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| 21 February 2019 |
| TenneT's grids continue to perform excellently in transition to much more solar and wind energy   * **TenneT invested EUR 2.3 billion in 2018 (2017: EUR 1.8 billion) in energy transition and security of supply (99.9988% grid availability in 2018)** * **Underlying revenue amounted to EUR 4.2 billion; EBIT (excluding special items) amounted to EUR 819 million** * **Stepping up innovation necessary for a flexible and affordable energy system based on solar & wind energy and green hydrogen**   **TenneT wants to focus more intensively on innovations and the optimisation of existing high-voltage grids in addition to large-scale national and international grid expansions. This is stated in the integrated annual report for the 2018 reporting year that is being presented today by the Dutch/German high-voltage transmission system operator TenneT. The annual report also shows that the total availability of the high-voltage grids (security of supply) continued to remain high with 99.9988 percent in 2018. This keeps TenneT's high-voltage grids in the Netherlands and Germany among the most reliable in the world.**  **TenneT again managed to attain strong financial results and invested EUR 2.3 billion in the Netherlands and Germany to accelerate the energy transition, while maintaining the high level of grid availability.**  Manon van Beek, CEO TenneT: "Our societal duty and our mission are to keep the energy system as reliable and affordable as possible during and after the energy transition. We must continue to expand and reinforce our grids both onshore and offshore to achieve this, but we must also use the capacity of this infrastructure better, more flexibly and efficiently with the help of technology. This is needed to prevent unnecessary additional investments and societal costs on top of our already considerable investment portfolio. In order to make rapid progress in the implementation of our extensive project agenda, cooperation at all levels and beyond the electricity domain is necessary. TenneT will therefore continue to actively engage in dialogue with our stakeholders in order to gain and obtain the right incentives for a greater focus on sustainability and reliability through digital innovation and energy system thinking, next to the current, sometimes one-dimensional focus on investments in assets."  **FURTHER INTEGRATION NORTH-WEST EUROPEAN ELECTRICITY MARKET** With the knowledge that the energy transition is only possible with a high level of international connectivity, good progress has also been achieved in 2018 with the integration of the North-West European electricity markets. The interconnector between the Netherlands and Germany (Doetinchem-Wesel) was commissioned in September. The subsea COBRA cable between the Netherlands and Denmark has 'landed' at the connection point in Eemshaven and will be put in operation later this year. The German and Norwegian markets will be connected to each other directly for the first time with the NordLink cable connection that is currently being built. It is expected that this 624 km interconnector will be ready for operation in 2021. International connections provide extra security of supply in the connected markets and contribute to an interconnected European market for sustainable energy. With the COBRA cable in 2019 and NordLink added in 2021, TenneT will be operating 16 interconnectors in total. This means that the TenneT high-voltage grid will represent a crucial link in the European electricity system.  **STRONG GROWTH OFFSHORE WIND FARM CONNECTIONS** TenneT reached a new milestone in Germany by bringing onshore nearly 17 terawatt hours (TWh) of offshore wind energy in 2018. This equals 1.5 times the annual electricity consumption of Deutsche Bahn, one of the largest electricity consumers in Germany. The total connection capacity of TenneT for offshore wind farms grew to 6,232 megawatts (MW), which means that the objective of the German government has already been achieved now. Also, the BorWin3 and DolWin6 projects will be ready in 2019 and 2023, respectively, increasing the transport capacity for wind farms to more than 8,000 MW.  The development of an offshore grid in the Dutch North Sea is progressing as planned. The jacket (sub structure) of the Borssele Alpha transformer platform has been installed at sea and the platform itself is currently in the final construction phase. Until 2023 TenneT will be constructing the offshore grid connections for the Borssele, Hollandse Kust Zuid and Hollandse Kust Noord wind energy zones, which together will provide a capacity of 3,500 MW.  In the meantime, TenneT has also been assigned by the Dutch government to connect the following phase of offshore wind energy[[1]](#footnote-1) to the Dutch high-voltage grid until 2030. This will result in an additional capacity of 6,100 MW. It is foreseen that the large IJmuiden Ver wind zone will be connected by TenneT by two DC connections instead of AC connections; each with a capacity of 2,000 MW (2 GW), which has never been done before. This ensures that optimum use is made of the area's scale. This also fits in with the preference of the wind industry to have larger wind farms. The new technologies save on costs and ensure a smaller spatial footprint. The Ministry of Economic Affairs will shortly be deciding on the connection method to be used.  **INNOVATION TO BETTER UTILIZE EXISTING AND FUTURE INFRASTRUCTURE** The energy transition and the rapidly changing energy landscape encourage TenneT to make smarter use of existing assets, use new technologies and enter into relevant innovation partnerships.  An example of this is the *InnoSys* project in Germany. TenneT, together with the three other German transmission system operators (TSOs), four distribution system operators (DSOs), universities and market parties, is investigating new IT solutions that will ensure that the transport capacity of its existing high-voltage grid can be better used for the significantly growing need of sustainable electricity transport. Such an automated grid control system could prevent additional grid investments.  Next to the growth in the volume of renewable energy sources, fewer conventional power stations will be available in the future to provide the necessary flexibility for maintaining the balance between the demand and supply of electricity. TenneT is actively looking for new (decentralised) sources for balancing that can offer flexibility such as batteries, wind and solar energy, industrial installations and cogeneration plants. TenneT will be expanding its successful pilots with Vandebron in the Netherlands and Sonnen in Germany in 2019 with ENGIE, Escozon & Energie Samen, Scholt Energy & Enervalis and again Vandebron.  TenneT and Daimler AG (Mercedes-Benz Energy GmbH) have jointly researched the feasibility of innovative system services for the high voltage transmission system. The study, published early 2019, shows that automotive battery storage systems can take over the tasks of large power plants and make a significant contribution to grid stabilization (balancing) and system reconstruction after power outages.  After 2030, further innovation with regard to the development of offshore wind energy will be needed. In view of international climate goals and goals for offshore wind of national governments, this involves large scale developments. TenneT's vision of the [North Sea Wind Power Hub](https://northseawindpowerhub.eu/) will be further elaborated within the consortium with Energinet, Gasunie and the Port of Rotterdam. Technical designs, the economic rationale, possible locations and regulatory and market requirements are currently being analysed and will be published later this year.  In addition to green electricity, green hydrogen is also likely to play an important role in the energy system of the future as a solution for energy storage (through electrolysis). TenneT and Gasunie have jointly undertaken a study on the future energy infrastructure for the first time: the *2050 Infrastructure Outlook.*  Together with Thyssen Gas and Gasunie Germany, TenneT is working on the realisation of a 100 MW electrolysis plant that can deliver green hydrogen for industry in phases as from 2022 and can serve as storage of sustainable energy in the form of gas. With Shell and Siemens, TenneT has taken the initiative to explore the possibilities of combining a tender to develop a power to gas (hydrogen) system with an offshore 900 MW wind energy tender in Germany in the period 2026 to 2030.  The desired and necessary shift from focus on investments in assets to more focus on innovation is also reflected in the first draft of the joint German grid development plan for 2030 (Netzentwicklungsplan), drawn up by the 4 German TSO's. This plan foresees technological innovations to optimize the usage of the grid.  **FINANCIAL RESULTS IN LINE WITH EXPECTATIONS**   |  |  |  | | --- | --- | --- | | Key underlying[[2]](#footnote-2) financial figures (in millions of euros) | 2018 | 2017 | |  |  |  | | Revenue | 4,176 | 3,948 | | Earnings before interest and taxes (EBIT) | 806 | 897 | | EBIT, corrected for special items | 819 | 742 | | Investments in fixed assets | 2,253 | 1,774 | | Total assets | 21,783 | 20,412 | | Net interest-bearing debt | 8,712 | 7,687 | | Dividend to Dutch State | 120 | 147 | |  |  |  |   **Underlying revenue and EBIT**  TenneT’s 2018 underlying revenue of EUR 4,176 million increased with 6% compared to 2017, mainly due to higher reimbursements for grid expenses and additional revenue generated by a growing asset base. Underlying EBIT decreased from EUR 897 million in 2017 to EUR 806 million in 2018. Excluding special items, underlying EBIT increased by 10% to EUR 819 million in 2018. EBIT growth was mainly driven by the increase in our asset base, causing a higher return on capital reimbursement.  **Investments & financing**  Otto Jager, TenneT's CFO: "TenneT delivered a financial performance in line with the expectations of our capital providers. To carry out our extensive investment programme, which also requires additional equity funding, we need to maintain full access to the financial markets."  Capex (investments) totalled EUR 2,253 million in 2018, of which EUR 876 million in the Netherlands and EUR 1,370 million in Germany. As a result of these investments, the net interest-bearing debt position increased by 13% to EUR 8,712 million at 31 December 2018.  TenneT values its position as a leader in the sustainable finance arena. As part of TenneT's Corporate Social Responsibility efforts in 2018, the company successfully completed another Green Bond issue, worth EUR 1.25 billion, under its Green Bond programme and raised EUR 500 million through a green United States Private Placement (USPP) transaction. In addition TenneT raised EUR 100 million of green hybrid capital from the European Investment Bank and received an equity contribution from the Dutch State of EUR 350 million.  **Senior unsecured credit ratings as of 31 December 2018**   |  |  |  | | --- | --- | --- | |  | Long-term rating | Short-term rating | | Standard & Poor’s | A- (stable outlook) | A-2 | | Moody’s Investor Service | A3 (stable outlook) | P-2 |   **INVESTMENT OUTLOOK** TenneT expects to invest approximately EUR 35 billion in the next 10 years, of which EUR 12 billion in the Netherlands and EUR 23 billion in Germany. The increase in the portfolio compared to the previous year primarily relates to an anticipated EUR 5 billion investment in offshore grid connections as part of phase 2 of the expansion of offshore wind energy in the Dutch part of the North Sea.  Other large onshore projects in the Netherlands are ‘Randstad 380 kV Noordring’, ‘Zuidwest 380 kV’, ‘Noordwest 380 kV’ and the upgrade of the national 380 kV ring. In Germany the largest projects are the long-distance, underground direct current connections called SuedLink and SuedOstLink, connecting the northern part of the country with the south.  **2018 Integrated Annual Report and 2018 Green Finance Report**  For more information about TenneT, please refer to the 2018 Integrated Annual Report, which is available on the [https://annual report.tennet.eu/](https://jaarverslag.tennet.eu/) website.  TenneT has published the [2018 Green Finance Report](https://www.tennet.eu/fileadmin/user_upload/Company/Investor_Relations/AR_2017/FCC_2018-08_Green_Finance_Report_2017.pdf), in relation to the 'green' financing of TenneT's investment portfolio by issuing green bonds (since 2015). |
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| |  |  | | --- | --- | |  | TenneT is a leading European grid operator (Transmission System Operator (TSO) that has its most important activities in the Netherlands and Germany. With 23,000 kilometres of high-voltage connections, we ensure a reliable and secure electricity supply to the 41 million end users in the markets that we serve. With more than 4,000 employees, we achieve a turnover of 4.2 billion euros and a total asset value of 21.8 billion euros. TenneT is one of the largest investors in national and international onshore and offshore electricity grids. Our focus is on bringing together the North Western European energy markets and facilitating the energy transition. TenneT makes every effort to meet the needs of society by being responsible, engaged and connected. **Taking power further.** | |  |  | |
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1. 2030 Offshore Wind Road Map: <https://www.rijksoverheid.nl/documenten/kamerstukken/2018/03/27/kamerbrief-routekaart-windenergie-op-zee-2030> [↑](#footnote-ref-1)
2. Contrary to IFRS, ‘underlying’ figures recognise regulatory assets and liabilities in connection with TenneT’s regulated activities whereas IFRS does not allow this. This means that amounts resulting from past events and which are allowed or required to be settled in future grid tariffs are recognized separately. [↑](#footnote-ref-2)