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Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	**X**

This deliverable comprises a consistent base case which enables evaluating the results of the whole project in an industrial environment. The base case includes extensive data from the site as well as reference results obtained from standard tools and methods.

Process modelling has been used as assisting data source e.g. if no measured data of important energy consumers is available. Pinch studies of the single production units and a total site analysis of the cluster with common available tools have been done in order to define a reference case.

The following steps need to be done:

- Data collection:
    - Heat streams for each unit
    - Design data for the utility system
- Conventional analysis of the cluster
    - Static pinch analysis of the existing units
    - Perform a static total-site-analysis of the cluster
    - Rough evaluation of improvement measures in terms of energy and financial savings potential, investment costs and feasibility/operability.

The resulting outcome from this analysis will be used for future analysis.

Data Collection

The cluster of the demo site comprises 6 production units for coal gasification, transform, low temperature methanol washing, Methanol Reaction, Methanol distillation, sulphur recovery. The heat streams for these processes are given in the table below.

Unit	Inlet T [C]	Outlet T [C]	Enthalpy [kW]

The unit consumption is listed in the table below.

Unit	Utility	Consumption [kW]

Composite curves, grand composite curves, and the corresponding heat exchanger network are included in the report.