Nuclearеurope response to the Public Consultation:

EU taxonomy climate delegated act

Nuclearеurope's response to this consultation focuses on the following economic activities:

- 4.26: Pre-commercial stages of advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle.
- 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.
- 4.28: Electricity generation from nuclear energy in existing installations.

Technical Screening Criteria

Regarding the Technical Screening Criteria applied to these three activities, overall these are deemed to be fit for purpose. Nevertheless, some improvements are required as follows:

Final disposal facilities for low-, low- and intermediate-level radioactive waste

Economic activities 4.26, 4.27 & 4.28

- Article 1 (e) *the Member State has operational final disposal facilities for all very low-, low- and intermediate-level radioactive waste, notified to the Commission under Article 41 Euratom Treaty or Article 1(4) of Council Regulation (Euratom) No 2587/1999, and included in the national programme updated under Directive 2011/70/Euratom*

It is our opinion that the disposal facilities should be operational at the time when they will actually have to receive waste, and not necessarily from the start of the project. Accordingly, this sentence should be read as follows (additional text in bold): "*Member State has operational **or planned** final disposal facilities for all very low-, low- and intermediate-level radioactive waste …*"

Deep geological repository for high-level radioactive waste

Economic activities 4.26 & 4.27

- Article 1 (f) *The Member State has a documented plan with detailed steps to have in operation, by 2050, a disposal facility for high-level radioactive waste describing all of the following:*
  - *i. concepts or plans and technical solutions for spent fuel and radioactive waste management from generation to disposal;*
  - *ii. concepts or plans for the post-closure period of a disposal facility's lifetime, including the period during which appropriate controls are retained and the means to be employed to preserve knowledge of that facility in the longer term;*
  - *iii. the responsibilities for the plan implementation and the key performance indicators to monitor its progress;*
  - *iv. cost assessments and financing schemes.*

  For the purposes of point (f), Member States may use plans drawn up as part of the national programme required by Articles 11 and 12 of Directive 2011/70/Euratom.

Economic activity 4.28

- Article 1 (f) *for projects authorised after 2025, the Member State has a documented plan with detailed steps to have in operation, by 2050, a disposal facility for high-level radioactive waste describing all of the following:*
  - *i. concepts or plans and technical solutions for spent fuel and radio active waste management from generation to disposal;*
  - *ii. concepts or plans for the post-closure period of a disposal facility's lifetime, including the period during which appropriate controls are retained and the means to be employed to preserve knowledge of that facility in the longer term;*

iii. *the responsibilities for the plan implementation and the key performance indicators to monitor its progress;*

iv. *cost assessments and financing schemes.*

For the purposes of point (f), Member States may use plans drawn up as part of the national programme required by Articles 11 and 12 of Directive 2011/70/Euratom.

It is our opinion that this requirement should be aligned to the date when such a repository is feasible with regard to technical and/or economic needs of the national nuclear programme of the given Member State (applicable to both new and existing nuclear installations), or unless other solutions regarding spent nuclear fuel are on the way (feasible) e.g. potential reprocessing of the spent nuclear fuel. For example, Poland has yet to start building a nuclear power plant and therefore will not require a DGR until 2070 at the earliest. Applying this criteria would mean that the Polish DGR would lay empty for 20+ years.

Notification under Article 41 of the Euratom Treaty

Economic activities 4.27 & 4.28

- Article 3 *The project has been notified to the Commission in accordance with Article 41 of the Euratom Treaty or with Article 1(4) of Council Regulation 2587/1999, where either of these provisions is applicable, the Commission has given its opinion on it in accordance with Article 43 of the Euratom Treaty, and all the issues raised in the opinion, with relevance for the application of Article 10(2) and Article 17 of Regulation (EU) 2020/852, and of the technical screening criteria laid down in this Section, have been satisfactorily addressed.*

In our opinion, the fact that "*the project has been notified to the Commission in accordance with Article 41 of the Euratom*" should be deemed sufficient to meet this criterion without having to demonstrate that "*all the issues raised in the opinion* [of the Commission]…*have been satisfactorily addressed*". This requirement goes beyond the provisions of the Euratom Treaty and creates an unnecessary administrative burden. Accordingly, this part should be deleted.

Small modular reactors (SMRs) & Advanced Modular Rectors (AMRs)

Economic activities 4.26 & 4.27

In our opinion, SMRs & AMRs are not very well covered because they overlap with sections 4.26 and 4.27. These technologies attract private investment and offer a unique opportunity to involve private capital in the energy transition. It is therefore unfortunate to maintain uncertainty about the eligibility for taxonomy of a technology so closely aligned with Europe's climate ambitions. Section 4.27 should be updated to explicitly include these technologies, including projects in development. This revision would provide the regulatory clarity needed to unlock investment and establish next-generation nuclear as a cornerstone of Europe's net zero infrastructure

General comments

We also take this opportunity to highlight several additional points regarding the taxonomy for consideration:

- The Taxonomy should be amended to treat nuclear as a permanent net zero energy solution and put on the same level as renewables in line with the science (i.e. it should no longer be considered as transitional and subject to sunset clauses).
  As an interim measure, we call for sunset clauses to be adapted to limit investment uncertainty. This would mean that for life-time extensions the date would switch from, for example, 2040 to 2060 and for new build projects from 2045 to 2065.
- Furthermore, all fuel cycle activities should be included under the taxonomy as enabling activities, including notably those related to mining, conversion, enrichment, fuel fabrication and reprocessing of spent fuels.
- The scope of eligibility (description of the activity) for existing nuclear power plants should be aligned with the scope of new nuclear plants (i.e. activity 4.28. should include also safe operation of existing nuclear installations in terms of electricity and heat production).
- Investments in nuclear projects outside of the EU should also be included in the taxonomy (in line with investments in, for example, renewables).