Basic information

2020/2241(INI) INI - Own-initiative procedure	Procedure completed
A European Strategy for Energy System Integration **Subject** 3.60 Energy policy	

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
ITRE Industry, Research and Energy	GRUDLER Christophe (Renew)	22/07/2020
	Shadow rapporteur SALINI Massimiliano (EPP) GONZÁLEZ CASARES Nicolás (S&D) DALUNDE Jakop G. (Greens/EFA) DE LA PISA CARRIÓN Margarita (ECR) BORCHIA Paolo (ID) ERNST Cornelia (GUE/NGL)	

Committee for opinion	Rapporteur for opinion	Appointed
ENVI Environment, Public Health and Food Safety	The committee decided not to give an opinion.	
TRAN Transport and Tourism (Associated committee)	KOUNTOURA Elena (GUE/NGL)	03/11/2020

European Commission

Commission DG	Commissioner
Energy	SIMSON Kadri

Key events

Date	Event	Reference	Summary

26/11/2020	Committee referral announced in Parliament		
26/11/2020	Referral to associated committees announced in Parliament		
18/03/2021	Vote in committee		
26/03/2021	Committee report tabled for plenary	A9-0062/2021	Summary
17/05/2021	Debate in Parliament		
19/05/2021	Decision by Parliament	T9-0240/2021	Summary

Technical information	
Procedure reference	2020/2241(INI)
Procedure type	INI - Own-initiative procedure
Procedure subtype	Strategic initiative
Legal basis	Rules of Procedure EP 55 Rules of Procedure EP 57_o
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/9/04092

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE658.868	11/11/2020	
Amendments tabled in committee		PE661.966	11/12/2020	
Committee opinion	TRAN	PE660.213	26/02/2021	
Committee report tabled for plenary, single reading		A9-0062/2021	26/03/2021	Summary
Text adopted by Parliament, single reading		T9-0240/2021	19/05/2021	Summary

European Commission

Document type	Reference	Date	Summary
Commission response to text adopted in plenary	SP(2021)538	09/11/2021	

A European Strategy for Energy System Integration

2020/2241(INI) - 26/03/2021 - Committee report tabled for plenary, single reading

The Committee on Industry, Research and Energy adopted an own-initiative report by Christophe GRUDLER (Renew Europe, FR) on a European strategy for energy system integration.

The report stressed that the integration of energy systems can bring a response to many of the challenges stemming from energy transition, and particularly the challenge of decarbonisation, optimisation and balancing of the energy networks, therefore guaranteeing security of supply and fostering the EU's strategic autonomy. Furthermore, energy system integration can accelerate the transition towards a climate neutral economy while aiming at keeping the costs for European citizens, authorities and businesses within realistic limits.

Overall, the strategy for energy system integration should include a cascading priority for energy efficiency and savings, decarbonisation of end-uses through direct electrification, renewable-based and low-carbon fuels for applications that do not have another alternative.

Optimising and decarbonising energy systems

Members recalled that circularity and direct electrification, where possible, present an important pathway towards decarbonisation. Given the high energy consumption in the water sector, the Commission is called on to consider energy-efficient measures for the EU water sector and the possibility of using treated waste water as an on-site source of renewable energy in energy system integration.

The report welcomed the new EU Methane Strategy and called on the Commission to propose measures to further reduce methane emissions in the energy sector.

Regarding the challenge of decarbonising heating and cooling, Members called for the further implementation of the heating and cooling strategy. District heating and cooling networks should be eligible for funding under the revised Connecting Europe Facility Regulation.

Members advocated speeding up decarbonisation in some sectors such as construction, where energy efficiency efforts are still insufficient. They also highlighted the potential for re-using waste, in particular energy and thermal waste from industrial processes, bio-waste, buildings and data centres.

The Commission is called on to extend the principle of energy efficiency to the whole value chain and to all end-uses as a cost-efficient way to reduce emissions.

Balancing energy systems

Maintaining the balance of electricity grids and managing demand and production peaks will be more complex with an increasingly decentralised and renewable generation mix. In this respect, Members underlined the role of demand-side response, storage and smart energy management. They stressed that moving towards decentralised energy production has many benefits/

The report regretted that a number of Member States have not yet reached their 10 % electric interconnection target by 2020. It welcomed the Commission's proposal to raise the 2030 electricity interconnection target to 15 %, provided that it better supports national investments through the list of projects of common interest.

Stressing the role that electric mobility can play as a form of smart integration of the power and transport sectors by unlocking flexibility capacities, Members noted that the electrification of the transport sector has the potential to increase the EU's energy strategic autonomy by reducing the need for imported fossil fuels. They underlined the storage and flexibility potential of the deployment of 'vehicle-to-grid' technologies and noted that it will require the interoperability of energy systems and electric vehicles.

On the other hand, the report noted with concern the large dependence of the EU on imports of lithium-ion batteries.

Ensuring energy accessibility for all citizens and businesses

Members stressed the importance of guiding customers towards the most energy-efficient and cost-effective decarbonisation option, on the basis of prices that properly reflect all the costs of the energy carrier used.

They highlighted the consumer empowerment potential in the integrated renewable energy systems to generate, consume, store, and sell energy. The report reiterated the potential of energy communities and micro grids to develop access to more sustainable energy, especially for remote areas, islands and the outermost regions.

Ensuring European leadership on sustainable and renewable energy technologies

Members stressed the importance of increasing the competitiveness of European technologies to foster the autonomy of the Union in the strategic energy sector. They called on the Commission to support research and innovation through the various structural and sectoral funds.

Lastly, the report highlighted the need for a just transition and called on the Commission and Member States to address structural changes in the energy sector in all relevant legislative proposals in order to help facilitate the transition towards climate neutrality.

A European Strategy for Energy System Integration

2020/2241(INI) - 19/05/2021 - Text adopted by Parliament, single reading

The European Parliament adopted by 542 votes to 111, with 42 abstentions, on a European strategy for energy system integration.

Coherent long-term approach and stable regulatory framework

Members endorsed the direction set out by the Commission in its communication on a strategy for energy system integration, namely a prioritisation of energy efficiency and savings, decarbonisation of end-uses through direct electrification, and renewable and low-carbon fuels for applications where there is no other choice.

Recalling that the energy transition will require between **EUR 520 and EUR 575 billion** of annual investment in infrastructure and renewable energy deployment, Parliament called for a coherent long-term approach in a spirit of solidarity and cooperation, as well as a stable regulatory framework for the industries concerned and society at large.

In the aftermath of the COVID-19 pandemic, this strategy should set out a vision for a climate-neutral economy, enhance energy security and competitiveness, boost employment and SMEs, protect health and the environment, and promote sustainable growth and innovation.

The Commission is invited to explore different avenues that can help each Member State to use the most effective decarbonisation solutions according to its needs and resources.

Optimising and decarbonising energy systems

Parliament recalled hat circularity and direct electrification, where possible, present an important pathway towards decarbonisation. Given the high energy consumption in the water sector, the Commission is called on to consider energy-efficient measures for the EU water sector and the possibility of using treated waste water as an on-site source of renewable energy in energy system integration.

The resolution welcomed the new EU **Methane** Strategy and called on the Commission to propose measures to further reduce methane emissions in the energy sector.

Given the insufficient progress in energy efficiency and building renovation, Members called on the Commission to review the targets set out in the energy efficiency directive, making them more aligned with the climate targets.

Parliament called for the further implementation of the **heating and cooling strategy**. District heating and cooling networks should be included as potential projects of common interest under the TEN-E Regulation.

Members also highlighted the potential for **re-using waste**, in particular energy and thermal waste from industrial processes, bio-waste, buildings and data centres. They called for priority to be given to the development of a renewable hydrogen supply chain in Europe and stressed the need for ambitious targets to move towards decarbonisation of all modes of passenger and freight transport.

The Commission is called on to extend the principle of energy efficiency to the whole value chain and to all end-uses as a cost-efficient way to reduce emissions

Balancing energy systems

Maintaining the balance of electricity grids and managing demand and production peaks will be more complex with an increasingly decentralised and renewable generation mix. In this respect, Members underlined the role of demand-side response, storage and smart energy management. They stressed that moving towards decentralised energy production has many benefits.

Members regretted that a number of Member States have not yet reached their 10 % electric interconnection target by 2020. They welcomed the Commission’s proposal to raise the 2030 electricity interconnection target to 15 %, provided that it better supports national investments through the list of projects of common interest.

Stressing the role that **electric mobility** can play as a form of smart integration of the power and transport sectors by unlocking flexibility capacities, Members noted that the electrification of the transport sector has the potential to increase the EU’s energy strategic autonomy by reducing the need for imported fossil fuels. They underlined the storage and flexibility potential of the deployment of ‘vehicle-to-grid’ technologies and noted that it will require the interoperability of energy systems and electric vehicles.

Furthermore, underlining the EU's heavy dependence on imports of lithium-ion batteries, Parliament welcomed the approach of the strategic action plan on batteries, notably the diversification of raw material sources, the development of substitutes for rare earths and the creation of the European battery alliance.

Ensuring energy accessibility for all citizens and businesses

Parliament stressed the importance of guiding customers towards the most energy-efficient and cost-effective decarbonisation option, on the basis of prices that properly reflect all the costs of the energy carrier used. It highlighted the consumer empowerment potential in the integrated renewable energy systems to generate, consume, store, and sell energy. The resolution reiterated the potential of energy communities and micro grids to develop access to more sustainable energy, especially for remote areas, islands and the outermost regions.

Ensuring European leadership on sustainable and renewable energy technologies

Members stressed the importance of increasing the competitiveness of European technologies to foster the autonomy of the Union in the strategic energy sector. They called on the Commission to support research and innovation through the various structural and sectoral funds.

To ensure a just transition, the resolution called on the Commission and Member States to address structural changes in the energy sector in all relevant legislative proposals in order to help facilitate the transition towards climate neutrality.