

1 Development of Energy Prices based on EUSUSTEL Assumptions

	Energy Carrier	Unit	2005	2010	2015	2020	2025	2030
1.2	Coal	€2005/GJ	1.84	1.73	1.85	1.94	2.02	2.07
1.3	Gas	€2005/GJ	4.19	4.40	4.11	4.02	4.69	4.71
1.4	Oil	€2005/GJ	7.46	6.16	6.21	6.64	7.52	7.96

2 Development of Energy Prices at Power Plant

	Energy Carrier	Unit	2005e	2010e	2015e	2020e	2025e	2030e
2.1	Lignite, Germany	€2005/GJ	0.97	0.98	0.98	0.98	0.98	0.98
2.2	Coal, near shore	€2005/GJ	1.96	1.86	1.97	2.07	2.14	2.19
2.3	Coal, long distance	€2005/GJ	2.19	2.08	2.20	2.30	2.37	2.42
2.4	Gas	€2005/GJ	4.98	5.19	4.90	4.82	5.49	5.51
2.5	Heavy fuel oil	€2005/GJ	5.24	3.94	3.98	4.42	5.30	5.73
2.6	Light fuel oil	€2005/GJ	9.25	7.95	7.99	8.43	9.31	9.74
2.7	Nuclear	€2005/GJ	0.80	0.80	0.80	0.80	0.80	0.80

3 Abbreviations

ALLGC	Average Lifetime Levelized Generation Costs
PCC	Pulverized Coal Combustion
CCGT	Combined Cycle Gas Turbine
EPR	European Pressurized Reactor
CHP_CCGT_BT	Combined Heat and Power Combined Cycle Back Pressure Turbine
CHP_CCGT	Combined Heat and Power Combined Cycle
IC_Engine	Internal Combustion Engine
CHP_BT	Combined Heat and Power Back Pressure Turbine
PAFC	Phosphoric Acid Fuel Cell
MCFC	Molten Carbonate Fuel Cell
SOFC	Solid Oxide Fuel Cell
IG_Biomass	Internal Gasification Biomass
Conventional	Geothermal Conventional
Binary cycle	Geothermal Binary Cycle

4 Comments on Results

- [technologie] for technology data using ranges: Lowest and Highest ALLGC have been calculated
- * for Geothermal power plants: Cost calculation not possible, due to missing operation cost data
- Hydro for Hydro technologies: High ALLGC, due to very high range for operation costs
- Backup costs for RES technologies: Backup cost (min) is based on Gas Power Plant (CCGT), Backup cost (max) is based on Coal Power Plant (PCC)
- Cost for CO2 Emissions 10 €/t CO2

