



Council of the
European Union

Brussels, 23 May 2019
(OR. en)

8185/3/19
REV 3

ENER 217
CLIMA 109

NOTE

From:	General Secretariat of the Council
To:	Delegations
Subject:	Draft Council conclusions on the Future of Energy Systems in the Energy Union designed to ensure the clean energy transition and the achievement of energy and climate objectives towards 2030 and beyond - Discussion

Following the discussion at the Energy Working Party on 21 May the Presidency prepared a further revised draft of Council conclusions on the 'Future of Energy Systems'. Changes compared to the previous version are marked as **bold underlined** and with ~~strikethroughs~~. To facilitate the drafting process the paragraphs and bullet points were numbered (these numbers will be removed before adoption of the Council conclusions).

The Working Party on Energy (EWP) on 27 May will be invited to discuss these revised draft conclusions with a view to find agreement on the conclusions.

**Draft Council conclusions on the Future of Energy Systems
in the Energy Union to ensure the clean energy transition and the achievement
of energy and climate objectives towards 2030 and beyond**

The Council of the European Union:

1. RECALLING:

- the conclusions adopted by the European Council on 13 and 14 December 2018, especially with regard to the invitation to continue work on the elements outlined in the Commission Communication "A Clean Planet for all",
- the conclusions adopted by the European Council on 21 and 22 March 2019 that emphasise the importance of the EU submitting an ambitious long-term strategy by 2020,
- the 'Clean Energy for all Europeans' legislative package, setting the framework for the implementation of the Union's 2030 climate and energy targets on greenhouse gas reductions, renewable energy increases, energy efficiency improvement **and electricity interconnections**,
- the conclusions adopted by the Council on 21 November 2018 on 'a future EU Industrial Policy Strategy' that emphasise the importance of mainstreaming industrial policy across all EU policies including energy policy.

2. TAKING NOTE OF:

- The Commission Communication of 16 February 2016 on an 'EU Strategy on Heating and Cooling of 2016',
- The Commission Communication of 23 November 2017 titled 'Strengthening Europe's energy networks',
- The Commission Communication of 9 January 2019 on 'Energy prices and costs in Europe',
- The Commission Communication of 9 April 2019 titled 'Fourth Report on the State of the Energy Union',

- The Commission Recommendation of 3 April 2019 on Cybersecurity in the Energy Sector.

3. ACKNOWLEDGING the five dimensions of the Energy Union with a forward-looking climate policy, that are closely interrelated and mutually reinforcing: energy security, solidarity and trust; a fully integrated European energy market; energy efficiency contributing to moderation of demand; decarbonization of the economy; and research, innovation and competitiveness, and the need to provide a coherent strategy and a balanced approach of the five dimensions.

4. UNDERLINES the importance of the EU submitting an ambitious long-term strategy by 2020 striving for climate neutrality in line with the Paris Agreement, while taking into account Member States' specificities and the competitiveness of European industry **and RECOGNISES the need to step up the global efforts to tackle climate change in light of the latest available science, especially the IPCC Special Report on the impacts of global warming of 1.5°C above preindustrial levels.**¹

New 5. ACKNOWLEDGES that well-functioning energy markets are the basis for a cost-efficient clean energy transition.

~~5. STRESSES the need to ensure the clean energy transition and the achievement of energy and climate targets towards 2030 and beyond, by developing reliable, sustainable and cost-effective energy networks and by modernizing the energy system thorough the promotion of innovative technologies, digitalization and sector integration and by modernizing the whole economy towards carbon neutrality on the longer term.~~²

6. UNDERLINES the importance of ambitious Integrated National Energy and Climate Plans (NECP) to be notified by Member States by the end of 2019 and their effective implementation as well as regional **coordination and** cooperation between the Member States with regard to these plans, while taking into account the Member State's specificities and different potentials reflected in the NECP and while respecting the Member States' right to determine their choice between different energy sources and the general structure of its energy supply under Article 194(2), and RECOGNIZES the role of the **Energy Union** governance system and the exchange of best practices to guarantee and facilitate the achievement of the energy and climate targets towards 2030.

¹ Presidency comment: Paragraph 4 consists of wordings from European Council conclusions from 21-22 March 2019. Due to ongoing discussions on the LTS in the Environment Working Party and due to the European Council meeting on 20/21 June the Presidency cannot divert from this agreed wording.

² Presidency comment: Moved below 10a.

7. STRESSES the importance of citizens and businesses to be at the core of the ~~market-driven~~³ clean energy transition process, ~~while in order to~~ ensure public support for the EU's ambitious energy and climate targets towards 2030 and beyond as well as public acceptance regarding measures, and providing for a just transition and for affordable energy for household consumers, taking into account vulnerable customers and energy poverty, as well as for industry, in order to ensure its global competitiveness.

8. RECOGNISES the need for substantial public and private investments to facilitate the clean energy transition in all relevant sectors, notably in the electricity and gas sectors, in transport as well as in the heating and cooling sector, and the importance of ensuring adequate EU and national financial support and a stable and predictable investment framework, EMPHASISING in this respect the importance of the EU's overall financial framework, the role of the European Investment Bank to provide multipliers for sustainable investments and the importance of ~~balanced~~ EU state aid rules that are coherent with the EU energy and climate goals towards 2030 and beyond and with relevant EU legislation to implement these goals.

9. UNDERLINES the need to implement the energy efficiency first principle in line with the Regulation on the Governance of the Energy Union and to improve energy efficiency, ~~in particular for instance~~ in buildings as well as in industrial appliances, while STRESSING the need to remove regulatory and other market barriers and making use of common standards.

10. ACKNOWLEDGES the important role of regional cooperation in ensuring the clean energy transition and the achievement of the objectives of the Energy Union, including through the already established cooperation fora in the EU and with external actors.

10a. STRESSES the need to ensure the clean energy transition and the achievement of energy and climate targets towards 2030 and beyond, in particular by developing interconnected, reliable, ~~sustainable~~ and cost-effective energy networks and by modernizing the energy system through the promotion of innovative technologies, digitalization as well as sector coupling and sector integration, while recognizing technology neutrality and the Member State's right to choose their energy mix, ~~and by modernizing the whole economy towards carbon neutrality on the longer term~~.⁴

³ Presidency comment: Addressed in new paragraph 4a

⁴ Presidency comment: Former paragraph 5 moved here as this paragraph functions as an intro to the following three sub-chapters. Deletion as addressed in para 4.

I. To promote the development of reliable, ~~sustainable~~ and cost-effective **energy networks** the Council:

11. STRESSES the importance of cost-effective and efficient local, regional and national energy networks as enablers of the clean energy transition for the functioning of the internal market and in order to ensure security of supply, with a focus on diversification of energy sources and routes and improvement of markets' integration.

12. UNDERLINES the importance of making the energy infrastructure ready to make use of the opportunities offered by the ongoing process of modernization and decarbonization, by the growing shares of renewable energy, in order to evolve into a secure, fit-for purpose, modern, effective, smart and resilient energy system across the EU.

13. IDENTIFIES the following energy infrastructure priorities:

- a. Enhance the development of cross-border interconnections necessary to reach the 10% electricity interconnection target for 2020 with the objective of arriving at a 15% target for 2030, as defined in the Governance Regulation and supporting projects that are crucial for the integration and synchronization of Member States' systems grids into the EU energy networks and also addressing intra-state bottlenecks, aiming at achieving a fully effective and more integrated internal energy market.
- b. Further facilitate the roll-out of RES as well as their integration in the networks, both at transmission and distribution level, particularly through promoting sector integration and developing storage solutions, bearing in mind the need of enhanced transmission networks to maintain grid stability and security of supply;
- c. Facilitate the further electrification of the economy, in particular in emissions' intensive sectors, such as in the transport and industry sectors;
- d. Exploit the significant potential for the deployment of **direct** renewable heat, waste heat and CHP in the heating and cooling sector, including district heating and cooling.
- e. Promote the development of infrastructure for E-mobility, renewable and other alternative fuels in line with Directive 2014/94 on alternative fuel infrastructure, such as the EV charging infrastructure in the public and private areas, across the EU;

- f. Enhance energy and power sector flexibility **by promoting inter alia** energy storage, grid expansion, flexible generation, power-to-x technologies, sector coupling as well as demand management solutions such as smart metering;
- g. Analyze **the role of** existing infrastructure in order to secure a cost effective **clean energy** transition and avoid lock-in effects and stranded assets and optimize the utilization of existing infrastructure and available interconnections, by making maximal use of market integration, **sector** coupling and regional cooperation;
- ~~h. **Implement energy efficiency measures and the energy efficiency first principle;**~~⁵
- i. Ensure the protection of critical energy infrastructure and their cybersecurity.

II. To promote the development and deployment of **innovative technologies** the Council:

14. CALLS on the importance of ~~striving for technology neutrality~~⁶ for creating a level-playing field for available and emerging decarbonized technologies and market-based solutions, while EMPHASISING that technologies to be deployed must be **reliable**, safe, sustainable and environmentally sound.

15. RECOGNIZES the importance of research and demonstration as well conditions that allow innovative new decarbonized technologies to develop and mature under market conditions, and STRESSES the need to exponentially increase investments in Research, Development and Innovation to facilitate technological leadership of European companies with regard to both established and emerging decarbonized technologies, while also promoting business models and social innovations to ensure the deployment and acceptance of the technological solutions.

16. UNDERLINES that digitalization, including the development of smart grids and data management and its protection, will play a fundamental role for future energy systems, providing increased flexibility and supporting the energy efficiency first principle **and security of supply**, while RECOGNISING that cybersecurity and the protection of personal data will have to be ensured throughout the entire energy sector.

⁵ Presidency Comment: Addressed inter alia in paragraph 9.

⁶ Presidency Comment: Addressed inter alia in paragraph 10a.

17. REITERATES that storage systems, both conventional and new solutions, are key for transition, in particular to create opportunities for hydro power ~~for seasonal storage~~ and batteries ~~for short term storage~~ but also storage of gas and hydrogen from power to gas production, when contributing to decarbonisation, in particular renewable hydrogen.

18. ENCOURAGES the improvement of and access to EU funds, in particular for active consumers and energy communities as well as for industry when innovating and when adapting to clean energy transition needs, while ensuring a level playing field within all market participants.

19. STRESSES the importance of market-based solutions in combination with cost-efficient financial support for the swift deployment of renewable energy, inter alia through the new Union renewable energy financing mechanism, energy efficiency and other low-emission technologies with an aim to reap renewables and energy efficiency potentials, especially in the buildings sector, while and exploiting synergies with other EU funding schemes such as Horizon Europe, the Connecting Europe Facility, the InvestEU programme and Structural Funds in order to ensure cost-effective funding of the clean energy transition and ENCOURAGES also the use of financial de-risking instruments, such as power purchase agreements, to be put in place both in the renewables and the energy efficiency sectors.

20. ACKNOWLEDGES that carbon capture ~~and Storage (CCS) and Carbon Capture and Use (CCU)~~ technologies may play a crucial role for decarbonisation beyond 2030, especially for the mitigation of process emissions from industrial processes, ~~as currently these are the only known technologies to prevent CO2 emissions from fossil fuel use, while public acceptance in for the~~ Member States that choose this technology will have to be respected.

21. RECOGNIZES the necessity to assess and take account of the costs and benefits of the deployment of new technologies on both economic and social dimensions, with the aim of maintaining and improving industrial competitiveness of the EU on a global level in order to foster growth and employment, while avoiding measures that would be detrimental to it and STRESSES the opportunities offered by a truly European industrial policy approach to create appropriate and supportive conditions for the EU to be in the lead regarding the clean energy transition.

21. ENCOURAGES the development of technologies that facilitate a structural change in the way society and businesses relate to energy by incentivizing behavioral changes by individuals and companies that will help to underpin the clean energy transition.

III. To promote sector coupling and sector integration the Council:

22. HIGHLIGHTS the importance of sector integration and sector coupling, such as of electricity, gas, heating and cooling as well as transport infrastructure, supported by digitalization, that are key to contribute to the decarbonization of the energy system in a cost-effective manner, and considering that citizen participation, such as through Smart Cities and energy communities, is important to realising sector coupling.

23. UNDERLINES the importance of ensuring the deployment of cost-effective solutions for decarbonisation.

24. CALLS on the importance of ensuring a level playing field across sectors, ~~recognizing technology neutrality and the Member State's right to choose their energy mix~~, so that the more cost effective and reliable solutions for decarbonisation are deployed and STRESSES in this regard the need to ~~remove~~ analyze possible regulatory and other market barriers and gaps, and explore common standards in order to facilitate the market uptake and the development of sector integration and sector coupling technologies;

25. STRESSES the need to better exploit the synergies between different parts of the energy system, production, transport, trade, transformation, distribution and consumption, and by empowering consumers, including in transport and industry, to become active participants in the energy system, thus contributing to decarbonization and system flexibility.

26. EMPHASIZES the potential of renewable and low-carbon gas and liquid fuel technology development and its deployment, such as hydrogen, particularly from renewables, biogas/biomethane, the potentials of which needs to be further assessed and explored, with a view to make the best use of the existing EU gas infrastructure in a decarbonized energy system.

In view of the next legislative term the Council:

27. CALLS on the European Commission to ~~duly respect~~ **take into account** the above mentioned principles when presenting proposals in any policy areas and more specifically when presenting proposals to further develop reliable, ~~sustainable~~ and cost-effective energy networks and to further modernize the energy system thorough the promotion of innovative decarbonized technologies, digitalization and sector coupling and sector integration.

28. CALLS on the European Commission to **undertake an analysis of** ~~develop an action plan on~~ sector coupling technologies, **including** hydrogen, **in particular** with regards to ~~the removal of~~ regulatory and market barriers and **based on this analysis** explore **possible initiatives to improve the functioning and integration of electricity and gas markets regarding the deployment of** ~~and common standards in view of the nascent global market for~~ such technologies.

29. CALLS on the European Commission to reflect the efforts required to reach the EU energy and climate targets for 2030 in the context of any revision of the EU State aid rules which may be carried out as a result of the fitness check.

NEXT STEPS

Provisional timetable

27 th of May	EWP: finalization of draft CC
12 th of June	COREPER: approval
25 th of June	TTE: adoption