

Total direct GHG emissions (Scope 1)

	2021	2022	2023	2024
CO ₂ Emissions calculated with the <u>old</u> method	981,770	936,590	935,700	899,379
CO ₂ Emissions calculated with the <u>new</u> method	1,260,422	1,236,018	1,250,740	1,177,032

Electricity generation based on non-renewable energy sources

	2024 (GWh)	Revenue generated 2024 (€)
Coal	0	0
Nuclear	0	0
Natural gas	325.5	11,646,491
Oil	0	0
Waste to energy (49% non-renewable shares)	415.0	35,293,904
Total	740.5	46,940,396

Electricity generation based on renewable energy sources

	2024 (GWh)	Revenue generated 2024 (€)
Wind	0	0
Hydro	0	0
Solar	4.0	13,833
Biomass	27.2	6,220,505
Geothermal	0	0
Landfill gas	34.9	3,655,176
Wave tidal	0	0
Waste to energy (51% renewable shares)	417.5	36,734,472
Total	483.6	46,623,986

Installed capacities based on non-renewable energy generation sources

	Capacity 2024 (MW)	Share capacity 2024 (%)	Target capacity 2030 (MW)	Share of target capacity 2030 (%)
Coal	0	0	0	0
Nuclear	0	0	0	0
Natural gas	153.2	50.1	150	31.6
Oil	0	0	0	0
Other non-RE (Waste to energy 49% renewable share)	64.6	21.1	65	13.7
Total	217.8	71.2	215	45.3

Installed capacities based on renewable energy generation sources

	Capacity 2024 (MW)	Share capacity 2024 (%)	Target capacity 2030 (MW)	Share of target capacity 2030 (%)
Wind	0	0	0	0
Hydro	0	0	0	0
Solar	5.2	1.7	177	37.3
Biomass	6.6	2.2	7	1.5
Geothermal	0	0	0	0
Landfill gas	13.9	4.5	14	2.9
Wave tidal	0	0	0	0
Other RE (Waste to energy 51% renewable shares)	62.0	20.3	62	13.0
Total	87.7	28.7	260	54.7

Energy Intensity

	2021	2022	2023	2024
Energy used per unit of water supplied (MWh/ML water)	456	450	429	424
Composted, reused, recycled, recovered waste from water business (% of total waste from water business)	90	94	94	99

In 2024, the Hera Group produced 162.7 thousand tons of sludge from water treatment plants (+5% compared to the previous year). From a circular economy perspective, 75% of the sludge produced was sent to indirect agronomic reuse for fertiliser production and composting and 4% was sent to indirect agronomic reuse. 20% has been sent to incineration to the IDAR plant of Bologna while there were no landfill disposals, also in line with the requirements of the ARERA guide. This result allows the 1.5% target for sewage sludge landfill disposal to be reached early by 2030.

Carbon intensity index for electricity sales

The carbon intensity index of electricity sales in 2024 improves to 269.15 t CO₂e/GWh (278.49 t CO₂e/GWh in 2023). The improvement in the indicator stems from a smaller increase in absolute emissions (+18%) than the increase in volumes sold (+12%).

Availability Factor of Plants

	Average availability factor (%)	Number of units
Coal plants	-	-
Gas plants	83	19
Hera Group doesn't have coal plants		

Efficiency of Generation

	2022	2023	2024	Trend explanation	Average age of plants (years)
Efficiency coal plants (% or BTU/kWh)	-	-	-	-	-
Efficiency open-/combined-cycle gas plants (% or BTU/kWh)	68	71	71	Efficiency of generation is stable over the years	15.1
Hera Group doesn't have coal plants					