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**Energy Efficiency**  
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# U.S. Department of Energy Biomass Program

*Growing A Robust Biofuels Economy*



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**Northeast Regional Feedstock Partnership Meeting**  
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# U.S. Presidential Commitment to Ambitious Biofuels Goals

## *biomass program*

- **2006 State of the Union:**
  - Cost-competitive cellulosic ethanol” by 2012
  - **“30 in 30”**
    - Longer-term DOE biofuels goal
    - Ramp up the production of biofuels to **60 billion** gallons
    - Displace **30%** of U.S. gasoline consumption by 2030
- **2007 State of the Union:**
  - **“20 in 10”**
    - Reduce U.S. gasoline use by **20%** by 2017 through...
      - o **15%** reduction from new Alternative Fuels Standard at **35 billion** gallons/year
      - o **5%** reduction from enhanced efficiency standards (CAFÉ)



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- EPA Act 2005 Section 932(d) - Commercial Integrated Biorefinery
  - Secretary Bodman announced six awards
  - Range Fuels Kick Off (November 5, 2007)
- 10% Validation Solicitation: One-tenth to one-fifth of the projected scale of a first-commercial facility
  - Integrated biorefinery demonstrations using cellulosic feedstocks and producing a combination of fuels, chemicals, and substitutes for petroleum-based feedstocks and products
- DOE will invest up to \$405 million in three new Bioenergy Research Centers that will be located in Oak Ridge, Tennessee; Madison, Wisconsin; and near Berkeley, California. The Centers are intended to accelerate basic research in the development of cellulosic ethanol and other biofuels.
- Title XVII - Loan Guarantees
  - DOE has evaluated loan guarantee pre-applications for a variety of renewable energy projects, including several biomass projects  
<http://www.lgprogram.energy.gov/>



# DOE/OMB Regional Feedstock Partnership Milestones for FY08

## *biomass program*

- Biomass Resource Development

*Primary focus—Sustainable crop development*

- Fall 2007—Inventory existing plots from replicated field trials of dedicated energy crop & CRP lands
- Spring 2008—Propose experimental design for replicated field trials of dedicated energy crops and CRP lands
- Spring 2008—Agricultural residue removal tool (ARS/INL- led)
  - Corn stover FY08 focus (immediacy of problem)
  - Small grain straws sustainability
- Spring/Summer 2008—Conduct field trails





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- Biomass Resource Assessment
  - Assets
    - Opportunities for many types of feedstock
    - Large land areas of underutilized biomass
  - Challenges
    - Water and climate issues
    - Infrastructure
    - Energy crop Scale-up

SGI involved in development and population of  
“GIS Atlas” (ORNL-led)



## *biomass program*

- Education & Outreach
  - Continued development/population of BLOWEB as an accessible information source on the Internet
  - Extension activities
    - SARE (Sustainability)
    - Experiment Stations
    - Extension