4<sup>th</sup> IAEA ministerial conference « Nuclear Energy in the XXIst century » Abou Dhabi

Statement by Mr. Daniel VERWAERDE, Chairman of the CEA (French Alternative Energies and Atomic Energy Commission) Head of the French Delegation Mister Chairman, Mister Director General, Ministers, Distinguished delegates

- It is a pleasure for me to extend to you, Mr. President, the congratulations of the French Government for the organization of this fourth IAEA Ministerial Conference on "Nuclear Energy in the Twenty-first Century".
- 2. The previous edition, in 2013 in Saint-Petersburg, was part of a context still largely marked by the impact of the accident at the Fukushima Daïshi plant. Nuclear safety remains the highest priority worldwide, but other issues are emerging.
- 3. We have to address them because it is clear that nuclear energy, which accounts for almost a third of the world's non-carbon electricity production, will remain important in the coming years.

## Monsieur le Président

- 4. The Paris climate agreement is one of the major diplomatic achievements of recent years. It lays the path that will preserve our planet for future generations.
- 5. Achieving this objective requires not neglecting any source of decarbonated electricity production, and therefore to consider both renewable energies and nuclear energy. Nuclear power is the only source of non-carbon energy that is technically mature and allows base-load electricity generation. The International Energy Agency estimates that an additional 20 GW of new nuclear capacity will be necessary annually until 2025, to successfully limit the temperature rise of the planet to 2 ° C, in accordance with the goal set by the Paris Agreement
- 6. In addition, nuclear energy has strategic advantages, compared to fossil fuels, in terms of security of supply.

7. And indeed, some thirty new States are considering, at various stages of progress, the use of nuclear energy for their energy supply.

M. Chairman,

- 8. However, the economic context and the energy market conditions are a challenge in this regard. Three types of responses should have to be considered :
- 9. Firstly, an explicit political commitment by governments in the nuclear power program is indispensable in countries wishing to build nuclear reactors. States have a key role to play in setting clear guidelines, organizing the establishment of a comprehensive national infrastructure, and preparing the skills needed for such programs, that commit a country in the long term.
- 10. We must also provide solutions to facilitate investment in nuclear projects by reducing the financial risk associated with them. States are, here again, essential actors, to provide sufficient guarantees and to provide robust liability regimes. Probably we should, more generally, address the various parameters that drive electricity prices.
- 11. Finally, we must continue and increase our R & D and innovation efforts in the field, in order to reduce costs without compromising on our non-proliferation, safety and security requirements, expand the technological offer to meet a wide range of demands and contexts, and prepare future generations of reactors

## M. Chairman,

- 12. France has experienced the assets of nuclear energy for many years now and is committed to help address these new challenges. Today, it is benefiting from the choices made in the seventies : a very significant security of supply, a very low rate of greenhouse gas emissions per GDP unit, and a very competitive price of its electricity today.
- 13. The President of the French Republic confirmed the objectives set by the Energy Transition for Green Growth Act of 2015. It is based on the one hand on energy sobriety and efficiency, and on the other hand on the diversification of sources of energy supply.

Renewable energies will thus be called for significant development to reach 40% of electricity production in 2030 and the share of nuclear power will be brought to 50% of the electricity mix by 2025. With the application of the law on energy transition, nuclear energy therefore remains an important component of the French electricity mix

- 14. This policy goes together with a major restructuring of the French nuclear industrial sector. This process initiated in 2015 will be completed by the end of the year. EDF and AREVA NP have begun to merge their activities related to design, project management and commercialization of new reactors. AREVA, for its part, refocused its business on the fuel cycle activities (mine, upstream, downstream) with the creation of a new entity "NEW CO"
- 15. The French State, with the support of Japanese strategic partners, has committed € 5 billion to this operation. Nuclear energy will therefore remain an important component of the national energy policy and France intends to maintain its leading position in nuclear technologies on the international market as well as in the framework of its international nuclear cooperations.
- 16. The whole sector is therefore mobilized to promote the French expertise and technological offer, with the highest standards of nuclear safety, security and non-proliferation. In the field of reactors, it covers both high power reactors (EPR), medium power (ATMEA) but also the development of SMR.
- 17. In parallel, France has been operating storage facilities for medium, low and very low level waste for several decades, managing more than 90% of the volumes of radioactive waste generated. France is also, with the CIGEO project, among the few countries that have initiated the development of a management solution for its ultimate waste after reprocessing.
- 18. Finally, France has been working for many years now on the preparation of the new generation of nuclear reactors, the Generation IV, in particular through the ASTRID project, with the aim of ensuring a more sustainable management of resources and the reduction of waste, through the closure of the fuel cycle.
- 19. France is also building on its soil a new research reactor, the Jules Horowitz reactor, which has been opened, with other CEA facilities, to Agency's member states as part of the ICERR program (International Center Based on Research Reactors) of the IAEA.

Six partnership agreements have been signed in recent months with Algeria, Indonesia, Jordan, Morocco, Slovenia and Tunisia to implement this programme.

M. Chairman,

20. Let me conclude by underlining that more generally for all these issues, we count on the support of the IAEA. And I wish to pay a special tribute here to its work in assistance to member States in favour of a responsible development of nuclear energy.