

Energy in H2020

The Energy Societal Challenge in H2020, the EU R&I funding programme 2014-20, is **one of the most important in terms of earmarked budget** (€ 5,9 bn) over the next 7 years. This reflects the special attention the European Commission attaches to the shift towards an energy secure, competitive, climate resilient and low-carbon economy. This energy transition is underpinned by the **EU 2020 and 2030 energy and climate objectives** and is part of the longer term EU strategy for the emissions reduction by 2050 (80-95% compared to 1990 levels). The launch of the **European Energy Union** package in February 2015 confirmed that energy is a top priority for the European Commission that set the ambitious goal for the EU to become **'the world number one in renewable energies'**.

Within the EU energy policy framework and the path traced by the revised **European Strategic Energy Technology Plan**¹ (SET-Plan), activities under H2020 will play a pivotal role in mobilising Europe's research excellence to generate **innovative low-cost and low-carbon energy solutions** and to bring them to the market. Besides, H2020 funding is supposed to **triggering additional public and private investments** in the Member States, **building European industrial capacities** for developing supply chains that are resilient to the growing global competition, as well as **enabling an active participation of citizens**.

The **biannual Energy Work Programmes** (WPs) of H2020 will be implemented through **calls for proposals** covering a **range of technology areas** including solutions for smart cities and communities, energy efficiency, renewable energies, electricity grids and energy storage, sustainable bio-fuels and alternative fuels, as well as sustainable fossil fuel-based power sector. For the first time, the EU R&I framework programme will also tackle **non-technological challenges** such as new financing and business models, as well as actions supporting the implementation of the EU energy legislation (previously covered by the Intelligent Energy Europe Programme). Another novelty in H2020 concerns **innovative SMEs** and **larger industries**, in particular first applicants, in the energy field. The former will benefit from a targeted support provided by the SME Instrument, the latter will be able to rely on the Fast Track to Innovation scheme.

Beyond the Energy WP, in H2020 many energy-related challenges will be addressed in other WPs. It is the case, for example, of energy advanced materials and energy-efficient manufacturing and process industries (within the WP 'Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing'), bio-refineries and off-shore energy (in the WP 'Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the Bio-economy'), energy-efficient and low-carbon economy (in the WP 'Climate action, environment resource efficiency and raw materials'), e-vehicles and vessels (in the WP 'Smart, green and integrated transport'), security of energy infrastructures (in the WP 'Secure societies'), frontier research on energy and energy research infrastructures (in the WPs 'Future and Emerging Technologies' and 'European research infrastructures'), financial instruments for energy RTD activities carried out by innovative enterprises (in the WP 'Access to Risk Finance').

¹ Launched in 2007 the SET-Plan is the technology pillar of the EU's energy and climate policy to support research and innovation investments on low-carbon technologies by establishing joint partnership among research actors, industry, European Commission and Member States. The Plan has been revised in order to encompass the entire energy system as well as the entire supply chain and demand side in an integrated whole system approach, including consideration of environmental and social concerns within the energy system.

Over the next 7 years, RTD activities in fuel cells and hydrogen energy technologies will continue to be funded under the **Fuel Cells and Hydrogen Joint Technology Initiative** (FCH JTI) with a total budget of € 1.33 bn, whilst the bio-based innovation will be supported under the new **Joint Technology Initiative on the bio-based industries** (BBI JTI) with a total budget of € 3,7 bn.

Partially funded by Horizon 2020, the European company **KIC Inno-Energy** will focus its action on promoting innovation, entrepreneurship and education in the sustainable energy field by relying on a world class alliance bringing together academics, businesses and research institutes.

Finally, a new big novelty of the current financial programming period is the **possibility to combine Horizon 2020 money with the European Structural and Investment Funds** managed at national and regional level. For the next 7 years the European Commission scheduled at least € 38 bn (twice the amount spent in this area during the previous funding period) from the ERDF and Cohesion Fund to be invested in supporting the regions in their transition to a low-carbon economy, including R&I in low carbon technologies and their market uptake. This would actually mean more funding opportunities for enterprises and researchers active in this specific domain.

On this website you will find all the relevant information about H2020 energy-related funding opportunities (and handy information on other EU funding programmes/initiatives in the field of sustainable energy), EU energy and R&I policy developments, strategic European energy networks, as well as how to receive support in H2020 project development and partner search.

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