

The 3M logo is displayed in a bold, red, sans-serif font in the top left corner of the advertisement.The Novec logo is displayed in a bold, white, sans-serif font, positioned below the 3M logo.

Brand

The background of the advertisement features a silhouette of high-voltage power lines and towers against a vibrant sunset sky with shades of orange, red, and purple. In the distance, a power plant and several wind turbines are visible on the horizon.

# Powering a sustainable future.

## 3M™ Novec™ Insulating Gases

A reliable, efficient and environmentally responsible alternative for SF<sub>6</sub> in the electrical power industry.

3M Science. Applied to Life.™

# Solutions for building a greener grid.

## Specify solutions using 3M™ Novec™ Insulating Gases – and help reduce your impact on the environment.

When it comes to keeping our electrical power grid reliable, there's no room for error. Access to dependable electricity helps keep people safe, comfortable and productive – and that's why it's crucial to ensure the reliability of the electrical transmission and distribution infrastructure that carries power along the grid.

SF<sub>6</sub> is the most commonly used dielectric gas for medium and high voltage electrical equipment. However, SF<sub>6</sub> is a potent greenhouse gas with a global warming potential (GWP) many orders of magnitude greater than CO<sub>2</sub>.

Take a meaningful step toward building a greener electrical grid by switching to 3M™ Novec™ Insulating Gases. These products are engineered to provide dielectric performance, reliability and safety comparable to SF<sub>6</sub> – without the significant environmental trade-offs. And because they also offer an opportunity for lower total cost of ownership, “going green” can be easier on your budget.



## Reduce your greenhouse gas impact by up to 99.99%

Did you know that SF<sub>6</sub> has a global warming potential (GWP) 23,500 times that of CO<sub>2</sub> when compared over a 100-year period? In fact, it is the most potent greenhouse gas that the Intergovernmental Panel on Climate Change (IPCC) has ever reviewed.


While precautions are taken to quickly identify and repair leaks and prevent unintended releases of SF<sub>6</sub>, it is difficult to completely eliminate emissions. That's why we worked with industry leaders to develop alternative solutions. Switching to mixtures using 3M™ Novec™ Insulating Gases can help you achieve greenhouse gas reductions of up to 99.99% compared to equipment applications using SF<sub>6</sub>.

## Tested and proven dielectric performance.

3M™ Novec™ Insulating Gases offer excellent dielectric performance, a wide margin of safety and exceptional environmental properties. They are well-suited as an alternative to SF<sub>6</sub> in insulating and arc quenching gas mixtures for medium and high voltage applications. These gases have been tested for reliability both in laboratories and in successful field installations.



## 3M™ Novec™ Insulating Gases

Engineered for:	To give you:
 <p><b><i>Dielectric strength</i></b></p>	<p>Peace of mind against interruption or breakdown in insulating properties to help ensure your equipment performs as intended</p>
 <p><b><i>Sustainability</i></b></p>	<p>Reduced environmental impact thanks to low GWP and zero ODP</p>
 <p><b><i>Health and safety</i></b></p>	<p>A non-flammable, insulating gas that provides a wide margin of safety for workers when used as designed for intended applications</p>
 <p><b><i>Versatility</i></b></p>	<p>Reliability over a wide range of operating temperatures and environments</p>
 <p><b><i>Cost effectiveness</i></b></p>	<p>Reduced administrative burden from reporting SF<sub>6</sub> emissions</p>
 <p><b><i>Compatibility</i></b></p>	<p>Options to use Novec gases with a wide range of equipment components* including most common metals</p>

\*Compatibility is best evaluated on the specific materials being considered for use in contact with Novec Insulating Gases. 3M engineers are available to assist with evaluation of material compatibility tests.

## Engineered for performance, safety and sustainability

3M has been providing innovative chemistries for a wide variety of industries for decades, and our solutions are continually evolving and improving. Our scientists are constantly working on ways to help you do your job better, more safely and more responsibly. The result – 3M™ Novec™ Insulating Gases for the electrical power industry.



### Let's get started—together

3M Novec is more than a line of products – we're people who share your passion for solving problems and improving lives.

Not sure if Novec Insulating Gases are right for your application? We are here to help! Contact us to answer any questions you may have and for guidance, product data and test samples. Visit [3M.com/novec](http://3M.com/novec) or contact your local 3M Novec representative for more information and to get started today.

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### The 3M™ Novec™ Brand Family

The Novec brand is the hallmark for a variety of proprietary 3M products. Although each has its own unique formula and performance properties, all Novec products are designed in common to address the need for safe, effective, sustainable solutions in industry-specific applications. These include precision and electronics cleaning, heat transfer, fire protection, protective coatings, immersion cooling, advanced insulation media replacement solutions and several specialty chemical applications.

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3M™ Novec™ Engineered Fluids • 3M™ Novec™ Aerosol Cleaners • 3M™ Novec™ 1230 Fire Protection Fluid • 3M™ Novec™ Electronic Grade Coatings • 3M™ Novec™ Electronic Surfactants • 3M™ Novec™ Insulating Gases

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**Safety Data Sheet:** Consult safety data sheet (SDS) before use.

**Regulatory:** For regulatory information about this product, contact your 3M representative.

**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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