



## Council on Sustainable Biomass Production

Air Resources Board Workshop  
September 15, 2010

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### ***Our Goal***

Ensure that biomass feedstocks in the U.S. are produced in a sustainable manner, ***balancing*** economic, environmental and social goals.

### ***Our Strategy***

Develop and promote a ***voluntary*** standard and third-party verified certification system through which growers of biomass and biofuel/bioenergy producers can be recognized in the market.

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### ***CSBP Focus***

- dedicated fuel crops (e.g., switchgrass)
- crop residues (e.g., corn stover)
- purpose-grown wood (e.g., poplar plantation)
- forestry; and,
- native vegetation (e.g., mowed prairie).

Does not include food crops.

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### **All stakeholders using consensus based decision-making**

- **Producers/farmers:** PA's Monona Farms, Iowa's Prairie Lands Bio-Products, Weyerhaeuser, MO's Show Me Energy
- **Refiners:** Verenium Corporation, Dupont Dansico, Genera Biomass
- **ENGOS:** EDF, NRDC, TNC, TRCP, NWF, AFF
- **Energy Companies:** Chevron, Duke Energy
- **Biotech Companies:** Mendel, Ceres, ArborGen
- **Agencies:** USDA (Forestry and Ag), EPA, DOE's Office of Biomass Production, Assoc. of Fish and Wildlife Agencies, National Assoc. of State Foresters
- **Academics:** Texas A&M, Energy Biosciences Institute (Univ. of Illinois)

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### **Provisional Standard**

- Two years of intensive work
- Address the full complement of sustainability issues through **principles, criteria, and indicators**

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### **CSBP Standard**

- Applicable to both agriculture and silviculture.
  - Climate Change
  - Biological Diversity and Productivity
  - Water Quality and Quantity
  - **Soil Quality**
  - Socio-Economic Well-being
  - Integrated Resource Management Planning
- Through **principles, criteria, and indicators**

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### **Principle/Criteria/Indicators**

**P: Soil:** Biomass production shall maintain or improve soil quality by minimizing erosion, enhancing carbon sequestration, and promoting healthy biological systems and chemical and physical properties.

**C: Maintain or improve soil health.** Minimize erosion and maintain soil carbon and nutrients at appropriate levels...

**I: Soil assessment and monitoring:** assesses and monitors nutrient levels of the soil or plants and soil capabilities guide management decisions.

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### **Principle/Criteria/Indicators (cont.)**

**I: Soil nutrient and conservation planning:** conserves soil and maintains its productivity through an integrated resource management plan.

**I: Residue removal:** retains biomass materials required for erosion control and soil fertility.

**I: Compaction:** identifies soils vulnerable to compaction and uses appropriate methods...

**I: Road construction:** limits field travel zones or paths...

**I: Erosion:** score less than or equal to T on RUSLE-II...

**I: Soil carbon:** maintains or improves soil carbon levels. (zero or positive score on Soil Conditioning Index)

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### **Agriculture:**

#### **Draft Standard → Provisional Standard**

- **Field testing of the standard in 2010**
  - Feasible/practical for large growers, small growers, and cooperatives
  - Scientifically valid as a measure of sustainability
- **Field testing of certification program in 2011**
- **Finalization and launch of certification program in 2012**

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**Forestry:**

- Coordinating with existing forestry certification programs (in process of developing biomass components)
- Short rotation woody biomass???
- Completion of forestry components by 2012.

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**Biomass Users Standard**

- Cover biomass conversion to both biofuel and biopower
- Begin development late-2010
- Standard completed and certification program launched in 2012

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**Key Challenges for Sustainable Cellulosic Biomass Production**

- Farmer Engagement and Interest in Sustainability for New Industry
- Developing the Value Proposition for Sustainable Biomass Production
- Land Conversion for Biofuels (forests and grasslands)
- GHG Emission Measurement
- Indirect Land Use Change Impacts
- Feedstock vs. Refinery Sustainability

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Other Agricultural or Biomass Sustainability  
Standards Under Development

Keystone Alliance for Sustainable Agriculture – Field to  
Market [www.fieldtomarket.org](http://www.fieldtomarket.org)

Leonardo Academy Sustainable Agriculture Standard  
[www.leonardoacademy.org/programs/standards/agstandard/development.html](http://www.leonardoacademy.org/programs/standards/agstandard/development.html)

Roundtable on Sustainable Biofuel [www.rsb.org](http://www.rsb.org)

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**To submit comments:**  
Link provided at [www.csbp.org](http://www.csbp.org)

**For more information:**

- [www.csbp.org](http://www.csbp.org)
- **Staff List**

Barbara Stinson  
Meridian Institute  
303-670-5161  
[bstinson@merid.org](mailto:bstinson@merid.org)

John Heissenbuttel  
Heissenbuttel Natural Resource Consulting  
209-296-4889  
[hnc@volcano.net](mailto:hnc@volcano.net)

Mark Jacobs  
Meridian Institute  
202-664-9421  
[mjacobs@merid.org](mailto:mjacobs@merid.org)

Danielle Youngblood  
Meridian Institute  
202-354-6451  
[dyoungblood@merid.org](mailto:dyoungblood@merid.org)

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**Questions & Discussion**

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