EC Draft Taxonomy Delegated Regulation on climate change mitigation & adaptation

Eurelectric feedback

December 2020

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:
- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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Markets & Investments Committee
Electrification & Sustainability Committee
Generation & Environment Committee

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INTRODUCTION

Eurelectric supports a target of at least 55% greenhouse gas (GHG) emissions reduction by 2030. The electricity industry is committed to deliver a carbon-neutral power supply for Europe well before 2050 and is transforming the energy system to make it more and more responsive, resilient and efficient. Carbon-free direct and indirect electrification as well as the resulting energy efficiency gains will make the key contributions to the decarbonisation of transport, buildings and industry.

Today, the business strategies of many electricity companies are dedicated to the achievement of a carbon-neutral generation, transmission, distribution and supply of power, in line with the objectives of the EU Taxonomy regulation. Creating such a common language for investors, assets' managers, corporates and public authorities is crucial to support the transition towards a decarbonised economy. However, the alignment between the EU Taxonomy and companies' priorities can still be improved while the legislation still need to be implemented and business models can still be refined to improve minor non-strategic issues.

In this context, we welcome the opportunity to provide our feedback on the proposed draft delegated act. While some improvements compared to the final Technical Expert Group on Sustainable Finance (TEG)-report have been made, we believe key issues remain to be addressed in the draft delegated act.

We are worried that the draft delegated act is deviating from two important points. First, **it should strictly adhere to the provisions of the level 1 Taxonomy regulation**. Second the delegated act **must align with current EU legislation to avoid unnecessary double standards**.

GENERAL COMMENTS

Before providing comprehensive comments on specific technologies, Eurelectric would like to outline some general feedback.

- **Sustainable finance is a key building block of a European decarbonisation roadmap.** To be an integrated part of this strategy, **consistency with the EU acquis** (e.g. Clean Energy Package when it comes to the energy sector) **and the EU long-term decarbonisation objectives should be ensured.** In this context, the Taxonomy delegated act and the therein proposed technical screening criteria should respect relevant EU acquis, which was developed following in-depth impact assessment and consultation with all relevant stakeholders, and according to well-established and transparent legislative processes. The delegated act should not set forth new, revised methodologies and metrics, nor more stringent thresholds and sustainability requirements than those already applicable under existing, sector-specific EU regulation (such as the Energy Efficiency Directive, the Renewable Energy Directive, the Clean Vehicles Directive, etc.). Many of these regulations will be revised in the course of next year in light of the EU Green Deal ambitions, and the Taxonomy

delegated act should not anticipate nor forego the outcome of these revisions but refer to the sustainability criteria and objectives therein defined. If not, the delegated act would create a huge legal confusion, risk disrupting the proper market functioning due to changes to the applicable regulatory framework, impact investors' trust and distort competition in the EU internal market. Further, it increases the risk of 'wrong data', i.e. data extracted or reported based on the incorrect legislation.

- **A dedicated section for "transitional" and "enabling activities" is required.** A dedicated section in the Annexes to the delegated act for "transitional activities" as defined in article 10.2 of Regulation (EU) 2020/852 and for "enabling activities" as referred to article 16 of the Regulation should be provided for, which will be subject to review every 3 years as per the requirements of article 19 of the Taxonomy regulation. This would allow for a regular stock-taking exercise and would ensure a level-playing field on the approach related to best available technologies being used as a benchmark. These dedicated sections should outline a set of criteria that include both quantitative and qualitative elements that allow enabling and transitional activities, upon compliance with these criteria, to be classified as environmentally sustainable activities.

- **The energy system is shifting from a centralised and silos-minded set-up to more circular and integrated value chains dominated by renewable energy sources. In this context, activities and technologies supporting this movement should be properly recognised, with dedicated, realistic and progressive thresholds**, while remaining distinct from thresholds defining the "fully" sustainable activities. In order to avoid any risk of lock-in effects due to this "transitional" role, additional criteria should be developed, ensuring the compatibility of those assets in the trajectory to net zero greenhouse gas emissions by 2050. Once the technologies are entirely using renewable or low carbon energy sources and meet the relevant criteria, activities that were considered as transitional should be fully recognized as substantially contributing to climate change mitigation and adaptation.

- **Retail sustainable energy services should be included in the Taxonomy**: Retail activity (sustainable energy services) is still missing from the Taxonomy list. After the decision taken by the EU and its Member States on the liberalisation of the European electricity market in the 1990's, the electricity value chain was restructured in four main segments (generation, transmission, distribution and retail).
  Although legally separated to foster the system's competitiveness, each segment is indispensable to guarantee that the energy needs of Europeans are properly satisfied on an ongoing basis, so that without the concurrence of one of these four segments the electricity value chain could not be properly represented.
  We urge the European Commission to recognise some energy services as an economic activity qualified as contributing significantly to climate change mitigation. Power utilities play an important role in providing services such as energy efficiency which are key to the energy transition. Those activities should clearly be identified and recognised under this Taxonomy. Clear rules on how energy service providers could

apply the Taxonomy in the **Statistical classification of economic activities in the European Community (**NACE) sectors for energy efficient products would be welcome, as well as a guiding process for issuers who want to finance energy efficiency projects to reduce GHG emissions and to be eligible for green financing. Therefore, we suggest that the EU Taxonomy delegated act should also consider the retail power activity among those with eligibility criteria by requesting retailers to apply either:

- the criteria for the electricity generation activities, for which eligibility could be analysed based on the current Origin Certificate mechanisms regulated by National Authorities or based on the energy mix of the producers to which retailers acquire the electricity in the wholesale market.
- the criteria for the electricity distribution activities - where applicable and when retailers sell electricity to customers - so that the eligibility condition is the same.

- **Further alignment between the Do no significant harm (DNSH) criteria and the European regulation on environmental protection, in particular when it comes to hydropower**: We welcome the improved alignment between DNSH criteria and the European regulation on environmental protection, as it reduces the uncertainty on the level of compliance of the DNSH criteria published in these delegated act. However, significant discrepancies still exist. For some content where this alignment is still not explicit, we recommend better clarification on what is the level of compliance expected under the European Regulation on Environmental Protection and what are additional requirements. The same principles for assessment must apply for all renewable electricity generation technologies, whereas criteria should be set in accordance with existing EU law. We particularly identified this lack of clarity in the Hydropower Generation DNSH- Sustainable use and protection of water and marine resources, where there is no mention of the Water Framework Directive. Finally, we would also raise the fact that the DNSH criteria stemming from the adaptation objective, as it is stated in Appendix E of Annex 1, will substantially and disproportionally increase the compliance work to be carried out by companies, which will result in an unjustified administrative burden for the industry.

- **DNSH test-levels for climate adaptation requirements under Annex 1 Appendix E on climate change mitigation are unproportioned:** As a basic obligation, climate risk mitigation activities also need to be 'tested' for negative impact from "the physical climate risks that are material to that activity". Thus, acknowledged risk mitigation activities shall be assessed in this regard and a plan to implement adaptation solutions to reduce material physical climate risks to the activity shall be developed. However, such a climate change adaptation risk assessment criteria and compliance needs are disproportionally wide-ranging as they are build-in via DNSH criteria listed in Annex E to Annex 1. While Eurelectric understands the need for a comprehensive climate adaptation test for risk mitigation activities, the current level of requirements in the delegated act is unproportioned both in terms of details and scope. Investors only need this information on a general level.

Also having in mind that criteria for the four remaining objectives will be issued next year, such a comprehensive test is unreasonable. Hence, there is currently close to no difference between the requirements for "substantial contribution" to climate change adaptation (Annex 2, e.g. "Electricity generation from wind power", p. 97) and "DNSH" to climate change adaptation under climate change mitigation (Annex 1, pp. 231-232). We highly advise that the DNSH requirements to climate change adaptation for risk mitigation activities are made significantly lighter than for activities having a substantial contribution to risk adaptation. Thus, the costs related to compliance of these DNSH criteria should have a reasonable level in order not to lead to a negative impact for green companies/activities as well as for the competitiveness of European 'real economy'.

On this background, it would be helpful if companies could understand the level of commitment expected for the disclosure proposed to climate change adaptation (physical risks). The information requested (weather variability, climate date projections and future scenarios) may not be available at a national or regional scale, outside the EU borders, and the level of uncertainty may be so important that any cost of adaptation may not have any economic rationale.

- **A phase-in approach is needed also for *existing* and *new* activities**: It is stated that for activities *upgrading* or *altering existing* assets or processes, the adaptation solutions identified need to be implemented within five years from the start of the activity. Similar phase-in approach should apply for *existing* (already running) activities when the delegated act comes into application as well as for *new* activities established after this delegated act comes into application.

SPECIFIC COMMENTS

1. Hydropower

We welcome that hydropower is considered as a sustainable renewable technology that contributes to the mitigation and adaption. However, **we are concerned about the technical screening criteria and the general assessment of hydropower. Hydropower risks to be considered not fully sustainable if the draft delegated act does not change substantially.** Hydropower is not only renewable itself – it also balance the load from other renewables such as wind- and solar power. By regulating water and counteracting the effects of droughts and floods, it also contributes significantly to climate change adaption.

The draft delegated act and its Annexes do not follow the technology neutrality principles laid out in the mother regulation and the principles in the preface of the draft delegated act as regards to the general assessment of hydropower as sustainable electricity generation technology as well as failing to include hydropower into the section on installation, maintenance and repair of renewable generation technologies.

The current version bears the risk of creating a double-standard for hydropower. The proposed DNSH criteria for hydropower, especially those for "Sustainable use and protection of water and marine resources" should be shortened and reference shall be made only to the current EU water acquis as it is already the case in other activities of the Annexes, such as for wind power offshore requirements**.** Therefore, we urge the Commission to replace the current text under DNSH 3 on water to: "*The activity complies with the provisions of Directive 2000/60/EC and in the Directive 2008/56/EC)".* **We strongly recommend setting the same standard of reference to existing EU law for all renewable electricity generation technologies**

The Commission should treat all renewables equally and replace the current "substantial contribution" criteria for hydropower to *"The activity generates electricity from hydropower."* This would streamline the criteria to all renewable technologies in the annexes according to RED II.

2. Storage

The draft delegated act and its Annexes fail to put forth a technology-neutral approach for electricity storage technologies. At this stage in the path towards 2050, **all electricity storage technologies, should be categorised as economic activities making a substantial contribution based on their own performance, and not only as enabling activities.** The European energy transition requires substantial investments in storage technologies in order to fulfil both the requirements to reduce CO2 emissions and to keep the high levels of security of supply, grid stability while ensuring all environmental standards.

See annex for further details with regards to Eurelectric response on hydropower and electricity storage.

3. Bioenergy

3.1. Bioenergy related economic activities considered as transitional activity

In the Taxonomy Regulation, a distinction is made between technologies that are to be considered a "*substantial contribution to climate change mitigation*" in article 10.1 (a) and those that "*support the transition to a climate-neutral economy*" in article 10.2. Article 10.1 of the Taxonomy Regulation also clearly mentions "*generation, transmission, storage and distribution or use of renewable energy in line with Directive (EU) 2018/2001 (RED II) as environmental sustainable activity, contributing to climate change mitigation*". On this background, bioenergy is strangely classified as "transitional" in section 4.8 (electricity generation), 4.20 (cogeneration), 4.24 (heating and cooling) in the proposed delegated act.

Having the criteria for biomass-based energy production in mind, Eurelectric does not see such a clarification as justified. Indeed, the use of bio-energy, meeting the sustainability and GHG emissions savings set forth under RED II are low-carbon and, hence, are environmental sustainable activities and not transitional activity. Indeed, bioenergy is generally using waste and forest residues materials left from other activities and thereby fits well into the thinking of recycling and use of all bits of a source in order to be climate

friendly. Additionally, there are strict requirements securing only sustainable biomass is used to produce electricity, heat and cold, thus, sustainable energy.

Overall, we believe that bioenergy should be seen as a long term renewable energy source that meet sustainability criteria set in the RED II and thus, be recognised as "substantial contribution to climate change mitigation".

3.2. GHG emission savings from the use of biomass to be at least 80% in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001 (REDII)

Eurelectric welcomes the fact that the delegated act proposal establishes a clear reference to the requirements of the RED II, Industrial Emissions Directive and the implementing decision on Large Combustion Plants (LCP) Best Available Techniques (BAT) conclusions. These improvements sets the ground for a coherence with EU acquis.

Nevertheless, we call on the European Commission to ensure the **full alignment between the requirements set in the different legislations**. In this regard, for the production of electricity from bioenergy, an alignment between existing requirements and the proposed threshold is needed.

According to article 29.1 "*Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria laid down in paragraphs 2 to 7 and 10 if used in installations producing electricity, heating and cooling or fuels with a total rated thermal input equal to or exceeding 20 MW in the case of solid biomass fuels*". According to Article 29.10 in RED Directive: "*The greenhouse gas emission savings from the use of biofuels, bioliquids and biomass fuels taken into account for the purposes referred to in paragraph 1 shall be at least 70 % for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2021 until 31 December 2025, and 80 % for installations starting operation from 1 January 2026.*" Thus, 80% threshold is lower compared to the initial TEG proposals but is much stricter than the threshold from RED II which is 70% for installations starting operation after 2021 and 80% for installations starting operation after 2026.

In other words, the criteria proposed by European Commission, in the delegated act will go beyond provisions in RES Directive since requirements are set on plants below 20 MW and all existing plants will be included and shall apply sustainability criteria and climate savings set in RED II. In the RED Directive, all plants below 20 MW were excluded considering requirements on sustainability criteria for biomass from forest and agricultural land and climate savings criteria shall only be applied on new plants that come into operation after 2021.

Considering the above, Eurelectric believes that **the delegated act should not set stricter sustainability criteria and GHG emission saving requirements than those currently applying in recently revised sector specific legislation (RED II).** Thus, the Commission **should clarify that the limit of 20 MW applies, also that climate savings of 70 percent**

apply to plants that come into operation after 1 January 2021 and 80 percent for plants that come into operation after 1 January 2026.

3.3. Other comments related to bioenergy

We welcome the improvement that in **section 4.8 of Annex 1 and Annex 2**, it is mention that when it comes to pollution prevention and control, "*for installations falling within the scope of the Directive 2010/75/EU of the European Parliament and of the Council, emissions **are within or lower** than the emission levels associated with the best available techniques (Bat-AEL) ranges set out in the best available techniques (BAT) conclusions for large combustion plants*."

Further, in **section 4.8 of Annex 1 and Annex 2**, it is not clear if **condensation mode** is accepted for CHP installations > 100 MWth. This would need to be clarified.

Moreover, in **section 4.13 on manufacture of biomass, biofuels and biogas**, the DNSH for pollution prevention and control still mentions an obligation to apply a gas-tight cover on the digestate storage for biogas production. **With a view of harmonisation across all sections (section 4.8, 4.13, 4.20 and 4.24 related to use and/or production of bioenergy) and non-discrimination based on the use of biogas, this constraint should be removed.**

In Annex 2, Section 1.4. Afforestation, DNSH (6) Protection and restoration of biodiversity and ecosystems, the paragraph on whole tree stems ("*The use of whole tree stems for bio-energy is avoided, especially where viable, unsubsidised markets exist for their use in carbon-retaining materials or products, except where it has been authorised at the national or regional levels in exceptional circumstances, including for phytosanitary reasons or to reduce fire risks, in accordance with applicable law*.") should be removed. In practice this definition is impossible to agree with. The bioenergy industry largely utilizes residues and side streams and low-value timber assortments while continuing to ensure that the sustainability of the value chain is fully respected. The forests in the afforested areas will at some point need thinning and maintenance to take care of the forest (inlc. preventing fire risks) and to able better growth. The (usually small diameter) wood harvested when doing the thinning most often has no better use than as bioenergy. **The term "whole tree stem" is unclear and the use of such should be avoided, and instead, refer to existing specification sin the RED II**.

4. Nuclear power

We appreciate the fact the European Commission followed the TEG recommendations advising to set up a specific process assessing the role of nuclear energy under the Taxonomy. Nevertheless, **we regret that the assessment of nuclear will not be finalised and completed in 2020**, as it "*is still ongoing and the Commission will report on its results in the context of the review of this Regulation*" (recital 16 of the delegated act).

The delay in the assessment conveys uncertainty for the nuclear sector specifically, and the power sector more generally, as it prevents the industry from having a clear view on which technologies will have access to sustainable financing. This also risks undermining the ability of the Member

States to develop a pathway towards climate neutrality, taking advantage of all the carbon-neutral options available. Moreover, the lack of such an assessment could also leave some gaps in the revision process of EU legislation and policies which, next year, will be reviewed to take into consideration the Taxonomy criteria (e.g. ecolabel, EIB Lending Criteria, etc.).

Therefore, we **urge the European Commission to accelerate the assessment process of nuclear to mitigate the risks of such a delay.** As such, **we call on the European Commission to include timeframe for inclusion of nuclear in the delegated act.** In this context, Eurelectric **suggests to introduce the following statement in the Recital 16 of the Delegated regulation**: "*In the event that the JRC work on nuclear results in nuclear being considered as sustainable, the Delegated Act will be amended within 2 months to include nuclear. In addition, all Taxonomy compliant regulation should be updated accordingly*".

Finally, Eurelectric also wishes to **reaffirm that nuclear will be part of the solution to decarbonise the EU economy by 2050** and is internationally recognised as a crucial asset in the fight against climate change. The IPCC special report[1] on how to limit the global temperature rise to 1.5°C clearly states that nuclear will be needed to achieve this goal. Further technical information on the role of nuclear in the energy transition is detailed in Eurelectric's paper on the TEG report.

5. Electricity generation – gaseous and liquid fuels

5.1. Under Annex 1 on Mitigation

Electricity generation from gaseous and liquid fuels is Taxonomy-eligible if life-cycle assessment (LCA) GHG emissions are lower than 100gCO2e/kWh. In this regard, electricity generation from gaseous and liquid fuels is considered as contributing substantially to climate change mitigation if complying with the threshold of 100gCO2e/kWh.

Taking into account the ongoing effort to reduce the carbon intensity of electricity produced from gas-fired power plants, the proposed value of LCA GHG emissions below 100gCO2e/kWh is unrealistic, foregoing current best available technologies until full use of renewable or low carbon molecules in the gas-fired plants. Currently, BAT-GHG emissions values for a highly-efficient CCGT are around 350g CO2e/kWh and scaling up the production of renewable and low-carbon gases will take several years.

In this context, Eurelectric would suggest that power generation from gaseous and liquid fuels to be qualified a **transitional activity in the sense of article 10 (2) of the Regulation (EU) 2020/852 if LCA GHG emissions are lower than 250gCO2e/kWh in average over economic the lifespan of the plant** (following especially the integration of an increased share of renewable or low-carbon gases, hence avoiding any lock-in or stranded assets). This criterion should be reduced according to technological progress on a regular basis.

[1] https://www.ipcc.ch/sr15

Such threshold should be distinct from the DNSH criteria under the climate change adaptation category.

Having said that, we would also suggest that once CCGTs are 100% using renewable or low-carbon gases, hence dropping below the 100gCO2e/kWh GHG emissions value, electricity generation from gaseous and liquid fuels should no longer be a transitional activity but as an activity contributing substantially to climate change mitigation. Indeed, **equal treatment of sustainable activities must be ensured.** The delegated act should clearly label **electricity generation activities from renewable or low-carbon gaseous and liquid fuels, once they are considered as sustainable with LCA GHG emissions below 100gCO2e/kWh, as environmental sustainable activity** contributing to climate change mitigation and no longer as transitional activity.

Nonetheless, in order to avoid locking the energy system in assets that aren't contributing to the objective of achieving net zero greenhouse gas emissions for EU countries as a whole by 2050, additional criteria should be included:

- Direct emissions need to reach the threshold of 100gCO2e/kWh before 2050.
- Operators need to have a credible plan about how to reach the emissions threshold for transitional activities (250 gCO2e/kWh).
- Taking into account the flexibility and balancing role they will play in the medium to long term, any new natural gas-fired units must not be developed in replacement of generation units with less carbon emissions and must not be built if alternatives with less carbon emissions are economically and technically more viable while ensuring the security of supply.
- Gas-fired power plants need to be ready for renewable or low-carbon gases, including hydrogen, based on European technical specifications or norms, as soon as they are available.
- Such set up should be used for highly efficient natural gas-fired units (both Combined Cycle Gas Turbines and Open Cycle Gas Turbines) according to EU Best Available Techniques reference documents (BREFs).

5.2. Under Annex 2 on Adaptation

The DNSH for climate change activities is set at having GHG emissions being lower than **270 gr CO2e/kWh direct emissions.**
However, Eurelectric believes that the DNSH criteria of 270 grCO2e/kWh should not be a static value to be considered at one specific moment in time (i.e. at investment decision), but averaged over the lifetime of the asset.
Therefore, we suggest that the **DNSH value should be GHG emissions below 270 grCO2e/kWh in average over the (remaining) economic lifespan of the asset.**

6. Manufacture of Hydrogen

Eurelectric stresses that given the decarbonisation challenges at hand, Europe should strive to maintain leadership in emerging energy carriers such as sustainable hydrogen, sustainable biomethane and synthetic methane, as well as renewable power-to-gas which could play a role to decarbonise specific segments of industrial activity and heavy-duty transport where no electric alternative to fossil fuels exist. This is a multifaceted and complex matter and the uncertainty around future innovations, the expected potential for future commercial availability/ maturity of biomethane, sustainable hydrogen and renewable power-to-gas must be acknowledged.

However, section 3.9 of the Annex 1 on mitigation sets that manufacturing of hydrogen would be recognised as substantially contributing to climate change mitigation if complying with "***LCA GHG emissions savings requirement of 80 % relative to a fossil fuel comparator of 94g CO_2e/MJ [resulting in 2.256 tCO_2eq/tH2]*** *in analogy to the approach set out in Article 25(2) and Annex V of Directive (EU) 2018/2001 of the European Parliament and of the Council. Life cycle GHG emissions savings are calculated using the methodology referred to in Article 28(5) of Directive (EU) 2018/2001 or, alternatively, using ISO 14067 or ISO 14064-1"*.

Moreover, based on a LCA approach, **the proposed threshold rules out 'brown' production methods to the limits of energy sources used for the production of clean hydrogen, such as production of H2 produced by electrolysis from solar electricity**. In general, the production of hydrogen from renewable energy sources should clearly be exempted from proving compliance with any kind of carbon intensity threshold, in accordance with the provisions of Regulation (EU) 2020/8522 (in particular, Article 10.1.(h) and the sections 4.1, 4.2, 4.3, 4.4 and 4.5 (with conditions) of Annex 1.

Therefore, Eurelectric recommends that to support the development of decarbonised hydrogen and the early deployment of projects, it would be relevant to set criteria which allow sufficiently decarbonised electricity mixes to produce low carbon hydrogen which would qualify as sustainable. Sources of **electricity emitting less than 100 gCO2e/kWh as defined by the Taxonomy should be allowed to produce low carbon H2 in order to qualify as sustainable (i.e. 5,8kgCO2eq/KgH2)**.

7. Transmission and distribution networks for renewable and low-carbon gases

Given the decarbonisation challenges at hand, Europe should strive to maintain leadership in emerging energy carriers, in particular renewable and low-carbon gaseous and liquid fuels such as hydrogen, biomethane and synthetic methane. In an integrated energy system (as presented by the EC Strategy on Energy System Integration) renewable and low-carbon fuels could play a role to decarbonise specific segments of industrial activity and heavy-duty transport where no electric alternative to fossil fuels exist as well as to provide additional flexibility solutions. This is a complex matter and the uncertainty around future innovations, the expected potential for future

[2] Regulation (EU) 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088

commercial availability/maturity of biomethane, hydrogen and synthetic methane must be acknowledged.

In this context, the Taxonomy and its technical screening criteria should better reflect the complexity, uncertainty and ongoing innovation around different types of renewable and low-carbon gases, the related gas infrastructure adaptation needs and the challenges and opportunities of synergies with the electricity system. **The European Commission should engage a realistic and justified assessment for the development of an adequate transmission and distribution hydrogen network within an integrated energy system while looking at the specificities of each national grids**. As long as it's transporting renewable and low-carbon gases and enhancing the integration of the energy system as a whole, the transmission and distribution network should be classified as "sustainable". The availability of adequate infrastructure for the transport of renewable and low-carbon gases is a prerequisite to ramp them up. Eurelectric fully supports the fact that a cost-effective and future-proof approach to infrastructure investments should be ensured to avoid investment in assets that do not contribute to a cost-effective and energy efficient decarbonisation path.

8. Transmission and distribution

Together with other European electricity distribution system operators, we already raised the crucial role of electricity distribution networks to achieve the environmental objectives[3]. Eurelectric supported the view of the TEG Report to **include in the taxonomy all electricity T&D infrastructure or equipment in systems, which are on a trajectory to full decarbonisation**. Also, Eurelectric believes that **all investments in the electricity grid infrastructure (both at transmission and distribution level) should therefore be defined as sustainable** to support the energy transition by enabling further electrification of different sectors of society and the growth of renewable and carbon-neutral energy by 2050. Eurelectric stresses that the **delegated act conflicts with the wording of article 10 of the Taxonomy regulation** (Regulation (EU) 2020/852). The delegated act qualifies transmission and distribution of electricity as "enabling activities", whereas the above-mentioned **article 10 expressly recognises that transmitting and distributing renewable energy contribute substantially to climate change mitigation** (1.(a)). Eurelectric also sees a **need for clarification regarding the implication for an activity to be labelled as "contributing" or "enabling"** in terms of investments. On that matter, Eurelectric recalls that the TEG report from March 2020 recognises both the "contributing" and "enabling" roles of transmission and distribution of electricity.
Overall we welcome the approach proposed in the delegated act, however, we believe that there are some improvements which would be incorporated in the final delegated act:

8.1. Under Annex 1 on mitigation

The first technical screening criterion reads as follows: "*The transmission and distribution infrastructure or equipment in the system is the interconnected European system, i.e. the interconnected electricity system covering the interconnected control areas of Member States, Norway, Switzerland and the United Kingdom, and its subordinated systems".* **Eurelectric welcomes the non-cumulative list of TSC and calls for confirmation that the**

[3] E.DSO, Eurelectric and GEODE Joint letter, 31 October 2019

"interconnected European System" encompasses any transmission or distribution line or equipment interconnected in the EU. Moreover, we would welcome some clarifications on the meaning of "subordinated systems".Eurelectric stresses that **the consideration of transmission and distribution activities as enabling activities can neither depend on the carbon content of the electricity that circulates in the grid, nor on the GHG emissions level of the power plants connected to the grid.** In this regard, **technical screening criteria 2 and 3 (p.117-118) conflict with the mission of TSOs and DSOs as defined in Regulation (EU) 2019/943** on the internal market for electricity, which states that "*market participants shall have a right to obtain access to the transmission networks and distribution networks on objective, transparent and non-discriminatory terms*" (article 3 (q)). The current requirements would hamper the development of the system operators' grids as neutral market facilitators and prevent the energy transition towards a fully decarbonised economy.

Moreover, subsection 6. (a) mentions "*the rolling five-year (average) period used in determining compliance with the thresholds*". Nevertheless, this **rolling five-year period** is not explicitly foreseen in the document. In addition, it **does not match with heavy investments needed** for these infrastructures. Indeed, the EU power sector has a proven track record of continuous emissions reductions and has pledged to become carbon neutral well-before mid-century. As electrification is broadly recognized as a key tool to decarbonise the economy, strengthening electricity networks does support the transition and should therefore be reflected in the delegated act. Instead, the requirements in the delegated act could lead to **instability and uncertainty for investors**. Therefore, one potential alternative criteria could be to refer to the variation in the average system emissions factor, not to the absolute value in order to recognize the different starting points in the decarbonisation pathways of different countries.

Eventually, Eurelectric stresses the need to ensure the stability of the "**Taxonomy compliant" labelling to secure long-term investments in networks infrastructures needed to reach Green Deal objectives.** Regarding point 6. (e), in case of changes in criteria to be "Taxonomy compliant", the **new criteria should not apply retroactively.** Therefore, Eurelectric proposes the following addition in the point 6.e) of section Substantial contribution to climate change mitigation (page 119): "*it is possible for a system to become ineligible after having previously been eligible. In systems that become ineligible, no new transmission and distribution activities are eligible from that moment onward, until the system complies again with the threshold (except for those activities which are always eligible, see above). Activities in subordinated systems may still be eligible, where those subordinated systems meet the criteria of this Section*. ***Updated criteria cannot apply retroactively to investment decisions***."

8.2. Under Annex II on adaptation

Eurelectric does not support the use of the mitigation technical screening criteria (TSC) in the section "description of the activity" (p.115-116) to qualify the activity for the adaptation objective, **and calls for their removal, for two main reasons:**

- **There are strong incoherencies in this section.** The TSC mentioned could be understood as being **cumulative**, creating stricter criteria to qualify for the adaptation objective than for the mitigation objective. In addition, the criteria set in the "description of the activity" section **conflict with the DNSH (1)**: criterion 3 mentions a threshold of 100gCO2e/kWh, whereas the DNSH criteria regarding the mitigation objective mentions a threshold of 270gCO2e/kWh.
- **Moreover, this approach is not legitimate:** TSC from Annex I are not mentioned in the "description of the activity" section for any other activity in the "Energy" section of Annex 2.

The DNSH-criteria for "transition to a circular economy" risks leading to financial and legal uncertainties. It would be very difficult for DSOs to comply with binding contractual agreements for recycling. Therefore, Eurelectric recommends the application of the same criteria as for electricity generation technologies to the transmission and distribution of electricity.

9. Geothermal

With respect to geothermal energy, it has to be considered that this resource is fully renewable because the tapped heat from an active reservoir is continuously restored by natural heat production, without any real consumption of the resource.

With respect to GHG emissions from Geothermal Power plants, the CO2 emitted has a natural origin, as there is no combustion of fossil fuels. In fact, all geothermal fields are characterised by a minor (compared to emissions of other technologies) and naturally occurring gas emission from the ground that originates from the reservoir and from the mantle. For this reason any GHG emissions from geothermal power plant can be considered as substitutive of the natural emissions.

This has been confirmed by the recent UN's Intergovernmental Panel on Climate Change (IPCC) data[4], where Geothermal Power Plants are not accountable for any direct emissions.

In section 4.6 of the Annex 1 on mitigation, it is indicated that geothermal power plants should conduct the LCE.

Based on the above consideration, Eurelectric recommends that geothermal power plants are exempted from conducting the LCE analysis also for new projects. Indeed, only technologies potentially close to the threshold of the Emission Performance Standard (EPS) should be subject to a requirement of conducting an individual LCE analysis for individual projects. Having the decline of the EPS threshold in mind – and the general development both for existing and new technologies

[4] Schlömer S., T. Bruckner, L. Fulton, E. Hertwich, A. McKinnon, D. Perczyk, J. Roy, R. Schaeffer, R. Sims, P.Smith, and R. Wiser, 2014: Annex III: Technology-specific cost and performance parameters. In: Climate Change 2014:Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of theIntergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K.Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier,B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T.Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA., https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf

– a dynamic approach must prevail in terms of identifying which technologies should be subject to obligatory LCE analysis and which technologies should be exempt from conducting LCE analyses.

In this context, **it shall be kept in mind that for most power plants in the EU, an environmental impact assessment is mandatory**. According to the Environmental Impact Assessment Directive (2011/92/EU), environmental as well as climate factors (for example greenhouse gas emissions, impacts relevant to adaptation), the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change are already an essential and mandatory part of the environmental impact assessment report.

10. Installation, maintenance and repair of renewable energy technologies

The list in Annex I, Section 7.6 should include all renewable technologies according to the RED II. The list is limited to wind, solar, heat pumps, storage and micro CHP.

We call on the European Commission to clarify the absence of any reference to hydropower and bioenergy in this section, which seems contrary to the purpose of promoting sustainable solutions.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability

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