

Foundry Energy Efficiency Benchmarking

FOUNDRYBENCH

Contract number: IEE/07/585/SI2.500402

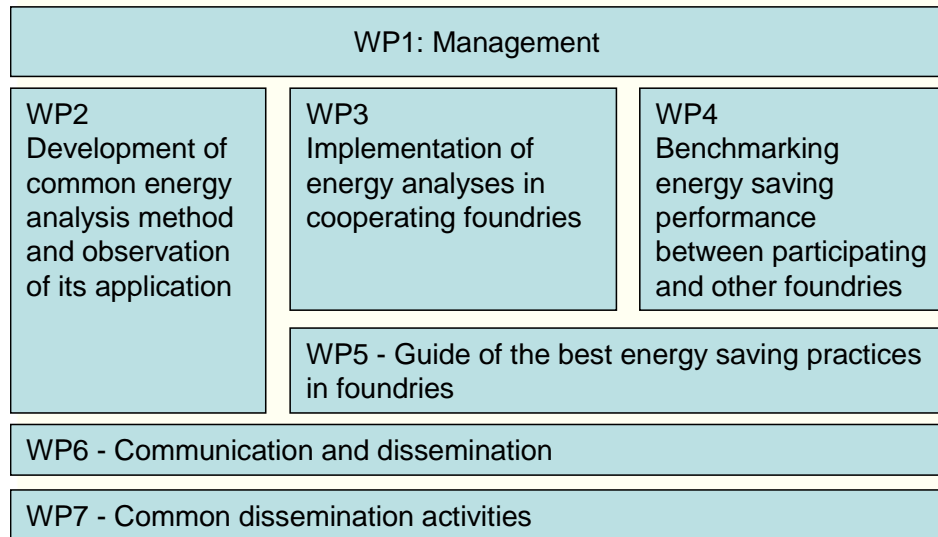
Project duration: January 1st 2009 to December 31th
2011

December 31th 2011

Foundrybench

- Benchmarking of best energy saving practices for Foundries

Structure of the project



- Partners:
Hermia, Finland; AXCONS, Finland; IfG, Germany; CTIF, France; SFA, Sweden; FRI, Poland; IMMCO, UK; Tecnalía, Spain
- Results for Foundries:
 - Guide and database of foundry energy saving solutions
 - Audit results
 - Benchmarking results
 - Energy use reductions
 - Metheology of energy analyses

Background

- Foundries are energy intensive production facilities
- Energy costs are 5-10% of production costs in foundries
- Melting and heat treatment of metals consumes a lot of energy which is converted into and usually wasted as heat
- The more expensive the energy is, the more sensitively the energy consumption reflects into the economic performance of the establishment
- Energy saving is thus an important defence mechanism in current globalisation trends
- Cuts in energy use in metal casting industry will also generate remarkable reductions in carbon dioxide emissions
- More efficient energy use means savings in heat and electricity

Objectives and mains steps

- Objectives:
 - to raise the awareness among foundry sector decision-makers to reduce their energy use and stimulate the spread of best practices among the target foundries that would improve their energy efficiency.
 - to develop a database of the best energy saving practices in foundries that contains practical information on energy saving solutions and their effect on energy consumption and economic effect.
 - to develop a well-targeted foundry specific benchmarking tool based on uniform and professional assessment of foundry energy use that can be applied throughout different foundry or product types and climatic conditions.
- Actions of project partners:
 - to develop and agree on a common methodology and tools for analysing the energy efficiency of the foundries
 - to implement the energy analyses in the participating foundries
 - to provide comparative data to build the energy efficiency index (EEI)
 - to recommendations to improve the energy efficiency in foundry
 - to establish an energy efficiency ranking system relevant for given types of foundries

Results of Foundrybench

As the result of Foundrybench European foundries can reduce their energy use. For that Foundrybench develop:

- Common foundry energy analysis method
- To invent energy saving potentials in foundries
- Benchmarking tool
- Energy efficiency index for foundries
- Database of best energy saving practices
- Good practice guide on energy saving potentials and opportunities for foundries

Partners and contacts

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