

(English version)

**Question for written answer E-001997/25
to the Commission**

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(19 May 2025)

Subject: Inclusion of nuclear energy production targets and deployment pathways in the revised PINC

The Clean Industrial Deal aims to enhance European competitiveness and decarbonisation, but its success hinges on the availability of affordable, reliable clean energy. Prominent authorities in the field such as the International Energy Agency have highlighted that nuclear energy can contribute to lower energy costs while improving energy security ⁽¹⁾.

Given this, and in the light of recent studies, such as that published by Compass Lexecon in 2024 ⁽²⁾ showing that increasing European nuclear power capacity from 100 GW to 150 GW by 2050 could reduce energy system costs and accelerate emissions reductions, can the Commission clarify:

1. whether it plans to include concrete production and deployment targets for nuclear energy — including large-scale reactors, lifetime extensions, and new technologies such as small modular reactors — in the upcoming revision of the nuclear illustrative programme (PINC);
2. how the PINC will be aligned with the broader goals of the Clean Industrial Deal, and in particular, how the Commission will ensure that nuclear energy is treated on equal footing with other clean technologies in policy instruments that support industrial electrification and decarbonisation?

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Answer given by Mr Jørgensen on behalf of the European Commission
(31 July 2025)

The Euratom Treaty ⁽¹⁾ requires the Commission to indicate in the Nuclear Illustrative Programme of the Commission (PINC) the nuclear energy production targets without specifying whether the requirement concerns nuclear energy production in individual Member States or in the EU.

The Commission has in the PINC indicated the levels of nuclear energy production in the EU corresponding to the nuclear energy production targeted by Member States under their national policies reflected in National Energy and Climate Plans (NECPs) ⁽²⁾.

The PINC identifies a ‘base case’ scenario of 109 gigawatts electrical (GWe) of net electricity generation capacity from large-scale nuclear reactors in 2050 ⁽³⁾. This does not cover capacity from Small Modular Reactors (SMRs), which could add 17-53 GW by 2050 ⁽⁴⁾.

The Clean Industrial Deal (CID) ⁽⁵⁾ announced the action plan for Affordable Energy (AEAP) ⁽⁶⁾ to improve competitiveness and reduce energy costs for our industries in the transition.

The AEAP recognised the need to assess nuclear investments in the updated PINC. The updated PINC ⁽⁷⁾ assesses the evolution of generation capacity and associated investment needs, covering the entire life cycle of nuclear installations, including lifetime extensions, newbuilds, innovative nuclear technologies such as SMRs, waste management, and decommissioning activities ⁽⁸⁾. It shows that nuclear energy has a role to play in building our decarbonised energy system.

¹ International Energy Agency, *Nuclear Power and Secure Energy Transitions — From Today's Challenges to Tomorrow's Clean Energy Systems*, June 2022, <https://www.iea.org/reports/nuclear-power-and-secure-energy-transitions>.

² Compass Lexecon, *Pathways to 2050: the role of nuclear in a low-carbon Europe — Final report*, 15 October 2024: <https://www.nucleareurope.eu/project/pathways-to-2050/>.

⁽¹⁾ Article 40.

⁽²⁾ In line with the provisions of Article 40, the Commission assessed where individual Member States, based on official information available to us, intend to achieve certain volumes or shares of nuclear energy production capacity.

⁽³⁾ With a range of installed capacity between 70 and 144 GWe, depending on the rate of success of lifetime extension of existing large-scale reactors.

⁽⁴⁾ As per preliminary evaluation by sector organisations.

⁽⁵⁾ https://commission.europa.eu/topics/eu-competitiveness/clean-industrial-deal_en.

⁽⁶⁾ https://energy.ec.europa.eu/strategy/affordable-energy_en.

⁽⁷⁾ Adopted on 13 June 2025. See: https://energy.ec.europa.eu/publications/communication-nuclear-illustrative-programme-under-article-40-euratom-treaty_en.

⁽⁸⁾ It also addresses key enablers, such as energy system effects, skills development, competitive industrial and fuel supply chains.

The Commission has repeatedly recognised that ensuring the necessary framework conditions for all clean energy technologies will allow the EU to keep its industrial leadership in the nuclear sector while also upholding the highest safety standards and responsible management of radioactive waste.
