DEPARTMENT OF AGRICULTURE

Notice Inviting Applications for Biomass Research and Development

AGENCY: Rural Development, USDA.

ACTION: Notice.

SUMMARY: The U.S. Department of Energy (DOE) and the U.S. Department of Agriculture (USDA) jointly solicit applications for financial assistance addressing research and development of biomass based products, bioenergy, biofuels and related processes. This Notice herein referred to as the “Solicitation” is intended to promote greater innovation and development related to biomass, and to support the Biomass Research Development Act of 2000, the Healthy Forest Restoration Act of 2003, the Energy Policy Act of 2005, and Federal policy calling for greater use of biomass-based products, feedstock production, and processing and conversion.

This joint USDA/DOE solicitation for FY07 reflects the technical areas identified in the Biomass Research and Development Act of 2000 as amended by the Energy Policy Act of 2005. These technical areas will assist DOE and USDA in developing and maintaining a balanced portfolio of activities under the Federal Government’s Biomass program to effectively advance cost effective utilization of biomass for the production of biobased fuels and products. DOE and USDA will have separate funding allocations and make separate awards under this Notice.

DATES: Pre-applications must be submitted no later than July 11, 2007, not later than 8 p.m. Eastern Time. The closing date for applications (only for those pre-applications which have been selected for further processing) will be 45 calendar days following notice of invitation by Agency, not later than 8 p.m. Eastern Time. You are encouraged to transmit your application well before the deadline. Applications received after the deadline will not be reviewed or considered for an award. The comment period for the information collection under the Paperwork Reduction Act of 1995 continues through August 10, 2007.

ADDRESSES: For further information contact Lisa Siesennop, Business Loan and Grant Analyst, USDA Rural Development, 1400 Independence Ave., SW., Stop 3225, Washington, DC 20250–3225, Telephone: (202) 980–3810, Fax: (202) 720–6561, E-mail: lisa.siesennop@wdc.usda.gov.

SUPPLEMENTARY INFORMATION:

Programs Affected

This program is listed in the Catalog of Federal Domestic Assistance under Number 81.087. This program is subject to Executive Order 12372, which requires Intergovernmental consultation with State and local officials. Intergovernmental consultation will occur in accordance with the process and procedures outlined in 7 CFR part 3015 subpart V.

Paperwork Reduction Act

The collection of information requirements contained in this Notice has been submitted to the Office of Management and Budget (OMB) for temporary emergency clearance. However, in accordance with the Paperwork Reduction Act of 1995, USDA Rural Development will seek standard OMB approval of the reporting requirements contained in this Notice and hereby opens a 60-day public comment period.

Title: Biomass Research and Development Initiative.

Type of Request: New collection.

Abstract: Rural Development needs to receive the information contained in this collection of information to select the projects that demonstrate the greatest potential for success. The selection process is competitive. Rural Development will ensure that the funds are used for the intended purpose.

Estimate of Burden: Public reporting burden for this collection of information is estimated to average 11 hours per response.

Respondents: Institutions of higher education; National laboratories; Federal research agencies; State research agencies; private sector entities to include companies, corporations, cooperatives, and other entities that compete in the marketplace; nonprofit organizations, other than 501(c)(4) organizations that engage in lobbying, and a consortium of two or more of these entities.

Estimated Number of Respondents: 466.

Estimated Number of Responses per Respondent: 2.

Estimated Total Annual Responses: 871.

Estimated Total Annual Burden on Respondents: 9,252 hours.

Comments: Comments are invited on: (a) The accuracy of Rural Development’s estimate of the burden of the proposed collection of information including the validity of the methodology and assumptions used; (b) ways to enhance the quality, utility and clarity of the information to be collected; and (c) ways to minimize the burden of the collection information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments may be sent to Cheryl Thompson, Rural Development, STOP 0742, 1400 Independence Ave., SW., Washington, DC 20250. All responses to this Notice will be summarized and included in the request for OMB approval. All comments will also be a matter of public record.

E-Government Act Compliance

The Department of Agriculture is committed to complying with the E-Government Act of 2002 (Pub. L. 107–347, December 17, 2002), to promote the use of the Internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes. To demonstrate commitment for the E-Government Act, USDA is requiring that all applicants intending to submit pre-applications or applications in response to this solicitation use Grants.gov in the submission process.

I. Funding Opportunity Description

Authority

The authority for the Biomass Research and Development Initiative (Initiative) is 7 U.S.C. 8606.

Objectives

The objectives of the Initiative as set out in 7 U.S.C. 8606(b) are to develop:

(1) Technologies and processes necessary for abundant commercial production of biobased fuels at prices competitive with fossil fuels;

(2) High-value biobased products; (A) To enhance the economic viability of biobased fuels and power; and

(B) As substitutes for petroleum-based feedstocks and products; and

(3) A diversity of sustainable domestic sources of biomass for conversion to biobased fuels and biobased products.
Purposes

The purposes of the Initiative as set out in 7 U.S.C. 8606(c) are:

1. To increase the energy security of the United States;
2. To create jobs and enhance the economic development of the rural economy;
3. To enhance the environment and public health; and
4. To diversify markets for raw agricultural and forestry products.

DOE and USDA are, therefore, seeking applications to address the Technical Areas set out in 7 U.S.C. 8606(d) and listed here as the only eligible topic areas under this Solicitation. Each individual application must address only one Technical Area. However, an applicant may submit multiple, unique applications in order to respond to multiple topics or may submit multiple unique applications to a single topic area. If invited to submit an application, the application must address only the specific pre-application subject matter and technical area as identified in the invitation letter sent from the Agency to the applicant.

Technical Topic Areas

The Technical Areas as set out in 7 U.S.C. 8606(d) are described below and in more detail in Appendix A.

1. Feedstock production through the development of crops and cropping systems relevant to production of raw materials for conversion to biobased fuels and biobased products. (USDA Topic)
2. Overcoming recalcitrance of cellulosic biomass through developing technologies for converting cellulosic biomass into intermediates that can subsequently be converted into biobased fuels and biobased products. (USDA and DOE Topic)
3. Product diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and polymers) produced from biomass, or a commercial or industrial product (such as animal feed and electric power) derived in connection with the conversion of biomass to fuel. (USDA and DOE Topic)
4. Analysis that provides strategic guidance for the application of biomass technologies in accordance with realization of improved sustainability and environmental quality, cost effectiveness, security, and rural economic development, usually featuring system-wide approaches. (USDA Topic)

Definitions Applicable to This Notice

Agency. The United States Department of Agriculture, Rural Development, or the United States Department of Energy, either or both acting on behalf of the Federal government.

Applicant. The legal entity submitting the pre-application or application. This entity may be one eligible organization or a consortium of eligible organizations that has chosen to submit a single application in response to a solicitation.

Application. The documentation submitted at the Agency’s invitation after submitting a pre-application. Application is referred to as “proposals” in the DOE Industry Interactive Procurement System (IIPS).

Award. The written documentation executed by DOE or USDA Contracting Officer, after an applicant is selected, which contains the negotiated terms and conditions for providing financial assistance to the applicant. A Financial Assistance Award may be either a grant or (for DOE) a cooperative agreement.

Biobased Fuel. Any transportation fuel produced from biomass.

Biobased Product. An industrial product (including chemicals, materials, and polymers) produced from biomass, or a commercial or industrial product (such as animal feed and electric power) derived in connection with the conversion of biomass to fuel.

Biomass. Any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residue fibers, animal wastes, municipal wastes, and other waste materials.

Budget. The cost expenditure plan submitted in the application, including both the Federal Government contribution and the applicant Cost Share.

Consortium (plural consortia). The group of eligible organizations that have chosen to submit a single pre-application or application in response to this Solicitation.

Contracting Officer. The Agency official authorized to execute awards on behalf of DOE or USDA who is responsible for the business management and non-program aspects of the Financial Assistance process.

Cooperative Agreement. A Financial Assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and Substantial Involvement (see definition below) is anticipated by DOE during the performance of the contemplated activity.

Cost Sharing. The respective share of Total Project Costs to be contributed by the Applicant and by the Federal Government. The percentage of Applicant Cost Share is to be applied to the Total Project Cost (i.e., the sum of Applicant plus Federal Government Cost Shares) rather than to the DOE or the USDA contribution alone.

Data Universal Numbering System (DUNS) Number. A unique nine-character identification number issued by Dun and Bradstreet (D&B). Organizations must obtain a DUNS number, free of charge, prior to registering in the CCR by contacting D&B at 1–866–705–5711 or via the internet at http://www.grants.gov/RequestaDUNS.

Demonstration. Demonstration of technology in a pilot plant or semi-works scale facility.

Financial Assistance. The transfer of money to an applicant to accomplish a public purpose under this Solicitation through Grants or (for DOE) Cooperative Agreements.

Federally Funded Research and Development Center (FFRDC). A research laboratory as defined by Federal Acquisition Regulation 35.017.

Grant. A Financial Assistance instrument used by DOE or USDA to transfer money when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation under this Solicitation and no Substantial Involvement is anticipated by DOE or USDA during the performance of the contemplated activity.

Grants.gov. The “storefront” web portal which allows organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies. Grants.gov is the single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. http://www.grants.gov

Key Personnel. The individuals who will have significant roles in planning and implementing the proposed Project on the part of the Applicant, including FFRDCs.

Pre-application. The documentation submitted in response to this Notice. NOTE: Application is referred to as “proposal” in the DOE Industry Interactive Procurement System (IIPS).

Project. The set of activities described in an Application that is approved by DOE or USDA for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

Proposal. The term used in IIPS meaning the documentation submitted...
in response to a solicitation. Also see definition for Application.

Recipient. The organization that receives a Financial Assistance Award from the Agency, is financially accountable for the use of any Agency funds or property provided for the performance of the Project, and is legally responsible for carrying out the terms and condition of the award.

Selection Official. The Agency official designated to select Applications for negotiation toward award under a solicitation. Each Agency will have its own Selection Official.

Substantial Involvement. Significant involvement by the Government which may include shared responsibility for the performance of the Project; providing technical assistance or guidance which the Applicant is to follow; and the right to intervene in the conduct or performance of the Project. Such involvement will be negotiated with each Applicant prior to signing any agreement.

Total Project Cost. The Agency approved expenses for completing the Project.

II. Award Information

Grant Amounts

Up to $4 million in DOE funding and up to $12 million in USDA funding is available for new awards under this Solicitation. The maximum amount for an individual award made under this Solicitation is $1 million. DOE and USDA anticipate making a total of 16–30 awards under this Solicitation, depending on the size of the awards.

Funding Distribution

As directed by 7 U.S.C. 8606(g)(2), the distribution of funding by technical area shall be distributed to achieve an approximate award distribution as follows:

(1) Feedstock Production: 20 percent.
(2) Overcoming Recalcitrance of Cellulosic Biomass: 45 percent.
(3) Product Diversification: 30 percent.
(4) Analysis for Strategic Guidance: 5 percent.

As directed by 7 U.S.C. 8606(g)(3), the funding distribution areas within the first three technical areas shall be distributed to achieve an approximate award distribution as follows:

(1) Applied fundamentals: 15 percent.
(2) Innovation: 35 percent.
(3) Demonstration: 50 percent.

III. Eligibility Information

Applicant Eligibility

All entities listed under 7 U.S.C. 8606(f) are eligible to apply, except nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995. Eligible entities are:

(a) Institutions of higher education (as defined in 20 U.S.C. 1002(a)).
(b) National Laboratories (as defined in 42 U.S.C. 15801);
(c) Federal research agencies;
(d) State research agencies;
(e) Private sector entities. Private sector entities include companies, corporations, cooperatives, and other entities that compete in the marketplace;
(f) Nonprofit organizations, other than 501(c)(4) organizations that engage in lobbying; or
(g) Consortia of 2 or more entities described in paragraphs (a) through (f) above. Consortia are encouraged in order to bring important capabilities together to best achieve the desired innovation on biomass projects.

Eligible FFRDC applicants may apply for an award under this Solicitation, or they may be proposed as a team member in both cases subject to the following guidelines:

(a) The Federal agency sponsoring the FFRDC must authorize in writing the participation of the FFRDC in the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with its authority under its award. The following language is acceptable for this authorization:

Authorization is granted for the __________________________ to participate in the proposed Project. The work proposed for the Laboratory is consistent with or complimentary to the missions of the Laboratory and will not adversely impact execution of the assigned programs at the Laboratory.

(b) The value of, and funding for, the FFRDC portion of the work, when the FFRDC is not the prime recipient, will not be included in the award to a successful applicant. DOE will fund a DOE/National Nuclear Security Administration FFRDC through the DOE field work proposal system and other FFRDC’s will be funded by the Agency through an interagency agreement with the sponsoring FFRDC agency.

(c) The applicant, if successful, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to, intellectual property agreement among the parties, disputes and claims arising out of any agreement between the applicant and the FFRDC.

Project Eligibility

The technical areas defined in 7 U.S.C. 8606(d) and listed here, are the only eligible topic areas under this Solicitation.

The technical areas are described below and in more detail in Appendix A.

(1) Feedstock production through the development of crops and cropping systems relevant to production of raw materials for conversion to biobased fuels and biobased products. (USDA Topic)
(2) Overcoming recalcitrance of cellulosic biomass through developing technologies for converting cellulosic biomass into intermediates that can subsequently be converted into biobased fuels and biobased products. (USDA and DOE Topic)
(3) Product diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and cogenerated power) that eventually can increase the feasibility of fuel production in a biorefinery. (USDA Topic)
(4) Analysis that provides strategic guidance for the application of biomass technologies in accordance with realization of improved sustainability and environmental quality, cost effectiveness, security, and rural economic development, usually featuring system-wide approaches. (USDA Topic)

The term “demonstration” as defined in 7 U.S.C. 8602 means “demonstration of technology in a pilot plant or semiworks scale facility.”

Grant Funding

(a) Costs must be allowable in accordance with the applicable Federal cost principles (see 10 CFR part 600 and 7 CFR part 3015 subpart T, as applicable).
(b) The applicant’s cost share requirement will be based on the total project cost, including the applicant’s and the FFRDC contractor’s portions of the effort if any. If an FFRDC is the applicant, they are responsible for fulfilling the cost share requirement with non-Federal funds.
(c) As directed under 7 U.S.C. 8606(g)(4), the cost share borne by the applicant must be at least 20 percent of the total project costs for research and development and projects and 50 percent of the total project costs for projects designed to demonstrate the feasibility of commercial application and must come from non-Federal
sources. The sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of total project costs equals the total project cost. (For DOE see 10 CFR part 600 for the applicable cost sharing requirements.)

(d) For institutions of higher education, hospitals, for profit organizations, and non-profit organizations, costs incurred for a selected project may be charged to an award provided they were incurred within the ninety (90) calendar day period immediately preceding the execution of the grant agreement, if such costs are allowable in accordance with the applicable Federal cost principles (see 10 CFR part 600 and 7 CFR part 3015 subpart T). Recipients must obtain the prior approval of the Agency for any pre-award costs that are for periods greater than this 90 day calendar period.

(e) Pre-award costs are incurred at the recipient’s risk. DOE and USDA are under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

IV. Application and Submission Information

Application and Documentation

(a) Grants.gov. Applicants must submit pre-applications and, if selected, applications to the Agency in electronic format. The electronic format deadline will be based on Washington DC time.

Users of Grants.gov will be able to download a copy of the pre-application and application package, complete it off line, and then upload and submit the application via the Grants.gov site. You may now e-mail an electronic copy of a pre-application or application to USDA.

When you enter the Grants.gov site, you will find information about submitting an application electronically through the site as well as the hours of operation. USDA and DOE strongly recommend that you do not wait until the deadline date to begin the application process through Grants.gov. To use Grants.gov, applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number which can be obtained at no cost via a toll-free request line at 1–866–705–5711.

You must submit all documents electronically through the Grants.gov Web site including all necessary assurance and certifications. After electronically submitting an application through the Web site, the applicant will receive an automatic acknowledgement from Grants.gov that contains a Grants.gov tracking number. USDA or DOE may request that the applicant provide original signatures on forms at a later date.

If applicants experience technical difficulties with the Grants.gov system on the closing date and are unable to meet the 8 p.m. (Washington, DC time) deadline, print out your pre-application or application and submit it to the National Office using the contact information provided in the Addresses section of this Solicitation. The Agency will verify the occurrence of technical difficulties with Grants.gov. If applicants submit a pre-application or application to the National Office, the pre-application or application must be postmarked by the closing date. Additionally, applicants are requested to use an express mail service (e.g., FedEx, USPS, UPS, DHL) to submit their pre-application or application. No hand-delivered, e-mail, or Fax pre-applications or applications will be accepted.

Applicants may access the electronic grant application for the Biomass Research and Development Initiative at http://www.grants.gov.

Please note that applicants must locate the downloadable pre-application package for this program by the CFDA Number or FedGrants Funding Opportunity Number, which can be found at http://www.grants.gov.

(b) Pre-applications. Pre-applications are required and must be submitted electronically through Grants.gov at www.Grants.gov. You must complete the mandatory forms in accordance with the instructions on the forms and the additional instructions below. Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in this Solicitation.

(1) The pre-application shall consist of a SF 424 “Application for Federal Assistance,” form and the pre-application narrative, limited to no more than three additional pages when printed single-sided, plus cover sheet. The SF-424, the cover sheet, and the three-page project summary, as described herein, are required for a pre-application.

(2) SF–424—Complete this form first to populate data in other forms. Complete all required fields in accordance with the pop-up instructions on the form. To activate the instructions, turn on the “Help Mode,” and then click on “Add Mandatory Other Attachment” to attach.

G) The pre-application narrative should address the major aspects of the four technical evaluation criteria given below. The pre-application shall be organized into the following sections:

1. Technical Relevance and Merit.

Describe the benefits if the research is successful and in particular any potential fossil fuel displacement, energy efficiency, rural economic development, and environmental improvements. The framework of the
of the Biomass Research and Development Initiative. Explain how the project objectives serve the needs of the eligible technical areas outlined in the project eligibility section of this Solicitation.

(ii) Specifically address the novelty, innovation, uniqueness, and originality of the proposed work.

(iii) Describe the technical merit of the proposed research, development, or demonstration.

(iv) Address the extent to which the proposed work will demonstrate the current state of knowledge or technology and the extent to which the proposed work will complement or advance the current knowledge or technology for the stated objectives.

(C) Project Objectives. This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.

(D)Merit Review Criterion Discussion. This section should be formatted to address each of the merit review criterion and sub-criterion listed in criterion 1 through 4 below. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. DOE and USDA will evaluate and consider only those applications that address and address only each of the merit review criterion and sub-criterion. The merit criterion are:

(1) Criterion 1: Technical Relevance and Merit. The purpose of this section is to demonstrate the technical relevance and merit of the proposed work. The application will be evaluated based on the extent to which the project, if successfully carried out, will address research, development, and demonstration activities for the biomass Technical Topic Areas as described in this Solicitation. The applicant must address the following topics:

A discussion of the specific objectives and their relevance to the objectives outlined in 7 U.S.C. 8606(b) of the Biomass Research and Development Initiative. Explain how the project objectives serve the needs of the eligible technical areas outlined in the project eligibility section of this Solicitation.

(ii) Specifically address the novelty, innovation, uniqueness, and originality of the proposed work.

(iii) Describe the technical merit of the proposed research, development, or demonstration.

(iv) Address the extent to which the proposed work will demonstrate the current state of knowledge or technology and the extent to which the proposed work will complement or advance the current knowledge or technology for the stated objectives.

(C) Project Objectives. This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.

(D)Merit Review Criterion Discussion. This section should be formatted to address each of the merit review criterion and sub-criterion listed in criterion 1 through 4 below. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. DOE and USDA will evaluate and consider only those applications that address and address only each of the merit review criterion and sub-criterion. The merit criterion are:

(1) Criterion 1: Technical Relevance and Merit. The purpose of this section is to demonstrate the technical relevance and merit of the proposed work. The application will be evaluated based on the extent to which the project, if successfully carried out, will address research, development, and demonstration activities for the biomass Technical Topic Areas as described in this Solicitation. The applicant must address the following topics:

A discussion of the specific objectives and their relevance to the objectives outlined in 7 U.S.C. 8606(b) of the Biomass Research and Development Initiative. Explain how the project objectives serve the needs of the eligible technical areas outlined in the project eligibility section of this Solicitation.

(ii) Specifically address the novelty, innovation, uniqueness, and originality of the proposed work.

(iii) Describe the technical merit of the proposed research, development, or demonstration.

(iv) Address the extent to which the proposed work will demonstrate the current state of knowledge or technology and the extent to which the proposed work will complement or advance the current knowledge or technology for the stated objectives.
(iii) Describe the type, quality, availability, and appropriateness of facilities, equipment, and materials utilized to carry out the proposed work.
(iv) Discuss intellectual property agreements among the project participants.
(v) Explain the level of participation by project participants as evidenced by letter(s) of commitment.

(6) Relevance and Outcomes/Impacts.
This section should explain the relevance of the effort to the objectives in the Solicitation (as outlined in the Summary) and the expected outcomes and impacts.

(F) Project Timetable.
This section should outline as a function of time, year by year, all the important activities or phases of the project, including any activities planned beyond the project period. Successful applicants must use this project timetable to report progress.

(G) Evaluation Phase.
This section must include a plan and quantifiable measures to be used to assess the success of the project.

(H) SF–424A, “Budget Information—Non-Construction Programs.” You must provide a separate budget for each year of support requested and a cumulative budget for the total project period. Use SF–424A on the Applicant and Recipient Page at http://grants.pr.doe.gov. Save the information in a single file named “SF424A.xls,” and click on “Add Optional Other Attachment” to attach.

(I) Budget Justification.
You must justify the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; provide a list of equipment and cost of each item; identify proposed subaward/consultant work and cost of each subaward). Describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for each category; and provide any other information you wish to support your budget. Provide the name of your cognizant/oversight agency, if you have one, and the name and phone number of the individual responsible for negotiating your indirect rates. If cost sharing is required, provide an explanation of the source, nature, amount and availability of any proposed cost sharing. Save this information in a single file named “Budget.pdf,” and click on “Add Optional Other Attachment” to attach.

(J) Subaward Budget.
You must provide a separate budget (i.e., budget for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated to be more than $100,000 or 50 percent of the total project cost (whichever is less). Use SF–424A or the SF–424C “Budget Information for Construction Programs.” These forms are found on the Applicant and Recipient Page at http://grants.pr.doe.gov. Save each Subaward budget in a separate file. Use up to 10 letters of the subawardee’s name (plus.xls) as the file name (e.g., ucla.xls or energyres.xls), and click on “Add Optional Other Attachment” to attach.

(K) Certifications/Assurances for use with SF–424. You must complete and provide the “Certifications and Assurances” on the Applicant and Recipient Page at http://grants.pr.doe.gov. Submission of an electronic application through Grants.gov constitutes the submission of a signed document. Type the name of the person responsible for providing the certifications and assurances and save as a pdf file. Do not submit a scanned copy of the form. Name the file “Certs.pdf,” and click on “Add Optional Other Attachment” to attach.

(L) Commitment Letters from Third Parties Contributing to Cost Sharing.
The applicant must have firm funding commitment letters from third parties expected to contribute to cost sharing. At the time the application is submitted, the applicant must identify for each participant providing cost sharing:

(1) The name of the organization;
(2) The proposed dollar amount to be provided;
(3) The amount as a percentage of the total project cost; and
(4) The proposed cost sharing—cash, services, or property. For projects with multiple cost sharing partners, summarize the information in a table format. Provide the information in a single file named “CLTP” and click on “Add Optional Other Attachment” to attach.
M Biographical Sketch. Provide a biographical sketch for each key person proposed, including subawardees and consultants if they meet the definition of key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. Save all biographical sketches in a single file named “bio.pdf” and click on “Add Optional Other Attachment” to attach. The biographical information for each person must not exceed 2 pages when printed on 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right) with font not smaller than 11 point and must include:

1. Education and Training. Undergraduate, graduate and postdoctoral training, provide institution, major/area, degree and year.
2. Professional Experience. Beginning with the current position list, in chronological order, professional and/or academic positions with a brief description.
3. Publications. Provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and Web site address if available electronically. Patents, copyrights and software systems developed may be provided in addition to or substituted for publications.
4. Synergistic Activities. List no more than 5 professional and scholarly activities related to the effort proposed.
5. Budget for DOE Federally Funded Research and Development Center (FFRDC), if applicable. If a DOE FFRDC is to perform any portion of the work, you must provide a DOE Field Work Proposal in accordance with the requirements in DOE Order 412.1 Work Authorization System. These forms are available at http://grants.pr.doe.gov. Use up to 10 letters of the FFRDC name (plus .pdf) as the file name (e.g., lanl.pdf or ord.pdf), and click on “Add Attachments” in Field 11 to attach.
6. Authorization for Participation of a FFRDC. If a FFRDC is to perform any portion of the work, you must provide an authorization letter as described in the Applicant Eligibility section of this Solicitation. Provide the information in a single file using up to 6 letters of the FFRDC name (plus “auth.pdf” e.g., anlauth.pdf, laslauth.pdf) and click on “Add Optional Other Attachment” to attach.
7. SF–LLL “Disclosure of Lobbying Activities”. If applicable, complete SF–LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit SF–LLL, available at http://www.whitehouse.gov/omb/grants/grants_forms.html.

V. Application Review Information

Evaluation of Grant Applications

(a) Initial Review Criteria. An initial review will not be performed for pre-applications. Prior to a comprehensive merit evaluation for applications, USDA will perform an initial review to determine that (1) The applicant is eligible for an award and meets the minimum cost share requirements; (2) the information required by the Solicitation has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the Notice.

(b) Merit Review Criteria. All timely applications that fulfill the minimum application requirements, as determined by the Initial Review Criteria outlined in paragraph (a) of this section will be eligible for comprehensive evaluation and will undergo the following evaluation by DOE and USDA. The first evaluation includes a joint technical merit review using a scientific peer review process. During the technical merit review, each application will be rated with a numerical score using the technical criteria listed below. Each of the four technical criteria will be rated on a one hundred point numerical scale and weighted accordingly. The total score will be the sum of the weighted scores, with a maximum numerical score of 100 points (plus any policy factor points awarded).

1. Criterion 1: Technical Relevance and Merit, Weight: 40 percent. Each criterion will be individually rate each of the program policy factors listed below as well as the policy review by DOE Headquarters and USDA personnel. This will be performed by various Headquarters or USDA personnel depending on the applicable sector of the technology or project proposed. Each Program Policy Review will be conducted by a reviewer not part of the merit review process for that application. The Program Policy Review will be based on the policy factors listed below as well as the policy factors located in the Independent Program Policy Factors section of this Solicitation. The Committee will also individually rate each of the program policy factors listed below as high (which will result in 5 bonus points being added to the applicant’s merit score), medium (which will result in 3 bonus points being added to the applicant’s merit score), or low (which will result in no bonus points being added to the applicant’s merit score) with respect to the extent to which the proposed activity:
   (1) Involves a consortia of experts from multiple institutions;
   (2) Encourages the integration of disciplines and application of the best technical resources; and
   (3) Increases the geographic diversity of demonstration projects.

   The maximum number of bonus points available to any grantee will be 15, based on the above cited criteria, as awarded by a policy factor panel made up of Agency personnel. These rating scores will be added to the merit scores and included in the Chairperson Report to the Selection Official.


Technical evaluation of applications will be performed in accordance with 10 CFR 600.13. Members of the Merit Review Committee (hereinafter referred to as “Committee”) will be required to protect the confidentiality of any specifically identified trade secrets or privileged or confidential commercial or financial information obtained as a result of their participation in this evaluation. Information contained in the applications shall be treated in accordance with the policies and procedures set forth in 10 CFR 600.15.

In addition, to meet requirements of the EPAct, each recommended application will receive a Program Policy Review by DOE Headquarters and USDA personnel. This will be performed by various Headquarters or USDA personnel depending on the applicable sector of the technology or project proposed. Each Program Policy Review will be conducted by a reviewer not part of the merit review process for that application. The Program Policy Review will be based on the policy factors listed below as well as the policy factors located in the Independent Program Policy Factors section of this Solicitation. The Committee will also individually rate each of the program policy factors listed below as high (which will result in 5 bonus points being added to the applicant’s merit score), medium (which will result in 3 bonus points being added to the applicant’s merit score), or low (which will result in no bonus points being added to the applicant’s merit score) with respect to the extent to which the proposed activity:

1. Involves a consortia of experts from multiple institutions;
2. Encourages the integration of disciplines and application of the best technical resources; and
3. Increases the geographic diversity of demonstration projects.

The maximum number of bonus points available to any grantee will be 15, based on the above cited criteria, as awarded by a policy factor panel made up of Agency personnel. These rating scores will be added to the merit scores and included in the Chairperson Report to the Selection Official.

(c) Evaluation guidelines. Each member of the Committee, including ex-officio members shall strictly adhere to the following guidelines:
1. Committee members shall not discuss the evaluation process with any unauthorized personnel.
2. Committee members shall not divulge their identities to any applicant.
3. Committee members shall not contact applicants.
4. Committee members shall not discuss the Committee proceedings outside of the Committee meeting, even after the selection and award.
5. Committee members shall not accept any invitations, gratuities (i.e., meals, gifts, favors, etc.), or job offers...
from any applicant. If a Committee member is offered any invitations, gratuities, or job offers by or on behalf of any applicant, the member shall immediately report it to the Contracting Officer.

(6) Committee members shall only evaluate information provided by the applicants in the pre-applications and applications and only evaluate against the published criteria. No additional criteria are to be considered by the Committee.

(7) Committee members shall individually assess all pre-applications and applications against the published criteria only and initially rate all applications independently and without consultation between members.

(8) Committee members may contact the Chairperson to obtain clarifications regarding pre-applications and applications.

(d) Evaluation of pre-applications. (1) Appointment. The Selection Officials will appoint the Committee of no less than three individuals to review pre-applications. The Committee will be composed of independent experts selected from outside the Departments of Agriculture and Energy as directed by 7 U.S.C. 8606(g)(1)(B). The Committee may consist of multiple panels of no less than three individuals per panel to perform technical evaluations of the pre-applications, depending on the number of pre-applications received. The Committee will not include anyone who, on behalf of the Federal government, provides assistance to the applicant(s); has any decision-making role regarding the application(s); serves as Contracting Officer or performs business management functions for the project; audits the recipient for the project; or, has any other conflict of interest.

(2) Certification. Prior to evaluating pre-applications, each Committee member must read and sign a confidentiality and conflict of interest certification and acknowledgement, indicating an understanding of the evaluation and selection plan procedures and requirements. A signed form must be returned to the Contracting Officer prior to performing evaluations on any pre-application. Once signed, strict adherence to the agreement is required. All individuals not directly appointed to the Committee, but involved in the evaluation process, will also sign a confidentiality and conflict of interest certification and acknowledgement form.

(e) Pre-application review process. During Committee meetings, each member shall receive one paper copy of each pre-application to be reviewed by that member. Paper copies will include a control number for tracking purposes. Committee members shall not make copies of any pre-application, and when the Committee’s work is completed, all pre-applications shall be returned to the Contracting Officer. A checklist will be used to record return of the pre-applications to the Contracting Officer.

(i) Initial review. Initial review will not be performed for pre-applications.

(ii) Pre-application comprehensive evaluation. The members of the Committee shall receive pre-applications for review at the Committee. Each committee member shall independently review assigned pre-applications and identify strengths and weaknesses for each criterion. A pre-application must be evaluated even if it does not address the criteria or the order is not maintained. However, it is not the evaluator’s responsibility to search for information which is not readily apparent. After the Committee members have independently reviewed their assigned pre-applications, the Committee will convene to discuss the strengths and weaknesses of each application and come to consensus on numerical scores and strengths and weaknesses. If the number of pre-applications warrants the assignment of multiple panels, consensus will be reached and recorded within the panels. Following the panel discussions, the entire Committee will convene and reach consensus on all the pre-applications. Once the consensus pre-application scores have been assigned to all pre-applications being considered by the Committee, the Committee will recommend a range that establishes a pre-application selection range.

(4) Chairperson’s report—pre-applications. A Chairperson’s Report must be prepared presenting the findings of the Committee. The Report shall include three sections—one to establish the purpose of the report, one to document the completion review performed and record the merit review process used including any deviations, and one to request action by the selection official. In addition, relevant attachments shall be included, as referenced below.

(a) Section 1 shall include the following:

(1) A brief statement as to the purpose of the Chairperson’s Report; and

(2) A brief summary of the number of pre-applications received and the number recommended by the Committee for selection for submission of an application.

(b) Section 2 shall include the following:

(1) The number of Committee members, their names, a statement that all applications were independently evaluated in accordance with the evaluation criteria and certification that all signed confidentiality and acknowledgment forms were executed;

(2) A discussion of the independent review process for all pre-applications;

(3) Details of the Committee and the process followed, including a discussion of any deviations, such as issues with conflict of interest; and

(4) A discussion of the development of consensus scores for each pre-application, the ranking process, the number of pre-applications recommended, and any observations or findings that impacted the decision regarding the recommended selection range. Details of the Committee’s process to set the selection range and a reference to the final list of recommended pre-applications should also be included.

(c) Section 3 shall include the following:

(1) A request for action from the Selection Official regarding selection of pre-applications for submission of applications; and

(2) Instructions regarding these actions and subsequent communication of his/her decision to the Contracting Officer (including submittal of the pre-application selection statement, as defined below).

The Selection Official may require the Chairperson or the Committee to present the report orally in addition to the written Chairperson’s Report. In a separate document, the Committee shall provide any recommendations (lessons learned) to the Contracting Officer to improve the Notice or evaluation criteria and plan in the future.

(5) Pre-application selection statement. After the Selection Official receives the Chairperson’s report, the Selection Official will complete the Selection Statement, which will specify those applicants who will be invited to submit applications. The Selection Official shall then forward the signed Selection Statement to the Contracting Officer.

(6) Pre-application debriefing methods. Applicants are entitled to a debriefing. After selections have been made for those applicants that are invited to submit applications, applicants will be notified of the method to be used for debriefings. Debriefings may be provided either orally or in writing and will consist of the consensus strengths and weaknesses.
as determined by the Committee reviews regarding the pre-applications. Debriefings for pre-applications will take place at the end of the selection process.

(7) Appeals. Appeals will be handled in accordance with 7 CFR part 11 of this title. Any party adversely affected by an Agency decision under this Solicitation may request an appeal from the Director, National Appeals Division, USDA, within 30 days of the adverse decision.

e. Evaluation of Application Appointments.

(1) Appointments. The Selection Officials will appoint the Committee of no less than three individuals to review applications. The Committee will be composed of independent experts selected from outside the Departments of Agriculture and Energy as directed by 7 U.S.C. 8606(g)(1)(B). The committee may consist of multiple panels of no less than three individuals per panel to perform technical evaluations of the applications, depending on the number of applications received. DOE and USDA may use outside assistance in accordance with applicable regulations including qualified personnel from other Federal agencies, other Government entities, academia, industry, and DOE or USDA contractors. The Committee may not include anyone who, on behalf of the Federal government, provides assistance to the applicants, has any decision-making role regarding the applications; serves as Contracting Officer or performs business management functions for any selected project; audits the recipient of any selected project; or has any other conflict of interest.

(2) Certification. Prior to evaluating Applications, each evaluator must read, understand and sign a confidentiality and conflict of interest certification and acknowledgement, indicating an understanding of the Evaluation and Selection Plan procedures and requirements. A signed form must be returned to the Contracting Officer prior to performing evaluations on any Application. Once signed, strict adherence to the agreement is required. All individuals not directly appointed to the Committee, but involved in the evaluation process will also sign a confidentiality and conflict of interest certification and acknowledgement form.

(3) Application Review Process. Each evaluator will be assigned Applications for independent review prior to the convening of the Committee. A copy of each Application will be made available to each evaluator for independent review. In addition, each evaluator shall receive an explanation of the merit review process, a copy of the criteria, and an explanation of scoring. Any printed or electronic copies of Applications shall be returned to the Chairperson, Contracting Officer or destroyed following the convening of the Committee.

(i) Initial Review. Prior to a comprehensive evaluation, the Agency will perform an initial review to determine the following:

1. The applicant is eligible for an award;
2. The information required by the Notice has been submitted, and
3. All mandatory requirements of the Notice have been satisfied. If an applicant or application fails to meet these requirements, the applicant will be deemed non-responsive and eliminated from further review.

(ii) Comprehensive Evaluation. All timely applications that have been determined, through the Initial Review, to meet the minimum application qualifications will be eligible for comprehensive evaluation. A listing of the factors that are to be considered in the comprehensive evaluation are specified in the Merit Review Criteria section of this Solicitation.

(A) Independent review. The Committee members shall be notified of applications assigned to them to review by the Chairperson. Each Committee member shall independently review each application against the published criteria and provide written documentation of the strengths and weaknesses for each criterion. With the completion of the independent review, each evaluator shall be prepared to discuss each application’s strengths and weaknesses during the Committee meeting.

An application must be evaluated even if an application does not address the criteria or follow the prescribed format. However, it is not the Committee members’ responsibility to search for information which is not readily apparent. Committee members are expected to use their best judgment in evaluating the application.

(B) Committee review. The Committee will meet and discuss in detail the strengths and weaknesses of each criterion within each application and will provide written documentation of their consensus strengths and weaknesses. The Committee will then develop consensus scores for each criterion based on their deliberations. Once the final scores have been assigned, the Committee will propose a range of applications recommended for selection for negotiation of award. This selection range shall determine the order in which applications will be recommended for selection.

(C) Program Policy Review. See Independent Program Policy Factors in this section of the Solicitation for further details.

4. Chairperson’s Report—Applications. A Chairperson’s Report must be prepared presenting the findings of the Committee. The Report shall include four sections—one to establish the purpose of the report, one to document the compliance review performed, one to record the merit review process used and any deviations, and one to request action by the selection official. In addition, relevant attachments shall be included, as referenced below.

(a) Section 1 shall include the following:

1. A brief statement as to the purpose of the Chairperson’s Report; and
2. A list of the reasons why they were rejected and not comprehensively reviewed.

(b) Section 2 shall include the following:

1. A list of applications rejected in the initial compliance review, if any; and
2. A list of applications rejected in the independent review process for all applications.

(c) Section 3 shall include the following:

1. The number of Committee members, their names, a statement that all applications were independently evaluated in accordance with the evaluation criteria; and certification that all signed Confidentiality and Acknowledgment Forms have been executed;
2. A discussion of the independent review process for all applications;
3. Details of the Committee meeting and the process followed, including a discussion of any deviations, such as issues with conflict of interest; and
4. A discussion of the development of consensus scores for each application, the ranking process, the number of applications recommended, and any observations or findings that impacted the decision regarding the recommended selection range.

(d) Section 4 shall include the following:

1. A request for action from the Selection Official regarding application of the program policy factors and selection of applications for negotiation of award; and
(2) Instructions regarding these actions and subsequent communication of his/her decision to the Contracting Officer. The Selection Official may require the Chairperson or the Committee to present the report orally in addition to the written Chairperson’s Report.

In a separate document, the Committee shall provide any recommendations (lessons learned) to the Contracting Officer to improve the Notice, or Evaluation and Selection Plan in the future.

(5) Independent Program Policy Factors. These policy factors are in addition to the policy factors listed in Merit Review Criteria section of this Solicitation and are unique to each Agency.

For the DOE award selection process, an independent program policy factor review will occur. After the DOE Selection Official receives the Chairperson’s report, the DOE Selection Official shall consider program policy factors for the purpose of maximizing the effectiveness of available government funding. The program policy factors will not be point scored, but the DOE Selection Official will consider them in making the selections for negotiation of award. USDA award selections will be based solely on the rank and recommendations provided by the Committee with the exception that two or more applicants achieve the same merit score in any given technical topic area and the level of funding is not sufficient to fund all such like scored applications.

For proposals selected for award by DOE, program policy factors will include:

(a) Balance of the overall portfolio of DOE investments in biomass research and development.

(b) Level of cost sharing above the minimum requirement.

For proposals selected for award by USDA, additional program policy factors will include:

(c) Level of cost sharing above the minimum requirement.

(6) Application Selection Statement. The Selection Official will complete the Selection Statement. The Selection Statement shall specify a ranked order of applications recommended by the Committee for negotiation of award and applications not selected. For purposes of DOE, selections of any applications not in the Committee’s selection range will require written approval from the Assistant Secretary of Energy Efficiency and Renewable Energy.

(7) Debriefing of Unsuccessful Applicants. Unsuccessful applicants are entitled to a debriefing. After selections for negotiation for award have been made, those applicants not selected will be advised, in writing, that they were not selected. Debriefings will consist of either the findings of the Initial Review as determined by USDA or the consensus strengths and weaknesses as determined by the Committee. The debrief letters will not include the consensus score of the application or the relative standing of the application in comparison to all other applications. The letters forwarding this information will be signed by the Committee Chairperson.

(8) Appeals. Appeals will be handled in accordance with 7 CFR part 11 of this title. Any party adversely affected by an Agency decision under this Solicitation may request an appeal determination from the Director, National Appeals Division, USDA, within 30 days of the adverse decision.

(9) Additional Information. Committee members may contact the Chairperson to obtain clarification regarding a pre-application or application. Committee members shall not contact the applicant.

(10) Non-Discrimination Statement. USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual’s income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA’s TARGET Center at (202) 720–2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW., Washington, DC 20250–9410, or call (866) 632–9992 (voice), or (202) 401–0216 (TDD). “USDA is an equal opportunity provider, employer, and lender.”

VI. Award Administration

(a) Award Notices.

(1) Notice of selection. DOE and USDA will notify applicants selected for award. This notice of selection is not an authorization to begin performance. Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

(2) Notice of award. A notice of financial assistance award issued by the Contracting Officer is the authorizing award document.

(b) Administrative and national policy requirements.

(1) Administrative requirements. The administrative requirements and national policy requirements (e.g., “generally applicable requirements”) for Federal agency grants and cooperative agreements are governed by the awarding agency’s regulations (10 CFR part 600 for DOE (See: http://ecfr.gpoaccess.gov); 7 CFR parts 3015, 3016, and 3019 for USDA), except for DOE grants made to FDP institutions. The FDP terms and conditions and DOE FDP agency specific terms and conditions are located on the National Science Foundation Web site at http://www.nsf.gov/awards/managing/fed_dem_part.jsp.

(2) Special terms and conditions and national policy requirements. For DOE, the special terms and conditions for use in most grants and cooperative agreements are located at http://grants.pr.doe.gov. The national policy assurances to be incorporated as award terms are located at http://grants.pr.doe.gov.

(i) Intellectual Property Provisions. Financial assistance intellectual property provisions for USDA and DOE will be specified in the award documents for each project. The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at http://www.gc.doe.gov/techtrans/sipp_matrix.html.

(ii) Statement of Substantial Involvement. Either a grant or, for DOE, cooperative agreement may be awarded under this program Solicitation. If the award is a cooperative agreement, the DOE will negotiate a Statement of Substantial Involvement prior to award.

Grantee Reporting Requirements

All award recipients are required to provide a concise narrative report to the Agency describing the status of work on each Project on a semi-annual basis, or more frequently for cause. It is estimated complete reports will be 2–3 pages. The information included should reflect quantifiable results that can be used to evaluate and measure progress towards Project success, based on the objectives, timeline, and Project scope of the Agency approved application provided by the Grantee.

These reports must include the following information:

(a) Statement of quantifiable progress toward Project objective(s) achieved to date,
(b) Problems, obstacles, new developments or market/industry/ research changes that affected or may affect the expected outcomes, completion date, cost or scope of the Project,
(c) Recommended changes to the work plan.

All award recipients are required to provide a concise final narrative report to the Agency. It is estimated complete final reports will be at least five pages. The information included should reflect quantifiable results that can be used to evaluate and measure Project success, based on the objectives and Project scope of the Agency approved application provided by the Grantee.

This final report must include the following information:
(a) Statement of quantifiable progress toward Project objective(s),
(b) Problems, obstacles, new developments or market/industry/ research changes that had an effect on the expected outcomes, completion date, cost or scope of the Project,
(c) Description of the estimated impact of the Project,
(d) Description of the estimated impact on the development of the principal discipline(s) of the Project,
(e) Description of the estimated impact on other disciplines,
(f) Description of the estimated impact on human resource,
(g) Description of the estimated impact on physical, institutional, and information resources that form infrastructure,
(h) Description of the estimated impact on society,
(i) Description of the estimated impact on technology transfer,
(j) Estimate of the economic impact of the Project following commercialization, and
(k) Estimate of the need and cost to retire existing infrastructure upon commercialization.

Appendix A—Detailed Descriptions of Technical Areas

1. Feedstock Production through the development of crops and cropping systems relevant to production of raw materials for conversion to biobased fuels and biobased products, including:
   • Development of advanced and dedicated crops with desired features, including enhanced productivity, broader site range, low requirements for chemical inputs, and enhanced processing;
   • Advanced crop production methods to achieve the features described in paragraph 1 above;
   • Feedstock harvest, handling, transport, and storage; and
   • Strategies for integrating feedstock production into existing managed land.

Discussion and Program Relevance
Proposals are invited for research, development, and demonstration projects that promote feedstock production through the development of crops and cropping systems relevant to production of raw materials for conversion to biobased fuels and biobased products. Biomass feedstocks of interest include agricultural and forest resources. Biomass feedstock development and production efforts should focus on improving quality, reducing raw material costs, enhancing the productivity, and ensuring agronomic and silvicultural methods for sustainable production. This may include development of advanced and dedicated crops with desired features, including enhanced productivity, broader site range, low chemical input requirements and enhanced processing.

Projects of interest include, but are not limited to, those that develop appropriate agriculture and forest production/ management technologies and systems; identify and evaluate innovative equipment designs and systems to produce, harvest, recover, and transport biomass; or develop tools which land managers and community developers can use to evaluate the technical and economic viability of biomass production systems or to manage these systems more efficiently. Tools should integrate management, harvesting, and processing technologies and methods with economic analyses of utilization options for bioenergy, biofuels, and biobased products. Desired outcomes include:
   • Scientific and technological breakthroughs to overcome production barriers and enhance economic viability.
   • Substantive development and demonstration of known and adapted technologies for effective and economical biomass feedstock production and use.
   • Comprehensive descriptive and analytical understanding of methods and costs of management, collection, handling, primary processing, and transportation of primary feedstocks.
   • Sustainable production and harvesting systems and methods that protect or enhance the site and surrounding landscape, including the long-term soil productivity, water, and other ecological and environmental resources.
   • Guidelines, tools, and management systems that provide a basis for decisions on land use, production, and technology application for integrated resource management and biomass use.
   • Tools that aid land managers and community developers in evaluating the technical and economic viability of biomass production, markets, and revenue streams for local areas.

2. Overcoming Recalcitrance of Cellulosic Biomass through developing technologies for converting biomass containing hemicellulose, primarily xylan, and processes that combine these in a feasible and economical way to produce high yields of xylose are sought. There are a number of pretreatment methods being developed and evaluated including dilute acid, ammonia fiber expansion (AFEX), ammonia percolation, lime, hot water (as is, or with pH control to maintain neutral pH), and organosolv-based processes. These pretreatments each produce substrates that differ in composition and in the levels of conditioning or detoxification required to make the sugars derived from these materials fermentable by microorganisms. Proposals should identify the basic mechanisms behind conditioning processes and from that knowledge, the methods that result in maximal sugar degradation while removing known inhibitors to ethanologens such as acetic acid and phenolic compounds.

Proposals are also invited that will address the recalcitrance of lignocellulosic biomass and develop conversion techniques and processes for thermochemical approaches, including gasification and pyrolysis, which move the program toward meeting its syngas quality and cost target goal delineated in the “Desired outcome” section below. Proposals should address cost-competitive, consolidated cleanup and conditioning processes for a stand-alone biomass gasification-mixed alcohol process to:

- minimize the number of unit operations: achieve syngas quality required for fuel synthesis; reduce syngas impurities; and optimize performance into synthesis catalysts for fuels conversion. Gas cleanup is a general term for removing the unwanted impurities from biomass gasification product gas and generally involves an integrated, multi-step approach to remove or eliminate tars, acid gases, ammonia, alkali metals, and particulates.
Proposals should identify or develop catalyst systems that reform tars with greater tolerance to sulfur gases to achieve synthesis yields of ~90 gal fuel/ton biomass. Comparable R&D plans and technical targets are being developed for biofuels production from pyrolysis processes. Pyrolysis efforts should focus on improving stability and long-term storability and reducing the Total Acid Number (TAN) of bio-oils. Improving the yields of converting bio-oils to fungible fuels is another R&D area of importance.

Desired outcomes: Development of processes or process combinations that improve the efficiency of biomass conversion by improving the xylose yield or overall quality of the sugar intermediate in order to achieve the cost of a mixed, dilute sugars stream suitable for fermentation to ethanol in a mature biochemical plant of $0.06–0.07/lb sugars by the year 2012 and to $0.03–$0.04/lb by the year 2030.

Identification or development of processes or process combinations that overcome the recalcitrance of cellulosic biomass by developing conversion techniques and processes for thermochemical approaches, including gasification and pyrolysis, that produce a syngas with a quality of 3. percent or less methane, 10 ppm or less benzene, 1 ppm or less hydrogen sulfide, 10 ppm or less ammonia, 10 ppb or less hydrogen chloride and 0.1 grams or less of heavy tars per Normal cubic meter and at a cost of $5.25 per million BTU or less.

3. Product Diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and co-generated power) that eventually can increase the feasibility of fuel production in a biorefinery, including:
   • Catalytic processing, including thermochemical fuel production;
   • Metabolic engineering, enzyme engineering and fermentation systems for biological production of desired products or cogeneration of power;
   • Product recovery;
   • Power production technologies; and
   • Integration into existing biomass processing facilities, including starch ethanol plants, paper mills, and power plants.

Discussion and Program Relevance

Proposals are invited for research, development, and demonstrations of technologies that would result in product diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and co-generated power) that eventually can increase the feasibility of fuel production in a biorefinery, including those that also:
   • Enable the conversion, via biological, thermal, catalytic or chemical means, of agricultural and forest biomass feedstocks into biobased products.
   • Improve the performance or commercial viability of biobased products and co-products.
   • Improve the potential for developing rural based processing and manufacturing of biobased products.
   • Demonstrate commercial relevance of the technology, its expected marketability, and its potential commercial viability for processing and manufacturing biobased products.

Desired outcomes:
   • Develop new technologies that would significantly decrease the cost and improve the efficiency of converting biomass into sugars for subsequent conversion to marketable fuels, chemicals or polymers.
   • Develop new technologies that would significantly decrease the cost and improve the energy efficiency of converting lignocellulosic syngas.
   • Develop new technologies that would significantly decrease the cost and improve the energy efficiency of converting syngas into marketable fuels or chemicals.
   • Develop new technologies that would significantly decrease the cost and improve the energy efficiency of producing new, marketable products from biomass.
   • Develop new technologies that would significantly improve the performance or decrease the cost and improve the energy efficiency of producing new, marketable products from biomass.
   • Develop new technologies that would significantly improve the performance or decrease the cost and improve the energy efficiency of producing new, marketable products from biomass.

Analysis that Provides Strategic Guidance for the application of biomass technologies in accordance with realization of improved sustainability and environmental quality, cost effectiveness, security, and rural economic development, usually featuring system-wide approaches.

Appendix B—Proprietary and Intellectual Property Information

Proprietary Application Information

Patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in an application only when such information is necessary to convey an understanding of the proposed project. The use and disclosure of such data may be restricted, provided the applicant includes the following legend on the first page of the project narrative and specifies the pages of the application which are to be restricted:

The data contained in pages of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives data as a result of or in connection with the submission of this application, DOE or USDA shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the government’s right to use or disclose data obtained without restriction from any source, including the applicant.

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

The following contains proprietary information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation.

Intellectual Property Developed Under this Program

Patent rights. The government will have certain statutory rights in an invention that is conceived or first actually reduced to practice under a DOE or USDA award. Specific regulations of each agency will be identified in the award documents for each project.

For DOE awards, 42 U.S.C. 5908 provides that title to such inventions vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, the Secretary of Energy may waive all or any part of the rights of the United States subject to certain conditions. (See “Notice of right to request patent waiver” below.)

Rights in technical data. Normally, the government has unlimited rights in technical data created under a Federal Agency agreement. Delivery or third party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy the Government’s own needs or to insure the commercialization of technology developed under a Government agreement. The rights in data applicable to the various types of DOE financial assistance recipients are contained in 10 CFR part 600 and for USDA in 7 CFR Parts 3015, 3016, and 3019.

Special protected data statutes. For DOE, this program is covered by a special protected data statute. The provisions of the statute provide for the protection from public disclosure, for a period of up to five (5) years from the development of the information, of data that would be trade secret, commercial or financial information that is privileged or confidential, if the information had been obtained from a non-Federal party. Generally, the provision entitled, Rights in Data—Programs Covered Under Special Protected Data Statutes, (10 CFR 600, Appendix A to Subpart D), would apply to an award made under this announcement. This provision will identify data or categories of data first produced in the performance of the award that will be made available to the public, notwithstanding the statutory authority to withhold data from public dissemination, and will also identify data that will be recognized by the parties as protected data.

Notice of right to request patent waiver. For DOE, applicants may request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of an agreement as a result of this announcement, in advance of or within 30 days after the effective date of the award. Even if such advance waiver is not requested or the
request is denied, the recipient will have a continuing right under the award to request a waiver of the rights of the United States in identified inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR part 784.

Domestic small businesses and domestic nonprofit organizations will receive the patent rights clause at 37 CFR 401.14, i.e., the implementation of the Bayh-Dole Act. This clause permits domestic small business and domestic nonprofit organizations to retain title to subject inventions. Therefore, small businesses and nonprofit organizations do not need to request a waiver.

Jackie J. Gleason, Administrator, Rural Business-Cooperative Service.

DEPARTMENT OF AGRICULTURE

Rural Housing Service

Section 538 Multi-Family Housing Guaranteed Rural Rental Housing Program (GRRHP) Demonstration Program for Fiscal Year 2007

AGENCY: Rural Housing Service, USDA.

ACTION: Notice of Funds Availability.

SUMMARY: Through this Notice of Funds Availability (NOFA), the Agency announces the implementation of a demonstration program under the section 538 Guaranteed Rural Rental Housing Program (GRRHP) pursuant to 7 CFR 3565.4 for Fiscal Year (FY) 2007 and 7 CFR 3565.17 Demonstration programs. The Demonstration Program’s purpose is to test the viability and efficacy of the concept of a continuous loan note guarantee through the construction and permanent loan financing phases of a project. Those applications that meet the Demonstration Program’s qualifying criteria and are selected to participate will be offered one loan note guarantee upon closing of the construction loan that will be in effect throughout both of the project’s construction and permanent phases without interruption. To be considered for participation in the Demonstration Program, in addition to responding to this NOFA, a Lender must have first submitted its application under either the GRRHP’s 2007 Notice at 72 FR 8339 (Feb. 26, 2007) or the GRRHP’s 2006 Notice at 71 FR 4559 (Jan. 27, 2006). Furthermore, the application to be considered must have been obligated from October 1, 2006 to July 31, 2007.

The funding for the Demonstration Program will be approximately $10 million. Expenses incurred in developing applications will be at the applicant’s risk. The following paragraphs outline the timeframes, eligibility requirements, lender responsibilities, and the overall response and application processes.

Eligible Lenders wishing to have their FY 2007 obligations considered for the Demonstration Program must send a signed request on its letterhead with the proposed project details as outlined in the “Demonstration Program Response Submission Address” section of this NOFA.

Demonstration Program Guidelines: The following guidelines are being provided to facilitate a structured implementation of the program:

1. Demonstration guarantee. The Demonstration guarantee is a guarantee that will be offered to those applications that apply for and meet the 2007 Demonstration Program NOFA’s demonstration program’s qualifying criteria. The Demonstration guarantee will consist of one loan note guarantee upon closing of the construction loan that will be in effect throughout both of the project’s construction and permanent financing phases without interruption.

2. Upon approval of an application from an approved lender, the Agency will commit to providing a demonstration guarantee for the construction and permanent financing phases of the project, subject to the availability of funds.

3. Guarantee percentage and payment. Both construction loan advances and permanent loans are eligible for a guaranty subject to the following limitations:

   Construction loan advances and permanent loans. The Agency may guarantee a construction contract which has credit enhancements to protect the Government’s interest. The Agency can guarantee the “construction and permanent” financing phases of a project. The Agency cannot, however, guarantee only the “construction” financing phase of a project. Guarantees under the demonstration guarantee will cover construction loan advances and the subsequent permanent loan. A demonstration guarantee requires an additional operating reserve equal to 2% of the appraised value of the project or total development costs, whichever is greater, to be set aside prior to closing the construction loan. This cash contribution is an additional amount, over and above the required initial operating and maintenance contribution. The maximum guarantee of construction advances will not at any time exceed the lesser of 90 percent of the amount of principal and interest up to default advanced for eligible uses of loan proceeds or 90 percent of the original principal amount and interest up to default of a loan. Penalties incurred as a result of default are not covered by the guarantee. The Agency may provide a lesser guarantee based upon its evaluation of the credit quality of the loan.

4. A lender making a construction loan must demonstrate an ability to originate and service construction loans.

5. Guarantee during construction. The Agency will issue a demonstration guarantee only to an approved lender.

6. Demonstration guarantee program compliance requirement. For a demonstration guarantee, the following items will have to be submitted in order to remain compliant with program requirements. The items must be submitted within the timeframe stipulated by the Agency and must also be approved by the Agency:

   (1) A certificate of substantial completion;

   (2) A certificate of occupancy or similar evidence of local approval;

   (3) A final cost certification in a form acceptable to the Agency;

   (4) A complete copy of the permanent loan closing docket; and

   (5) Necessary information to complete an updated necessary assistance review by the Agency.

   The Agency may declare the loan in default if the Lender fails to comply with the demonstration guarantee program guidelines. The Agency may also declare the loan in default if the Agency’s final inspection is not satisfactory. To facilitate the implementation of the program, certain program forms may be addended to include relevant Demonstration Program requirements.

   The selected applicants will be subject to the Demonstration Program guidelines in this NOFA, and GRRHP’s controlling statute, regulations, and handbook as amended. The GRRHP operates under the Housing Act of 1949 and regulations at 7 CFR part 3565. The GRRHP Origination and Servicing Handbook (HB-1–3565) is available to provide lenders and the general public with guidance on program administration. HB-1–3565, which contains a copy of 7 CFR part 3565 in Appendix 1, can be found at the Rural Development Instructions Web site address http://www.rurdev.usda.gov/regs/hsblist.htm#hb6.

Demonstration Program Eligibility: Applications that meet the following criteria will be eligible for consideration...