

24<sup>th</sup> January 2022

**Danish comments on the 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**

We thank the Commission for consulting the Member State Expert Group on the Commission's draft Delegated Regulation on establishing technical screening for economic activities in certain energy sectors as regards climate change mitigation and climate change adaptation supplementing Regulation (EU) 2020/852 on a framework to facilitate sustainable investment (Taxonomy Regulation).

The Danish government strongly supports the Taxonomy Regulation on a common classification system for sustainable economic activities adopted by the Council and European Parliament. The taxonomy has the potential to substantially increase sustainable investments by providing guidance to private investors and therefore play a key role in delivering on the EU's commitments towards climate neutrality by 2050 while avoiding significant harm on the environment.

It is, however, crucial for the credibility and usability of the Taxonomy Regulation that technical screening criteria are established in line with the requirements in the Taxonomy Regulation. This implies that the taxonomy should cover the economic activities with the highest potential for a significant contribution to the environmental objectives, following a science-based and technology neutral approach, while avoiding significant harm to other environmental objectives. Criteria for transitional activities should not lead to a lock-in of carbon-intensive assets, hampering the deployment of best performance alternatives in the energy sector.

We are therefore deeply concerned that natural gas and nuclear energy are included in the circulated draft as we find that these technologies fall outside the scope of the Taxonomy Regulation.

**Nuclear energy**

Nuclear energy does not meet the legal criteria specified in article 10 of the Taxonomy Regulation. It does not fall under the activities qualifying as contributing substantially to climate change mitigation listed in article 10 (1), and it cannot qualify to be included as a transitional activity with reference to article 10 (2) given that a transitional activity is defined as one where there is no technologically and economically feasible low-carbon alternative. Finally, nuclear energy is not an enabling activity since it does not contribute to promoting other activities listed in article 10 (1). On the contrary, the proposal could lead to a lock-in of investments for many decades to come.

Furthermore, nuclear energy is incompatible with the “do no significant harm” principle. There is a proven risk of severe accidents in nuclear power plants with potential catastrophic consequences for human health and the environment. Safe and secure disposal of nuclear waste remains unsolved. So far there is no operational sustainable solutions to handle high-level radioactive waste and spent fuel.

This is also why the SCHEER experts found that further assessments and evidence were needed when they were reviewing the JRC technical report on nuclear energy. The experts emphasized that current regulation is not sufficient to mitigate all relevant risks, including uncertainties about the disposal of high-level nuclear waste and the impact of radiation on the environment.

It is noted that in particular in the area of radioactive waste management, Member States have advanced slowly in implementing the provisions for responsible and safe management of radioactive waste. This in particular with respect to management of high level waste and spent fuel designated as waste. The practical attainment of the goals defined for the EUR-ATOM area therefore still require extensive and time consuming efforts to be realised.

**Natural gas**

Natural gas is a fossil fuel with significant emissions. The Taxonomy should not drive investments towards new fossil fuel based generation that does not comply with the generally applied 100 g CO<sub>2</sub>e/kWh threshold for electricity generation. Using the “do no significant harm” threshold of 270 g CO<sub>2</sub>/kWh as a criterion for substantial contribution in the case of natural gas breaks with the principle of technology neutrality, and the threshold is well above the recommendations by science institutions and agencies such as the IPCC and IEA.

Natural gas does not meet the requirements of 10 (2) for activities to be classified as transitional under the Taxonomy Regulation. Technologically and economically feasible low-carbon solutions exist, and a labelling of natural gas as sustainable will hamper the development and deployment of renewable energy.

It will also enhance the risk of carbon lock-in considering the economic lifetime of natural gas-fired plants and the uncertainty of availability of sufficient volumes of renewable energy and low-carbon gasses in the EU to replace natural gas in electricity production towards 2035. Natural gas does have a role in contributing to energy security in Europe in a transition period, but the Taxonomy Climate Delegated Act is not the right file to handle this role.

### **Concluding remarks**

We fully acknowledge the prerogative of member states and investors to decide on their own investment strategies and energy assets. But for the taxonomy to be a credible guidance tool on sustainable investments, it has to make clear that while renewable energy technologies are classified as sustainable activities, investments in natural gas and nuclear power are not.

Regrettably, if the draft Delegated Regulation put forward by the Commission is adopted and enters into force, nuclear energy and natural gas will attract investments that could have been made in renewable energy instead.

We therefore urge the Commission to uphold the taxonomy's important objective to facilitate green financing and take action to not adopt the circulated draft Delegated Regulation on natural gas and nuclear energy.

In the attached Annex, we have included initial comments to the specific economic activities. It should be noted, that our comments are preliminary and do not anticipate the Danish Government's position during the formal objection period initiated if the Commission adopts the circulated draft Delegated Regulation.

## **Danish comments on the annexes to the draft delegated regulation on technical screening criteria for economic activities in certain energy sectors**

### **ANNEX I on climate change mitigation**

#### **4.26. Pre-commercial stages of advanced technologies with minimal waste from the fuel cycle**

The criteria suggested for the pre-commercial phase must be designed so that investments only contribute to the development of so-called fourth-generation facilities characterized i.a. by reducing 1) the amount and lifetime of nuclear waste, 2) the risk and severity of accidents and 3) the applicability of radioactive material for military purposes.

So far there are no operational disposal facilities for high-level radioactive waste. According to the JRC “the necessary technologies are now available” for safe isolation of high-level radioactive waste. If that is the case, it should be uncontroversial to include high-level radioactive waste in the criteria concerning requirements for disposal facilities. This would strongly promote the actual establishment of disposal facilities which have long been needed to reduce the risk associated with nuclear power significantly.

To be specific, the proposed criteria 1(f) stating that the relevant Member States are only required to have a “*plan with detailed steps to have in operation, by 2050, a disposal facility for high-level radioactive waste*” is far from sufficient. The requirement of operational disposal facilities shall not only apply to very low, low- and intermediate levels of radioactive waste, but also apply to high-level waste. This must apply to both new and existing plants.

It is therefore proposed that Annex I on climate change mitigation (section 4.26, page 14) be amended so that in 1 (e) after “... *intermediate-level*” is added: “*as well as high-level*”. As a consequence, it is proposed that 1 (f) be deleted. As a further consequence it is suggested that section 3 (b) should also be deleted and section 5 is updated accordingly.

It appears from 1 (c, d) that it must be possible to demonstrate that a project at the end of estimated life has sufficient resources available to ensure the management of radioactive waste and the decommissioning of power plants. Since there are currently no sustainable solutions for management of high-level radioactive waste, the following should be added in criteria 1(c, d): “...*including sufficient resources to establishment and management of permanent disposal facilities for high-level radioactive waste.*”

The suggested criteria for (4) transition to a circular economy are insufficient and too vague. Currently, the following is proposed: *“A plan for the management of both non-radioactive and radioactive waste is in place and ensures maximal reuse or recycling of such waste at end of life in accordance with the waste hierarchy, including through contractual agreements with waste management partners, the reflection in financial projections or the official project documentation.”*

The criteria on circular economy (4) should be revised in order to include specific minimum levels of (for example) recycling for each type of waste, reflecting best practice in waste management – including management of spent fuels.

#### 4.27. Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best-available technologies

The remarks in section 4.26 should also apply for section 4.27.

The criteria should be clarified so that it is clear to all stakeholders that new nuclear power plants must be state-of-the-art IV generation power plants – perhaps including III+ generation power plants, where spent fuel is recycled and where radioactive waste and the risk of accidents are reduced significantly. Construction of new II or III generation nuclear power plants should under no circumstances be included since they represent outdated technologies.

In addition the timeframe for investments in new nuclear power plants should be shortened significantly. The current criteria includes construction permits issued by 2045. Given the very long licensing process, construction time (approx. 15-20 years) and lifespan (approx. 40 years) of nuclear power plants, this will lead to a technological lock-in for many decades.

#### 4.28. Electricity generation from nuclear energy in existing installations

Investments in existing nuclear plants cannot be considered neither sustainable nor in accordance with the do no significant harm principle. Therefore, it is suggested that section 4.28 be deleted in the draft delegated act.

Criteria 1(f) is even more vague for existing installations, than for new installations, which cannot be justified by any scientific arguments.

In addition, the timeframe for investments in modification of existing nuclear installations (for the purpose of extension) should be shortened significantly. The current criteria includes modifications authorized by 2040.

This will lead to a technological lock-in for many decades and prolong the lifespan of outdated technology which does not live up to best practice for safety and environmental impact.

4.29. Electricity generation from fossil gaseous fuels, 4.30. High-efficiency co-generation of heat/cool and power from fossil gaseous fuels, 4.31. Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system

Several of the criteria in 4.29-4.31 are not strict enough or insufficient to ensure that natural gas investments labelled as sustainable will in practice not lead to carbon lock-in, hamper the development of renewable energy and deliver in time the envisioned transition to renewable energy or low-carbon gasses.

*Construction permit granted by 31 December 2030*

The deadline for natural gas fuelled facilities that do not comply with the 100 g CO<sub>2</sub>e/kWh threshold goes far beyond the 2025 deadline set in the Commission's first proposal to include certain natural gas activities (from March 2021). If the proposal to include natural gas is maintained, the deadline should as a minimum be advanced to 2025 as originally suggested by the Commission.

If the construction permit only has to be granted by the end of 2030, it will be possible to build new natural gas-fired facilities labelled as sustainable activities even in the 2030s. This risks to jeopardise the possibilities of achieving the EU's own climate and energy targets, and keeping global temperature rise below 1.5 degree. In addition, the 2030 deadline for a natural gas facility to receive a construction permit does not seem to correlate with the 2035 deadline for this very facility to be 100 pct. fuelled by renewable energy or low carbon gasses.

*In the case of electricity generation: the 550 kg CO<sub>2</sub>e/kW threshold*

According to the Commission, natural gas-fired power plants labelled as sustainable will provide peak load and not baseload. The threshold of an annual average of 550 kg/kW over 20 years is meant to make sure that facilities with higher direct emissions than 270 g CO<sub>2</sub>e/kWh either limit the number of operating hours or make a faster transition to renewable energy to comply with the requirement. However, once the facility has been built, it is likely to be switched on if the marginal costs are the lowest in the situation. According to the draft, the Commission may address an opinion to relevant operators if the thresholds are not met, but it is not clear what the sanction may be in case of non-compliance.

*The power/heat generated by the activity may not yet efficiently be replaced by renewable energy.*

This criteria is very vaguely formulated. It has to be clearly stipulated that investments in a natural gas activity can only be categorized as sustainable if it has been demonstrated that no technically or economically feasible renewable energy alternative exists. It also has to be specified how this should be established – by whom and by which kind of assessment.

*The facility replaces an existing high emitting generation facility*

It will be important to make sure that the replacement condition contributes to accelerated solid or liquid fossil fuel phase out, and thus that the facility being replaced is not already planned to close.

In addition, for a natural gas activity to be classified as sustainable, it should be required that, in parallel, the country or the investor commit to substantially increase the investments in renewable energy capacity in at least the same order of magnitude. This will be a prerequisite for ensuring that investments in natural gas do not direct investments away from renewable energy.

*The facility demonstrates compatibility with co-firing of low carbon gaseous fuels*

It is very important that, as suggested by the Commission, natural gas-fired facilities need to demonstrate compatibility with a clear and ambitious pathway towards renewable and low carbon gasses in order to limit the risk of carbon lock-in.

However, it is quite uncertain today whether there will be enough renewable and low carbon gasses available at European and global level for replacing natural gas generation by such gasses, since these gasses will also be key in the decarbonisation of the industry and transport sectors. The criteria therefore need to specify more clearly whom is going to assess and approve that a new facility will be able to meet the required pathway, and which measures will be taken in case of non-compliance, i.e. if the fuel switch does not take place as foreseen.

## **ANNEX II on climate change adaptation**

### **4.26. Pre-commercial stages of advanced technologies with minimal waste from the fuel cycle**

In general, the technical screening criteria are too vague and insufficient in order to avoid the risk of significant harmful consequences.

This is for example the case for criteria 1: *“The economic activity has implemented physical and non-physical solutions (‘adaptation solutions’) that substantially reduce the most important physical climate risks that are material to that activity.”* This criteria should be revised in order to include detailed and specific actions and safeguards in different circumstances.

Similarly, the technical screening criteria regarding circular economy (4) are insufficient and too vague. The following is proposed: *“A plan for the management of both non-radioactive and radioactive waste is in place and ensures maximal reuse or recycling of such waste at end of life in accordance with the waste hierarchy, including through contractual agreements with waste management partners, the reflection in financial projections or the official project documentation.”*

The criteria on circular economy (4) should be revised in order to include specific minimum levels of (for example) recycling for each type of waste, reflecting best practice in waste management – including handling of spent fuels.

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In addition, the timeframe for investments in new nuclear installations should be shortened significantly. The current criteria includes construction permits issued by 2045. Given the very long construction time (approx. 15-20 years) and lifespan (approx. 40 years) of nuclear energy facilities, this will lead to a technological lock-in for many decades.

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The remarks in section 4.26 should also apply for section 4.28.

In addition, the timeframe for investments in modification of existing nuclear installations (for the purpose of extension) should be shortened significantly. The current criteria includes modifications authorized by 2040. This will lead to a technological lock-in for many decades and prolong the lifespan of outdated technology which does not live up to best practice for safety and environmental impact.