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 a vibrant ethanol industry today, and we must ensure that the life cycle assessment (LCA) we use has the most up-to-date science available.

**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 The science within this model is severely outdated and 10-15 years old. 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.

**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.