the European ambition and at the same time make policies that would reduce up to 60% by 2030, 70% by 2035 and 80% by 2040. This might also impact our project portfolio as we are an important partner for these governments to realise these ambitions.

Economic developments

As economies decarbonise, we expect a global trend of strong electrification from for example industries, placing significant additional demands on our grid. This is why we need to continue and step up our extensive grid investment programme to ensure that we are able to transmit electricity from where it is generated (e.g. offshore wind farms) to where it is consumed (e.g. large industrial clusters). Significant investments are needed in every scenario we foresee to cater for the growing need in electricity.

Technical developments

The growing share of renewables in the energy mix creates new challenges. Many new production/generation facilities of renewable electricity, grow at a faster pace than the grid causing a backlog in connections and congestions on the existing grids. Another constant challenge is to keep the grid in balance as the infeed of renewable electricity is weather-related and therefore volatile and intermittent. Furthermore, as a grid operator, TenneT needs to plan for changes that can impact the energy mix early on, such as the development of green hydrogen to make economic sectors that are difficult to decarbonise sustainable.

Societal developments

Global supply chains are currently fragile: delays and shortages in various categories are observed, raw material prices are increasing and competition in the market is high for required resources. We also recognise scarcity in human resources, both internal and external. Shortage of talent combined with demographic changes such as the implications on our workforce due to an ageing society, are relevant risks for us which we actively try to mitigate.

Taking these developments into account, TenneT has a critical role to play in this impactful journey to a reliable, affordable and zero-carbon energy system. As an electricity transmission system operator, we are the backbone of the green energy transition and need to upgrade and expand our grid as well as our grid operations to serve changing energy needs. A commitment to responsible growth is guiding our approach to these challenges, alongside our purpose, principles and strategy with clear objectives.

Our purpose
To connect everyone with a brighter energy future

Our promise
Lighting the way ahead together

Our principles

The energy transition is a challenge that requires new ideas, new technologies and new behaviours that build on the strong foundations we have laid.

Connection

We are involved and work actively with other parties.
The challenge of the energy transition requires us to do things differently and collaborate with a wide range of partners.
We know that we do not have all the answers ourselves.

Ownership

We are accountable for our words, actions and decisions.

Courage

We are honest, open and clear about what we think.
We dare to make bold decisions, take ambitious initiatives and are willing to learn from our mistakes.

Our strategy and value creation

TenneT is one of Europe's major investors in national and cross-border grid connections on land and at sea, bringing together the Northwest European energy markets and driving the energy transition. The energy transition is one of the most impactful challenges facing society and energy supply. To fulfil our role in the energy transition, we are working on a responsible growth based on four strategic pillars:

Strategic goals

Energise our people and organisation

With an inclusive and safe environment where people enjoy coming to work. We will build a leadership model that empowers, inspires and creates growth opportunities, so everyone can perform at their best and work as one team.

Strategic goals 2025

Provide a great and safe place to work for up to 10,000 internal and external employees.

Secure supply today and tomorrow

By maintaining the grid to meet reliability targets and operating it effectively. We will design solutions to balance electricity supply and demand in the future, while meeting societal objectives and realising our infrastructure projects as promised.

Strategic goals 2025

Deliver EUR 6 billion in projects annually while securing a healthy asset base where customers can be connected within a set number of months and security of supply is at least 99.9999%.

Drive the energy transition

As a green grid operator and thought leader, developing innovative solutions and playing a key role in the energy data world.

Strategic goals 2025

Realise at least 5 significant energy innovations (grid, operations, market) including an accepted North Sea grid design.

Safeguard our financial health

By ensuring a regulatory framework to support our strategy and by delivering a return in line with what our capital providers expect, as well as by raising the necessary external financing.

Strategic goals 2025

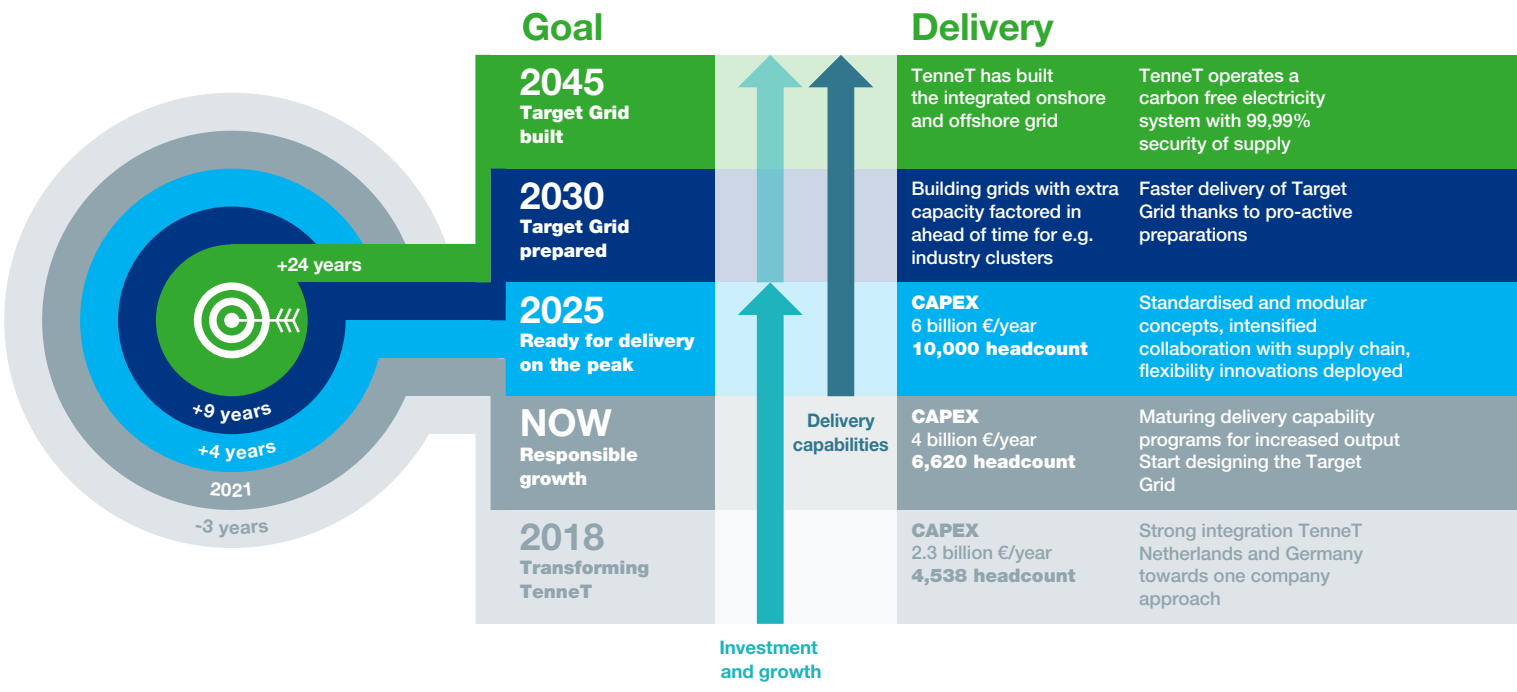
Secure sufficient equity, while achieving at least regulatory returns, to maintain our current A-/ A3 credit ratings.

Our path towards 2050

By 2050 the European Union aims to turn Europe into the world's first climate-neutral continent. Germany is on an even more ambitious path with targets to be climate-neutral by 2045. As an interim goal, the EU aims for a 55% reduction of CO_2 emissions by 2030. Although these clean-energy milestones of 2030, 2045 and 2050 seem far away to some, for TenneT they loom large on the horizon. The energy transition is moving much faster now than how infrastructure used to be overhauled or upgraded in the past decade. We need to move ahead now so we can drive the energy transition as more and more energy consumption will be electrified.

We are preparing our target grid, which will be the blueprint for a future grid that can support the energy transition for generations to come. It is prepared in stages to coincide with important climate goals in 2025, 2030 and 2045. This is not just about growing our infrastructure, but should also include smart solutions and innovative technology. As a first step, we plan to be ready to deliver at full capacity on the peak by 2025. By 2030, we plan to have a reliable backbone in place and through pro-active preparations for future transmission projects, we are in a position to move forward faster to support the next steps in the energy transition. And by 2045, we will have delivered the grid required for a climate-neutral energy system, in accordance with the Paris Agreement and the national climate goals. By then, we will also have integrated large-scale offshore and onshore renewable generation and industrial customers to meet their climate goals.

Target grid



How we create value

TenneT has an important role within the electricity supply chain and helps enable the lives of people working and living in the areas we serve. The way we create value is represented visually on the next pages, using the concept of value creation as described by the International Integrated Reporting Council (IIRC), which together with the Sustainability Accounting Standards Board (SASB) formed the Value Reporting Foundation. By means of the six inputs defined by this framework (financial, manufactured, intellectual, human, social & relationship and natural) we describe our input, output, outcome and impact. This model is the basis of our Integrated Annual Report. Our inputs, through which we create impact for society, are influenced by our strategy, our purpose and our principles. All of these are described in this chapter. More information on the specific inputs, our related outputs, outcomes and impacts are disclosed in the chapter 'Our Performance in 2021'. The way we aim to create long-term value is defined alongside the six inputs from our value creation model. Here we aim to:

Deliver a high security of supply

Delivering a high security of supply in today's fast changing more volatile energy system is a growing challenge. However, thanks to TenneT's decades of experience in operating our grid, together with a vision of how the future grid and electricity markets should be designed, we are able to secure supply of electricity both today and in the future. And with this, we support the daily lives and activities of people and businesses in the areas we serve.

Ensure critical infrastructure for society

Electricity plays a vital role in the lives of our stakeholders and society as a whole. TenneT builds and maintains the high-voltage grid that is needed for this secure supply of electricity. With the materials and products we use to build and maintain our grid, such as our cables, (sub)stations, pylons and interconnectors, we realise the critical infrastructure that supports today's electricity needs as well as enabling the energy system of the future.

Create a sustainable workplace

We consider our employees to be our most important asset and essential to realise our ambitions. Our programmes and actions, including how we train our people and how we create an inclusive environment where people are energised to work, help us create a stable, safe and sustainable workplace.

Create value to transition to a climate neutral economy

The transition to a climate neutral economy will be essential to mitigate climate change. As a company with a key role in the energy landscape and a vision for a greener energy future, our aim is to drive the energy transition and contribute to achieving the climate targets of the Netherlands, Germany and the European Union. On the one hand, we aim to do this by contributing to a sustainable energy system, where we are able to connect everyone in the areas we serve to green electricity. On the other, we also strive to reduce the environmental impact of our operations. This is related to our use of energy sources, our work in the natural environment and the materials we need to build, operate and maintain our grid.

Secure a sustainable financial performance and investor ratings

In order to create long-term value, we are focused on maintaining a healthy financial position. Our main sources of financing are our regulatory revenue and externally raised capital, which is increasingly stemming from green financing. To safeguard our financial health, we aim to optimise our financing costs and deliver a return on capital that meets the expectations of our capital providers. In addition it is essential to maintain our strong credit and ESG ratings.

Solve societal challenges with stakeholders and through partnerships

We are convinced that collaboration with stakeholders and strong partnerships with suppliers, customers and other parties are essential to finding solutions that will help us transition to a climate neutral economy to address and mitigate climate change. Combining experience and knowledge from different organisations around the world will help us to do so.

Stakeholders

- Employees
- NGOs
- Governments and policy-makers
- Customers
- Suppliers
- Regulators
- Shareholders
- Energy market participants

Input

- Extensive knowledge of and experience with operating the system and integrating energy markets
- Cables, lines, stations, offices and interconnectors
- Our skilled and motivated employees
- Energy, natural environment and materials to build, maintain and operate our grid
- Regulatory revenue, (Green) Financing
- Strategic partnerships and our engagement with (project) stakeholders

How we create value

- Energise our people and organisation
- Secure supply today and tomorrow
- Drive the energy transition
- Safeguard our financial health

How we operate

- Enable the energy market
- Designing the energy system
- Build the electricity grid
- Maintain the electricity grid
- Operate the electricity grid
- Enable the core activities

Output

Deliver a high security of supply, see page 22

With our knowledge and experience in operating the system and following up on our ambition to further integrate European energy markets, we are able to provide a secure supply of energy. In 2021, we have been able to achieve a **99.99999%** availability of our grid. The instances we were unable to secure supply, were the result of **3** interruptions. Our knowledge, experience and vision with respect to an integrated European energy market is reflected in our grid and the **17** interconnectors that are operational.

Ensure critical infrastructure for society, see page 29

With our assets, we ensure that we are able to fulfill our core activities and tasks. We keep building and maintaining our grid to realise the critical infrastructure, which helps us drive the energy transition and supports the economic development and human wellbeing of the people that live in our service area. **We expected to invest EUR 3.9 billion in 2021, and we were able to realise EUR 4.0 billion.**

Create a sustainable workplace, see page 39

Our goal is to create a working environment where our people feel safe and valued. We strive to bring out the best in our people to help them develop themselves and organise this in a way that energises them. That is why we track our **absentee rate, which was 3.1 in the Netherlands and 2.6 in Germany in 2021**. Unfortunately we did not manage to have zero safety incidents and recorded a **Total Recordable Incident Rate (TRIR) of 5.8**.

Create value to transition to a climate neutral economy, see page 46

We want to drive the energy transition, because we believe we are able to make a significant contribution. Realising our investment programme and innovation portfolio will contribute to the climate targets in the Netherlands and Germany, which is essential on the pathway to a climate neutral economy. As of 2021, we realised a total of **8.5 GW** of offshore capacity and connecting renewable energy sources to the electricity grid in the Netherlands and Germany. At the same time, we ourselves have the firm ambition to be climate neutral as early as 2025, so that we too will contribute to part of the solution. In 2021 our (gross) carbon footprint was **2,312,139 tonnes CO_2**, which has been greened for **69.0%**.

Secure sustainable financial performance and investor ratings, see page 54

TenneT is a regulated company, that has an important societal role. That is why we strive to make choices considering the impact on societal costs. To finance our grid investments, we raise the necessary financing and meet the expectations of our capital providers. This is reflected in various ways, such as our **credit rating of A- S&P and A3 Moody's, our ROIC of 4.2 and a S&P ESG evaluation, with a score of 84 out of 100 and a classification 'strong'**.

Solve societal challenges with stakeholders and through partnerships, see page 60

We believe in the power of cooperation. Working together will help us achieve the next steps with respect to the energy transition faster and better. Furthermore, in realising our future grid, we engage with our stakeholders to consider societal objectives. That is why we also measure our reputation on a bi-annual basis. The outcome of this is a **reputation that can be classified as 'fairly strong to very strong'**.

Outcome & Impact

Our societal financial impact on an average household in our service area

Equivalent number of households that in theory would have been able to receive 100% green electricity

Societal impact due to availability of our grid

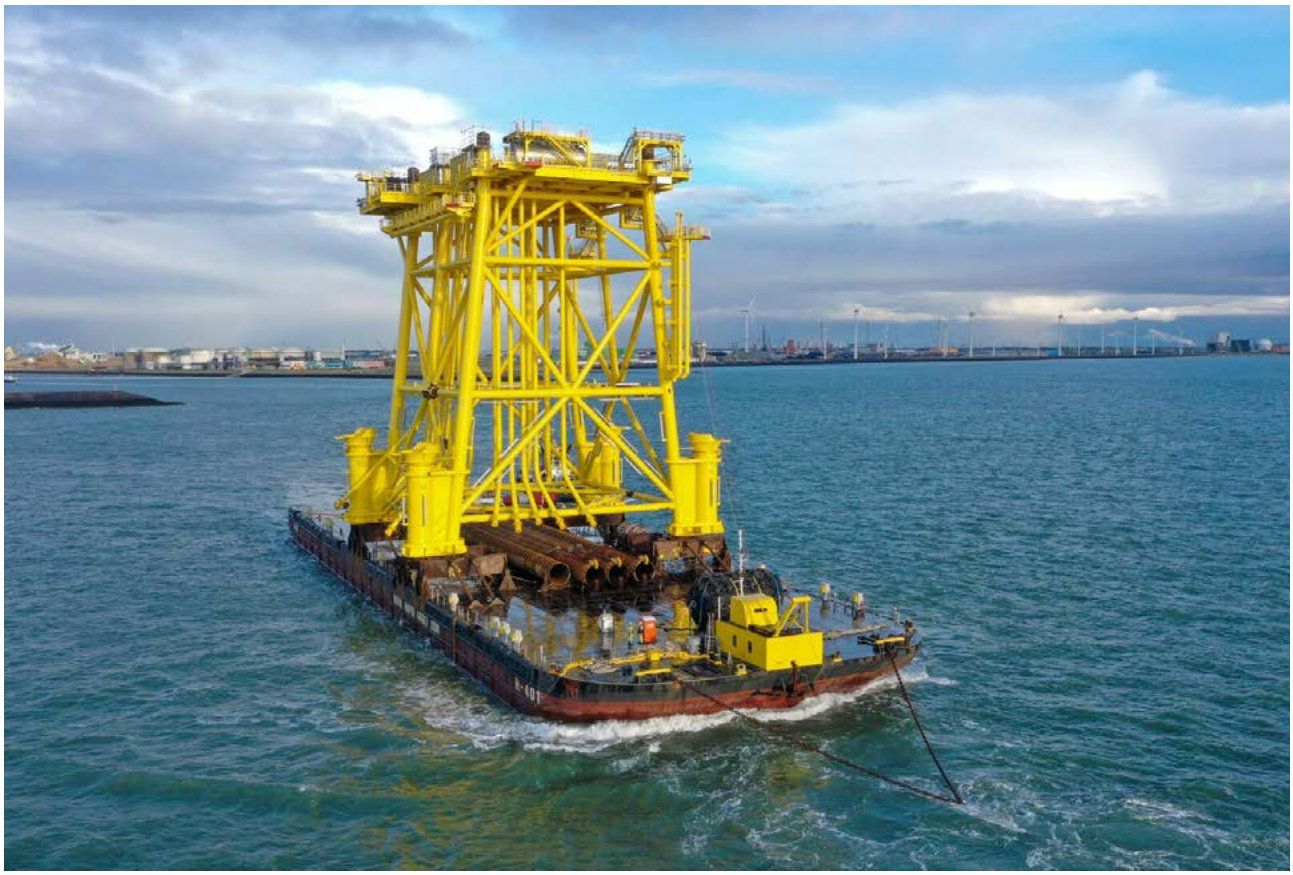
Avoided CO_2 emissions

Measuring our societal impacts

Our ambition is to show our societal impacts as part of our value creation model. We have succeeded in doing so for some areas and are working to expand this model in the coming years. Disclosing an organisation's impact(s) is a relatively new area of reporting. We aim to disclose the outcomes and impacts which we create on a societal level as a European TSO. This provides insights from a broader perspective on how the people living in the areas we serve experience the positive or negative impact we create and have on them. By showing these impacts and the way we are able to fulfil our purpose, we believe that we provide more meaningful insights for stakeholders rather than to focus on translating a variety of our company level outputs to outcomes and impacts.

In 2020, we started to show the societal impact in two important new areas: the value we create by ensuring the availability of our grid and our progress in connecting more renewable energy to our grid. The latter is shown in the tonnes of CO_2 emissions that we have been able to avoid each year and the equivalent number of households that in theory would have been able to receive 100% green electricity that year. In 2021, we added an additional societal impact – the financial impact we have on the electricity costs of an average household in the areas we serve. As we are a regulated company, our impact on household costs is an important factor that we want to address in this report.

More information can be found in the chapters 'Deliver a high security of supply', 'Create value to transition to a climate neutral economy' and 'Secure sustainable financial performance and investor ratings' where we included our societal impacts in these areas.



How our strategy creates value

Our Integrated Annual Report 2021 has been set up alongside the outputs of our value creation model. The image on next page shows how this is connected to our four strategic pillars and where more information about each topic can be found.

Connectivity table

Strategic pillar	Chapter	Topics in materiality matrix	Key KPI's	SDG
Overarching	Page 2	• Stakeholder engagement • Compliance	• Internal engagement index • Reputation survey	
Energise our people and organisation	Page 39	• Create a sustainable workplace • Safety	• Absentee rate • % female inflow • Total Recordable Incident Rate	5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH
Secure supply today and tomorrow	Page 22 Page 29	• Security of supply • Responsible supply chain practices • (Cyber) security • Connectivity of our grid • Customer relations	• Grid availability • Investments	7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Drive the energy transition	Page 29 Page 46 Page 60	• TenneT's own environmental impact • Stakeholder engagement • Strategic partnerships • Driving the energy transition	• Sustainability performance • # of GW of new flexibility • # of scalable / scaled system initiatives	13 CLIMATE ACTION 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 14 LIFE BELOW WATER 15 LIFE ON LAND
Safeguard our financial health	Page 54	• Financial health	• Adjusted underlying EBIT • ROIC • Adjusted FFO/Net debt	7 AFFORDABLE AND CLEAN ENERGY

Our supply chain

Our main task is to secure electricity supply to almost 43 million people that live in the areas we serve. To realise this, we transmit electricity via our high-voltage grid. We also need to design, build, maintain and operate our grid. These dimensions have their own challenges and opportunities.

First, we need to design, build and maintain a high quality, reliable, sustainable, and resilient grid that can support the energy system of the future. This requires the development of new technologies and causes an increase in demand for proven technology and skilled resources, next to raw materials (such as steel, copper and aluminium) which are manufactured or mined by third parties and used in our projects to build and maintain our assets. These assets are crucial to operate our grid. Some of the raw materials we use are scarce resources, such as virgin copper, which have an environmental impact due to their extraction. We want to be a green and responsible grid operator, taking measures to reduce our negative impacts and even creating positive impacts, wherever possible. We have formulated ambitions to become more circular and make less use of scarce resources, including virgin copper. Once our assets are commissioned, we aim to extend their useful lives through regular maintenance, which will help us to reduce the use of (raw) materials. When our assets reach the end of their lifecycle, we aim to recycle all materials or components that can be safely re-used.

Building and maintaining the energy grid of the future is a combined effort, involving thousands of people. For TenneT's employees and those employed by our partners, we strive to do this in a safe and responsible way. The nature of our work, especially where high-voltage is involved, requires the most stringent adherence to safety standards. We are proud of everyone who helps us to drive the energy transition.

However, our work involves more than designing, building and maintaining assets. We also need to operate them, by providing transmission and system services and facilitating the market. In this way, we play a pivotal role at the centre of the electricity supply chain, transmitting electricity to end-users via the grids of the distribution system operators (DSOs), which is either generated on land or at sea, or imported from or exported to neighbouring grids via cross-border interconnectors.

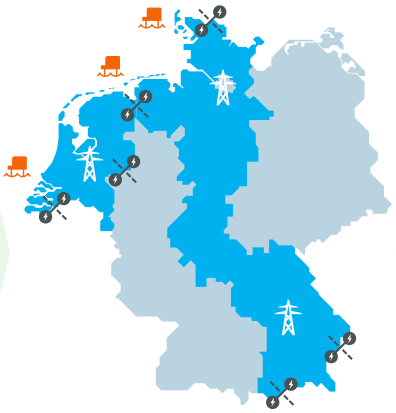
This electricity supply chain has changed significantly over the past decades, but TenneT has long been an established key player and important partner of governments and other key stakeholders since its founding in 1998. As the energy transition forces the system to undergo significant changes in the path towards zero-carbon emission, TenneT can play a key role in helping stakeholders in the supply chain to work together. Sharing our experience and knowledge gained from the past decades, and also learning from others, we aim to help our entire supply chain overcome the challenges ahead to deliver the energy system of the future.

TenneT in the supply chain

Designing, building, maintaining and operating the grid

Raw material extraction and production of materials
Finding sufficient and the right resources remains a challenge, to deliver a greener energy system and in a way where we reduce our impact on the planet

Construction
Safety is very important when working with heavy machinery and high voltage when building and maintaining our grid



By creating efficient markets that support our task to transmit electricity to our customers we aim to make our grid future proof

Decommisioning
In our projects, we strive to re-use our materials as much as possible or dispose them in a proper way

Generation / In-feed

Renewables
More offshore wind farms are connected to our grid

Import
We import electricity to balance our grid which can also save societal costs

DSOs

Renewables
Onshore, we aim to create more capacity to enable more renewables to be connected

Powerplants
Conventional power plants are also still in the mix, but are increasingly being phased out by governments

Consumption

Export
We transport electricity to other areas if this helps them secure supply in a consistent or more cost-efficient way

DSOs

Consumers/flexumers
With a society that is gradually electrifying, we strive to supply households of electricity together with the DSOs and work together with them in finding new solutions to power society

Large industries
More and more large industries are greening their processes which results in an increasing greener electrification need. As partner for industries we therefore play an important role in the transition to a climate neutral economy

Our stakeholders

TenneT's vital role in the European energy sector involves strong collaboration with a wide range of partners and stakeholders. We aim to build and maintain our stakeholder relationships in the best way possible. This year, we reassessed our stakeholder landscape, as the environment we are operating in continues to change. We performed this assessment together with our business units. Although we value our relations with all our stakeholders, big or small, there are some groups that have a greater influence on us and vice versa. Our key stakeholders are summarised in the visual included below.

Every two years, we conduct a survey to assess how well we are performing in the perception of our key stakeholders. This survey was performed amongst our previous list of key stakeholders.

The most recently conducted survey resulted in the perception of TenneT's reputation as 'fairly strong to very strong' and TenneT's customer satisfaction gave an overall level of satisfaction of 85% (customers gave a score of 7 or higher).

Next to these stakeholders, we very much also value our engagement with specific project stakeholders in local communities. We are open to the concerns of people and organisations in the areas where our assets are built, and actively seek to engage with them. We hold regular stakeholder dialogues (workshops, talks, events and online sessions) where we aim to build awareness of and understanding for our work. In these interactions, we listen to the concerns of local stakeholders to see how we can address them properly. We measure our community relations efforts through stakeholder surveys.

Our stakeholders

The Sustainable Development Goals and TenneT

The Sustainable Development Goals (SDGs) were determined by the United Nations as global goals that member states should translate into national policy. The aim of the SDGs is to create a sustainable future for all people. The cooperation between governments and other important partners, such as businesses and NGOs, are key to achieving these important goals. TenneT is committed to the SDGs and in 2021 we re-assessed which SDGs are most applicable to us. We reached out to our key stakeholder groups and discussed their views on this.

SDG 13 – Climate action

The world is facing major global challenges, including the consequences of climate change. This affects TenneT's core business. And it is our choices and business conduct which can have a large impact on this the global challenge. That is why we have identified SDG 13 'Climate Action' as the main societal objective we contribute to. The impact of climate factors is also becoming increasingly important in our activities and business operations. This is why we strive to ensure a transition to a sustainable energy system at a socially acceptable cost while maintaining security of supply.

SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all

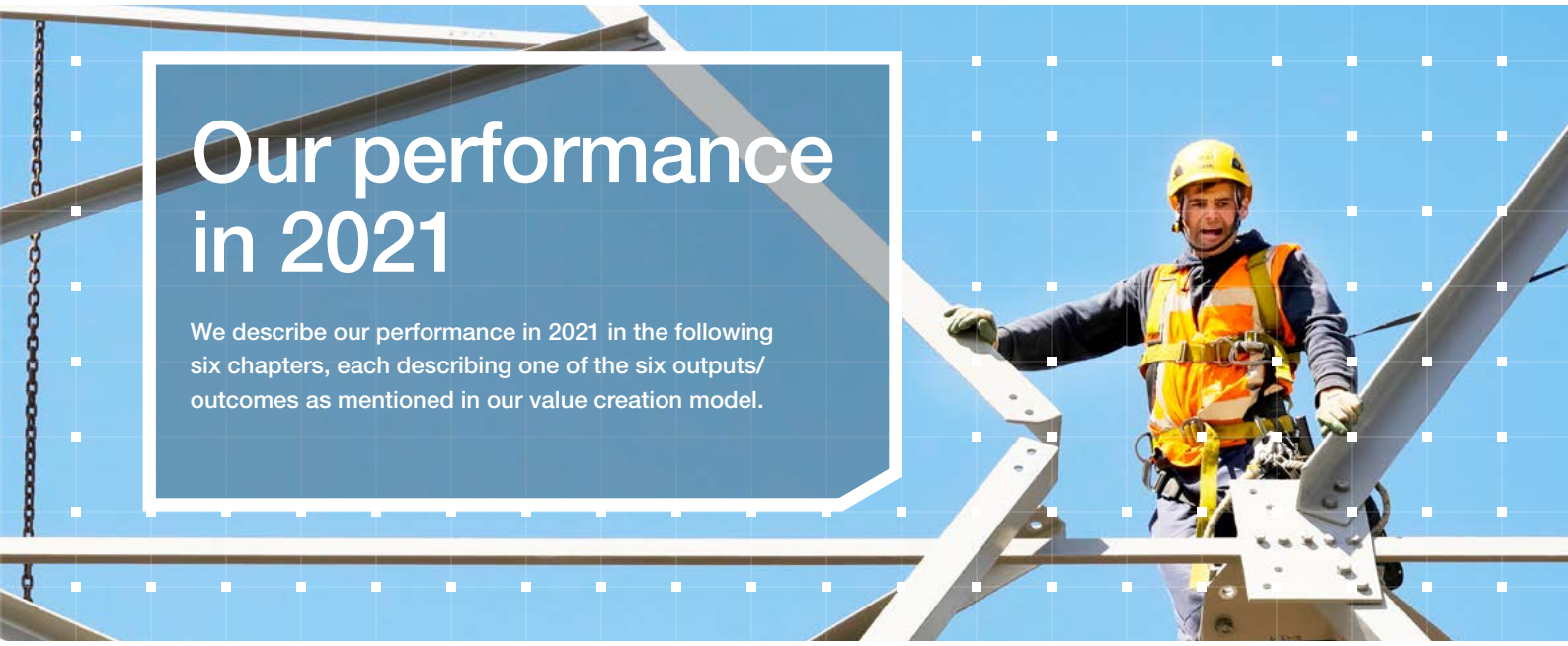
SDG 7 is where we feel that we contribute most with our core business activities. The underlying target we contribute to is target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix. This is clearly reflected in TenneT's activities. Our investments are expected to connect 26.7 GW of offshore wind to the onshore grid by 2030. As of 2021, we were able to connect 8.5 GW of offshore wind energy so far. Onshore, we are facilitating the fast-growing supply of wind and solar energy with grid expansions and smart solutions. We have been able to achieve our target this year to progress on our investments. More information on this is included in the 'Ensure a critical infrastructure for society' chapter. By realising our investments, we are able to contribute to the increase of renewables in the energy mix in the Netherlands and Germany and to drive the energy transition.

SDG 9 – Build a resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Our core activities also make a significant contribution to SDG 9. Our role is particularly linked to target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all. By driving the energy transition and by operating as a European TSO, we support economic development and human well-being by empowering society and providing a secure supply of electricity today and in the future. We invest in our grid to ensure that our system is reliable, sustainable, resilient and future-proof for a changing energy mix. We can further ensure security of supply for the areas we serve by connecting our grid to other European countries. An example of this is the opening of the NordLink cable, the first direct power connection between Germany and Norway in 2021. The high-voltage DC link will enable the exchange of 1,400 MW of renewable energy – wind power from Germany and hydropower from Norway. NordLink is thus making a contribution to the energy transition in Germany and Europe. By increasing the number of interconnectors – from the current 16 – we create more opportunities to import and export electricity. This enables a more cost-efficient supply, making electricity more affordable for end-users. Furthermore, we also continue to investigate ways to make our grid more resilient, including protecting our assets against the effects of climate change. Extreme weather conditions such as floods and high winds, or the longer-term risk of rising sea levels, are factors we take into account. More information on this has been included in our Key risks section.

Other SDGs

In the execution of our activities, we also have an impact on other SDGs. We contribute to SDG 5 and SDG 8 when we look at policies relating to our people (including our contractors) and SDG 12, SDG 14 and SDG 15 with respect to the choices we make that affect our planet. SDG 12 for instance, relate to our circularity ambitions, which also has an effect on climate change. Reducing the use of virgin materials, such as copper, will have a positive climate effect as it avoids emissions in the extraction phase.



Our performance in 2021

We describe our performance in 2021 in the following six chapters, each describing one of the six outputs/ outcomes as mentioned in our value creation model.

Deliver a high security of supply

TenneT has a clear and critical task: to ensure the continuous supply of electricity for almost 43 million end-users across the Netherlands and Germany, 24 hours a day, 365 days a year. This goal has inspired us since the company was founded in 1998. Our commitment to provide a high level of security of supply continues to drive us today, but we must do so in a far more complex, dynamic and challenging energy landscape.

With our knowledge and experience built over the last decades, we are dedicated to providing a secure supply of electricity, today and for decades to come. Our end-users expect a near-perfect 99.99% supply of electricity. But maintaining this level is challenging in combination with the European roadmap to achieve climate-neutrality by 2050.

The targets to reach this goal continue to grow. For example, in July, the European Union announced its “Fit for 55” package of legislation, committing to a 55% reduction in overall carbon emissions by 2030. As a large share of total greenhouse gas emissions in the EU comes from the energy sector, TenneT can play a key role in enabling this goal.

While green electricity has many advantages and will be key to achieving Europe’s climate goals, its supply by nature is intermittent. The volumes are steadily increasing in terms of wind energy – especially from the North Sea – as well solar power. But we cannot just simply connect more and more renewable energy production facilities to the grid. The characteristics of renewable energy sources (RES) concerning variability and uncertainty impacts generation dispatch, system balancing, system stability and the power flow pattern in the network. As a result, the challenge is not just to build a RES-dependent grid, but also to keep it in balance and stable at all times so we can continue to provide a high security of supply - today and tomorrow.

It is important to make responsible choices when building a greener energy future. We do not only need to make sure our grid is prepared for more RES to be connected, we also have to find flexible solutions and ensure the stability of our grid. We aim to secure supply of electricity when the sun does not shine or the wind does not blow and at the same time making the transition to a climate neutral economy.

Our performance in 2021

Onshore grid availability	Performance	Target	Status	Trend
	99.99999% 2020: 99.99995% 2019: 99.99982%	99.99962%		Our onshore grid availability was again one of our best performances in the past decade.

Offshore grid availability	Performance	Target	Status	Trend
	94.09% 2020: 94.03% 2019: 93.20%	95.10%		Despite recording a grid availability higher than 2020, we did not meet our target as we have increased our target compared to last year.

Secure supply today

We are proud to have been able to have kept our grids available 99.99999% of the time in all of our supply areas. Although we are pleased with this performance, we regret some instances of interrupted supply. An example of this relates to an interruption at the Soest substation which impacted over 50,000 households for about 20 minutes. A root cause analysis was performed to learn from this incident and for future references. Despite the interruptions that occurred in our grid, we are pleased to have been able to sustain our level of grid availability onshore grid in 2021 with a comparable availability performance we had in 2020.

We report our onshore and offshore grid availability separately, as these grids are constructed differently. There is less built-in redundancy in our offshore connections compared to our onshore grid. This means availability in the offshore grid is typically lower compared to onshore. In 2021, we achieved 94.09% offshore grid availability compared to 94.03% in 2020. Despite this being a slight improvement of our offshore grid availability, we did not manage to meet the target for 2021, which we updated to raise the bar for ourselves in this area.

Although our onshore grid availability in 2021 is among the highest reliability levels in the world, we do not take it for granted. Around the clock, TenneT has many dedicated people working to make a high security of supply possible. The focus of this work takes place at our four control centres (two in Germany and two in the Netherlands) where we operate the grid, monitor the stability and performance of the system and coordinate across borders.

As a European TSO, we are part of an interconnected European electricity grid. This ensures a stable electricity supply throughout the continent. In 2021, there were two events that split the European interconnected system in two, where the European cooperation was essential to control and minimise the impact of these events. The 2021 system splits were a warning sign that the integrated European system is being stretched close to its stability limits by the increased demands of the energy transition. These usually rare events occurred twice in 2021 – on 8 January and 24 July. The 8 January split caused a temporary separation of the South-Eastern part of Europe from the rest of the Continental European grid, while the event on July 24th temporarily disconnected the Iberian peninsula and a small part of the French grid from the rest of the Continental European grid.

Fortunately, TSOs across Europe – including TenneT – are prepared for such events with emergency and restoration plans. Following a larger disturbance in Continental Europe on 4 November 2006, new awareness and stringent countermeasures have been introduced to mitigate the consequences of system splits. These include the European Awareness System (EAS), whereby TSOs exchange real-time information in order to be able to react immediately in case of unusual system conditions.

This allows TSOs to rapidly manage such events in a coordinated manner and limit their consequences. On 8 January and 24 July, TSOs resynchronised the separated areas within very short time frames.

The learning from these events in 2021 is not only that the increased pressure on our system can destabilise security of supply, but also that cross-border collaboration between TSOs and a European interconnected system is essential for our security of supply. It also shows the need for new, strategically located and reliable flexible demand and supply solutions to balance increased volatility in the grid.

The effects of changing climate and weather patterns also stressed our grid and the security of supply. The extreme weather events in the summer of 2021 caused four of our pylons in the Netherlands to collapse, while not leading to a disruption of our supply. This is due to the way we operate our grid as we secure our grid based on the n-1 principle. This ensures that in the event of one unplanned outage, our supply remains secure.

In 2021, we faced additional challenges in our grid due to growing congestion. This occurs when a high feed-in of renewable energy sources – for example on very windy days – cannot be fully accommodated due to the limited available transmission capacity of the high-voltage grid. This endangers our security of supply as electricity cannot be transmitted across overloaded powerlines.

In these instances of congestion, TenneT needs to activate remedial actions, including costly redispatch measures. This means we ask electricity providers from e.g. conventional power plants to change their power feed-in specific locations to ensure that we do not have overloads and that the system balance is maintained. This upward and downward regulation in the network takes place on almost a daily basis.

As the amount of RES being connected to the grid grows and conventional power plants such as coal-fired units are being decommissioned, temporary congestion scenarios become more common and redispatch costs tend to rise. To illustrate this, over the past decade, our redispatch volumes have increased in parts of our German grid by a factor of approximately 10 between 2011 and 2020, due to the increasing role of renewables in the energy mix and the longer distance between generation and the use of electricity. Managing these challenges, while also securing supply and driving the energy transition, is all part of the balancing act TenneT has to perform.

Securing supply tomorrow

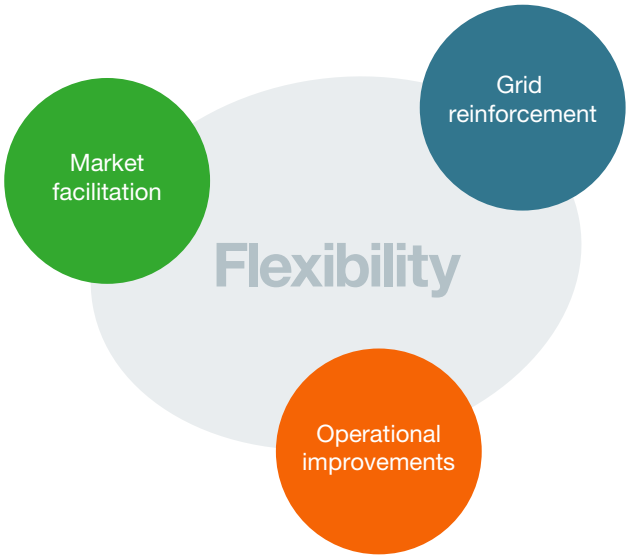
As we look ahead, we must continue to ensure a high security of supply, despite the increasing complexity of running a climate neutral energy system. Innovation will be critical to meet this challenge, not only related to more effective and efficient use of our assets, but also to boost our system operations and improve market design. To achieve this, there are three focus areas that will be essential for securing supply in the future.

Societal value of the availability of our grid

Transmitting electricity to large industries and via DSOs to millions of households powers and empowers society. This is our main task and also our main societal impact as a company. Designing, building, maintaining and operating a grid that is available all the time is the most important impact TenneT can have for society. To ensure that the people living in the areas we serve are able to live their lives and organisations can do their work. Achieving this impact requires each part of the energy supply chain to work together, therefore this achievement is not just the result of our own actions, but this societal impact we make together with others in the supply chain, such as electricity generation companies, other TSOs and distribution system operators. Regardless, an electricity grid that is available to supply electricity to its customers for 99.99999% of the time creates value.

Our assessment, based on academic research, shows that the estimated societal value created by the availability of our Dutch grid surpasses the gross domestic product (GDP) of the Netherlands, which was over EUR 800 billion in 2020. This is because the supply of electricity does not only create economic value, but also direct and indirect benefits, such as being able to enjoy leisure time. For more information on this assessment and our methodology, please refer to the Additional CSR data document on our website. We will continue to further develop societal impact indicators during the next years and invite others to help us with this.

Our three focus areas



Grid reinforcement

To cope with the increased complexity and volatility of the energy system we must strengthen the grid. Currently, in several parts of our serving area, including provinces in the Netherlands, some sections of our grid do not have the capacity to connect more renewable energy sources. For example, in September 2021 the Dutch regulator ACM was notified that the grid capacity in the province of Gelderland and the Flevopolder region reaches its limits. The rapid growth of wind farms and solar farms in these areas is leading to congestion in the system. With additional transformers and adjustments to the regional high-voltage grid, we aim to create structural solutions, with plans to invest up to EUR 450 million on measures to reinforce the grid in these regions. Also in December 2021, we announced that we will invest up to EUR 650 million in the Amsterdam area to reinforce the grid. Going forward, we expect to identify more of these bottlenecks which we will resolve to ensure that our grid is future-proof and can support the energy transition. We have created a 'grid capacity map' in 2021 to identify such bottlenecks in the Netherlands, which can be found on our corporate website. These measures however can take considerable time, particularly in the permitting and licensing phase, and are faced with increasing scarcity of hardware and other resources from our suppliers. For more on this, please refer to our 'Ensure a critical infrastructure' chapter.

Market facilitation

To secure supply now and in the future, an integrated European grid is a key requirement. To this end, we have been working closely with other European TSOs and power exchanges for the past 15 years to connect electricity markets, both physically as well as commercially. A connected grid and integrated market has many advantages, such as a more reliable supply of electricity at a fair price. Interconnected cross-border grids allow electricity to be imported and exported, which helps to maintain affordable prices in a dynamic market and helps TSOs to balance supply and demand.

Cross-border interconnections play a particularly important role in the import and export of green electricity. When there is less demand than supply of renewable electricity, the excess supply can be exported. Vice versa, in situations when there is more demand for renewable energy sources than can be supplied at any particular time or location, international interconnectors make imports of electricity from other areas of the grid possible as an alternative to balance the grid.

The delivery of the NordLink cable (see 'Ensure a critical infrastructure for society' chapter) is an example of what we have achieved in 2021 to create cross-border connections that facilitate the exchange of renewable electricity. This 623 km interconnector between Germany and Norway was commissioned in May 2021 and has a capacity of 1,400 MW.

Next to that TenneT is working together with other European TSOs to further harmonise and improve the functioning of the markets and develop new products being valuable for market participants as well as support further cross-border energy exchanges. All these developments are continuously being aligned with ministries, regulators and market participants.

To further facilitate a smooth functioning of the market in Germany and the Netherlands we work together continuously with DSO's and market parties to improve data exchange processes. This improves security and efficiency of these processes, but it also to paves the way for new market activities in the field of flexibility.

Operational improvements

As well as building new assets, we must also invest in new concepts for operating the grid, making a more efficient and optimised use of our system through new digital solutions. With our Control Room of the Future project, we aim to fundamentally redesign our grid control systems to make them fit for the future. Another example of how to make use of digital innovation to secure future supply is the InnoSys2030 project. TenneT's development of digital innovations and partnerships is growing rapidly.

It helps to strengthen our capacity for data analysis and exchange, improves our ability to calculate capacity across Europe and enhances decision support and the stability and efficiency of the system. For more examples see our 'Solve societal challenges with stakeholders and through partnerships' chapter.

Flexibility in demand and supply of electricity

At the centre of these three priorities is flexibility. Feeding more RES into the electricity system creates a challenge to keep the grid balanced and ensure security of supply. Traditionally, Transmission System Operators have used fossil-fuelled power plants to provide the flexible power needed to keep the grid balanced. Now, we are looking for new sources of flexibility.

Flexibility is a key requirement of future energy markets. The broader we facilitate the market to unlock flexibility at the right location, through innovation and partnerships, the more stability and security we will build into the grid. Hence, we are exploring multiple innovations through our focused Flexibility, Innovation and Digital Portfolio approach. Through these, we intend to unlock flexibility technologies by market parties. This will enable us to drive, develop and integrate partnerships, participations and projects for new and data-driven business opportunities. For example, we have engaged in crowd balancing platforms, collaborating with multiple partners to unlock flexibility from electricity stored in consumer-owned devices, such as electric vehicles and heat pumps. Our participation in GOPACS platform (Grid Operators Platform for Congestion Solutions) together with the DSOs and the Equigy platform, with fellow European TSOs – are examples of this engagement.

System resilience

Delivering a high security of supply is only possible when all steps to ensure the integrity and stability of our grid have been taken. This requires us to consider many risk scenarios, including potential security threats ranging from copper theft to cyber-attacks. Extreme weather events are another increasingly common threat to our system resilience, requiring us to take risk mitigation measures related to the design and construction of our assets, as well as providing system back-up of IT systems in the event of failure. We treat the possibility of a severe outage resulting from extreme weather and all types of security incidents very seriously. Protection against them is an essential aspect of our security of supply resilience. We cannot rule out these types of events entirely, despite prevention measures that are continuously assessed, optimised and tested. In addition, we develop, align and carry out contingency plans together with national authorities to mitigate these risks.

What could prevent us from realising our goals?

As our grid becomes more reliant on renewable energy being weather-dependent electricity sources, we face more challenges for how we operate our grid in its current form and also plan for its expansion in the future. In parallel, there is uncertainty about the future strategy on the phase out of conventional energy production and the future expansion of renewables could lead to adaptions and shortages in electricity production and reduced leeway for TSOs. We must ensure our grid is future-proof and remains stable to limit congestion scenarios, cost of redispatch. We have defined and started multiple strategic initiatives to ensure our system is up to the task and back-up in the event of failure are available.

However, our strategic plans are challenged with uncertainty on a national and/or European level concerning ambitious climate targets entailing a surge of renewable expansion, political decision-making and the phase-out of conventional energy sources. In the short-term, these uncertainties can hinder investment decisions in the European grid. Furthermore, the climate targets lead towards an increase of the grid connection requests. Due to this increasing demand, for some areas in the Netherlands our capacity to connect customers is limited and requests cannot be met on time. To mitigate this situation TenneT works intensively with all relevant stakeholders, such as but not limited to the Dutch State, customers and constructors, to plan appropriately, to inform what is achievable including our ability to grow and to set the right priorities to all stakeholders as well as to assess the investment plans for the coming years.

New technologies help us mitigate risks related to security of supply, particularly digitalisation has a potential to make optimal use of our grid. For example, data analytics can help us gain insights on how we can use weather predications, assess real-time electricity demand, survey our assets and also help us to keep the grid in balance by connecting to an increasing number of producers and consumers. However, although technology will play a crucial role in realising the energy transition, there are currently no decisive breakthroughs that will simultaneously guarantee security of supply, affordability for society and competitiveness of industry prices.

We foresee that the technological answers will be a mix of technologies, use of digital solutions and data, market design and price models, sector coupling, standardisation, new types or functionality of cables and lines, transformers as well as other assets to transmit energy. However, as innovations are used in the market, the risks connected to the use of innovations relate to an increased risk of outages due to new and unforeseen technical failures that has not been observed before with older but familiar technology. Some of our older assets require more maintenance work and downtime and present a growing logistical challenge and cost. As such, TenneT is actively involved in defining high quality standards from suppliers and service providers and builds rigorous test procedures into its project planning and guarantee periods into its supplier contracts.

These uncertainties do not only concern the application of new technologies, but also the social environment, the level of European collaboration to foster cross-border solutions, the progress with sector coupling, the integrated decarbonisation and the ongoing politics of the green industry. This is relatively new territory for players in the European energy system, it carries great opportunities, but also risks that need to be appropriately managed.

As mentioned, extreme weather, vandalism, theft and cyber security incidents present ongoing threats on our system resilience across our sector. To ensure we are prepared for these risks and any repercussions, we continuously work on understanding them and how best to handle them internally and in partnership with other parties.

In terms of our cyber-security resilience, an important moment in 2021 was the successful recertification of ISO 27001 ISMS in Germany. The ISO 27000 standards are designed to assist companies in managing cyber-security risks. TenneT is preparing itself for the upcoming EU legislation, Network Code for Cyber Security, which will bring new requirements the Netherlands and Germany.

Lieve Declercq

CEO of SPIE Nederland

SPIE Nederland is a key partner for TenneT in the design, construction and implementation of energy assets, including power lines and substations. We need to tackle large projects in energy and infrastructure in parallel, working faster by being smarter.

"The Netherlands has a lot of smart minds working together on the energy transition.

The energy transition is an enormous challenge and, as a partner of TenneT, we are at the heart of the action. Technical services companies like SPIE play a crucial role, and good cooperation among all partners in the chain, including with TenneT, is essential to achieving the goals of the energy transition. The Netherlands has a lot of smart minds working together on this, but all their activities need to be linked together. We need to tackle large projects in energy and infrastructure in parallel, working faster by being smarter. If we continue in the old traditional ways, we will never complete the renewal of the Dutch infrastructure in time. However, as all players accelerate their work, safety must remain our top priority. I don't lose sleep over many things, but safety is something that is always on my mind. Our people often work in special circumstances, at great heights and with high electrical voltage. My principle is simple: you work safely, or you don't work at all. I am guided by a clear principle: 'I am uncompromising on safety and the project will be finished on time."

"The Netherlands has a lot of smart minds working together on the energy transition."

Ensure critical infrastructure for society

Building, maintaining and operating the high-voltage electricity grid that millions of homes and businesses depend on is the most important business activity of TenneT. As Europe strives to become climate neutral by 2050, the electricity infrastructure at the heart of the energy transition is undergoing a fundamental redesign, which presents significant challenges for TenneT in the years ahead.

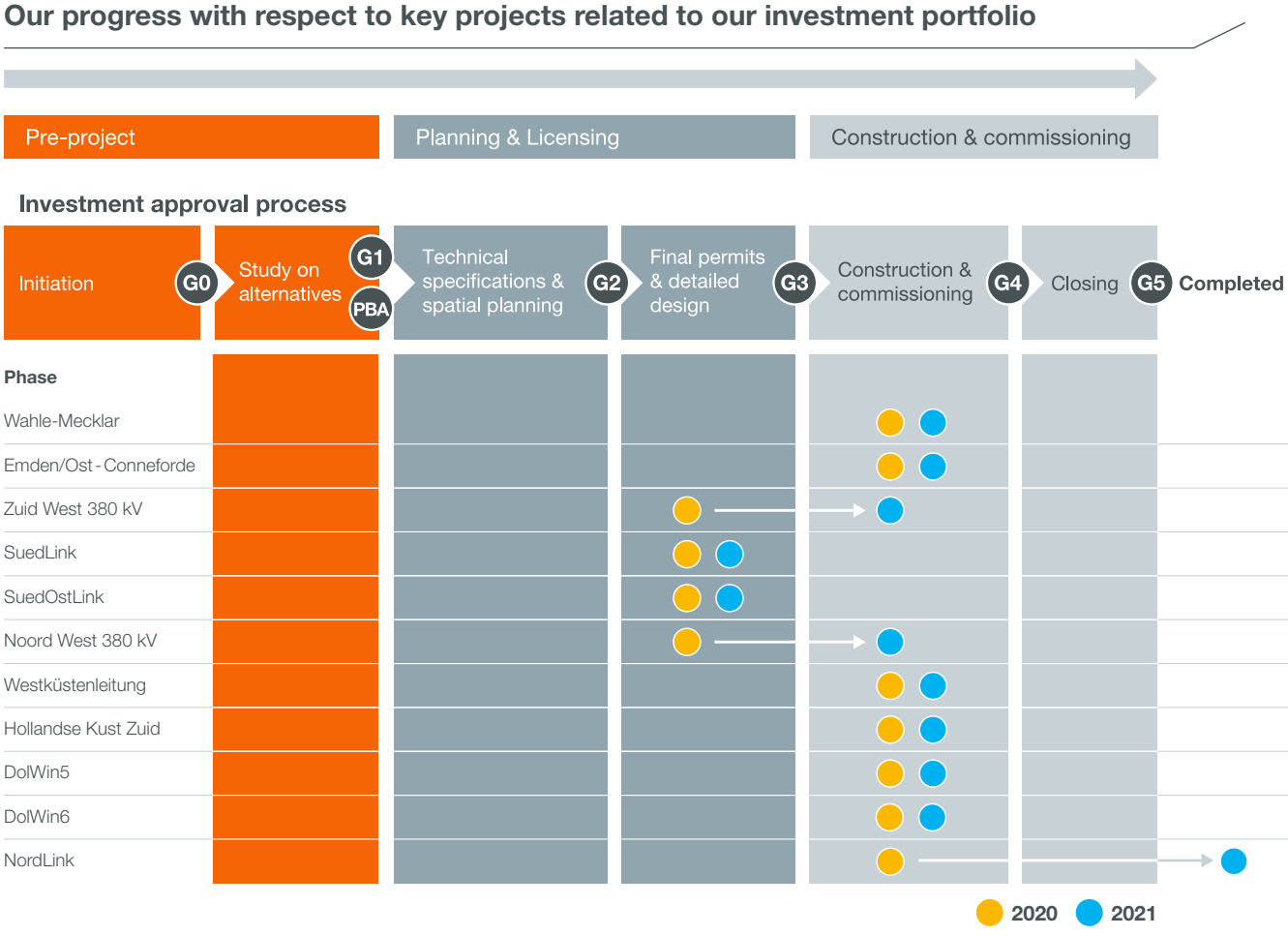
TenneT has a clear and constant societal task: to provide society with a secure supply of electricity, while driving the energy transition and facilitating the European cross-border electricity market. Our extra high-voltage electricity grid transmits electricity over long distances, across sea and land, to help power homes and businesses. With the materials and products we use to build and maintain our grid, such as our cables, pylons, (sub)stations and interconnectors, we create the critical infrastructure that people and businesses depend on every day.

While providing power supply is crucial today, the development and transformation of our electricity system will play an even more critical role in the next decades in the transition to a clean, climate-neutral world.

The European energy transition is one of the biggest challenges of our times with a goal to make Europe the world's first climate-neutral continent by 2050 and reduce emissions by 55% by 2030. Germany aims to be climate-neutral already by 2045, while the Netherlands aims to be climate-neutral in 2050.

To prepare the infrastructure that will help to reach these goals, TenneT aims to have realised thousands of kilometers of new high-voltage overhead lines, substations and cables and have connected nearly 30 GW of offshore wind energy by 2030. To achieve this, we plan to increase our average annual investment volume to at least EUR 6 billion while increasing the maintenance of our network in the coming years.

Our progress with respect to key projects related to our investment portfolio



The scale of this challenge means that we must step up to expand our grid and grow our organisation more rapidly. At the same time, we need to consider how we can grow in a responsible way. This not only includes building assets to reinforce our grid to make it future-proof, but also means exploring other solutions, such as making smarter use of our existing assets. By using new technology, engaging in partnerships and using agile working methods and other innovative approaches, we can build a greener energy future through other means than grid expansion alone.

We must consider how to develop our critical infrastructure in a sustainable manner. That means acting responsible when it comes to the materials we use to build and maintain our assets, especially if they are scarce, such as virgin copper. In addition, the number of new employees we can onboard and integrate into our organisation within a single year is finite. Furthermore, there is limited space to build our assets in the natural landscape.

Realising our grid investments is characterised by three different phases. The Initiation phase starts with identifying capacity constraints in the electricity grid. At this stage, it is decided to either accept the capacity constraint or to solve it with new or upgraded infrastructure. Thereafter, the planning and licensing phase begins, where other aspects are considered, such as the spatial planning of the project. After a final investment decision has been made, permits are requested and final design details are formalised. Several tenders are issued or framework contracts are used to award a contract for the engineering, construction and commissioning phase of the project. When the project is administratively closed, it is formally completed. The majority of the project time currently relates to the first two phases, particularly planning & licensing, which may take up to eight years. The actual construction of assets takes significantly less time, usually two to four years. In order to reach the 2030 and 2050 CO_2 reduction targets primarily the planning and licensing phase needs to shorten significantly.

Our performance in 2021

Future proof grid Investments in EUR million	Performance	Target	Status	Trend
	3,969 (2021) / 3,412 (2020) / 3,064 (2019)	3,905		We are again in the fortunate situation that we have succeeded in reaching our 2021 investment target and recorded a higher investment amount than last year.

We have maintained strong progress with our investments, as we continued to stay on track with the majority of our critical infrastructure projects during 2021, with 3,967 million invested in the Dutch and German high-voltage grids – a 16% increase compared to EUR 3.4 billion in 2020. There were some areas of our portfolio where this was not the case, such as our DolWin5 offshore project, where the effects of the pandemic caused delays. Construction of the platform at the Singapore shipyard is currently behind schedule due to restrictions related to the COVID-19 pandemic, including labor and travel restrictions to Singapore. Against this background, in December 2021, TenneT asked the BNetzA for approval to postpone the expected completion date of the grid connection system from October 1, 2024 to October 1, 2025. Despite the challenging circumstances, 2021 was still another record year of investment for TenneT. We are proud that we have been able to meet our investment target, thanks to the efforts of many colleagues and contractors helping us to realise these projects.

Stakeholder engagement

In order to construct and maintain the critical infrastructure required to drive the energy transition, it is crucial to engage with local communities, NGOs and politicians at the earliest stage of a project to address their concerns and gain their understanding. As we expand our network, we must do so responsibly, by building a dialogue and gaining acceptance with local communities.

As a result, our work involves a delicate balance: what is desired on a national level is not always welcomed by local communities. To meet this challenge, we aim to do this in a responsible, engaged and connected way. We act responsibly in how we fulfil our role in society, engaged in how we build acceptance for our actions and connected in our dialogue with stakeholders. When we start a new project, we engage with the stakeholders affected, listen to their concerns and needs, and provide information about the project to evaluate and discuss.

Although we take the opinions of stakeholders seriously, receiving new opinions after we have already followed a due process to include opinions in an earlier stage might cause additional delays. We benefit from clear outcomes of our stakeholder engagement which enable us to plan and move ahead with certainty. The planning and licencing phases of our projects take up by far the most time in the realisation of our assets and with that, can slow the progress we need to drive the energy transition and achieve climate goals.

An example of the challenges we face in this regard is the offshore project 'Ten Noorden van de Waddeneilanden', which involves laying underground cables across the island of Schiermonnikoog – as part of a project to connect to a wind farm north of the island at Eemshaven. The planning of the project required extensive stakeholder engagement, as the proposal to bury cables across natural landscapes of the island met strong opposition from local citizens and environmental organisations. A decision on the final routing of the cable is therefore delayed and expected in 2022 at the earliest.

In most projects, we have observed a strong preference for underground cabling compared to overhead lines, despite this being generally more costly and less reliable. Together with project stakeholders, we aim to find the best solutions for each situation and consider the viewpoints of all involved. That is why we organise meetings and workshops during the early stages of a project. In the case of the project on Schiermonnikoog, a number of meetings were held with several stakeholders such as landowners and other local communities, in-person and also digitally. We informed them about the plans and status of the project and provided them with the opportunity to ask questions.

Offshore

Offshore wind plays a crucial role in the energy transition as the European Commission aims to connect 300 GW by 2050. The North Sea will play a crucial role, acting as a wind energy powerhouse for Europe. Germany and The Netherlands thus have set ambitious offshore energy goals: by 2030 alone, they want to achieve a capacity of 30 GW and approximately 11.5 GW respectively. To ensure that we can deliver the infrastructure that supports these goals, we are striving to connect increasing volumes of offshore wind energy to the onshore grid in the most environmentally friendly ways. To guarantee optimal efficiency, we use standardised building blocks of 2 GW HVDC connections.

In 2021, we made important progress in several areas of our offshore portfolio, including the developments with respect to our 2 GW programme, the launch of the Windstrom Booster concept, the opening of NordLink and in our offshore grid connections for Hollandse Kust (Zuid) and Hollandse Kust (Noord). These examples underpin the advantages of being a cross-border TSO as this helps us to share knowledge and best practices in offshore activities. We will further elaborate on this in the sections below.

2 GW programme and the Windstrom-Booster

To be able to connect larger offshore wind farms and thus bring more energy onshore, TenneT has adopted a new offshore grid concept for future grid connections. TenneT expects to build at least six offshore grid connections with a transmission capacity of 2 GW each in Germany and the Netherlands by 2030 – three in each country.

The new concept is based on a new 525 kV HVDC cabling system, developed in co-operation with our cable suppliers with whom we are closely collaborating to ensure this ground-breaking technology is available in time.

The 2 GW programme also uses a standardised grid connection design and a standard contract model, allowing us to realise these projects faster and at lower cost. The 2 GW standard will more than double the capacity in comparison to the previous 900 MW HVDC standard used in Germany and almost triple the 700 MW AC standard applied in the Netherlands.

TenneT has already started the tender for the offshore grid connection and HVDC system in the Dutch IJmuiden Ver wind area. It is expected that this contract will be awarded by the end of 2022. The engineering for the land station was tendered recently and the cable contract will follow during 2022. The first 2 GW IJmuiden Ver connection is planned to be operational in 2028.

Building on the standards from this 2 GW programme, our insights from the North Sea Wind Power Hub consortium and supplemented by additional technological developments, we presented a new concept: our '6 GW Windstrom-Booster' concept. This concept aims to connect three offshore grid connection systems in such a way that 6 GW of power is bundled together, with an accelerated offshore planning, less spatial use and with the potential to efficiently link onshore customers as well as offshore interconnections. 2022 the further implementation will be elaborated in cooperation with the government and other offshore TSO's.

NordLink opening

A key milestone in our 2021 critical infrastructure programme was the official opening in May of NordLink – the first interconnector between Germany and Norway. The high-voltage subsea cable took five years to complete, at a cost of EUR 1.8 billion. NordLink is a landmark project as the 623 km DC link will enable the exchange of 1,400 MW of renewable electricity– wind power from Germany and hydropower from Norway – thus contributing to the energy transition in Germany and Europe. This capacity would be enough to power the equivalent of around 3.6 million German households with green electricity.

Hollandse Kust (Zuid) and Hollandse Kust (Noord)

TenneT is building two transformer platforms, Hollandse Kust Zuid Alpha and Beta, for the offshore grid connection of the wind farm Hollandse Kust Zuid. In June, the second jacket (Beta) of TenneT's offshore connection system was installed, 22 kilometres off the coast of The Hague. The almost 3,000-tonne jacket, anchored to the seabed by six approximately 60-metre piles, is the foundation for one of two transformer stations for the Hollandse Kust (Zuid) windfarm, each with a capacity of 700 MW. The connection for the wind farms will be ready for use in 2022, when offshore wind energy will be fed into TenneT's onshore Randstad 380 kV Zuid ring for further transmission to electricity consumers.

In the final quarter of 2021, the jacket of Hollande Kust (Noord) was installed, an offshore transformer grid connection system, 18 kilometres from the coast of Egmond. The planning for this project is to be completed in 2023.

In January 2022, due to the weather events related to storm Corrie, a adrift cargo vessel collided with the jacket of Hollandse Kust Zuid Beta. Fortunately there were no people working there at that moment. We are currently investigating the effects of this collision, to get a clear picture of the exact damage to the jacket so that we can make a plan for necessary repairs.

Onshore

As part of our onshore portfolio, we realise projects to help secure supply and drive the energy transition. Many of these projects concern building new connections and substations as well as are reinforcement of the grid in order to connect more renewable energy sources. All of these lines help us transmit the increasing amount of green electricity over the long distances from where it is generated to where it is consumed.

TenneT onshore grid expansion projects met a challenge during 2021 with a new law in Germany that affects our long-distance DC cable corridors. These are strategically important as they carry wind-generated electricity from the North Sea into the heavily populated and industrialised southern part of Germany. A new clause in the Energy Industry Act (EnWG) stipulates that the TSO responsible for the area in which the DC cable ends, is now responsible for the whole project. The aim of the legislation is to create

a better balance of responsibility for strategically important DC interconnectors between the four Germany TSOs. As a result, we handed over the responsibility of the southern part of the NorthwestLink project (B-Korridor) to Amprion.

SuedLink and SuedOstLink

Despite the uncertainties of the legal changes, the strategically important SuedLink and SuedOstLink DC projects reached an important phase in 2021 as for both projects the so called corridors are approved by the German regulator BNetzA. SuedLink is a 700 km, EUR 10 billion DC connection, carrying wind-generated electricity from Germany's north coast to energy-intensive industry in the southern part of the country. The SuedOstLink will also carry wind-generated electricity to southern Germany, running from Saxony-Anhalt to Bavaria. Both projects are facing some delays in the current licensing phase due to various issues, such as changes in scope, additional routing alternatives and shortages in the service provider markets. The plan approvals for first sections are expected for 2023 which means that the preparations for the construction phase are now up and running. The cables and converter stations for both projects have been procured and the production of the cables has been planned for early 2022.

Wahle-Mecklar

The increasing amount of renewable energy fed into the grid in Schleswig-Holstein has made it necessary to expand the existing grid structure. The planned Wahle-Mecklar extra high voltage line aims to connect the transformer substation in Wahle near Braunschweig in Lower Saxony with Mecklar near Ludwigsau transformer substation in Hesse at a voltage of 380 kV. A line with a length of around 230 km will be realised and includes a 380 kV overhead line with three underground cabling sections as well as five substations (UW). The aim is to realise this project by 2024. In 2021, the construction works for the last section was put out to tender and partly awarded and the construction continued in three sections. The planning approval decision for the remaining fourth section has already been received. Furthermore, construction activities were completed at one substation, and another station substation will be finished in 2022.

Westküstenleitung

The Westküstenleitung in Schleswig-Holstein relates to a 380 kV line to be realised between Brunsbüttel and the federal border with Denmark and has a total length of around 140 km. Next to this, also five substations are part of the realisation of this project. The third section of this line has been commissioned in September 2021 and with that the first three out of five sections have already been commissioned. The entire project is planned to be realised in 2023.

Zuid-West 380 kV West

We started the construction of a new 380 kV connection between Borssele and Rilland. This power highway is essential for transmitting electricity from existing and future wind farms in the North Sea to the southwest of the Netherlands. In addition, the new connection is important for the exchange of electricity with Belgium. The Borssele to Rilland section is one half of a longer corridor that will extend to Tilburg.

Noord-West 380 kV

This project relates to the construction of the new 380 kV overhead connection between Eemshaven and Vierverlaten (Groningen) and a new 380 kV substation in Vierverlaten. The project is well on track to realise the scheduled ISD in 2023. After a long and intense planning and permitting phase, the construction is developing in accordance with the best case project schedule.

Maintain the grid to meet reliability targets

In addition to investment in new infrastructure, we are increasing our investments in maintenance. Ensuring that our grid is fit to operate at its maximum capacity is key to our ongoing commitment to secure supply today and in the future and to our maintenance strategy. However, as our grid becomes larger and more complex, and considering that some of our older assets were installed in the 1950s and 60s and even before, our maintenance work presents a growing logistical challenge and at increasing costs. The focused application of our maintenance efforts is helping to maintain the availability of our grid and to do more with scarce resources.

We are developing smarter ways to assess the condition and performance of our assets, which allows us to forecast more accurately when maintenance and replacement work is needed. We also use data analytics to predict failures, which helps us manage the right timing for planned outages to perform maintenance work. By maximising the accuracy of knowing when and where maintenance is needed, we can minimise our outage windows and match it with the appropriate people and available equipment. This reduces the likelihood of unplanned failures in the system, which cause a reduction in the available windows for planned maintenance.

Supply chain management

Given the volatile supplier market and our ambitious investment portfolio we are looking to improve our relationships with our contractors. Joint growth is required as both TenneT and our contractors need to grow to meet the challenges of tomorrow. Contractors are one of our key stakeholders, bringing valuable expertise and capacity to make the energy transition happen. Our unit Supply Chain Management uses the so-called integrated Supply Chain Management programme to mitigate the risks of increasing scarcity of materials and services, the price increases of raw materials and the unpredictability of global logistics. The goal of this programme is to build partnerships with our most important suppliers based on trust, transparency, and mutual respect. Understanding each other's interests, wanting to learn from each other, to improve operations and to jointly work on improvement projects, all on the basis of equality. This should result in increasing the reliability of our supply chains, efficient co-operation and a good safety performance. This philosophy is now piloted in the EU-303 framework contract with the scope of building and maintaining substations onshore NL, with nine of our international supply chain partners. Further EU-30x and other framework contracts will be developed in the course of 2022.

As we rely on our suppliers to provide essential services, components and materials for our work, such as pylons, transformers, HVDC technology and power lines, we want to ensure that none of them are, directly or indirectly, involved in conduct that does not meet our policies and quality standards. This can relate to product specifications, environmental performance or human rights. Our policy is to visit suppliers and ask them detailed questions on these issues. If improvements are necessary, we discuss with them how these can be made. In 2021, we performed 24 supplier visits. It is our policy to not accept suppliers who fail to meet our standards. In 2021, 20 suppliers met our standards, or were given the opportunity after taking corrective actions. 3 suppliers were not approved and 1 supplier is awaiting the result of this visit. In 2021, we made progress to embed human rights in our supply chain management and building a broader coalition to work on human rights and finetune our ambitions.

We are also working with our contractors to make progress towards our climate, circularity and nature ambitions. An example is the standardisation of a CSR tender toolbox, which we started and aim to finalise in 2022. We use an environmental cost indicator (ECI) for evaluation purposes. This is based on the methodology of a Life Cycle Assessment (LCA) which allows us to calculate the environmental impact directly into each project's cost evaluation. This includes the entire lifecycle assessment, including factors such as materials used and transport. The first pilot using this method was conducted in 2019-2020 related to our Hollandse Kust Noord grid connection system. Another large scale offshore tender IJmuiden Ver has also been published implementing this methodology. The offshore projects within our 2 GW programme will use this process as well. In addition, in 2023 a new framework agreement will be set up for various supply chain categories. Therefore, certain categories within TenneT's supply chain will become more sustainable and fairer, as it also focuses on human rights and working conditions. Further CSR tender tools include our 'raw material passport', gaining insights into aspects such as raw materials, specific human rights requirements and nature inclusive design.

TenneT employs a systematic approach to i.e. optimising maintenance efficiency, using integrated activity planning. The aim is to get the most out of our resources and people and to find the smartest balance between building and maintaining the grid.

Integrated activity planning involves a wide range of departments at TenneT, ensuring that all key stakeholders with an impact on outage planning are involved. Through close cross-functional team involvement, detailed plans are made for outage windows where essential maintenance needs to be performed.

The Supply Chain Management team is involved to gain knowledge about the market availability of critical materials. technologies and skilled resources. The results are collated and a priority is assigned to each task. This enables us to plan and execute our maintenance in an optimal way, both internally and also with our suppliers and contractors.

Next to integrated activity planning there are other initiatives on an operational level that support optimal execution of our activities, such as the Delivery Booster. This initiative is focused on boosting the efficiency of resource allocation and people for each maintenance project, by taking a holistic view across the year and taking the smartest approach based on availability of people, resources, project priority and location. Our analytical approach to maintenance is proving to have a positive effect, as 2020 and 2021 were excellent years for overall availability of our infrastructure.

Substations replacement

An important part of our work to modernise our onshore grid is to replace our ageing substations. To that end, we are engaged in a programme to replace around 140 high-voltage substations by 2031 in the Netherlands. In addition, a further 210 high-voltage substations will be upgraded or expanded. The use of EU-303 framework contracts with our suppliers aims to enhance the speed and efficiency of this work, allowing for faster procurement, standardisation, innovation and joint growth. After an approved design, we started in 2021 realising 4 of the 6 Proof of Concept stations. Including these lessons learned, we have also started the preparations for 6 of the 12 testphase stations where we will apply this approach.

What could prevent us from realising our goals?

However, there are obstacles that threaten our progress. Extreme weather events are an increasingly damaging factor, especially visible during 2021 with severe flooding and storms that hit our home markets in Germany and the Netherlands. Heavy winds caused damage to our infrastructure with 4 pylons collapsed in the province of Gelderland. Although we managed to avert a serious outage, the event forcefully illustrated the potential impact of extreme weather on our assets. It illustrates the need for an increased focus on system resilience, which we are pursuing.

Acute weather conditions are mitigated during the design, construction and maintenance of our assets, e.g. in the choice of location and the choice of materials we use. We therefore monitor developments in weather patterns to gain more experience and insights related to the scenarios and effects of extreme events. Examples of mitigation work include our Krimpen aan de IJssel substation and one of our pylons in a flood area. Both have been elevated to reduce risk. Furthermore, TenneT insures all substations and buildings during construction and operation against risks from natural catastrophes.

Another factor that continues to delay our progress is licensing and permitting. Limited space is available to build and expand our grid in the natural landscape. In the current political and regulatory climate, the majority of the duration of a critical infrastructure project can be spent on planning and licensing, which reduces time left for the actual construction. It often takes eight years to achieve the necessary permitting for a project that takes two years to construct. If we can only move at this speed, the projects needed to achieve the targets of 2030, even 2040, are already running against a tight deadline.

We need to move to a reduction of the permitting time with the political support and consensus that this requires. Therefore, we invite our stakeholders to participate and consider their viewpoints involved. Whereas, economic developments could influence the acceptance of costs associated with the energy transition. In turn, together with policy making authorities we need to build public acceptance for our critical infrastructure work by leading the debate on the energy transition and the steps needed to achieve it.

The increased competition for talent and our ongoing need to hire more people every year, continues to be a key challenge. Our headcount grew over the past year, and with a need to continue recruiting, we are reaching the limit of the number of new people we can integrate into the company each year. Also, when we hire people to work on our growing portfolio of critical infrastructure, it can take two to three years to train them for the needed specialist skills and to deploy the full impact of their work. Rather than simply getting larger with linear growth, we need to get smarter, finding new ways of working, new partnerships with our suppliers and tools, that help us deal with the challenges in front of us.

Similar to the scarcity of talent, we face more competition to reach the essential products, materials and suppliers from outside TenneT that we need to perform our work. Precise management and demand planning across our supply chain, as well as close relationships with key suppliers, will be increasingly critical to delivering our projects on time.

In order to achieve our goals and realise the energy transition, we need governments to help us. We require decisive green industry policy and a European collaboration and system integration.

In addition, our progress depends on closer cooperation between governments, other TSOs, DSOs, large customers, and key suppliers. Only jointly we can develop innovative ways to provide reliable, clean, and affordable electricity for a sustainable future. It also requires appropriate European and national legislation and regulations and an investment framework that enables us to meet the needs and objectives of society, economy and politics.

Stakeholder's acceptance for our infrastructure work is another challenge we face, especially in the communities where our work is taking place. The expansion of our high-voltage electricity grid and investments in sustainable energy solutions may significantly alter landscapes and affect a large number of people and interests. The debate on potential health risks related to our overhead transmission lines and electro-magnetic fields is still ongoing. TenneT aims to comply with rules and regulations and take sufficient caution in the construction and operation of our assets. We are also currently working together with the respective authorities and other involved stakeholders in the process of updating our policy with respect to electro-magnetic fields.

Holger Lösch

Deputy Director General of the Federation of German Industries (BDI)

BDI works together with TenneT to ensure German industry remain export-driven and innovative and promotes a climate-neutral industrialised future.

"Tackling climate change is a national and global challenge. We will not succeed without unprecedented levels of collaboration and cooperation between countries, companies and consumers.

Transforming our energy system to be CO_2-neutral is key to this ambition and industry must play a key role, both as an enabler and as a consumer. As an enabler, we must facilitate the development of renewable energy technologies, such as sun, wind, smart grids, electricity storage and green hydrogen, making them ever-more cost efficient.

As consumers, we must create processes and products that customers want, with a view to achieving climate-neutrality by the middle of this century. The level of climate ambition set out in the European and German 2030 targets does not allow us to move at a moderate speed in those sectors which are crucial to the energy transition. We will have to act much faster on renewable energy, grids and other infrastructure which help consumers reduce their CO_2 emissions. This unique transformation of the energy system offers many opportunities, but also brings risks in the short and mid-term. Minimising these risks is a challenge for industry and politics."

"Tackling climate change is a national and global challenge."

Technical data:

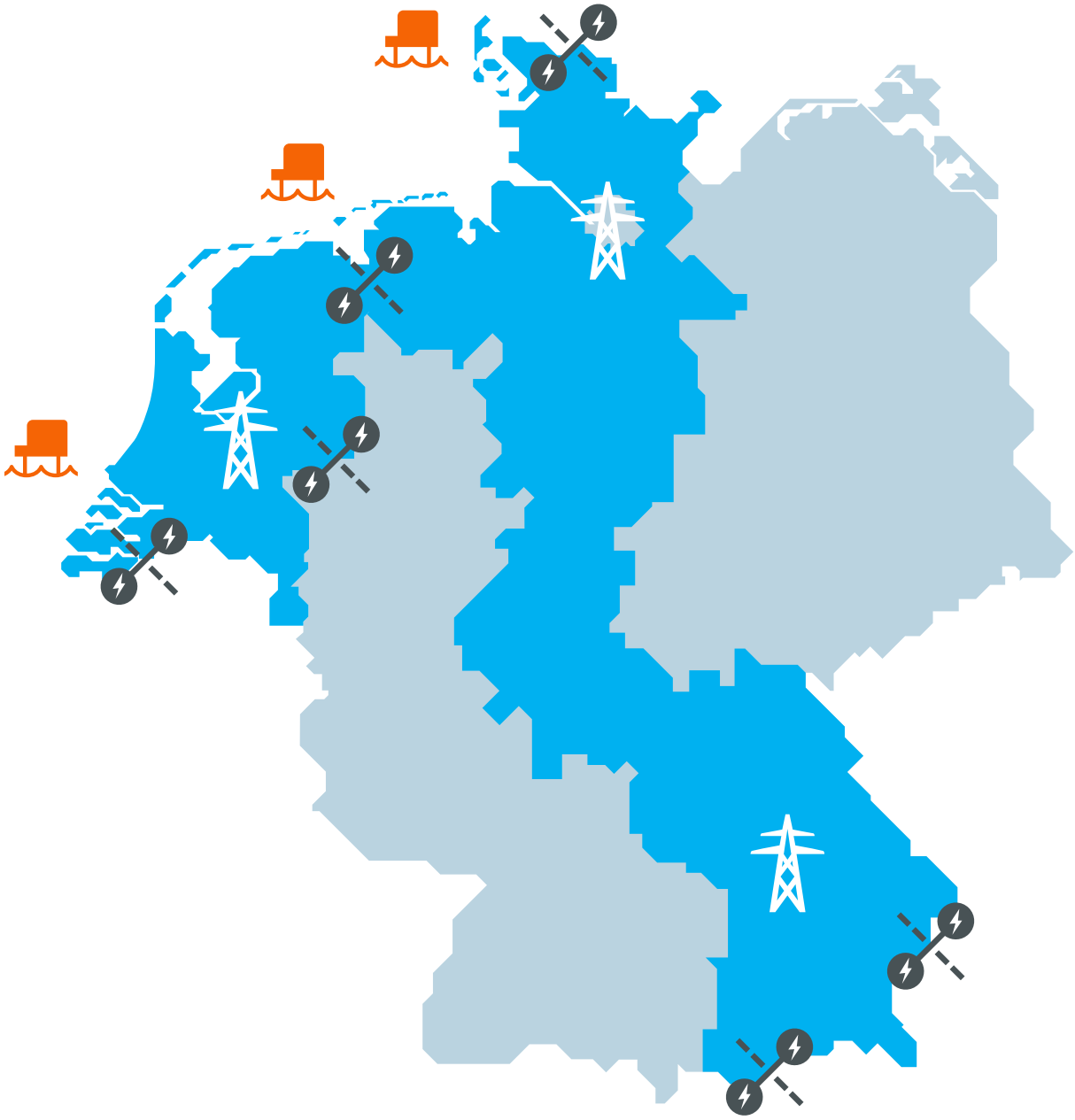
interconnectors
17
2020: 16
2019: 15

substations
475
2020: 468
2019: 462

completed offshore connections
14
2020: 14
2019: 13

Circuit length (kilometers)
24,518
2020: 23,866
2019: 23,232

pylons
approximately 27,500
2020: 27,000
2019: 26,000



Create a sustainable workplace

We regard our 6,620 dedicated internal and external employees as our most valuable assets. Our talented teams are at the heart of our efforts to meet the challenges ahead of us, as we accelerate on our path to contribute to the European energy transition targets of 2030 and 2050.

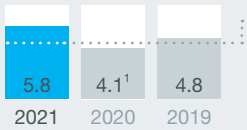
However, the scale of work required to achieve these targets and ultimately build a climate-neutral Europe, requires the deployment of a large amount of new talent. The scale and urgency of this need will grow particularly fast in the second half of this decade.

Already, our growth story has been remarkable. Since 2008, we have grown from approximately 600 to 5,168 internal employees, helping us realise annual investments that have increased from approximately EUR 275 million in 2008 to EUR 3,969 million in 2021. And, with ambitious targets ahead of us, this growth will continue.

We must be responsible in the way we grow, especially regarding our people. We can't simply keep adding more people to our organisation, as more people doing the same will not transform TenneT's ways of working to the next level. Our growth needs to be realised in a responsible manner and at a pace that achieves the output we want to deliver in the best possible way.

Not only does the demand for talent make it increasingly hard to find the people we need – especially in specialist technical roles – but it is also becoming more challenging to properly onboard and integrate new people into the organisation.

Our performance in 2021

	Performance	Target	Status	Trend
Safe workforce TRIR (including contractors)	**5.8**  	**4.5**		Regrettably, there were three fatal incidents in 2021. This also impacted our overall performance and we did not meet our target this year.
Healthy workforce Absentee rate Netherlands / Germany	**NL 3.1%** **GE 2.6%** 2021 NL 3.1, GE 2.6 2020 NL 2.7[2], GE 2.5 2019 NL 3.0, GE 3.0			We recorded a higher absentee rate than in 2020, mainly due to the impact of the pandemic. Considering these unusual circumstances, we understand the reason behind a higher absentee rate as a result of this.
Diverse workforce Diversity (% female inflow of total inflow)	**31%**	**30%** in 2023		Our efforts to attract a diverse workforce have resulted in reaching our target for a diverse workforce.

1 The 2020 TRIR is presented based on the previous definition. When applying the updated definition the 2020 TRIR is 5.4.
2 The 2020 absentee rate for the Netherlands is presented based on the previous definition. When applying the updated definition the 2020 absentee rate is 2.7.

Organise for our people to perform at their best and to work as one company

The TenneT transformation that was initiated a few years ago helps to enable us to drive the energy transition in a better way and become a more effective, innovative and exciting place to work. Responsible growth is important in this process, as it is about enabling TenneT to achieve its business and societal objectives in a way that is future proof. In the years following the transformation, we have worked hard to achieve this and significant efforts have been undertaken to create further integration of our operations in both Germany and the Netherlands. The effects of this are visible on many levels in our organisation with integrated teams and leadership.

We are convinced that now is the time to use our ingenuity and entrepreneurial spirit to increase our delivery capacity and capability. We aim to reduce bureaucracy and administrative burdens, streamline our business, attract the right talent and install better performance management processes. We want to build leadership that empowers, inspires, and creates opportunities for growth and learning. This will allow us to attract more and diverse talent and become the preferred customer of our supply partners.

And as we progress, we aim to ensure more efficient structures for onboarding new talent at a sustainable rate. This will prepare the foundation we need in the years ahead.

In addition, we are evaluating how we will manage new ways of working post-COVID-19. The current 'new normal' way of working provides an opportunity to assess the approaches that will deliver the most engagement and satisfaction for our employees and the most value for TenneT. This includes both plans for remote work and smart ways of collaborating virtually. These topics and the social implications on our employees and organisation are regularly discussed with the respective works councils and TenneT leadership.

In 2021, our cultural transformation continued to ensure that our people are engaged in our strategy, collaborate in the most productive way, and that our leadership teams are equipped to support in this process.

Employee engagement index

As we transform TenneT and create a future-oriented and sustainable workplace, it is important for us to track our progress through regular employee surveys. Our currently annual employee survey measures our employees' emotional and behavioural attachment to TenneT, the extent to which their work environment supports their productivity and performance and their overall wellbeing at work.

We pay close attention to this survey as we realise that in a fast-growing organisation, cultural change and engagement are not easy to come by. The latest survey was performed at the end of 2021 and will set the new baseline for the next two years. The result is a slight decrease as we recorded an 80% employee engagement score in 2021, compared to 82% in 2020. The insights obtained from this survey will help us in the next months to progress in areas where there is room for improvement.

Future-proof our organisation by recruiting the best talent

Despite the challenges to recruit a significant number of people in a highly competitive labour market and the difficulty of onboarding and integrating large numbers of people during COVID-19, we were able to welcome 1,316 new internal employees to TenneT in 2021. Nearly all needed to be onboarded virtually, posing a significant challenge that we mastered well considering the circumstances. We expect to continue this pace of recruitment, while keeping in mind the importance of safe and effective onboarding. We have set a maximum of around 700 additional FTEs for 2022 and expect a similar number of employees to join us annually for the upcoming years.

In certain roles finding talent can be especially difficult. For some specific technical functions, talent is extremely scarce. In other roles, such as technicians working in the field, it can take up two to three years to train someone to the required level, not to mention the recruitment time itself.

The challenge of recruitment makes it even more essential to bring out the best in our current workforce, with additional training for their current role and to help them develop to new positions. This also helps to retain the right people.

To access talent we continue relations with universities and other educational institutes and establish new ones. In Germany, we partnered up with the University of Bayreuth in October 2021 to facilitate knowledge exchange and joint research projects. In the Netherlands we have a programme called Power Minor. This is a unique partnership between TenneT and the Hogeschool van Arnhem en Nijmegen, The Hague University of Applied Sciences and the Hogeschool van Amsterdam. It takes students behind the scenes of electricity production, transmission and distribution, with guest lectures from experts in the energy sector and helps to make the link between engineering theory and its application in a career at TenneT. In 2021, approximately 30 students participated in this program.

We also expand the geographic reach of our search, using our International Trainee Programme, and targeting candidates to train for our skilled field operations roles, such as our High-Voltage Trainee programme.

Build leadership that empowers

Central to the success of TenneT is embedding and broadening our leadership capabilities to enable our leaders to be in the driver seat of our transformation, building new ways of working that are open, curious, courageous, and focused on learning and growing. To this end, we have commenced our Lead Your Team programme. With an emphasis on people and change management, this programme is based on the competencies our leaders and all employees will need to meet the challenges ahead. A mandatory requirement for all leaders of the new TenneT departments, Lead Your Team is designed to be a shared journey, helping to embed our principles of ownership, courage and connection, and collaborating with leaders towards a new culture with new behaviours and ways of working.

In 2021, five additional learning blocks were included in the programme: Health & Vitality, Inclusion & Diversity, Leading in Complex Environments, Feedback and Magic Mirrors. Safety is fully integrated into our leaders training, as all skills learned within the learning blocks of Lead Your Team can be put into practice in the Safety Leadership Programme.

As part of a learning organisation, we run several campaigns that immerse our people in our culture and strategy and build a full understanding of our purpose, promise and principles. To further embed our company strategy within all layers of our organisation, we also organised a strategy event where we engaged employees in each pillar of TenneT's strategy.

Safety at TenneT

TenneT has an important role to play with respect to the energy transition. The ambitions of the governments and society we serve are very high, and TenneT and others in the energy sector need to deliver in an increasing rapid pace. The transition towards a brighter energy future comes with new demands, more complicated services and projects and an accelerating growth of our organisation and involved contractors. In this context, safety needs our energy, now more than ever before. To do this, we are launching a new safety strategy with concrete actions for the upcoming years. The strategy does not only focus on occupational safety, but also on psycho-social, external and electrical safety.

Our safety strategy 2026 consists of four pillars: solid basis, safety culture, contractor management and continuous improvement. For each of these pillars, focus areas with corresponding actions have been defined. These actions include the enhancement of a pro-active safety culture and the implementation of an occupational health and safety management system. Furthermore, attention will be paid to contractor management with focus on creating partnerships and improving safety performance within supply chains. Another pillar aims at increasing the learning potential from positive and negative events in order to ensure continuous improvement.

To push our safety culture, we introduced our Safety Leadership Program, with the motto 'Safety needs our Energy', to enhance a pro-active safety culture within TenneT. We see this as an essential step. It provides a behavioural framework in order to develop a positive and stimulating environment in which all our employees and (sub)contractors can work safely. This is supported with a program to make it an integral part of our leadership, behaviour and processes.

We continue to measure our own safety culture using the Safety Culture Ladder (SCL). This is a NEN standard for assessing safety culture within organisations and indicates the maturity of a company in the field of safety awareness, attitude and behaviour. TenneT has been recertified at level 3 (out of 5) in 2021. We aim for level 4 within the next years. Some pilot projects, for example, Noord-West 380 kV from the Large Projects Netherlands unit, are already taking actions in this regard. We aim to achieve 100% coverage of our order volume which is executed by our contractors executing high and medium safety risk activities. We are proud to state that per year-end 2021 almost 92% of our order volume relates to contractors that were certified or were in the process of getting certified.

Bring out the best in our people in an inclusive and safe environment

Safety

We measure our safety performance by means of the Total Recordable Incident Rate (TRIR) KPI, which represents the number of accidents per million hours worked. All incidents, near misses and unsafe situations are recorded via a central reporting and documentation system. Incidents that require medical treatment, affect the ability to work or result in at least one day of absence, as well as fatal accidents are included in the TRIR. Regarding these types of incidents, we recorded a TRIR (related to our internal and external employees) of 5,79 in 2021, which was unfortunately above our target value of 4.5 and also above the 4.1 recorded in 2020.

The fact that in 2021 three people working on our projects suffered fatal injuries is unacceptable and deeply regrettable.

The first fatal injury occurred on 7 April 2021, where one of our contractors died as a result of an accident during the installation of a reinforcement cage while performing foundation work on the Wahle-Mecklar overhead line project at a site located near the municipality of Woltwiesche, Germany. Another fatality occurred on 13 September 2021, one of our contractors was victim of a fatal accident during the clearing of a construction site for the Emden/ Ost-Conneforde grid expansion project in the municipality of Großefehn, Germany. And finally, on 2 December 2021, one of our contractors was fatally injured in an electrical accident while performing works on a transformer house at the Borken substation in Hesse, Germany.

Following each incident, we responded by strengthening our safety culture for all employees and (sub)contractors and conducted an incident investigation together with the involved companies. Directly after the incidents in September and December, we held a 'Safety Stand Down' at all TenneT locations, including the home-offices. During this planned work stoppage and in open dialogue, managers and employees discussed everyone's safety, working together to assess what could be improved.

We are aware that focus and effort on contractor management is key. Contractors bring in valuable expertise and capacity needed to make the energy transition happen. This requires partnerships based on trust, transparency and mutual respect to achieve efficient operations and a good safety performance. Aligned with our vision 'Safety needs our Energy', we are building a pro-active safety culture. This philosophy is now piloted in the EU-303 framework contract, with the scope of building and maintaining substations onshore NL, with nine of our international partners.

Dealing with the COVID-19 pandemic also posed challenges in 2021. TenneT's prevention team and internal working groups performed risk assessments defined measures, such as hygiene concepts to protect the employees and ensure business continuity. This has successfully prevented the spread of infections among the workforce.

Inclusion & Diversity

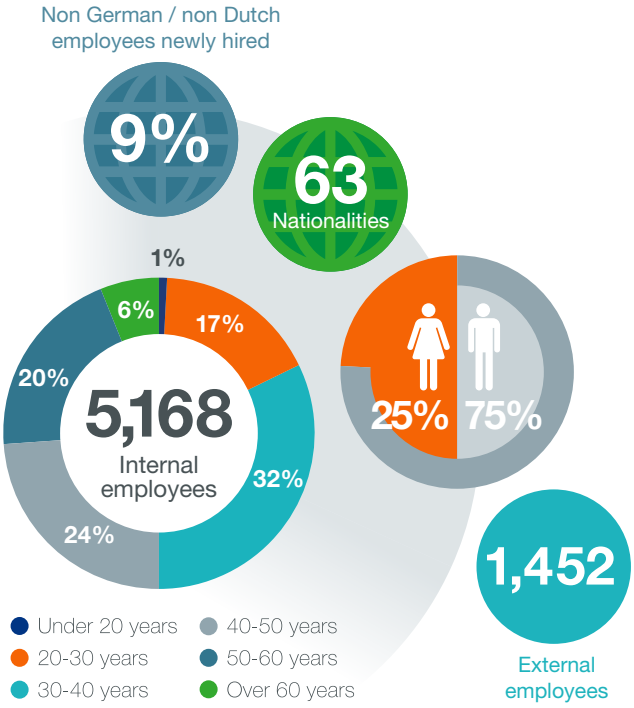
Inclusion and diversity (I&D) is critical for TenneT to attract, retain and develop talent and ensure future success. TenneT aims to reflect the society it serves, by being inclusive as an employer, promoting diversity and making our people feel safe and supported at work. In our sector, where we face the technological and engineering challenges of the energy transition, diverse talents and perspectives help us find the solutions and responsible growth we need.

We believe that an inclusive workplace culture is the prerequisite for diversity. We also strongly believe and experience that inclusion and diversity leads to more innovation and creativity as well as sustainable success. Employees feeling accepted, heard, worthy and safe are emotionally more engaged.

Moreover, we are becoming a more diverse organisation as we extend our recruitment efforts beyond the Netherlands and Germany. We have a target to hire at least 10% non-Dutch and non-German staff. As we need to recruit hundreds of new employees every year, we have to hire from a more diverse pool to find the talent we need.

Recruiting professionals with non-Dutch and non-German passports is challenging as national tax laws inside and outside Europe are not conducive to hire international employees, unless they are willing to settle in the Netherlands or Germany.

Diversity at TenneT



As of this 2021, inclusion and diversity is part of the leadership development program in the Lead Your Team program. This learning block shows that for TenneT inclusive leadership is the standard unleashing the potential of contrasting perspectives and backgrounds due to different gender, ethnicity, personality, education and age mix.

In addition, we also took steps to embed an I&D focus into every step of the employee journey. This goes all the way from how we attract candidates and how we remove unconscious bias from our recruitment process, to how we remove bias from job selection promotion decisions and take learnings from exit interviews. We have requested the Dutch Central Bureau of Statistics to research the cultural diversity of our Dutch workforce via the 'Barometer Cultural Diversity'. In decisions with consequences for rewards and benefits, we strive for equal pay for equal work. This is why in 2021 TenneT has conducted its first investigation into a gender salary gap. The first results of this assessment indicate that a potential gender salary gap might exist in the Netherlands and in Germany. This gender salary gap could have been created over the years by legal and cultural differences in both countries. In 2022, we will continue to monitor this gender salary gap and gain more insight in which areas it is more likely to occur.

Diversity charter

In 2021 our CEO Manon van Beek and COO Tim Meyerjürgens signed a new diversity charter on behalf of TenneT in the Netherlands and in Germany. This is a manifesto in which organisations declare their commitment to more diversity in the workplace. The aim is to overcome differences between employees and to recognise and utilise the talents of all individuals. The diversity charter also gives us a platform where we can exchange ideas and learnings with other companies. Thus, we are committed to continuously working on I&D and also to transparently report on our I&D progress through Key Performance Indicators (KPIs), such as percentage new hires with non-Dutch and non-German nationality, percentage female new hires and percentage women in leadership positions. Our KPIs related to I&D have been updated in 2021 to better align internal and external reporting.

For example, we promote diversity through our partnership with TENT Partnership for Refugees (in Germany), and Refugee Talent Hub and Talent for Transition (in the Netherlands). Talent for Transition launched 'Diverse Energy Talent', which supports diverse energy talents in a traineeship in the energy industry. We employed three trainees from 'Diverse Energy Talent' in 2021. In addition, we employed seven newcomers via Refugee Talent Hub on work experience positions. Of the newcomers starting on such position in 2019, two have found permanent employment at TenneT in 2021.

Additionally, we have made the first steps working together with Stedin and Alliander on I&D. This was kicked-off during events in Arnhem, Bayreuth and Lehrte on Coming Out Day.

What could prevent us from reaching our goals?

The need for projects that build, maintain and replace the grid is expected to intensify. A conflicting situation could arise where (sub)contractors intendedly or unintendedly have to balance safety requirements versus on-time project delivery. Not inhering to TenneT's safety protocols could increase the risk of unfortunate injuries or preventable fatalities. TenneT has zero tolerance for harm to people from exposure to health and safety threats. Hence education is intensified to educate all stakeholders, making no difference between internal and contractors, about the importance and adherence to all safety regulations whether working at a construction site or at the office. At construction sites the safety regulation of TenneT supersedes the one of the (sub) contractor and if an unsafe situation is about to happen, we speak up and stop.

The COVID-19 pandemic is unfortunately a risk factor still to consider. While TenneT always aims to provide a safe work environment, mental health related problems, such as a burnout, are emerging as a potential risk. Working from home for the last two years significantly reduced social interactions or potentially introduced a more complicated work/life balance. TenneT continuous to provide numerous social engagements online, education and offers specialised help for employees experiencing problems. When national regulations allow for it, in conjunction with TenneT's own policy, more physical options will be available for social interactions while still maintaining the safety for all employees.

To realise our projects, a further growth of the organisation is required by hiring and retaining new talent. This could lead towards two potential limiting factors. Firstly, general scarcity in the market and limited availability of specialised skills could lead to a highly competitive market. A significant shift is noticeable in which traditional energy related competences are replaced by new competences that most organisations, unrelated to energy, also require because of instance the increasing digitalisation. Considering the competitive market, applicants do not only consider the primary benefits, but give more weight to internal succession and ambition chances, company image and the implementation of the new way of working (e.g. partially working from home). Secondly, it is a delicate balance of growing responsible. Growing too fast could result into operational inefficiencies, overcapacity of the onboarding process or potential loss of the TenneT culture. TenneT continuously aims to improve its image as an attractive employer, now and in the future, by listening to applicant feedback and to act on changing market conditions. Furthermore, active participation in career events and reaching out to students at universities creates awareness, stronger commitment and helps to attract new competences other organisations are in competition with Lastly, the 'International Trainee Programme' and the 'High Voltage Trainee Programme' are successfully continued.

“Ensuring health and safety for our people is vital.”

Frank Westphal

Managing Director at VINCI Energies Deutschland Industry & Infrastructure GmbH.

VINCI is a world leader in energy and construction and partners with TenneT in planning services, erecting overhead lines, building transformer stations and maintaining North Sea offshore plants.

“We are proud to work closely with TSOs such as TenneT – they are making the Energiewende possible. Our people are at the centre of our everything we do. Ensuring their health and safety is vital. We have worked closely with TenneT on improving safety for many years. In November we became the first overhead line fitter company in Germany to achieve Safety Culture Ladder Level 4.

At our Omexom Institute in Korbußen, all our overhead line fitters and subcontractors’ complete extensive annual safety trainings. These are developed in partnership with the Chamber of Industry and Commerce. TenneT’s junior project managers and construction inspectors also have regular trainings at our institute. This is part of our commitment to ensure everyone goes home safely every day. We are guided by VINCI Energies’ ‘SAFETY Excellence’ initiative, launched in 2017. This combined with our progressive safety culture, means we openly share lessons learned and encourage everyone to lead by example. Occupational accidents and illnesses are not a twist of fate, they are preventable.

We are committed to ensure the health and safety of everyone at VINCI Energies and our partners. This is a core value for us.”

Create value to transition to a climate neutral economy

As a European TSO, we contribute to a greener energy future by driving the energy transition and ensuring our high-voltage grids are future proof. This allows us to operate an electricity system relying on renewable energy sources which is the core of our purpose: to connect everyone to a brighter energy future.

We want to achieve this by delivering a grid that contributes to a climate neutral economy. We have chosen to report on our progress in this area by disclosing the equivalent number of households that in theory would have been able to receive 100% renewable electricity. This is one of our key metrics to measure our societal impact. For more information on our impact in this area, please see the box-out in this chapter. Next to our ambition to drive the transition towards a greener future, we also aim to lead as a green and responsible grid operator in how we conduct our own business. This is an integral part of our strategy and includes climate, circularity, and nature friendly ambitions, which we aim to achieve by 2025.

For us, a greener energy future does not mean just building more assets on land and sea. The sharp increase in demand for renewable electricity, the required pace and conditions of a grid that facilitates these developments, challenge us to consider how to realise growth in a responsible way. On the one hand, we need to deliver a decarbonised energy system to drive the energy transition, with the assets that enable a clean energy future. On the other hand, we need to build, maintain and operate our assets in a responsible way, taking into account our impact on nature, climate and social aspects. We aim to make responsible choices to ensure that we drive the energy transition as well as lead as a green grid operator.

Our performance in 2021

Climate	Performance	Target	Status	Trend
	CO_2 footprint of our grid losses, substations, offices and mobility (net emission in tonnes of CO_2)	Climate neutral in 2025[1]		We have made steps to become more climate-neutral in 2021, by increasing our percentage greened of our carbon footprint from 62.0% to 69.0% compared to last year.

Circularity	Performance	Target	Status	Trend
	• Reduction of virgin copper use • Reduction of non-recyclable waste	25% reduction in 2025[2,3]		This year, we have made progress on gaining more insights on the use of virgin copper and the percentage of non-recyclable waste.

Nature	Performance	Target	Status	Trend
	• (Net) impact on nature • Environmental incidents	Zero impact on nature in 2025		We consider every incident to be one too many. However, we are pleased with the positive nature measures and a reduction of almost 66% of oil leakages.

[1] To be fully climate neutral (SF_6 emissions, grid losses, energy use offices, stations and mobility of our employees) in 2025.
[2] In 2025 25% less impact of virgin copper use.
[3] In 2025 25% less impact of non-recyclable waste.

Societal impact we enable by driving the energy transition

The largest impact that TenneT has in terms of climate action is to enable the switch from a fossil fuel-driven economy to a climate neutral economy by connecting renewable energy sources and transmitting the produced electricity. We define our key impact metric in this area as the equivalent number of households that in theory would have been able to receive 100% green electricity. We have chosen this metric since it is a metric that is understood by many. It is important to realise the majority of the electricity consumption comes from industry.

We estimate that by the end of 2021 we have enabled the theoretical equivalent of 9.2 million households to receive green electricity. The total volume includes renewable electricity generated for industrial sectors and export.

These climate figures are not just achieved by our own operations, but also by our partners in the value chain, such as electricity generation companies and distribution system operators (DSOs). By working together, we avoided 10.7 million tons of CO_2 equivalents in 2021. More information on these impact metrics (such as the methodology) is included in our additional CSR data document.

Climate

As a responsible grid operator, we aim to reduce our own carbon footprint. This is why we have clear targets for 2025 and next to this, we have developed additional targets for 2030. Our reported carbon footprint mainly relates to emissions from our own operations, where grid losses are the largest source of emissions. We also report on emissions that are outside our own operations, such as elsewhere in our value chain. In 2021, 69.03% of our carbon footprint has been 'greened', which exhibits our progress in achieving our goal to be carbon neutral by 2025. In addition to this, we took a major step forward in our climate ambitions by formulating so-called 'Science-Based Targets' for 2030. These targets are in alignment with- and an extension of our current 2025 climate targets.

The Science-Based Targets initiative (SBTi) helps companies to align their CO_2 emission reduction goals with the Paris Agreement. In 2021, we committed ourselves to reducing direct emissions (scope 1 and 2) by 95% by 2030, from base year 2019. We also committed ourselves to reducing our indirect emissions (scope 3) from purchased goods and services and our capital goods by 30%. This means we are taking responsibility for scope 3 carbon emissions that arise in our supply chain, as a result of what we purchase and contract, starting from 2021. This relies on supplier engagement and a collective outlook on how we can collaborate with our value chain to reduce our collective emissions. We have identified three particular 'hotspots' for attention: purchased capital goods (such as cables and transformers); the services we procure to do our own work (including construction and civil works) and the energy used in our value chain (including fuel used by contractors and raw-material suppliers).

In 2021 we have already started to reduce our scope 3 emissions with other partners in the supply chain. As part of a Netbeheer Nederland partnership and the Groene Netten coalition, we set up an internal carbon price (ICP) mechanism along with other infrastructure parties. We started at 50 euros/tonne for the year 2021 and analysed the impact of our investment decisions and procurement. The impact analysis indicated that taking penalties into account related to SF_6 are a potential area where there ICP instrument could be effective.

Grid losses

As approximately 95% of TenneT's CO_2 footprint is due to grid losses, this is a priority area for our CO_2 reduction efforts. Grid losses inevitably occur during power transmission and are equal to the difference between electricity fed into the grid and the withdrawal. As the length of our high-voltage connections increases, the amount of grid losses grows. There is a trade-off here, as we need to develop and build more and longer high-voltage connections, such as Westküstenleitung or Zuid-West 380 kV, which function as green electricity 'highways' that support the energy transition, but this could have an adverse impact on the amount of grid losses. This effect is based on several variables, such as the technology at hand.

Also, while grid losses might increase, the impact of these grid losses on our gross carbon footprint could be limited due to a higher amount of renewable energy sources in the grid mix. In 2021, our grid losses increased to 5,604 GWh in 2021, compared to 5,530 GWh in 2020.

To reduce our gross carbon footprint, we 'green' our electricity consumption with the use of guarantees of origin. In 2021, we compensated for 100% of the grid losses in the Netherlands. In Germany, to continue with our efforts to green our grid losses, we have extended a pilot project from 2020 into a benchmark: each year certificates of origin are to be bought in the amount corresponding to at least 55% of the prognosed German grid losses. In 2021, we purchased certificates of origin equal to 55% of our German grid losses. The purchase and cancellation of those certificates is done in the Netherlands, since its currently not legally possible to do both in Germany. By doing this we green our grid losses on an overall company level. By having a dialogue with our regulator in Germany, we aim to reduce our carbon footprint related to our grid losses in Germany directly in the future.

Mobility

Our approach to reduce our carbon footprint is to decrease emissions where possible, to 'green' our emissions where this is not possible and to compensate for our carbon footprint as the final option. To reduce our carbon footprint we have adopted a new action plan to lower the environmental impact of our mobility, encouraging our employees to travel less and if they do, to use green transportation. Due to the COVID-19 pandemic our employees have travelled less and many have worked from home, which resulted in mobility emission savings. For employees working on our projects in the field, we are making our vehicle fleet more sustainable with electric vehicles and plug-in hybrids. We have introduced a new mobility policy to incentivise our employees to lease electric cars in both the Netherlands and Germany, encouraging them to reduce their emissions. In Germany, we are developing a bike-lease scheme and, if successful, we will add it to the existing bike policy in the Netherlands. Promoting sustainable travel is part of a wider commitment through the "Anders Reizen" initiative to halve the CO_2 emissions of all TenneT's business travel by 2030.

Offices and substations

The use of our offices and substations has an impact on our carbon footprint. To mitigate this carbon impact, we have purchased green gas for our German offices as of January 2021. With this, we have been able to green the gas use of our offices in both the Netherlands and Germany, next to the electricity use which we already greened. For the replacement of our substations we strive to decrease the carbon footprint by reducing climate impact in design, for example by using solar panels, insulation measures and LED lighting where possible. We have installed solar panels on our land stations at Hollandse Kust Noord and will use the generated electricity for own consumption.

SF_6 gas

Sulphur hexafluoride (SF_6) is a gas used by TSOs in high-voltage (sub)stations and distribution systems. This gas is used as a highly effective insulator and extinguisher in switching installations, allowing these installations to be more compact which is often necessary in built-up environments. SF_6 is also a greenhouse gas, over 23,500 times more polluting than CO_2. Although SF_6 accounts for approximately 1% of our climate footprint, any leakage is damaging to the environment, which is why we try hard to minimise and avoid leakages across our grids. We have also accelerated our efforts to explore alternative solutions in some of our projects. For example, substation Maasbracht will include alternative SF_6 solutions for some assets that are being developed in close consultation with the market.

Carbon footprint

Net carbon footprint
716,063
tonnes CO_2e

Gross carbon footprint
2,312,139
tonnes CO_2e

69.0%
Percentage greened of our carbon footprint

Scope 1
1.27%
Direct
Own operations

- **1.02%** SF_6 leakage
- **0.18%** Lease vehicles
- **0.08%** Gas consumption

Scope 2
98.34%
Indirect
Upstream

- **94.35%** Grid losses
- **3.80%** Electricity use stations
- **0.19%** Electricity use offices

Scope 3
0.38%
Indirect

- **0.38%** Travel and transport

As such, we are also working with some of our suppliers to develop SF_6 free Hybrid-Gas Insulated Switchgear (H-GIS) solutions for our extra high voltage connections. We stimulate this research as the market needs to be stimulated to find an alternative for SF_6.

This year, we have announced additional targets for reducing SF_6, starting from the year 2022. These include the stipulation that new assets will be two-thirds SF_6-free by 2030, while we maintain our leakage rate for all installed assets at less than- or equal to 0.28% per annum. We are also developing a roadmap with intermediate targets for 2030 at different voltage levels. In 2021, we were able to meet our target (0.28%) this year, with a leakage rate of 0.22%, which was lower than the SF_6 leakage rate in 2020 (0.24%).

Linking finance to our climate performance

To make progress against our climate ambitions even more visible, we have linked our financing costs to our climate performance. Secure access to finance is essential to ensure that we maintain the pace of our investment portfolio. An example of this is our EUR 3.3 billion sustainable Revolving Credit Facility (RCF), which is linked to sustainability performance indicators and targets. In practice this means that, depending on the realisation of our climate-related KPIs, a discount is applied to the interest margin on the RCF. This is related to the green percentage of energy use of our stations (100% in 2021 vs 100% in 2020) and our offices (100% in 2021 vs 81% in 2020). It is also linked to SF_6 (refer to SF_6 section above) and to the net carbon impact of mobility per employee against the total number of employees (1.2 in 2021 compared to 2.1 in 2020). We compensated for a part of our leaked SF_6 to reduce our CO_2 footprint through carbon offset certificates. We chose for a project that helps to phase-out fossil fuels in Colombia by opting for energy created from renewable biomass.

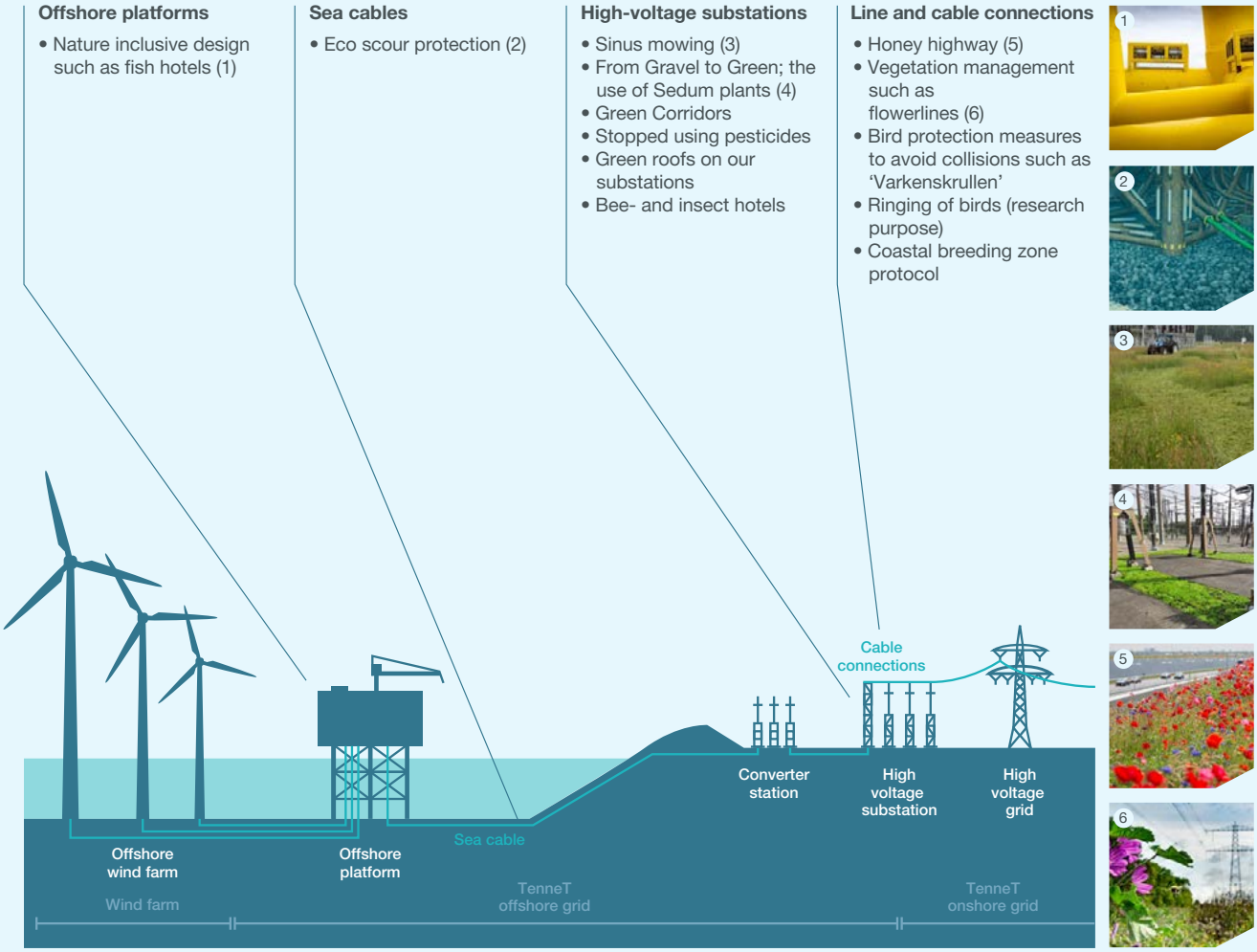
Nature

As we build, maintain, and operate our assets in the natural landscape, we have an unavoidable impact on nature. However, we put in significant effort to reduce our negative impacts and create positive impacts as well, aiming to reduce our net impact to zero. To aid this process, we developed a new code of conduct in 2021 which sets out rules and guidelines on how our maintenance and construction works must be carried out in accordance with the Nature Protection laws, to ensure species of flora and fauna are protected. We track the number of environmental incidents and the litres of oil leaked from our cables. We monitor and track our environmental incidents, which includes incidents except for SF_6 related incidents as we gain more meaningful insights from that perspective by the total volume of leaked SF_6. Unfortunately, in 2021 there were instances where we had a negative impact on the natural environment in areas where our assets are located. During the year, we recorded 81 environmental incidents and 1,798 of litres of oil that leaked from our cable systems. An example of an environmental incident is related to the fire that occurred near our Louwsmeer station in the Netherlands, where also oil leaked and where we needed to remediate the soil. This is why we developed a metric related to the repair time of these cable systems, which we aim to start reporting on from 2022 onwards. We regret that these incidents occur. We strive to follow up on these incidents appropriately and aim to learn from the root causes to avoid them happening again. This will provide us with more information that can help us to take appropriate actions.

We are developing a roadmap for nature to support us in identifying opportunities where positive nature measures can be implemented. The roadmap makes it easier for us to identify high impact positive measures and thereby scale up our positive impacts to reach our nature ambition.

Furthermore, in our ambition to mitigate our negative impacts and where possible also create positive impacts, we request in our investment plans to include biodiversity a ‘Commitment to Nature’ paragraph. This includes a description of the anticipated impact on nature, mitigating actions to minimise impact and measures to create a positive impact on nature. We are pleased that in 2021 more investment documents for our projects contained a paragraph on their ‘Commitment to Nature’. In 2021, 87.5% of our G2 documents included a ‘Commitment to Nature’ paragraph.

Nature measures



Highlights on our high voltage stations

In 2021 we stopped using weed-killing pesticides (such as RoundUp) on our high voltage stations and replaced them with new and experimental solutions, such as lawn tiles that allow vegetation to grow through them or succulents (for example in our Hengelo-Oele station). The use of succulents inhibits the growth of weeds, but also lowers the site temperature and stimulates biodiversity.

Another biodiversity-boosting measure is the use of sinus mowing for the grasslands at our sites. This method of phased mowing was developed with the Dutch Butterfly Conservation and aims to increase the biodiversity of insects and pollinators. With sinus mowing the vegetation is mowed in a pattern that follows the sinus wave leaving a part of the vegetation (ca. 40%) intact. We are now using this method at 36 stations covering a total surface space of 43 hectares.

Highlights on our cable and line connections

Birds are an important concern for biodiversity around our assets which is why we have several bird-proofing measures along the entire length of new and upgrades lines. As our land stations near the coast can be a fenced and predator-free safe haven for birds, we have developed a coastal breeding birds' protocol. We are also assisting Staatsbosbeheer and SOVON Dutch Centre for Field Ornithology with their research on rare species that breed in our high-voltage pylons. Furthermore, Specialists from SOVON identified the most risky high voltage connections for bird collisions which helps us gain insight.

We aim to boost habitat development around our cable and line connections. For example, we are adapting some cable corridors to accommodate low-growing heather in Boxmeer which fosters the habitat of a rare butterfly species called Ilex Hairstreak. Along the A7 motorway between Bolsward

and Heerenveen, where TenneT is laying a cable connection of approximately 30 km long, we have sowed flowers on several strips to create a 'honey highway'. In Germany, along the Stade-Landesbergen trajectory ecological vegetation management helps to create new habitats and foster biodiversity. In the planning phase of the new line, we introduced this concept to the landowners of forests affected and persuaded several of them to participate.

In addition, and in close cooperation with local governments and private stakeholders, Stade-Landesbergen created a landscape plan for the new Mehringen substation. This creates a green corridor around the station that will also be enriched with other nature measures. Consequently, the substation will be more integrated in the landscape and create a green zone between villages and the station.

Highlights offshore

Offshore, we aim for nature inclusive design when constructing our assets. For example, we have installed fish hotels at the foundation of Hollandse Kust Noord. We have also implemented Eco scour protection as a pilot in our Hollandse Kust Zuid project. We have replaced the layer that is usually made of granite with calcareous rocks, which provides a safe breeding space for fish.

Circularity

We need copper, steel, aluminium, and many other raw materials to expand our grid. Although we cannot do without these materials, we aim to reduce our impact through circularity, re-using raw materials and components as much as possible, and minimising waste. We focus on copper, as it is becoming increasingly scarce, and we have a high dependency on it in our operations.

We have raised our circularity requirements in some of our tenders. For example, our suppliers must provide evidence of which percentage of their materials are recycled. Circularity requirements like these will also be part of our sustainable tendering toolkit.

In 2021, we continued to work on gaining more insights into the use of virgin copper and our non-recyclable waste. Last year, we learned more about the main categories of assets where we make use of virgin copper (such as cables and transformer stations) and on the different data sources to collect data on copper purchases. This helped us to assess a range related to the percentage of purchased virgin copper in 2020. This year we have been able to refine this assessment and we were able to gain more insights by collecting more information, such as raw material passports from suppliers for more categories. Our assessment now includes insights of transformers and cables.

Our analysis includes assumptions and extrapolations, and is partially based on data points from our base year assessment. We estimate that in 2020 around 37.5% of our purchased copper was recycled and in 2021 this was slightly less, around 34%. We believe that based on the results of both years' assessment, that, when the full analysis is completed, it will indicate that the percentage of recycled copper will range from 25-40% of our total copper purchases. In the next years we will aim to further improve our analysis and use these insights to discuss with our suppliers how we can increase the use of recycled copper in our assets. An important step was taken in 2021, when the requirement to deliver recycled copper in our assets was included in one of our 2 GW tenders.

For waste we have performed a similar analysis, where we were able to gain insights into more parts of our waste in more parts of our organisation. This year's assessment includes insights for our offices, onshore- and offshore operations, and onshore projects. Our next step is to include data of our offshore projects and to get a complete picture of our onshore projects. This year's analysis includes actual waste reports and, for some of our onshore projects, it also includes assumptions and extrapolations based on proxy data.The results of this year's assessment show that in both years our non-recyclable waste is around 11%. We believe that, when we have completed the full analysis, this aligns with our understanding that 10-25% of our waste is non-recyclable.

These steps help us in our journey to embed circularity in our organisation to a greater extent. To meet our goals to reduce 25% of our non-recyclable waste and virgin-copper purchases by 2025 will be challenging, however we are determined to meet our goal.

An example of how we progressed with our efforts to reduce non-recyclable waste is our Noord-West 380 KV project. Based on meetings with contractors to discuss the causes of non-recyclable waste, an important source was identified – the heavy-duty fabric used to create temporary roads at construction sites. After usage, these fabrics can be difficult to reuse or recycle. However, with BAM and the University of Delft, we investigated new applications for this waste stream, which can help further reduce our non-recyclable waste from this type of project.

Furthermore, we aim to boost the recycling of key materials so they can be re-used for our assets, in particular copper and oil. For example, we are exploring circular solutions with our transformers, allowing us to re-use certain parts of transformers when they are decommissioned, including the re-use of transformer oil.

What could prevent us from reaching our goals?

TenneT delicately balances projects resulting into achievements of the energy transition while still being able to fulfil the core tasks of maintaining the grid. This balance becomes even more complex if one considers important influences like protecting the natural environment or reducing the carbon footprint. European and national ambition is intensifying not only in the number of projects required but likely in the time to deliver as well. This infers that due to the increasing number of projects, combined with our core task of maintaining the grid, project delay could become a possibility.

To actively participate as TenneT in the energy transition, investing in upcoming technological developments and innovations is an important prerequisite to be able to deliver on the energy transition targets. These investments could vary from physical changes, for instance applying a substitute for the SF_6 gas, to process and data driven applications like artificial intelligence to improve grid inefficiencies. These technologies, physical or non-physical, are costly and complex to develop, significant amount of time is required to test safety and reliability requirements and scarcity of the competences and equipment limits the development. In this context, it is important to be aware that suppliers are scarce and in high demand, presenting an additional challenge. As a TSO it is not possible to develop all new technology required in-house and therefore a relationship with innovation partners is crucial. TenneT is actively participating and working together with stable partners on new innovations benefitting the grid as well as the energy transition. Since the image as leading TSO with the green ambition and financial stability, the risk of a fierce competition with competitors concerning partner resources is not considered likely to happen.

When considering risks to the ambition as a green and responsible grid operator, one should consider the global economic and political context. These include a potential economic slowdown, regulatory changes, geopolitical conflicts, financial market turmoil and rapid advances in technology. While these would affect the costs on macro-economic level, on micro-economic level it is as important to consider to what extend society is willing to pay the cost of the energy transition. Ultimately, this could impact the regulatory framework, financing options and the availability and prices of products and services for both the consumers as organisations.

"Close cooperation between society, politics and business is essential for success."

Gunnar Groebler

CEO of the Salzgitter AG

As one of Europe's largest steel producers, the Salzgitter AG has a roadmap to achieve low-CO_2 steel-making, but its decarbonisation ambitions rely on collaboration across industry and politics: TenneT has an important role in facilitating the process.

"Infrastructure providers such as TenneT are taking on a great responsibility, by seeking the balance between demand of society versus economic and technical necessities.

The energy transition is a major task for our entire society. The steel industry has the capability and also wants to be part of the solution. Hydrogen-based technologies for CO_2 – neutral steel production are already fully developed today. With "SALCOS – Salzgitter Low CO_2-Steelmaking", we have a path towards a virtually CO_2-free steel production. However, we still need appropriate economic and political conditions to develop a demand for "green steel". Additionally, we need capacity and infrastructure to enable the generation and distribution of green hydrogen. We will only reach the objectives of the energy transition, if all players from the economic, political, business, and civil society work closely together and find solutions for their occasionally conflicting interests. I am impressed how this interplay between society, politics and business has developed so far. The excellent cooperation of TenneT and Salzgitter AG is exemplary for joint projects in this context."

Secure sustainable financial performance and investor ratings

The energy transition is accelerating and the electricity infrastructure at its heart needs to be prepared. The European Union raised its climate ambitions and presented a new legislative package of proposed measures – "Fit for 55" – aimed at reducing greenhouse gas emissions by 55% in 2030. This raises the bar from the 49% reduction previously announced. Among the Member States, Germany raised its target to even 65% from 55% and plans and ambitions in the Netherlands now far exceed the earlier ambitions of the Dutch Climate Agreement. In the context of these ambitious targets, it is up to us to make the right investments for sustainable long-term growth.

In order to reach these climate goals, our electricity infrastructure is undergoing a fundamental redesign, requiring substantial investment. To safeguard our financial health, we need to maintain a solid balance between equity and debt.

To maintain broad and sustainable access to – green – financing, we will continue our efforts to report transparently on our sustainable performance. In 2021, we have determined our eligibility in line with the EU Taxonomy. For more information on this, please read the box out on this topic on the next page.

Our performance in 2021

	Performance	Target	Status	Trend
Healthy financial operations Adjusted underlying EBIT group[1] (EUR milion)	**801** 801 (2021), 796 (2020), 753 (2019)	778		Adjusted underlying EBIT group is in line with the target and 2020.
Satisfied capital providers ROIC group (%)	**4.2%** 4.2 (2021), 5.1 (2020), 5.1 (2019)	4.0%		The ROIC group is slightly above target due to higher EBIT compared to target.
Safeguarded capital structure[2] Adjusted FFO/ Net debt group	**10.5%** 10.5 (2021), 11.3 (2020), 12.9 (2019)	8.5%		FFO to net debt has developed according to expectation. The FFO remained stable, while the net debt position increased.

[1] Reference is made to next page.
[2] Reference is made to Note 17 of the financial statements.

Eligibility of TenneT's activities with the EU Taxonomy

Our primary tasks are to provide electricity transmission services, system services and facilitating the energy market. Those economic activities are linked to NACE code D35.12 and are concluded to substantially contribute to climate change mitigation, since TenneT is transmitting and distributing renewable energy in line with Directive (EU) 2018/2001, including necessary reinforcement or extension of the grid. In line with the technical screening criterium 4.9 “Transmission and distribution of electricity” on climate mitigation, we have calculated the percentages of investments, revenues and operating expenditures that are eligible.

Most of our activities (the regulated business of the TSOs in the Netherlands and Germany) are eligible, since our grid is part of the interconnected European system. We have excluded our non-regulated activities and the infrastructure which is dedicated to a direct connection between our substation or network and a power production plant that is more greenhouse gas intensive than 100 gCO_2e/kWh measured on a life cycle basis.

Total group eligible turnover: 97%
Total group eligible CAPEX: 100%
Total group eligible OPEX: 99%

Underlying EBIT decreased from EUR 910 million in 2020 to EUR 834 million in 2021, which can be explained by higher revenues, higher grid expenses, higher personnel expenses and higher depreciation due to increasing assets. In 2021 we faced higher grid expenses, largely caused by increased electricity prices at the end of the year. Since a huge part of those higher grid expenses will be settled in future tariffs, this also results in an increase in underlying revenue. Under IFRS future settlements are not included in revenues and therefore the IFRS revenues and IFRS EBIT are significantly lower in 2021.

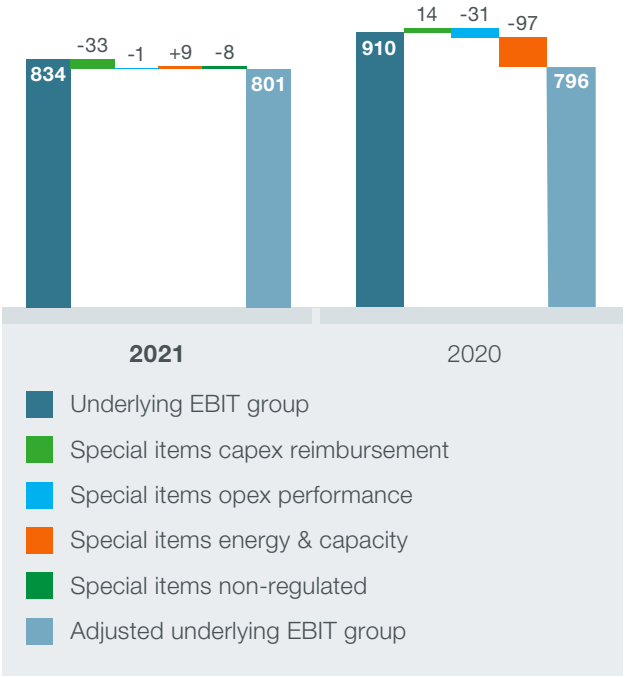
For 2022, we expect an EBIT which is in line with the 2021 EBIT. It is expected that the investments will further grow to EUR 4.2 billion, which requires additional financing. The resulting increase in debt is expected to result in a decrease of the ROIC and a decrease in the FFO / Net debt in 2022.

Deliver a return on capital in line with the expectations of our capital providers

Special items Capex reimbursement are mainly related to reimbursement adjustments of prior years. Special items other mainly relate to additional provisions of doubtful debtors. Special items non-regulated related to the fair value adjustments of our minority interests in investment funds.

Underlying EBIT group*

EUR million



*Refer to note 2 of the financial statements.

Raising the necessary external financing

The infrastructure we need for a secure and reliable electricity grid – today and in the future – requires constant vigilance, efficient operations, and sustainable investments. Our task is clear and critical: to ensure a continuous availability of electricity for almost 43 million end-users connected to our grids across the Netherlands and Germany, 24 hours a day, 365 days a year. Broad and sustainable access to financing is a pre-requisite for implementing our strategy and realising our investment portfolio that meets political and societal sustainability requirements. We need to ensure that this is financed with the right mix of equity and debt, always balancing affordability, the demand for security of supply and sustainability.

We made some strides in 2021:

The budget for the Netherlands, presented on the third Tuesday of September ("Prinsjesdag"), details the equity contributions the Dutch State intends to make to TenneT for investments in the Dutch electricity grid: EUR 4.25 billion over the 2023-2030 period. The equity contributions are conditional and will only be made available when TenneT needs them to maintain its credit ratings.

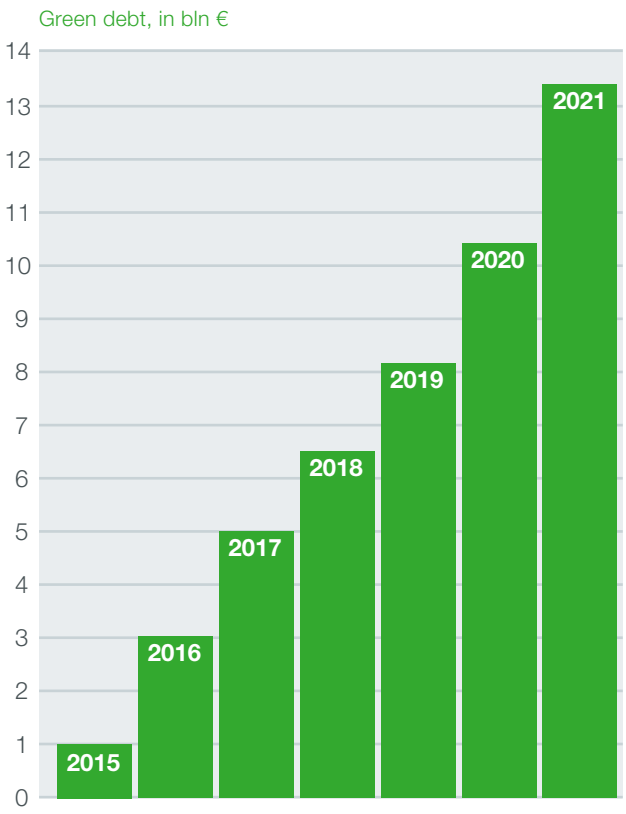
Regarding our remaining equity requirements for our German activities, we are exploring several alternatives, including the participation of reputable Western private investors. TenneT is confident it will be able to raise the necessary funds in a timely manner and does not expect these equity requirements to arise before 2024.

In May, TenneT successfully issued its first and largest ever green triple tranche Euro bond, raising EUR 1.8 billion. Investors from 20 European countries placed orders worth EUR 4.0 billion, underlining TenneT's international appeal and strong financial profile. In November, TenneT issued an additional green Eurobond, raising another EUR 1.0 billion. Proceeds from these bonds will be used to invest in eligible green power transmission projects in the Netherlands and Germany.

The focus is on connecting large-scale offshore wind farms to the onshore electricity grid and enhancing the onshore transmission capacity for renewable energy.

In September, we signed a new loan agreement of EUR 250 million with the EIB to finance a project involving the construction of a 41 km electricity transmission≈corridor from Eemshaven to Vierverlaten, in the north of the Netherlands.

Green Bonds



Together with the other three German TSOs, TenneT is responsible for the management of Erneuerbare Energien Gesetz (EEG) in Germany. In 2020, TenneT had to raise additional financing to cover significant unforeseen variations in renewable energy volumes and wholesale electricity prices. In 2021, TenneT received EUR 3.5 billion from the German government under the Climate Programme 2030 ("Klimaschutzprogramm 2030") to finance payments made to renewable energy producers as part of a nation-wide support to reduce the so-called renewable energies levy ("EEG levy").

Our financial strategy is focused on maintaining our credit rating at a minimum of A-/A3 and generating returns on investment in accordance with our risk profile. In 2021, our A- credit rating from Standard & Poor's and our A3 rating from Moody's were reaffirmed again – underpinning our ability to secure financing for the future. Also, our Environmental, Social and Governance (ESG) evaluations were reaffirmed by external rating agencies. For example, Standard & Poor's again classified us as "strong" with a score of 84/100 and Sustainalytics indicated that TenneT is at low risk of experiencing material financial impacts from ESG factors.

Our societal financial impact on households in our serving area

As we are serving society with trusted resources, safeguarding our financial health is of paramount importance. Our revenue consists of the regulated income we receive for costs we incur to fulfil our task of securing supply today and tomorrow. Designing, building, maintaining, and operating a future-proof grid comes at a cost which – among other customers - households contribute to via the payment of grid fees. Our financial health, a solid financial performance as well as a solid investor rating are directly impacted by our cost reimbursements set by the regulator. We have calculated our societal financial impact on households in our serving area.

We have assessed our impact on the electricity invoice (retail of electricity; taxes, charges and levies; grid fees) of an average household in the Netherlands and in Germany. In Germany, our share is around 5.6%, in the Netherlands, our share is approximately 9.0%. The main reason why this differs relates to a tax discount households receive in the Netherlands, which have a lowering effect on the total electricity invoice. As both the electricity retail price and our part of the grid fees are approximately the same in both countries, the result is that TenneT's grid fees therefore represent a higher share of the electricity invoice in the Netherlands compared to the German electricity invoice of an average household. We expect that our share both in the Netherlands and in Germany might increase over the coming years, as our costs for driving the energy transition may rise, amid increasingly ambitious German, Dutch and European climate goals.

Contribute to achieve a reliable and predictable regulatory framework which supports our financial strategy

The nature of our business and the scale of the energy challenge require us to think decades ahead to determine how and where to invest. The technical and regulatory lifetime of our investments can range from 20 to 50 years. Our investments need to be supported by a regulatory framework with a long-term focus and a high degree of reliability and predictability. While regulatory periods are typically only established for a period of three to five years, the underlying methodologies in principle provide a stable long-term regulatory framework in both the Netherlands and Germany. This relates amongst others to the recognition of investments in the Regulated Asset Base (RAB), methods used to determine the cost of capital, and the fact that TSOs for instance are not exposed to volume risk.

In 2021, the Autoriteit Consument & Markt (Authority for Consumers and Markets (ACM)), set the Dutch tariff method for TenneT for the new regulatory period 2022-2026. Going forward, the ACM changed the methodology for establishing the risk-free rate of the Weighted Average Cost of Capital (WACC). Although the ACM decided to maintain the current real WACC system, due to financing issues grid operators face in relation to the energy transition, it lowered its inflation estimate from 1.8% to 0.9%. This means a 0.9% lower asset inflation and an additional adjusted real WACC of 0.9%-points. The adjusted real WACC for new assets will be 1.9% over 2022-2026.

The ACM increased the beta factor which is a measure for the systematic risk of assets of TenneT's Dutch offshore investments to reflect the risk of the size of the investment portfolio in relation to the existing regulated asset base. This increases the WACC for TenneT TSO NL's offshore investments by 0.5%, resulting in the adjusted real WACC for new assets offshore of 2.4% in the years 2022-2026.

The ACM conducted a European Benchmark study (TCB18) resulting in an 89.1% efficiency score. The ACM also decided to honour the grace period of 15 years that started in 2010. This means TenneT's efficiency score will decline from 97.28% in 2022 to 89.1% in 2025, amounting to an average efficiency percentage of 92.37%. TenneT appealed, among others, the ACM's efficiency decision in 2021, due to several flaws contained in the benchmark according to our assessment.

In Germany, the Ministry of Economic Affairs and Energy changed the current investment measure application (IMA) regime into the so-called 'capital cost pass-through system' ("Kapitalkostenabgleich;" KKA). This is a pass-through of rising investment costs while reducing the revenues by the value of declining net book values. The changes will become effective as of 2024. Essentially, revenues for investments are to be aligned with the annual capital costs ("pass through"). This will eliminate time lags, clawbacks, and plateau effects of the previous system. The revised Incentive Regulation Ordinance (ARegV) provides for the change of method. Transitional regulations are intended to prevent disadvantages.

The 2021 amendment of the ARegV also introduced incentives on redispatch. The incentive mechanism is designed as a limited bonus/malus scheme. From 2022 onwards, a reference value is set for all redispatch costs of all four German TSOs. If the actual costs are higher than the reference value, then TSOs must bear a 6% share of the difference between those costs and the reference value (malus) up to EUR 30 million (cap) per annum.

Vice versa, if actual costs are below the reference value, the TSOs are allowed to keep a 6% share of the difference as a bonus. For the years 2022 and 2023, the scheme is applied with an uncapped bonus. From 2024, the mechanism will be applied symmetrically with equal bonus and malus.

On 20 October 2021, the German regulator Bundesnetzagentur (BNetzA) published the final determination of imputed rate of Return on Equity (RoE, < 40%) for the fourth regulatory period (2024 – 2028). The RoE (< 40%) in the final determination is 5.07% before tax (4.13% after tax).

TenneT TSO B.V. appeals against the efficiency score applied by the ACM, the change of the remuneration method for execution costs of System Operations from a rolling-forward system to a fixed budget and the disapproved costs of the Borssele projects. In Germany TenneT TSO GmbH and the German offshore entities appealed against the determination of the return on equity.

What could prevent us from realising our goals?

TenneT's revenues depend mainly on the regulatory frameworks in the Netherlands and Germany. Adverse changes in any of the regulatory systems might impact the financial performance. The regulatory reimbursement schedules (revenue cap) in both the Netherlands and Germany aim to allow TenneT to recover the efficiently incurred costs including a market-based return. The regulatory methods underlying the revenue cap are typically established for a period of three to five years.

The main risks for TenneT are that market returns continuously decrease because of the low interest environment on the capital markets. Furthermore, it is increasingly difficult to accurately forecast efficiently incurred expenses for future periods as past expense patterns no longer reflect the future, especially with TenneT's significant growth. These developments could lead to substantial deviations between the allowed revenue in a given year of the regulatory period and the actual costs needed to run the business. Although this risk is partially mitigated by the fact that TenneT receives additional income on top of the revenue cap for specific investments it remains an area of debate between TenneT, regulators and market parties.

To meet the average annual investment requirement of EUR 6 billion, TenneT is required to finance itself by attracting funds on the capital market. By issuing bonds, thus increasing the debt position, the ratio of funds from operations to total debt decreases. Hence the financial risk increases and credit rating agencies are obligated to downgrade the credit rating if the leverage ratio is below a defined rating threshold. To maintain the current A- (S&P) / A3 (Moody's) senior unsecured credit rating, additional capital is required for the coming years.
The economic outlook could become an additional influence for the coming years. The capital market highly appreciates green investments and combined with the required projects necessary to meet the energy transition targets, an expected growth in availability of green investment opportunities is expected. Resulting into possible fiercer competition. To date TenneT has always been able to secure the required financial capital by issuing green bonds without any notable problems. Investment institutions, like investment banks, continue to appreciate investments in green businesses as highly favourable. Combined with the attractiveness of TenneT's financial stability, prospect of future grid projects both onshore and offshore, the stable credit rating and the green ambition there is no significant risk of restrictions to the capital market.

A relatively small risk could occur if shareholder values by the current shareholder are misaligned with a potential new shareholder. The Dutch State could infer additional requirements, either as shareholder or via legislation and regulation, to protect their interests in the vital part of the Dutch grid. Contrary, a new shareholder could argue to deprioritise planned projects or reorganise part of the organisation in Germany or the Netherlands. To date no significant risk is expected to materialise. TenneT is in close contact with all relevant stakeholders including the Dutch State to align the ambition, interest and requirements.

Evert den Boer

CEO of the Dutch regional grid operator, Enexis Group

The group works closely with TenneT on smart solutions to make maximum use of existing and new networks.

"I want all parties in our sector to come together with a shared ambition, agreed tasks and priorities. This is how we will shape the energy system of the future.

The energy transition has now really gained momentum and we see a need for extra capacity on the electricity grid in almost all sectors. This means that both TenneT and the regional grid operator will have to do everything they can in the coming years to expand and, where necessary, upgrade the grids. At the same time, we have to do this in a smart way and with collaboration between all players. Producers, network operators and customers must work together on smart solutions, such as storage, conversion, cable pooling and demand management. And in the meantime, we need to expand the grid significantly to realise the energy transition. In times of transition, there are many interdependencies between different players, each with their own role and specific priorities. With so many interconnected parties it is crucial that there is more coordination so that the energy transition is as efficient as possible. Therefore, more than ever, I want all parties in our sector to come together with a shared ambition, agreed tasks and priorities. This is how we will shape the energy system of the future."

"The energy transition has now really gained momentum."

Solve societal challenges with stakeholders and through partnerships

As a European TSO, the main societal challenge we can help overcome, is to mitigate climate change by enabling the energy transition. Driven by ambitious European and national goals, the energy transition will require a fundamental redesign of our energy system and radical new thinking.

The energy transition presents big challenges for the usage and expansion of the electricity grids and the dynamic stability of the power system. The scale and complexity of the task means that conventional solutions are no longer adequate. We need new ideas and fresh thinking, with multiple stakeholders collaborating to find solutions and create value. This is why TenneT works together with a wide range of strategic partners, both within and outside the electricity domain. And our collaborations are not solely focused on technical innovations. We draw on the power of partnerships to achieve each of our four strategic pillars and also to ensure we grow responsibly. To give a broad but brief overview of our collaborative efforts, we have selected a sample below of just a few partnerships per strategic pillar.

Our performance in 2021

As we invest in our grid, our workload increases and our organisation grows. Therefore we have to make responsible choices. For example, this means that we, as a regulated company, make responsible choices on our investments, which represent societal costs, and which are targeted at solutions and assets that will serve the future energy system in the long-term. We must deliver what is expected of us, but we must also find the smartest, most efficient and affordable way to do so. Our partnerships can help us in finding these solutions.

Partnerships to drive the energy transition

In our aspiration to drive the energy transition, we aim to work with a wide range of other ambitious players to find solutions that will enable us to design an energy system fit for a climate neutral Europe, while also helping us to grow responsibly by making smart use of our existing grid.

InnoSys 2030

InnoSys 2030 seeks new ways to increase grid utilisation as a valuable complement to grid extension. Today, our assets are operated with a considerable safety margin in case an element fails (n-1 security). The joint research project InnoSys 2030 searches new ways on how to optimise grid utilisation by load flow optimisation and real-time measures in case of failures.

A powerful research consortium under the lead of TenneT, with all four German TSOs, five DSOs, universities and industry partners, is currently working on five different fields of research. The starting point of InnoSys 2030 was the analysis of existing measures to increase grid utilisation. In 2019 and 2020 new concepts were developed and tested with regard to their practical suitability. Simulations, demonstrations, and field experiments were started in 2021. In the end of this project a roadmap was developed and will be published in 2022, which shows the implementation path of those concepts until 2030.

Control Room of the Future

In order to drive the energy transition while maintaining a high level of grid reliability, TenneT needs to modernise the heart of our power system – the control room – to make it fit for the future. The Control Room of the Future programme (CROF) is at the leading edge of technology in the energy transition, with a goal to move from the manual control of independent technologies to a model that combines the best of manual and automated systems. For this ambitious vision, various projects need to be defined that include methodologies and software development, grid data, grid measurements, network model, network security assessment, decision support, communication interfaces and operator training.
The CROF roadmap includes the development of these and other projects until 2031. The CROF programme will be a rich learning and development environment, combining the expertise of our subject-matter experts with the latest insights from our partners, including suppliers and universities.

Working together with other companies to lead as a green and responsible grid operator

Together with many other Dutch critical infrastructure organisations, in a coalition called ‘De Brede Welvaart’, we are working together to make the economy more sustainable and resilient and to create long-term value. The way we contribute to and report on this work is included in our value creation model. The societal impact of this work is described in the respective chapters in this report.

We are also working together with other infrastructure companies in the 'Groene Netten' coalition in the Netherlands on several topics such as biodiversity and circularity. Together with other European TSOs we have joined forces via the Renewables Grid Initiative (RGI). Here we are collaborating with them with respect to how we can develop our offshore agenda in a nature-friendly manner. Via the RGI, we are a member of the OCEaN (Offshore Coalition for Energy and Nature) coalition where we work together also with NGOs on this topic.

Partnerships to secure supply, today and tomorrow

ENTSO-E

Our partnership with the European Network of Transmission System Operators for Electricity (ENTSO-E) is important in our efforts to secure supply for today and tomorrow. ENTSO-E is a collaboration of 39 TSOs from 35 countries who work together in a number of key areas. These include drafting technical and market-related network codes, coordinating plans to develop European infrastructure and promoting technical cooperation between TSOs. As member of ENTSO-E, TenneT is helping to build a more integrated European electricity market, contributing to a sustainable energy landscape, and promoting electricity in Europe is affordable, sustainable and secure.

Data innovation: GAIA-X and energy data-X

TenneT is among the partners who participate in the international GAIA-X project. Representatives from business, science and politics collaborate to create a proposal for the next generation of data infrastructure, including the realisation of sovereign data exchange in a European cloud. This work is essential for designing an energy system of the future, because it will depend on a reliable and secure architecture for exchanging data across borders, between different energy players and with consumers. It will also need to be robust, to cope with increasing decentralisation and complexity, expansion of smart meter charging for electric vehicles, and the increasing application of artificial intelligence (AI) models. The establishment of a large and comprehensive energy data infrastructure will enable interoperability between energy systems and form a foundation for new data-driven solutions to the energy transition.

Within GAIA-X, TenneT is part of a research project funded by BMWi (the German Federal Ministry for Economic Affairs and Energy) to demonstrate new approaches for data exchange. In the only winning consortium from the energy sector, TenneT is leading a consortium of all four German TSOs, several DSOs (E.ON, enercity Netz, Energienetze Mittelrhein) and other partners to realise a new and innovative approach for data exchange ('energy data-X'), with integration into smart services and artificial intelligence (AI).

Infrastructure Outlook 3050

In April 2021, TenneT, Gasunie and the Dutch DSOs published the Infrastructure Outlook 2030-2050 (II3050). Based on broad stakeholder participation, the study provides insight into the scenarios of a future energy system until 2050 and assesses the required energy system developments to enable such a system. Some of the important conclusions: the infrastructure for electricity must be expanded on a large scale, a nationwide hydrogen transport pipeline network is needed, infrastructure for heat and CO_2 must be constructed, more speed is needed since the current lead times for investments in the grid lead to bottlenecks and a long-term perspective is needed for an efficient transition. The fact that the Dutch government announced a plan to adapt existing natural gas transport pipelines for the transport of hydrogen ('hydrogen backbone') is a direct result of the insights presented in the II3050.

"Quo vadis, electrolysis?" study

Together with Gasunie and Thyssengas, TenneT published the "Quo vadis, electrolysis?" study in 2021, taking into account the existing and future energy infrastructures and developments that serve the energy system. According to this study, the North-Western part of Lower Saxony is a preferred location for the infrastructural coupling of electrolysers. As a result of the large-scale conversion from L-gas (low-calorific) to H-gas (high-calorific), existing natural gas pipelines can be made usable for the widespread distribution of hydrogen on a short term. The existing gas infrastructure enables the transport of generated green hydrogen to the major load centres. In a second phase, large electrolysers in Schleswig-Holstein could be connected to a hydrogen network after 2025. More short-term, regional hydrogen applications could relieve the bottleneck situation in the electricity transmission grid.

Partnerships to energise our people and organisation

Cooperation with educational institutes

Sharing expertise and insights with educational institutes plays an important part in building knowledge for our sector and also educating the new generation of technical talent. It is also important to help us access the latest thinking and technology to unlock new solutions for the energy transition. TenneT builds a wide range of close partnerships with the academic world and research centres.

These include partnerships with the University of Bayreuth, TU Delft and Radboud University Nijmegen, which are focused on specific areas of research, and a wide range of further alliances with academic institutions including: FAU Erlangen-Nürnberg; TU Eindhoven; TU Ilmenau; RWTH Aachen, Hogeschool van Arnhem en Nijmegen, Hogeschool van Amsterdam and Hasso-Plattner Institut.

Refugee Talent

We provide opportunities for refugees in the Netherlands and Germany through apprenticeships and vocational training. To find qualified refugee talents, we partnered up with the Refugee Talent Hub and TENT Partnership – which link refugees and employers, with paid employment as the goal. In 2021 TenneT Netherlands employed seven newcomers through a work experience position. Of the newcomers who started in 2019 on such a position, two have found permanent employment at TenneT in 2021. TenneT Netherlands provided a learning path ('opleidingstraject') for these refugee talents to learn more about the company and gain insights into the working culture in the Netherlands. In addition to this learning path for newcomers, TenneT's leaders and teams have been made aware and enabled to be more inclusive and understand the cultural background of refugee talent.

Partnerships to safeguard our financial health

Our cooperation with co-investors

To finance the expansion of offshore grid connections, TenneT cooperates with external co-investors such as KfW-IPEX, Copenhagen Infrastructure Partners (CIP) and Chubu Electric Power. Via separate legal entities the co-investors contribute equity and receive financial participation rights in return. Their contribution helps to ensure adequate financial ratios. Furthermore, their participation strengthens TenneT's interest in a reliable and stable regulatory framework as co-investors interests have been communicated towards policymakers and regulators.

Partner banks

To secure a solid financing and ensure that we can drive the energy transition in an affordable way, we maintain strong relationships with our shareholder, the Dutch state, and with the banks that are participating in TenneT's Revolving Credit Facility (RCF) – ABN AMRO, BNG, BNP Paribas, Commerzbank, Deutsche Bank, HSBC, ING, NatWest, Rabobank, Santander, UniCredit and SMBC. The majority of these relationship banks also participated in TenneT's previous RCF, showing the strength of our long-term relationships. Through these partnerships, we are able to secure our financing.

In 2021, we issued EUR 2.8 billion of Green Bonds with the support of our banking partners and have become one of the top 3 corporate issuers of green debt financing globally. The financial importance of this model is strengthened by the growing number of investors seeking to invest in companies that contribute to the EU's Green Deal ambitions, such as companies of which their activities are eligible with the EU Taxonomy. For more information on how we as TenneT assessed how our activities are eligible with the EU Taxonomy can be found in the chapter 'Secure sustainable financial performance and investor ratings'.

What could prevent us from realising our goals?

To be able to drive the energy transition and lead as a green grid operator, it is important to consider societal acceptance of the energy transition. Extending the grid and deliver on the green ambition could directly affect the impact on nature, available ground and expansion space for the physical assets or the debate about overhanging transmission lines and the effect on health and safety. Improper alignment could result into the inability to fulfil our ambition, potential delay of the energy transition or less than promised carbon footprint reduction. While TenneT always aims to comply to all rules and regulations and while sufficient precautions are taken at planning and constructing the grid, societal acceptance remains for TenneT an important and influential stakeholder.

Both the German and Dutch government have indicated an increase in ambition with regard to the energy transition. It is expected that the number of projects could grow and therefore could impact the project delivery times. This infers that TenneT must be even more agile than before. It is important that alignment takes place between the political aspiration and the TenneT ambition to result feasible project delivery without contradicting promises. The political landscape TenneT operates in, could sometimes be considered complex. Either by different coalition agreements, a difference in local governance structure or due to national and European interests. Without proper alignment it could impact cross-border innovation.

Ultimately, TenneT relies on strong partnerships with a wide range of stakeholders to achieve the work that will enable a climate-neutral Europe. Getting there will involve collaboration, negotiation and the balancing of common and individual goals, but the destination of a clean energy future is shared by all.

Statements of the Executive Board

The Executive Board is responsible for designing and operating TenneT's risk management and internal control system, and for reviewing its effectiveness.

In control statement

The Executive Board is responsible for designing and operating TenneT's risk management and internal control system, and for reviewing its effectiveness.

The risk management and internal control system consists of the following elements:

- The enterprise risk management system aimed to identify, analyse, define mitigating measures and monitor the development of risks relevant to TenneT;
- The internal control framework aimed to manage and control critical processes, including control self-assessments to document the effectiveness of control processes;
- Business plans and quarterly reports with information on financial and non-financial objectives and their achievement;
- Internal audits of key processes and follow-up to audit findings with relevant management;
- Actions based on recommendations made in the external auditor's management letter;
- An upwardly cascading internal Letter of Representation (LOR) process, resulting in a company-wide LOR signed by the Executive Board;
- A compliance management system that enables TenneT to demonstrate its compliance with relevant laws- and regulations, industry codes and standards, as well as its commitment to good corporate governance, best practices, ethics and stakeholder expectations among others risk of internal fraud, bribery or corruption.

The Executive Board periodically reviews and analyses the strategic, operational, financial and compliance risks to which TenneT is exposed. It also regularly assesses the design and effectiveness of the risk management and internal control system. The results of these assessments are shared with the Audit, Risk & Compliance Committee, acting as a committee of Supervisory Board, the Supervisory Board itself and the external auditor.

The risk management and internal control system does not provide absolute assurance that all corporate objectives will be fully achieved, nor does it give full assurance that material errors, losses, fraud or violations of laws and regulations will not occur in the operational processes and/or the financial reporting.

Taking the above into account, the Executive Board is of the opinion that TenneT's risk management and internal control system provides reasonable assurance that TenneT's financial reporting does not contain any errors of material significance and that the risk management and internal control system has operated effectively in the year under review.

Statement of responsibility

We confirm that, to the best of our knowledge, the financial statements for the period 1 January to 31 December 2021 have been prepared in accordance with IFRS, as adopted by the EU, and with Part 9, Book 2 of the Dutch Civil Code; that the disclosures in the financial statements are a true and fair view of TenneT's assets, liabilities, financial position and results as a whole; and that the disclosures in the annual report give a true and fair review of TenneT's financial performance, results and position, together with a description of the most significant risks and uncertainties the company faces. Furthermore, we confirm that to the best of our knowledge, the Group has adequate resources to remain in operation during the next 12 months and consequently the financial statements have been prepared on a going concern basis.

Arnhem, 14 March 2022

M.J.J. van Beek
T.C. Meyerjürgens
M.C. Abbenhuis
A.C.H. Freitag

Our Executive Board

M.J.J. (Manon) van Beek

Chair Executive Board / Chief Executive Officer

51, Dutch (f)

Initial appointment:
1 September 2018

Expiry first term:
31 August 2022

T.C. (Tim) Meyerjürgens

Member of the Executive Board / Chief Operating Officer

46, German (m)

Initial appointment:
1 March 2019

Expiry first term:
29 February 2024

M.C. (Maarten) Abbenhuis

Member Executive Board / Chief Operating Officer

48, Dutch (m)

Initial appointment:
1 January 2021

Expiry first term:
31 December 2024

A.C.H. (Arina) Freitag

Member of the Executive Board / Chief Financial Officer

51, German (f)

Initial appointment:
1 January 2022

Expiry first term:
31 December 2025

O. (Otto) Jager

Member of the Executive Board / Chief Financial Officer

52, Dutch (m)

Initial appointment:
1 August 2013

Second appointment:
1 August 2017

Expiry last term:
31 December 2021

Our Executive Board

Other positions qualitate qua:
- Chair Aufsichtsrat TenneT TSO GmbH
- Member Board TenneT Verwaltungs GmbH

Other positions:
- Chair Supervisory Board Kanker.nl Foundation
- Chair Board Giving Back Foundation
- Chair Board Refugee Talent Hub Foundation
- General Member Board of German-Dutch Chamber of Commerce DNHK
- Council of the Thinktank Agora Energiewende
- Chair of the Roundtable for Europe's Energy Future (REEF)
- Co-Chair Energy Roundtable of the European Clean Hydrogen Alliance (part of EU efforts)

Other positions qualitate qua:
- Member Board TenneT TSO B.V.
- Member Board TenneT TSO GmbH
- Member Board TenneT Verwaltungs GmbH
- Member Board TenneT Offshore GmbH
- Member Board GreenNet

Other positions:
- Member Executive Board WAB (Wind Energy Association Bremerhaven)
- Member Advisory Board Offshore Wind Energy MBA
- Member Board of Trustees German Offshore Wind Energy Foundation
- Member Advisory Board Federal Association of Wind Farms Offshore
- Member Board of Directors FGH (Forschungsgemeinschaft für Elektrische Anlagen und Stromwirtschaft e. V.)
- Member Board of Trustees FGE (Forschungsgesellschaft Energie e. V.)
- Member of the German National Committee of CIGRE
- Member Supervisory Board of GreenneT

Other positions qualitate qua:
- Member Board TenneT TSO B.V.
- Member Board TenneT TSO GmbH

Other positions:
- Formal representative Vereniging Nederlandse EnergieData Uitwisseling (NEDU)
- Member Board Netbeheer Nederland (as of 14 January 2021)
- Member Cooperation Board TSCNET Services GmbH

Other positions qualitate qua:
- Member Board TenneT TSO B.V.
- Member Board TenneT TSO GmbH

Other positions:
- Member Supervisory Board of GreenneT
- Member Board Flexcess GmbH

Other positions qualitate qua:
- Member Board TenneT TSO B.V.
- Member Board TenneT TSO GmbH
- Member Board GreenNet

Other positions:
- Chair Advisory Council of the New CFO Executive Program, Erasmus University Rotterdam

"The year 2021 was again characterised by extremely challenging circumstances. Enormous volumes in the project environment as well as in the maintenance and operation of the network demanded a lot from our colleagues, and the shortage of raw materials and supplies made it even more difficult. The effects of the transformation also created hurdles that had to be overcome and sometimes resulted in renewed organisational adjustments. It was also not easy to recruit the necessary colleagues, who are urgently needed at all levels of the company to cope with the tasks of the present, but above all those of the future. And all this under the conditions of the corona pandemic.

As Betriebsrat, we would like to take this opportunity to say a big thank you to each and every one of you for creating such an outstanding achievement despite all the obstacles, burdens and hard times. It does not depend on the job or the position, but ALL together have managed to lead our company TenneT so successfully through this year. What is important now is that we always treat each other with respect and consideration, even under time pressure and stress, take care of each other and ourselves, recognise stress limits and act accordingly, so that everyone can continue to be healthy and efficient in 2022."

Michael Kunter (Betriebsrat)

"The world inside and outside TenneT has been very eventful this year. Many external changes have a major impact on TenneT and its employees. The tight labour market, rapidly rising energy prices, the energy transition and, of course, Covid-19 with all its restrictions, uncertainties and discussions. TenneT employees have adapted their working methods, with home working becoming the norm. Despite the fact that we are now less able to speak to each other, this has not had a negative impact on the quality of our work. All our colleagues have put their shoulders to the wheel and we have achieved good results. They have shown that they really are at the heart of TenneT. TenneT's organisation is getting bigger and bigger as it grows. It is important that we continue to ensure that we do not place too great a burden on this heart. The many projects and initiatives we are involved in mean that we can expect a high workload. The prospect that TenneT will be taking decisions about what we will not be doing (temporarily) should help to keep the workload under control. We are very curious about the implementation and we are convinced that this will contribute to another good result next year."

Tom Goossens (Ondernemingsraad)

Supervisory Board Report

Report of the Supervisory Board

The Supervisory Board (SB) supervises the Executive Board (EB) on its overall management of the company. The SB supports and challenges the EB in setting and realising its long-term strategic goals.

Safety

The SB deeply regrets that in 2021 three fatalities occurred during the carrying out of works for TenneT. These unacceptable incidents underline the importance of continuous awareness and improvement of safety for each person working for and with TenneT. To this end, the SB closely monitors TenneT's safety performance, which is the first topic on the agenda of each SB meeting. The SB advises and challenges the EB by discussing the latest safety reports and relevant trends, as well as all noteworthy incidents.

With respect to COVID-19, TenneT's overall performance was not significantly affected due to measures already taken in 2020. However, the SB remains mindful of the psychological effects the pandemic may have on TenneT's employees, on top of the already heavy workload.

Security of supply

In 2021, TenneT once again delivered a very high grid availability. The performance on security of supply is closely monitored by the SB, especially in the context of challenges arising from the increasing infeed of renewable energy, which is intermittent by nature. Because of that, and due to the increasing uncertainties in the European Energy Market, we see the mutual dependencies of European countries rising to secure adequacy, and thus security of supply, in 2030. Cross-border coordination with all the neighbouring countries is of vital importance.

Other attention topics

Financing

During 2021, TenneT continued its constructive dialogue with its shareholder, the Ministry of Finance, with respect to TenneT's financing needs to enable the energy transition. The SB is pleased that the Dutch government has confirmed in a letter to the Dutch parliament that the equity required for TenneT TSO B.V. will be made available by the Dutch state and has been included in the state budget. The SB trusts that, with a new Dutch government in place, a sustainable equity funding solution for the entire company will be available soon.

At the same time, the SB welcomed the issuance of EUR 2.8 billion of green senior bonds and bank financing of more than EUR 1 billion over 2021. The SB supported the EB in ensuring adequate regulatory returns in the light of the goals and affordability of the European climate ambitions.

Investment portfolio

TenneT's investment portfolio is growing as it strives to support government climate ambitions, calling for the integration of continuously increasingly volumes of renewable energy sources. As well as upgrading and expanding the grid to meet this need, TenneT also needs to carry out maintenance work to keep the grid working effectively. To facilitate the planning of these works, the SB discussed and supported the optimisation of TenneT's grid maintenance portfolio.

Challenges

The SB regularly exchanged views with the EB on the challenges of TenneT's comprehensive investment portfolio, which are accelerated by increasing European and national ambitions on decarbonisation. For this reason, the SB welcomed the introduction of the standardised 2GW offshore wind connection programme. This will enable more efficient project management and project execution.

Another market development followed closely by the SB is the scarcity of resources, both in terms of (raw) materials and people. The SB supports the supply chain initiative for TenneT to become a preferred customer. for key suppliers to secure timely execution of projects and to speed up joint innovation – within the framework of European procurement law. TenneT's standardised cross-border portfolio is a good starting point in this process.

Strategy

The EB organised a separate strategy session for the SB in which TenneT's strategy was scrutinised. The SB recognised (i) TenneT's need to grow – and to do so in a responsible way, and (ii) the necessity to further advance the organisational transformation process started in 2019. To this end, the SB welcomed the sharpened strategic goals for 2025, which led to three transformational priorities. The SB is convinced that these changes will form a good basis for an increase in TenneT's delivery capabilities, as it works to deliver on the 2030 energy transition targets.

Leadership

In 2021, the SB was able to successfully recruit Ms A.I.H. Freitag as TenneT's new CFO (starting 1 January 2022), resulting in a 50/50 balance within the EB in terms of gender and nationality.

The SB was pleased to see the Senior Leadership Team, with a good balance between genders, as well as Dutch and German nationalities, in operation in 2021. As part of its regular and additional meetings, the SB met or interacted with most of the 22 direct reports of the EB.

The SB continued to monitor progress on targets of inclusion and diversity. Another topic that the SB closely monitored was the development of potential internal leaders, including senior leaders.

Composition of the Executive Board

In 2021, CFO Mr O. Jager announced his intention to pursue his ambitions outside of TenneT, after two full terms in the EB and more than 13 years at the company. His second and final term in the EB ends on 31 December 2021. His successor, Ms A.I.H. Freitag, will start as of 1 January 2022, following a thorough handover in the last quarter of 2021. Ms Freitag combines strong expertise in finance with international experience in major German infrastructure companies, where regulatory aspects played an important role. The SB is very pleased to welcome Ms Freitag to the EB team.

Mr Jager has successfully and with full dedication fulfilled the role of CFO over the past eight years. Under his guidance, TenneT has seen a twelvefold increase in its investment portfolio: from EUR 275 million in 2008 to EUR 3,967 billion in 2021. At the same time, it has remained financially healthy and green-financed, with a solid credit rating and outlook. The SB appreciates this performance very much, and thanks Mr Jager wholeheartedly for his excellent leadership in the finance arena, as well as his valuable contributions to TenneT's people and leadership agenda.

Composition of the Supervisory Board

The SB consists of three female SB members and two male SB members representing various European nationalities. All SB members have extensive executive and non-executive (supervisory) experience in the Netherlands, Germany and elsewhere in Europe, reflecting TenneT's truly European character.

The SB discusses the external positions of the SB and of the EB members quarterly to ensure a high level of engagement for TenneT and to avoid potential conflicts of interest.

The composition of the SB complies with the Dutch Electricity Act, which stipulates that the majority of its members have no direct or indirect links to legal entities (or shareholders thereof) engaged in the production, purchase or supply of electricity or gas. While it was noted that Ms E. Kairisto is also a member of the supervisory board of Fortum Oyj and that Mr S. van Els is a member of the supervisory board of EVOS B.V., the SB concluded that these roles currently do not contradict the aforementioned stipulation.

For more information on individual members of the SB, as well as on the appointment and reappointment schedule, please visit our website.

SB meetings

The SB had 12 meetings in 2021. Most of these were virtual meetings due to government restrictions resulting from COVID-19. Each SB meeting ended with an evaluation by both SB and EB members, in which reflections were shared in an open and trusted atmosphere. Evaluation topics were, among others, the quality of the dialogues, the level of detail and quality of the documents provided, and the setting of the agenda.

Permanent education

To keep SB members up to date on relevant topics, TenneT organised various interactive education sessions during the year. Topics included regulatory and political developments in the Netherlands, Germany and Europe, the risks and mitigating measures of cybersecurity for a TSO, tax aspects and supply chain management.

A joint education session on 'The energy system of the future 2030 – 2050' was organised together with the SB and EB of Gasunie. The SB members participated in a webinar on the Annual Market Update and in other events, such as the opening of the NordLink interconnector.

SB attendance 2021	Supervisory Board	Audit, Risk and Compliance Committee	Remuneration and Appointments Committee	Strategic Investments Committee
A.F. van der Touw (chair)	10/11	3/4	5/5	-
L.J. Griffith	11/11	-	5/5	-
E. Kairisto	11/11	4/4	-	4/4
A.C.C. van Els	11/11	-	5/5	4/4
E.M Schöne	11/11	4/4	-	4/4
Total attendance	98.2%	91.7%	100.0%	100.0%

Committees

Strategic Investment Committee

The Strategic Investment Committee (SIC) supports SB decision making on investments worth more than EUR 50 million by reviewing the proposals and advising the SB accordingly. The SIC reviewed 36 investment proposals in 2021 – over a third more than the year before. When assessing investment proposals, the SIC paid attention to the technical choices made, the financial aspects, the timing/optimisation and the impact on society.

The SIC discussed TenneT's quarterly investment reports, in preparation for the SB's dialogue on these. As well as general developments in TenneT's investment portfolio, the reports also update on progress with regard to TenneT's large projects, offshore and onshore, in Germany and the Netherlands. Aspects considered by the SIC were timely delivery, possible risks for delay, and external factors that may impact project planning and/or budget.

The SIC was pleased to see that TenneT has started to implement a Building Information Model (a digital model of existing and/or planned construction, constructed from a diverse range of factors, to which specific information is linked).The implementation and use of this model will be followed further in 2022.

Special areas of attention for the SIC in 2021 continued to be the scarcity of resources (raw materials and skilled people) as well as scarcity of specialist suppliers. TenneT aims to address this by becoming a customer of choice for its suppliers. In this respect, TenneT is optimising its position through greater standardisation, which the SIC supports. Safety and of security of supply were the first topics on the agenda of all SIC meetings.

Further topics discussed by the SIC were: Innovations, the set-up of the TenneT project budgets, including risk and political developments in Germany. Regulatory developments in both the Netherlands and Germany had the special attention of the SIC (and the Audit, Risk & Compliance Committee), due to the dilemma between the affordability of the energy transition and the financeability of the company.

The SIC consists of Mr S. van Els (Chair), Ms E. Schöne and Ms E. Kairisto. The SIC met four times in 2021 with both COOs present. One of the SIC meetings was attended by the external auditor. In one SB meeting, a further SIC meeting was integrated.

Audit, Risk & Compliance Committee

The SB's Audit, Risk & Compliance Committee (ARCC), monitors TenneT's financial reporting, including quarterly and annual reports, financing, risk management and internal control, internal audit, the independent external audit of the financial statements and the evaluation of the external auditor.

The ARCC prepares the dialogue on the quarterly finance reports as well as the reports on internal audit, risks, opportunities, compliance and integrity. Reports on internal audit findings and the way these were addressed within TenneT were a topic of special attention for the ARCC. The ARCC recognised that some improvements to follow-up procedures were made, yet also saw the need for further improvements in 2022. Compliance and integrity findings were also discussed with the ARCC, and risk management and control systems were evaluated as part of the dialogue on risks and opportunities. The most important legal proceedings were discussed with the ARCC twice in 2021.

The individual SB members were interviewed on the topics of the annual internal audit plan, the annual strategic risk assessment and compliance and integrity topics by the Head of Internal Audit, the Head of Compliance and Integrity and the Lead Risk Management & Insurance. The ARCC reviewed TenneT's Group Integrated Planning & Performance and Financing Plan before it was approved by the SB. Furthermore, the reports of the external auditor were discussed with the ARCC before they were shared with the SB. Also during 2021, the ARCC paid special attention to TenneT's credit rating. Next to that, IT and cyber security will remain a topic of focus for the ARCC.

The ARCC consists of Ms E. Kairisto (chair), Mr A. van der Touw and Ms E. Schöne. The ARCC met four times in 2021, with the CFO, the CEO, TenneT's Head Internal Audit and the external auditor, Deloitte, attending the full meetings. For the relevant parts of the ARCC meetings regarding specific reports or topics, the respective Senior Leaders and/ or experts joined the meetings as well.

Management Letter

In the Management Letter, Deloitte reported that there are no significant deficiencies. Deloitte stated that the tone at the top is seen as supportive of the internal control environment. Deloitte found that the updated fraud risk assessment is a good improvement in the entity level controls. Deloitte reported several findings with regard to IT access and information security, valuation basis of the decommissioning provision and accrual for in-feed management expenses. The SB will keep monitoring the mitigation of the risks resulting from these findings.

Integrated reporting and audit

In 2021, the SB discussed the financial statements for the 2020 financial year. This dialogue was prepared by the ARCC and the respective meeting was preceded by the regular meeting between the ARCC and external auditor without any EB member, nor the Company Secretary, being present. The SB reviewed the 2020 internal quarterly reports and the interim annual report. Furthermore, it discussed the independent auditor's reports, results from internal risk and control assessments, the 2022 budget and the Integrated Performance Plan 2022-2024.

Financial statements

The SB examined the Integrated Annual Report 2020, the financial statements 2020, the independent auditor's report, the assurance report of the independent auditor related to non-financial information, the interim report/management letter and the audit results report issued by TenneT's external auditor. The ARCC prepared and advised on these documents. As a result, the SB endorsed the documents and recommended that the General Meeting of Shareholders adopt the financial statements. The SB recommended that the General Meeting of Shareholders discharge the EB members from liability for its management of the company and release the SB from liability for its supervision over the year 2020.

Remuneration & Appointment Committee

The Remuneration and Appointment Committee (RAC) prepares, among others, the SB's decision-making regarding the remuneration of individual EB members and the appointment of EB and SB members. The RAC also closely monitors the review of the Senior Leadership Team (SLT), as well as succession planning for the EB and SLT.

The RAC conducted performance dialogues with the EB members, prepared by the SB members. The SB furthermore reviewed the performance of the SLT.

Transformation

The RAC regularly discussed the organisational transformation with the EB in various meetings. The RAC supported this topic to be included in the employee survey in Q4 2021, the results of which will be discussed in 2022. Furthermore, the RAC considered setting the strategic priorities, the next step of the organisational transformation, to be a valuable instrument for doubling TenneT's execution capacity.

Inclusion and diversity

The SB supports TenneT's goal to work with people from diverse backgrounds and ages, with a range of experience, skills and knowledge. In addition, TenneT believes that diversity contributes to exploring new approaches and fresh thinking that may contribute to a more efficient way of working. During 2021, inclusion and diversity were discussed as part of the management team review.

In 2021, TenneT met its target on female recruitment; unfortunately, the target for cultural diversity has not been met yet. The RAC will continue to focus its attention on TenneT's progress with regard to inclusion and diversity.

Remuneration

In 2020 the SB reached a temporary agreement with TenneT's shareholder on the remuneration policy for EB members, pending a potential revised shareholder structure.

TenneT's request to have committee remuneration for all SB members aligned with ARCC remuneration and to have a higher remuneration for the chairs of the committees (vis-à-vis the committee members) has not been honoured.

SB Succession

In view of currently synchronous appointment terms of three of the five SB members, the RAC has started to contemplate measures to mitigate continuity risks related thereto.

The RAC consists of Ms L. Griffith (chair), Mr A. van der Touw and Mr S. van Els and met five times during 2021; one further meeting was integrated in a SB meeting. The RAC meetings were attended by the CFO, the CEO and the Director of People. Where the topics posed a potential conflict of interest, the EB members and the Director of People did not attend.

Self-evaluation of the SB

The self-evaluation of the SB was conducted in December 2021. Several 2020 topics aimed at a better SB functioning and interaction with the EB and finding the right balance between exercising supervision and acting as sparring partner have proved to work well during 2021, such as an SB-only moment of reflection after each SB meeting and a constructive-critical dialogue on TenneT's strategy. For 2022, the SB will, among others, monitor progress on resolving high-risk audit findings and maintain its focus on IT and cybersecurity matters.

Capabilities matrix Supervisory Board

Competencies	A.F. van der Touw (chair)	E. Kairisto	A.C.C. van Els	E. Schöne	L.J. Griffith
General management	■	■	■	■	■
Financial management	●	■	●	●	●
Capital market/ investor relations	●	■	●	●	●
Technology	●	◆	■	◆	◆
IT	●	●	■	●	●
Risk management	■	■	■	■	■
Project management (large infrastructure projects)	■	■	■	■	●
Human resources	■	■	■	■	■
Marketing/Public Affairs/ Brand image	■	●	■	■	■
Regulation	●	●	●	■	●
Public sector/State owned companies	■	●	●	■	●
Political/managerial experience and network the Netherlands	■	◆	●	◆	■
Political/managerial experience and network Germany	■	■	■	■	◆
International background/experience	■	■	■	●	●
Legal	●	●	●	■	■
Experience in energy-, industrial and/or financial sector	■	■	■	■	■
Knowledge of Dutch Corporate Governance Code	■	●	●	●	■
Corporate Social Responsibility (ESG)	■	■	■	■	■

■ = H ● = M ◆ = L

The SB capability matrix was completed as part of the SB self-evaluation; there were no changes compared to the previous year. The matrix serves as a guideline for topics on the permanent education calendar, as well as for competences to consider regarding future vacant SB positions.

Contact with the works councils

Ms L. Griffith and Mr S. van Els, both appointed SB members on the nomination of the Dutch Works Council, regularly met with its members. Other SB members also met with the Dutch Works Council to exchange information about the important subjects in the SB and the Dutch Works Council. Ms Griffith is also a member of the Aufsichtsrat of TenneT TSO GmbH. Because of this, she also had close contact with members of the German Works Council. The SB considers these interactions to be very valuable since they display the relevant topics for employees of TenneT.

Thanks

TenneT again looks back on a year excellent performance. This success is the result of the enormous commitment, enthusiasm, and hard work of all employees of TenneT, all of whom the SB wholeheartedly thanks. The SB would like to thank specifically the Company Secretary, Ancella Anssems, for her advice and constant support during 2021.

Remuneration policy

TenneT's remuneration policy primarily aims to offer remuneration at a level that will attract and retain qualified and capable statutory directors (including those from within the organisation). The remuneration policy meets the best-practice provisions on remuneration defined in the Dutch Corporate Governance Code. Since all of the shares in TenneT are held by the State of the Netherlands, TenneT's remuneration policy falls within the scope of the 2013 state participations policy ('Nota Deelnemingenbeleid Rijksoverheid 2013').

TenneT's revised remuneration policy has been approved by the Shareholder and is effective as of January 2020. The most important elements of the current remuneration policy are described below.

Employment market reference group

Remuneration for the statutory directors of TenneT has been set using a benchmark, comparison with organisations competing in the same business and employment markets as TenneT. These organisations include

- International transmission system operators (TSOs);
- Operators of infrastructure;
- Installation/engineering companies;
- Building companies;
- Financial institutions.

This reference group is divided in three sub reference groups, (semi-)public, private and international TSOs. The remuneration level of the statutory directors is determined based on the level of the median of the sub-reference groups, taking into account the relevant job grading. The remuneration policy includes "equal pay", regardless of gender or nationality.

The Supervisory Board intends to review the remuneration policy for statutory directors once every four years. The Supervisory Board may resolve to do this as well in case of important policy changes, changes in shareholder structure or ownership and changes in the labour market. Such changes will be submitted to the shareholder for approval.

Remuneration norm

The benchmarking method as applied by TenneT results in a 'norm' level of remuneration for TenneT statutory directors that significantly exceeds the maximum amount desired by the Shareholder of EUR 383,160 (level 2019). Upon the appointment of a new statutory director, the Supervisory Board shall, at the request of the Shareholder, limit the amount of remuneration. For 2021, this limit was set at EUR 414,564 for TenneT's Chief Executive Officer. The remuneration of the other statutory directors of TenneT has been capped at 90% of the remuneration of the CEO. The Supervisory Board applies the principle of equal pay to the remuneration policy for the statutory directors.

If, in the opinion of the Supervisory Board, the maximum remuneration as required by the shareholder leads to unacceptable risks to the organisation because no suitable candidates can be found to fulfil the role of statutory director, the Supervisory Board shall consult the Shareholder.

The Supervisory Board decides on the annual increase in salary. If the remuneration of a statutory director has reached its maximum, further increases will be limited to the structural increments as agreed upon in the collective labour agreement which is applicable to all Dutch TenneT employees. Ms. Freitag and Mr. Meyerjürgens, whilst being based in Germany both have a Dutch labour agreement with TenneT.

Service agreement and compensation for early termination

In principle, with effect from 2017, employment contracts – with the exception of internal appointments – are concluded for a fixed term of four years. In the event that the employment contract is terminated prior to the expiry date, TenneT pays a maximum of one year's salary as a termination compensation, unless the statutory director resigns voluntarily or the termination is the result of his or her actions. Mrs. Freitag will also receive this termination compensation if she will not be employed for a second term at the initiative of TenneT.

Other allowances and secondary benefits

The total remuneration package for statutory directors includes an allowance for necessary out-of-pocket expenses, the use of a lease car (of a type comparable to those provided to statutory directors of similar organisations) including possible private use, accident and directors' and officers' liability insurance, and thirty days' paid leave per annum.

Secondary benefits also include a nominal contribution towards health insurance premiums and the choice of other flexible individualised benefits, such as converting holiday allowance into extra leave hours. Most of these benefits are applicable to all TenneT employees, working under the Dutch collective labour agreement. The company does not extend any loans, loan guarantees or advances against future earnings to any statutory director.

The Dutch and German tax authorities have taken the position that part of the remuneration of Mr. Jager is subject to taxation in each country separately, resulting in double taxation of the same income. By decision of the Supervisory Board, outline with TenneT's policy applicable to all employees, TenneT holds Mr. Jager harmless and has compensated Mr. Jager for the negative tax consequences, arising from the international allocation of the TenneT remuneration.

Pensions

The retirement age of statutory directors is based on the statutory pension age for Dutch contracts and the German age for German contracts as the case may be. Statutory directors participate in the regular pension scheme of the country in which they are covered for social insurance.

The Netherlands based statutory directors participate in a pension arrangement as defined in the collective labour agreement and as applicable for all employees in the Netherlands. The employer and employee contribution for the statutory directors follow the same rules as applicable to all other employees. Dutch pension regulations define the pensionable salary up to the fiscal maximum of EUR 112,189 (gross pension, 2021).

The statutory directors based in the Netherlands receive the same compensation as TenneT employees with an income above the fiscal maximum pension salary. The compensation is based on the fiscally allowed, age-dependent premium percentages up to fiscal maximum pension salary.

German based statutory directors participate in the regular pension scheme ("Beitragsplan") or any other pension scheme that such statutory director may have already been entitled to.

Board remuneration

This section specifies the current remuneration for statutory directors as well as members of the Supervisory Board. As of 2020, no variable remuneration is applicable anymore for statutory directors, following a change in remuneration policy agreed by the shareholder. As a result, statutory directors' variable remuneration component has been converted into fixed salary as of 2020.

During 2021, the Executive Board of TenneT was composed of the following statutory directors:

	Position	Date of first appointment	End of 1st term	End of 2nd and last term
M.J.J. van Beek	CEO	1 September 2018	31 August 2022	
O. Jager	CFO	1 August 2013	31 July 2017	31 December 2021
T.C. Meyerjürgens [1]	COO	1 March 2019	29 February 2024	
M.C. Abbenhuis	COO	1 January 2021	31 December 2024	
A.C.H. Freitag	CFO	1 January 2022	31 December 2025	

[1] As of 1 March 2020 Mr. Meyerjürgens is statutory director

Ms. Van Beek has a fixed-term employment contract with the company. Mr. Abbenhuis and Mr. Meyerjürgens both have open-ended employment contracts. Mr. Jager announced that this second term would be his last term. His extended second term ended the 31st of December 2021. The 2nd of August 2021 TenneT announced the appointment of Ms. Arina Freitag as TenneT's new CFO, per 1st of January 2022.

Remuneration of the statutory directors

The comparative figures of the remuneration of the statutory directors have been adjusted to include the termination compensation for former Board member Ben Voorhorst, which has incorrectly been omitted from the 2020 Integrated Annual Report. The termination benefit was paid out in 2021.

Total remuneration

2021 (in EUR thousand)	Fixed remuneration	Gross Pension	Net pension	Total pension	Termination benefit	Other
M.J.J. van Beek	415	34	50	84	-	14
O. Jager	372	32	53	85	513 [1]	52
T.C. Meyerjürgens	372	213	-	213	-	26
M.C. Abbenhuis	332	31	32	63	-	19
Total	**1,491**	**310**	**135**	**445**	**513**	**111**

2020 (in EUR thousand)	Fixed remuneration	Gross Pension	Net pension	Total pension	Termination benefit	Other
M.J.J. van Beek	399	30	34	64	-	14
B.G.M. Voorhorst	359	29	36	65	580 [2]	21
O. Jager	359	28	23	51	-	21
T.C. Meyerjürgens [3]	300	158	-	158	-	16
Total	**1,417**	**245**	**93**	**338**	**580**	**72**

[1] The amount of EUR 513k consists of EUR 402k severance payment and EUR 111k of salary payments for the period of handover and strategic advice.
[2] The amount of EUR 580k consists of EUR 372k severance payment and EUR 208k of salary payments for the period of handover and strategic advice.
[3] As of 1 March 2020 Mr. Meyerjürgens is statutory director.

For former statutory directors the end of their term as statutory director is different from the end date of their underlying, indefinite employment contract. Because the statutory board terms were not prolonged by the Supervisory Board, TenneT had to initiate the termination of the underlying indefinite term employment contracts as a result of which Mr Voorhorst and Mr Jager were entitled to a severance payment in the amount of one gross annual salary. In view of handover and strategic advisory services for the company and in accordance with good governance, both Mr Voorhorst and Mr Jager stayed on for a few more months, after which their employment contracts were terminated. The compensation for this period is, in accordance with IFRS standards, included in the termination benefit.

Fixed remuneration

In accordance with the indexation for employees as determined by the collective labour agreement for TenneT, the salaries of all statutory directors have been increased by 3.5% as of January 2021. The Supervisory Board sets and evaluates performance targets for each statutory director on an annual basis.

Pension cost

The pensions of all Dutch statutory directors are administered by the ABP Pension Fund. The pension accrual is based on an average pay system up to the fiscal maximum (gross pension). With respect to the fixed remuneration exceeding the fiscal maximum, the Dutch statutory directors may participate in a net pension system. The 2021 net pension contributions for Mr. Voorhorst and Mr. Jager include recalculations for previous years.

The pension of the German statutory director is based on actuarial calculations in line with IAS19. The amount is equal to the yearly service costs.

Other allowances and secondary benefits

All statutory directors have a company car available to them. The value of the private use is part of the Other income shown in the table. The company does not reimburse its statutory directors for any personal income tax consequence resulting from the private use of leased cars.

For Dutch statutory directors the secondary benefits as shown in the remuneration table, include a contribution to health insurance and a budget for flexible terms of employment. Each statutory director received an allowance for necessary out-of-pocket expenses, of EUR 2,196 a year. This allowance is not included in the remuneration table as it is a compensation of expenses incurred and hence not considered a remuneration component.

Other allowances also include reimbursement in respect of double taxation on the same income for Mr. Jager. We are in discussion with the tax authorities regarding double taxation for other board members for the years 2018 and 2019. TenneT will start a mutual agreement procedure for these years to avoid double taxation.

The total remuneration paid to the statutory directors is reconciled to and further disclosed in note 4 of the consolidated financial statements.

Remuneration ratio

The remuneration ratio CEO to employees is measured by comparing the CEO's annual total compensation with the median annual total compensation, including fixed salary, variable remuneration and pension benefits of all other employees. The remuneration ratio CEO to senior management is measured by comparing the CEO's annual total compensation with the median annual total compensation, including fixed salary, variable remuneration and pension benefits of the Senior Leadership team (SLT). With the TenneT Transformation that was introduced in July 2020 the group for the comparison of the CEO remuneration partly changed. Instead of the 57 Senior Managers reported before, the new organisation includes 22 Senior Leadership team (SLT) members at Director level, which is the new comparison group. As a result the remuneration ratio CEO vs. SLT in 2021 is different compared to CEO vs. Senior Management in 2020 and 2019.

	2021	2020	2019
Remuneration ratio to employees	5.4	5.6	5.4
Remuneration ratio to SLT	1.9	2.1	2.1

Compared to other companies that are wholly owned by the Dutch government the remuneration ratio to employees is below average.

Remuneration of the Supervisory Board

The remuneration policy for the Supervisory Board defines the remuneration for the different roles and committees of the Supervisory Board. During 2021 each Supervisory Board member was serving on one or two committees.

The roles and responsibilities of members of the Supervisory Board were as follows:

	Supervisory Board	Audit, Risk and Compliance Committee	Remuneration and Appointments Committee	Strategic Investments Committee
A.F. van der Touw	Chair	Member	Member	
L.J. Griffith [1)]	Vice-chair		Chair	
E. Kairisto	Member	Chair		Member
A.C.C. van Els	Member		Member	Chair
E. Schöne	Member	Member		Member

[1] Mrs. Griffith is also member of the Aufsichtsrat of TenneT TSO GmbH;

The Shareholder agreed to an annual indexation of the Supervisory Board remuneration following TenneT's collective labour agreement, from 1 January 2015 onwards. As a result, Supervisory Board member remuneration increased by 3.5% as of January 2021.

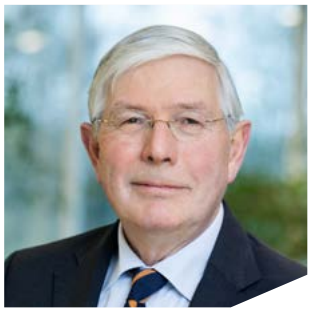
Following this increase, Supervisory Board member remuneration was as follows from January 2021 and onwards:

(EUR)		
Chair	31,490	per annum
Vice-chair	25,327	per annum
Member	22,602	per annum
Audit, Risk and Compliance Committee	7,529	per annum
Remuneration and Appointment Committee	5,955	per annum
Strategic Investment Committee	5,955	per annum

The total remuneration received by the Supervisory Board in their capacity as TenneT Holding B.V. Supervisory Board members during 2021 was as follows, resulting in the following remuneration amounts as of 1 January 2021:

	2021			2020		
(in EUR thousand)	Fixed remuneration	Committee fee	**Total**	Fixed remuneration	Committee fee	**Total**
A.F. van der Touw	32	14	46	30	13	43
L.J. Griffith	25	6	31	22	6	28
E. Kairisto	23	13	36	22	7	29
A.C.C. van Els	23	12	35	22	11	33
E.M Schöne	23	13	36	22	7	29
P.M. Verboom	-	-	-	18	10	28
R.G.M. Zwitserloot	-	-	-	20	5	25
Total	**126**	**58**	**184**	**156**	**59**	**215**

Our Supervisory Board



A.F. (Ab) van der Touw

Chair of the Supervisory Board / Member of the Audit, Risk & Compliance Committee / Member Remuneration & Appointments Committee

66, Dutch (m)

Initial appointment:
1 June 2019

Expiry first term:
31 May 2021

L.J. (Laetitia) Griffith

Vice-Chair of the Supervisory Board / Chair of the Remuneration & Appointment Committee

56, Dutch (f)

Initial appointment:
1 July 2015

Expiry second term:
30 juni 2023

E.M. (Edna) Schöne

Member of the Supervisory Board / Member Strategic Investments Committee
Member of the Audit, Risk & Compliance Committee

50, German (f)

Initial appointment:
1 May 2019

Expiry first term:
30 April 2023

E. (Essimari) Kairisto

Member of the Supervisory Board / Chair of the Audit, Risk & Compliance Committee
Member of the Strategic Investments Committee

55, German and Finnish (f)

Initial appointment:
1 May 2019

Expiry first term:
30 April 2023

A.C.C. (Stijn) van Els

Member of the Supervisory Board / Chair Strategic Investments Committee / Member Remuneration & Appointments Committee

57, Dutch (m)

Initial appointment:
1 May 2019

Expiry first term:
30 April 2023

Principal position:
- Former CEO Siemens Nederland (until 1 April 2018)

Other positions:
- Member Board Deutsch-Niederländische Handelskammer
- Chair Supervisory Board Universiteit Leiden
- Chair Board Dutch Bach Association
- Chair Board Fonds Slachtofferhulp
- Chair Supervisory Board NIBA
- Member Board GAK Foundation
- (External) member Ondernemingskamer Gerechtshof ' s Gravenhage
- Chair Advisory Council Ministry of Defence
- Chair Advisory Council Ministry of Infrastructure
- Chair Supervisory Board, Platform Talent voor Techniek
- Member Supervisory Board Van Leeuwen Buizen Groep B.V.

Principal position:
- Former State Councillor in the Advisory Division of the Dutch Council of State

Other positions:
- Member of the Aufsichtsrat TenneT TSO GmbH
- Chair Supervisory Board Holding Nationale Goede Doelen Loterij / Postcode Loterij
- Chair Supervisory Board Nederlands Filmfonds
- Member of the Supervisory Board of Gassan Diamonds B.V.
- Member of the Supervisory Board of ABN AMRO
- Chair Stichting Nederlands Vioolconcours

Principal position:
- Member Executive Board Euler Hermes AG

Other positions:
- Member of the Board 'Lateinamerikaverein'
- Member of the Executive Committee 'Ostausschuss der deutschen Wirtschaft'
- Member of the Executive Committee International Chamber of Commerce Germany
- Member of the Undernehmensbeirat KfW Ipex

Principal position:
- Former CFO Hochtief Solutions AG

Other positions:
- Member Supervisory Board Fortum Oyj
- Member Supervisory Board Applus+ SA
- Member Supervisory Board Freudenberg SE
- Chair 'Deutsch-Finnische-Gesellschaft e.V.'
- Member Supervisory Board Iveco Group N.V.

Principal position:
- Former CEO Shell Germany
- Commercial director (non-executive) at Havenbedrijf Rotterdam N.V.

Other positions:
- Chair Supervisory Board IDA Foundation
- Chair Supervisory Board EVOS B.V.
- Member Advisory Council Dutch Ministry of Infrastructure
- Honorary consul general of the Bundesrepublik Deutschland in Rotterdam

Sietske Poepjes

Provincial Executive of the Dutch province of Friesland

Sietske Poepjes views the energy transition as a collaboration between multiple parties and works with TenneT and others to ensure that Friesland's abundant nature and landscape are safeguarded.

"For the energy transition we aim to strike a balance between developments that are good for Friesland and the effects they have on nature, our landscape and our community as a whole.

We encounter TenneT in various ways on this quest. One the one hand, we need each other to solve congestion issues for the grid, while on the other hand, TenneT's work affects nature, the landscape, and the community. At the moment, we are working with TenneT on researching Friesland's energy future and the infrastructure that this will require. We need to work together to strike the right balance, in order to tackle these challenges. I look forward to working with TenneT on these challenges and to looking beyond our own borders towards a healthy balance that can count on the support of our community in Friesland."

"It's about striking a balance between TenneT's work for the energy transition and preserving our nature and landscape."

Governance and risk management

Corporate governance

As a transmission system operator, TenneT plays an important role in society. We believe in having a solid governance structure, effective oversight and a transparent accountability to all stakeholders. To that end, we comply with the Dutch Corporate Governance Code (hereafter: the Code), insofar as it is applicable.

Corporate governance structure

TenneT's corporate governance structure comprises the Executive Board, the Supervisory Board and the General Meeting of Shareholders. Additionally our internal auditor and external auditor play an important role in this structure.

Executive Board

The Executive Board of TenneT Holding B.V. has four statutory directors. The Executive Board members have joint authority to represent the company. Each board member also holds limited individual power of attorney. Three members of the Executive Board of TenneT Holding B.V. are managing directors of TenneT TSO B.V., three members of the Executive Board are managing directors of TenneT TSO GmbH and one of these three members is managing director of TenneT Offshore GmbH.

The Executive Board is responsible for the management of the company, which includes regulated and non-regulated activities.

Supervisory Board

The Supervisory Board of TenneT Holding B.V. supervises the policies, management and the general affairs. It carries out its duties in the interests of the company and its stakeholders, and also takes into account relevant aspects of corporate social responsibility. TenneT has a two-tier board structure, as specified in the Electricity Act.

All information about the Supervisory Board (such as its rules and rotation schedule) is available on our corporate website.

General Meeting of Shareholders

All shares in TenneT's capital are held by the Dutch state, which is represented by the Ministry of Finance. Under the Electricity Act, only the Dutch state may hold voting interests in the company. A General Meeting of Shareholders is held within six months after the end of each financial year. The General Meeting of Shareholders in 2021 was held virtually due to the COVID-19 restrictions.

The General Meeting of Shareholders discharged the Executive Board and Supervisory Board members from liability from their respective activities in the previous year. Other shareholder meetings are held as and when deemed necessary by the Executive Board, Supervisory Board or the Shareholder.

External auditor

The General Meeting of Shareholders has the power to appoint external auditors to audit the financial statements prepared by the Executive Board. These auditors report to the Supervisory Board and the Executive Board, and their findings are presented in an independent auditor's report, an assurance report, a management letter and an audit review results report. The General Meeting of Shareholders appointed Deloitte Accountants B.V. as TenneT's external auditor as per 1 January 2020.

The performance of the external auditor is evaluated by the Executive Board and the Audit, Risk & Compliance Committee and, if necessary, also by the entire Supervisory Board.

The external auditor attends all meetings of the Audit, Risk & Compliance Committee. It also attends Supervisory Board meetings when the independent auditor's report on the financial statements is discussed and the financial statements approved. Furthermore, in 2021 the external auditor attended one meeting of the Strategic Investments Committee for information purposes.

Internal auditor

The Head Internal Audit attends all meetings of the Audit, Risk & Compliance Committee. Internal Audit aligns its audit scope and reports directly to the Executive board and the Audit, Risk & Compliance Committee on minimum quarterly basis.

Compliance & integrity officers

TenneT has a Head Compliancy & Integrity Officer, who is also a member of the Senior Leadership Team, and Local Compliance & Integrity Officers in both the Netherlands and Germany. All material compliance and integrity issues are shared and discussed with the Audit, Risk & Compliance Committee. Additionally, Compliance & Integrity officers report directly to the Executive board and the Audit, Risk & Compliance Committee on at least a quarterly basis.

Related parties

Related party transactions are disclosed in note 30 to the consolidated financial statements.

Diversity

Diversity is disclosed in the Supervisory Board report.

Deviations from the Dutch Corporate Governance Code

Certain principles and best-practice provisions in the Code do not apply to TenneT. The reasons why and to what extent TenneT decided not to or could not adopt these particular principles and best-practice provisions are explained below:

2.1.3, 3.1.3: Not applicable: no Executive Committee has been established at TenneT.

2.3.8: Not applicable: no delegated Supervisory Board member is employed by TenneT.

2.3.2: If the Supervisory Board has more than four members, the Code stipulates that the board shall appoint from among its members an Audit Committee, a Remuneration Committee, and a Selection and Appointments Committee. The TenneT Supervisory Board has combined the tasks of the latter two committees into a Remuneration and Appointments Committee.

2.7.5 - 2.8.3, 3.3.2, 3.3.3: Not applicable: these provisions do not apply to TenneT because it only has one shareholder, being the Dutch state.

Chapter 4: Regarding paragraph 4.1 TenneT complies with the Code. Paragraphs 4.2 – 4.4 are not applicable to TenneT because it only has one shareholder, namely the Dutch state.

Chapter 5: Given TenneT's two-tier board structure, this chapter is not applicable.

Corporate risk management and Internal control

Professional corporate risk management with integrated internal control processes are key throughout the organisation that results into effective risk-based decisions.

Corporate risk management and internal control framework

Risk Management continuously identifies risk, assesses severity of risk, prioritises risk, implements risk responses and maintains a portfolio view. It reports the identified uncertainties, opportunities or control issues proactively on a quarterly basis towards the Executive Board, Supervisory Board and Senior Leaders. The principles of corporate risk management and internal control should be taken into account in all activities performed at and for TenneT.

Corporate risk management facilitates top down and bottom up dialogues, workshops, detailed analyses and general trainings on risk awareness at all levels within TenneT. The resulting outcome provides management insights to take risk-based decisions that support the achievement of objectives set at all organisational levels.

As corporate risk management the focus and key objectives are to:

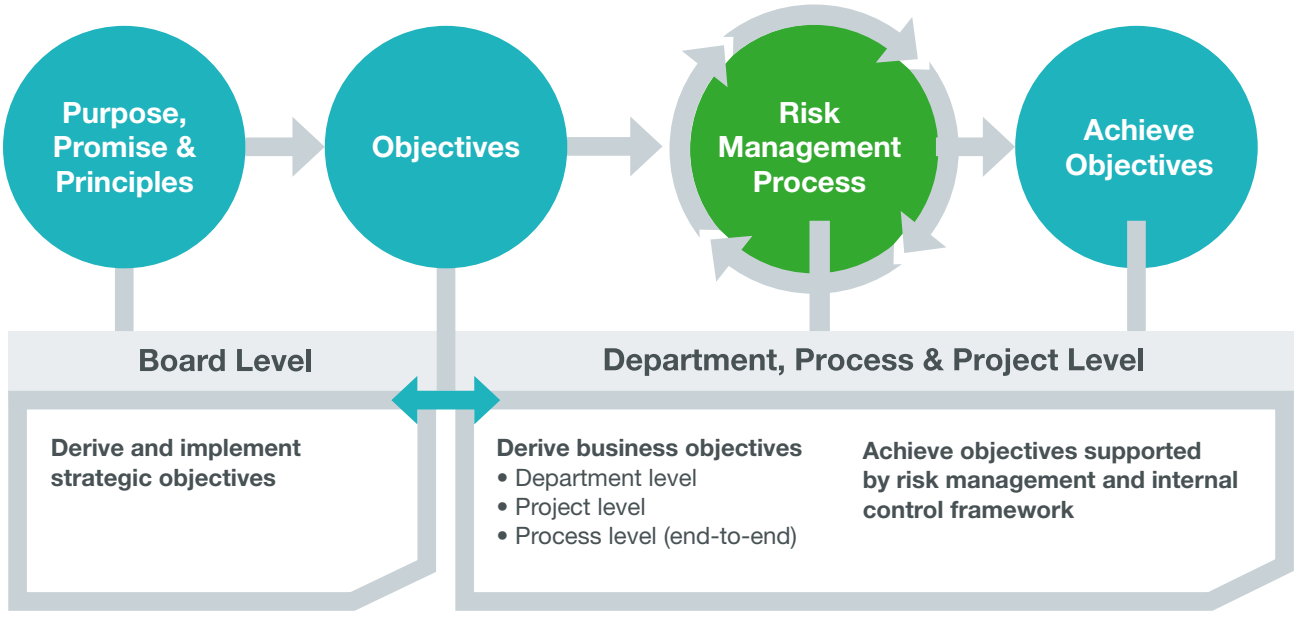
- Identify events, assess the risk, formulate risk responses, inform and communicate, implement control activities and continuous monitoring;
- Establish and maintain a uniform risk management framework;
- Provide the required tools, framework and guidelines for risk based decision making;
- Transparent and uniform reporting based on the ISO and COSO framework.

As TenneT the corporate risk framework is structured into:

- Strategic Risk Management (SRM);
- Operational Risk Management (ORM);
- Project Risk Management (PRM);
- Risk and Portfolio management;
- Internal Control and Process Risk Management.

TenneT's corporate risk management and internal control frameworks are based on ISO 31000 and COSO standards and are compliant with the requirements of applicable laws and regulations such as the Dutch Corporate Governance Code, the German Control and Transparency in Business Act and the German Accounting Law Reform Act.

Risk management and internal control



Strategic risk management (SRM)

Within the Strategic Risk Management (SRM) domain, all significant risks and opportunities are assessed that could arise and impact the strategic objectives of TenneT now or in the near future. These topics are derived by in-TenneT workshops and aligned across the different units within TenneT using key informative reports published by objective and respected publishers. It is the objective of SRM to assist the Executive Board by reporting key decisional information, deemed necessary to steer or adjust the strategic goals. The findings of SRM are discussed regularly with the Supervisory Board and the Audit, Risk & Compliance Committee.

Operational risk management (ORM)

TenneT's Operational Risk Management (ORM) supports the management of the units in managing risks and opportunities related to TenneT's objectives. On a bi-annual basis, ORM facilitates risk & opportunity dialogues with the unit leaders and the unit risk champions to discuss risk & opportunity developments. Furthermore ORM continuously assists the risk champions to coordinate risk management activities.

While management is the one responsible for daily risk management, it is the task of ORM to streamline the risk process and to ensure the usage of the same methodology, process and understanding across all units. Significant risks or opportunities that could either impact the strategy or have a significant influence on other units are escalated appropriately.

Project risk management (PRM)

To meet challenges arising from the investment portfolio and related objectives, TenneT implements project risk management to all planned and executed projects. PRM aims to boost the likelihood of realising project goals on time, on budget and with a high level of quality. For all large projects, dedicated project risk managers systematically review and manage risks together with project leads within the quality and uniformity standards safeguarded by corporate risk management. Project risk management works closely together with claim management and has reached a high maturity level within TenneT.

Risk and portfolio management

To strengthen security of supply, TenneT's asset management uses condition monitoring and risk based assessments to plan maintenance and investments. Grid constraints are identified by analysing grid components and failures and by monitoring the necessary transport capacity. These constraints are assessed according to the risk they pose to TenneT's objectives. Should the risk exceed a predefined level, responses are proposed and included.

Internal control

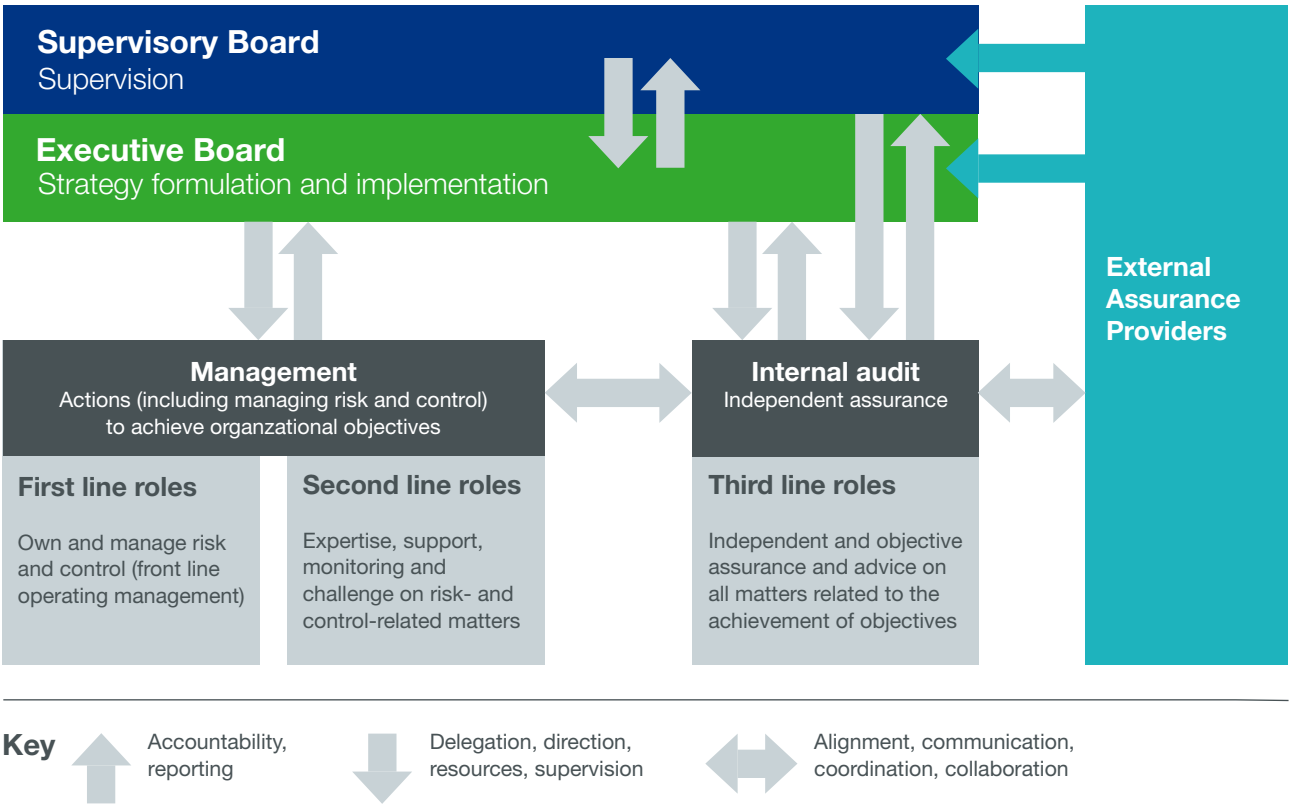
The internal control framework is designed to support and safeguard the realisation of our process objectives, the compliance with laws, regulations, internal policies and procedures and the reliability of the internal and external reporting. To assess the effectiveness of this framework and identify opportunities for improvement, a control self-assessment is performed twice a year by control owners and validated by management. The risk management & internal control team performs quality reviews on the assessments and reports, monitors and follows-up on the identified issues, for mitigation and remediation with the relevant business owners.

The outcome of the control self-assessments provide direct input for the Letter of Representation process and substantiates the in-control statement of the Executive Board. Overall control effectiveness and the scope of TenneT's internal control framework are part of the bi-annual report to the Executive and Supervisory Board.

Internal audit

Internal Audit functions under the responsibility of the full EB, the Head Internal Audit reports to the CEO. The Head Internal Audit has direct access to the Supervisory Board, advised by the Audit, Risk and Compliance Committee (ARCC) and attends all meetings of the ARCC. The Supervisory Board supervises the functioning and performance of Internal Audit and has regular contact with the Head Internal Audit.

Three lines of defence



Compliance and integrity

A culture of compliance and integrity, or simply said “responsible behaviour”, is essential to be trustworthy and successful in a sustainable manner. We therefore aim to predict, prevent, detect and respond to compliance & integrity risks that threaten the realisation of TenneT’s strategy and objectives, and may lead to economic or reputational harm. The applicable laws and regulations as well as internal policies and procedures determine the boundaries within which we operate, but more importantly it is our mindset and the way we behave and act that demonstrate our commitment to a compliant and integer culture. To achieve this, we need leadership, the right tone from the top and to act consistently with our principles Ownership, Courage and Connection.

For the implementation of our compliance management system, ISO 19600 (succeeded in 2021 by ISO 37301) served as reference model. An internal charter and framework provide guidance to TenneT and describe the compliance organisation, roles and responsibilities, and the systems, processes and tools used. Our guiding principles Ownership, Connection and Courage, our Code of Conduct; “The way we act” and Supplier Code of Conduct, and a set of other compliance policies and directives support our employees in doing the right things.

The compliance & integrity officers and data protection officers (DPO’s) are positioned independent from the business. The Head of Compliance & Integrity has a direct reporting line to the CEO and the Audit Risk & Compliance Committee (ARCC) and the local compliance officers and DPO’s have direct access to local management. Also in 2021, the compliance officers and DPO’s have been able to act independently, whilst maintaining a good connection to the business. They are frequently requested for advice, and reporting channels where compliance or privacy incidents or concerns can be reported (like the Speak Up Portal or special mailboxes) are familiar to the organisation.

Regular and ad hoc reporting to, alignment and dialogues with the CEO, Executive Board, the Audit Risk & Compliance Committee and local management about the state of compliance & integrity and privacy take place and are considered effective. Furthermore, a GRC platform with respective representatives from other second and third line functions has been formed and quarterly meeting of the Compliance & Integrity Committee take place.

Besides the regular duties of the compliance & integrity organisation, in 2021, special attention has been given to amongst others the following topics:

- The privacy organisation has been further professionalised with the appointment of Privacy Champions in each unit of TenneT, who function as a liaison or single point of contact between the privacy officers and the business units. This will better accommodate for ensuring compliance of our data privacy processes with laws and regulations.
- TenneT has followed up on the agreed commitment to the Dutch energy regulator ACM to improve the prevention of incidents in the high voltage network. As part of that, TenneT has provided all requested information regarding the compliance management system and compliance organisation and culture for assessment by a third party, the UMS Group, and received positive feedback from UMS Group.
- TenneT has ensured its compliance with the new EU Directive 2019/1937 on the protection of whistleblowers. The Speak Up Portal, which was already implemented in 2018 complies with all requirements. Speaking up is actively promoted and communicated by TenneT.
- E-learnings are rolled-out to all employees, on a quarterly basis, about topics like compliance, data privacy, information protection, health and safe workplace and fraud, bribery and corruption. All new employees receive these trainings as part of their onboarding program.

In 2021, 40 alleged compliance-related breaches were reported (2020: 56). Most frequently, employees reach out directly to the compliance & integrity officers, but also the special e-mail address is used, or the Speak Up portal is used to report (anonymously). TenneT received 1 external complaint. All reported alleged breaches are actively followed up. For 2021 it can be concluded that 11 constituted actual breaches, in most of the cases due to mistakes and unintentional acts, but have not led to disciplinary action or termination of employment. In the field of personnel expenses, certain non-compliances were identified and reported and remediation actions taken.

There have been 34 data leaks and/or irregularities in 2021 (2020: 27). If and when required, in total in 8 instances, they have been reported to the relevant authorities. This was an increase in comparison to 2020, mostly due to the fact that there have been major IT projects like OneERP and OnePPL.

TenneT did not identify any fraud, bribery or corruption breaches which had a material impact in 2021. Material impact is defined in our risk matrix as a breach that has a significant adverse effect on TenneT's reputation and/or financial position.

Risk appetite

Risk appetite is the amount and type of risk TenneT is willing to pursue or retain.

The risk appetite statement describes the willingness of TenneT to take on risks in pursuit of its strategic objectives. Annually, the Executive Board, together with the Senior Leaders, determine the right balance for TenneT between the risk, reward and opportunity. It is evaluated by considering influences such as company culture, financial strength, capabilities of the organisation, external influences and stakeholder influences.

Overarching the risk appetite statement, TenneT has two explicit 'zero tolerance' criteria:

- TenneT has zero tolerance for harm to people from exposure to health and safety threats;
- TenneT has zero tolerance for bribery, fraud and other corrupt business practices as reflected in the TenneT Code of Conduct.

Both zero tolerance statements are excluded in the risk appetite assessment.

In terms of the amount of risk that TenneT is willing to accept, a differentiation is made between the categories *risk averse* (low risk appetite), *risk neutral* (balanced risk appetite) and *risk taking* (high risk appetite).

The following visual summarises risk appetite assessed by the Executive Board and Senior Leaders. To learn more about specific strategic risks please refer to the section 'Our performance in 2021'.

Risk appetite and trend score

Strategic pillar	Description	Risk Appetite	Risk Trend	Opportunities Trend
Energise our people and organisation	with an inclusive and safe environment where people enjoy coming to work.	Low - + High	Low - + High	Low - + High
Secure supply today and tomorrow	by maintaining the grid to meet reliability targets and operating it to its maximum capability.			
Drive the energy transition	as a green grid operator and a thought leader.			
Safeguard our financial health	by implementing a regulatory framework to support our strategy, and delivering a return in line with what our capital providers expect, and raising the necessary external financing.			

Key risks

To provide one structured risk overview of all the risks and opportunities identified by TenneT, three risk tables are introduced. A strategic risk table based on the four strategic pillars, regulatory risks and lastly the climate related risks. Please note that the risks mentioned in these tables are also presented earlier in the performance section.

Strategic pillar	Risks	Mitigating measures
Energise our people and organisation	• Recruitment in the energy sector is highly competitive and the shortage of talent will continue for the foreseeable future. • Rapid and ad-hoc changes due to governmental COVID-19 regulations and the inability for social interactions increases the risk of potential mental health related problems. • We face a delicate balance, between growing responsible and sustainable in such a way that allows us to stay agile and productive versus growing too fast, which could slow us down with organisational inefficiencies and a lack of cohesion in the workforce. • Safety remains a core concern for everyone at TenneT.	• Improving TenneT's attractiveness as employer, the succession planning and our interaction with potential candidates and students. • Education is intensified to commit all stakeholders, making no difference between internal employees and contractors, about the importance and adherence to all safety regulations whether working at a construction site or at the office. • Providing support to our employees via in-house programs like the 'Always Energy' initiative.
	Opportunities	
	• Utilising the new way of working, either partially from home or by opening new work hubs could attract talent. • Boosting our execution power through finding better ways of working together in a performance-oriented culture.	
Secure supply today and tomorrow	**Risks**	**Mitigating measures**
	• Uncertainty about the phase-out of conventional energy production and the future expansion of renewables. • Permitting processes by authorities could cause project delays. • Some of our older assets require more maintenance work and presents a growing logistical challenge and cost. • High pressure in the supply chain for specialistic services, resources and scarce materials. • Too much or too little renewables being fed into the grid can destabilise the system and interrupt supply. Congestion scenarios such as this are becoming more common and redispatch costs rise. • Customer demand to be connected in reasonable time to our grid is high. • Security threats ranging from copper theft, cyber-attacks, ransomware and social engineering remains a high impact risk due to the nature of our work. • Introducing new technologies could increase the risk of outages caused by unforeseen malfunctions.	• We design and strengthen our assets, as well as providing system back-up in the event of failure. • Investing in the usage of new technology related to the security of supply, particularly in digitalisation and its potential to make smarter use of our grid. • Updating our supply chain management including among others new sourcing models, long-term partnerships, improving demand planning or revising contract models and tendering procedures. • Monitoring M&A activities in the markets (e.g. cable producers). • Optimising and simplifying organisational and decision making processes to increase efficiency and flexibility in our maintenance programme. • We are continuously assessing and identifying new security risks and to define and implement suitable measures for this.
	Opportunities	
	• New technologies (e.g. big data and data analytics) can support us in improving the utilisation of the grid.	

Strategic pillar	Risks	Mitigating measures
Drive the energy transition	• Indicated but not yet implemented governmental policies, due to the recent elections, could affect or delay our projects that require new market designs. • Our strategic plans are complicated by uncertainty on a national and/or European level due to an increase of political ambition on energy transition targets, the phase-out of conventional energy sources and the future expansion of renewables. • Limited space is available to build and expand our grid. • A lack of societal acceptance of the energy transition could lead to an inability to realise our ambitions. • Economic developments could influence the acceptance of costs associated with the energy transition.	• Together with project stakeholders, we aim to find the best solutions for each situation. • We are actively working with our contractors to make progress towards climate, circularity and nature ambitions. • We aim to use an environmental cost indicator (ECI) for evaluation purposes, based on the methodology of a Life Cycle Assessment (LCA).
	Opportunities	
	• New technologies, European collaboration to foster cross-border solutions, sector coupling, integrated decarbonisation and the ongoing politics of the green industry. • We have observed a strong preference for underground cabling compared to overhead lines.	
Safeguard our financial health	**Risks**	**Mitigating measures**
	• Lower regulatory rates of return on capital could diminish TenneT's attractiveness for investors. • Less favourable insurance market and limited options in risk transfer. • Our revenues depend mainly on the regulatory frameworks in the Netherlands and Germany. Adverse changes in any of the regulatory systems might impact our financial performance. • Dependence on regulatory framework and political commitments and growing concern about the cost of energy are increasing the pressure on the reimbursement schedules (revenue cap).	• Several alternatives are explored to finance the remaining equity requirement for our German investments. • The revenue cap is partially mitigated by an additional income stream on top of the revenue cap for specific investments. • Application of active cost control and to strive for an efficient operation of our business as far as reasonably possible in order to avoid adverse effects from efficiency assessments of our regulators.
	Opportunities	
	• Standard & Poor's continued to rate us as 'strong' and Sustainalytics indicated that TenneT is at low risk of experiencing material financial impacts from ESG factors. • Investments in green businesses and economies are increasingly favoured by large investors and banks.	

Regulatory risks

	Regulatory risk	Risk-mitigating actions
General 	• Inability to meet increasing efficiency targets over time as imposed by incentive regulation, especially taking into account a strongly growing company and the need for significant investments in grid expansion, maintenance, operation as well as innovation. • TenneT is unable to achieve a reasonable return on its invested capital as well as the full remuneration of operational costs as the regulated return continues to decline due to the low interest environment, the disallowance or only partial recognition of certain operational costs and stricter regulatory incentives.	• TenneT performs regular reviews of its processes and organisational structure, introduced lean management, carries out continuous improvement activities and automates its IT-related processes. TenneT also makes careful choices on make-or-buy decisions to optimise value for money to society and conducts strategic dialogues with regulators (ACM, BNetzA, ACER), policymakers and industry partners/suppliers to co-shape its future regulatory framework. • TenneT's strategy is to seek mutually acceptable results with regulatory stakeholders. However, if needed to protect pivotal strategic positions on solid legal grounds, legal action may be taken.
Europe 	• The 'Clean Energy Package' (CEP) entered into force. It requires amongst others that TSOs provide 70% of the total cross-border transmission capacity to the market, an amount difficult to achieve without extensive and costly redispatch activities. The German government introduced an action plan to gradually achieve this target by 31.12.2025. Delays in fulfilment of this plan by TenneT could lead to material financial penalties. Similarly, the Dutch Ministry of Economic Affairs has issued an action plan to gradually achieve the 70% target by 1.1.2026, which also contains derogations for TenneT.	• In Germany TenneT keeps the capacity requirements along the 'trajectory' as defined in the national 'action plan'. This means stepping up to full 70% using instruments such as redispatch and countertrade, also with the involvement of e.g. the DSO of Schleswig-Holstein Netz supporting through infeed-management of RES. • In the Netherlands, TenneT monitors compliance against the action plan, in particular also as to the conditions of the derogation. TenneT reports on issues to the ACM and the Ministry of Economic Affairs, if any.
The Netherlands 	• Regulatory returns in the Netherlands are under pressure due to the low interest rate environment. This implies a weakening of operational cash flows in times when TenneT is investing heavily. Furthermore, the ACM plans to replace the estimated by the actual risk-free rate. This would expose TenneT to more variability in cash flows and in the short- to medium-term is likely to have a further negative impact on returns as a result of the low market interests, which is partially offset by the real plus WACC system leading to higher cash flows in the new regulatory period. • According to the decision by the ACM, TenneT's cost efficiency level will decline from 97.9% in 2021 to 89.1% in 2025, impacting the next regulatory period with decreasing revenue.	• TenneT is appealing against the efficiency determination by the ACM and supports the appeal of Netbeheer Nederland regarding the determination on the WACC.
Germany 	• The BNetzA decreased the rate of return on equity for the next regulatory period from 6.91% to 5.07% before corporate tax. This will have a significantly negative impact on TenneT's cash flow and revenue as of 2024. The European Court of Justice decided that the German legal design of the regulatory framework must be changed in order to give the BNetzA more independence from political influences. It is yet unclear how far the degree of independence will reach with regard to parliamentary and legal checks and balances and how it will be implemented in a reliable and future-proof way in the regulatory framework. Furthermore, the independence of the regulator from national legislators may also affect the relationship of the ACM to the Ministry of Economic Affairs (EzK) in the Netherlands, as was announced in a press release by the ACM.	• TenneT together with other grid operators challenges the methodology used by the BNetzA on the return on equity determination and is appealing against this determination. • TenneT established an internal working group including colleagues from its regulatory, legal and political departments to accompany the political process. • TenneT engages, amongst others, in the German Association of Energy and Water Industry (BDEW) to support profound analysis and advocacy work within the network industry. • TenneT engages in public and expert discussions and positions itself as a competent partner and trustful advisor to the regulators and policymakers.

Climate related risks and opportunities

The Taskforce for Climate related Financial Disclosures provide recommendations for companies to improve and increase the reporting of climate related financial information. We have followed up on their recommendations, also in our risk assessment process and have identified the following climate related risks and opportunities for TenneT, which we clustered below. Please note that there might be some overlap with risks also being mentioned earlier in the report, but this is to provide one structured overview in this section.

Climate related risks

Risks		How might this affect TenneT?	Risk mitigating actions
• **Transition risks**	• **Policy and legal risks**	• Policy and legal risks are related to our regulatory framework. Choices we make that can help society and us as a company to transition to a climate-neutral economy are subject to discussion with our regulator. Our regulatory framework is updated once every 5 years and this might pose a risk that if ambitions from governments in the areas we serve move faster than the spirit of the regulatory framework, this might be a constraining factor to drive the energy transition.	• We mitigate this by lobbying on national and European level, run pilot projects and present business cases and focus on those topic that promise the highest benefit for society, which are integration of power and hydrogen as well as flexibility and grid utilisation together with partners.
	• **Technology risk**	• A risk of stranded assets might occur in case a new technology is developed which makes them obsolete.	• Mitigating actions include challenging the necessity of each investment and embrace other solutions, if those promise more societal value and actively work and invest in new technology as part of our strategy. Next to this, our approach regarding innovation aims to focus on the most important areas and implementing new technology as fast as possible, which reduces this risk.
	• **Market risk**	• Our market risks relate to dealing with the higher infeed of renewable energy sources and impacting the way we balance our grid and market prices. Renewable energy sources are less predictable and cannot easily be increased in case of a higher demand. Differences in market prices can lead to too high requests for energy at one location, e.g. Southern-Germany, where not all energy can be transmitted to the users. In such situations additional measures are required to balance the grid, e.g. redispatch.	• TenneT plans and builds DC-grid connections in Germany and interconnectors within Europe and we investigate the grid integration of green hydrogen and power grids as well as improving the quality of data to predict power production and consumption.
	• **Reputation risk**	• A reputation risk could occur when we are unable to deliver on our strategic goal to drive the energy transition. Connected to this are the increasing ambitions of the governments in the areas we serve to meet these requirements. Also, when realising our assets, we also have a reputational risk if there is a growing resistance from local communities and governments, if we do not engage with our stakeholders properly ("not in my backyard"). Furthermore the overall cost of the energy transition is also a risk from a reputational perspective (affordability).	• To mitigate this risk we aim to communicate in an open and transparent fashion. Next to this, we invite stakeholders in the planning and approval process of projects to voice their opinion which we consider in, for instance, the final route of a certain project. We also aim to balance affordability, sustainability and security of supply in all our investment decisions. Further mitigation takes place through the usage of professional planning, project management and costs forecasting.
• **Physical risks**	• **Acute**	• Acute risks are related to for instance (extreme) weather conditions that could impact our assets and supply chain.	• Acute weather conditions are mitigated during the design, construction and maintenance of our assets, e.g. choice of location and the choice of materials. Regarding our supply chain, monitoring of suppliers and diversification are mitigating factors.
	• **Chronic**	• Chronic physical risks can relate to rising sea and ground water levels for instance, where our assets might bear a risk due to this.	• We monitor developments to gain more experience and insights related to the scenarios and effects. Examples include projects related to assets such as our Krimpen aan de IJssel substation and one of our pylons, which we both have elevated. TenneT insures all substations and buildings during construction and operation against risks from natural catastrophes. Pylons and overhead-lines are not insured.

Climate related opportunities

Opportunities	How might this affect TenneT?
• **Resource efficiency**	• Increased decentralised power production and storage including self-balancing micro grids as well as electrolysers if they are correctly located can relieve high-voltage grids. Furthermore, DC-interconnectors enhance the transmission of power of very long distances and connect renewable power production and demands in different countries.
	• Solutions related to flexibility help us to make smarter use of our grid. This might have a positive effect as this could lead to less grid expansion and therefore help us reduce the amounts of resources required to secure supply today and tomorrow.
• **Energy source**	• TenneT is a leading investor in the energy transition and so we have been able to gain a vast amount of experience connecting renewable energy sources, such as offshore wind, to our grid. This experience helps us to further drive the energy transition together with partners and fulfil the future investment portfolio.
• **Products and Services**	• Our project portfolio has significantly changed in order to meet national and European climate goals. Key projects are connecting offshore wind energy to our grid or to ensure that our onshore grid is prepared for a new energy future. The gathering and analysis of energy data may lead to new products and services provided by TSOs, such as Equigy.
• **Markets**	• Strategies and objectives of financial institutes and banks provide opportunities for TenneT to attract sustainable financing at favourable terms and conditions by issuing green finance products to finance and refinance our investments in green infrastructure projects.
• **Resilience**	• Trends in the society, like the electrification of mobility result in higher demand on a stable grid and power supply. To ensure resilience integration of power and gas grids is a vital alternative. Digitalisation using technologies like automatisation, robotics and block-chain will help to optimise grid utilisation while safeguarding a reliable supply of electricity.

Financial statements

Consolidated financial statements

Consolidated statement of financial position

For the year ended 31 December (EUR million)

Assets	Notes	2021	2020
Non-current assets			
Tangible fixed assets	8	23,811	20,859
Right-of-use assets	9	433	505
Intangible assets	10	254	212
Investments in joint ventures	12	638	673
Investments in associates	12	34	34
Deferred tax assets	6	162	37
Other financial assets	13	37	28
Total non-current assets		**25,369**	**22,348**
Current assets			
Inventories	14	83	65
Account- and other receivables	15	2,401	3,795
Income tax receivable	6	143	31
Cash and cash equivalents	16	3,204	567
Total current assets		**5,831**	**4,458**
Total assets		**31,200**	**26,806**

Consolidated statement of financial position

For the year ended 31 December (EUR million)

Equity and liabilities	Notes	2021	2020
Equity			
Equity attributable to ordinary shares	18	4,844	5,324
Hybrid securities	18	2,125	2,125
Equity attributable to owners of the company		**6,969**	**7,449**
Non-controlling interests	19	638	689
Total equity		**7,607**	**8,138**
Non-current liabilities			
Borrowings	20	12,366	10,217
Contract liabilities	21	428	376
Deferred tax liability	6	7	146
Provisions	22	1,417	1,282
Lease liabilities	9	235	327
Net employee defined benefit liabilities	23	351	405
Other liabilities		25	5
Total non-current liabilities		**14,829**	**12,758**
Current liabilities			
Borrowings	20	1,339	2,243
Contract liabilities	21	2	2
Income tax payable	6	6	2
Provisions	22	45	66
Other financial liabilities		281	85
Bank overdrafts	16	64	90
Lease liabilities	9	169	135
Account- and other payables	24	6,858	3,287
Total current liabilities		**8,764**	**5,910**
Total equity and liabilities		**31,200**	**26,806**

References relate to the notes starting with note 1 'Basis for reporting'. These form an integrated part of the consolidated financial statements.

Consolidated statement of income

For the year ended 31 December (EUR million)

	Notes	2021		2020	
Revenue	3		**5,524**		**5,025**
Grid expenses	4	-4,102		-2,252	
Personnel expenses	4	-287		-239	
Depreciation and amortisation of assets	8,9,10	-1,165		-1,074	
Other operating expenses	4	-303		-171	
Other (gains)/losses		-4		7	
Total operating expenses			**-5,861**		**-3,729**
Share in profit of joint ventures and associates	12		62		60
Operating profit			**-275**		**1,356**
Finance income		2		2	
Finance expenses	5	-182		-197	
Finance result			**-180**		**-195**
Profit before income tax			**-455**		**1,161**
Income tax expense *	6		135		-324
Profit for the year			**-320**		**837**
Profit attributable to:					
Equity holders of ordinary shares *	18	-401		748	
Hybrid securities	18	57		44	
Owners of the company			**-344**		**792**
Non-controlling interests	19		24		45
Profit for the year			**-320**		**837**

Earnings per share attributable to the equity holders of ordinary shares

For the year ended 31 December (EUR per share)

	Notes	2021	2020
Basic and diluted earnings per share	7	-2,005	3,740

Consolidated statement of comprehensive income

For the year ended 31 December (EUR million)

		Attributable to equity holders of the company							
		Hedging reserve	Retained earnings	Unappro-priated result *	**Equity attributable to ordinary shares**	Hybrid securities	**Equity attributable to owners of the company**	**Non-controlling interest**	**Total equity**
	Notes	18	18	18		18		19	
2020									
Other comprehensive income to be reclassified to profit or loss in subsequent years:									
Amortisation of hedges	18	-1	-	-	-1	-	-1	-	-1
Taxation	6	-	-	-	-	-	-	-	-
		-1	**-**	**-**	**-1**	**-**	**-1**	**-**	**-1**
Items not to be reclassified to profit or loss in subsequent years:									
Re-measurement of defined benefit pensions	23	-	-24	-	-24	-	-24	-	-24
Taxation	6	-	8	-	8	-	8	-	8
		-	**-16**	**-**	**-16**	**-**	**-16**	**-**	**-16**
Total other comprehensive income 2020		**-1**	**-16**	**-**	**-17**	**-**	**-17**	**-**	**-17**
Profit for the year		-	-	748	748	44	792	45	837
Total comprehensive income 2020		**-1**	**-16**	**748**	**731**	**44**	**775**	**45**	**820**
2021									
Other comprehensive income to be reclassified to profit or loss in subsequent years:									
Amortisation of hedges	18	-	-	-	-	-	-	-	-
Taxation	6	-	-	-	-	-	-	-	-
		-	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Items not to be reclassified to profit or loss in subsequent years:									
Re-measurement of defined benefit pensions	23	-	79	-	79	-	79	-	79
Taxation	6	-	-23	-	-23	-	-23	-	-23
		-	**56**	**-**	**56**	**-**	**56**	**-**	**56**
Total other comprehensive income 2021		**-**	**56**	**-**	**56**	**-**	**56**	**-**	**56**
Profit for the year		-	-	-401	-401	57	-344	24	-320
Total comprehensive income 2021		**-**	**56**	**-401**	**-345**	**57**	**-288**	**24**	**-264**

Consolidated statement of changes in equity

For the year ended 31 December (EUR million)

		Attributable to equity holders of the company									
		Paid-up and called-up capital	Share premium reserve	Hedging reserve	Retained earnings	Unappro-priated result	**Equity attributable to ordinary shares**	Hybrid securities	**Equity attributable to owners of the company**	**Non-controlling interest**	**Total equity**
(EUR million)	Notes	18	18	18	18	18		18		19	
At 1 January 2020		**100**	**1,790**	**1**	**2,271**	**534**	**4,696**	**1,120**	**5,816**	**744**	**6,560**
Profit for the year		-	-	-	-	748	748	44	792	45	837
Total other comprehen-sive income		-	-	-1	-16	-	-17	-	-17	-	-17
Total comprehensive income		**-**	**-**	**-1**	**-16**	**748**	**731**	**44**	**775**	**45**	**820**
Dividends paid	18	-	-	-	-	-112	-112	-	-112	-50	-162
Capital contribution	18	-	-	-	-	-	-	-	-	5	5
Capital repayment	18	-	-	-	-	-	-	-	-	-55	-55
Issue of hybrid securities	18	-	-	-	-	-	-	1,000	1,000	-	1,000
Distribution on hybrid securities	18	-	-	-	-	-	-	-39	-39	-	-39
Tax on distribution on hybrid securities	18	-	-	-	9	-	9	-	9	-	9
Appropriation remaining prior year result		-	-	-	422	-422	-	-	-	-	-
At 31 December 2020		**100**	**1,790**	**-**	**2,686**	**748**	**5,324**	**2,125**	**7,449**	**689**	**8,138**
Profit for the year		-	-	-	-	-401	-401	57	-344	24	-320
Total other comprehen-sive income		-	-	-	56	-	56	-	56	-	56
Total comprehensive income		**-**	**-**	**-**	**56**	**-401**	**-345**	**57**	**-288**	**24**	**-264**
Dividends paid	18	-	-	-	-	-149	-149	-	-149	-33	-182
Capital repayment	18	-	-	-	-	-	-	-	-	-42	-42
Distribution on hybrid securities	18	-	-	-	-	-	-	-57	-57	-	-57
Tax on distribution on hybrid securities	18	-	-	-	14	-	14	-	14	-	14
Appropriation remaining prior year result		-	-	-	599	-599	-	-	-	-	-
At 31 December 2021		**100**	**1,790**	**-**	**3,355**	**-401**	**4,844**	**2,125**	**6,969**	**638**	**7,607**

Consolidated statement of cash flows

For the year ended 31 December (EUR million)

	Notes	2021		2020	
Operational activities					
Operating profit			**-275**		**1,356**
Non-cash adjustments to reconcile profit to net cash flows:					
Depreciation, amortisation and impairment of assets	8,9,10	1,165		1,074	
Share in profit of joint ventures and associates	12	-61		-60	
Dividends received from joint ventures and associates	12	85		31	
Movements in provisions and other (financial) liabilities and assets		-59		101	
			1,130		**1,146**
Working capital adjustments excluding EEG working capital:					
(Increase)/decrease in account- and other receivables	15	-90		-85	
(Increase)/decrease in inventories		-18		1	
Increase/(decrease) in account- and other payables	24	-319		-13	
Increase/(decrease) in contract liabilities	21	52		36	
Increase/(decrease) in current financial liabilities		196		6	
Cash generated from operation			**-179**		**-55**
Income tax paid (net)			-246		-402
Net cash flows from operating activities excluding EEG working capital			**430**		**2,045**
EEG working capital adjustments:					
(Increase)/decrease in EEG receivables	15	1,956		-1,625	
(Increase)/decrease EEG deposits > 3 months	15	-472		-	
Increase/(decrease) in EEG payables	24	2,961		-516	
			4,445		**-2,141**
Net cash flows from operating activities			**4,875**		**-96**
Investing activities					
Purchase of tangible and intangible fixed assets	8,10	-2,852		-3,413	
Proceeds from sale of tangible and intangible fixed assets		11		-	
Interest received		3		-	
Acquisition of subsidiary		-		-12	
Capital contribution to joint ventures and associates	12	-		-44	
Net cash flows used in investing activities			**-2,838**		**-3,469**
Financing activities					
Net financing					
Proceeds from borrowings	20	3,481		3,316	
Repayment of borrowings	20	-2,243		-566	
			1,238		**2,750**

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Consolidated statement of cash flows

For the year ended 31 December (EUR million)

	Notes	2021		2020	
Other financing activities					
Payment of lease liabilities	9	-156		-169	
Interest paid		-174		-189	
Dividends paid to ordinary shareholders of the company	18	-149		-112	
Proceeds from issue of hybrid securities	18	-		1,000	
Distribution on hybrid securities	18	-57		-39	
Dividends paid and capital repayments to non-controlling interests	19	-76		-100	
			-612		**391**
Net cash flows from financing activities			**626**		**3,141**
Net change in cash and cash equivalents			**2,663**		**-424**
Cash and cash equivalents at 31 December	16	3,140		477	
Cash and cash equivalents at 1 January	16	477		901	
			2,663		**-424**

Notes to the consolidated financial statements

We are continuously improving our financial reporting to make it more relevant and understandable to our stakeholders. These financial statements focus on the key (financial) topics for 2021. Like last year, the notes to the consolidated financial statements are disclosed following more or less the sequence of items in the consolidated statement of financial position and consolidated statement of income. Accounting policies are indicated with ⓘ, while key assumptions and estimates are identified by using ✸ in front of the header.

1 Basis for reporting

Basis for preparation

The accounting policies describe our approach to recognise and measure transactions and balance sheet items in our financial statements. Accounting policies, including new European Union (EU) endorsed accounting standards, amendments and interpretations, relating to the consolidated financial statements as a whole are described below. This section also provides general guidance regarding assumptions, estimates and judgements used in the preparation of the financial statements. A more detailed description of accounting policies and significant estimates related to specific reported amounts is presented in the respective notes. Only accounting policies which are deemed material are presented in these financial statements. We consider an item material if, in our view, it is likely to have an impact on the economic decisions of primary users of these financial statements.

General

TenneT Holding B.V. and its subsidiaries are a leading electricity transmission system operator with activities in the Netherlands and a large part of Germany. In the Netherlands, our activities are conducted by TenneT TSO B.V. and its subsidiaries. In Germany, our activities are performed by TenneT GmbH & Co. KG and its subsidiaries.

The Dutch State owns the entire issued share capital of TenneT Holding B.V. Furthermore, TenneT Holding B.V. has issued hybrid securities which are deeply subordinated and are accounted for as part of equity attributable to equity holders of the Company. The registered office of TenneT Holding B.V. is located at Utrechtseweg 310, Arnhem, the Netherlands, with its statutory seat in Arnhem and a registration with the Dutch Commercial Register under number 09083317.

These consolidated financial statements of TenneT Holding B.V. and its subsidiaries (hereafter referred to as 'TenneT', 'the Company' or 'the Group') for the year ended 31 December 2021 were prepared by our Executive Board and authorised for issuance in accordance with a resolution of the Supervisory Board on 14 March 2022. The financial statements will be submitted for adoption at the General Meeting of Shareholders. These consolidated financial statements have been audited by Deloitte Accountants B.V.

Restatement of key management remuneration

In accordance with IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors, comparative figures of the key management remuneration have been retrospectively adjusted to include the termination compensation for former Board member Ben Voorhorst (EUR 580k), which has incorrectly been omitted from the 2020 Integrated Annual Report. We refer to Note 4 for the updated key management remuneration disclosure schedules.

Changes in EU-endorsed published IFRS standards and interpretations effective in 2021

Significant new and amended standards adopted by the Group

TenneT has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

IFRS standards issued but not yet effective and adopted by the Group

It is anticipated that any issued changes to IFRS standards that are not yet effective and adopted by TenneT will not have a significant impact. Changes in EU-endorsed published IFRS standards and interpretations effective in 2021

Basis for consolidation

The consolidated financial statements incorporate the financial statements of TenneT Holding B.V. and its subsidiaries as at 31 December 2021. A list of the legal entities included in the consolidation is included in note 30. Subsidiaries are consolidated from the date of acquisition, constituting the date on which control is obtained and continue to be consolidated until the date when such control ceases. The financial statements of subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intercompany balances, transactions, unrealised gains and losses resulting from intercompany transactions and dividends are eliminated in full in consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If we cease to have control over a subsidiary, we derecognise the subsidiary's assets (including goodwill), liabilities and any non-controlling interest in the former subsidiary at the date control is lost (including the cumulative translation

differences). Furthermore, the fair value of the consideration received, the fair value of any investment retained and any surplus or deficit in statement of income are recognised. Acquisitions are accounted for using the acquisition method, where the purchase price is allocated to the identifiable assets acquired and liabilities assumed on a fair value basis and the remainder is recognised as goodwill.

Basis for preparation

These consolidated financial statements are prepared in accordance with IFRS as adopted by the EU and Part 9, Book 2 of the Dutch Civil Code. The company financial statements for TenneT Holding B.V. are prepared in accordance with the provisions of Part 9, Book 2, of the Dutch Civil Code.

The consolidated financial statements are prepared on a going concern basis. The going concern basis presumes that the Group has adequate resources to remain in operation and that the Executive Board intends it to do so, for at least one year from the date of the end of the reporting period.

The consolidated financial statements are prepared on a historical cost basis, unless described otherwise in the accounting policy of a balance sheet position. They are presented in euros and all values are rounded to the nearest million (EUR 000,000), except when otherwise indicated.

Significant accounting judgements, estimates and assumptions

The preparation of financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities and the reported amounts of revenue and expenses during the reporting period. Such estimates are assessed continuously on the basis of previous results and experience, consultations with experts, trends, prognoses and other methods which we deem appropriate in each individual case. Actual results could differ from these estimates. Significant items containing estimates and assumptions are as follows:

Item	Note	Estimate/assumptions
Tangible fixed assets	8	Estimate of remaining useful life, identification of cash-generating units for fixed asset impairment testing and TSO NL impairment testing assumptions
Right-of-use assets and liabilities	9	Estimates of discount rate and expected extension or accelerated termination date
Intangible fixed assets	10	Estimate of recoverable amount and remaining useful life
Impairment review of goodwill	10	Estimate of cash flow projections and pre-tax discount rate
Grid expense payable	24	Amongst others estimate of electricity usage and energy prices
Provision for environmental management and decommissioning	22	Estimate of removal costs, removal dates, discount rate and price increases in the period leading up to removal
Tariff related provisions	22	Estimate of electricity usage and number of parties
Other provisions	22	Mainly relate to estimate of probability, realisation date and curtailed feed-in volumes and prices
Net employee benefit obligations	23	Financial, actuarial and demographic assumptions

Functional currency

These consolidated financial statements are presented in euros, which is also the parent company's and all subsidiaries` functional currency.

COVID-19 impact

The COVID-19 pandemic continued during 2021. Measures initiated in 2020 and continued in 2021 allowed us to run operations in the field and in our control room without interruption, despite challenging circumstances. We are proud of the resilience of our employees. During 2021, COVID-19 had, like in 2020, no material impact on the financial figures of TenneT.

2 Segment information

This section sets out the financial performance for the year in accordance with the way in which we manage our business (operating segments). We measure and assess our performance based on underlying financial information, which is explained further below.

We generate substantially all of our revenue from our regulated operating segments in the Netherlands and Germany. Therefore, close collaboration with our respective regulators to obtain regulations and agreements that provide reasonable compensation for the risks we face is key to us. Our involvement in certain limited non-regulated activities is closely related and ancillary to our core tasks.

Segment analysis

Our operating segments consist of:

- TSO Netherlands
- TSO Germany
- Non-regulated activities

For management information purposes, the performance of our regulated activities in the Netherlands and in Germany is considered separately into two geographical segments. This segmentation, based on separately applicable regulatory frameworks, is the key determinant for financial management of the business and for decision-making on budgets, allocation of resources and financing.

Financing activities (including finance income and expenses) are managed on a Group basis and amounts related thereto are not allocated to the segments. Transfer prices between the Netherlands and Germany are set at arm's length in a manner similar to transactions with third parties. These intercompany transactions are eliminated in consolidation.

Our Executive Board is the chief operating decision-making body of the company (as defined by IFRS 8 'Operating segments'). Periodically, it monitors the performance of the respective operating segments for the purpose of performance management and decision making about resource allocation. The segment performance is based on underlying financial information, where EBIT, investments and return on capital are key metrics. The definition of EBIT equals operating profit. Performance of non-regulated activities is evaluated based on EBIT and return on capital of these activities.

Underlying financial information is based on the principle of recognising regulatory assets and liabilities for all of our regulated activities. This implies that amounts resulting from past events and which are allowed to be received or are required to be returned through future tariffs are recorded as an asset or liability, respectively. TenneT's Executive Board believes that the presentation of underlying financial information provides additional relevant insight in the actual business, financial performance, and as such economic reality. Furthermore, this reflects the regulatory regime.

ⓘ Accounting policies applied for underlying financial information

Underlying financial information matches regulatory revenues and expenses in a corresponding reporting period and defers certain income items until used for investments or tariff reductions.

Matching is achieved through recognition of regulatory deferral accounts. The key requirement for such recognition is that an existing regulatory framework must be in place that permits the future reimbursement or requires the future settlement of regulated assets or liabilities, respectively. Consequently, a regulated asset is recognised in underlying financial information in

respect of permitted reimbursements of current year expenses in future year's tariffs. Vice versa, a regulated liability is recognised in underlying financial information in respect of required settlements (i.e. repayments) of current year revenues through future tariffs. Furthermore, until 2015 certain investments in the Netherlands were financed via auction receipts resulting from auctioning available electricity transmission capacity on cross-border interconnections.

During 2021, there were three customers, being two DSOs and one TSO, in the German segment that generated revenues that were more than 10% of our total revenue. The revenue from these customers amounted respectively EUR 703 million (2020: EUR 816 million), EUR 611 million (2020: EUR 572 million) and EUR 552 million (2020: EUR 770 million).

	2021			2020		
(EUR million)	**Investments**	**Assets**	**Liabilities**	Investments	Assets	Liabilities
TSO Netherlands	1,552	9,651	6,384	1,281	7,790	4,564
TSO Germany	2,408	22,325	16,943	2,121	19,637	14,271
Non-regulated activities	9	437	206	10	841	204
Total segments	**3,969**	**32,413**	**23,533**	**3,412**	**28,268**	**19,039**
Eliminations and adjustments	-	-452	601	-	-968	730
Consolidated underlying information	**3,969**	**31,961**	**24,134**	**3,412**	**27,300**	**19,769**

	2021		2020	
(EUR million)	**Assets**	**Liabilities**	Assets	Liabilities
TSO Netherlands	9,106	6,013	7,405	3,976
TSO Germany	22,109	16,773	19,517	13,747
Non-regulated activities	437	206	857	215
Total segments	**31,652**	**22,992**	**27,779**	**17,938**
Eliminations and adjustments	-452	601	-973	730
Consolidated IFRS information	**31,200**	**23,593**	**26,806**	**18,668**

Investment amounts recognised under IFRS equal underlying investments.

For an analysis of underlying results please refer to the ‘Secure a sustainable financial performance and investor rating’ section of the integrated annual report.

Regulatory deferral accounts: reconciliation to IFRS figures

The difference between underlying financial information - as presented in the segment information and board report - and IFRS reported figures is related to the recognition of regulated assets and liabilities, auction receipts and the measurement of tangible fixed assets. In the IFRS financial statements, revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. In the underlying financial information revenues are recognised according the permissible tariff decision adopted by the regulator. By doing so, volume and post calculation differences are directly matched to the related costs and therefore provide additional relevant insight to manage TenneT's business.

These differences also result in different deferred tax balances in underlying financial information compared to IFRS reported figures. No other differences between underlying financial information and IFRS exist.

Underlying financial information can be reconciled to reported IFRS figures as follows:

	2021					
(EUR million)	TSO NL	TSO Germany	Non-regulated	**Total segments**	Eliminations	**Total**
Connection and transmission services	1,504	3,008	-	4,512	-	4,512
Maintenance of the energy balance	91	283	-	374	-	374
Operation of energy exchanges	4	-	-	4	-	4
Offshore (balancing)	187	1,142	-	1,329	-	1,329
Other	59	120	27	206	-58	148
Inter-segment	28	48	1	77	-77	-
Total underlying revenue	**1,873**	**4,601**	**28**	**6,502**	**-135**	**6,367**
Inter-segment adjustments and eliminations	-28	-48	-1	-77	77	-
Total underlying revenue from contracts with customers	**1,845**	**4,553**	**27**	**6,425**	**-58**	**6,367**
Grid expenses	-1,075	-2,772	-2	-3,849	32	-3,817
Other operating expenses	-546	-1,232	-19	-1,797	19	-1,778
Share in profit of joint ventures and associates	1	12	-	13	49	62
Underlying operating profit	**225**	**561**	**6**	**792**	**42**	**834**
Revenue adjustment to IFRS	-503	-340	-	-843	-	-843
Cost adjustment to IFRS	7	-273	4	-262	-4	-266
IFRS operating profit/(loss)	**-271**	**-52**	**10**	**-313**	**38**	**-275**
Finance result						-180
Profit/(loss) before income tax						**-455**
Income tax expense						135
Profit/(loss) for the year						**-320**

	2020					
(EUR million)	TSO NL	TSO Germany	Non-regulated	**Total segments**	Eliminations	**Total**
Connection and transmission services	907	2,011	-	2,918	-	2,918
Maintenance of the energy balance	52	92	-	144	-	144
Operation of energy exchanges	4	-	-	4	-	4
Offshore (balancing)	153	1,082	-	1,235	-	1,235
Other	52	99	26	177	-28	149
Inter-segment	22	23	-	45	-45	-
Total underlying revenue	**1,190**	**3,307**	**26**	**4,523**	**-73**	**4,450**
Inter-segment adjustments and eliminations	-22	-23	-	-45	45	-
Total underlying revenue from contracts with customers	**1,168**	**3,284**	**26**	**4,478**	**-28**	**4,450**
Grid expenses	-446	-1,666	-2	-2,114	11	-2,103
Other operating expenses	-483	-1,000	-21	-1,504	7	-1,497
Share in profit of joint ventures and associates	1	30	3	34	26	60
Underlying operating profit	**240**	**648**	**6**	**894**	**16**	**910**
Revenue adjustment to IFRS	-44	619	-	575	-	575
Cost adjustment to IFRS	7	-136	-	-129	-	-129
IFRS operating profit	**203**	**1,131**	**6**	**1,340**	**16**	**1,356**
Finance result						-195
Profit before income tax						**1,161**
Income tax expense						-324
Profit for the year						**837**

	Reconciliation IFRS to underlying figures					
	2021			2020		
(EUR million)	IFRS figures	Underlying items	Underlying figures	IFRS figures	Underlying items	Underlying figures
Revenue	**5,524**	**843**	**6,367**	**5,025**	**-575**	**4,450**
Grid expenses	-4,102	285	-3,817	-2,252	149	-2,103
Personnel expenses	-287	-	-287	-239	-	-239
Depreciation and amortisation of assets	-1,165	-20	-1,185	-1,074	-20	-1,094
Other operating expenses	-303	1	-302	-171	-	-171
Other (gains)/losses	-4	-	-4	7	-	7
Total operating expenses	**-5,861**	**266**	**-5,595**	**-3,729**	**129**	**-3,600**
Share in profit of joint ventures and associates	62	-	62	60	-	60
Operating profit/(loss)	**-275**	**1,109**	**834**	**1,356**	**-446**	**910**
Finance income	2	18	20	2	4	6
Finance expenses	-182	-11	-193	-197	-14	-211
Finance result	**-180**	**7**	**-173**	**-195**	**-10**	**-205**
Profit/(loss) before income tax	**-455**	**1,116**	**661**	**1,161**	**-456**	**705**
Income tax expense	135	-303	-168	-324	135	-189
Profit/(loss) for the year	**-320**	**813**	**493**	**837**	**-321**	**516**
Profit/(loss) attributable to:						
Equity holders of ordinary shares	-401	805	404	748	-321	427
Hybrid securities	57	-	57	43	-	43
Owners of the company	**-344**	**805**	**461**	**791**	**-321**	**470**
Non-controlling interests	24	8	32	46	-	46
Profit/(loss) for the year	**-320**	**813**	**493**	**837**	**-321**	**516**
Basic and diluted earnings per share	**-2,005**		**2,020**	**3,740**		**2,135**
Underlying items						
To be settled in tariffs		1,317			-353	
Auction receipts		-387			-179	
Investment contributions		-1			5	
Maintenance of the energy balance		-85			-48	
Revenue		**844**			**-575**	
To be settled in tariffs		285			149	
Grid expenses		**285**			**149**	
Depreciation and amortisation of assets		-20			-20	
Total operating expenses		**-20**			**-20**	
Share in profit of joint ventures and associates		-			-	
Operating profit/(loss)		**1,109**			**-446**	

To be settled in tariffs

Revenue surpluses and deficits resulting from differences between expected (ex ante) and realised (ex post) electricity transmission volumes are incorporated in the tariffs of subsequent years in both Germany and the Netherlands. In underlying financial information, these surpluses and deficits are recorded as assets and liabilities, respectively, under 'to be settled in tariffs'. The expenses related to these items have to be settled in future tariffs in the coming years.

The underlying item “to be settled in tariffs” is related to the revenue stream “connection and transmission services” and concerns an increase amounting to EUR 1,317 million (2020: decrease of EUR 353 million).

Auction receipts & investment contributions

Auction receipts result from auctioning the available electricity transmission capacity on cross-border interconnections. These receipts are not at TenneT's free disposal. In accordance with Regulation (EU) 2019/943, auction receipts shall be used to fulfil the following priority objectives:

a. guaranteeing the actual availability of the allocated capacity including firmness compensation; or
b. maintaining or increasing cross-zonal capacities through optimisation of the usage of existing interconnectors by means of coordinated remedial actions, where applicable, or covering costs resulting from network investments that are relevant to reduce interconnector congestion.

When these priority objectives have been adequately fulfilled, auction receipts may be used as income to be taken into account by the regulatory authorities when approving the methodology for calculating network tariffs or fixing network tariffs, or both. In the Netherlands, TenneT agreed with its regulator (Autoriteit Consument en Markt) that investments in interconnectors are no longer financed through the auction receipts as of 2016. The current outstanding balance of auction receipts will be used in accordance with the aforementioned objectives. On 24 November 2021, an additional addendum to the original agreement was signed where ACM decided that no auction receipts will be used to reduce tariffs in 2022. Investments in previous years financed by using auction receipts are classified as investment contributions and are reported under ‘liabilities’. A periodic amount equal to the depreciation charges, plus a portion of the operating expenses, is released to the statement of income, following the release scheme as described above.

In Germany, the use of auction receipts for investments was effectively achieved by reducing tariffs over a rolling 20-year period as of 2019.

Investments financed by using auction receipts are classified as investment contributions and are reported under ‘liabilities’. A periodic amount equal to the depreciation charges, plus a portion of the operating expenses, is released to the statement of income, following the release scheme as described above.

The underlying item auction receipts is part of revenue stream “operations of energy exchanges” for a decrease amounting to EUR 387 million (2020: decrease EUR 179 million). The underlying item investment contribution is part of revenue stream “other” for an amount of EUR 1 million decrease (2020: EUR 5 million increase).

Maintenance of the energy balance

As system manager of the high-voltage grid in the Netherlands, TenneT receives funds for performing certain statutory duties, such as the maintenance of the energy balance. The proceeds from these activities (i.e., imbalance settlements) may only be used after approval by the ACM. Imbalance settlements collected during the year are to be offset in transmission tariffs in the subsequent year. Consequently, these amounts are recorded as a liability and released in the subsequent year in the underlying financial information.

As the balancing group coordinator, TenneT TSO GmbH (“TTG”) is responsible for balancing the balancing groups in terms of energy. We balance surplus or shortfall balancing groups by means of control energy and bill the balancing group managers for the resulting costs. For this billing of balance imbalances, the so-called “Uniform balancing energy price across control zones” (reBAP) is used. As a result, TTG receives higher payments from the balancing group managers than TTG pays to the power plant operators. The resulting additional revenues from the balancing energy billing system are to be deducted from the grid charges. Analogously, revenue shortages will increase future grid fees.

The underlying item maintenance of the energy balance is part of revenue “stream maintenance” of the energy balance for an amount of EUR 85 million decrease (2020: EUR 48 million decrease).

Depreciation and amortisation of assets

Differences in depreciation and amortisation of assets occur due to the difference in accounting treatment of the regulatory deferral accounts and the related cash flows in order to determine the economic useful life and recoverable amount of the assets resulting from acquisitions and used for impairment analysis.

There is no difference in depreciation method between underlying and IFRS, but the amount of depreciation differs mainly due to an impairment under IFRS of the NorNed cable in 2015 of EUR 232 million which was not recognised in underlying financial information.

With regard to TenneT's German segment, depreciation as well as assets in underlying financial information are higher due to higher acquisition costs resulting from an adjustment in connection with the Purchase Price Allocation in 2010.

3 Revenue

	2021					
(EUR million)	TSO NL	TSO Germany	Non-regulated	**Total segments**	Eliminations	**Total**
Connection and transmission services	801	2,419	-	3,220	-	3,220
Maintenance of the energy balance	166	294	-	460	-	460
Operation of energy exchanges	164	228	-	392	-	392
Offshore (balancing)	161	1,142	-	1,303	-	1,303
Other	50	130	27	207	-58	149
Inter-segment	28	48	1	77	-77	-
Total IFRS revenue	**1,370**	**4,261**	**28**	**5,659**	**-135**	**5,524**
Inter-segment adjustments and eliminations	-28	-48	-1	-77	77	-
Total IFRS revenue from contracts with customers	**1,342**	**4,213**	**27**	**5,582**	**-58**	**5,524**

	2020					
(EUR million)	TSO NL	TSO Germany	Non-regulated	**Total segments**	Eliminations	**Total**
Connection and transmission services	617	2,538	-	3,155	-	3,155
Maintenance of the energy balance	97	96	-	193	-	193
Operation of energy exchanges	99	85	-	184	-	184
Offshore (balancing)	270	1,082	-	1,352	-	1,352
Other	41	102	26	169	-28	141
Inter-segment	22	23	-	45	-45	-
Total IFRS revenue	**1,146**	**3,926**	**26**	**5,098**	**-73**	**5,025**
Inter-segment adjustments and eliminations	-22	-23	-	-45	45	-
Total IFRS revenue from contracts with customers	**1,124**	**3,903**	**26**	**5,053**	**-28**	**5,025**

Connection and transmission services

Revenue from connection and transmission services is regulated by the ACM in the Netherlands and by the BNetzA in Germany and includes revenue from services provided to DSOs and industrial clients (such as resolution of transmission restrictions, congestion management and reactive power management).

Revenue increased mainly due to ongoing investments and a growing asset base.

Maintenance of the energy balance

TenneT is responsible to ensure that electricity supply and demand is in balance at all times (i.e. the alternating current frequency in the power grid must be at 50 Hz continuously). If this balance is significantly disrupted, it may result in a power outage or even a black-out, depending on the length and severity of the imbalance. To ensure this balance, TenneT contracts and deploys (among others) reserve and emergency capacity to compensate unexpected fluctuations in supply and demand. The cash in- and outflows associated with maintaining this energy balance (e.g. imbalance settlements) fluctuate considerably and are settled through regulated tariffs in both the Netherlands and Germany in subsequent years.

Revenue increased mainly due to higher energy prices.

Operation of energy exchanges

This amount includes revenues resulting from the auctioning of cross-border (electricity transmission 'interconnection') capacity.

Revenue increased mainly due to higher energy prices.

Offshore (balancing)

Total offshore (balancing) slightly decreased due to the additional non-recurring income pertaining to the years 2017-2019 of EUR 29 million in 2020.

Revenue from offshore (balancing) is regulated.

ⓘ Accounting policy

Revenue primarily represents the sales value derived from the connection and transmission of electricity together with the sales value derived from the provision of other services to customers during the year. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

Revenues arise from contracts with a single performance obligation. The assessment of unbilled connection and transmission services supplied to customers between the date of the last meter reading and year-end is subject to significant judgement. This assessment is primarily based on expected consumption and weather patterns.

If revenue received or receivable exceeds the maximum annual amount as determined by the national regulators, ACM or BNetzA respectively, a downward adjustment will be made to future tariffs to reflect this over-recovery. Under IFRS, no liability is recognised since this adjustment relates to the provision of future services. Similarly, no asset is recognised under IFRS when a regulator permits increases to be made to future tariffs in respect of under-recovery.

Offshore (balancing) revenues in The Netherlands are accounted for in accordance with the recognition and measurement principles of IAS 20. These revenues are not recognised until there is reasonable assurance that the Group satisfies the conditions attached to receiving this income.

4 Operating expenses

Grid expenses

(EUR million)	2021	2020
System services	2,266	1,238
Connection and transmission services	829	360
Maintenance of the energy balance	374	145
Maintaining and operating transmission grids	637	516
Other	-4	-7
Total	**4,102**	**2,252**

System services increased additionally due to higher costs related to feed-in management, transmission restrictions, grid losses and redispatch costs. The increase is caused both by higher energy prices due to market situation and more transmission restrictions. Increase of cost of maintaining and operating transmissions grids mainly related to higher insurance costs.

Personnel expenses

(EUR million)	2021	2020
Salaries	390	318
Social security contributions	57	47
Pension charges defined benefit plans	24	20
Pension charges other plans	32	23
Other personnel expenses	39	35
Capitalised costs for (in)tangible fixed assets	-255	-204
Total	**287**	**239**

Average workforce in FTEs (internal employees only)	4,586	3,927
Average workforce in FTEs employed in the Netherlands	1,975	1,712
Average workforce in FTEs employed in the Germany	2,611	2,215

Key management remuneration

Members of the Executive Board and Supervisory Board are regarded as key management. The comparative figures of the key management remuneration have been adjusted to include the termination compensation for former Board member Ben Voorhorst (EUR 580k), which has incorrectly been omitted from the 2020 Integrated Annual Report. The termination benefit was paid out in 2021.

Aggregate remuneration of members of the Supervisory Board and Executive Board is as follows:

Supervisory Board (EUR thousand)	Fixed remuneration	Committee fee	Total
2021	**126**	**58**	**184**
2020	156	59	215

Executive Board (EUR thousand)	Fixed remuneration	Pension cost	Termination benefit	Total
2021	**1,602**	**445**	**513**	**2,560**
2020	1,489	338	580	2,407

The aggregate Executive Board remuneration comprises remuneration of statutory directors of EUR 2,560 thousand (2020: EUR 2,321 thousand) and remuneration of non-statutory directors of nil (2020: EUR 86 thousand). As of 1 March 2020 the entire Executive Board consisted of statutory directors. Pension remuneration equals (i) the contributions payable to the defined contribution plan for service rendered in the period or (ii), for defined benefit plans, the current service cost and, when applicable, past service cost. We refer to the Supervisory Board Report for a more detailed disclosure on remuneration.

Other operating expenses

(EUR million)	2021	2020
Accommodation and office expenses	99	71
Consultancy expenses	48	39
Hiring of temporary personnel	49	38
Travel and living expenses	13	10
Other expenses	94	13
Total	**303**	**171**

The increase of the accommodation and office expenses is mainly due to the increased size of the organisation. Further, the increase of the other operating expenses is mainly related to normalisation of the other expenses. These were significantly lower last year due to a release of the offshore liability.

The fees listed in the table below relate to the services provided to the Company and its consolidated Group entity by Deloitte Accountants B.V., The Netherlands, the external auditor as referred to in section 1(1) of the Dutch Accounting Firm Oversight Act (Dutch acronym: Wta), as well as by other Dutch and non-Dutch Deloitte individual partnerships and legal entities, including their tax services and advisory groups.

(EUR thousand)	2021	2020
Audit of the financial statements		
Deloitte Accountants B.V.	826	813
Deloitte GmbH Wirtschaftsprüfungsgesellschaft	700	833
Total audit of the financial statements	**1,526**	**1,646**
Other assurance services		
Deloitte Accountants B.V.	374	451
Deloitte GmbH Wirtschaftsprüfungsgesellschaft	164	52
Total other assurance services	**538**	**503**
Total audit fees	**2,064**	**2,149**

The financial audit fees include the aggregate fees in 2021 and 2020 for professional services rendered for the audit of TenneT's Integrated Annual Report and annual statutory financial statements of subsidiaries or services that are normally provided by the auditor in connection with these audits.

The other assurance fees include the aggregate fees invoiced for assurance and services for other audit services, which generally only the company's independent auditor can reasonably provide, such as comfort letters, regulatory statements and audits of grant statements.

ⓘ Accounting policy

TenneT has energy purchase contracts for the forward purchase of energy or gas that are used to satisfy physical delivery requirements to customers or for the energy that the group uses itself. Substantially all our costs of purchasing electricity for supply to customers are recoverable at an amount equal to cost. The timing of recovery of these costs can vary between financial periods leading to an under- or over-recovery within any particular year that can lead to large fluctuations in the IFRS income statement. We follow approved policies to manage price and supply risks for our commodity activities.

TenneT's energy procurement risk management policy and delegations of authority govern its commodity trading activities for energy transactions. The purpose of this policy is to ensure we transact within pre-defined risk parameters and only in the physical and financial markets where we or our customers have a physical market requirement. In addition, state regulators require TenneT to manage commodity risk and cost volatility prudently through diversified pricing strategies. In both The Netherlands and Germany, we are required to file a plan outlining our energy procurement strategy to be approved by the respective regulator. In certain cases, we might receive guidance with regard to specific hedging limits.

Energy purchase contracts for the forward purchase of electricity that are used to satisfy physical delivery requirements to customers, or for energy that TenneT uses itself, meet the expected purchase or usage requirements of IFRS 9. They are, therefore, not recognised in the financial statements until they are realised. In note 28 of the consolidated financial statements commitments under such contracts have been disclosed as “Grid related commitments”.

Operating expenses are expenses incurred during regular day-to-day business, such as system services, connection and transmission services, personnel expenses, depreciation and accommodation and travel costs. Operating expenses are recorded in the statement of income in the period they are incurred.

5 Finance expenses

(EUR million)	2021	2020
Interest on borrowings and credit facilities	175	188
Capitalised interest on assets under construction	-13	-11
Interest on provisions	1	2
Interest on defined benefit pension plans	3	4
Interest on lease liability	2	2
Other finance expenses	14	12
Total	**182**	**197**

Finance expenses decreased due to lower interest rates on new loans.

ⓘ Accounting policy

Finance expenses comprise mainly interest expenses, such as interest and fees on borrowings and credit facilities, interest on provisions, interest on defined benefit plans and interest on lease liabilities. Finance expenses are recorded in the statement of income using the effective interest rate method.

6 Corporate income tax

TenneT strives to comply with all applicable tax legislation in a socially responsible manner, maintaining among the highest levels of transparency, quality and integrity. Management responsibility and oversight of our tax strategy lies with our “Chief Financial Officer” (CFO), our Director Financial Governance & Services and our Head of Tax who monitor our tax activities and report to the Executive Board and the Audit, Risk and Compliance Committee.

Our tax strategy is fully consistent with our corporate strategy. Building a transparent relationship with tax authorities based on mutual trust is an integral part of this strategy. We have built and are continuously improving our tax control framework to be “in control” of tax risks and to allow the company to demonstrate to all its stakeholders, including the tax authorities, that the company complies with all applicable laws and regulations.

Corporate income tax is payable in the Netherlands and Germany. In the Netherlands, we have entered into a so called ‘horizontal monitoring agreement’ with the Dutch tax authorities. Based on transparency and mutual trust, this agreement is meant to ensure that tax positions are fully disclosed and agreed on in advance, as a result of which generally no tax audits are performed by the Dutch tax authorities. All corporate income tax returns in the Netherlands have been filed up to and including 2019. Corporate income tax paid in the Netherlands in 2021 amounted to EUR 58 million.

In Germany, corporate income and trade tax returns for all German entities have been filed up to and including fiscal year 2020. The German tax authorities started the tax audit for the fiscal years 2017 to 2019. In 2021, we paid EUR 188 million of corporate income tax in Germany.

Key components of corporate income tax expense are:

Consolidated income statement (EUR million)	2021	2020
Current income tax charge	152	190
Deferred tax:	-287	134
Income tax expense reported in the statement of income	**-135**	**324**

Consolidated statement of comprehensive income (EUR million)	2021	2020
Effect of re-measurement of defined benefit pensions	-23	8
Income tax charged directly to other comprehensive income	**-23**	**8**

Corporate income tax on profits has been applied at the rates prevailing in the respective countries. In the Netherlands, a statutory corporate income tax rate of 25% was applied, while in Germany, on average, a marginal statutory corporate income tax rate of 29,52% was applied (including trade tax levied by municipalities or 'Gewerbesteuer'). Reconciliation between corporate income tax expense and the accounting profit multiplied by a statutory corporate income tax rate of 25% is as follows:

(EUR million)	2021	2020
Profit/(loss) before corporate income tax	**-455**	**1,162**
Statutory corporate income tax rate of 25% (The Netherlands, 2020: 25%)	-113	290
Effect of higher corporate income tax rate in Germany	-8	46
Effect of future tax rate change in the Netherlands	-4	1
Adjustments in respect to current and deferred tax of previous years	-	-3
Non-deductible costs	2	1
Non-taxable income	-9	-6
Tax paid by third parties	-3	-5
At the effective corporate income tax rate of 30% (2020: 28%)	**-135**	**324**

The main reason for the higher effective tax rate of 30% compared to the Dutch statutory tax rate of 25% is the effect of the higher tax rate in Germany. Since the accounting profit before tax is in a loss position, the items non-taxable income and tax paid by third parties, increase the effective tax rate, which in a profit position normally decrease the effective tax rate.

Deferred taxes relate to the following:

	Statement of financial position		Statement of income	
(EUR million)	**2021**	2020	**2021**	2020
Auction receipts	-60	-139	-79	-46
Investment contributions	-71	-69	2	6
Tariffs to be settled	85	-115	-200	165
Depreciation for tax purposes	-150	-156	-6	56
Provisions	403	378	-48	-46
Profit allocation to hybrid securities	-6	-6	-	-
Other	-46	-2	44	-1
Net deferred tax assets/(liabilities)	**155**	**-109**		
Deferred tax expense/(income)			**-287**	**134**

Deferred taxes are presented in the statement of financial position as follows:

(EUR million)	**2021**	2020
Deferred tax assets	162	37
Deferred tax liabilities	-7	-146
Deferred tax, net	**155**	**-109**

Movements in deferred tax positions are set out below.

(EUR million)	**2021**	2020
At 1 January	**-109**	**20**
Tax expense during the period recognised in statement of income	287	-134
Adjustment tax expense relating to rate change	4	-
Initial recognition of acquired companies (note 11)	-	-3
Tax income during the period recognised in other comprehensive income	-23	8
At 31 December	**159**	**-109**

ⓘ Accounting policy

The corporate income tax charge for the period is recognised in the statement of income, equity or the statement of comprehensive income, in accordance with the relevant accounting treatment of the related transaction. The corporate income tax charge comprises both current and deferred tax.

Current income tax assets and liabilities are measured at the amount expected to be recovered from, or paid to, the tax authorities. The tax rates and tax laws used to calculate these amounts are those enacted or substantively enacted at the reporting date in those countries where we operate and where we generate taxable income.

Deferred tax is recognised using the liability method with respect to temporary differences between the tax bases of assets and liabilities and their respective carrying amounts for financial reporting purposes at the reporting date. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date in the relevant jurisdictions.

Deferred tax is generally recognised in respect of all temporary differences, the carry-forward of unused tax credits and any unused tax losses. Deferred tax assets (also in association with investments in subsidiaries, associates and interests in joint arrangements) are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry-forward of unused tax credits and unused tax losses can be utilised. This assessment is performed annually. Deferred tax is not recognised for the temporary differences arising from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered. There are no unrecognised carry forward losses per 31 December 2021 (2020: nil).

Deferred tax assets and liabilities are recognised on a gross basis in the statement of financial position unless:
- the entity has a legally enforceable right to set off current tax assets against current tax liabilities and
- the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity, or
  - different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

7 Earnings per share

Earnings per share were calculated by dividing profit for the year attributable to ordinary shareholder of the Group, after adjustment for the distribution on hybrid securities, by the weighted average number of ordinary shares outstanding during the year. The following table reflects the income and share data used for the basic and diluted earnings per share calculations.

(EUR million)	2021	2020
Profit/(loss) for the year attributable to the ordinary shareholder of the company	-344	792
Allocation to hybrid securities	-57	-44
Profit/(loss) for the year attributable to equity holders of the company adjusted for the allocation to hybrid securities	**-401**	**748**
Weighted average number of ordinary shares in issue (in thousands)	200	200

ⓘ Accounting policy

Calculation of earnings per share is based on the profit for the year attributable to TenneT's sole shareholder and the weighted average number of shares outstanding during the year.

8 Tangible fixed assets

(EUR million)	High-voltage substations	High-voltage connections	Other assets	Assets under construction	Total
Cost					
At 1 January 2020	**10,359**	**8,530**	**961**	**3,627**	**23,477**
Additions	260	324	60	2,698	3,342
Transfers	536	824	32	-1,392	-
Initial recognition of acquired companies (note 11)	-	-	11	-	11
Changes in estimations	-17	-90	-	-	-107
Disposals	-6	-	-2	-	-8
At 31 December 2020	**11,132**	**9,588**	**1,062**	**4,933**	**26,715**

Continuation >

(EUR million)	High-voltage substations	High-voltage connections	Other assets	Assets under construction	**Total**
Additions	131	258	70	3,439	3,898
Transfers	358	382	24	-764	-
Changes in estimations	119	-78	-	-	41
Disposals	-8	-5	-5	-8	-26
At 31 December 2021	**11,732**	**10,145**	**1,151**	**7,600**	**30,628**
Depreciation and impairment					
At 1 January 2020	**2,462**	**2,144**	**330**	**-**	**4,936**
Depreciation for the year	503	358	60	-	921
Disposals	-1	-	-	-	-1
At 31 December 2020	**2,964**	**2,502**	**390**	**-**	**5,856**
Depreciation for the year	530	378	61	-	969
Disposals	-5	-2	-1	-	-8
At 31 December 2021	**3,489**	**2,878**	**450**	**-**	**6,817**
Net book value:					
At 1 January 2020	7,897	6,386	631	3,627	18,541
At 31 December 2020	8,168	7,086	672	4,933	20,859
At 31 December 2021	8,243	7,267	701	7,600	23,811

High-voltage substations include onshore and offshore transformer and converter stations. High-voltage connections consist of overhead and underground connections. Unlike lands for substations, lands surrounding high-voltage pylons and cables are generally not owned by TenneT. Other tangible fixed assets consist of office buildings, office ICT equipment and other company assets.

In 2021 the discount rate used for the decommissioning provision was between 0.165% and 0.318% (2020: 0.0% and 0.1%) for offshore wind farms (OWF) connections (see note 22). The discount rate was adjusted in 2021 to reflect current market assessments of the time value of money and the risks specific to this liability. The main part of the decommissioning provision was recognised as part of the carrying value of the related asset. Besides the change of the discount rate, also changes in inflation, changes in underlying assumptions and updated price levels are included in the change of estimates.

The amount of borrowing costs capitalised during 2021 is disclosed in note 5. The effective interest rate used to determine the amount of borrowing costs capitalised was 2.0% (2020: 2.1%).

Annual impairment trigger analyses on tangible assets, and where applicable testing for impairment, is done at the individual asset level, or smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets (cash generating units (CGUs)). For our three operating segments this consists of:

- TSO Netherlands (One large CGU consisting of regulated on- and offshore assets, and the NorNed cable tested, for impairment (triggers), on individual level);
- TSO Germany (One large CGU consisting of regulated on- and offshore assets);
- Non-regulated companies (Several small CGUs as well as individual assets).

The non-regulated companies also include the Joint Venture investment in the BritNed cable, tested, for impairment (triggers), on individual level.

Impairment test for tangible fixed assets

On 20 September 2021, the ACM published a new method decision for the Netherlands, which includes a decrease in the benchmark score from 97.9% in 2021 to 89.1% in 2025 and 2026 (making an average of 92.37% in the regulatory period 2022-2026 due to the grace period). Although TenneT appealed this ACM's efficiency decision in 2021, the adjustment of the benchmark score was identified as a triggering event to perform an impairment test at the level of the regulatory assets of TenneT TSO Netherlands.

A test for impairment has been conducted as at 31 December 2021. The recoverable amount of the CGU TSO Netherlands is determined based on value-in-use calculations using a discounted cash flow method. The determination of the recoverable amount is primarily based on:

- the provisions in the regulatory framework, as laid down in the 2022-2026 Method Decree (Methode Besluit) and in other applicable regulations and decrees. The WACC reimbursement is expected to converge towards the IFRS-based nominal discount rate in the long run;
- the operational projections and liquidity forecast for four regulatory periods based on approved budgets and committed investment plans. In our model it is assumed that the benchmark score will increase in the next regulatory period to being fully efficient as of the second next regulatory period – also based on the substantial arguments that TenneT brought forward against the current benchmark score;
- IFRS-based nominal pre-tax discount rate (3.75%);
- The continuing value of the grid is derived from the then expected standardised asset value (GAW). The standardised asset value is the value of the investments that a TSO is allowed to charge via the tariffs with a reasonable return.

Based on the information currently available and the above-mentioned test for impairment, management has concluded that as at 31 December 2021 there was no impairment on the CGU TSO Netherlands.

The forecast period assumed is up to 2041, which exceeds the limitation of 5 years for value in use calculations as described in IAS 36. Management considers it appropriate to exceed beyond 5 years since the forecast period should be at the end of a regulatory period and long enough to include the start of operations of the committed investment projects to be able to reflect a steady state situation.

Sensitivity analyses have been performed, including changes in the (i) investment plans, (ii) WACC reimbursement in subsequent regulatory periods and (iii) increases of the benchmark score for future regulatory periods. The sensitivity analyses did not result in a different outcome.

ⓘ Accounting policy

Tangible fixed assets are valued at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such costs include the cost of replacing part of the asset and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of the asset are required to be replaced at intervals, such parts are recognised as individual assets with specific useful lives and depreciated accordingly. Likewise, when major maintenance is performed, its cost is recognised in the carrying amount of the asset as a replacement, if the recognition criteria are met. All other repair and maintenance costs are recognised in the statement of income as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset, if the recognition criteria for a provision are met. Depreciation is calculated on a straight line basis.

An asset is derecognised on disposal or when no future economic benefits are expected from its use. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of income when the asset is derecognised.

General and specific borrowing costs directly attributable to the acquisition, construction or production of the tangible fixed assets, are added to the cost, until such time that the assets are substantially ready for their intended use or sale. No borrowing costs are capitalised if and to the extend such borrowing costs are directly compensated in the year of construction.

Key estimates and assumptions

To calculate depreciation amounts, the following useful lives of various asset categories were assumed:

Estimated useful lives tangible fixed assets	Years
Substations	
Switches and offshore converter stations	20-35
Offshore platforms	20
Security and control equipment	10-20
Power transformers	20-35
Capacitor banks	20-35
Telecommunications equipment	10-20
Connections	
Pylons/lines	35-40
Cables (subsea and underground)	20-40
Other	
Office buildings	40-50
Office IT equipment	3-5
Process automation facilities	5
Other company assets	5-10

Residual values, useful lives and methods of depreciation of assets are reviewed at each financial year-end and adjusted prospectively, if appropriate.

9 Right-of-use assets and lease liabilities

Right-of-use assets

(EUR million)	Land & buildings	Power plants	NordLink cable	Other right-of-use assets	**Total**
Cost					
At 1 January 2020	**101**	**205**	**-**	**86**	**392**
Additions	7	14	249	3	273
Remeasurement	5	-39	-	2	-32
Depreciation	-11	-90	-7	-14	-122
Other movement	-9	-	-	3	-6
At 31 December 2020	**93**	**90**	**242**	**80**	**505**
Additions	37	51	-	10	98
Disposal	-1	-	-	-1	-2
Remeasurement	2	-	-2	-	-
Depreciation	-14	-60	-81	-13	-168
At 31 December 2021	**117**	**81**	**159**	**76**	**433**

Leased Land & Buildings

Land is mainly leased to set up pylons for electricity transmission lines and for constructed substations. These contracts run for a period of 2-170 years. Buildings are leased mainly as office space and for storage space. These contracts run for a period of 1-35 years.

Lease contracts for buildings are negotiated individually and include a range of different terms and conditions, including extension options.

Lease payments are in substance fixed, only a minority of the lease contracts contain clauses with reference to the CPI index.

Leased power plants

TenneT is committed to the use of grid reserve power plants representing lease commitments according to IFRS 16. The commitments have a maturity of 2-7 years and can be prolonged depending on the decision of regulatory authorities.

Lease payments were in substance fixed and TenneT had no power plant leases which contained variable lease payments. Lease contracts did not include any clauses with reference to an index or contractual rate.

Leased NordLink cable

TenneT leases the NordLink submarine cable to transport electricity between Germany and Norway. The lease contract has a remaining maturity of 2 years and no extension option according to IFRS 16 is included in the lease contract. Lease payments are in substance fixed.

Leased others

Telecom lease contracts (including fibreglass cables) run for a period between 3 and 36 years. For qualifying employees TenneT leased cars with a lease term between 1 and 10 years. TenneT does not purchase or guarantee the value of leased telecom assets or cars.

TenneT had several contracts with termination / extension options. In determining the lease term all relevant facts and circumstances that create a significant economic incentive to exercise those options are taken into consideration.

TenneT had no material 'sub lease' contracts in 2021 and 2020 and therefore no material income from subleasing right-of-use assets. TenneT has not entered into any sale and leaseback contracts. No lease contracts with residual value guarantees are entered into. No lease contracts have been concluded that contain restrictions or covenants.

Lease payments were in substance fixed, only some of the lease contracts had pre-determined lease payment changes.

Short-term leases and leases of low value

TenneT leased certain other assets with terms up to 1 year. TenneT considers these assets to be of low-value or short term in nature and therefore no right of use assets and lease liabilities were recognised for these leases. The aggregate total of short-term lease expenses for more than one month and low value assets lease expenses amounted to EUR 2 million (2020: EUR 2 million).

Lease liability

	2021			2020		
(EUR million)	**Current**	**Non-current**	**Total**	Current	Non-current	Total
Lease liability Land & buildings	17	101	118	12	80	92
Lease liability power plants	72	9	81	42	48	90
Lease liability NordLink	66	64	130	68	131	199
Lease liability other leases	14	61	75	13	68	81
Total	**169**	**235**	**404**	**135**	**327**	**462**

(EUR million)	Lease liability Land & buildings	Lease liability power plants	Lease liability NordLink	Lease liability other leases	Total
At 1 January 2020	**100**	**207**	**-**	**87**	**394**
Addition	8	13	250	4	275
Interest	1	-	-	1	2
Remeasurement	5	-39	-	2	-32
Repayments	-12	-91	-51	-15	-169
Other movements	-10	-	-	2	-8
At 31 December 2020	**92**	**90**	**199**	**81**	**462**
Addition	36	51	-	8	95
Interest	1	-	-	1	2
Remeasurement	3	-	-2	-	1
Repayments	-14	-60	-67	-15	-156
At 31 December 2021	**118**	**81**	**130**	**75**	**404**

The total cash outflow (including low value items and short-term leases) in 2021 was EUR 158 million (2020: EUR 171 million). Future cash outflows of leases not yet commenced but to which TenneT is committed mainly relate to leased power plants and amount to EUR 46 million yearly from 2022 till 2032.

The maturity analysis of lease liabilities is disclosed in note 25.

(EUR million)	2021	2020
Depreciation expense of right-of-use assets	-168	-122
Short-term lease expenses	-2	-2
Interest expense on lease liabilities	-2	-2
Total amount recognised in profit and loss	**-172**	**-126**

ⓘ Accounting policy

At inception of a contract, TenneT assesses whether a contract conveys the right to control the use of an identified asset for a period in exchange for consideration, in which case it is classified as a lease.

TenneT recognises a right-of-use asset and a lease liability at the lease commencement date. The asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to restore the underlying asset, less any lease incentives received.

The lease asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term, considered to be indicated by the lease term. The lease asset is periodically adjusted for certain remeasurements of the lease liability and impairment losses (if any).

The lease liability is initially measured at the present value of outstanding lease payments, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, TenneT's incremental borrowing rate. If available, the interest rate implicit in the lease is used for discounting (e.g. car leases). Otherwise the incremental borrowing rate is used and shown on the next page.

	2021	2020
Under 5 year	0.00%	0.00%
5-10 years	0.00%	0.50%
10-15 years	0.24%	1.10%
15-25 years	0.58%	1.60%
Above 25 years	0.95%	2.00%

After initial recognition, the lease liability is measured at the present value of the remaining lease payments using the effective interest method and is remeasured when there is a change in future lease payments arising from a change in an index or rate or if TenneT changes its assessment of whether it will exercise a purchase, extension or termination option. A corresponding adjustment is made to the carrying amount of the right-of-use asset with any excess over the carrying amount of the asset being recognised as profit or loss.

Short-Term Leases and Leases of Low Value

TenneT has elected not to recognise right-of-use assets and lease liabilities for short-term leases (leases with a term of 12 months or less) and leases of low-value assets. TenneT recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term or another systematic basis, if that basis is more representative of the pattern of the lessee's benefit. Furthermore, TenneT has elected not to recognise the lease of intangible assets.

10 Intangible assets

(EUR million)	Goodwill	Software	Customer contracts	Other intangible assets	Intangible assets under construction	**Total**
Cost						
At 1 January 2020	**31**	**269**	**64**	**41**	**45**	**450**
Additions	-	1	-	-1	66	66
Initial recognition of acquired companies (note 11)	4	-	-	9	-	13
Transfers	-	38	-	-	-38	-
At 31 December 2020	**35**	**308**	**64**	**49**	**73**	**529**
Additions	-	21	-	-2	52	71
Transfers	-1	52	-	-	-52	-1
At 31 December 2021	**34**	**381**	**64**	**47**	**73**	**599**
Amortisation and impairment						
At 1 January 2020	**-**	**223**	**53**	**14**	**-**	**290**
Amortisation for the year	-	21	5	1	-	27
At 31 December 2020	**-**	**244**	**58**	**15**	**-**	**317**
Amortisation for the year	-	21	5	2	-	28
At 31 December 2021	**-**	**265**	**63**	**17**	**-**	**345**
Net book value:						
At 1 January 2020	31	46	11	27	45	160
At 31 December 2020	35	64	6	34	73	212
At 31 December 2021	34	116	1	30	73	254

As at 31 December 2021 and 2020, goodwill was allocated to the cash generating units (CGUs) in the following operating segments: TSO Netherlands (EUR 3 million), TSO Germany (EUR 24 million) and non-regulated activities (EUR 7 million, 2020: EUR 8 million). Please refer to note 11 for details on change of goodwill.

During 2021 EUR 39 million (2020: EUR 12 million) of software was internally developed.

ⓘ Accounting policy

Intangible assets are measured at acquisition cost on initial recognition. The cost of intangible assets acquired in a business combination is recognised at fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Except for capitalised development costs, internally generated intangible assets are not capitalised and expenses are reflected in the statement of income in the period in which they incur.

Goodwill is initially measured at cost and represents the excess (i) of the consideration transferred over (ii) TenneT's interest in the value of the net identifiable assets, liabilities and contingent liabilities of the acquiree and the amount of the non-controlling interest in the acquiree. After initial recognition, goodwill is measured at cost less accumulated impairment losses.

At each reporting date, we assess whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the asset's recoverable amount is estimated. The recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. If the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Key estimates and assumptions

Estimated useful lives intangible assets	Years
Goodwill	Indefinite
Software	3-12
Customer contracts	10-14
Purchased rights to use land	25-45
Other	5-15

Intangible assets, with the exception of goodwill, are assumed to have a fixed useful life within the ranges outlined above and are amortised over this useful life. The useful life is re-assessed each reporting period. Intangible assets are amortised on a straight line basis, as this best reflects the use of the asset.

Goodwill is assumed to have an indefinite useful life and is therefore not amortised, but is tested for impairment annually or more frequently, if events or changes in circumstances indicate a triggering event, either individually or at CGU level.

Impairment testing of goodwill

For the purpose of annual impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs. For our three operating segments this consists of:

- TSO Netherlands (One large Cash Generating Unit consisting of regulated on- and offshore assets)
- TSO Germany (One large Cash Generating Unit consisting of regulated on- and offshore assets)
- Non-regulated companies (Several small Cash Generating Units)

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects our assessment of current market conditions in respect of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, an appropriate valuation model is used, if no recent market transactions can be identified.

The impairment calculation is based on detailed projections, which are prepared separately for each of the CGUs to which the individual assets are allocated. The projections take into account current regulatory parameters, considering expected future regulatory developments. Management believes that the resulting cash flows can be determined reliably and that they give an appropriate reflection of the CGUs cash flow generating potential.

The recoverable amount of the German CGU was determined based on a value in use calculation using cash flow projections from our three year business plan. The pre-tax discount rate applied to cash flow projections was 3.9% (2020: 3.5%). The cash flows beyond the three-year period until 2043 were estimated on the basis of projected regulatory allowed returns and invested capital. The terminal value was determined estimating the regulatory asset base as of December 2043. We concluded that the recoverable amount as at 31 December 2021 was significantly in excess of the carrying value and as such no impairment loss needed to be recognised.

11 Business combinations

At 30 October 2020 TenneT acquired, through its subsidiary Relined GmbH, 100% of the shares of Globalways GmbH effective 1 January 2020. This company operates a network of internet connections via fibre glass cables. The acquisition consideration contains an additional earn-out option in 2021 and 2022 of EUR 1.5 million per annum. The 2021 earn-out option was not used. In 2020 the fair value of the assets and liabilities acquired was determined and was accounted for accordingly. This initial consideration, which amounted to approximately EUR 16 million, led to an amount EUR 4 million of goodwill. As of 2021, the initial amount of goodwill was adjusted downwards for changes in working capital with an amount of EUR 1 million.

ⓘ Accounting policy

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of assets and liabilities measured at their acquisition-date fair value (with a limited number of specified exceptions) including the amount of any non-controlling interest in the acquiree. For each business combination, we decide whether to measure the non-controlling interest in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred in connection with an acquisition and included in administrative expenses.

Non-current assets held for sale are defined as non-current assets (other than financial instruments or property investments) immediately available for sale and highly likely to be sold within a year. Non-current assets held for sale have been stated at the lower of (i) the asset's carrying value and, (ii) fair value less costs of disposal.

12 Investments in joint ventures and associates

Joint ventures

TenneT has, directly or indirectly, 50% equity stakes in BritNed Development Ltd. ('BritNed'), DC Nordseekabel GmbH & Co. KG ('NOKA'), DC Nordseekabel Beteiligungs GmbH, Reddyn B.V. and Tensz B.V. We have a 20% equity stake in Equigy B.V. and a 25% indirect equity stake in Open Tower Company (OTC). For the investments in Equigy B.V. and OTC, joint control is exercised, despite unequal equity stakes. Therefore both investments are classified as joint ventures as of 2021.
In December 2021 Flexcess GmbH was established as joint venture together with TransnetBW. Both shareholders have a 50% equity stake. Flexcess GmbH has a 20% participates in Equigy B.V. effective as of 1 January 2022.

These investments are classified as joint ventures, for which only the investments in BritNed (legal seat: Arnhem, the Netherlands), OTC (legal seat: Vianen, the Netherlands) and NOKA (legal seat: Bayreuth, Germany) are each considered as an investment of material value. Other joint ventures are considered immaterial and are therefore not further disclosed. TenneT's share in profit (which is equal to other and total comprehensive income) of these immaterial joint ventures amounted to EUR 1 million in 2021 (2020: EUR 3 million).

The table below contains summarised financial information with respect to material joint ventures and a reconciliation with their carrying amounts.

	2021			2020		
Statement of financial position (EUR million)	**BritNed**	**NOKA**	**OTC**	BritNed	NOKA	OTC
Non-current assets	468	840	82	483	888	86
Cash and cash equivalents	56	12	19	46	48	8
Other current assets	38	44	24	29	59	21
Non-current liabilities	-47	-51	-161	-47	-80	-161
Current liabilities	-85	-6	-6	-72	-15	-2
Equity	**430**	**839**	**-42**	**439**	**900**	**-48**
Ownership TenneT	*50%*	*50%*	*25%*	*50%*	*50%*	*25%*
Carrying amount of the investment	**215**	**420**	**-**	**220**	**450**	**-**

	2021			2020		
Statement of income (EUR million)	**BritNed**	**NOKA**	**OTC**	BritNed	NOKA	OTC
Revenue	163	13	26	88	78	27
Depreciation and amortisation	-19	-41	-7	-16	-5	-6
Other costs	-57	-5	-7	-12	-3	-7
Operating profit	**87**	**-33**	**12**	**60**	**70**	**14**
Finance income and expenses	-2	-1	-5	-2	-2	-5
Income tax expense	-15	-2	-2	-14	-8	-2
Profit for the year*	**70**	**-36**	**5**	**44**	**60**	**7**
Ownership TenneT	*50%*	*50%*	*25%*	*50%*	*50%*	*25%*
Group's share in profit	**35**	**-18**	**1**	**22**	**30**	**2**

* Profit for the year is equal to other and total comprehensive income.

BritNed

BritNed is a joint venture with National Grid International Ltd (National Grid), the British TSO. It owns and operates a 1,000 MW 'Direct Current'(DC) interconnector between the United Kingdom and the Netherlands. Operating costs and trading revenue are shared equally between TenneT and National Grid. BritNed had contingent liabilities of EUR 2 million (2020: EUR 2 million) mainly related to comfort letters issued. In 2021 EUR 40 million dividend was received from BritNed (2020: EUR 25 million). TenneT Holding B.V. has, together with the other shareholder, National Grid Holding One plc, provided a parent company guarantee on the liabilities of BritNed.

NOKA

NordLink is an interconnector between Norway and Germany jointly owned by Statnett SF, TenneT and KfW IPEX-Bank GmbH (KfW) made a final investment decision to establish an interconnector between Norway and Germany under the project name ‘NordLink’. Ownership of the interconnector is equally split, with TenneT and KfW owning the southern part through NOKA, a jointly owned company and Statnett owning the northern part. In 2021 the main activity of NOKA was operating in the southern part of the interconnector. Operating costs and trading revenue are shared equally between NOKA and Statnett.

As at 31 December, NOKA had contingent liabilities of EUR 3 million (2020: EUR 13 million) mainly related to purchase obligations. During 2021 TenneT has withdrawn EUR 42 million from NOKA's capital (2020: capital contribution of EUR 42 million).

OTC

OTC (legal seat: Vianen, the Netherlands) is a holding company and holds majority interests in four separate asset companies: Colonne B.V., Mobile Radio Networks Vehicle B.V. (MRNV), OTC Networks B.V. and OTC II B.V. These companies mainly own infrastructure assets specifically designed for terrestrial communications. OTC had no contingent liabilities as at 31 December 2021 (2020: nil). No dividend from OTC was received in 2021 (2020: EUR 2 million).

Other

None of our joint ventures are permitted to distribute profits without the consent from all shareholders or partners. We received nil from other interests in joint ventures (2020: nil).

Other interests in joint ventures amounted EUR 3 million at 31 December 2021 (2020: EUR 1 million).

Associates

At 31 December 2021 our substantial investments in associates consisted of a 34% interest in Holding des Gestionaires de Réseaux de Transport d'Electircité S.A.S. (HGRT). In addition, the Group holds four immaterial investments in Energie Data Services Nederland B.V. (EDSN), European Market Coupling Company GmbH (EMCC), WL Winet B.V. and TSCNET Services GmbH (TSC). The Group's share in profit (which is equal to other and total comprehensive income) of these immaterial associates amounted to nil in 2021 (2020: EUR 4 million).

Summarised financial information in respect of material associates and reconciliation with their respective carrying amounts, of the investment in the consolidated financial statements is as follows:

	2021	2020
Statement of financial position (EUR million)	**HGRT**	HGRT
Non-current assets	91	91
Current assets	1	1
Non-current liabilities	-	-
Current liabilities	-	-
Equity	**92**	**92**
Ownership TenneT	*34%*	*34%*
Carrying amount of the investment	**31**	**31**

	2021	2020
Statement of income (EUR million)	**HGRT**	HGRT
Revenue	-	-
Depreciation and amortisation	-	-
Other costs	-	-
Operating profit	**-**	**-**
Finance income and expenses	11	10
Income tax expense	-	-
Profit for the year*	**11**	**10**
Ownership TenneT	*34%*	*34%*
Group's share in profit	**4**	**3**

* Profit for the year is equal to total and other comprehensive income.

HGRT

The legal seat of HGRT is in Paris, France. HGRT holds a 49% stake in EPEX. EPEX is the exchange for the power spot markets for the 'North West Europe' (NWE) region and the United Kingdom. At 31 December 2021, HGRT had no contingent liabilities outstanding (2020: nil). In 2021 EUR 3 million dividend was received (2020: EUR 3 million).

Other

Our interest in other associates amounted EUR 3 million at 31 December 2021 (2020: EUR 3 million). From other associates we received nil dividend in 2021 (2020: EUR 1 million).

ⓘ Accounting policy

A joint venture is an arrangement whereby the parties in the arrangement have joint control over the net assets of the joint arrangement.

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. An associate is an entity in which we have significant influence, but no control. Significant influence is the power to participate in the financial and operating policy decisions of the investor.

Investments in joint ventures and associates are accounted for using the equity method. Under the equity method, the investment in the joint venture or associate is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the investment since the acquisition date. Goodwill relating to the associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment.

The statement of income reflects our share in the results of operations of investments. Any change in other comprehensive income of these investments is presented as part of the other comprehensive income. In addition, when there is a change recognised directly in the equity of the investment, our share of any change is recognised in the statement of changes in equity. Unrealised gains and losses resulting from transactions between us and any investment are eliminated to the extent of the interest in such investment. When an associate or joint venture distributes dividend to us in excess of our carrying amount, a liability is recognised if TenneT:

- is obliged to refund the dividend;
- has incurred a legal or constructive obligation; or
- made payments on behalf of the associate.

In the absence of such obligations, the excess in net profit for the period is recognised. When the associate or joint venture subsequently generates profits, this is only recognised if and to the extent they exceed the excess cash distributions recognised in net profit plus any previously unrecognised losses.

After application of the equity method, we determine whether it is necessary to recognise an impairment loss on our investment in the joint venture or associate. At each reporting date, we determine whether there is objective evidence that the investment is impaired. If such evidence exists, the amount of impairment is calculated as the excess of the carrying value of the investment over its recoverable amount and recognised in the statement of income.

Upon loss of significant influence over the joint venture/associate, any retained investment is valued at fair value. Any difference between the carrying amount of the investment upon loss of significant influence and the fair value of the retained investment and proceeds from disposal is recognised in the statement of income.

13 Other financial assets

(EUR million)	2021	2020
Receivables from related parties	5	5
Fees for credit facilities available	4	5
Minority participating interests	14	6
Other	14	12
Total	**37**	**28**

The receivables from related parties mainly consisted of loans granted to MRNV, a minority participating interest of Novec B.V., in an amount of EUR 5 million (2020: EUR 5 million). The other position includes minorities equity investments in Westley Fund 3 and 4, located in Menlo Park, California, USA, with fair value of EUR 11 million and in Set Ventures 2 and 3,

located in Amsterdam, for a total fair value of EUR 3 million. We contributed EUR 2 million in capital for these minorities (2020: EUR 1 million). Since we have obtained reliable fair value information about these investments, we have accounted this accordingly, resulting in an EUR 8 million fair value gain recognised. Furthermore due to disinvestments by Westley Fund 3 we accounted a result of EUR 2 million.

ⓘ Accounting policy
Please refer to note 27, accounting policies for financial instruments.

14 Inventory

Inventory primarily composed of oil which is used for measures taken at power plants that are standing by for TenneT. The allowance for inventory is EUR 6 million (2020: EUR 11 million). The fair value of inventory was not materially different from the carrying value.

ⓘ Accounting policies
Inventory is stated at the lower of cost and net realisable value. Cost comprises direct purchase costs and associated costs incurred in bringing inventories to their present condition and location. The net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make a sale.

15 Account- and other receivables

(EUR million)	2021	2020
Amounts to be invoiced to EEG trade debtors	790	2,752
EEG trade receivables	21	15
EEG short-term bank deposits > 3 months	472	-
Trade receivables	401	316
Amounts to be invoiced	434	490
VAT receivables	159	51
Other	124	171
Total	**2,401**	**3,795**

EEG trade receivables and amounts to be invoiced to EEG trade debtors

In accordance with the Renewable Energy Sources Act (EEG) TenneT TSO GmbH is required to purchase electricity from producers of renewable energy at fixed feed-in tariffs. Subsequently such renewable energy is sold on power exchanges at spot prices.

EEG revenues and expenses are legally required to be administrated separately and are legally designated to be equal, except for certain potential bonus amounts payable to TenneT for marketing the energy on the power exchange. The EEG levy also includes an additional liquidity buffer to avoid a net financing need for the TSOs. TenneT acts as an agent with respect to these EEG services.

EEG trade debtors and receivables consisted of the accrual of unbilled EEG levy mainly for the month December, the outstanding invoices for the EEG levy, the accrual for horizontal balancing amounts (i.e. unsettled charges to the other German TSOs) and energy trading revenues. EEG trade receivables were not at our free disposal. Please refer to note 24 for the EEG accounts payable.

As a result of the Climate Programme 2030 (“Klimaschutzprogramm 2030”) the four German TSOs received EUR 10.8 billion from the German government to finance the EEG in 2021. TenneT received 32% of this amount in three instalments (January 2021: EUR 1,632 million, May 2021: EUR 960 million and October 2021: 864 million) to finance payments made to renewable energy producers.

Please refer to note 16 for EEG deposits.

Trade receivables

As at 31 December, the ageing of trade receivables was as follows:

			Past due		
(EUR million)	Total	Not past due	0-30 days	31-60 days	More than 60 days
2021	**401**	**371**	**30**	**-**	**-**
2020	316	281	2	2	31

Changes in the allowance for expected credit losses were as follows:

(EUR million)	2021	2020
At 1 January	**16**	**13**
Charge for the year	22	4
Utilised	-	1
Unused amounts reversed	2	-
At 31 December	**40**	**18**

As at 31 December 2021, receivables with an initial value of EUR 23 million (2020: EUR 7 million) were fully provided for.

Amounts to be invoiced

The majority of the amounts to be invoiced related to unbilled grid fees and rechargeable offshore costs in Germany.

ⓘ Accounting policy

Please refer to note 27, accounting policies for financial instruments.

16 Cash, cash equivalents and bank overdrafts

Cash and cash equivalents consisted of the following items.

	2021			2020		
(EUR million)	At free disposal	Not at free disposal	**Total**	At free disposal	Not at free disposal	**Total**
Collateral securities	-	281	281	-	85	85
EEG funds	-	771	771	-	5	5
EEG deposits < 3 months	-	2,150	2,150	-	-	-
Deposits	-	-	-	475	-	475
Cash at bank	2	-	2	2	-	2
Cash and cash equivalents	**2**	**3,202**	**3,204**	**477**	**90**	**567**
Bank overdrafts	-64	-	-64	-90	-	-90
Total cash and cash equivalents used in cash flow statement	**-62**	**3,202**	**3,140**	**387**	**90**	**477**

Funds related to EEG activities have been legally separated as required by BNetzA. EEG Funds are not at the TenneT's free disposal. For further reference regarding EEG we refer to note 15. Cash at banks carry interest at floating rates based on daily bank deposit rates which may at times be negative.

ⓘ Accounting policy

In the consolidated statement of cash flows, cash and cash equivalents include cash at bank, deposits held at call with banks, other short-term highly liquid investments with remaining maturities of three months or less and are presented net of outstanding bank overdrafts. Securities are deposits on collaterals that serve as financial security for auction and energy exchange transactions. A matching obligation is recognised towards the party that deposited the funds as collateral. Securities are stated at fair value upon receipt and subsequently at amortised cost.

17 Capital management

The primary objective of TenneT's capital structure is to ensure a sustainable financial position to absorb adverse changes in the regulatory environment and to enable us to execute our extensive investment programme which is essential for the success of the energy transition in the Netherlands and Germany. The majority of the funding for our investment programme is sourced from the debt capital markets, commercial banks and international financial institutions (e.g. the European Investment Bank).

To maintain broad access to financial markets at favourable conditions, we have defined capital management objectives, policies and processes which include:

1. to maintain a senior unsecured long-term credit rating of at least A3/A-;
2. to maintain a long-term average Funds From Operations (FFO) to Net debt based on ‘underlying’ financial information of at least 8.5% (with individual years of at least 8.0%);
3. to diversify the maturities of long-term funding instruments to limit refinancing risk;
4. to maintain liquidity through cash and undrawn committed credit lines covering at least our net cash requirement on a rolling 12-month forward-looking basis.

1. Maintain a senior unsecured credit rating of at least A3/A-

As of 31 December 2021 TenneT Holding B.V. had the following senior unsecured long-term credit ratings from Standard & Poor’s and Moody's Investor Service, which comply with our financial policy.

Unsecured credit rating at 31 December 2020 and 31 December 2021	Long-term rating	Short-term rating
Standard & Poor's	A– (stable outlook)	A-2
Moody's Investor Service	A3 (stable outlook)	P-2

2. Maintain a long-term average FFO/Net debt ratio based on underlying financial information of at least 8.5%

To maintain a solid financial position, we intend to maintain a long-term average FFO/Net debt ratio of at least 8.5% based on underlying financial information (see note 2), which meets the minimum requirements for an A-/A3 long-term unsecured credit rating as formulated by the credit rating agencies Standard & Poor's and Moody's Investor Service. Individual years can be no lower than 8.0%.

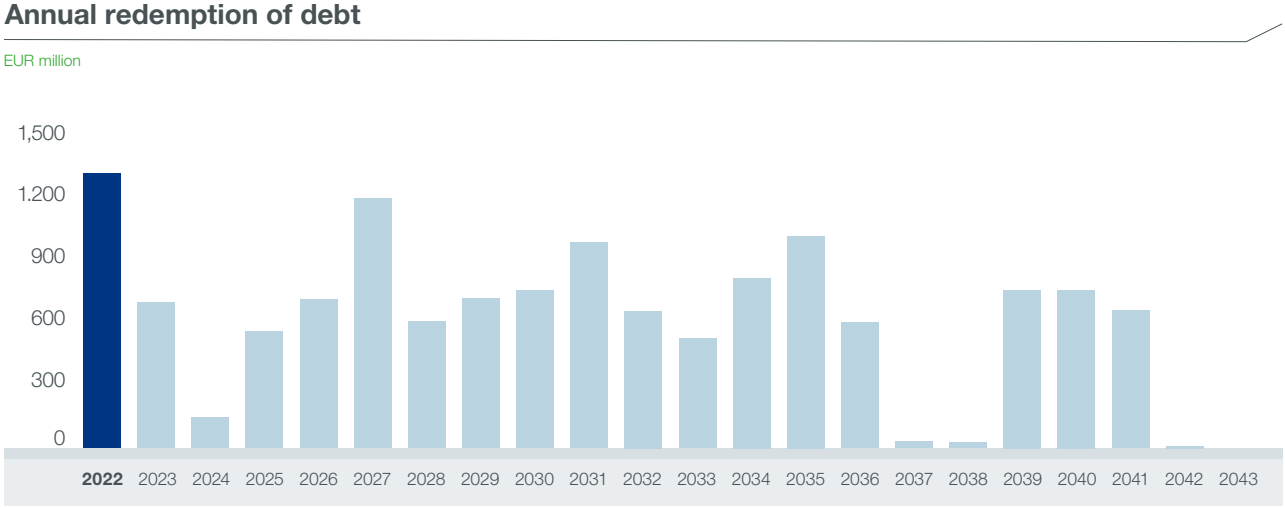
A reconciliation of the Adjusted FFO and net debt is provided in the following table. Please refer to the chapter “Secure a sustainable financial performance and investor rating” for detailed information about the Adjusted FFO.

Based on underlying information (EUR million)	2021	2020
Net profit for the year	493	516
+ amortisation, depreciation and impairments	1,185	1,094
+ result on disposal of assets (non-cash)	-	-
Total FFO	**1,678**	**1,610**
Capitalised interest on assets under construction	-13	-11
Interest on provisions	1	2
50% Hybrid interest	-28	-22
FFO Adjusted	**1,638**	**1,579**
Net debt		
+ Long-term borrowings	12,366	10,217
+ Short-term borrowings	1,339	2,243
+ Bank overdrafts	64	90
- Cash and cash equivalents at free disposal	-2	-476
Lease liabilities	404	462
Net employee defined benefit liabilities	351	405
50% Hybrid loan	1,062	1,063
Net debt	**15,584**	**14,004**
Adjusted FFO/net debt	**10.5%**	**11.3%**

3. Diversify maturities of long-term funding instruments to limit refinancing risk

To minimise refinancing risk, we diversify the maturity profile of our senior debt. As of 31 December 2021, our interest bearing debt (excluding bank overdrafts) had the following annual redemption profile:

Annual redemption of debt



4. Maintaining liquidity through cash and undrawn committed credit lines covering at least our net cash requirement on a rolling 12-month forward-looking basis

We monitor the liquidity of the Group on a rolling 12-month forward-looking basis. This means that the sum of (i) cash and cash equivalents, (ii) undrawn committed credit facilities and (iii) 12-month expected net cash flow from operating activities should be sufficient to meet the expected aggregate of scheduled debt repayments, investments in fixed assets and dividend payments over the subsequent 12 months. The 12-month liquidity requirement was met on 31 December 2021 and 31 December 2020.

18 Equity

Paid-up and called-up capital

The Company's authorised share capital amounted to EUR 500 million (2020: EUR 500 million), divided into one million shares of EUR 500 each. Of these shares, two hundred thousand shares have been issued and paid-up.

Share premium reserve

The share premium reserve consists of the capital contributions, made by the shareholder of ordinary shares, the Dutch State represented by the Ministry of Finance.

Hedging reserve

The hedging reserve relates to the cumulative result of sold forward-starting interest rate swaps (hereafter referred to as 'FSIRS'), classified as cash flow hedges. These interest rate swaps were sold at the moment Euro Medium Term Notes ('EMTN') were issued in 2010 and 2011. The end term of the original FSIRS is 2020 and 2021. As at 31 December 2021, the 2021 FSIRS amounts to nil.

Retained earnings

Part of the retained earnings has been presented as legal reserve. For more details see note 40.

Hybrid securities

Hybrid securities are deeply subordinated securities and are, with the exception of common equity, the most junior instruments in the capital structure of the Company. The hybrid securities are undated and do not default on non-payment of coupons (unless such payment was mandatory following a resolution or payment of a dividend to common shareholders, i.e. as so called 'dividend pusher').

The holders of the hybrid securities have limited ability to influence the outcome of a bankruptcy proceeding or a restructuring outside bankruptcy. Consequently, the hybrid security holders cannot oblige TenneT to pay distributions or redeem the securities in part or in full. Payment of distributions on and redemption of the securities is at our sole discretion. As a result, the hybrid securities are classified as part of the equity attributable to the company's owners.

On 31 December 2021, TenneT had EUR 2.1 billion of green hybrid securities outstanding divided in two tranches. The first tranche consisted of EUR 1.1 billion green hybrid securities that bear an optional, cumulative coupon of 2.995%, payable at TenneT's discretion annually on 1 June of each year. As at 31 December 2021, the unpaid cumulative dividend for this tranche amounted to EUR 18 million (2020: EUR 18 million), relating to the period 1 June until 31 December and payable on 1 June 2022.

The second tranche consisted of EUR 1 billion green hybrid securities that bear an optional, cumulative coupon of 2.374%, payable at TenneT's discretion annually on 22 October of each year. As at 31 December 2021, the unpaid cumulative dividend for this tranche amounted to EUR 7 million (2020: EUR 7 million).

Dividend distribution

In 2021 a common full-year dividend of EUR 149 million (EUR 745 per share) to our ordinary shareholder was distributed (2020: EUR 112 million). In agreement with the State of the Netherlands TenneT has established a dividend policy with a pay-out of 35% of the underlying profit for the year, after payments of distributions to hybrid securities holders and minority equity investors. We made aggregate distributions to the holders of hybrid securities of EUR 57 million during 2021 (2020: EUR 39 million). The appropriation of the 2021 profit is at the free disposal of the General Meeting of Shareholders.

19 Non-controlling interests

The proportion of economic interests held by non-controlling interests in the Group's subsidiaries is as follows:

% Non-Controlling Interests	Country	2021	2020
TenneT Offshore 2. Beteiligungsgesellschaft mbH ("TO2")	Germany	69%	69%
TenneT Offshore 8. Beteiligungsgesellschaft mbH ("TO8")	Germany	63%	63%
TenneT Offshore DolWin3 Beteiligungs GmbH & Co. KG ("TOD3")	Germany	67%	67%
TenneT Offshore DolWin3 Verwaltungs GmbH ("TODV")	Germany	67%	67%
ETPA Holding B.V. ("ETPA")	Netherlands	50%	50%

The Group has the power to control TO2, TO8, TOD3 and TODV and holds 51% of the voting rights in these entities. TenneT also holds 50.002% of the voting rights of, and has the power to control ETPA. Movements in the non-controlling interest, to the extent material, are summarised below.

Movement schedule Non-Controlling interests (EUR million)	TO2	TO8	TOD3
At 1 January 2020	**259**	**249**	**236**
Profit attributable to non-controlling interests	8	16	22
Dividends paid	-13	-37	-
Capital contribution	4	1	-
Capital repayment	-	-	-55
At 31 December 2020	**258**	**229**	**203**
Profit attributable to non-controlling interests	10	-6	20
Dividends paid	-16	-18	-
Capital repayment	-1	-1	-40
At 31 December 2021	**251**	**204**	**183**

The non-controlling interest in TO2, TO8, TODV and TOD3 are held by Copenhagen Infrastructure Partners (CIP), which owns respectively 69% for TO2, 63% for TO8 and a 67% economic interest for TODV and TOD3 in the adjusted (for certain regulatory effects) profits of these companies and 49% of the voting rights.

Financial information of these subsidiaries, to the extent material, is summarised below on a consolidated basis before intercompany eliminations and in conformity with our accounting principles.

	2021		
Statement of financial position (EUR million)	TO2	TO8	TOD3
Non-current assets	337	634	916
Current assets	160	217	125
Non-current liabilities	-47	-296	-653
Current liabilities	-88	-226	-94
Equity	**362**	**329**	**294**
Attributable to owners of the parent	111	125	111
Attributable to non-controlling interests	251	204	183

	2020		
Statement of financial position (EUR million)	TO2	TO8	TOD3
Non-current assets	978	1,410	1,658
Current assets	168	155	168
Non-current liabilities	-661	-1,045	-1,413
Current liabilities	-113	-155	-86
Equity	**372**	**365**	**327**
Attributable to owners of the parent	114	136	124
Attributable to non-controlling interests	258	229	203

	2021		
Statement of income (EUR million)	**TO2**	**TO8**	**TOD3**
Revenue	164	164	192
Depreciation and amortisation	-82	-104	-98
Other expenses	-52	-58	-36
Operating profit	**30**	**2**	**58**
Finance income and expenses	-8	-15	-24
Income tax expense	-7	3	-4
Profit/(loss) for the year	**15**	**-10**	**30**
Other comprehensive income	-	-	-
Total comprehensive income	**15**	**-10**	**30**
Attributable to non-controlling interests	10	-6	20

	2020		
Statement of income (EUR million)	TO2	TO8	TOD3
Revenue	148	222	182
Depreciation and amortisation	-82	-102	-96
Other costs	-31	-52	-23
Operating profit	**35**	**68**	**63**
Finance income and expenses	-18	-32	-25
Income tax expense	-6	-11	-4
Profit for the year	**11**	**25**	**34**
Other comprehensive income	-	-	-
Total comprehensive income	**11**	**25**	**34**
Attributable to non-controlling interests	8	16	22

	2021		
(EUR million)	TO2	TO8	TOD3
Net cash flows from operating activities	75	64	75
Net cash flows used in investing activities	-12	-11	-13
Net cash flows from financing activities	-63	-53	-62
Change in cash and cash equivalents	-	-	-

	2020		
(EUR million)	TO2	TO8	TOD3
Net cash flows from operating activities	80	157	156
Net cash flows used in investing activities	-9	-1	-88
Net cash flows from financing activities	-71	-156	-68
Change in cash and cash equivalents	-	-	-

20 Borrowings

(EUR million)	Effective interest rate	Maturity	Redemption schedule	2021	2020
4.50% bond 2010 EUR 500 million	4.60%	Feb-22	At maturity	-	499
4.625% bond 2011 EUR 500 million	4.70%	Feb-23	At maturity	500	499
0.75% green bond 2017 EUR 500 million	0.87%	Jun-25	At maturity	498	497
1.000% green bond 2016 EUR 500 million	1.04%	Jun-26	At maturity	499	499
1.75% green bond 2015 EUR 500 million	1.83%	Jun-27	At maturity	498	497
1.375% green bond 2018 EUR 500 million	1.49%	Jun-28	At maturity	496	496
1.375% green bond 2017 EUR 500 million	1.41%	Jun-29	At maturity	499	498
0.875% green bond 2019 EUR 500 million	0.98%	Jun-30	At maturity	496	495
4.75% bond 2010 EUR 200 million	4.92%	Jun-30	At maturity	197	197
1.250% green bond 2016 EUR 500 million	1.35%	Oct-33	At maturity	494	494
2.0% green bond 2018 EUR 750 million	2.04%	Jun-34	At maturity	746	746
1.875% green bond 2016 EUR 500 million	1.97%	Jun-36	At maturity	493	493
1.500% green bond 2019 EUR 750 million	1.58%	Jun-39	At maturity	740	739
0.125% green bond 2020 EUR 600 million	0.20%	Nov-32	At maturity	595	594
0.500% green bond 2020 EUR 750 million	0.54%	Nov-40	At maturity	744	744
0.125% green bond 2021 EUR 650 million	0.10%	Dec-27	At maturity	648	-
0.500% green bond 2021 EUR 500 million	0.34%	Jun-31	At maturity	495	-
0.875% green bond 2021 EUR 1000 million	0.12%	Nov-35	At maturity	993	-
1.125% green bond 2021 EUR 650 million	0.65%	Jun-41	At maturity	645	-
Non-current interest-bearing bonds				**10,276**	**7,987**
4.71% loan 2010 EUR 40 million	4.71%	2016-2022	Linear	-	3
2.74% loan 2012 EUR 150 million	2.74%	Sep-23	At maturity	150	150
4.44% loan 2010 EUR 140 million	4.44%	2016-2023	Linear	11	22
0.72% loan 2015 EUR 500 million	0.72%	2018-2032	Linear	345	379
0.77% loan 2015 EUR 150 million	0.77%	2018-2037	Linear	112	120
0.813% loan 2016 EUR 125 million	0.81%	2019-2038	Linear	100	106
0.05% loan 2020 EUR 100 million	0.05%	2025-2042	At maturity	100	100
0.436% loan 2020 EUR 350 million	0.44%	Sep-26	Linear	350	350
Non-current interest-bearing loans				**1,168**	**1,230**

Continuation >

< Continuation

(EUR million)	Effective interest rate	Maturity	Redemption schedule	2021	2020
0.646% green Schuldschein 2016 EUR 77 million	0.67%	May-22	At maturity	-	77
0.989% green Schuldschein 2016 EUR 100 million	1.01%	May-24	At maturity	100	100
1.310% green Schuldschein 2016 EUR 55 million	1.32%	May-26	At maturity	55	55
1.500% green Schuldschein 2016 EUR 50 million	1.51%	May-28	At maturity	50	50
1.750% green Schuldschein 2016 EUR 43 million	1.76%	May-31	At maturity	43	43
1.750% green Schuldschein 2016 EUR 95 million	1.76%	May-31	At maturity	95	95
2.000% green Schuldschein 2016 EUR 80 million	2.01%	May-36	At maturity	80	80
Non-current interest-bearing Schuldschein				**423**	**500**
1.61% USPP 2019 EUR 160 million	1.63%	Jan-29	At maturity	160	160
1.83% USPP 2019 EUR 295 million	1.85%	Jan-31	At maturity	294	295
2.01% USPP 2019 EUR 45 million	2.02%	Jan-34	At maturity	45	45
Total non-current interest-bearing USPP				**499**	**500**
Total non-current interest-bearing borrowings				**12,366**	**10,217**
0.875% green bond 2015 EUR 500 million	0.96%	Jun-21	At maturity	-	500
4.50% bond 2010 EUR 500 million	4.60%	Feb-22	At maturity	500	-
Current interest-bearing bonds				**500**	**500**
EEG related loans 2020 EUR 1,528 million	0.22%	Jan-21	At maturity	-	1,528
Current interest-bearing EEG related loans				**-**	**1,528**
0.646% green Schuldschein 2016 EUR 77 million	0.67%	May-22	At maturity	77	-
Current interest-bearing Schuldschein				**77**	**-**
4.12% loan 2010 EUR 150 million	4.12%	Jan-21	At maturity	-	150
4.71% loan 2010 EUR 40 million	4.71%	Nov-21	Linear	3	3
4.40% loan 2010 EUR 40 million	4.40%	Nov-21	Linear	-	3
4.44% loan 2010 EUR 140 million	4.44%	Nov-21	Linear	11	11
0.72% loan 2015 EUR 500 million	0.72%	Sep-21	Linear	34	34
0.77% loan 2015 EUR 150 million	0.77%	Jan-21	Linear	8	8
0.813% loan 2016 EUR 125 million	0.81%	Oct-21	Linear	6	6
Variable interest loan 2021 EUR 700 million	Variable	Jan-22	At maturity	700	-
Current interest-bearing loans				**762**	**215**
Total current interest-bearing borrowings				**1,339**	**2,243**
Total borrowings				**13,705**	**12,460**

Changes in borrowings arising from financing activities are as follows:

(EUR million)	(Non) - current interest-bearing bonds	(Non) -current interest-bearing loans	Non-current interest-bearing Schuldschein	Current interest-bearing EEG related loans	Non-current interest-bearing USPP	**Total**
At 1 January 2020	**7,642**	**1,061**	**500**	**-**	**499**	**9,702**
Cash inflow from new borrowings	1,338	450	-	1,528	-	3,316
Cash outflow from redemptions	-500	-66	-	-	-	-566
Amortisation (non-cash)	7	-	-	-	1	8
At 31 December 2020	**8,487**	**1,445**	**500**	**1,528**	**500**	**12,460**
Cash inflow from new borrowings	2,781	700	-	-	-	3,481
Cash outflow from redemptions	-500	-215	-	-1,528	-	-2,243
Amortisation (non-cash)	8	-	-	-	-1	7
At 31 December 2021	**10,776**	**1,930**	**500**	**-**	**499**	**13,705**

TenneT had a Revolving Credit Facility (RCF) of EUR 3.6 billion as of 31 December 2021. Subsequent to a one-year extension executed in September 2021 EUR 3.3 billion is available till November 2026 and EUR 0.3 billion till the original maturity date of November 2024. Furthermore, TenneT had available EUR 500 million of undrawn long-term loan commitment from the EIB at 31 December 2021, of which EUR 250 million will be settled in February 2022 with a fixed interest rate of 0.562% and a linear repayment schedule starting in 2027 and with a last repayment in 2045.

TenneT also has a committed bank facility of EUR 300 million and an uncommitted bank facility of EUR 500 million at its disposal till February 2024 (including committed extension options) and September 2022 respectively (both facilities were undrawn at 31 December 2021).

In 2021 TenneT signed a EUR 700 million committed bilateral revolving credit facility, which was fully drawn at 31 December 2021. The committed bilateral revolving credit facility is available till December 2025 (including committed extension options).

Finally, TenneT had EUR 450 million of short-term uncommitted credit facilities available at year end of which drawn EUR 64 million (2020: EUR 90 million).

The amount of borrowing costs (including fair value adjustment) capitalised was EUR 75 million (2020: EUR 64 million).

For more information about the fair value see note 26.

ⓘ Accounting policy

Refer to note 27, accounting policies for financial instruments.

21 Contract liabilities

(EUR million)	Investment contributions	Other	Total
At 1 January 2020	**341**	**1**	**342**
Addition	48	2	50
Amortisation	-13	-	-13
Release to profit and loss	-	-1	-1
At 31 December 2020	**376**	**2**	**378**
Addition	75	-	75
Amortisation	-21	-2	-23
At 31 December 2021	**430**	**-**	**430**

	2021			2020		
(EUR million)	Investment contributions	Other contract liabilties	Total	Investment contributions	Other contract liabilties	Total
< 1 year	2	-	2	2	-	2
1-5 years	12	-	12	52	-	52
> 5 years	416	-	416	324	-	324
Total	**430**	**-**	**430**	**378**	**-**	**378**

ⓘ Accounting policy

Contract liabilities are recognised when payments are made, or the payments are due (whichever is earlier) before a related performance obligation is satisfied. Contract liabilities are recognised in accordance with the related contract. At initial recognition, contributions received from third parties are measured at transaction price, presented as contract liabilities ('investment contributions') and are subsequently recognised as revenue over the related asset's useful life.

22 Provisions

	2021			2020		
(EUR million)	**Current**	**Non-current**	**Total**	Current	Non-current	Total
Environmental and decommissioning	14	1,364	1,378	15	1,144	1,159
Tariff related	16	14	30	21	101	122
Other	15	39	54	30	37	67
Total	**45**	**1,417**	**1,462**	**66**	**1,282**	**1,348**

(EUR million)	Environmental management and decommissioning	Tariff related	Other	**Total**
At 1 January 2020	**1,142**	**128**	**141**	**1,411**
Addition	117	-1	22	138
Utilisation	-	-2	-8	-10
Changes in estimations	-94	-2	2	-94
Unused amounts reversed	-8	-1	-90	-99
Imputed interest	2	-	-	2
At 31 December 2020	**1,159**	**122**	**67**	**1,348**
Addition	162	1	11	174
Utilisation	-9	-92	-18	-119
Changes in estimations	78	-	-1	77
Unused amounts reversed	-13	-1	-5	-19
Imputed interest	1	-	-	1
At 31 December 2021	**1,378**	**30**	**54**	**1,462**

Provisions for environmental management and decommissioning

Provisions for environmental management and decommissioning serve to cover future obligations in relation to high-voltage connections, underground cables and offshore platforms, including decommissioning costs. In 2021 EUR 163 million was added (2020: EUR 117 million) for future decommissioning costs for projects constructed during 2021. Changes in estimates related to the provision for decommissioning amounted to EUR 78 million (2020: -/- EUR 94 million), mainly due to a changes in the discount rate used, in the inflation rate, underlying assumptions and applicable price levels. Both amounts were not recognised through the statement of income. There was no material decommissioning of substations in 2021. In line with current regulation and permits, the first decommissioning of an offshore grid connection is expected to start in 2029.

Tariff related provisions

Tariff-related provisions relate to uncertain regulatory compensations of nil (2020: EUR 91 million) and to provisions for system service fees in the Netherlands. We charge electricity consumers a fee for system services performed. Following a change in law, the court in the Netherlands concluded that only parties with a direct connection to a grid maintained by a TSO are required to pay system service fees for the period prior to 31 December 2014. Consequently, we are required to refund amounts paid by certain parties to us without a direct grid connection. These refunds can be recouped by us through future tariffs. In 2021, EUR 0 million (2020: EUR 1 million) of the provided amount matured and was released through the statement of income.

Other provisions

The majority of other provisions relates to the risk of compensation payments associated with delays and interruptions of offshore grid connections in Germany. The connection of offshore wind farms presents additional technical and organisational challenges. A number of factors, including a lack of supplier resources required for the construction of offshore grid connection systems, as well as weather conditions and the application of new technologies, hindered the timely realisation and/or interrupted the operational phase of offshore grid connection systems.

ⓘ Accounting policy

Provisions are recognised when there is (i) a legal or constructive obligation as a result of past events, (ii) it is probable that anoutflow of resources embodying economic benefits will be required to settle the obligation and (iii) when the amount can be reliably estimated. Provisions are measured at the present value of estimated cash flows to settle obligations, based on expected price levels. Cash flows are discounted at a pre-tax rate that reflects the risks specific to the liability. The unwinding of interest components associated with provisions is recognised in the statement of income as a finance cost.

Estimated future costs are reviewed annually and adjusted as appropriate. Changes in estimated future costs and discount rates for decommissioning costs are recognised as changes in estimations and recorded in tangible fixed assets. For all other provisions changes in estimated future costs and discount rates are recognised in the statement of income.

Key estimates and assumptions

The estimated decommissioning provision involves 1) decommissioning costs and 2) assessing the expected remaining useful life of relevant assets. The main uncertainties related to the decommissioning costs are the removal method (currently assuming reverse installation), the uncertainties around equipment and vessel availability, and market rates at expected time of decommissioning. As at 31 December 2021, limited benchmark information was available. Decommissioning costs are provided for at the present value of expected costs to settle the obligation. The useful life of the offshore grid connections is estimated at 20 years. For interconnectors the useful life is estimated at 40 years. This provision assumed a discount rate between 0.165% and 0.318% was applied for other provisions (2020: between 0.0% and 0.1%) and an inflation rate of 2.0% (2020: 1.8%). A change in the discount rate of 1 percent point would have a maximum impact of EUR 164 million on the asset value and liability value.

A discount rate of 0.0% was applied for other provisions (2020: 0.0%). A change in discount rate of 1 percent point would have a maximum impact of EUR 4 million on the related book value.

The estimated amount of risks associated with delays and interruptions concerning the Group's offshore activities in Germany is based on the number of offshore grid connections and the compensation payable to the operators of offshore grid connections.

We are of the opinion that the recorded provisions reflect the best estimate of the probable outflow of resources. However, uncertainty about the assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of these provisions in future periods.

Due to the business TenneT operates in and TenneT's legal structure, TenneT faces several contingent liabilities. In general, the following items are recognised as contingent liabilities at TenneT:

- Possible impact of the Dutch and German regulatory frameworks on the TenneT's business financial conditions and net income;
- Operational risks and risks related to material projects;
- Impact of environmental issues;
- Risks relating to the legal structure of TenneT;
- Risks relating to the financing of TenneT;
- Factors which are material for the purpose of assessing market risks.

Uncertainties relating to contingent liabilities make a reliable estimation of the financial impact impossible. For further contingent liabilities we refer to note 28.

23 Net employee defined benefit liabilities

Pension plans Germany

We have defined benefit plans for the majority of our German personnel. Said personnel are mainly employed based on the collective labour agreement of 'Tarifgruppe Energie' and thus enjoy benefits in the form of old-age, disability and surviving dependents' pensions. The large majority of the benefit obligations are based on pension schemes that define annual pension claims based on respective employees' pensionable income of a particular year. Furthermore, each employee is allowed to defer a certain amount of his compensation to raise his pension claim within defined bounds.

The Group contributes to two post-employment defined benefit plans in Germany, pursuant to a works council agreement called 'Betriebliche Alterssicherung' (hereafter referred to as 'pension scheme 2001') and a works council agreement called 'Beitragsplan' (hereafter referred to as 'pension scheme 2008'), as well as to a small number of individual pension commitments. The pension obligations related to these plans are partly covered by assets held in two Contractual Trust Arrangements (CTA) administrated by 'Helaba Pension Trust e.V.' (Helaba). According to German law, TenneT remains ultimately liable for fulfilling these pension obligations.

Pension scheme 2001

This scheme covers employees who started their employment with TenneT Germany on or before 31 December 2007 (or later, if the individual employment contract was agreed on or before 1 April 2008). The scheme became effective on 1 January 2001 and absorbed older plans at the time. As part of the transition in 2001 to the new plan, employees were guaranteed a vested pension claim based on the old plan for their years of service prior to the transition date. The plan offers benefits in the form of old-age, disability and surviving dependents' pensions and is composed of an employer-funded basic level based on the respective employee's yearly pensionable income, an employer-funded top-up level based on the respective company's performance and an employee-funded supplementary level which allows employees to increase their pension entitlement through deferred compensation. Yearly fixed pension claims are calculated with a fixed internal interest rate that sum up to the total earned pension benefits of the respective employee.

Pension scheme 2008

This scheme covers employees who started their employment with TenneT Germany after 31 December 2007 (unless the individual employment contract was agreed before 1 April 2008, in which case the pension scheme 2001 applies). This scheme offers benefits in the form of old-age, disability and surviving dependents' pensions.

Pension cost is composed on the employer-funded basic level based on the respective employee's yearly pensionable income, an employer funded top-up level based on the respective company's performance and an employee-funded supplementary level which allows employees to increase their pension entitlement through deferred compensation. If the employee contribution to the supplementary level reaches a certain level, the company pays an additional contribution of one-third of the respective basic level contribution.

Annually, for each year a contribution to the pension claims is increased with an interest rate that is recalculated based on the weighted average current yield of German Federal Government Bonds (Bundesanleihen), with an effective floor of 3.0% (2020: 2.5%) and with different maturities (10, 20 and 30 years) reflecting the average duration of the plan. The annual pension claim contributions for all years of service sum up to the total earned pension benefits of the respective employee.

Differences between the plans are limited and refer mainly to the way internal interest rates and the pensionable income are determined. Therefore, the disclosure in the notes below comprises the combined plans.

Components of the net benefit expense recognised in the statement of income were as follows:

(EUR million)	2021	2020
Current service costs (note 4)	24	14
Past service cost - plan amendments (note 4)	-	6
Net interest costs (note 5)	3	4
Net benefit expense	**27**	**24**

The funded status of the plans and the amounts recognised in the statement of financial position as at 31 December were as follows:

(EUR million)	2021	2020
Defined benefit obligation	466	514
Fair value of plan assets	-113	-107
Benefit liability	**353**	**407**

The defined benefit liabilities as at 31 December 2021 were as follows.
The short-term part of the benefit liability is presented as part of note 22 provisions.

(EUR million)	2021	2020
Defined benefit liability long-term	351	405
Defined benefit liability short-term	2	2
Total defined benefit liability	**353**	**407**

Changes in the present value of the long-term defined benefit obligation ('DBO') over the year were as follows:

(EUR million)	2021	2020
Defined benefit obligation at 1 January	**514**	**465**
Current service costs	24	14
Past service costs	-	6
Interest costs	4	5
Contributions by plan participants	3	2
Benefits paid	-5	-4
Re-measurements on obligation	-74	26
Defined benefit obligation at 31 December	**466**	**514**

Re-measurements on obligation are mainly due to the change of the discount rate from 0.7% to 1.3%.

Changes in the fair value of plan assets as at 31 December of the year were as follows:

(EUR million)	2021	2020
Fair value of plan assets at 1 January	**107**	**104**
Actual return on plan assets	6	3
Contributions by employer	4	4
Benefits paid	-4	-4
Fair value of plan assets at 31 December	**113**	**107**

Major categories of plan assets as a percentage of the fair value of the total plan assets were as follows:

	2021	2020
Quoted in active markets:		
Equity instruments	36%	32%
Debt securities	47%	47%
Other	4%	4%
Unquoted investments:		
Debt securities	0%	5%
Real estate	12%	11%
Cash	0%	1%
Other	1%	0%

Re-measurements, including actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions, recognised in the statement of comprehensive income were as follows:

(EUR million)	2021	2020
Accumulated balance at 1 January	**282**	**258**
Re-measurements during the year	-79	24
Accumulated balance at 31 December	**203**	**282**

Re-measurements of the year originate from; the following items:

(EUR million)	2021	2020
Re-measurements from actuarial gains(-)/losses in DBO	-74	26
Exceeding return on plan assets (over net interest incl. in net liability)	-5	-2
Accumulated balance at 31 December	**-79**	**24**
Thereof:		
actuarial gains(-)/losses from experience	-	-7
actuarial gains(-)/losses from changes in demographic assumptions	-	-
actuarial gains(-)/losses from changes in actuarial assumptions	-79	33

ⓘ Accounting policy

For defined benefit plans, pension costs are determined using the projected unit credit method. Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling (excluding net interest) and the return on plan assets (excluding net interest), are recognised in other comprehensive income in the period in which they occur. Re-measurements are not reclassified to the statement of income in subsequent periods.

Service costs comprising current service costs and, if applicable, past-service costs, gains and losses on curtailments and non-routine settlements are recognised as personnel expenses in the consolidated statement of income. Interest is calculated by applying the discount rate to the net defined benefit liability or asset and is recognised as part of the finance result in the statement of income.

Prepaid pension costs relating to defined benefit plans are capitalised only if they lead to refunds to the employer or to reductions in future contributions to the plan by the employer.

Key estimates and assumptions

Pension obligations and pension entitlements that are known on the reporting date are valued using economic trend assumptions including, among others, salary growth rates and pension increase rates, that are intended to reflect realistic expectations, as well as variables specific to reporting dates such as discount rates. The principal assumptions used in determining the pension obligation were as follows:

	2021	2020
Discount rate	1.30%	0.70%
Inflation rate	2.00%	2.00%
Future salary increases	2.50%	2.50%
Future pension increases	1.75%	1.75%

Assumptions regarding future mortality experience are set based on actuarial advice in accordance with published statistics and actuarial experience. An increase in each of the main assumptions would have had the followings effects.

(EUR million)	2021	2020
0.25% change of discount rate	-26	-25
0.5% change of salary increase rate	2	2
0.5% change of pension increase rate	2	2
Change of 1 year in life expectancy	17	17

The sensitivities indicated are computed based on the same methods and assumptions used to determine the present value of the defined benefit obligations and are based on variations in a single variable only. Note that the sensitivity analyses may not be representative of an actual change in the defined benefit obligation, as it is unlikely that changes in assumptions would occur in isolation.

Due to the development of plan assets and the change in (statutory) discount rates, we expect to have an obligation to contribute to plan assets in 2022 of EUR 4 million. We expect the following, undiscounted, benefit payments from the plan.

(EUR million)	2021	2020
Within the next 12 months	6	5
Within 2-5 years	28	25
Within 5-10 years	47	41
More than 10 years	452	382
Total	**533**	**453**

Pension plan the Netherlands

For the majority of our Dutch personnel we have a multi-employer scheme offered by ABP Pension Fund (ABP) in the Netherlands. The pension contribution rate for 2021 was 25.9% of the pensionable salary. In 2022 we expect to contribute EUR 33 million, based on 2021 number of employees, to the ABP scheme. Compared to the total participants in the ABP pension fund, our share in ABP is limited. We are not liable for any deficits in the multi-employer plan.

ABP has indicated that it is unable to provide the kind of company-specific information required by IFRS for defined-benefit pension schemes. Consequently, this scheme is treated as if it were a defined contribution scheme.

Since the financial situation of the ABP pension plan at 31 December 2015 was inadequate from a regulatory perspective, ABP filed a recovery plan, which was approved by De Nederlandsche Bank (DNB) during the course of 2016. In accordance with this recovery plan, ABP evaluates how recovery is progressing at the start of each year. Progress is measured by means of the policy funding ratio at the end of the preceding year. The policy funding ratio is the 12-month moving average of the nominal funding ratio. ABP's policy funding ratio as at 31 December 2021 was 102.8% (2020: 93.2%) which is above the critical regulatory coverage rate level under which pensions would have to be reduced.

ⓘ Accounting policy

Payments to defined contribution plans are charged as an expense in the period to which they relate.

24 Account- and other payables

(EUR million)	2021	2020
EEG accounts payable	4,206	1,245
Accounts payable	455	473
Payables in connection with tangible fixed asset purchases	423	337
Grid expenses payable	1,410	911
Interest payable	105	104
Social securities and other taxes payable	27	35
Payables to related parties	8	11
Other payables	224	171
Total	**6,858**	**3,287**

EEG accounts payable

Refer to note 15.

Payables in connection with tangible fixed assets purchases

Payables in connection with tangible fixed assets purchases related to unbilled services and deliveries for onshore and offshore investment projects.

Grid expenses payable

The grid expenses payable consisted mainly of accrued expenses for (i) feed-in management and (ii) redispatch measures.

Key estimates and assumptions

Accrued expenses for measures taken to restore the imbalance of the electricity grid, relate to balancing services provided by various electricity generating parties. At year-end, we record an accrual for all balancing costs. The accrual is based on actual volumes or, if not available, forecast volumes derived from models. Several assumptions are made in these models such as weather conditions, requested volumes and capacity per plant. Prices are based on underlying contracts and/or historical data.

Other payables

Other payables mainly comprised compensation payments to offshore wind farm operators (OWFs), personnel related liabilities and accruals for which invoices had not yet been received.

Key estimates and assumptions

Compensation payments to OWFs are based on amounts of electricity which could not be fed into the grid. The pass-through accrual is based on a comparison of the costs incurred and the revenue generated by the offshore grid surcharge.

25 Financial risk management

Our business activities are exposed to a number of financial risks such as interest rate risk, credit risk, liquidity risk and refinancing risk, which are described in detail in this note. Our financial risk management strategy primarily focuses on protecting liquidity, equity capital and net profit in order to safeguard our ability to continue active operations while providing an adequate return to our shareholders. Our approach to managing financial risks, including a number of specific disclosures (such as a maturity analysis of contractual undiscounted financial obligations) required by accounting standards, are set out in this note. For details about regulatory risks we refer to the 'Risk Management' section of our Executive Board report.

Risk management related to financing activities is done by our Treasury department under policies included in the Treasury Statute approved by our Executive Board. The Treasury department's objective is to facilitate the realisation of our financial and strategic objectives from a funding and financial risk perspective. The Treasury Statute includes principles covering specific areas such as interest rate risk, liquidity risk, the use of derivatives and the investment of excess liquidity. The use of all ordinary course financial instruments is permitted, provided these are used solely to cover open positions of the Company. Any speculative use of financial instruments is explicitly not authorised.

Interest rate risk

TenneT is exposed to interest rate risk on its debt portfolio. To limit this risk, our policy is to base the majority of our loan portfolio on fixed interest rates. As of 31 December 2021, the long-term loan portfolio was for more than 95% based on fixed interest rates. An increase or decrease in interest rates of 2 percentage points would result in an increase or decrease of EUR 15 million in our net interest cost (2020: EUR 8 million).

Furthermore, there is a risk that interest payable on borrowings exceeds the interest compensation received by TenneT under the prevailing regulatory systems in the Netherlands and Germany, respectively. The ACM set the relevant interest rate which linearly decreased from 3.58% in 2016 to 2.29% in 2021. In 2022 a new regulatory period will start in the Netherlands. In Germany, actual interest costs are compensated up to a level customary to the market. The BNetzA determines marketability on the basis of reference interest rates published by the Deutsche Bundesbank. Currently we expect that actual costs of debt for TenneT are below the predefined maximum reference rates. in which ACM has decided to ex post settle the interest rate for interest rates actually measured in the applicable year of the regulatory period.

Credit risk

TenneT is exposed to the risk of loss resulting from counterparties' defaulting on their commitments including failure to pay or make a delivery on a contract. Our exposure to credit risk from operating activities and treasury activities is inherent to our business activities.

Operational credit risk

In respect of our operating activities, TenneT has a credit policy in place, which takes into account the risk profiles of our counterparties. We also have policies in place to monitor the financial viability of counterparties.

In both the Netherlands and Germany, TenneT is responsible for maintaining the balance between supply and demand of energy. The associated costs are covered by income from parties with balance responsibility, which are charged for any imbalances attributable to them. Any surplus is deducted from subsequent tariffs for system services. For certain situations, securities in the form of bank guarantees and collaterals are held as protection against the default risk of parties with balance responsibility. With respect to investment projects, we require counterparties to deliver bank guarantees or collaterals as a protection against defaults.

The management of energy exchanges, the execution of the Renewable Energy Act in Germany and the maintenance of the energy balance between supply and demand requires transfer of significant cash amounts. Our policies are aimed at minimising the risks associated with the clearing transactions in connection with these cash flows.

Credit risk on trade and other receivables is limited, because most of our trade and other debtors have a low risk of default. Consequently, TenneT requires no material collateral as security and no insurance for credit risk. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in note 13 and 15. The movement of the allowance for expected credit losses of trade receivables is included in note 15.

The provision rates for expected credit losses are based on groupings of various customer segments with similar loss patterns (such as customer type and arrears in payments). Any expected credit losses for financial guarantee contracts and commitment letters (if any) are also provided for. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, trade receivables and other financial assets are written-off if there is no reasonable expectation of recovering the contractual cash flows. The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, TenneT may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group.

Financial credit risk

In 2021, financial credit risk arose mainly from TenneT's transactions and positions with several financial institutions. As at 31 December 2021, the maximum credit risk amounted to nil (2020: EUR 475 million).

In accordance with our treasury policies, counterparty credit exposure is monitored frequently against the counterparty credit limits. We have concentration limits in place when funds are placed on deposit or when financial derivatives are entered into. At 31 December 2021 we had nil at our free disposal. These deposits had a maturity of less than 3 months (2020: EUR 475 million), see note 15.

At 31 December 2021 we had EUR 2,622 million deposits with third parties for EEG cash amounts (2020: nil) and no financial derivatives outstanding. As of 31 December 2021 EUR 472 million of these deposits had a maturity of more than 3 months (2020: nil), please refer to note 15 and note 16.

Management does not expect any significant losses from non-performance by treasury counterparties.

Liquidity risk

Liquidity risk is defined as the risk that the Group cannot meet its short-term financial obligations. Liquidity is monitored every quarter on a rolling 12-month forward-looking basis. Our request to maintain at least 12-month liquidity was met at each quarter end date, including 31 December 2021 and 31 December 2020.

The following maturity schedule presents our financial obligations on a contractual, non-discounted basis.

(EUR million)	Notes	<1 month	1 to 3 months	3 to 12 months	1 to 5 years	More than 5 years	**Total**
At 31 December 2021							
Lease liabilities	9	12	21	100	251	69	453
Borrowings	20	704	548	268	2,701	11,408	15,629
Account- and other payables	24	1,797	1,293	3,660	4	-	6,753
Other financial liabilities		281	-	-	-	-	281
Total		**2,794**	**1,862**	**4,028**	**2,956**	**11,477**	**23,116**
At 31 December 2020							
Lease liabilities	9	12	23	103	263	125	526
Borrowings	20	158	47	683	2,592	8,972	12,452
EEG related Borrowings	20	1,528	-	-	-	-	1,528
Account- and other payables	24	1,011	517	1,660	-5	-	3,183
Other financial liabilities		85	-	-	-	-	85
Total		**2,794**	**587**	**2,446**	**2,850**	**9,097**	**17,774**

TenneT's borrowings have a diversified maturity profile, which reduces refinancing risks (see also note 20).

In order to reduce liquidity risk, TenneT had a EUR 3.6 billion committed revolving credit facility (RCF) at its disposal for general corporate purposes. At 31 December 2021, this facility was undrawn. Furthermore, we had EUR 500 million of undrawn long-term loan commitments from the EIB available at 31 December 2021 and a EUR 700 million committed bilateral RCF, which was fully drawn at 31 December 2021. Next to that we had a committed bank facility of EUR 300 million and an uncommitted bank facility of EUR 500 million available (both facilities were undrawn at 31 December 2021). Finally, we had EUR 450 million of short-term uncommitted credit facilities available at year end of which drawn EUR 64 million (2020: EUR 90 million).

The EEG has a significant impact on TenneT's working capital position and to prevent negative EEG bank account balances and additional short-term bridge financing, a liquidity buffer is included in the EEG levy. In accordance with EEG legislation, shortfalls are reimbursed through EEG levies and/or government contributions in subsequent years.

As a result of the Climate program 2030 ("Klimaschutzprogramm 2030") the four German TSOs received EUR 10.8 billion from the German government to finance the EEG in 2021. TenneT received 32% of this amount in three instalments (January 2021: EUR 1,632 million, May 2021: EUR 960 million and October 2021: 864 million) used to finance payments made to renewable energy producers.

The size of our credit facilities is such that we expect that all substantial adverse financial developments and events can reasonably be expected to be accommodated and that continuation of day-to-day operations is ensured for at least 12 months. The terms and conditions of our credit facilities include negative pledge and pari passu clauses. No security interest over any of the Group's assets has been provided. All credit facilities have floating-rate interest conditions.

TenneT also has access to diversified funding sources through its medium-term note (EMTN) programme and our commercial paper (CP) programme. Both programmes significantly reduce our dependency on bank financing.

TenneT expects to meet its financial obligations for 2022 with (i) cash and cash equivalents, (ii) funds from operations, (iii) unused credit facilities and (iv) capital market transactions. We expect to meet our financial obligations for the subsequent years through various capital market transactions and equity contributions and intend to manage future refinancing risks by spreading the tenors of new financing arrangements.

Equity risk

There is a risk of a lack of access to equity on a sustainable basis. This risk reflects the inability to raise additional equity in a timely fashion in case of unexpectedly large increases in our investment portfolio or negative regulatory developments. Actions taken in order to mitigate this risk are: (i) an active financing strategy to create and maintain an optimal capital structure as well as to diversify funding sources and manage financial risks, (ii) a proactive approach of potential investors and active discussion with our shareholder to contribute additional equity (which effected in EUR 4.25 billion) and (iii) lobbying activities to ensure that regulatory frameworks remain adequate to safeguard regulators income and returns to investors.

Commodity price risk

Energy purchase contracts for the forward purchase of electricity that are used to satisfy physical delivery requirements to customers, or for energy that the Group uses itself, meet the expected purchase or usage requirements of IFRS 9. They are, therefore, not recognised in the financial statements until they are realised. Disclosure of commitments under such contracts is made in note 28.

Energy purchase contracts are considered to comprise two components, being a forward purchase of power at spot prices, and a forward purchase of environmental certificates at a variable price (being the contract price less the spot power price). With respect to our current contracts, neither of these components meets the requirement to be accounted for as a derivative. As currently no liquid market for environmental certificates exists, this component meets the expected purchase or usage exemption of IFRS 9. We expect to enter into an increasing number of these contracts, in order to meet our compliance requirements in the short to medium term. It is possible that in future, if and when liquid markets develop, and to the extent that we are in receipt of environmental certificates in excess of our required levels, this exemption may cease to apply, and we may be required to account for forward purchase commitments for environmental certificates as derivatives at fair value through profit and loss.

26 Fair values

The table below provides an overview of the carrying value and fair value of financial instruments, including IFRS treatment and the level in the valuation hierarchy. Instruments are measured at fair value.

		Carrying amount		Fair value		
(EUR million)	Notes	**2021**	2020	**2021**	2020	Hierarchy
Financial assets						
Other financial assets:						
- Minority participating interests	13	14	6	14	-	Level 3
Total		**14**	**6**	**14**	**-**	
Financial liabilities						
Borrowings:						
- Borrowings – bonds	20	10,776	8,487	11,221	9,478	Level 1
- Borrowings – other	20	2,929	2,445	2,329	2,665	Level 2
- Borrowings – EEG related	20	-	1,528	-	1,528	Level 2
Total		**13,705**	**12,460**	**13,550**	**13,671**	

As at 31 December 2021, no instruments carried at fair value were held (2020: nil). Furthermore, we concluded that the fair value of the loans and receivables, cash and cash equivalents, account- and other payables and other financial liabilities approximate their carrying amounts at year end 2021, due to the short-term maturities of these instruments.

The following hierarchy by valuation technique was used to calculate the fair value of assets and liabilities:

- Level 1: Measurement based on quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Measurement based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3: Measurement based on inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The fair value of the level 2 borrowings was based on discounted cash flows. A change in the assumptions used to calculate the fair value should not result in a significantly different outcome. There were no transfers between the fair value hierarchy levels during 2021 or 2020.

27 ⓘ Accounting policies for financial instruments

Financial assets

All financial assets are recognised initially at fair value, net of directly attributable transaction cost.

After initial recognition financial assets are measured at amortised cost, fair value through other comprehensive income (OCI) and fair value through profit or loss. All of TenneT's financial assets are classified as amortised cost, because the following two conditions are met:

- The financial assets are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment.

The Group recognises an allowance for expected credit losses (ECLs) for financial assets. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

Financial liabilities

All financial liabilities are recognised initially at fair value and, in case of loans, borrowings and payables, net of directly attributable transaction costs. The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts.

After initial recognition at fair value, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the statement of income when the liabilities are derecognised as well as through the EIR amortisation process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance expense in the statement of income.

28 Contingencies and commitments

Off-balance sheet rights and related obligations consist of the following categories:

(EUR million)	2021	2020
Investment related off-balance items		
Off-balance sheet rights		
Bank guarantees received	1,440	1,227
Comfort letters received	1,314	1,202
Total	**2,754**	**2,429**
Off-balance commitments		
Capital commitments	7,468	7,133
Comfort letters issued	783	776
Total	**8,251**	**7,909**
Other off-balance items		
Other off-balance obligations		
Grid-related commitments	640	920
Other off-balance sheet commitments	55	43
Total	**695**	**963**

The expected cash flows in respect of capital commitments equal the amounts in the above table. For comfort letters issued, no cash flows are expected.

Bank guarantees received

Bank guarantees received included guarantees for investment projects.

Comfort letters received

The majority of comfort letters received was from parties involved in the construction of German onshore and offshore projects.

Capital commitments

Capital commitments are commitments entered into with regard to the purchase of tangible fixed assets. Approximately EUR 4.0 billion of capital commitments were payable within 12 months, as at 31 December 2021 (2020: EUR 2.7 billion).

Comfort letters issued

The comfort letters issued mainly related to offshore projects in Germany.

Grid related commitments

Grid-related commitments included unused auction receipts, received in the Netherlands amounting to EUR 136 million (2020: EUR 482 million).

Other

Other off-balance sheet commitments mainly consisted of:

- Compensation claimed by several parties for the delay or non-availability of the offshore grid connection. The related legal proceedings are still pending. If and to the extent the claims are (partly) justified and the payments resulting therefrom could not be passed through to the end customers, the binding rulings may have a negative impact on the financial position;
- Capital commitments to minority participating interests;
- TenneT TSO B.V. is currently involved in a claim procedure because of alleged wrongful termination of construction contracts and in a counter claim procedure against this counter party regarding financial settlement & damages due to the alleged non-fulfilment of the construction contracts.

For these items, it is not practicable possible to determine the financial effect and possible timing of cash outflows and cash inflows.

Various other off-balance sheet commitments and contingencies as well as other off-balance sheet rights existed as of 31 December 2021 but were immaterial from a disclosure perspective. The majority of these claims related to (i) construction contracts and planning damage where additional payments would be capitalised, or (ii) claims relating to compensation for delays and interruptions where any compensation would be pass-through for TenneT or (iii) claims relating to refunds of transmission services, which would be compensated in future tariffs. In the unlikely event that these claims would prevail in court, this could have a material impact on the Company's financial situation.

Environmental obligations

The Group is exposed to risks regarding environmental obligations arising from past activities. For example, a number of sites have to be decontaminated and restored to their original condition before being handed back at the end of the contractual period. Under current legislation, environmental plans and any other measures to be adopted have to be agreed with local, regional and national authorities as appropriate. As soon as such plans are approved or other legal obligations arise, a provision is formed based on the most reliable estimate possible of future expenses. TenneT is of the opinion that the currently recognised provisions are adequate, based on information currently available.

29 Related parties

Note 30 provides an overview of legal entities included in the consolidated financial statements.

TenneT has entered into transactions with the following related parties:

- State of the Netherlands: TenneT Holding B.V. is controlled by the Dutch State, which owns 100% of the Company's ordinary shares (refer to note 18);
- Joint ventures NOKA, OTC and BritNed (refer to note 12);
- Associate HGRT (refer to note 12);
- Members of the Executive Board and Supervisory Board of TenneT Holding B.V. (refer to note 4).
- Copenhagen Infrastructure partners (CIP). As of 1 April 2022 Mr Jager will be a partner at CIP

30 Consolidated subsidiaries

The following legal entities were included in the consolidation of TenneT Holding B.V:

			Voting interest		Economic interest		
Subsidiary	Legal seat	Country	**2021**	2020	**2021**	2020	
Direct subsidiaries							
ETPA Holding B.V.	Amsterdam	Netherlands	50%	50%	50%	50%	
NLink International B.V.	Arnhem	Netherlands	100%	100%	100%	100%	*
NOVEC B.V.	The Hague	Netherlands	100%	100%	100%	100%	
Relined B.V.	Utrecht	Netherlands	100%	100%	100%	100%	
TenneT Duitsland Coöperatief U.A.	Arnhem	Netherlands	100%	100%	100%	100%	*
TenneT Green B.V.	Arnhem	Netherlands	100%	100%	100%	100%	*
TenneT Orange B.V.	Arnhem	Netherlands	100%	100%	100%	100%	
TenneT TSO B.V.	Arnhem	Netherlands	100%	100%	100%	100%	
TenneT TSO Duitsland B.V.	Arnhem	Netherlands	100%	100%	100%	100%	*
Indirect subsidiaries							
B.V. Transportnet Zuid-Holland	Voorburg	Netherlands	100%	100%	100%	100%	*
CertiQ B.V.	Arnhem	Netherlands	100%	100%	100%	100%	
Duvekot Rentmeesters B.V.	Bathmen	Netherlands	100%	100%	100%	100%	
ETPA B.V.	Amsterdam	Netherlands	50%	50%	50%	50%	
Nadine Netwerk B.V.	Arnhem	Netherlands	100%	100%	100%	100%	*
Omroepmasten B.V.	Vianen	Netherlands	100%	100%	100%	100%	
Saranne B.V.	Arnhem	Netherlands	100%	100%	100%	100%	*
Stichting Beheer Doelgelden Landelijk Hoogspanningsnet	Arnhem	Netherlands	N/A	N/A	N/A	N/A	
TransTenneT B.V.	Arnhem	Netherlands	100%	100%	100%	100%	*
DC Netz DolWin4 GmbH	Bayreuth	Germany	100%	100%	100%	100%	
DC Netz HelWin1 GmbH	Bayreuth	Germany	100%	100%	100%	100%	
DC Netz SylWin2 GmbH	Bayreuth	Germany	100%	100%	100%	100%	
Globalways GmbH	Stuttgart	Germany	100%	100%	100%	100%	
NOVEC GmbH	Emsbüren	Germany	100%	100%	100%	100%	
Relined GmbH	Emsbüren	Germany	100%	100%	100%	100%	
Greennet Stiftung	Bayreuth	Germany	100%	0%	100%	0%	
TenneT GmbH & Co. KG	Bayreuth	Germany	100%	100%	100%	100%	**
TenneT Offshore 1. Beteiligungsgesellschaft mbH	Bayreuth	Germany	51%	51%	31%	31%	
TenneT Offshore 2. Beteiligungsgesellschaft mbH	Bayreuth	Germany	51%	51%	31%	31%	
TenneT Offshore 8. Beteiligungsgesellschaft mbH	Bayreuth	Germany	51%	51%	37%	37%	
TenneT Offshore 9. Beteiligungsgesellschaft mbH	Bayreuth	Germany	51%	51%	37%	37%	
TenneT Offshore Dolwin3 Beteiligungs GmbH & Co. KG	Bayreuth	Germany	51%	51%	30%	30%	**
TenneT Offshore Dolwin3 GmbH & Co. KG	Bayreuth	Germany	51%	51%	30%	30%	
TenneT Offshore Dolwin3 Verwaltungs GmbH	Bayreuth	Germany	51%	51%	33%	33%	
TenneT Offshore GmbH	Bayreuth	Germany	100%	100%	100%	100%	
TenneT TSO GmbH	Bayreuth	Germany	100%	100%	100%	100%	
TenneT Verwaltungs GmbH	Bayreuth	Germany	100%	100%	100%	100%	
WL Winet GmbH (in liquidation)	Emsbüren	Germany	100%	100%	100%	100%	***

* For these companies TenneT has issued a declaration of liability as referred to in Book 2, Part 9, Section 403 of the Netherlands Civil Code.

** This company, which has been consolidated in these financial statements, has opted for the exemption of Section 264b of the German Commercial Code.

*** WL Winet GmbH exists since 2016 but never showed a positive result. Although sales were increasing, management didn't expect an improvement of the result due to the lack of finding qualified personnel. Therefore, it was decided to liquidate WL Winet GmbH. The liquidation commenced on 1 March 2019.

As TenneT is able to exercise direct control over its management and financial and operational policies, Stichting Beheer Doelgelden Landelijk Hoogspanningsnet, a foundation which temporarily manages funds arising from the maintenance of the energy balance and auctioning of cross-border capacity by TenneT TSO B.V., is included in the consolidation.

31 Events after the reporting period

The Russian invasion in Ukraine does not have an impact on TenneT's tangible assets. It could have an impact on TenneT through higher energy prices and higher cost of supplies that are needed for maintenance and investment projects. The situation is continuously being monitored in close alignment with the Dutch and German governments.

In January 2022, due to the weather events related to storm Corrie, an adrift cargo vessel collided with the jacket of Hollandse Kust Zuid Beta. We are currently investigating the effects of this collision, to get a clear picture of the exact damage to the jacket so that we can make a plan for necessary repairs.

Company financial statements

Company statement of financial position

For the year ended 31 December (EUR million)

Assets	Notes	2021	2020
Non-current assets			
Investments in subsidiaries	36	8,216	8,651
Investments in joint ventures and associates	37	31	31
Other financial assets	38	12,861	9,828
Total non-current assets		**21,108**	**18,510**
Current assets			
Other financial assets	38	274	2,093
Account- and other receivables	39	12	14
Cash and cash equivalents		-	475
Total current assets		**286**	**2,582**
Total assets		**21,394**	**21,092**

Equity and liabilities	Notes	2021	2020
Equity	40		
Paid up and called-up capital		100	100
Share premium		1,790	1,790
Revaluation reserve		10	22
Reserve for participating interests		64	94
Reserve for internally generated assets		87	55
Retained earnings		3,193	2,515
Unappropriated result		-401	748
Equity attributable to ordinary shares		**4,843**	**5,324**
Hybrid securities		2,125	2,125
Equity attributable to owners of the company		**6,968**	**7,449**
Non-current liabilities			
Borrowings	41	12,366	10,217
Deferred tax liability		8	6
Total non-current liabilities		**12,374**	**10,223**
Current liabilities			
Borrowings	41	1,339	2,243
Bank overdraft		64	90
Account- and other payables	42	649	1,087
Total current liabilities		**2,052**	**3,420**
Total equity and liabilities		**21,394**	**21,092**

Company statement of income

For the year ended 31 December (EUR million)

(EUR million)	Notes	2021	2020
Revenue		**1**	**-**
Other operating expenses		-8	-6
Other gains/(losses)		-	-
Total operating expenses		**-8**	**-6**
Share in profit of joint ventures and associates		14	5
Operating profit		**7**	**-1**
Finance income	33	194	159
Finance expenses	34	-186	-202
Finance result		**8**	**-43**
Profit before income tax		**15**	**-44**
Income tax expense		-14	1
Profit from subsidiaries	36	-345	835
Profit for the year		**-344**	**792**

Notes to the company financial statements

These notes contain information about the company financial statements of TenneT Holding B.V. Details related to TenneT Holding B.V.'s financial results and position are provided, as well as a description of the specific accounting policies applied when compiling these company financial statements.

32 Company accounting policies

The company financial statements for TenneT Holding B.V. have been prepared in accordance with the provisions of Part 9, Book 2 of the Netherlands Civil Code. The same principles governing valuation and the determination of results (including the principles governing the classification of financial instruments as equity or liability) have been applied when compiling the company financial statements and the consolidated financial statements, as permitted by Article 2:362, clause 8 of the Netherlands Civil Code.

Expected credit loss (ECL) provisions for receivables from subsidiaries have been eliminated as intercompany positions. Changes in these ECL provisions may impact the carrying amounts of the financial assets in the company statement of the financial position due to a possible provision. This may result in a difference between the company's equity and the consolidated equity. No ECL provision was deemed necessary.

33 Finance income

Finance income was mainly related to the interest received on intercompany loans and other in- house financing activities (see note 38). The intercompany agreements have terms equivalent to those that prevail in arm's length transactions.

34 Finance expenses

Finance expenses mainly related to interest on borrowings and credit facilities (2021: EUR 175 million; 2020: EUR 187 million).

35 Personnel expenses

TenneT Holding B.V. did not employ any personnel during 2020 or 2021, and as a result did not incur any personnel expenses in those periods. Members of the Executive Board and Supervisory Board of the Company received their remuneration, as disclosed in note 4 of the consolidated financial statements, from other entities within the Group.

36 Investments in subsidiaries

Changes in investments in subsidiaries can be broken down as follows:

(EUR million)	2021	2020
At 1 January	**8,651**	**7,552**
Share in result	-345	835
Capital contribution	-36	284
Dividends received	-110	-3
Re-measurement of defined benefit pension	56	-17
At 31 December	**8,216**	**8,651**

Investments in subsidiaries relate to the legal entities included in the consolidation as disclosed in note 30 of the consolidated financial statements.

ⓘ Accounting policies

Investments in subsidiaries are measured at net asset value. The net asset value of a participating interest is determined by valuing assets, provisions and liabilities and calculating the result using the accounting principles applied to the consolidated financial statements.

When TenneT's share of losses in an investment equals or exceeds its interest on investment, (including separately presented goodwill or any other unsecured non-current receivables, as part of the net investment), it does not recognise any further losses, unless it has incurred legal or constructive obligations or made payments on behalf of this investment. In such case, TenneT will recognise a provision.

37 Investments in joint ventures and associates

Investments in joint ventures and associates related to HGRT. In 2021, TenneT's share in HGRT's result amounted to EUR 4 million (2020: EUR 3 million) and EUR 3 million (2020: EUR 3 million) dividends were received. Further reference is made to note 12 of the consolidated financial statements.

38 Other financial assets

(EUR million)	2021	2020
Receivables from subsidiaries	12,843	9,818
Minority participating interests	14	5
Other financial assets	4	5
Total	**12,861**	**9,828**

In relation to the minority participating interests reference is made to note 13.

Receivables from subsidiaries mainly related to intercompany loans and cash management activities of TenneT Holding B.V. The agreed interest rate for the intercompany loans is our cost of fund rating +0.125%. These receivables were unsecured. The movement schedule is as follows:

(EUR million)	2021	2020
At 1 January	**9,828**	**6,655**
Additions	3,190	3,377
Repayments	-57	-93
Transfer to current	-108	-110
Fair value adjustment equity investments	8	-
Other movements	-	-1
At 31 December	**12,861**	**9,828**

TenneT Holding B.V. had EUR 271 million (2020: EUR 2.1 billion) of current other financial assets which were related to receivables from subsidiaries. Certain subsidiaries have guaranteed the payment to, certain creditors of TenneT Holding B.V. up to an aggregate amount of EUR 400 million (2020: EUR 2.5 billion).

39 Account- and other receivables

Account- and other receivables mainly related to corporate income tax receivable.

40 Equity

(EUR million)	Reserve Participating interests	Reserve for internally generated assets	Hedging reserve	Revaluation reserve	**Total legal reserve**
At 1 January 2020	**62**	**62**	**1**	**32**	**157**
Result NOKA and HGRT	35	-	-	-	35
Dividend NOKA and HGRT	-3	-	-	-	-3
Internally generated intangible assets	-	32	-	-	32
Depreciation on internally generated intangible assets	-	-39	-	-	-39
Depreciation revaluation tangible fixed assets	-	-	-	-11	-11
Amortisation of hedges	-	-	-1	-	-1
At 31 December 2020	**94**	**55**	**-**	**21**	**170**
Result NOKA and HGRT	15	-	-	-	12
Dividend NOKA and HGRT	-45	-	-	-	-42
Internally generated intangible assets	-	52	-	-	52
Depreciation on internally generated intangible assets	-	-19	-	-	-19
Depreciation revaluation tangible fixed assets	-	-	-	-11	-11
At 31 December 2021	**64**	**87**	**-**	**10**	**161**

The statement of changes in equity and disclosures to that statement are included in the consolidated financial statements. For details on the hybrid securities see note 18.

The revaluation reserve covers the IFRS 1 revaluation of tangible fixed assets in 2004. The reserve for participating interests relates to HGRT and NOKA, for which TenneT does not control payment of dividends. In the consolidated financial statements, the revaluation reserve, the reserve for internally generated assets and the reserve for participating interests were included in retained earnings.

The legal reserves are not freely distributable.

Appropriation of result for the year ended 31 December 2020

The annual report 2020 was approved in the General Meeting held on 11 March 2021. The General Meeting determined the appropriation of result in accordance with the proposal being made to that end.

The appropriation of the 2021 profit is at the free disposal of the General Meeting of Shareholders and has not been recorded in the financial statements.

41 Borrowings

Details on borrowings are included in the consolidated financial statements, see note 20.

42 Account- and other payables

(EUR million)	**2021**	2020
Payables to subsidiaries	544	983
Interest payable	105	104
Total	**649**	**1,087**

43 Events after the reporting period

See note 31 of the consolidated financial statements.

Arnhem, 14 March 2022

Executive Board TenneT Holding B.V.
M.J.J. van Beek (Chair)
T.C. Meyerjürgens
M.C. Abbenhuis
A.C.H. Freitag

Supervisory Board TenneT Holding B.V.
A.F. van der Touw (Chair)
A.C.C. van Els
L.J. Griffith
E. Kairisto
E.M. Schöne

TenneT Holding B.V.
Utrechtseweg 310
6812 AR Arnhem
The Netherlands

Postbus 718
6800 AS Arnhem
The Netherlands
Chamber of Commerce register 09083317

Other information

Profit appropriation

Profit appropriation is governed by Section 38.3 of the Articles of Association, which states the following “To the extent that the profit is not used to make up prior losses in accordance with the provision of paragraph 2, it shall be at the free disposal of the general meeting. In the calculation of the profit amount to be distributed on every share, only the amount of the compulsory payments on the nominal amount of the shares shall be taken into consideration. In the event of a tied vote on a proposal to distribute or reserve profits, the profits to which the proposal relates shall be reserved”.

Independent auditor's report

To: the Shareholder and Supervisory Board of TenneT Holding B.V.

Report on the audit of the financial statements 2021 included in the integrated annual report

Our opinion

We have audited the accompanying financial statements 2021 of TenneT Holding B.V. (the "**Company**" or "**TenneT**") based in Arnhem, The Netherlands. The financial statements include the consolidated financial statements and the company financial statements.

In our opinion:

- the accompanying consolidated financial statements give a true and fair view of the financial position of TenneT Holding B.V. as at 31 December 2021, and of its result and its cash flows for 2021 in accordance with International Financial Reporting Standards as adopted by the European Union ("**EU-IFRS**") and with Part 9 of Book 2 of the Dutch Civil Code; and
- the accompanying company financial statements give a true and fair view of the financial position of TenneT Holding B.V. as at 31 December 2021, and of its result for 2021 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The consolidated financial statements comprise:

1. The consolidated statement of financial position as at 31 December 2021;
2. The following statements for 2021: the consolidated statement of income, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows; and
3. The notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

1. The company statement of financial position as at 31 December 2021;
2. The company statement of income for 2021;
3. The notes comprising a summary of the accounting policies and other explanatory information.

Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the financial statements" section of our report.

We are independent of TenneT Holding B.V. in accordance with the EU Regulation on specific requirements regarding statutory audit of public-interest entities, the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information in support of our opinion

We designed our audit procedures in the context of our audit of the financial statements as a whole and in forming our opinion thereon. The following information in support of our opinion was addressed in this context, and we do not provide a separate opinion or conclusion on these matters.

Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at EUR 55 million. The materiality is based on 7% of underlying operating profit, as set out in note 2 of the consolidated financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

Component audits are performed using the materiality levels determined by the judgement of the group engagement team, considering materiality for the consolidated financial statements as a whole and the reporting structure of the group. For the largest reporting entities, the audits are performed using the following component materiality levels:

- TenneT TSO GmbH & Co. KG ("**TSO DE**"): of EUR 37.4 million;
- TenneT TSO B.V. ("**TSO NL**"): EUR 24.2 million; and
- TenneT Holding B.V.: EUR 22 million.

For the other reporting entities, the component materiality levels did not exceed EUR 11 million.

We agreed with the Supervisory Board that misstatements in excess of EUR 2.75 million, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Scope of the group audit

TenneT Holding B.V. is the head of a group of entities. The financial information of this group is included in the consolidated financial statements of TenneT Holding B.V.

Because we are ultimately responsible for the opinion, we are responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for reporting entities. Decisive were the size and/or the risk profile of the reporting entities or operations. On this basis, we selected reporting entities for which an audit had to be carried out on the complete set of financial information or specific items.

In establishing the overall group audit strategy and plan, we determined the type of work that needed to be performed at the components by the group engagement team and the component auditors.

Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those components to be able to conclude whether sufficient appropriate audit evidence was obtained as a basis for our opinion on the group financial statements as a whole, also considering COVID-19 related travel restrictions. For each component we determined whether we required an audit of their complete financial information or whether other procedures would be sufficient.

Our group audit mainly focused on significant group entities TenneT Holding B.V., TSO DE and TSO NL, because combined they make up more than 90% of the group's revenue, underlying operating profit and assets. We included additional reporting entities in the scope of our group audit to have additional audit coverage on the group's consolidated financial statements, and performed other procedures with respect to residual risk in components and account balances that have not been included in audit scope.

The group consolidation, financial statements disclosures and certain centrally coordinated accounting topics were audited by the group engagement team. These topics included among others treasury and corporate income tax. Specialists were involved in the areas of tax, accounting, valuation, pension, and information technology.

We have obtained the following audit coverage of the group with our audit procedures:

Audit coverage	
Revenue	99%
Underlying operating profit	97%
Assets	99%

Due to the continued COVID-19 travel restrictions during 2021 we were able to visit Germany on a very limited basis. Consequently, we maintained our strategy for direction and supervision of the TSO DE component auditors in line with prior year's audit. The group engagement team among others held audit planning calls with all the individual component auditors, held bi-weekly update calls with component management and the component auditors, and conducted remote file reviews to evaluate the work undertaken and to assess their findings.

By performing the procedures mentioned above at group entities, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the consolidated financial statements.

Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matters	How the key audit matter was addressed in the audit

Tangible fixed assets

Securing supply and facilitating the integration of sustainable energy sources into the high-voltage grid require substantial investments and flexible access to (equity) funding. TenneT expects to increase its annual investment volume to at least EUR 6 billion by 2025 in onshore and offshore grid connections.

We have included this as a key audit matter because of:

- the financial significance of the tangible fixed assets and capital expenditures; and
- the risks associated with large investment projects, complexity in procurement, construction and timely completion; and
- the professional judgment required in estimating the useful lives of assets and in identifying any potential impairment (triggers).

We have tested the internal control environment related to tangible fixed assets through testing of operating effectiveness of relevant controls, including controls related to investment approval and the financial closing of assets under construction as well as the periodic determination of the useful life of tangible fixed assets. In addition, we have tested relevant controls for design and implementation around the liquidity forecast safeguarding TenneT's ability to finance investments.
At yearend, we have performed test of details on the additions and other movements. We obtained and discussed internal management reports about progress of the key assets under construction. We evaluated management's useful life estimations for reasonableness based on economic, regulatory and asset health data.
Also, we have evaluated management's impairment trigger analyses noting that such a trigger was identified for the TSO NL cash generating unit. As a consequence, TenneT performed an impairment test for these assets as at December 31, 2021. The impairment test comprised of assessing the recoverable amount by means of a value-in-use calculation using a discounted cash flow model. The resulting recoverable amount is higher than the carrying amount. Therefore, no impairment is recorded in the financial statements 2021. The main assumptions used in the calculation of the recoverable amount are disclosed in the financial statements Note 8. Furthermore, we evaluated the approriateness of the disclosure of the accounting policy and estimation uncertainty of the TSO NL impairment test.

Observation
No reportable matters were identified as a result of our procedures.

Provision for decommissioning of (offshore) assets

Moving towards a renewable future involves significant investments in (offshore) assets, that are to be decommissioned over the next 20 to 40 years, thus requiring recognition of decommission provisions. The corresponding provisions are based on estimates of costs, timing of decommissioning, discount rates and inflation.

We have included this as a key audit matter because of:

- the significance of the provision and additions for the year triggered by the start of construction of new (offshore) assets; and
- the uncertainty involved in measuring the provision and sensitivity to changes in key assumptions, including the cost base, the inflation rate and the discount rate.

We have obtained management's position papers on the cost assumptions and alignment of the methodology across The Netherlands and Germany. Our audit procedures include testing of design and implementation of relevant controls around the periodical assessment of these assumptions and the evaluation of the financial model used to calculate the provision.
Our substantive audit procedures further include an assessment of the reasonability of the key assumptions (including involvement of a specialist with regards to the cost assumptions) through comparison with observable market data and procedures to address the completeness of the provision.
Furthermore, we evaluated the appropriateness of the disclosure of the accounting policy and estimation uncertainty of these provisions.

Observation
Our procedures did not identify material observations and we considered management's key assumptions, to be within the reasonable range of our own expectations.

Accrual for in-feed management expenses

Due to a larger share of renewable energy production in Germany, supply of energy may sometimes exceed demand. In such instances, TenneT initiates redispatch measures to maintain the energy balance on its grids at 50 Hertz. If there is no redispatch possibility on the transmission grid, TenneT will direct distribution system operators to curtail producers of (renewable) electricity to secure system stability. These producers are then entitled to reimbursement for their lost in-feed.

We have included this as a key audit matter because the accrual for in-feed management is significant and subject to estimation uncertainty in assessing variable renewable energy production, where TenneT is dependent on information from other market participants.

Moreover, final settlement of in-feed management measures may take up to six years to resolve due to regulatory terms.

We obtained an understanding of the external factors and market processes that drive the estimation uncertainty, including an evaluation on the correlation between average wind developments and in-feed management expenses for 2021 and the previous periods.
We have tested the internal control environment related to the in-feed management expenses by testing design and implementation of relevant controls. This includes an assessment of the methodology applied by TenneT to estimate the accrual at reporting date.
We performed the following combination of substantive testing procedures:
- we tested quantity (GWh) and pricing data of the accrual estimation with underlying contract and counterparty quantity data.
- we performed back-testing of historical estimates, primarily aimed to test quantity estimations (GWh) with the use of observable market data, as well as the pricing estimations of the transactions based on contracts, and
- we evaluated underlying drivers of historical estimate updates to the current period estimates.

Observation
Our procedures did not identify material observations and we considered management's key assumptions (quantity and price) to be within the reasonable range of our expectations.

Consideration of fraud in the audit of the financial statements

Description	Response

An auditor conducting an audit in accordance with Dutch Standards on Auditing is responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. Owing to the inherent limitations of an audit, there is an unavoidable risk that some material misstatements of the financial statements may not be detected. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
 	
We have exercised professional judgement and have maintained professional scepticism throughout our audit in identifying and assessing the risks of material misstatement of the financial statements due to fraud, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.
	We performed the following procedures:
	• In identifying potential risks of material misstatement due to fraud, we obtained an understanding of TenneT and its environment, including its internal controls. We evaluated TenneT's fraud risk assessment and made inquiries with management, those charged with governance and others within TenneT, including but not limited to the functions (i) Internal Audit, (ii) Compliance & Integrity and (iii) Financial Governance & Services. We evaluated several fraud risks factors to consider whether those factors indicated a risk of material misstatement due to fraud.
	• Following these procedures, and the presumed risks under the prevailing auditing standards, we considered the fraud risks in relation to management override of controls, including evaluating whether there was evidence of bias by the Supervisory Board, the Executive Board and other members of management, which may represent a risk of material misstatement due to fraud. As part of the fraud risk of management override of controls, we identified the risk of classification of operational expenditure as capitalised expenditure due to the differences in related regulatory accounting and thus future revenues.
	• We made inquiries of management, those charged with governance and others within TenneT regarding the risk of material misstatements in the financial statements due to fraud, their process for identifying and responding to the risk of fraud, the internal communication regarding their views on business practices and ethical behaviour and whether they have knowledge of any actual, suspected or alleged fraud affecting the company.
	• We held discussions amongst team members and component auditors to identify fraud risk factors and considered whether other information obtained from our risk assessment procedures indicated risks of material misstatement due to fraud. Fraud risk factors identified include among others:
	  • fraud, bribery and corruption;
	  • compliance with respect to trade regulations/sanctions;
	  • compliance with respect to environmental requirements; and
	  • compliance with procurement policies.
	• We evaluated whether unusual or unexpected relationships have been identified in performing analytical procedures, that may indicate risks of material misstatement due to fraud.
	• We involved forensic specialists, focused on our fraud and non-compliance risk assessment, inquiries with management, the evaluation of the internal control environment and in determining the audit response.
	• We determined overall responses to address the assessed risks of material misstatement due to fraud at the financial statement level or at the assertion level by:
	  • assigning and supervising personnel with the adequate knowledge, skills and ability;
	  • evaluating whether the selection and application of accounting policies by the group, particularly those related to subjective measurements and complex transactions, may be indicative of fraudulent financial reporting;
	  • incorporating an element of unpredictability in the selection of the nature, timing and extent of our audit procedures. Among others, these Include the selection of fixed asset project tested, expense sampling selection criteria and (physical) asset inspection.
	  • tested the appropriateness of journal entries recorded in the general ledger and other adjustments made in the preparation of the financial statements;
	  • evaluated whether the judgments and decisions made by management in making the accounting estimates included in the financial statements indicate a possible bias that may represent a risk of material misstatement due to fraud. Significant accounting judgements, estimates and assumptions that might have a major impact on the financial statements are disclosed in note 1 of the consolidated financial statements. Impairment testing of the TSO NL assets, grid expense payables and the provision for decommissioning were focus areas in our audit as the related account balances are subject to significant management judgment. Reference is made to the section "Our key audit matters";
	  • performed a retrospective review of management judgments and assumptions related to significant accounting estimates such as cost assumptions on the decommissioning provisions and in-feed management accruals reflected in prior year financial statements.

Consideration of laws and regulations in the audit of financial statements

Description	Response
We are responsible for obtaining reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether due to fraud or error taking into account the applicable legal and regulatory framework. However, we are not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations. Owing to the inherent limitations of an audit, there is an unavoidable risk that some material misstatements in the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the auditing standards. In the context of laws and regulations, the potential effects of inherent limitations on the auditor's ability to detect material misstatements are greater for such reasons as the following: • There are many laws and regulations, relating principally to the operating aspects of an entity, that typically do not affect the financial statements and are not captured by the entity's information systems relevant to financial reporting. • Non-compliance may involve conduct designed to conceal it, such as collusion, forgery, deliberate failure to record transactions, management override of controls or intentional misrepresentations being made to the auditor. • Whether an act constitutes non-compliance is ultimately a matter to be determined by a court or other appropriate adjudicative body. Ordinarily, the less directly non-compliance is linked to the events and transactions reflected in the financial statements, the less likely the auditor is to become aware of it or to identify the non-compliance.	We performed the following procedures: • As part of obtaining an understanding of TenneT and its environment we obtained a general understanding of the legal and regulatory framework applicable to TenneT and the industry in which it operates and how TenneT is complying with that framework. • We assessed the laws and regulations relevant to the Company through discussion with management, those charged with governance and others within TenneT, including but not limited to the functions (i) Internal Audit, (ii) Compliance & Integrity, (iii) Legal Affairs, (iv) Regulatory Affairs and (v) Financial Governance & Services. We have read related minutes and reports. We involved our forensic specialists in our evaluation. • We obtained sufficient appropriate audit evidence regarding provisions of those laws and regulations generally recognised to have a direct effect on the determination of material amounts and disclosures in the financial statements such as (corporate) tax and pension laws and financial reporting regulations, the requirements under the International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and Part 9 of Book 2 of the Dutch Civil Code. • Apart from these, TenneT is subject to other laws and regulations where the consequences of non-compliance could have a material effect on amounts and/or disclosures in the financial statements, for instance, through imposing fines or litigation. Given the nature of TenneT's business and the complexity of energy laws and regulations in The Netherlands and Germany, as well as environmental laws, there is a risk of non-compliance with the requirements of such laws and regulations. In addition, we considered relevant laws and regulations applicable to listed companies. Our procedures are more limited with respect to other laws and regulations that do not have a direct effect on the determination of the amounts and disclosures in the financial statements. These laws and regulations compliance may be fundamental to the operating aspects of the business, to TenneT's ability to continue its business, or to avoid material penalties (e.g., compliance with the terms energy laws in The Netherlands ang Germany or compliance with environmental regulations) and therefore non-compliance with such laws and regulations may have a material effect on the financial statements. Our responsibility is limited to undertaking specified audit procedures to help identify non-compliance with those laws and regulations that may have a material effect on the financial statements. • Our procedures are limited to (i) inquiry of the Executive Board, the Supervisory Board and others within TenneT as to whether the company is in compliance with such laws and regulations and (ii) inspecting correspondence, if any, with the relevant licensing or regulatory authorities to help identify non-compliance with those laws and regulations that may have a material effect on the financial statements. • Naturally, we remained alert to the indications of (suspected) non-compliance throughout the audit. • Finally, we obtained written representations that all known instances of (suspected) fraud or non-compliance with laws and regulations have been disclosed to us.

Report on the other information included in the integrated annual report

In addition to the financial statements and our auditor's report thereon, the integrated annual report contains other information that consists of the:

1. Director's Report, consisting of:
   - About TenneT;
   - Our Performance in 2021; and
   - Governance and risk management;
2. Supervisory Board Report.
3. Other Information as required by Part 9 of Book 2 of the Dutch Civil Code.
4. Other information included in the integrated annual report.

Based on the following procedures performed, we conclude that the other information:

1. is consistent with the financial statements and does not contain material misstatements; and
2. contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of the other information, including the Director's Report in accordance with Part 9 of Book 2 of the Dutch Civil Code, and the other information as required by Part 9 of Book 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements

Engagement

We were appointed by the General Meeting as statutory auditor of TenneT Holding B.V. on 18 December 2019. The audit of the financial year 2020 was our initial audit engagement.

European Single Electronic Format ("ESEF")

The Commission Delegated Regulation (EU) 2019/815 of 17 December 2018, supplementing Directive 2004/109/EC of the European Parliament and of the Council with regard to regulatory technical standards on the specification of a single electronic reporting format, stipulates that the integrated annual report of the Company has to be prepared in an ESEF. The requirements to be met are set out in the aforementioned delegated regulation (the "**RTS on ESEF**").

In our opinion, the integrated annual report made up in XHTML format, including the partly tagged consolidated financial statements as included in the reporting package by the Company, has been prepared in all material respects in accordance with the RTS on ESEF.

Management is responsible for preparing the integrated annual report including the financial statements in accordance with the RTS on ESEF, whereby management combines the various components in a reporting package. Our responsibility is to obtain reasonable assurance for our conclusion whether the integrated annual report in this reporting package, is in accordance with the requirements. We have taken into consideration what is stated in Alert 43 'Vaststellen dat voldaan is aan ESEF-vereisten' as issued by The Royal Netherlands Institute of Chartered Accountants.

Our procedures included:

- obtaining an understanding of the Company's financial reporting process, including the preparation of the reporting package;
- obtaining the reporting package and performing validations to determine whether the reporting package containing the Inline XBRL instance document and the XBRL extension taxonomy files have been prepared in accordance with the technical specifications; and
- examining the information related to the consolidated financial statements in the reporting package to determine whether all required tagging has been applied and whether they are in accordance with the RTS on ESEF.

No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audit of public-interest entities.

Description of responsibilities regarding the financial statements

Responsibilities of management and the Supervisory Board for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code, and for the preparation of the Director's Report in accordance with Part 9 of Book 2 of the Dutch Civil Code.

Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, management is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Management should disclose events and circumstances that may cast significant doubt on the Company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the Company's financial reporting process.

Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit assignment in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included e.g.:

1. Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
3. Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
4. Concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
5. Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.
6. Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or review had to be carried out on the complete set of financial information or specific items.

We communicate with management and the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identified during our audit. In this respect we also submit an additional report to the audit committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Rotterdam, 14 March 2022

Deloitte Accountants B.V.

Signed by J.A. de Bruin

Assurance report of the independent auditor with respect to the 2021 Sustainability Information of TenneT Holding B.V.

To: the Shareholder and the Supervisory Board of TenneT Holding B.V.

Our conclusion

We have reviewed the sustainability information included in the Integrated Annual Report ("**IAR**") for the year 2021, excluding 'Box out: Eligibility of TenneT's activities with the EU Taxonomy' included on page 55 of the 2021 IAR, of TenneT Holding B.V. ("**TenneT**") based in Arnhem. (the "**Sustainability Information**"). A review is aimed at obtaining a limited level of assurance.

Based on our review performed nothing has come to our attention that causes us to believe that the Sustainability Information does not present, in all material respects, a reliable and adequate view of:

- the policy and business operations with regard to the Sustainability Information presented; and
- the thereto related events and achievements for the year 2021.

In accordance with the reporting criteria as included in the section 'Reporting criteria'.

The Sustainability Information consists of the performance information in the chapters 'At a glance 2021', 'Letter from the Board', 'About TenneT', 'Our Performance in 2021' (excluding the sections 'Secure sustainable financial performance and investor ratings' and 'Statements of the Executive Board') and the section 'About this report' in the 2021 Integrated Annual Report.

Basis for our conclusion

We have conducted our review on the Sustainability Information in accordance with Dutch law, including Dutch Standard 3810N 'Assurance-opdrachten inzake maatschappelijke verslagen' (Assurance engagements relating to sustainability reports) which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000 'Assurance Engagements other than Audits or Reviews of Historical Financial Information'. This assurance engagement is aimed at obtaining limited assurance. Our responsibilities under this standard are further described in the section 'Our responsibilities for the review of the Sustainability Information'.

We are independent of TenneT in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in The Netherlands. This includes that we do not perform any activities that could result in a conflict of interest with our independent assurance engagement. Furthermore we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Reporting criteria

The Sustainability Information needs to be read and understood together with the reporting criteria. TenneT is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The reporting criteria used for the preparation of the Sustainability Information are the Sustainability Reporting Standards of the Global Reporting Initiative ("**GRI**") and the applied supplemental reporting criteria as disclosed in the chapter 'About this report" of the 2021 IAR.

The absence of an established practice on which to draw, to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

Limitations to the scope of our review

The Sustainability Information includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherent to prospective information, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Sustainability Information.

The references to external sources or websites in the Sustainability Information are not part of the Sustainability Information as reviewed by us. We therefore do not provide assurance on this information. Our conclusion is not modified in respect to these matters.

Responsibilities of the Executive Board and the Supervisory Board for the sustainability information

The Executive Board is responsible for the preparation of reliable and adequate Sustainability Information in accordance with the reporting criteria as disclosed in the chapter 'Reporting Principles', including the identification of stakeholders and the definition of material matters. The choices made by the Executive Board regarding the scope of the Sustainability Information and the reporting policy are summarised in the chapter 'Our strategy and value creation' of the IAR.

Furthermore, the Executive Board is also responsible for such internal control as it determines is necessary to enable the preparation of the Sustainability Information that is free from material misstatement, whether due to fraud or error.

The Supervisory Board is responsible for overseeing the reporting process of TenneT.

Our responsibilities for the review of the sustainability information

Our responsibility is to plan and perform the review in a manner that allows us to obtain sufficient and appropriate evidence for our conclusion.

Procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in review is therefore substantially less than the assurance obtained in an audit.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the Sustainability Information. The materiality affects the nature, timing and extent of our review procedures and the evaluation of the effect of identified misstatements on our conclusion.

We apply the 'Nadere voorschriften kwaliteitssystemen)' (NVKS, regulations for quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements.

We have exercised professional judgement and have maintained professional skepticism throughout the review, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our review included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant social themes and issues, and the characteristics of TenneT.
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the Sustainability Information. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the Executive Board.
- Obtaining an understanding of the reporting processes for the Sustainability Information, including obtaining a general understanding of internal control relevant to our review.
- Identifying areas of the Sustainability Information with a higher risk of misleading or unbalanced information or material misstatements, whether due to fraud or error.
- Designing and performing further assurance procedures aimed at determining the plausibility of the Sustainability Information responsive to this risk analysis. These procedures consisted amongst others of:
  - interviewing management, KPI owners and/or other relevant staff at corporate and business level responsible for the sustainability strategy, policy and results;
  - determining the nature and extent of the review procedures for KPI's. For this, the nature, extent and/or risk profile of the KPI's are decisive. Based thereon we selected the KPI owners or other relevant staff whom we have interviewed. Due to the COVID-19 travel restrictions during 2021 we were not able to execute the on-site visits. Consequently, we revised our strategy in which we performed the interviews and documentation inspection virtually. For selected KPI's we performed remote documentation inspections with the KPI owners that were intended to:
    - obtain assurance information that the Sustainability Information reconciles with underlying records of TenneT;
    - review, on a limited test basis, relevant internal and external documentation; and
    - perform an analytical review of the data and trends.
- Evaluating the consistency of the Sustainability Information with the information in the IAR which is not included in the scope of our review.
- Evaluating the presentation, structure and content of the Sustainability Information.
- Considering whether the Sustainability Information as a whole, including the disclosures, reflects the purpose of the reporting criteria used.
- Assessing whether the Sustainability Information has been prepared in accordance with the Sustainability Reporting Standards Core option of the GRI.

We communicated with the Executive and Supervisory Boards regarding, among other matters, the planned scope, timing and outcome of the review and significant findings that we identified during our review.

Rotterdam, 14 March 2022

Deloitte Accountants B.V.

Signed by J.A. de Bruin

About this report

Scope of this report

The scope of this report is TenneT B.V. and the subsidiaries in which it has a controlling interest (generally speaking a voting interest of over 50%). For example, our 50% stake in BritNed and BritNed's activities are not included in our results. This integrated report covers the full year 2021, i.e. 1 January 2021 to 31 December 2021. TenneT's Integrated Annual Report 2021 was published on 16 March 2022 and is available online.

The 2020 Annual Report was published on 12 March 2021.

In 2021, there were no significant acquisitions or divestments impacting our non-financial reporting. A complete overview of all the entities consolidated in this Integrated Annual Report can be found in note 31 of the consolidated financial statements. Our reporting policy in the event of acquisitions or divestments can be found in Notes to the consolidated financial statements, 11 Business combinations. For non-financial performance we report acquisitions and divestments fromthe day of purchase or when an entity is sold respectively. We recognise that in the event of acquisitions, reporting improvements may be required which may result in data being estimated.

Reporting principles

Our non-financial qualitative and quantitative information is prepared according to the Global Reporting Initiative (GRI) Standards, following the in-accordance option: 'Core'. We also adhere to the sector guidelines for our industry (G4 sector disclosures - electric utilities). For more information, please refer to the reporting guidance document on our corporate website.

The GRI context index, as included on our corporate website, shows which GRI aspects are material to TenneT and refers to those sections in the report describing this aspect. In addition, and in accordance with the policy on state-owned companies (*Nota Deelnemingenbeleid Rijksoverheid 2013*), TenneT complies with the Dutch Corporate Governance Code, as laid down in the Corporate Governance section of this report.

We have used the Integrated Reporting (IR) framework, as defined by the International Integrating Reporting Council (IIRC) as a basis for this integrated report. This allows us to be transparent about our impact as an organisation. The financial information in this report was prepared in accordance with IFRS, as adopted by the EU, and complies with Section 9 of Book 2 of the Dutch Civil Code.

Furthermore, our Integrated Annual Report complies with the EU Directive on the disclosure of non-financial and diversity information, which was translated to Dutch legislation and has been mandatory for annual reports since 2017.

This report is also a Communication on Progress, i.e. an update on how we implement the 10 principles of the United Nations Global Compact (UNGC). We have endorsed these principles since 2015, not just to underline our own commitment, but also to drive CSR performance in the value chain. The UNGC principles are the basis of our TenneT Supplier Code of Conduct and mandatory for all suppliers. New suppliers who do not meet our standards during supplier visits, are disqualified from our tender procedures. Our Communication on Progress document can also be found on our website.

In 2015, the UN launched the Sustainable Development Goals (SDGs). These goals are accepted worldwide as driving sustainability. The section in our integrated annual report 'The Sustainable Development Goals and TenneT' describes our impact and the contribution we make to the SDGs that are most relevant to our business.

Stakeholders and materiality

In accordance with the applied reporting principles, this integrated report covers topics considered material to our organisation. TenneT uses the materiality principle to determine which subjects to include in the report and which activities and supply chain to take into account. Our corporate website (www.tennet.eu) includes additional information which was not considered material for integrated reporting purposes. How we defined the material topics and the results of this assessment can be found in the materiality section below. The fact that we report on selected topics does not mean we do not manage aspects that are not considered material to our business. Our activities and CSR policy are broader and are not limited to the outcome of the materiality analysis. For more detailed information, go to the CSR section of our website.

In 2021 we performed a new materiality analysis, which is performed biannually. The analysis is based on a questoinnaire that was distributed among our key stakeholders and in which we have asked them to provide their views on the importance of specific aspects included on the topic list. Furthermore, TenneT's economic, social and environmental impact was determined through an internal analysis. This determined whether our impact per topic is either high, medium or low. This, together with the outcome of the stakeholder questionnaire, is the basis of the materiality analysis. This resulted in four key material topics: financial health, security of supply, safety and driving the energy transition. The materiality process is thoroughly embedded in the TenneT organisation. The final step in the validation process was the approval of the Executive Board. After this validation step, the materiality analysis was completed and resulted in the following matrix.

Materiality

Economic Environmental Social

#	Subject
1	Financial health
2	Security of supply
3	TenneT's own environmental impact
4	Creating a sustainable workplace
5	Safety
6	Responsible supply chain practices
7	Stakeholder engagement
8	Customer relations
9	Strategic partnerships
10	Driving the energy transition
11	(Cyber) security
12	Compliance
13	Connectivity of our grid

In 2021, the European Commission adopted a proposal for the Corporate Sustainability Reporting Directive (CSRD). This will replace the aforementioned directive on Non-Financial Reporting (NFRD). With respect to materiality, the concept of double-materiality is mentioned in both the NFRD as well as the CSRD, meaning that companies have to report about how sustainability issues affect their business and about their own impact on people and the environment. How we as TenneT impact people and the environment is disclosed in IAR2021 in several ways. This is a part of the materiality analysis where the significance of the impact TenneT has of the environment and society (and the economy) is assessed per relevant topic. Key impacts are also disclosed quantitatively and qualitatively in the relevant chapters. From a people perspective this is disclosed for instance how we engage with our stakeholders and how we aim to create a sustainable workplace. With respect to the environment, we disclose this in our chapter 'Create value to transition to a climate-neutral economy'.

The impact of sustainability issues on our business is described for instance in the way we incorporate the TCFD (Taskforce for Climate related Financial Disclosures) recommendations in IAR2021. The impact climate change has on our business and how risks and opportunities arise from this is disclosed on page 92-93. We also disclose how societal trends, also related to our people and future employees, might impact us, as for instance changing demographics and scarcity of (technical) talent provides challenges.

Scope and boundaries

The table on the next page provides a clear overview of the material topics, their impact, our contribution and the boundaries. A detailed disclosure of our management approach on each material topic can be found in the CSR section of our website.

Material topic	Security of supply	Financial health	Safety	Drive the energy transition
Reference				
• Reference	• Deliver a high security of supply	• Secure sustainable financial performance and investor ratings	• Create a sustainable workplace	• Deliver a high security of supply, Ensure critical infrastructure for society, Create value to transition to a climate neutral economy, Solve societal challenges with stakeholders and through partnerships.
• Why material?	• Our main task is to ensure security of electricity supply to approximately 43 million people across the Netherlands and Germany.	• Securing sustainable performance and investor ratings will enable us to drive the energy transition against lower societal costs. We need to invest in onshore and offshore grid infrastructure to realise the energy transition over the next ten years, which includes additional investments in underground DC cables in Germany following the German government's decision hereon.	• Our employees are our most important and valuable asset, which is why the safety of everyone involved in our activities (employees and contractors) is a top priority.	• With our knowledge, experience and vision with respect to the future energy landscape, we believe that we can serve society by helping to drive the energy transition in an effective and efficient manner.
• What is the impact?	• Electricity is the backbone of the economy of the countries we operate in.	• It is important to carefully make the right investment decisions and to manage them properly to be sure we are doing the right things at acceptable costs.	• We need to make sure our employees can perform their work safely, as every safety incident is one too many.	• National governments in the area we serve have committed themselves to national and international climate agreements. We are an important stakeholder to help realise this.
• What is our role?	• We are responsible for maintaining a balance between supply and demand; we operate and manage the high-voltage grid.	• We are responsible for realising the investment programme and living up to our stakeholders' expectations.	• We are responsible for integrating safety into our daily pratices as a TSO.	• To connect everyone with a brighter energy future, we need to lead as a green grid operator, be a thought leader in the energy transition, develop innovative instruments to unlock flexibility and establish a pivotal role in the energy data world to facilitate innovation.
• What are the bounderies?	• We are responsible for transmission services. Production is the responsibility of producers, distribution lies with DSOs.	• We are responsible for realising our investment portfolio. The investment programme is based on the task we are given by the Dutch and German governments.	• We are responsible for making sure all our employees, both internal and external, can return safely to their homes at the end of the day. The scope of our safety reporting relates to both our own employees as safety incidents from employees working for our contractors related to our projects.	• Our boundaries related to this topic align with the scope of this report.
• Key Performance Indicators (KPIs)	• Security of supply: uptime in %	• Adjusted underlying EBIT group FFO/Net debt ROIC	• TRIR	• Amount of GW of offshore capacity realised
• Targets/ambitions	• 99.99962% grid availability onshore 95.10% grid availability offshore	• In 2021, our investment target was EUR 3.905 billion • To finance our investments, our target is to deliver EUR 6 billion in projects annually by 2025.	• 4.5 (in 2021)	• TenneT aims to realise thousands of kilometres of new high-voltage overhead lines, substations and cables and to connect nearly 30 GW of offshore wind energy by 2030.
• Unit(s) responsible within organisation	• Asset Management (AM) Large Projects departments (LPG), (LPN), (LPD), (LPO) System Operations (SO) Grid Field Operations, Maintenance & (Baseload) Projects (GFO)	• Strategic Investment Committee Supervisory Board Business Guidance Corporate (BGD)	• Safety & Security (SSC)	• Large Projects departments (LPG), (LPN), (LPD), (LPO) Digital & Process Excellence (DPE) Asset Management (AM) Grid Field Operations (GFO)

For most of our figures, our reporting focus is on our own operations, although we do take some aspects of the value chain into account in our carbon footprint and safety (TRIR). We recognise that reporting outside our gate (so-called 'value chain reporting') provides a better overview of our impact. We will strive to expand the boundaries of our reporting where possible in the next years.

EU Directive on Non-Financial and Diversity Information

Our annual report complies with the EU directive on non-financial reporting. The table below provides a clear overview of where the different aspects of this directive are reported.

	A description of the policies pursued, including due dilligence	The outcome of those policies	Principle risks in own operations and within value chain	How risks are managed	Non-financial key performance indicators
Topic					
• Relevant social and personnel matters (e.g. HR, safety etc.)	• Create a sustainable workplace • Create value to transition to a climate neutral economy • Solve societal challenges with stakeholders and through partnerships	• Create a sustainable workplace • Create value to transition to a climate neutral economy • Solve societal challenges with stakeholders and through partnerships	• Create a sustainable workplace • Create value to transition to a climate neutral economy • Solve societal challenges with stakeholders and through partnerships	• Create a sustainable workplace • Create value to transition to a climate neutral economy • Solve societal challenges with stakeholders and through partnerships	• Create a sustainable workplace • Create value to transition to a climate neutral economy • Solve societal challenges with stakeholders and through partnerships
• Relevant Environmental matters (e.g. climate-related impacts)	• Create value to transition to a climate neutral economy	• Create value to transition to a climate neutral economy	• Create value to transition to a climate neutral economy	• Create value to transition to a climate neutral economy • Climate related risks	• Create value to transition to a climate neutral economy
• Relevant matters with respect for human rights (e.g. labour protection)	• Ensure critical infrastructure for society	• Ensure critical infrastructure for society	• Ensure critical infrastructure for society • Create value to transition to a climate neutral economy	• Ensure critical infrastructure for society • Create value to transition to a climate neutral economy	• Ensure critical infrastructure for society
• Relevant matters with respect to anti-corruption and bribery	• Governance and risk management, Risk management and internal control, compliance and integrity	• Governance and risk management, Risk management and internal control, compliance and integrity	• Governance and risk management, Risk management and internal control, compliance and integrity	• Governance and risk management, Risk management and internal control, compliance and integrity	• Governance and risk management, Risk management and internal control, compliance and integrity

	A description of the policies pursued	Diversity targets	Description of how the policy is implemented	Results of the diversity policy
Topic				
• Insight into the diversity (executive board and the supervisory board)	• Create a sustainable workplace Supervisory Board report, Diversity and culture	• Create a sustainable workplace Supervisory Board report, Diversity and culture	• Create a sustainable workplace Supervisory Board report, Diversity and culture	• Create a sustainable workplace Supervisory Board report, Diversity and culture

Data collection process

The reported data is obtained from financial and non-financial data management systems in our own operations, such as IFS and SAP for financial and HR data, Mecoms for our electricity transport data, and Zenya for our incident reporting, i.e. safety data. The key non-financial qualitative and quantitative data is included in the regular planning and control cycles and reported internally at least once a quarter by the Business Guidance department which performs a check on the quality and reliability of the data. TenneT's Executive Board and senior management contribute to the context of the report and the quantitative data.

The definitions and calculations used are disclosed in the abbreviations and definitions section of this integrated report and in the CSR section of our corporate website. The definitions and calculations used were re-assessed based on such things as process improvements, further alignment within the group and the materiality analysis. As a result, certain originally reported comparative figures were re-classified to conform to the current year's presentation.

The data for this report was measured, and where no data was available, it was estimated. An example of this is the energy use at some of our smaller offices. Due to the nature and maturity level of non-financial data, we acknowledge that it is a journey to fully align this with the level of financial systems and processes. Therefore, improvements can be made over time with the aim to provide our stakeholders better and more relevant information. That is why 100% completeness and accuracy of our data cannot be guaranteed as processes may be subject to a higher degree of manual data collection.

External assurance

The financial statements included in this report are subject to an independent external audit and TenneT's non-financial reporting is subject to a limited assurance review. These were both conducted by our external auditor, Deloitte Accountants B.V.. Reliable data is essential in our dialogue with stakeholders, so we decided to have our non-financial data reviewed by an externalassurance provider. We have requested Deloitte to reviewthe Integrated Annual Report sections 'At a Glance', 'Letter from the Board', 'About TenneT' and 'Our Performance in2021' (excluding 'Secure sustainable financial performance and investor ratings' and 'Statements of the Executive Board') in accordance with the GRI Standards and audit the financial statements in accordance with IFRS as adopted by the EU and Part 9 of Book 2 of the Dutch Civil Code.

Governance of CSR

For TenneT, CSR covers a broad range of subjects, all aimed at creating a sustainable future for our internal and external stakeholders. CSR is embedded in our current strategy. We have set clear priorities, targets and key performance indicators in this. For some areas we are currently developing new or updating key performance indicators. On an overall level, our Executive Board is responsible for our strategy and company target setting, which includes the areas with respect to CSR. Our Strategy and Partnerships department, is mandated by the Executive Board to make decisions based on the CSR areas in our overall strategy and to execute studies for future ambitions with respect to CSR. In case new decisions and directions, this will be approved by the relevant decision committee within our organisation depending on the topic (Future Design, Asset, Integrated Work Planning or Systems & Market committee).

Progress with respect to our CSR policy and actions is reported and reviewed by our Executive Board and Supervisory Board on a quarterly basis.

SWOT Analysis

In the section 'Our performance in 2021' of our report, we elaborated on TenneT's performance, strategic risks and the outlook for 2022. Our SWOT provides an insight into our company's opportunities and strengths, as well as threats and weaknesses, providing context to our stakeholders.

SWOT Analysis

Strengths

- High level of security of supply
- Attractive employer with competent, well educated and experienced employees with high degree of engagement
- Broad experience as a leading (North Sea) offshore grid operator
- First cross-border TSO in Europe and a favorable corporate reputation amongst stakeholders
- Proven track record in leading European market integration in North West Europe
- Strong financial health with strong credit ratings

Weaknesses

- Suboptimal performance culture (bureaucratic internal processes and decision making procedures)
- Aging assets
- Scarcity in availability of technical staff
- Big data capabilities
- Operating a more volatile grid

S W O T

Opportunities

- Growing ambitions of the governments in the areas we serve regarding decarbonisation targets
- New technologies for smarter and more sustainable project execution, operation and maintenance of our grid (e.g. horizontal drilling, 525 kV connections)
- Strong growth in electrification of society
- System integration / sector coupling (a.o. hydrogen)
- Ability to attract employees as a key player in the energy transition

Threats

- Development in electricity mix causes a more volatile environment to operate in
- Growing and evolving cyber security threat landscape
- Insufficient public acceptance of new infrastructure / rising cost of the energy transition
- Supplier shortages and lack of technical staff possibly leading tot project delays
- Negative developments in the regulatory framework, growing regulatory interventions
- Due to high infeed of renewable energy the transport capacity reaching its limits in certain areas in NL
- Permitting time for projects to support the energy transition is too long. This leads to a too long lead time to realise projects

Company addresses

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TenneT Holding B.V.
European Office
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1000 Brussels
Belgium

Key figures: five-year summary

(based on underlying figures)

	2021	2020	2019	2018	2017
Net debt	15,584	14,004	10,815	8,712	7,687
Underlying EBIT group	834	910	768	853	897
Underlying profit for the year	493	516	401	450	531
Investments in tangible fixed assets	3,969	3,412	3,012	2,212	1,763
Grid availability	99.99999%	99.99995%	99.99982%	99.99884%	99.99895%
Interruptions	3	4	14	17	11
Interconnectors	16	15	15	14	13
Internal headcount	5,168	4,321	3,768	3,409	3,187

Glossary

2 GW project
To realise such an innovative direct current system, TenneT launched the design phase with five HVDC suppliers on the basis of an innovation partnership: ABB Power Grids, GE Renewable Energy's Grid Solutions (Netherlands), Consortium Global Energy Interconnection Research Institute Co. Ltd. (GEIRI) & C-EPRI Electric Power Engineering Co. Ltd. (C-EPRI) (China), Siemens (Germany), and Xian Electric Engineering Co., Ltd (China). These suppliers will develop this innovative 2 GW 525 kV HVDC solution based on criteria set by TenneT. They will provide specific information on this to Iv-Offshore&Energy b.v., which is carrying out the Front-End Engineering Design (FEED) study on behalf of TenneT. On this basis, a standardised platform design will be developed for all HVDC solutions.

ABP – Algemeen Burgerlijk Pensioenfonds
ABP is the civil service pension fund for government, education and energy employees in the Netherlands.

AC – Alternating current
In alternating current (AC), the flow of electricity periodically reverses direction. By contrast direct current (DC), electricity only flows in one direction. AC is used to transport electricity over relatively shorter distances and DC longer ones.

ACER – Agency for the Cooperation of Energy Regulators
The European network organisation for energy regulators. It has a key role in the integration of European electricity and gas markets, providing a framework for cooperation at EU level and regulatory certainty.

ACM – Autoriteit Consument & Markt
Dutch national regulatory authority.

Adjusted FFO – Adjusted funds from operations
Profit for the year plus depreciation, amortisation and impairments minus gain/loss on the disposal of assets minus capitalised interest on assets under construction, plus interest on provisions, minus 50% of Hybrid interest.

Adjusted FFO/net debt
Adjusted funds from operations divided by net debt.

Balance Responsible Parties
A market party that is recognised as, and is permitted to exercise, Programme Responsibility by TenneT.

Blockchain
The digital process of verifying and documenting the performance of distributed flexible devices. Blockchain is suited to connecting multiple parties and large numbers of distributed computed nodes and enabling them to undertake joint action in a scalable, transparent and trusted network.

BNetzA – Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen
German national regulatory authority.

BritNed
The 260 km-long high-voltage direct current BritNed cable has a capacity of 1,000 MW and connects the Dutch and British electricity grids.

Capex – Capital expenditure
Capital expenditure (capex) is the amount spent on acquiring or improving long-term assets. Its benefits are enjoyed over a long period time, not only in the current year. Capex is of a non-recurring nature and results in the acquisition of permanent assets.

Carbon footprint
The total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide (CO_2).

CEP – Clean Energy Package
On 30 November 2016, the European Commission published its long-anticipated 'Clean Energy for All Europeans' package, more commonly referred to as the 'Winter Package', consisting of numerous legislative proposals together with accompanying documents, aimed at further completing the internal market for electricity and implementing the Energy Union.

CGU – Cash-generating unit
A cash-generating unit is the smallest group of assets that independently generates cash flow and whose cash flow is largely independent of the cash flows generated by other assets.

CIP – Copenhagen Infrastructure Partners
Copenhagen Infrastructure Partners is a fund management company that is joined between four senior partners and PensionDenmark.

CO_2 – Carbon dioxide
Carbon dioxide is a greenhouse gas formed by the burning of carbon-based fuels. Its concentration in the atmosphere is rapidly increasing, leading to global warming.

COBRAcable
A 275 km-long high-voltage direct current cable that is under construction to connect the Dutch and Danish electricity grids. It will have a capacity of 700 MW.

COSO – Committee of Sponsoring Organisations of the Treadway Commission
COSO has established the common internal control model against which companies and organisations assess their control systems.

CP programme – Commercial paper programme
A commercial paper is a flexible short-term debt instrument that is issued directly to the market with different maturities and is offered continuously.

CPI index
A consumer price index measures changes in the price level of a weighted average market basket of consumer goods and services purchased by households.

CSR – Corporate social responsibility
Corporate social responsibility relates to the socially responsible business practices of a company, balancing people, planet and profit.

CSRD – Corporate Sustainability Reporting Directive
The objective of the proposed CSRD is to improve sustainability reporting and ensure it is brought into a company's management report to better leverage the potential of the European single market and to contribute to the transition to a fully sustainable and inclusive economic and financial system in line with the European Green Deal and the UN Sustainable Development Goals (SDGs).

Cross-border TSO
A cross-border TSO is a TSO that operates in more than one country.

CTA - Contractual Trust Arrangements
A contractual trust arrangement is essentially a form of company pension fund where the fund's assets have been transferred to a legal entity separate from the company.

DBO - Defined Benefit Obligation
A defined benefit obligation pension plan is a type of pension plan in which an employer/sponsor promises a specified pension payment, lump-sum or combination thereof on retirement that is predetermined by a formula based on the employee's earnings history, tenure of service and age, rather than depending directly on individual investment returns.

DC – Direct current
In direct current (DC), the flow of electricity is only in one direction. In alternating current (AC), the electricity flows periodically reverses direction. DC is used to transport electricity over relatively longer distances and AC over shorter ones.

DSO – Distribution system operator
A regional electricity distribution company, that is connected with end users and is responsible for providing (1) power distribution services, by constructing and maintaining a robust high-voltage grid, and (2) facilitating a smooth functioning, liquid and stable electricity market.

E-wet – Elektriciteitswet 1998
The Dutch electricity law.

EAS – European Awareness System
The EAS is the technology platform which allows transmission system operators to exchange information in real-time. All operators input a number of measurements including frequency and cross border exchange. These measurements are then merged to provide an overall European view of each TSO on the platform.

EBIT – Earnings before interest and tax
Earnings for the period before income tax expense and interest payments are deducted.

EBITDA – Earnings before interest, tax, depreciation and amortisation
Earnings for the period before income tax expense, interest payments depreciation and amortisation are deducted.

EC – European Commission
The European Commission is the executive of the European Union and promotes its general interest.

ECL - Expected Credit Loss
Expected Credit Loss is the probability-weighted estimate of credit losses (i.e., the present value of all cash shortfalls) over the expected life of a Financial Instrument.

EEG – Erneuerbare-Energien-Gesetz
German Renewable Energy Act, designed to govern the preferred supply of electricity from renewable sources into the grid with guaranteed, fixed minimum producer prices. It is intended to serve and protect the climate and is one of several statutory provisions aimed at reducing Germany's dependence on fossil fuels such as oil, natural gas or coal, and nuclear power.

EIB – European Investment Bank
The European Investment Bank is one of the key financial institutions of the EU. It is the only bank owned by and representing the interests of the EU member states, providing financing for sustainable investment projects that contribute to furthering EU policy objectives.

EIR - Effective Interest Rate
The effective interest rate is the interest rate on a loan or financial product restated from the nominal interest rate and expressed as the equivalent interest rate if compound interest was payable annually in arrears.

EMTN – Euro medium-term note
A flexible medium-term debt instrument that is issued directly to the market with different maturities and is offered continuously rather than all at once like a bond issue.

Energinet
Energinet is the Danish TSO that TenneT is partnering with to build the COBRAcable between the Netherlands and Denmark. Energinet.dk is also participating in the development of the North Sea Wind Power Hub.

EnWG – Energiewirtschaftsgesetz
The German electricity law.

ENTSO-E – European Network of Transmission System Operators for Electricity
ENTSO-E is the organisation of transmission system operators at a European level, representing 41 TSOs from 34 countries. Its mission is to promote important aspects of energy policy, especially integrating renewable energy and the completion of an internal energy market.

Equigy B.V.
Together with TenneT (Germany and the Netherlands), Transpower (Germany), Swissgrid (Switzerland) and Terna (Italy), four of the largest European transmission system operators are now jointly developing a cross-border blockchain platform - Equigy. This will enable millions of European households and owners of e.g. electric vehicles to actively offer the flexible capacity of their cars and house batteries on the energy markets to stabilise the electricity system and thus earn money from the energy transition.

ESG ratings
ESG ratings asses environmental, social and governance information of TenneT.

EU – European Union
The European Union (EU) is a political-economic union of 28 member states located in Europe.

Flexumers
Energy consumers simultaneously acting as producers

FTE – Full-time equivalent
Full-time equivalent is a unit that measures work by converting workload hours into the number of people required to complete that task.

Gasunie – N.V. Nederlandse Gasunie
Gasunie is a European gas infrastructure company that transports natural gas and green gas in the Netherlands and the northern part of Germany. Gasunie is participating in the development of the North Sea Wind Power Hub.

GIS – Gas insulated switchgear
A switchgear insulated via SF_6 gas or other gasses.

Green (hybrid) bonds
The proceeds of the green bonds are used to finance, refinance and/or invest in projects relating to the transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology.

Green hybrid bonds are perpetual bonds without an end-date.

GRI – Global Reporting Initiative
The Global Reporting Initiative is a non-profit organisation that promotes sustainability and produces global standards for sustainability reporting.

GW – Gigawatt
A unit of power equal to one billion watts.

GWh – Gigawatt hour
A unit of energy equivalent to delivering one billion watts of power for a period of one hour.

Helaba – Helaba Pension Trust e.V.
Helaba Pension Trust e.V. is a subsidiary of German bank Landesbank Hessen-Thüringen and holds a part of the assets of the German pension plan.

HGRT – Holding des Gestionnaires de Réseaux de Transport d'Électricité S.A.S.
Holding des Gestionnaires de Réseaux de Transport d'Électricité S.A.S. is a holding company of EPEX SPOT power exchange.

HR – Human resources
Our HR department aims to make a distinctive contribution to TenneT's position as a leading TSO by attracting, recruiting and retaining qualified staff, as well as by creating a healthy and stimulating working environment.

HVDC – High-voltage direct current
A high-voltage, direct current system can transmit bulk electricity over longer distances than an alternating current system and with lower grid losses. As such, HVDC is used for linking offshore wind farms to the onshore grid and for our Interconnectors NorNed to Norway, BritNed to the UK and COBRAcable to Denmark and NordLink to Norway.

IAS - International Accounting Standards
International Accounting Standards (IAS) are older accounting standards issued by the International Accounting Standards Board (IASB), an independent international standard-setting body based in London. The IAS were replaced in 2001 by International Financial Reporting Standards (IFRS).

ICF – Internal control framework
Framework for the set of internal controls, to provide reasonable assurance on the reliability of our internal and external reporting.

IFRIC - International Financial Reporting Interpretations Committee
IFRIC Interpretations are developed by the IFRS Interpretations Committee (previously the International Financial Reporting Interpretations Committee, IFRIC) and are issued after approval by the International Accounting Standards Board (IASB).

IFRS – International Financial Reporting Standards
The internationally prescribed and recognised reporting guidelines.

IIRC – International Integrated Reporting Council
The International Integrated Reporting Council (IIRC) is a global coalition of regulators, investors, companies, standard setters, the accounting profession, academia and NGOs. The coalition promotes communication about value creation as the next step in the evolution of corporate reporting. Together with the Sustainability Accounting Standards Board (SASB) the IIRC formed the Value Reporting Foundation.

KfW – Kreditanstalt für Wiederaufbau
KfW is the Reconstruction Credit Institute development bank owned by the German government.

kV – kilovolt
A unit of electric voltage equal to 1,000 volts.

KWK-G – Kraft-Wärme-Kopplungs-Gesetz
The German Combined Heat and Power Act.

LEAN
The core idea of LEAN is to maximise customer value while minimising waste. Simply, LEAN means creating more value for customers with fewer resources. The principles of LEAN were developed by the Japanese car manufactory Toyota.

LoR – Letter of Representation
A Letter of Representation is signed by the management of the Group and/or performance unit to attest to the accuracy of the financial statements.

Moody's
Moody's Investors Service provides credit ratings, research, and risk analysis.

MW – Megawatt
A unit of power equal to one million watts.

MWh – Megawatt hour
A unit of energy equivalent to delivering one million watts of power for a period of one hour.

Net debt
Gross debt minus cash and cash equivalents at free disposal plus lease liabilities plus net employee defined benefit obligation plus 50% of hybrid securities.

Netbeheer Nederland
Netbeheer Nederland is the association in the energy sector representing the interests of national and regional electricity and gas network operators in the Netherlands.

NEN
NEN is a Dutch non-profit organisation that supports the standardisation process in the Netherlands.

NGO – Non-governmental organisation
A non-governmental organisation is a voluntary citizens' group that is neither a government initiative nor a conventional for-profit business.

NOKA – DC Nordseekabel GmbH & Co. KG
NOKA is jointly owned by TenneT and German development bank KfW. It is responsible for financing and building the German part of the NordLink cable.

NorNed
NorNed is a 580-kilometre long high-voltage direct current submarine power cable between Feda in Norway and the seaport of Eemshaven in the Netherlands, which interconnects both countries' electrical grids.

NordLink
TenneT is jointly developing the NordLink interconnector with its project partners, the Norwegian TSO Statnett and German development bank KfW. With an overall transmission capacity of 1,400 MW, the subsea cable will run between Tonstad in the South of Norway and Wilster in Northern German.

NOVI – Nationale Omgevingsvisie
The Netherlands' new Environment and Planning Act comes into effect in 2021, part of which is a single national roadmap for the living environment called the 'National Omgevingsvisie'.

NWb – WENB Sector Energie NWb
NWb is a Dutch NGO for employers in the energy sector.

NSWPH – North Sea Wind Power Hub
The consortium of the North Sea Wind Power Hub programme has joined forces to realise climate goals. The consortiums work is based on research, stakeholder interaction and experience from earlier projects. Partners in the consortium are Energinet, Gasunie and TenneT.

OCI - Other comprehensive Income
Other comprehensive income comprises items of income and expense (including reclassification adjustments) that are not recognised in profit or loss as required or permitted by other IFRSs.

OECD – Organisation for Economic Co-operation and Development
The Organisation for Economic Co-operation and Development is an intergovernmental economic organisation with 36 member countries, founded in 1961 to stimulate economic progress and world trade.

Oekom
Oekom research AG is a sustainability rating agency and external assessor for benchmarking CSR reports.

Opex – Operational expenditure
Operating expenditure (opex) is the expense that a company incurs as a result of its normal business operations.

OWF – Offshore wind farm operators
Offshore wind farms are constructed in bodies of water to generate electricity from wind.

PBA - Project Budget Approval
The process of formally identifying and approving the project budget, prior to the start of the project.

RCF – Revolving credit facility
A line of credit where TenneT pays a commitment fee and can then use the funds as and when needed.

RES – Renewable Energy Sources
All sources of renewable energy including sunlight, wind, tides, waves, biomass and geothermal heat.

ROIC – Return on invested capital
Underlying EBIT Group expressed as a percentage of the average underlying invested equity plus loans and bank overdrafts minus cash at free disposal during the year.

S&P – Standard & Poors
Standard & Poors provides credit ratings, research, and risk analysis.

SASB – Sustainability Accounting StandardsBoard
The Sustainability Accounting Standards Board is a non-profit organisation that sets financial reporting standards. SASB was founded in 2011 to develop and disseminate sustainability accounting standards. Together with the IIRC, the SASB formed the Value Reporting Foundation.

SBTi – The Science Based Targets initiative
The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The SBTi call to action is one of the We Mean Business Coalition commitments.

SCL – Safety Culture Ladder
TenneT uses the Safety Culture Ladder (SCL) as a tool to increase safety awareness and enhance safety culture, not only within our own organisation but also for our contractors. The Safety Culture Ladder is a requirement in the selection phase of a tender as described in the 'Safety by Contractor Management' programme.

SDG – United Nations Sustainable Development Goals
The Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere. The 17 aspirational 'global goals' with 169 targets between them were adopted by all UN Member States in 2015, as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals.

SF_6 – Sulphur hexafluoride
An inorganic, colourless, odourless and non-flammable greenhouse gas that is used in the electricity industry to insulate high-voltage circuit breakers, switchgear and other electrical equipment.

SHE – Safety, Health & Environment
SHE is the set of activities relating to safety, health & environment.

SIC - Standard Interpretation Committee
SIC Interpretations were previously issued by the Standard Interpretations Committee (SIC), and were subsequently endorsed by the International Accounting Standards Board (IASB). The IFRS Interpretations Committee has reissued Interpretations in this series if it considers it necessary.

SLA – Service level agreement
A service-level agreement is an agreement between two or more parties, where one is the customer and the others are service providers.

SuedLink
A DC connection to transport electricity generated in the north of Germany to the South.

SuedOstLink
A DC connection to transport electricity generated in north of Germany to the South-East.

Sustainalytics
Sustainalytics is a sustainability ratings agency and external assessor for benchmarking CSR reports.

TransnetBW
One of the four German TSOs.

TRIR – Total recordable incident rate
The total recordable incident rate is the number of total recordable incidents per million hours worked. Recordable incidents are fatalities, lost work day cases, restricted work day cases and medical treatment cases.

TSCNET
TSCNET Services is one of Europe's Regional Security Coordinators (RSCs). The company based in Munich, renders integrated services for power transmission system operators (TSOs) and their control centres to maintain the operational security of our electricity system – 24 hours a day, seven days a week.

TSO – Transmission system operator
A transmission system operator transports electricity at national or regional level from producers to distributers. A TSO is responsible for providing (1) power transmission services, by constructing and maintaining a robust high-voltage grid, (2) system services, by maintaining the balance between supply and demand of electricity 24/7 and (3) facilitating a smooth functioning, liquid and stable electricity market.

UN – United Nations
An international organisation formed to promote international peace, security, and cooperation under the terms of the charter signed by 51 founding countries in San Francisco in 1945.

UNGC – United Nations Global Compact
A call from the UN to companies to align strategies and operations with universal principles on human rights, labour, environment and anti-corruption, and take actions that advance societal goals.

VKE – Versorgungskasse Energie VVaG
Versorgugnskasse Energie VVaG is pension fund for energy mutuals and a subsidiary of E.ON SE. It holds a part of the assets of the German pension plan.

WACC – Weighted average cost of capital
The WACC is the rate that a company is expected to pay on average to all its capital providers to finance its assets.

Colophon

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We look forward to receiving your feedback on this report.
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Disclaimer

`We´, `TenneT´, `TenneT Holding´, `the Group´, `the company´ or similar expressions are used in this report as a synonym for TenneT Holding B.V. and its subsidiaries.

Parts of this report contain forward-looking information. These parts may include unqualified statements on future operating results, government measures, the impact of other regulatory measures on the activities of TenneT as a whole, TenneT´s shares and those of its subsidiaries and joint-ventures in existing and new markets, industrial and macro-economic trends and TenneT´s performance in these. Such statements are preceded or followed by or contain words such as `believes´, `expects´, `anticipates´ or similar expressions. These forward-looking statements are based on current assumptions concerning future activities and are subject to known and unknown factors, and other uncertainties, many of which are beyond TenneT´s control, so that future actual results may differ significantly from these statements.

All financial information in this integrated annual report is reported in millions of euro, unless stated otherwise.
As a result, small rounding differences may occur.

TenneT is a leading European grid operator. We are committed to providing a secure and reliable supply of electricity 24 hours a day, 365 days a year, while helping to drive the energy transition in our pursuit of a brighter energy future – more sustainable, reliable and affordable than ever before. In our role as the first cross-border Transmission System Operator (TSO) we design, build, maintain and operate 24,500 km of high-voltage electricity grid in the Netherlands and large parts of Germany, and facilitate the European energy market through our 16 interconnectors to neighbouring countries. We are one of the largest investors in national and international onshore and offshore electricity grids, with a turnover of EUR 6.4 billion and a total asset value of EUR 32 billion. Every day our 6,620 employees take ownership, show courage and make and maintain connections to ensure that the supply and demand of electricity is balanced for almost 43 million people.

Together, we are lighting the way ahead

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