**Nuclear energy: EESC backs the ITER project for unlimited sustainable energy in Europe**

**Clean energy is a top priority and fusion technologies could provide a long-term solution. The European Economic and Social Committee (EESC) emphasises the great potential of nuclear fusion for achieving clean energy and believes that the Commission should link the ITER project more closely to the European fusion research organised by the EUROfusion consortium.**

Fusion energy is expected to play an important role in Europe's future. A fusion power plant supplies carbon-free and sustainable energy and, compared to conventional nuclear fission, is inherently safe. Fusion-based technologies could therefore provide the long-term solution to achieving clean energy. The EU could be at the forefront of developing fusion infrastructure and this would help Europe secure a range of energy supplies.

## In the opinion produced by **Ulrich Samm** and adopted at its December plenary session, the EESC supports the Commission's proposal on ITER and identifies fusion energy as a virtually inexhaustible, climate-friendly energy source. The Committee recognises that the high long-term investments needed to develop a fusion power plant entail industrial risk. Nevertheless, **Mr Samm** pointed out that "if successful, it would bring about such a disruptive innovation that it would significantly change the existing energy supply. Fusion represents an abundant and virtually inexhaustible fuel. ITER would function as an unlimited source of energy in Europe."

## **The ITER project**

## The International Thermonuclear Experimental Reactor (ITER) is an international scientific collaboration project launched in 2005 thanks to a global partnership between the EU and six countries (United States, Russia, Japan, China, South Korea, and India). The project aims to demonstrate the scientific and technological feasibility of fusion energy for peaceful purposes by constructing and operating the first 500 MW fusion reactor in Cadarache, France.

## The Commission proposal addresses the key challenges faced by the ITER project in the next MFF, in particular in terms of resources and leadership. In the past few years, positive progress has been made and major problems have been overcome by appointing new senior management and adopting a revised ITER baseline schedule.

* **EUROfusion**

EUROfusion is the research programme in Europe that has attracted by far the largest number of Member States. These Member States contribute to essential projects, and together they establish the EU as a world leader in this area. EUROfusion is funded under the Euratom research and training programme and operates the major experimental facility Joint European Torus (JET) located in Culham, United Kingdom.

## The EESC urges the Commission to stress the importance of linking ITER to the European fusion research organised by EUROfusion. It is essential to constantly reinforce the project with accompanying programmes, and the budget reserved for EUROfusion in the period 2021-2025 must be compatible with the goals of the fusion roadmap, where the work for ITER is central.

* **Communicating the results of joint EU projects**

The results achieved by ITER and European fusion research in general would not be possible for countries working alone without EU funding. Significant developments have already taken place. More will follow not only for research, industry and SMEs in the long-term, but also for the economy and job creation in the short and medium term. It is therefore important to constantly communicate to the public the positive impact of these complex European projects, both from a technological and industrial perspective and from a socio-economic perspective. This will increase people's confidence in science and research, and will help to raise awareness of the results achieved by EU projects.

**Background**

For more information on the EESC's recent work on nuclear energy, you can visit our website:

* [Horizon Europe](https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/horizon-europe)
* [2021-2025 Euratom research and innovation programme](https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/research-and-training-programme-european-atomic-energy-community-period-2021-2025-complementing-horizon-europe-framework)
* [Multiannual Financial Framework, nuclear decommissioning and radioactive waste](https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/mff-and-nuclear-decommissioning-and-radioactive-waste)
* [Nuclear illustrative programme](https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/nuclear-illustrative-programme-0)