



\$480 Million Solicitation for Integrated Pilot- and Demonstration-Scale Biorefineries

Projects selected under this Funding Opportunity Announcement will work to validate integrated biorefinery technologies that produce advanced biofuels, bioproducts, and heat and power in an integrated system, thus enabling private financing of commercial-scale replications.

DOE anticipates making 10 to 20 awards for refineries at various scales and designs, all to be operational in the next three years. The DOE funding ceiling is \$25 million for pilot-scale projects and \$50 million for demonstration scale projects.

These integrated biorefineries will reduce dependence on petroleum-based transportation fuels and chemicals. They will also facilitate the development of an "advanced biofuels" industry to meet the federal Renewable Fuel Standards.

\$176.5 Million for Commercial-Scale Biorefinery Projects

\$176.5 million will be used to increase the federal funding ceiling on two or more demonstration- or commercial-scale biorefinery projects that were selected and awarded within the last two years.

The goal of these efforts is to reduce the risk of the development and deployment of these first-of-a-kind operations. These funds are expected to expedite the construction phase of these projects and ultimately accelerate the timeline for start up and commissioning.

\$110 Million for Fundamental Research in Key Program Areas

The Biomass Program plans to use \$110 million to support fundamental research in key program areas, distributed in the following manner:

- Expand the resources available for sustainability research through the Office of Science Bioenergy Research Centers and establish a user-facility/small-scale integrated pilot plant (\$25 million)
- Create an advanced research consortium to develop technologies and facilitate subsequent demonstration of infrastructure-compatible biofuels through a competitive solicitation (\$35 million)
- Create an algal biofuels consortium to accelerate demonstration of algal biofuels through a competitive solicitation (\$50 million).

This funding will help to develop cutting-edge conversion technologies, including generating more desirable catalysts, fuel-producing microbes, and feedstocks.

\$20 Million for Ethanol Research

The Biomass Program is planning to use \$20 million of the Recovery Act funding in a competitive solicitation to achieve the following:

- Optimize flex-fuel vehicles operating on high octane E85 fuel (85% ethanol, 15% gasoline blend)
- Evaluate the impact of higher ethanol blends in conventional vehicles
- Upgrade existing refueling infrastructure to be compatible with fuels up to E85.