

Building U.S. Biofuel Capacity through Partnerships

Biofuels offer a wide range of potential benefits to our nation, economy, and environment. Some biofuels that are available today, like ethanol and biodiesel, are already helping to reduce our dependence on oil. In the near future, we expect biofuels to play an increasingly important role in meeting the needs of our nation's transportation sector.

Accelerating Development of Biofuel Technology, Feedstocks, and Infrastructure

Meeting ambitious national targets for biofuels requires a radically accelerated level of technology research and infrastructure development. To expedite progress, the U.S. Department of Energy's Biomass Program is forging collaborative partnerships with industry, academia, state governments, and diverse stakeholder groups.

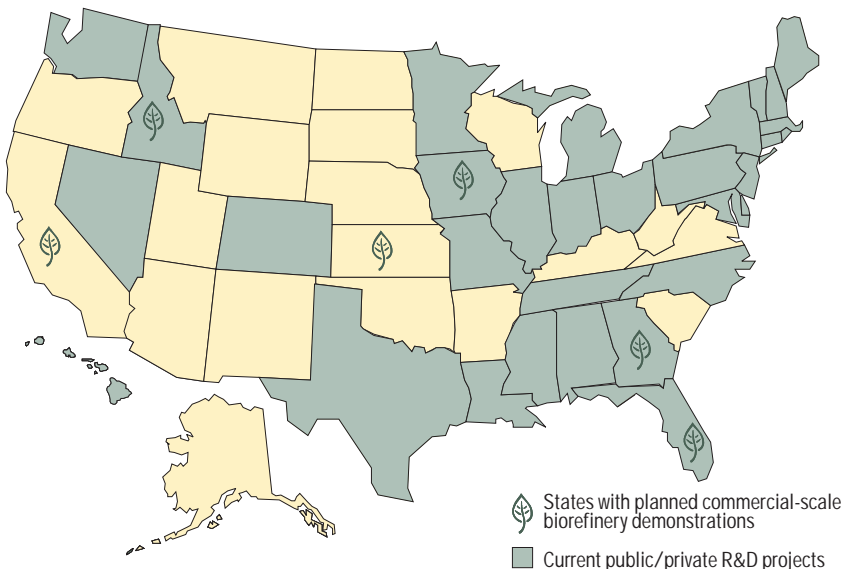
Conducting Research, Development, and Demonstrations

The Biomass Program is investing in cost-shared technology research, development, and demonstration projects across the country to accelerate biofuel production and the development of supporting infrastructure. In 2006, the program invested \$80 million in projects with industry, academia, and others across 30 states. In 2007, the program announced that it will invest up to \$385 million over the next four years to support development of six integrated biorefineries. These public-private, cost-shared projects will produce up to 130 million gallons of ethanol annually by 2012. A major goal of these projects is to demonstrate the cost-effective and replicable production of cellulosic biofuels. Achieving this goal will provide the foundation of the future biofuels industry.

Strategic Biofuel Targets

- Make ethanol from cellulosic biomass cost-competitive by 2012.
- Facilitate production of biofuels to contribute toward displacing 20% of projected gasoline use by 2017.
- Facilitate biofuels production to displace 30% of gasoline use (2004 levels) by 2030.

Investing in Biomass Technology Research, Development, and Demonstration



Partnership Benefits

- Brings together the expertise and specialized resources of public and private sectors.
- Uses regional understanding of resources and constraints to design viable supply networks.
- Accelerates progress in solving technological challenges in biofuels development.
- Expedites development of biorefinery technologies using diverse feedstocks.
- Encourages broad participation in meeting national energy goals.

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In March 2007, the Biomass Program announced more than \$23 million in federal funding for five projects focused on developing highly efficient fermentative organisms to convert biomass-derived sugars to ethanol. These projects will play a critical role in providing the tools necessary to produce cellulosic ethanol cost-effectively.

Regional Feedstock Partnerships

To achieve the ambitious biofuel goals, sufficient quantities of biomass feedstocks must be available at competitive prices. Factors affecting feedstock availability, such as soil quality, rainfall, climate, land-use patterns, and competing end-uses, vary widely by region. To address such regional variability, the U.S. Departments of Energy and Agriculture, in partnership with the Sun Grant Initiative universities, established the *Regional Biomass Energy Feedstock Partnership*. This Partnership covers five regions: Northeast, Southeast, North Central, South Central, and Western. Each regional partnership is working to:

- Determine the most effective biomass feedstocks and potential quantities available in each area
- Identify and eliminate barriers to developing feedstock resources
- Foster development of the biofuel feedstock supply chain

This approach will enable future biorefineries to process a variety of biomass feedstocks into fuels, power, and high-value products while optimizing biomass resources and economic benefits in each region. For more information, please visit <http://bioenergy.ornl.gov>

Coordination with Other Federal Agencies

The Biomass Program works with a broad range of other federal agencies to coordinate and expedite progress in the development of biofuels.

In particular, the program is actively engaged in the Biomass Research and Development Initiative—a multi-agency effort to coordinate and accelerate all federal biomass-related research and development. The initiative is guided by two distinct groups. An Interagency Board (with members appointed by the President from 11 federal agencies) coordinates strategic planning and optimizes use of federal dollars in biomass programs across agencies. The Advisory Committee (composed of approximately 30 individuals from industry, academia, and state government) provides guidance on the technical focus of federal biomass activities. For more information, please visit www.brdisolutions.com



For additional information, please contact:

The EERE Information Center
(877) EERE-INF (337-3463)
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A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.



U.S. Department of Energy Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable