Switching Gears
for net zero

The race for net zero places clean electricity at the heart of Europe's energy supply. This shifts the focus to the grid infrastructure itself:

it must not harm the environment, the climate, or people.

Today, electricity grids still rely on SF6 as an insulating gas. Its contribution to global warming potential is 25,200 times greater than that of CO2. The grids of tomorrow could rely simply on Natural-Origin Gases; these have zero impact on the climate, the environment and human health.

This requires the right policy choices now. The negotiations of the F-Gas Regulation will determine which kind of switchgear insulation will succeed SF6.

Switchgears are the 'nodes' of power grids. They are essential to ensure that electricity is transmitted and distributed at the proper voltage level.

What comes after SF6 is in our hands: Do we really want to accept the use of other harmful F-Gases such as Fluoroketone and Fluoronitrile, which are classified as PFAS ('forever chemicals')? Or do we want to make the switch to Natural-Origin Gases, whose usage poses no risks to the environment or to human health?

Who we are

We are the six leading power equipment manufacturers demonstrating global leadership with a clear commitment to support the EU to set global standards for a cleaner future. Already today the majority of T&D manufacturers have based their solutions upon Natural-Origin Gas.

We have been relentless in our quest for new technologies based on Natural-Origin Gases. Many applications are now available and successfully proven in operation. We will close the remaining portfolio gaps in accordance with the proposed transition times outlined in the F-Gas Regulation.

With the **Switching Gears for Net Zero Alliance**, we convey a simple message: power grids can and should be F-gas free.

MITSUBISHI ELECTRIC
Changes for the Better

nuventura

Schneider Electric

SIEMENS energy

SIEMENS

TOSHIBA



Our choice is clear:

We want to switch gears for net zero, for zero F-Gases in switchgear.



Avoid GHG emissions and hence fully align with Europe's net zero climate law. F-Gas free solutions are the only technology allowing operators to reach their own net zero targets and to reach net zero emissions in all product life-cycle phases.

Zero dependencies as Natural-Origin Gases are widely available and free of patents, unlike Fluoronitrile and Fluoroketone which are entirely controlled by a single company. There is already a broad choice of reliable and safe technologies and manufacturers.

Prevent harm to the environment and human health by avoiding use of PFAS or "forever chemicals" which are at odds with the EU's non-toxic environment strategy. This eradicates new oppositions from anti-wind campaigners, as accelerating renewable energy is Europe's number one priority.

No additional costs to consumers' electricity bills thanks to lower gas costs and lower maintenance costs. Despite higher initial investment costs due to higher material needs, the relevant question is: as a society, can we afford not to have F-gas free grids?

Timely action is needed.

Operators need investment certainty and a clear signal that Europe is switching gears for F-gas free power grids.

Our call to EU policymakers:

- Phase-out switchgear relying on F-gases for all voltage levels where F-gas free alternatives are commercially available;
- Extend containment, leakage and reporting obligations to all use cases of F-gases, including Fluoroketone ($CF_3C(O)CF(CF_3)_2$) and Fluoronitrile ($Iso\text{-}C_3F_7CN$);
- Support the ambitious timeframe proposed by the European Commission for phasing out of SF_6 and F-Gases in power grids.

www.switchinggearsfornetzero.com