SF₆ gas management solutions
Managing SF₆ in switchgear installations
A complete SF$_6$ gas management solution, in an efficient and environmentally friendly manner.
Does your business have a stockpile of old equipment or cylinders filled with SF$_6$?

Is the management of SF$_6$ a burden your organisation would rather do without?

Are you required to reduce the carbon footprint and environmental impact of your business?

Are you planning decommissioning or replacement of your first generation switchgear installations?

Are you also under pressure to save money on your replacement and upgrade projects?

If you answered yes to any of these questions, ABB’s new environmental service can help your organisation. ABB offers a complete SF$_6$ gas management solution, supporting our customers with the handling and management of the gas in an environmentally friendly and compliant manner.
Customer benefits

The benefits of using ABB’s SF₆ gas management solutions include:
- Improved safety and lower risk
- Reduced maintenance and replacement costs
- Lower greenhouse gas emissions
- Enhanced asset management capabilities
**Improved safety**

SF₆ in equipment that has experienced large amounts of switching can produce decomposition products that are corrosive and potentially harmful to people. In line with ABB’s focus on safety, our gas management procedures include the careful management of this hazardous substance required for reclaiming and recycling gas. Also, ABB’s gas quality inspections ensure the purity of gas in equipment exceeds the minimum standards required for safe operation. This not only protects the equipment and network, but reduces the risk of potential workplace accidents and incidents.

**Reduced maintenance and replacement costs**

The cost of handling SF₆ can be substantial, when including the cost of purchase and service of equipment such as reclaimers, gas sensing equipment, special vacuum cleaners, gas cylinders etc. Also, the expense of training service technicians and ensuring staff are qualified to handle gas can be considerable. The management and administration costs associated with SF₆ inventory management, as well as monitoring and compliance with changing local and international regulations and standards can also be significant. ABB’s gas management solutions allow organisations to reduce the high cost of developing their own gas handling capabilities.

**Remove a non-core business activity**

The management of SF₆ is an activity that many organisations do not consider as a core competence that adds value to their business. The gas is a necessity for reliable and safe operation of equipment, but the management of SF₆ is now considered an unwanted burden for many companies. ABB’s complete SF₆ gas management offering provides a solution for customers that would like to partner with ABB in the handling, reclaiming, recycling and disposal issues associated with the gas.

**Support environmental compliance objectives**

Sustainability and reducing the environmental impact of delivering products and services to the market is a primary objective of many progressive organisations. ABB’s goal is to ensure SF₆ gas is not allowed to escape to atmosphere and that any hazardous decomposition products are disposed of in a compliant and environmentally friendly manner. ABB’s SF₆ gas management solutions give customers the confidence they are meeting their environmental policy objectives through our stringent gas handling procedures, inventory systems and our trained and certified service technicians. The focus on regulating the use and handling of SF₆ to combat the effects of climate change is likely to continue in the near future. ABB continually assesses its SF₆ gas management policies, procedures, practices and standards to ensure compliance with local and international regulations and benchmarks.

**Reduced carbon footprint**

ABB understands that some customers hold unwanted, non-conforming or contaminated SF₆ that they no longer require. As part of ABB’s commitment to help our customers reduce their environmental impact, ABB will accept any quantity or quality of SF₆ for purifying to new gas quality (according to IEC 60376) using ABB’s patented recycling process and technology. Recycling contaminated gas results in a substantial net reduction in carbon emissions for organisations when compared to alternatives such as gas destruction and purchasing new gas.

**Adhere to local standards**

As well as government regulation, there are a number of standards that are associated with the handling, usage, transportation and storage of SF₆. The ABB gas management policies, procedures, systems and business practices have been set up to comply with local and international standards.

**Benefit from qualified service technicians**

The likelihood of damage to equipment is high if contaminated gas is inadvertently used in the maintenance or installation of switchgear. Even new gas can easily be compromised due to mishandling or from the introduction of impurities from cylinders, reclaimers or other gas handling equipment. This can lead to time wasted and increased cost to your organisation. ABB’s service technicians are continuously trained and certified to handle SF₆ and follow correct gas handling procedures.

**Improved protection and extension of product life**

SF₆ is well known for its insulating and arc quenching capabilities, however, over time the gas can deteriorate particularly if the equipment has experienced regular switching. Inferior gas quality can diminish these capabilities, compromising the performance of the equipment. Checking the quality of gas in equipment is essential for ensuring the protection and extension of product life. ABB’s service inspection procedures for SF₆ products include gas quality testing and replacement should gas fail product operating standards. ABB’s gas inspections are recommended for risk management best practice.

**Enhanced asset management capabilities**

The amount of unwanted SF₆ that organisations hold can be large and in many cases the quality of the gas is unknown. ABB’s SF₆ gas management solutions can help organisations improve their asset management capabilities by analysing and managing existing gas inventory. This includes completing inspections and tests on gas quality and quantity, consolidating partially filled cylinders, recycling of contaminated gas and the removal of unwanted gas.

**Make reporting to authorities easier**

The reporting obligations for organisations to local authorities are predicted to increase in line with changes in legislation to combat the effects of climate change. ABB’s inventory management solutions can support the reporting and monitoring requirements of SF₆ to regulatory bodies.
ABB can provide your organisation with solutions to all your existing SF$_6$ gas handling needs.
ABB offering

- Commissioning new products
- Inspection, maintenance and upgrades of existing assets
- SF₆ recycling and inventory management
- Decommissioning and recovery of SF₆

**SF₆ gas management solutions offering**

ABB’s SF₆ gas management solutions reduces the burden of managing SF₆ for all situations where the gas is used or handled. ABB can address the following customer needs:

**Commissioning**
- Top up gas for new equipment installation
- Safety check on installed gas purity
- Buy back any unwanted or unused new gas (where ABB completes commissioning work)

**Decommissioning**
- Reclaiming gas from decommissioned equipment
- Recycle used or contaminated gas for reuse
- Disposal of unwanted gas
- Environmentally compliant management of hazardous SF₆ decomposition by-products

**Maintenance of existing equipment**
- Inspection and assessment of gas quality in equipment
- Gas leakage detection and repair
- Refilling equipment with new gas
- Reclaiming used or contaminated gas from equipment

**Inventory management**
- Safety check of existing gas inventory
- Assessment of gas purity for reuse in equipment where quality is unknown
- Consolidation of partially filled gas cylinders
- Purify contaminated gas to new gas standard (IEC 60376)
- Choice of rent or buy cylinders
- Return empty cylinders
- Removal and destruction of non compliant cylinders
- Audit gas inventory for carbon emission accounting
- Pooling of gas stock for customers

**Disposal of gas**
- ABB will accept unwanted gas, no matter the level of contamination.
Contact us

ABB Australia Pty Limited

Power Products Service
ABB Australia Pty Limited
Moorebank NSW 2170 Australia
Ph: +61 (0)2 9821 0111
General enquiries: 1300 782 527
ABB SupportLine: 1800 222 435

Internet: www.abbaustralia.com.au