EPOS WP 2 – Sector analysis

Lead: CEMEX

Map of potential IS streams and activities

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Summary

WP2 aims at data collection and processing per sector in order to set a common baseline for each process industry and to provide a harmonised sector blueprint for further improvement via cross-sectorial symbiosis. The main focus in this WP is on building data capacity and knowledge per sector, setting a common sector reference situation, mapping the needs and prospects for clustering, drafting the potential for cross-sectorial symbiosis and selecting the key performance indicators (KPIs) to reach this goal.

Deliverable 2.2 is the result of the actions described under Task 2.4: ‘Mapping of feasible cross-sectorial streams’ and the related Subtask 2.4.1: ‘Mapping of sharable industrial energy/resource streams and activities”. All industry partners have provided the list of sharable streams that are offered by their sites with an indication of interest in sharing those streams, from the industry of origin. Specific and meaningful information for each stream is provided to assess the feasibility of symbiosis. Each stream from the EPOS lead sites is also assessed for the economic value it holds. This information will prove helpful for symbiosis activities within the project and also for the generic industrial symbiosis methodology development.

The economic assessment is carried out for the ability of each stream to be used as a heat source, as secondary combustible source or to replace a primary raw material, as a secondary raw material (recycled or processed material). Some streams fulfil the criteria to provide more than one function and hence a prioritisation is recommended; provided as follows:

1. Extraction of heat from the stream, to avoid definitive loss of thermal energy;
2. Utilisation of underused resources as secondary raw material to avoid wasting physical properties of the material;
3. Combustion of wastes to produce heat, as last solution to valorise resources and avoid landfilling.

The work has resulted in a prioritised list of sharable streams from each EPOS lead site, based on economic value assignment and industry’s interest to share the streams. The list will be used by Veolia in WP 5 for cross-sectorial validation and further utilised in WP 6 for the development of business cases for industrial symbiosis.