# Biofuels

### Science and Sustainability Tour

Tour participants represented the Committee on Oversight and Accountability, Congressional Western Caucus, House Agriculture Committee and Senate Agriculture Committee as well as the offices of Rep. Sanford D. Bishop Jr. (GA-O2), Rep. James Comer (KY-O1), Sen. Mike Crapo (ID), Rep. Sharice Davids (KS-O3), Sen. Tammy Duckworth (IL), Sen. Joni Ernst (IA), Rep. Randy Feenstra (IA-O4), Rep. Carlos A. Gimenez (FL-28), Rep. Kevin Hern (OK-O1), Rep. Ashley Hinson (IA-O2), Rep. Erin Houchin (IN-O9), Rep. Dusty Johnson (SD-AL), Rep. Barry Loudermilk (GA-11), Rep. Blaine Luetkemeyer (MO-O3), Rep. Nicole Malliotakis (NY-11), Rep. Cory Mills (FL-O7), Sen. Jerry Moran (KS), Rep. Cathy McMorris Rodgers (WA-O5), Rep. Adrian Smith (NE-O3), Sen. Dan Sullivan (AK), and Rep. Mark Takano (CA-39). Guests from the Argonne National Laboratory, Department of Energy, Environmental Protection Agency and International Trade Commission were also present.

The Iowa Renewable Fuels Association (IRFA) recently hosted the 15th Annual Biofuels: Science and Sustainability Tour, bringing Washington, D.C. congressional staffers and agencies to Iowa for an immersive, hands-on experience in biofuels and modern agriculture. 50 participants were able to visit a fuel terminal, research farms, renewable natural gas plant, cattle operation, family farm, biodiesel plant, ethanol plant and fuel retailer.

#### DAY ONE

#### **Iowa State Fair**

The first official stop of the tour was the Iowa State Fair. Over dinner at Cattlemen's, participants were able to hear from Iowa FFA members on the importance of agriculture, engage in fair educational displays such as the Animal Learning Center, marvel at the prize-winning livestock animals and witness the latest in farming technology.



IRFA member Bill Couser shared a few words with tour participants.

#### **DAY TWO**

#### **ONEOK Fuel Terminal**

Here the group is watching a tanker truck offload ethanol into the terminal system.



To kick off the next day, the tour started at ONEOK's fuel terminal in Pleasant Hill. Participants learned about the transportation, storage, and distribution process for petroleum products. Renewable fuels also had a key spotlight, as ONEOK discussed their blending capabilities for their customers.

#### Kwik Star Fuel Retailer

In Ames, Iowa at Kwik Star, participants learned more about what it means to be a fuel retailer who offers higher ethanol and biodiesel blends such as E15 and B20. Participants could see fuel dispending equipment as well as enjoy food options inside the convenience store.



Kwik Trip's Joe Zietlow talks to the group while mentioning features of the pumps and the blends available to consumers.

## Iowa State University BioCentury Research Farm & Comparison of Biofuel Cropping Systems (COBS)

Dr. Tannon
Daugaard spoke
on thermochemical biofuels
production and
Dr. Keith Vorst
discussed food
protection
processes.



The tour's next stop was at ISU's BioCentury Research Farm in Ames. The research facility shared the latest research in biomass production and processing. Participants saw biopolymer processing technology, the thermochemical and biochemical processing trains, and research labs.

At the COBS farm, participants were able to learn about research on how various crop rotations impact water quality. The impact of cover crops on soil health was also explained.



Participants
gather around
aluminum
culverts, where
drainage from
each plot is able
to be
continuously
monitored and
sampled.

#### Western Iowa Energy



Before the plant tour, WIE president/GM and IRFA board president Brad Wilson welcomed the group. The biodiesel stop this year was at Western Iowa Energy in Wall Lake, Iowa. Through a tour of the plant, participants could see for themselves the production process, advancements in efficiency, and the ability to utilize multiple feedstocks.

#### **Biodiesel Policy Update**

To close out the day, Paul Winters with Clean Fuels Alliance America provided a biodiesel policy update. He discussed the environmental and carbon benefits that biodiesel and renewable diesel are delivering today as well as the significant health benefits and cost savings for communities that switch to using biodiesel.



Participants enjoyed a BBQ dinner in Wall Lake during the policy update.

#### DAY THREE

#### **Wagner Family Farm**

During lunch,
participants
heard from
several
generations of
the Wagner
family while
enjoying an Iowa
favorite walking tacos!



The first stop of day three was at the Wagner Family Farm in rural Primghar, Iowa. With the rain, participants took shelter in the Wagner family's machine shed. Several generations of Wagners joined us, including first generation farmer Bill Wagner who is 94 years old.

The Wagner family shared how much of a role advancements in farming technology play in maintaining their operation, such as GIS field mapping capabilities, as well as GIS precision planting and yield data.



Iowa Corn Growers Association and Iowa Soybean Association were also in attendance to share about each crop.

#### **Ethanol Policy Update**

Along with his presentation, Robert drove RFA's plug-in hybrid electric flex fuel vehicle.



Before leaving the Wagner farm, Robert White with the Renewable Fuels Association provided an ethanol policy update. He discussed the Renewable Fuel Standard, exports, octane, low carbon markets and everything ethanol.

#### Siouxland Energy Cooperative

The next stop of the day was at Siouxland Energy in Sioux Center. With a tour of the plant, participants could familiarize themselves with the ethanol production process and witness wet distillers grains - a high protein livestock feed co-product of producing ethanol. General manager Jeff Altena discussed process efficiencies with the group as well.



Participants
check out
Siouxland's
grain receiving
area, with a
capacity to hold
> 1 million
bushels in grain
bins.

#### **Vander Stouwe Cattle Operation**

The Vander
Stouwe cattle
operation
showcased the
benefits of the
unique building
design the cattle
are housed in.



The tour continued on to Eric Vander Stouwe's cattle operation, also in Sioux Center. Eric and his feed and nutritionist Travis Feekes discussed typical responsibilities of caring for cattle and the use of biofuel coproducts in livestock feed rations.

#### **Wells Enterprises**

The final stop of the day was at Wells Enterprises in Le Mars, Iowa. Participants learned more about sourcing from local commercial dairy operations with a focus on how biofuel coproducts impact the consumer food system.



Wells Enterprises had many tasteful, interactive exhibits alongside tour guides Lesley Bartholomew and Adam Baumgartner.

#### **DAY FOUR**

#### **Gevo Renewable Natural Gas Facility**

Participants saw dairy cows at Rock River Jerseys, also the site of Gevo's manure digesters.



For the final day of the tour, the first stop of the day was at Gevo's Renewable Natural Gas Facility in rural Northwest Iowa. At the facility, participants learned how Gevo captures methane from cow manure and converts it into low carbon natural gas for use as a direct transportation fuel or to power other low carbon fuel production facilities.

#### Sustainable Aviation Fuel, World Ag Overview

At POET Headquarters in Sioux Falls, South Dakota, the final stop on the final day of the tour covered the emerging sustainable aviation fuel market led by Gevo's Kent Hartwig. POET's Doug Berven also shared an overview on the untapped potential of global agriculture productivity.



Tour participants had lunch at POET before flying out of the Sioux Falls airport.

#### A big thank you to Tour sponsors, it would not be possible without you!







































