

Transition to Climate Neutral, Safe and Sustainable Power Grids

C3 PS 1 - Q1.17

Which strategies can be implemented to prevent the use or the dispersion of Substances of Very High Concerns (SVHC)?

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SIEMENS
ENERGY

C3 PS1 - Question 1.17. – Preventing the use of SVHC

▪ Manufacturer

- Complete transparency on substances used and thus on SVHC in own portfolio (*basis for SVHC phase out*)
- Target is not to use any SHVC in future

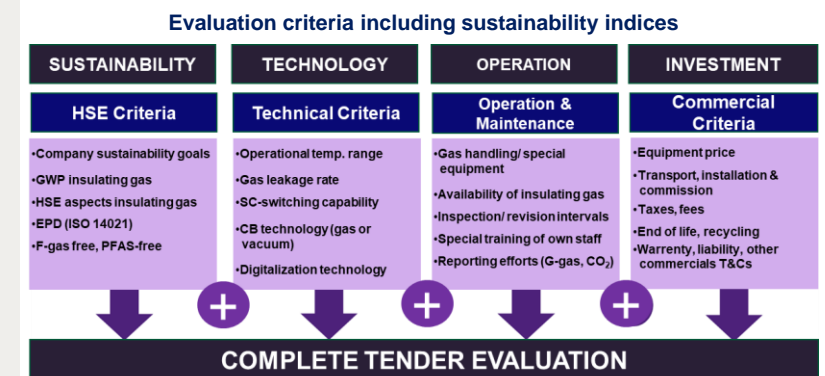
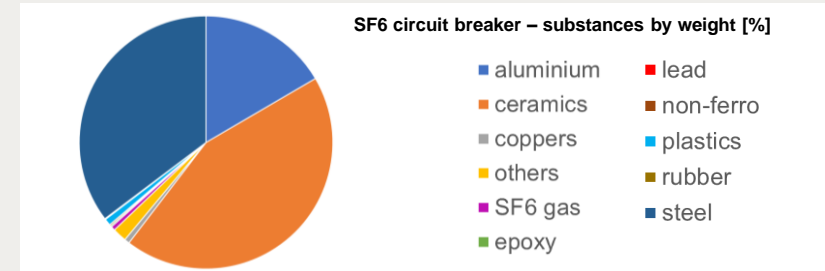
▪ Grid operator

Sustainable project specifications with HSE and Lifecycle requirements including its cost consideration to avoid the use of toxic and hazardous substances (SVHC) in electrical equipment

▪ Society, Countries and Regulators

- Innovative regulations to sustainable phase out toxic and hazardous substances and forever chemicals (e.g. PFAS).
- Sustainable suggestion for alternative substances

Group Discussion Meeting



Global activities on PFAS regulations

Stockholm Convention on persistent Organic Pollutants (POP) aiming on reducing or eliminating PFAS (2001)

Five EU member states (*Denmark, Germany, Norway, the Netherlands, Sweden*) filed registry of intention to ban PFAS (2020)

EPA (US) upgrade PFAS action plan for drinking water regulation (*prohibition of import of PFAS containing products*) (2020)

PFAS National Environmental Management Plan for guidance to address PFAS contamination (2018)

C3 PS1- Question 1.17. - Preventing the use of SVHC

Example of replacing forever chemicals or substances generating toxic byproducts by introducing a **new technology**

Old portfolio



SF₆ insulation gas



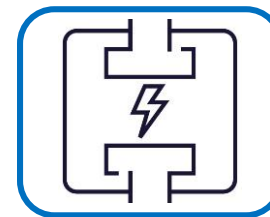
PTFE (PFAS) IU parts



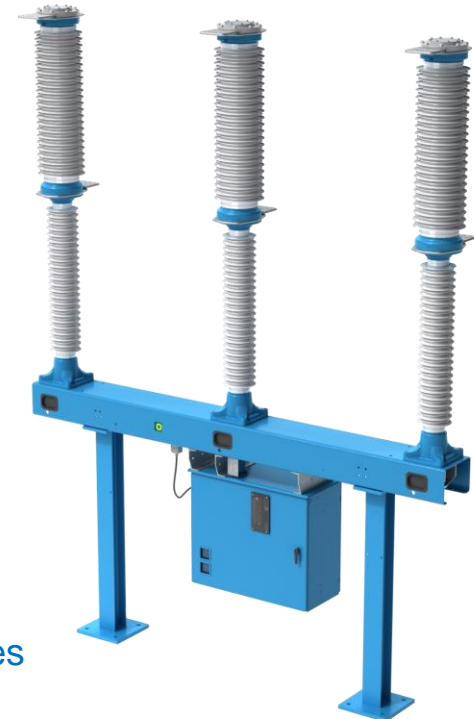
(New) BLUE portfolio



N₂ + O₂ insulation gas
(Clean Air)



Vacuum breaker electrodes
w/o PFAS IU parts



Group Discussion Meeting

IU – interrupter unit

PFAS:

currently under evaluation within EU to be declared toxic (SVHC) and banned by 2025