



# Policy Incentives for Biofuels

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Energy Offices (NASEO) Meeting  
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# Federal Policy Incentives

## **2002 Farm Bill (H.R. 2646/P.L. 107-171)**

### **Energy Title (Title IX)**

\$405 million in mandatory funding over five years:

- **Procurement of Biobased Products**
- **Grants and Loans**
- **Research and Development**
- **CCC Bioenergy Program**

## Sec. 9002 Federal Procurement of Biobased Products (\$6 mil.)

- **Federal Agencies must purchase biobased products if comparable in price, performance, and availability to conventional products**
- **Biobased products must undergo testing before receiving certification for listing**
- **By December 31, 2004 'umbrella' legislation will be reported describing categories of biobased products to be defined.**
- **Series of legislation will follow defining each category.**
- **Funding Status: House added \$2 million for total of \$3 million for program. Senate has maintained Administration's \$1 million funding level. Awaiting conference action.**

# Sec. 9004 Biodiesel Fuel Education Program (\$5 mil.)

- **1 mil/yr (\$1 mil/yr FY03-07)**
- **Educate government and private fleet managers and public on benefits of biodiesel.**
- **National Biodiesel Board, U. of Idaho awarded funding**
- **Senators Harkin and Bond offered an amendment in Senate Appropriations restoring full funding for this program.**

## Sec. 9006 Renewable Energy System & Energy System Improvements Program (\$115 mil.)

- \$23 mil/yr FY03-07 for grants, loans, and loan guarantees for renewable energy systems and energy efficiency improvements
- September 2004: USDA announced awards totaling \$22.8 mil to 167 applicants in 26 states; \$9.5 mil for anaerobic digesters, \$3.1 mil for biomass/bioenergy, \$7.9 mil for wind, and \$1.8 mil for energy efficiency improvements.
- Proposed rule to be published very soon with 30-day comment period.

## Sec. 9008 Biomass Research and Development Act (\$75 mil.)

- \$14 mil/yr (FY03-07)
- In July 2004, USDA/DOE announced \$25.5 million in biomass research funding to 22 projects selected under a joint solicitation

## Sec. 9010 Commodity Credit Corporation Bioenergy Program (\$204 mil.)

- Compensates producers of ethanol and biodiesel for commodity purchases to expand production
- Most traditional commodities as well as cellulosic feedstocks are eligible

# Rural Development Title

## Sec. 6401 Value-added Agricultural Product Market Development Program

- Amended to allow renewable energy systems to qualify for grants
- \$28.7 million FY 2003 Value-Added Producer Grants (VAPG) to 184 projects in 40 states.
- \$13.2 million available for FY 2004. Deadline for Applications was July 30.
- FY 2004 awardees expected to be announced by Oct. 8<sup>th</sup>. USDA saw a 50 percent reduction in applications due to a 61 percent reduction in available funds.

# Conservation Reserve Program

- **Voluntary program for agricultural landowners. Annual rental payments and cost-share (up to 50 percent ) to remove environmentally sensitive cropland from production**
- **Acts as incentive for production of bioenergy crops like switchgrass, hybrid poplar, and hybrid willow**
- **Last signup May 5, 2003, through June 13, 2003. 71,000 offers for about 4.1 million acres were received.**
- **Amended to allow wind turbines and biomass harvesting on CRP lands where consistent with soil, water, and wildlife habitat goals of CRP.**

# President's FY2005 Proposed Budget Cuts: Energy Title

- **Sec. 9006 Renewable Energy System & Energy System Improvements Program (\$23 mil/yr.)**
  - \$12 million cut: FY05 budget provides only \$10.77 million
  - **STATUS**: House adopted Kaptur-Herseth Amendment to restore funding to \$23 million; Senate awarded \$20 million.
- **Sec. 6401 Value-added Agricultural Product Market Development Program (\$40 mil/yr.)**  
\$25 million cut: FY05 budget provides only \$15.5 million
  - **STATUS**: House and Senate funded request level.
- **Sec. 9010 Commodity Credit Corporation Bioenergy Program (\$150 mil/yr.)**
  - \$50 million cut: FY05 budget provides only \$100 million
  - **STATUS**: Cut maintained by both House and Senate.

# USDA/NRECA Memorandum of Understanding

- **NRECA to research, develop, promote, and encourage greater cooperative use biofuels, biobased products**
- **USDA and NRECA will develop education, outreach, technical support bioenergy education among cooperatives**
- **Technologies to be considered: biomass co-fired plants, biomass gasification power plants, animal-waste-to-electricity studies, landfill methane power plants, wind and solar**
- **Rural Utilities Service (RUS) has \$200 million renewable energy loan window. In FY03 \$71.5 million distributed to renewables. FY04 loans to date are \$12.5 million.**

# Energy Title/Value Add Contacts

**SEC. 9002 Federal Procurement of Biobased Products**

**Contact: Roger Conway, 202-401-0461**

**SEC. 9004 Biodiesel Fuel Education Program**

**Contact: Carmela Bailey, 202-401-6443**

**SEC. 9006 Renew. & Effic. / Rural Development Title Programs**

**Contact: William Hagy, 202-720-7287**

**<http://www.rurdev.usda.gov/rbs/coops/vadg.htm>**

**SEC. 9008 Biomass Research and Development Act**

**Contact: Merlin Bartz, 202-720-6519**

**<http://www.bioproducts-bioenergy.gov>**

**SEC. 9010 CCC Bioenergy Program**

**Contact: Steve Gill, 202-720-2121**

**[http://www.fsa.usda.gov/daco/bio\\_daco.htm](http://www.fsa.usda.gov/daco/bio_daco.htm)**

**SEC. 6401 Rural Business Cooperative Service**

**Contact: James Haskell, 202-720-8460**

**<http://www.rurdev.usda.gov/rbs/coops/vadg.htm>**

# What we need...

- **Federal Renewable Fuels Standard (contained in 2003 Energy Bill)**
  - Sets 5 billion gallon requirement, doubling renewable fuels production by 2012 (expansion maybe needed?)
  - Requirement on refiners – not on states or consumers
    - Credits can be traded among refiners, blenders, and importers
  - Cellulosic ethanol to be counted as 1.5 gallons of renewable fuel. Conference Report provided 2.5 credit for ethanol derived from agricultural residues.
  - Conference report phased out MTBE by 2014 and provided MTBE producer liability waivers (However, waivers must be removed if RFS is to pass.)

# Renewable Production Tax Credit (PTC)

- Energy Bill extended wind and biomass (including poultry litter) PTC to January 1, 2007 and was expanded by Senate bill to include swine and bovine waste nutrients, geothermal energy, and solar energy.
- **NEEDS** credits usable for public power and cooperatives.
- 9/23 Congress passed wind/biomass extender to 12/05
- Broader Renewable PTC pending in FSC/ETI bill.

# Renewable Portfolio Standard (RPS)

- **Federal level**

- A 10% national standard that would apply to all states by 2020 proposed in Senate energy bill
- Energy Bill Conference report had no RPS (53 Senators signed a letter supporting RPS)

# Federal Tax Incentives for Biodiesel and Ethanol

- **Proposed excise tax credit of \$1.00/gal agri-biodiesel and 50¢/gal for waste animal/plant oils.**
  - **Part of Senate Transportation Bill (S.1072)- bill is in conference committee.**
  - **Part of FSC/ETI (S.1637) bill; in Conference Committee.**

# Ethanol Tax Incentives

- **Excise Tax Exemption: Refiner/Marketer pays 5.2¢/gal. less tax on 10% ethanol blend**
  - **Extension to 2010 part of Transportation and FSC/ETI Bills**
- **Blenders Income Tax Credit:**
  - **Alternative to above; most blenders use excise exemption.**
- **Volumetric Ethanol Excise Tax Credit (VEETC):**
  - **Would change current law to eliminate impact on Highway Trust Fund**
  - **Included in Transportation and FSC/ETI Bills**
- **Small Ethanol Producer Credit:**
  - **Proposed change makes farmer co-ops eligible for 10¢/gal producers tax credit.**
  - **Proposal changes definition to 60 mgal/yr (up from 30 mgal/yr)**
  - **Part of Senate FSC/ETI Bill**

# Other Biofuel Incentives

- **Energy Policy Act of 1992 Alternative Fuel Fleet Requirements (CAFE)**
- **Fuel Economy (CAFE) Credits for Flex-Fuel Vehicles.**

# State Renewable Energy Incentives with Biomass Provisions

<http://www.dsireusa.org/>

## **1) Financial Incentives**

- State Grant Programs (26 states)
- Production Incentives for Renewable Power Generation and Fuels (46 states)
- Loan Programs (16 states)
- Property Tax Incentives (8 states)
- Personal Income Tax Incentives (6 states)
- Corporate Tax Incentives (9 states)
- Sales Tax Incentives (7 states)
- Industrial Recruitment Incentives (3 states)
- Rebate Programs (7 states)

# State Renewable Energy Incentives with Biomass Provisions (cont'd)

## 2) Rules & Regulations

- Construction and Design Policies (2 states)
- Generation Disclosure Rules (18 states)
- Green Power Purchasing/Aggregation Policies (8 states)
- Net Metering Rules (26 states)
- Public Benefit Funds (13 states)
- Renewable Portfolio Standards/Set Asides/Goals (16 states)
- Required Utility Green Power Option (5 states)

# State Renewable Energy Incentives with Biomass Provisions (cont'd)

## 3) Outreach & Voluntary Programs

- Outreach Programs (4 states)
- Utility Green Pricing Programs (14)

# State Public Benefit Funds

- **15 states (plus the District of Columbia) have enacted PBF's. More than half specifically promote biomass; MA references biodiesel and biogas, MN references biogas.**
- **Generally state-wide programs**
- **Support for renewable energy resources, energy efficiency initiatives, low-income support programs**
- **Most commonly supported through a charge to all customers on electricity consumption**

# State RPS, cont'd

- **State Level**

- 16 States have enforceable policies: AZ, CA, CT, HI, IA, MA, MD, ME, NJ, NM, NV, NY, PA, RI, TX, WI
- 2 states have voluntary goals: MN, IL
- 5 states (CO, MN, NY, TX, FL) have local, public, or utility renewable policies
- CO will hold public vote on RPS November 2, 2004
- NV includes Biofuels (biodiesel, ethanol)
- MN has 2% biodiesel mandate

# What are the drivers?

- **Energy portfolio diversity: Reliability and decreased vulnerability**
- **National Security**
- **Environment – air/water pollution prevention, climate change**
- **Public Health**
- **Keeping land in agricultural production (smart growth)**
- **Jobs, Jobs, Jobs...**

# Oil Market Report (7/13)

- World oil demand growth of 2.5 mb/d projected for 2004 for global demand forecast of 81.4 mb/d.
  - 2005 global oil demand forecast of 83.2 mb/d
- 
- 9/27 Oil prices reached record \$50 per barrel due to threat of unrest in Nigeria.

# U.S. is falling behind...

- **Solar PV's: 562 megawatts (MW) in 2002 to 742 in 2003, but US share fell from 120.6 MW in 2002 to 104.2 in 2003**
- **Wind Energy: MW grown 500 percent since 1997 to 39,294 MW in 2003, with the US responsible for just 16 percent and Europe for 74 percent.**
- **Europe moving on biofuels**
- **Why? Much more aggressive policies in EU and Japan**

# Example: Iogen

- **World's first cellulose ethanol fuel for commercial use**
- **Supported by Shell, Petro-Canada, and the Government of Canada**
- **Petro-Canada is the first user of cellulosic ethanol.**
- **U.S.? Masada Resources, Middletown , NY, yet to break ground on demonstration project  
Iogen wants to build a plant in US. Idaho?**

# Choren: Syn Fuels

- German-based company
- Producing renewable synthetic fuels (diesel) or combined heat and power from varying organic materials - wood and vegetable waste using Fischer-Tropsch process.
- Agreements with VW and DaimlerChrysler



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