

THE LUND DECLARATION

EUROPE MUST FOCUS ON THE GRAND CHALLENGES OF OUR TIME

- European research must focus on the Grand Challenges of our time moving beyond current rigid thematic approaches. This calls for a new deal among European institutions and Member States, in which European and national instruments are well aligned and cooperation builds on transparency and trust.
- Identifying and responding to Grand Challenges should involve stakeholders from both public and private sectors in transparent processes taking into account the global dimension.
- The Lund conference has started a new phase in a process on how to respond to the Grand Challenges. It calls upon the Council and the European Parliament to take this process forward in partnership with the Commission.

The global community is facing Grand Challenges. The European Knowledge Society must tackle these through the best analysis, powerful actions and increased resources. Challenges must turn into sustainable solutions in areas such as global warming, tightening supplies of energy, water and food, ageing societies, public health, pandemics and security. It must tackle the overarching challenge of turning Europe into an eco-efficient economy.

To respond effectively, the European Research Area must develop processes for the identification of Grand Challenges, which gain political support and gradually move away from current thematic approaches, towards a structure where research priorities are based on these Grand Challenges. Responses to Grand Challenges should take the form of broad areas of issue-oriented research in relevant fields.

Processes to ensure quality, relevance and trust will be of crucial importance for Europe's ability to meet contemporary and future Grand Challenges and use knowledge as a tool to turn problems into opportunities and progress. Such processes have to be articulated in the context of Research, Education and Innovation communities, and be based on the understanding of the interaction between "bottom-up" and "top-down" initiated research. The development of such processes is a matter of urgency.

The identification of the Grand Challenges must engage the major stakeholders including the European Institutions, business, public services, NGOs

and the research community as well as interaction with major international partners. Meeting the challenges should involve public-private partnerships, including SMEs, with their potential to develop excellent and sustained problem-solving capacity. It will require Member States to develop more pro-active strategies on research priorities at regional, national and Community level. The Framework Programme for Research must also respond to these demands. Therefore the Commission and the Member States together should, based on a broad consultation process, agree on the most appropriate and efficient division of labour when designing future programmes.

Meeting the Grand Challenges also requires the following:

- **Strengthening frontier research initiated by the research community itself.** It is fundamentally important to create knowledge diversity, endowing the European Union with expertise, especially when confronted with unforeseen Grand Challenges and "shocks". Competition among researchers will ensure that research carried out in Europe is of international excellence.
- **Taking a global lead in the development of enabling technologies** such as biotechnology, information technology, materials and nanotechnologies.
- **Bringing together supply- and demand -side measures to support both business development and public policy goals.** Measures are

needed to maximize the economic and societal impact of new knowledge in areas such as industrial, environmental and social policies, agriculture and regional development. Links between these policy areas and research policies must be strongly improved. Supply-oriented research and innovation policies should be more strongly supported by demand-oriented policies, such as lead market initiatives, public procurement, problem- and issue-driven policies and priority setting.

- **Excellence and well-networked knowledge institutions.** Modernisation of universities and cooperation between universities and research institutions is a key element for enhancing the competitiveness of European research. There is a need to develop instruments to stimulate and support initiatives for cross-border cooperation between knowledge-building institutions in creating peak of excellence environments including for less developed research institutions.

- **The creation and maintenance of world class research infrastructures** in Europe including installations for big science as well as those serving the needs of social sciences and humanities.
- **A risk-tolerant and trust-based approach in research funding** entailing actions for necessary changes in the Communities' Financial Regulation and Rules for participation and dissemination.

Meeting the Grand Challenges will be a prerequisite for continued economic growth and for improved chances to tackle key issues. It will involve women and men on equal terms in the development of society and cut across social, religious, generational and cultural obstacles bringing about new possibilities and increase the well-being and quality of life for all. Europe's leadership in meeting the global challenges will make it an attractive partner in global cooperation for sustainable development.



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