

**Biomass Research and Development Act**  
**Amended by the Food, Conservation and Energy Act of 2008**

SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT.

(a) Definitions.--In this section:

(1) Biobased product.--The term `biobased product' means--

(A) an industrial product (including chemicals, materials, and polymers) produced from biomass; or

(B) a commercial or industrial product (including animal feed and electric power) derived in connection with the conversion of biomass to fuel.

(2) Demonstration.--The term `demonstration' means demonstration of technology in a pilot plant or semi-works scale facility, including a plant or facility located on a farm.

(3) Initiative.--The term `Initiative' means the Biomass Research and Development Initiative established under subsection (e).

(b) Cooperation and Coordination in Biomass Research and Development.--

(1) In general.--The Secretary of Agriculture and the Secretary of Energy shall coordinate policies and procedures that promote research and development regarding the production of biofuels and biobased products.

(2) Points of contact.--To coordinate research and development programs and activities relating to biofuels and biobased products that are carried out by their respective departments--

(A) the Secretary of Agriculture shall designate, as the point of contact for the Department of Agriculture, an officer of the Department of Agriculture appointed by the President to a position in the Department before the date of the designation, by and with the advice and consent of the Senate; and

(B) the Secretary of Energy shall designate, as the point of contact for the Department of Energy, an officer of the Department of Energy appointed by the President to a position in the Department before the date of the designation, by and with the advice and consent of the Senate.

(c) Biomass Research and Development Board.--

(1) Establishment.--There is established the Biomass Research and Development Board to carry out the duties described in paragraph (3).

(2) Membership.--The Board shall consist of--

(A) the point of contacts of the Department of Energy and the Department of Agriculture, who shall serve as cochairpersons of the Board;

(B) a senior officer of each of the Department of the Interior, the Environmental Protection Agency, the National Science Foundation, and the Office of Science and Technology Policy, each of whom shall have a rank that is equivalent to the rank of the points of contact; and

(C) at the option of the Secretary of Agriculture and the Secretary of Energy, other members appointed by the Secretaries (after consultation with the Board).

(3) Duties.--The Board shall--

(A) coordinate research and development activities relating to biofuels and biobased products--

(i) between the Department of Agriculture and the Department of Energy; and

(ii) with other departments and agencies of the Federal Government;

(B) provide recommendations to the points of contact concerning administration of this title;

(C) ensure that--

(i) solicitations are open and competitive with awards made annually; and

(ii) objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest; and

(D) ensure that the panel of scientific and technical peers assembled under subsection (e) to review proposals is composed predominantly of independent experts selected from outside the Departments of Agriculture and Energy.

(4) Funding.--Each agency represented on the Board is encouraged to provide funds for any purpose under this section.

(5) Meetings.--The Board shall meet at least quarterly.

(d) Biomass Research and Development Technical Advisory Committee.--

(1) Establishment.--There is established the Biomass Research and Development Technical Advisory Committee to carry out the duties described in paragraph (3).

(2) Membership.--

(A) In general.--The Advisory Committee shall consist of--

(i) an individual affiliated with the

biofuels industry;

(ii) an individual affiliated with the biobased industrial and commercial products industry;

(iii) an individual affiliated with an institution of higher education who has expertise in biofuels and biobased products;

(iv) 2 prominent engineers or scientists from government or academia who have expertise in biofuels and biobased products;

(v) an individual affiliated with a commodity trade association;

(vi) 2 individuals affiliated with environmental or conservation organizations;

(vii) an individual associated with State government who has expertise in biofuels and biobased products;

(viii) an individual with expertise in energy and environmental analysis;

(ix) an individual with expertise in the economics of biofuels and biobased products;

(x) an individual with expertise in agricultural economics;

(xi) an individual with expertise in plant biology and biomass feedstock development;

(xii) an individual with expertise in agronomy, crop science, or soil science; and

(xiii) at the option of the points of contact, other members.

(B) Appointment.--The members of the Advisory Committee shall be appointed by the points of contact.

(3) Duties.--The Advisory Committee shall--

(A) advise the points of contact with respect to the Initiative; and

(B) evaluate and make recommendations in writing to the Board regarding whether--

(i) funds authorized for the Initiative are distributed and used in a manner that is consistent with the objectives, purposes, and considerations of the Initiative;

(ii) solicitations are open and competitive with awards made annually;

(iii) objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of

special interest;

(iv) the points of contact are funding proposals under this title that are selected on the basis of merit, as determined by an independent panel of scientific and technical peers predominantly from outside the Departments of Agriculture and Energy; and

(v) activities under this title are carried out in accordance with this title.

(4) Coordination.--To avoid duplication of effort, the Advisory Committee shall coordinate its activities with those of other Federal advisory committees working in related areas.

(5) Meetings.--The Advisory Committee shall meet at least quarterly.

(6) Terms.--Members of the Advisory Committee shall be appointed for a term of 3 years.

(e) Biomass Research and Development Initiative.--

(1) In general.--The Secretary of Agriculture and the Secretary of Energy, acting through their respective points of contact and in consultation with the Board, shall establish and carry out a Biomass Research and Development Initiative under which competitively awarded grants, contracts, and financial assistance are provided to, or entered into with, eligible entities to carry out research on and development and demonstration of--

(A) biofuels and biobased products; and

(B) the methods, practices, and technologies, for the production of biofuels and biobased products.

(2) Objectives.--The objectives of the Initiative are to develop--

(A) technologies and processes necessary for abundant commercial production of biofuels at prices competitive with fossil fuels;

(B) high-value biobased products--

(i) to enhance the economic viability of biofuels and power;

(ii) to serve as substitutes for petroleum-based feedstocks and products; and

(iii) to enhance the value of coproducts produced using the technologies and processes; and

(C) a diversity of economically and environmentally sustainable domestic sources of renewable biomass for conversion to biofuels, bioenergy, and biobased products.

(3) Technical areas.--The Secretary of Agriculture and

the Secretary of Energy, in consultation with the Administrator of the Environmental Protection Agency and heads of other appropriate departments and agencies (referred to in this subsection as the 'Secretaries'), shall direct the Initiative in the 3 following areas:

(A) Feedstocks development.--Research, development, and demonstration activities regarding feedstocks and feedstock logistics (including the harvest, handling, transport, preprocessing, and storage) relevant to production of raw materials for conversion to biofuels and biobased products.

(B) Biofuels and biobased products development.-- Research, development, and demonstration activities to support--

- (i) the development of diverse cost-effective technologies for the use of cellulosic biomass in the production of biofuels and biobased products; and
- (ii) product diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and cogenerated power) that potentially can increase the feasibility of fuel production in a biorefinery.

(C) Biofuels development analysis.--

(i) Strategic guidance.--The development of analysis that provides strategic guidance for the application of renewable biomass technologies to improve sustainability and environmental quality, cost effectiveness, security, and rural economic development.

(ii) Energy and environmental impact.-- Development of systematic evaluations of the impact of expanded biofuel production on the environment (including forest land) and on the food supply for humans and animals, including the improvement and development of tools for life cycle analysis of current and potential biofuels.

(iii) Assessment of federal land.-- Assessments of the potential of Federal land resources to increase the production of feedstocks for biofuels and biobased products, consistent with the integrity of soil and water resources and with other environmental considerations.

(4) Additional considerations.--Within the technical areas described in paragraph (3), the Secretaries shall support research and development--

(A) to create continuously expanding opportunities for participants in existing biofuels production by seeking synergies and continuity with current technologies and practices;

(B) to maximize the environmental, economic, and social benefits of production of biofuels and derived biobased products on a large scale; and

(C) to facilitate small-scale production and local and on-farm use of biofuels, including the development of small-scale gasification technologies for production of biofuel from cellulosic feedstocks.

(5) Eligibility.--To be eligible for a grant, contract, or assistance under this section, an applicant shall be--

(A) an institution of higher education;

(B) a National Laboratory;

(C) a Federal research agency;

(D) a State research agency;

(E) a private sector entity;

(F) a nonprofit organization; or

(G) a consortium of 2 or more entities described in subparagraphs (A) through (F).

(6) Administration.--

(A) In general.--After consultation with the Board, the points of contact shall--

(i) publish annually 1 or more joint requests for proposals for grants, contracts, and assistance under this subsection;

(ii) require that grants, contracts, and assistance under this section be awarded based on a scientific peer review by an independent panel of scientific and technical peers;

(iii) give special consideration to applications that--

(I) involve a consortia of experts from multiple institutions;

(II) encourage the integration of disciplines and application of the best technical resources; and

(III) increase the geographic diversity of demonstration projects; and

(iv) require that the technical areas described in each of subparagraphs (A), (B),

and (C) of paragraph (3) receive not less than 15 percent of funds made available to carry out this section.

(B) Cost share.--

(i) Research and development projects.--

(I) In general.--Except as provided in subclause (II), the non-Federal share of the cost of a research or development project under this section shall be not less than 20 percent.

(II) Reduction.--The Secretary of Agriculture or the Secretary of Energy, as appropriate, may reduce the non-Federal share required under subclause (I) if the appropriate Secretary determines the reduction to be necessary and appropriate.

(ii) Demonstration and commercial projects.--The non-Federal share of the cost of a demonstration or commercial project under this section shall be not less than 50 percent.

(C) Technology and information transfer.--The Secretary of Agriculture and the Secretary of Energy shall ensure that applicable research results and technologies from the Initiative are--

- (i) adapted, made available, and disseminated, as appropriate; and
- (ii) included in the best practices database established under section 1672C(e) of the Food, Agriculture, Conservation, and Trade Act of 1990.

(f) Administrative Support and Funds.--

(1) In general.--The Secretary of Energy and the Secretary of Agriculture may provide such administrative support and funds of the Department of Energy and the Department of Agriculture to the Board and the Advisory Committee as are necessary to enable the Board and the Advisory Committee to carry out their duties under this section.

(2) Other agencies.--The heads of the agencies referred to in subsection (c)(2)(B), and the other members of the Board appointed under subsection (c)(2)(C), are encouraged to provide administrative support and funds of their respective agencies to the Board and the Advisory Committee.

(3) Limitation.--Not more than 4 percent of the amount made available for each fiscal year under subsection (h) may be

used to pay the administrative costs of carrying out this section.

(g) Reports.--For each fiscal year for which funds are made available to carry out this section, the Secretary of Energy and the Secretary of Agriculture shall jointly submit to Congress a detailed report on--

(1) the status and progress of the Initiative, including a report from the Advisory Committee on whether funds appropriated for the Initiative have been distributed and used in a manner that is consistent with the objectives and requirements of this section;

(2) the general status of cooperation and research and development efforts carried out at each agency with respect to biofuels and biobased products; and

(3) the plans of the Secretary of Energy and the Secretary of Agriculture for addressing concerns raised in the report, including concerns raised by the Advisory Committee.

(h) Funding.--

(1) Mandatory funding.--Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture shall use to carry out this section, to remain available until expended--

(A) \$20,000,000 for fiscal year 2009;

(B) \$28,000,000 for fiscal year 2010;

(C) \$30,000,000 for fiscal year 2011; and

(D) \$40,000,000 for fiscal year 2012.

(2) Discretionary funding.--In addition to any other funds made available to carry out this section, there is authorized to be appropriated to carry out this section \$35,000,000 for each of fiscal years 2009 through 2012.