

Update data WP3 - 3.1.2: CCGT

- Efficiency-evolution
 - Slightly increase with approximately 0.2% per year, with a maximum of 65% in 2030.
 - As no data is found on the future emissions, this efficiency evolution can be used for the calculation of the emissions evolution (as suggested by IER, in our last meeting).
- Investment cost
 - From different sources, more detailed information on the investment cost can be found:
 - From: Overall investment cost: 515 US\$/kW¹ (from internal source)
 - To: Overnight construction cost of 580 US\$/kW¹ (from IEA/NEA)
 - In any case, this numbers can narrow the original range of 400 to 800 US\$/kW.
- O&M cost
 - From IEA/NEA: the O&M-cost is expected to be rather stable, and is approximately 20 €/MWh.
- Cost-evolution
 - From different sources in literature, a **progress ratio of 90%** can be found (i.e. a doubling in capacity, goes together with a price reduction of 10%). This progress ratio does only take into account the CCGT-technology, not the overall electricity production (including all extra costs) from CCGT.

¹ The original numbers are given in US\$. As exchange rate to €, we propose a 1-1 ratio.