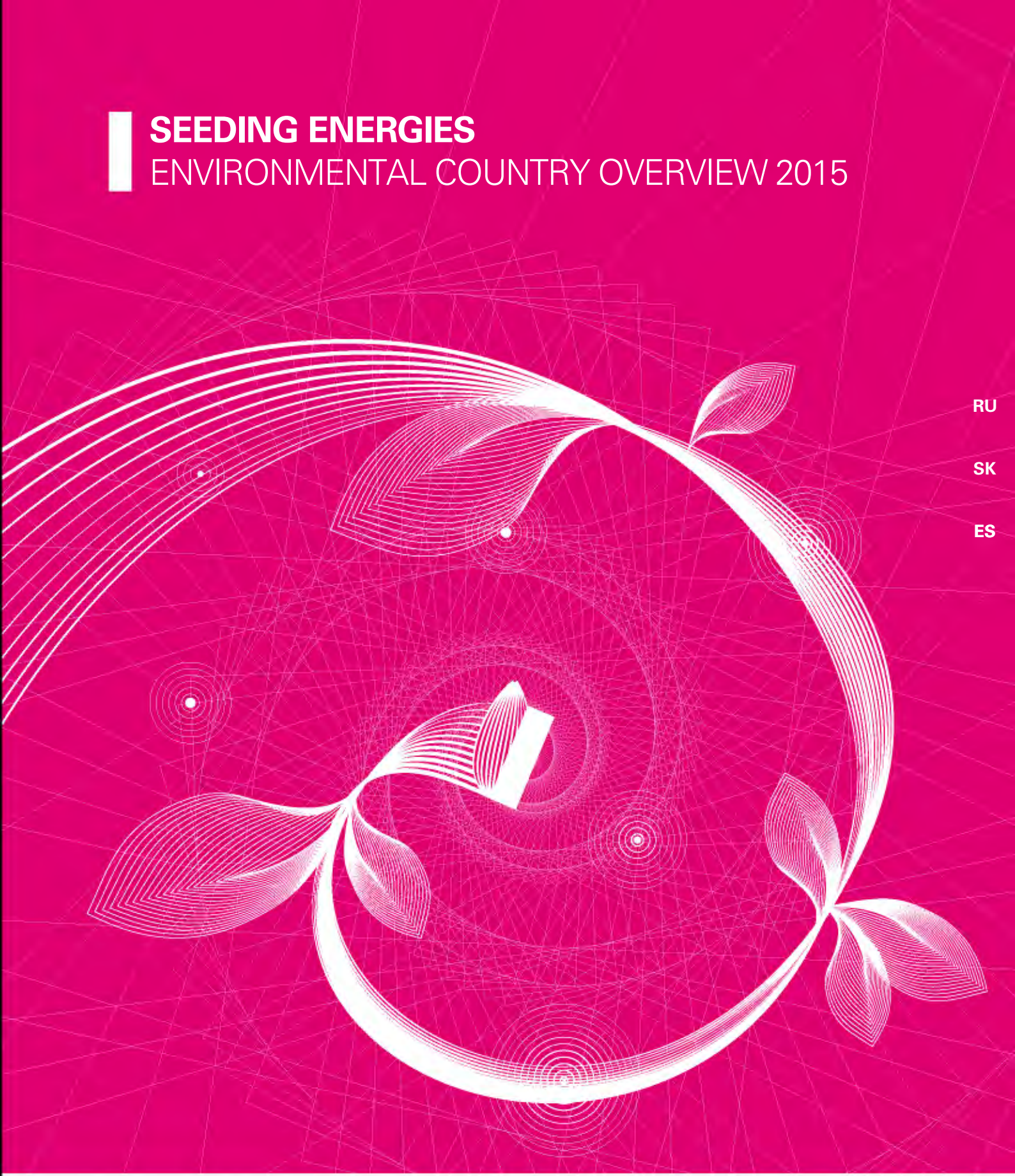
SEEDING ENERGIES
ENVIRONMENTAL COUNTRY OVERVIEW 2015

RU

SK

ES



Environment: general data

G4-9

G4-9

Sources

Thermoelectric · Renewable · Nuclear

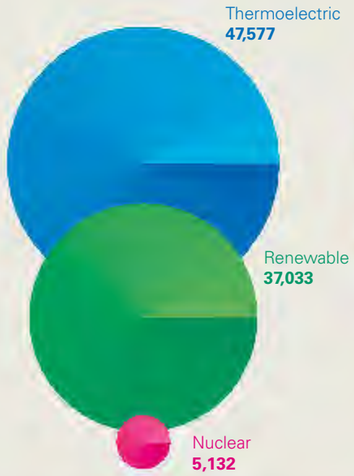
Geographic area

Europe · Latin America · North America

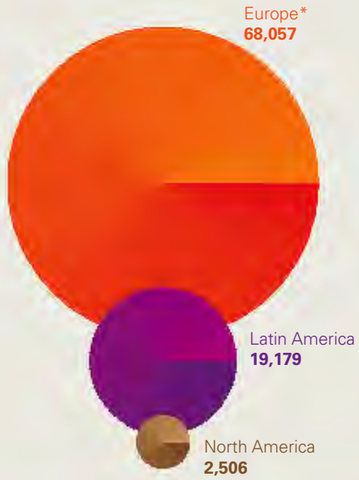
Net installed capacity 2015

MW

BY SOURCE

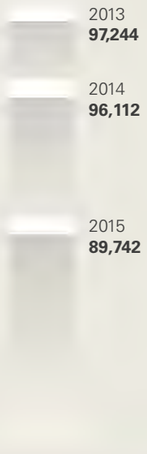


BY GEOGRAPHIC AREA



BY YEAR

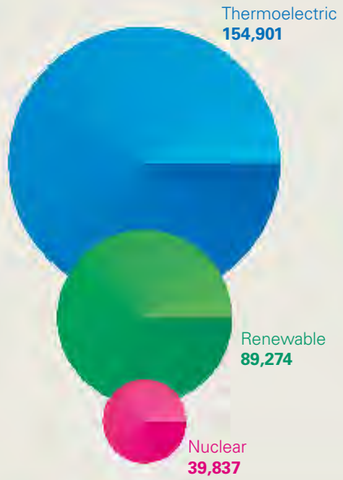
MW



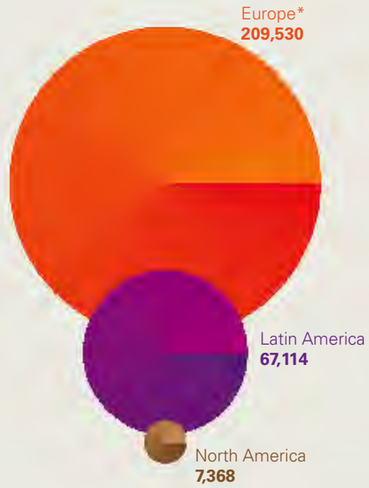
Energy production 2015

GWh

BY SOURCE

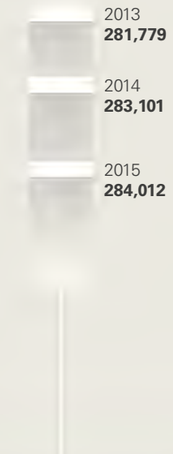


BY GEOGRAPHIC AREA



BY YEAR

GWh

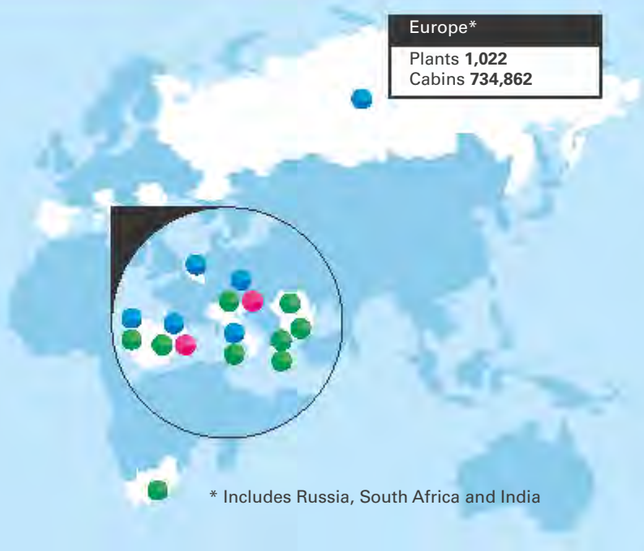


Length of the grid

km

High voltage	Medium voltage	Low voltage
38,249	662,049	1,165,373

Country	Plants	Cabins
Canada	2	-
United States	98	-
Argentina	3	18,600
	2	
Brazil	1	252,932
	38	
Chile	8	22,232
	28	
Colombia	2	69,606
	14	
Costa Rica	3	-
Guatemala	5	-
Mexico	9	-
Panama	2	-
Peru	3	9,762
	8	
Uruguay	1	-



Country	Plants	Cabins
Belgium	1	-
Bulgaria	2	-
Greece	50	-
Italy	38	578,836
	604	
Portugal	1	-
	13	
Romania	13	22,482
Russia	4	-
Slovakia	2	-
	35	
	2	
Spain	33	133,544
	217	
	3	
South Africa	1	-
India	3	-

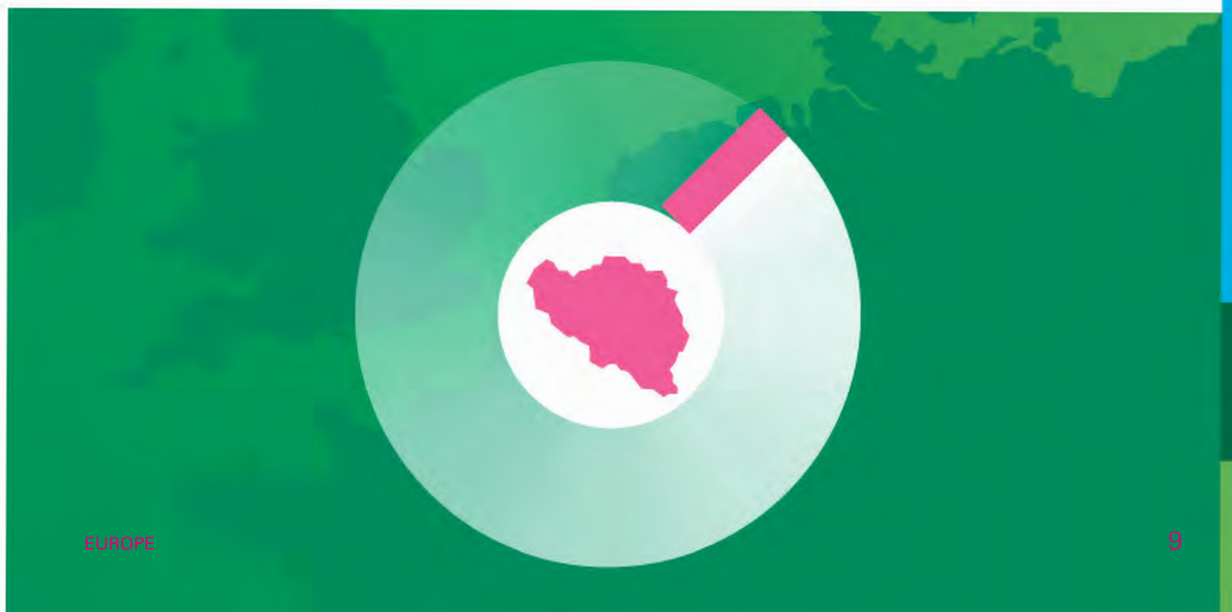
The number of plants indicated may vary in the individual country sheets due to differing aggregation criteria used on the basis of organizational and non-operational criteria.

EUROPE

BELGIUM

Thermoelectric
production

Marcinelle Energie SA



BELGIUM

Thermoelectric **production**

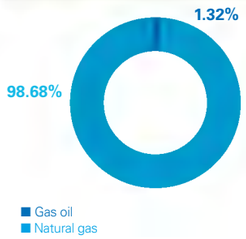
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
1	406 MW	1,150 millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
With gas turbines in combined cycle	1	1	406
Total	1	1	406

Fuel consumption

TOTAL: **179,263 t** (of oil equiv.)



Waste water

DISCHARGED (m^3)

485,000

Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

BELGIUM

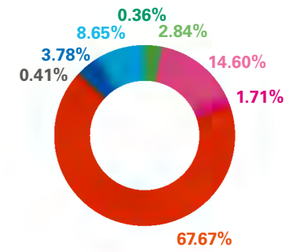
Thermoelectric **production**

ATMOSPHERIC EMISSIONS

NO_x (t)	170
CO_2 (t)	427,255

Consumables

TOTAL: **185 t**



Special waste

TOTAL PRODUCED **153 t**
TOTAL TRANSFERRED FOR RECOVERY **153 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	148	5
TRANSFERRED FOR RECOVERY	148	5

Water for industrial use (100% from river)

TOTAL CONSUMPTION: **1,299,000 m^3**

TOTAL FRESH WATER DRAWN OFF: **1,299,000 m^3**

BELGIUM

Significant events

Significant events in 2015

Enel operates in Belgium with Marcinelle Energie SA in thermoelectric production.

In 2015 production rose compared to previous years following the greater demand from the electricity market.

Consequently, the consumption of industrial water and consumables also rose, except for some specific materials, such as for example polyelectrolyte (which fell from around 5% of consumables in 2014 to 1.7% in 2015) which is used in place of the previous system of batteries.

G4-EN23

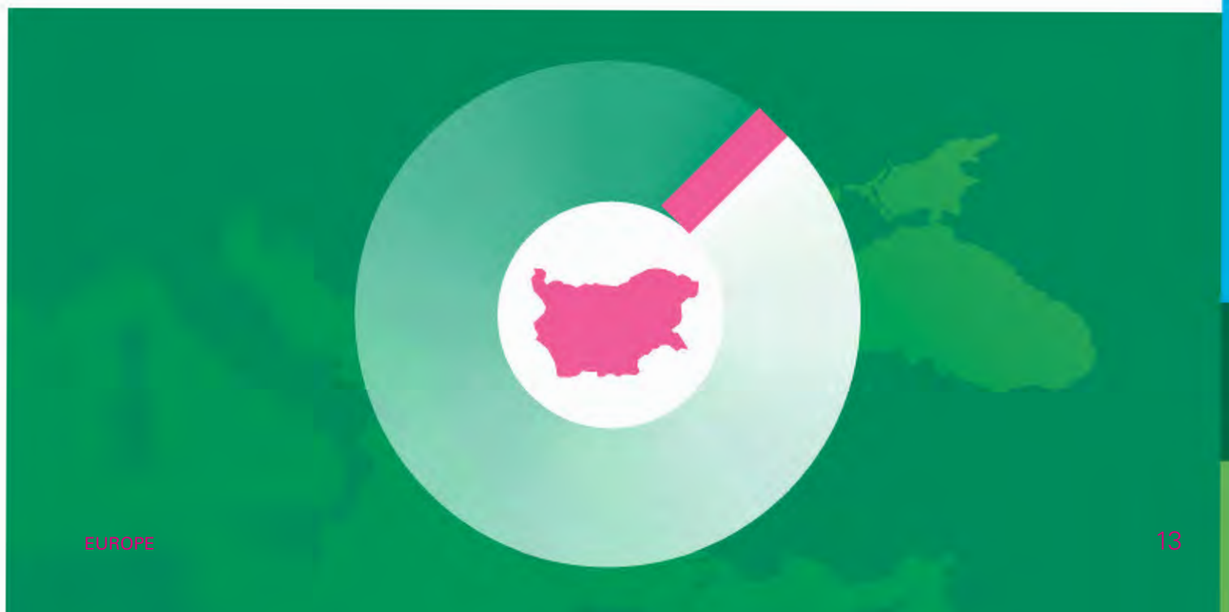
Special waste fell from 169 t to 153 t. The total transferred for recovery was 100%.

BULGARIA

Production from **renewables**

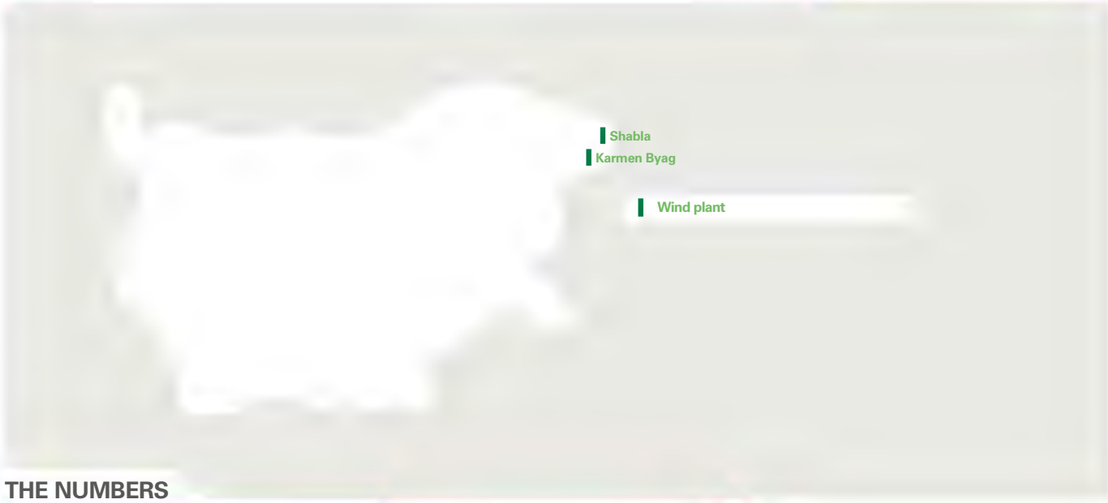
> Wind production

Enel Green Power SpA



BULGARIA

Production from **renewables**



THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
2	42 MW	90 millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
WIND		
	2	42
Total	2	42

BULGARIA

Production from **renewables**

Emissions of CO_2 avoided* (t)

TOTAL: 111,402

Wind
111,402

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

*Emissions avoided are calculated as the sum of the emissions avoided in the various areas taking as a benchmark for the specific CO_2 emission the average thermoelectric production of the individual country taken from the Enerdata database (http://services.enerdata.eu). The figure is the product of the electricity production obtained with each renewable or nuclear source and the specific CO_2 emission from thermoelectric production in the country where Enel operates.

Equivalent annual hours of use*

TOTAL: 2,132

For production:

from **wind**
2,132

*Annual production/power ratio.

Special waste

TOTAL PRODUCED (t)
2

TOTAL TRANSFERRED FOR RECOVERY (t)
2

BULGARIA

Significant events

Significant events in 2015

Enel operates in Bulgaria with Enel Green Power in producing wind energy.

Enel Green Power owns wind plants for a net maximum capacity of 42 MW.

G4-EN19

Wind production enabled the avoidance of the atmospheric emission of more than 111 thousand tons of CO_2.

G4-EN23

During 2015 there was a decrease in special waste which went from 4 t in 2014 to 2 t in 2015. The waste transferred for recovery was 100%.

GREECE

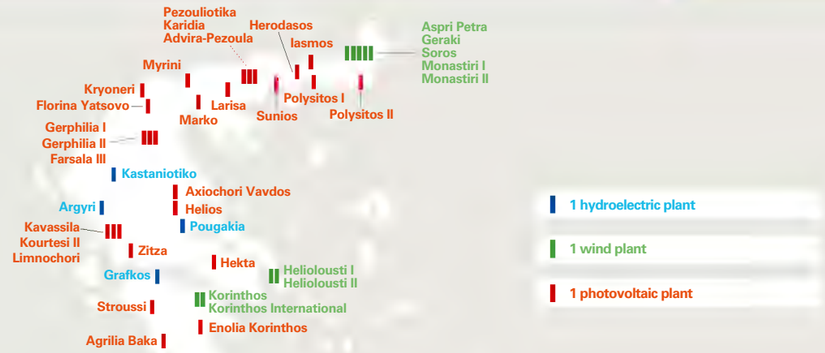
Production from **renewables**

> Hydroelectric, wind and photovoltaic production

Enel Green Power SpA

GREECE

Production from **renewables**



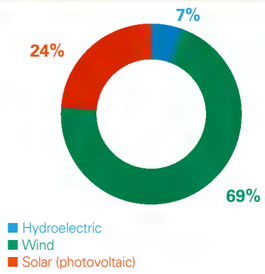
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
50	**290** MW	**549** millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
HYDRO		
Run-of-the-river	5	19
WIND		
	17	200
PHOTOVOLTAIC		
	28	71
Total	50	290

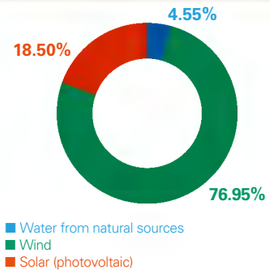
Net maximum capacity

TOTAL: **290 MW**



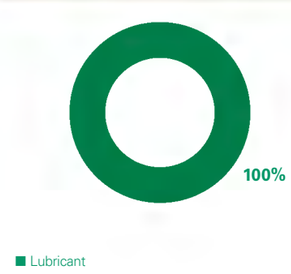
Net electricity production

TOTAL: **549 million of kWh**



Consumables

TOTAL: **4.5 t**



GREECE

Production from **renewables**

Equivalent annual hours of use*

TOTAL: 4,848

Wind
2,109

Photovoltaic
1,437

Hydro
1,302

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 497,865

For production:

from **wind**
383,393

from **solar**
91,760

hydroelectric from **natural sources**
22,713

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

OTHER DATA

WIND PLANT
Surface area occupied by lay-bys, roads, buildings:
116.65 ha

PHOTOVOLTAIC PLANT
Surface area occupied by modules:
80.42 ha

Total surface area concerned:
246.89 ha

Special waste

TOTAL PRODUCED **82 t**
TOTAL TRANSFERRED FOR RECOVERY **98 t**

GREECE

Significant events

Significant events in 2015

Total net production rose by around 60 GWh, 12% more than in 2014.

In particular wind production rose by 63 GWh, up by 18% on 2014, and photovoltaic production rose by 6 GWh, 6% up on 2014. On the other hand, a fall was recorded in hydroelectric production of around 9 GWh, 25% down on the previous year.

G4-EN19

Renewable production (wind, hydroelectric and photovoltaic) enabled the avoidance of atmospheric emissions of around 498 thousand tons of CO_2.

G4-EN23

In 2015 there was a reduction in special waste from 90 t in 2014 to 82 t in 2015. There was also an increase in non-hazardous waste transferred for recovery compared to that produced. This difference was due to the transfer for recovery of waste stored in 2014.

ITALY

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**
	> Hydroelectric, wind, solar and geothermal production	
Enel Produzione SpA	Enel Produzione SpA Enel Green Power SpA	Enel Distribuzione SpA (e-distribuzione as from June 30, 2016)

ITALY

Thermoelectric **production**

THE NUMBERS

POWER PLANTS **37**

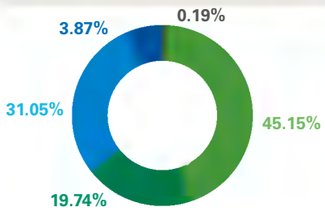
NET POWER **16,743** MW

PRODUCTION **43,495** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
Steam (condensing)	13	32	7,558
Steam with back-up gas turbines	2	8	3,306
With gas turbines in combined cycle	7	14	5,199
With gas turbines in simple cycle	6	18	648
With alternative engines	9	40	32
Total	37	112	16,743

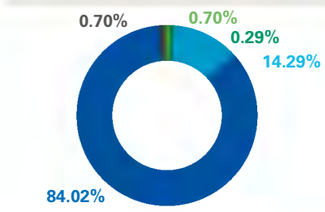
Net maximum capacity

TOTAL: **16,743 MW**



Fuel consumption

TOTAL: **10,064,197 t** (of oil equiv.)



Waste water

DISCHARGED (m^3)
4,404,000

USED INSIDE PLANT (m^3)
5,882,000

enel

ITALY

Thermoelectric **production**

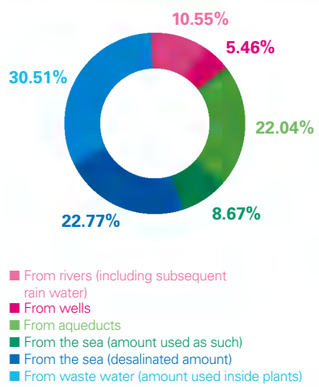
ATMOSPHERIC EMISSIONS

NO_x (t)	17,300
SO_2 (t)	13,727
Particulate matter (t)	474
CO_2 (t)	37,549,100
Thermoelectric production from fossil fuels (from combustion)	37,413,697
Thermoelectric production from fossil fuels (from desulfurization)	135,403
SF_6 (kg)	362
(t equiv. of CO_2)	8,034
Total (t equiv. of CO_2)	37,557,134

Water for industrial use

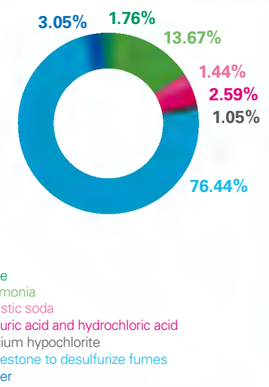
TOTAL REQUIREMENT: **19,281,012 m³**

TOTAL FRESH WATER DRAWN OFF: **7,336,687 m³**



Consumables

TOTAL: **392,297 t**



Special waste

TOTAL PRODUCED (t)
2,080,080

TOTAL TRANSFERRED FOR RECOVERY (t)
1,838,219

Non-hazardous waste

TOTAL PRODUCED **2,075,929 t**

TOTAL TRANSFERRED FOR RECOVERY **1,835,601 t**

	Coal ash	Desulfurization of gypsum	Other
PRODUCED	1,553,066	425,391	97,472
TRANSFERRED FOR RECOVERY	1,395,650	417,872	22,079

Hazardous waste

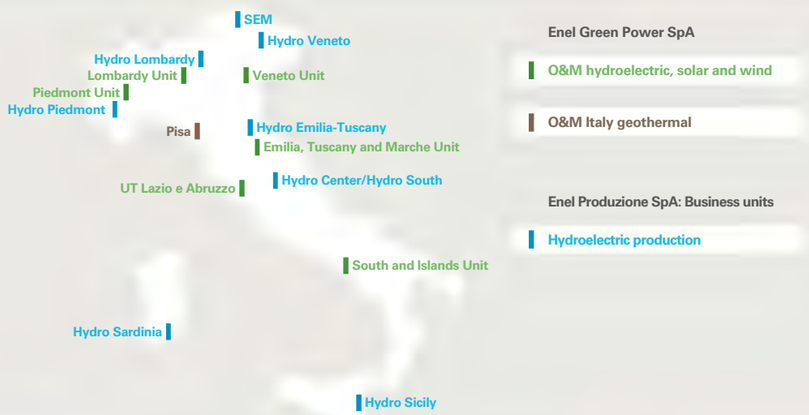
TOTAL PRODUCED **4,151 t**

TOTAL TRANSFERRED FOR RECOVERY **2,618 t**

	Light oil ash	Other
PRODUCED	4	4,147
TRANSFERRED FOR RECOVERY	0	2,618

ITALY

Production from **renewables**



Enel Green Power SpA

- O&M hydroelectric, solar and wind
- O&M Italy geothermal

Enel Produzione SpA: Business units

- Hydroelectric production

THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
605	13,932 MW	25,023 millions of kWh

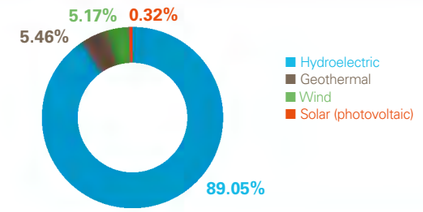
TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Run-of-the-river	315	321	1,707
Basin/reservoir	152	160	3,727
Pure/mixed pumping	16	17	6,973
GEO			
Condensation	34	36	761
WIND	32		720
PHOTOVOLTAIC	56		44
Total	605	534	13,932

ITALY

Production from **renewables**

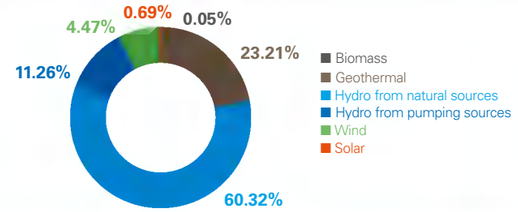
Net maximum capacity

TOTAL: **13,932 MW**



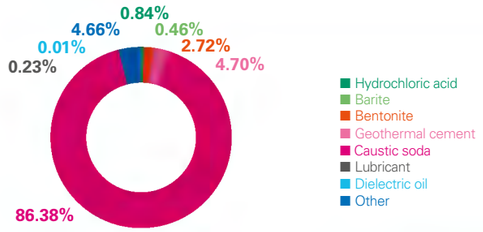
Net electricity production

TOTAL: **25,023 million kWh**



Consumables

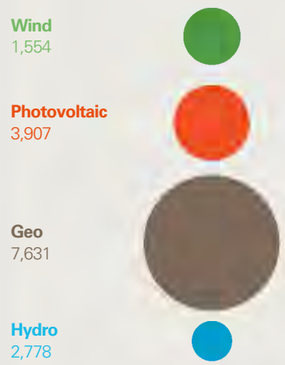
TOTAL: **85,971 t**



In geothermal production for Italy there was a 22% increase compared to 2014 in the consumption of caustic soda. This, aside from being connected to production, is closely connected to reducing H_2S. Soda is used to operate AMIS abatement systems and its consumption is proportional to the quantity of H_2S removed from the gas and therefore increased consumption indicates a higher level of reduction in H_2S. This occurred because in 2015 all the AMIS systems in our power plants came into operation.

Equivalent annual hours of use*

TOTAL: 15,870



* Annual production/power ratio (excluding hydro production from pumping sources).

Emissions of CO_2 avoided (t)

TOTAL: 13,594,257

For production:

The CO_2 avoided by using biomass comes from thermoelectric plants with sections dedicated to burning biomass.

Atmospheric emissions

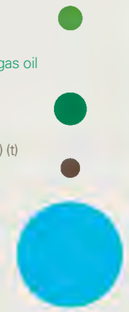
TOTAL: 2,020,489 t

FS_6 (all the segments) (kg) 401 (increase on 2014 due to refills which do not occur every year)
(t equiv. of CO_2)
8,906

CO_2 (from combustion of gas oil in generators) (t)
9,917

H_2S (from geothermal fluid) (t)
5.606

CO_2 (from geothermal fluid) (t)
1,996,060



ITALY

Production from **renewables**

Geothermal fluid

TOTAL FLUID EXTRACTED
56,329,000 t

NET OF REINJECTED LIQUIDS
36,809,000 t

STEAM USED FOR PRODUCTION OF ELECTRICITY
47,342,100 t

FLUID USED TO TRANSFER HEAT DIRECTLY
635,900 t

Special waste

TOTAL PRODUCED **49,677 t**
TOTAL TRANSFERRED FOR RECOVERY **33,070 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	45,755	3,922
TRANSFERRED FOR RECOVERY	31,922	1,148

Hydroelectric production

RESERVOIRS EMPTIED

Quantity: **5**
Flood sediment **moved** due to reservoir bed **discharges**: **132,560 m³**
Fish ladders: **49**

SOWING OF FISH SEEDS

Quantity: **54**
Over **109,503 kg**
2,137,085 exemplars

Geothermal activity

WELLS DRILLED

New: **8**
Recovered wells: **2**
Extent of drilling: **25,288 m**

EXISTING WELLS

Quantity: **497**
For production: **296**
For reinjection: **63**
For other uses: **138**

Photovoltaic plant

Surface area occupied by modules: **12 ha**
Total surface area concerned: **25.1 ha**

ITALY

Electricity **distribution**

THE NUMBERS

CABINS	POWER (MVA)	TOTAL LINES (KM)
578,836	199,773	1,140,214

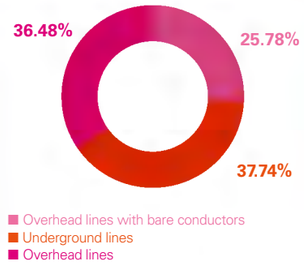
Enel Distribuzione has ISO 14001 certification for its own Environmental Management System extended to the whole organization.

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Other secondary cabins	135,091	12,371
Satellite centers and MV sections	529	
Primary cabins	2,187	106,364
MV/LV secondary cabins	441,029	81,038
Total	578,836	199,773

Power lines (length in kilometers)	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	11	0	0	11
MV	190,265	15,529	145,699	351,493
LV	103,669	414,799	270,241	788,709
	293,945	430,328		

Power lines



ITALY

Electricity **distribution**

General data

MUNICIPALITIES SERVED
7,539

SURFACE AREA SERVED (km²)
276,324

COSTOMERS CONNECTED TO COMPANY NETWORK
31,574,489

Electricity distributed
(millions of kWh)

DISTRIBUTED IN TOTAL
226,569

OWN CONSUMPTION TO OPERATE NETWORK
396

Atmospheric emissions

SF_6 (kg)
4,176
The variation in the data also depends on any plant breakdowns or refills.

(t equiv. of CO_2)
92,707

CO_2 (t)
723

TOTAL GREENHOUSE GAS
93,430
t equiv. of CO_2

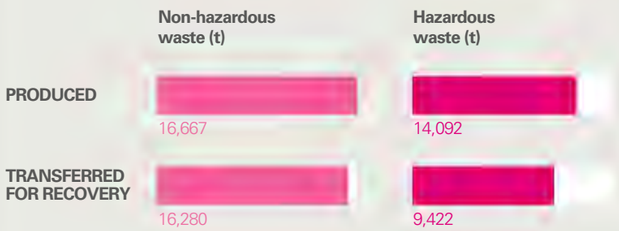
Consumption of resources

CONSUMABLES (t)
63

GAS OIL (toe)
235
Consumables include gas oil for generators, insulating oil for parts and absorbent material for containment operations following spills of oil or electrolyte. These supplies may increase or decrease over the years depending on local needs.

Special waste

TOTAL PRODUCED **30,759 t**
TOTAL TRANSFERRED FOR RECOVERY **25,722 t**



The quantity of waste produced can rise or fall from one year to the next. The main cause for the change is land contaminated by oil and the water in primary cabin basins (large quantities).

ITALY

Significant events

Significant events in 2015

Enel operates in Italy with Enel Produzione in thermoelectric and renewable production, with Enel Green Power, SEH and San Floriano Energy in production from renewables, with Enel Distribuzione in electricity distribution and with the Market Division in the sale of electricity and gas.

In 2015 total production fell by 4.6%, with an increase in thermoelectric production of 4% compared to 2014 and a fall in production from renewable sources of 16.6%.

G4-EN1

Under consumables there was an increase in the main materials used for thermoelectric production, in particular sulfuric and hydrochloric acid. The increase in ammonia for the removal of nitrates was connected to the greater production recorded in 2015.

G4-EN1 **G4-EN3**

Total use in thermoelectric production of fossil fuels grew by around 2% due to greater production from coal and natural gas, while there was reduced consumption of oil of 23%.

G4-EN6

The energy saved thanks to the initiatives to reduce energy consumption and increase energy efficiency for 2015 totaled 210 TJ. The installation of new reduced-loss transformers, new cabins and the reconstruction/enhancement of LV/MV power lines, on the basis of Enel Distribuzione's long-term infrastructure development plan, envisages an annual average saving of around 10,000 transformers in reduced losses. This figure is taken annually from the introduction of such transformers on to Enel Distribuzione's logistic platforms. The assessment of the reduction in terms of network losses is broken down considering specific parameters linked to the construction/maintenance of plant: new primary/secondary cabins, the reconstruction/enhancement of MV/LV power lines. The model proceeds with due simplifications, determining an equivalent circuit for the HV, MV and LV network, on the basis of which the losses of the main network elements are estimated. Starting from the energy input into the grid, the average current to use the components is calculated and thus the losses related to this current. For the equivalent resistance parameters a weighted average is used on the basis of the types of conductors. Finally, from the lower losses, the energy is worked out on the basis of the use parameters. The inclusion in the distribution system of new cabins (both HV/MV and MV/LV) enables a rationalization and optimization of the lower voltage, thus causing a reduction in the average length and average load of the network itself, leading to a reduction in energy losses. The overhaul of the MV and LV lines is generally carried out by replacing the existing lines with new larger ones, which leads to a reduction in energy losses which are proportional to the resistance and the square of the current.

G4-EN6 G4-EN7

In 2014 Enel Green Power opened the worksite, at the geothermal power plant "Cornia 2" in the Municipality of Castelnuovo Val di Cecina, in Tuscany, for the realization of the first plant in the world which uses biomass to heat geothermal steam with the aim of increasing energy efficiency and electricity production in the geothermal cycle. It is a significant technological breakthrough since the environmental impact is close to zero: by supplementing a pre-existing industrial site, it maintains the total renewability of the resource and of the cycle and unites two renewable sources for energy production which opens up new international possibilities. Specifically, the additional power will be 5 MW for a plant which currently has installed power of 13 MW and which may increase the level of production by around 37 GWh/per annum. Overall, the operation will enable a further saving in CO_2 of 17 thousand tons per annum.

G4-EN6 G4-EN7 G4-EN19

During 2014 the Market Division enhanced its commitment to the dissemination of products and services aimed at sustainable development, energy efficiency and raising awareness on the issue of energy saving. New activities were developed aimed both at residential customers and businesses, in order to direct their consumption towards greater overall efficiency, reducing waste and minimizing the impact on the environment.

G4-EN8 G4-EN10

Compared to 2014 there was a fall in specific water consumption of 7%.

G4-EN15 G4-EN16

Total net specific emissions of CO_2, in other words for all electricity production, rose from 498 to 549 g/kWh (+10%) owing to the greater thermoelectric production from coal and the reduction in production from renewable sources

G4-EN19

In 2015 CO_2 emissions avoided due to production from "carbon free" sources totaled around 14 million tons.

G4-EN21

The use of plant with more efficient systems to reduce pollutants led to the fall in net specific emissions in reference to thermoelectric production alone of SO_2, NO_X and particulate matter. The specific emissions of H_2S from geo-thermoelectric production continued to fall thanks to the effect of the "AMIS" abatement systems, falling by 24% compared to 2014.

G4-EN23

The production of waste rose by around 4% compared to 2014.
Compared to previous years there was an increase in waste transferred for recovery of 5%, in particular heavy coal ash (+24%), light coal ash (5%) and gypsum from desulfurization.
Excluding the ash produced in the Sulcis group 2 thermoelectric plant, all the ash produced in Italy is sold or recovered.

Enel Distribuzione

Description of spill	Impact and mitigation
Italy – various locations Spills mainly from PTP transformers, following tampering/theft. Such accidental spills, which mainly affect small areas, fall within the scope of application of the simplified recovery procedure, in accordance with art. 249 of Leg. Decree 152/06. Quantity m^3: 54	Following the spill the potential pollution is reported to the competent authorities and emergency safety procedures are adopted, with simultaneous sampling of the earth in the area concerned. On the basis of the results of the laboratory analyses the area is reopened or, should the set limits be exceeded, repair work is undertaken. In order to limit this type of environmental incident, the possibility is being assessed of installing dry-type transformers which are resin-insulated and wrapped in aluminum.

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of such impacts.

Emissions: work continues to improve the abatement systems for atmospheric emissions in thermoelectric power plant, through the use of fuel with a very low sulfur content to reduce SO_2 (in particular use of dense STZ oil at the Augusta plant).

Waters: water saving was achieved through: greater recovery of waste water which was possible thanks to keeping up maintenance standards of the plant for treating and recycling waters; the reuse of waste water as top-up water in cooling towers; the continuation at coal power plants of the programme to realize plants to crystallize waste water in the treatment of bleeding from desulfurization; arrangement of waste water treatment systems by osmosis.

Waste: work continued to remove materials containing asbestos where it has been found. For all the activities undertaken, the policy continued to look for new possibilities of recovering waste and packaging.

Soil: modernization at some plants of the containment basins for hazardous substances, elimination and recovery of tanks for dense oil.

Materials: recycling and use in the waste water treatment systems of mud in place of

ferric chloride as the secondary neutralizer and of brine from the evaporators to correct the pH level (thermoelectric power plant of Priolo Gargallo). Gradual replacement of polluting and toxic products with other alternative, biodegradable and non-toxic products (hydrazine with carbohydrazide, biodegradable oil in place of mineral oil).

Noise: development of plants and new minimum vital water flows (MVW): Pontesei, Ghirlo, Santa Caterina, Soverzene tank, Comelico dam and Val Gallina dam (Hydro Veneto BU); Creva, Valnegra (Hydro Lombardy BU); Fiastra dam, MVW for Talvacchia dam, Scandarello dam and Sant'Eleuterio dam (Hydro Centre BU); MVW for Isola Santa, MVW for Gramolazzo dam, Villacollemandina (Hydro Emilia-Tuscany BU).

Countryside: environmental requalification of areas around plants.

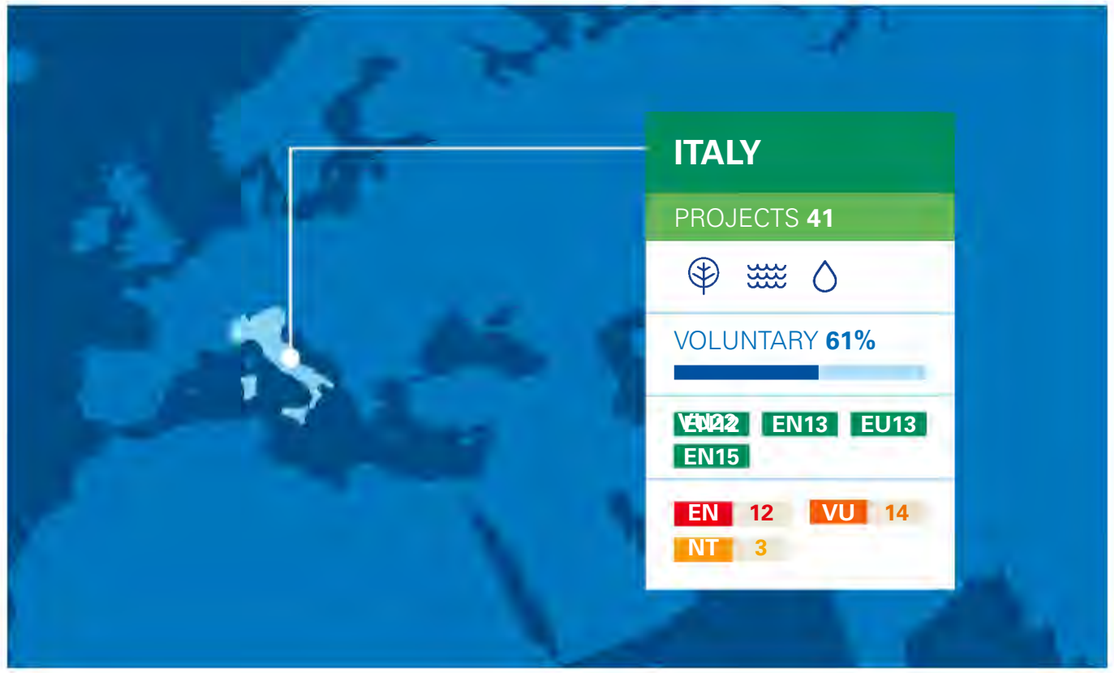
Global Generation

Division	Segment	Description of intervention
Global Generation Thermoelectric production	Reduction in consumption/ improvement in efficiency	Power plant of Brindisi South Work completed to realize the project to cover the coal storage area with a dome.
Global Generation Thermoelectric production	Renewables	Power plant of Priolo Gargallo Archimedes project: use of renewable energy sources to reduce CO_2 and NO_x. Operation of the demonstration thermodynamic solar plant for electricity production, of around 5 MW, on the site of Enel Produzione SpA in Priolo Gargallo (in the province of Syracuse).
	Emissions	Mud used in place of ferric chloride in the secondary neutralizer, ITAR.
	Waters	Use of brine to correct the pH level in ITAR.
Global Generation Thermoelectric production	Reduction in consumption/ improvement in efficiency	Power plants of Rossano and Mercure Optimization in the use of auxiliary equipment.

Division	Segment	Description of intervention
Global Generation Thermoelectric production	Substances/ Waste	Power plant of Fusina Continuing use of combustible waste/secondary solid fuel from urban waste.
Global Generation Hydroelectric production	Renewables	Hydro Piedmont BU In 2015 concession requests were presented for the following Hydro control units: Andonno 2 on the discharge of the demodulation basin of the same name in the municipality of Roccavione (Cuneo); Saretto at the base of the dam of the basin of the same name in the municipality of Acceglio (Cuneo); Comba Alta on the same line as the existing San Giacomo control unit in the municipality of Demonte (Cuneo); Piazzette on the discharge of the existing Crot control unit in the municipality of Usseglio (Turin). The authorization request was presented for partial renewal of the Geglio plant in the municipality of Baceno (Verbano-Cusio-Ossola). Project for new units for energy recovery and the valorization on releases of the minimum vital water flow (MVW), as indicated above. Where possible sending of waste to recovery rather than disposal. Where possible replacement of oils with biodegradable alternatives.
	Waste	In 2015 the removal and clean-up of the cooling pipes containing asbestos was completed for the group 1 alternator at the Demonte plant; material containing asbestos inside the Entracque plant is still being extracted and the area cleaned up (at December 31, 2015 3 of the 5 areas envisaged had been completed).
	Soil	Gradual replacement of the underground single-chamber tanks used to store gas oil to power plants or generators with new double-walled tanks and automatic detection of losses.

Division	Segment	Description of intervention
Global Generation Hydroelectric production	Renewables	Hydro Center BU Objective of the Hydro Center BU is to increase the production of electricity from renewables through: 1. design and realization of new control units for energy recovery on MVW releases; 2. design and realization of modernization of Ceprano and Pontefiume plants to obtain incentives pursuant to Ministerial Decree of 7/6/2012 as amended.
Global Generation Hydroelectric production	Substances Waste Renewables	Hydro Veneto BU Replacement of polluting and toxic products with alternative biodegradable and non-toxic products. Preference for sending waste materials for recovery. Implementation of dedicated release devices for the MVW from minor works.
Global Generation Hydroelectric production	Waste	Hydro Sicily BU During 2015, 4,680 kilos of asbestos were disposed of, insulating material under GR 2 and 3 alternators and bridge crane brakes at the Anapo plant; asbestos at the Contrasto and Guadalami plants and braking devices at the Contrasto plant.

Biodiversity



Main projects

LIFE+ Con.Flu.Po

Enel Green Power SpA is a co-founder of the Life+ project "Restoring connectivity in the Po river basin, opening migratory route for Acipenser Naccarii and 10 fish species included in Annex II" carried out in the nearby of Isola Serafini hydroelectric plant (Po River, North Italy). The aim of the project is to plan and build the largest fish ladder in Italy which will be able to restore the migration routes of fishes such as sturgeon, cobice, eel, shad and mullet from the Adriatic Sea to Lugano Lake. Measures for the control of invasive species will be also put in place as well as monitoring activities using different and advanced techniques.

LIFE+ AquaLife

Enel Produzione SpA is a co-founder of the Life+ project AquaLife: "Development of an innovation and user-friendly indicator system for biodiversity in groundwater dependent ecosystem" carried out in the National Park "Gran Sasso Monti della Laga" (Abruzzo, Central Italy) with the cooperation of University of L'Aquila and the Abruzzo Region. The aim of the AquaLife project is the development and dissemination of the AQUALIFE Package, which is an innovative and user-friendly indicator system to assess the biodiversity of groundwater dependent ecosystems (GDEs). GDEs are defined as those ecosystems whose biological structure and ecological processes are directly or indirectly influenced by groundwater.
Enel Produzione SpA applied GDEs to proper define the Minimum Ecological flow for the hydroelectric plants located in the Vomano River watershed.

Safeguarding corks and bats along the distribution grid

Enel Distribuzione SpA has been acting since a long time for the safeguard of raptors, corks and bats using the power lines as roosts or nests. Main activities include installation of platform for nesting, bat boxes, insulation of power lines as well as solutions to prevent accidental electrocution.

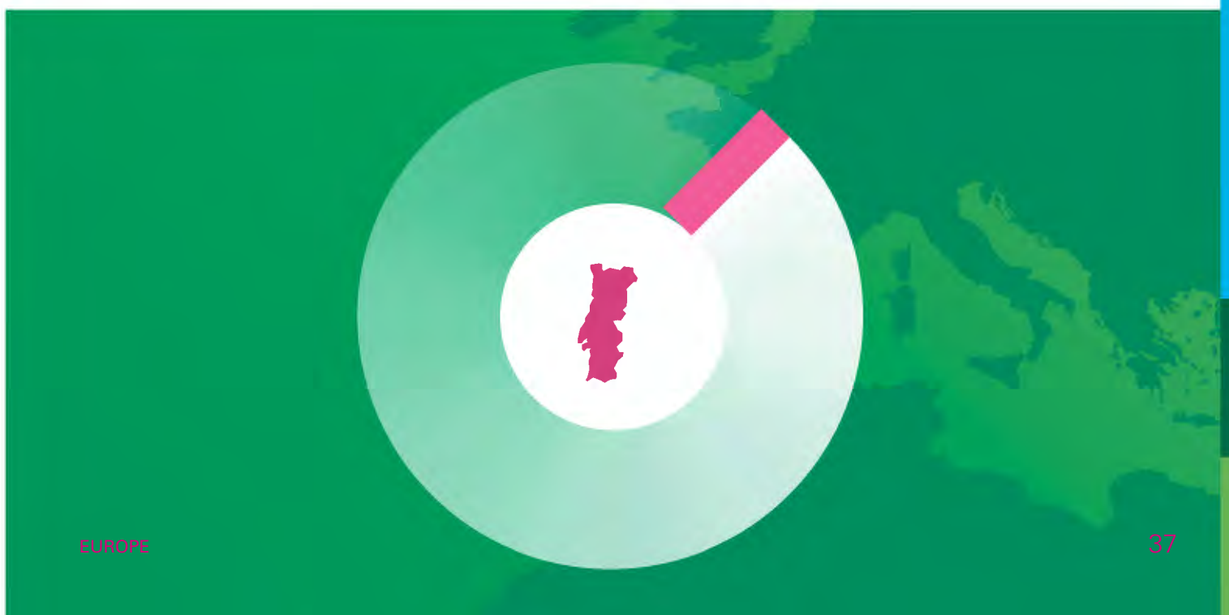
In 2015 the project "Follow the storks" has been carried out, a comprehensive plan to track with satellite's applications the movement of the largest population of white storks in Italy (Gela, Sicily). In the Mincio natural park (Lombardy, North Italy) Enel Distribuzione cooperated with the National Center for White Storks reintroduction to provide power lines insulation and nesting supports for the storks.

PORTUGAL

Thermoelectric **production**	Production from **renewables**
	> Wind production

Endesa SA

Enel Green Power SpA



PORTUGAL

Thermoelectric **production**

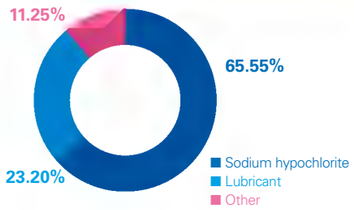
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
1	**842** MW	**605** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
With gas turbines in combined cycle	1	2	842
Total	1	2	842

Consumables

TOTAL: **6.7 t**



Fuel consumption

TOTAL: **94,494 t** (of oil equiv.)

Net electricity production

TOTAL: **605.27 millions of kWh**

ATMOSPHERIC EMISSIONS

CO_2 (t) **221,912,000**

Water for industrial use

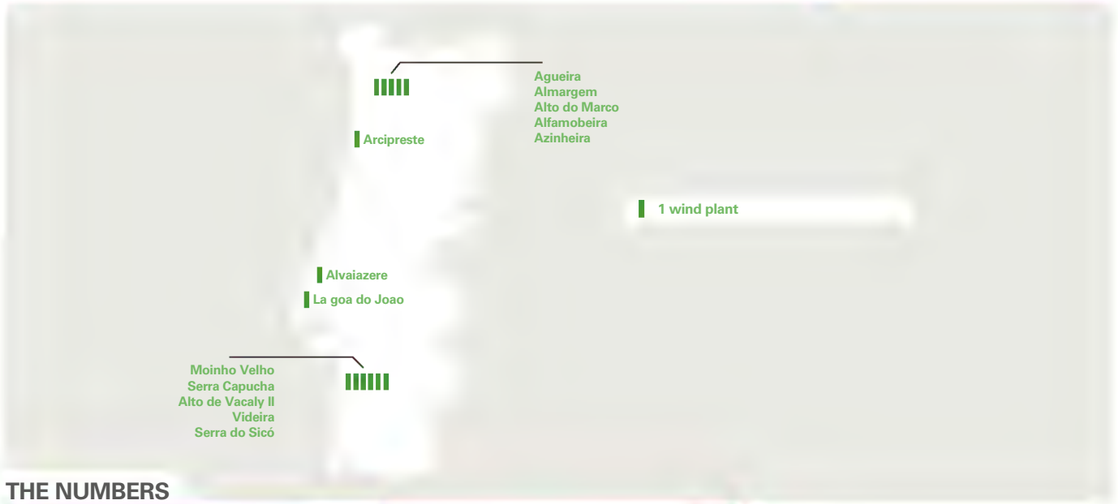
TOTAL REQUIREMENT:
1,026,430 m³

TOTAL FRESH WATER DRAWN OFF:
1,026,430 m³
(100% from surface water)

Special waste

TOTAL PRODUCED **7.78 t**
TOTAL TRANSFERRED FOR RECOVERY **5.38 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	7.646	0.137
TRANSFERRED FOR RECOVERY	5.246	0.137



THE NUMBERS

POWER PLANTS **13**

NET POWER **126** MW

PRODUCTION **499** millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
WIND	13	126
Total	13	126

Equivalent annual hours of use*

TOTAL: 3,961

Wind
3,961

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 388,227

For production:

from **wind**
388,227

Special waste

TOTAL PRODUCED **2.608 t**
TOTAL TRANSFERRED FOR RECOVERY **2.55 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	0.561	2.047
TRANSFERRED FOR RECOVERY	0.552	1.998

Significant events in 2015

Enel operates in Portugal with Endesa in thermoelectric production and with Enel Green Power in wind energy production.

In 2015 the only thermoelectric plant in the scope of consolidation of the Group was the combined cycle plant (CCGT) of Pego owned by Endesa. The only fuel used is natural gas.

G4-EN19

In 2015 the emissions of CO_2 avoided totaled around 388 thousand tons thanks to the production of wind energy.

G4-EN23

Special waste compared to 2014 rose by around 17%, in particular the percentage of waste transferred for recovery in 2015 rose by around 8%.

G4-EN27

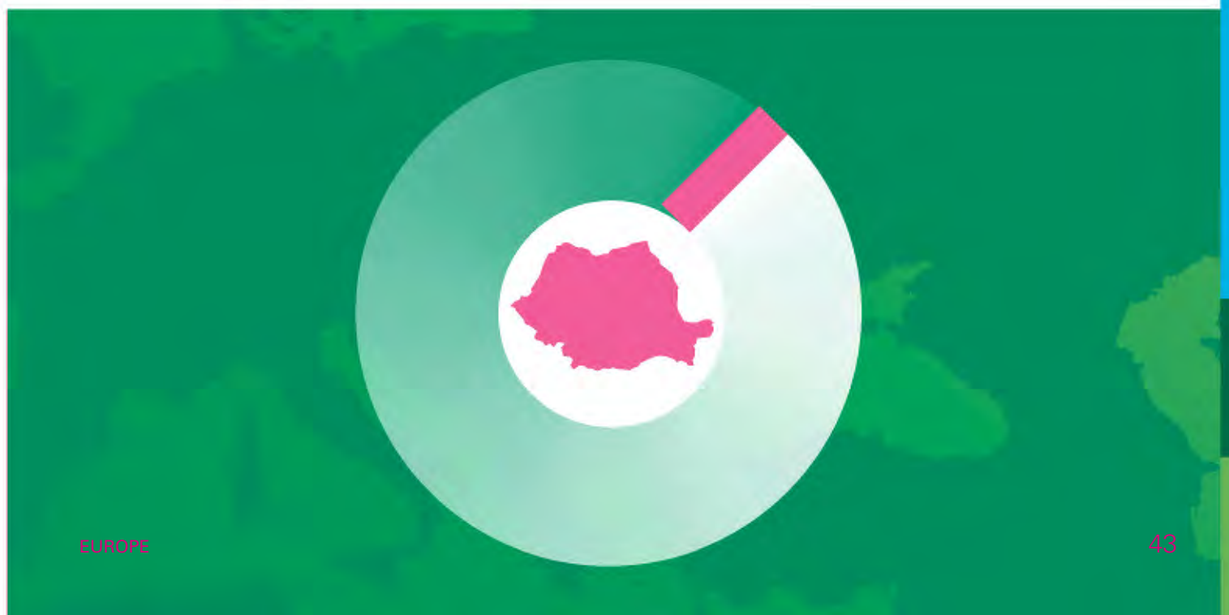
Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of such impacts.

Waste: valorization of almost all the waste produced. Classified as sub-products from volatile ash and gypsum.

ROMANIA

Production from **renewables**	Electricity **distribution**
> Solar and wind production	

Enel Green Power SpA	Enel Electrica Banat SA Enel Electrica Dobrogea SA Enel Electrica Muntenia Sud SA



ROMANIA

Production from **renewables**

THE NUMBERS

POWER PLANTS **13**

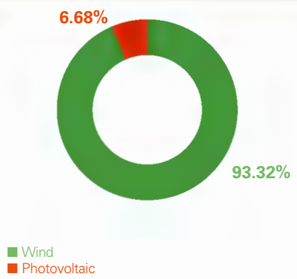
NET POWER **534** MW

PRODUCTION **1,330** millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
WIND	9	498
PHOTOVOLTAIC	4	36
Total	13	534

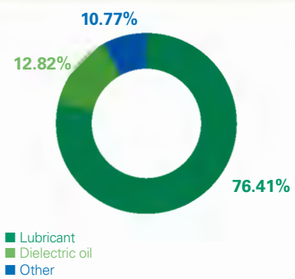
Net maximum capacity

TOTAL: **534 MW**



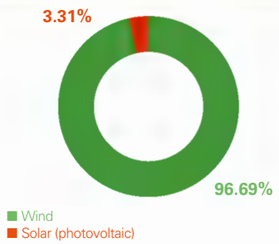
Consumables

TOTAL: **9.75 t**



Net electricity production

TOTAL: **1,330 millions of kWh**



ROMANIA

Production from **renewables**

Equivalent hours of use*

TOTAL: 3,817

Wind 2,581

Photovoltaic 1,236

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 1,503,774

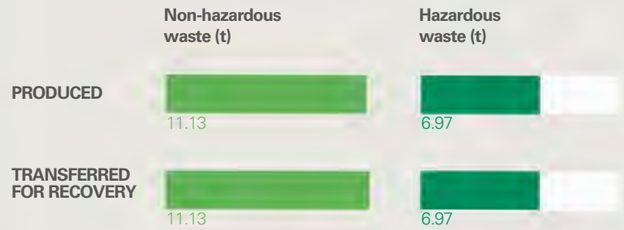
For production:

from **wind** 1,454,024

from **solar** **49,749**

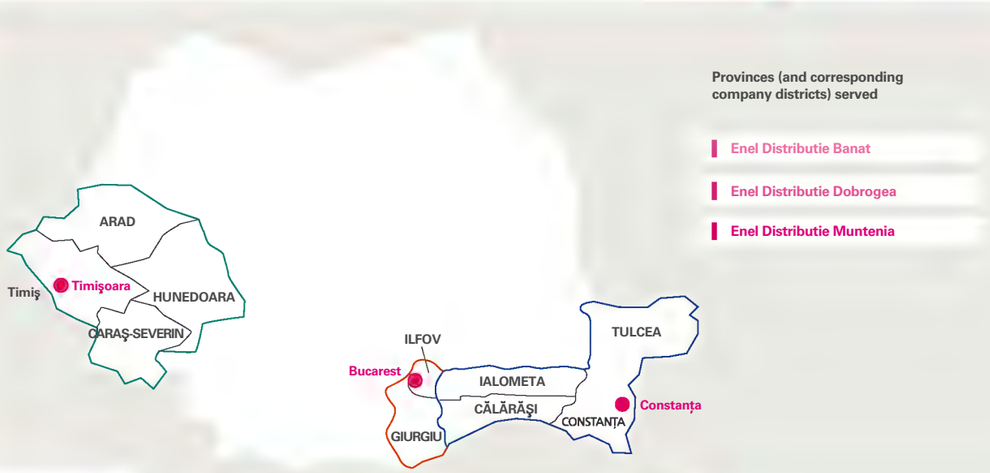
Special waste

TOTAL PRODUCED **18.10 t**
TOTAL TRANSFERRED FOR RECOVERY **18.10 t**



ROMANIA

Electricity **distribution**



THE NUMBERS

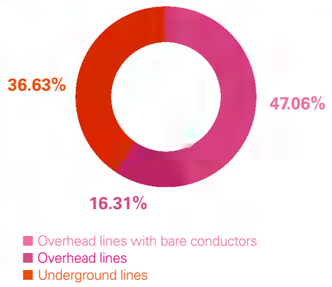
CABINS	POWER (MVA)	TOTAL LINES (KM)
22,482	21,364	91,285

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Primary	283	12,975
Satellite centers and MV sections	189	137
MV/LV secondary	21,887	7,567
Other secondary	123	685
Total	22,482	21,364

Power lines (length in kilometers)	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	6,301	0	283	6,584
MV	22,054	163	12,825	35,042
LV	14,605	14,725	20,329	49,659
	42,960	14,888	33,437	91,285

Power lines



ROMANIA

Electricity **distribution**

General data

MUNICIPALITIES SERVED
2,854

SURFACE AREA SERVED (km²)
62,492

CUSTOMERS CONNECTED TO COMPANY NETWORK
2,714,436

Electricity

(millions of kWh)

DISTRIBUTED IN TOTAL
14,582

OWN CONSUMPTION TO OPERATE NETWORK
18.4

Atmospheric emissions

SF_6 (kg)
23.65

(t equiv. of CO_2)
525

CO_2 (t)
121.79

TOTAL GREENHOUSE GAS
677.79
t equiv. of CO_2

Consumption of resources

CONSUMABLES (t)
60

LUBRICANT (t)
1.0

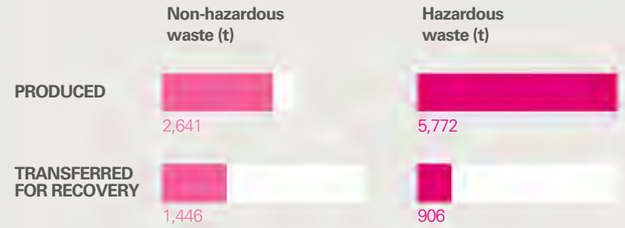
DIELECTRIC OIL (t)
57.5

OTHER (T)
1.5

GAS OIL (toe)
38.6

Special waste

TOTAL PRODUCED **8,412 t**
TOTAL TRANSFERRED FOR RECOVERY **2,352 t**



Significant events in 2015

Enel operates in Romania in wind and solar photovoltaic production with Enel Green Power, in electricity distribution (with Enel Distributie Banat, Enel Distributie Dobrogea and Enel Distributie Muntenia) and in electricity sales with Enel Energia and Enel Energia Muntenia.

G4-EN6

Energy saved thanks to reducing consumption and improving efficiency.

Modernization and replacement of low and medium voltage lines, with better insulation of the atmospheric impact as part of a broader project to optimize the operation network.

G4-EN7

Initiatives to supply energy efficient products and services or which are based on renewable energy, and reduction in the energy requirement thanks to these initiatives.
In 2015 Enel Romania replaced 5,500 incandescent light bulbs in Prundu with low consumption bulbs (15 W and 20 W), as part of a campaign to promote responsible electricity consumption.

G4-EN19

The emissions of CO_2 avoided thanks to wind production and production from solar photovoltaic plants totaled around 1.5 million tons.

G4-EN23

Special waste transferred for recovery totaled 2,370 tons, slightly down compared to 2014.

G4-EN24

Total and volume of significant spills. During 2015 there were 8 accidents in MV/LV secondary substations and 4 accidents in HV/MV substations with a total spill of 0.38 m^3. The soil was treated and cleaned up with biodegradable and absorbent material.

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of mitigation of these impacts.

Noise: in order to prevent exposing workers and the local population to noise risk and electromagnetic fields, Enel's worksites are constantly monitored. In 2015, 85 noise tests were carried out, focused mainly in sensitive areas such as power stations near residential areas, and on the basis of private notifications received by Enel Distributie Muntenia and Enel Distributie Banat. The results of measuring

ROMANIA
Significant events

magnetic fields have always been below the legal limits. As for noise, counter-measures have been taken which have led in some cases to the reduction of the values below the limits allowed by the law.

Waste: the partnership continued between Enel Distributie Banat, Enel Distributie Dobrogea, Enel Distributie Muntenia and Recolamp Association for the recovery of non-functioning lighting. In addition, in partnership with Recolamp, it was possible to extend the collection of batteries. In 2015, 481 kg of lamps and fluorescent tubes were collected as well as 12 kg of small batteries.

RUSSIA

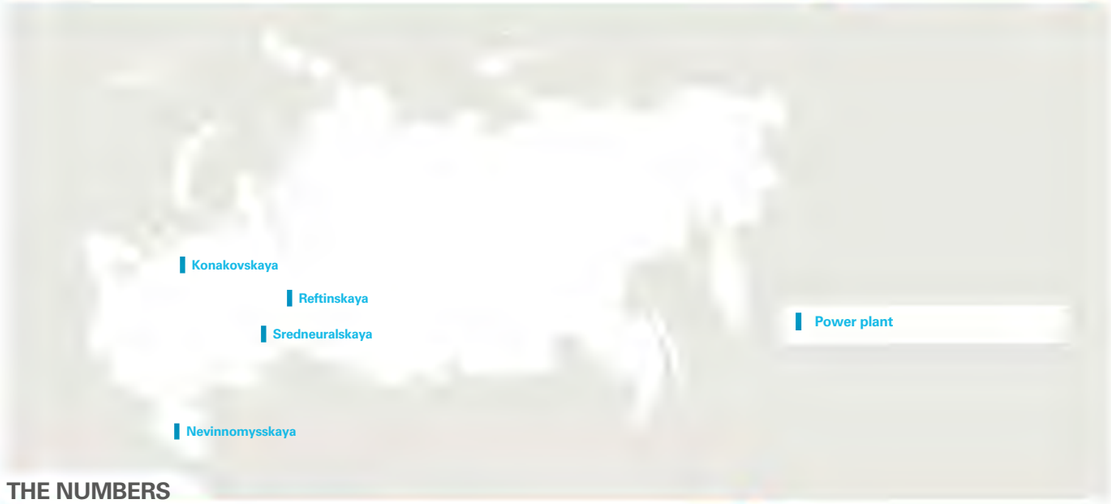
Thermoelectric
production

> Production of thermoelectric energy and heat

OGK-5

RUSSIA

Thermoelectric **production**



THE NUMBERS

POWER PLANTS **4**

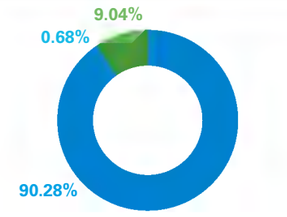
NET POWER **8,944** MW

PRODUCTION **42,090** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW	Thermal power 10^6 kcal/h
Steam (condensing) with intermediate draw-offs of fluid for cogeneration	4	35	8,074	0
Back-pressure steam for cogeneration	0	3	61	0
With gas turbines in combined cycle for cogeneration	0	2	809	0
Total	4	40	8,944	2,383

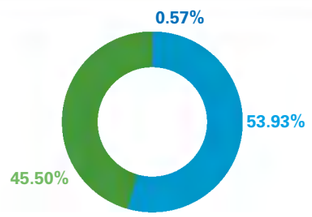
Net maximum capacity

TOTAL: **8,944 MW**



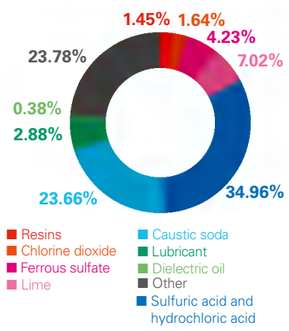
Fuel consumption

TOTAL: **10,490,026 t** (of oil equiv.)



Consumables

TOTAL: **8,338 t**



enel

RUSSIA

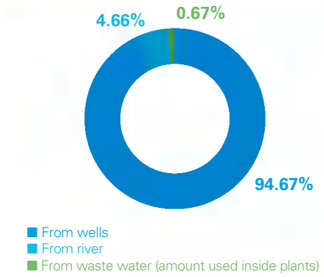
Thermoelectric **production**

ATMOSPHERIC EMISSIONS

NO_x (t)	86,105
SO_2 (t)	141,404
Particulate matter (t)	70,876
CO_2 (t)	
from combustion	31,348,826

Water for industrial use

TOTAL REQUIREMENT: **25,978,269 m³**
TOTAL FRESH WATER DRAWN OFF: **25,804,608 m³**



Waste water

DISCHARGED (m³) **24,250,618**

USED INSIDE THE PLANTS (m³) **173,661**

Heat production

(combined with the production of electricity)

TOTAL: **5,623,146** million kcal

EQUIVALENT TO: **6,539** million kWh

Special waste

TOTAL PRODUCED **4,553,735 t**
TOTAL TRANSFERRED FOR RECOVERY **262,435 t**

Significant events in 2015

Enel operates in Russia in thermoelectric production with OGK-5.

G4-EN1 G4-EN3

The fuel mix saw a slight rise in the share of coal which offset a proportional fall in gas. The overall production level stayed practically the same as in 2014 (-0.7%).

G4-EN8 G4-EN10

There was a fall in water consumption for industrial use. Specific consumption (in reference to the entire production of electricity and heat) fell from 0.64 l/kWh in 2014 to 0.53 l/kWh (-17%). The fall in consumption was mainly due to the dry removal system for coal ash used as an alternative to the wet system.

G4-EN15 G4-EN16

Specific emissions of CO_2 (in reference to the entire production of electricity and heat) rose slightly in 2015 compared to 2014 from 625 to 645 g/kWh due to higher production from coal-fired units.

G4-EN21

Net specific thermoelectric emissions of NO_x and SO_2 remained stable compared to the previous year. Specific emissions of particulates (in reference to the entire production of electricity and heat) fell by 28% compared to 2014 due to the installation of fabric filters.

G4-EN24

Spills:

In October 2015 there were two notifications of traces of oil in the canals and fishing basins of the fishery next to the discharge canals of the 300 MW units. Water samples were collected and the cooling systems were inspected to identify the problem. Absorbent materials were deployed and after use were collected and disposed of in compliance with environmental law.

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of such impacts.

Emissions

Reftinskaya: replacement of fabric filters completed in units 4 and 7, with a significant reduction in emissions of particulates.

RUSSIA
Significant events

Waste water

Reftinskaya: construction and testing of a pumping station for the filtering and treatment of waters. The assessment of its efficiency will take place in 2016.

Noise

Nevinnomysskaya: construction of a noise reduction system. The assessment of its efficiency will take place in 2016.

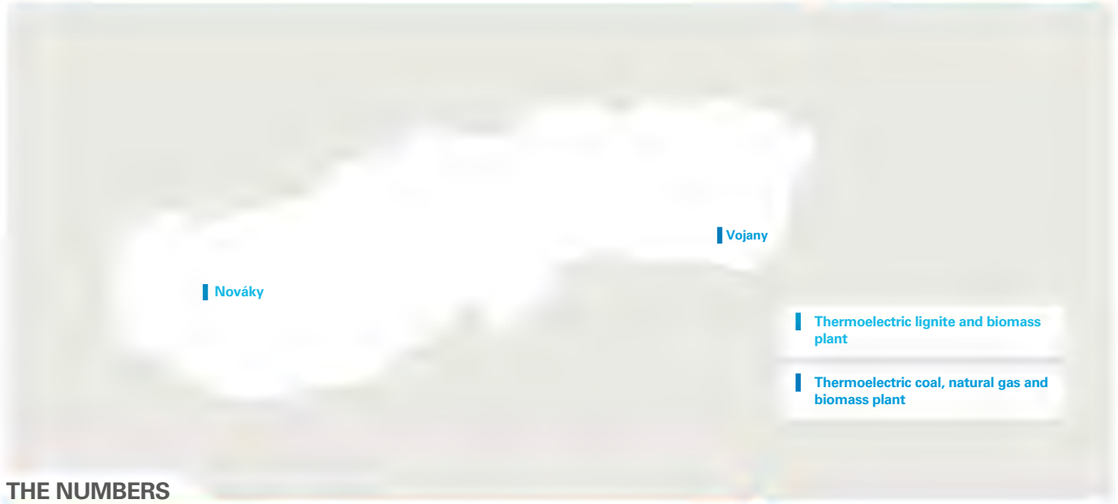
Sredneuralskaya: rebuilding of the gas supply system underway in order to reduce noise emissions.

SLOVAKIA

Thermoelectric **production**	Production from **renewables**	Production **from nuclear**
> Production of thermoelectric energy and heat	> Hydroelectric and photovoltaic production	> Production of nucleo-thermoelectric energy and heat
Slovenské elektrárne AS	Slovenské elektrárne AS	Slovenské elektrárne AS

SLOVAKIA

Thermoelectric **production**



THE NUMBERS

POWER PLANTS **2**

NET POWER **600** MW

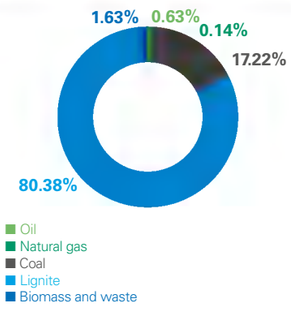
PRODUCTION **1,824** millions of kWh

Closure of some units at Nováky and Vojany (completion of decommissioning of EVO II: -400 MW); EVO B1, B2: -197 MW, and reduction in capacity of ENO A: -31MW

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW	Thermal power 10^6 kcal/h
Steam (condensing) with intermediate draw-offs of fluid for cogeneration	2	7	600	25
Total	2	7	600	25

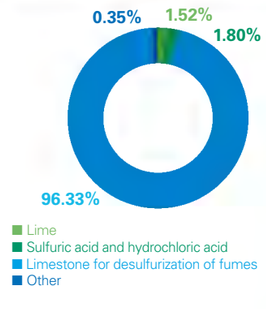
Fuel consumption

TOTAL: **625,596 t** (of oil equiv.)



Consumables

TOTAL: **62,495 t**



Waste water

DISCHARGED (m^3)
4,509,000

USED INSIDE PLANT (m^3)
n.a.

SLOVAKIA

Thermoelectric **production**

ATMOSPHERIC EMISSIONS

NO_x (t)	3,884
SO_2 (t)	47,265
Particulate matter (t)	533
CO_2 (t)	2,533,534
from desulfurization	2,506,579
from combustion	26,955
Total (t equiv. of CO_2)	2,533,534

Water for industrial use

TOTAL REQUIREMENT:
9,884,573 m^3

TOTAL FRESH WATER DRAWN OFF:
9,884,573 m^3

Emissions of CO_2 avoided

For electricity production from biomass:
44,562 t

Electricity

NET PRODUCTION:
1,824 million of kWh
(includes production from biomass – 39.66 GWh – at the Nováky plant)

HEAT PRODUCTION
(combined with the production of electricity):
221,649 million of kcal

EQUIVALENT TO:
257 million of kWh

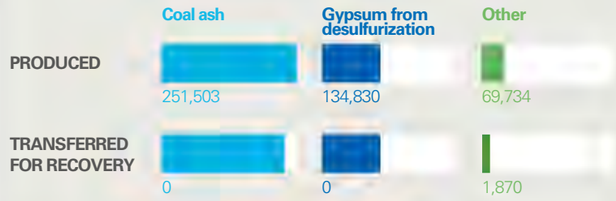
Special waste

TOTAL PRODUCED (t)
456,137

TOTAL TRANSFERRED FOR RECOVERY (t)
1,911

Non-hazardous waste

TOTAL PRODUCED **456,068 t**
TOTAL TRANSFERRED FOR RECOVERY **1,870 t**



Hazardous waste

TOTAL PRODUCED **69 t**
TOTAL TRANSFERRED FOR RECOVERY **41 t**

SLOVAKIA

Production
from nuclear

THE NUMBERS

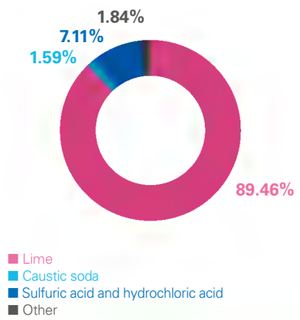
POWER PLANTS
2

NET POWER
1,814 MW

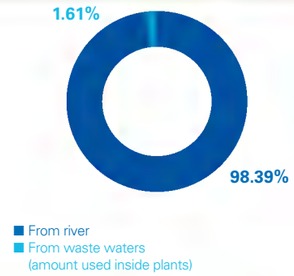
PRODUCTION
14,081 millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW	Thermal power 10^6 kcal/h
Steam (condensing)	2	4	1,814	464
Total	2	4	1,814	464

Consumables
TOTAL: **6,371 t**



Water for industrial use
TOTAL REQUIREMENT: **44,360,849 m³**
TOTAL FRESH WATER DRAWN OFF: **43,647,933 m³**



Waste water

DISCHARGED (m³)
8,376,063

USED INSIDE PLANT (m³)
712,916

Electricity
(million kcal)

HEAT PRODUCTION (combined with the production of electricity):
469,946
(equivalent to 547 millions of kWh)

Radionuclides in the discharged waste waters
(GBq)

TRITIUM
22,009

SLOVAKIA

Production
from nuclear

Emissions of CO_2 avoided (t)

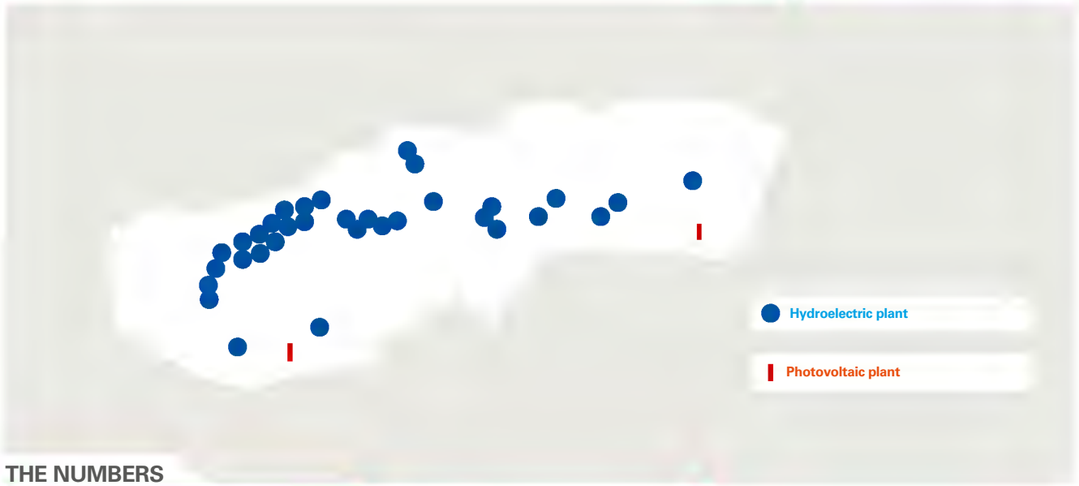
Nucleo-thermoelectric production:
15,821,680 t

Radioactive atmospheric emissions

Radioactive waste

SLOVAKIA

Production from **renewables**



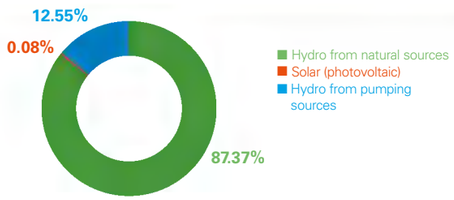
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
37	**1,592** MW	**2,387** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Run-of-the-river	17	44	747
Basin/reservoir	14	31	132
Pure/mixed pumping	4	15	711
Total	35	90	1,590
PHOTOVOLTAIC			
	2		2
Total	37	90	1,592

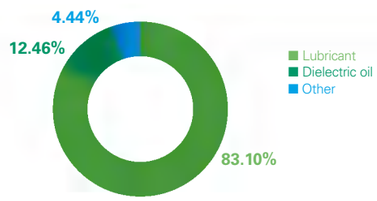
Net electricity production

TOTAL: **2,387 million of kWh**



Consumables

TOTAL: **46 t**



SLOVAKIA

Production from **renewables**

Equivalent annual hours of use*

TOTAL: 3,400

Photovoltaic
1,043

Hydro
2,357

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 2,345,975

For production:

hydroelectric from **natural sources**
2,343,818

from **solar** (photovoltaic)
2,157

Atmospheric emissions

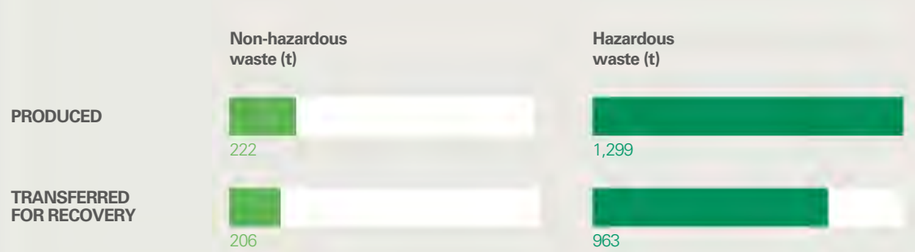
TOTAL: 425 t

SF_6 (all the segments) (kg) 18.85
(t equiv. of CO_2)
418

CO_2 (produced from combustion of oil) (t)
7

Special waste

TOTAL PRODUCED **1,521 t**
TOTAL TRANSFERRED FOR RECOVERY **1,169 t**



Significant events in 2015

Enel operates in Slovakia with Slovenské elektrárne in thermoelectric and nuclear production (both cogeneration) and renewable production (hydroelectric and photovoltaic).

Compared to 2014 overall production fell by 11%, mainly due to the reduction in production from renewable sources (-47%).

G4-EN1 **G4-EN2**

As for consumables, there was a general fall in consumption of 26% due to lower thermoelectric production at the Vojany and Nováky plants.

As for the lower consumption of oil, this was also due in part to its reuse. In some plants there is intensive treatment of oil. In the thermoelectric plant of Vojany, for example, used oil is cleaned mechanically and electrostatically. In the nuclear plant of Bohunice, on the other hand, used dielectric oil is filtered and degasified.

G4-EN8

Specific water consumption in reference to thermoelectric cogeneration saw an increase in 2015 (+1% compared to 2014) due to greater water consumption at the Vojany plant.

G4-EN21

Emissions in 2015 rose slightly compared to 2014 (+5%). SO_2 emissions increased mainly due to the temporary shutdown of some units for maintenance in the Nováky plant with a corresponding greater contribution from less efficient units with higher emissions.

G4-EN19

In 2015 emissions of CO_2 were avoided for a total of around 18 million tons, down compared to the figures for 2014 owing to lower electricity production from renewable sources.

G4-EN23

The lower production of ash from coal compared to 2014 was due to the lower consumption of coal and lignite in thermoelectric production, which also caused a lower production of gypsum.
The production of low and medium level radioactive liquid waste did not change significantly from 2014.

SLOVAKIA

Significant events

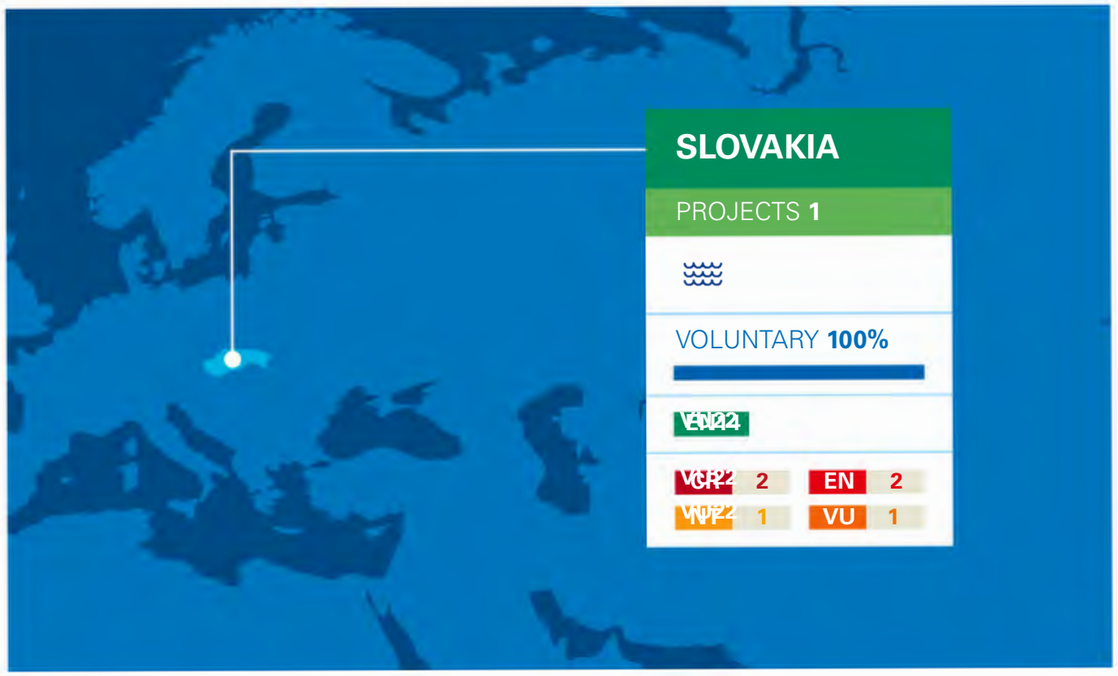
G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of these impacts.

Use of materials: in the desulfurization process paper industry waste was used so as to reduce the use of natural lime resources. In 2014 in ENO a significant part of the production of non-hazardous waste (ash, lime) was classified as a sub-product and was mainly reused in the construction sector.

Emissions and renewables: in 2015 the quantity of biomass used in co-combustion in the fluidized bed boilers of the Nováky and Vojany plants saved the atmospheric emission of around 45 tons of CO_2.

Biodiversity



Main projects

Energy for Nature

In 2014 Slovenské elektrárne was awarded the prestigious European Business Award for the Environment (EBAE) 2012 in the new category Business and Biodiversity for its outstanding achievements in halting biodiversity loss and supporting natural ecosystems. The project, ongoing since 2007, is aimed to preserve wildlife (chamois, Alpine marmot, European lynx, grey wolf, peregrine falcon, golden eagle and salmon trout) in the National Park of High Tatras, one of Slovakia's most important wildlife areas.

SPAIN

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**	Production **from nuclear**
	> Hydroelectric, solar and wind production		
Endesa SA Enel Green Power SpA	Endesa SA Enel Green Power SpA	Endesa SA	Endesa SA

SPAIN

Thermoelectric **production**

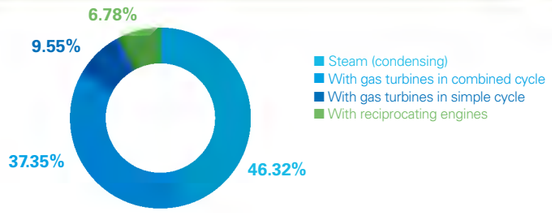
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
33	**12,326** MW	**39,524** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
Steam (condensing)	9	30	5,710
With gas turbines in combined cycle	9	14	4,603
With gas turbines in simple cycle	5	41	1,177
With reciprocating engines	10	107	836
Total	33	192	12,326

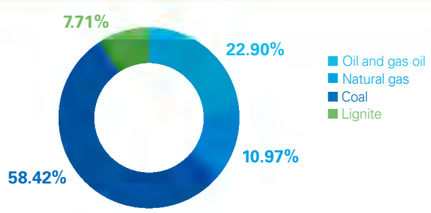
Net maximum capacity

TOTAL: **12,396 MW**



Net electricity production

TOTAL: **39,524 million kWh**

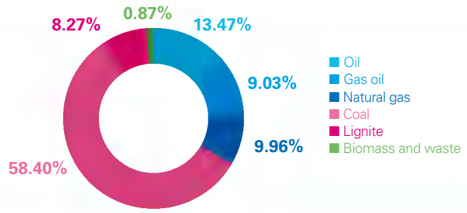


SPAIN

Thermoelectric **production**

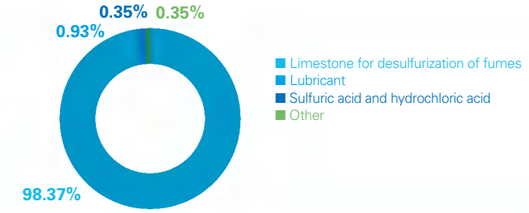
Fuel consumption

TOTAL: **5,127,584 t** (of oil equiv.)



Consumables

TOTAL: **585,126 t**



ATMOSPHERIC EMISSIONS

NO_x (t)	94,235
SO_2 (t)	89,267
Particulate matter (t)	2,186
CO_2 (t)	33,327,171
from desulfurization	218,846
from combustion	33,108,325
SF_6 (kg)	480
(t equiv. of CO_2)	10,554
Total (t equiv. of CO_2)	33,118,879

Waste water

DISCHARGED (m^3)

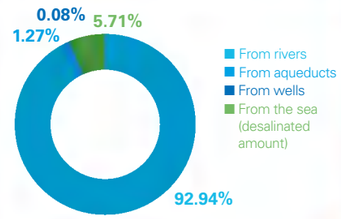
58,151,000

Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

Water for industrial use

TOTAL REQUIREMENT: **50,051,992 m^3**

TOTAL FRESH WATER DRAWN OFF: **47,190,708 m^3**



Special waste

TOTAL PRODUCED (t)

2,716,331

TOTAL TRANSFERRED FOR RECOVERY (t)

16,580

SPAIN

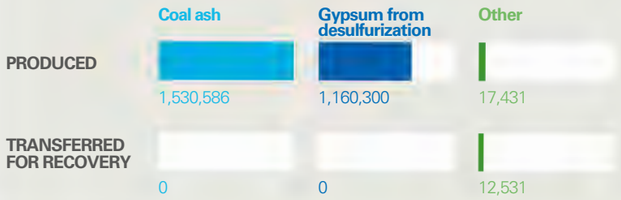
Thermoelectric **production**

Non-hazardous waste

TOTAL PRODUCED **2,708,317 t**
TOTAL TRANSFERRED FOR RECOVERY **12,531 t**

Hazardous waste

TOTAL PRODUCED **8,014 t**
TOTAL TRANSFERRED FOR RECOVERY **4,849 t**



Storage and movement of coal

Endesa manages three port terminals at Ferrol, Carboneras and Los Barrios for the storage and movement of coal destined for the power plants of Puentes (Ferrol), Almería (Carboneras) and the thermoelectric power plant of Los Barrios owned by E.ON. The transfer of coal to the power plants is normally done by lorry.

Distance **Ferrol-Puentes**: around **60 km**
Distance **Carboneras-Almería**: around **1 km**
Distance **Los Barrios-CT E.ON**: around **3 km**

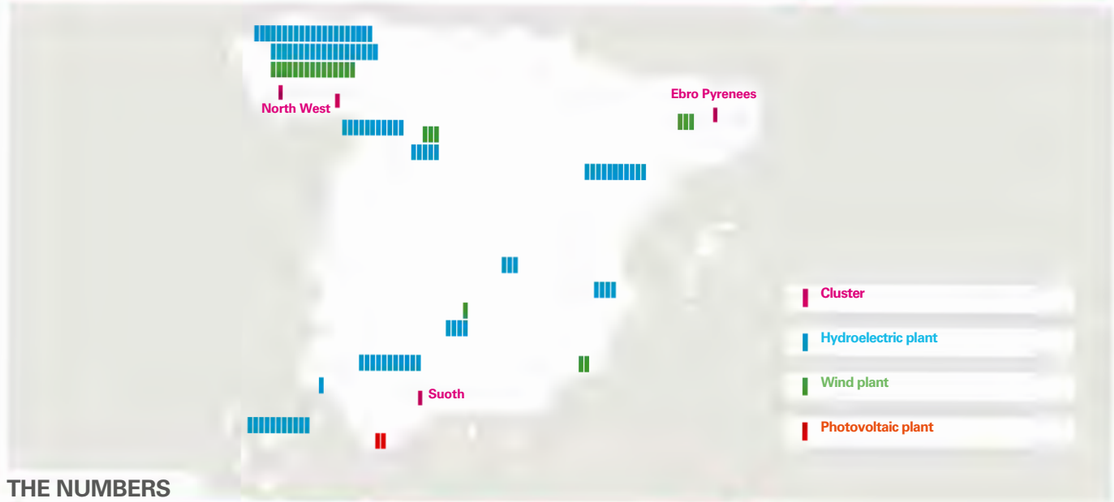
TOTAL COAL TRANSFERRED TO POWER PLANTS: **8,804,172 t**

TOTAL ELECTRICITY CONSUMPTION: **8.25 million kWh**

Other data (consumption of natural gas and gas oil, consumables, water for industrial use, waste water, atmospheric and water emissions, waste) are included later in those for thermoelectric production.

SPAIN

Production from **renewables**



THE NUMBERS

POWER PLANTS **222**

NET POWER **6,393** MW

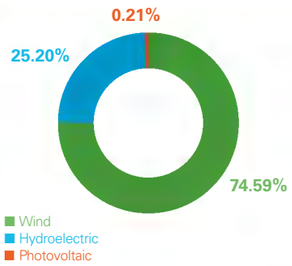
PRODUCTION **11,060** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Run-of-the-river	61	321	429
Basin/reservoir	72	160	3,005
Pure/mixed pumping	6	17	1,330
Total	139	255	4,764
WIND	80		1,616
PHOTOVOLTAIC	3		13
Total	222	255	6,393

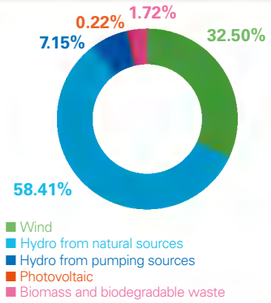
SPAIN

Production from **renewables**

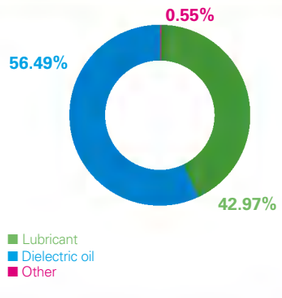
Net maximum capacity
TOTAL: **6,393 MW**



Net electricity production
TOTAL: **11,060 million kWh**



Consumables
TOTAL: **148 t**



ATMOSPHERIC EMISSIONS

CO_2 (t)	
(combustion of gas oil in standby generators)	14
SF_6 (all the segments) (kg)	3
(t equiv. of CO_2)	0.07
Total (t equiv. of CO_2)	14.07

Equivalent annual hours of use*
TOTAL: 5,934

*Excluding hydro production from pumping sources.

Emissions of CO_2 avoided (t)
TOTAL: 7,740,211

For production:

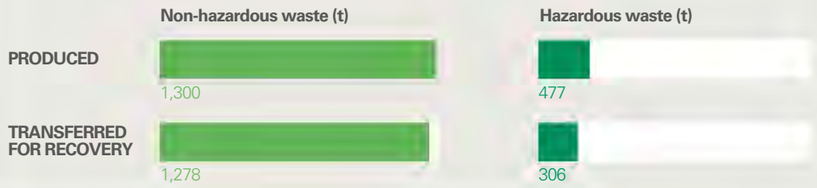
hydroelectric from **natural sources**
5,162,669

from **wind**
2,559,741

from **solar** (photovoltaic)
17,801

Special waste

TOTAL PRODUCED **1,777 t**
TOTAL TRANSFERRED FOR RECOVERY **1,583 t**



SPAIN

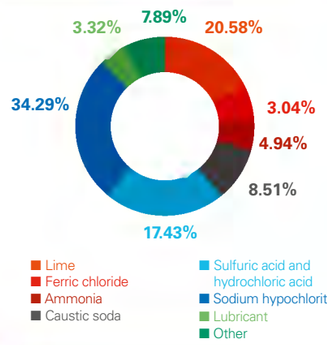
Production **from nuclear**

THE NUMBERS

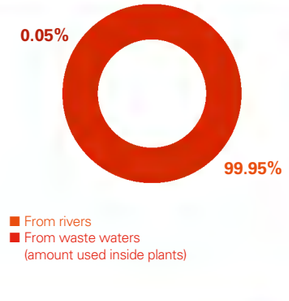
POWER PLANTS	NET POWER	PRODUCTION
3	3,318 MW	25,756 millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
Steam (condensing)	3	5	3,318
Total	3	5	3,318

Consumables
TOTAL: **1,306 t**



Water for industrial use
TOTAL REQUIREMENT: **16,825,987 m³**
TOTAL FRESH WATER DRAWN OFF: **16,817,200 m³**



Radionuclides in the discharged waste waters
(GBq)

TRITIUM	PRODUCED BY FISSION AND CORROSION
60,829	11.8

Waste water

DISCHARGED (m³)
1,677,491

USED INSIDE PLANT (m³)
99,882

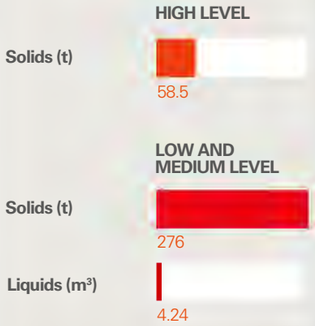
Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

SPAIN

Production **from nuclear**

Radioactive atmospheric emissions

Radioactive waste



Special waste

TOTAL PRODUCED **3,335 t**
TOTAL TRANSFERRED FOR RECOVERY **891 t**

SPAIN

Electricity **distribution**

THE NUMBERS

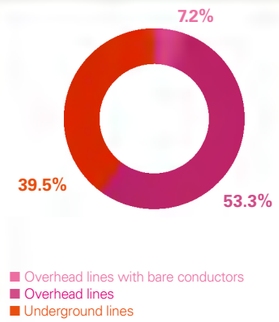
CABINS	POWER (MVA)	TOTAL LINES (KM)
133,544	145,255	317,675

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Other secondary	235	2,276
Primary	1,002	83,579
MV/LV secondary	132,307	59,400
Total	133,544	145,255

Power lines (length in kilometers)	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	18,728	-	751	19,479
MV	4,093	73,474	40,869	118,436
LV	-	95,763	83,997	179,760
	22,821	169,237	125,617	317,675

Power lines



General data

MUNICIPALITIES SERVED
1,937

SURFACE AREA SERVED (km²)
185,500

CUSTOMERS CONNECTED TO COMPANY NETWORK
11,931,588
(of whom supplied: 11,931,588)

Electricity distributed
(millions of kWh)

DISTRIBUTED IN TOTAL
98,225

Consumption of resources

CONSUMABLES (t)
145
(100% dielectric oil)

GAS OIL (toe)
433

Atmospheric emissions

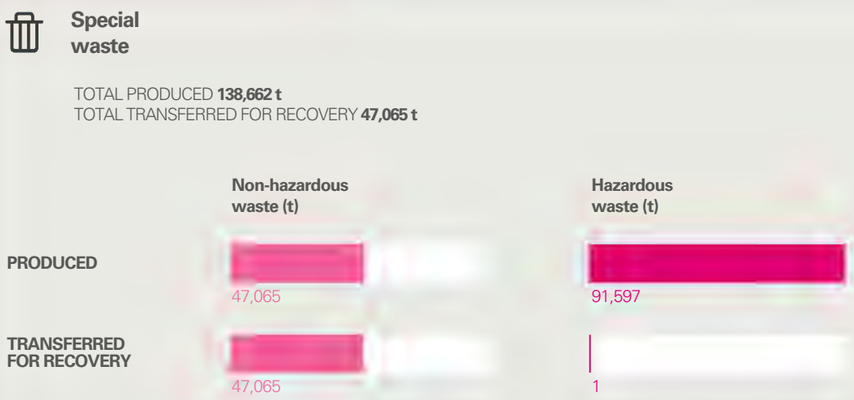
SF_6 (kg)
218
(t equiv. of CO_2)
5.123

CO_2 (t)
1,334

TOTAL GREENHOUSE GAS
1,339.123
t equiv. of CO_2

Special waste

TOTAL PRODUCED **138,662 t**
TOTAL TRANSFERRED FOR RECOVERY **47,065 t**



Significant events in 2015

In Spain Enel operates with Endesa in thermoelectric, nuclear and renewables production and in electricity distribution and sales and with Enel Green Power in production from renewables and thermoelectric combined with small systems.

Total production grew by around 3 TWh. The biggest factor was the increase of over 3.3 TWh in thermoelectric production from fossil fuels, the fall of around 1.6 TWh in renewables and the 1 TWh increase in nuclear production.

G4-EN1 G4-EN3

The use of non-fossil fuels in thermoelectric production saw:
- an increase in solid biomass from ~36,866 toe to 71,873.9 toe;
- a fall in biogas from landfills and the treatment of waste water from ~20,510 toe to 7,207 toe.

The consumption of fossil fuels in thermoelectric production rose compared to 2014, going from 8,329 ktoe to 9,054 ktoe.

The fossil fuel mix was characterized by the increase in the share of coal (+7%) together with natural gas (+30%) and an increase in oil (+4%), almost exclusively with a low sulfur content.

G4-EN15 G4-EN16 G4-EN21

Owing to the increase in coal and lignite thermoelectric production, specific atmospheric emissions increased in relation to thermoelectric production for all the main macro pollutants.

G4-EN19

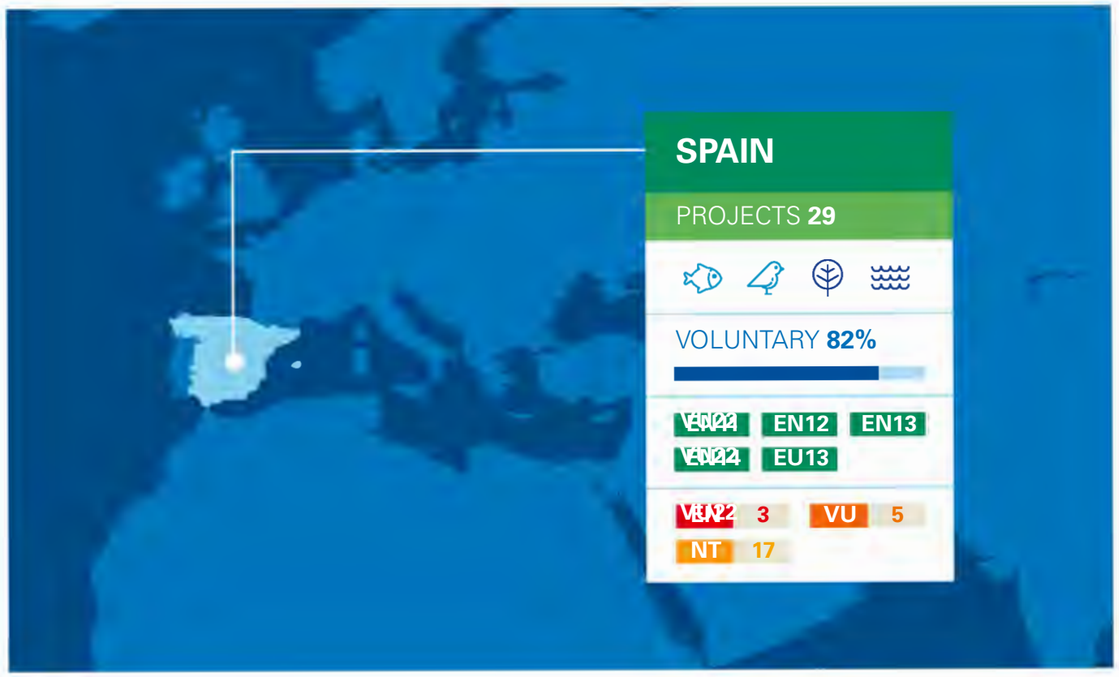
In 2015 the emissions of CO_2 avoided due to "carbon free" production totaled around 30 million tons, of which 22 million tons from nuclear production and around 9 million tons from renewable sources.

G4-EN23

In 2015 there was a slight fall in the percentage of waste transferred for recovery, due in particular to the non-recovery of ash and gypsum from coal and lignite production following the fall in demand in the construction sector.

The specific production over the five years of low and medium level liquid radioactive waste depends on the maintenance and efficiency of the plants and, for high level solid waste, on the changeover of fuel rods.

Biodiversity



Main projects

Biodiversity in wetlands
Endesa has been implementing a census of water birds at the artificial lake in As Pontes, a restored open pit coal mine that once filled represents the largest lake in Spain. The aim is to evaluate and demonstrate the importance of the lake as a wetland.

Under the same topic, a project for the analysis and description of the status of wetlands in the Catalonian central depression investigates the evolution of these portions of land over the past 20 years with the purpose of drawing up management guidelines.

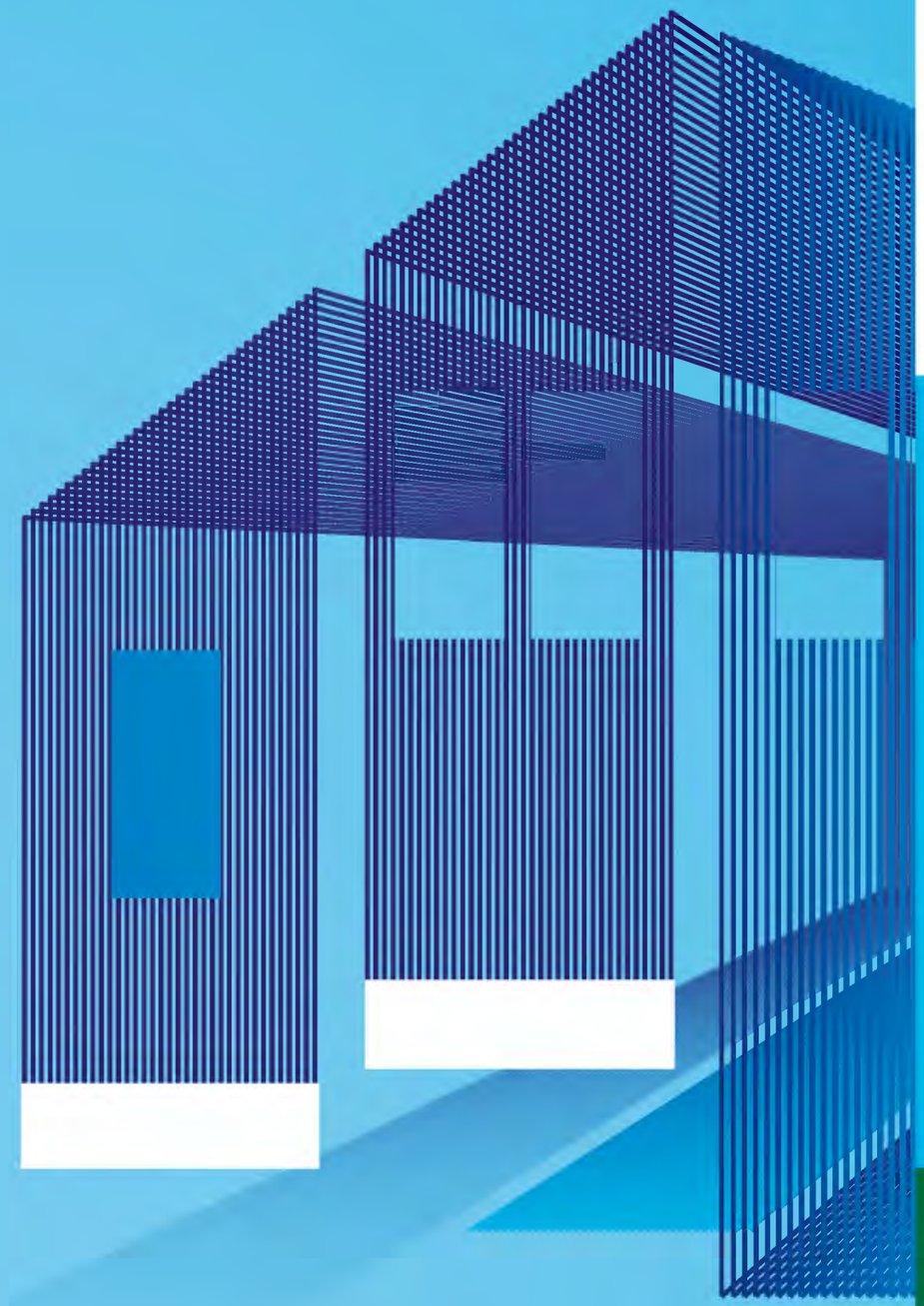
Ecosystem services and climate change
The sustainability of water resources under climate change is investigated through models for hydrological and sediment dynamics in the Noguera Pallaresa watershed (nearby of Rialb hydroelectric power plant) in response to climate change and land-use change. Moreover a comparative study in the Ter and Noguera Pallaresa watersheds (Talarn power plant) is ongoing to determine the ecosystems status and quantify the related ecosystem services.

SPAIN
Biodiversity

Avilinia Project
Co-ordination of Environmental Actions Deriving from the Power Transmission System and the Protection of Birds.

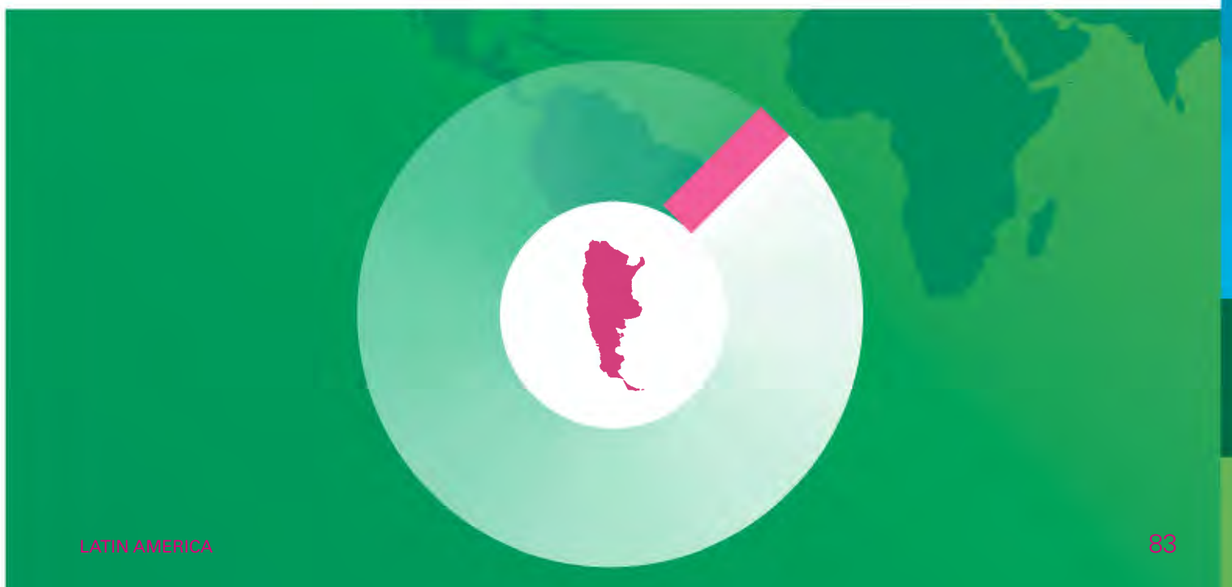
Under an agreement with the Balearic Islands Regional Government, Endesa Distribución has been implementing an environmental management plan to lower the risk of electrocution for birds in the most important areas in the Balearic Islands. Since the agreement was in force in 2004 an impressive total of 1,173 improvement initiatives have been carried out.

LATIN AMERICA



ARGENTINA

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**
	> Hydroelectric production	
Endesa SA	Endesa SA	Endesa SA



ARGENTINA

Thermoelectric **production**

THE NUMBERS

POWER PLANTS **5**

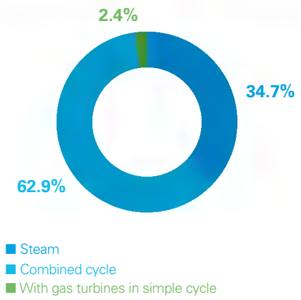
NET POWER **3,056** MW

PRODUCTION **11,966** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
Steam	1	10	735
Steam repowered with gas turbines		1	328
Combined cycle	3	5	1,921
With gas turbines in simple cycle	1	2	72
Total	5	18	3,056

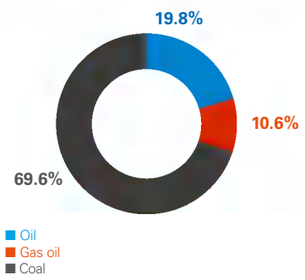
Net maximum capacity

TOTAL: **3,056 MW**



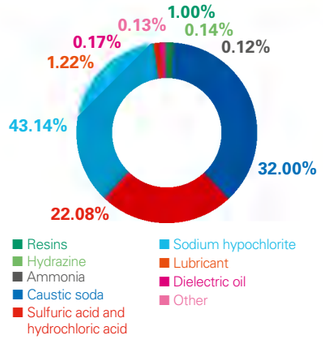
Fuel consumption

TOTAL: **2,283 t** (of oil equiv.)



Consumables

TOTAL: **7,819 t**



ARGENTINA

Thermoelectric **production**

ATMOSPHERIC EMISSIONS

NO_x (t)	9,922
SO_2 (t)	3,229
Particulate matter (t)	458
CO_2 from combustion (t)	5,923,923

Water for industrial use

TOTAL CONSUMPTION:
2,529,890 m³

TOTAL FRESH WATER DRAWN OFF:
2,529,890 m³

Waste waters

DISCHARGED (m³)
1,528,097

Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

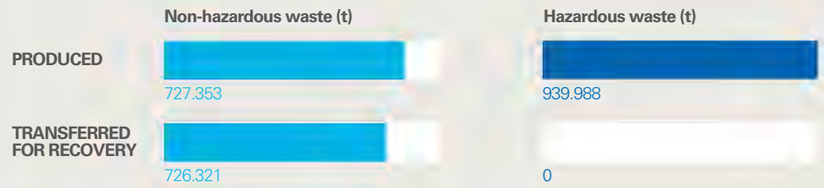
Special waste

TOTAL PRODUCED (t)
1,667.341

TOTAL TRANSFERRED FOR RECOVERY (t)
726.312

Special waste

TOTAL PRODUCED **1,667.341 t**
TOTAL TRANSFERRED FOR RECOVERY **726.321 t**



ARGENTINA

Production from **renewables**

THE NUMBERS

POWER PLANTS **2**

NET POWER **1,328** MW

PRODUCTION **3,238** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
HYDRO			
Run-of-the-river	1	1	1,200
Basin/reservoir	1	1	128
Total	2	2	1,328

ARGENTINA

Production from **renewables**

Equivalent annual hours of use*

TOTAL 2,439

Hydro
2,439

*Annual production/power ratio (excluding hydro production from pumping sources).

Emissions of CO_2 avoided (t)

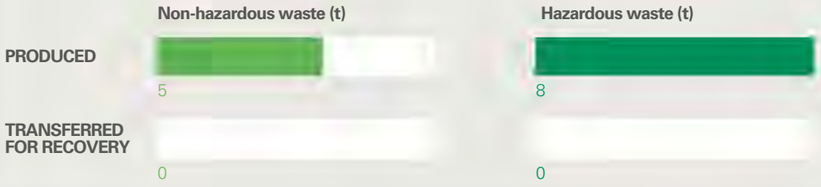
TOTAL 1,579,624

For production:

Hydroelectric from **natural sources**
1,579,624

Special waste

TOTAL PRODUCED **13 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**



ARGENTINA

Electricity **distribution**

THE NUMBERS

CABINS **18,600**

POWER (MVA) **18,627**

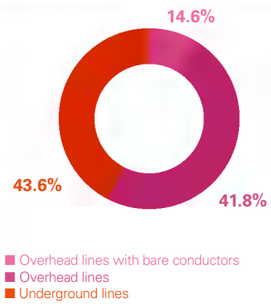
TOTAL LINES (KM) **26,010**

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Primary	71	12,424
MV/LV secondary	18,526	6,159
Other secondary	3	44
Total	18,600	18,627

Power lines (length in kilometers)	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	596	-	524	1,120
MV	3,196	146	4,530	7,872
LV	-	10,734	6,284	17,018
	3,792	10,880	11,338	26,010

Power lines



ARGENTINA

Electricity **distribution**

General data

MUNICIPALITIES SERVED **13**

SURFACE AREA SERVED (km^2) **3,303.51**

CUSTOMERS CONNECTED TO COMPANY NETWORK **2,479,072**
(of whom supplied: 2,478,398)

Electricity sold
(millions of kWh)

DISTRIBUTED IN TOTAL **18,492**

OWN CONSUMPTION TO OPERATE NETWORK **25**

Atmospheric emissions

SF_6 (kg) **280**

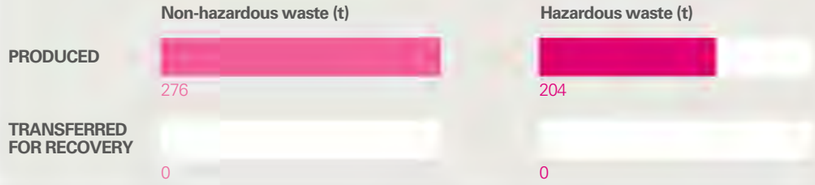
TOTAL GREENHOUSE GAS **7,785** t equiv. of CO_2

Consumption of resources

CONSUMABLES (t) **635**

Special waste

TOTAL PRODUCED **480 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**



Significant events in 2015

Enel operates in Argentina with Endesa in thermoelectric and hydroelectric production and in the distribution and sale of electricity.

Electricity production rose in total by around 6% owing to greater production from renewables (+23%).

G4-EN1 **G4-EN3**

The fuel mix compared to 2014 remained stable. Production from renewables rose by around 19% compared to 2014, with a total increase in production in the country of 5%.

G4-EN8

There was a fall of around 12% in the net specific water requirement for industrial use in thermoelectric production.

G4-EN21

Net specific emissions of NO_x and SO_2 fell respectively by 17% and 27%.

G4-EN15 **G4-EN16**

Net specific emissions of CO_2 (referring only to thermoelectric production) fell by around 6.8 g/kWh (-1.4%).

G4-EN19

Emissions of CO_2 avoided due to hydroelectric production totaled 1,579,624 t.

G4-EN24

Total and volume of significant spills.

In the Costanera plant there were 2 spills, one of oil (5 l) and one of fuel (10 l).

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of these impacts.

Materials

Edesur: in-house and external awareness raising campaign on energy saving.

Water

Costanera: management and control system for water consumption.

ARGENTINA

Significant events

Emissions

Costanera: system to inject water into the combustion chamber to reduce NO_x.

Waste

Edesur: training aimed at improving waste management.

Costanera: management and control system for hazardous waste.

Noise

Costanera: review and analysis of the purchase and installation of silencers on the steam turbo units, PLAN TVs.

Biodiversity

Main projects

El Morejón Reserve

The "Reserva Privada El Morejón" extends over a total area of 341 ha of which 38 are occupied by the Manuel Belgrano Plant and its facilities. Endesa took the opportunity to help to conserve nature by fostering the development of a preserved area. In this area there are two types of local forests (Tala and Sauzal), two lagoons due to the filling of water of local pits for the extraction of calcium carbonate and a variety of terrestrial plants, mammals and birds that inhabit and seek refuge in the lagoon islands, fishes, and amphibians.

BRAZIL

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**
	> Hydroelectric production, wind and solar	
Endesa SA	Endesa SA Enel Green Power SpA	Endesa SA

BRAZIL

Thermoelectric **production**

THE NUMBERS

POWER PLANTS **1**

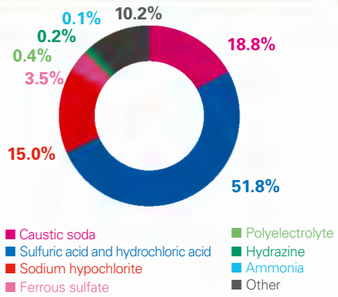
NET POWER **314** MW

PRODUCTION **2,342** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
With back-up gas turbines		1	108
With gas turbines in combined cycle	1	2	206
Total	1	3	314

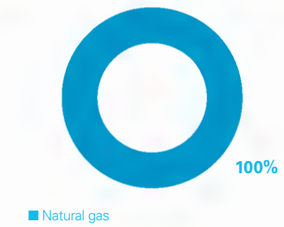
Consumables

TOTAL: **330 t**



Fuel consumption

TOTAL: **418,000 t** (of oil equiv.)



ATMOSPHERIC EMISSIONS

NO_x (t) **529**

CO_2 ..... **772,136**
from combustion (t)

BRAZIL

Thermoelectric **production**

Water for industrial use

TOTAL CONSUMPTION:
71,147 m³

TOTAL FRESH WATER DRAWN OFF:
71,147 m³

Waste waters

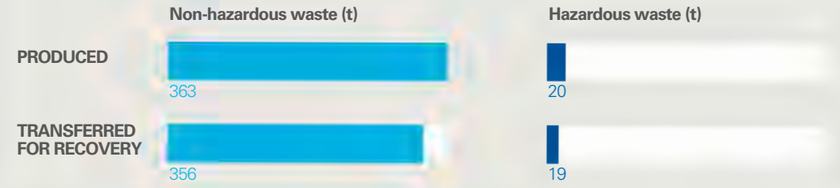
DISCHARGED (m³)
446,867

Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

Special waste

TOTAL PRODUCED **383 t**

TOTALTRANSFERRED FOR RECOVERY **375 t**



BRAZIL

Production from **renewables**

THE NUMBERS

POWER PLANTS **38**

NET POWER **1,168** MW

PRODUCTION **3,348** millions of kWh

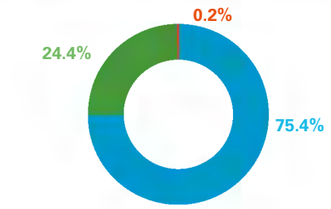
TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
HYDRO			
Run-of-the-river	11	10	756
Basin/reservoir	10	11	
Total	21	21	756
WIND	14		400
PHOTOVOLTAIC	3		12
Total	38	21	1,168

BRAZIL

Production from **renewables**

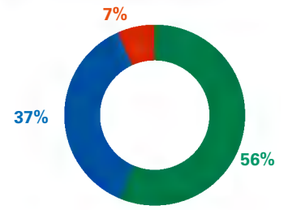
Total net electricity production

TOTAL: **3,348 million kWh**



Consumables

TOTAL: **60 t**



Equivalent annual hours of use*

TOTAL: 5,962

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 1,937,904

For production:

hydroelectric from **natural sources**
1,460,985

from **wind**
472,794

from **photovoltaic**
4,125

Special waste

TOTAL PRODUCED **69 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	20	49
TRANSFERRED FOR RECOVERY	0	0

BRAZIL

Electricity **distribution**

THE NUMBERS

CABINS **252,932**

POWER (MVA) **15,456**

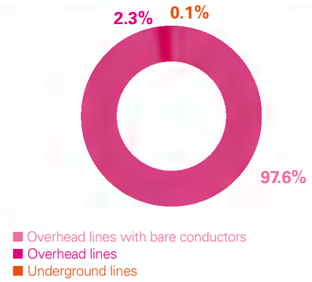
TOTAL LINES (KM) **196,594**

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Primary	226	7,559
MV/LV secondary	252,706	7,897
Total	252,932	15,456

Power lines (length in kilometers)	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	8,870	-	-	8,870
MV	119,141	19	81	119,241
LV	63,988	4,459	25	68,482
	192,010	4,478	106	196,594

Power lines



enel

BRAZIL

Electricity **distribution**

General data

MUNICIPALITIES SERVED **250**

SURFACE AREA SERVED (km²) **181,501**

CUSTOMERS CONNECTED TO COMPANY NETWORK **6,634,294**
(of whom supplied: 6,634,180)

Electricity distributed
(millions of kWh)

DISTRIBUTED IN TOTAL **22,311**

OWN CONSUMPTION TO OPERATE NETWORK **37**

Atmospheric emissions

SF_6 (kg) **83**

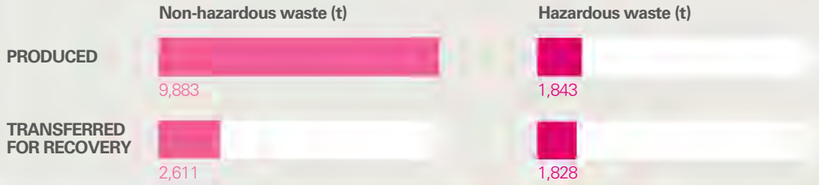
TOTAL GREENHOUSE GAS **1,843** t equiv. of CO_2

Consumption of resources

CONSUMABLES (t) **1,270**
(100% dielectric oil)

Special waste

TOTAL PRODUCED **11,726 t**
TOTAL TRANSFERRED FOR RECOVERY **4,439 t**



Significant events in 2015

Enel operates in Brazil with Endesa in thermoelectric and hydroelectric production and in electricity distribution and sales, and with Enel Green Power in hydroelectric, wind and solar production.

G4-EN1 **G4-EN3**

The fuel mix compared to 2014 remained effectively stable, with a slight fall in thermoelectric production at the Fortaleza plant.

G4-EN21

Specific net thermoelectric emissions of NO_x remained stable compared to 2014.

G4-EN15 **G4-EN16**

Net specific emissions of CO_2 (referring only to thermoelectric production) fell by around 2% due to less intermittent operations throughout the year.

G4-EN19

Emissions of CO_2 avoided due to production from renewables (hydroelectric, wind and solar) totaled 1,937,904 t.

G4-EN24

Total and volume of significant spills.
Ampla: 3 spills for a total of 33 m^3.

G4-EN27

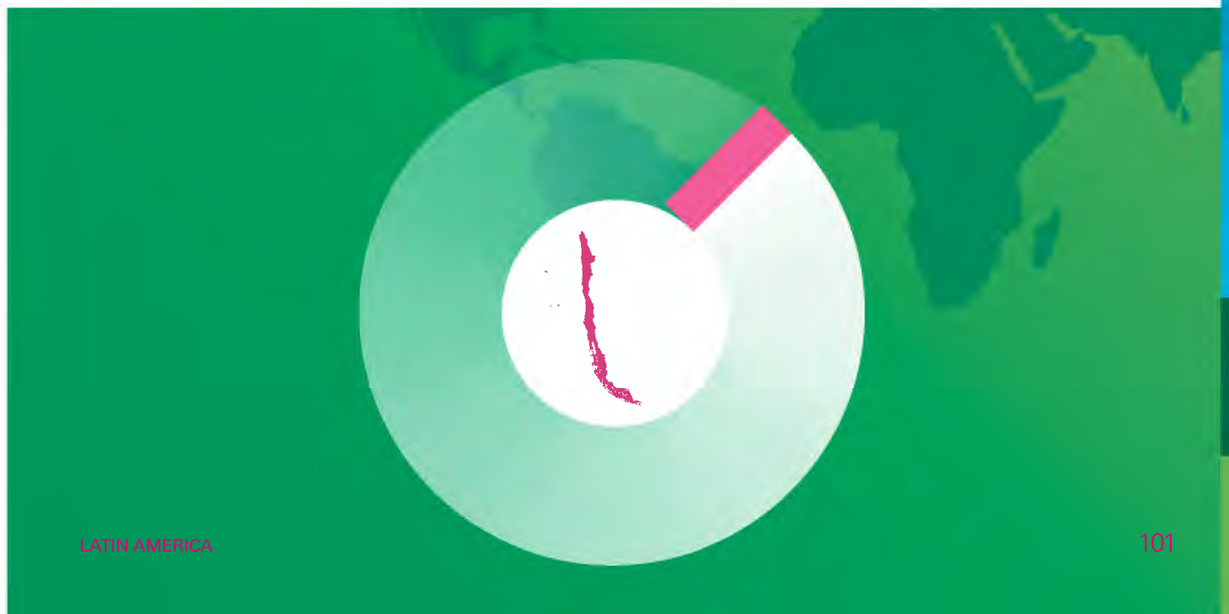
Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of these impacts.

Materials

Ampla: in-house and external awareness raising campaign on energy saving.

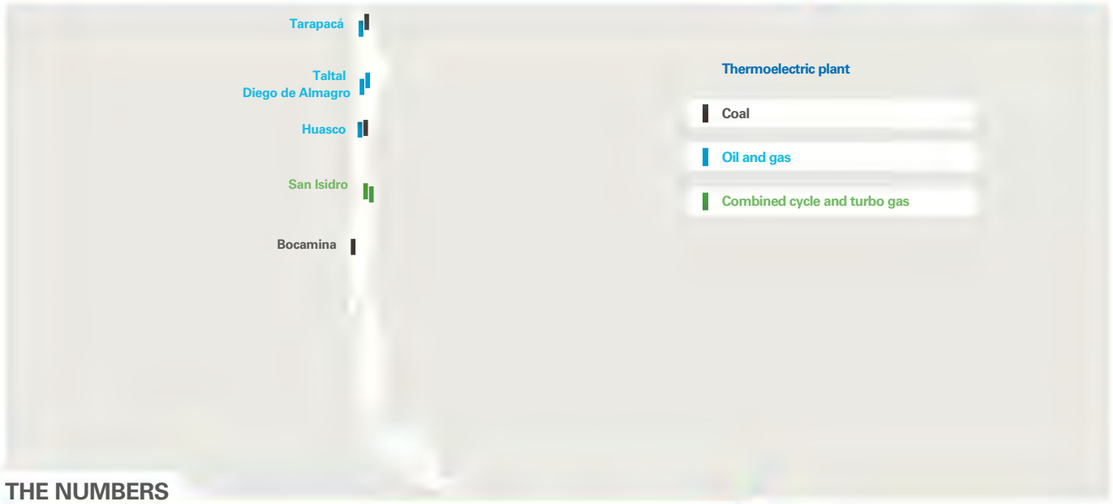
CHILE

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**
	> Hydroelectric production, wind and solar	
Endesa SA	Endesa SA Enel Green Power SpA	Endesa SA



CHILE

Thermoelectric **production**



THE NUMBERS

POWER PLANTS **10**

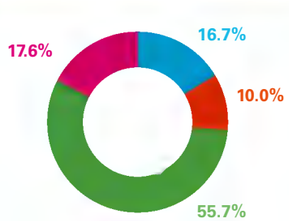
NET POWER **2,752** MW

PRODUCTION **6,314** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
Steam	3	3	459
With back-up gas turbines		2	276
Combined cycle	2	6	1,532
With gas turbines in simple cycle	5	9	485
Total	10	20	2.752

Net maximum capacity

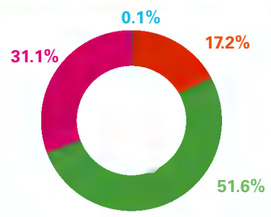
TOTAL: **2,752 MW**



- Steam
- With back-up gas turbines
- With gas turbines in combined cycle
- With gas turbines in simple cycle

Fuel consumption

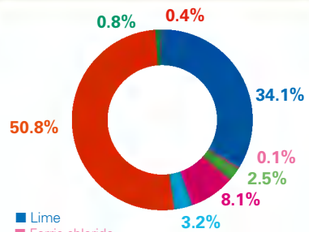
TOTAL: **1,392 t** (of oil equiv.)



- Gas oil
- Natural gas
- Coal
- Oil

Consumables

TOTAL: **4,987 t**



- Lime
- Ferric chloride
- Caustic soda
- Sulfuric acid and hydrochloric acid
- Sodium hypochlorite
- Limestone to desulfurize fumes
- Lubricant
- Other

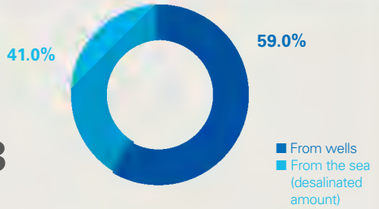
Water for industrial use

TOTAL REQUIREMENT:
1,978,941 m³

TOTAL FRESH WATER DRAWN OFF:
1,159,749 m³

Waste waters

DISCHARGED (m³)
1,494,623



Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

ATMOSPHERIC EMISSIONS

NO_x (t)	8,972
SO_2 (t)	4,706
Particulate matter (t)	170
CO_2 from combustion (t)	4,091,749

Special waste

TOTAL PRODUCED (t)
113,654

TOTAL TRANSFERRED FOR RECOVERY (t)
0

Non-hazardous waste

TOTAL PRODUCED **112,593 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

Hazardous waste

TOTAL PRODUCED **1,060 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

	Coal ash	Gypsum from desulfurization	Other	Oil fly ash	Other hazardous ash	Other
PRODUCED	105,270	6,885	438	0	0	1,060
TRANSFERRED FOR RECOVERY	0	0	0	0	0	0

CHILE

Production from **renewables**

THE NUMBERS

POWER PLANTS **31**

NET POWER **4,140** MW

PRODUCTION **13,508** millions of kWh

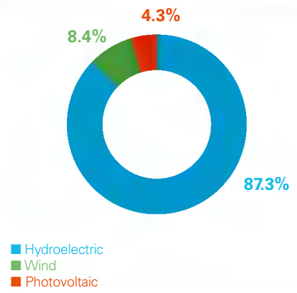
TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
HYDRO			
Run-of-the-river	13	26	887
Basin/reservoir	6	14	2,661
Total	19	40	3,548
WIND	9		418
PHOTOVOLTAIC	3		174
Total	31	40	4,062

CHILE

Production from **renewables**

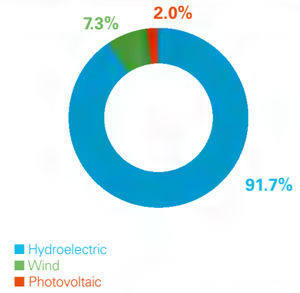
Net maximum capacity

TOTAL: **4,062 MW**



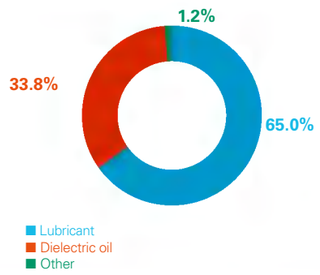
Net electricity production

TOTAL: **13,508 million kWh**



Consumables

TOTAL: **31.06 t**



Emissions of CO_2 avoided (t)

TOTAL: 9,695,298.3

For production:

hydroelectric from **natural sources**
8,806,446

from **wind**
701,225

from **solar source** (photovoltaic)
187,628

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Equivalent annual hours of use*

TOTAL: 7,835

Wind
2,876

Solar (photovoltaic)
1,501

Hydro
3,458

*Annual production/power ratio.

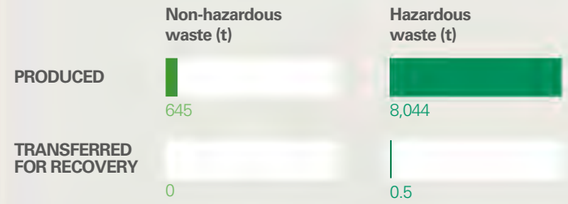
OTHER DATA

WIND PLANT
Surface area occupied by lay-bys, roads, buildings
4,380 ha

PHOTOVOLTAIC PLANT
Total surface area concerned
487 ha

Special waste

TOTAL PRODUCED **8,689 t**
TOTAL TRANSFERRED FOR RECOVERY **0.5 t**



CHILE

Electricity **distribution**

THE NUMBERS

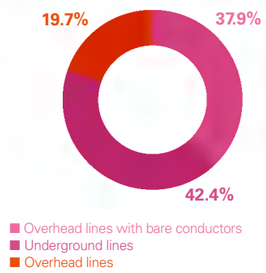
CABINS	POWER (MVA)	TOTAL LINES (KM)
22,232	12,503	16,786

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Primary	52	8,116
MV/LV secondary	22,177	4,357
Other secondary	3	30
Total	22,232	12,503

Power lines	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	352	-	11	363
MV	2,630	1,485	1,100	5,215
LV	3,385	5,626	2,197	11,208
	6,367	7,111	3,308	16,786

Power lines



CHILE

Electricity **distribution**

General data

MUNICIPALITIES SERVED
33

SURFACE AREA SERVED (km^2)
2,105

CUSTOMERS CONNECTED TO COMPANY NETWORK
1,759,052
(of whom supplied: 1,759,046)

Electricity distributed
(millions of kWh)

DISTRIBUTED IN TOTAL
15,657

OWN CONSUMPTION TO OPERATE NETWORK
13

Atmospheric emissions

SF_6 (kg)
6.35

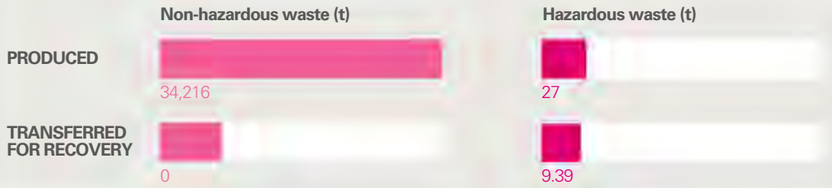
TOTAL GREENHOUSE GAS
141 t equiv. of CO_2

Consumption of resources

CONSUMABLES (t)
0.015

Special waste

TOTAL PRODUCED **34,243 t**
TOTAL TRANSFERRED FOR RECOVERY **9.39 t**



Significant events in 2015

Enel operates in Chile with Endesa in thermoelectric, wind and hydroelectric production and in electricity distribution and sales, and with Enel Green Power in hydroelectric, wind and photovoltaic production.

Compared to 2014 thermoelectric production remained stable, and production from renewable increased with the coming into full operation of the new wind plant.

G4-EN1 **G4-EN3**

The fuel mix compared to 2014 changed as regards fossil fuels with an increase in gas oil, which went from 1.4% to 17.2%. Production from renewable increased by around 5.5% compared to 2014.

G4-EN8

There was a fall of around 46% in the net specific water requirement for industrial use in thermoelectric production.

G4-EN21

In relation to the fossil fuels used, there was an increase in emissions of NO_x (+50%) compared to 2014. Emissions of SO_2 and particulates fell respectively by 16% and 25% compared to the previous year.

G4-EN15 **G4-EN16**

Net specific emissions of CO_2 (referring only to thermoelectric production) rose by 35% owing to the greater use of gas oil and coal during the year.

G4-EN19

Emissions of CO_2 avoided due to hydroelectric, wind and photovoltaic production totaled 9,695,298.3 t.

G4-EN24

Total and volume of significant spills.
Chilectra: there were 19 leaks from transformers in various locations for an overall total of around 0.5 m^3 of oil.

Endesa: oil spills totaling 2.8 m^3.

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of these impacts.

Emissions
CT Tarapacá: the DeSOx project, which will reduce concentrations and emission rates of SO_2, was approved in July 2015. The project is currently in the construction phase.

CT Taltal: on October 22, 2015 the environmental assessment service approved the construction of the demineralized water injection system to reduce the production of NO_x during operations with gas oil.

Waste
CT Tarapacá: during 2015 the clean production agreement was signed, which establishes the guidelines for sustainable management of industrial waste.

Noise
During 2015 the noise mitigation system (sound absorbent panels) came into use in the Santa Elena and La Reina substations.

Biodiversity

Main projects

Huinay (Chile)

Huinay in Chile, extends approximately 34,000 hectares from the Comau or Leptepu Fjord, in the province of Palena, up to Argentina and constitutes a privileged area in terms of biodiversity. This characteristic has made it a full-fledged research laboratory for a specific science foundation, Fundación San Ignacio del Huinay supported by Enel and its subsidiary Endesa. Active since 1998, the Foundation has contributed to the discovery of 50 new species including one, Endesa Tethocyathus, which is the first species to be named after a company.

COLOMBIA

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**
	> Hydroelectric production	
Endesa SA	Endesa SA	Endesa SA

COLOMBIA

Thermoelectric **production**

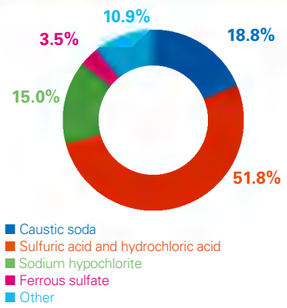
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
2	411 MW	1,482 millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
Steam (condensing)	2	7	411
Total	2	7	411

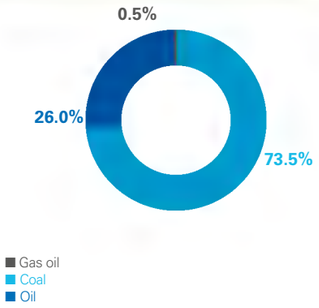
Consumables

TOTAL: **330 t**



Fuel consumption

TOTAL: **435,460 t**



Waste waters

DISCHARGED (m^3)
70,790

Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

COLOMBIA

Thermoelectric **production**

ATMOSPHERIC EMISSIONS

NO_x (t)	3,908
SO_2 (t)	12,485
Particulate matter (t)	629
CO_2 from combustion (t)	1,418,338

Special waste

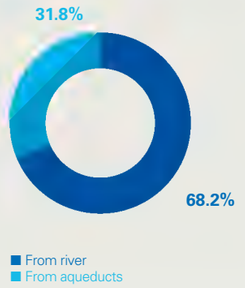
TOTAL PRODUCED (t)
73,709

TOTAL TRANSFERRED FOR RECOVERY (t)
336

Water for industrial use

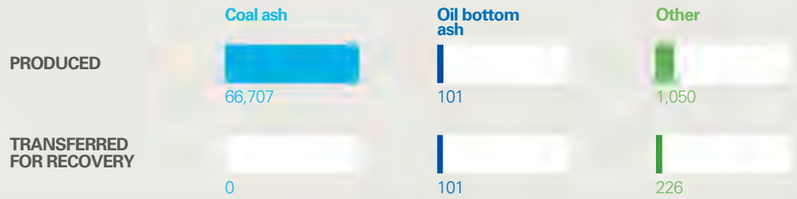
TOTAL CONSUMPTION:
280,307 m^3

TOTAL FRESH WATER DRAWN OFF:
280,307 m^3



Non-hazardous waste

PRODUCED **73,652 t**
TRANSFERRED FOR RECOVERY **327 t**



COLOMBIA

Production from **renewables**

THE NUMBERS

POWER PLANTS **11**

NET POWER **2,996** MW

PRODUCTION **12,223** millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
HYDRO			
Run-of-the-river	7	12	1,101
Basin/reservoir	3	10	1,185
Pure/mixed pumping	1	0	0
Total	11	22	2,996

COLOMBIA

Production from **renewables**

Special waste

TOTAL PRODUCED **585 t**
TOTAL TRANSFERRED FOR RECOVERY **145 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	547	39
TRANSFERRED FOR RECOVERY	137	8

Consumables

TOTAL: **7.9 t**

Emissions of CO_2 avoided (t)

TOTAL: 7,432,966

For production:

hydroelectric from **natural sources**
7,432,966

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Equivalent annual hours of use*

TOTAL: 4,080

Hydro
4,080

*Annual production/power ratio.

COLOMBIA

Electricity **distribution**

THE NUMBERS

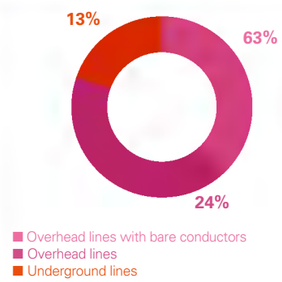
CABINS	POWER (MVA)	TOTAL LINES (KM)
69,606	17,625	49,783

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Primary	55	7,875
MV/LV secondary	69,490	9,379
Other secondary	61	371
Total	69,606	17,625

Power lines	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	1,247	-	-	1,247
MV	16,396	1,485	3,362	20,266
LV	13,951	11,414	2,905	28,270
	31,594	11,921	6,267	49,783

Power lines



COLOMBIA

Electricity **distribution**

General data

MUNICIPALITIES SERVED
102

SURFACE AREA SERVED (km²)
14,456

CUSTOMERS CONNECTED TO COMPANY NETWORK
2,823,369
(of whom supplied: 2,816,462)

Electricity transported
(millions of kWh)

DISTRIBUTED IN TOTAL
13,946

OWN CONSUMPTION TO OPERATE NETWORK
9

Atmospheric emissions

SF_6 (kg)
186

TOTAL GREENHOUSE GAS
4,138 t equiv. of CO_2

Consumption of resources

CONSUMABLES (t)
0

Special waste

TOTAL PRODUCED **42,981 t**
TOTAL TRANSFERRED FOR RECOVERY **3,898 t**

Significant events in 2015

Enel operates in Colombia with Endesa in thermoelectric and hydroelectric production and in electricity distribution and sales.

Compared to 2014thermoelectric production rose by 59% with contributions from both the Termozipa plant and that at Cartagena. Hydroelectric production-fell overall by 3%.

In October 2015 Enel, through its Colombian subsidiary Emgesa, started production at the hydroelectric plant of El Quimbo, in Colombia. With installed power of 400 MW, the plant is located in the region of Huila, around 350 km south-west of Bogotá. The plant, which is fed by the Magdalena, the country's biggest river, covers 6 municipalities (Gigante, Garzón, Altamira, El Agrado, Paicol and Tesalia).

G4-EN1 **G4-EN3**

The fuel mix compared to 2014 changed as regards fossil fuels with an increase in the consumption of oil, which went from 8.5%in the previous year to 26% in 2015, and fell in regard to the consumption of coal. Production from renewable rose by around 5.5% compared to 2014.

G4-EN8

There was a fall of around 12% in the net specific water requirement for industrial use in thermoelectric production.

G4-EN21

Compared to 2014 there was a fall in specific emissions of SO_2 (-9%) and an increase in specific emissions of NO_x and particulates.

G4-EN19

Emissions of CO_2 avoided due to hydroelectric production totaled around 7.4 million tons.

G4-EN15 **G4-EN16**

Net specific emissions of CO_2 (referring only to thermoelectric production) fell by 22% in relation to the different fuel mix used.

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of these impacts.

Materials

It is required and checked that the supply sources for resources and materials are from sites authorized by the Environmental Authority.

Waters

Maintenance of an efficient use program in administrative offices through initiatives to promote reduced consumption.

Emissions

A project was undertaken to modernize street lighting with LED technology. For 2015, 10,507 traditional sodium lights were replaced with LED technology in order to achieve a reduction in energy consumptionestimated at around 4,602 GJ.

A program of lending electric bicycles to employees was implemented, which enabled a saving of emissions of 25 tons of CO_2 and 123,360 kilometers cycled.

A photovoltaic system installed on the roof of the offices at Codensa, the distribution company, with capacity of 42 kWp, meets 5% of energy demand. During 2015 it generated 25 MWh, avoiding the emission of 4.75 tons of CO_2.
In addition, a program was maintained to monitor emissions of SF_6 and control of vehicle emissions.

Waste

Codensa carries out controls over the whole process, from the generation to the disposal of all industrial and institutional waste. In the same way PCB contaminated material is removed for incineration or use.

Noise

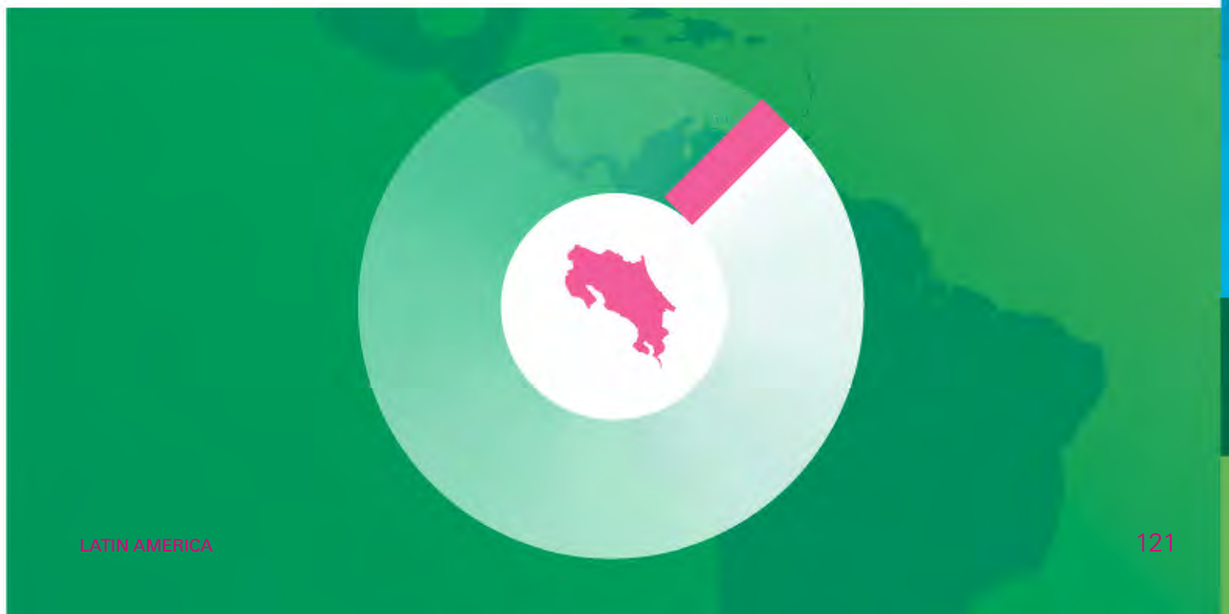
Codensa responds opportunely to customers' requests regarding the noise generated by installations by applying specific corrective methods depending on the situation.

COSTA RICA

Production from
renewables

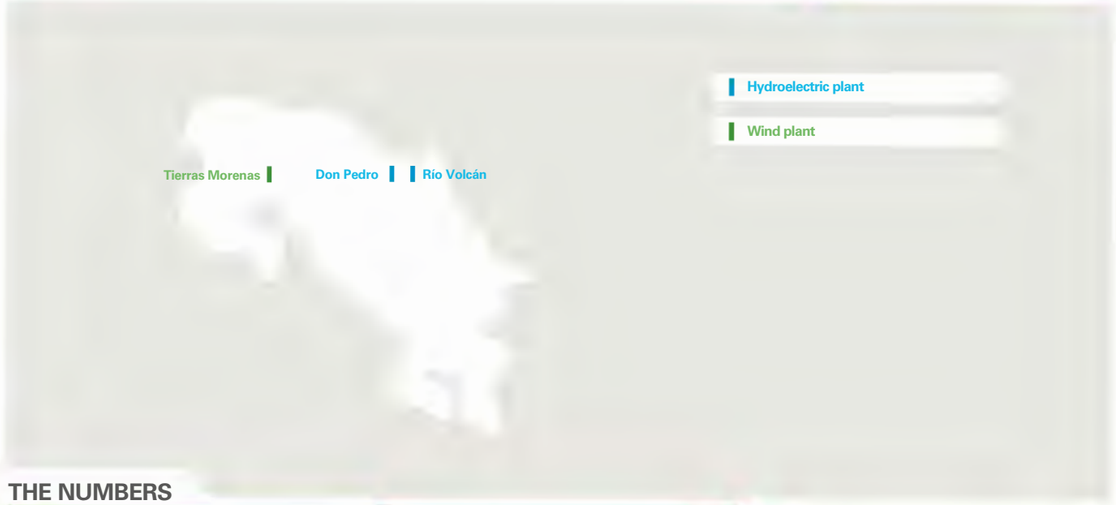
> Hydroelectric and wind production

Enel Green Power SpA



COSTA RICA

Production from **renewables**



THE NUMBERS

POWER PLANTS **3**

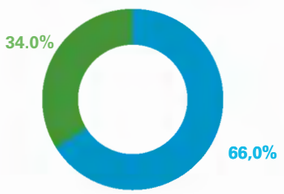
NET POWER **55** MW

PRODUCTIONS **230** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Basin/reservoir	2	2	31
WIND			
	1		24
Total	3	2	55

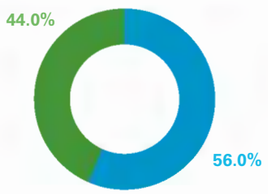
Net electricity production

TOTAL: 230 millions of kWh



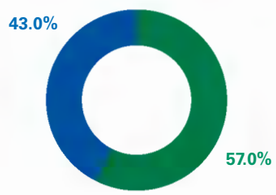
Net maximum capacity

TOTAL: **55 MW**



Consumables

TOTAL: **0.36 t**



COSTA RICA

Production from **renewables**

Equivalent annual hours of use*

TOTAL: 8,143

Wind 3,250

Hydro 4,893

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 161,693

For production:

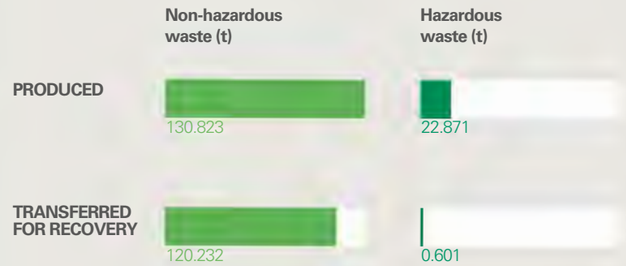
from **wind** 54.955

hydroelectric from **natural sources** 106,738

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Special waste

TOTAL PRODUCED **153.694 t**
TOTAL TRANSFERRED FOR RECOVERY **120.833 t**



COSTA RICA

Significant events

Significant events in 2015

Enel operates in Costa Rica with Enel Green Power in energy production from hydroelectric and wind.

Total production (hydroelectric and wind) rose by 7% due to a greater contribution from hydroelectric production.

In December 2015 the wind asset (24 MW net power) has been sold.

G4-EN19

Emissions of CO_2 avoided due to production from renewable totaled around 161 thousand tons.

GUATEMALA

Production from **renewables**

> Hydroelectric production

Enel Green Power SpA

GT
MX
PA
PE
UY
CA
NORTH AMERICA
US
AFRICA AND NEW COUNTRIES

GUATEMALA

Production from **renewables**

THE NUMBERS

POWER PLANTS **5**

NET POWER **164** MW

PRODUCTION **579** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Run-of-the-river	1	1	14
Basin/reservoir	4	4	150
Total	5	5	164

GUATEMALA

Production from **renewables**

Equivalent annual hours of use*

TOTAL: 3,535

Hydro
3.535

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 339,133

For production:

hydroelectric from **natural sources**
339,133

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Consumables

TOTAL: **0.2 t**

Lubricant

Special waste

TOTAL PRODUCED **1,707 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	1,674	33
TRANSFERRED FOR RECOVERY	0	0

GUATEMALA

Significant events

Significant events in 2015

Enel operates in Guatemala with Enel Green Power producing hydroelectric energy.

Total hydroelectric production fell by 20% compared to 2014.

G4-EN19

Emissions of CO_2 avoided due to production from renewables totaled around 339 thousand tons.

G4-EN24

Total and volume of significant spills.

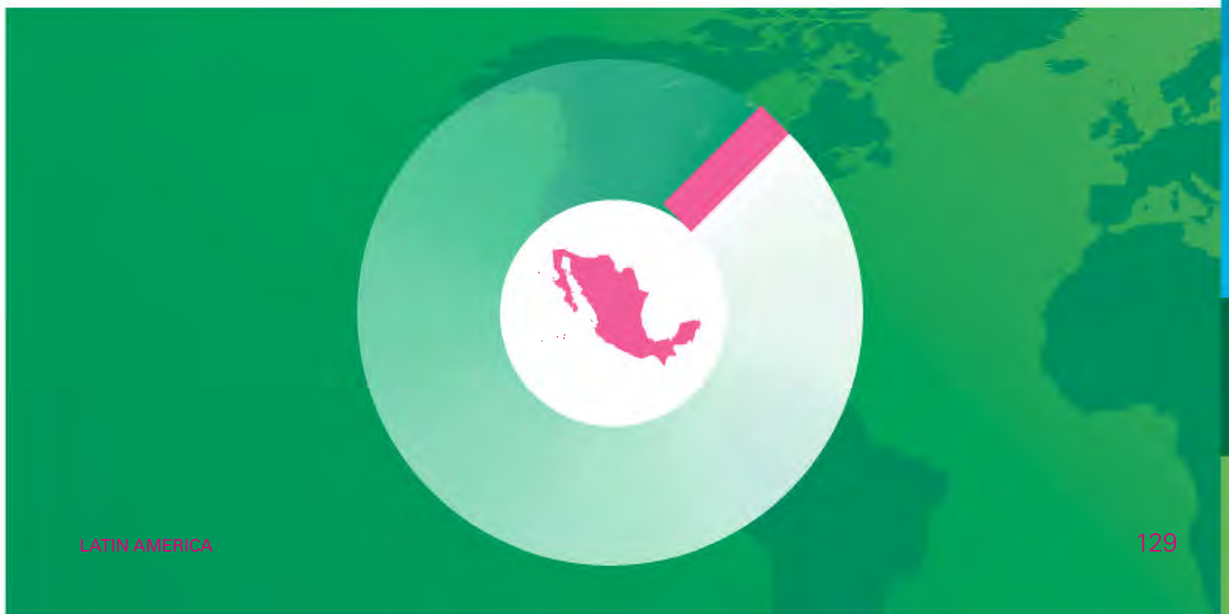
There was a significant spill at the hydroelectric plant of Palo Viejo for a total of 0.8 m^3.

MEXICO

Production from **renewables**

> Hydroelectric and wind production

Enel Green Power SpA



MX
PA
PE
UY
NORTH AMERICA
AFRICA AND NEW COUNTRIES

MEXICO

Production from **renewables**

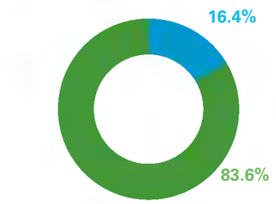
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
9	**499** MW	**1,372** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO	3	3	53
WIND	5		446
PHOTOVOLTAIC	1		
Total	9	3	499

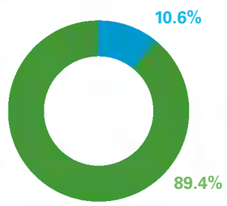
Net electricity production

TOTAL: **1,372 million kWh**



Net maximum capacity

TOTAL: **499 MW**



Consumables

TOTAL: **0.8 t**

MEXICO

Production from **renewables**

Equivalent annual hours of use*

TOTAL: 6,858

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 796,493

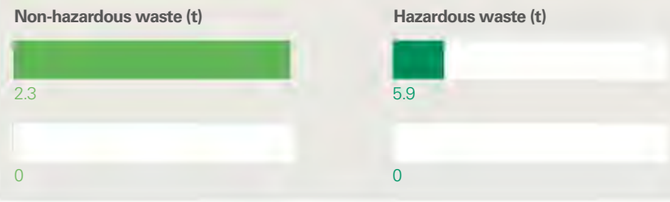
For production:
hydroelectric from **natural sources**
130,476

from **wind**
666,017

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Special waste

TOTAL PRODUCED **8.2 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**



MEXICO

Significant events

Significant events in 2015

Enel operates in Mexico with Enel Green Power, producing hydroelectric and wind energy.

Total hydroelectric production rose by 62% compared to 2014 due to the greater contribution from wind (+93% compared to the previous year owing to increased capacity of 83% due to the construction of the new wind farm).

Enel Green Power completed and linked to the grid the new Dominica II wind farm in Mexico, in the State of San Luis Potosí. The plant adds 100 MW to the Dominica I plant which is already operational, thus taking total installed capacity from the wind farm to 200 MW.

The farm, which is located in the municipality of Charcas, consists of 50 turbines of 2 MW each and can generate over 250 GWh per annum, equivalent to the annual requirement of around 143 thousand Mexican families, avoiding the atmospheric emission of around 140 thousand tons of CO_2 per annum. The two farms together will be able to produce over 510 GWh annually.

G4-EN19

Emissions of CO_2 avoided due to production from renewables totaled around 796 thousand tons.

PANAMA

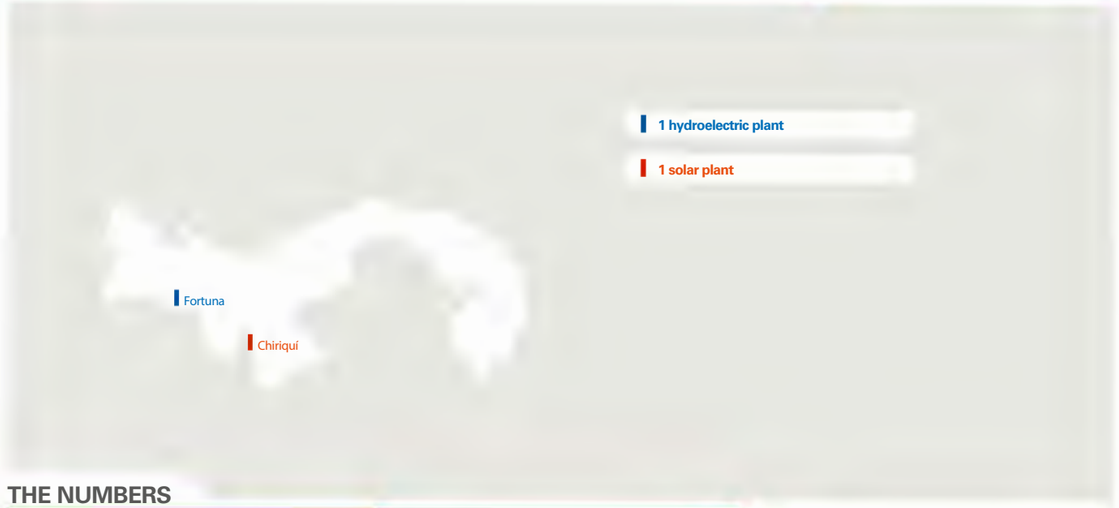
Production from **renewables**

> Hydroelectric and solar production

Enel Green Power SpA

PANAMA

Production from **renewables**



THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
2	**312** MW	**1,661** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO	1	1	300
SOLAR	1		12
Total	2	1	312

Net electricity production

TOTAL: **1,661 million kWh**

Net maximum capacity

TOTAL: **312 MW**

Consumables

TOTAL: **8.4 t**

PANAMA

Production from **renewables**

Equivalent annual hours of use*

TOTAL: 6,245

Solar
738

Hydro
5,507

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 1,447

For production:

hydroelectric from **natural sources**
1,439

from **solar**
8

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Special waste

TOTAL PRODUCED **24.7 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	19.4	5.3
TRANSFERRED FOR RECOVERY	0	0

Significant events in 2015

Enel operates in Panama with Enel Green Power in producing hydroelectric and solar energy.

Total energy production rose by around 48% compared to 2014 due to the greater contribution from hydroelectric (+47% in production compared to the previous year).

Enel Green Power completed and connected the Chiriquí plant to the grid. It is the first photovoltaic plant built by the Italian company in Panama.

With total installed capacity of 12 MW, the plant can generate over 19 GWh annually, equivalent to the annual consumption requirement of more than 16 thousand local families.

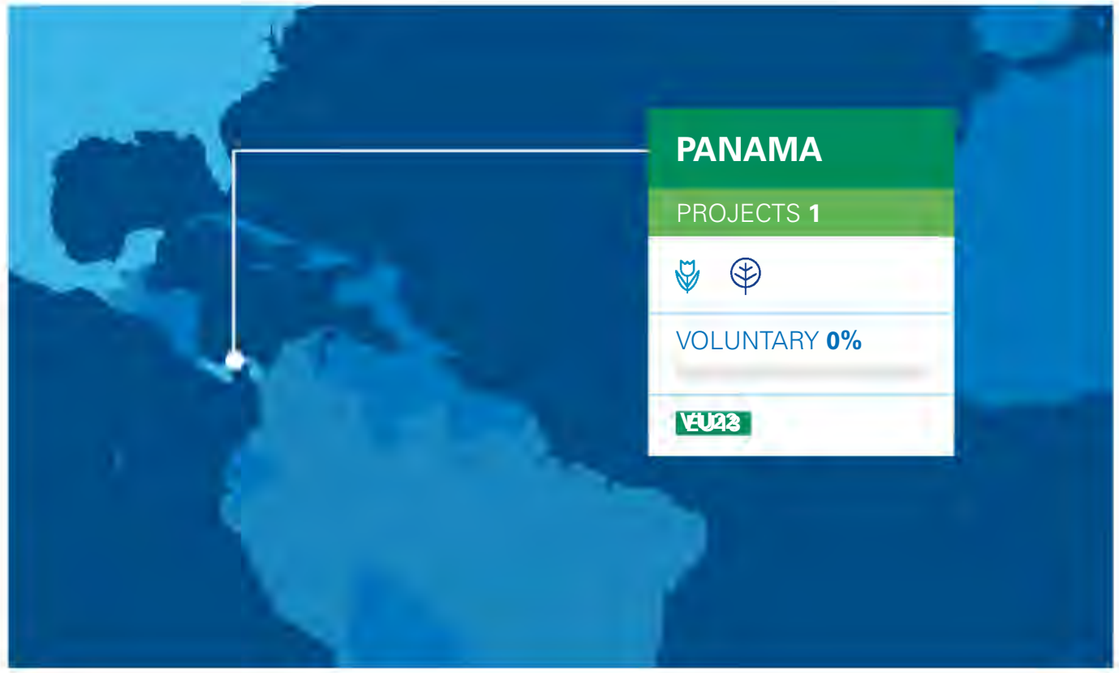
The energy generated by Chiriquí will be bought by the hydroelectric plant of Fortuna, which is also owned by Enel Green Power and is 90 km away.

The Chiriquí photovoltaic plant consists of 39,640 photovoltaic modules distributed over a surface area of 23,000 hectares.

G4-EN19

Emissions of CO_2 avoided due to production from renewables totaled around 1,447,000 tons.

Biodiversity



Main projects

Fortuna forest reserve

The Fortuna forest reserve is a site of outstanding naturalistic value that extends for about 19,500 hectares near the Pacific coast of Panama. The area is part of the UNESCO "World Biosphere Reserve" network and is considered among the most important in the world for the wealth of its biodiversity. Enel Green Power in cooperation with the Smithsonian Tropical Institute was responsible for reforestation activities in areas particularly important for local communities.

PERU

Thermoelectric **production**	Production from **renewables**	Electricity **distribution**
	> Hydroelectric production	
Endesa SA	Endesa SA	Endesa SA

PERU

Thermoelectric **production**

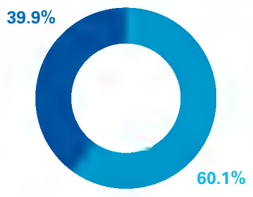
THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTION
3	1,183 MW	4,148 millions of kWh

TYPE OF PLANT	Power plants	Sections	Net maximum capacity MW
With gas turbines in combined cycle	1	2	472
With gas turbines in simple cycle	2	8	711
Total	3	10	1,183

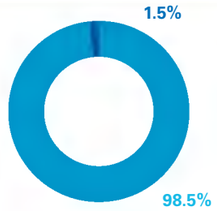
Net maximum capacity

TOTAL: **1,183 MW**



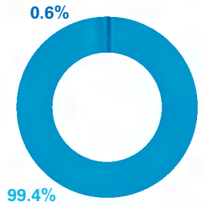
Water for industrial use

Total requirement: **3,393,411 m³**
Total fresh water drawn off: **3,393,411 m³**



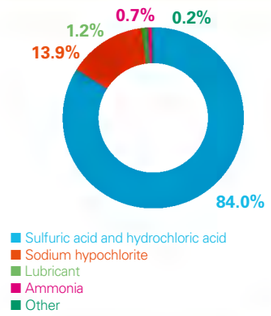
Fuel consumption

TOTAL: **828,539 t** (of oil equiv.)



Consumables

TOTAL: **737 t**



ATMOSPHERIC EMISSIONS

NO_x (t)	2,466
SO_2 (t)	201
Particulate matter (t)	117
CO_2 from combustion (t)	1,637,947

Special waste

TOTAL PRODUCED **602 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	263	339
TRANSFERRED FOR RECOVERY	0	0

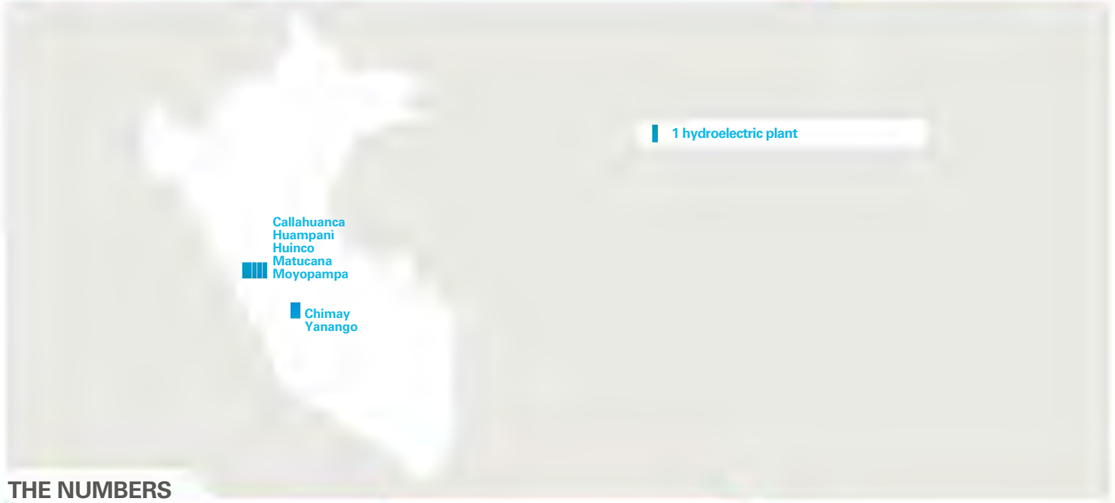
Waste waters

DISCHARGED (m³)
975,121

Waste waters include rain water which flows into treatment plants if it comes from areas where it might have been polluted.

PERU

Production from **renewables**



THE NUMBERS

POWER PLANTS **7**

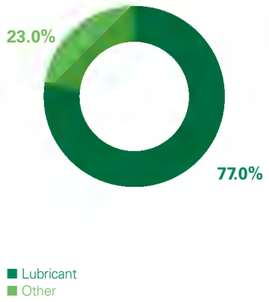
NET POWER **755** MW

PRODUCTION **4,653** millions of kWh

TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Run-of-the-river	5	12	224
Basin/reservoir	2	6	531
Total	**7**	**18**	**755**

Consumables

TOTAL: **1.2 t**



Equivalent annual hours of use*

TOTAL: 5,942

*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 2,820,939

For production:

hydroelectric from **natural sources**
2,820,939

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

PERU

Production from **renewables**

Special waste

TOTAL PRODUCED **490 t**
TOTAL TRANSFERRED FOR RECOVERY **0 t**

	Non-hazardous waste (t)	Hazardous waste (t)
PRODUCED	476	14
TRANSFERRED FOR RECOVERY	0	0

PERU

Electricity **distribution**

THE NUMBERS

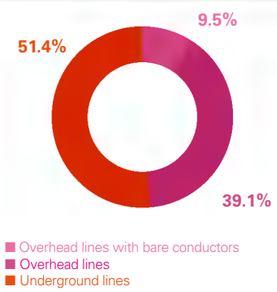
CABINS	POWER (MVA)	TOTAL LINES (KM)
9,762	3,795	27,324

TYPE OF PLANT

Cabins	no.	Installed transformation capacity MVA
Primary	29	1,991
MV/LV secondary	9,729	1,774
Other secondary	4	30
Total	9,762	3,795

Power lines (length in kilometers)	Overhead lines with bare conductors	Overhead lines	Underground lines	Total lines
HV	480	-	92	573
MV	2,113	-	2,371	4,484
LV	-	10,692	11,575	22,267
	2,593	10,692	14,038	27,324

Power lines



PERU

Electricity **distribution**

General data

MUNICIPALITIES SERVED
57

SURFACE AREA SERVED (km²)
1,517

CUSTOMERS CONNECTED TO COMPANY NETWORK
1,335,723
(of whom supplied: 1,335,702)

Electricity distributed
(millions of kWh)

DISTRIBUTED IN TOTAL
7,624

OWN CONSUMPTION TO OPERATE NETWORK
21

Atmospheric emissions

TOTAL GREENHOUSE GAS
1.6 t equiv. of CO_2

Consumption of resources

CONSUMABLES:

DIELECTRIC OIL (t)
1.42

GAS OIL (toe)
0.5

Special waste

TOTAL PRODUCED **10,272 t**
TOTAL TRANSFERRED FOR RECOVERY **1,267 t**

Significant events in 2015

Enel operates in Peru with Endesa in hydroelectric and thermoelectric production and in electricity distribution and sales.

Compared to 2014 thermoelectric production fell by 10%, while hydroelectric production rose by around 5%. Total annual production fell by around 3%.

G4-EN1 **G4-EN3**

The fuel mix compared to 2014 remained unchanged since it consisted solely of natural gas and gas oil used only in the stages of powering up the plant.

G4-EN8

Specific net consumption of water for industrial use in thermoelectric production rose slightly, going from 0.73 to 0.82 l/kWh.

G4-EN21

Compared to 2014 there was a fall in specific emissions of SO_2 (-14%) and NO_x (-1%) and an increase in specific emissions of particulates (+22%).

G4-EN15 **G4-EN16**

Net specific emissions of CO_2 (referring only to thermoelectric production) fell from 400 to 395 g/kWh.

G4-EN19

Emissions of CO_2 avoided due to hydroelectric production totaled around 2.8 million tons.

G4-EN27

Initiatives to reduce the environmental impacts of products and services and the extent of the mitigation of these impacts.

Water

In 2015, the national water authority approved the reuse of industrial water for irrigation from the plants of Ventanilla and Santa Rosa.

URUGUAY

Production from **renewables**

> Wind production

Enel Green Power SpA

URUGUAY

Production from **renewables**

THE NUMBERS

POWER PLANTS	NET POWER	PRODUCTIONS
1	50 MW	49 millions of kWh

Emissions of CO_2 avoided (t)
TOTAL: 29,808

For production:

from **wind**
29,808

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Equivalent annual hours of use*
TOTAL: 982

Wind
982

*Annual production/power ratio.

Significant events in 2015

In Uruguay Enel Green Power operates with a wind farm, Melowind, located in the area of Cerro Largo, around 320 km from the capital Montevideo.

The 50 MW wind farm can generate up to 200 GWh of electricity annually, equivalent to the average consumption of 74 thousand homes, avoiding the atmospheric emission of over 62 thousand t of CO_2 per annum.

The electricity is sold to the State electricity company UTE, which manages the transmission, distribution and sale of electricity in Uruguay.

NORTH AMERICA

CANADA

Production from
renewables

> Wind production

Enel Green Power SpA

CANADA

Production from **renewables**

THE NUMBERS

POWER PLANTS **2**

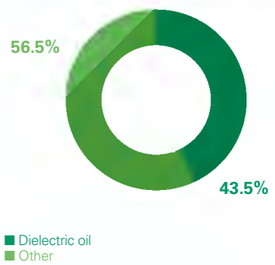
NET POWER **103** MW

PRODUCTIONS **305** millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
WIND	2	103
Total	2	103

Consumables

TOTAL: **0.23 t**



Emissions of CO_2 avoided (t)

TOTAL: 246,949

For production:

from **wind**
246,949

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Equivalent annual hours of use*

TOTAL: 2,958

Wind
2,958

*Annual production/power ratio.

Special waste

TOTAL PRODUCED **1.75 t**
TOTAL TRANSFERRED FOR RECOVERY **1.75 t**

CANADA

Significant events in 2015

Enel operates in Canada with Enel Green Power North America in wind production with a consolidated capacity of 103 MW.

Castle Rock Ridge
Municipality: **Pincher Creek**
Region: **Alberta**
Year of construction: **2012**
Type: **wind**
Capacity: **76 MW**
No. of wind generators: **33**

St. Lawrence
Municipality: **Newfoundland**
Region: **Ontario**
Year of construction: **2012**
Type: **wind**
Capacity: **27 MW**

G4-EN6 **G4-EN7** **G4-EN19**

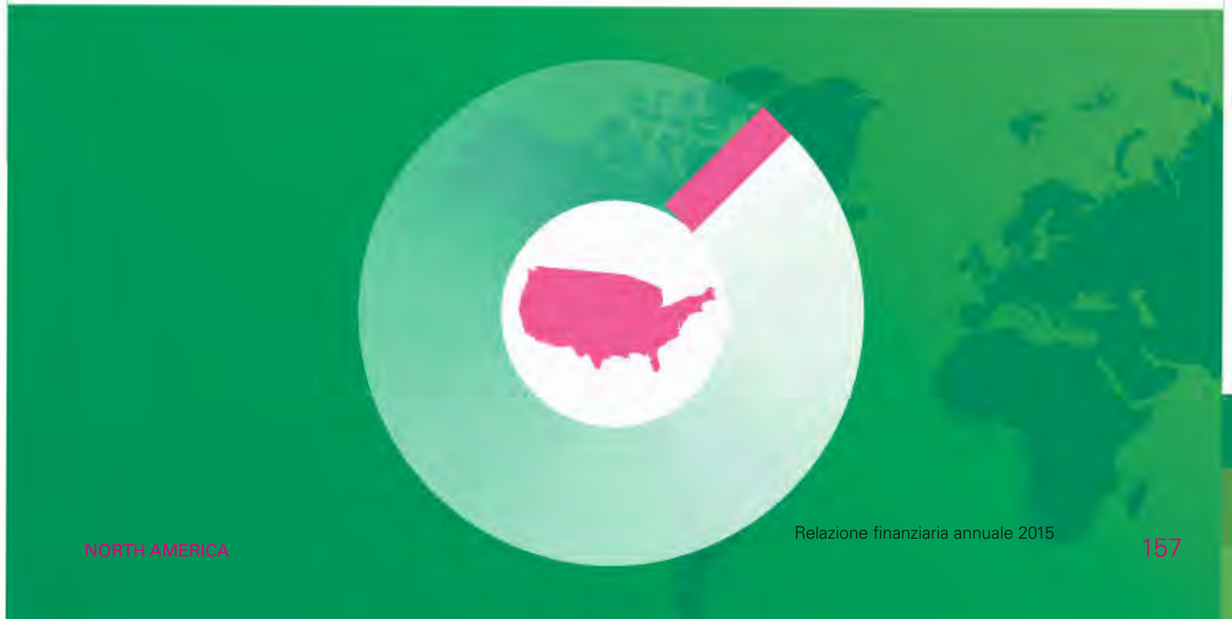
In 2015 the CO_2 emissions avoided due to "carbon free" production totaled around 247 thousand tons, all from wind production.

UNITED STATES

Production from **renewables**

> Hydroelectric, wind, geothermal and photovoltaic production

Enel Green Power SpA



UNITED STATES

Production from **renewables**

THE NUMBERS

POWER PLANTS **98**

NET POWER **2,403** MW

PRODUCTIONS **7,063** millions of kWh

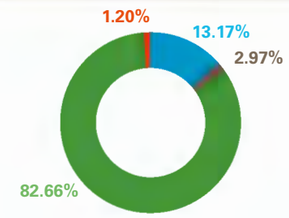
TYPE OF PLANT	Power plants	Derivations	Net maximum capacity MW
HYDRO			
Run-of-the-river	60	60	200
Basin/reservoir	2	2	116
GEO			
	3		72
WIND			
	30		1,987
PHOTOVOLTAIC			
	3		29
Total	98	62	2,403

UNITED STATES

Production from **renewables**

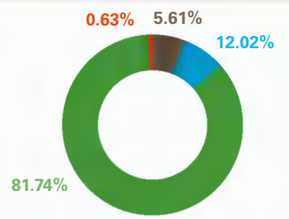
Net maximum capacity

TOTAL: **2,403 MW**



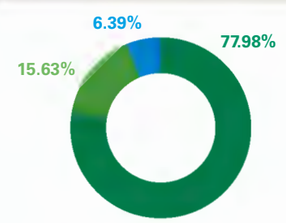
Net electricity production

TOTAL: **7,063 million kWh**



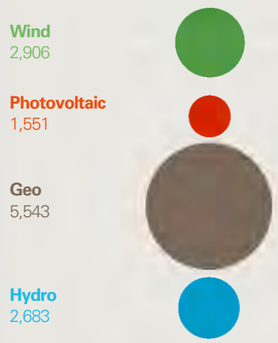
Consumables

TOTAL: **687 t**



Equivalent annual hours of use*

TOTAL: 12,683



*Annual production/power ratio.

Emissions of CO_2 avoided (t)

TOTAL: 5,076,353

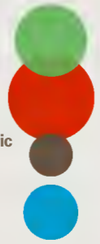
For production:

from **wind**
4,149,137

from **photovoltaic**
32,102

from **geo-thermoelectric**
284.822

hydroelectric from **natural sources**
610,292



Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary. The contribution of the geo-thermoelectric production is calculated on the basis of the natural origin of the related CO_2 emissions.

Atmospheric emissions (t)

CO_2
produced from combustion of gas oil in back-up generators
1,026

Geothermal fluid

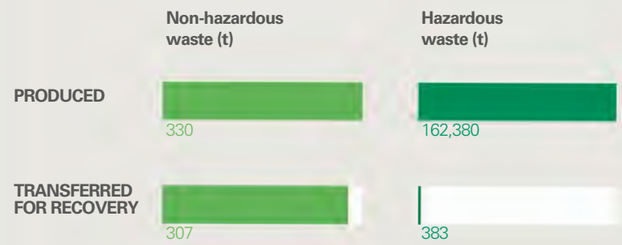
TOTAL FLUID EXTRACTED
59,532,000 t

STEAM USED FOR PRODUCTION OF ELECTRICITY
59,532,000 t

The transfer of heat enables the use of resources which do not have (or no longer have) thermodynamic characteristics compatible with geo-thermoelectric production. It is destined above all to heating greenhouses and the remote heating of buildings.

Special waste

TOTAL PRODUCED **162,710 t**
TOTAL TRANSFERRED FOR RECOVERY **690 t**



Geothermal business

WELLS DRILLED

New: **2**

EXISTING WELLS

For production: **19**

For reinjection: **15**

For other uses: **8**

Significant events in 2015

Enel Green Power North America (EGP-NA), which is part of Enel Green Power, is a leading company which owns and manages renewable energy plants in North America with projects in operation and under development in 21 States of the USA.

Total production from renewable sources increased compared to the previous year by around 689 GWh (+11%), basically due to the greater contribution from wind.

G4-EN19

In 2015 CO_2 emissions avoided due to "carbon free" production totaled around 5 million tons (around 8% more than the previous year).

Biodiversity

Main projects

Safeguarding birds and bats in wind power plants

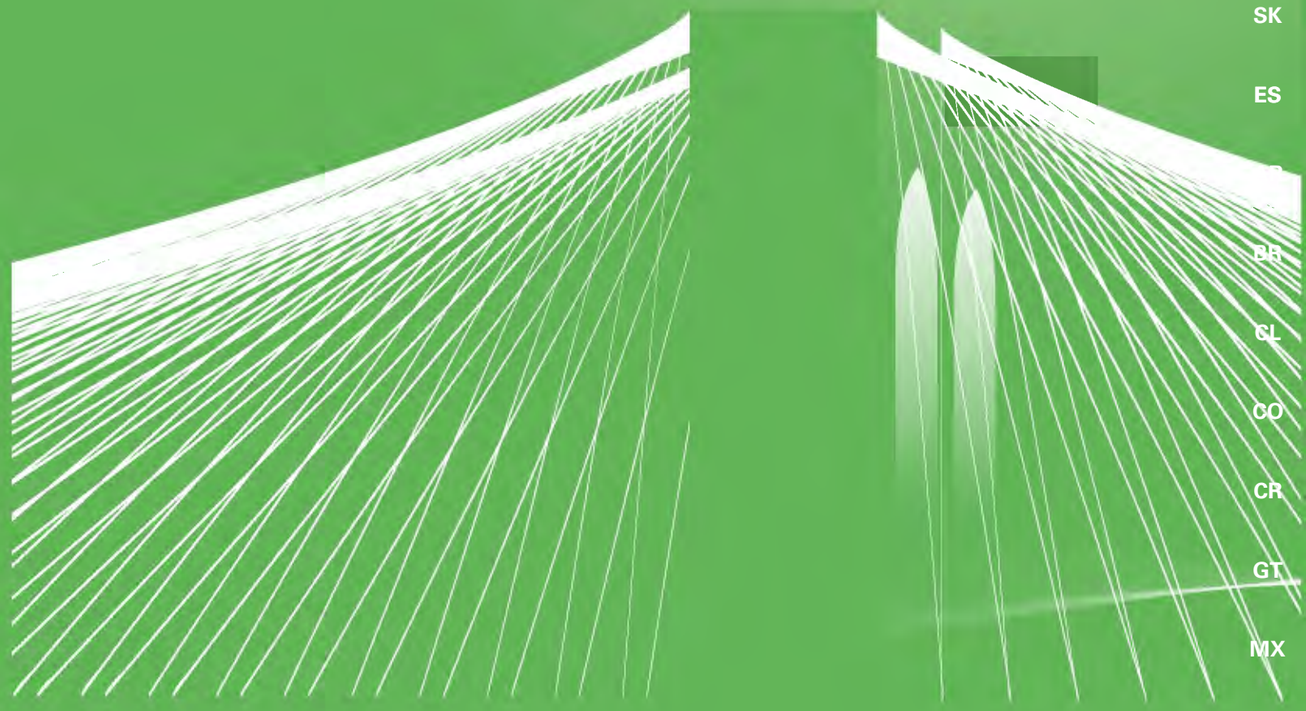
Enel Green Power is working with the American Wind and Wildlife Institute (AWWI) to investigate the impacts of wind energy facilities while identifying science based solutions to prevent and minimize those impacts. These solutions include the use of audio or visual deterrents which have proven to be effective especially for bats. Bald and Golden Eagle protection is also a current key focus of AWWI, who is exploring lead shot abatement and road carrion removal programs as ways to prevent eagles mortality.

By pass systems for migratory fishes in hydroelectric plants

To enhance understanding of migration conditions and patterns, Enel Green Power cooperates with fishery agencies to monitor the movements and ecology of anadromous and catadromous species such as eels, salmons, alewives.

Lits and ladders are built in the Lawrence and Bootts hydroelectric power plants (New England, Massachusetts) to ease the passage of local species of eels and salmons.

AFRICA AND NEW COUNTRIES



INDIA

Production from
renewables

> Wind production

Enel Green Power SpA

THE NUMBERS

POWER PLANTS **3**

NET POWER **172** MW

PRODUCTIONS **48** millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
WIND	3	172
Total	**3**	**172**

Emissions of CO_2 avoided (t)

TOTAL: 48,391.5

For production:

from **wind**
48,391.5

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Significant events in 2015

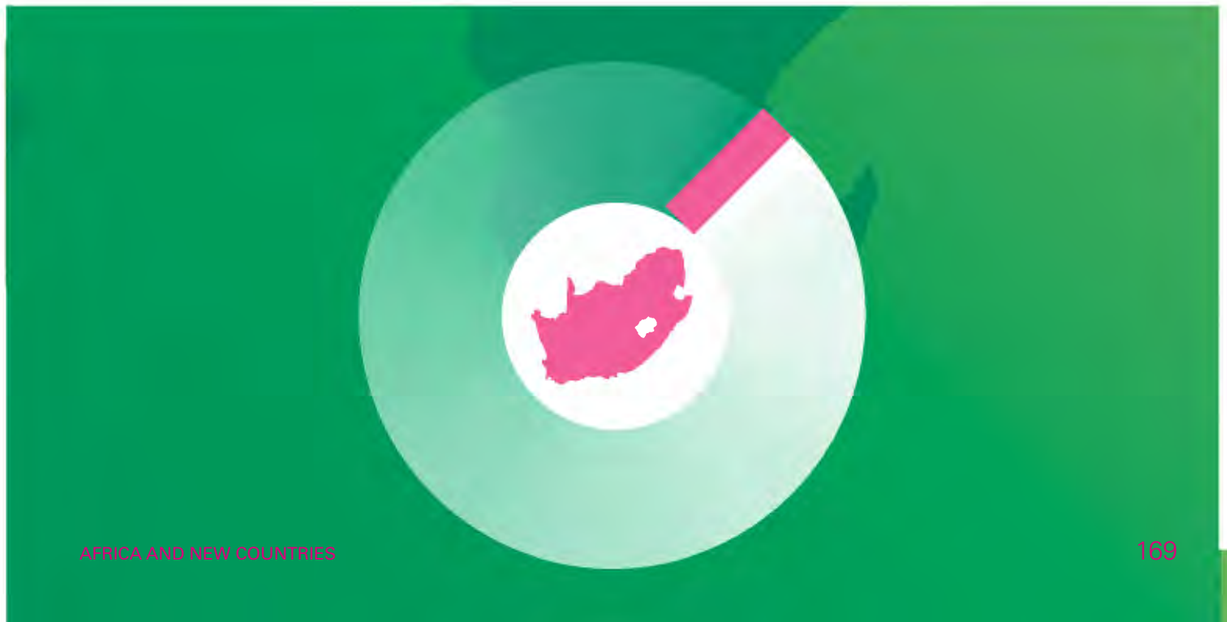
In September 2015, Enel Green Power acquired BLP, an Indian company with 35 employees and 170 MW of installed capacity. BLP, one of the most important renewable energy companies in India, currently owns and manages wind farms in the States of Gujarat and Maharashtra.

SOUTH AFRICA

Production from
renewables

> Solar production

Enel Green Power SpA



SOUTH AFRICA

Production from **renewables**

THE NUMBERS

POWER PLANTS **1**

NET POWER **10** MW

PRODUCTIONS **18** millions of kWh

TYPE OF PLANT	Power plants	Net maximum capacity MW
PHOTOVOLTAIC	1	10
Total	1	10

Emissions of CO_2 avoided (t)
TOTAL: 17,997

For production:

from **solar**
17,997

Emissions from thermoelectric production using fossil fuels which would otherwise have been necessary.

Equivalent annual hours of use*
TOTAL: 1,840

Solar
1,840

*Annual production/power ratio.

Significant events in 2015

In June 2015 Enel Green Power was awarded two 20-year contracts for energy supply with the South African utility Eskom for projects totaling a further 280 MW. The two wind projects, Soetwater (142 MW) and Garob (138 MW), which will be built in the Northern Cape province in areas with considerable wind potential, will be completed and come into operation by the end of 2018 and require total investment of around 340 million euro, in line with the strategic growth objectives envisaged by Enel Green Power's current industrial plan.

Once they are completed the two plants will be able to generate around 1,000 GWh per annum, making an important and environmentally sustainable contribution to the country's growing energy demand.

The Soetwater and Garob projects, which join the wind farm projects at Oyster Bay (142 MW), Nxuba (141 MW) and Karusa (142 MW), will bring the capacity of the Enel Green Power Group to 705 MW.

The new projects will join the 10 MW from the Upington photovoltaic plant which Enel Green Power already operates in the country and the 513 MW of projects for which 20-year energy supply contracts have been signed with Eskom, following their award as part of the third stage of the REIPPPP's tender of 2013. In particular, these are the photovoltaic plants of Aurora (82.5 MW), Tom Burke (66 MW), Paleisheuwel (82.5 MW), Pulida (82.5 MW) and the wind farms of Gibson Bay (111 MW) and Nojoli (88 MW).

Biodiversity
Legend

Fauna

mammals

birds

fish

flora

Ecosystem

land

water

wet zones

GRI Indicator

EN11 EN12

EN13 EN14

EN15 EU13

IUCN Risk of Extinction

EX EW — EXTINCT

CR EN VU — THREATENED

NT LC — LOW RISK

X — NUMBER OF THREATENED SPECIES

The Red List, which is drawn up by the International Union for Conservation of Nature (IUCN), provides information on the conservation status of various species.

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SEEDING ENERGIES

There is an energy that is produced every day, which, once generated, belongs to everyone.
This energy is fuelled by ideas, passion and cooperation.
They are small and powerful seeds, from which grow tangible fruits: innovation and progress, in tune with the world around us.
At Enel, that is how we define Sustainability.

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