

Untangling Bioenergy Policy in Forest Landscapes - Summary
BERKELEY BIOECONOMY CONFERENCE
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Panel Topic: Environmental Considerations – “Untangling Bioenergy Policy in Forest Landscapes.”

Conference / Location: Berkeley Bioeconomy Conference, March 27-28, 2013, University of California, Berkeley, CA.

Session Topic Description: This presentation addresses the challenge of implementing effective forest sustainability practices in the wake of emerging bioenergy programs and policies.

Moderator & Panelists: Jody Endres, Assistant Professor, Natural Resources and Environmental Science, The University of Illinois; email: Jendres2@illinois.edu.

Design, Methodology, Approach: Presentation with Q&A discussion following.

Main Discussion Points: Endres’ presentation addressed the debate about government incentives and policies for biofuel, balanced with sound forestry and environmental protection and sustainability. Bioenergy policy is pushing a review of the forestry policy debate, especially in regards to sustainability. Environmental impacts are being realized, especially with the use of forest mass for biofuel due to current biofuel policies and incentives. Endres believes that we need to reconcile sustainable forestry yield and multiple-purpose land use with biodiversity protection.

Endres pointed to the issue that current bioenergy policies are aggressively incentivizing feedstocks and our federal incentive policy promotes launching more bioenergy refineries, but environmental protection is not factored in, which concerns many environmental groups. She supports that the root of the bioenergy policy controversies have to do with addressing mounting greenhouse gas emissions, but this must be tempered with environmental impacts to land, forest use, and the associated emissions. There are many private forestry and sustainability certifications that are working to mitigate potential environmental impacts, but the challenge is to somehow develop a cohesive, effective environmental and land use policy while using biofuels more beneficially in environmental terms. Endres says, “We need to translate environmental science into policy through effective knowledge systems.”

She highlighted the legal case of Klein & the Sierra Club vs. U.S. Department of Energy & Frontier Renewable Resources (Michigan, 2012) about the use of forest mass for biofuel. Mascoma Corporation was expected to develop a commercial-scale cellulosic ethanol facility using a proprietary consolidated bioprocessing technology platform that would convert hardwood pulpwood into 20 million gallons of ethanol per year. The U.S. Department of Energy had analyzed the effects of the biofuel incentivization (on 350 acres) and decided that there were no negative environmental impacts. Mascoma agreed to an SFI (Sustainable Forestry Initiative) forest certification and audit. But environmental groups argued that the certification wasn’t sufficient, and that there was no basis in federal law for this and it could not be enforced. The

District Judge agreed to the SFI certification. This is an example of the federal policy push for the development of bioenergy refineries, without requiring environmental protections or sustainability management policies implemented prior to, or during, the process.

Endres cited a second example in Europe with the European Forestry Institute's REDD (Reducing Emissions from Deforestation and Forest Degradation) facility, which seeks to build synergies between REDD+ and Europe's Forest Law Enforcement, Governance and Trade (FLEGT) processes, as well as advocates against deforestation and forest degradation, and advocates for conservation and the sustainable management of forests. Endres points out that the EU does not have a common forest policy like the U.S., but does have a forest action plan and "Forest Europe," which builds common strategies for member countries to try to protect and sustainably manage forests. But Endres says their policies aren't sufficient and environmental groups complain that their policies are vague and undefined. The EU has spent over 2 billion on implementing sustainability forest management, but yet they are still lacking information on the state of the forests and a cohesive plan going forward. Additionally, bio-diversity monitoring has come into serious question, and now it's become necessary to come up with better options that integrate biodiversity into forestry and land use management practices.

Endres notes that Europe is starting to connect sustainability efforts to bioenergy more aggressively now. In April 2012, the European Commission passed the resolution EU 2020 Biodiversity Strategy to reduce the potential for biodiversity loss. One of the targets is more sustainable agriculture and forestry. Additionally, the European Agricultural Fund for Rural Development (EAFRD) is working to strengthen the EU's rural development policy, and is contributing to improving the competitiveness of agriculture and forestry. Plus, the European Commission has mandated against illegal logging in their Action Plan on Forest Law (FLEGT), to control the import of illegally sourced timber. The new 2013 Timber Regulation states that importers must implement due diligence when importing forest goods from other countries. There is also the international ISEAL Alliance, a non-governmental organization that works to strengthen sustainability standards through codes of good practices, as well as the ISO management system of standards. Private forest certification programs are in place too, but there is no one standard that is required and compulsory, and worldwide in reach, and many of the private certifications are limited in their target, such as the FSC certification can only be used for forest residues and plantations.

Outcomes & Analysis: As forest biomass is more and more recognized as an alternative fuel source to replace fossil fuels and reduce carbon and greenhouse gas emissions, there is increasing concern about the pressure aggressive biofuel policies are having on forests, the implications on forest health, maintaining a sustainable wood supply, and impacts on cumulative greenhouse gas emissions. Up until recently, government policies reflected that energy from biomass is good, and government policies have increasingly supported biofuel production through biomass. But with the burning of biomass and the removal of forest wood from heavily forested areas and the negative environmental implications accompanying it, governments have to rethink carbon accounting and forest policy. Endres states that, "carbon accounting is the real gorilla in the world," and the big question is now how to integrate a forestry standard that will address carbon accounting. "All carbon models are very different from each other and this is a huge challenge."

Keywords: Bioenergy policy, biodiversity protection, environmental accounting, bioenergy policies, EU bioenergy policies, environmental values, ISEAL Alliance, Forests Europe, SFI certification, FSC Certification, FLEGT, EU REDD, REDD, EAFRD, Measure 225, Forest Action Plan, Forest Stewardship Council, FSC, European Agricultural Fund for Rural Development (EAFRD).

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