

Nearly \$800 Million from Recovery Act to Accelerate Biofuels Research and Commercialization

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from the*

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The *American Recovery and Reinvestment Act of 2009* (Recovery Act), Pub. L. 111-5, was signed into law by President Obama on February 17, 2009. The Recovery Act is a \$787-billion economic stimulus package aimed at jumpstarting the U.S. economy, creating or saving millions of jobs, and putting a down payment on addressing long-neglected challenges so the nation can thrive in the 21st century. Federal agencies were charged with developing plans to award Recovery Act funds on activities that stimulate the economy and create or retain jobs. Final agency and program plans were submitted to the Office of Management and Budget (OMB) on May 15, 2009, and are now available at <http://www.recovery.gov>.

The U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Biomass Program was appropriated \$786.5 million in Recovery Act funds. The Biomass Program was directed by the President to accelerate advanced biofuels research and development (R&D) and provide additional funding for commercial-scale biorefinery demonstration projects with the Recovery Act funds. The Recovery Act gives preference to activities that can be started and completed expeditiously, including a goal of using at least 50 percent of the funds for activities that were initiated no later than June 17, 2009. The Program has received further guidance that all funds be obligated within eighteen months and spent within five years of the Recovery Act signing.

The Biomass Program \$786.5 million of Recovery Act funding is distributed across five areas. The largest portion, \$480 million, will go toward solicitations for integrated pilot- and demonstration-scale biorefineries. This will include awards for refineries planning to be operational within three years. The DOE funding ceiling for these solicitations will be \$25 million for pilot-scale projects and \$50 million for demonstration-scale projects. A funding opportunity announcement (FOA; Recovery Act: Demonstration of Integrated Biorefinery Operations; reference number: DE-FOA-0000096) under this portion of Recovery Act funding was issued May 7, 2009, and closed June 30, 2009, with a funding ceiling of \$50 million. Initial award announcements for this solicitation are expected by November 15, 2009.

The next piece will also be directed at biorefinery projects; although this \$176.5 million will be used to increase the funding of existing demonstration- and commercial-scale projects, rather than soliciting for new ones. This money will aim at accelerating those project construction phases in an attempt to get them up and running. This money will not be open for competitive solicitation.

Although biorefineries account for the majority of the Recovery Act money, another \$110 million is being used for fundamental research in the following key program areas:

- Expanding sustainability research through the Office of Science Bioenergy Research Centers (\$5 million)

- Establishing an integrated process-development unit (\$20 million)
- Creating an Advanced Biofuels Consortium to develop technologies and facilitate demonstrations of biofuels compatible with existing infrastructure (\$35 million)
- Creating an Algal Biofuels Consortium to accelerate demonstration of algal biofuels (\$50 million).

A FOA (Recovery Act: Dev. of Algal/Advanced Biofuels; reference number: DE-FOA-0000123) under this portion of Recovery Act funding was issued July 16, 2009, and will close September 14, 2009. Approximately \$85 million is expected to be available for new awards under this announcement, with a \$50-million ceiling for the Algae Consortium (1-2 awards) and a \$35-million ceiling for the Advanced Biofuels Consortium (1 award). Initial award announcements for this solicitation are expected by January 31, 2010.

An additional \$20 million is being devoted solely to ethanol research. The goals under this funding will be to optimize flex-fuel vehicles (FFVs) operating on E85, to evaluate the impact of higher ethanol blends in conventional vehicles (non-FFVs), and to upgrade existing refueling infrastructure to be compatible with fuels up to E85. A FOA (Recovery Act: Expansion of Infrastructures for Higher Ethanol Blends; reference number: DE-FOA-0000125) under this portion of Recovery Act funding was issued July 31, 2009, and will close September 30, 2009. Approximately \$5.5 million is expected to be available for new awards under two topic areas in this announcement: Topic Area 1 seeks to expand the retail refueling infrastructure for ethanol blends (\$3.5-million ceiling; 15 awards), whereas Topic 2 focuses on raising public awareness of ethanol blends through an education and outreach program (\$2-million ceiling; 3 awards). Initial award announcements for this solicitation are expected by December 30, 2009.

The remaining \$13.5 million will go toward expanding the pretreatment capacity of the National Renewable Energy Laboratory (NREL) Integrated Biorefinery Research Facility. This money will not be open for competitive solicitation.

Although the U.S. Department of Agriculture (USDA) was not appropriated any Recovery Act funding for the advancement of biomass R&D, the millions of dollars the agency spends on strengthening rural communities should benefit the rural-based biomass industry as a whole. For more on USDA Recovery Act funding visit:

http://www.usda.gov/wps/portal/arra?navid=USDA_ARRA_PLAN.