

**EMIRI's response to the  
Green Paper on "A 2030 framework for climate and energy policies"**

A clear climate and energy framework has been defined by the EU up to 2020 determining clear policy objectives and targets. However, these actions need to be further reinforced and new ones introduced to go beyond the EU 2020 goals. EMIRI, the Energy Materials Industrial Research Initiative, strongly agrees that the EU should incorporate a strong technology and innovation strategy as an instrument for their 2030 policy framework building on the measures mentioned in the Communication "Energy Technologies and Innovation" [COM (2013) 253] to accomplish the 2050 objectives.

Climate change and affordable and secure supply of energy are two key challenges that need to be tackled, and can be solved through mastering state-of-the-art technology leading to improved European competitiveness, growth and job opportunities. The Strategic Energy Technology plan (SET-Plan) emphasises this by establishing energy technology policies to develop and deploy cost-effective low carbon technologies. What is more, within the framework of the SET-Plan, the Materials Roadmap Enabling Low Carbon Energy Technologies (SEC 2011/1609) endorsed by the European Commission, underlines the major role of materials as a key critical enabler concerning low carbon energy applications. The critical role of materials is taken up again in the Communication "Energy Technologies and Innovation".

We would argue strongly that advanced materials, which is also one of the recognised key enabling technologies, can make a significant contribution to the EU's societal and economic priorities, through encouragement and a greater focus on developing a complete and seamless innovation cycle spanning from research throughout to industrial-commercial deployment by means of a proper funding scheme.

**4.3. How can EU research and innovation policies best support the achievement of the 2030 framework?**

EMIRI's main recommendations:

- Promote research and development, innovation and large scale deployment in new materials (key enabling technologies) as they are major elements of the critical path for introducing innovation into the real-world applications
- Through research and innovation reinforce the European advanced materials sector's leading world position, which provides employment opportunities within Europe and added value

- Establish commitment among stakeholders to the rapid adoption and implementation of a consistent and common European medium to long term strategic research and innovation agenda for low carbon energy materials incorporating a full value chain and a pan-European perspective. In this way it can be anticipated that the advanced materials industry will be better able to deliver the right material with the right performance at the right time and so enable the SET Plan's overall objectives
- Stronger coordination and integration of stakeholders and investments along the research and innovation chain to accelerate development and market uptake. Within the SET-Plan there is the need to align national energy research and innovation policies and funding programmes to define priorities and avoid duplication. Additionally, joint actions/investments between Member States and the EU need to be encouraged to leverage private sector investments in support of the SET-Plan. Furthermore, an increased coordination and collaboration between the EERA, the EII's and EMIRI (now a recognised participant of the EII's) should be fostered
- Support the advanced materials industry players having ambitious and comprehensive industrial goals through effective and simple financing mechanisms e.g. Public Private Partnerships / Public-Public Private Partnerships. "Today industry makes about 70% of the total research and innovation investment in the SET Plan while Member States account for about 20% and the European Commission for 10%" [COM (2013) 253]. To build confidence and encourage far reaching targets, such schemes, should foresee from the outset sufficient funds to cover the full innovation cycle. Such prospects should preferably be referenced in present documents relating to the strategy of future innovation-oriented funding mechanisms.