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Executive Vice-President Frans Timmermans

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Revision of the EU F-Gas-Regulation: Ban SF₆ from our future energy supply

Dear President of the European Commission von der Leyen,
Dear Executive Vice-President Timmermans,

Putin's war in Ukraine shows quite plainly the negative impact of our dependency on fossil oil and gas. In order to end this dependency and to approach compliance with binding climate policy, the expansion of renewable energies becomes more exigent than ever. Apart from the immense demand for green electricity from industry, private households will play an increasingly important role: The growing share of e-mobility and the expansion of electricity-based heat pumps in buildings will lead to an increasing demand for electricity and its infrastructure.

The expansion of this decentralized energy generation and increase in infrastructure entails an immense uptake of switchgear. Exemplarily for Germany, the growth rate of switchgear is expected to be 2 % every year until 2050. This uptake of switchgear would be synonymous with an increase of the most potent greenhouse gas, sulphur hexafluoride (SF₆), which is used as insulating gas in switchgear. An increase in SF₆ needs to be inhibited due to its strong climate impact: The Sixth Assessment Report of the IPCC underlines the issue of SF₆. It has repeatedly upgraded the GWP value of SF₆ to now 25.200 and determined an atmospheric lifetime of about 1000 years. Moreover, it states that atmospheric concentrations of SF₆ are rising continuously, taking a millennium to degrade into less climate-impactful compounds. These alarming research results emphasize the urgent need for action. An increase of SF₆ is in strong contrast to EU climate targets; a switch to climate and environmentally friendly alternatives for SF₆ needed urgently.

SF₆-free alternatives are market-ready and available for a wide portfolio of middle and high voltage switchgear. Particularly in regards to the expansion of renewables, this sustainable energy generation must be combined with a likewise sustainable power distribution without the most potent greenhouse gas on earth.

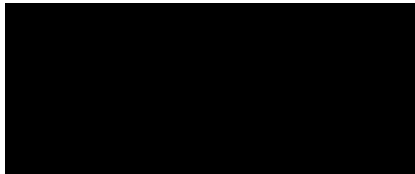
Currently, the revision of the **European F-gas regulation (EU) 517/2014** offers a substantial opportunity to introduce strict bans and containment measures for SF₆-based switchgear. This includes immediate sectoral bans for new switchgear containing SF₆ and other fluorinated substitutes up to 145 kV and prospective bans with ambitious transition periods for SF₆ application over 145 kV. We urge you to push for a climate-friendly and strong revision of the regulation. We must not leave future generations with the burden of SF₆ emissions.

Similarly to many other sectors where F-gases are used, we see the risk of establishing fluorinated substitutes rather than F-gas free climate- and eco-friendly alternatives. In the switchgear industry, companies and grid operators increasingly use perfluorinated nitrile and perfluorinated ketone instead of SF₆ as a drop in solution. Although these have lower GWP values compared to SF₆, both substitutes belong to the problematic group of per- and polyfluoroalkyl substances (PFAS). PFAS are “forever chemicals”, since their lifetime is around 1,000 years before they degrade. Accordingly, they accumulate increasingly in our ecosystems. Experts worldwide, including the European Chemicals Agency, express their concerns, identifying PFAS as a global threat to human and environmental health. PFAS are linked to many adverse health and environmental effects such as kidney cancer and ground water contamination, and research on them is just in the beginning. Following the precautionary principle, SF₆-free substitutes, which are PFAS, are no alternatives for SF₆ applications. It is crucial to raise awareness for the issues of PFAS substitutes and to succeed the SF₆ phase-out with fully sustainable alternatives.

More and more companies increase their efforts to operate sustainably and an upswing for sustainable alternatives appears in every industry. With the revision of the EU F-gas regulation, the time is right for businesses to move forward and this can be seen already: Leading switchgear manufacturers are ambitious frontrunners in the debate on SF₆ and PFAS-free technologies and demand stricter regulations for SF₆ and PFAS substitutes. Right now, it is time for political leaders to show ambition and to enable the change towards a truly sustainable and future-proof energy supply.

Thank you for considering these views.

Yours sincerely,



CEO, Deutsche Umwelthilfe e.V.

Annex:

DUH Backgroundpaper on SF₆