

Rubric for grading Course Project

DTU Course 46770: Integrated Energy Grids

February 2026

- 0.5 points Proper discussion of optimal capacity/generation mix including plots for the dispatch for one week in summer and winter, annual electricity mix and duration curves.
- 0.5 points Proper discussion of the optimum capacity mix vs global CO₂ constraint.
 - 1 point Proper discussion on interannual sensitivity including plots for average capacities (obtained for different weather years) and interannual variability. (0.5 points if average and variability are calculated + 0.5 points if the reasoning of differences among technologies is provided)
 - 1 point Proper discussion on storage technologies and how they modify the optimal capacity mix.
 - 1 point 0.5 points for the description and implementation of the interconnected model + 0.5 points for reasoning on the impacts of the interconnected model compared to a single node.
 - 1 point 0.5 points for the correct calculation of the incidence matrix and the power transfer distribution factor (PTDF) matrix of the network + 0.5 points for the correct calculation of the optimal power flowing through every line.
 - 1 point 0.5 points for the description and implementation of the gas network + 0.5 points for the comparison of energy transported by both types of networks
- 0.5 points Calculation of CO₂ price and reporting on currently existing CO₂ price, including the comparison between them and reasoning
- 1.5 points 0.5 points for the description of the sector-coupling approach selected + 0.5 points for the model implementation + 0.5 points for reasoning on the impacts of the sector-coupled model compared to the single node.
 - 1 point 0.5 points for the research question identified + 0.5 points for a description of the modelling approach to investigate it.
 - 1 point The text is clear and well structured, figures can be easily read and include proper captions and units.