



SF₆ Mitigation Opportunities

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Through Partnership Collaboration, EPA works with Partners to identify and develop resources that highlight cost-effective and emerging methods of reducing SF₆ emissions. As a result, more than 85% of Partner SF₆ emissions have been reduced since the Partnership began in 1999.

Key emission mitigation strategies include:

- upgrading equipment to SF₆-free circuit breakers to reduce SF₆ use and leaks;
- establishing lifecycle approach for SF₆ management;
- ensuring good management of SF₆ acquisitions and gas inventory;
- training employees annually in SF₆ handling and in using the necessary equipment;
- recycling SF₆ gas at equipment servicing or disposal;
- implementing leak detection and repair strategies;
- and decommissioning equipment properly.

Alternatives to SF₆

Alternatives to SF₆ containing electrical equipment have emerged over the last 10 - 15 years. While lower and medium voltage equipment class alternatives have enjoyed success, higher voltage classes and a wider offering of types continue to be developed. Alternative technologies that do not use SF₆ may include, but are not limited to, equipment utilizing vacuum interrupters and alternative fluorinated gases and gas mixtures with lower global warming potential compared to SF₆. EPA collaborates with Partners and other industry players to support further development of these SF₆ alternative technologies and provide resources to electric utilities when considering upgrading or switching electrical equipment.

[Explore Partnership resources on SF₆ alternatives.](#)

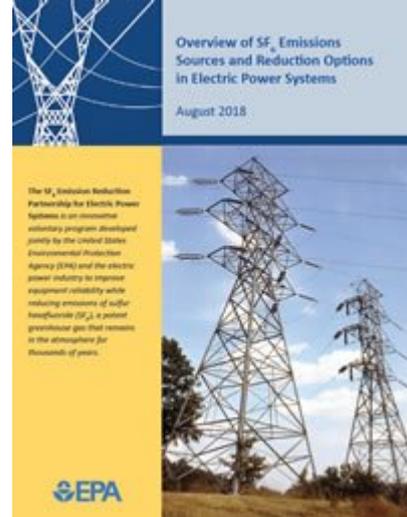
Learn about Best Practices

In collaboration with Partners and industry stakeholders, EPA has reviewed SF₆ emission sources and compiled best practices for mitigating SF₆ in electric power systems. These have been developed, tested, and shared over the past decade by participants in EPA's SF₆ Emission Reduction Partnership for Electric Power Systems. The following resources provide information about best practices and cost-effective methods of reducing SF₆ emissions that can be implemented by the electric power industry.

- [Overview of SF6 Emissions Sources and Reduction Options in Electric Power Systems \(pdf\)](#) (7.3 MB, August 2018)
- [Reducing SF6 Emissions in Electric Power Systems: Best Practices](#)

View [Additional Resources](#) for information on SF₆ related regulations, research, and case studies.

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