

# Letter from the Board

## Towards a new balance

We look back to an extraordinary year 2020 with important lessons for business and wider society. For TenneT, 2020 highlighted once again that our employees are our most important asset: amid unprecedented uncertainty caused by the COVID-19 pandemic they have proved to keep the balance between delivering security of supply and meeting the demands of the energy transition.

We are proud to have delivered on our mission to provide a robust security of supply performance of 99.9999% onshore grid availability and record investments of EUR 3.4 billion to expand and maintain our critical infrastructure. But we cannot rest and must work towards a new balance of meeting the climate targets of 2050 while addressing the challenges of making the energy system future-proof. With the European Green Deal giving a boost to the integration of large volumes of renewable energies into the electricity system, TenneT will continue contributing to a cleaner energy future. We are in international cooperation and industry partnerships to tap the energy potentials of the North Sea and develop new solutions to provide green electricity at socially acceptable costs. In doing so, we are playing our part to help Northwest Europe become one of the most sustainable and competitive regions in the world.

Europe has recently decided to step up its climate ambition and reduce its carbon footprint by 55% by 2030 compared to 1990. Further ahead, Europe aims to be climate-neutral by 2050. To reach these goals, the electricity infrastructure which sits at the heart of the transition to a net-zero carbon world is undergoing a fundamental redesign. With more fluctuating electricity generation and increasingly difficult planning & licensing procedures as well as deteriorating regulatory conditions, TenneT will need to work towards a new balance between growth and stability, between individual and societal needs and between investment incentives and the cost of the energy transition.

To successfully meet the future challenges, in 2020 TenneT started a transformation with a new organisational structure and a sharpened strategy based on four pillars. Pursuing our new purpose 'to connect everyone with a brighter energy future', we are helping build the sustainable, affordable and reliable energy system of tomorrow.



## Energise our people and organisation

TenneT's 5,722 dedicated employees are our most important and valuable asset. Due to the COVID-19 pandemic, 2020 was a balancing act for everyone in our organisation, as we combined an extraordinary level of activity and company growth with efforts to keep our workforce safe, engaged and connected. More than 800 new colleagues were hired to contribute to the energy transition. Over 30% of these are female, also in the senior leadership team. A new organisational structure was introduced and TenneT was once again certified as a Top Employer. In an extraordinary year when normal working became a real challenge, we are proud that employees are highly engaged (82% positive) with their role at TenneT.

As safety is at the core of everything we do, we are keenly aware of the risks associated with our activities and believe that every safety incident is one too many. We deeply regret two fatal accidents that occurred in 2020 with our subcontractors. We are deeply saddened by these incidents, and our thoughts go out to the families and friends of these two workers. Early 2021, TenneT intensified the training programme in collaboration with all partners to continuously raise awareness and strive for improved safety leadership on the road towards zero harm.

TenneT's role in the future of society also brings new tasks for our employees. We are growing fast and will focus on speeding up our work in the coming years by further improving operational excellence. Employees are encouraged to contribute by developing new solutions and work on more efficient processes enabling them to provide an excellent service. Our restated company values of 'courage, ownership and connection' are the guiding principles for this exciting journey.

Sourcing the talent we need to grow is an ongoing endeavour in our organisation. For 2021 we plan to hire over 600 additional employees. We are actively recruiting on a highly competitive European market to attract dedicated people and also work closely with sectoral and regional educational institutions to train young professionals for technical jobs.



## Secure supply today and tomorrow

Security of supply is of critical importance for all 42 million end-users in our service area and the core mission of TenneT. To keep our grid in balance is a growing challenge for system operators such as TenneT with a growing share and volatile nature of renewable energy. TenneT is proud to have achieved an onshore grid availability of 99.9999% in 2020.

Providing security of supply with increasing volumes of renewable energies also requires substantial infrastructure expansion. In 2020, TenneT made record investments in grid construction, despite the challenges of COVID-19. Our portfolio is on track and with EUR 3.4 billion invested in our network during the year, TenneT is one of the largest investors in Europe driving the energy transition. However, the magnitude and fast pace of grid construction, combined with the growing infeed of renewables, has also put our operational implementation under increasing pressure. Grid expansion and maintenance is a highly challenging work: not only does it demand a great deal of resources, but technical expertise is scarce and spatial procedures are more complex. It requires new forms of cooperation with suppliers, intensive local community management, long-term planning and continuous innovation.

On the road to the future, unlocking flexibility and system integration will be essential to enhance the efficiency of the energy system, reduce the need for grid expansion and to keep the grid balanced. As a response, and together with other leading European TSOs, we set up the crowd balancing platform Equigy in 2020. By using blockchain technology, the platform gives system operators access to the flexible electricity available in consumer-owned devices, such as electric vehicles or heat pumps.



## Drive the energy transition

The North Sea, with its offshore wind potential, will undoubtedly become the new powerhouse of Northwest Europe. With Europe aiming to achieve 300 GW offshore wind by 2050, a further rapid and internationally coordinated expansion of the North Sea grid is needed, demanding new concepts and partnerships. TenneT is contributing to develop this region which requires a balance to reconcile regional, national and cross-border interests to forge new alliances between neighbouring countries and stakeholders.

In 2020, we carried out a record number of offshore activities and our windfarm connections continued to grow with the completion of the 12<sup>th</sup> offshore grid connection in Germany, BorWin3. Towards 2030, TenneT has committed to build at least fifteen new grid connection systems, of which five additional grid connections of 2 GW each in the North Sea. This will lead in total to an additional 18 GW generation capacity.

The future will see the coupling of energy markets through interconnection and smart integration into onshore grids. Driving this progress, TenneT announced a cooperation agreement to explore the feasibility of connecting Dutch and British wind farms to the energy systems of both countries. We are also investigating joint energy hubs in the North Sea with Denmark, in close cooperation with the German, Dutch and Danish governments.



### Safeguard our financial health

TenneT's financial results in 2020 were solid and proved that we can keep a balance of strong and stable credit ratings while embarking on record financing. In 2020 underlying revenue of EUR 4.45 billion increased by 9% compared to 2019. Adjusted underlying EBIT group increased from EUR 753 million in 2019 to EUR 796 million in 2020. TenneT cherishes its position as a leader in sustainable finance. With more than EUR 10 billion of green debt and sustainable funding available, TenneT is the largest corporate issuer of green debt instruments in the Netherlands. In 2020, we successfully issued a green hybrid bond of EUR 1 billion and EUR 1.35 billion of green senior bonds. Furthermore, we are proud to have won the prestigious FD Henri Sijthoff award for outstanding financial reporting with our Integrated Annual Report 2019.

Looking forward, TenneT is determined to maintain a solid financial position as we prepare to facilitate an annual investment portfolio growing to EUR 5 to 6 billion within the next 5 years to drive the energy transition. In 2020, exclusive talks were held about a possible participation in TenneT by the German state, to secure future long term capital requirements. Also alternative options to attract additional capital will be further explored in 2021 with our shareholder and other stakeholders.

In addition to our capital requirements, we also call for a review of the regulatory frameworks in both, the Netherlands and Germany to make it future-proof and better suited to drive the energy transition. With a growth-driven business, TenneT is determined to continue investing responsibly and to generate an adequate return in a low-interest environment.

### Towards a new balance

The energy transition is an enormous and compelling challenge, demanding players like TenneT to master complexity and agility. The time to shape the European transition is now and it can only be solved with a strong commitment of the EU and its member states to engage in a new balance of collaboration among governments, market players, industries, regulators and transmission system operators.

Over the past decade, TenneT has achieved substantial socio-economic benefits with its cross-border approach: markets have been integrated and contributed to the competitiveness of the Northwest European markets. For the future, TenneT will embark on a new balance of providing an unwavering high level of security of supply while undergoing a structural system change. It will endeavour to deliver grid expansion at an affordable cost for society. With investments reaching new records, financial stability remains crucial for TenneT.

TenneT is ready to play its part for the next phase of the transition, with the public interest always as guiding principle. We want to thank all our partners, stakeholders and employees for their contribution in 2020. In particular, we wish to thank our Supervisory Board members Pieter Verboom and Rien Zwitterloot and our colleague in the Executive Board, COO Ben Voorhorst, as they said farewell to TenneT in 2020 after a long record of service and tremendous contribution.

# About TenneT



## Profile

Climate change is a threat to the world. In Paris, in 2015, global commitments were made to limit global warming. In Europe, commitments have been made to combat climate change, too. By 2050, Europe wants to be the first climate-neutral continent. To this end, the European Commission has drawn up the European Green Deal, a programme covering all sectors of the economy and involving major changes and investments.

The energy transition is a crucial part of these commitments. As the first cross-border TSO, TenneT wants to play a pioneering role in this transition to a clean, circular economy. We have been showing successful examples of making an active contribution to the transition to a sustainable, reliable and affordable European energy supply for years. With approximately 24,000 kilometres of high-voltage connections, we ensure a secure supply of electricity to more than 42 million end-users. TenneT is also one of Europe's largest investors in national and cross-border transport capacity on land and at sea, bringing together the Northwest European energy markets and driving the energy transition in Europe.

In both Germany and the Netherlands, we see the climate ambitions reflected in our investment agenda. We are at the beginning of our next growth phase with new and major challenges. Integrating large amounts of renewable energy into a newly designed energy system at a socially acceptable cost is an important task. An energy system 'built' on renewable energy sources – wind and solar – is much more dynamic and complex. This leads to high demands on the design of the grid and requires ambitious investments and digital innovations. We are working with partners in the energy market to apply new, smart technologies and implement system integration in the future.

In order to be prepared, we started the transformation of TenneT in 2019. In addition to a new organisational structure, we have sharpened our strategy, which provides direction as a compass for making effective decision making choices. We have also developed an inspiring goal, a promise and clear starting points to guide us on our growth path.

**Our purpose**  
To connect everyone with a brighter energy future

**Our promise**  
Lighting the way ahead together

### Our principles



Connection



Ownership



Courage

## Our strategy and value creation

### Our strategy

Our strategy helps us drive the changes we believe are needed for the energy system today and tomorrow. TenneT's strategy consists of four 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.

#### Secure supply today and tomorrow



By maintaining the grid to meet reliability targets and operating it to its maximum capability. We will design solutions for balancing the grid in the future, while meeting societal objectives and realising our grid projects as promised.

#### Drive the energy transition



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

#### Safeguard our financial health



By implementing 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.

### Our key activities

Securing the supply of electricity is our core task and main responsibility. We aim to ensure a safe, reliable and secure supply to more than 42 million end-users, 24 hours a day, 365 days a year. We are committed to this core objective today and in the future. Therefore we work together with our stakeholders and through partnerships to shape the future energy landscape. We believe that this requires a multidisciplinary decision-making process in which we do not only consider security of supply, but also how our decisions affect sustainability and affordability. We face a constant balancing act between these three dimensions, prompting us to make decisions that optimise trade-offs between them. Sometimes these dimensions can directly conflict with each other, which makes it difficult to find the right solution.

Our core tasks are to:

- Ensure a secure and continuous supply of electricity as the key objective of our operations.
- Provide transmission services by transporting electricity along the high-voltage grid from where it is produced to where it is consumed.
- Provide system services to balance supply and demand of electricity in the Netherlands and in a large part of Germany.
- Facilitate a smoothly-running, liquid and stable electricity market and support the large-scale, energy system transition to renewable energy sources.



## 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. It requires us to do things differently and to learn from each other because we know that we do not have all the answers ourselves. As part of the transformation, we also sharpened our principles. These principles guide how we work together, also with all our stakeholders.

### Connection

We are involved and work actively with other parties, with respect for opinions and differences. In the changing world, close collaboration with other transmission system operator (TSOs), distribution system operator (DSOs), customers, governments and regulators is becoming more and more important. This is not only on a national scale, but also on European level, for example in the offshore development and future sector coupling.

### Ownership

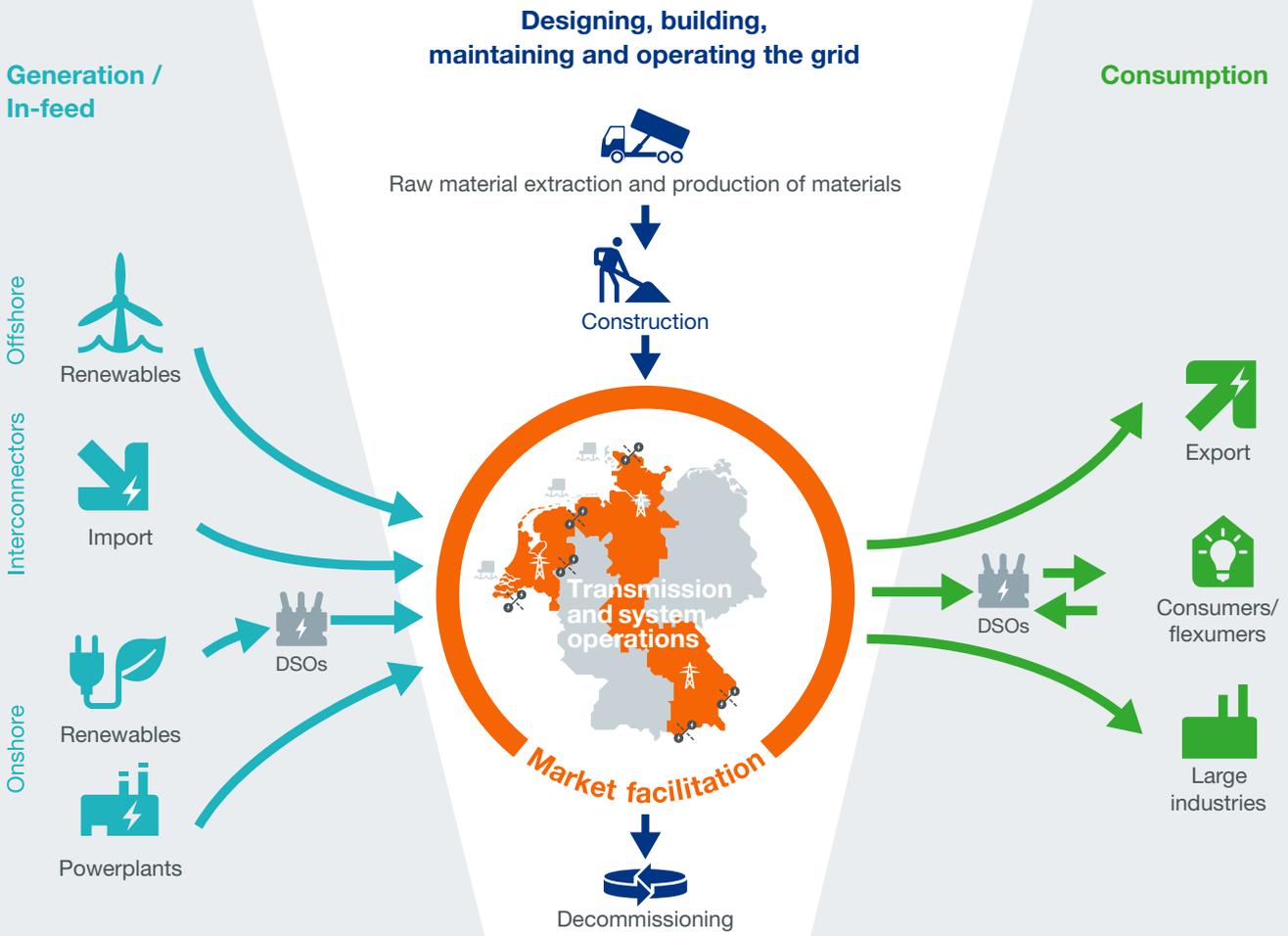
We are accountable for our words, actions and decisions. Our offshore portfolio is an example of how to bring sustainable energy into the European system. We plan annual investments growing to EUR 5-6 billion within the next 5 years in contributing towards a sustainable Europe in 2050.

### Courage

We are honest, open and clear about what we think. We dare to make decisions, take initiatives and are willing to learn from our mistakes. We embrace the European Green Deal and challenge the implementation where needed.

We take action in joint EU projects such as the North Sea Wind Power Hub and system studies together with Gasunie to identify what is needed for a future reliable energy system. In full-filling our tasks, bringing more renewable

## TenneT in the supply chain



energy sources to the grid we need to make decisions. Our focus is on the difficult and delicate balancing act of: sustainability, security of supply and affordability.

Our supply chain can be viewed from different perspectives. Horizontally, on the left, the sources of electricity generation are presented. In the middle we show how we design, build, maintain and operate the electricity grid in the Netherlands and the in a large part of Germany and facilitate the European energy market, through our interconnectors with our neighbouring countries over land and sea. On the right, we show the transport electricity to large industrial customers and to DSOs who distribute it to end-customers. On the vertical axis we illustrate the 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.

We want to be a green and responsible grid operator, taking steps to reduce our negative impacts and even creating positive impacts, wherever possible. We also strive to create a safe working environment while building and maintaining our grid. The energy transition is one of the most impactful challenges facing society. In the past decades, TenneT has become a key player in the energy market. In 2020, we implemented an internal transformation programme to help us fulfil this pivotal role and prepare for our next phase of growth.

As an independent European grid operator, TenneT harnesses the expertise of its people and partners, in its pursuit of a brighter energy future for everyone. To achieve this, we need to offer new ideas and technologies. It also demands that we do things differently, and that we learn from each other, across industries, because we know we don't have all the answers ourselves. It's why we're happy to collaborate and share knowledge and experience



### Stakeholders

### Input

### How we create value



Customers



Debt investors



Employees



Governments



Local communities



Media



NGOs



Other European TSOs



Shareholders



Suppliers



#### Intellectual

Extensive knowledge of and experience with operating the system and integrating energy markets



#### Manufactured

Cables, lines, stations, offices and interconnectors



#### Human

Our skilled and motivated people



#### Natural

Energy, natural environment and materials to build, maintain and operate our grid



#### Financial

Regulatory return (Green) Financing



#### Social and relationship

Strategic partnerships and our engagement with (project) stakeholders



Energise our people and organisation



Secure supply today and tomorrow



Drive the energy transition



Safeguard our financial health

# To connect everyone with a brighter energy future

### 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

## Outcome & Impact



### Deliver a high security of supply

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 2020, we have been able to achieve a **99.9999%** availability of our onshore 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 **16** interconnectors that have been realised as of 2020.

Societal impact due to the availability of our grid.



### Ensure critical infrastructure for society

With our assets, we ensure that we are able to fulfil 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 3,080 million in 2020, while we were able to realise 3,412 million.**



### Create a sustainable workplace

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 2.7 in the Netherlands and 2.5 in Germany in 2020**. Next to this we monitor to what extent we are successful in our efforts to be an inclusive and diverse organisation (refer to page 36). And with respect to a safe working environment, we track the Total Recordable Incident Rate (TRIR). We were unable to achieve zero safety incidents this year, as we unfortunately also had 2 fatal incidents which has led to a **TRIR of 4.1 in 2020**.



### Create value to transition to a low carbon economy

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 low carbon economy. In 2020 we realised 1.6 GWh additional offshore capacity, increasing the amount of connected 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 2020 our (gross) carbon footprint was **2,448,640 tonnes CO<sub>2</sub>**, which has been greened for **62.0%**.

Equivalent number of households that have been able to receive green electricity



### Secure a solid financial performance and investor rating

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 **ROIC of 5.1, FFO/Net Debt of 11.3% and our adjusted underlying EBIT group\* of EUR 796 million**.



### Solve societal challenges with stakeholders and through partnerships

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'**.



\* Reference is made to the chapter Secure a solid financial performance and investor rating.

with a wide range of stakeholders and experts. This approach will enable us to keep the lights on, while we work with others to design and deliver tomorrow's energy system.

### How we create value

TenneT plays a pivotal role in society. By ensuring the supply of electricity, we make a fundamental difference to the people working and living in the areas we serve. Our work involves a wide range of stakeholders. Our relationship with them may have been originated by law or contracts (shareholders, governments, political parties and regulatory bodies), by internal or external cooperation (employees, suppliers, debt investors and rating agencies) or by the nature of the services we provide (customers, the media, NGOs, local communities and other European TSOs).

For more information about our stakeholders and how we engage with them, is included in 'Our stakeholders' section and on our [corporate website](#).

The way we create value is represented visually on the previous pages, using the concept of value creation as described by the International Integrated Reporting Council (IIRC). 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 core tasks, how we balance our decisions and how we operate. 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 2020'.

The way we aim to create long-term value for the greater good is defined alongside the six inputs from our value creation model. Here we aim to:

**Deliver a high security of supply.** We have extensive experience in operating the electricity grid and have a clear vision on how to design the system to secure supply efficiently and effectively. This is how we deliver on our promise and fulfil our role to keep the lights on in a way that is sustainable for years to come.

**Ensure critical infrastructure for society.** We build and maintain the electricity grid, which has a vital role in the lives of our stakeholders. With the materials and products we use to build and maintain our grid, such as our cables, stations and interconnectors, we realise the critical

infrastructure that enables us to transport electricity. This supports the daily lives and activities of people and businesses in the areas we serve.

**Create a sustainable workplace.** Our people are our most important assets and essential to realising our ambitions. Our programs and actions, 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 low carbon economy.** Our aim is to drive the energy transition. Realising our investment programme and innovation portfolio will contribute to achieving the climate targets in the Netherlands and Germany, which is essential to achieving a low-carbon economy. Looking at our business from this point of view, we create positive impact by connecting renewable energy sources to the electricity grid. This however does have an impact and dependencies related to the use of energy sources, the natural environment and the materials we need to build, operate and maintain our grid.

**Secure a solid financial performance and investor rating.** In order to create long-term value, we are focussed on maintaining a healthy financial position. Our main sources of funding are our regulatory revenue and externally raised capital, which is increasingly from 'green' financing. Maintaining our strong credit rating by retaining a balanced equity to debt ratio is essential to safeguard our financial health, lowering our financing costs and delivering a return on capital that meets the expectations of our capital providers.

**Solve societal challenges with stakeholders and through partnerships.** We operate in a multi-stakeholder landscape. We need to build strong relationships with our stakeholders to fulfil our societal role. On the one hand, this is visible in the connections we make as we undertake our projects, such as engaging with local communities, NGOs and local governments to gain acceptance. On the other hand, we also aim to build new relationships through partnerships. These forms of collaboration are essential to find the answers and innovations we need to shape the energy landscape of the future. Our current relationships and social connections help us achieve this and we aim to expand these further.

Our ambition is to show our societal impacts as part of our value creation. We have succeeded in doing so for some areas and are further developing other areas in the coming years. This year, we started to show the societal impact in

two important new areas: the societal value related to the availability of our grid and related to connecting more renewable energy to our grid. The latter is shown in the tonnes of CO<sub>2</sub> emissions that we have been able to avoid in 2020 and the equivalent number of households that has been to switch to 100% renewable energy in 2020. More information can be found in the chapters '[Deliver a high security of supply](#)' and '[Create value to transition to a low carbon economy](#)'.

### Explaining how our strategy creates value

Our Integrated Annual Report 2020 has been set up alongside the outputs of our value creation model.

The image below 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
<b>Overarching</b>	 	<ul style="list-style-type: none"> <li>Stakeholder engagement</li> </ul>	<ul style="list-style-type: none"> <li>Internal engagement index</li> <li>Reputation survey</li> </ul>	 
 <b>Energise our people and organisation</b>		<ul style="list-style-type: none"> <li>Health and development of our people</li> <li>Diversity and inclusiveness</li> <li>Safety</li> <li>Talent attraction</li> </ul>	<ul style="list-style-type: none"> <li>Absentee rate</li> <li>% female inflow</li> <li>Total Recordable Incident Rate</li> </ul>	 
 <b>Secure supply today and tomorrow</b>	 	<ul style="list-style-type: none"> <li>Security of supply</li> <li>Responsible supply chain practices</li> <li>(Cyber) security</li> <li>Accessibility of our grid</li> </ul>	<ul style="list-style-type: none"> <li>Grid availability</li> <li>Investments</li> </ul>	    
 <b>Drive the energy transition</b>	 	<ul style="list-style-type: none"> <li>Our own environmental impact</li> <li>Driving energy transition</li> <li>Stakeholder engagement</li> <li>Strategic partnerships</li> <li>Driving energy transition</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability performance</li> <li># of GW of new flexibility</li> <li># of scalable / scaled system initiatives</li> </ul>	
 <b>Safeguard our financial health</b>		<ul style="list-style-type: none"> <li>Financial health</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted underlying EBIT group</li> <li>ROIC Group</li> <li>Adjusted FFO/Net debt Group</li> </ul>	

# About our connection with our stakeholders and the world around us

## Our stakeholders

TenneT is a key player in the European energy landscape. Our vital role involves a wide range of stakeholders, including shareholders, local communities, employees, regulators, investors, NGOs, politicians, media, customers, suppliers and other European TSOs. Strong collaboration with partners is needed to drive the energy transition.

On a daily basis, we interact with our stakeholders and we aim to manage our relationships in the best way possible. Every two years, we conduct a survey to assess how well we are performing in the perception of these key stakeholders. The most recent survey has resulted in a 'fairly strong to very strong' reputation among them. Furthermore, we strengthened our organisational structure in 2020 so we can work more closely together with local

communities impacted by our projects. This helps us connect even better with people that are living in areas where we plan to build new infrastructure. In dialogues (workshops, talks, events and online sessions) we are building awareness and understanding. 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.

To read more about our stakeholder outreach, please visit our [corporate website](#).

These are examples of how we interact with our stakeholders. If you would like to know more about our stakeholders and what we have done, please visit our corporate website.

## The external developments we (fore)see

In this section we describe important developments facing us now and in the future. Due to the nature of our business, we need to look far ahead, as far as 2050. If we want to realise our goals regarding these timeframes, we must start preparing now.

### Economic developments

We expect that volumes will increase due to the global trend of electrification. That is reason why we keep on investing in our grid to make sure that we are able to transport electricity from where it is generated (e.g. from wind farms at sea) to where it is consumed. In each scenario we foresee, we need to significantly invest in our grid.

Furthermore, we see our customer base is changing. As technical developments and government incentives make renewable energy sources more accessible, our customer base will include more so-called 'flexumers', identified as consumers who also deliver electricity back to the grid.

### Political developments

Governments are stepping up their ambitions to tackle climate change and accelerate the transition to a low carbon economy. The European Commission announced its 'Green Deal' in 2019 with a new target to reduce its carbon

footprint until 2030 by 55% instead of 40%. This is an important milestone on the path to becoming the first climate-neutral continent on the planet by 2050. The Green Deal is an umbrella for approximately 50 legislative initiatives touching on every part of TSOs business. It includes i.e. the EU climate law, the EU offshore strategy, the EU sector coupling strategy and the EU taxonomy legislation. Within the current draft of the EU taxonomy legislation, electricity TSOs' investments are classified as "sustainable" investments which has a positive impact on our strategic pillar "financial health". And the new US administration decided to rejoin the Paris Agreement.

Elsewhere, China is raising its climate ambitions, as well as Canada. And the new US administration decided to rejoin the Paris Agreement. In 2019, TenneT sharpened its strategy to support the strengthened climate ambitions of the Dutch and German governments. This requires close cooperation with governments, regulators and other stakeholders. In this context, the legislative and regulatory frameworks in Germany and the Netherlands should help us to fulfil our role, not slow us down. However, in the energy landscape, we notice that current developments in technology, innovation and societal demand and

acceptance are changing at a pace that our regulators cannot always keep up with.

To meet the 55% target set by the EU, both the Dutch and German governments are expected to speed up their CO<sub>2</sub> reduction efforts in the transition from conventional electricity generation to renewables. In Germany, the 'Kohleausstieg' (coal phase-out) and shutting down of coal-powered plants such as in the Netherlands are recent examples. We see that the energy mix is increasingly greener, as the contribution of solar and wind energy grows each year. For TenneT, this means that many additional wind farms will need to be connected and integrated into the energy system before 2030. Clarity is already needed in 2021 on the designation of new offshore wind areas in the North Sea. This creates new challenges. Many new renewable energy sources, often at locations far away from our existing grid, need to be connected. This also fuels discussions about the need to maintain our high level of grid redundancy, the so-called n-1 criterion. Another constant challenge is to balance the grid with a higher infeed of renewables, which is typically intermittent. In this context, we must prepare for situations when there is no sun or wind ('Dunkelflaute'). We are therefore working hard to innovate, invest in and support new technologies, such as better weather prediction models, dynamic line rating, green hydrogen and decentralised flexibility that we can call upon for balancing the supply and demand of electricity. We also are keen to unlock innovation through the stakeholders we work with and to encourage governments and regulators to remove barriers to help us find new solutions and partnerships.

In the Netherlands, the cabinet serves in a caretaker capacity as of January 2021. The result of this is that the Dutch parliament decided on topics that are considered to be 'controversial' and therefore are postponed for a new cabinet to follow up on after the elections in March 2021. Important topics for TenneT are fortunately not considered to be 'controversial' and are not affected by the resignation of the Dutch cabinet earlier this year.

### Other developments (including megatrends)

The materials we use have a limited supply. Resource scarcity is a trend we take seriously. Therefore we include it in our strategy with our circularity ambitions and our aim to lead as a green and responsible grid operator. This helps us ensure we are a sustainable and resilient company that can serve our customers now and for generations to come.

We also see scarcity in human resources. Our people are our most important asset. We are currently working diligently on multiple levels to ensure we are best equipped for future growth. With our Transforming TenneT programme, we are able to face the challenges ahead. The scarcity of technical talent, combined with demographic changes such as the ageing society, are relevant risks for us which we are actively working to mitigate.

The current COVID-19 pandemic is an unforeseen development with a global impact. As with other businesses, it has taught us new ways of working. The implications and opportunities of working remotely affect our current and future employees. The same goes for our potential contractors in tender procedures. Information can be found in our 'Create a sustainable workplace' chapter.

As we build our grid, the need for more critical infrastructure is challenged by growing urbanisation and the scarcity of available land routes. Space is getting tighter which requires creative and innovative solutions. We are in continuous dialogue with governments, NGOs, local communities and other critical infrastructure companies to find acceptable solutions. Fostering consensus, understanding and acceptance among our stakeholders is crucial and it is not always easy to find a balance between the needs of the parties involved. Building a reliable, affordable and sustainable grid requires us to take all demands into consideration to try to find the right balance. That is the balancing act we need to perform, all the time. This inevitably means that we need to make choices. That is why we believe that we have a key role to play in moving to a low carbon economy and driving the energy transition. We will work together with our partners, bring everybody to the table and work on solutions that last for decades to come.

## The Sustainable Development Goals and TenneT

The Sustainable Development Goals were determined by the United Nations as the new global goals where member states should work on together which they should translate to national policy. The aim is to create a sustainable future for all people. The cooperation between governments and other important partners such as businesses and NGOs are key in ensuring that we can achieve these goals together. TenneT has embraced these Sustainable Development Goals (SDG). In 2018, we assessed the way we aim to contribute achieving those goals.



### Our main global challenge

The world is facing major global challenges, including climate change. This affects TenneT's core business. At the same time, this is the global challenge our choices and business conduct have the most impact on. That is why we have identified SDG 13 as the main societal challenge we contribute to. How do we ensure a transition to a sustainable energy system at a socially acceptable cost while maintaining security of supply? The impact of climate factors is also becoming increasingly important in our activities and business operations.



### Ensure access to affordable, reliable, sustainable and modern energy for all

To us, SDG 7 is one of the SDGs 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. We are investing in connecting offshore wind farms for around 26 GW. In 2020, two large offshore projects were completed: Borssele Alpha near the Dutch coast in the North Sea and BorWin3 in the German North Sea, connecting an additional 1.6 GW of offshore wind energy to our grid. Onshore, we are facilitating the fast-growing supply of solar energy with grid extensions and smart solutions. With this, 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.



### Build a resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Another main SDG our core activities can contribute to is SDG 9. Our societal role is 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 ensuring that we drive the energy transition and by operating as a European TSO, we support economic development and human well-being by empowering society, as our goal is to secure supply not only today but also tomorrow. To ensure that our grid is reliable, sustainable, resilient and of high quality, we invest in our grid. By designing a grid that is able to secure supply now and in the future, considering a changing energy mix. By building and maintaining our grid and by connecting our grid to other European countries around us, which helps us to operate the grid and ensure a high grid availability for the areas we serve. An example of this is the progress we made with respect to NordLink, the first direct power connection between Germany and Norway. 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. Completion is expected in early 2021, which will bring our total of interconnections up to 16. By increasing the number of interconnectors, we create more opportunities to import and export electricity. This can benefit a more cost-efficient supply, as electricity with a lower price on the other side of the border can be imported and could create positive effects to make supply of electricity more affordable.

Furthermore, we also continue to investigate the way we can make our grid more resilient, for instance due to the effects of climate change. Extreme weather conditions and or chronic physical risks such as rising sea levels are factors we consider. More information on this has been included in our [Key risks](#) section.

### Other SDGs

Next to this, we are aware that in the execution of these activities, we also have an impact on other SDGs. This relates 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. SDG12 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 effect on the planet and climate change as this will avoid emissions in the extraction phase for instance.



## How we addressed the effects of the COVID-19 pandemic

As the pandemic struck, we quickly adopted all measures imposed by both the German and Dutch governments. As for many other businesses, emergency public health measures had a significant impact across our organisation. We adapt to the new circumstances and implemented innovative new ways of working to ensure business continuity with minimal disruption. We are proud of how our employees adapted to these new circumstances. In total, 103 colleagues became infected by COVID-19 in 2020.

To coordinate our response and manage new routines to ensure our people stayed safe during the pandemic, TenneT put its risk management measures into action. Specialist teams were set up to handle the situation: a crisis team, a business continuity team and a 'plan ahead'-team.

### What was the impact of COVID-19 on TenneT's strategy?

#### Securing supply today and tomorrow

To secure supply today and tomorrow, our maintenance and construction projects are key. In this regard, the COVID-19 pandemic presented further challenges in 2020. For example, the limited availability of materials created some initial backlog in our maintenance schedule.

By sharing and moving essential supplies between projects – such as steel for overhead lines – we tried to minimise disruption as much as possible. We reached out to all our contractors to keep in touch and help each other where possible, for example when bottlenecks occurred or planned deliveries had to be postponed. We appealed to all our partners to remain reasonable and flexible and supported them where possible.

Looking ahead, we might face possible delays to future projects as public health restrictions have made the usual planning and permitting process hard to sustain. This is particularly true for our onshore projects, where the permitting process relies on face-to-face stakeholder meetings in local communities. In line with government safety measures, all of these in-person meetings had to stop during the pandemic. Some of these can now continue online, but the knock-on effect from the delay in this essential pre-construction activity will pose challenges. We did however demonstrate good progress with online consultations in 2020. We successfully held virtual tender meetings with potential suppliers for our SuedLink, SuedOstLink and BorWin5 projects. This is the first time we have virtually engaged with suppliers during a tender process. The success of the negotiations showed the possibility for this efficient way of working in the future, requiring less travel time and expense.

Despite the challenges in 2020 caused by the pandemic, we were determined to keep our investment portfolio on track. During the year, we maintained the momentum of our ambitious grid expansion and investment programme.

#### Driving the energy transition

Closures and emergency health restrictions in some of the international ship yards where we construct our offshore platforms put the timescale of several projects under pressure. Fortunately these did not cause any critical delays. In many cases, our teams locked down on-site – staying away from their families on end to keep construction on track.

A fortuitous by-product of the restrictions imposed during the pandemic had a favourable effect on some elements of our CO<sub>2</sub>-footprint, due to fewer people travelling to work and lower energy consumption at our offices.

#### Energise our people and organisation

During 2020, the pandemic impacted the roll-out of our new TenneT organisation. The inability for colleagues to meet in person was a particular challenge for the formation of new teams. However, the pandemic also provided an unexpected opportunity to accelerate the process of change, helping to embed new ways of working faster than might have been possible otherwise. For example, cross-border teams in the new organisational structure quickly adapted to remote working routines that foster virtual collaboration. Leaders of the new units – including leaders who had not previously led remote teams – have been trained in the skills of motivating and collaborating with their teams in a virtual setting.

Aware of the need to care for mental well-being during the pandemic, we are also providing training in the psychological aspects of people management, building empathy, self-awareness and psychological safety skills. Throughout this period, TenneT continued to recruit and we welcomed 818 new colleagues in 2020. Our onboarding and application process was brought online, so necessary vacancies could still be fulfilled.

As well as giving our employees the opportunity to improve their home office, we also paid attention to their personal circumstances. We are conscious that working from home involves specific challenges for different people, both physical and mental. Making sure our people stay connected with their colleagues and paying attention to work life balance and exercise are particularly important in the new reality. To facilitate this, we shifted our health and vitality initiative,

Always Energy, into an online programme and provided webinars and real-time engagement to ensure the wellbeing of our colleagues was fully supported.

### Safeguarding our financial health

Specific to the COVID-19 situation and this strategic pillar is the situation regarding our EEG levies. Together with the three other German TSOs, TenneT is responsible for the financial management of the 'Renewable Energy Sources Act' (Erneuerbare Energien-Gesetz (EEG)), which has a significant impact on TenneT's cash flow, although it does not affect our financial performance. Based on this law, German end-users pay a levy to finance the green energy transition in Germany. The EEG levy is used to subsidise the EEG feed-in tariffs which are paid to producers of renewable energy who receive a guaranteed price for their produced green electricity exceeding the market price. The EEG levy is determined based on forecasted renewable energy volumes and electricity prices for the subsequent year.

To prevent negative EEG balances and the necessity of additional short-term bridge financing, a liquidity buffer is included in the EEG levy. TenneT raised an additional 12-month liquidity financing of EUR 1.5 billion and uncommitted financing of EUR 0.5 billion in 2020 at very low interest rates, to cover for the effect of significant unforeseen variations in renewable energy volumes and wholesale electricity prices. This will be revised in 2021.

### Forward looking statements on COVID-19

The general expectation is that the impact of the pandemic will decrease during 2021, especially with the roll-out of vaccinations. Up to now we consider ourselves fortunate that the effects are low, but the longer the lockdown scenario stays, it might have an impact on our business. We remain focussed on strengthening the resilience of our people and we will closely monitor developments. Looking ahead, the shift to virtual working has opened new possibilities for attracting talent. Being located close to one of our offices is no longer so essential, allowing us to draw on a broader geographic and more diverse talent pool. For example, we are now accessing labour markets in Spain, Romania, Poland and other European countries. To extend this opportunity, we are undertaking a new accelerator project in our People Unit to help us tap into new talent pools, with an emphasis on building a more attractive employer brand and using new communications techniques to connect with potential candidates.