

FLUOROTECHNOLOGY FOR ALTERNATIVE ENERGY APPLICATIONS

FluoroTechnology plays a critical role in many alternative energy sources, leading to reduced emissions and energy costs. Thanks to the insulation properties and improved durability, efficiency and safety of fluoropolymers and fluorinated polymers, products such as lithium batteries, fuel cells and photovoltaic solar panels are possible.

Fluorinated polymers enable efficient electrolytic ionic migration, allowing for smaller, more efficient lithium batteries used in all types of electronics from automobiles to cell phones. Fluoropolymers provide chemical resistant membranes and dividers in fuel cells. They also provide the high vapor barrier, high transparency, superior weatherability, and flexibility to make solar panel front and back sheet films durable, extending product life.



The use of FluoroTechnology in the alternative energy industry supports more than 800 jobs in the U.S. and more than 2,000 jobs in Europe. Globally, FluoroTechnology materials and products specific to the alternative energy industry generate a total of 2.7 billion in economic output.¹

FluoroCouncil's Commitment to Sustainability

FluoroCouncil and its members are working with regulatory authorities and other stakeholders worldwide to innovate and drive increasingly sustainable FluoroTechnology solutions, including the global transition from long-chain PFAS² to alternatives such as short-chain fluorochemicals. Short-chain fluorochemicals are alternatives to the long-chain PFAS that provide the same valuable properties, but with improved environmental and human health profiles.

All FluoroCouncil companies are charter members of the [2010/2015 PFOA Stewardship Program](#), a global partnership with U.S. Environmental Protection Agency (EPA) based on goals to eliminate perfluorooctanoic acid (PFOA) and related chemicals from facility emissions and product content by the end of 2015. Similar programs are in place with Environment and Health Canada. A significant volume of data has been developed and rigorously evaluated by industry and regulators, supporting the conclusion that the short-chain alternative substances offer equivalent performance with improved environmental and human health profiles.

According to [the U.S. EPA](#), "data indicate that [shorter-chain chemicals] have substantially shorter half-lives in these animals than PFOA and are less toxic than long-chain PFAC chemicals."

¹ Based on preliminary estimates of 2013 data by the American Chemistry Council.

² PFAS = per- and polyfluoroalkyl substances

THE FLUOROCOUNCIL MEMBERS ARE:

Archroma Management LLC, Arkema France, Asahi Glass Co., Ltd., Daikin Industries, Ltd.,
Solvay Specialty Polymers, and The Chemours Company LLC