

# What fuels are European countries using for Combined Heat and Power (CHP)?

Combined Heat and Power (CHP), also known as cogeneration, is a potentially crucial aspect of EU net-zero strategies. These systems use power stations or heat engines to generate both electricity and heat simultaneously. For example, some CHP systems use high-temperature heat to power a turbine and generate electricity and then distribute the excess heat to heat water or air in homes, offices etc. These systems can be highly efficient and, therefore, could play an important role in the climate transition.

Many European Union countries already use these systems but they tend to differ in the fuels that are used. **Eurostat** recognises five major fuel types: solid fossil fuels (e.g. coal), oil products, natural gas, renewables (e.g. wood, organic waste) and other fuels (e.g. industrial waste). The countries that use the most fuel for CHP are: **Austria, Denmark, Finland, France, Germany, Italy, Netherlands, Poland, Spain and Sweden**. Poland and Germany are the biggest CHP fuel users in Europe. The Nordic countries are strong represented and also use significant amounts of renewable fuels.

Solid fossil fuels



Oil products



Natural gas



Renewables



Other



**Notes:** Fuel use reported in Peta Joules (PJ) as Net calorific values.  
Visualization by James G. Hagan.  
Data from *Eurostat*.

## Top 8 CHP fuel-users in the EU

