

Vattenfall fully supports the EU's goal of phasing-out Fluorinated greenhouse gases (F-gas), which have a very high global warming potential (GWP).

However, F-gases are still predominately used today in electrical switchgears, which are of vital importance in order to fulfil the EU's energy transition and decarbonisation goals, as well as ensure security of supply. Electrical switchgear equipment play a critical role in the functioning of renewable energy installations, grid expansion, and the distribution and transmission of electricity. Given the current climate and geopolitical crisis, the transition period for phasing out F-gases should take into account the need not to jeopardize the decarbonisation of our energy mix, as well as ensure a continued security of energy supply.

Key Messages:

- 1. **Clarity on the continuation of use of existing SF6 based** installations (art 11.1 includes spare parts used for repairs in the "Placing on the market" (POM) prohibition). The industry needs clarity that this does not apply to spare parts of existing installations in order to sustain its operations.
- 2. Revision of the transition times to switch from SF6 based technologies. The proposed prohibition dates lead to very short transition times for all voltage levels, but notably for high voltage where we lack alternative solutions.
- 3. Consideration for exemptions for appliances where there are no optimal existing technical solutions yet, which can be the case in fossil-free energy production and distribution given the dimension of the appliances needed, in order to safeguard the road to energy transition and security of supply.

Vattenfall is a European energy company with approximately 19,000 employees. For more than 100 years we have electrified industries, supplied energy to people's homes and modernized our way of living through innovation and cooperation. Our goal is to make fossil-free living possible within one generation. Everything we do and the decisions we take shall lead to this goal. This is the basis of Vattenfall's strategy, and we advocate for a regulatory environment that makes this transition possible – in the energy sector and beyond in transport, industry etc.

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Background

On 8th April 2022, the European Commission adopted a proposal for a Regulation revising the Fluorinated greenhouse gases regulation adopted in 2014. The proposal aims at update reviewing the legislation and update in view of the European Green Deal and Climate Law and recent international obligations on hydrofluorocarbons (Montreal Protocol).

Clarity on the continuation of the use of existing SF6 based installations

In order to secure energy production, the operation of existing installations using SF6 gas must be secured until the end of their lifetime. Currently, the Commission's proposal includes spare parts in the POM prohibition (Art 11,1). Also with view on the use of F-Gases as refrigerants in heat pumps, this prohibition should generally not encompass spare parts for existing installations, until the end of their lifetime.

The lack of spare parts could endanger the safe operation and maintenance of energy production installations and undermine the security of supply, if existing switchgears have to be prematurely placed out of service due to an inability to purchase spare parts.

Moreover, the lack of replacement parts may also require remodelling of the grid, which could further endanger the security of supply.

It must be secured that installations can be maintained without replacing the whole switching installation before end of life, and clarity should be given in the text of the Commission's revision proposal on this matter.

Revision of the transition times

The proposed prohibition dates lead to very short transition times, which is concerning considering that in most cases SF6 free alternative are still very limited. Therefore, we ask to reconsider the transition times for all voltage levels.

In the voltage levels above 24 kV and especially from 52 kV upwards only very few commercial solutions are available, and at more than 145 kV no solutions besides air insulated switch gears exist. Therefore, we believe that there is no prospect that a sufficient number of economically viable alternatives can be provided by the market after the current proposed prohibition dates. Important to note is also that a lack of alternatives in the higher voltage levels could lead to a delayed extension of crucial grid connections to secure the transformation to a fossil-free energy system.

Moreover, SF6 free alternatives need to meet the technical specification of the individual installation, which requires sufficient testing periods, in order to be safely placed on the market.

Consideration for exemptions

The switchgears used in fossil-free energy production and distribution are often optimised to use as less space as possible. If they need to be replaced by SF6-free switchgears of a larger size, or by ones which are not compatible, it may be necessary to change the entire installation which jeopardizes both the transition to fossil-free energy generation and security of supply.

We ask that the final text takes into account the market availability for SF6 based switchgears in installations that are highly dependent on the size of the appliance and, if necessary, considers exemptions to the prohibition if no viable alternative is market ready.

