

Targeted Consultation for the Evaluation of the Guidelines on State aid for Environmental protection and Energy 2014-2020 (EEAG)

FORATOM response to the European Commission DG Competition Consultation

The European Atomic Forum (FORATOM) is the Brussels-based trade association for the nuclear energy industry in Europe. The membership of FORATOM is made up of 15 national nuclear associations. FORATOM represents nearly 3,000 European companies working in the industry, which supports around 1,100,000 jobs in the European Union.

Background

In its strategic vision “A clean Planet for All”¹, published in November 2018, the European Commission stated that nuclear will form, with ca. 15% of power share, the backbone of a carbon-free European power system, together with renewables. With each EU Member State free to choose its own energy mix, the EC underlines that those which are investing in nuclear agree that it can contribute to security of energy supply, competitiveness and cleaner electricity production.

In its vision, the Commission takes stock of the latest Intergovernmental Panel on Climate Change (IPCC) report (“Global Warming of 1.5°C”²) which highlights the need to step up international climate action. The report also indicates that a sharp increase in nuclear energy production is needed to keep global warming below 1.5°C. Likewise, the IEA (“Nuclear Power in a Clean Energy System”³) warns that a steep decline in nuclear power would threaten energy security and climate goals and could result in billions of tonnes of additional carbon emissions.

¹ « By 2050, more than 80% of electricity will be coming from renewable energy sources (increasingly located off-shore). Together with a nuclear power share of ca. 15%, this will be the backbone of a carbon-free European power system.” https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_en.pdf

² « Nuclear power increases its share in most 1.5° pathways with no or limited overshoot by 2050” https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter2_Low_Res.pdf

³ <https://www.iea.org/publications/nuclear/>

Comments

1. It is essential that there is **clear guidance** to prospective developers and to EU Member States regarding the application of State Aid Policy. In the field of energy in particular, the challenges are immense to meet the objective of providing secure, low carbon energy supplies in an affordable way.

FORATOM shares EU Commissioner for Climate Action & Energy Miguel Arias Cañete statement that, by 2050, the deployment of renewables and a stable share of nuclear energy is the solution to make the European power sector carbon-free.

2. In order to enable EU's successful transition to a low carbon economy, it will need to make sure that **all options available are taken into consideration without discrimination**. These include measures **to increase** the efficiency of energy use, demand side management, and above all **low carbon generation**.

3. The **establishment of an effective carbon price signal** reflecting emissions externalities is fundamental to drive investments into mature low carbon technologies. The ETS system could deliver this signal, but only if there is a robust, long term carbon price resulting from this.

4. **Decarbonisation of the economy** and the **security of energy supply are closely interlinked**, the latter being a specific aim identified in the preamble to the Euratom Treaty. Security of supply requirements fall into two categories: ensuring that enough low carbon power plants are built, and that there is enough capacity to meet demand at all times. It is critical that the market framework supports both objectives. FORATOM believes that **consumers will benefit from security of supply being explicitly recognised as an objective that qualifies for state aid**.

5. Ensuring that **nuclear energy contributes to decarbonize other sectors of the economy such as industry, heating and transport**, is crucial. Producing district heat from both existing and newer designs of nuclear reactors is a sustainable and affordable way. The deployment of Small Modular Reactors (SMRs) could be located close to urban areas and provide citizens both low-carbon electricity and heat. In addition. For example, sector coupling using nuclear energy to produce hydrogen for the transport sector and heat to be used in industrial processes.

6. As far as **system costs** are concerned, important to note that, whilst average costs per MWh of wind and solar PV tend to decrease quickly, the **criterion currently being applied doesn't give a clear picture of actual systems costs incurred**. According to the NEA-OECD study "The cost of Decarbonisation: System Costs with High Shares of Nuclear and Renewables"⁴ – 2019, the system costs on the basis of an increase of the unit costs of VRE can be substantial and depend on the level of penetration (e.g. some addition costs are to be added to the plant-level generation costs of VRE, and could reach up to €60 per MWh, for onshore wind, to up to €130 per MWh, for solar PV).

⁴ <https://www.oecd-nea.org/ndd/pubs/2019/7299-system-costs.pdf>

Considerations for future potential new EEAG

Beyond the comments made above, FORATOM considers that the EC's guidelines on state aid for environmental protection and energy should encompass all low-carbon technologies that can help deliver the decarbonisation of the EU economy as eligible for compatible aid, without defining specific technology preferences.

A level playing field for all forms of low carbon technologies, including nuclear energy, needs to be achieved. In this context, FORATOM encourages the EC to mention, in any future possible EEAG, that current support schemes for individual Renewable Energy Systems (RES) are expanded to all low-carbon sources including also CCS and nuclear, thus avoiding the sole promotion of a single energy source. Moreover, a clear pathway for the phasing out of subsidies as new technologies become competitive should be decided.

It is important for the European Commission that, to be in line with the EU decarbonization goals, it ensures coherence between policies and it ensures that nuclear is not excluded from any EU financing initiatives that support all low carbon technologies