



Project Fact Sheet

May, 2010

Changing the heating market mechanisms: Boiler Information System ON efficiency (BISON)

Key action: Building heating
Status: Closed

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Website: <http://www.boilerinfo.eu>

Benefits: Develop an interactive web based tool to choose central heating boilers
Improvement of boiler/installation efficiency

Keywords: Information, energy saving, boiler efficiency

Duration: 11/2007 – 05/2010

Budget: € 608.000 (EU contribution: 50%)

Contract number: EIE/07/278/SI2.467623



Summary

About 20-25% of the energy used in the EU is utilised for room heating. As a result, any change of the market will have a considerable impact on the overall energy balance in the EU. And even a few % improvement will represent a large quantity of energy saving and CO₂ reduction at the EU scale.

There is a huge energy saving potential linked directly to the right choice of boiler both on existing and new installations. The performance of central heating boilers is to a great extent linked to the installation conditions, and the boilers are sold via installers. Therefore, the consumer needs information on efficiency that reflects the real performances of the appliances and that takes into account the interaction of the boiler with the installation and the building, the energy demand, the heat distribution system, etc.

The web calculation tool implemented on www.boilerinfo.eu and developed during this project predicts the energy savings in the situations of replacing an old boiler, choosing a new boiler or performing modification to an existing boiler.

Results

Project outcome: The interactive web calculation tool www.boilerinfo.eu for central heating boilers aims at reducing domestic heating costs in the EU by providing consumers with appropriate guidance on central heating appliances. The web calculation tool includes the option of choosing different languages: English, Spanish, Greek, Portuguese and Danish and is not only directed at the consumers, but also enables installers and energy consultants etc. to advise their customers better.

Main achieved results:

- The new website www.boilerinfo.eu was created and this website presents the project outcome. The calculation model was implemented on the web so it is possible for the user to get advice in the following situations:
 - ✓ Find a suitable boiler for a new house
 - ✓ Replace the existing boiler
 - ✓ See all boilers in a stand-alone database. This part is independent from interactive calculation and can be used as an information source on boilers.
- The boiler database has been established and contains more than 1100 boilers.

- The calculation tool was connected to the boiler database. A number of errors and deficiencies discovered during the test and evaluation was corrected.
- The ECOdesign calculations connected to the boiler database (as additional activities) were implemented.

Lessons learnt

- National differences for input/output parameters: We were seeking to have as much as possible included in the common interface design. But our study showed that we cannot avoid some differences between input/output parameters from country to country. The main differences can be explained by different geographical location of the countries involved in the project and by national differences such as building traditions, rules of thumb etc.
- The boiler database: Implementing the test data for boilers received from partners in the common database was a bigger challenge than expected. Despite the difficulties regarding collection and implementation of the test data for boilers and the long debugging process and adaptations the database underwent, we have now more than 40 different manufacturers represented in the database.
- ECOdesign: The future of the tool is now very much connected to ECOdesign. ECOdesign plans were totally unknown at the project definition phase, but it turned up during the project development that the scope of BISON was interacting very much with ECOdesign. This was both a challenge and an opportunity, and we have been working on making the tools complementary. The gas industry that is very much involved in ECOdesign discussions has shown a strong interest in the BISON project and we decided together to continue to work at developing the tool and database, integrating the next version of the ECO-boiler model and organising a wide use of the tool for ECOdesign calculations.