

# 5 DATA AND INDICATORS

# PERFORMANCE DATA AND INDICATORS

## ECONOMIC AND FINANCIAL RESULTS

		2019	2018	2017 restated
Core business revenue	million EUR	1,022	1,027	1,048
EBITDA (restated)	million EUR	504	491	472
EBIT (restated)	million EUR	205	216	220
Net Profit	million EUR	33	133	108
of which attributable to the owners of the parent	million EUR	32	133	108
Profit att. to the owners of the parent at replacement cost <sup>(1)</sup>	million EUR	104	107	117
Total net financial indebtedness	million EUR	1,554	1,343	1,233
Net invested capital	million EUR	3,340	3,172	3,110
Investments <sup>(2)</sup>	million EUR	432	510	94
Financial leverage		47%	42%	40%

<sup>(1)</sup> Does not include inventory gains (losses) of TotalErg, non-recurring items and related applicable theoretical taxes.

<sup>(2)</sup> Property, plant and equipment and intangible assets and investments in Merger & Acquisition operations.

Total revenues in 2019 includes EUR 93 thousand in grants from Public Administration or the European Community for employee training. ERG Group does not donate to political parties.

## ERG SHARES

		2019	2018	2017
Market capitalization	million EUR	2,889	2,480	2,315
Year-end reference price	EUR	18.50	16.50	15.40
Maximum price	EUR	20.18	20.34	16.50
Minimum price	EUR	15.69	15.08	9.96
Average price	EUR	17.73	17.78	12.62
Average volume	no.	256,639	304,159	249,533

Maximum price recorded on 29/11/2019, lowest price recorded on 25/03/2019.

## CUSTOMERS

		2019	2018	2017
Intragroup customers	n.	38	22	21
Industrial customers	n.	11	8	9
Site customers	n.	12	15	11
Electricity and GO traders and wholesales	n.	37	n.a.	n.a.
Customers operating in the electricity system	n.	19	n.a.	n.a.
Operation & Maintenance customers	n.	53	n.a.	n.a.

## PERSONNEL, ORGANISATION OF WORK AND INDUSTRIAL RELATIONS

		2019	2018	2017
Employees at 31/12	n.	754	737	714
Executives	n.	38	39	37
of which at Genoa site		66%	61%	59%
Middle managers	n.	197	193	169
Office workers	n.	342	325	331
Blue-collar workers	n.	177	180	177
Other external collaborators <sup>(1) (3)</sup>	n.	4	7	20
Female employment (%)		20.8%	20.1%	20.9%
of which: female employment at Genoa site (%)		43.0%	42.0%	42.5%
Average time at the company (years)		<sup>(4)</sup> 12.1	9.8	9.8
Average employee age (years)		43.2	43.8	43.6
Part time employees (Italy)	%	4.2%	5.0%	4.1%
Part time employees (abroad)	%	0.0%	1.3%	n.d.
Percentage of overtime (Italy)	%	5.4%	5.4%	4.8%
Percentage of overtime (abroad)	%	3.7%	2.6%	n.d.
Unionisation rate (Italy)	%	34.0%	31.7%	31.0%
Ongoing labour disputes	n.	1	3	2
Strikes <sup>(2)</sup>	ore	-	-	-
Turnover (inbound staff + outbound staff)/headcount at 31/12	%	13.7%	13.4%	10.2%
Inbound turnover	%	8.0%	8.3%	5.0%
Outbound turnover	%	5.7%	5.1%	5.2%

(1) The 2019 figure includes 2 men and 2 women, the 2018 figure includes 4 men and 3 women, the 2017 figure includes 13 men and 7 women.

(2) Hours of Italy-wide strikes.

(3) Value restated with respect to that indicated into the 2017 Non-Financial Statement due to improved reporting methodology.

(4) Increase due to the updating of the employee database.

## TRAINING

		2019	2018	2017
Total training <sup>(1)</sup>	hours	46,758	34,356	37,950
of which required by law	%	16%	17%	n.d.
of which for technical and soft skills improvement	%	84%	83%	n.d.
Average training per employee	days/emp	7.8	5.9	6.6

<sup>(1)</sup> Total training also includes courses provided to staff who left the company during the year.

TRAINING BY PROFESSIONAL CATEGORY AND GENDER GRI 404	2019			2018			2017		
	Men hours	Women hours	Total	Men hours	Women hours	Total	Men hours	Women hours	Total
Executives	1,613	88	1,701	1,044	113	1,157	2,003	171	2,174
Middle managers	10,456	4,104	14,560	6,927	1,876	8,803	7,533	2,578	10,111
Office workers	14,429	5,365	19,794	12,002	3,579	15,581	14,600	4,455	19,055
Blue-collar workers	10,702	-	10,702	8,814	-	8,814	6,348	262	6,610
<b>Total</b>	<b>37,201</b>	<b>9,557</b>	<b>46,758</b>	<b>28,788</b>	<b>5,568</b>	<b>34,356</b>	<b>30,484</b>	<b>7,466</b>	<b>37,950</b>

AVERAGE TRAINING BY PROFESSIONAL CATEGORY AND GENDER <sup>(1)</sup> GRI 404-1	2019		2018		2017	
	Men h/emp	Women h/emp	Men h/emp	Women h/emp	Men h/emp	Women h/emp
Executives	44.8	44.0	28.2	56.5	57.2	85.5
Middle managers	73.6	74.6	48.4	37.5	60.8	57.3
Office workers	59.6	53.7	52.4	37.3	62.9	45.0
Blue-collar workers	60.5	-	49.0	-	36.5	87.3

<sup>(1)</sup> Average training by professional category and gender at 31/12.

## DETAILED ANALYSIS OF PERSONNEL (NO. OF EMPLOYEES)

TYPE OF CONTRACT AND GENDER GRI 102-8	2019			2018			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent contract - Full time	597	124	721	588	113	701	564	118	682
Permanent contract - Part-time	-	31	31	-	34	34	-	29	29
Fixed-term contract - Full time	-	2	2	1	1	2	1	2	3
<b>Group Total</b>	<b>597</b>	<b>157</b>	<b>754</b>	<b>589</b>	<b>148</b>	<b>737</b>	<b>565</b>	<b>149</b>	<b>714</b>

TYPE OF CONTRACT AND REGION GRI 102-8	2019			2018			2017		
	Italy	Abroad	Total	Italy	Abroad	Total	Italy	Abroad	Total
Permanent contract - Full time	643	78	721	628	73	701	635	47	682
Permanent contract - Part-time	31	-	31	33	1	34	29	-	29
Fixed-term contract - Full time	2	-	2	1	1	2	2	1	3
<b>Group Total</b>	<b>676</b>	<b>78</b>	<b>754</b>	<b>662</b>	<b>75</b>	<b>737</b>	<b>666</b>	<b>48</b>	<b>714</b>

TYPE OF CONTRACT GRI 102-41	2019		2018		2017	
	Total	%	Total	%	Total	%
Electric (Italy)	643	85%	630	86%	112	16%
Industrial executives (Italy)	38	5%	39	5%	37	5%
French contract	44	6%	37	5%	n.d.	n.d.
Foreign contracts	29	4%	31	4%	42	6%
Energy and Oil (Italy)	-	-	-	-	372	52%
Metalworking and Mechanical Engineering (Italy)	-	-	-	-	151	21%
<b>Group Total</b>	<b>754</b>		<b>737</b>		<b>714</b>	

BY COUNTRY AND GENDER	2019			2018			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Italy	535	141	676	528	134	662	531	135	666
France	37	9	46	33	8	41	14	7	21
Germany	20	4	24	22	3	25	17	4	21
UK	2	1	3	3	-	3	-	-	-
Bulgaria	1	-	1	1	-	1	1	-	1
Poland	-	1	1	-	1	1	-	1	1
Romania	2	1	3	2	2	4	2	2	4
<b>Group Total</b>	<b>597</b>	<b>157</b>	<b>754</b>	<b>589</b>	<b>148</b>	<b>737</b>	<b>565</b>	<b>149</b>	<b>714</b>

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

PERSONNEL EMPLOYED BY AGE AND GENDER - 2019	Men	Women	Total	Turnover rate
<30 years	12	2	14	40.0%
between 30 and 50 years	23	7	30	6.4%
>50 years	-	-	-	-
<b>Total</b>	<b>35</b>	<b>9</b>	<b>44</b>	<b>6.5%</b>
Inbound turnover rate	6.5%	6.4%	6.5%	

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%
<b>Total</b>	<b>22</b>	<b>6</b>	<b>28</b>	<b>4.2%</b>
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%
<b>Total</b>	<b>24</b>	<b>2</b>	<b>26</b>	<b>3.9%</b>
Inbound turnover rate	4.5%	1.5%	3.9%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2019	Men	Women	Total	Turnover rate
<30 years	-	-	-	-
between 30 and 50 years	11	2	13	2.8%
>50 years	14	-	14	8.1%
<b>Total</b>	<b>25</b>	<b>2</b>	<b>27</b>	<b>4.0%</b>
Outbound turnover rate	4.7%	1.4%	4.0%	

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%
<b>Total</b>	<b>26</b>	<b>6</b>	<b>32</b>	<b>4.8%</b>
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%
<b>Total</b>	<b>19</b>	<b>6</b>	<b>25</b>	<b>3.8%</b>
Outbound turnover rate	3.6%	4.4%	3.8%	

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

PERSONNEL EMPLOYED BY AGE AND GENDER - 2019	Men	Women	Total	Turnover rate
<30 years	4	–	4	25.0%
between 30 and 50 years	7	5	12	20.3%
>50 years	–	–	–	–
<b>Total</b>	<b>11</b>	<b>5</b>	<b>16</b>	<b>20.5%</b>
Inbound turnover rate	17.7%	31.3%	20.5%	

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	–	–	–	–
<b>Total</b>	<b>26</b>	<b>7</b>	<b>33</b>	<b>44%</b>
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	–	–	–	–
<b>Total</b>	<b>10</b>	<b>–</b>	<b>10</b>	<b>20.8%</b>
Inbound turnover rate	29.4%	–	20.8%	

OUTBOUND EMPLOYEES BY AGE AND GENDER - 2019	Men	Women	Total	Turnover rate
<30 years	3	1	4	25.0%
between 30 and 50 years	7	3	10	16.9%
>50 years	2	–	2	66.7%
<b>Total</b>	<b>12</b>	<b>4</b>	<b>16</b>	<b>20.5%</b>
Outbound turnover rate	19.4%	25.0%	20.5%	

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	–	–	–	–
<b>Total</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>8,0%</b>
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%
<b>Total</b>	<b>10</b>	<b>2</b>	<b>12</b>	<b>25,0%</b>
Outbound turnover rate	29,4%	14,3%	25,0%	

## DETAILED ANALYSIS OF PERSONNEL (NO. OF EMPLOYEES)

% PROFESSIONAL CATEGORY AND GENDER GRI 405-1	2019			2018			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	95%	5%	38	95%	5%	39	94%	6%	37
Middle Managers	72%	28%	197	74%	26%	193	73%	27%	169
Office workers	71%	29%	342	70%	30%	325	70%	30%	331
Blue-collar workers	100%	-	177	100%	-	180	98%	2%	177
<b>Total</b>	<b>597</b>	<b>157</b>	<b>754</b>	<b>589</b>	<b>148</b>	<b>737</b>	<b>565</b>	<b>149</b>	<b>714</b>

% PROFESSIONAL CATEGORY AND AGE GRI 405-1	2019				2018				2017			
	< 30 years	30-50 years	> 50 years	Total	< 30 years	30-50 years	> 50 years	Total	< 30 years	30-50 years	> 50 years	Total
Executives	-	50%	50%	38	-	54%	46%	39	-	59%	41%	37
Middle Managers	1%	81%	18%	197	5%	79%	17%	193	1%	80%	18%	169
Office workers	9%	64%	27%	342	6%	65%	28%	325	5%	66%	29%	331
Blue-collar workers	10%	74%	16%	177	8%	74%	18%	180	11%	73%	16%	177
<b>Total</b>	<b>51</b>	<b>528</b>	<b>175</b>	<b>754</b>	<b>45</b>	<b>518</b>	<b>174</b>	<b>737</b>	<b>36</b>	<b>506</b>	<b>172</b>	<b>714</b>

AGE BRACKET AND GENDER	2019			2018			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<30 years	43	8	51	39	6	45	32	4	36
between 30 and 50 years	411	117	528	405	113	518	388	118	506
>50 years	143	32	175	145	29	174	145	27	172
<b>Total</b>	<b>597</b>	<b>157</b>	<b>754</b>	<b>589</b>	<b>148</b>	<b>737</b>	<b>565</b>	<b>149</b>	<b>714</b>

PERSONNEL EMPLOYED BY ORIGIN AND REGION	2019			2018			2018		
	Italy	Abroad	Total	Italy	Abroad	Total	Italy	Abroad	Total
Company acquisitions	-	-	-	-	12	12	-	-	-
Permanent contract	42	16	58	25	21	46	24	10	34
Temporary contract	2	-	2	3	-	3	1	-	1
Training	-	-	-	-	-	-	1	-	1
<b>Total</b>	<b>44</b>	<b>16</b>	<b>60</b>	<b>28</b>	<b>33</b>	<b>61</b>	<b>26</b>	<b>10</b>	<b>36</b>

OUTBOUND EMPLOYEES BY REASON AND GENDER	2019			2018			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Resignation	20	6	26	11	3	14	14	5	19
End of temporary contract	-	-	-	-	3	3	2	1	3
Agreed resolution	17	-	17	18	3	21	12	3	15
<b>Total</b>	<b>37</b>	<b>6</b>	<b>43</b>	<b>29</b>	<b>9</b>	<b>38</b>	<b>28</b>	<b>9</b>	<b>37</b>



## SAFETY\*

INJURIES IN THE WORKPLACE (NO.)	Men	Women	Total 2019	Total 2018	Total 2017
Italy	1	-	1	4	4
Abroad	3	-	3	-	2
<b>Total</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>6</b>

FREQUENCY INDEX	Men	Women	Total 2019	Total 2018	Total 2017
Italy	1.10	-	0.89	3.61	3.53
Abroad	31.13	-	22.41	-	20.03
<b>Total</b>	<b>3.97</b>	<b>-</b>	<b>3.17</b>	<b>3.25</b>	<b>4.87</b>

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

SEVERITY INDEX	Men	Women	Total 2019	Total 2018	Total 2017
Italy	0.04	-	0.03	0.16	0.24
Abroad	1.43	-	1.03	-	0.24
<b>Total</b>	<b>0.17</b>	<b>-</b>	<b>0.14</b>	<b>0.15</b>	<b>0.24</b>

Severity index calculated as (no. of days lost x 1,000)/no. hours worked

OTHER SAFETY INDICATORS	Men	Women	Total 2019	Total 2018	Total 2017
Sick leave rate [%]	2.0%	2.2%	2.0%	2.2%	<sup>(1)</sup> 1.6%
Working days lost due to injuries in the workplace (no.)	175	-	175	182	300
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 refers to Italian employees only (no. of days absence /workable days).

## HSE AUDIT AND SAFETY WALKS

		2019	2018	2017
Wind	no.	368	237	554
Solar	no.	29	33	n.a.
Hydro	no.	58	87	51
Power	no.	116	86	53

## SAFETY

THIRD-PARTY COMPANY INJURIES		2019	2018	2017
Third-party company injuries	no.	2	2	4
Frequency index – third-party companies - Total		3.67	4.26	7.28
Frequency index – third-party companies - Italy		2.40	5.19	2.47
Frequency index – third-party companies - Abroad		7.80	-	20.67
Severity index – third-party companies - Total		0.17	0.16	0.05
Severity index – third-party companies - Italy		0.20	0.19	0.06
Severity index – third-party companies - Abroad		0.08	-	0.03

Frequency index calculated as  $(\text{no. of injuries} \times 1,000,000) / \text{no. hours worked}$

Severity index calculated as  $(\text{no. of days lost} \times 1,000) / \text{no. hours worked}$ .

**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, Power, Wind plants Italy and Office: manual recording of the hours worked.

Wind plants abroad: estimated hours worked, given the technical impossibility of recording the presence of O&M contractors with global service agreements, is based on the assumption that one FTE can service 15 MW, multiplied by workable days (260) and by 8 hours.

Plants under construction in the UK: hours recorded according to site report.

**METHOD FOR CALCULATING DAYS LOST DUE TO INJURIES - THIRD-PARTY COMPANIES**

Report sent by the company of the injured worker.

## SUPPLIERS

		2019	2018	2017
Active suppliers (transactions with at least one order)	no.	1,736	1,772	1,564
with registered offices or a billing address in Italy	no.	63%	65%	71%
with registered offices or a billing address in the regions where our plants are located	no.	35%	34%	35%
% expenditure local suppliers (Italy/total)		61%	77%	74%
Qualified suppliers on Vendor List	no.	997	990	920
of which: qualified based on HSE parameters	no.	231	223	226
Newly qualified suppliers in the year	no.	67	67	61
of which: newly qualified based on HSE parameters	no.	31	36	31
Average qualification time	days	41	59	103
% of tenders (of total value of purchases)		54%	53%	41%
% of tenders (of total number of purchases)		25%	29%	31%

## WIND - ENVIRONMENT AND COMMUNITY

		2019	2018	2017
Production	GWh	4,000	3,464	3,613
Load factor		24%	22%	23%
CO <sub>2</sub> avoided	kt	2,350	2,050	2,270
Indirect energy consumption <sup>(1)</sup>	GWh	12.01	11.47	<sup>(4)</sup> 11.43
% Indirect green energy consumption		97.7%	98.6%	82.3%
Indirect CO <sub>2</sub> emissions <sup>(2)</sup>	kt	0.16	0.09	1.4
Indirect energy consumptions by installed MW	MWh/MW	5.97	6.07	6.12
SF <sub>6</sub> present in the electrical equipment <sup>(3)</sup>	kg	2,723	3,230	924
SF <sub>6</sub> in stock	kg	1,424	1,424	1,333
SF <sub>6</sub> top ups	kg	1.0	0.5	3.2
equivalent to tons of CO <sub>2</sub>	t	23	12	76
F-GAS present in air conditioning systems	kg	136	88	80
F-GAS top ups	kg	-	12	-
equivalent to tons of CO <sub>2</sub>	t	-	19	-
Waste produced	t	380	185	56
of which sent to recycling		34.1%	53.3%	60.9%
Hazardous waste produced	t	49	102	35
of which sent to recycling	t	26	45	16
of which sent to recycling		52.6%	44.0%	45.7%
of which sent to disposal	t	23	49	19
of which sent to disposal		47.4%	47.7%	54.3%
Non-hazardous waste produced	t	331	83	21
of which sent to recycling	t	104	54	18
of which sent to recycling		31.4%	65.3%	85.7%
of which sent to disposal	t	227	23	3
of which sent to disposal		68.7%	28.1%	14.3%

(1) The increase in consumption is caused by the increase in the plants running.

(2) The data 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, international comparisons) according to a Location Based approach.

(3) Data as at year-end 2018 include quantities into the wind turbines (1,870 kg) and into plants abroad (436 kg) not included in the previous years.

(4) Value restated with respect to that indicated into the 2017 Non-Financial Statement due to improved reporting methodology.

## SOLAR - ENVIRONMENT AND COMMUNITY

		2019	2018	2017
Production	GWh	226	130	n.a.
Performance ratio		81.70%	79.10%	n.a.
CO <sub>2</sub> avoided	kt	114.36	67.99	n.a.
Indirect energy consumption	GWh	2.15	1.16	n.a.
% Indirect green energy consumption		65.3%	3.1%	-
Indirect CO <sub>2</sub> emissions	kt	0.4	0.6	n.a.
SF6 present in the electrical equipment	kg	9.80	9.80	n.a.
SF6 top ups	kg	-	-	n.a.
equivalent to tons of CO <sub>2</sub>	t	-	-	n.a.
Area covered by photovoltaic plants	m <sup>2</sup>	901,699	630,291	n.a.
Water used for panel cleaning	m <sup>3</sup>	1,252	494	n.a.
Waste produced <sup>(1)</sup>	t	-	-	n.a.
of which sent to recycling		-	-	n.a.
Hazardous waste produced	t	-	-	n.a.
of which sent to recycling	t	-	-	n.a.
of which sent to recycling		-	-	n.a.
of which sent to disposal	t	-	-	n.a.
of which sent to disposal		-	-	n.a.
Non-hazardous waste produced	t	-	-	n.a.
of which sent to recycling	t	-	-	n.a.
of which sent to recycling		-	-	n.a.
of which sent to disposal	t	-	-	n.a.
of which sent to disposal		-	-	n.a.

[1] In 2018 and 2019 the Operation & Maintenance activities were performed by third parties.

## OFFICES IN ITALY

		2019	2018	2017
Indirect energy consumption	MWh	1,248	1,333	1,154
Indirect CO <sub>2</sub> emissions <sup>(1)</sup>	t	377	371	363

[1] The data 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, international comparisons) according to a Location Based approach.

Waste: waste produced in offices is disposed of as municipal waste and therefore quantities are not accounted for.

Water consumption: the consumption of water in the offices refers exclusively to uses for sanitary purposes and is part of the condominium services. It is immaterial with respect to the business.

## HYDROELECTRIC POWER – ENVIRONMENT AND COMMUNITY

		2019	2018	2017
Production	GWh	1,229	1,740	1,144
Technical availability plants		97.64%	97.87%	96.63%
CO <sub>2</sub> avoided	kt	622	910	631
Energy consumption from primary sources - Diesel fuel <sup>(1)</sup>	litres	19,500	32,717	17,000
Indirect energy consumption	GWh	8.23	5.46	<sup>(4)</sup> 7.35
% Indirect green energy consumption		100%	100%	100%
Indirect CO <sub>2</sub> emissions <sup>(2)</sup>	kt	-	-	-
SF <sub>6</sub> present in the electrical equipment	kg	850	820	894
SF <sub>6</sub> in stock	kg	321	321	323
SF <sub>6</sub> top ups	kg	-	2,0	2,9
equivalent to tons of CO <sub>2</sub>	t	-	47	68
F-GAS present in air conditioning systems	kg	196	189	179
F-GAS top ups	kg	-	-	-
equivalent to tons of CO <sub>2</sub>	t	-	-	-
Total releases from concession (MVF)	milioni di m <sup>3</sup>	963	957	1,057
Waste produced	t	3,104	2,861	2,866
of which sent to recycling		97.9%	99.4%	99.0%
Hazardous waste produced	t	21	13	12
of which sent to recycling	t	19	9	11
of which sent to recycling		90.5%	72.1%	91.7%
of which sent to disposal	t	2	4	1
of which sent to disposal		9.5%	27.9%	8.3%
Non-hazardous waste produced	t	3,083	2,848	2,854
of which sent to recycling	t	3,020	2,835	2,827
of which sent to recycling		98.0%	99.5%	99.1%
of which sent to disposal	t	63	13	27
of which sent to disposal		2.0%	0.5%	0.9%
of which waste removed from rivers and water basins (wood and grate cleaning residues) <sup>(3)</sup>	t	2,920	2,685	2,525
of which sent to recycling		100%	100%	100%

(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) 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.

(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) Data updated from 2017 Non-Financial Statement (13.9 GWh) 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

		2019	2018	2017
Production	GWh	2,504	2,151	2,453
ERG Power performance index <sup>(1)</sup>		64.04%	64.80%	63.20%
Energy consumption (primary sources - methane)	TEP migliaia m <sup>3</sup>	485,145	422,212	472,468
Indirect energy consumption <sup>(2)</sup>	GWh	1.25	0.89	0.79
% Indirect green energy consumption		19.6%	14.3%	15.3%
Direct CO <sub>2</sub> emissions <sup>(3)</sup>	kt	1,155	1,008	1,130
Indirect CO <sub>2</sub> emissions <sup>(2)</sup>	kt	0.5	0.4	0.4
NO <sub>x</sub> emissions <sup>(3)</sup>	t	393	340	364
CO emissions	t	45	42	44
SF <sub>6</sub> present in the electrical equipment <sup>(4)</sup>	kg	13,072	13,077	13,061
SF <sub>6</sub> in stock	kg	326	332	370
SF <sub>6</sub> top ups	kg	8	11	16
equivalent to tons of CO <sub>2</sub>	t	191	266	376
F-GAS present in air conditioning systems <sup>(4)</sup>	kg	944	944	823
F-GAS top ups	kg	-	3	132
equivalent to tons of CO <sub>2</sub>	t	-	4	220
Thermoelectric CO <sub>2</sub> index	kt/GWheq	0.396	0.399	0.408
Thermoelectric NO <sub>x</sub> index	t/GWheq	0.135	0.134	0.131
Thermoelectric CO index	t/GWheq	0.016	0.017	0.016
Seawater withdrawals for plant cooling systems	million m <sup>3</sup>	224	197	200
Well water withdrawals	million m <sup>3</sup>	6	6	5
Water returned to the natural cycle	% of withdrawals	97.1%	96.8%	97.1%
Cooling water returned to the natural cycle	million m <sup>3</sup>	224	197	200
Water resource use index demineralised water plant	% water produced/ inbound water	60.9%	58.6%	63.8%
Waste produced	t	861	1,546	2,079
of which sent to recycling		70.1%	54.6%	65.3%
Hazardous waste produced	t	51	174	291
of which sent to recycling	t	18	74	110
of which sent to recycling		36.0%	42.7%	37.8%
of which sent to disposal	t	33	99	181
of which sent to disposal		64.0%	57.3%	62.2%
Non-hazardous waste produced	t	810	1,373	1,788
of which sent to recycling	t	585	770	1,247
of which sent to recycling		72.3%	56.1%	69.7%
of which sent to disposal	t	225	603	541
of which sent to disposal		27.7%	43.9%	30.3%

[1] Index of "1<sup>st</sup> principle overall performance" calculated in accordance with the procedures laid down by Italian Ministerial Decree of 5 September 2011 (CAR).

[2] 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.

[3] The data 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] The data consider plants containing a quantitative amount over 5 t. CO<sub>2</sub> eq.

## OPERATING DATA AND ENVIRONMENTAL INDICATORS - GROUP

		2019	2018	2017
Total electricity production	GWh	7,959	7,485	7,209
of which from renewable energy sources	GWh	5,455	5,334	4,756
Sales of electricity	GWh	15,120	13,627	11,747
Market share of power generation in Italy		2.16%	2.15%	2.00%
Market share of power sales in Italy		4.16%	3.78%	3.20%
Direct energy consumption (methane)	TEP	485,145	422,212	472,468
Direct energy consumption (methane)	Nm <sup>3</sup>	572,731	493,556	550,876
CO <sub>2</sub> avoided	kt	3,086	3,029	2,901
Scope 1 emission originated by energy production	kt	1,155	1,008	1,130
Other Scope 1 emissions <sup>(2)</sup>	kt	1.3	1.4	1.0
Total indirect energy consumptions	GWh	24.9	20.3	20.9
% Indirect green energy consumption		89%	86%	84%
Scope 2 emissions <sup>(1)</sup>	kt	1.4	1.5	2.2
Scope 3 emissions generated by capital goods (Wind)	kt	31	29	-
waste produced	t	4,345	4,591	5,001
of which sent to recycling	t	3,772	3,786	4,230
of which sent to recycling		87%	82%	85%
of which non-hazardous	t	4,224	4,304	4,663
of which non-hazardous		97%	94%	93%

(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%.