

**Bioenergy Sustainability and Land-Use Change Report  
Oak Ridge National Laboratory (ORNL)  
February 2011**

**ORNL Publications Published:**

DOE's Biological and Environmental Research (BER) Advisory Committee's Long Term Visions Workshop Report has been made official and public – see [http://www.sc.doe.gov/ober/berac/BER\\_LTVreport.pdf](http://www.sc.doe.gov/ober/berac/BER_LTVreport.pdf). Virginia Dale and Gregg Marland (ORNL) contributed to Chapter 4 on Grand Challenges in Energy Sustainability.

**ORNL Publications Submitted:**

Price Projections of Feedstocks for Biofuels and Biopower in the U.S. Journal of Energy Policy. Langholtz, M., Graham, R.C., Eaton, L., Perlack, R., Hellwinckel, C., De la Torre Ugarte, D., in review.

“Collaborators welcome: Global Sustainable Bioenergy Project (GSB)” – an article for "GLP News" was submitted by Keith Kline, Esther Parish, Nagendra Singh, Stan Wullschleger, Benjamin Preston and Martin Keller of ORNL and Lee R. Lynd (Dartmouth College). The article reviews recent collaborations among ORNL, PNL and others in research supporting the GSB.

**ORNL provided comments:**

February 3: Allen McBride and Rebecca Efrogmson provided comments to DOE's Office of the Biomass Program to forward to Raffi Balian at the State Department regarding USDA's reworking of the water indicators for the Global Bioenergy Partnership (GBEP).

February 11: Keith Kline and Gangheng Wang provided comments on the draft of The Environment Paper Network's 'Forest Carbon Accounting in Products – A Proposed Methodology' that presents their Working Group's proposed methodology for accounting for the carbon footprint of forest products

Feb 23: Kline submitted comments to CARB regarding methods used to estimate carbon intensity for new and revised proposed biofuel pathways under the Low Carbon Fuel Standard, stressing that allocation of emissions and benefits in alternative fuel pathways should be applied in a consistent manner, and ideally one that complies with ISO standards for life-cycle assessment.

February 28: Comments developed by Keith Kline, Matt Langholtz, Allen McBride, Debo Oladosu, and Virginia Dale were transmitted to the Environmental Protection Agency regarding their draft report to Congress on biofuels and the environment.

**ORNL Invited Talks and Presentations:**

February 2: Virginia Dale gave a talk at the University of Tennessee on “Sustainability indicators for bioenergy” for the Sustainable Technology Through Advanced Interdisciplinary Research (STAIR) weekly seminar.

February 6-9: Keith Kline presented “Bioenergy, Land-Use Change and Food Security” at the Advance 2011 Biodiesel Conference and Expo (see <http://www.biodieselconference.com/2011/>) in Phoenix, Arizona. He participated on a panel on “Views of Food and Fuel” that included Harry Baumes (USDA), Steve Kaffka (California Biomass Collaborative) and producers. The session highlighted why food-fuel competition issues will likely remain important for any bioenergy crop in coming years.

**ORNL CBES Forum:**

The Center for Bioenergy Sustainability Forum was held on February 17<sup>th</sup>, 2011. Chris Johnas and Robin Jenkins from DuPont presented “DuPont Danisco Cellulosic Ethanol (DDCE) LLC Evaluates Business Opportunities with sustainability Assessments”.

**Other Activities:**

February 1: Gangsheng Wang began his post-doctoral research on GHG emissions associated with agricultural land use and LUC with Keith Kline and Mac Post and will focus on calculation methods, data analysis, and application of a cropland ecosystem model for bioenergy feedstock sustainability analyses.

February 11, 18 and 28: Gangsheng Wang and Keith Kline participated in the ISO PC-248 “Sustainability Criteria for Bioenergy” GHG emission methods work group calls, contributing to the development of proposed criteria and guidelines.

Rebecca Efroymsen has been selected as a peer reviewer for the USEPA report "Biofuels and the Environment: First Triennial Report to Congress." The peer review meeting will be held in Washington, D.C., in March 2011.

**Upcoming ORNL Visits/Events:**

April 4-8: OBP Sustainability Platform Peer Review, Annapolis, MD.

May 2-5: 33rd Symposium on Biotechnology for Fuels and Chemicals, Seattle.

May 17-18: GLBRC Sustainability Retreat, South Bend, IN.