

## **Environmental Efficiency of Reprofitted Filters and Combustion Improvement Systems for Wood stoves**

Wood burning in wood stoves and boilers is the largest source of particle emissions in Denmark and causes adverse health impacts as well as annoyance to neighbours due to odours.

A project was carried out 2008-2010 to test and evaluate technologies for flue gas cleaning on existing wood stove and wood boiler installations. The project was carried out for the Danish Environmental Protection Agency under the title "*Test of technologies for flue gas cleaning and combustion improvement for existing residential wood burning appliances*". The technologies tested included particle filters and a retrofit system for combustion improvement.

A group from the current Department of Environmental Science at Aarhus University took part in the project (at the time of the project period the group was part of the National Environmental Research Institute). Other partners were FORCE Technology and the Danish Technological Institute.

The project involved laboratory tests and field test.

The overall conclusion was that the technologies had an efficiency which was low or very low, depending on the compound. The pollution from wood stoves and -boilers, older than 5-10 years, is reduced much more efficiently by replacing them with new approved ones, rather than installing any of the tested technologies.

Web page with information (in Danish, report in English):

<http://envs.au.dk/videnudveksling/luft/fra/braende/filtertest/>

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