

Welcoming message from the German Federal Ministry of Education and Research



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Ladies and Gentlemen,

“Our policies are shaped by the principle of sustainability. We want future generations to enjoy good living conditions. Global climate protection is the pre-eminent environmental policy challenge of our time. It will provide the basis for sustainable long-term economic and ecological development in the future. We also regard climate protection as a competitive driver for new technologies.” Words to this effect are contained in the original German text of the coalition agreement between the CDU, CSU and FDP.

The theme of your annual conference “Research for global markets for renewable energies” follows on from the strategic foundations established in the coalition agreement. On the one hand, the goal is to open up and benefit from export opportunities for our economy. On the other hand, we can help to solve critically important global energy and climate problems and act responsibly for the future by promoting the spread of environmentally friendly and climate-friendly energy technologies worldwide. I am pleased that the Renewable Energy Research Association is addressing these pressing issues at its annual conference.

The new federal government attaches extremely high importance to energy policy. After all, the issue of how we provide our energy requirements in the future in an environmentally friendly, climate-friendly and sustainable manner is one of the most important global challenges of our time. For this reason, we want to prepare for the transition to the era of regenerative energies and wish to expand our technological leadership in renewable energies. Research is a key part of the approach here. Only by conducting excellent energy research will we be able to maintain our strong international competitive position. And only through research will we be able to ensure that renew-

able energy sources offer solutions that are cost-effective enough to be able to play an even stronger role in strategic decisions on energy supply and climate protection.

For this reason, we will be developing a new energy research programme focussing on energy efficiency research, storage technologies, intelligent grid technology and second-generation biofuels.

The German Federal Ministry of Education and Research (BMBF) and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) are pleased to be acting as the patrons of the Research Association’s annual conference. The responsibility for energy policy and energy research policy is spread across a number of different bodies in the new federal government too. The BMBF and BMU have already successfully coordinated their support for research on renewable energies during the previous legislative period. The fact that two federal ministries are now acting as patrons for the annual conference demonstrates that these two ministries will continue to consult with each other and closely coordinate their activities. In my view, this is essential if the energy policy goals in the coalition agreement are to be achieved.

Making climate protection affordable

Climate change is happening and is relentless. In order to keep climate change at a manageable level, we have to reverse the trend with regard to emissions.

In a few days, the World Climate Summit will begin in Copenhagen. We must ensure that this climate summit will be a success. Failure is not something we can afford. We need a legally

binding international climate protection treaty for the period after 2012, an agreement that follows on from the Kyoto Treaty. The World Climate Summit in Copenhagen must be used to put in place the preparations for the agreement of a long-term climate protection treaty in the course of 2010.

The federal government will do everything possible to ensure that all of the central points of the new climate protection treaty will be decided upon in Copenhagen, alongside the form and structure of this treaty. The cabinet was unanimous in this regard at its meeting in Meseberg. For this reason, the Federal Chancellor will be participating personally in the Climate Summit in Copenhagen. At the Summit, she will be personally active in trying to ensure that everything possible is done to achieve a binding climate protection treaty.

Climate protection measures cost money. However, this should not stop states from engaging in climate protection, as all climate protection measures not undertaken today will ultimately cost us much more in the future. One of the federal government's main goals is thus to make climate protection affordable – for industrialised states and for developing countries too. In order to reduce CO₂, we need efficient and effective technologies that make use of renewable energy sources.

This represents a major task for researchers. On the one hand, current technologies have to be further refined and the investment costs of these reduced. On the other hand, we must use new scientific findings to develop entirely new technological approaches that will serve as technology leaps and provide for much more efficient solutions to our energy and climate problems.

There is a particular need here for fundamental research organised on a long-term basis. With its "Basic Energy Research 2020+" support initiative, the German Federal Ministry of Education and Research will continue to promote this area of energy research in particular. This corresponds with the distribution of responsibilities for support for energy research among the various bodies.

Maintaining our leading position in research

Germany enjoys a leading international position in research on and production of renewable energy technologies and technologies for the efficient conversion and use of energy.

Continuous and ambitious support for research and development, accompanied by practical testing since the 1980s, has borne fruit. However, other countries have also identified the potential of renewable energies and the associated market opportunities in the same way as Germany has done. These states are investing strongly in production and research, and in photovoltaic and wind power technology in particular.

If Germany wishes to maintain its leading technological position in this competitive environment, our research will have to be excellent. We must further develop our technologies and promote innovation by intelligently combining activities in research, industry, infrastructure and the nurturing of young talent.

Research and innovation require coordination: The excellence of the individual players is an important prerequisite, but is not everything.

As well as supporting the development of individual technologies, the BMBF therefore also promotes successful and promising technology regions as "teams" with the ministry's special programmes such as the Leading Edge Cluster competition: The goal is to develop world-class research, regional support for innovation and infrastructure, the industry and educational institutions.

These are overall concepts aimed at further improving the competitiveness of given regions in the future. For example, the goal of the "Solar Valley Central Germany" cluster of excellence is to reduce the costs of photovoltaic technology to such an extent that so-called grid parity is achieved. It is necessary to overcome the cost barrier associated with photovoltaics in order to speed up the use of this technology.

In the future, we will continue to bundle support for sophisticated technology with

regional strengths and initiatives. The second round of the Leading Edge Cluster competition has been initiated with this in mind, and the evaluation round is already in progress.

Improving networking in international research

Research for global markets – the subject to be presented and discussed at this conference for renewable energies – means international cooperation first and foremost, and this holds in a number of regards:

International exchange opportunities for scientists and cooperation with the best research centres in the world are prerequisites for maintaining our excellent research position. Only as an attractive scientific location with international links will we be able to continue to develop leading technology and supply it to the world.

In this context, the internationalisation of the training and education of our young scientists and support for the mobility of scientists are essential.

Many of the target countries for our environmentally friendly energy technology products are developing countries. However, simply exporting technology is not enough here; we also have to prepare the ground for environmentally friendly supply and usage concepts with strategically prepared cooperation projects. This includes the fostering of expertise, specialist institutions and the training of experts.

In summary, cooperation with developing countries in matters of education, research and development must be strengthened in order for this fostering and training to take place.

These are the components of the federal government's strategy on the internationalisation of science and research, which was approved at the start of last year and is to be continued during the present legislative period too.

Science Year 2010 – The future of energy

Last but not least, we also have to draw public attention to the critical importance of the issue of energy in the future and the central role of research in the search for solutions.

For this reason, the BMBF has given the upcoming Science Year of 2010 the motto "The future of energy". The BMBF will be acting together with partners from science, industry, politics and society as a whole to address the public, foster enthusiasm, encourage public debate and communicate the importance of research and science in achieving secure, environmentally sustainable and affordable energy supply in the future. The "Science Year – Energy" initiative is particularly aimed at fostering the interest of young people in the topics of energy and energy research and, as a result, in scientific and technical careers too. We hope that as many research institutes, universities and companies as possible will take part in the "Science Year – Energy": with their own projects, by participating in the research exchange platform, exhibitions, discussion platforms and the nationwide "Energy Day" planned for the end of September 2010, which will give people an opportunity to look behind the scenes and visit facilities where the future of energy research is being shaped.

Returning to matters in hand, I would like to wish you all a stimulating exchange of information and opinions at the Research Association's annual conference and hope you will come up with many good ideas for business with global markets.