

## **ENVIRONMENTAL MANAGEMENT DATA**

## **RESPONSIBLE MANAGEMENT OF WASTE**

In every activity we develop, we record the volumes and the type of waste generated both during the development phase of the project, and in the operation phase, in order to have a complete picture of the overall footprint of our activities and to be able to receive comprehensive decisions for their optimal management.

The volumes of waste generated as a result of our activities, are characterized by high variability from year to year, mainly due to the ever-changing volume of our activities, but also the very nature of our projects. In this context, we recognize that the comparison of waste volumes from year to year does not reflect the full picture of our performance in this area. All quantities are listed in the Electronic Waste Register (EWR) for all companies of the TERNA ENERGY Group.

GRI 306-3: Waste generated GRI 306-4: Waste diverted from disposal GRI 306-5: Waste directed to disposal			2020		2019		
	Waste by composition						
Hazardous waste		Waste generated	Waste diverted from disposal	Waste directed to disposal	Waste generated	Waste diverted from disposal	Waste directed to disposal
Lubricants	lt	21.619	21.619	0	15.060	15.060	0
Contaminated absorbent materials	kg	15.694	15.694	0	17.020	17.020	0
Contaminated plastic packaging	kg	11.106	11.106	0	3.826	3.826	0
Oil and gas filters	kg	5.333	5.333	0	3.556	3.556	0
Batteries	kg	911	911	0	25	25	0
Waste electrical equipment	kg	94	94	0	0	0	0
Waste adhesives and sealants	kg	244,6	244,6	0	0	0	0
Laboratory Waste	kg	40,00	40,00	0	0	0	0
Total	t	55,04	55,04	0	39,48	39,48	0
Non-hazardous waste		Waste generated	Waste diverted from disposal	Waste directed to disposal	Waste generated	Waste diverted from disposal	Waste directed to disposal
Urban waste	t	12,01	0	12,01	1,88	0	1,88
Recyclable	t	19,03	19,03	0	17,40	17,40	0
Total	t	31,04	19,03	12,01	19,28	17,40	1,88
Waste diverted from disposal by recovery operation							
Hazardous waste		Onsite	Offsite	Σύνολο	Onsite	Offsite	Σύνολο
Preparation for reuse	t	0	0	0	0	0	0
Recycling	t	0	55,04	55,04	0	39,48	39,48
Total	t	0	55,04	55,04	0	39,48	39,48



		Onsite	Offsite	Σύνολο	Onsite	Offsite	Σύνολο
Non-hazardous waste							
Preparation for reuse (biogas production)	t	0	0	0	0	0	0
Recycling	t	0	19,03	19,03	0	17,40	17,40
Total	t	0	19,03	19,03	0	17,40	17,40
Waste directed to disposal by disposal operation							
Hazardous waste		Onsite	Offsite	Σύνολο	Onsite	Offsite	Σύνολο
Incineration (with energy recovery)	t	0	0	0	0	0	0
Incineration (without energy recovery)	t	0	0	0	0	0	0
Landfilling	t	0	0	0	0	0	0
Total	t	0	0	0	0	0	0
Non-hazardous waste		Onsite	Offsite	Σύνολο	Onsite	Offsite	Σύνολο
Incineration (with energy recovery)	t	0	0	0	0	0	0
Incineration (without energy recovery)	t	0	0	0	0	0	0
Landfilling	t	0	12,01	12,01	0	1,88	1,88
Fertilizer	t	0	0	0	0	0	0
Total	t	0	12,01	12,01	0	1,88	1,88

<sup>1</sup>The table includes data for the following countries: Greece, United States of America, Bulgaria, Poland. Data for the countries of Northern Macedonia, Serbia, and Albania are not included, as they do not have facilities and therefore the above data are not monitored.

## **AIR EMISSIONS**

As the largest Greek energy producer from RES with 1,363.8 MW installed, TERNA ENERGY produced 4,151,134 MWh of clean energy in 2020, preventing the call of 3,006,166 tons CO<sub>2</sub> in the atmosphere.

Year	Electricity generation from renewable energy sources (MWh)	CO <sub>2</sub> Emission prevention (tnCO2eq)
2016	1.770.395,585	1.317.651,61
2017	2.091.566,849	1.608.411,14
2018	2.713.871,165	2.010.868,16
2019	3.238.051,894	2.374.323,33
2020	4.151.134,000	3.006.166,00



The following table includes data only for the Greek facilities regarding the direct and indirect greenhouse gas emissions for 2019 and 2020. The greenhouse gas emissions included, relate to the activities controlled by the company. The methodology followed for the quantification and compilation of greenhouse gas emissions was based on the standards ISO 14064-1:2018 and the Greenhouse Gas Protocol.

ATHEX C-E1 Direct GHG Emissions (Scope 1) GRI 305-1: Direct GHG Emissions (Scope 1)	2020	2019	
CO <sub>2</sub> (in tons CO <sub>2</sub> e)	9.586,73	7.020,90	
Total direct (scope 1) GHG emissions in metric tons of CO <sub>2</sub> e			
Biogenic CO2 emissions in metric tons of CO2e	9.128,40	6.546,1	
ATHEX C-E2 Indirect emissions (Scope 2) GRI 305-2: Energy indirect (Scope 2) GHG emissions	2020	2019	
Location-based emissions in metric tons of $\ensuremath{\text{CO}_2e}$	5.214,94	2.121,09	
Market-based emissions in metric tons of $CO_2e$	N/A	N/A	
Which gases were included in the calculation of the indirect emissions (e.g. CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all)?	CO <sub>2</sub> , CH <sub>4</sub>	CO <sub>2</sub> , CH <sub>4</sub>	
SASB (IF-WM-120a.1): GHG Emissions	2020	2019	
Emissions of NOx (include NO and NO2 and exclude N2O) in metric tons	5,32	3,28	
Emissions of SO, (include SO2 and SO3) in metric tons	3,2	1,98	
Emissions of non-methane volatile organic compounds (VOCs) in metric tons	5,86	3,97	
Emissions of hazardous air pollutants (HAPs) in metric tons	0	0	

## **RESPONSIBLE MANAGEMENT OF WATER**

In all our facilities there is a rational water use, which is used in the production process, as well as for the hygiene needs of the staff of the facilities.

In cases where the production process allows it, practices of recycling and reuse of water are applied during the design of the installation. One such example is the Municipal Solid Waste Treatment Plant of the Epirus Region.

The unit is connected to the network of the Municipality and the water is consumed in the production process, as well as for the hygiene needs of the staff and the facilities. Part of the water used in the production processes ends up in the biological treatment of the unit through a drainage network. The biological treatment also ends with the water used for the hygiene of the staff and the facility. This water is treated by the biological treatment plant whose effluent is used only for production purposes. This achieves the best possible management and reuse of water.

Total quantity of wastewater discharge for 2020 was 100.27m<sup>3</sup>.



In 2020 the total water consumption for the facilities in Greece amounted to a total of 5.62 ML, coming mainly from the Municipal Water Supply and Sewerage Company of Ioannina of the Municipality of Dodoni. The total water consumption came from the Group's operating facilities in Greece. Specifically: Athens, Skopia, Louzes, Nafpaktos, Etoloakarnania, Tsouka-Tsougari, Tsilikoka, Pyrgari, Aliveri, Evia, Crete, Boeotia, Thrace, Veria, Rhodes, Rhodes, Argolis and island of Agios Georgios, areas of non-significant impact on water resources (water-stress areas). In general, no water is sourced from areas with High or Extremely High Baseline Water Stress for the company's activities.

GRI 303-3: Water withdrawal	2020	2019
Total water withdrawal (ML)	5,62	4,18
GRI 303-4: Water discharge	2020	2019
Total water discharge (ML)	0	0
GRI 303-5: Water consumption	2020	2019
Total water consumption (ML)	5,62	4,18

For the facilities outside Greece (US, Bulgaria and Poland), the amount of water consumed is very low due to the type of activities (wind farms) which does not require the use of water. Specifically, the total amount of water consumed in 2020 was 108 m<sup>3</sup>.