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**NOTE**

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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 energy transition and the achievement of energy and climate objectives towards 2030 and beyond - Finalisation

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Following four rounds of discussions at the Energy Working Party, the Presidency prepared a further re-revised draft of the Council conclusions on the 'Future of Energy Systems' for finalization by the Energy Working Party on 4 June, with a view of Coreper to approve the conclusions on 12 June. Bearing in mind the large amount of concerns addressed and incorporated into the text, the Presidency intends to have a targeted discussion on remaining points of utmost concern only.

On the questions of how to refer to energy transition and technologies the Presidency proposes the following wordings, in line with established terms (see footnotes) and as part of an overall compromise on the balance of the text:

- 'Transition towards an affordable, safe, competitive, secure and sustainable low-carbon energy system' in the chapeau in paragraph 5; throughout the text referred to as 'the energy transition'.
- 'Low-carbon technologies' throughout the text; in the case of chapter II on innovative technologies (paragraph 14) referred to as 'reliable, safe, sustainable and environmentally sound'.

Changes compared to the previous version are marked as **bold underlined** and with ~~strikethroughs~~. To facilitate the drafting process the paragraphs and bullet points are numbered. These numbers and 'Presidency comments' in footnotes will be removed before adoption of the Council conclusions.

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**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 conclusions adopted by the European Council on 20 and 21 June addressing the Communication by the European Commission on a European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy]**,
- 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, **including the energy efficiency first principle**, 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 **and RECOGNISING the importance of mainstreaming all sectoral policies to support energy and climate objectives, security of supply and energy access for the consumer.**

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.<sup>1</sup>

**5. STRESSES the need for the transition towards an affordable, safe, competitive, secure and sustainable low-carbon energy system (henceforth referred to as 'the energy transition')**<sup>2</sup> and the achievement of energy and climate targets towards 2030 and beyond, in particular by developing interconnected, reliable 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 ACKNOWLEDGING** that well-functioning energy markets are **important** for a cost-efficient ~~clean~~ energy transition, recognizing **the principle of** technology neutrality **as well as** the Member State's right to choose their energy mix **and technologies**.<sup>3</sup>

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<sup>1</sup> 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.

<sup>2</sup> Presidency comment: "Affordable, safe, competitive, secure and sustainable low-carbon energy system" is an established term from Council conclusions on Governance from 2015. The Governance regulation refers to a "transition to a sustainable low-carbon economy".

<sup>3</sup> Presidency comment: Former Paragraphs 5 and 10a merged.

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 **and beyond**.

7. STRESSES the importance of citizens and businesses to be at the core of the **clean** energy transition process, 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 **and fair** transition **that** takes into account vulnerable customers, energy poverty **and regional social and economic impacts, such as on coal-intensive and peat regions, as well as the importance of providing a sufficient degree of flexibility to citizens and businesses when adopting measures, and UNDERLINING the need** for affordable energy for household consumers as well as for industry, in order to ensure its global competitiveness, **while also ensuring a level playing field for European energy producers vis -a-vis producers from third countries**.

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 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, for instance in buildings, **in energy infrastructure** 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.

I. To promote the development of reliable, 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 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, **including the integration of offshore wind electricity production**, 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 renewable heat, waste heat and **highly efficient** 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 **such as hydrogen, biogas and synthetic 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. 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 for creating a level-playing field for available and emerging **low-carbon** technologies<sup>4</sup> 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 **low-carbon** 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 **low-carbon** technologies, while also promoting business models and social innovations to ensure the deployment and acceptance of the technological solutions **and** ENCOURAGES<sup>5</sup> **in this context** 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.

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.

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

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<sup>4</sup> Presidency comment: Horizon 2020 refers specifically to "efficient, safe, secure and reliable low-carbon energy technologies" and on a more general basis to "low-carbon technologies".

<sup>5</sup> Presidency comment: Former paragraph 21a.



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 **within the Multiannual Financial Framework**, energy efficiency and other low-emission technologies with an aim to reap renewables and energy efficiency potentials, especially in the buildings sector, 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 **in this context** 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 **solutions that are based on** carbon capture **and storage (CCS) and carbon capture and use (CCU)** technologies may play a role for decarbonization beyond 2030, especially for the mitigation of process emissions from industrial processes, for the Member States that choose this technology.

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.

~~21a. 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.<sup>6</sup>~~

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<sup>6</sup> Presidency comment: Merged with paragraph 15.

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 **and self-consumption**, 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 decarbonization.

24. CALLS on the importance of ensuring a level playing field across sectors so that the more cost effective and reliable solutions for decarbonization are deployed and STRESSES in this regard the need to analyze possible regulatory and other **unjustified** 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 **biogas and biomethane renewable and low-carbon gas and liquid fuel as well as the development** and deployment **of technologies contributing to decarbonization**, such as **for the production of** 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 take into account the above mentioned principles when presenting proposals in any policy areas and more specifically when presenting proposals to further develop reliable and cost-effective energy networks and to further modernize the energy system thorough the promotion of innovative **low-carbon** technologies, digitalization and sector coupling and sector integration, **while pursuing climate neutrality in line with the provisions of the Paris Agreement**.

28. CALLS on the European Commission to undertake an analysis of sector coupling **and sector integration** technologies, including **the production of** hydrogen, in particular with regards to 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 such technologies **and energy carriers**.

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

12 <sup>th</sup> of June	COREPER: approval
25 <sup>th</sup> of June	TTE: adoption