

**Welcoming Address**

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Parliamentary State Secretary  
to the Federal Minister of Education and Research, Germany**

**on the occasion of the  
5<sup>th</sup> BMBF Forum for Sustainability:  
Research for Sustainability – Driver for Innovation**

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– Check against Delivery –

Dear Ladies and Gentlemen,

I am happy to welcome you here at the ewerk in Berlin to the 5<sup>th</sup> BMBF Forum for Sustainability which is taking place together with the 12<sup>th</sup> European Roundtable on Sustainable Consumption and Production.

Five Years of BMBF Forum mean five years of Research for Sustainability as a central priority topic of the BMBF. It is the last year of an extraordinary successful funding programme. But if you expect me now to take stock of it, then unfortunately I have to disappoint you. This is not because our projects have not been successful – far from it! Here in Germany as well as abroad I have always obtained a lot of appreciation for our funding programme Research for Sustainability (Fona). There was appreciation of the thematic width of the programme. There was enthusiasm for the fruitful cooperation between science, economy and society. And there was respect for the high scientific quality by which German scientists could position themselves internationally.

But as I mentioned before, it is not my intention today to celebrate the past. Much more important than looking back is to look ahead. I may already reveal that we are currently working on a new BMBF funding programme, which will not only continue but even develop the Research for Sustainability – along with new partners and new focuses. But more on this later.

Ladies and Gentlemen, Germany is presently facing two challenges: on the one hand, in a globalised world it is important to maintain and develop competitiveness and economical performance. On the other hand, it is important to take responsibility for our still high consumption of energy and raw materials and to find intelligent solutions for the usage of these resources.

Therefore, it is by far not sufficient to rely on well proven and available technologies and concepts. In fact, we have to activate creativity and inventive talents. The key to it is: investing in research and development. Sustainability must become a driver for innovations – in Germany, in Europe, worldwide!

## **I. Sustainability as driver for innovations**

Germany is well positioned for this task. Only a short time ago 1,000 internationally operating enterprises have attested us in an opinion poll to be the by far most innovative location in Europe. The environmental technologies are playing an important role on this.

Ladies and Gentlemen, the field of environmental technologies offers two important future lead markets. We are going to establish a master plan in cooperation with the Federal Environment Ministry and other Federal Resorts in order to enter these lead markets systematically. Germany, with its traditional strength in the fields of wastewater, air monitoring and waste technologies as well as in the areas of renewable energies and in plant engineering and construction has got the chance to shape and construct these lead markets worldwide. But one thing is for certain: you do not capture a lead market with today's technology!

In order to enter a lead market on a sustained basis you have to be permanently open for innovations; you have to rapidly spot and use tomorrow's trends, to walk off the beaten tracks and to dare to do the impossible. This is a classical task for the medium-sized businesses.

But – as we all know – on all of this the international competition pressure weighs heavily; at the same time the medium-sized businesses represent the innovative backbone of our society. Cooperating with a university or a research institute seems to be the only opportunity for these enterprises to pursue an initial crazy idea or to make an apparent detour. Thus, our task as Ministry of Education and Research – as far as I see it – is to create these opportunities for small and medium-sized businesses. “Resource and Energy Efficiency” is therefore one of the main topics of the initiative “KMU-innovativ” of the BMBF, which has been working successfully for already one year.

From the perspective of sustainability we consider the following three topics to be important: In the first place there is the climate change and the measures we can undertake in order to minimise it to an agreeable degree for human beings and nature. Concerning research this means working on three parameters. First, we need to have a

substantiated comprehension of the system in order to describe and predict the complex climatic circumstances. For that reason, the BMBF has been financing for many years research infrastructures like mainframe computers, research aircrafts and ships. But to go beyond a mere understanding of the system itself, we secondly want to know, of course, more details on the present and future impacts of the climate change. The third important question in climate research consists of precise strategies and technological development. The reduction of farm-based greenhouse gas emissions by intelligent manuring or extinction and avoidance of large-area coal seam fires in China and other countries are given here as examples of the multitude of innovative approaches. Furthermore, in the future we want to introduce more often sociological approaches and perspectives to the development of strategies for the adaptation to the climate change and for the preventive climate protection. Therefore we need to pay special attention to the social dimension of the climate change.

The second topic is a great challenge and at the same time closely related to climate change: it is the issue of sustainable energy supply and usage. Here as well, I do not consider the function of research is coming up with small and fast optimisations and corrections of the existing system. Within the framework of our national sustainability strategy we go for drastic aims like increasing the proportion of renewable energies related to the total power consumption until 2020 to 25–30 percent and increasing the power efficiency by a factor of two. Here as well, the BMBF backs research visions like the further development of new generations of solar technologies, the usage of photosynthesis-like processes for the production of hydrogen or the storage of CO<sup>2</sup>.

At the moment, due to the intensity of the climate debate we seem to forget that our life consists not only of energetic aspect also of very substantial ones: there is also the protection and intelligent usage of natural resources – water, earth, ore and minerals, food, wood, farmland as well as settlement area – which is considered to be one of the most urgent scientific tasks and is therefore an important topic. The enormously increasing demand of raw materials in many emerging nations has caused an increase in commodity prices in the recent years, which has shown not only to German economists that there soon might be a scarcity in raw materials. An important research task is therefore to spot and solve goal conflicts in the complex interrelations, e.g. in the field of land use.

In my opinion, these three topics – climate change, energy and resources – are the core topics of sustainability research.

## **II. We are supporting the international direction**

Five years of Fona – looking back on these five years, I see especially the Eastern European expansion of the EU as the major political event, which has had a decisive influence on this time period. In 2004 many Central and Eastern European States have joined the EU, amongst others Poland, the Czech Republic and Hungary; in 2007 Bulgaria and Romania. At the beginning of 2004, the EU consisted of 15 member states, whereas today there are 27. I feel especially 7 happy and honoured about the fact that all these countries are represented here today. Your countries, my dear colleagues, are going to have a decisive influence on what will happen in Europe. For German enterprises Central and Eastern Europe is one of the most important growth markets: Poland, the Czech Republic and Hungary rank amongst the 15 most important trade partners of Germany!

At the Fona-Forum 2007 the idea of a collective sustainability dialogue with Central and Eastern Europe was sealed; now it is going to be realised! Networks of strength – this was the motto of a series of bilateral conferences, in which we have elicited common priority topics for the future cooperation. Representatives from politics, sciences, and industry as well as knowledge multipliers from your countries and from Germany have discussed in detail possible subject areas of our future research cooperation.

This afternoon, participants of these five conferences are going to present their perspectives in a session and discuss the current situation in order to point out the potentials of cooperation, especially in the collective development of research markets for sustainability research. Our target is building up a long-term, stable and equal research partnership with these countries and their centuries-old research tradition. Collective research, collective development – this requires a long-term commitment. We also want to undertake concrete steps within the framework of the European ERA-Net Cooperation in the field of forestry and tree related research with Slovenia, Hungary and Latvia; we are also in discussions with further partners of the new member states.

But we need to keep on broadening our horizon if we want to continue our contribution to the worldwide sustainable development. I do not only refer to the by now traditional and furthermore essential orientation towards the excellent research centres of the US or Japan. In fact it is time to establish research alliances with those countries, which considering their future economic development, will define the earth's future in a far higher degree than ours will: China, Brazil, Russia, South Africa are only some examples of countries with excellent and qualified researchers, having their own ideas of how to develop sustainable ways for life and economy.

And last but not least, if we want to maintain our status as the world's export champion, we firstly need to understand the serious problems of these countries as for what is needed and what not. In the future, they will determine the global demand – and it is only going to be covered by us if we cooperate as partners at eye level with the inventive pioneers of these countries.

The BMBF takes the initiative in the dialogue on research policies with important groups of emerging nations that are supposed to have an above-average economic growth. Since March 2007, a BMBF workgroup has come into operation, preparing strategic partnerships with China, India, Brazil, Russia and South Africa. I now cordially welcome a delegation of international observers from these countries who have come here to Berlin only to visit this forum.

### **III. Outlook: Research for Sustainability – the success story goes on!**

Dear Ladies and Gentlemen, sustainability has been a major issue on our research agenda for some years now. Many of you sitting here have been working on it for many years; you influence the scientific discussion in your field of studies and make the ideas and ideals of this concept become reality.

And nevertheless – and this is something you will confirm – it looks like the world has only now fully realised the importance of sustainable development and the importance of pushing forward innovations for a sustainable future. The climate change discussions created by the Stern report, the UN contracting state conference about biodiversity in Bonn – all these events have set the ball rolling since 2007. To me, this means one thing: we need to seize this opportunity. If society, science, and industry are ready

to face up to sustainability, then suddenly many creative constellations and ideas will come up which nobody would have anticipated. This is how we want to approach the topic with our new funding programme; we are going to position sustainability as a driver for innovation, as an incentive for courageous ideas. Along with the slogan “More research, more funding” present developments will be further expanded and new cooperations promoted.