

Brussels, 9 March 2022

Dear President Michel,

Dear President Macron,

Like the rest of Europe, FORATOM is very concerned about the severe energy price escalation. From our perspective, the ideal energy mix is composed of renewable energy sources and nuclear. This is why we find it important to highlight that the nuclear sector which we represent consistently produces around one quarter of the electricity in the EU at an affordable price. Furthermore, nuclear is the main source of highly dispatchable, low-carbon energy which is non-weather dependent.

In the context of the EC Communication on energy prices, we believe that the EU should envisage increasing its reliance on nuclear power. This will bring the benefits outlined below.

Energy prices: Overall, nuclear production costs remain stable thanks to low operating costs and the low impact of potential variations in the price of uranium, as it accounts for only around 5% of total operating costs. In the extreme (and highly unlikely) situation where uranium prices were to triple, the price of nuclear electricity would only increase by 10%, which is far less than in the case of coal or gas power stations. Given that nuclear reactors have a constant capacity factor of between 80-90%, this can ensure energy market stability both in terms of prices and grid operation. Even if most of the uranium needed for the EU's nuclear fleet is imported, unlike fossil fuels, the diversity of the suppliers provides enough alternatives in cases where one supplier is unavailable, even if the market is rather limited.

Achieving the decarbonisation targets: The early closure of some of the existing nuclear reactors increases the risk of having to depend on CO₂ intensive fossil fuels. Maintaining the current nuclear fleet will thus help achieve the 2030 targets, and have an important impact on the overall carbon budget as every tonne of CO₂ emitted adds to global warming.

Security of energy supply: While the 2030 scenarios for the power sector within the Fit for 55 package are based on the National Energy and Climate Plans (NECPs) submitted by the Member States, they do raise some questions regarding the potential scarcity of dispatchable technologies. Indeed, the current energy crisis has revealed some of the European Green Deal's (EGD) weakness in terms of security of energy supplies. With nuclear capacity expected to decrease and coal being phased out, the only technology left to support the massive deployment of renewables is gas. But gas, in addition to increasing our dependency on imports, also emits GHG (both CO₂ and methane) making it more difficult to achieve the decarbonisation targets.

Hydrogen is also expected to help ensure energy independence. But in order to enable a competitive hydrogen economy, large amounts of low-carbon hydrogen will be needed, as recognised in the Communication. Low-carbon hydrogen produced through electrolysis from nuclear power is key for the creation of such a hydrogen economy in the short and medium term given the following advantages:

- It is low-carbon
- The long-term operation of existing nuclear power plants enables the most competitive power prices
- Nuclear has a high capacity factor of over 90%

Viability/Affordability: An electricity mix based on 100% renewables is simply not viable. The massive deployment of renewables will trigger high power system costs. Even if, in recent years, renewable developers have been claiming that projects can be implemented without subsidies, the reality shows that government support (particularly in terms of grid connections) is still needed. Furthermore, potential raw material scarcity could lead to a flattening of the renewables cost curve or even an increase in costs, particularly in the case of solar PV. But the biggest issue afflicting almost all deployed renewables is their variability. And this needs to be resolved. Storage, hydrogen or other proposed solutions aren't mature enough yet and therefore dispatchable technologies are still very much needed. Given this context, customer costs are increasing, and one of the biggest impacts of this will be felt by the EU's industry, potentially affecting its competitiveness.

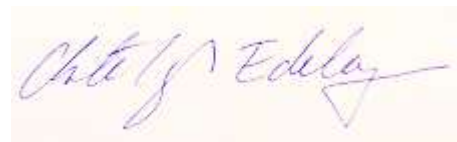
To conclude, within the context of the Communication on energy prices as well as other EU initiatives in the field of energy, we believe that the valuable contribution of nuclear should be recognised. Therefore, it is essential to fully maintain the current nuclear fleet in operation whenever possible and to support the development of new nuclear reactors in countries wishing to make use of this technology.

Yours sincerely,



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FORATOM DG

Jean-Michel Quilichini
FORATOM President



Christopher Eckerberg
FORATOM Vice-President

Cc: Ms Ursula von der Leyen, EC President
Mr Frans Timmermans, Executive Vice - President European Green Deal
Ms Kadri Simson, Energy Commissioner