



INTERNATIONAL SUSTAINABLE FINANCE CENTRE

EU Taxonomy Complementary Delegated Act

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EU Taxonomy Complementary Delegated Act: Re-defining sustainability? Why gas & nuclear are not green

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Early this year, the European Commission's draft text of the EU Taxonomy Complementary Delegated Act (CDA) was widely leaked, which notably included gas and nuclear as green assets in the Taxonomy classification system. The inclusion goes against the recommendations of the Platform for Sustainable Finance experts, and has caused a significant [backlash](#). Labelling gas and nuclear as sustainable economic activities, undermines the credibility of the Taxonomy and contradicts the principle of a science-based Taxonomy. If the CDA is adopted, there will be a risk of new investments in gas and nuclear infrastructure and projects which will undermine the EU's efforts to reach its own carbon neutrality targets. It also increases the risk of stranded assets and greenwashing, and of a delay in transitions to low carbon growth. Especially in Central and Eastern Europe, gas will likely play an important role in the transition from coal – labelling gas as green risks crowding out investments in renewables and reducing the pressures to rethink the energy systems. As [analysis](#) by Bellona Europe has shown, the planned shifts to renewables gases at gas plants also is risky: a gas power plant using 100% renewable hydrogen could consume 2.8 times the electricity it would produce.

Key points

- The Taxonomy is a non-prescriptive classification system that granularly lists scientifically verified sustainable activities. Designed rigorously by an expert group, it could become a global gold standard to combat greenwashing. Yet, it is currently under risk to become a gateway for greenwashing unsustainable activities.
- Even if countries rely on gas and nuclear energy for the transition, the inclusion of these unsustainable sources of energy in the Taxonomy is unnecessary and counterproductive. They can still be financed. EU member states are guided by emission targets, but remain independent to choose their energy mix.
- Labelling nuclear energy and gas as green risks misallocating capital to potential stranded assets. The Taxonomy also risks supporting a highly inefficient hydrogen production pumped through gas pipelines.
- Nuclear energy is incompatible with the 'Do No Significant Harm' (DNSH) criteria of the Taxonomy which is why it cannot be labelled green. Regardless of its classification, nuclear energy is costly, risky and effectively uninsurable. Thus, it is difficult to justify its role in the energy transition when better options are available.
- The conditions for green gas allow gas-fired power plants to emit a staggering 11 tonnes of CO₂e per kW of capacity over 20 years before they are mandated to offset their emissions. To meet the criteria for a green gas label, companies rely on large-scale deployment and effectiveness of carbon capture & storage (CCS) technologies which are currently insufficient and impracticable.
- The criteria leaves significant loopholes for opportunistic interpretations and even fraud. By leveraging the green gas label, fossil infrastructure benefitting from sustainable financing (such as green bonds) up to the emission threshold and then switching to conventional bond financing once the limit is reached, contradicts the intention of the Taxonomy - yet it would be completely legal. Eventual penalising of breaches will be contractual responsibility of the investor who, however, will have no incentive to do so.
- Fossil energy should be gradually phased out mixing in renewable gases, such as blue hydrogen, yet this process is proved to be economically inefficient and technologically unfeasible. Adoption in its current form would harm the Taxonomy's scientific consistency and its legitimacy, which in turn endangers global decarbonisation efforts for achieving net-zero.
- The CDA and the green label of nuclear energy and gas "through the backdoor" is the result of intense lobbying and strongly politicised negotiations.



The EU Taxonomy

The EU Taxonomy is a classification framework that distinguishes economic activities according to their alignment with long-term sustainability from various perspectives, such as climate change mitigation and adaptation.

It is not prescriptive and is not an instrument of enforcement (although it can be used as a benchmark for rules) but is meant to serve as a tool for ordering and standardisation of what constitutes sustainable economic activities. It is meant to ensure that all project owners and investors (such as EU Member States) speak the same language when labelling economic activities sustainable, but it does not have the power to push or restrict investors to investing in specific fields or types of investments unless they independently decide to pursue investments with this classification.

EU Member States still retain the decision-making power as to how they plan and implement their energy transitions, or any other transitions to low carbon economic growth. It also means that countries have the power to decide on their own energy mix.

Concrete formulations of the classification proposed by responsible experts in the EC (specifically in the EU Platform on Sustainable Finance; the Platform) are incorporated into the EU legislature through the so-called delegated acts that go through the usual EU legislative process. Delegated acts are supposed to examine technical screening criteria only.

The first delegated act covering the climate mitigation and adaptation objectives was adopted in June 2021. At the moment, a Complementary Delegated Act (CDA) proposing the inclusion of gas and nuclear energy as sustainable activities under certain conditions is being discussed in the EC (through the backdoor, with rather limited consultation with experts only (no civil society) until January 21st). Other remaining delegated acts covering the other four environmental objectives (sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems) are expected for later in 2022 ([European Commission, 2022](#)).

What does the CDA propose and what are the shortcomings?

Negotiations about classification under EU Taxonomy have led to a number of disputes among EU member states with different interests and priorities. While Germany is fine with the inclusion of gas into the Taxonomy, it is opposed to nuclear energy. France is insisting on adding nuclear, but it opposes gas.

Unfortunately, some countries hope to maintain the status quo of the old fossil fuel business models in the context of an uneasy energy system decarbonisation. Specifically, the current CDA, lobbied for mainly by Bulgaria, Croatia, Czech Republic, Finland, France, Hungary, Poland, Romania, Slovakia and Slovenia, is proposing to label nuclear and gas energy investments as sustainable under unrealistic and very problematic conditions ([World Nuclear News, 2021](#)). The main issue is that prolonged reliance on gas will negatively affect the competitiveness of their businesses and economies.

Nuclear energy

While generating electricity by using nuclear reactors is less emission-heavy than coal or gas, it goes against the critical Do No Significant Harm or DNSH criteria with respect to environmental objectives other than climate mitigation and adaptation. In particular, the still unresolved question around nuclear waste disposal makes the energy source incompatible with the “pollution prevention and control” objective. This does not automatically mean that nuclear cannot play a role in the energy transition to varying degrees for different countries, but it simply cannot be labelled as green because it does not meet the scientific criteria fundamental to the EU Taxonomy.

In addition, nuclear energy is by multiples more expensive than renewable energy sources, making it an unattractive asset for private investors. Both the risks of nuclear accidents and its high costs make nuclear energy economically unviable and effectively uninsurable, relying vastly on public subsidies. It is therefore unfit to play a significant role in the energy transition ([Jaczko, 2022](#)). This means that all the risks and costs need to be absorbed by the sovereign governments.

Gas energy

The CDA proposes that electricity generation and (“efficient”) heat/cool co-generation will be “green by law” if either A) or B) applies:

A) Life-cycle emissions are below 100 g CO₂e/kWh annually, which requires using carbon capture and storage (CCS) technologies that are still too underdeveloped to be taken seriously in such planning (less probable scenario).

B) All conditions below apply (more probable scenario considering the CCS situation):

B.1) Construction permission obtained before 31 Dec 2030.

B.2) Direct emissions below 270 g CO₂e/kWh or 550 kg CO₂e/kW of annual average over 20 years period, ie. 11 tonnes of emissions in total, (second option applies only to electricity generation) and a “credible trajectory” plan that would be verified annually. Specific plan would be included in a private contract with an investor who will be responsible for the enforcement.

➤ This is a serious blow to the emission targets originally recommended by the EC expert group, and a hardly surmountable roadblock for emission reduction efforts.

➤ It is not clear how many projects would meet the criteria ([Andreas Hoepner, 2022](#)):

- According to experts, it might be over 11 GWe or even 14 GWe including Poland that is currently non-compliant for conditions below.
- The annual 270 g threshold will hardly be met by any gas power plant, however, the 20-year 550 kg threshold is more flexible and offers space for emission-heavy compliance strategies. A gas project can pursue 20-year path, start as green promising future CCS and being financed as sustainable and, once emission limit reached and CCS still unworkable, facilities will have to shut down or lose their green labels.

➤ The fact that the Commission chose reporting of direct emissions instead of lifecycle brings significant risk of ignoring major footprint which will not be accounted for.

- The enforcement mechanism is unrealistic, since the investor will have no incentive to sanction and harm their own investments. Alternatively, the Commission will have to enforce the rules, strip facilities of their green labels and thus come into conflict with private investors that have such plants in their portfolios.

B.3) It is not efficient to replace the power generation by renewable energy sources.

- No specific criteria are given to assess “efficiency”:
 - Superior economic efficiency of renewables compared to gas was proven ([Graham et al., 2021](#); [Lazard, 2021](#)). Equally, superior efficiency of renewables compared to CCS deployment ([Grant et al., 2021](#)).
- Even though there are efficient alternatives, fossil businesses are interested to proof them inefficient since they are out of their business model comfort zone. Those businesses will be the first ones to use the interpretation loophole.

B.4) It replaces another fossil-based (coal and oil) electricity generating facility (new cannot be bigger than 115% of the former) and heat/cool facility (100%).

B.5) “Facility demonstrates it has a plan to move to renewables or low carbon gases”, ie. gases that produce 30% less emissions by 1 January 2026 and 55% by 1 January 2030.

- It will be extremely complicated for most gas plants to get enough hydrogen to mix in, only few will be able.
- Moreover, if they do, mixing biofuels is proved to be extremely inefficient – up to point when as much as 2.8-times the amount of energy would be consumed by the facility to mix the fuels (100% green hydrogen in this case) compared to the amount generated (= efficiency loss of 64%) ([Nagell, 2022](#)).
- It is unfeasible and irrational at the current stage of development to switch to hydrogen by using the existing gas infrastructure, since it might lead to physical damage of the infrastructure and additional environmental harm ([Howarth & Jacobson, 2022](#)).
- This condition is clearly based on the old discussion about the hydrogen- and renewable gases-based transition of energy sector, which, however, has been proved wrong a while ago.

B.6) Built in a member state that officially and concretely committed to coal phase out and "reported this in its integrated national energy and climate plan (...) or in another instrument”.

- Poland has no plan and is excluded; Slovenia has a plan in discussion but not specific enough to be included; Czechia has a plan in discussion and can be included or excluded depending on the interpretation (so far, commitments are very vague).

The issues with gas inclusion

First, even though the CDA is supposed to provide key technical guidance, it leaves more questions than answers. In general, the expert community points out that clear definitions are either missing or confusing leaving loopholes for opportunistic interpretations.

Secondly, the CDA provides a massive incentive for gas investments with substantial risk of future stranded assets, and, in effect, derails investments needed to phase fossil fuels out for good and scale up truly sustainable alternatives, such as renewable energy. Once they reach the emission threshold, invested facilities will have to work with CCS (which is currently unworkable), shut down operations and remain stranded, or lose their green labels. Since the Taxonomy is directly linked to standards in financial markets, labelling gas green will enable issuance of green bonds (increasingly popular with ESG-interested investors) to finance gas infrastructure, and thus cannibalise part of the market key for other, more sustainable solutions.

Thirdly, the CDA condones an unjustifiable huge amount of emissions for coming decades and brings uncertainty when it comes to global decarbonisation efforts. If the CDA proposal goes through, the EU and global net zero targets will be jeopardised.

Lastly, the proposed conditions, specifically the emission limits, apply double standards to different technologies (gas vs. renewables) and thus lose any technological neutrality. In other words, if the CDA is adopted, it will harm the Taxonomy's consistency and legitimacy. What used to be an initiative to provide technical guidance to avoid greenwashing, risks becoming a greenwashing tool itself. It is absolutely critical to maintain a Taxonomy that is science-based, and that relies on technical evidence, as argued and outlined in a comprehensive analysis by [Climate Strategy & Partners](#).

The most alarming fact is that negotiations about those conditions are taking place in the presence of all EU Member State governments. They must know by now that the design of the CDA is entirely incompatible with the science-based criteria, ie. that supporting gas endangers long-term sustainability of life on our planet.

The upcoming process

Once the Commission forwards the proposal to the European Parliament and the European Council (exact date unknown, second half of January), no further amendments to the proposal are possible and it can either be accepted or rejected by the co-legislators.

The Delegated Act has already been sent to MEPs, EU Member States and the Platform experts on the 31st of December. They can provide feedback until 21st of January (original 12th of January deadline was extended due to an uproar about the short time for feedback). It is important to note that this procedure is highly unusual and unreasonable, especially considering the limited timeline for experts to provide input in less than two weeks which includes the holiday season. It is a welcome sign that the Platform's members managed to convince the Commission to extend the deadline for their feedback. It is also welcome that a number of organisations have been able to submit analysis on why gas and nuclear should not be included in the Taxonomy, such as [CAN Europe](#), [Climate Strategy & Partners](#), [The Club of Rome](#), [E3G](#), [Transport & Environment](#), and even the [International Institutional Investors Group on Climate Change](#), amongst others.



In a last-minute rush, the Platform even announced to “modify its usual consensus-based approach to provide feedback from individual members' in response.” Only on January 11, the Platform’s Chairman confirmed to switch back to its “usual work progress, synthesising member feedback and providing a single Platform report” due to the Commission’s deadline extension for feedback until 21st of January. ([Nathan Fabian, 2022](#)).

The Commission said it will analyse these contributions and formally adopt the CDA in January 2022. It will then be sent to the co-legislators at the European Parliament and the European Council who will have four months to examine the document (until around the end of May). In line with the Taxonomy Regulation, both institutions may request an additional two months of scrutiny time (until around end of July). Once the scrutiny period is over, and assuming neither of the co-legislators object, the CDA will enter into force and apply. Without objection of the co-legislators, the act will be automatically adopted.

To reject the proposal, either a qualified majority in the Council (practically unrealistic as many member states expressed their support of the CDA) or simple majority in EP (unlikely but more realistic) is necessary. At the same time, Italy and Austria are becoming more critical about the CDA and the latter might even consider to sue before the European Court of Justice.

Many experts from the NGO community are accusing the EU negotiations of being highly politicised, especially in relation to the French context where greening nuclear might be crucial in President Macron's potential re-election. At the same time, Germany’s strong opposition to nuclear has led to its more flexible stance on gas which is arguable more problematic from the standpoint of CO2 emissions.

We strongly believe that the CDA in its current form can be very harmful to the efforts of global decarbonisation and long-term sustainability, and that it should be rejected by the legislators. If it is not, we hope that other countries will keep their sustainability principles consistent (or other players introduce new, greater ambition levels). We also hope that the EU does not lower its ambitions and does not water down the upcoming Delegated Acts, as it would harm its credibility as a global standard setter and be counterproductive for its efforts to introduce policy coherence for decarbonisation and transition to net zero emissions.



Get in touch

If you have any questions regarding the EU Green Deal and the Taxonomy, please get in touch with our team:



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