Federal legislation, regulation, litigation. Plus Educational Resources. And Advanced Biofuels USA activities.

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Advanced Biofuels USA, a nonprofit educational organization, advocates for the adoption of advanced biofuels us an energy security, economic development, military flexibility and climate change solution.







A season of Thanksgiving. A mix of historic and new, as we look to learn from the past to enhance our future. Certainly, agriculture has a key role to play. As we gather with family and friends, we can give thanks for those who grow crops for our food, fuel, feed, fiber and fun.

Reminder - Advanced Biofuels USA Split Newsletter into Two Parts: Conference Calendar which was sent earlier; and News and Happenings--this one. All can be found archived on our NEWS page.

Happenings on Capitol Hill, at the White House and in Federal Agencies

New Tags: 2016 US Presidential Campaign and 2016 US House and Senate Campaigns

2916

ELECTION To help make sustainable renewable transportation fuels part of the conversations of the 2016 campaigns, Advanced Biofuels USA is following comments by candidates as the presidential and Congressional campaign season gets underway. Click on these tags to keep in touch with the latest. To find tags on our website, just scroll down to the bottom of the right margin.

Latest Federal Legislation Posts



We follow proposed and actual federal legislation. Here are some key stories. For more legislative news, click here.

We also follow policy developments in the US, other countries and states. For more information on those topics, click on the name of the country or state that appears along the right margin of our website at www.AdvancedBiofuelsUSA.org.

BIO Applauds Renewable Chemicals Act Bill

November 13, 2015 - 6:09 pm

by Joanna Schroeder (DomesticFuel.com) Senators Debbie Stabenow (D-MI), Chris Coon (D-DE) and Al Franken have introduced a new bill, S. 2271 the Renewable Chemicals Act of 2015. If passed, the legislation would amend the Internal

New Bill Would Keep Fossil Fuel Reserves On Public Lands In The Ground

November 6, 2015 - 3:26 pm Includes VIDEO

by Katie Valentine (Think Progress) ... Sen. Jeff Merkley (D-OR), along with Senator and presidential candidate Bernie Sanders, is introducing a bill Wednesday that would bar new leases on coal, gas, oil, and tar sands ...

Congress Misses a Chance to Improve the Transportation Bill

November 5, 2015 – 11:03 am

(The Washington Post) ... But the process apparently isn't open enough to allow for a vote on the most obvious transportation solution: raising the gasoline tax to pay for the country's roads and rails. In the

House Science Committee Hearing Exposes Fundamental Flaws in RFS Opponents Attacks

(Renewable Fuels Association) Today (November 3, 2015), the House Science, Space and Technology committee held a joint hearing of the subcommittees on Environment and Oversight titled "Renewable Fuel Standard: A Ten Year Review of Costs ...

NBB to Congress: Stop Subsidizing Foreign Biodiesel Production

by Ron Kotrba (Biodiesel Magazine) As the battle over the biodiesel tax credit structure heats up, the National Biodiesel Board sent a letter to House Ways and Means Committee Chairman Paul Ryan and Ranking Member ...

Biofuel Groups Debate Fate of Renewable Fuel Standard

October 30, 2015 - 3:46 pm

by Anna Simet (Biomass Magazine) Agreeing to respectfully disagree was one of very few assenting points reached by

association heads representing the biodiesel, ethanol and advanced biofuel groups during a candid debate about the renewable ...

Support, Opposition Grow Over Proposed Changes to Biodiesel Tax Credit

October 23, 2015 - 6:36 pm

(Environmental and Energy Study Institute) On October 21, the Advanced Biofuels Association, along with the Petroleum Marketers Association and other retail fuel groups, expressed opposition to changing the biodiesel and renewable diesel blenders' tax credit. ...

Advanced Biofuels Producers Oppose Grassley Tax Credit Change: Amendment Could Hurt Consumers

October 23, 2015 - 2:53 pm

(Advanced Biofuels Association) During the Senate Finance Committee's July markup, Senator Charles Grassley offered an amendment, co-sponsored by Senator Maria Cantwell, which would extend the biodiesel and renewable diesel tax credit for two years. However, ...

U.S. Refiners Oppose Linking Subsidies to Repeal of Oil Export Ban

October 21, 2015 - 4:18 pm

by Timothy Gardner (Reuters) The top U.S. oil refiner industry group told Senate Majority Leader Mitch McConnell on Tuesday it opposes any subsidies for renewable energy or other interests that would be potentially included in ...

Latest Federal Regulation Posts



The Department of Energy, Environmental Protection Agency, the Renewable Fuel Standard and renewable volume obligations continue to get media coverage. The Department of Agriculture also plays a key role in the biofuels world. Here are some of our <u>latest postings</u>. Others you'll find in the <u>Federal Regulations</u> category.

This month, a lot of attention from Congress on the Renewable Fuel Standards's renewable volume obligations. EPA should publish them by November 30.

Should the U.S. End the Ethanol Mandate?

November 16, 2015 – 1:00 pm

by Margo Oge & Robert Bryce (The Wall Street Journal/Governors' Biofuel Coalition) ... Robert Bryce, a senior fellow at the Manhattan Institute for Policy Research, says the ethanol mandate is bad for consumers and the environment. ...

Sit on the RINs

November 16, 2015 – 12:12 pm

by Jim Lane (Biofuels Digest) ... The US Environmental Protection Agency has discovered the following way of interpreting Energy Independence and Security Act. To wit, if the transportation fuels supply chain — controlled by guess whom ...

Fuels America Launches TV Campaign to Counter Anti-RFS Letter

November 13, 2015 – 6:03 pm

(Fuels America/Ethanol Producer Magazine) Fuels America is announcing a significant television campaign today calling out Rep. Peter Welch (VT-AL) for signing on to a Congressional letter that was authored by oil industry lobbyists. The first phase ...

RFA Urges Secretary of State Kerry to Promote the Success of the RFS at COP21

November 12, 2015 – 4:12 pm

(Renewable Fuels Association) The Renewable Fuels Association (RFA) sent a letter this week to U.S. Secretary of

State John Kerry, urging him to promote the success of the Renewable Fuel Standard (RFS) at the upcoming ...

Is Obama Doing Inhofe's Dirty Work on Biofuels?

November 12, 2015 - 12:39 pm

by Paul Alexander (Huffington Post) ... "That's the biggest risk we face — not acting," Obama said. "Today, we're continuing to lead by example. Because ultimately, if we're going to prevent large parts of this earth from ...

Ad by Americans for Energy Security & Innovation: Obama Is a Hypocrite

November 12, 2015 - 10:54 am

(Americans for Energy Security & Innovation) President Obama's Environmental Protection Agency is gutting the successful Renewable Fuel Standard that has created jobs and cut our dependence on foreign oil. WATCH AD READ MORE

Biorefinery Assistance Program Changes Now in Effect

November 11, 2015 - 12:30 pm

by John Kirkwood (Faegre Baker Daniels LLP/Ethanol Producer Magazine) A few changes have been implemented in the Biorefinery, Renewable Chemical and Biobased Product Manufacturing Assistance Program, writes John Kirkwood. ... In June, an interim final ...

Anti-Ethanol Group Expands National Ad Buy

November 11, 2015 - 11:26 am

by Devin Henry (The Hill) A group opposing the federal ethanol mandate has extended its advertising campaign against the rule into several corn-growing states. The American Council for Capital Formation (ACCF), a D.C.-based free market ...

Don't Weaken the RFS

November 10, 2015 - 11:49 am

by Rep. Donald Payne Jr. (R-N.J.) (The Hill) ... The RFS is Congress's answer to lowering greenhouse gas emissions and expanding the nation's renewable fuels sector while reducing reliance on imported oil. The RFS is the most ...

A High Price to Pay: The Hidden Costs of Corn-Ethanol Mandates on New England

November 10, 2015 – 11:30 am

(Center for Regulatory Solutions) ... How have the RFS and federal corn consumption mandates impacted non-corn states, and the small businesses struggling to stay competitive in the global economy? According to a new study ...

ARF Releases Candidate Midterm Report Card

November 10, 2015 - 11:16 am

(America's Renewable Future) Today, America's Renewable Future (ARF) released a midterm report card placing 2016 presidential candidates into three categories—good, needs work, and bad—based on their support of the federal Renewable Fuel Standard (RFS). The ...

Oil Lobby Had Hand in House Lawmakers' Anti-Ethanol Note to EPA

November 9, 2015 – 6:14 pm

by Mark Drajem (Bloomberg) An odd-bedfellows group of lawmakers — led by an oil-industry ally from Texas and a progressive Vermonter — raised a familiar-sounding concern about ethanol in a letter this week to EPA chief Gina ...

RFA Sees Positives And Negatives From CBO Report

November 9, 2015 – 6:08 pm

(WNAX) A Congressional Budget Office report released this summer and shared at a Congressional Committee hearing last week looked at what might happen if the RFS were repealed. Renewable Fuel Association Senior Vice President Geoff ...

Boston-Area TV Ad Campaign Urges Federal Action on Corn Ethanol Mandate

November 9, 2015 – 5:45 pm

by Shannon Young (MassLive) A Washington D.C.-based group launched a television ad campaign in Boston this week that takes aim at the federal corn ethanol mandates and calls on congressional lawmakers to end them.

Groups Pressure EPA On Biofuels Mandate

November 9, 2015 - 5:32 pm

by Melody M. Bomgardner (Chemical & Engineering News) Supporters and opponents of biofuel mandates are ramping up pressure on EPA in hopes of influencing a rule, due on Nov. 30, on how much corn ethanol and ...

Strong RFS Support Offers Low-Risk Opportunity for Democrats to Connect with Voters They Need to Retake

Majority

November 9, 2015 - 5:18 pm

by Ryan Fitzpatrick (Third Way) Although relatively obscure by Washington standards, the Renewable Fuel Standard (RFS) carries a unique level of importance and visibility in many rural states. The fact that the RFS invariably becomes

Will the Renewable Fuel Standard Impact the 2016 Elections?

November 9, 2015 - 5:11 pm

by Jonathan H Harsch (Agri-Pulse) The escalating battle over the Renewable Fuel Standard (RFS) added another front Thursday. National Farmers Union President Roger Johnson warned President Obama that lowering the RFS volume requirements could result in ...

New CRS Report: How Corn Ethanol Mandates Have Hurt Ohio's Environment and Economy

November 6, 2015 - 3:00 pm

(Center for Regulatory Solutions) Washington-imposed mandates that have forced increasing volumes of corn ethanol to be added to Ohio's and our nation's fuel supply have produced an additional 1.92 million metric tons of CO2 emissions ...

184 Lawmakers Want EPA to Reduce 2016 Biofuel Mandate

November 6, 2015 – 2:44 pm

by Kyle Feldscher (Washington Examiner) Almost 200 House members want the Environmental Protection Agency to halt its plan to increase the amount of biofuels required in gasoline next year.

The 184 lawmakers from both parties sent ...

House Science Committee Hearing Exposes Fundamental Flaws in RFS Opponents Attacks

November 4, 2015 – 5:48 pmt

(Renewable Fuels Association) Today (November 3, 2015), the House Science, Space and Technology committee held a joint hearing of the subcommittees on Environment and Oversight titled "Renewable Fuel Standard: A Ten Year Review of Costs ...

Obama's Climate Plan Is a 'Fantasy Document'

November 3, 2015 – 7:24 pm

by John Siciliano (Washington Examiner) ... "If you add them up, we are way, way, way short to what we committed to in Paris," said David Bookbinder, former counsel for environmental group Sierra Club and ...

Payne Leads House Members in Calling on EPA to Protect Biofuels Volume Requirement

November 3, 2015 – 5:24 pm

(Office if Congressman Donald M. Payne, Jr.) As the U.S. Environmental Protection Agency (EPA) finalizes proposed rules under the Renewable Fuel Standard (RFS), Congressman Donald M. Payne, Jr. (NJ-10) and 15 of his House colleagues ...

CBC to EPA: Commit to the RFS

November 3, 2015 – 5:00 pm

by Joanna Schroeder (DomesticFuel.com) Sixteen members of the Congressional Black Caucus (CBC) have sent a letter to the Environmental Protection Agency (EPA) today calling on the agency to get back on track with the Renewable

How Gas-Guzzling Americans Are Aiding the Call for More Biofuels

November 3, 2015 - 3:38 pm

by Mario Parker (BloombergBusiness) Obama administration may increase biofuel consumption targets; U.S. gasoline demand this year to reach highest since 2007 — More demand means more gasoline being blended. And more blending means more ethanol potentially ...

Better Biofuels Ahead: The Road to Low-Carbon Fuels

November 3, 2015 - 2:20 pm

by Emily Cassidy (Environmental Working Group) Biofuels produced from switchgrass and post-harvest corn waste could significantly reduce the emissions that contribute to climate change, according to an analysis by EWG and University of California biofuels experts.

Automobile Fuel Economy Standards in a Lower-Oil-Price World: A CFR Discussion Paper

November 2 2015 10:36 on

by Varun Sivaram and Michael A. Levi (Council on Foreign Relations) Corporate average fuel economy (CAFE) standards, which require automakers to achieve government-mandated targets for the efficiency of the vehicles they sell each year, can ...

Biodiesel Poll: 80% of Voters Support a US Renewable Fuel Standard

November 2, 2015 - 7:22 pm

by Jim Lane (Biofuels Digest) In Washington, 80 percent of US registered voters support a renewable fuel standard today and just 10 percent oppose. The remaining 9 percent are unsure.

Moore Information conducted an online survey ...

Fuels America: How Did the Oil Industry Suddenly Become Obama Administration Climate Policy Advisors?

November 2, 2015 – 6:55 pm

by Jim Lane (Biofuels Digest) In Washington, Fuels America will launch a seven-figure TV and digital ad campaign Friday morning depicting President Obama's choice of who to listen to when it comes to the Renewable ...

Opinions Sought on National Forest Service Biofuels, Forest Restoration Projects

November 2, 2015 – 6:23 pm

(Southeast Partnership for Integrated Biomass Supply Systems) Bioenergy Alliance Network of the Rockies (BANR research member David Jackson, PhD of the University of Idaho seeks participants for a survey of "a broad cross-section of the American public" to ...

Biofuel Groups Debate Fate of Renewable Fuel Standard

October 30, 2015 - 3:46 pm

by Anna Simet (Biomass Magazine) Agreeing to respectfully disagree was one of very few assenting points reached by association heads representing the biodiesel, ethanol and advanced biofuel groups during a candid debate about the renewable

DuPont Celebrates the Opening of the World's Largest Cellulosic Ethanol Plant

October 30, 2015 - 2:49 pn

(DuPont/PR Web) DuPont celebrated the opening of its cellulosic biofuel facility in Nevada, Iowa, with a ceremony including Iowa Gov. Terry Brandstad and many other dignitaries. This biorefinery is the world's largest cellulosic ethanol plant, ...

Ethanol from Corn Stalks: A Cure for Climate Change?

October 30, 2015 – 12:37 pm

by Donnelle Eller (Des Moines Register) ... "This is one of the core technologies that we need to cut oil use and reduce emissions from transportation," said Jeremy Martin, a senior scientist at the Union of Concerned Scientists. "It ...

New Ozone Regulations Ignore Tailpipe Exhaust

October 30, 2015 - 11:35 am

(Environmental and Energy Study Institute) The Environmental and Energy Study Institute (EESI) welcomes new ozone standards that will further protect public health from the negative respiratory, developmental, and other health effects of ozone exposure. The ...

Answers for Your Questions about Low Oil Prices and Renewable Fuels

October 30, 2015 - 10:37 am

by Jim Lane (Biofuels Digest) The Digest looks at security and energy security — ... This week, the head of Russian state intelligence service, Alexander Bortnikov, warned of a potential "invasion of Central Asia" by Taliban or ...

Are White House Insiders With Connections to Big Oil Undermining the President's Climate Change Agenda?

October 29, 2015 - 12:49 pm

by Paul Alexander (Huffington Post) ... (H)e must explain his decision to gut the Renewable Fuel Standard and hand Big Oil a decisive political victory. One lingering question is, did high-level White House staffers with ...

Oil Lobby Launches New Campaign against Ethanol Mandate

October 29, 2015 - 12:30 pm

by Devin Henry (The Hill) The American Petroleum Institute (API) will run a "multifaceted advocacy campaign" against the Renewable Fuel Standard (RFS) for the next month ahead of a deadline for the Obama administration to ...

Soapbox: Obama's EPA Needs to More Aggressively Support Biodiesel

October 28, 2015 - 1:15 pm

by Lisa Mortenson (Community Fuels/Sacramento Bee) California took a major step forward in the fight against climate change recently by adopting an aggressive new low carbon fuel standard that will sharply reduce carbon pollution from ...

President Obama Is Turning His Back on the Renewable Fuel Standard

October 27, 2015 – 2:03 pm

by former Senator Jim Talent (The Gazette) I'm old enough to remember when energy first became a national security issue during the original energy crisis in the early 1970s. That was the first time America ...

ACE Members Pressure EPA, White House; Promote Octane Benefits of Ethanol

October 27, 2015 - 11:38 am

by Brian Jennings (Ethanol Producer Magazine/A,merican Coalition for Ethanol) ACE members will keep working to help the EPA get the RFS on track will also continuing to work on other strategies to increase ethanol use, ...

Volkswagen's Woes Could Affect Ethanol Plants

October 27, 2015 - 10:42 am

by James L. Pray (Ethanol Producer Magazine/BrownWinick Law Firm) ... Diesel-powered Volkswagen cars and ethanol plants share more than their common tie to the auto industry. Both must meet rigorous emission standards: For Volkswagen cars, it ...

Obama's Carbon Emission Hypocrisy

October 26, 2015 – 11:54 am

by former Sen. Jim Talent (R-Mo.) (The Hill) On November 30, President Obama will join leaders from 196 nations in Paris for the COP 21 United Nations Conference on Climate Change. Ironically, that same day, ...

Latest Federal Litigation Posts



Federal litigation news sometimes overlaps with Federal Regulation items. For example, it seems that the VW "defeat device" regulatory cheating will end up in federal court. And issues about the Renewable Fuel Standard are in and out of federal courts, as well.

Here are some recent articles posted on the Advanced Biofuels USA

website.

Follow the links to the original posts to access the full articles. Find more items about federal litigation on our website here.

Gevo Targets Marine Market, Cuts to Isobutanol Production Cost

November 9, 2015 – 4:23 pm

by Jim Lane (Biofuels Digest) ... Based on the clarity provided by the resolution of the lawsuits, and based on the most recent results of the isobutanol fermentation campaigns conducted at the company's production plant in ...

Biofuel Groups Debate Fate of Renewable Fuel Standard

October 30, 2015 - 3:46 pm

by Anna Simet (Biomass Magazine) Agreeing to respectfully disagree was one of very few assenting points reached by association heads representing the biodiesel, ethanol and advanced biofuel groups during a candid debate about the renewable ...

Volkswagen's Woes Could Affect Ethanol Plants

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by James L. Pray (Ethanol Producer Magazine/BrownWinick Law Firm) ... Diesel-powered Volkswagen cars and ethanol plants share more than their common tie to the auto industry. Both must meet rigorous emission standards: For Volkswagen cars, it ...

Original Articles!

Advanced Biofuels USA writer **Bob Kozak** shares his thoughts about US investment in biofuels research (or lack thereof). He notes, "Conventional wisdom about declining oil prices, mostly originating from US Department of Energy/Energy Information Administration (DOE/EIA), says the fall of oil prices over the past fifteen months is simply a result of an increase in oil supply, mostly from Saudi Arabia. As is the case with most conventional wisdom, it is wrong. The reason oil

prices fell is not simply because of increased supply but instead — Because significant supplies of oil were available at below market prices beginning in the summer of 2014.

"That's right, not an increase in supply, but an increase in supply at below the market price." In Part 2 of this series, he will explore how the biofuels industry might position itself to pick up the pieces, providing sustainable, renewable, home-grown fuel while keeping oil under the ground. Here's a link to the full article. Just click on the title.

Why Oil Is Cheap in October 2015 (Part 1 of 2)

October 27, 2015 – 4:31 pm

by Robert E. Kozak* (Advanced Biofuels USA) Conventional wisdom about declining oil prices, mostly originating from US Department of Energy/Energy Information Administration (DOE/EIA), says the fall of oil prices over the past fifteen months is ...

More Educational Resources

What others are doing

We can't emphasize enough the value of every bit of thoughtful, knowledgeable education about biofuels. Here are some examples.

Lake Crystal Wellcome Memorial High School Visits Guardian Energy

October 28, 2015 - 6:24 pm

(Minnesota Bio-Fuels Association) Thirty-five high schools students today toured the Guardian Energy ethanol plant to gain a better understanding of renewable fuel production.

The students, from Lake Crystal Wellcome Memorial Secondary School, toured the various processes ...

High School Students Visit Al-Corn Ethanol Plant

October 26, 2015 - 2:15 pm

by William Morris (Owatonna People's Press) A group of Owatonna High School students got an in-depth look at a possible career in agribusiness Friday when their Agriculture Explorations class visited Al-Corn Clean Fuel in Claremont.

FFA Helps Build Next-Gen Leaders

October 27, 2015 - 11:17 am

by Tom Buis (Growth Energy/Ethanol Producer Magazine) Today's students are tomorrow's leaders in agriculture, and no organization prepares them to rise up and meet the challenges that lie ahead like the National FFA Organization. Not ...

American Ethanol Front and Center at Texas Motor Speedway November 6-8, 2015

November 3, 2015 – 7:02 pm

(National Corn Growers Association) For the third year in a row, Texas Corn Producers is teaming up with American Ethanol at the Texas Motor Speedway in Fort Worth. On November 6 through 8, American Ethanol ...

Biofuels Mobile Education Center Spreads Awareness of Biofuels

November 3, 2015 – 6:58 pm

by Shannon Yokley (Brownfield Ag News) The Biofuels Mobile Education Center (BMEC) is traveling from coast to coast to spread awareness about the benefits of ethanol. One of their recent stops was at the Kansas ...

Teach-the-Teacher and Related Opportunities

USDA Climate Hubs Fellows Program (CFHP) Opportunity-App DEADLINE: Nov. 20, 2015

November 2, 2015 – 6:15 pm

(Southeast Partnership for Integrated Biomass Supply Systems) USDA-NIFA CLIMATE HUBS FELLOWS PROGRAM HAS BEEN ANNOUNCED, WITH A NOVEMBER 20TH, 2015 APPLICATION DEADLINE The Climate Hubs Fellows Program (CHFP) has been announced (http://go.usa.gov/3J4GA). The deadline for applications ...

2016 SouthEast Energy Development (SEED) Fellowship Program — 10 Week Summer Undergraduate

Fellowship (MAY 23 -JULY 23, 2015) App. DEADLINE Nov. 23, 2015

November 2, 2015 – 6:05 pm

The Southeast Energy Development (SEED) Fellowship is funded by the U.S. Department of Agriculture-Agriculture and Food Research Initiative (AFRI) program under the Southeast Partnership for Integrated Biomass Supply Systems (IBSS) project.

If you can help students attend conferences, please do. It's an invaluable experience.

Scholarships and Competitions

Students, Prep Your Entries for Planet Forward Storyfest 2016!

October 27, 2015 - 12:10 pm | No Comment

(George Washington University) Already dense urban populations are growing. What will tomorrow's smart cities look like? How can they be sustainable?

By 2050, nearly 70% of the world's population will be in urban areas, according to \dots

Scholarship to Biodiesel Conference Open to Young Scientists

October 21, 2015 - 5:34 pm

(The National Biodiesel Board /Biodiesel Magazine) The application process is now open for college science students interested in attending the National Biodiesel Conference & Expo, Jan. 25-28 in Tampa, Florida. Members of the Next Generation Scientists for ...

Our Latest Educational Activities

Coppin State University Science Symposium



Thanks again to **Dr. Jamal Uddin**, Symposium organizer and Associate Professor of Natural Sciences and Director of the Center for Nanotechnology at Coppin State University in Baltimore, MD, for inviting Advanced Biofuels USA to exhibit at the Coppin State University Science Symposium September 17-18.

Introductions at past symposiums partnerships and projects.

And, we have a great time, too.

"Path to the Future" poster is

Environmental Science and

up for the Advanced Biofuels USA



As always, we learn not only from attending the seminars presented by leaders in science from around the world; but from interactions with students and faculty.

have lead to lasting and exciting

Pictured with **Joanne Ivancic** by our Virginia State University Professor of Agriculture, **Dr. Shobha Sriharan.**A student stopped to chat and to sign newsletter.

Poster sessions filled the halls. Dr.

Gulnihal Ozbay, Research Assistant Professor in the Agriculture and Natural Resources Department at Delaware State University talked about her work on habitat restoration and nutrient management, especially around the Chesapeake Bay.





Urbanna High School Environmental Science Classes



HIGH SCHOOL

renewables.

Thoughtful questions during the small group conversations around with some clear take-aways, as

Thanks also to **Elizabeth McCook** for the invitation to spend a day with her Environmental Science classes at Urbana High School in Frederick County, Maryland.

We covered a lot of ground, using the first session slides from the PowerPoint in our <u>Biofuels Basics/Public Presentations</u> page. We discussed what are biofuels; how are they used; how are they made; and discussed some of the reasons that hinder their wider use. The subject matter was

perfectly timed as the students were transitioning from learning about fossil fuels and nuclear energy to discussing

classes and insightful discussions during assigned sustainability issues left me

Economic, environmental and social issues were raised in the assigned small group discussions:

- How do we use land for Food/Fuel/Feed/Fiber and Fun? Who gets to decide how land is used?
- How will we economically produce and transport feedstock to biorefineries? Fuel to customers?
- How can growing crops, using forest products, growing algae or using waste from food processing or municipal waste help or hurt the environment?
 - What are applications for biofuels in the near future? How do we integrate them into daily life?



One student suggested giving samples. She and others in the group elaborated that maybe giving test drives to people in vehicles using biofuels would help. Then people would have the experience of biofuels. The group was in agreement that somehow giving samples was something that would help people better understand biofuels.

My take-away was that these students probably represented thoughts and feelings of many people in the eastern part of the US. Frederick County is a mix of suburbia, colonial era towns and rural farmland and forests. Biofuels are not a part of everyday life. There's only one station in the entire country, which stretches from Pennsylvania to Virginia, that sells E85. Biofuels are strange stuff that most have never experienced. They aren't really conscious of the 10% ethanol in regular fuel. I think the insights these girls shared are valuable for thinking about expanding the adoption of renewable fuels beyond the Midwest. I told them about

the \$.85 promotions for E85 and such. They thought those were OK, but seemed to want something even more enticing, something that would even reach those who didn't own cars yet.

Now that's something to think about. Elizabeth McCook, the teacher, said that she was told by her dealership that she should not use E85 in her flex fuel vehicle. Maybe a promotion that gets dealerships to provide new FFVs

full of E85 would address both of these issues. A free sample; and educating the dealership employees.

Another group was very interested in discussing the relationships among the price of oil, natural gas, gasoline and biofuels. And in following the value chain back from the fuels we use to their feedstock sources, contemplating how everyone in the value chain must at least make a living; and how transportation also impacts carbon footprint (depending on how renewable the transportation fuel is).

We also talked about how much a gallon of fuel costs compared to a gallon of milk or a bottle of water, or a loaf of bread. They seemed quite astonished that we can power a car with 4 people in it 25 or 30 miles for less than what a loaf of bread might cost.

All in all, it invigorates me to spend a day every so often in a classroom, to plant seeds of thoughts and to reap insights and good questions. I could not do what teachers do every day. I also learn how exhausting it is, the energy demanded, the impossibility of giving daily 40, 50 or 60 students the attention each deserves. And to cover such a wide range of topics...

My hat's off to teachers, and best wishes to science teachers who tackle the complexities of renewable energy. $\underline{\text{READ MORE}}$

Is this information useful to you?

Help Us Continue to Provide Outstanding Service. Please DONATE!



Advanced Biofuels USA relies on Individual Contributions, Corporate Donations, In-Kind Donations and the Work of Many Volunteers to enable this organization to promote the understanding, development and use of advanced biofuels and to inspire action.

You can now make a secure donation to Advanced Biofuels USA via PayPal by clicking on the "Donate" button above. It's

quick, easy and safe. Make it a year-long gift by making monthly installments automatically.

You can make your gift in memory or in honor of someone special. Just let us know. Call (301-644-1395) or send an email: info@AdvancedBiofuelsUSA.org. We'll send a special card acknowledging your gift.

Don't let this opportunity slip away! Thank you for your support.

You have received this newsletter because you indicated to us an interest in Advanced Biofuels USA. We hope you find it useful. If you want to stop receiving these occasional newsletters, just follow the instructions below.

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