5 DATA AND INDICATORS

DATA AND INDICATORS

ECONOMIC AND FINANCIAL RESULTS

		2018	2017 restated	2016
Revenues from ordinary operations	million EUR	1,027	1,048	1,025
EBITDA at replacement cost	million EUR	491	472	455
EBIT at replacement cost	million EUR	216	220	202
Net Profit	million EUR	133	108	125
of which Group Net Profit	million EUR	133	108	122
Group net profit (loss) at adjusted replacement cost [1]	million EUR	107	117	107
Total net financial indebtedness	million EUR	1,343	1,233	1,557
Net invested capital	million EUR	3,172	3,110	3,286
Investments [2]	million EUR	510	94	60
Financial leverage		42%	40%	47%

(1) Does not include inventory gains (losses) of TotalErg, non-recurring items and related applicable theoretical taxes.
(2) In investments in tangible and intangible fixed assets. Not including M&A investments for 39.5 million EUR in 2017 for the acquisition of the companies of the DIF Group in Germany and the M&A investments for 306 million EUR made in 2016.

Total revenues in 2017 include 100 thousand EUR in grants from Public Administration or the European Community for employee training.
ERG Group does not donate to political parties.

ERG SHARES

		2018	2017	2016
Market capitalization	million EUR	2,480	2,315	1,535
Year-end reference price	EUR	16.50	15.40	10.20
Maximum price	EUR	20.34	16.50	12.45
Minimum price	EUR	15.08	9.96	8.88
Average price	EUR	17.78	12.62	10.61
Average volume	no.	304,159	249,533	244,424

(1) Maximum price recorded on 14/05/2018, lowest price recorded on 02/01/2018.

CUSTOMERS

		2018	2017	2016
Intercompany customers	n.	22	21	20
Industrial customers	n.	8	9	3
Site customers	n.	15	11	11

PERSONNEL, ORGANISATION OF WORK AND INDUSTRIAL RELATIONS

		2018	2017	2016
Employees at 31/12	no.	737	714	715
Executives at Genoa site	no.	39 61%	37 59%	40 70%
Middle managers	no.	193	169	161
Administrative staff	no.	325	331	344
Workers	no.	180	177	170
Other external collaborators [1]	n.	19	32	35
Female employment (%) of wich: female employment at Genoa site (%)		20.1% 42.0%	20.9% 42.5%	21.0% 41.6%
Average time at the company (years)		9.8	9.8	8.9
Average employee age (years)		43.8	43.6	43.8
Part time employees (Italy)	%	5.0%	4.1%	3.8%
Part time employees (abroad)	%	1.3%	n.d.	n.d.
Percentage of overtime (Italy)	%	5.4%	4.8%	4.9%
Percentage of overtime (abroad)	%	2.6%	n.d.	n.d.
Unionisation rate	%	31.7%	31.0%	26.9%
Ongoing labour disputes	no.	3	2	[1] 4
Strike [2]	hours	0	0	272
Turnover [3] *(inbound staff + outbound staff)/headcount at 31/12*	%	13.4%	10.2%	6.8%
Inbound turnover	%	8.3%	5.0%	9.9%
Outbound turnover	%	5.1%	5.2%	3.2%

(1) The 2018 figure includes 13 men and 6 women, the 2017 figure includes 22 men and 10 women, the 2016 figure includes 24 men and 11 women.
(2) Hours of Italy-wide strikes
(3) The indicator does not count the staff that have joined/left the Group as a result of acquisitions/disposals of companies, so as to show the real change in staff during the year.

TRAINING

		2018	2017	2016
Total training	hours	34.356	37.950	31.787
of wich required by law	%	17%	n.d.	n.d.
of wich for technical and soft skills improvement	%	83%	n.d.	n.d.
Average training per employee	days/emp	5.9	6.6	5.6

TRAINING BY PROFESSIONAL CATEGORY AND GENDER GRI 404-1	2018			2017			2016		
	Men hours	Women hours	Total	Men hours	Women hours	Total	Men hours	Women hours	Total
Executives	1,044	113	1,157	2,003	171	2,174	1,092	164	1,256
Middle managers	6,927	1,876	8,803	7,533	2,578	10,111	6,166	1,557	7,723
Administrative staff	12,002	3,579	15,581	14,600	4,455	19,055	11,438	4,310	15,748
Workers	8,814	–	8,814	6,348	262	6,610	7,023	37	7,060
Total	**28,788**	**5,568**	**34,356**	**30,484**	**7,466**	**37,950**	**25,719**	**6,068**	**31,787**

AVERAGE TRAINING BY PROFESSIONAL CATEGORY AND GENDER [1] GRI 404-1	2018		2017		2016	
	Men h/emp	Women h/emp	Men h/emp	Women h/emp	Men h/emp	Women h/emp
Executives	28.2	56.5	57.2	85.5	29.5	54.6
Middle managers	48.4	37.5	60.8	57.3	52.2	36.2
Administrative staff	52.4	37.3	62.9	45.0	47.5	41.8
Workers	49.0	–	36.5	87.3	41.6	37.0

(1) average training by professional category and gender

DETAILED ANALYSIS OF PERSONNEL (NO. OF EMPLOYEES)

TYPE OF CONTRACT GRI 102-8	2018			2017		
	Men	Women	Total	Men	Women	Total
Permanent contract - Full time	588	113	701	564	118	682
Permanent contract - Part-time	–	34	34	–	29	29
Fixed-term contract - Full time	1	1	2	1	2	3
Group Total	**589**	**148**	**737**	**565**	**149**	**714**

TYPE OF CONTRACT GRI 102-8	2018			2017		
	Men	Women	Total	Men	Women	Total
Permanent contract - Full time	628	73	701	635	47	682
Permanent contract - Part-time	33	1	34	29	–	29
Fixed-term contract - Full time	1	1	2	2	1	3
Group Total	**662**	**75**	**737**	**666**	**48**	**714**

TYPE OF CONTRACT GRI 102-41	2018		2017	
	Total	%	Total	%
Electric	630	86%	112	16%
Industrial executives	39	5%	37	5%
French contract	37	5%	n.d.	n.d.
Foreign contracts	31	4%	42	6%
Energy and Oil	–	–	372	52%
Metalworking and Mechanical Engineering	–	–	151	21%
Group Total	**737**		**714**	

BY COUNTRY AND GENDER	2018			2017		
	Men	Women	Total	Men	Women	Total
Italy	528	134	662	531	135	666
France	33	8	41	14	7	21
Germany	22	3	25	17	4	21
UK	3	–	3	–	–	–
Bulgaria	1	–	1	1	–	1
Poland	–	1	1	–	1	1
Romania	2	2	4	2	2	4
Group Total	**589**	**148**	**737**	**565**	**149**	**714**

DETAILED ANALYSIS OF TURNOVER - ITALY - GRI 401-1 (NO. OF EMPLOYEES)

PERSONNEL EMPLOYED BY AGE AND GENDER - 2018	Men	Women	Total	Turnover rate
<30 years	9	3	12	44.4%
between 30 and 50 years	13	2	15	3.2%
>50 years	–	1	1	0.6%
Total	**22**	**6**	**28**	**4.2%**
Inbound turnover rate	4.2%	4.5%	4.2%	

PERSONNEL EMPLOYED BY AGE AND GENDER - 2017	Men	Women	Total	Turnover rate
<30 years	9	1	10	35.7%
between 30 and 50 years	14	1	15	8.0%
>50 years	1	–	1	0.2%
Total	**24**	**2**	**26**	**3.9%**
Inbound turnover rate	4.5%	1.5%	3.9%	

PERSONNEL EMPLOYED BY AGE AND GENDER - 2016	Men	Women	Total	Turnover rate
<30 years	10	1	11	31.4%
between 30 and 50 years	8	6	14	3.1%
>50 years	7	3	10	5.5%
Total	**25**	**10**	**35**	**5.2%**
Inbound turnover rate	4.7%	7.2%	5.2%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2018	Men	Women	Total	Turnover rate
<30 years	2	2	4	14.8%
between 30 and 50 years	7	2	9	1.9%
>50 years	17	2	19	11.2%
Total	**26**	**6**	**32**	**4.8%**
Outbound turnover rate	4.9%	4.5%	4.8%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2017	Men	Women	Total	Turnover rate
<30 years	1	1	2	7.1%
between 30 and 50 years	8	3	11	5.9%
>50 years	10	2	12	2.7%
Total	**19**	**6**	**25**	**3.8%**
Outbound turnover rate	3.6%	4.4%	3.8%	

OUTBOUND EMPLOYEES BY AGE AND GENDER- 2016	Men	Women	Total	Turnover rate
<30 years	1	–	1	2.9%
between 30 and 50 years	9	4	13	2.9%
>50 years	9	–	9	5.0%
Total	**19**	**4**	**23**	**3.4%**
Outbound turnover rate	3.6%	2.9%	3.4%	

DETAILED ANALYSIS OF TURNOVER - ABROAD - GRI 401-1 (NO. OF EMPLOYEES)

PERSONNEL EMPLOYED BY AGE AND GENDER - 2018	Men	Women	Total	Turnover rate
< 30 years	10	4	14	77.8%
between 30 and 50 years	16	3	19	35.8%
> 50 years	–	–	–	–
Total	**26**	**7**	**33**	**44%**
Inbound turnover rate	42.6%	50.0%	44.0%	

PERSONNEL EMPLOYED BY AGE AND GENDER - 2017	Men	Women	Total	Turnover rate
< 30 years	5	–	5	62.5%
between 30 and 50 years	5	–	5	125.0%
> 50 years	–	–	–	0.0%
Total	**10**	**–**	**10**	**20.8%**
Inbound turnover rate	29.4%	–	20.8%	

PERSONNEL EMPLOYED BY AGE AND GENDER - 2016	Men	Women	Total	Turnover rate
< 30 years	6	2	8	35.7%
between 30 and 50 years	18	5	23	8.0%
> 50 years	5	–	5	0.2%
Total	**29**	**7**	**36**	**3.9%**
Inbound turnover rate	4.5%	1.5%	3.9%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2018	Men	Women	Total	Turnover rate
< 30 years	1	1	2	11.1%
between 30 and 50 years	2	2	4	7.5%
>50 years	–	–	–	–
Total	**3**	**3**	**6**	**8.0%**
Outbound turnover rate	4.9%	21.4%	8.0%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2017	Men	Women	Total	Turnover rate
< 30 years	1	–	1	12.5%
between 30 and 50 years	7	2	9	225.0%
>50 years	2	–	2	5.6%
Total	**10**	**2**	**12**	**25.0%**
Outbound turnover rate	29.4%	14.3%	25.0%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2016	Men	Women	Total	Turnover rate
< 30 years	–	–	–	–
between 30 and 50 years	–	–	–	–
>50 years	–	–	–	–
Total	**–**	**–**	**–**	–
Outbound turnover rate	–	–	–	

DETAILED ANALYSIS OF PERSONNEL (NO. OF EMPLOYEES)

% PROFESSIONAL CATEGORY AND GENDER GRI 405-1	2018			2017		
	Men	Women	Total	Men	Women	Total
Executives	95%	5%	39	94%	6%	37
Middle managers	74%	26%	193	73%	27%	169
Administrative staff	70%	30%	325	70%	30%	331
Workers	100%	–	180	98%	2%	177
Total			**737**			**714**

% PROFESSIONAL CATEGORY AND AGE GRI 405-1	2018				2017			
	< 30 years	30-50 years	> 50 years	Total	< 30 years	30-50 years	> 50 years	Total
Executives	–	54%	46%	39	-	59%	41%	37
Middle managers	5%	79%	17%	193	1%	80%	18%	169
Administrative staff	6%	65%	28%	325	5%	66%	29%	331
Workers	8%	74%	18%	180	11%	73%	16%	177
Total	**45**	**518**	**174**	**737**	**36**	**506**	**172**	**714**

AGE BRACKET AND GENDER	2018			2017		
	Men	Women	Total	Men	Women	Total
<30 years	39	6	45	32	4	36
between 30 and 50 years	405	113	518	388	118	506
>50 years	145	29	174	145	27	172
Total	**589**	**148**	**737**	**565**	**149**	**714**

PERSONNEL EMPLOYED BY ORIGIN AND REGION	2018			2017		
	Italy	Abroad	Total	Italy	Abroad	Total
Company acquisitions	–	12	12	–	–	–
Permanent contract	25	21	46	24	10	34
Temporary contract	3	–	3	1	–	1
Training	–	–	–	1	–	1
Total	**28**	**33**	**61**	**26**	**10**	**36**

OUTBOUND EMPLOYEES BY REASON AND REGION	2018			2017		
	Man	Women	Total	Man	Women	Total
Resigation	11	3	14	14	5	19
End of temporary contract	–	3	3	2	1	3
Agreed resolution	18	3	21	12	3	15
Total	**29**	**9**	**38**	**28**	**9**	**37**

SAFETY*

INJURIES IN THE WORKPLACE (NO.)	Men	Women	Total 2018	Total 2017	Total 2016
Italy	4	–	4	4	2
Abroad	–	–	–	2	–
Total	**4**	**–**	**4**	**6**	**2**

FREQUENCY INDEX	Men	Women	Total 2018	Total 2017	Total 2016
Italy	4.43	–	3.61	3.53	n.d.
Abroad	–	–	–	20.03	n.d.
Total		**–**	**3.25**	**4.87**	**1.74**

Frequency index calculated as (no. of injuries x 1,000,000)/no. hours worked

SEVERITY INDEX	Men	Women	Total 2018	Total 2017	Total 2016
Italy	0.2	–	0.16	0.24	n.d.
Abroad	–	–	–	0.24	n.d.
Total		**–**	**0.15**	**0.24**	**0.03**

Severity index calculated as (no. of days lost x 1.000)/no. hours worked

OTHER SAFETY INDICATORS	Men	Women	Total 2018	Total 2017	Total 2016
Sick leave rate (%)	2.1%	2.7%	2.2%	[1]1.6%	1.9%
Working days lost due to injuries in the workplace (no.)	182	–	182	300	40
Cases of occupational disease (no.)	–	–	–	–	–
Rate of occupational disease (%)	–	–	–	–	–
Work-related deaths (no.)	–	–	–	–	–

* *The safety indicators do not count the "other external collaborators".*
(1) sick leave rate refer just to the italian employees (no. of days absence /day workable).

AUDIT HSE AND SAFETY WALKS

		2018	2017	2016
Wind	no.	237	554	342
Solar	no.	33	n.a.	n.a.
Hydro	no.	87	51	28
Power	no.	86	53	125

SAFETY

THIRD-PARTY COMPANY INJURIES		2018	2017	2016
Third-party company injuries	no.	2	4	1
Frequency index – third party companies - Total		4.26	7.28	2.14
Frequency index – third party companies - Italy		5.19	2.47	n.d.
Frequency index – third party companies - Abroad		–	20.67	n.d.
Severity index – third party companies - Total		0.16	0.05	0.06
Severity index – third party companies - Italy		0.19	0.06	n.d.
Severity index – third party companies - Abroad		–	0.03	n.d.

METHOD FOR ESTIMATING HOURS WORKED - THIRD PARTY COMPANIES
The hours worked by the employees of third party companies have been estimated differently according to the technology involved.
Hydro plants, Power, Wind Italy and Office: manual recording of the hours worked.
Wind Farms abroad: the estimate of the hours worked, given the technical impossibility of recording the presence of the O&M contractors with global service agreements, is based on a hypothesis that one FTE can service 15 MW, moltiplied by workable days (260) and by 8 hours.

METHOD FOR CALCULATING DAYS LOST DUE TO INJURIES - THIRD PARTY COMPANIES
Report sent by the company of the injured worker..

SUPPLIERS

		2018	2017	2016
Active suppliers (transactions with at least one order)	no.	1.772	1.564	1.553
with registered offices or a billing address in Italy	%	65%	71%	86%
with registered offices or a billing address in the regions where our plants are located	%	34%	35%	33%
% expenditure local suppliers (Italy/total)		77%	74%	59%
Qualified suppliers on Vendor List	no.	990	920	1.147
of which: qualified based on HSE parameters	no.	223	226	313
Newly qualified suppliers in the year	no.	67	61	51
of which: newly qualified based on HSE parameters in 2018	no.	36	31	28
Average qualification time	days	59	103	110
% of tenders (of total value of purchases)[1]	%	53%	41%	–
% of tenders (of total value of purchases)	%	–	–	52%
% of tenders (of total number of purchases)[1]	%	29%	31%	–
% of tenders (of total number of purchases)	%	–	–	29%

1) The 2017 indicators have been calculated following a different method with respect to the previous years of reporting, or rather respectively considering the tender value/ total value of orders issued and the number of tenders/total orders issued which does not permit a comparison with the figures for the previous years. Accordingly, the indicators are represented separately.

WIND - ENVIRONMENT AND COMMUNITY

		2018	2017	2016
Production	GWh	3,464	3,613	3,501
Load factor		22%	23%	23%
CO_2 avoided	kt	2,050	2,270	2,217
Indirect energy consumption [1]	GWh	11.47	[4] 11.43	[4] 11.36
Indirect green energy consumption %		98.6%	82.3%	26.2%
Indirect CO_2 emissions [2]	kt	0.09	1.4	5.5
Indirect energy consumptions by installed MW	MWh/MW	6.07	6.12	6.60
SSF_6 present in the electrical equipment [3]	kg	3,230	924	896
SF_6 in stock	kg	1,424	1,333	n.d.
SF_6 top ups	kg	0,5	3,2	n.d.
equivalent to tons of CO_2	t	12	76	n.d.
F-GAS present in air conditioning systems	kg	88	80	90
F-GAS top ups	kg	12	–	–
equivalent to tons of CO_2	t	19	–	–
Waste produced	t	185	56	50
of which sent to recycling		53.3%	60.9%	n.d.
Waste hazardous produced	t	102	35	21
of which sent to recycling	t	45	16	n.d.
of which sent to recycling		44.0%	45.7%	n.d.
of which sent to disposal	t	49	19	n.d.
of which sent to disposal		47.7%	54.3%	n.d.
Waste non-hazardous produced	t	83	21	29
of which sent to recycling	t	54	18	n.d.
of which sent to recycling		65.3%	85.7%	n.d.
of which sent to disposal	t	23	3	n.d.
of which sent to disposal		28.1%	14.3%	n.d.

(1) The increase in consumption is caused by the increase in the plants running.
(2) Value take into consideration the supplies of electricity from renewable production which does not generate emissions; the indirect emissions are calculated on the basis of the conversion factors relating to the gross thermoelectric production of each country published by Terna on its website (Source: Terna, 2015 international comparisons) according to a Location Based approach.
(3) Data as at end 2018 accounts quantities into the wind turbines (1.870kg) and into plants abroad (436 kg) not accounted in the previous years.
(4) Value recalculated with respect to that indicated into the Non Financial Reporting 2017 due to improved reporting methodology.

SOLAR - ENVIRONMENT AND COMMUNITY

		2018	2017	2016
Production	GWh	130	n.a.	n.a.
Technical availability plants		79.10%	n.a.	n.a.
CO_2 avoided	kt	67.99	n.a.	n.a.
Indirect energy consumption	GWh	1.16	n.a.	n.a.
Indirect green energy consumption %		3.1%	–	–
Indirect CO_2 emissions	kt	0.6	n.a.	n.a.
SF_6 present in the electrical equipment	kg	9.80	n.a.	n.a.
SF_6 top ups	kg	–	n.a.	n.a.
equivalent to tons of CO_2	t	–	n.a.	n.a.
Area covered by photovoltaic plants	m^2	630,291	n.a.	n.a.
Water used for panel cleaning	m^3	494	n.a.	n.a.
Waste produced [1]	t	–	n.a.	n.a.
of which sent to recycling		–	n.a.	n.a.
Waste hazardous produced	t	–	n.a.	n.a.
of which sent to recycling	t	–	n.a.	n.a.
of which sent to recycling		–	n.a.	n.a.
of which sent to disposal	t	–	n.a.	n.a.
of which sent to disposal		–	n.a.	n.a.
Waste non-hazardous produced	t	–	n.a.	n.a.
of which sent to recycling	t	–	n.a.	n.a.
of which sent to recycling		–	n.a.	n.a.
of which sent to disposal	t	–	n.a.	n.a.
of which sent to disposal		–	n.a.	n.a.

(1) In 2018 the Operation & Maintenance activities have been performed by third parties.

OFFICES IN ITALY

		2018	2017	2016
Indirect energy consumption	MWh	1,333	1,154	1,280
Indirect CO_2 emissions [1]	t	371	363	607

(1) Value take into consideration the supplies of electricity from renewable production which does not generate emissions; the indirect emissions are calculated on the basis of the conversion factors relating to the gross thermoelectric production of each country published by Terna on its website (Source: Terna, 2015 international comparisons) according to a Location Based approach.

Wastes: wastes produced in offices are disposed of as municipal waste and therefore quantities are not accounted for.
Water consumptions: the consumptions of water in the offices refers exclusively to uses for sanitary purposes and are part of the condominium services, therefore are not accounted. They are non-material with respect to the business.

HYDROELECTRIC POWER – ENVIRONMENT AND COMMUNITY

		2018	2017	2016
Production	GWh	1,740	1,144	1,358
Technical availability plants		97.87%	96.63%	96.52%
CO_2 avoided	kt	910	631	775
Energy consumption from primary sources - Diesel fuel [1]	litres	32,717	17,000	28,700
Indirect energy consumption	GWh	5.46	[5] 7.35	7.66
% indirect green energy consumption		100%	100%	100%
Indirect CO_2 emissions [2]	kt	–	–	–
SF_6 present in the electrical equipment	kg	820	894	894
SF_6 in stock	kg	321	323	326
SF_6 top ups	kg	2.0	2.9	n.d.
equivalent to tons of CO_2	t	47	68	n.d.
F-GAS present in air conditioning systems	kg	189	179	174
F-GAS top ups	kg	–	–	–
equivalent to tons of CO_2	t	–	–	–
Total releases from concession (MVF)	million m^3	957	1,057	970
Waste produced	t	2,861	2,866	2,747
of which sent to recycling		99.4%	99.0%	74.0%
Waste hazardous produced	t	13	12	3
of which sent to recycling	t	9	11	2
of which sent to recycling		72.1%	91.7%	80.0%
of which sent to disposal	t	4	1	1
of which sent to disposal		27.9%	8.3%	20.0%
Waste non-hazardous produced	t	2,848	2,854	2,744
of which sent to recycling	t	2,835	2,827	2,036
of which sent to recycling		99.5%	99.1%	74.2%
of which sent to disposal	t	13	27	708
of which sent to disposal		0.5%	0.9%	25.8%
of which waste removed from rivers and water basins (wood and grate cleaning residues) [3]	t	2,685	2,525	2,610
of which sent for recycling		100%	100%	[4] 77%

(1) The diesel fuel is used to fuel power supply continuity systems and for office heating; emissions are not calculated for this consumption, as the figure represents the purchases and not the consumption, furthermore no final balance is drawn up.

(2) Indirect emissions are calculated on the basis of the conversion factors relating to the thermoelectric production of each country published by Terna on its website (Terna, international comparisons)according to the Location Based approach.

(3) Wood and grate cleaning residues removed from the rivers represent a portion of the total waste produced. They are reported separately to point out the contribution given by the activities for the territory and the hydro-geological safety of river-beds.

(4) Transfer activities to the recycling facility started in May 2016.

(5) Data updated from 2017 reporting (13.9GWh) due to subsequent checks on plant's consumption. Update made in order to show the correct trend over the years.

THERMOELECTRIC POWER – ENVIRONMENT AND COMMUNITY

		2018	2017	2016
Production	GWh	2,151	2,453	2,693
ERG Power performance index[1]		64.8%	63.2%	62.4%
Energy consumption (primary sources)	TEP	422,212	472,468	507,738
	thousand m^3	493,556	550,876	592,765
Indirect energy consumption [2]	GWh	–	1,63	1,58
Indirect energy consumption [2] [4]	GWh	0.89	0.79	0.75
% Indirect green energy consumption		14.3%	15.3%	5.8%
Direct CO_2 emissions [3]	kt	1,008	1,130	1,216
Indirect CO_2 emissions[2]	kt	–	0.8	0.8
Indirect CO_2 emissions [2] [4]	t	0,4	0.4	0.4
NO_X emissions [3]	t	340	364	394
CO emissions	t	42	44	46
SF_6 present in the electrical equipment	kg	13,077	13,061	13,061
SF_6 in stock	kg	332	370	n.d.
SF_6 top ups	kg	11	16	5
equivalent to tons of CO_2	t	266	376	117
F-GAS present in air conditioning systems	kg	944	823	10
F-GAS top ups	kg	3	132	n.d.
equivalent to tons of CO_2	t	4	220	n.d.
Thermoelectric CO_2 index	kt/GWheq	0.399	0.408	0.404
Thermoelectric NO_X index	t/GWheq	0.13	0.13	0.13
Thermoelectric CO index	t/GWheq	0.017	0.016	0.015
Seawater withdrawals for plant cooling systems	million m^3	197	200	217
Well water withdrawals	million m^3	6	5	6
Water returned to the natural cycle	% of withdrawals	96.8%	97.1%	97.1%
Cooling water returned to the natural cycle	million m^3	197	200	217
Water resource use index demineralised water plant	% water produced/ inbound water	58.6%	63.8%	64.2%
Waste produced	t	1,546	2,079	3,715
of which sent to recycling		54.6%	65.3%	n.d.
Waste hazardous produced	t	174	291	351
of which sent to recycling	t	74	110	n.d.
of which sent to recycling		42.7%	37.8%	n.d.
of which sent to disposal	t	99	181	n.d.
of which sent to disposal		57.3%	62.2%	n.d.
Waste non-hazardous produced	t	1,373	1,788	3,364
of which sent to recycling	t	770	1,247	n.d.
of which sent to recycling		56.1%	69.7%	n.d.
of which sent to disposal	t	603	541	n.d.
of which sent to disposal		43.9%	30.3%	n.d.

(1) Index of "1st principle overall performance" calculated in accordance with the procedures laid down by Ministerial Decree of 5 September 2011 (CAR).
(2) Indirect emissions are calculated on the basis of the conversion factors relating to the thermoelectric production of each country published by Terna on its website (Terna, international comparisons)according to the Location Based approach.
(3) The figures relating to the atmospheric emissions are consistent with the annual data reported for the purposes of the E-PRTR Register and with the EU-ETS declarations.
(4) la variazione è determinata dalla modifica dell'assetto di impianto che permette una più precisa contabilizzazione dei consumi. La rettifica viene esposta per consentire una corretta visione dei trend dei consumi.

OPERATING DATA AND ENVIRONMENTAL INDICATORS - GROUP

		2018	2017	2016
Total electricity production	GWh	7,485	7,209	7,552
of which from renewable energy sources	GWh	5,334	4,756	4,859
Sales of electricity	GWh	13,627	11,747	12,303
Market share of power generation in Italy		2.15%	2.00%	2.28%
Market share of power sales in Italy		3.78%	3.20%	3.55%
Direct energy consumption (methane)	TEP	422,212	472,468	507,738
Direct energy consumption (methane)	Nm^3	493,556	550,876	592,765
CO_2 avoided	kt	3,029	2,901	2,993
Scope 1 emission originated by energy production	kt	1,008	1,130	1,216
Other Scope 1 emissions [2]	kt	1.4	1.0	0.2
Total indirect energy consuptions	GWh	–	27,7	21,5
Total indirect energy consuptions	GWh	20.3	20.9	21.2
% Indirect green energy consumption		86%	84%	51%
Scope 2 emissions [1]	kt	1.5	2.2	6.6
Scope 3 emission	kt	31,726	2,504	2,713
of wich generated by traded energy	kt	3,213	2,504	2,713
of wich generated by capital goods	kt	28,513	n.d.	n.d.
Waste produced	t	4,591	5,001	6,512
of which sent to recycling	t	3,786	4,230	3,901
of which sent to recycling		82%	85%	60%
of which non-hazardous	t	4,304	4,663	6,137
of which non-hazardous		94%	93%	94%

(1) The indirect emissions are calculated on the basis of the conversion factors relating to the gross thermoelectric production of each country published by Terna on its website (Source: Terna, international comparisons) and according to the Location Based and Market based approach.

(2) The variation is determined by the inclusion of the company technical fleet not previously accounted for. The emissions generated by vehicles allocated for mixed use were counted at 50%.