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FOCUS OF FEDERAL FUEL CELL RESEARCH FUNDING IN GERMANY

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For energy supply security and the protection of environment the compatibility of fossil fuel use and climate protection is of major concern. We are confronted with a globally rising energy demand entailing high and volatile prices on the oil and gas markets. This development requires worldwide efforts for technological changes and a coherent energy strategy. In the short term the objective should be to achieve improved energy efficiency. In the long term renewable energy resources need to account for an increased share in energy supply. Fuel cells are one example of the use of an efficient and innovative technology. They can be run with hydrogen, natural gas, bio gas or methanol. Using hydrogen in fuel cells maximises efficiency and enables emission reduction benefits in transport and stationary applications. So far this environmentally friendly technology has been unable to compete with other technologies such as combustion engines, heating systems and gas turbines. Fuel cells require significant technical breakthroughs, cost reduction and appropriate policies to be prepared for market entry. In order to boost innovation dynamics specific research and demonstration projects are funded in Germany at federal level. The Federal Ministry of Economics and Technology, the Federal Ministry of Education and Research, the Federal Ministry of Transport, Building and Urban Development, the Federal Ministry of Food, Agriculture and Consumer Protection and the institutions German Research Foundation (DFG) and German Federation of Industrial Research Associations (AiF) provide financial grants. The evaluation of ongoing government funded projects in the fuel cell and hydrogen research area are expected to answer the questions regarding the focus of federal fuel cell research funding and the state of development of the different fuel cell types in Germany.

In April 2005 the National Coordination Office Jülich (NKJ) for Fuel Cell and Hydrogen started information gathering in order to draw up a list providing an overview of all fuel cell and hydrogen research projects with German participation. For the data analysis the projects are classified with regard to the different fuel cell types and research fields: basic science, development of components, applied science and demonstration. The analysis has been carried out using data filters. The results show the funds allocated to different fuel cells types and research fields.