

Bioenergy, Sustainability, and Land-Use Change Report Oak Ridge National Laboratory (ORNL) October 2017

Publications

- Dale VH, Kline KL, Richard TL, Karlen DL, Belden WW (2017) Bridging biofuel sustainability indicators and ecosystem services through stakeholder engagement. *Biomass and Bioenergy*. <http://authors.elsevier.com/sd/article/S0961953417303100>
- Parish ES, Dale VH, Kline KL (2017) Has pellet production affected SE US forests? *World Biomass*. DCM Productions, United Kingdom. Pages 38-42. <http://www.dcm-productions.co.uk/flippages/flipbook/index.html?page=1>
- Rocío Uría-Martínez and Paul Leiby (submitted) Energy security role of biofuels in evolving liquid fuel markets. *Biofuels, Bioproducts, and Biorefining*.

CBES Forum

Oct. 25: A presentation on “Bio-EESR: A web interactive tool to explore the economic and energy security implications of biofuels” was made by Rocio Uria-Martinez and Paul Leiby of ORNL.

Presentations

Oct. 16: Laurence Eaton and Matt Langholtz presented “Biomass Supply Capacity and Strategies” to the National Academy of Sciences Committee on Developing A Research Agenda for Carbon Dioxide Removal and Reliable Sequestration webinar titled “Introduction to Bio-Energy with Carbon Capture and Storage.”



Oct. 18-20: Keith Kline gave a keynote presentation on the interactions among bioenergy and food security for the “Ethanol Summit of the Americas,” Houston, Texas.



Oct. 19: Virginia Dale gave a presentation to the BETO Landscape Design team led by Antares Inc. about how the ORNL approach to quantify progress toward sustainability would be implemented. She set forth 4 proposed scenarios and key indicators for the project.

Oct. 24-26: Keith Kline participated in the CRC Life-Cycle Assessment of Transportation Fuels Workshop held at Argonne National Laboratory, IL.

Other ORNL Activities

Virginia Dale learned that the webinar she presented last week for the JASON project—“the first STEM Role Model live event of the 2018-19 school year...had well over 2700 students and teachers in attendance, which is about 5 times [the] average.” The event is archive on the Jason website at <http://www.jason.org/virginia-dale>

Sept. 29 – Oct. 5: Paul Leiby lead the Transportation Research Board’s Committee on Transportation Energy in a series of activities. Evaluated over 130 paper reviews and made presentation and publication recommendations for over 41 submitted and reviewed papers. Also established session descriptions and presenters for 3 podium sessions, 1 poster session, and 1 ½ day workshop at the upcoming January 20-18 Annual Meeting of the Transportation Research board.

Oct. 5: Paul Leiby delivered and discussed new estimates of the energy security implications of petroleum use reduction through fuel economy and biofuels with EPA/OTAQ sponsors on

Oct. 9-13: Rocío Uría-Martínez and Megan Johnson had a phone discussion with DOE Water Power Technologies Office sponsor Hoyt Battey regarding data on U.S. hydropower construction costs, O&M

costs, and performance trends to be included in the 2017 Hydropower Market Report (to be published in Spring 2018).



Oct. 18: ORNL participated in the Fifth Annual National Bioenergy Day (led by Esther Parish).



Oct. 24-25: Esther Parish and the rest of ORNL's Environmental Metrics for Hydropower (EMH) Project team traveled to D.C. to meet with DOE Water Power Technologies Office (WTPO) Sponsor Tim Welch and with the project's Science and Mission Advisory Boards. The EMH team presented its recent progress and received feedback on its proposed River Function Framework, EMH database of several thousand environmental metrics (gleaned from literature, FERC documents, etc.), and two initial case studies.

Oct. 25: Gbadebo Oladosu and Paul Leiby held a conference call with Jennifer Li of EPSA to discuss feedback on ORNL Report of Simulations with the Oxford Economic Model and a "Findings" document based on the report. A revised "Executive Summary" was forwarded to Jennifer Li to address these comments and help revise the "Findings" document.

Oct. 31-Nov. 3: Yetta Jager participated in a review of the Department of Interior's Northeast Climate Change Science Center, which will include a visit to USGS Conte Lab.

Upcoming ORNL Visits/Events

Nov. 7-8: Keith Kline is invited to give a presentation at the workshop at the University of Florida-UF in Gainesville, Florida, on "Ethanol in the Americas" <http://bioenfapesp.org/gsb/lacaf/index.php/workshop-ethanol-in-the-americas>

Nov. 15-17: Latha Baskaran will give a presentation at the annual Society of American Foresters National Convention in Albuquerque, NM. The presentation is on "Framework to Identify Effects of Forest Management for Wood-based Pellets on Biodiversity."

Dec. 6-8: Virginia Dale, Keith Kline, and Esther Parish will participate in the first workshop of the US-China Food-Energy-Water Systems Transdisciplinary Environmental Research Network in Nashville, TN. Virginia will give a plenary lecture on "Environmental Challenges and Opportunities in the Food-Energy-Water Nexus."

Dec. 11-15: At the invitation of Tom Richard, Virginia Dale will give a poster in the session on "Carbon-negative Bioenergy" at the 2017 AGU Fall Meeting Session.

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