Basic information

2017/2084(INI) INI - Own-initiative procedure	Procedure completed
Accelerating clean energy innovation **Subject** 3.50.04 Innovation 3.60 Energy policy 3.60.05 Alternative and renewable energies	

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
ITRE Industry, Research and Energy	BUZEK Jerzy (PPE)	09/02/2017
	Shadow rapporteur KOUROUMBASHEV Peter (S&D) BAREKOV Nikolay (ECR) MEISSNER Gesine (ALDE) BENITO ZILUAGA Xabier (GUE/NGL) DALUNDE Jakop G. (Verts/ALE) PAKSAS Rolandas (EFDD) KAPPEL Barbara (ENF)	

Committee for opinion	Rapporteur for opinion	Appointed
ENVI Environment, Public Health and Food Safety	ECK Stefan (GUE/NGL)	27/04/2017
TRAN Transport and Tourism	DE MONTE Isabella (S&D)	27/03/2017
REGI Regional Development	SMOLKOVÁ Monika (S&D)	30/05/2017

European Commission

Commission DG	Commissioner
Research and Innovation	MOEDAS Carlos

Key events

Date	Event	Reference	Summary
30/11/2016	Non-legislative basic document published	COM(2016)0763	Summary
15/06/2017	Committee referral announced in Parliament		
11/01/2018	Vote in committee		
24/01/2018	Committee report tabled for plenary	A8-0005/2018	Summary
05/02/2018	Debate in Parliament		
06/02/2018	Decision by Parliament	T8-0026/2018	Summary
06/02/2018	Results of vote in Parliament		
06/02/2018	End of procedure in Parliament		

Technical information

Procedure reference	2017/2084(INI)
Procedure type	INI - Own-initiative procedure
Procedure subtype	Initiative
Legal basis	Rules of Procedure EP 55
Other legal basis	Rules of Procedure EP 165
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/8/10141

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE609.590	18/09/2017	
Committee opinion	ENVI	PE605.922	25/10/2017	
Amendments tabled in committee		PE612.073	25/10/2017	
Committee opinion	TRAN	PE606.126	24/11/2017	
Committee opinion	REGI	PE610.699	08/12/2017	
Committee report tabled for plenary, single reading		A8-0005/2018	24/01/2018	Summary
Text adopted by Parliament, single reading		T8-0026/2018	06/02/2018	Summary

European Commission

Document type	Reference	Date	Summary

Commission document (COM)	COM(2016)0763	30/11/2016	Summary
Commission response to text adopted in plenary	SP(2018)210	03/05/2018	

Accelerating clean energy innovation

2017/2084(INI) - 24/01/2018 - Committee report tabled for plenary, single reading

The Committee on Industry, Research and Energy adopted an own-initiative report by Jerzy BUZEK (EPP, PL) on accelerating clean energy innovation.

The EU must remain ambitious in its policies and instruments in order to send the right investment signals and not lose its global leading market position in clean energy research and innovation. Energy-related research and innovation was recognised as a priority area under FP7 and Horizon 2020, and should continue to be one under FP9, given the Union's commitments within the Energy Union and under the Paris Agreement, so as to leverage public and private R&D funding more effectively, and to help lower the investment risks of most prospective innovation in clean energy, particularly in energy efficiency and renewables.

In this regard, the report noted that the EU needs to send strong and consistent signals and create incentives, in order to provide investor certainty and boost private investment in clean energy innovation, R&D and deployment.

Coherence with other EU policies: although Members welcomed the Commission communication setting the framework for accelerating the EU's clean energy innovation, they stressed the need for a **regulatory and financing framework** for energy innovation that is coherent with the EU's energy roadmap 2050 and its commitments under the Paris Agreement.

They stated that the successful deployment of energy innovation is a **multidimensional challenge** that encompasses both supply- and demand-side value chains, human capital, market dynamics, regulation, innovation and industrial policy issues. The importance of further liberalising European energy markets, notably by removing obstacles to free price formation and phasing out energy subsidies was also stressed.

The Commission and the Member States are urged to put in place **mechanisms for coordinating EU, national and regional research and energy innovation programmes** in order to foster synergies and avoid duplication, thus ensuring the most effective use of existing resources and infrastructure.

Members remained concerned about the large number and **complexity of existing financial instruments** and stressed the need for **greater coherence between the relevant funds**, including structural funds, dedicated to clean energy projects, and for the existing financing instruments at EU and Member State level to be made more comprehensible.

The Commission is called on to:

- carry out an evaluation of the performance of its energy-related financial instruments and funds, and to provide a 'fast track' response to improve the instruments if specific instances of gridlock, incoherence are identified and to adapt the aforementioned instruments and funds to the new EU energy targets;
- step up efforts in support of innovation in sustainable sourcing of raw materials, better product design, recycling, reuse and cascade use of existing metals and materials in the context of the circular economy and energy savings.

Long-term financing certainty: Members reiterated their call for an increased overall budget of at least **EUR 120 billion for FP9 (2021-2027)** and urged the Commission to increase the proportion of related financing for sustainable, low-emission energy projects under FP9 by at **least 50 % over and above the corresponding Horizon 2020 amounts**, so as to ensure sufficient funding to support EU's energy transition and the effective implementation of the Energy Union.

Citizen-driven energy innovation: accelerating clean energy innovation requires Europeans to undergo a **change in their mind-set** that would transcend simple awareness of energy issues and move towards a **deeper understanding of the behavioural changes**, especially in energy savings and new production and consumption patterns.

The Commission is urged to:

- pay more attention in its R&D initiatives to the link between innovation in energy systems and new professional profiles, education needs, jobs and training requirements;
- assist in empowering **local and regional authorities** in the deployment of clean energy innovation, such as smart cities, e-mobility and smart and micro-grids;
- encourage the Commission to support existing funding for **electric vehicles infrastructure** deployment;
- support and develop further initiatives such as the Europe-wide electro mobility initiative and the Fuel Cells and Hydrogen Joint Undertaking;
- ensure the financing of innovation aimed at the development of **hydrogen storage** and advanced long-term storage solutions for electric vehicles, the development of a hydrogen charging infrastructure, as well as infrastructure and plug-in solutions, including charging infrastructure for electric vehicles.

The report encouraged the Member States and local authorities to take further initiatives, such as fiscal incentives in relation to the market penetration of electric and hydrogen vehicles, tax reductions and exemptions for the owners of electric and hydrogen vehicles, as well as various other initiatives in relation to the promotion of the use of electric vehicles, such as price reductions, bonus payments and premiums for the buyers of electric vehicles, and the creation of free parking spaces for electric vehicles.

Lastly, the report stressed that synergies between EU policies should be strengthened through a **unified and consistent EU position on anti-dumping measures**, in order to ensure that the manufacturing industry takes full advantage of the energy transition.

Accelerating clean energy innovation

2017/2084(INI) - 06/02/2018 - Text adopted by Parliament, single reading

The European Parliament adopted by 559 votes to 63, with 43 abstentions, a resolution on accelerating clean energy innovation.

The EU must remain ambitious in its policies and instruments in order to maintain its global leading market position in clean energy research and innovation. Energy-related research and innovation was recognised as a priority area under FP7 and Horizon 2020, and should continue to be one under FP9, given the Union's commitments within the Energy Union and under the Paris Agreement, so as to leverage public and private R&D funding more effectively, and to help lower the investment risks of most prospective innovation in clean energy, particularly in energy efficiency and renewables.

In this regard, Parliament noted that the EU needs to **send strong and consistent signals** and create incentives, in order to provide investor certainty and boost private investment in clean energy innovation, R&D and deployment.

Coherence with other EU policies: although welcoming the Commission communication setting the framework for accelerating the EU's clean energy innovation, Parliament stressed the need for a regulatory and financing framework for energy innovation that is coherent with the EU's energy roadmap 2050 and its commitments under the Paris Agreement.

It stated that the successful deployment of energy innovation is a **multidimensional challenge** that encompasses both supply- and demand-side value chains, human capital, market dynamics, regulation, innovation and industrial policy issues. The importance of further liberalising European energy markets, notably by removing obstacles to free price formation and phasing out energy subsidies was also stressed.

Parliament emphasised the importance of:

- putting in place **mechanisms for coordinating** EU, national and regional research and energy innovation programmes in order to foster synergies and maximise the market uptake of new technologies;
- **reducing the complexity of existing financial instruments** in order to improve the coherence between the relevant funds, including the Structural Funds, dedicated to clean energy projects;
- setting up within the Commission a dedicated inter-service team specifically responsible, *inter alia*, for new planning of common research and innovation policies;
- further supporting investments in sustainable sourcing of raw materials and steer innovation towards better product design, recycling and reuse of existing metals and materials in a circular economy;
- ensuring that **work on innovation and standards and interoperability** is coordinated so that the Union can achieve global leadership in setting standards in clean energy 'Internet of Things'-integrated sectors.

Long-term financing certainty: Parliament reiterated its call for an increased overall budget of at least **EUR 120 billion** for FP9 (2021-2027). It urged the Commission to increase the proportion of related financing for sustainable, low-emission energy projects under FP9 by at least **50 %** over and above the corresponding Horizon 2020 amounts, so as to ensure sufficient funding to support EU's energy transition and the effective implementation of the Energy Union.

Citizen-driven energy innovation: Members pointed out that a cost-effective energy transition towards environmentally friendly, consumer-oriented and more digitalised and decentralised systems with **active prosumers and prosumer communities** requires research and the deployment of innovation across all energy system sectors.

Accelerating clean energy innovation requires Europeans to undergo a change in their mind-set that would transcend simple awareness of energy issues and move towards a **deeper understanding of the behavioural changes**, especially in energy savings and new production and consumption patterns.

The Commission is urged to:

- pay more attention in its R&D initiatives to the link between innovation in energy systems and new professional profiles, education needs, jobs and training requirements;
- assist in empowering local and regional authorities in the deployment of clean energy innovation, such as smart cities, e-mobility and smart and micro-grids;
- encourage the Commission to support existing funding for electric vehicles infrastructure deployment;
- support and develop further initiatives such as the Europe-wide electro mobility initiative and the Fuel Cells and Hydrogen Joint Undertaking;
- ensure the financing of innovation aimed at the development of hydrogen storage and advanced long-term storage solutions for electric vehicles, the development of a hydrogen charging infrastructure, as well as infrastructure and plug-in solutions, including charging infrastructure for electric vehicles.

The resolution encouraged the Member States and local authorities to take further initiatives, such as **fiscal incentives** in relation to the market penetration of electric and hydrogen vehicles, tax reductions and exemptions for the owners of electric and hydrogen vehicles, as well as various other initiatives in relation to the promotion of the use of electric vehicles, such as price reductions, bonus payments and premiums for the buyers of electric vehicles, and the creation of free parking spaces for electric vehicles.

Lastly, the Commission was invited to (i) exploit the full potential of the Mission Innovation initiative so that its members can honour their commitment to double the annual spending on clean energy R&D between 2015 and 2020; (ii) develop a comprehensive export strategy for clean and sustainable energy technologies through a dedicated support facility.

Accelerating clean energy innovation

2017/2084(INI) - 30/11/2016 - Non-legislative basic document

PURPOSE: to set out a comprehensive strategy to accelerate innovation in the field of clean energy.

BACKGROUND: the policy measures set out in this document constitute the core of the research and innovation pillar of the Energy Union. They form an integral part of the broader package of "facilitating measures" needed to boost the clean energy transitions, which are outlined the "Clean Energy for All Europeans" Communication.

The European Union is well placed to lead this transition, which received new momentum and direction from the Paris Agreement.

Europe has spearheaded global efforts to fight climate change, has been a driving force in developing renewables, and leads the world in energy-efficiency solutions for industry, transport, buildings.

CONTENT: this Communication lays out a **comprehensive strategy** for the three **main policy levers** the EU can deploy to boost private investment in clean energy innovation.

(1) Create the right business environment for innovation through targeted signals, policies, standards and regulations. The objective is to create incentives for private investment in clean energy research, development and deployment.

Creating the right market conditions for innovation includes putting in place a stable, long-term, transparent and predictable regulatory environment. The Commission is putting forward, together with this Communication, a broad package of legislative and non-legislative measures under the Energy Union:

- the redesign of the European electricity market will support the penetration of renewable-energy sources, allow for effective demand management, and unlock regionally integrated energy markets;
- the Energy Performance of Buildings directive will create incentives for the development of innovations to achieve a European building stock of nearly-zero-energy houses and deliver energy-plus districts by 2050;
- the revised Renewable Energy Directive (RED II) will, inter alia, spur the development of the next generation of renewable-energy solutions in the heating and cooling, transport and electricity sectors;
- Commission proposals to review the EU Emission Trading System (ETS), the Effort-Sharing Regulation, as well as the proposal for the integration of Land Use, Land Use Change and Forestry (LULUCF) into the overall effort to reduce the greenhouse gas emissions will likewise stimulate low-carbon innovation;
- the action plan for the Circular Economy will contribute to increasing energy efficiency and reducing emissions by better using raw materials and recycling secondary raw materials and waste;
- **public procurement** can and should serve as a further powerful instrument to create markets for innovative products.

(2) Financial instruments to boost private sector investment: in 2014, private investments in Energy Union research and innovation priorities are estimated to have reached **EUR 22.9 billion in the EU**. While this number represents an increase compared to previous years, such growth should take place at much faster pace.

The EU disposes of an array of different funding and financial instruments to support low carbon innovation:

- **the European Fund for Strategic Investments (EFSI)** is the key instrument in this regard: the Commission has proposed to extend the duration of the European Fund for Strategic Investments until the end of 2020 and to require that at least 40% of projects in the European Fund for Strategic Investments infrastructure and innovation window should contribute to climate, energy and environment action in line with the COP21 objectives; financial instruments are also available through the European Structural and Investment Funds;

- the European Commission, together with the European Investment Bank (EIB) last year launched the **Energy Demonstration Projects facility** as part of Horizon 2020 InnovFin. It is working towards at least doubling the budget of the InnovFin Energy Demonstration Projects scheme;
- the Commission and the European Investment Bank will set up a Cleaner Transport Facility to support the deployment of alternative energy transport solutions;
- the Commission, through the European Investment Project Portal and other channels, will bring a pipeline of innovative projects to the attention of investors of the relevant Public Private Partnerships supported under Horizon 2020. These partnerships concern the Joint Technology Initiatives on Fuel Cells and Hydrogen, CleanSky, the Single European Sky Air Traffic Management Research, Shift2Rail, and the BioBased Initiative, as well as contractual Public-Private Partnerships, e.g. Green Vehicles and Sustainable Process Industry through Resource and Energy Efficiency.

(3) Better funding of energy science and technology: funding from the EU budget needs to focus on potentially disruptive technologies, innovations, and business models, including breakthrough innovations for the low-carbon economy which are not foreseen in strategic, mission-driven funding.

The Commission intends to deploy more than **EUR 2 billion** from the Horizon 2020 work programme for 2018-2020 to support research and innovation projects in four priority areas:

- decarbonising the EU building stock by 2050: from nearly-zero energy buildings to energy-plus districts;
- strengthening EU leadership on renewables (RES);
- developing affordable and integrated energy storage solutions;
- electro-mobility and a more integrated urban transport system.

This represents a 35% budget increase in annual terms from 2014-2015 levels in these four areas.

(4) Globally: Europe needs to enhance its role as a global climate champion and pioneer of low-carbon and energy-efficient solutions.

The Commission will cooperate with the Member States to ensure that the European Union plays a leading role in the global **Mission Innovation** initiative launched at COP21. It will lead the Converting Sunlight Innovation Challenge to create storable solar fuels and the Affordable Heating and Cooling of Buildings Innovation Challenge.

The **Enterprise Europe Network** will be extended to new third country markets to facilitate business cooperation and technology transfer for SMEs.