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**Scientific Forum
Nuclear Power and the Clean Energy Transition**

September 22, 2020

Statement by François JACQ, Chairman of CEA

Ladies and Gentlemen,

The Scientific Forum is a major annual milestone of the IAEA, and once again this year it will deal with a fundamental topic, the role of nuclear power in the context of the clean energy transition. The COVID health crisis motivates more than ever questioning about our lifestyles and their associated technologies.

As Chairman of the French Atomic Energy Commission, a leading Research and Technology Organization with a strong longstanding expertise in nuclear technologies for energy and health, I am pleased to share with you today our vision and experience to feed this forum's objective.

The clean energy transition is a necessity for our societies:

Indeed, the work of the Intergovernmental Panel on Climate Change confirms the inexorable warming of the planet. Massive human emissions of greenhouse gases, in particular carbon dioxide, are a major cause for this warming. These emissions result largely from the use of fossil fuels for energy production.

It is therefore unavoidable to decarbonize our energy systems:

Climate challenges are forcing us to reduce our energy consumption, in particular fossil fuels, and to strengthen low-carbon energy production modes such as renewable and nuclear energies.

The aim of this forum is to identify the place of nuclear power in the clean energy transition:

This forum brings together energy and climate experts with governmental and industrial actors, as well as international organizations under the leadership of the IAEA. Pooling our efforts and sharing our various experiences will contribute to enrich this forum.

The current contribution of nuclear power to the energy transition and to the fight against global warming is real.

Today, nuclear power plants provide more than 10% of the world's electricity with minimal greenhouse gas emissions. Because of its low carbon signature, nuclear energy is a strong asset in the energy transition.

In the medium term, the reduction of our dependence on fossil resources cannot be entirely compensated by an increase of renewable energies. Due to their intermittent nature, their capacities remain limited and must be supplemented by a continuously available, flexible and lower cost energy source. Nuclear energy fully meets these criteria.

In France, the electricity mix has been characterized for several decades by a large share of nuclear power. The production of carbon-free electricity is a major asset for France to achieve its goals in the framework of the Paris Agreement and reach carbon neutrality by 2050. Nuclear will therefore remain at the heart of the French energy transition strategy.

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Since the beginning of this year, the covid-19 pandemic has been causing great social and economic upheaval. It is forcing States to implement policies that further strengthen our resilience in response to health hazards or those resulting from climate change.

We therefore need a strong political and financial support for research and innovation to be able to meet these challenges.

This is exactly the decision made by the French government, which recently announced in its recovery plan its support for the nuclear sector through an investment of €470 million over 2 years. A significant share of this amount is dedicated to the Nuward small modular reactor project.

In this recovery strategy, France is also focussing on the development of clean hydrogen produced from decarbonized electricity, which is another important area of innovation. In the medium term, clean hydrogen could become an essential energy vector in the industry and transportation. In total, more than 7 billion euros will be devoted to the hydrogen sector between now and 2030.

In conclusion, the energy transition appears more than ever to be a top priority. By reopening this debate to scientists and nuclear energy stakeholders during this scientific forum, the IAEA is fully fulfilling its mission. And I am sure that our work will contribute, on a solid scientific and technical basis, to guiding political, economic and industrial choices for the coming decades. I wish you all an excellent forum.