

12th Annual Biofuels Science and Sustainability Tour

Sponsored in part by the National Biodiesel Foundation



Group photo outside of Verbio RNG plant

Summary: The 12th Annual Biofuels Science and Sustainability Tour provided insights into the entire economic value chain of biofuel production, from sustainable agriculture to fuel production and blending. It included discussions of engine manufacturing and research on production efficiency. The tour included stops at REG's biodiesel plant, Lincolnway Energy, Verbio RNG Plant, the Couser Cattle Company, Iowa State University, Eagle's Catch (aquaculture facility), Kwik Trip, Kimberly Family Farms, and John Deere. Participants saw how biodiesel is made, how diesel engines are manufactured, and how biodiesel is marketed to consumers.

There was ample time for questions and discussion on soy and biodiesel while on the bus and at each location. Tour participants left the tour with a solid understanding of the unique market and policy challenges facing the biodiesel industry.

Daily Activities Included:

Day 1 - Aug 16

The tour kicked-off with Iowa's Agricultural Secretary, Mike Naig addressing Congressional staffers on the importance of biofuels production and use to the state's economy and advancements in agronomic practices that lead to a reduced environmental footprint year-after-year. Attendees visited the state fair agriculture and renewable energy exhibits to obtain information about new technologies in these industries and to better understand regulatory issues facing the industries.



NBF Director, Dave Walton had a chance to discuss industry issues with Dave Chu, Senior Policy Advisor for Hawaiian Congressman Kaiuli'I Kahele

Day 2 - Aug 17

National Biodiesel Board's Public Affairs and Federal Communications Director Paul Winters discussed biodiesel policy updates with the 40 congressional staffers and other participants at the Renewable Energy Group biodiesel plant in Newton, IA. As the group toured the plant, they saw the biodiesel production process, advancements in efficiency, the ability to utilize multiple feedstocks.

Experts discussed the Renewable Fuel Standard, RINs, small refinery exemptions, exports, octane, carbon, and everything ethanol. Plant executives reviewed production



Tour stops at REG

process, advancements in efficiency, and lead tour of the Lincolnway Energy ethanol plant.

Verbio plant executives provided a review of the facility still under-construction. They discussed RFS and carbon policy impact of renewable natural gas (RNG), which is producing net zero carbon ethanol.

"We are extremely excited about showcasing the commissioning of our



Photos of Lincolnway Energy plant tour.

Nevada biorefinery to congressional representatives, as this is the first large scale cellulosic RNG production facility in the country using agriculture residues, an unlimited feedstock," stated President of Verbio Farm Services Ron DeJongh. "Phase 1 will produce the equivalent of 7 million ethanol gallons in renewable natural gas."

Participants heard an overview of Couser Cattle Company's agricultural operation followed by informal small group discussions with local farmers and participants on policy, trade and regulations impacting the farm economy. Tour participants learned about the latest seed technology and agronomic practices for corn and soybeans. They became familiar with the benefits of biofuel feed coproducts in livestock



Couser Cattle Company

operations, witnessed the advances in precision farming equipment and discussed how biofuels, environmental and trade policy impacts family farm operations.

Day 3- August 18



Iowa State University Sustainable Advanced Bioeconomy Research Farm.

Attendees toured the state-of-the-art research facility and witnessed the latest pre-commercial research on enzymatic and thermo-chemical biofuels production as well as pre-treatment of various feedstocks at the Iowa State University Sustainable Advanced Bioeconomy Research Farm

While visiting the Eagle's Catch (aquaculture facility), attendees learned from executives about sustainable tilapia fish production and its connections with biofuels coproduct production.

The Annual Biofuels tour would not be complete without a visit to a family farm. This year's stop was the Kimberley Family

Farm. Grant Kimberley reviewed the history of the farm and the advances in technology and productivity made over five generations. Tour participants were joined by farmer-leaders of Iowa Soybeans Association and Iowa Corn Promotion Board and discussed and saw first-hand the improvements in crop genetics and agronomics.

Day 4 - Aug 19

The Tour finished up at local Kwik Star Convenience Store fueling station. While there they discussed the distribution of biofuel through terminals & retail stations. Attendees learned about the advantages of how year-round E15 /Unleaded 88 and how the fuel has been a success for air quality and retailers.



Kimberley Family Farm discuss technology advances