OUR ENVIRONMENTAL PERFORMANCE

Among the matters common to all operating units, Prysmian has selected those that are significant not only in environmental terms, but also in terms of its responsibilities towards employees and local communities, and as a competitive factor that contributes value to the Group. These aspects are considered significant and this Report presents indicators showing their importance:

- energy consumption, obtained as the sum of all energy sources used in manufacturing and service activities;
- water consumption, which is significant due to the large volumes needed for cooling in the various production cycles;
- hazardous and non-hazardous waste, with a potential impact on various environmental factors and very considerable importance in the assessment of process efficiency;
- recycled waste hazardous and non-hazardous (part of those referred to in the previous point);
- ozone-depleting substances which, although small in amount, are present in almost every production unit, and it is essential to prevent leakages and reduce their potential atmospheric impact;
- emissions of greenhouse gases, primarily linked to the use of sources of energy and, to a very limited extent, to the use of greenhouse gases at certain stages of production;

Based on assessments and past experience, the Group does not report on the following aspects, which are considered to be less significant:

- waste water originating from cooling systems, if not contained within a closed-circuit system and if not requiring special treatment;
- atmospheric emissions generated by production processes, which are not especially significant in most cases.

Further details on the performance indicators, the scope and the reporting methods are available in the "Note concerning the scope and methods for reporting environmental data".

ENERGY CONSUMPTION

In 2017, the total energy consumption of the Group recorded a small increase (+1.1%), mostly attributable to the Accessories category (whose production activity in a plant was started recently and therefore had its start-up period during 2017). In fact, looking at the values of the other production categories, consumption appears more or less stable, if not decreasing as compared with production.

ENERGY CONSUMPTION BY PRODUCT LINE (GJ)

ENERGY CONSUMED (GJ)							
Source	Power Cables	Telecom Cables	Accessories	Optical fibre	Group 2017	Group 2016	Group 2015
Electricity (purchased from the grid)	1,904,996	468,678	32,407	397,038	2,803,119	2,890,939	4,211,764
Electricity supplied 100% under a certified-green contract	986,605	81,619	24,238	309,667	1,402,128	1,253,393	-
Fuel oil	13,887	7,044	-	-	20,931	20,663	39,870
Petrol	1,696	350	109	27	2,183	4,433	3,922
Diesel	95,837	4,636	299	614	101,386	88,816	88,327
LPG	52,441	6,838	7,910	27	67,216	83,133	100,246
Natural gas	921,767	198,178	36,492	667,833	1,824,271	1,797,890	1,612,984
Steam (purchased, not produced internally)	23,642	-	-	-	23,642	32,255	33,945
Chilled water	6,982	-	-	-	6,982		
Heat purchased from distribution networks	69,028	-	-	6,999	76,027	90,192	88,269
Total	4,076,883	767,344	101,455	1,382,205	6,327,887	6,261,714	6,189,327





ENERGY CONSUMPTION PER TONNE OF PRODUCT (GJ/t)

ENERGY CONSUMPTION PER Km OF PRODUCT (GJ/Km)



EMISSIONS

Greenhouse gas emissions, measured in tonnes of CO_2 equivalent, have been calculated using the methodologies indicated in "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition, 2004)" considering, for the Scope 1 emissions (direct greenhouse gas emissions)⁴¹, the consumption of fuels, the release of overflow refrigerant gases and the release of SF6 and, for the Scope 2 emissions (indirect emissions of greenhouse gases), the consumption of purchased energy (mainly electricity⁴²).

Emissions totalled 649,299 tCO₂eq in 2017, down by 5% with respect to 2016. The figure is down thanks to the improvement actions carried out with the aim of recovering SF6, which otherwise would be dispersed in the environment (see Chapter "Main initiatives to lower environmental impact"), and following the adoption of emission factors updated with regard to electricity.

⁴¹ Source of Scope 1 emission factors: GHG protocol

⁴² Main sources of Scope 2 emissions factors: for 2015 and 2016 Defra 2012, for 2017 Terna 2014 and GHG protocol