

# Federal Policies and Incentives for Biomass Energy: A Brief Survey

Biomass Market Development Conference

February 17, 2010

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# Navigating the Maze

- Federal policies meant to spur development of biomass energy markets are:
  - Evolutionary;
  - Diffuse, dispersed across agencies;
  - Created to meet multiple, evolving policy goals;
  - Not always consistent

# Biomass Types

- Woody biomass: forest harvest, thinnings, (hazardous fuel/infestation reduction), woody crops (willow), waste wood, etc.
- Crop/residue biomass: ethanol/biodiesel cultivated feedstock, annual and perennial energy crops, volunteer species, invasive species, yard wastes, animal manure, etc.

# Energy Forms

- Liquid fuels – transport, heating
- Solid fuels – transport, heating
- Electricity

# Policy Goals

- Replacing imported fossil energy with domestic, renewable sources
- Reducing greenhouse gas emissions
- Stimulating local/ag economies, creating jobs
- Improving forest health, while not diverting products from existing markets

# Major Legislation

- Biomass R & D Act – 2000
- Farm Bills – 2002, 2008
- Energy Policy Act (EPACT) – 2005
- Energy Independence & Security Act - 2007
- ARRA (Stimulus Bill) - 2009

# Varied Means to Multiple Ends

- Loan guarantees, grants, subsidies, tax credits to:
  - Meet 2007 EISA renewable fuels standards
  - Fund R & D for advanced biofuel production
  - Finance commercial scale ventures
  - Provide direct support for actual production
  - Spur development of closed-loop biomass systems

# Funding Agencies

- USDA: Competitive grants, direct payments, loan guarantees
- US Treasury: tax credits, cash grant option
- Department of Energy: grants, loan guarantees

# USDA Biomass Programs – 2008 Farm Bill, Title IX

- **Section 9011 - Biomass Crop Assistance Program (BCAP)**
- Supports establishment and production of biomass crops for conversion to bioenergy
- Cost-shares collection, harvest, storage and transport (CHST) of eligible materials to approved biomass conversion facilities up to \$45/ton
- FSA administers program



# BCAP

- Proposed Final Rule published for comment: [www.fsa.usda.gov/bcap](http://www.fsa.usda.gov/bcap) .
- Program will be trimmed by OMB. Funded in Farm Bill at “Such sums as necessary” – i.e., blank check. Program exceeding cost projections by orders of magnitude.
- Seven NY facilities approved to date; \$9.4MM in funds requested for period 12/1/09 to 3/31/10

# REAP

- A/K/A Section 9007; delivered by Rural Development
- Grants, guarantees of private capital loans for a broad array of renewable energy projects, including biomass/bioenergy projects
- Grants for 25% of total project cost, capped at \$500,000; loan guarantees or grant/loan guarantee combinations for up to 75% of project cost, capped at \$25MM

# REAP

- Funds equipment, buildings, engineering
- Solid or liquid biofuel production (ethanol, biodiesel, wood pellets) eligible; combustion systems for heat, steam, electric generation, CHP also eligible
- Eligible applicants: farms, rural small businesses. No residential applications



# USDA Biomass Programs

## Section 9003: Biorefinery Assistance Program

- Large loan guarantees for commercial-scale biorefineries
- Administered with DOE technical assistance
- Three guarantees for \$160MM approved to date; more under consideration
- 2010 round due to be announced later this year; funding for nearly \$1 billion in loan guarantees in 2010 budget



# USDA Biomass Programs

- Section 9005: Direct payments for production of advanced biofuels
- Grossly oversubscribed for \$55MM available in 2009 funding round
- \$85MM for FY 2010 program

# USDA Biomass Programs

- Section 9008: Biomass R & D Initiative
  - Administered jointly with DOE
  - R & D, demonstration projects for biofuels, biobased products. Historically strong focus on cellulosic research; program priorities established in yearly funding notice
  - Mandatory funding: \$28 - 40MM through 2012



# Biomass tax credits: an incomplete list

- PTC for electric generation:
  - \$0.021 closed-loop biomass facilities
  - \$0.011 open-loop biomass facilities
- VEETC: \$.45/g blenders' credit
- Renewable biodiesel: \$1/g. Expired 12/31/09; Congressional action possible.

# ARRA Section 1603: US Treasury Cash Grant

- Option to take ITC in lieu of PTC for qualified open or closed loop biomass facility or trash facility, including expansion of existing facility
- Further option to convert ITC to cash grant
- Project must be placed in service in 2009 or 2010 or construction begun before 12/31/10 and placed in service by 1/1/2014.

# ARRA Treasury Cash Grant

- Eligible biomass projects can receive 30% of project cost after project is placed in service and required documentation provided
- Project cost as basis for figuring credit reduced by value of nontaxable grants
- Depreciable basis of energy property reduced by 15% for biomass projects



# ARRA Treasury Cash Grant

- IRS published preliminary guidance several months ago; more complete guidance expected to be issued
- <http://www.ustreas.gov/recovery/1603.shtml> for guidance, application, FAQs, etc.

# Biomass Policy Directions?

- A more constrained Federal fiscal environment will likely color future incentives, but the shift to renewable power and heat sources, and legislative efforts to hasten the shift, will not disappear any time soon. Future legislation may focus on more accurate accounting of the full social costs of nonrenewable fuel use.

# Questions?

# Thank you!

