

SUSTAINABLE AVIATION FUEL: ETHANOL IS KEY TO MEETING GOALS



Corn ethanol is a low carbon transportation fuel that can help decarbonize anything from planes to automobiles. Ethanol can play a major role in supplying the fledgling sustainable aviation fuel (SAF) industry, which reduces aviation carbon emissions.

In order to meet this challenge, we need to have a strong and vibrant ethanol industry today, and we must ensure that the life cycle assessment (LCA) we use has the most up-to-date science available.

COMMITTED TO GOAL

Growth Energy's members have contributed to producing more than 600 million gallons of SAF, **meeting more than 20 percent of President Biden's 2030 goal** of producing 3 billion gallons of SAF under his Sustainable Aviation Fuel Grand Challenge.

GROWTH ENERGY'S ASK

We urge Members of Congress to use U.S.-based methodologies like the GREET Model when determining the carbon intensity from U.S.-produced ethanol converted to SAF.

LIFE CYCLE ASSESSMENT (LCA) MODELING

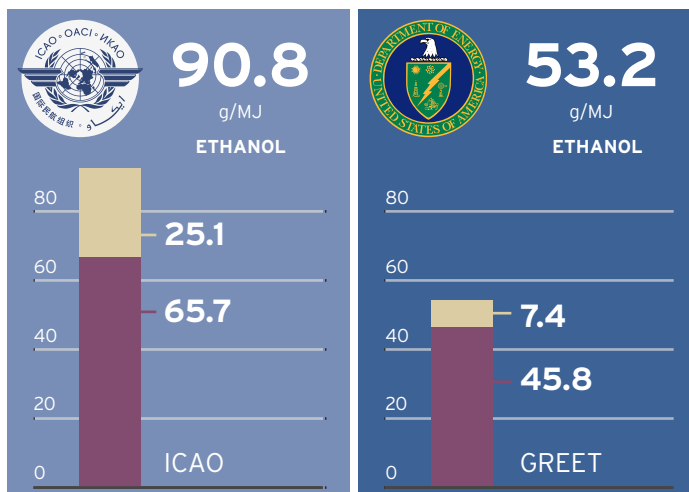
In order to address climate change, Congress is currently reviewing methods to encourage fuel producers to make SAF, including tax incentives. To qualify, fuel producers must offer a renewable fuel that significantly reduces carbon emissions compared to petroleum-based jet fuel.

However, Congress is considering using the International Civil Aviation Organization (ICAO), a United Nations agency, when modeling the carbon intensity of various fuels. The science within this model is severely outdated. In fact, ICAO actually rates petroleum-based jet fuel better than U.S. corn-grain ethanol, which is blatantly untrue.

The U.S. Department of Energy's GREET Model is already in use and incorporates up-to-date science which more accurately scores carbon intensity for ethanol and other renewable fuels.

Congress should be using a U.S.-based lifecycle emissions model when determining U.S.-based tax incentives. Without a change in modeling to GREET, U.S. biofuel producers will not be able to participate in the SAF market, and rural communities will be locked out from contributing to a cleaner climate, and our ability to decarbonize the airline fleet will suffer.

ETHANOL FOR JET FUEL: ICAO VS GREET



These ratings are based on two main factors:

INDUCED LAND USE VALUES: ICAO relies on a land use estimate that is three and a half times higher than GREET and scores significantly higher at 25.1 g/MJ. GREET recognizes the increased efficiencies from U.S. farmers and rates ethanol's land use change at 7.4 g/MJ.

ATTRIBUTIONAL GHG EMISSIONS: ICAO bases its corn-grain ethanol on information nearly ten years old in its estimate of direct GHG emissions of 65.7 g/MJ. GREET updates its model annually and rates ethanol as 45.8 g/MJ.

These differences cause ICAO to rate corn-based ethanol 71% higher than GREET.