

EPOS WP 4 – Tool validation and assessment

Lead: ArcelorMittal Maizieres Research SA

Feedback on AM IS data feed into EPOS tool

D4.5

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Summary

The AM Dunkirk site was chosen as the demonstration site for the EPOS Project because of ArcelorMittal's initiative to advance sustainable industry by starting-up a district cluster, thus creating a better environment in Dunkirk according to industrial symbiosis principles.

As a demonstration site, ArcelorMittal will be able to test and give feedback on the data feed into the EPOS tool. For this purpose, a first deliverable (refer to D4.1) was written, describing the demonstration site and different synergies currently existing on site. Deliverable 4.1 is the starting point for the subtasks that led to this deliverable (D4.5). Hence, the objective of this deliverable is to summarize the work done on testing the EPOS tool and to give operational feedback on it. This is an important task, as it assesses the usability of the EPOS tool from an industrial perspective and shows the results of the application of this tool on the demonstration site.

This deliverable (D4.5) consists of two highly connected sections. The first presents the practical application of the EPOS methodology (WP3) on the ArcelorMittal Dunkirk demonstration site. The second presents the modelling of the Dunkirk district heating connection using the EPOS tool and the results of its application. In each section, the same steps for applying the method are followed. It starts by defining the system boundaries, then data gathering and structuring, which is followed by building and plotting flow diagrams of each process and ends with modelling. Different features of the EPOS tool are highlighted in this deliverable (the multi-time approach, the clustering approach, the layers approach etc.) which all contribute to putting in place different scenarios. The analysis is based on comparing these scenarios, which leads to conclusions on the work done and the definition of the next steps. A short operational feedback is given as a result of the application of the EPOS method and tool.