



Questions and Answers on the EU Taxonomy Complementary Climate Delegated Act covering certain nuclear and gas activities

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1. **Rationale for the Delegated Act**

The goal of the EU Taxonomy is to prevent greenwashing and to help investors identify economic activities in line with our environmental and climate objectives. Shifting towards renewable energy is essential for achieving climate neutrality. But it is also necessary to have stable sources to accelerate the transition towards net-zero greenhouse gas emissions.

The [Taxonomy Regulation](#) lays out three types of activities: low-carbon (Article 10(1)), transitional (Article 10(2)) and enabling (Article 16).

In this Complementary Climate Delegated Act, the Commission includes certain nuclear and gas activities in the second category of activities, i.e. transitional, those covered by Article 10(2) of the Taxonomy Regulation. These are activities that cannot yet be replaced by technologically and economically feasible low-carbon alternatives, but do contribute to climate change mitigation and with the potential to play a major role in the transition to a climate-neutral economy, in line with EU climate goals and commitments, and subject to strict conditions, without crowding out investment in renewables.

Furthermore, this Delegated Act also provides for specific disclosure requirements associated with natural gas and nuclear energy activities included in the act, by amending the Delegated Act on disclosures under Article 8 of the Taxonomy Regulation. This amendment will introduce requirements for large listed non-financial and financial companies to disclose the proportion of their activities linked to natural gas and nuclear energy. This should help investors to distinguish between the different activities they are investing in.

How ambitious are the technical screening criteria, and do the included activities really lead to environmental benefits, e.g. as compared to energy production from coal?

The Taxonomy Complementary Climate Delegated Act includes strict requirements for the activities to qualify. In the case of fossil gas-related activities, for example, the facility should switch fully to renewable or low-carbon gases by 31 December 2035. This can help accelerate the transition from high-emitting energy sources, such as coal, to renewable or low-carbon gases.

Nuclear power is low-carbon. Expert advice sought by the Commission as part of its preparatory work (the reports of the Technical Expert Group until 2020, and the report of the Joint Research Committee in 2021) confirms this.

Following scientific advice, the Commission has concluded that nuclear energy, subject to strict safety and environmental conditions (including on waste disposal) that ensure the respect of the do no significant harm principle, can play a role in the transition towards climate neutrality in line with the European Green Deal.

What is the rationale for defining nuclear activities as being in line with the EU's climate and environmental objectives?

The Technical Expert Group on Sustainable Finance, advising the Commission on Taxonomy, acknowledged that nuclear represents a low-carbon energy source. This is in line with the positions of international organisations such as the Intergovernmental Panel on Climate Change (IPCC), the Organisation for Economic Co-operation and Development (OECD) and the UN Economic Commission for Europe, which consider CO₂ emissions from nuclear power plants over their life-cycle comparable to those from renewable energy sources (as low or even lower).

However, expert opinion has been less conclusive on the other environmental impacts of nuclear power and its compatibility with the "do no significant harm (DNSH)" criterion. For this reason, the Commission set up a specific process on nuclear energy, involving a technical assessment by the Joint Research Centre (JRC), the European Commission's science and knowledge service. Their report

was published and reviewed by Member States' experts on radiation protection and waste management appointed by the Scientific and Technical Committee under Article 31 of the Euratom Treaty, as well as by experts from the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER). Overall, the report and reviews conclude that compliance with the safety standards and waste management requirements under the regulatory framework in EU Member States ensures a high level of protection for the environment and for people.

For nuclear energy activities to be enlisted under the taxonomy, the screening criteria set requirements beyond the existing regulatory framework; for instance sunset dates for accelerating transition to advanced technologies, and definite dates for operational disposal facilities to be in place.

What about nuclear waste?

The [Taxonomy Regulation](#) requires that the long-term disposal of waste does not cause significant or long-term harm to the environment.

Nuclear energy generates a relatively low amount of waste in comparison to the large amount of generated heat and/or electricity. It produces mainly low-level radioactive waste, for which there are disposal facilities that have operated for decades, while high-level radioactive waste accounts for 1% of total nuclear waste.

The EU regulatory framework establishes the legal requirement for national policies to keep the generation of radioactive waste to a minimum.

In addition, the technical screening criteria for nuclear energy go beyond requiring mere compliance with legislation regarding radioactive waste management and disposal. Notably, disposal facilities for low-level waste must be operational already, and Member States should have in place a detailed plan to have in operation, by 2050, a disposal facility for high-level radioactive waste. Some Member States have more advanced projects regarding the long-term disposal of nuclear waste. The inclusion of nuclear energy in the EU Taxonomy can accelerate the development of solutions for final waste disposal elsewhere in the EU. In addition, the technical screening criteria for nuclear energy prohibit the export of radioactive waste for disposal in third countries.

What is the rationale for defining certain gas-related activities as "substantially contributing to" the EU climate and environmental objectives?

During the public consultation conducted in November 2020 for the preparation of the Climate Delegated Act, the energy sector attracted the largest number of responses. Stakeholders notably commented on bioenergy, hydropower, geothermal plants, hydrogen and natural gas. Many stakeholders suggested that natural gas should be recognised for its role as a transition fuel in decarbonisation and that criteria for transitional activities should take into account different starting points across Member States and be attainable with existing technologies. The first EU Taxonomy Climate Delegated Act did not include any transitional activities in the energy sector. However, the European Commission committed to adopting a complementary Delegated Act capturing activities relevant for the climate objectives, but not yet reflected in the first Climate Delegated Act.

The European Union has translated the goal of the Paris Agreement into a long-term European growth strategy. Under the European Green Deal, the EU is working on implementing a comprehensive set of legislative proposals (most recently, [the Fit for 55 Package](#)). The European Commission tabled its proposals based on robust evidence: the Fit for 55 Package rests on a common analytical base with energy system modelling at its core. According to the scenarios in this modelling, natural gas will continue to play an important role in terms of consumption and generation until 2030, after which we expect a decline to 2050. Throughout the transition of our energy system, the function of natural gas-fired electricity generation will change and will increasingly be a facilitator for the spread of renewable electricity and stable supply.

The EU Taxonomy complements these policies and plays a role in transitioning the financial sector to a more sustainable model. The Complementary Delegated Act has been prepared using the same coherent analytical base as the one of the [Climate Target Plan](#) and the Fit for 55 Package. The Commission's proposal is therefore consistent with the Commission's modelling underpinning its most ambitious legislative package for our climate. The Complementary Delegated Act recognises the specific role of natural gas-related activities in the transition. The carefully crafted set of technical screening criteria ensure that all relevant requirements of the Taxonomy Regulation are complied with. By identifying the role of natural gas in the transition, the Delegated Act also recognises the different situations in our Member States, while contributing to a sustainable transition.

Unlike nuclear power, natural gas undoubtedly releases CO2 when it is converted into electricity or heat. How can this form of energy lead to environmental benefits?

The Taxonomy Regulation sets out that substantial contribution to climate change mitigation can be achieved through, among other things, the avoidance or reduction of greenhouse gas emissions. Article 10(2) complements this by phasing out greenhouse gas emissions, in particular emissions from solid fossil fuels – a requirement that has been taken into account in the technical screening criteria in the Complementary Delegated Act, along with the other requirements applicable to transitional activities. In the Commission's modelling for Paris-aligned pathways, natural gas is projected to represent 22% of gross inland energy consumption in 2030, and 9% in 2050. Any natural gas in 2050 will have to be abated.

The technical screening criteria ensure that any new gas-based power/heat plant (or refurbished combined heat and power plant or heat/cool plant) is either below the technology-neutral 100g CO₂/kWh life-cycle emission threshold (i.e. using Carbon Capture and Storage technologies) or meets a number of stringent conditions and obtains a construction permit by 2030. Importantly, the use of gas should act as a replacement of plants running on more polluting solid and liquid fossil fuels (e.g. coal). As regards the co-generation of heat and power and heating/cooling activities, for every new natural gas-fired plant to be built, a coal-fired plant with the same capacity has to be removed for the technical screening criteria to be complied with. Regarding the power generation, the capacity of the gas-fired plant cannot exceed the capacity of the coal-fired plant by more than 15%. Facilities have to integrate a rapid conversion towards renewables with a clear commitment for a full switch to renewables by 2035.

How is the Complementary Climate Delegated Act going to address the energy price discussions?

The Taxonomy is not an instrument of EU energy policy. It is a tool to increase transparency in financial markets for private sector sustainable investments. It does not mandate investments and does not prevent any economic sector from receiving investments. Member States remain fully responsible and competent for deciding their own energy mix and for striking the appropriate balance – in terms of energy security, energy price stability and their commitment to decarbonisation and climate neutrality. The Taxonomy is an important element in the sustainable finance toolkit to help fund the Green Deal.

The spike in energy prices that the EU is facing is a major concern for the European Commission. Supporting a clean energy transition would allow us not just to avert the disastrous impacts of climate change but also to reduce the EU's vulnerability to fossil fuel price volatility. In the medium term, our policy response should focus on making the EU more efficient in the use of energy, less dependent on fossil fuels and more resilient to energy price spikes, while providing affordable and clean energy to end-users. The Complementary Delegated Act is part of these efforts and aims to drive the EU towards the required green transition to a decarbonised economy.

Aren't you exacerbating EU dependence on gas from third countries?

The Taxonomy does not favour any one source of energy from a specific region. Investment decisions remain commercial decisions based on many economic and financial factors.

The European Green Deal and its ambitious climate and energy objectives are our best guarantee to reduce our energy dependency (by increasing investment in renewable energy sources). By creating a strong home market, we are seeing the EU clean tech industry thrive as part of the ongoing economic recovery, supported by funding for environmental goals under the [EU Recovery and Resilience Facility](#).

This Complementary Climate Delegated Act recognises the role that certain energy activities can play in supporting decarbonisation, for a limited period of time, until better alternatives based on renewable or low-carbon technologies are sufficiently developed.

2. Content of the Delegated Act

What activities and accompanying criteria does the Complementary Climate Delegated Act introduce?

Today's Complementary Climate Delegated Act:

- **introduces additional economic activities from the energy sector into the EU Taxonomy.** The Delegated Act includes in particular certain nuclear energy activities that can play a role, under strict conditions regarding nuclear and environmental safety (also related to waste disposal), in the EU's transition towards climate neutrality. It also covers some gas energy activities as transitional activities, subject to specific conditions which recognise the role gas can play to help some regions transition from the most polluting solid fossil fuel energy sources, such as coal, to renewable energy.

- **introduces specific disclosure requirements for businesses related to their activities in the gas and nuclear energy sectors.** Those requirements should further enhance the information provided to investors and improve transparency.

More specifically, this Complementary Climate Delegated Act covers the following activities:

Nuclear-related activities:

1. Advanced technologies with closed fuel cycle ("Generation IV") to incentivise research and innovation into future technologies in terms of safety standards and minimising waste (with no sunset clause);
2. New nuclear power plant projects for energy generation, which will be using best-available existing technologies ("Generation III+"), will be recognised until 2045 (date of approval of construction permit);
3. Modifications and upgrades of existing nuclear installations for the purposes of lifetime extension, will be recognised until 2040 (date of approval by competent authority)

Gas-related activities:

1. Electricity generation from fossil gaseous fuels
2. High-efficiency co-generation of heat/cool and power from fossil gaseous fuels
3. Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system

Each gas-related activity needs to meet either of the following emission thresholds:

- lifecycle emissions are below 100gCO₂e/kWh, or
- until 2030 (date of approval of construction permit), and where renewables are not available at sufficient scale, direct emissions are below 270gCO₂e/kWh or, for the activity of electricity generation, their annual direct GHG emissions must not exceed an average of 550kgCO₂e/kW of the facility's capacity over 20 years. In this case, the activity must meet a set of cumulative conditions: e.g. it replaces a facility using solid or liquid fossil fuels, the activity ensures a full switch to renewable or low-carbon gases by 2035, and a regular independent verification of compliance with the criteria is carried out.

What are the amendments introduced to the Delegated Act on disclosures under Article 8 of the Taxonomy Regulation?

In order to provide a high degree of market transparency regarding investments in natural gas and nuclear energy activities covered by this Delegated Act, financial and non-financial companies should present specific disclosure requirements that would show to what degree gas and nuclear energy activities, complying with the technical screening criteria, is in the numerator and denominator of the key performance indicators of those undertakings. This should help investors to distinguish among activities they invest in. With the help of this specific disclosure requirement, investors that are not willing to invest in nuclear and gas activities under the conditions in this Delegated Act would be able to identify and invest in activities and financial products that have no exposures to economic activities in the nuclear and gas sectors.

In addition, in order to provide a high degree of transparency to investors in financial products concerning exposures to fossil gas and nuclear energy activities, the Commission will explore amending further the disclosure framework pertaining to those financial products as appropriate, to provide for full transparency over the whole life of those financial products. To ensure that such information is clearly identified by end-investors, the Commission will consider amending the requirements on the financial and insurance advice given by distributors.

How did you amend the Complementary Climate Delegated Act following the consultation?

As a result of the feedback, adjustments to the technical screening criteria and disclosure and verification requirements were introduced to reinforce notably their clarity and usability. Some criteria were made more flexible, to reflect commercial availability and technological readiness. Specific adjustments were made to make certain criteria more workable across Member States. Transparency and verification requirements were reinforced to improve information and credibility towards investors.

3. **Process**

Why did the Commission not launch a public consultation? Why was the European

Parliament not formally consulted? How will stakeholders benefit?

The Commission signalled its intention in April 2021 to come forward with a Complementary Climate Delegated Act to help accelerate the transition to a cleaner energy future. The Commission prepares and adopts delegated acts after consulting expert groups, composed of representatives from each EU country. The Platform on Sustainable Finance (PSF) and the Member States Expert Group on Sustainable Finance (MSEG) must be consulted on all Delegated Acts under the Taxonomy Regulation, given their expert role foreseen by the Taxonomy Regulation. As part of the process, the European Parliament receives the same information as Member States, and is invited to submit its views.

The relevant issues concerning natural gas and nuclear energy in relation to the Taxonomy have been in the public domain since 2020, marked by extensive exchanges, expert analysis and stakeholder feedback. Various stakeholders have expressed their positions on nuclear and gas on multiple occasions over the last months and years. The Commission has built on this to present a targeted compromise subject to consultation.

There have been significant public deliberations around the Taxonomy Regulation, the work of the Technical Expert Group, and the finalisation of the first Climate Delegated Act. The issues on gas and nuclear have also been discussed several times with Member States and the European Parliament during the course of these discussions. Stakeholders have submitted extensive feedback to the Commission on these activities, based on the options discussed for the first draft of the Climate Delegated Act for gas-related activities, and on the JRC report and expert committee reviews for nuclear-related activities. A general public consultation for the proposal was not envisaged, given the involvement of experts through a specific review process for an in-depth assessment of the DNSH aspects set out for nuclear energy and the consultation of the PSF and MSEG. First, a [technical assessment of nuclear energy](#) under the Taxonomy Regulation (and the DNSH criterion) was prepared by the Joint Research Centre (JRC), the European Commission's science and knowledge service. That report was published and reviewed by Member States' experts on radiation protection and waste management appointed by the [Scientific and Technical Committee under Article 31 of the Euratom Treaty](#), as well as by experts from the [Scientific Committee on Health, Environmental and Emerging Risks](#) (SCHEER). As a result, in line with the requirements of the Taxonomy Regulation (including Articles 10(3), 11(3), 20(2), 23(4) and 24(2)), the activities covered in the Complementary Delegated Act have undergone extensive analysis and scrutiny in the preparatory phase and benefitted from input from a wide range of experts.

In addition to the consultation with the Platform on Sustainable Finance and Member States experts before adoption, this Delegated Act will also be subject to a scrutiny period by the co-legislators (see specific question). Similar to the first Climate Delegated Act, the European Parliament and Council will have four months to formulate any objections, and two additional months if they deem necessary. Once the scrutiny period is over and assuming neither of the co-legislators objects, the Complementary Delegated Act will enter into force.

Why did the Commission not include gas and nuclear into a new category of activities distinct from the current Taxonomy?

The Commission appreciates the assessment by some. For example, the Platform on Sustainable Finance, that some of the activities and criteria would be more appropriate in a possible future Taxonomy category of the framework encompassing "intermediate" or "amber" environmental performance levels, distinct from the current Taxonomy, on which the Platform is preparing proposals. The Platform is mandated to help design a transition Taxonomy framework that works across markets – and it remains fully valid. The Commission welcomes the conceptual work of the Platform in this respect and looks forward to seeing the final report in the near future.

Without pre-empting the final outcome of the work by the Platform, the Commission, after lengthy consideration, has taken the position that the urgency of the transition-imperative can be to the extent possible addressed, in part, through the Taxonomy Regulation as it stands today. It is crucial to make full use of existing provisions of the Taxonomy Regulation, given the urgency of the climate crisis. This possibility was outlined in the Commission Communications of April and July 2021 on upcoming steps regarding sustainable finance.

Developments since then, including in energy markets and Member States' emissions trajectories, have only reinforced the need to act now, where we can.

What is the timeframe for the implementation of this Delegated Act? Will there be a phased-in entry into force of this Delegated Act?

After the scrutiny period of the European Parliament and the Council, this Delegated Act is expected to apply as of 1 January 2023. The application date has been set out to provide stakeholders with

sufficient time to assess whether their economic activities comply with the technical screening criteria under this Delegated Act and to report on the basis of that assessment.

Once adopted, will this Delegated Act be reviewed?

The Taxonomy Regulation provides for future reviews of the technical screening criteria set out in this Complementary Climate Delegated Act every three years following their application. This will concern in particular the appropriateness of the time limits provided by the Delegated Act for the recognition of contributions of certain gas and nuclear energy activities to climate change mitigation.

How long will the scrutiny period by the co-legislators last?

Similar to the first Climate Delegated Act, the European Parliament and the Council (who have delegated the power to the Commission to adopt this Delegated Act) will have four months to scrutinise the document, and, should they find it necessary, to object to it. In line with the Taxonomy Regulation, both institutions may request an additional two months of scrutiny time. The Council will have the right to object to it by reinforced qualified majority (which means that at least 72% of MS (i.e. at least 20 MS) representing at least 65% of the EU population are needed to object to the DA), and the European Parliament by a majority of its members (i.e. at least 353 MEPs) in Plenary.

Once the scrutiny period is over and assuming neither of the co-legislators objects, the Complementary Climate Delegated Act will enter into force and apply.

For More Information

[Press release: EU Taxonomy: Commission presents Complementary Climate Delegated Act to accelerate decarbonisation](#)

[Factsheet](#)

[Taxonomy Complementary Climate Delegated Act](#)

[EU taxonomy for sustainable activities](#)

[FAQ: What is the EU taxonomy and how will it work in practice?](#)

[FAQ: What is the EU taxonomy Article 8 Delegated Act and how will it work in practice?](#)

[FAQ: Interpretation of certain legal provisions of the Disclosures Delegated Act under Article 8 of EU Taxonomy Regulation on the reporting of eligible economic activities and assets](#)

[DG FISMA's website on sustainable finance](#)

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