



## **Nucleareurope response to the Public Consultation:**

### **Burden reduction and simplification for competitiveness of small mid-cap enterprises - Omnibus Regulation**

Nucleareurope welcomes the European Commission's proposal for simplification, particularly in the chemicals sector through this omnibus.

With regard more specifically to Regulation 2024/573 'FGAS' published in 2024, we would like to take advantage of this consultation to draw attention to what we consider to be a flaw in the system: the impossibility, as the regulation currently stands, of placing HFCs on the market beyond 2050, even though this would be necessary to meet 'safety requirements', as defined in article 3, 42) of FGAS, at operating nuclear sites.

Article 35 of the FGAS regulation provides that "Before 1 January 2040, the Commission shall review the needs for hydrofluorocarbons in the sectors where they are still used and the phase-out of HFC quota set out in Annex VII for the year 2050...". Yet, given that long term investments will be made in the next few years, or are already starting to be made, we believe that this rendez-vous clause is far too late to guarantee the availability of the supply chain given the industrial conditions of supply and that operators (manufacturers and users) need to have visibility without further delay.

For this reason, in line with the recent publication of the PINC by the European Commission and in order to ensure the long-term production of low-carbon electricity, mainly based on a European value chain and essential for the EU energy security of supply, **it is appropriate that the quota mechanism for reducing the quantity of HFCs placed on the market (Article 16) should not apply to equipment using HFCs for safety requirements such as applications designed to cool nuclear power stations**, as it is already provided for in the case of military equipment and the etching of semiconductor material.

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In accordance with the regulation (EU) 2021/1119, which sets a climate neutrality target for the European Union by 2050, and the Montreal Protocol, which implements a gradual reduction in HFCs, the FGAS regulation provides for a quota mechanism for placing HFCs on the market, with a target of 0 from 2050 (Annex VII). **Yet, beyond 2050, nuclear operators will still need refrigeration and**



**air conditioning using HFCs to ensure the safe operation of their low-carbon power generation facilities.**

Refrigeration equipment considered here come under point 5c of Annex IV of the F-GAS Regulation, with a prohibition on the placing on the market ban as of 1 January 2030, unless it is necessary to meet 'safety requirements' at the operating site as defined in Article 3(42) of the same Regulation. However, **the implementation of the quota mechanism with a phase-out scheduled for 2050 makes this derogation ineffective beyond this deadline**, and the available alternatives to HFCs do not make it possible to respond to this situation, **either in the case of (a) new production facilities, or (b) existing facilities.**

- a. In the case of new production facilities that will be commissioned in the next few years and given the outside temperature conditions projected for the end of the century, the development of safety standards for the design of these facilities leads to greater use than in the past of chillers to ensure the cooling of buildings containing equipment involved in the performance of safety functions. The available alternatives to HFCs have been studied and technical solutions such as HFO or natural refrigerants have had to be excluded in some cases, mainly because **their hazardous properties are incompatible with design rules relating to fire and explosion risks** for systems and equipment located inside buildings on nuclear powerplant.

For example, in the case of projects for new nuclear production facilities in France and following the evolution of the basic design of EPR2 technology reactors, the main qualified and safe technological solution is based on the use of HFC R513A (a mixture of R-134a and R-1234YF, which is already an optimised solution in terms of global warming potential). Initial requirements are estimated at around 18t of HFC per nuclear reactor and around 500 kg per year per reactor to cover maintenance during operation, which will extend well beyond 2050.

- b. Regarding existing installations requiring the use of HFCs for the same safety reasons as mentioned above, it is possible to build up stocks of fluids for maintenance purposes, but this does not guarantee the feasibility and availability of these stocks over a period of several decades. Here again, it is important to be able to anticipate the need to put HFC on the market beyond 2050.