

Materials Research and Development for Europe

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The European Union and its Member States will be confronted with increasing societal challenges in the coming decades: the **Europe2020 strategy** has set out five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020¹. In particular, the **Innovation Union Flagship Initiative** aims at improving research and innovation in Europe to ensure that innovative ideas can be turned into competitive products and services that create growth and jobs².

Materials research has an essential role in supporting the development of competitive and sustainable growth in Europe. Whatever the future goods and services will be, the main driving force behind their development will be the Key Enabling Technologies (KETs) such as nanotechnology, micro- and nanoelectronics, biotechnology, manufacturing and advanced materials: mastering these technologies means being at the forefront of managing the shift to a low carbon, knowledge-based economy too³. In addition, since non-energy raw materials are vital inputs for the EU's economy and are particularly crucial for the development of modern environmentally friendly technologies, such as electric cars and photovoltaic, the **EU Raw Materials Initiative** sets out the targeted measures to maintain fair and undistorted access to these materials⁴.

The European Commission, which is now promoting research in materials science and engineering within the EU 7th Framework Programme for Research and Technological Development, plans to present the new **Common Strategic Framework for Future EU Research and Innovation Funding**⁵ by the end of 2011.

¹ http://ec.europa.eu/europe2020/index_en.htm

² http://ec.europa.eu/research/innovation-union/index_en.cfm

³ http://ec.europa.eu/enterprise/sectors/ict/key_technologies/kets_high_level_group_en.htm

⁴ http://ec.europa.eu/enterprise/policies/raw-materials/index_en.htm

⁵ http://ec.europa.eu/research/csfr/index_en.cfm