

# EU Taxonomy - Platform's Technical Screening Criteria for the 4 remaining objectives

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A Eurelectric response paper

September 2021

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.

Dépôt légal: D/2021/12.105/41

# Call for feedback by the Platform on Sustainable Finance on the draft report on preliminary recommendations for technical screening criteria for the EU taxonomy

Fields marked with \* are mandatory.

## Introduction

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### Deadline extension

Some stakeholders have faced technical difficulties with the submission of their feedback.

We apologise for the inconvenience.

In order to account for later submissions due to these technical difficulties with the questionnaire, the deadline for the call for feedback by the platform has been extended from originally 24 September **until Tuesday 28 September 23:59 CEST.**

### Technical issue:

We are aware that this questionnaire takes a long time to load.

**Here are 2 pieces of advice to enhance your experience**

- **use the latest versions of one of the following browsers: Microsoft Edge, Mozilla Firefox or Google Chrome**
- **follow the order of the questionnaire: fill it in one section after the other without skipping any section.**

Jumping over unfilled section(s) can cause never ending loading of the next sections

We are aware of this issue and are still working on technical solutions to make the process of filling the questionnaire easier and faster.

### Disclaimer:

The draft report is a working document by the [Platform on Sustainable Finance](#) and contains preliminary technical screening criteria that do not represent a final view of the Platform.

This call for feedback is part of ongoing work by the Platform, which was set up by the Commission to provide advice on the further development of the EU taxonomy. The call for feedback represents an opportunity to gather feedback and evidence from a wider set of stakeholders, to improve the draft criteria and make them more robust and usable.

This feedback process is not an official Commission consultation. The draft report produced by the Platform is not an official Commission document. Nothing in this feedback process commits the Commission nor does it preclude any policy outcomes.

The climate and environmental challenges we face put an immense task ahead of us: to transition to a low carbon, climate-resilient, and environmentally sustainable economy. The aim of sustainable finance policies is to help all economic actors navigate that transition with the urgency needed to avoid risks and meet climate and environmental goals.

In March 2018, the Commission published its [action plan: financing sustainable growth](#), based on the advice of the [High Level Expert Group \(HLEG\)](#). Action 1 of the Commission's action plan calls for the establishment of an EU classification system for sustainable activities, or [EU taxonomy](#). The Commission followed through on this action by proposing a regulation for such a taxonomy, which was adopted by the co-legislators in June 2020. The [Taxonomy Regulation](#) establishes the basis for the EU taxonomy by setting out 4 overarching conditions that an economic activity has to meet in order to qualify as making a substantial contribution to environmental objectives

- i. it contributes substantially to one or more of the six environmental objectives set out in the Taxonomy Regulation [\[1\]](#)
- ii. it does not significantly harm any of the other environmental objectives
- iii. it is carried out in compliance with minimum (social) safeguards set out in the Taxonomy Regulation [\[2\]](#)
- iv. and it complies with the 'technical screening criteria' that are established by the European Commission through delegated acts. The technical screening criteria specify the conditions under which an economic activity meets criteria (i) and (ii)

The development of the EU taxonomy relies on extensive input from experts from across the economy and civil society. Building on the experience of the [Technical Expert Group \(TEG\) on Sustainable Finance](#) and in line with the Article 20 of the [Taxonomy Regulation \(\(EU\) 2020/8521\)](#), the European Commission set up a permanent expert group, the [Platfor](#)

[m on Sustainable Finance](#), which advises the Commission on issues related to its sustainable finance policy, notably the further development of the EU taxonomy. The Platform operates through a plenary in full composition of all 57 members and 11 observers, and is organised around 6 subgroups where the technical work on its opinions, reports or recommendations takes place. As one of the 6 subgroups, the [Technical Working Group \(TWG\)](#) has, as its core tasks, to

- advise the Commission on the technical screening criteria on environmental objectives in line with Article 19 of the Taxonomy Regulation
- advise on the possible need to update those criteria
- analyse the impact of the technical screening criteria in terms of potential costs and benefits
- and assist the Commission in analysing requests from stakeholders to develop or revise technical screening criteria for a given economic activity

The first of the above-mentioned tasks is the focus of the [Platform's TWG July 2021 draft report and accompanying annex document](#) as well as this associated call for stakeholder feedback – specifically to gather further evidence and feedback on proposed draft technical screening criteria. **The draft criteria presented in the report are working documents of the Platform and do not represent a final view of the Platform.** They are presented to gather feedback so that the criteria can be further refined and developed before a final set of recommendations on the criteria are agreed by the Platform and presented to the European Commission in November 2021.

The TWG report focuses primarily on presenting a first set of priority economic activities and draft recommendations for associated substantial contribution and do no significant harm (DNSH) technical screening criteria in relation to the four non-climate environmental objects covering water, circular economy, pollution prevention, and biodiversity & ecosystems. However, a small number of economic activities and corresponding draft recommendations for technical screening criteria related to the climate mitigation and adaptation objectives have also been included.

Due to resources, workload and time available, the Platform TWG addressed a first set of economic activities per environmental objective in its first phase of the work. The proposed methodology for the selection and prioritisation of the activities is explained in detail in the [TWG draft report](#). It is important to note that an activity that is not included in this first batch of activities for the remaining 4 environmental objectives, for which the Platform will develop recommendations for technical screening criteria, may still be addressed as part of a second batch (Platform work starting after submission of the current batch of criteria). It is likely that the recommendations for additional activities and criteria included in that second batch would be addressed in a later update of the delegated act by the European Commission. Thus, non-inclusion by the Platform in the first batch of priority activities does not imply that the activity will not be considered for inclusion in the taxonomy. As recalled above, nothing in this process commits the Commission or precludes any policy outcomes.

In line with the taxonomy's guiding principle of establishing robust, science-based criteria, the call for feedback puts emphasis on providing a clear scientific and technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for any comments made with respect to the proposed technical screening criteria.

## Call for feedback

The Platform is inviting stakeholders to provide feedback on the draft report through this online questionnaire.

**The deadline for providing feedback is Friday 24 September 2021 at 18:00 Central European Summer Time.**

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<sup>1</sup> The environmental objectives as set out in Article 9 of the Taxonomy Regulation are: climate change mitigation, climate change adaptation, pollution prevention and control, water and protection of marine resources, a circular economy, resource efficiency and recycling, and protection of ecosystems.

<sup>2</sup> Article 18 of the Taxonomy Regulation specifies those as the OECD guidelines for multinational enterprises and UN guiding principles on business and human rights, including the declaration on fundamental principles and rights at work of the International Labour Organisation (ILO), the eight fundamental conventions of the ILO and the international bill of human rights.

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**Please note:** In order to ensure a fair and transparent consultation process **only responses received through our online questionnaire will be taken into account** and included in the report summarising the responses. Should you have a problem completing this questionnaire or if you require particular assistance, please contact [fisma-platform-sf@ec.europa.eu](mailto:fisma-platform-sf@ec.europa.eu).

More information on

- [the call for feedback document](#)
- [the draft report of the Platform Technical Working Group on proposed \(TSC\)](#)
- [the Platform on Sustainable Finance](#)
- [sustainable finance](#)
- [the protection of personal data regime for this consultation](#)

## About you

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\* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

\* First name

Stella

\* Surname

Benfatto

\* Email (this won't be published)

sbenfatto@eurelectric.org

\* Organisation name

*255 character(s) maximum*

Eurelectric

Transparency register number

*255 character(s) maximum*

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

4271427696-87

\* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

\* Where are you based?

Please add your country of origin, or that of your organisation.

- |  |                                     |                                     |                                      |
|--|-------------------------------------|-------------------------------------|--------------------------------------|
| <input type="radio"/> Austria            | <input type="radio"/> France        | <input type="radio"/> Lithuania     | <input type="radio"/> Slovakia       |
| <input checked="" type="radio"/> Belgium | <input type="radio"/> Germany       | <input type="radio"/> Luxembourg    | <input type="radio"/> Slovenia       |
| <input type="radio"/> Bulgaria           | <input type="radio"/> Greece        | <input type="radio"/> Malta         | <input type="radio"/> Spain          |
| <input type="radio"/> Croatia            | <input type="radio"/> Hungary       | <input type="radio"/> Netherlands   | <input type="radio"/> Sweden         |
| <input type="radio"/> Cyprus             | <input type="radio"/> Iceland       | <input type="radio"/> Norway        | <input type="radio"/> Switzerland    |
| <input type="radio"/> Czech Republic     | <input type="radio"/> Ireland       | <input type="radio"/> Other country | <input type="radio"/> United Kingdom |
| <input type="radio"/> Denmark            | <input type="radio"/> Italy         | <input type="radio"/> Poland        |                                      |
| <input type="radio"/> Estonia            | <input type="radio"/> Latvia        | <input type="radio"/> Portugal      |                                      |
| <input type="radio"/> Finland            | <input type="radio"/> Liechtenstein | <input type="radio"/> Romania       |                                      |

\*

Where does your organisation carry out its activities (you can select more than one answer)?

- Europe
- Middle East
- Africa
- Asia
- North America
- South America
- Global

**Field of activity**

**\* Financial activity**

Please select as many answers as you like

- Accounting
- Auditing
- Banking
- Credit rating agencies
- Insurance
- Pension provision
- Investment management (e.g. hedge funds, private equity funds, venture capital funds, money market funds, securities)
- Market infrastructure operation (e.g. CCPs, CSDs, Stock exchanges)
- Social entrepreneurship
- Other
- Not applicable

**\* Non-financial activity (NACE)**

Please select as many answers as you like

- Agriculture, forestry and fishing
- Mining and quarrying
- Manufacturing
- Electricity, gas, steam and air conditioning supply
- Water supply; sewerage, waste management and remediation activities
- Construction
- Transportation and storage
-



Accommodation and food service activities

- Information and communication
- Real estate activities
- Professional, scientific and technical activities
- Administrative and support service activities
- Public administration and defence; compulsory social security
- Education
- Human health and social work activities
- Other
- Not applicable

**\* Contributions received are intended for publication on the Commission’s website dedicated to the Platform. Do you agree to your contribution being published?**

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

- Yes, I agree to my responses being published under the name I indicate ( name of your organisation/company/public authority or your name – your email address will never be published)**
- No, I do not want my response to be published**

I agree with the [personal data protection provisions](#)

## Activities you would like to comment on

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Please select the activity(ies) and the aspect(s) of the activity(ies) and its criteria that you would like to comment on:

### Sector 1: Agriculture, forestry & fishing

Please select as many answers as you like

- Animal production 1.1
- Crop production 1.2
- Forestry logging 1.3
- Fishing 1.4

### Sector 2: Manufacturing

Please select as many answers as you like

- Manufacture of basic pharmaceutical products 2.1
- Manufacture of basic pharmaceutical preparations 2.2
- Manufacture of chemicals 2.3
- Manufacture of chemicals products 2.4
- Manufacture of plastic packing goods 2.5
- Manufacture of durable electrical and electronic equipment 2.6
- Manufacture of circular electrical and electronic equipment 2.7
- Resell and/or remanufacture of used electrical and electronic equipment 2.8
- Manufacture of equipment generating electricity and/or heat 2.9
- Manufacture of high, medium and low voltage electrical equipment that result in or enable substantial GHG emissions reductions 2.10
- Manufacture of machinery enabling closed-loop systems, and high-quality waste collection and waste management 2.11
- Manufacture of machinery, equipment and solutions enabling a substantial contribution to the circular economy 2.12
- Manufacture of machinery, equipment and solutions enabling a substantial contribution to pollution prevention and control 2.13
- Manufacture of machinery, equipment and solutions enabling a substantial contribution the sustainable use and protection of water and marine resources 2.14
- Manufacture of motor vehicles, trailers and semi-trailers 2.15
- Manufacture of other transport equipment 2.16
- Design, manufacture, remanufacture, and reselling of furniture 2.17
- Manufacture of food products and beverages (making a substantial contribution to biodiversity) 2.18
- Manufacture of food products and beverages (making a substantial contribution to the transition to a circular economy) 2.19
- Finishing of textiles 2.20
- Manufacture, repair, refurbishment and resale of wearing apparel 2.21
- Manufacture, remanufacture and reselling of footwear and leather goods 2.22
- Tanning of leather 2.23

### **Sector 3: Energy**

Please select as many answers as you like

- Environmental refurbishment of electricity generation facilities that produce electricity from hydropower 3.1
- Electricity generation from bioenergy for protection and restoration of biodiversity and ecosystems 3.2
- Electricity generation using solar photovoltaic technology 3.3
- Electricity generation using concentrated solar power (CSP) technology 3.4
- Electricity generation from wind power 3.5
- Electricity generation from ocean energy technologies 3.6
- Electricity generation from hydropower 3.7
- Electricity generation from geothermal energy 3.8
- Electricity generation from natural gas 3.9
- Electricity generation from renewable non-fossil gaseous fuels 3.10
- Electricity generation from biogas 3.11
- Power from cogeneration of heat/cool and power from solar energy 3.12
- Power from cogeneration of heat/cool and power from geothermal energy 3.13
- Power from cogeneration of heat/cool and power from natural gas 3.14
- Power from cogeneration of heat/cool and power from renewable non-fossil gaseous fuels 3.15
- Power from cogeneration of heat/cool and power from biogas 3.16

## Sector 4: Civil engineering

Please select as many answers as you like

- Construction of civil engineering objects 4.1
- Civil engineering for climate change adaptation 4.2
- Maintenance of roads and motorways 4.3
- Maintenance of bridges and tunnels (railway, road and cycling infrastructure) 4.4

## Sector 5: Buildings

Please select as many answers as you like

- Construction of new buildings and major renovations of buildings for the transition to a circular economy 5.1
- Construction of new buildings and major renovations of buildings for protection and restoration of biodiversity and ecosystems 5.2
- Acquisition and ownership of buildings 5.3

- Demolition or wrecking of buildings and other structures 5.4

## **Sector 6: ICT**

Please select as many answers as you like

- Digital solutions exploiting space-based earth observations enabling climate change mitigation 6.1
- Digital solutions exploiting space-based earth observations enabling climate change adaptation 6.2
- Digital solutions exploiting space-based earth observations enabling the protection and restoration of biodiversity and ecosystems 6.3
- Digital solutions exploiting space-based earth observations enabling pollution prevention and control 6.4
- Digital solutions exploiting space-based earth observations enabling sustainable use of waters and marine resources, and their protection 6.5
- Provision of data-driven solutions enabling to prolong asset's lifetime, provide value chain material and product information, or enable product designers to make a substantial contribution to the circular economy 6.6
- Provision of data-driven solutions enabling map and monitor water quality and scarcity, and manufacture of equipment enabling the efficient use and treatment of water resources 6.7

## **Sector 7: Disaster risk management**

Please select as many answers as you like

- Emergency services – Emergency health services 7.1
- Emergency services – Disaster response coordination 7.2
- Emergency services – Disaster relief 7.3
- Emergency services – Search and rescue 7.4
- Emergency services – Hazardous materials response 7.5
- Emergency services – Firefighting 7.6
- Emergency services – Technical protection response and assistance 7.7
- Flood risk prevention and protection infrastructure for inland and coastal floods 7.8
- Nature based solutions (Nbs) for flood risk prevention and protection for both inland and coastal waters 7.9

## **Sector 8: Transport**

Please select as many answers as you like

- Sea and coastal freight water transport 8.1
- Sea and coastal passenger water transport 8.2
- Retrofit and upgrade of vessels for the transport of freight on vessels designed for operating on sea or coastal waters 8.3
- Retrofit and upgrade of vessels for the transport of passengers on vessels designed for operating on sea or coastal waters 8.4
- Inland freight water transport 8.5
- Inland passenger water transport 8.6
- Urban and suburban passenger land public transport 8.7
- Transport by motorbikes, passenger cars and light commercial vehicles 8.8
- Manufacturing of aircraft 8.9
- Passenger air transport 8.10
- Air transportation ground handling operations 8.11

## **Sector 9: Restoration, remediation**

Please select as many answers as you like

- Conservation of habitats/ecosystems 9.1
- Restoration of ecosystems for protection and restoration of biodiversity and ecosystems 9.2
- Restoration of ecosystems for climate change adaptation 9.3
- Remediation activities enabling restoration of waterbodies 9.4
- Remediation activities for the transition to a circular economy 9.5
- Remediation activities for pollution prevention and control 9.6
- Remediation activities enabling restoration of ecosystems 9.7

## **Sector 10: Tourism**

- Hotels, holiday, camping grounds and similar accommodation 10.1

## **Sector 11: Water supply**

Please select as many answers as you like

- Water supply 11.1
- Desalination 11.2

## **Sector 12: Sewerage**

Please select as many answers as you like

- Urban wastewater treatment 12.1
- Phosphorus recovery 12.2
- Production of alternative water resources 12.3
- Sustainable urban drainage systems (SUDs) 12.4

## **Sector 13: Waste management**

Please select as many answers as you like

- Collection and transport of non-hazardous and hazardous waste 13.1
- Separate collection and transport of hazardous waste 13.2
- Treatment of hazardous waste as a means for pollution prevention and control 13.3
- Treatment of hazardous waste as a means for material recovery 13.4
- Recovery of bio-waste by anaerobic digestion and/or composting 13.5
- Remediation of legally non-conforming landfills and abandoned or illegal waste dumps 13.6
- Depollution and dismantling of end-of-life products for material recovery 13.7
- Sorting and material recovery of non-hazardous waste 13.8
- Preparation for re-use of end-of-life products and components they are made of having become waste 13.9

## **Sector 14: Services**

Please select as many answers as you like

- Provision of electrical and electronic equipment through circular business models 14.1
- Provision of repair and maintenance services and of directly related activities 14.2

## **On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

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## Manufacture of high, medium and low voltage electrical equipment that result in or enable substantial GHG emissions reductions 2.10

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## On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
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- The DNSH TSC

## Substantial contribution technical screening criteria (TSC)

### Do you consider the ambition level set by the proposed substantial contribution criteria to be appropriate?

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

### Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The proposed substantial contribution criteria states that the activity “manufacture of high, medium and low voltage electrical equipment” should not manufacture products containing SF6 in to be aligned with the Taxonomy. End-users, such as DSOs and generators have already voluntarily committed to using SF6-free alternatives provided they meet the criteria laid out in Art. 21.4 of the F-gas Regulation and strict safety requirements from toxicological and environmental perspectives. SF6-free alternatives have already been deployed both in standard applications (mainly at 12kV, and more recently in smaller quantities up to 24kV), and in pilot projects at higher voltages (predominantly up to 36kV). However, commercial availability of SF6-

free products for voltage levels above and including 24kV, with the same or at least comparable operational suitability and reliability requirements of SF6 solutions, is still limited and predominantly installed in pilot projects. Also, DSOs and generators must guarantee the security of electricity supply at all times. To achieve this, all technical grid equipment, including switchgears and circuit breakers, must meet strong reliability criteria throughout their entire life cycle. Any future SF6-free solution must be proven to be as reliable, cost-effective, and safe as currently deployed SF6 technology. Thus, the substitution of SF6 in existing equipment is not yet possible at the current state of technology development. The existing equipment containing SF6 will remain in operation until they reach their predefined end-of-life criteria. The complete replacement of SF6 gas in existing plants would only be possible with considerable financial and human effort once substitute solutions for SF6 have been found. As such, the level of ambition set by the proposed substantial contribution criteria is considered disproportionate to the current state-of-the-art of the existing technology and the requirement regarding SF6 should be removed.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed substantial contribution criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The substantial contribution criteria related to SF6 proposed in the report are not feasible in the short and medium term as alternative technologies do not yet fully cover the wide range of applications of SF6 required by DSOs and generators. In concrete terms, this means that SF6 is still the only solution currently available in those cases. Significant barriers still need to be overcome with respect to technology development levels and the possibilities for replacing SF6 in existing equipment. In addition, there is a risk that a potential replacement of existing SF6 equipment before its end of life will significantly slow down the process of integrating renewables due to system stability and outage constraints.

**Do you consider that the rationale and scientific evidence on which the proposed criteria are based is sufficient and robust?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the sufficiency and robustness of the rationale and scientific evidence, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Considering that SF6-free equipment required by DSOs and generation is still in the development phase the proposed substantial contribution criteria are not based on robust rationale and scientific evidence. Fluorinated greenhouse gases reported under the United Nations Framework Convention on Climate Change accounted for approximately 3% of EU overall greenhouse gas emissions, expressed in tonnes CO2 equivalent, in 2017. European industry using SF6 accounts for less than 0.2% (European Environment Agency, Prod-ID: IND-354-en, 31 Oct 2019) of the total EU greenhouse emissions (or approx. 9 Mtons CO2 per year). The contribution of DSOs and generation to these emissions is significantly below latter value. The electricity system is highly dependent on such electrical equipment and a safe operation is crucial to integrate more renewables into the system. The Taxonomy criteria should therefore, reflect the real operation of the electricity system and aim to include standards that will contribute to the energy transition, and not hinder the investment into activities that are essential for an effective climate change mitigation.

**Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the criteria for the activity, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Alternative technologies do not yet fully cover the wide range of applications for SF6 required by DSOs and generators. Therefore, SF6 is the only solution available today and is expected to remain so in the coming years, as there are no alternatives that offer equivalent performance and operational reliability for the equipment.

**Additional information**

Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

The maximum file size is 1 MB.

You can upload several files.

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

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- The substantial contribution TSC
- The DNSH TSC

### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

## Environmental refurbishment of electricity generation facilities that produce electricity from hydropower 3.1

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### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

-

The description/boundary of the activity

- The substantial contribution TSC
- The DNSH TSC

## Description/boundary of the economic activity

### What does your comment about the description/boundary of the activity concern?

Please select as many answers as you like

- The granularity of the activity
- The boundary of the activity
- The clarity with which the activity has been defined

### Please provide a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your selection:

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Activity 3.1. should be removed as the scope and criteria of activity 4.5 (ref DA CC mitigation) Electricity generation from hydropower is sufficient. The proposal is not consistent with other activities. We believe the scope of this activity has already been covered in the scope of the activity Electricity generation from hydropower, referring to activity 3.7 in this proposed DA and activity 4.5 in the DA for climate change mitigation and adaptation. This described activity includes "construction and operation" and the DNSH criteria specify that this includes "operation of existing hydropower plants, including refurbishment". However, the fact is that most refurbishment and reinvestments of hydropower plants include an interface with environmental issues.

Therefore, the proposal introduces an unnecessary and artificial division between generic hydropower activities and specific environmental refurbishments. This adds a complicated layer for companies that shall report and stakeholders that shall understand how companies can meet the technical screening criteria. Proposal adds to the administrative burden without a contribution to sustainability, based on the comments above.

At last, it is not effective, as the proposed criteria re-introduce many items that has already been discussed and changed in the scope of the DA for objective 1 and 2.

## Substantial contribution technical screening criteria (TSC)

### Do you consider the ambition level set by the proposed substantial contribution criteria to be appropriate?

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Criteria presented in Annex 3.1 tightens hydropower operations creating concerns that the criteria will create overlapping legislation. Several restrictions limit the possibility for hydropower operators to be eligible:

1. Further explanations are needed for fulfilling points 5.1. to 5.3. for substantial contribution to the objective “protection and restoration of biodiversity and ecosystems”. Individual measures that improve the environmental performance of a hydropower plant also contribute substantially to the protection of biodiversity and should therefore be acknowledged.
2. The limitation of capacity below 10 MW should be removed. The exclusion is not appropriate, as small hydro power plants can provide reliable and green energy for some regions. Furthermore, the electrical output of a plant does not necessarily impact the positive effect of a modernisation measure on biodiversity. Evaluation could be done in site-specific way, e.g. a power plant with 9 MW installed capacity with a full-profile drilled pressure shaft and the required minimum water flow might have a smaller ecological footprint than a larger plant.
3. Requirement 4 on non-eligibility of existing barriers converted into plants is not justified. The refurbishment allows it transform into a low carbon energy tool equipped when relevant for fish and sediment transfer, which is positive for climate change mitigation and biodiversity. Also, plants constructed after the DA should be included as in the future new efficient systems beneficial to the environment may be found.
4. Requirement 5 restricts the perimeter of environmental refurbishment ignoring that environment may be improved not only through fish passes. Also, it did not consider the best practice on adapting hydropower plants to fish migration when appropriate.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s)**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

See comments in the first Q:

An overlap with previous documents should be double checked as well as the consistency among the technical criteria of all the taxonomies Also, the rationale behind DNSH need to be further defined. If increasing dam height or water volume does not affect the status of water body, it shouldn't matter.



**Do you have any major concerns with respect to the **ability to implement** (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed substantial contribution criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

See comments above:

We believe that the proposed activity 3.1. introduce an unnecessary and artificial division between generic hydropower activities and specific environmental refurbishments. This adds a complicated layer for companies that shall report and stakeholders that shall understand how companies can meet the technical screening criteria.

**Do you consider that the **rationale and scientific evidence** on which the proposed criteria are based is **sufficient and robust**?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the sufficiency and robustness of the rationale and scientific evidence, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The specific criteria that “allow for all riverine species to migrate both ways... for at least 85% of those who enter to exit alive and for a low mortality observed further downstream of the dam” does not consider the best practice on adapting hydropower plants to fish migration.

The Norwegian Research Centre for Hydropower Technology has shared learning on this in this article, backed up by a legacy of scientific work: <https://storymaps.arcgis.com/stories/f9e8c4ff1c8849fb874176adbb17fb0b>

**Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the criteria for the activity, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The Platform for Sustainable Finance should consult the scientific community at Sintef and NINA in Trondheim, Norway which is world-leading in applicable research on how to adapt hydropower operation to the minimize environmental impact. Not consulting this community risk missing the state-of-the-art knowledge on this area.

The handbook can also be referred to on environmental design of hydropower: <https://brage.nina.no/nina-xmlui/handle/11250/2397711>

Moreover, no best-available-technology is in place for downstream migration, especially at plants with rated discharge > 100 m<sup>3</sup>/s (fine screens); fish-friendly turbines and adapted turbine operation subject to R&D.

**Do No Significant Harm (DNSH) technical screening criteria (TSC)**

**Does the proposed DNSH criteria ensure no significant harm to the environmental objective?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**What should the performance limit level be in your view?**

**Please provide a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Regarding criteria on DNSH objective 3 under hydropower refurbishment: It is not justified to limit dam height or water used volume. For example, some dams are located on rivers with natural barriers so dam's height is not a meaningful parameter. What's more, such criteria can get in the way of environmental projects according to the concept of environmental design in hydropower (<https://www.sintef.no/en/shared-research->

areas/hydropower/environmental-design-of-hydropower-systems-power-production-that-respects-nature/) and focus on win-win solutions for renewable energy and the natural environment. A more flexible and site-specific approach will facilitate new and sustainable solutions.

Limiting water volume is also not justified: If the dam and the plant exist, it is clearly positive for the community to use them to produce low carbon energy and keep the river flow regulation under strict environmental criteria as well as agriculture irrigation and recreational uses and open to the use in forest fire extinction. One should remind that water is only circulated through hydropower plants and there is therefore no supplementary impact to circulate more water.

**Are there any key factors which have been omitted from the draft proposed DNSH criteria or that need better defining?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s):**

*2000 character(s) maximum*

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The proposed DNSH criteria disregard that an environmental impact assessment will assess whether an increase of the dam height or reservoir would have an impact of environmental factors.

In practice, the impact can be very limited (i.e. no significant harm), while the benefit of increasing the reservoir can have major impact on the power systems ability to integrate more intermittent renewables.

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed DNSH criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed DNSH criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

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If volume means discharge: sustainable use and protection of water resources is also achievable with higher discharge, e.g. fish-friendly turbine with higher rated discharge.

## Additional information

Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

The maximum file size is 1 MB.

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Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

## Electricity generation from bioenergy for protection and restoration of biodiversity and ecosystems 3.2

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### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### Description/boundary of the economic activity

### What does your comment about the description/boundary of the activity concern?

Please select as many answers as you like

- The granularity of the activity
- The boundary of the activity
- The clarity with which the activity has been defined

**Please provide a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your selection:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Eurelectric calls for further clarification on:

-Annex, 3.2, from p. 406: It seems that the Platform, in general, has kept the same headlines and DNSH criteria for activities that have already been covered in the climate delegated act (e.g. wind power). The Platform has changed the headline of bioenergy to “Electricity generation from bioenergy for protection and restoration of biodiversity and ecosystems”. The last part of the headline (“for protection and restoration of biodiversity and ecosystems”) should be changed into the same headline setup as the rest of the recommendation. Also, having the content of that section in mind it leaves unnecessary confusion, cf. also comments below.

-The Platform has also changed the DNSH criteria. While the content of it is acceptable, the new criteria complexify the Taxonomy by creating different referential.

-The activity’s title refers to electricity production, but the Platform’s report includes “Operation of installations generating electricity and/or heat that produce exclusively from biomass, biogas or bioliquids”. Later in the text, the activity is classified under NACE code D35.30 that is used for heat production. As a comparison, under 3.12, 3.13, 3.14, 3.15 and 3.16, they emphasize that it is power only activities.

-As the size of the plant has not been mentioned in the criteria, does it mean that all plants need to fulfil the criteria, no matter which size the plant is? That would be a deviation from the REDII/III.

Moreover, it should be noted that while the proposed TSCs and standard may be acceptable, it may also be a challenge to fulfil measurement and control requirements (e.g. the long term impact from noise (also because the granularity makes it difficult). Thus, only a more qualitative evaluation can be made, i.e. not based on ‘hard quantitative data. On this background, it may be wise for the Taxonomy to begin with a softer approach until the necessary scientific experience has been established.

## Substantial contribution technical screening criteria (TSC)

**Do you consider the ambition level set by the proposed substantial contribution criteria to be appropriate?**

- Yes
- No (please comment)
- Don’t know / no opinion / not applicable

**Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Eurelectric calls for further explanation on the following aspects:

- Requirement to have an EIA procedure (or screening) for all projects.
- The criteria related to “whole trees”. There is no clear definition of a whole tree. Do the criteria also apply to thinning wood? The trees are “whole” but are a residue in forestry.
- We suggest a rewording where this criterium only applies to “whole trees” that can be used by other industries along with a cascading principle. Since a total ban of coarse woody debris would mean excluding the use of all tops, reeds and other industrial waste. Therefore, what part of the biomass (based on industrial waste) would be ok to use then?

- We admit that residues left in the forest can support biodiversity along with other ecosystem services. We also admit that there must be a limit for removal of trees and forest residues but the the limit must be decided by relevant authorities in Member States. These are potentials that could be used to increase the use of bioenergy and to fulfil the European Commission goal on use of renewable to achieve the climate reduction goals.

Moreover, we suggest verifying the requirements for the sourcing plan. Indeed, it seems that the proposals do not comply with the requirements and current implementation of the RED II, which allows the Member States to establish a national system for the proof of sustainability.

Finally, with the RED already a set of criteria exists, defining under which conditions biomass is a renewable energy source and when its usage is considered to be sustainable, taking the impact on biodiversity into account. If stricter requirements are necessary, this should be addressed and discussed in the negotiations for the review of the RED. The proposed reporting requirements and criteria go beyond current legislation. In this context, we also would like to draw attention to the recent European Commission reply to a parliamentary request: P9\_RE(2021)000867.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s)**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

As also mentioned above, the title of Section 3.2 is unclear.

Section 3.2, p. 406 is called "Electricity generation from bioenergy for protection and restoration of biodiversity and ecosystems". Why does it say "for"? Does it only apply to electricity production from bioenergy FOR protection[...] or does it apply to bioenergy-based electricity generation in general? The first part of 'Description of the activity' shows that the latter seems to be the case. Nevertheless, Eurelectric shall strongly suggest the title to correspond and reflect with this understanding.

Based on this understanding, it is misleading that in many other sections than 3.2, it appears that e.g. biomass might not be in scope. Hence, the fact that biomass logically is covered by 3.2 appears not to be fully reflected in other sections in chapter 3. Thus, it is a inconsistency that biomass in other sections is screened out of the repeated section ('Rationale for choosing the proposed SC criteria and thresholds') as a sustainable fuel for energy production.

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed substantial contribution criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Looking at the implementation, Eurelectric believes that the following aspects should be reviewed/further specified:

2.c.b: How is "locally appropriate" defined? It is not always a national competent authority can or will define a removal threshold and this threshold is extremely specific to local (i.e. individual field) conditions.

2.d.b: "Coarse woody debris" is not a clearly defined resource. It should be defined by the criteria. We suggest that the thresholds mentioned in 2.d.c include coarse woody debris and that a threshold is applied to the sum of "slash" and "coarse woody debris".

2.d.c. Similar to above, but for silviculture. In many places the national authorities will or have not defined a threshold and it can be difficult to do for each forest or forest type due to lack of scientific evidence.

The wording about "will not result in a decrease in the diversity [...]" is very hard. It is always a trade-off between commercial and biodiversity aspects. Perhaps the wording can be something like "not result in a SIGNIFICANT decrease" or similar that acknowledges that there can be a trade-off.

3. c) The voluntary standards available today for showing compliance with REDII (e.g. SBP or PEFC if they are approved) are not necessarily in compliance with the requirements of paragraph 2. For example, the thresholds required are not part of present certification systems. It will be extremely difficult for biomass consumers to comply with these criteria if existing governance systems are not sufficient. Forest certification needs to be able to play a role in these criteria, otherwise they can never be operational for biomass consumers.

**Do you consider that the rationale and scientific evidence on which the proposed criteria are based is sufficient and robust?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

- Yes
- No (please comment)
-

Don't know / no opinion / not applicable

## Do No Significant Harm (DNSH) technical screening criteria (TSC)

**Does the proposed DNSH criteria ensure no significant harm to the environmental objective?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**What should the performance limit level be in your view?**

**Please provide a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

As states above, the Platform has also changed the DNSH criteria. While the content of it is acceptable, the new criteria complexify the Taxonomy by creating different referential.

**Are there any key factors which have been omitted from the draft proposed DNSH criteria or that need better defining?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed DNSH criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

## Additional information



Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

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### **On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### **On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### **On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### **On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

## Electricity generation from hydropower 3.7

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### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### Substantial contribution technical screening criteria (TSC)

#### Do you consider the **ambition level** set by the proposed substantial contribution criteria to be appropriate?

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

#### Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The criteria should only apply to new constructions.

Although the ambition level sets an appropriate environmental standard and thresholds, we believe applying these criteria on existing assets will be an unnecessary administrative burden and will not contribute effectively for this environmental objective.

The current standards for EPDs relies on current database values and nearly all the pollution in a life-cycle perspective occurs in the upstream supply chain. Conducting the analysis on assets built 40-50 years ago - which is the case for the bulk of the hydropower fleet – will produce values that have no real value for disclosure purposes. It is also unrealistic to retrieve actual environmental data from the supply chain as the practice for documenting these values would be non-existent.

The requirements should also be based on existing regulation and not create/add new requirements above existing directive, etc. Therefore, reaching WFD objectives should be the target for water biodiversity. Requirements 3, 4, 5 should be deleted from document or should be identical to activity 4.5 under the Climate DA.

What's more, the thresholds of 0.05 kg SO<sub>2</sub> eq /MWh for AP risks to be exceeded by certain hydropower plants (see data analysis on p. 468 of Annex) in certain cases for the interaction with other activities with no relation with power generation. Therefore, it needs to be increased. Gradual reduction in medium- to long-

term conceivable.

Complementary remarks may be brought on the following topic: LCA experts will question the pertinence of acidification, ozone creation, etc. in European HP plants.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s)**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The draft proposal is not efficient as it doesn't recognise that most of the pollution occurs in the upstream supply chain. Neither does it recognizes that the current practice for EPDs and unavailability of data will result in meaningless disclosure in relation to actual environmental performance.

We believe an improved definition would be to differentiate current and new/rehabilitated assets. Where current assets should be exempted for the reporting criteria – as was the case for solar and wind power for climate change mitigation – and that new assets are required to perform an LCA at construction. The basis for this is the fact, as provided in most of the EPDs referred already (for example [22] Vattenfall), that the bulk of the pollution occurs in either the supply chain or in the grid. Hence it is ineffective to target existing assets with this massive administrative burden, when the results from retroactively reporting on the supply chain has no real connection to real historical pollution data. We believe there is sufficient scientific basis already in the current proposal for exempting existing assets.

For new and rehabilitated assets there is the option of keeping the criteria, as it should be possible to enforce disclosure of supply chain footprint in the contractual phase. Since these are long-established assets and there is little pollution occurring in the operational phase, we recommend that this should be done during the lifetime of the asset through documenting mainly the upstream supply chain environmental footprint.

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed substantial contribution criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The criteria are not commonly used criteria in HP where WFD is the main reference text. Availability of data is at present questionable.

**Do you consider that the rationale and scientific evidence on which the proposed criteria are based is sufficient and robust?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the sufficiency and robustness of the rationale and scientific evidence, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

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including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Complementary analysis needed. The scientific basis in the report for discussing relevant thresholds are not sufficient. It relies on a very few EPDs. We can't find the same values. You find our first findings of the scientific findings for hydro:

- Ref[3] gives a broad range of acidification performance, between 0.05 & 0.4. When we study the appendix of the report we find these values, but only as 2 data points. Illustrating this as a range in the report gives a false impression of a range of values. We contacted the author, who states that using only a few data points to conclude on the environmental footprint of hydro in general is statistically incorrect.
- There is no proper reference to Ref[7]. We are not able to understand the scientific basis for this. The reasoning for the thresholds is extensive for acidification, while for the 4 other cat. there are no mention or references. We struggle to find any scientific basis for setting thresholds for these categories. We know that your ref[22] Vattenfall include data on the other categories as well, and for all well below the thresholds discussed.

We believe the weakness of the given references, and omitting others, diminishes the scientific basis for these thresholds. The population of data is too low and the analysis not statistically correct, giving the impression that two data points from one study constitute a range. That in combination with the infeasibility of conducting the LCA justifies removing the criteria for existing assets. Last, we want to direct your attention to one EPDs conducted for Nordic hydro, which document a very low environmental footprint for hydro on almost all the pollution categories. Statkraft conducted an EPD of the Trollheim hydro facilities in 2019. On p.

4 this document a level for acidization(0,00667), eutrophication(0,0546) and photochemical ozone(0,000869) for the generation of electricity. Eutrophication is on par with the proposed threshold while the others are below.

**Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the criteria for the activity, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

See comments on 2.2.2. from activity 3.1. on refurbishment.

**Do No Significant Harm (DNSH) technical screening criteria (TSC)**

**Does the proposed DNSH criteria ensure no significant harm to the environmental objective?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**What should the performance limit level be in your view?**

**Please provide a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Requirement 2.1: is redundant with respect of requirement 1. The requirement should be based on existing regulation and not create/add new requirements above existing directive, etc. Therefore, reaching WFD objectives should be the target for water biodiversity. Keep the identical wording to WFD.

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**Are there any key factors which have been omitted from the draft proposed DNSH criteria or that need better defining?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed DNSH criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed DNSH criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

We understand that the common practice of the application of the WFD will continue, e. g. the definition of measures to achieve and monitor target status of the water body lies in the responsibility of the respective authorities.

### **Additional information**

Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

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## **Electricity generation from geothermal energy 3.8**

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**On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

## Substantial contribution technical screening criteria (TSC)

**Do you consider the ambition level set by the proposed substantial contribution criteria to be appropriate?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Geothermal is renewable because the tapped heat from an active reservoir is continuously restored by natural heat production, without any real consumption of the fluid. About GHG emissions, the CO<sub>2</sub> emitted from geothermal plants has a natural origin, as there are no combustion of fossil fuels. Recent on-field test demonstrates that emission from geothermal plants may replace the natural emission, according to criteria of substitutive emission. Similar considerations have to be done for other components such as CH<sub>4</sub>, H<sub>2</sub>S & ammonia that are presents in the fluid and are released during operation phase. The natural emission topic has been approached to properly conduct a LCA study in the "Study on Geothermal plants and applications emissions: overview and analysis" (RINA-VITO-Ernst Young, 2019). The final recommendation highlights that it's crucial to differentiate between anthropogenically and natural emitted gases from geothermal systems, and vital to substantially improve the quality of potential impact assessments. Thus, for LCA methodology application to geothermal technologies can be conduct taking account the initial baseline emission and it could be applied only to new plant construction.

- o CO<sub>2</sub> emission from geothermal sources mustn't be considered in the calculation of greenhouse gases emission (not anthropogenic and substitutive of natural emission baseline)

- o Similar reasoning applies to other components of the fluid as CH<sub>4</sub>, H<sub>2</sub>S & ammonia, in relation of the operation phase. Thus, also referring to the Acidification potential, a possible LCA analysis can be conducted by considering that the geothermal emissions during the operation phase are reduced by the effect of the substitutive natural emissions.

With respect to the threshold PM<sub>2.5</sub> & PM<sub>10</sub> there aren't evidence of emissions of particulate matter due to the type of technologies. The regulatory framework at national and international level do not include emissions level for these pollutants.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s)**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

See above.

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed substantial contribution criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Availability of data is at present questionable.

**Do you consider that the rationale and scientific evidence on which the proposed criteria are based is sufficient and robust?**

-



Yes

- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the sufficiency and robustness of the rationale and scientific evidence, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

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Complementary analysis needed.

The scientific basis presented in the document for discussing relevant thresholds are not sufficient and are typically applied to other technologies different from geothermal.

LCA methodology application to geothermal technology is very recent and few data and scientific literature is available.

In the frame of Geoenvi project, funded by EU in H2020 program, a generalized approach for LCA methodology application for geothermal plants has been developed for the first time. Based on the conclusions of this project the methodology is to be tested and further validated for the application to geothermal technology (<https://www.geoenvi.eu/>).

Regarding EPD, no sufficient data about geothermal technology are available at the moment.

**Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the criteria for the activity, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

**Do No Significant Harm (DNSH) technical screening criteria (TSC)**

**Does the proposed DNSH criteria ensure no significant harm to the environmental objective?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Are there any key factors which have been omitted from the draft proposed DNSH criteria or that need better defining?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed DNSH criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

### **Additional information**

Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

The maximum file size is 1 MB.

You can upload several files.

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

## **Electricity generation from natural gas 3.9**

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**On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

## Description/boundary of the economic activity

### What does your comment about the description/boundary of the activity concern?

Please select as many answers as you like

- The granularity of the activity
- The boundary of the activity
- The clarity with which the activity has been defined

### Please provide a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your selection:

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The functional unit of all impact categories is “one MWhel” for all power plant categories. In the case of CHP plants, the corresponding functional unit should be changed to “1 MWh of the sum of all energy outputs”. In this case, allocation of emissions to the different energy products of a CHP plant (electricity, steam, heat, cooling, mechanical energy) can be avoided. Such an approach would be in line with the calculation of GHG emissions of CHP plants proposed in the taxonomy.

Note that some of the GHG emissions are relevant for the proposed air emission related impact categories, as well (e.g. N<sub>2</sub>O for EP, CH<sub>4</sub> for POCP). For reasons of consistency, the same allocation approaches should be pursued for GHG emission and other pollutant emissions.

## Substantial contribution technical screening criteria (TSC)

### Do you consider the ambition level set by the proposed substantial contribution criteria to be appropriate?

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

### Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Proposed thresholds for AP & EP are not achievable. Even best performing CCGT (operated at the lower range of the BAT-AELs), are not able to comply with the proposed values if all relevant pollutants contributing to the corresponding impact categories are considered. Publications on the supply chain impacts of natural gas demonstrate that the proposed thresholds on AP cannot be complied due to the

supply chain emission that are mostly outside the responsibility of the plant investor. Ex: supply chain data published by the German Federal Agency for the Environment reflecting the gas supply mix representative for German power plants (Emissionsbilanz Erneuerbarer Energieträger 2018). For many if not all gas plants fired with H<sub>2</sub> (or H<sub>2</sub>blending) the proposed thresholds for AP & EP may not be achievable due to the inherently higher combustion temperatures leading to higher thermal NO<sub>x</sub> emissions and the imminent need for the application of SCR. Too stringent ELVs outside the BREF range may be associated with cross media effects and draw backs such as higher other pollutant emission, use of toxic reagents, waste generation, higher self-consumption and less energy efficiency. The TSC in case of acidification and PM are very ambitious yet not realistic since they aim at levels achieved by offshore wind. Technical possibilities are subject to geographical and climate circumstances and so wind, geothermal and PV is not an alternative for gas generation and cogeneration especially in district heating sector. Thus, the difference between power and heat generation technologies and wind, geothermal and PV should be recognized and other thresholds should apply for gas operated installations. More data on oil and gas is required to justify proposed thresholds as a general guideline for heat and energy production. To avoid data collection bias separate technology groups and installation size (power output) should be distinguished. Experience of LCP BREF TWG could serve as an example.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s)**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

For each project type, key pollutants to be assessed should be identified to reduce the administrative burden. In contrast, derivation of thresholds must include relevant and identified pollutants contributing to a particular impact category.

Derivation of the AP thresholds are obviously based on SO<sub>2</sub>- and NO<sub>x</sub>-emissions only. Emissions of NH<sub>3</sub> must be taken into account for deriving meaningful and achievable AP thresholds for many plant categories. Unavoidable ammonia slip associated with the application of SCR technology is of particular relevance for gas plants using natural gas, biogas or hydrogen.

In the case of gas turbines, the evident cross-relationship of NO<sub>x</sub>, NH<sub>3</sub> and CO emissions needs to be addressed. The three pollutants contribute in different levels to the proposed impact categories and emission performance depends strongly on the operational modes and load regimes.

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)

- No
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the ability to implement the proposed substantial contribution criteria, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

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Conducting a full-fledged LCA for investment projects is a very labour-intensive and costly exercise. Thus, the TSC report should consider tailored/adjusted requirements for smaller projects and SME.

The impact category of POCP should be omitted for all power plant categories. No evidence is provided that the proposed thresholds can be achieved by any plant category. Equivalent factors and methodology for deriving them differ significantly across scientific literature. There is usually not sufficient information available across the supply chain on the broad variety of organic carbon species necessary for the POCP assessment. Impact evaluation and equivalent factors for the key pollutants depend on site-specific and meteorological conditions as well as on the background concentration.

The proposed thresholds for gas plants are apparently based on natural gas use. Emission performance and supply chain emissions may be very different for gas plants using biogas, biomethane or hydrogen. The applicable thresholds must reflect plant technology, fuel type and quality, plant size, and the intended operational regime (base load, peak load, emergency use etc.).

A major issue for implementation is availability of data. Not all plants/utilities are collecting all the necessary data to be able to calculate the relevant measures and compare them with the proposed thresholds.

**Do you consider that the rationale and scientific evidence on which the proposed criteria are based is sufficient and robust?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify your concern(s) on the sufficiency and robustness of the rationale and scientific evidence, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

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The rationale and scientific evidence for the selected criteria are neither sufficient nor robust. Equivalent factors for the various pollutants are not documented but vary significantly across the literature sources. Some of the literature references appear to be outdated (more than 20 years old). Environmental Product Declarations are not a scientifically robust data source for deriving impact thresholds.

Contextual background information on reference plants regarding plant layout, operational modes, fuel quality, efficiency and monitoring requirements for the various pollutants are completely lacking. The process for selecting representative reference plants for deriving the thresholds is not transparent. It appears that instead of a systematic analysis of plant types, operational modes and plant characteristics prior to the data collection, a rather random selection of publicly available plant information and EPDs were selected and used.

Data and figures presented on AP are incomplete. In addition to SO<sub>2</sub> and NO<sub>x</sub> mapped, further pollutants contributing to the AP need to be considered (NH<sub>3</sub>) when deriving an AP threshold.

The sample of data used is quite small. No justification is given regarding the selection of data giving the impression that data has been chosen in such a way so as to justify only the selected thresholds. From a statistical point of view this is not a correct approach.

The reasoning for the thresholds is extensive only for acidification. For the four other categories the reasoning is much more superficial, with hardly any references.

### **Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

### **Please identify your concern(s) on the criteria for the activity, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Criteria for gas-fired power plants have obviously been derived from large-scale best performing CCGT operated in base load. However, other relevant gas technologies need to be considered, as well: OCGT for peak operation and reciprocating engines as reference technologies for smaller gas plants and power plants using biogas.

Emission performance of OCGT operated in highly flexible modes differ significantly from CCGT due to lower electrical efficiencies and generally higher emissions associated with frequent start-ups and partial load operation. Engines apply different abatement technologies and have different emission profiles.

Compliance with the threshold needs to be demonstrated at the design stage when the investment decision is taken. It must be clarified that the anticipated combustion related emissions refer to normal operating conditions and assume compliance with the corresponding emission limit values and other permit requirements.

For medium sized combustion plants (MCP with less than 50 MW rated thermal capacity), demonstration of compliance with the thresholds, including a full LCA and consideration of supply chain emissions, should not be required. A more tailored TSC criteria could be to require compliance with the generally more stringent BAT requirements of the BREF LCP for new plants for the plant category of 50 – 100 MW.

## Additional information

Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

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You can upload several files.

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### On which aspect(s) of this activity would you like to comment?

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### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
-

The substantial contribution TSC

- The DNSH TSC

### On which aspect(s) of this activity would you like to comment?

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### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

## Power from cogeneration of heat/cool and power from biogas 3.16

---

### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### Substantial contribution technical screening criteria (TSC)

Do you consider the **ambition level** set by the proposed substantial contribution criteria to be appropriate?

- Yes
- No (please comment)
- Don't know / no opinion / not applicable



**Please provide an alternative suggestion with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion:**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

No comment.

**Are there any key factors which have been omitted from the draft proposed substantial contribution criteria or that need better defining that should be addressed?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Please identify the missing aspects or the improved definitions together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s)**

*2000 character(s) maximum*

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We are aware that it is explicitly mentioned that there is a "Pending decision on the threshold level". Eurelectric agrees that the relevance of several TSCs in 3.16 need justification. Hence, if in, the level of threshold needs validation w.r.t. thresholds for photochemical ozone creation potential, eutrophication potential, particulate matter PM10, and fine particulate matter PM2.5.

**Do you have any major concerns with respect to the ability to implement (e.g. technical feasibility) the proposed substantial contribution criteria?**

- Yes (please comment)
- No
- Don't know / no opinion / not applicable

**Do you consider that the rationale and scientific evidence on which the proposed criteria are based is sufficient and robust?**

- Yes
-

No (please comment)

Don't know / no opinion / not applicable

**Please identify your concern(s) on the sufficiency and robustness of the rationale and scientific evidence, together with a brief explanation and rationale as well as supporting evidence (including links to published journals and articles) for your concern(s):**

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It is mentioned in several sections, including section 3.16 p. 573:

'Nevertheless, other activities (technologies) are not included in the proposal. Power generation using liquid fuels (oil) and biomass were not included because the available data range showed their performance concerning the pollution objective is, by far, insufficient to achieve with the proposed SC thresholds.

Therefore, it appears unrealistic that currently any aligned assets exist that could be invested in. Hence, these activities are not proposed for the taxonomy'.

However, this assumption is not right. In this context, it is not correct that biomass-based energy production cannot be within the limit of the graph of 0,4 kg/MWh.

**Do the criteria for the activity represent the state-of-the-art in technological and/or practice terms?**

Yes

No (please comment)

Don't know / no opinion / not applicable

### Additional information

Should you wish to provide additional information on this activity (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

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**On which aspect(s) of this activity would you like to comment?**

Please select as many answers as you like

The description/boundary of the activity

The substantial contribution TSC

## The DNSH TSC

### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

### On which aspect(s) of this activity would you like to comment?

Please select as many answers as you like

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- The substantial contribution TSC
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The substantial contribution TSC

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Please select as many answers as you like

- The description/boundary of the activity
- The substantial contribution TSC
- The DNSH TSC

## Horizontal considerations with respect to the proposed TSCs

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### Substantial contribution technical screening criteria (TSC)

**Where economic activities are linked (e.g. through the supply chain) or have similar characteristics, are the associated substantial contribution criteria for a particular environmental objective suitably aligned and consistent?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify the specific instances (economic activities, substantial contribution criteria) where you consider there to be misalignments or inconsistencies together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s):**

*2000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

TSC propose the same thresholds for all activities referring to the functional unit of 1MWhel. Thresholds for the impact categories must distinguish between different power plant(PP) technologies, consider BAT requirements as well as supply chain emissions and transformation losses associated with energy storage and flex. operation of the PP. PPs are increasingly designed in modular systems and need to cope with flex. requirements. Ex: PP using energy storage systems to support self-consumption, providing system services for the grid, or supplying flex. power supply to the grid will need higher thresholds per functional unit as alone-standing PPs considering storage and transformation losses, more frequent start-up & shut-down processes as well as the LCA emissions of the additional energy storage devices. The supply chain of renewable H2 includes renewable electricity production from PV, hydro or wind as well as storage and transformation losses. Thus, the use of renewable H2 or other RFNBO in gas-fired PPs requires higher thresholds than PV or wind to consider the transformation losses associated with the electrolysis plant, H2 transport and storage and the emissions associated with the combustion process. Application of fixed thresholds for three different air-related impact categories is not in line with an integrated assessment of LCA analysis, EIA or plant permitting. Cross media impacts need to be considered when compliance with one impact category affects other categories. For gas plants, the most striking ex. is the use of SCR for

ambitious NOx reduction that may trigger ammonia slip emission and efficiency losses in the waste heat recovery boiler. Also, technology choices and operational design, regional and site-specific issues need to be considered in the impact analysis. Meteorological conditions and availability of water resources may affect plant performance and efficiency. The relative importance of AP, EP & POCP varies for sites and geographical area.

Should you wish to provide additional information (e.g. a position paper, report) on the TSC or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

The maximum file size is 1 MB.

You can upload several files.

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

### **Do No Significant Harm (DNSH) technical screening criteria (TSC)**

**For each environmental objective, is the proposed performance level of DNSH criteria generally consistent and aligned across the different economic activities?**

- Yes
- No (please comment)
- Don't know / no opinion / not applicable

**Please identify the specific instances (environmental objective, economic activities, DNSH criteria) where you consider there to be misalignments or inconsistencies together with a brief scientific/technical explanation and rationale as well as supporting evidence (including links to published journals and articles) for your suggestion(s):**

*2000 character(s) maximum*

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See remark on DNSH.

WFD requirements are sufficient and there should not be requirements on DNSH based on undocumented criteria like dam's height or water volume used. The requirement ignores the requirement to reference to the WFD.

DNSH requirements from delegated act of June 2021 should be taken as reference and no new DNSH requirements should be issued to ensure self-consistency of documents.

Should you wish to provide additional information (e.g. a position paper, report) on the DNSH TSC or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

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## General feedback on the draft report

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**Please provide us with any additional comments you would like to make on the report:**

*5000 character(s) maximum*

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Activities categorisation:

The Platform's methods on how they have decided to include certain energy production activities under certain environmental targets should be clarified. For example, it would make more sense to include bioenergy under circular economy target instead of biodiversity target.

The report's content must be coherent. Conclusions on biomass and technical screening criteria applying to it under section 3.2. should not be contradicted by other statements in other sections.

Alignment with the ongoing workstream on the Complementary DA:

- While both nuclear energy and natural gas will be assessed in the complementary delegated act on climate change mitigation and adaptation (yet to be published), we note that they are not treated equally in the draft delegated act on the four remaining environmental criteria. The production of electricity from natural gas is included, while electricity from nuclear energy is not assessed. We see no justification to this choice and therefore ask the Platform to assess the contribution of both nuclear energy and natural gas to the four remaining environmental objectives.
- Moreover, several activities related to nuclear energy have been explicitly excluded from the list established by the Platform (see below). This exclusion is not justified, as nuclear production is still being examined in the context of the preparation of the complementary delegated act on climate change mitigation and adaptation. We call on the Platform to wait for the adoption of the complementary delegated act on climate change mitigation and adaptation before taking any decision on that matter.
  - o Sea and coastal freight water transport (as of p.767) and Inland freight water transport (as of p.786) exclude the transport of nuclear waste;
  - o Exclusion of all activities relating to the decontamination of nuclear plants or sites under the following activities :
    - Remediation activities enabling restoration of waterbodies;
    - Remediation activities for the transition to a circular economy;
    - Remediation activities for pollution prevention and control;
    - Remediation activities enabling restoration of ecosystems;
  - o Categories 13.3 et 13.4 "Treatment of hazardous waste as a means for pollution prevention and control" exclude the treatment/disposal of radioactive waste.

About the pollution criteria:

Annex, 3.3-3.9 and 3.10-3.16: The pollution criteria (acidification potential, ozone creation potential, eutrophication potential, PM10 and PM2,5) are given as life cycle emissions. The life cycle emissions are rather complicated to determine, the acceptability of even clean production (like wind) is not clear. Could it be possible to consider only direct emissions?

Annex 3.8: The scientific basis presented in the document are not sufficient to define relevant thresholds: no EPDs are available and LCA methodology application to geothermal technology is very recent and few data and scientific literature are available. The weakness of the given references, diminishes the scientific basis for enforcing these thresholds. That, in combination with not fully developed LCA methodology for geothermal technology, is a weak argument to support the proposed criteria.

Moreover, according to IPCC (Intergovernmental Panel on Climate Change) declaration, the Geothermal Power Plants are not accountable for any GHG direct emissions and recent studies report such emission as substitutive of the natural emissions meaning that would be present even if the installation was not in operation. Since also small amount of CH<sub>4</sub>, H<sub>2</sub>S and ammonia are presents in the fluid, analogous consideration have to be done also for these components during operation phase.

LCA analysis can be conduct taking account the initial baseline emission and it could be applied only to new plant construction.

Should you wish to provide additional information (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) below.

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## Useful links

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