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Megatrends are large and enduring changes which affect our daily lives, and consequently, our needs and demands; they also affect many industries. These megatrends are: Growing and Aging Population, Urbanization, Energy Demand and Climate Protection, as well as Globalization and Expansion of Developing Markets. They are innovation drivers and often interconnected, like housing, energy efficiency, mobility, climate protection. Chemistry offers new technologies, new materials and products as well as new applications which address the needs of future society; chemistry therefore takes a key position in the innovation system - with cross-sectional impact, e. g. for areas like construction, automotive, engineering, or electro-technology.

Research and development (R&D) are obligatory prerequisites for innovative success. The innovation value chain starts with basic research in academia, followed by industrial R&D, and finally converting the scientific and technical results into successful market products, processes and services. Cooperations between universities and industry, and between suppliers and customers are an essential building block for knowledge generation and transfer.

Successful research combines market impulses with scientific insights into innovative products; i. e. “technology push” and “market pull” complement each other. BASF – the Chemical Company, is a research-based transnational company, serving customers and partners in almost all countries of the world; and innovation is its life blood. BASF has spent approx. 1,49 bn Euro on R&D in 2010, the highest amount for chemical R&D worldwide in a company; and it will further increase this sum in 2011. BASF has more than 9,600 employees in R&D at more than 60 sites worldwide. Innovations are the result of global teamwork within BASF and close partnerships with academia and customers in about 1,900 R&D collaborations worldwide. Five Growth Clusters (Nanotechnology, White and Plant Biotechnology, Raw Material Change, Energy Management) address the megatrends and develop materials and solutions for global challenges in energy and resources, mobility and communication, health and nutrition, as well as housing and construction.

A strong knowledge and science base is vital for the successful future of Europe. This strong base needs a culture of innovation to generate wealth for Europe. We, the society as a whole, need to be open for innovation and progress. Better public understanding of science, improved technology acceptance, innovation culture and lifelong learning are key issues. All items form integral parts of BASF's sustainability strategy, i. e. aligning economic success with environmental and social responsibility. This will ensure long-term business success.

Research planning is an integral part of innovation management. It comprises a bottom-up approach on project level as well as top-management guidance. Phases and gates control the projects, with an open idea-finding process in the beginning, followed by a thorough and repeated project assessment ("business case") and focused project work from laboratory to launch.

The presentation will give examples on BASF's R&D strategies, structure and processes.