

**Proposal for a Council Decision establishing the Specific Programme implementing
Horizon 2020**

3. SECURE, CLEAN AND EFFICIENT ENERGY

3.3. Broad lines of the activities

(a) Reducing energy consumption and carbon footprint by smart and sustainable use

Activities shall focus on research and full-scale testing of new concepts, non-technological solutions, more efficient, socially acceptable and affordable technology components and systems with in-built intelligence, to allow real-time energy management for near-zeroemission buildings, renewable heating and cooling, highly efficient industries and mass take-up of energy efficiency solutions by companies, individuals, communities and cities.

(b) Low-cost, low-carbon electricity supply

Activities shall focus on research, development and full scale demonstration - of innovative renewables and carbon capture and storage technologies offering larger scale, lower cost, environmentally safe technologies with higher conversion efficiency and higher availability for different market and operating environments.

(c) Alternative fuels and mobile energy sources

Activities shall focus on research, development and full scale demonstration of technologies and value chains to make bio-energy more competitive and sustainable, to reduce time to market for hydrogen and fuel cells and to bring new options showing long-term potential to maturity.

(d) A single, smart European electricity grid

Activities shall focus on research, development and full scale demonstration of new grid technologies, including storage, systems and market designs to plan, monitor, control and safely operate interoperable networks in an open, decarbonised, climate resilient and competitive market, under normal and emergency conditions.

(e) New knowledge and technologies

Activities shall focus on multi-disciplinary research for energy technologies (including visionary actions) and joint implementation of pan-European research programmes and world-class facilities.

(f) Robust decision making and public engagement

Activities shall focus on the development of tools, methods and models for a robust and transparent policy support, including activities on public acceptance and engagement, user involvement and sustainability.

(g) Market uptake of energy innovation

Activities shall focus on applied innovation to facilitate the market uptake of energy technologies and services, to address non-technological barriers and to accelerate the cost effective implementation of the Union's energy policies.

The document is available at:

[http://ec.europa.eu/research/horizon2020/pdf/proposals/proposal_for_a_council_decision_establishing_the_specific_programme_implementing_horizon_2020_-_the_framework_programme_for_research_and_innovation_\(2014-2020\).pdf#view=fit&pagemode=none](http://ec.europa.eu/research/horizon2020/pdf/proposals/proposal_for_a_council_decision_establishing_the_specific_programme_implementing_horizon_2020_-_the_framework_programme_for_research_and_innovation_(2014-2020).pdf#view=fit&pagemode=none)