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**Keynote: Euratom Research and Training and Horizon  
Europe framework programmes**

Dear Minister,

Dear Senator,

Dear Honourable members,

Ladies and gentlemen,

- Thank you Honourable Minister Hurduc for Research and Innovation of Romania, and the Institute for Nuclear Research (RATEN ICN) for co-organising together with the European Commission these events taking place this week, in Pitesti, in Romania, under the auspices of the Romanian Presidency of the Council of the EU.
- It is a great honour to be here among so many of the world's leading scientific experts. Today I will speak to you about three things. Firstly, about the EU's ambition to become the world's 1<sup>st</sup> major economy to go climate neutral by 2050; Secondly, about Euratom as a platform to work together and the results we have achieved so far; and finally I will speak to you about the new features of the future Euratom program.

**Decarbonisation: Clean Planet for All**

- The alarming findings of the recent International Panel on Climate Change (IPCC) special report call for unprecedented efforts and much higher emissions reductions in order to limit the global warming to 1.5 degrees Celsius.
- This is a wake-up call to the world – policy-makers and business community alike. The powerful mobilisation of citizens, including youth, for the cause of climate action cannot remain answered.
- The EU committed to lead by example
- With its 2050 decarbonisation strategy ‘A Clean Planet for All’, the EU unveiled the ambition to become the world's 1<sup>st</sup> major economy to go climate neutral by 2050
- This calls for a range of new ground breaking solutions and makes research and innovation a cornerstone to a carbon neutral world.
- Member States have very different views on nuclear energy
- Through the European Strategic Energy Technology Plan (SET-Plan), the implementation plan for nuclear energy is supported only by several member states.
- Yet in the ‘Clean Planet for All’ communication, the European Commission recognises a continued contribution from nuclear energy to decarbonise the economy by 2050.

### **EURATOM as a platform to work together**

- EURATOM provides us a platform to work together on objectives where we do agree: ensuring the safe and sustainable use of peaceful nuclear energy technologies.

- EURATOM has been the framework in which, for more than 60 years, knowledge and competence in nuclear science and technology have been developed in Europe, and through International Cooperation together with, among others, the OECD, the Nuclear Energy Agency and the International Atomic Energy Agency.
- EURATOM would not have been possible if Europe was not continuously maintaining high competences, underpinned by sound and advanced research.
- Today, all EU Member States meet equally high standards of safety, radiation protection, safeguards and security.
- The EU became the first major regional actor with a legally binding regulatory framework for nuclear safety following the implementation of the latest Directives on safety, waste and basic safety standards.
- As such, we can ensure that Member States can rely on one another, respect each other's choices and citizens in different Member States can rely on their neighbours across the border.
- I would like to highlight a couple of benefits of the EURATOM Research and Training programme:
  - It focusses on basic and fundamental research but also on technological and industrial developments, as these are essential to face and overcome the Energy and Climate Change challenges that are lying ahead of us.
  - In the field of decommissioning we need to transfer the fundamental research into successful industrial projects while ensuring adequate training opportunities are available for this growing market.

- In the field of waste management, we need to implement solutions that can help the society to understand issues linked to waste disposal and agree on the acceptability of proposed solutions.
- The European Commission is proud to support the launch of a third COFUND European Joint Programme with co-funding of EUR 32 million from Euratom, supporting further integration of Waste Management Organisations, Technical Support Organisations and other Research Organisations in Joint Programming at European level.
- Following the Council Regulation establishing the Euratom Research and Training Programme for 2019-2020, a specific 2 years' work programme has been published. The Fission call that opened on 15 May 2019 will benefit from a total budget of 139.9 million euros. Fusion actions include the extensions of EUROfusion and the contract of operation of JET with a total budget of 328 million euros.
- This work programme focuses on the safety of nuclear systems, radiation protection and radioactive waste management. As in the previous work programme, education and training will be supported in two ways: through specific actions and through the requirement that each research and innovation action in this work programme dedicates at least 5 % of the total budget to education and training activities for PhD students, postdoctoral researchers and trainees.
- This work programme gives particular attention to innovations in the safety of reactors and in decommissioning by supporting technology transfer from the research community to industry.

- On radiation protection, the work programme focuses on further integration of research, preparation of a research roadmap for medical applications, and ensuring the safe use of these medical applications.
- For research infrastructure, this work programme launches important actions aiming to maximise the safety of existing and future research reactors.
- The work programme introduced two pilot actions with JRC on knowledge management and on open access to JRC nuclear research facilities with the objective to address better synergies between direct and indirect actions.

### **Future Euratom programme and Horizon Europe**

- The new Euratom program will continue to improve safety, security and radiation protection and to contribute to the decarbonisation of the energy system in the long term.
- The budget we proposed is EUR 2.4 billion (2021-27), EUR 1.675 billion (2021-25)
- The new elements that the European Commission are proposing in the next Euratom program include
  - non-power applications such as the uses of ionising radiation, not only for medical applications, but also for industry, agriculture and space research.
  - the creation of stronger synergies between nuclear research and other research areas through joint activities within the new research and innovation framework for 2021-2027, Horizon Europe.

- a single set of objectives, combining the indirect and direct action and we will also offer to all projects the possibility for access to our Joint Research Centre facilities and expertise.
- One overarching element of research is the human capital. It is imperative that we maintain and further enhance the number, the competences and the excellence of our research community, especially in the nuclear sector. For this reason, the Marie Skłodowska-Curie Actions will be opened up to Euratom researchers.

### **Conclusion**

- I have unveiled to you today that with the 2050 decarbonisation strategy ‘A Clean Planet for All’, the EU unveiled the ambition to become the world's 1<sup>st</sup> major economy to go climate neutral by 2050. We see nuclear energy as part of the future energy mix to achieve this.
- Even though there are clear differences between Member States about the role of nuclear energy, the Euratom program has given us a platform to work together on objectives we do agree on: ensuring the safe and sustainable use of peaceful nuclear energy technologies.
- EURATOM has been the framework in which, for more than 60 years, knowledge and competence in nuclear science and technology have been developed in Europe.
- The current programme focusses on safety of nuclear systems, radiation protection and radioactive waste management. Education and training is supported too.
- In the new Euratom programme we introduce a some new elements: a focus on non-power applications for medical and industrial use, a single set of direct and indirect objectives, clear synergies with

Horizon Europe and we will open up Marie Skłodowska-Curie Actions to nuclear researchers.

- I would like to conclude by expressing all my gratitude for organising these successful events and I personally look forward to hear from the results of this dialogue.

Thank you, Chairman, Honourable Members, Ladies and gentlemen.