

Remanufacturing Older Breakers

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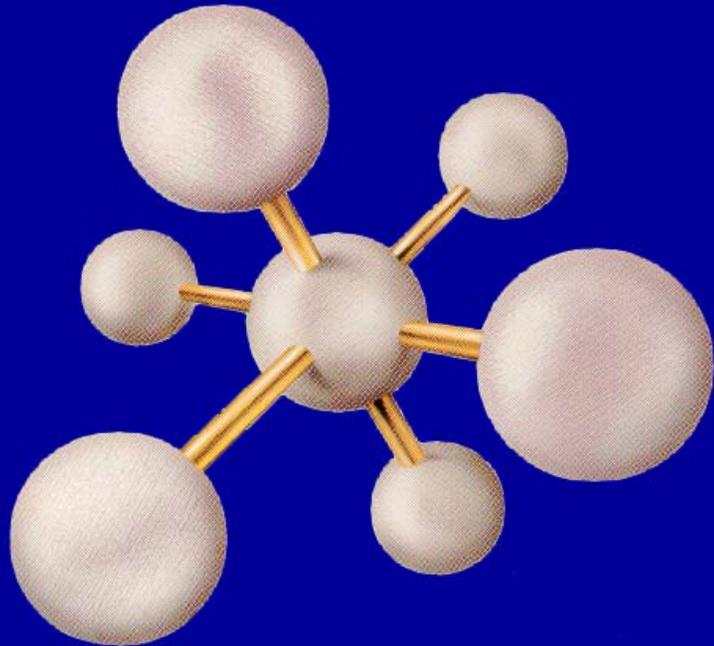
A Solution for Reducing SF₆ Emissions

Circuit Breakers



SF₆ as an Insulating Medium

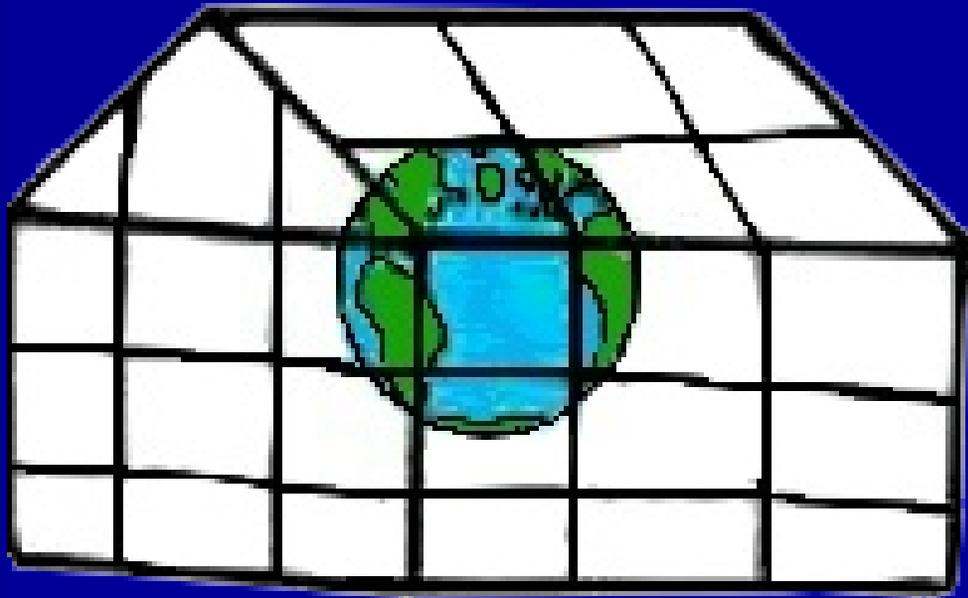
- ◆ Used for over 40 years



Benefits of SF₆

- ◆ High dielectric strength
- ◆ Excellent arch quenching properties
- ◆ Good chemical stability
- ◆ Non-toxic

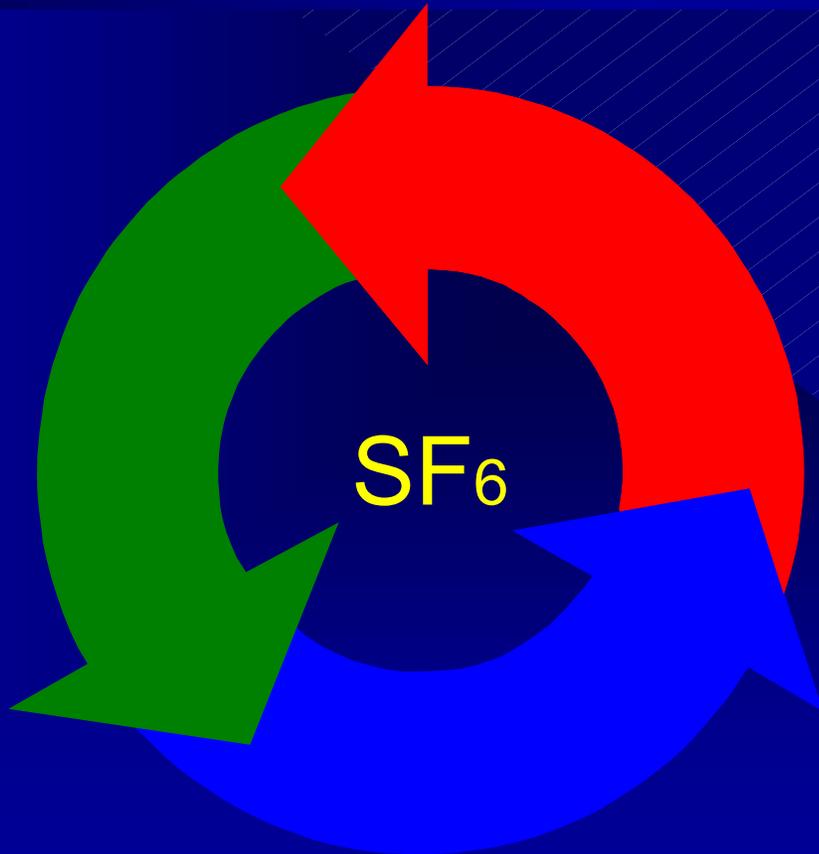
SF₆ Is a Greenhouse Gas



Reducing SF₆ Emissions

- ◆ New designs to minimize leakage
- ◆ SF₆ emission monitoring
- ◆ SF₆ recovery
- ◆ SF₆ recycling

Remanufacturing = Recycling



The Remanufacturing Process

- ◆ Disassembly of breaker
- ◆ Comparing of parts to original specifications
- ◆ Rebuilding, replacing, or machining of non-conforming parts
- ◆ Cleaning and restoring of all parts
- ◆ Reassembled and tested to original specifications

Benefits of Remanufacturing

- ◆ Environmentally friendly
- ◆ Economical

Environmental Benefits

- ◆ Reduces SF₆ emissions
- ◆ Reduces CO₂ emissions
- ◆ Saves landfill space
- ◆ Conserves raw materials
- ◆ Conserves 85% of the energy required to produce new

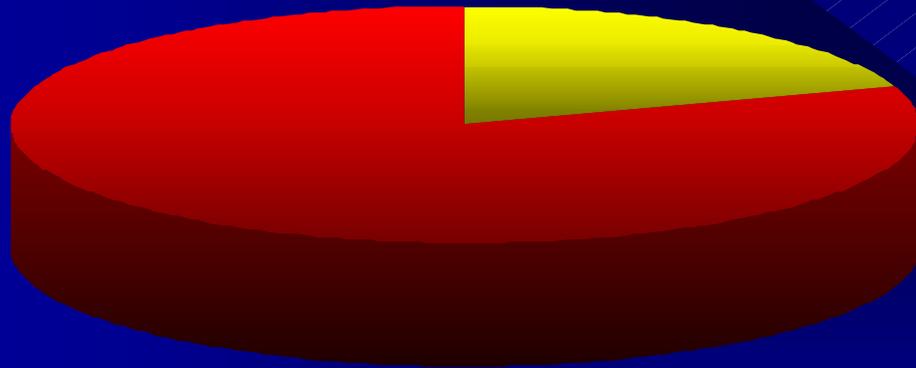
Remanufacturing Conserves 400 Trillion BTU's of Energy per Year

This energy could power 6 million passenger vehicles for 1 year

Economic Benefits

- ◆ Save on materials
- ◆ Save on site prep and construction costs
- ◆ Save on engineering costs
- ◆ Save on training costs
- ◆ Save on spare parts inventory

Remanufacturing Costs 1/3 the Price of New



■ Cost of Remanufactured Breaker

■ Cost of New Breaker

Remanufacturing Is a Solution with Many Benefits

