

**Definitions IAR and Green Finance report 2016**

KPIs are listed in the order of appearance in the integrated annual report 2016. Additional KPIs reported in the Green Finance report are listed at the bottom.

KPI	Unit	Description	Report
<b>Grid availability onshore</b>			
		Grid availability is the sum of the availability of the national grids, thereby overestimating the impact for TenneT as a whole. Grid availability is calculated as 1 - (customer minutes lost/total minutes in one year). In NL we report the SAIDI, based on interrupted customer minutes and ASIDI, based on interrupted active power flow. In GE we report the ASIDI.	IAR
Grid availability	%		
Interruptions	#	Number of incidents that resulted in no energy supplied to customers.	IAR
Energy not transported	MWh	Total amount of energy not transported during all incidents in one year, based on transformer capacity.	IAR
<b>Grid availability offshore</b>			
		Based on the ASAI (Average Service Availability Index), the average availability a customer would experience. Scope: only operational systems compliant to section 2.3.2 "Leitfaden zur Ermittlung einer umlagefähigen Entschädigung bei Störung, Verzögerung oder Wartung der Netzanbindung von Offshore-Anlagen" of October 2013, i.e. OWF1 GCP operational period starts at least 4 months after end of soak test. Calculation of the KPIs are in line with IEEEE 1366. In other words; we report according to the regulatory scheme.	IAR and Green finance report
Grid availability	%		
Average interruption	hours	Average time a customer did not receive electricity supply.	Green finance report
<b>Technical data</b>			
		The length of the overhead lines and underground cabling (a circuit consists of three phases)	IAR
Total circuit length	km		
Overhead lines	km	Circuit length of our overhead lines (lines that are visible)	IAR
Underground cabling	km	Circuit length of our cables which are laid under the ground.	IAR
Number of substations	#	Number of locations where electricity is transformed to a lower voltage level.	IAR
HDVC converter locations	#	Locations where electricity is converted from AC to DC or from DC to AC.	IAR
Connected Offshore windfarms	#	Wind parks for which TenneT hold a liability according to EnWG §17e Ab. 1 and 3	IAR
Stakeholder dialogues	#	Public events organised by TenneT where public was invited to learn more about our projects.	IAR
Imports and exports	GWh	Imports is the amount of electricity in GWh transported from connected grids into our grid via the interconnections. Exports is the amount of electricity in GWh transported from our grid via the interconnections to connected grids.	IAR
Price convergence	%	Percentage of hours per year that the electricity prices at both sides of the border were equal.	IAR
Operating generation capacity	GW	The supply side of the German and Dutch power systems visualized by source of production.	IAR
Customer satisfaction	%	Customer satisfaction was measured in an independent survey, conducted in the Netherlands and in Germany. The customer satisfaction score is based on the percentage of customers who judge their relationship with TenneT as 'satisfying' or better.	IAR
Oil leaked	litres	The oil leakage of cables is directly recorded by the amount of oil refilling that occurs during the year on specific components. Specific maintenance guidelines are in place that give instruction to the way that these recordings should be made.	IAR
Environmental incidents	#	Within our stations and lines we have technical equipment that contain oil or cooling liquids. An accidental spill is an environmental incident and are reported in our incident management system, ITask.	IAR
Carbon footprint		More detailed information about the carbon footprint calculation can be found on our website: <a href="http://www.tennet.eu/n/about-tennet/csr-sustainability.html">http://www.tennet.eu/n/about-tennet/csr-sustainability.html</a>	
Carbon footprint (gross)	ton CO2	The summation of all individual contributors to our carbon footprint, without taking greening or compensation into account.	IAR
Carbon footprint (nett)	ton CO2	The summation of all individual contributors to our carbon footprint, with taking greening or compensation into account.	IAR
SF6 leakage	ton CO2	The carbon footprint related to our SF6 leakage, a strong contributor to greenhouse gas emissions.	IAR
Lease vehicles	ton CO2	The carbon footprint based on the amount of km travelled with lease cars.	IAR
Gas consumption	ton CO2	The carbon footprint based on the gas consumption of our offices. For the gas consumption in our offices in Germany the figures are based on previous year and will be restated next year.	IAR
Grid losses	ton CO2	The carbon footprint based on the grid losses, where a different conversion factor is used for NL and GE, because the grid mix is different.	IAR
Electricity use stations	ton CO2	The carbon footprint based on the electricity consumption of our stations for which TenneT has 100% ownership. The electricity use of our stations in Germany is based on the previous year and will be restated next year.	IAR
Electricity use offices	ton CO2	The carbon footprint based on the electricity use of our offices. For the electricity use in our offices in Germany the figures are based on previous year and will be restated next year.	IAR
Travel	ton CO2	The carbon footprint based on the amount of kilometres travelled by car, train and plain.	IAR
Grid losses	Gwh	Grid losses is energy that is lost while transporting electricity. Every fifteen minutes, we compare the total amount of kWh transferred into the grid with the total transferred out, which result in the amount of energy lost. These in- and outflows are electronically measured in 15-minute time slots at control centres using external meter readings in the grid. The accumulated data is periodically checked and reported on by an independent metering company using validated software. TenneT verifies this data with its metering systems. The completeness of the metering data is determined by a plausibility check. We report according to the regulatory scheme.	IAR and Green finance report
Transported electricity	Gwh	The amount electricity transported to our customers. The data is based on the same measurements as described for the grid losses.	IAR
Carbon footprint/Transported electricity	ton CO2/G	The amount electricity transported to our customers. The data is based on the same measurements as described for the grid losses.	IAR
SF6 leakage rate	%	The amount leaked divided by the amount banked. In NL we use the average amount of banked SF6 in our assets. In Germany the amount at year end. For offshore we report SF6 leakages at the moment the converter stations are our property. This is different from the other KPIs in our Green Finance Report, where we report according to regulatory operation.	IAR and Green finance report
SF6 leaked	kg	The amount of SF6 leaked is directly recorded by the amount of refills that occur during the year on specific components. Specific maintenance guidelines are in place on the way that these recordings should be made. These refills are reported by the service providers.	IAR
Employees		The employee numbers reflect the employees part of the TenneT organisation. We have excluded the Novac employees (also for 2014 and 2015) since Novac has their own HR policies.	
Number of internal employees	#	The number of internal and external employees (headcount)	IAR
Number of external employees	#	See above	IAR
Male employees	%	Percentage of male employees compared to the total number of employees	IAR
Female employees	%	Percentage of female employees compared to the total number of employees	IAR
Ratio highest fulltime salary and median fulltime salary	-	Includes fixed salary (incl acquired leave days), variable remuneration and pension benefits, conform Global Reporting Initiative (GRI) standard G4-54	IAR
Safety			
LTIF		LTIF is defined as the number of lost time injuries per million working hours. The LTIF is calculated as the division of the LTI x one million (#LTI x 1.000.000), by the total number of working hours. The LTI is defined as the sum of the number of work related incidents, resulting in fatalities, permanent total disabilities and lost workday cases (LWCs). Number of work related incidents is including contractor personnel at TenneT sites. Working hours are defined as the total number of worked hours. Working hours are calculated including TenneT personnel and contractor personnel at TenneT sites. There is a generally increasing safety awareness within the company, enforced by the Safety Vision 2018 which entails both to work on strengthening our safety culture and to improve related processes. Our employees and contractors are aware of their obligation towards TenneT to report incidents. We have no indications that the reported number of lost-time injuries is not accurate or complete.	IAR and Green finance report
<b>Reported in Green Bond</b>			
Significant controversies		Events like major leaks, heavy accidents, etc	Green Finance report
Allocation of proceeds	EUR	Allocation of proceeds describes how much of the Green Bond funding has been used for financing the assigned projects	Green Finance report
Advancement of projects in the building phase	year	Year in which the platform will start operating	Green Finance report
# households (actual capacity)	#	Actual capacity transmission line divided by average electricity consumption of one German household	Green Finance report
CO2 emissions (actual capacity)	ton CO2	Actual capacity transmission line multiplied by the carbon emission per kWh for fossil based power generation.	Green Finance report
Avoided CO2 emissions per bond issue	ton CO2	The avoided CO2 emissions per bond issue, based on the amount spend, amount funded by green bonds and projects funded by a specific bond issue.	Green Finance report