

**Keith L. Kline**  
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## Education

University of Michigan, B.S. School of Natural Resources, 1979  
Framingham State College, Massachusetts, M.Ed. International Education Program, 2000

## Appointments

*2010- present:* Senior Research Staff; Oak Ridge National Laboratory (ORNL), Climate Change Science Institute and Center for Bioenergy Sustainability,  
*2006-2009:* Research Staff; Oak Ridge National Laboratory (ORNL), Environmental Sciences Division  
*2004-2006:* Regional Natural Resources Advisor and environmental program team leader; U.S. Agency for International Development (USAID), Regional Center for Southern Africa  
*2000-2004:* Research Staff, Energy Efficiency and Renewable Energy Financing; ORNL Federal Energy Management Program Team, Engineering Science and Technology Division  
*1990-2000:* Team Leader; USAID Environmental Strategic Objective, Guatemala (on assignment to USAID from ORNL Energy Division)  
*1984-1990:* Independent Contractor, USAID Energy and Environmental Programs in Latin America: Maya Biosphere Project (Guatemala), Regional Environment and Natural Resource Management Project (Central America), Central American Research Institute for Industry and Technology (programs for fuelwood, renewables and energy efficiency)  
*1980-1984:* Appropriate Technology Outreach; Peace Corps, Ecuador: design, build, evaluate and train others in biogas, wind, solar, and fuelwood conserving technologies  
*1978-1979:* Teaching Assistant, University of Michigan Institute of Public Policy Studies, Ann Arbor, Michigan  
*1972-1980:* Maple Shade Farms, St. Joseph County, Michigan

## Publications (ten recent examples)

1. Kline KL, Dale VH, Efroymson RA, Haq Z, Goss-Eng A. 2009. Land-Use Change and Bioenergy: ORNL/CBES-001, U.S. Department of Energy and ORNL. <http://www.ornl.gov/sci/besd/cbes.shtml>
2. Kline KL, Dale VH, Lee R, Leiby P. 2009. In Defense of Biofuels, Done Right. *Issues in Science and Technology* 25(3): 5-84. <http://www.issues.org/25.3/kline.html>
3. Kline, K.L and Coleman, M.D. 2010. Woody energy crops in the southeastern United States: Two centuries of practitioner experience, *Biomass and Bioenergy*, Volume 34, Issue 12, Current and Potential Capabilities of Wood Production Systems in the Southeastern U.S., December 2010, Pages 1655-1666, ISSN 0961-9534, DOI: 10.1016/j.biombioe.2010.05.005.
4. Dale VH, Kline KL, Wiens J, Fargione J. 2010. Biofuels: Implications for land use and biodiversity. *Biofuels and Sustainability report of the Ecological Society of America* <http://www.esa.org/biofuelsreports>.

5. Kline KL, GA Oladosu, VH Dale, AC McBride. 2011. Scientific analysis is essential to assess biofuel policy effects: In response to the paper by Kim and Dale on —Indirect land-use change for biofuels: Testing predictions and improving analytical methodologies, *Biomass and Bioenergy* 35:4488-4491
6. Oladosu G., K. Kline, R. Martinez and L. Eaton. 2011. Sources of Corn for Ethanol Production in the United States: A Review and Decomposition Analysis of the Empirical Data. DOI: 10.1002/bbb.305; *Biofuels, Bioprod. Bioref.* 5:640–653
7. Dale, V.H., Kline, K.L., Wright, L., Perlack, R., Downing, M., Graham, R.L. 2011. Interactions between Bioenergy Feedstock Choices and Landscape Dynamics and Land Use. *Ecological Applications* 21(4):1039-1054.
8. Dale, V.H., Efrogmson, R., and Kline, K. 2011. The land use–climate change–energy nexus. DOI 10.1007/s10980-011-9606-2. *Landscape Ecol.* 26:755-773
9. Parish ES, KL Kline, VH Dale, RA Efrogmson, AC McBride, T Johnson, MR Hilliard, JM Bielicki. In press. Comparing Scales of Environmental Effects from Gasoline and Ethanol Production. *Environmental Management*
10. Oladosu D. K. Kline, P. Leiby, R. Martinez, M. Davis, M. Downing, and L. Eaton. In press. Global economic effects of the US biofuel policy and the potential contribution from advanced biofuels. *Biofuels*

### **Synergistic Activities**

- Serve as technical advisor for International Organization on Standards (ISO) Project Committee #248 for Bioenergy Sustainability Criteria. Contribute as individual expert on food security, indirect effects, definitions, and greenhouse gas (GHG) emission calculation methods. Contribute to technical drafting of Standard 13065 and serve on US delegation to the ISO Project Committee involving representatives from industry, environmental organizations and government institutions (2010-present).
- Support the Executive Committee of the Global Sustainable Bioenergy Project to develop a strategic and comprehensive plan to assess global bioenergy potential. Task Leader for initiatives to develop and test a global model for more sustainable production of bioenergy feedstocks (2011-present).
- Serve as advisor to The Council for Sustainable Biofuel Production (CSBP - voluntary sustainability standards) on GHG emission approaches for advanced feedstocks and field testing (2010-present).
- Coordinate international activities related to bioenergy sustainability for ORNL projects that are supported by the Department of Energy Office of Biomass Program.
- Collaborating partner in the Latin American, Caribbean and Africa project (LACAf) to identify opportunities to advance mutually beneficial biofuel and food production.
- Contribute as expert on GHG emissions accounting for bioenergy for the International Energy Agency Bioenergy Task 38.
- Member of the American Society for Testing and Materials (ASTM) International/ANSI (sustainable bioenergy).
- Served by invitation on the Expert Work Group on Land-Use Change for the California Air Resource Board (CARB) Low-Carbon Fuel Standard; Sacramento, California (2010-11).
- Reviewer for relevant journals (e.g. *Environmental Modeling and Software*, *Environmental Impact Assessment Review*, *Biofuels/Future Science*, *Biotechnology for Biofuels*, *Environmental Science and Technology*)