COMBINED HEAT AND POWER UNITS (CHP UNITS) - 2024

In 2024, the production of high-efficiency electricity from combined heat and power (CHP) generation amounted to 3 412 GWh, reflecting a 5.3% increase in comparison with 2023 (3 239 GWh). This contributed to gross CHP electricity production of 4 745 GWh, as the share of the high-efficiency output in it was 71.9% (67.2% in 2023).

In 2024, the generated useful CHP heat was 33 815 TJ. The total CHP fuel input, measured by net calorific value (NCV), was 53 206 TJ. In this fuel input mix, the natural gas and the works gas predominated, accounting for 22 093 TJ (NCV), or 41.5%, while the solid biomass accounted for 11 356 TJ (NCV) or 21.3%.

The combined heat and power (CHP) plants are thermal installations where energy from fuel combustion is transferred to an intermediate working fluid - either a gas or a liquid. This working fluid is then used to generate useful heat and electrical and/or mechanical energy simultaneously. The generated heat is used for industrial processes or for district heating.

The data are at national level and a single methodology is used, ensuring comparability across the time series. Information from EWRC decisions on issuing guarantees of origin for electricity from CHP generation is also used for comparison.