Welcome and Opening Remarks Lauren Aepli, US EPA





Welcome to the 2023 Workshop on SF₆ Emission Reductions and Alternatives







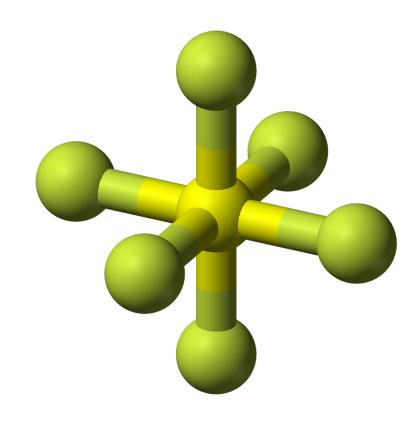
Workshop Information

- Scan the QR code on your badge to access the Workshop webpage
 - Agenda
 - Full Program
 - Product Education Sessions
- Chat with tabletop exhibitors during the breaks or mealtimes
- Questions after each presentation
- Slides will be posted to the EPS Program website after the workshop

Update from the Partnership Program

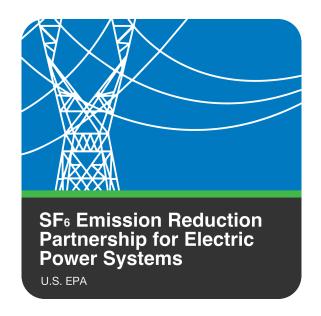
About SF₆

- Sulfur hexafluoride (SF₆) is a potent, long-lived greenhouse gas that serves as a dielectric (arcquencher) in the electric transmission sector
- SF₆ is valued as a relatively stable (non-reactive), non-toxic gas
- It is emitted from electric transmission systems during equipment operations, maintenance, and end-of-life
 - Electric transmission sector is largest source of SF₆ emissions in the US
- GWP (AR5): 23,500
- Atmospheric lifetime: 3,200 years



Partnership for Electric Power Systems

- Established in 1999 with 45 Charter Partners
- Currently 90 Partner utilities, representing approximately 50% of total U.S. grid transmission miles
- Total SF₆ nameplate capacity of partners: nearly 11.5 million lbs. in 2021
- Creates opportunities for collaboration between utilities to discuss best practices to reduce SF₆ emissions



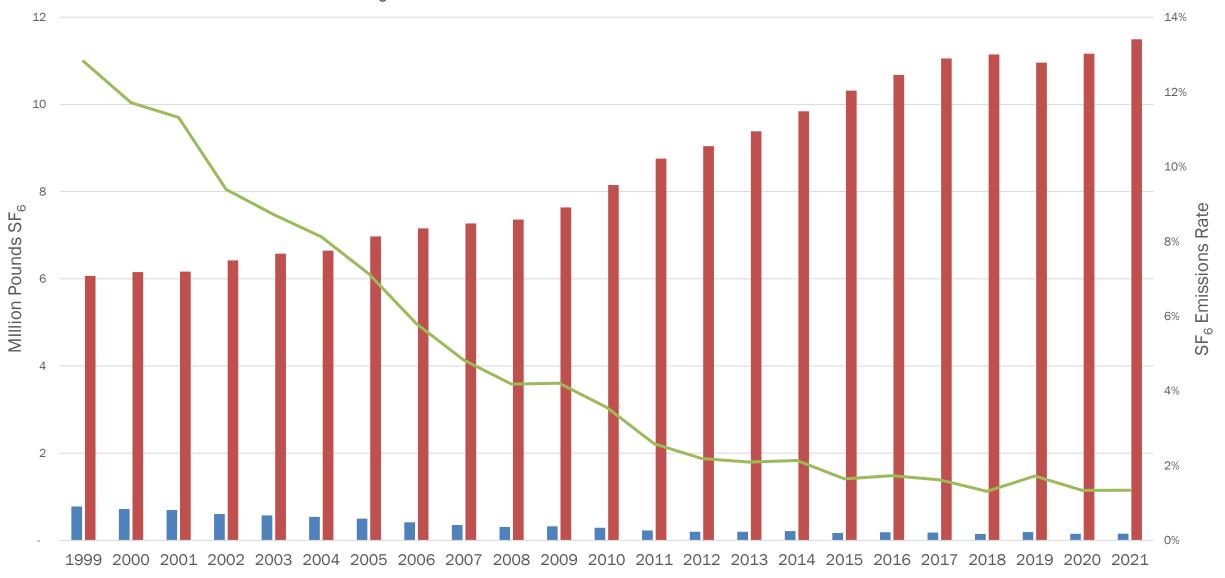
Mission: To reduce emission of sulfur hexafluoride (SF₆), a potent greenhouse gas, through voluntary, cost-effective technical and management solutions.

Vision for the Program

A **collaborative** effort between EPA and the electric power industry to **identify, recommend, and implement** cost-effective solutions to reduce sulfur hexafluoride (SF₆) emissions.

- Create opportunities for collaboration: among Partners, among the industry players (OEMs, utilities, regulators, trade groups)
- Provide technical materials that identify challenges and opportunities for mitigation
- Drive Partner participation and continued emissions reductions by being a source of recognition for their accomplishments

SF₆ Partnership Accomplishments 1999-2021

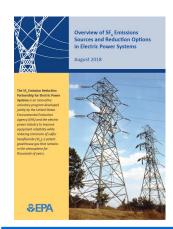


Partner Emissions (Ibs SF6) Estimated Partner Nameplate Capacity (Ibs SF6) —Emission Rate (emissions / nameplate capacity) 8

Technical Resources from the Program

Technical Report

- Overview of SF₆ Emissions Sources and Reduction Options in Electric Power Systems (2018)
- Summary Poster
 - Reducing SF₆ Emissions in Electric Power Systems (2019)
- Brief Report
 - Moving Toward SF₆-Free High Voltage Circuit Breakers: Considerations for Adopting Vacuum Breaker and Fluorinated Gas Alternative Technologies (2020)
- Tool
 - SF₆ Alternatives Benefits Calculator
- Case studies
- Webinars







How to Participate

- Share best practices
- Join the listserv
- Collaborate in review of new technical resources

Contact

- aepli.lauren@epa.gov
- www.epa.gov/eps-partnership
- See Contact Us page to join listserv

