

Environmental Sustainability

The SIT Group closely focuses on protecting the collective interest and therefore considers the environment and nature as fundamental and a shared heritage to be protected and defended. The Group is committed to adopting responsible behaviour in terms of environmental protection, acting strictly in compliance with applicable environmental rules, in addition to the limit established by any authorisations and provisions received from the competent authorities and refraining from behaviour which damages the environment.

Furthermore, the Group is committed to raising the awareness of employees, consultants, collaborators and all those who operate in its name and on its behalf regarding the protection of the environment and the minimization of negative impacts.

One of the Group's two Rovigo facilities performs aluminium casting, mechanical processing, surface treatments, the electromechanical assembly of gas safety, control and regulation systems, and safety and temperature control thermo-sensitive component production. The other facilities in Rovigo, Brasov (Romania), Monterrey (Mexico) and Suzhou (China) perform the electromechanical assembly of gas safety, control and regulation systems. The Hooegeveen (Netherlands) facility produces electronic controls.

The SIT Group has established protocols to guarantee immediate action to minimize environmental impacts in potential situations of environmental emergency or major incident.

The Group has adopted an Environmental Management System (EMS). In addition, the production facilities of Rovigo (Italy), Monterrey (Mexico) and Brasov (Romania) are certified to ISO 14001:2015¹². The system defines specific monitoring and control procedures, assigns clear roles and responsibilities, and guarantees active communications with stakeholder and control bodies. The system also requires the production facilities to annually define initiatives to improve environmental performances.

In 2018, as in 2017, initiatives were implemented to reduce Group environmental impacts by eliminating the use of highly polluting materials. For example, the aluminium die-casting Rovigo facility has installed a new additional die-casting washing machine that uses water and surfactants, thereby reducing the use of tetrachloroethylene.

¹² It should be noted that MeterRSit's facilities were upgraded to the ISO 14001:2015 certification in 2018.

Energy consumption and greenhouse gas emissions

The Group is committed to improving the energy efficiency of its offices and facilities in order to reduce consumption.

For example, one of the Group's initiatives in 2018 (initiated in 2017) saw the full replacement of the Rovigo die-casting facility's lighting system with energy-saving LEDs and dimmer switches. The majority of equipment systems at both Rovigo facilities have been fitted with meters to continuously monitor electricity consumption and promptly intervene in case of any anomaly. In 2018, at the Monterrey facility, roofing renovation works were completed in order to reduce air conditioning energy consumption.

The Group uses various energy sources for the production processes and offices of its various companies and sites.

The Group facilities mainly utilise electricity and methane gas. Note that the Group did not purchase Guarantees of Origin (GO) for electricity produced from renewable sources.

Energy consumption within the organization			
	Unit	2017	2018
Natural gas	m3	2,347,066	2,441,123
Diesel	l	134,843	130,894
LPG	l	43,952	54,511
Petrol	l	79,673	84,360
Electricity purchased	kWh	26,383,154	29,673,194

Energy consumption at the organisation in GJ ¹³			
	Unit	2017	2018
Natural gas	GJ	93,987	97,754
Diesel	GJ	5,139	4,988
LPG	GJ	1,111	1,378
Petrol	GJ	2,758	2,921
Electricity purchased	GJ	94,979	106,823
Total	GJ	197,974	213,864

Compared to 2017, in 2018 energy consumption increased 8.0%. This increase is mainly due to an approximate 13% increase in the Heating Division's production volumes.

¹³ The energy consumption in GJ was calculated using DEFRA 2018 conversion coefficients, which is available for downloading from the website: <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

Direct greenhouse gas emissions (Scope 1) ¹⁴			
	Unit	2017	2018
Natural gas	tCO ₂ eq	4,921	4,996
Diesel	tCO ₂ eq	351	389
LPG	tCO ₂ eq	66	83
Petrol	tCO ₂ eq	175	194
Total Scope 1	tCO₂ eq	5,513	5,662

Indirect greenhouse gas emissions (Scope 2) – Location Based ¹⁵			
	Unit	2017	2018
Electricity acquired	tCO ₂	10,082	11,029
Total Scope 2 Location based	tCO₂	10,082	11,029

Indirect greenhouse gas emissions (Scope 2) – Market Based ¹⁶			
	Unit	2017	2018
Electricity acquired from non-renewable sources	tCO ₂ eq	12,084	13,186
Total Scope 2 Market Based	tCO₂ eq	12,084	13,186

Regarding Ozone Depleting Substances (ODS)¹⁷, only the Monterrey facility keeps and uses such substances in its machinery and equipment. In particular, some equipment still uses the refrigerant gas R-22, amounting to a total of 104.5 kg in 2018, which has not, in any case, been emitted into the atmosphere, since it is contained in closed circuits that have suffered no losses.

Furthermore, rules have been clearly defined for the correct operation and maintenance of equipment that might accidentally generate atmospheric emissions, with particular attention paid to the proper management of ozone depleting substances. For the purposes of calculating atmospheric CO₂ emissions, the layout of the air conditioning and cooling systems serving the equipment and installations at the Group's Italian facilities was sent the competent authorities in 2018.

¹⁴ For the calculation of Scope 1 emissions, the 2018 DEFRA conversion factors were utilised <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017>. Moreover, regarding SIT Group's emissions, the consumption of hydrogen and other mixed gases, such as hydrogenated nitrogen, and mixtures of methane and argon, were not considered as they were a negligible part of the total.

¹⁵ For the calculation of the Scope 2 - Location Based emissions, the 2015-2016 International Comparisons conversion factors published by Terna were utilised.

¹⁶For the calculation of the Scope 2 - Market Based emissions, the 2018 "Residual Mix" conversion factors of the AIB-Association of Issuing Bodies were used.

¹⁷ Substances indicated in the United Nations Environment Programme's 'Montreal Protocol on Substances that Deplete the Ozone Layer', 1987.

Emissions from Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant emissions					
	Unit	Italy ¹⁸		Mexico	
		2017	2018	2017	2018
NO _x	kg	3,304.64	3,709.27	352.97	132.20
SO _x	kg	-	-	4.93	4.60
Volatile Organic Compounds (VOC)	kg	131.20	143.70	-	-
Hazardous air pollutants (HAP)	kg	318.37	297.55	-	-
Particles (PM)	kg	925.95	1,321.57	612.94	641.30
Organic Compounds expressed as Total Organic Carbon	kg	1,650.17	2,097.91	-	-
CO, CO ₂ , HCT, Led	kg	-	-	935,270	1,013,230

Waste management

In order to guarantee the adequate management of waste production and disposal, the Group has defined a series of waste tracking and monitoring procedures. The final destination of waste is entrusted to a waste transport and disposal supplier, which provides for recovery or disposal as indicated in relevant supporting documentation.

As for wastewater, specific analyses are carried out according to applicable regulations in each country, and all waste is adequately catalogued. The main types of hazardous waste produced include: used oil, solvents, non-halogenated solvent mixtures, halogenated solvents (perchloroethylene and oil), activated carbon from perchloroethylene washing machines, aqueous washing solutions, degreasing waste, oil-containing metal sludge, packaging containing hazardous substance residues. The hazardous substances on the "Other" line include mainly materials deriving from maintenance work on machinery and equipment. The non-hazardous waste includes sludge from the treatment of industrial water, metal and plastic packaging, and ferrous and non-ferrous swarf.

¹⁸ The figures shown refer to all of the Group's Italian facilities, and have been calculated by direct measurement of emissions. Disposal methods have been identified from information provided in disposal contracts.

Waste by type and disposal method ¹⁹							
	Unit	Hazardous		Non-hazardous		Total	
		2017	2018	2017	2018	2017	2018
Reuse	t	-	-	2.26	3.40	2.26	3.40
Recycling	t	21.79	32.07	397.87	581.21	419.66	613.28
Composting	t	0.15	0.22	845.46	1,230.87	845.61	1,231.09
Recovery (including energy recovery)	t	185.81	461.92	1,510.84	1,569.97	1,696.65	2,031.89
Incinerator	t	-	5.68	31.70	152.66	31.70	158.34
Landfill	t	52.87	99.93	142.46	32.87	195.33	132.80
On-site storage	t	10.70	12.56	23.46	23.17	34.16	35.73
Other	t	485.94	711.94	135.54	139.65	621.48	851.59
Total	t	757.26	1,324.32	3,089.59	3,733.80	3,846.85	5,058.12

The increase in hazardous waste from 2017 is mainly due to the increase in production volumes and to the greater amount of wastewater to be treated. In addition, part of the increase in hazardous waste comes from the new classification of aluminium foam as hazardous waste, following entry into force of EU Regulation 1179/2016 on 01/03/2018.

In 2018, SIT Romania received a fine of approximately Euro 144,000 from the Romanian Ministry of the Environment, pursuant to Law OUG 196/2005 concerning packaging management and disposal. The fine was levied for a claim that SIT Romania had not guaranteed packaging disposal traceability it had entrusted to a specialist company in the period from 2013 to 2017. SIT replaced the specialist disposal company in 2018, and, at the beginning of 2019, proceeded to pay the fine.

Responsible use of water resources

SIT Group uses and monitors the consumption of water in its production facilities and offices. In Group facilities, water is used in the production cycle mainly for civil and industrial use, such as in tumbling processes, to eliminate surface burrs from die-cast aluminium objects, and in the cooling of production machinery.

Water withdrawal by source ²⁰			
	Unit	2017	2018
Groundwater	m3	43,406.9	46,722.9
Water sourced from aqueducts	m3	95,197.0	58,587.0
Total	m3	138,603.9	105,309.9

¹⁹ The waste production data only represents waste produced by the Group's production facilities.

²⁰ The data on water withdrawal only show the waste produced in the Group's production plants.