Additional CSR data 2017

CSR data linked to Integrated Annual Report 2017

Introduction

In our integrated annual report 2017 we report about the topics that are considered to be most relevant to our internal and external stakeholders taking the TenneT Holding perspective, prepared in accordance with sustainability guidelines defined by the Global Reporting Initiative version Standards. The materiality process is fundamental to integrated reporting as it ensures we meet the level of transparency our stakeholders have the right to expect. The outcome of the materiality analysis is presented in the GRI table, for more info please go to the CSR section of our website.

Our CSR policy and activities are broader and are not limited to the outcome of the materiality analysis. Therefore additional CSR data that gives a full picture of the impact of TenneT on planet and people aspects is reported in this document.

In our integrated annual report most data is presented at TenneT Holding level and to give more insight in our operations, KPIs in this document are presented on TenneT Holding level and country level.

The data is reported aligned with the structure of the integrated annual report.

For definitions of the reported KPIs please go to the CSR section of our website.

In case there any additional questions considering CSR reporting, please send an email to CSR@tennet.eu.

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1. Strategic performance

1.1 Stakeholder dialogues

It is crucial that we connect with local communities, NGOs and politicians from the earliest stages of a project to address their concerns and gain their acceptance. It is our experience that stakeholder dialogue works best on a small scale, with a tailored approach.

In the table below the number of public events are presented.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Number of stakeholder dialogues	114	642	756	83	88	171	81	107	188

1.2 Grid availability

TenneT's track record in grid availability is among the best in the world. We work hard to guarantee a reliable electricity grid, a task that is complicated by the volatility of renewable energy, which makes it harder to balance supply with the rising demand. In the table below our onshore grid availability is presented.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Grid availability	99.9986%	100.0000%	99.9986%	99.9999%	100.0000%	99.9999%	99.9999%	100.0000%	99.9999%
110/150 kV									
Interuptions	11	N/A	11	6	N/A	6	14	N/A	14
Energy not transported	1,072	N/A	1,072	59	N/A	59	145	N/A	145
220/380 kV									
Interuptions	-	-	-	-	-	-	2	2	4
Energy not transported	-	-	-	-	-	-	3,669	10	3,679

Our total grid availability is reported as the sum of the availability on the national grids, thereby underestimating the availability for TenneT as a whole.

The industry has defined two standard KPIs for grid availability reporting. The SAIDI (System Average Interruption Duration Index) is the average outage duration for each customer served. The ASIDI (Average System Interruption Duration Index) is the average outage duration for interrupted active power flow.
Since 2017 TenneT reports according to GRI Standards, which requires more extensive reporting on the identified materials themes. For grid availability this means the SAIDI and ASIDI are reported from 2017.

	2017	
	NL	D
SAIDI		
110/150 kV	8,44	N/A
220/380 kV	0	N/A
ASADI		
110/150 kV	N/A	N/A
220/380 kV	0	0

1.3 Technical data

TenneT maintains and build asset infrastructure to transport electricity. Our assets by type of asset and voltage level are presented in the table below.

	2017			2016			2015		
Technical data	**NL**	**D**	**Total**	**NL**	**D**	**Total**	**NL**	**D**	**Total**
Number of substations:									
110/150 kV	288	5	293	285	5	290	286	6	292
220/380 kV	45	124	169	40	124	164	39	123	162
Total number of substations	**333**	**129**	**462**	**325**	**129**	**454**	**325**	**129**	**454**
HVDC converter stations	1	14	15	1	14	15	1	12	13
Connected offshore windfarms	-	17	17	-	16	16	-	11	11
Circuit length:									
Underground total	2,057	1,743	3,800	2,023	1,701	3,724	1,928	1,424	3,352
Overhead total	8,111	10,863	18,974	8,113	10,717	18,830	8,190	10,703	18,893
Total	**10,168**	**12,606**	**22,774**	**10,136**	**12,418**	**22,554**	**10,118**	**12,127**	**22,245**
150/300/450 kV DC	337	1,173	1,510	337	1,173	1,510	290	1,035	1,325
220/380 kV	2,939	10,844	13,783	2,912	10,699	13,611	2,894	10,684	13,578
110/150 kV	6,893	588	7,481	6,887	546	7,433	6,934	408	7,342
Total	**10,169**	**12,605**	**22,774**	**10,136**	**12,418**	**22,554**	**10,118**	**12,127**	**22,245**

2. Operational performance – our people

2.1 Employee data

TenneT is powered by its people. They are the key to our continued success and growth. That's why we create a safe, healthy, stimulating and energising place for them to work and empower our people to perform. We connect their personal ambitions to our strategic goals to fulfil our mission and commitment to society. Our core values guide us in everything we do: quality and integrity are an integral part of our vision for our people and our organisation.

In tables below additional data regarding FTE, headcount[1], permanent/temporary contracts, CAO/function contracts, male/female ratios, age distribution, inflow/outflow, management/non-management, full-time/part-time employees and education costs is presented.

Since 2017 TenneT reports according to GRI Standards, which requires more extensive reporting on the identified materials themes. For employee data this means we report permanent and temporary contract by gender from 2017.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
FTE (end of period)									
FTE internal	1,283	1,788	3,071	1,224	1,707	2,931	1,199	1,590	2,789
FTE external	465	301	766	326	216	542	346	128	475
Total	**1,748**	**2,089**	**3,837**	**1,550**	**1,923**	**3,473**	**1,545**	**1,719**	**3,264**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount (end of period)									
Headcount internal	1,335	1,862	3,197	1,274	1,766	3,040	1,248	1,639	2,887
Headcount external	574	297	871	417	214	631	443	125	568
Total	**1,909**	**2,159**	**4,068**	**1,691**	**1,980**	**3,671**	**1,691**	**1,764**	**3,455**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount (end of period)									
Permanent contract	1,225	1,631	2,856	1,173	1,530	2,703	1,160	1,433	2,593
Temporary contract	110	231	341	101	236	337	88	206	294
Total	**1,335**	**1,862**	**3,197**	**1,274**	**1,766**	**3,040**	**1,248**	**1,639**	**2,887**

	2017		
	NL	D	Total
Permanent contract			
Permanent contract male	942	1,318	2,260
Permanent contract female	283	313	596
Total	**1,225**	**1,631**	**2,856**
%male	**77%**	**81%**	**79%**
%female	**23%**	**19%**	**21%**

	2017		
	NL	D	Total
Temporary contract			
Temporary contract male	94	166	260
Temporary contract female	16	65	81
Total	**110**	**231**	**341**
%male	**85%**	**72%**	**76%**
%female	**15%**	**28%**	**24%**

[1] Total headcount differs with the total figure in our integrated annual based on a re-assesment of the figures.

The total internal headcount presented in the table below is higher, because it includes interns.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal									
Collective labour contracts	1,168	1,503	2,671	1,119	1,420	2,539	1,101	1,317	2,418
Function contracts	167	210	377	155	204	359	147	193	340
Other contracts	11	149	160	12	142	154	15	129	144
Total	**1,346**	**1,862**	**3,208**	**1,286**	**1,766**	**3,052**	**1,263**	**1,639**	**2,902**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal gender									
Male	1,036	1,484	2,520	981	1,389	2,370	957	1,290	2,247
Female	299	378	677	293	377	670	291	349	640
Total	**1,335**	**1,862**	**3,197**	**1,274**	**1,766**	**3,040**	**1,248**	**1,639**	**2,887**
%male	**78%**	**80%**	**79%**	**77%**	**79%**	**78%**	**77%**	**79%**	**78%**
%female	**22%**	**20%**	**21%**	**23%**	**21%**	**22%**	**23%**	**21%**	**22%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal by age									
Under 20 years	-	35	35	-	40	40	-	45	45
20-30 years	71	382	453	62	402	464	58	383	441
30-40 years	300	660	960	314	591	905	332	537	869
40-50 years	450	382	832	417	363	780	398	347	745
50-60 years	403	328	731	355	304	659	359	278	637
Over 60 years	111	75	186	126	66	192	101	49	150
Total	**1,335**	**1,862**	**3,197**	**1,274**	**1,766**	**3,040**	**1,248**	**1,639**	**2,887**

Interns are not part of the in- and outflow figures reported below.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal inflow									
Male	91	111	202	69	110	179	54	160	214
Female	17	26	43	23	33	56	22	42	64
Total	**108**	**137**	**245**	**92**	**143**	**235**	**76**	**202**	**278**
%male	**84%**	**81%**	**82%**	**75%**	**77%**	**76%**	**71%**	**79%**	**77%**
%female	**16%**	**19%**	**18%**	**25%**	**23%**	**24%**	**29%**	**21%**	**23%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal outflow									
Male	36	45	81	45	35	80	41	35	76
Female	11	18	29	21	19	40	11	11	22
Total	**47**	**63**	**110**	**66**	**54**	**120**	**52**	**46**	**98**
%male	**77%**	**71%**	**74%**	**68%**	**65%**	**67%**	**79%**	**76%**	**78%**
%female	**23%**	**29%**	**26%**	**32%**	**35%**	**33%**	**21%**	**24%**	**22%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal management									
Male	99	50	149	94	45	139	96	44	140
Female	20	3	23	22	3	25	22	2	24
Total	**119**	**53**	**172**	**116**	**48**	**164**	**118**	**46**	**164**
%male	**83%**	**94%**	**87%**	**81%**	**94%**	**85%**	**81%**	**96%**	**85%**
%female	**17%**	**6%**	**13%**	**19%**	**6%**	**15%**	**19%**	**4%**	**15%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal non-management									
Male	937	1,434	2,371	875	1,344	2,219	858	1,246	2,104
Female	279	375	654	271	374	645	269	347	616
Total	**1,216**	**1,809**	**3,025**	**1,146**	**1,718**	**2,864**	**1,127**	**1,593**	**2,720**
%male	**77%**	**79%**	**78%**	**76%**	**78%**	**77%**	**76%**	**78%**	**77%**
%female	**23%**	**21%**	**22%**	**24%**	**22%**	**23%**	**24%**	**22%**	**23%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal full-time									
Male	946	1,411	2,357	903	1,343	2,246	884	1,255	2,139
Female	113	275	388	116	292	408	114	279	393
Total	**1,059**	**1,686**	**2,745**	**1,019**	**1,635**	**2,654**	**998**	**1,534**	**2,532**
%male	**89%**	**84%**	**86%**	**89%**	**82%**	**85%**	**89%**	**82%**	**84%**
%female	**11%**	**16%**	**14%**	**11%**	**18%**	**15%**	**11%**	**18%**	**16%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Headcount internal full-time									
Male	951	1,416	2,367	903	1,343	2,246	884	1,255	2,139
Female	113	275	388	116	292	408	114	279	393
Total	**1,064**	**1,691**	**2,755**	**1,019**	**1,635**	**2,654**	**998**	**1,534**	**2,532**
%male	**89%**	**84%**	**86%**	**89%**	**82%**	**85%**	**89%**	**82%**	**84%**
%female	**11%**	**16%**	**14%**	**11%**	**18%**	**15%**	**11%**	**18%**	**16%**

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Average education costs per emloyee	2,246	2,092	2,157	2,354	2,011	2,155	2,218	2,743	1,928

2.2 Employee engagement & open dialog

We attach great value to ensuring our employees are committed and engaged. To help achieve this, we conduct an employee survey to measure levels of engagement and satisfaction. Since we did not conduct a survey in 2016, we have no new figures to report.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Employee satisfaction	N/A	N/A	N/A	N/A	N/A	N/A	80%	86%	83%
Sustainable engagement	82%	78%	80%	N/A	N/A	N/A	80%	86%	83%

We value an open dialogue with our employees and encourage them to report potential issues regarding integrity and undesirable behaviour.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Formal complaints	28	-	28	40	-	40	40	5	45
Of which whistle-blower cases	-	-	-	-	-	-	-	-	-

2.3 Remuneration

We reward our employees for their work by offering an appropriate package of salary, pension and secondary benefits. To illustrate the difference in remuneration between the highest full-time salary and median fulltime salary at TenneT, we have calculated the ratio of fixed salary (including acquired leave days),variable remuneration and pension benefits.

	2017			2016		
	NL	D	Total	NL	D	Total
Ratio CEO to median	7.1	7.6	7.5	7.1	6.9	7.0

2.4 Safety

The safety of everyone involved in our activities – our employees and our contractors – is a top priority. We continually strive for zero work-related incidents and accidents. Our goal is to become a safety leader and to have a pro-active safety culture. We aim to be recognised as such by our own employees as well as by our stakeholders. Our safety performance is presented in the table below.

Since 2017 TenneT reports according to GRI Standards, which requires more extensive reporting on the identified materials themes. For safety this means we report our safety statistics per country and total starting 2016.

	2017			2016			2015
	NL	D	Total	NL	D	Total	Total
LTIF	1.30	3.25	2.53	2.08	3.08	3.60	2.20
TRIR	1.79	4.12	3.26	3.54	5.65	4.92	6.52
HRI	7	16	23	10	14	24	33
Fatalities	-	-	-	1	-	1	-
Investigation index	100%	100%	100%	100%	100%	100%	100.0%

2.5 Health

We help our people to live healthy and active lives, and find a stimulating work-life balance. We offer coaching to our employees in the Netherlands and encourage all employees to join our Committed Power sports programme. The programme is open to employees and their partners and provides training and medical supervision to undertake a challenging activity, such as biking, nordic walking, running or skating.

	2017		2016		2015	
	NL	D	NL	D	NL	D
Sickness rate (%)	2.90%	3.00%	3.70%	2.90%	3.50%	2.50%

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Biking	125	51	176	104	65	169	111	52	163
Biking MTB	55	61	116	-	-	-	43	42	85
Nordic Walking	96	62	158	62	65	127	104	79	183
Running	109	61	170	232	208	440	199	157	356
Skating	40	8	48	-	-	-	-	-	-
Total	**425**	**243**	**668**	**398**	**338**	**736**	**457**	**330**	**787**

3. Operational performance – our impact on the planet

3.1 Carbon footprint

We present our gross CO_2 footprint for 2017, 2016 and 2015 in three scopes: direct emissions from our own operations; indirect emissions related to purchased energy; and indirect emissions related to other purchased goods. Our nett carbon footprint takes our measures to green our electricity use into account, resulting in a lower carbon footprint. Our calculations are based on the CO_2 Footprint Network Operators Manual, of the Association of Energy Network Operators in the Netherlands, CO2emissiefactoren.nl and document " Entwicklung der spezifischen Kohlendioxid- Emissionen des deutschen Strommix in den Jahren 1990 bis 2016". The detailed carbon footprint of 2017 is presented below, which includes since 2017 the helicopter and vessel transport to our offshore platforms. The 2016 and 2015 figures can be found in the appendix.

2017

Scope 1						
			conversionfactor		**emission in ton CO_2**	**net emissions in ton CO_2**
lease						
417,109	km	DE	0.000181	ton CO_2/km	75	75
	km	NL	0.000181	ton CO_2/km	5,092	5,092
Total lease					**5,167**	**5,167**
gas use offices						
4.01	GWh	DE	178.80	tonnes CO_2e/GWh	717	717
124,281.00	m^3	NL	0.001788	ton CO_2e/m^3	222	-
Total gas use offices					**939**	**717**
SF_6 leakage						
114.85	kg	DE	23.90	ton CO_2e/kg SF_6	2,745	2,745
819.00	kg	NL	23.90	ton CO_2e/kg SF_6	19,574	19,574
Total SF_6 leakage					**22,319**	**22,319**
Total Scope 1					**28,426**	**28,203**
Scope 2						
electricity use offices						
5.26	GWh	DE	327	tonnes CO_2e/GWh	1,720	1,720
4.96	GWh	NL	572	tonnes CO_2e/GWh	2,837	-
Total electricity use offices					**4,557**	**1,720**
grid losses						
3,724.00	GWh	DE	527	tonnes CO_2e/GWh	1,962,548	1,962,548
1,355.60	GWh	NL	572	tonnes CO_2e/GWh	775,403	-
Total grid losses					**2,737,951**	**1,962,548**
electricity use in stations						
168.70	GWh	DE	527	tonnes CO_2e/GWh	88,905	88,905
19.32	GWh	NL	572	tonnes CO_2e/GWh	11,051	-
Total electricity use in stations					**99,956**	**88,905**
Total Scope 2					**2,842,464**	**2,053,173**
Scope 3						
business and commute						
17,687,124	km	DE	0.000181	ton CO_2/km	3,201	3,201
13,800,456	km	NL	0.000181	ton CO_2/km	2,498	2,498
Total business and commute					**5,699**	**5,699**
air travel						
4,697,483	km	DE	0.000278	ton CO_2/km	1,306	1,306
2,942,113	km	NL	0.000278	ton CO_2/km	818	818
Total air travel					**2,124**	**2,124**
train						
4,307,763	km	DE	0.000005	ton CO_2/km	22	22
1,340,288	km	NL	0.000005	ton CO_2/km	7	7
Total train					**28**	**28**
Offshore transport						
Helicopters						
567,812	l	DE	0.002270	ton CO_2/l	1,289	1,289
Supply vessels						
1,579,500	l	DE	0.002920	ton CO_2/l	4,612	4,612
Total Offshore transport					**5,901**	**5,901**
Total Scope 3					**13,752**	**13,752**
Total					**2,884,642**	**2,095,129**
					ton CO_2e	ton CO_2e

Grid losses

Over 90% of TenneT's carbon footprint is due to grid losses. Grid losses are calculated as the difference between the amounts of electricity produced entering our transmission system and the amount that leaves our system for consumption. The grid losses presented per country and voltage level can be found in the table below.

	2017			2016			2015		
	NL	**D**	**Total**	**NL**	**D**	**Total**	**NL**	**D**	**Total**
110/150 kV									
Grid losses (GWh)	424	N/A	424	410	N/A	410	411	N/A	411
Transported GWh	93,657	N/A	93,657	91,860	N/A	91,860	90,638	N/A	90,638
%grid losses of transported GWh	**0.45%**	**N/A**	**0.45%**	**0.45%**	**N/A**	**0.45%**			
220/380 kV									
Grid losses (GWh)	931	3,724	4,655	808	2,994	3,802	664	2,804	3,468
Transported GWh	79,069	159,401	238,470	79,951	145,178	225,129	77,414	143,411	220,825
%grid losses of transported GWh	**1.18%**	**2.34%**	**1.95%**	**1.01%**	**2.06%**	**1.69%**	**0.86%**	**1.96%**	**1.57%**
Total grid losses (GWh)	**1,355**	**3,724**	**5,079**	**1,218**	**2,994**	**4,212**	**1,075**	**2,804**	**3,879**

SF_6 leakage

SF_6 is used in high-voltage equipment on substations because it is an excellent electrical insulator and is necessary for interrupting currents in circuit breakers. However, SF_6 is a strong contributor to greenhouse gas emissions. Below the leaked and banked amounts are reported.

	2017			2016			2015		
	NL	**D**	**Total**	**NL**	**D**	**Total**	**NL**	**D**	**Total**
SF_6 leaked (kg)	819	115	934	1,087	161	1,248	919	187	1,106
SF_6 banked (kg)	146,648	190,186	336,834	144,907	182,348	327,255	141,987	172,970	314,957
SF_6 leaked %	**0.56%**	**0.06%**	**0.28%**	**0.75%**	**0.09%**	**0.38%**	**0.65%**	**0.11%**	**0.35%**

3.2 Commitment to nature

Areas managed in regions of high biodiversity

The majority of TenneT's lines and cables are outside regions with high biodiversity, since these areas are protected by national and international laws. However, some of our infrastructure does cross areas of high biodiversity and below we report the surface areas managed in protected natural areas in the Netherlands and Germany.

Since different types of natural areas overlap, for instance protected bird and habitat areas, the sum of protected areas does not sum up to the total. Data is collected in 2016.

Type of natural protected area Netherlands	**Surface area managed in protected area (km^2)**
Total forest and heather	11,6
Total Natura 2000	6,2
Bird guideline area	5,1
Habitat guideline area	4,1
Protected natural area's	0,7
Type of natural protected area Germany	**Surface area managed in protected area (km^2)**
Natura 2000 (Bird, Habitat and Flora and Fauna areas)	13,1
Nature conservation areas	6,5
National parks	1,7
Natural parks	63,3
Biosphere reserves	2,3
Special protection area (Birds Directive)	17,4
Wadden Sea World Heritage property	1,6
Ramsar Convention	1,2
Total area (without overlap)	85,8

Use of herbicides

Because of the nature of our operations, operating high voltage infrastructure, mechanically weeding is not always possible. For that reason we make use of herbicides to control plant growth and avoid dangerous situations. For some of the herbicides that are banned on a national level due to risks of application, we have an exception as no reasonable alternatives are available. Herbicides are only used in a limited number of areas, since a permit from the state's agricultural chamber is necessary.

Below the use of herbicides in 2017 in the Netherlands and Germany is reported.

Herbicide	Netherlands	Germany
Round-up/ Glyfos/ TOUCHDOWN (liters)	564.5	11
U 46 MCPA (liters)	249.5	
Basta (liters)	0	
Finalsan Plus (kg)	0	428
Toki/Nozomi (kg)	14	
PROMOTOR (liters)	107.5	
Genoxone ZX (liters)	12	
Dicophar (liters)	50	

Partnerships and collaborations

Our Commitment to Nature vision underlines our approach and illustrates the responsibility we feel we have to avoid and minimise our environmental impact and protect and improve local nature. We always strive to balance our business activities with the impact they have on nature. Since stakeholder cooperation is crucial in making sure we come up with the best solution for nature we work together with several partners.

Partner	Logo	Description	Year
Energy cooperation in the North Sea: NOGEPA, NWEA, TNO, TenneT en Stichting Natuur & Milieu		Dutch offshore North Sea oil and gas operators, the offshore wind sector and NGO's, have joined forces and declare that they will collaborate in order to contribute to a safe, sustainable, reliable and affordable energy system in balance with improving eco-systems.	2016
St. de Noordzee	Stichting De Noordzee	In collaboration with St. de Noordzee a positive impact of the Dutch offshore activities in the Netherlands on marine biodiversity is pursued. Stichting de Noordzee and TenneT together gather academics to open a discussion on the possibilities to improve nature and biodiversity in the North sea.	2016
Green Deal Infra-nature	Green Deal	Via the Green Deal, an instrument from the Dutch ministries to progress sustainability, we are able to: • learn from the experience of other companies • create a relevant network with Ministries, NGO's and similar infrastructure companies. • set up a joint lobby for biodiversity related issues. The Ministry of Economic Affairs for example, wants to look upon a solution for the regulatory issues related to biodiversity.	2016
Life Elia	life elia	Pilot project in Germany to implement the findings of the ELIA colleagues –ecological maintenance under power lines.	
Natuur & Milieu	NATUUR & MILIEU	We signed a partnership agreement with Natuur & Milieu in October 2014 for 'Wind op Zee' (NL). Natuur & Milieu is coordinating the input for the EIA procedure for Wind op Zee.	2014

Partner	Logo	Description	Year
Cigre, workgroup corridor management		Cigre is an international non-profit association for promoting collaboration with experts from all around the world by sharing knowledge and joining forces to improve electric power systems of today and tomorrow. One of the working groups focusses on biodiversity and landscape to have effective corridor management.	
Best Grid / Renewables Grid Initiative (RGI)		Cooperation with a local NGO to analyse how to connect biotopes via power lines 2014-2015 – Partner was the Renewables Grid Initiative and NABU lower Saxony.	2014
NABU (German BirdLife), under Best Grid		For the project SuedLink, TenneT is cooperating very closely with the regional branch of NABU (German BirdLife) in Lower Saxony. Since 2017, we have agreed with other TSOs and the NABU (Naturschutzbund Deutschland) to set-up a bird hot line. People that find a dead bird in the vicinity of our lines can call this line, managed by the NABU, which keeps a register. The information will be used to change the type of bird flaps we use and potentially help us design new lines that are safer for birds in the future.	2014
The European Grid Declaration on Electricity Network Development and Nature Conservation		Under the RGI, a coalition of 24 organisations, including nine of Europe's largest TSOs, and NGOs such as WWF, Greenpeace, Birdlife International and Friends of the Earth Europe, work together.	2011

Environmental incidents

With our operations we have undoubtedly impact on nature. We recognise that we have a responsibility to care for the well-being of the natural environment, and are therefore transparent about the oil leakages and environmental incidents caused by our actions.

	2017			2016			2015		
	NL	D	Total	NL	D	Total	NL	D	Total
Oil Leaked (litres)	6,849	11	6,860	1,710	377	2,087	5,293	8,798	14,091
Environmental incidents	28	16	44	26	32	58	30	54	84

Appendix

2016

Scope 1						
			conversionfactor		**emission in ton CO_2**	**net emissions in ton CO_2**
lease						
412,870	km	DE	0.000181	ton CO_2/km	75	75
14,486,000	km	NL	0.000181	ton CO_2/km	2,622	2,622
Total lease					**2,697**	**2,697**
gas use offices						
4.01	GWh	DE	178.80	tonnes CO_2e/GWh	717	717
113,680.00	m^3	NL	0.001788	ton CO_2e/m^3	203	-
Total gas use offices					**920**	**717**
SF_6 leakage						
161.34	kg	DE	23.90	ton CO_2e/kg SF_6	3,856	3,856
1,086.76	kg	NL	23.90	ton CO_2e/kg SF_6	25,974	25,974
Total SF_6 leakage					**29,830**	**29,830**
Total Scope 1					**33,447**	**33,243**
Scope 2						
electricity use offices						
5.26	GWh	DE	327	tonnes CO_2e/GWh	1,720	1,720
4.59	GWh	NL	464	tonnes CO_2e/GWh	2,131	-
Total electricity use offices					**3,851**	**1,720**
grid losses						
2,994.44	GWh	DE	527	tonnes CO_2e/GWh	1,578,070	1,578,070
1,217.90	GWh	NL	464	tonnes CO_2e/GWh	565,106	-
Total grid losses					**2,143,175**	**1,578,070**
electricity use in stations						
168.70	GWh	DE	527	tonnes CO_2e/GWh	88,905	88,905
19.66	GWh	NL	464	tonnes CO_2e/GWh	9,124	-
Total electricity use in stations					**98,029**	**88,905**
Total Scope 2					**2,245,055**	**1,668,695**
Scope 3						
business and commute						
16,358,971	km	DE	0.000181	ton CO_2/km	2,961	2,961
12,624,408	km	NL	0.000181	ton CO_2/km	2,285	2,285
Total business and commute					**5,246**	**5,246**
air travel						
4,652,813	km	DE	0.000278	ton CO_2/km	1,293	1,293
3,067,700	km	NL	0.000278	ton CO_2/km	853	853
Total air travel					**2,146**	**2,146**
train						
3,511,201	km	DE	0.000005	ton CO_2/km	18	18
1,230,453	km	NL	0.000005	ton CO_2/km	6	6
Total train					**24**	**24**
Offshore transport						
Helicopters						
-	l	DE	-	ton CO_2/l	-	-
Supply vessels						
-	l	DE	-	ton CO_2/l	-	-
Total Offshore transport					**-**	**-**
Total Scope 3					**7,416**	**7,416**
Total					**2,285,918**	**1,709,354**
					ton CO_2e	ton CO_2e

2015

Scope 1						
			conversionfactor		**emission in ton CO_2**	**net emissions in ton CO_2**
lease						
576,842	km	DE	0.000181	ton CO_2/km	104	104
13,051,627	km	NL	0.000181	ton CO_2/km	2,362	2,362
Total lease					**2,467**	**2,467**
gas use offices						
3.07	GWh	DE	178.80	tonnes CO_2e/GWh	549	549
132,577.69	m^3	NL	0.001788	ton CO_2e/m^3	237	-
Total gas use offices					**786**	**549**
SF_6 leakage						
187.00	kg	DE	23.90	ton CO_2e/kg SF_6	4,469	4,469
919.00	kg	NL	23.90	ton CO_2e/kg SF_6	21,964	21,964
Total SF_6 leakage					**26,433**	**26,433**
Total Scope 1					**29,686**	**29,449**
Scope 2						
electricity use offices						
3.06	GWh	DE	535	tonnes CO_2e/GWh	1,637	1,637
4.83	GWh	NL	464	tonnes CO_2e/GWh	2,240	-
Total electricity use offices					**3,877**	**1,637**
grid losses						
2,803.38	GWh	DE	535	tonnes CO_2e/GWh	1,499,809	1,499,809
1,075.20	GWh	NL	464	tonnes CO_2e/GWh	498,893	-
Total grid losses					**1,998,702**	**1,499,809**
electricity use in stations						
109.00	GWh	DE	535	tonnes CO_2e/GWh	58,315	58,315
19.20	GWh	NL	464	tonnes CO_2e/GWh	8,910	
Total electricity use in stations					**67,225**	**58,315**
Total Scope 2					**2,069,804**	**1,559,761**
Scope 3						
business and commute						
15,158,618	km	DE	0.000181	ton CO_2/km	2,744	2,744
12,589,948	km	NL	0.000181	ton CO_2/km	2,279	2,279
Total business and commute					**5,022**	**5,022**
air travel						
4,713,995	km	DE	0.000278	ton CO_2/km	1,310	1,310
3,544,093	km	NL	0.000278	ton CO_2/km	985	985
Total air travel					**2,296**	**2,296**
train						
2,946,164	km	DE	0.000005	ton CO_2/km	15	15
954,606	km	NL	0.000005	ton CO_2/km	5	5
Total train					**20**	**20**
Offshore transport						
Helicopters						
-	l	DE	-	ton CO_2/l	-	-
Supply vessels						
-	l	DE	-	ton CO_2/l	-	-
Total Offshore transport					**-**	**-**
Total Scope 3					**7,338**	**7,338**
Total					**2,106,828**	**1,596,548**
					ton CO_2e	ton CO_2e