Umwelt Bundesamt

German Environment Agency

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No Greenwashing of the EU's Anti-Greenwashing Taxonomy

Comment on Draft Commission Delegated Act on the Inclusion of Nuclear Power and Fossil Gas in the EU Taxonomy

1 Executive Summary

The taxonomy is a transparency tool for the financial markets aimed at providing guidance for environmentally sustainable investments and preventing greenwashing. It includes activities that are deemed to make a substantial contribution to at least one of the EU's environmental objectives, while at the same time not doing significant harm to any of the other environmental objectives[1].

Activities which are not included in the EU Taxonomy are still perfectly legal to perform and invest in. They are just not officially labelled by the EU as being environmentally sustainable. There are objectives beyond environmental sustainability that the energy system is supposed to meet, like security of supply, energy efficiency, or reduction of energy poverty. These objectives are, however, not included in the Taxonomy, as the Taxonomy's focus is on providing science-based guidance on the environmental sustainability of economic activities. If the different objectives are intermingled, the Taxonomy will not be able to function as intended.

The draft Complementary Delegated Act (draft CDA)[2] proposes to include nuclear power and fossil gas in the Taxonomy as activities which are transitional in nature, based on Article 10(2) of the Taxonomy Regulation (EU 2020/852). This article requires that transitional activities have "*no technologically and economically feasible low-carbon alternative*", do "*not hamper the development and deployment of low-carbon alternatives*" and do "*not lead to a lock-in of carbon-intensive assets, considering the economic lifetime of those assets*". As explained below, these conditions are not fulfilled by either nuclear power or fossil gas.

Nuclear power

The draft CDA proposes to include nuclear power in the Taxonomy largely based on a plant fulfilling the Euratom Treaty and the relevant member state having a plan for a high-level radioactive waste disposal facility until 2050.

Nuclear power generation is not a transitional activity according to the criteria set out in Article 10(2) of the Taxonomy Regulation, as there exist low carbon alternatives which are technologically and economically feasible. These alternatives are specified in the first Climate Delegated Act (Climate DA, EU 2021/2139). Therefore, there is no legal basis for including nuclear power as transitional activity in the Taxonomy.

Beyond that, nuclear power doesn't comply with the Taxonomy's do-no-significant-harm (DNSH) principle. The disposal of high-level radioactive waste is as yet unresolved, with no

[1] These objectives are climate change mitigation and adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems.
[2] Draft Delegated Regulation amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities

disposal facility actually being operational in the EU and offering empirical evidence or scientific analyses of the technical and economic feasibility and the long-term environmental effects of high-level radioactive waste disposal. As emphasized by the group working on DNSH criteria for nuclear power in the Technical Expert Group (TEG)[3], a technology which leaves significant amounts of highly problematic waste to future generations cannot be considered as complying with the precautionary and do-no-significant-harm principles. Further, no presently available technology of nuclear power generation can rule out the occurrence of major accidents. Although the risk of accidents may be very small, combined with the potentially immense damages caused by such accidents it constitutes a breach of the DNSH principle. Finally, there are no criteria specified for the Uranium mining and processing required to run the plants.

Fossil gas

The draft CDA proposes to include electricity generation and cogeneration of heat/cool and power from fossil gas based either on fulfilling the criterion of the first Climate DA of 100g/kWh life-cycle emissions (criterion 1(a)) or emitting no more than 270g/kWh of direct emissions or 550kg/kW of average direct emissions over 20 years, combined with a number of side-conditions including the stepwise replacement by "renewable or low-carbon gases" (criterion 1(b)). Criterion 1(b) only applies to plants that receive permission until December 31, 2030.

Similar to nuclear power, power generation from fossil gas exceeding the first Climate DA's threshold of 100gCO_2e/kWh life-cycle emissions does not fulfil the criteria for transitional activities of Article 10(2) of the Taxonomy Regulation, as there exist the low carbon alternatives included in the first Climate DA which are technologically and economically feasible. Thus, fossil gas has no legal basis for being included in the Taxonomy as transitional activity.

Beyond that, the criteria proposed under 1(b) mean that there is virtually no threshold on emissions per kWh in the next ten years, and emissions exceeding the threshold of 100g/kWh life-cycle emissions even beyond 2050 may be deemed sustainable. The criteria set incentives to build a high number of gas power plants (potentially up to the present capacity of oil and coal plus 15%) rather than to develop technologies to directly use electricity, creating significant lock-in effects. Since the draft CDA does not specify or set criteria for the *renewable and low-carbon gases* which are supposed to replace fossil gas, it creates incentives to use, e.g., blue hydrogen or hydrogen from nuclear-power generated electricity as replacement, and disincentives to invest in renewable technologies which fulfil the criteria of the first Climate DA. It thus contradicts Art. 10(2) (b) of the Taxonomy Regulation which requires activities not to *"hamper the development and deployment of low-carbon alternatives"*. It would also lead to a surge in demand on bio-methane with the resulting adverse effects on ecosystems and biodiversity.

The draft CDA also contradicts the principle of technology neutrality, and the requirements of the criteria to be based on science and to consider life-cycle rather than just direct emissions, that are all stipulated in the Taxonomy Regulation. In addition, it implies that the Taxonomy alignment of the respective investments are almost impossible to verify, resulting in substantial uncertainty for companies, verifiers and investors.

Implications

The draft CDA could draw private and public investments towards new nuclear power plants and a potential replacement of the complete coal infrastructure by gas power plants. These investments would then not be available for the development and deployment of low-carbon renewable energy. Focusing on gas power plants could also reduce the incentives for the

[3] The Technical Expert Group was the predecessor of the Platform on Sustainable Finance and developed recommendations for the criteria of the first Climate DA.

development of electrified industry processes, energy efficiency measures etc. Both effects would lead the EU economy away from reaching the goals of the European Green Deal. The environmental implications of and the uncertainty resulting from the draft CDA would substantially impede the uptake of the Taxonomy by sustainability-oriented investors[4], and prevent the Taxonomy from becoming an international role model for sustainable finance.

The amount of emissions which could be classified as sustainable under the draft CDA has been calculated to amount to approx. 1.4 billion tons of CO_2e[5] if all coal plants were replaced by gas using the 550kg/kW limit average over 20 years. These calculations do not yet include the emissions resulting from the use of gas beyond the 20-year period covered by the draft CDA, the real diffuse methane emissions from fossil gas extraction, processing and transport, or the additional emissions resulting from hampering the development and deployment of renewable or energy-efficient alternatives. In addition, as the draft CDA fosters the extension of existing and the construction of new nuclear power plants it will lead to a further increase in high-level radioactive waste and a persistent risk of major nuclear accidents.

Recommendations

We recommend not to include nuclear power in the CDA. For fossil gas we recommend to retain the science-based criterion of 100g/kWh life-cycle emissions which is consistent with the first Climate DA (criterion 1a)), and delete the additional, weaker criteria under 1b).

If the European Commission deems nuclear power and fossil gas necessary to "*cover the energy demand in a continuous and reliable manner"* (recital 6) or as a stability reserve during the transition to a fully renewable and environmentally sustainable energy system, instead of including them in the Taxonomy it could regulate the two technologies separately, e.g., in a level one regulation as part of the Fit-for-55 package or in an extension of the Taxonomy for activities that do not meet the substantial contribution criteria but can move away from significant harm.

In such a separate regulation the issues of nuclear waste and nuclear accidents should be addressed more stringently than in the draft CDA, and sunset clauses set more tightly. Regarding fossil gas, this regulation would need to set yearly caps based on emission thresholds with a clear, decreasing trajectory and specify the emission thresholds and DNSH criteria for renewable and low-carbon gases meant to substitute for fossil gas. It would also need to set sunset clauses compatible with the Paris climate targets, and such as not to hinder the development and deployment of technologies supporting the complete decarbonization of the economy (energy efficiency, electrification of industry processes etc.) and create lock-in effects. Finally, the regulation would need to address the questions on usability and reporting that are left open in the draft CDA.

[4] See, e.g., the call of the Institutional Investors Group on Climate Change (IIGCC) to exclude gas from the Taxonomy: www.iigcc.org/news/iigcc-publishes-open-letter-calling-for-gas-to-be-excluded-from-the-eu-taxonomy/

[5] Hoepner, A., 2022: Taxonomygate; https://www.environmental-finance.com/content/analysis/taxonomygate.html

2 General remarks

The Taxonomy was developed as a tool that provides transparency to the financial markets regarding sustainable investments. Its main aim is to provide guidance to investors and to prevent greenwashing (Recital No. 11 Taxonomy Regulation (EU) 2020/852).

Activities not included in the Taxonomy are still perfectly legal to perform and invest in. They are just not officially labelled by the EU as environmentally sustainable. There are a number of objectives beyond sustainability that the energy system is supposed to meet, like security of supply, energy efficiency, or reduction of energy poverty (Article 1 (2) Governance Regulation (2018/1999/EU). These objectives are, however, not part of the Taxonomy, as the Taxonomy's focus is to provide science-based guidance on the environmental sustainability of economic activities rather than general policy guidance at the level of the energy system. If these objectives and perspectives are intermingled, the Taxonomy will not be able to function as the clear activity-based guidance intended. The questions raised by these further objectives are of systemic nature and should be dealt with elsewhere.

Article 20 (2) of the Taxonomy Regulation specifies a broad range of advisory services that the Platform on Sustainable Finance is to provide to the European Commission, including on the technical screening criteria, their usability, costs and benefits. These services require that the Platform be consulted during the development of the criteria with sufficient time to perform a thorough, science-based analysis. In the case of the draft CDA the Platform has not been involved in the development of the criteria, and has only been given three weeks time to comment on them. This is insufficient to develop detailed, science-based recommendations on all the proposed criteria. Earlier works of the TEG and the consultation on the first Climate DA referred to in Chapter 2 of the draft CDA "Consultations prior to the adoption of the Act" cannot substitute for an appropriate consultation of the Platform, as neither was closely related to the criteria of the draft CDA.

Finally, the European Commission so far did not announce to hold a public consultation on the draft CDA. This seems inappropriate given the draft CDA's importance and wide-ranging consequences, and cannot be justified by urgency as the draft CDA shall only apply from 1 January 2023 at the earliest.

3 Nuclear Power – Activities 4.26, 4.27, 4.28

3.1 Character of the activity

Activities 4.26, 4.27 and 4.28 refer to the development of nuclear technologies, the construction and operation of new nuclear power plants and the modification and extension of existing plants, respectively. They are included in the draft CDA as activities as referred to in Article 10(2) of the Taxonomy Regulation (EU) 2020/852. This article requires that for the activity in question there "*is no technologically and economically feasible low-carbon alternative*". This is not the case for nuclear power, as is proven by the inclusion of renewable energy activities in the first Climate DA (EU 2021/2139, Annex I chapter 4). Hence, there is no legal basis for including activities 4.26, 4.27 and 4.28 as transitional activities in the Taxonomy.

The aspect that the source of energy is available *"at a sufficient scale to cover the energy demand in a continuous and reliable manner"*, which is mentioned in recital (6), does not reflect Art 10 of the Taxonomy Regulation and can therefore not justify the inclusion of nuclear power in the draft CDA.

Nuclear power plants have high capital cost and are designed to operate with high full load hours. For technical and economic reasons, they will provide very limited system flexibility and will not be able to balance intermittent renewable energy sources like solar or wind. Depending on capacity market design for nuclear power plants, even negative effects on European electricity markets are likely, e.g., when nuclear power plants still operate in situations with high renewable energy supply. It is therefore crucial that nuclear power plants operate without adversely affecting spot markets, particularly when electricity prices are low or negative.

3.2 Compliance with DNSH

The assessment of the Technical Expert Group (TEG) regarding the compliance of nuclear energy with the DNSH principle resulted in the recommendation not to include nuclear energy in the EU Taxonomy.[6] This conclusion was reached, among others, as a result of analyzing the issues of nuclear waste disposal and risk of nuclear accidents.

3.2.1 High-level radioactive waste disposal

High-level radioactive waste has extremely long Half-live, creating environmental liabilities for many generations. No final disposal facility for high-level radioactive waste is currently in operation in the EU, such that there is no experience or scientific data to draw upon in their evaluation. The environmental effects, and the technical and economic feasibility of such disposal facilities can therefore not be assessed, neither in the short run nor for the extremely long periods of time these facilities will need to be safely operated. This contradicts the do-no-significant-harm principle and the precautionary principle required by Article 19(1) of the Taxonomy Regulation.

The draft CDA requires the member state where the plant is operated to have a plan to build a disposal facility for high-level radioactive waste until 2050. However, the draft CDA does not specify minimum requirements either for the plan or for the planned disposal facility itself. This makes it impossible to assess the reliability of these plans or the appropriateness of the disposal facility, and hence to evaluate alignment with the criteria. Beyond that, the member state needs to report on the progress on the plan for the disposal facility, but no minimum requirements for this progress are specified. Relying on the plan means that the draft CDA does not require disposal facilities to be operational at the time when the high-level waste is produced. This

[6] www.elseurope.eu/event/europ-es-science

deviates from the treatment of other activities, which are required to fulfil emission or safety criteria already at the time of the evaluation, rather than several decades later. This contradicts the principle of technology-neutrality.

Further, the draft CDA requires the member state where the activity is located to have in place "a radioactive waste management fund and a nuclear decommissioning fund" and to commit to reporting every five years on "the adequacy of the accumulated resources" of those funds. However, neither are there criteria specified for the funds themselves, nor for the test of their "adequacy".

3.2.2 Nuclear accidents

Although there is only a small risk of major accidents, there is currently no generation of nuclear power plants in operation for which such accidents can be ruled out. The damages caused by accidents are unpredictable, potentially devastating entire regions (see Chernobyl, Fukushima). Combining very small risks with potentially huge damages results in significant expected harm, which is not compatible with the DNSH principle and contradicts the precautionary principle.

Beyond that the draft CDA requires funds to be available only for the coverage of disposal and dismantling, but not accidents. The Vienna and Paris Conventions on third party liability for nuclear incidents, which may be claimed to provide a "safety net" below the Taxonomy, are not ratified by all member states[7] and even for several who did ratify the 2004 protocol only a small fraction of the potential damages is covered[8]. The draft CDA's (absent) criteria regarding nuclear accidents can therefore not be assumed to comply with the DNSH principle.

3.3 Uranium mining and processing

There are no criteria specified for the mining and processing of the uranium used as feedstock in the nuclear power plants, although both processes have high energy requirements and must be expected to result in significant impacts on the environment.

3.4 Sunset clauses

Sunset clauses are set at 2045 for the construction and operation of new power plants (4.27) and 2040 for the modification and extension of existing power plants (4.28), while there is no sunset clause for the pre-commercial development (4.26). Activities included under Art. 10(2) Taxonomy Regulation (EU) 2020/852 have to be transitional in nature, that is, they are not yet sustainable although they contribute to the transformation. Transitional activities therefore have to make a substantial contribution to reach the EU's climate target of carbon neutrality and need to be replaced by sustainable activities until 2050 at the latest. The proposed sunset dates (or their lack for 4.26) are not compatible with this concept. Nuclear power plants whose permit is issued in 2045 will not produce electricity before 2050, and hence cannot contribute to lowering GHG emissions on the way to climate neutrality in 2050. Given the long construction periods of nuclear power plants, sunset clauses would have to be set at 2025 or 2030 at the latest to make a considerable contribution before 2050. Even then, given the long lifetime of nuclear power plants, which would extend far beyond 2050, they are not compatible with the transition to 100% renewable energy in 2050, as they don't constitute a renewable energy source according to Directive (EU) 2018/2001.

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[7] www.oecd-nea.org/jcms/pl_31514/brussels-supplementary-convention-latest-status-of-ratifications-or-accessions

[8] www.oecd-nea.org/upload/docs/application/pdf/2020-11/cppc_operators_liability_amounts_2020-11.pdf

Hence, the missing or late sunset clauses create a significant lock-in and show that activities 4.26 to 4.28 are not in line with Article 10 of the Taxonomy Regulation since i) nuclear power is not a renewable energy in line with Directive (EU) 2018/2001 as referred to in Article 10(1), point (a), and ii) nuclear power is not a transitional activity as referred to in Article 10(2).

3.5 Recommendations

Nuclear power generation as specified in activities 4.26-4.28 does not fulfil the requirements of Article 10(2) of the Taxonomy Regulation. In addition, the criteria proposed do not comply with the DNSH and precautionary principle in various aspects. We therefore recommend nuclear power activities not be included in the CDA.

If the European Commission deems nuclear power necessary to "*cover the energy demand in a continuous and reliable manner"* (recital 6) during the transition to a fully sustainable energy system, instead of including it in the Taxonomy it could include it – under stricter criteria for DNSH – in a separate regulation, e.g., under the Fit-for-55 package or in an extension of the Taxonomy to activities that do not meet the substantial contribution criteria but can move away from significant harm.

4 Fossil gaseous fuels – activities 4.29, 4.30., 4.31

4.1 Character of the activity

The draft CDA proposes to include electricity generation and cogeneration of heat/cool and power from fossil gas based either on fulfilling the criteria of the first Climate DA (100g/kWh, criterion 1(a)), or emitting no more than 270g/kWh direct emissions or 550kg/kW average direct emissions over 20 years, combined with a number of side-conditions (criterion 1(b)). Criterion 1(b) only applies to plants that receive permission until December 31, 2030.

Similar to nuclear power, power generation from fossil gas exceeding the first Climate DA's threshold of 100gCO2e/kWh life-cycle emissions is not an activity as referred to under Article 10(2) of the Taxonomy Regulation, as there exist *"technologically and economically feasible low-carbon alternative[s]*" specified in the first Climate DA (EU 2021/2139, Annex I chapter 4). Thus, it has no legal basis for being included in the Taxonomy.

The aspect that *"renewable energies that comply with the appropriate threshold are not yet commercially available at a sufficient scale"*, which is mentioned in recital (4) of the draft CDA, does not reflect Art 10 of the Taxonomy Regulation and can therefore not justify the inclusion of activities 4.29, 4.30 and 4.31 as transitional activities in the draft CDA.

4.2 Thresholds on emissions

4.2.1 Direct GHG emissions below 270 gCO2e/kWh

For activities 4.29, 4.30 and 4.31 substantial contribution criterion 1b) specifies that "*direct GHG emissions of the activity are lower than 270g CO2e/kWh of the output energy*". This contradicts the Taxonomy Regulation in several points:

- Article 19 (1) (a) requires to "*respect the principle of technological neutrality*". This means that the threshold of 100gCO2e/kWh life-cycle emissions for electricity generation stipulated in the first Climate DA (EU) 2021/2139 has to be applied to all energy generation activities. The threshold of 270 gCO2e/kWh in the draft CDA contradicts this principle.
- Article 19 (1) (f) requires that the criteria *"be based on conclusive scientific evidence and the precautionary principle enshrined in Article 191 TFEU"*. In the first Climate DA the threshold of 270 gCO2e/kWh is defined as the 'do no significant harm' threshold for climate mitigation. Re-defining this DNSH threshold as a substantial contribution threshold in the draft CDA is inconsistent with the first Climate DA, and contradicts scientific evidence which is reflected in the 100g/kWh life-cycle threshold of the first Climate DA.

  In addition, it can be foreseen that the emission budget of the EU ETS is declining rapidly in future years. Power production with CO2 emissions of 270 gCO2e/kWh is evidently incompatible with rising EUA prices and a declining EU ETS cap in most situations on the electricity markets. The proposed high emissions threshold will therefore pave the way to stranded investments and will make the regulatory framework inconsistent.
- Article 19 (1) (g) requires that the technical screening criteria "*take into account the life cycle*", not just the direct emissions of an activity. This requirement is violated as the 270g/kWh refer to direct emissions of the output energy only.

4.2.2 Capacity criterion of 550kg/kW for electricity generation from fossil fuels

For activity 4.29, instead of the 270g/kWh threshold, criterion 1b) also allows the compliance with a capacity threshold of 550kg/kW. This threshold, however, is not a yearly cap, but must only be complied with over a 20-year average. This results in a factual absence of an emissions threshold for gas-fired power plants, since high emissions in early years can be justified with a planned – or at least alleged – later drop either in emissions per kWh or in operating hours.

The 550kg/kW average over 20 years criterion is inconsistent with the criteria for the future performance of investments (Capex-plans) in the disclosure delegated act (EU 2021/2178). There, Capex plans need to render the activity Taxonomy aligned within five years, or 10 years in exceptional cases.

Further, the 20-year average criterion is virtually unverifiable for either a third-party verifier or an investor. To evaluate taxonomy alignment in year one, verification would require detailed information about emissions and operating hours in years 2-20. Even the most well-meaning operator will have difficulties planning so far ahead, not to speak of the less well-meaning ones. For auditors and investors verification is practically impossible.

Finally, the question of how to deal with non-compliance ex-post is unresolved, e.g., when the 20-year average already exceeds the 550kg/kW threshold after 10 or 15 years. This makes the taxonomy reporting unreliable and results in adverse consequences for its usability for investors, contradicting Article 19(1) (k) of the Taxonomy Regulation, which asks for the criteria to be "easy to use and be set in a manner that facilitates the verification of their compliance".

Given this situation, gas power operators can finance the construction of their power plants through short or medium-term green bonds or loans largely independent of the plants' emissions, and refinance the investment with non-green financial instruments once it becomes obvious that they don't meet the 550kg/kW criterion. This contradicts the purpose of the Taxonomy to prevent greenwashing.

4.2.3 Substitution by renewable or low-carbon gases

Criterion 1b) of activities 4.29, 4.30 and 4.31 requires operators to have *"effective plans or commitments, approved by the management body, to use at least 30% of renewable or low-carbon gases as of 1 January 2026, and at least 55% of renewable or low-carbon gases as of 1 January 2030, and to switch to renewable or low-carbon gases and the switch takes place by 31 December 2035".* This criterion is problematic for various reasons:

- It is based on plans not only for the near (2026) but also for the distant future (2036), which is almost impossible to predict either for the operator, the verifier or the investor. It is for this reason that plans subject to which investments can count as Taxonomy aligned based on future performance of the activity (Capex-plans) were restricted to shorter periods in the Taxonomy's Disclosure delegated act (EU 2021/2178). The criterion creates an inconsistency with this regulation.
- Emission thresholds for "renewable or low-carbon gases" are not specified, and these feedstocks are not required to comply with the DNSH criteria of the first Climate DA. If "low-carbon gases" refer to a 70% reduction compared to the fossil fuel comparator of RED II (EU 2018/2001, Annex VI), whose threshold is 94g CO2e/MJ = 338,4 gCO2/kWh or higher, a 70% reduction corresponds to 101,52gCO2e/kWh. This would even be above the 100g/kWh threshold that the first Climate DA requires for 2022, although the criterion in the draft CDA applies only after 2035 and to direct emissions. In contrast, the 100g/kWh criterion of the first Climate DA refers to life-cycle emissions and – being transitional – is expected to already have decreased significantly by 2035 to meet the EU's climate targets. This shows

that the draft CDA's criterion is not in line with the science-based approach of the first Climate DA and the Paris climate targets, but can rather lead to a lock-in in carbon intensive technologies. If the 70% reduction requirement is interpreted to refer to the previous emissions of the respective plant the emissions remaining after a 70% reduction can be even higher than those resulting from the reference to the fossil fuel comparator.

- The criterion sets incentives to build a high number of gas power plants (up to the present capacity of oil and coal plus 15% for activity 4.29 if the allowed capacity would be fully used) rather than developing technologies to directly use electricity, leading to a lock-in in gas-based technologies. Green hydrogen, being less efficient than electricity from wind and solar and thus requiring the generation of even more renewable electricity, should be reserved to applications which cannot reasonably be electrified. In addition, since the criterion does not impose the criteria of the first Climate DA on the renewables and low-carbon gases used in the power plants, it creates disincentives to invest in technologies which do fulfill these criteria. It thus contradicts Art. 10(2)(b) of the Taxonomy Regulation which requires activities not to *"hamper the development and deployment of low-carbon alternatives"*.
- The required rates of replacement by renewable and low-carbon gases may not be achievable due to a lack of availability of these gases. If blue hydrogen is used instead, as would be compatible with the criteria, overall emissions may increase rather than decrease as a consequence of the replacement.
- Intermediate rates of replacement (e.g., 55%) may technically only be feasible if big shares of bio-methane are used rather than hydrogen, as hydrogen requires a 100% shift at lower percentages. This could result in a strong surge in demand for bio-methane. Together with the lack of strict criteria for the sustainability of biomass (reference only to RED II Art. 29), this would lead to a significant increase in the area used for energy crops and strong pressures on agriculture and forest ecosystems.

4.2.4 Implications for emissions covered under the draft CDA

The emissions which are classified as sustainable under the draft CDA amount to approx. 1.4 billion tons of CO2e[9]. This does not yet include the emissions resulting from the use of gas power plants beyond the 20-year period covered by the draft CDA, or the additional emissions resulting from hampering the development and deployment of renewable alternatives, which must also be expected to be substantial.

Taken together, the criteria under 1b) of activity 4.29 mean that gas power plants would be labelled sustainable that do not even comply with the DNSH criteria of the first Climate DA, let alone its substantial contribution criteria. Further, accounting for the strengthening of substantial contribution and DNSH criteria until 2040 in line with the TEG recommendations and the European Commission's climate scenarios, these plants would not meet those criteria throughout this period. Rather, although labelled sustainable under the draft CDA, they could continue to emit greenhouse gases at a level equivalent to significant harm.[10]

[9] https://www.environmental-finance.com/content/analysis/taxonomygate.html

[10] For the details of the relevant analysis see the response of the Platform on Sustainable Finance to the draft CDA.

4.3 A coal phase-out plan is in place and the facility replaces an existing high-emitting facility

There is no date specified for the coal phase-out to be completed. This means that a coal phase-out until 2050 or even later would be sufficient to comply with the criteria.

There are no criteria specified for when a facility "replaces" another, whether this has to be on-site, in the same region or country, the same operator etc. Similarly, it is unclear whether facilities decommissioned before the draft CDA enters into force or already scheduled to be decommissioned at the time the draft CDA enters into force can also be replaced by fossil gas plants under the draft CDA. This would increase the amount of emissions covered by the draft CDA.

Similarly, there are no criteria set for "high-emitting" facilities, adding further uncertainty.

Taken together, these uncertainties make the criteria virtually impossible to verify and may create unequal conditions across countries.

4.4 55% emission reduction through replacement by fossil gas

The draft CDA requires that "*the replacement leads to a reduction in emissions of at least 55% GHG per kWh of output energy*". If this threshold refers to the emissions of the particular solid or liquid fossil fuel plant to be replaced (which would require a one-on-one mapping of replaced and replacing plants), plants with lower emissions would be "punished" by lower resulting emission thresholds than apply to plants with higher initial emissions.

4.5 No efficient replacement by renewable energy sources

Activities 4.29, 4.30 and 4.31 contain the criterion that power generated by the activity may not yet *efficiently* be replaced by power generated from renewable energy sources. The term "efficient" is not defined, which means that this criterion can always be claimed to be fulfilled. However, renewables are already now technically and economically feasible, which means that in all but exceptional cases the energy generated by high-emission power plants should be possible to be efficiently replaced by renewable energy sources.

4.6 Sunset clauses

Sunset clauses for criterion 1b) of activities 4.29, 4.30 and 4.31 are uniformly set at 31 December 2030 (date of construction permit). Assuming an average construction time of 3 years and a lifetime of 20 to 30 years, these sunset clauses incentivize gas power stations to be operated far into the 2050s. This means they will be operated far beyond the date when the energy sector is supposed to be decarbonized in 2040 (Being an easier-to-decarbonize sector energy generation is foreseen in EU climate scenarios to be decarbonized significantly earlier than 2050.). Together with the implications of the emissions criteria summarized under 4.2.4, these sunset clauses would hinder the European Green Deal and could make it impossible for the EU to meet the Paris targets.

4.7 Recommendations

Based on the above analysis we recommend to retain the science-based criterion of 100g/kWh life-cycle emissions which is consistent with the first Climate DA (criterion 1a)), and delete the additional, weaker criteria under 1b).

If the European Commission deems renewable energy *"not yet commercially available at a sufficient scale"* (recital 4) and fossil gas necessary to fil this gap or serve as a stability reserve

during the transition to a fully sustainable energy system, instead of including it in the Taxonomy it could – with stricter emission criteria – be regulated separately, e.g., in a level one regulation as part of the Fit-for-55 package or in an extension of the Taxonomy for activities that do not meet the substantial contribution criteria of the Taxonomy Regulation but can move away from significant harm.

5 Disclosure

Annex III of the draft CDA specifies the disclosure of KPI related to nuclear power activities 4.26 to 4.28 and fossil gas activities 4.29 to 4.31. It stipulates that reporting entities only need to disclose the proportion of the respective activities in the *denominator* of the KPIs. Full transparency, however, is only obtained if this proportion is also disclosed for the *numerator*. In addition, it should be disclosed which share of the activity is performed within and outside the EU.

Regarding the transparency to investors in financial products referred to in Article 5 and 6 of Regulation (EU) 2020/852 concerning exposures to fossil gas and nuclear energy activities, the draft CDA does not contain any detail. Recital (15) only says that *"the Commission will amend or propose to amend the disclosure framework pertaining to those financial products as appropriate".* This should be done as to fulfil the same criteria on disclosures as outlined above.

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Lead author: Dr. Astrid Matthey

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Umweltbundesamt
Wörlitzer Platz 1
06844 Dessau-Roßlau
Tel: +49 340-2103-0
Fax: +49 340-2103-2285
buergerservice@uba.de
Internet: www.umweltbundesamt.de
/umweltbundesamt.de
/umweltbundesamt

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