



# Alternative Fuels & Chemicals Coalition

*Advocating for Public Policies to Promote the Development & Production of Alternative Fuels & Chemicals, with a Focus on Sustainable Aviation Fuels*

## The Benefits of Alternative Fuels & Chemicals

The **Alternative Fuels & Chemicals Coalition (AFCC)** is monitoring the funding levels in the FY2020 appropriation bills for the programs that have an impact on the development and production of alternative fuels and chemicals and sustainable aviation fuel. AFCC's objective is to ensure there is sufficient funding to:

- Support research and development,
- Stimulate innovations in the development and production of alternative fuels and chemicals,
- Fund scale up and commercialization,
- Streamline regulatory requirements,
- Speed deployment, and
- Facilitate industry adoption of new fuels and chemicals that offer significant improvements in operating costs and efficiency and reduce environmental impacts.

### **Alternative Fuels & Chemicals Offer Benefits to Every State – and Local Communities in Almost Every Congressional District**

- **Communities in every state and the majority of Congressional districts have the opportunity to create jobs and stimulate economic development through the production of alternative fuels and chemicals and, especially, sustainable aviation fuel (SAF).**
- This is because many alternative fuels and chemicals and SAF can be produced from waste products that are readily available in most communities.
- These wastes often represent economic and environmental liabilities to these communities due to the logistics associated with their disposal.
- **By using these waste materials to produce alternative fuels and chemicals and SAF, communities can turn these liabilities into job creators and economic assets.**

### **Alternative Fuels and Chemicals Offer Significant Economic Benefits**

For example, tests conducted on military jets at Wright-Patterson Air Force Base in 2012 and the Naval Air Warfare Center Weapons Division at China Lake in 2013 found that:

- **Some drop-in renewable aviation fuels add 13% to performance**, compared to fossil fuels.
- SAF lowers engine temperatures by 135 degrees, owing to the absence of impurities and particulate matter found in conventional fossil fuels; when these impurities burn, they cause high temperatures to radiate throughout the engine, causing an acceleration in metal fatigue.
- **These tests show that engine parts could last up to 10 times longer with the use of SAF.**
- The tests also showed that SAF had, for the same volume, 7 percent less mass, which lowered the weight of the plane and its fuel, allowing the jets to fly faster, farther, or carry more payload.
- **Each of these benefits translates into significant savings in reduced maintenance (hence, more time in the air), extended engine life, and increased revenues (and improved military preparedness) due to better performance and the ability to carry more payload.**

**This is one example of the benefits that alternative fuels and chemicals can offer. Wise FY2020 investments in agency programs will help spread benefits like these to many industrial sectors – and to communities throughout the U.S.**