

Benchmark values for the 2022-2024

	Benchmark for electricity generation (tCO ₂ per MWh)			Benchmark for heat production (tCO ₂ per GJ)		
	2022 Value	2023 Value	2024 Value	2022 Value	2023 Value	2024 Value
Conventional coal plants above 300 MW	0.8177	0.7950	0.7910	0.1105	0.1038	0.1033
Conventional coal plants below 300 MW	0.8729	0.8090	0.8049			
Unconventional coal	0.9303	0.8285	0.8244			
Natural gas	0.3901	0.3305	0.3288	0.056	0.0536	0.0533

Allocation formula for a coal-fired power generator

$$A = A_e + A_h, \text{ in which } A_e = Q_e * B_e * F_f \text{ and } A_h = Q_h * B_h$$

A: Total allowances for a coal -fired power generator, tCO₂

A_e: Allowances for electricity generation, tCO₂

A_h: Allowances for heat production, tCO₂

Q_e: Net electricity generation, MWh

B_e: Benchmark for electricity generation, tCO₂/MWh

F_f: Load efficiency adjustment factor

Q_h: Net heat production, GJ

B_h: Benchmark for heat production, tCO₂/GJ



Allocation formula for a gas-fired power generator

$$A = A_e + A_h, \text{ in which } A_e = Q_e * B_e \text{ and } A_h = Q_h * B_h$$

A: Total allowances for a gas-fired power generator, tCO₂

A_e: Allowances for electricity generation, tCO₂

A_h: Allowances for heat production, tCO₂

Q_e: Net electricity generation, MWh

B_e: Benchmark for electricity generation, tCO₂/MWh

Q_h: Net heat production, GJ

B_h: Benchmark for heat production, tCO₂/GJ