CONFERENCE COMMITTEE PRINT

Title IX -- Energy

Comparing H.R. 2419, As Passed by the House And the Senate Amendment Thereto

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SEC. 9001. TABLE OF CONTENTS.

Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is amended by inserting before section 9001 the following new section:

"SEC. 9000. TABLE OF CONTENTS.

"The table of contents of this title is as follows:

"TITLE IX—ENERGY

- "Sec. 9000. Short title; table of contents."
- "Sec. 9001. Definitions."
- "Sec. 9002. Federal procurement of biobased products."
- "Sec. 9003. Biorefinery development grants."
- "Sec. 9004. Biodiesel fuel education program."
- "Sec. 9005. Energy audit and renewable energy development program."
- "Sec. 9006. Rural energy for America program."
- "Sec. 9007. Hydrogen and fuel cell technologies."
- "Sec. 9008. Biomass Research and Development Act of 2000."
- "Sec. 9009. Cooperative research and extension projects."
- "Sec. 9010. Continuation of bioenergy program."
- "Sec. 9011. Research, extension, and educational programs on biobased energy technologies and products."
- "Sec. 9012. Energy Council of the Department of Agriculture."
- "Sec. 9013. Farm energy production pilot program."
- "Sec. 9014. Rural energy self-sufficiency initiative."
- "Sec. 9015. Agricultural Biofuels from Biomass Internship Pilot Program."
- "Sec. 9016. Feedstock flexibility program for bioenergy producers.".

SEC. 9001. ENERGY.

No similar provision.

Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is amended to read as follows:

`TITLE IX--ENERGY

`SEC. 9001. DEFINITIONS.

`Except as otherwise provided, in this title:

- `(1) **ADMINISTRATOR-** The term `Administrator' means the Administrator of the Environmental Protection Agency.
- `(2) **ADVISORY COMMITTEE-** The term `Advisory Committee' means the Biomass Research and Development Technical Advisory Committee established by section 9008(d)(1).

`(3) ADVANCED BIOFUEL-

`(A) IN GENERAL- The term `advanced biofuel' means fuel derived from

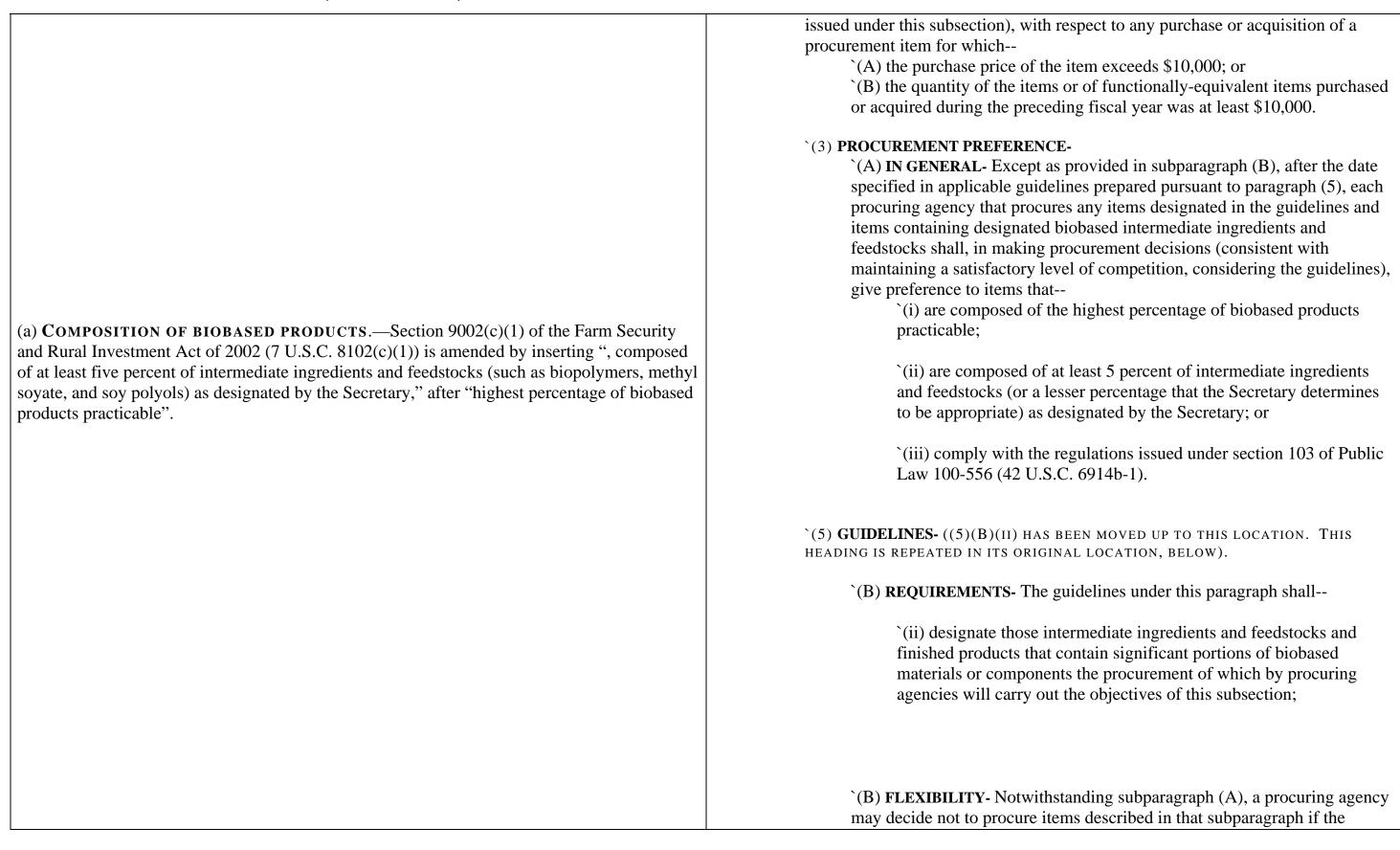
No similar provision.

renewable biomass other than corn starch.
`(B) INCLUSIONS- The term `advanced biofuel' includes
`(i) biofuel derived from cellulose, hemicellulose, or lignin;
`(ii) biofuel derived from sugar and starch (other than ethanol derived
from corn starch);
`(iii) biofuel derived from waste material, including crop residue,
other vegetative waste material, animal waste and byproducts
(including fats, oils,
greases, and manure), food waste, and yard waste;
`(iv) diesel-equivalent fuel derived from renewable biomass,
including vegetable oil and animal fat;
`(v) biogas (including landfill gas and sewage waste treatment gas)
produced through the conversion of organic matter from renewable
biomass;
`(vi) butanol or other alcohols produced through the conversion of
organic matter from renewable biomass; and
`(vii) other fuel derived from cellulosic biomass.
`(4) BIOBASED PRODUCT- The term `biobased product' means a product
determined by the Secretary to be a commercial or industrial product (other than
food or feed) that is
`(A) composed, in whole or in significant part, of biological products,
including renewable domestic agricultural materials and forestry materials;
or
`(B) an intermediate ingredient or feedstock.
`(5) BIOFUEL- The term `biofuel' means a fuel derived from renewable biomass.
`(6) BIOMASS CONVERSION FACILITY- The term `biomass conversion facility'
means a facility that converts or proposes to convert renewable biomass into
`(A) heat;
`(B) power;
(C) biobased products; or
`(D) advanced biofuels.
`(7) BIOREFINERY- The term `biorefinery' means equipment and processes that
`(A) convert renewable biomass into biofuels and biobased products; and
`(B) may produce electricity.
`(8) BOARD- The term `Board' means the Biomass Research and Development
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Board established by section 9008(c). `(9) INDIAN TRIBE- The term `Indian tribe' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b). `(10) INSTITUTION OF HIGHER EDUCATION- The term `institution of higher education' has the meaning given the term in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)). `(11) INTERMEDIATE INGREDIENT OR FEEDSTOCK- The term `intermediate ingredient or feedstock' means a material or compound made in whole or in significant part from biological products, including renewable agricultural materials (including plant, animal, and marine materials) or forestry materials, that are subsequently used to make a more complex compound or product. `(12) RENEWABLE BIOMASS- The term `renewable biomass' means--`(A) materials, pre-commercial thinnings, or removed exotic species that--`(i) are byproducts of preventive treatments (such as trees, wood, brush, thinnings, chips, and slash), that are removed--`(I) to reduce hazardous fuels; `(II) to reduce or contain disease or insect infestation; or `(III) to restore ecosystem health; `(ii) would not otherwise be used for higher-value products; and `(iii) are harvested from National Forest System land or public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)), in accordance with--`(I) Federal and State law; `(II) applicable land management plans; and `(III) the requirements for old-growth maintenance, restoration, and management direction of paragraphs (2), (3), and (4) of subsection (e) of section 102 of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6512) and the requirements for large-tree retention of subsection (f) of that section; or `(B) any organic matter that is available on a renewable or recurring basis from non-Federal land or land belonging to an Indian or Indian tribe that is held in trust by the United States or subject to a restriction against alienation imposed by the United States, including--`(i) renewable plant material, including--

	`(I) feed grains;
	`(II) other agricultural commodities;
	`(III) other plants and trees; and
	`(IV) algae; and
	`(ii) waste material, including
	`(I) crop residue;
	`(II) other vegetative waste material (including wood waste
	and wood residues);
	`(III) animal waste and byproducts (including fats, oils,
	greases, and manure);
	`(IV) construction waste; and
	`(V) food waste and yard waste.
	(v) food waste and yard waste.
	`(13) RENEWABLE ENERGY- The term `renewable energy' means energy derived from
	`(A) a wind, solar, renewable biomass, ocean (including tidal, wave,
	current, and thermal), geothermal, or hydroelectric source; or
	`(B) hydrogen derived from renewable biomass or water using an energy
	source described in subparagraph (A).
	`(14) RURAL AREA- Except as otherwise provided in this title, the term `rural area' has the meaning given the term in section 343(a)(13)(A) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)(A)).
	`(15) SECRETARY- The term `Secretary' means the Secretary of Agriculture.
SEC. 9002. FEDERAL PROCUREMENT OF BIOBASED PRODUCTS.	`SEC. 9002. BIOBASED MARKETS PROGRAM.
	`(a) Federal Procurement of Biobased Products-
	`(1) DEFINITION OF PROCURING AGENCY- In this subsection, the term
	`procuring agency' means
	`(A) any Federal agency that is using Federal funds for procurement; or
	`(B) a person that is a party to a contract with any Federal agency, with
	respect to work performed under such a contract.
	`(2) APPLICATION OF SECTION- Except as provided in paragraph (3), each
	procuring agency shall comply with this subsection (including any regulations



	procuring agency determines that the items
	`(i) are not reasonably available within a reasonable period of time;
	`(ii) fail to meet
	`(I) the performance standards set forth in the applicable
	specifications; or
	`(II) the reasonable performance standards of the procuring
	agencies; or
	`(iii) are available only at an unreasonable price.
	`(C) CERTIFICATION- After the date specified in any applicable guidelines
	prepared pursuant to paragraph (5), contracting offices shall require that,
	with respect to biobased products, vendors certify that the biobased
	products to be used in the performance of the contract will comply with the
	applicable specifications or other contractual requirements.
	`(4) SPECIFICATIONS- Each Federal agency that has the responsibility for
	drafting or reviewing procurement specifications shall, not later than 1 year after
	the date of publication of applicable guidelines under paragraph (5), or as
	otherwise specified in the guidelines, ensure that the specifications require the use
	of biobased products consistent with this subsection.
	`(5) GUIDELINES-
	`(A) IN GENERAL- The Secretary, after consultation with the
	Administrator, the Administrator of General Services, and the Secretary of
	Commerce (acting through the Director of the National Institute of
	Standards and Technology), shall prepare, and from time to time revise,
	guidelines for the use of procuring agencies in complying with the
	requirements of this subsection.
	`(B) REQUIREMENTS- The guidelines under this paragraph shall
No similar provision	
No similar provision.	`(i) designate those items that are or can be produced with biobased
	products (including biobased products for which there is only a
	single product or manufacturer in the category) and the procurement
	of which by procuring agencies will carry out the objectives of this
	subsection;
	(ii) MOVED TO PAGE 5.

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No sin	nilar provision.
No sin	nilar provision.
Security ar "life cycle	DREMENT GUIDELINE CONSIDERATIONS.—Section 9002(e)(2)(B) of the Farm and Rural Investment Act of 2002 (7 U.S.C. 8102(e)(2)(B)) is amended by striking costs" and inserting "information on life cycle costs if such information is e and available".
No sin	nilar provision.
No sin	nilar provision
No sin	nilar provision.

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- `(iii) set forth recommended practices with respect to the procurement of biobased products and items containing such materials and with respect to certification by vendors of the percentage of biobased products used;
- `(iv) provide information as to the availability, relative price, performance, and environmental and public health benefits, of such materials and items; and
- `(v) automatically designate those items that are composed of materials and items designated pursuant to paragraph (3), if the content of the final product exceeds 50 percent (unless the Secretary determines a different composition percentage).

No similar provision.

- `(C) INFORMATION PROVIDED- Information provided pursuant to subparagraph (B)(iv) with respect to a material or item shall be considered to be provided for another item made with the same material or item.
- `(**D**) **PROHIBITION-** Guidelines issued under this paragraph may not require a manufacturer or vendor of biobased products, as a condition of the purchase of biobased products from the manufacturer or vendor, to provide to procuring agencies more data than would be required to be provided by other manufacturers or vendors offering products for sale to a procuring agency, other than data confirming the biobased content of a product.
- `(E) STATE PROCUREMENT- Not later than 180 days after the date of enactment of this section, the Secretary shall offer procurement system models that States may use for the procurement of biobased products by the States.

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`(7) PROCUREMENT PROGRAM-

- `(A) **IN GENERAL** Not later than 1 year after the date of publication of applicable guidelines under paragraph (5), each Federal agency shall develop a procurement program that--
 - `(i) will ensure that items composed of biobased products will be purchased to the maximum extent practicable; and
 - `(ii) is consistent with applicable provisions of Federal procurement law.
- `(B) **MINIMUM REQUIREMENTS** Each procurement program required under this paragraph shall, at a minimum, contain--
 - `(i) a biobased products preference program;
 - `(ii) an agency promotion program to promote the preference program adopted under clause (i); and
 - `(iii) annual review and monitoring of the effectiveness of the procurement program of the agency.

`(C) CONSIDERATION-

- `(i) **IN GENERAL-** In developing a preference program, an agency shall--
 - `(I) consider the options described in clauses (ii) and (iii); and `(II) adopt 1 of the options, or a substantially equivalent alternative, for inclusion in the procurement program.

`(ii) CASE-BY-CASE POLICY DEVELOPMENT-

- `(I) IN GENERAL- Subject to paragraph (3)(B), except as provided in subclause (II), in developing a preference program, an agency shall consider a policy of awarding contracts to the vendor offering an item composed of the highest percentage of biobased products practicable.
- `(II) **CERTAIN CONTRACTS ALLOWED-** Subject to paragraph (3)(B), an agency may make an award to a vendor offering items with less than the maximum biobased products content.
- `(iii) MINIMUM CONTENT STANDARDS- In developing a preference program, an agency shall consider minimum biobased products content specifications that are established in a manner that ensures that the biobased products content required is consistent with this subsection, without violating paragraph (3)(B).

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- c) LABELING REQUIREMENTS AND REVISED DEADLINE.—Section 9002(h) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8102(h)) is amended—
 - (1) in paragraph (2)—
 - (A) by striking "Within one year after the date of enactment of this Act" and inserting "Not later than 90 days after the date of enactment of the (Farm, Nutrition, and Bioenergy Act of 2007),"; and
 - (B) by adding at the end the following: "Criteria shall be issued for finished products and intermediate ingredients and feedstocks.";
 - (2) by redesignating paragraphs (3) and (4) as paragraphs (4) and (5), respectively, and inserting after paragraph (2) the following:
 - "(3) **CONSULTATION**.—In developing the eligibility criteria for the labeling program under this section, the Secretary shall consult with other Federal agencies and with non-governmental groups with an interest in biobased products including small and large producers of biobased materials and products, industry, trade organizations, academia, consumer organizations, and environmental organizations.".

No similar provision.

`(b) LABELING-

`(1) **IN GENERAL-** The Secretary, in consultation with the Administrator, shall establish a voluntary program under which the Secretary authorizes producers of biobased products to use the label `USDA Certified Biobased Product'.

`(2) ELIGIBILITY CRITERIA-

`(A) CRITERIA-

- `(i) IN GENERAL- Not later than 90 days after the date of the enactment of this section, except as provided in clause (ii), the Secretary, in consultation with the Administrator and representatives from small and large businesses, academia, other Federal agencies, and such other persons as the Secretary considers appropriate, shall issue criteria (as of the date of enactment of this section) for determining which products may qualify to receive the label under paragraph (1).
- `(ii) **EXCEPTION-** Clause (i) shall not apply to final criteria that have been issued (as of the date of enactment of this section) by the Secretary.
- `(B) **REQUIREMENTS-** Criteria issued under subparagraph (A)--
 - `(i) shall encourage the purchase of products with the maximum biobased content;
 - `(ii) shall provide that the Secretary may designate as biobased for the purposes of the voluntary program established under this subsection finished products that contain significant portions of biobased materials or components; and
 - `(iii) to the maximum extent practicable, should be consistent with the guidelines issued under subsection (a)(5).
- `(3) **USE OF LABEL-** The Secretary shall ensure that the label referred to in paragraph (1) is used only on products that meet the criteria issued pursuant to paragraph (2).
- `(4) **RECOGNITION-** The Secretary shall--
 - `(A) establish a voluntary program to recognize Federal agencies and private entities that use a substantial amount of biobased products; and `(B) encourage Federal agencies to establish incentives programs to recognize Federal employees or contractors that make exceptional

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	contributions to the expanded use of biobased products.
	`(c) LIMITATION- Nothing in this section (other than subsections (f), (g), and (h)) shall apply to the procurement of motor vehicle fuels, heating oil, or electricity.
No similar provision.	`(d) INCLUSION- `(1) IN GENERAL- Not later than 90 days after the date of enactment of the Food and Energy Security Act of 2007, the Architect of the Capitol, the Sergeant at Arms of the Senate, and the Chief Administrative Officer of the House of Representatives shall establish procedures that apply the requirements of this section to procurement for the Capitol Complex.
No similar provision.	`(2) ANNUAL SHOWCASE- Beginning in calendar year 2008, the Secretary shall sponsor or otherwise support, consistent with applicable Federal laws (including regulations), an annual exposition at which entities may display and demonstrate biobased products.
No similar provision.	`(e) TESTING OF BIOBASED PRODUCTS- `(1) IN GENERAL- The Secretary may establish 1 or more national testing centers for biobased products to verify performance standards, biobased contents, and other product characteristics. `(2) REQUIREMENT- In establishing 1 or more national testing centers under paragraph (1), the Secretary shall give preference to entities that have established capabilities and experience in the testing of biobased materials and products.
No similar provision.	`(f) BIOENERGY AND OTHER BIOBASED PRODUCTS EDUCATION AND AWARENESS CAMPAIGN- `(1) IN GENERAL- The Secretary in consultation with the Secretary of Energy, shall establish a program to make competitive grants to eligible entities to carry out broad-based education and public awareness campaigns relating to bioenergy (including biofuels but excluding biodiesel) and other biobased products. `(2) ELIGIBLE ENTITIES- An entity eligible to receive a grant described in paragraph (1) is an entity that has demonstrated a knowledge of bioenergy (including biofuels but excluding biodiesel) and other biobased products and is `(A) a State energy or agricultural office;

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- `(B) a regional, State-based, or tribal energy organization;
 `(C) a land-grant college or university (as defined in section 1404 of the
 - (C) a land-grant college or university (as defined in section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3103)) or other institution of higher education;
 - `(D) a rural electric cooperative or utility;
 - `(E) a nonprofit organization, including an agricultural trade association, resource conservation and development district, and energy service provider;
 - `(F) a State environmental quality office; or
 - `(G) any other similar entity, other than a Federal agency or for-profit entity, as determined by the Secretary.

- (d) **AUTHORIZATION OF APPROPRIATIONS**.—Paragraph (1) of section 9002(k) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8102(k)) is amended to read as follows:
 - "(1) AUTHORIZATION OF APPROPRIATIONS.—
 - "(A) **FEDERAL PROCUREMENT**.—There are authorized to be appropriated \$1,000,000 for each of fiscal years 2008 through 2013 to implement the provisions of this section other than subsection (h).
 - "(B) **LABELING**.—There are authorized to be appropriated \$1,000,000 for each of fiscal years 2008 through 2013 to implement subsection (h) of this section."

`(h) FUNDING-

- `(1) **IN GENERAL-** Of the funds of the Commodity Credit Corporation, the Secretary shall use, to the maximum extent practicable, \$3,000,000 for each of fiscal years 2008 through 2012--
 - `(A) to continue mandatory funding for biobased products testing as required to carry out this section; and
 - `(B) to carry out the bioenergy education and awareness campaign under subsection (f).
- `(2) **AUTHORIZATION OF APPROPRIATIONS-** In addition to any other funds made available to carry out this section, there are authorized to be appropriated to carry out this section such sums as are necessary for each of fiscal years 2008 through 2012.
- `(3) **PRIORITY-** At the discretion of the Secretary, the Secretary may give priority to the testing of products for which private sector firms provide cost sharing for the testing.

- (e) REPORT REQUIREMENTS.—
 - (1) REPORT BY AGENCIES TO ADMINISTRATOR FOR FEDERAL PROCUREMENT POLICY.—Subsection (f) of section 9002 of the Farm Security

`(6) ADMINISTRATION-

- `(A) **OFFICE OF FEDERAL PROCUREMENT POLICY-** The Office of Federal Procurement Policy, in cooperation with the Secretary, shall--
 - `(i) coordinate the implementation of this subsection with other

and Rural Investment Act of 2002 (7 U.S.C. 8102) is amended—

- (A) by striking "The Office of" and inserting "(1) The Administrator for"; and
 - (B) by adding at the end the following new paragraph:
- "(2) To assist the Administrator for Federal Procurement Policy in preparing the report to Congress required under paragraph (1), each procuring agency each year shall submit to the Administrator a report covering the following:
 - "(A) Actions taken to implement subsections (c), (d), and (g) of this section.
 - "(B) The results of the annual review and monitoring program established under subsection (g)(2)(C).
 - "(C) The number of contracts entered into by the agency during the year covered by the report that include the procurement of biobased products.
 - "(D) A list of the biobased products procured by the agency during the year covered by the report.".

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policies for Federal procurement;

- `(ii) annually collect the information required to be reported under subparagraph (B) and make the information publicly available;
- `(iii) take a leading role in conducting proactive research to inform and promote the adoption of and compliance with procurement requirements for biobased products by Federal agencies; and
- `(iv) not less than once every 2 years, submit to Congress a report that--
 - `(I) describes the progress made in carrying out this subsection, including agency compliance with paragraph (4); and
 - `(II) contains a summary of the information reported pursuant to subparagraph (B).
- `(B) **OTHER AGENCIES-** To assist the Office of Federal Procurement Policy in carrying out subparagraph (A)--
 - `(i) each procuring agency shall submit each year to the Office of Federal Procurement Policy, to the maximum extent practicable, information concerning--
 - `(I) actions taken to implement paragraphs (3), (4), and (7);
 - `(II) the results of the annual review and monitoring program established under paragraph (7)(B)(iii);
 - `(III) the number and dollar value of contracts entered into during the year that include the direct procurement of biobased products;
 - `(IV) the number of service and construction (including renovations and modernizations) contracts entered into during the year that include language on the use of biobased products; and
 - `(V) the types and dollar value of biobased products actually used by contractors in carrying out service and construction (including renovations and modernizations) contracts during the previous year; and
 - `(ii) the General Services Administration and the Defense Logistics Agency shall submit each year to the Office of Federal Procurement Policy, to the maximum extent practicable, information concerning

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the types and dollar value of biobased products purchased by procuring agencies through GSA Advantage!, the Federal Supply Schedule, and the Defense Logistic Agency (including the DoD EMall).

- (2) **REPORT BY SECRETARY TO CONGRESS ON IMPLEMENTATION OF SECTION.**—Section 9002 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8102) is amended by adding at the end the following new subsection:
- "(1) **REPORT BY SECRETARY TO CONGRESS ON IMPLEMENTATION OF SECTION.**—Not later than six months after the date of the enactment of the Farm, Nutrition, and Bioenergy Act of 2007, and each year thereafter, the Secretary shall submit to Congress a report on the implementation of this section. The report shall include the following:
 - "(1) A comprehensive management plan defining tasks, milestones, and funding allocations for fully implementing this section.
 - "(2) A list of items designated under subsection (e)(1)(A) whose procurement will carry out the objectives of this section, with associated cost and performance data.
 - "(3) Information on the current status of implementation of the procurement preference under this section, including the procurement program of each Federal agency under subsection (g), and the voluntary labeling program under subsection (h)."
- (f) **REPEAL OF SUBSECTION**.—Subsection (b) of section 9002 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8102(b)) is hereby repealed.

`(g) REPORTS-

- `(1) **IN GENERAL-** Not later than 180 days after the date of enactment of this section and each year thereafter, the Secretary shall submit to Congress a report on the implementation of this section.
- `(2) **CONTENTS-** The report shall include--
 - `(A) a comprehensive management plan that establishes tasks, milestones, and timelines, organizational roles and responsibilities, and funding allocations for fully implementing this section; and
 - `(B) information on the status of implementation of--
 - `(i) item designations (including designation of intermediate ingredients and feedstocks); and
 - `(ii) the voluntary labeling program established under subsection (b).

No similar provision.

SEC. 9003. CONFORMING AMENDMENTS. (THIS SUBSECTION MOVED FROM THE END OF THE DOCUMENT)

(b) Marketing Program for Biobased Products-

	(1) IMPLEMENTATION-
	(A) IN GENERAL- The Secretary shall continue to carry out the
	designation and labeling of biobased products in accordance with section
	9002 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C.
	8102) as in effect on the day before the date of enactment of this Act until
	the date on which the Secretary is able to begin carrying out section 9002(a)
	of that Act (as amended by section 9001), which shall begin not later than
	90 days after the date of enactment of this Act.
	(B) EXISTING LISTINGS- Biobased products designated and labeled
	under section 9002 of the Farm Security and Rural Investment Act of 2002
	(7 U.S.C. 8102) as in effect on the day before the date of enactment of this
	Act shall continue to be considered designated and labeled biobased
	products after the date of enactment of this Act.
	(C) PROPOSED ITEM DESIGNATIONS- Notwithstanding any other
	provision of this Act or an amendment made by this Act, the Secretary shall
	have the authority to finalize the listings of any item proposed (prior to the
	date of enactment of this Act) to be designated in accordance with section
	9002 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C.
	8102) as in effect on the day before the date of enactment of this Act.
	(2) BIOENERGY EDUCATION AND AWARENESS CAMPAIGN- Section 947 of the
	Energy Policy Act of 2005 (42 U.S.C. 16256) is repealed.
SEC. 9003. LOAN GUARANTEES FOR BIOREFINERIES AND BIOFUEL PRODUCTION PLANTS.	`SEC. 9005. BIOREFINERY AND REPOWERING ASSISTANCE.
	(a) Puppose. The number of this section is to assist in the development of new or
	`(a) Purpose - The purpose of this section is to assist in the development of new or emerging technologies for the use of renewable biomass or other sources of renewable
	energy `(1) to develop advanced biofuels;
	`(2) to increase the energy independence of the United States by promoting the
	replacement of energy generated from fossil fuels with energy generated from a
	renewable energy source;
	`(3) to promote resource conservation, public health, and the environment;
	`(4) to diversify markets for raw agricultural and forestry products, and
	agriculture waste material; and
	`(5) to create jobs and enhance the economic development of the rural economy.
	`(b) DEFINITION OF REPOWER- In this section, the term `repower' means to
No similar provision.	substitute the production of heat or power from a fossil fuel source with heat or power
r · · · · · ·	from sources of renewable energy.

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Section 9003 of the Farm S	Security and Rural Investmen	ıt Act of 2002 (7 U	.S.C. 8103) is
amended—			

- (1) in the section heading, by inserting "; LOAN GUARANTEES FOR BIOREFINERIES AND BIOFUEL PRODUCTION PLANTS" after "GRANTS":
- (2) in subsection (b)(2)(A), by striking "and" the 1st place it appears and inserting "or";
- (3) in subsection (c), by redesignating subsection (h) as subsection (j) and subsections (d) through (g) as subsections (e) through (h), respectively, and inserting after subsection (c) the following:

`(c) ASSISTANCE-

`(1) **IN GENERAL-** The Secretary shall make available to eligible entities described in subsection (d)--

`(A) GRANTS TO ASSIST IN PAYING THE COSTS OF--

- `(i) development and construction of pilot- and demonstration-scale biorefineries intended to demonstrate the commercial viability of 1 or more processes for converting renewable biomass to advanced biofuels;
- `(ii) repowering a biomass conversion facility, power plant, or manufacturing facility, in whole or in part; or
- `(iii) conducting a study to determine the feasibility of repowering a biomass conversion facility, power plant, or manufacturing facility, in whole or in part; and

`(B) GUARANTEES FOR LOANS MADE TO FUND--

- `(i) the development and construction of commercial-scale biorefineries; or
- `(ii) the repowering of a biomass conversion facility, power plant, or manufacturing facility, in whole or in part.

- `(d) **ELIGIBLE ENTITIES-** An eligible entity under this section is--
 - `(1) an individual;
 - `(2) a corporation;
 - `(3) a farm cooperative;
 - `(4) a rural electric cooperative or public power entity;
 - `(5) an association of agricultural producers;

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- `(6) a State or local energy agency or office;
- `(7) an Indian tribe;
- `(8) a consortium comprised of any individuals or entities described in any of paragraphs (1)

through (7); or

`(9) any other similar entity, as determined by the Secretary.

"(d) LOAN GUARANTEES.—

"(1) **IN GENERAL**.—The Secretary shall make loan guarantees to eligible entities to assist in paying the cost of development and construction of biorefineries and biofuel production plants (including retrofitting) to carry out projects to demonstrate the commercial viability of 1 or more processes for converting biomass to fuels or chemicals.

"(2) LIMITATIONS.—

- "(A) MAXIMUM PERCENTAGE OF LOAN GUARANTEED.—A loan guarantee under paragraph (1) shall be for not more than 90 percent of the principal and interest due on the loan.
- "(B) **TOTAL AMOUNTS GUARANTEED.**—The total amount of principal and interest guaranteed under paragraph (1) shall not exceed—
 - "(i) \$1,000,000,000, in the case of loans valued at not more than \$100,000,000; or
 - "(ii) \$1,000,000,000, in the case of loans valued at more than \$100,000,000 but not more than \$250,000,000.
- "(C) **MAXIMUM TERM OF LOAN GUARANTEED.**—The Secretary shall determine the maximum term of a loan guarantee provided under paragraph (1).";
- (4) in subsection (f) (as so redesignated)—
 - (A) in paragraph (2)(B)—
 - (i) by striking "and" at the end of clause (viii);

`(f) LOAN GUARANTEES-

- `(1) **CONDITIONS-** As a condition of making a loan guarantee under subsection (c)(1)(B), the Secretary shall require--
 - `(A) demonstration of binding commitments to cover, from sources other than Federal funds, at least 20 percent of the total cost of the project described in the application;
 - `(B) in the case of a new or emerging technology, demonstration that the project design has been validated through a technical review and subsequent operation of a pilot or demonstration scale facility that can be scaled up to commercial size; and
 - `(C) demonstration that the applicant provided opportunities to local investors (as determined by the Secretary) to participate in the financing or ownership of the biorefinery.
- `(2) **LOCAL OWNERSHIP-** The Secretary shall give preference under subsection (c)(1)(B) to applications for projects with significant local ownership.
- `(3) **APPROVAL-** Not later than 90 days after the Secretary receives an application for a loan guarantee under subsection (c)(1)(B), the Secretary shall approve or disapprove the application.

`(4) LIMITATIONS-

`(A) MAXIMUM AMOUNT OF LOAN GUARANTEED-

`(i) **COMMERCIAL-SCALE BIOREFINERIES-** Subject to clause

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- (ii) by striking the period at the end of clause (ix) and inserting "; and"; and
 - (iii) by adding at the end the following:
 - "(x) The level of local ownership."; and
- (B) by adding at the end the following:

"(3) **PRIORITY IN AWARDING LOAN GUARANTEES.**—In selecting projects to receive loan guarantees under subsection (d), the Secretary shall give priority to projects based on the criteria set forth in paragraph (2)(B) of this subsection."; and

- (5) by inserting after subsection (h) the following new subsection:
- "(i) **CONDITION OF PROVISION OF ASSISTANCE**.—As a condition of receiving a grant or loan guarantee under this section, the eligible entity shall ensure that all laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed in whole or in part with the grant or loan guarantee, as the case may be, shall be paid wages at rates not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40, United States Code. The Secretary of Labor shall have, with respect to such labor standards, the authority and functions set forth in Reorganization Plan Numbered 14

- (iii), the principal amount of a loan guaranteed under subsection (c)(1)(B)(i) may not exceed \$250,000,000.
- `(ii) **REPOWERING-** Subject to clause (iii), the principal amount of a loan guaranteed under subsection (c)(1)(B)(ii) may not exceed \$70,000,000.
- `(iii) **RELATIONSHIP TO OTHER FEDERAL FUNDING-** The amount of a loan guaranteed under subsection (c)(1)(B) shall be reduced by the amount of other Federal funding that the entity receives for the same project.
- `(B) MAXIMUM PERCENTAGE OF LOAN GUARANTEED- A loan guaranteed under subsection (c)(1)(B) shall be in an amount not to exceed 80 percent of the project costs, as determined by the Secretary.
- `(C) AUTHORITY TO GUARANTEE ENTIRE AMOUNT OF THE LOAN- The Secretary may guarantee up to 100 percent of the principal and interest due on a loan guaranteed under subsection (c)(1)(B).
- `(2) **PREFERENCE-** In selecting projects to receive grants and loan guarantees under this section, the Secretary shall give preference to projects that receive or will receive financial support from the State in which the project is carried out.

No similar provision.

of 1950 (15 Fed. Reg. 3176; 64 Stat. 1267) and section 3145 of such title.";	
(6) in subsection (j) (as so redesignated), by striking "2007" and inserting "2012"; and	
(7) by adding at the end the following new subsection:	
"(k) ADDITIONAL FUNDING FOR LOAN GUARANTEES.—Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out this section— "(1) \$75,000,000 for fiscal year 2008; "(2) \$100,000,000 for fiscal year 2009; "(3) \$125,000,000 for fiscal year 2010; "(4) \$200,000,000 for fiscal year 2011; and "(5) \$300,000,000 for fiscal year 2012.". (8) in paragraph (2)(B) of subsection (f) (as so redesignated)—	`(h) Funding- Of the funds of the Commodity Credit Corporation, the Secretary shall use for the cost of grants and loan guarantees to carry out this section \$300,000,000 for fiscal year 2008, to remain available until expended.
(A) in clause (viii), by striking "and" at the end;(B) in clause ix, by striking "approaches." and inserting "approaches; and"; and	
(C) by adding at the end the following new clause:	
"(x) whether the impact the distribution of funds would have on existing manufacturing and other facilities that utilize similar feedstocks would be minimal.".	
No similar provision.	`(e) GRANTS- `(1) IN GENERAL- The Secretary shall award grants under subsection (c)(1)(A) on a competitive basis. `(2) SELECTION CRITERIA-

	`(A) GRANTS FOR DEVELOPMENT AND CONSTRUCTION OF PILOT AND DEMONSTRATION SCALE BIOREFINERIES-
	`(i) IN GENERAL- In awarding grants for development and
	construction of pilot and demonstration scale biorefineries under
	subsection (c)(1)(A)(i), the Secretary shall select projects based on
	the likelihood that the projects will demonstrate the commercial
	viability of a new or emerging process for converting renewable
	biomass into advanced biofuels.
	`(ii) FACTORS- The factors to be considered under clause (i) may
	include
	`(I) the potential market for 1 or more products;
	`(II) the level of financial participation by the applicants;
	`(III) the availability of adequate funding from other sources;
	`(IV) the participation of producer associations and
	cooperatives;
	`(V) the beneficial impact on resource conservation, public
	health, and the environment;
	`(VI) the timeframe in which the project will be operational;
	`(VII) the potential for rural economic development;
	`(VIII) the participation of multiple eligible entities;
	`(IX) the potential for developing advance industrial
	biotechnology
	approaches; and
	`(X) whether the distribution of funds would have minimal
	impact on existing manufacturing and other facilities that use
	similar feedstocks.
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No similar provision.	`(B) GRANTS FOR REPOWERING- In selecting projects to receive
	grants for repowering under clauses (ii) and (iii) of subsection (c)(1)(A), the
	Secretary shall consider
	(i) the change in energy efficiency that would result from the
	proposed repowering of the eligible entity;
	`(ii) the reduction in fossil fuel use that would result from the
	proposed repowering; and
	`(iii) the volume of renewable biomass located in such proximity to
	the eligible entity as to make local sourcing of feedstock
	economically practicable.
	`(3) COST SHARING-

	`(A) LIMITS-
No similar provision.	`(g) CONSULTATION- In carrying out this section, the Secretary shall consult with the Secretary of Energy.
SEC. 9004. ENERGY AUDIT AND RENEWABLE ENERGY DEVELOPMENT PROGRAM.	`SEC. 9007. RURAL ENERGY FOR AMERICA PROGRAM.
Section 9005(i) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8105) is amended by striking "2007" and inserting "2012".	`(b) Energy Audits and Renewable Energy Development Assistance-
	`(1) IN GENERAL- The Secretary shall make competitive grants to eligible entities to provide assistance to agricultural producers and rural small businesses `(A) to become more energy efficient; and

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`(B) to use renewable energy technology and resources. `(2) **ELIGIBLE ENTITIES-** An eligible entity under this subsection is--`(A) a State agency; `(B) a regional, State-based, or tribal energy organization; `(C) a land-grant college or university or other institution of higher education; `(D) a rural electric cooperative or public power entity; `(E) a nonprofit organization; and `(F) any other similar entity, as determined by the Secretary. `(3) MERIT REVIEW-`(A) MERIT REVIEW PROCESS- The Secretary shall establish a merit review process to review applications for grants under paragraph (1) that uses the expertise of other Federal agencies, industry, and nongovernmental organizations. `(B) **SELECTION CRITERIA-** In reviewing applications of eligible entities to receive grants under paragraph (1), the Secretary shall consider--`(i) the ability and expertise of the eligible entity in providing professional energy audits and renewable energy assessments; `(ii) the geographic scope of the program proposed by the eligible entity in relation to the identified need; `(iii) the number of agricultural producers and rural small businesses to be assisted by the program; `(iv) the potential for energy savings and environmental and public health benefits resulting from the program; and `(v) the plan of the eligible entity for providing information to agricultural producers and rural small businesses on the benefits of energy efficiency and renewable energy development. `(4) USE OF GRANT FUNDS-`(A) **REQUIRED USES-** A recipient of a grant under paragraph (1) shall use the grant funds to conduct and promote energy audits for agricultural producers and rural small businesses to provide recommendations on how to improve energy efficiency and use renewable energy technology and resources.

	`(B) PERMITTED USES- In addition to the uses described in subparagraph (A), a recipient of a grant may use the grant funds to make agricultural producers and rural small businesses aware of `(i) financial assistance under subsection (c); and `(ii) other Federal, State, and local financial assistance programs for which the agricultural producers and rural small businesses may be eligible.
	`(5) COST SHARING- A recipient of a grant under paragraph (1) that conducts an energy audit for an agricultural producer or rural small business under paragraph (4)(A) shall require that, as a condition of the energy audit, the agricultural producer or rural small business pay at least 25 percent of the cost of the energy audit, which shall be retained by the eligible entity for the cost of the energy audit
	`(j) Funding- `(1) COMMODITY CREDIT CORPORATION- Of the funds of the Commodity Credit Corporation, the Secretary shall make available \$230,000,000 to carry out subsections (b), (c), and (d) for fiscal year 2008, to remain available until expended, of which `(A) not less than 5 percent shall be used to carry out subsection (b);
SEC. 9005. RENEWABLE ENERGY SYSTEMS AND ENERGY EFFICIENCY IMPROVEMENTS.	`SEC. 9007. RURAL ENERGY FOR AMERICA PROGRAM.
Section 9006 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8106) is amended— (1) by striking the section heading and inserting the following: "SEC 1006 PURAL ENERGY FOR AMERICA PROGRAM"	`(a) ESTABLISHMENT- The Secretary, in consultation with the Secretary of Energy, shall establish a Rural Energy for America Program to promote energy efficiency and renewable energy development for agricultural producers, cooperatives, rural small businesses, and other similar entities through
"SEC. 9006. RURAL ENERGY FOR AMERICA PROGRAM.".".	`(1) grants for energy audits and renewable energy development assistance;
	`(2) financial assistance for energy efficiency improvements and renewable energy systems; and
	`(3) financial assistance for facilities to convert animal manure to energy.
	`(b) ENERGY AUDITS AND RENEWABLE ENERGY DEVELOPMENT ASSISTANCE- See section box above

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- (2) in subsection (a)—
 - (A) in the matter preceding paragraph (1), by inserting ", other agricultural producer" after "rancher";
 - (B) in paragraph (1), by striking "and" at the end;
 - (C) in paragraph (2), by striking the period and inserting "; and"; and
 - (D) by adding at the end the following new paragraph:

"(3) produce and sell electricity generated by new renewable energy systems.";

`(c) FINANCIAL ASSISTANCE FOR ENERGY EFFICIENCY IMPROVEMENTS AND RENEWABLE ENERGY SYSTEMS-

- `(1) **IN GENERAL-** In addition to any similar authority, the Secretary shall provide loan guarantees, grants, and production-based incentives to agricultural producers and rural small businesses--
 - `(A) to purchase renewable energy systems, including systems that may be used to produce and sell electricity; and
 - `(B) to make energy efficiency improvements.

`(5) PRODUCTION-BASED INCENTIVE PAYMENTS IN LIEU OF GRANTS-

- `(A) IN GENERAL- In addition to the authority under subsection (b), to encourage the production of electricity from renewable energy systems, the Secretary, on receipt of a request of an eligible applicant under this section, shall make production-based incentive payments to the applicant in lieu of a grant.
- `(B) **CONTINGENCY-** A payment under subparagraph (A) shall be contingent on documented energy production and sales by the renewable energy system of the eligible applicant to a third party.
- `(C) **LIMITATION-** The total net present value of a production-based incentive payment under this paragraph shall not exceed the lesser of--
 - `(i) an amount equal to 25 percent of the eligible project costs, as determined by the Secretary; and
 - `(ii) such other limit as the Secretary may establish, by rule or guidance.

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(3) in subsection (b), by inserting ", other agricultural producer" after "rancher";

(4) in subsection (c)—

- (A) in paragraph (1)—
 - (i) in subparagraph (B), by striking "50 percent" and inserting "75 percent"; and
- (ii) by redesignating subparagraph (B) as subparagraph (C) and inserting after subparagraph (A) the following:

"(B) LOAN GUARANTEES.—

- "(i) **MAXIMUM AMOUNT.**—The amount of a loan guaranteed under this section shall not exceed \$25,000,000.
- "(ii) **MAXIMUM PERCENTAGE.**—A loan guaranteed under this section shall not exceed 75 percent of the cost of the activity funded under subsection (a)."; and
- (B) by adding at the end the following new paragraph:

- "(3) **PRIORITIZATION**.—The Secretary shall give the greatest priority for grants under subsection (a) to activities for which the least percentage of the total cost of such activities is requested by the farmer, rancher, other agricultural producer, or rural small business.".
- (5) by redesignating subsection (e) as subsection (g) and striking subsection (f); and
- (6) by inserting after subsection (d) the following new subsections:

`(4) **LIMITS-**

`(A) **GRANTS-** The amount of a grant under this subsection shall not exceed 25 percent of the cost of the activity carried out using funds from the grant.

`(B) LOAN GUARANTEES-

- `(i) MAXIMUM AMOUNT- The amount of a loan guaranteed under this subsection shall not exceed \$25,000,000.
- `(ii) **MAXIMUM PERCENTAGE-** A loan guaranteed under this subsection shall not exceed 75 percent of the cost of the activity carried out using funds from the loan.

- `(2) **AWARD CONSIDERATIONS-** In determining the amount of a grant, loan guarantee, or production-based incentive provided under this section, the Secretary shall take into consideration, as applicable--
 - `(A) the type of renewable energy system to be purchased;
 - `(B) the estimated quantity of energy to be generated by the renewable energy system;
 - `(C) the expected environmental benefits of the renewable energy system;
 - `(D) the quantity of energy savings expected to be derived from the activity, as demonstrated by an energy audit comparable to an energy audit under subsection (b);

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"(e) FEASIBILITY STUDIES.—

- "(1) **IN GENERAL**.—The Secretary may provide assistance to a farmer, rancher, other agricultural producer, or rural small business to conduct a feasibility study of a project for which assistance may be provided under this section.
- "(2) **LIMITATION**.—The Secretary shall use not more than 10 percent of the funds made available to carry out this section to provide assistance described in paragraph (1).
- "(3) **CRITERIA**.—The Secretary shall issue regulations establishing criteria for the receipt of assistance under this subsection.
- "(4) **AVOIDANCE OF DUPLICATIVE ASSISTANCE.**—An farmer, rancher, other agricultural producer, or rural small business that receives assistance to carry out a feasibility study for a project under this subsection shall not be eligible for assistance to carry out a feasibility study for the project under any other provision of law.

No similar provision.

- `(E) the estimated period of time for the energy savings generated by the activity to equal the cost of the activity;
- `(F) the expected energy efficiency of the renewable energy system; and `(G) other appropriate factors.

`(3) FEASIBILITY STUDIES-

- `(A) IN GENERAL- The Secretary may provide assistance in the form of grants to an agricultural producer or rural small business to conduct a feasibility study for a project for which assistance may be provided under this subsection.
- `(B) **LIMITATION-** The Secretary shall use not more than 10 percent of the funds made available to carry out this subsection to provide assistance described in subparagraph (A).
- `(C) AVOIDANCE OF DUPLICATIVE ASSISTANCE- An entity shall be ineligible to receive assistance to carry out a feasibility study for a project under this paragraph if the entity has received Federal or State assistance for a feasibility study for the project.

- `(d) FINANCIAL ASSISTANCE FOR FACILITIES TO CONVERT ANIMAL MANURE TO ENERGY-
 - `(1) **DEFINITION OF ANIMAL MANURE-** In this subsection, the term `animal manure' means agricultural livestock excrement, including litter, wood shavings, straw, rice hulls, bedding material, and other materials incidentally collected with the manure.
 - `(2) **GRANTS AND LOAN GUARANTEES-** The Secretary shall make grants and loan guarantees to eligible entities on a competitive basis for the installation, operation, and evaluation of facilities described in paragraph (4).

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- `(3) **ELIGIBLE ENTITIES-** To be eligible to receive a grant or loan guarantee under this subsection, an entity shall be--
 - `(A) an agricultural producer;
 - `(B) a rural small business;
 - `(C) a rural cooperative; or
 - `(D) any other similar entity, as determined by the Secretary.

`(4) ELIGIBLE FACILITIES-

- `(A) IN GENERAL- Subject to subparagraphs (B) through (E), an eligible entity may receive a grant or loan guarantee under this subsection for the installation, first-year operation, and evaluation of an on-farm or community facility (such as a digester or power generator using manure for fuel) the primary function of which is to convert animal manure into a useful form of energy (including gaseous or liquid fuel or electricity).
- `(B) **SUBSYSTEMS INCLUDED-** Funds from a grant and loan guarantee under subparagraph (A) may be used for systems that support an on-farm or community facility described in that subparagraph, which may include feedstock gathering systems and gas piping systems.
- `(C) **CONVERSION OF RENEWABLE BIOMASS-** An eligible entity may use a grant or loan guarantee provided under this subsection to convert renewable biomass other than animal manure (such as waste materials from food processing facilities and other green wastes) into energy at a facility if the majority of materials converted into energy at the facility is animal manure.
- `(D) DEVELOPMENT AND DEMONSTRATION OF NEW

TECHNOLOGIES- An eligible entity may use a grant or loan guarantee provided under this subsection for the installation, demonstration, and first 2 years of operation of an on-farm or community facility that uses manure-to-energy technologies--

- `(i) that are not in commercial use, as determined by the Secretary; and
- `(ii) for which sufficient research has been conducted for the Secretary to determine that the technology is commercially viable.
- `(5) **SELECTION OF ELIGIBLE ENTITIES-** In selecting applications for grants and loan guarantees under this subsection, the Secretary shall consider--

`(A) the quality of energy produced; and
`(B) the projected net energy conversion efficiency, which shall be equal to the quotient obtained by dividing `(i) the energy output of the eligible facility; by `(ii) the sum of `(I) the energy content of animal manure at the point of collection; and `(II) the energy consumed in facility operations, including feedstock transportation;
`(C) environmental issues, including potential positive and negative impacts on water quality, air quality, odor emissions, pathogens, and soil quality resulting from `(i) the use and conversion of animal manure into energy; `(ii) the installation and operation of the facility; and `(iii) the disposal of any waste products (including effluent) from the facility;
`(D) the net impact of the facility and any waste from the facility on greenhouse gas emissions, based on the estimated emissions from manure storage systems in use before the installation of the manure-to-energy facility;
`(E) diversity factors, including diversity of `(i) sizes of projects supported; and `(ii) geographic locations; and
`(F) the proposed project costs and levels of grants or loan guarantees requested.
`(6) AMOUNT-
`(i) SMALLER PROJECTS- In the case of a project with a total eligible cost (as described in paragraph (4)) of not more than \$500,000, the amount of a grant made under this subsection shall not exceed 50 percent of the total eligible cost. `(ii) LARGER PROJECTS- In the case of a project with a total eligible cost (as described in paragraph (4)) of more than \$500,000,

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the amount of a grant made under this subsection shall not exceed the greater of--`(I) \$250,000; or `(II) 25 percent of the total eligible cost. `(iii) MAXIMUM- In no case shall the amount of a grant made under this section exceed \$2,000,000. `(B) LOAN GUARANTEES- The principal amount and interest of a loan guaranteed under this subsection may not exceed the lesser of--`(i) 80 percent of the difference between--`(I) the total cost to install and operate the eligible facility for the first year, as determined by the Secretary; and `(II) the amount of any Federal, State, and local funds received to support the eligible facility; and `(ii) \$25,000,000. `(7) **PROHIBITION-** A grant or loan guarantee may not be provided for a project under this subsection that also receives assistance under subsection (b) or (c). `(e) ROLE OF STATE RURAL DEVELOPMENT DIRECTOR-No similar provision. `(1) OUTREACH AND AVAILABILITY OF INFORMATION-`(A) OUTREACH- A State rural development director, acting through local rural development offices, shall provide outreach regarding the availability of financial assistance under this section. `(B) AVAILABILITY OF INFORMATION- A State rural development director shall make available information relating to the availability of financial assistance under this section at all local rural development, Farm Service Agency, and Natural Resources Conservation Service offices. `(2) APPLICATION REVIEW- Applications for assistance under this section shall be reviewed by the appropriate State rural development director.

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"(f) SMALL ACTIVITIES.—

- "(1) **LIMITATION ON USE OF FUNDS.**—The Secretary shall use not less than 15 percent of the funds made available under subsection (h) to provide grants for activities that have a cost of \$50,000 or less.
- "(2) **EXCEPTION**.—Beginning on the first day of the third quarter of a fiscal year, the limitation on the use of funds under paragraph (1) shall not apply to funds made available under subsection (h) for such fiscal year.".
- (7) by adding at the end the following new subsection:

No similar provision.

No similar provision.

No similar provision.

- "(h) **FUNDING**.—Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture shall make available to carry out this section—
 - "(1) \$50,000,000 for fiscal year 2008;
 - "(2) \$75,000,000 for fiscal year 2009;
 - "(3) \$100,000,000 for fiscal year 2010;

`(f) SMALL PROJECTS-

- `(1) **APPLICATION AND REVIEW PROCESS-** The Secretary shall develop a streamlined application and expedited review process for project applicants seeking less than \$20,000 under this section.
- `(2) **PERCENTAGE OF FUNDS-** Not less than 20 percent of the funds made available under subsection (k)(1) shall be made available to make grants under this section in an amount of less than \$20,000.
- (g) **PREFERENCE-** In selecting projects to receive grants under this section, the Secretary shall give preference to projects that receive or will receive financial support from the State in which the project is carried out.
- `(h) **Rural Energy Star** The Secretary, in coordination with the Administrator and the Secretary of Energy, shall extend the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a) to include a Rural Energy Star component to promote the development and use of energy-efficient equipment and facilities in the agricultural sector.
- `(i) **REPORTS-** Not later than 4 years after the date of enactment of the Food and Energy Security Act of 2007, the Secretary shall submit to Congress a report on the implementation of this section, including the outcomes achieved by projects funded under this section.

`(j) FUNDING-

- `(1) **COMMODITY CREDIT CORPORATION-** Of the funds of the Commodity Credit Corporation, the Secretary shall make available \$230,000,000 to carry out subsections (b), (c), and (d) for fiscal year 2008, to remain available until expended, of which--
 - `(A) not less than 5 percent shall be used to carry out subsection (b); and
 - `(B) not less than 15 percent shall be used to carry out subsection (d).

"(4) \$125,000,000 for fiscal year 2011; and	`(2) AUTHORIZATION OF APPROPRIATIONS- In addition to any other funds made available to carry out this section, there are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2008 through 2012.
"(5) \$150,000,000 for fiscal year 2012.".	
SEC. 9006. BIOMASS RESEARCH AND DEVELOPMENT ACT OF 2000.	`SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT ACT OF 2000.
(a) RESTATEMENT OF ACT .—Section 9008 of the Farm Security and Rural Investment Act of 2002 (116 Stat. 486) is amended to read as follows:	
"SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT ACT OF 2000.	
"(a) SHORT TITLE. —This section may be cited as the "Biomass Research and Development Act of 2000".	
"(b) FINDINGS.—Congress finds that—	
"(1) conversion of biomass into biobased industrial products offers outstanding potential for benefit to the national interest through—	
"(A) improved strategic security and balance of payments;	
"(B) healthier rural economies;	
"(C) improved environmental quality;	
"(D) near-zero net greenhouse gas emissions;	
"(E) technology export; and	
"(F) sustainable resource supply;	
"(2) the key technical challenges to be overcome in order for biobased industrial products to be cost-competitive are finding new technology and reducing the cost of technology for converting biomass into desired biobased industrial products;	
"(3) biobased fuels have the clear potential to be sustainable, low cost, and high performance fuels that are compatible with both current and future transportation systems and provide near-zero net greenhouse gas emissions;	
"(4) biobased chemicals have the clear potential for environmentally benign product life cycles;	
"(5) biobased power can—	

- "(A) provide environmental benefits;
- "(B) promote rural economic development; and
- "(C) diversify energy resource options;
- "(6) many biomass feedstocks suitable for industrial processing show the clear potential for sustainable production, in some cases resulting in improved soil fertility and carbon sequestration;
- "(7) (A) grain processing mills are biorefineries that produce a diversity of useful food, chemical, feed, and fuel products; and
- "(B) technologies that result in further diversification of the range of valueadded biobased industrial products can meet a key need for the grain processing industry;
- "(8) (A) cellulosic feedstocks are attractive because of their low cost and widespread availability; and
- "(B) research resulting in cost-effective technology to overcome the recalcitrance of cellulosic biomass would allow biorefineries to produce fuels and bulk chemicals on a very large scale, with a commensurately large realization of the benefit described in paragraph (1);
- "(9) research into the fundamentals to understand important mechanisms of biomass conversion can be expected to accelerate the application and advancement of biomass processing technology by—
 - "(A) increasing the confidence and speed with which new technologies can be scaled up; and
 - "(B) giving rise to processing innovations based on new knowledge;
- "(10) the added utility of biobased industrial products developed through improvements in processing technology would encourage the design of feedstocks that would meet future needs more effectively;
- "(11) the creation of value-added biobased industrial products would create new jobs in construction, manufacturing, and distribution, as well as new highervalued exports of products and technology;
- "(12) (A) because of the relatively short-term time horizon characteristic of private sector investments, and because many benefits of biomass processing are

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in the national interest, it is appropriate for the Federal Government to provide precommercial investment in fundamental research and research-driven innovation in the biomass processing area; and

- "(B) such an investment would provide a valuable complement to ongoing and past governmental support in the biomass processing area; and
- "(13) several prominent studies, including studies by the President's Committee of Advisors on Science and Technology and the National Research Council—
 - "(A) support the potential for large research-driven advances in technologies for production of biobased industrial products as well as associated benefits; and
 - "(B) document the need for a focused, integrated, and innovationdriven research effort to provide the appropriate progress in a timely manner.

"(c) **DEFINITIONS**.—In this section:

- "(1) **ADVISORY COMMITTEE**.—The term 'Advisory Committee' means the Biomass Research and Development Technical Advisory Committee established by this section.
- "(2) **BIOBASED FUEL.**—The term 'biobased fuel' means any transportation or heating fuel produced from biomass.
- "(3) **BIOBASED PRODUCT**.—The term 'biobased product' means an industrial product (including chemicals, materials, and polymers) produced from biomass, or a commercial or industrial product (including animal feed and electric power) derived in connection with the conversion of biomass to fuel.
- "(4) **BIOMASS**.—The term 'biomass' means 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, residues, fibers, and animal wastes, municipal wastes, and other waste materials.
- "(5) **BOARD**.—The term 'Board' means the Biomass Research and Development Board established by this section.
- "(6) **DEMONSTRATION**.—The term 'demonstration' means demonstration of technology in a pilot plant or semi-works scale facility.

`(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; and
 - `(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

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- "(7) **Initiative**.—The term 'Initiative' means the Biomass Research and Development Initiative established under this section.
- "(8) **Institution of Higher Education**.—The term 'institution of higher education' has the meaning given the term in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)).
- "(9) **NATIONAL LABORATORY**.—The term 'National Laboratory' has the meaning given that term in section 2 of the Energy Policy Act of 2005.
- "(10) **POINT OF CONTACT.**—The term 'point of contact' means a point of contact designated under this section.

"(d) COOPERATION AND COORDINATION IN BIOMASS RESEARCH AND DEVELOPMENT.—

"(1) **IN GENERAL**.—The Secretary of Agriculture and the Secretary of Energy shall cooperate with respect to, and coordinate, policies and procedures that promote research and development leading to the production of biobased fuels and biobased products.

"(2) POINTS OF CONTACT.—

- "(A) **In GENERAL**.—To coordinate research and development programs and activities relating to biobased fuels and biobased products that are carried out by their respective Departments—
 - "(i) 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
 - "(ii) 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

facility located on a farm.

- `(3) **INITIATIVE-** The term `Initiative' means the Biomass Research and Development Initiative established under subsection (e).
- `(4) **NATIONAL LABORATORY-** The term `National Laboratory' has the meaning given that term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).
- `(5) **POINT OF CONTACT-** The term `point of contact' means a point of contact designated under this section.

(b) COOPERATION AND COORDINATION IN BIOMASS RESEARCH AND DEVELOPMENT-

- `(1) IN GENERAL- The Secretary of Agriculture and the Secretary of Energy shall cooperate with respect to, and coordinate, policies and procedures that promote research and development leading to the production of biofuels and biobased products.
- `(2) POINTS OF CONTACT-
 - `(A) **IN GENERAL-** To coordinate research and development programs and activities relating to biofuels and biobased products that are carried out by their respective departments--
 - `(i) 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
 - `(ii) 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.

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before the date of the designation, by and with the advice and consent of the Senate.

- "(B) **DUTIES**.—The points of contact shall jointly—
- "(i) assist in arranging interlaboratory and site-specific supplemental agreements for research and development projects relating to biobased fuels and biobased products;
 - "(ii) serve as cochairpersons of the Board;
 - "(iii) administer the Initiative; and
- "(iv) respond in writing to each recommendation of the Advisory Committee made under subsection (f).

"(e) BIOMASS RESEARCH AND DEVELOPMENT BOARD.—

- "(1) **ESTABLISHMENT.**—There is established the Biomass Research and Development Board, which shall supersede the Interagency Council on Biobased Products and Bioenergy established by Executive Order No. 13134, to coordinate programs within and among departments and agencies of the Federal Government for the purpose of promoting the use of biobased fuels and biobased products by—
 - "(A) maximizing the benefits deriving from Federal grants and assistance; and
 - "(B) bringing coherence to Federal strategic planning.
 - "(2) **MEMBERSHIP**.—The Board shall consist of—
 - "(A) the point of contact of the Department of Energy designated under subsection (d), who shall serve as cochairperson of the Board;
 - "(B) the point of contact of the Department of Agriculture designated under subsection (d), who shall serve as cochairperson of the Board;
 - "(C) 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—
 - "(i) be appointed by the head of the respective agency; and

`(B) **DUTIES-** The points of contact shall jointly--

- `(i) assist in arranging interlaboratory and site-specific supplemental agreements for research and development projects relating to biofuels and biobased products:
- `(ii) serve as cochairpersons of the Board;
- `(iii) administer the Initiative; and
- `(iv) respond in writing to each recommendation of the Advisory Committee made under subsection (d).

`(c) BIOMASS RESEARCH AND DEVELOPMENT BOARD-

- `(1) **ESTABLISHMENT-** There is established the Biomass Research and Development Board, which shall supersede the Interagency Council on Biobased Products and Bioenergy established by Executive Order No. 13134 (7 U.S.C. 8101 note), to coordinate programs within and among departments and agencies of the Federal Government for the purpose of promoting the use of biofuels and biobased products by--
 - `(A) maximizing the benefits deriving from Federal grants and assistance; and
 - `(B) bringing coherence to Federal strategic planning.

`(2) **MEMBERSHIP-** The Board shall consist of--

- `(A) the point of contact of the Department of Energy designated under subsection (b)(2)(A)(ii), who shall serve as cochairperson of the Board; `(B) the point of contact of the Department of Agriculture designated under subsection (b)(2)(A)(i), who shall serve as cochairperson of the Board; `(C) 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--
 - `(i) be appointed by the head of the respective agency; and
 - `(ii) have a rank that is equivalent to the rank of the points of contact; and
- `(D) at the option of the Secretary of Agriculture and the Secretary of

- "(ii) have a rank that is equivalent to the rank of the points of contact; and
- "(D) at the option of the Secretary of Agriculture and the Secretary of Energy, other members appointed by the Secretaries (after consultation with the members described in subparagraphs (A) through (C)).
- "(3) **DUTIES.**—The Board shall—
- "(A) coordinate research and development activities relating to biobased fuels 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 (g) 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 to enable the Board to carry out the duties of the Board under paragraph (3).

"(f) BIOMASS RESEARCH AND DEVELOPMENT TECHNICAL ADVISORY

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Energy, other members appointed by the Secretaries (after consultation with the members described in subparagraphs (A) through (C)).

- `(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 to enable the Board to carry out the duties of the Board under paragraph (3).
- `(d) BIOMASS RESEARCH AND DEVELOPMENT TECHNICAL ADVISORY COMMITTEE-

COMMITTEE.—

- "(1) **ESTABLISHMENT**.—There is established the Biomass Research and Development Technical Advisory Committee, which shall supersede the Advisory Committee on Biobased Products and Bioenergy established by Executive Order No. 13134—
 - "(A) to advise the Secretary of Energy, the Secretary of Agriculture, and the points of contact concerning—
 - "(i) the technical focus and direction of requests for proposals issued under the Initiative; and
 - "(ii) procedures for reviewing and evaluating the proposals;
 - "(B) to facilitate consultations and partnerships among Federal and State agencies, agricultural producers, industry, consumers, the research community, and other interested groups to carry out program activities relating to the Initiative; and
 - "(C) to evaluate and perform strategic planning on program activities relating to the Initiative.

"(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 biobased fuels and biobased products;
- "(iv) two prominent engineers or scientists from government or academia who have expertise in biobased fuels and biobased products;
 - "(v) an individual affiliated with a commodity trade association;
- "(vi) 2 individuals affiliated with an environmental or conservation organization;

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- `(1) **ESTABLISHMENT-** There is established the Biomass Research and Development Technical Advisory Committee, which shall supersede the Advisory Committee on Biobased Products and Bioenergy established by Executive Order No. 13134 (7 U.S.C. 8101 note)--
 - `(A) to advise the Secretary of Energy, the Secretary of Agriculture, and the points of contact concerning--
 - `(i) the distribution of funding;
 - `(ii) the technical focus and direction of requests for proposals issued under the Initiative; and
 - `(iii) procedures for reviewing and evaluating the proposals;
 `(B) to facilitate consultations and partnerships among Federal and State agencies, agricultural producers, industry, consumers, the research community, and other interested groups to carry out program activities relating to the Initiative; and
 - `(C) to evaluate and perform strategic planning on program activities relating to the Initiative.

`(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 an environmental or conservation organization;
 - `(vii) an individual associated with State government who has expertise in biofuels and biobased products;

- "(vii) an individual associated with State government who has expertise in biobased fuels and biobased products;
- "(viii) an individual with expertise in energy and environmental analysis;
- "(ix) an individual with expertise in the economics of biobased fuels and biobased products;
 - "(x) an individual with expertise in agricultural economics;
- "(xi) an individual with expertise in agronomy, crop science, or soil science; and
 - "(xii) 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 whether, and make recommendations in writing to the Board to ensure that—
 - "(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 and that objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest;
 - "(iii) 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
 - "(iv) activities under this section are carried out in accordance with this section.

- `(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 whether, and make recommendations in writing to the Board to ensure that--
 - `(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 and that objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest;
 - `(iii) 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
 - `(iv) activities under this section are carried out in accordance with

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"(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 to enable the Advisory Committee to carry out the duties of the Advisory Committee.
- "(6) **TERMS**.—Members of the Advisory Committee shall be appointed for a term of 3 years, except that—
 - "(A) one-third of the members initially appointed shall be appointed for a term of 1 year; and
 - "(B) one-third of the members initially appointed shall be appointed for a term of 2 years.

"(g) 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, biobased fuels and biobased products, and the methods, practices and technologies, for their production.
 - "(2) **OBJECTIVES**.—The objectives of the Initiative are to develop—
 - "(A) technologies and processes necessary for abundant commercial production of biobased fuels at prices competitive with fossil fuels;
 - "(B) high-value biobased products—
 - "(i) to enhance the economic viability of biobased fuels and power;
 - "(ii) as substitutes for petroleum-based feedstocks and products; and
 - "(iii) to enhance the value of coproducts arise from such technologies and processes; and

this section.

- `(4) **COORDINATION-** To avoid duplication of effort, the Advisory Committee shall coordinate the activities of the Advisory Committee with activities of other Federal advisory committees working in related areas.
- `(5) **MEETINGS-** The Advisory Committee shall meet at least quarterly to enable the Advisory Committee to carry out the duties of the Advisory Committee.
- `(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, biofuels and biobased products, and the methods, practices, and technologies, for the production of the fuels and product.
- `(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 bioenergy;
 - `(ii) 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 sustainable domestic sources of renewable biomass for

- "(C) a diversity of sustainable domestic sources of biomass for conversion to biobased fuels and biobased products.
- "(3) **PURPOSES.**—The purposes of the Initiative are—
 - "(A) to increase the energy security of the United States;
- "(B) to create jobs and enhance the economic development of the rural economy;
 - "(C) to enhance the environment and public health; and
 - "(D) to diversify markets for raw agricultural and forestry products.
- "(4) **TECHNICAL AREAS.**—To advance the objectives and purposes of the Initiative, 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 research, development, and commercial applications toward—
 - "(A) feedstocks and feedstock systems relevant to production of raw materials for conversion to biobased fuels and biobased products, including—
 - "(i) development of advanced and dedicated crops and other biomass sources with desired features, including enhanced productivity, broader site range, low requirements for chemical inputs, and enhanced processing;
 - "(ii) advanced crop production methods to achieve the features described in clause (i);
 - "(iii) feedstock harvest, handling, transport, and storage;
 - "(iv) strategies for integrating feedstock production into existing managed land; and
 - "(v) improving the value and quality of coproducts, including materials used for animal feeding;
 - "(B) overcoming recalcitrance of cellulosic biomass through developing technologies for converting cellulosic biomass into intermediates that can subsequently be converted into biobased fuels and

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conversion to biofuels, bioenergy, and biobased products.

- `(3) **PURPOSES-** The purposes of the Initiative are--
 - `(A) to increase the energy security of the United States;
 - `(B) to create jobs and enhance the economic development of the rural economy;
 - `(C) to enhance the environment and public health; and
 - `(D) to diversify markets for raw agricultural and forestry products.
- `(4) **TECHNICAL AREAS-** To advance the objectives and purposes of the Initiative, 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 research, development, and demonstration toward--
 - `(A) feedstocks and feedstock systems relevant to production of raw materials for conversion to biofuels and biobased products, including-
 - `(i) development of advanced and dedicated crops with desired features, including enhanced productivity, broader site range, low requirements for chemical inputs, and enhanced processing;
 - `(ii) advanced crop production methods to achieve the features described in clause (i) and suitable assay techniques for those features;
 - `(iii) feedstock harvest, handling, transport, and storage;
 - `(iv) strategies for integrating feedstock production into existing managed land; and
 - `(v) improving the value and quality of coproducts, including material used for animal feeding;
 - `(B) development of cost-effective technologies for the use of cellulosic biomass in the production of biofuels and biobased products, including-

biobased products, including—

- "(i) pretreatment in combination with enzymatic or microbial hydrolysis;
- "(ii) thermochemical approaches, including gasification and pyrolysis; and
- "(iii) self-processing crops that express enzymes capable of degrading cellulosic biomass;
- "(C) 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, including—
 - "(i) catalytic processing, including thermochemical fuel production;
 - "(ii) metabolic engineering, enzyme engineering, and fermentation systems for biological production of desired products, coproducts, or cogeneration of power;
 - "(iii) product recovery;
 - "(iv) power production technologies;
 - "(v) integration into existing biomass processing facilities, including starch ethanol plants, sugar processing or refining plants, paper mills, and power plants; and
 - "(vi) enhancement of products and coproducts, including dried distillers grains (including substantially elevated starch content, increased oil content, improved fatty acid profiles, and improved resistance to mold and mycotoxins; and
- "(D) 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.

- `(i) pretreatment in combination with enzymatic or microbial hydrolysis;
- `(ii) thermochemical approaches, including gasification and pyrolysis; and
- `(iii) self-processing crops that express enzymes capable of degrading cellulosic biomass;
- `(C) 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, including--
 - `(i) catalytic processing, including thermochemical fuel production;
 - `(ii) metabolic engineering, enzyme engineering, and fermentation systems for biological production of desired products, coproducts, or cogeneration of power;
 - `(iii) product recovery;
 - `(iv) power production technologies, including distributed generation;
 - `(v) integration into existing renewable biomass processing facilities, including starch ethanol plants, sugar processing or refining plants, paper mills, and power plants;
 - `(vi) enhancement of products and coproducts, including dried distillers grains; and
 - `(vii) technologies that allow for cost-effective harvest, handling, transport, and storage; and
- `(D) analysis that provides strategic guidance for the application of renewable biomass technologies in accordance with realization of improved sustainability and environmental quality, cost effectiveness, security, and rural economic development, usually featuring system-wide approaches, including the harvest, handling, transport, and storage of renewable biomass.

- "(5) **ADDITIONAL CONSIDERATIONS.**—Within the technical areas described in paragraph (4), and in addition to advancing the purposes described in paragraph (3) and the objectives described in paragraph (2), 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, such as improvements in dried distillers grains as a bridge feedstock;
 - "(B) to maximize the environmental, economic, and social benefits of production of biobased fuels and biobased products on a large scale through life-cycle economic and environmental analysis and other means; and
 - "(C) to assess the potential of Federal land and land management programs as feedstock resources for biobased fuels and biobased products, consistent with the integrity of soil and water resources and with other environmental considerations.
- "(6) **ELIGIBLE ENTITIES.**—To be eligible for a grant, contract, or assistance under this subsection, 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 two or more entities described in subparagraphs (A) through (F).
 - "(7) ADMINISTRATION.—
 - "(A) IN GENERAL.—After consultation with the Board, the points of

- `(5) **ADDITIONAL CONSIDERATIONS-** Within the technical areas described in paragraph (4), and in addition to advancing the purposes described in paragraph (3) and the objectives described in paragraph (2), 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, such as improvements in dried distillers grains and other biofuel production coproducts for use as bridge feedstocks;
 - `(B) to maximize the environmental, economic, and social benefits of production of biofuels and biobased products on a large scale through lifecycle economic and environmental analysis and other means; and
 - `(C) to assess the potential of Federal land and land management programs as feedstock resources for biofuels and biobased products, consistent with the integrity of soil and water resources and with other environmental considerations.
- `(6) **ELIGIBLE ENTITIES-** To be eligible for a grant, contract, or assistance under this subsection, 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).
- `(7) ADMINISTRATION-
 - `(A) IN GENERAL- After consultation with the Board, the points of

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contact shall—

- "(i) publish annually one 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 competitively, on the basis of merit, after the establishment of procedures that provide for scientific peer review by an independent panel of scientific and technical peers; and
 - "(iii) give some preference 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.

- "(B) **DISTRIBUTION OF FUNDING BY TECHNICAL AREA.**—Of the funds authorized to be appropriated for activities described in this subsection, funds shall be distributed for each of fiscal years 2007 through 2012 so as to achieve an approximate distribution of—
 - "(i) 20 percent of the funds to carry out activities for feedstock production under paragraph (4)(A);
 - "(ii) 45 percent of the funds to carry out activities for overcoming recalcitrance of cellulosic biomass under paragraph (4)(B), of which not less than 10 percent shall be used for activities referred to in each clause of paragraph (4)(B);
 - "(iii) 30 percent of the funds to carry out activities for product diversification under paragraph (4)(C); and
 - "(iv) 5 percent of the funds to carry out activities for strategic guidance under paragraph (4)(D).

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 competitively, on the basis of merit, after the establishment of procedures that provide for scientific peer review by an independent panel of scientific and technical peers;
- `(iii) give partial preference 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 not less than 15 percent of funds made available to carry out this section is used for research and development relating to each of the technical areas described in paragraph (4).

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"(C) **DISTRIBUTION OF FUNDING WITHIN EACH TECHNICAL AREA.**— Within each technical area described in subparagraphs (A) through (C) of paragraph (4), funds shall be distributed for each of fiscal years 2007 through 2012 so as to achieve an approximate distribution of—

- "(i) 15 percent of the funds for applied fundamentals;
- "(ii) 35 percent of the funds for innovation; and
- "(iii) 50 percent of the funds for demonstration and commercial applications.

"(D) MATCHING FUNDS.—

- "(i) **IN GENERAL.**—A minimum 20 percent funding match shall be required for demonstration projects under this section.
- "(ii) **COMMERCIAL APPLICATIONS.**—A minimum of 50 percent funding match shall be required for commercial application projects under this section.
- "(E) **TECHNOLOGY AND INFORMATION TRANSFER TO AGRICULTURAL USERS.**—The Administrator of the Cooperative State Research, Education, and Extension Service and the Chief of the Natural Resources Conservation Service shall ensure that applicable research results and technologies from the Initiative are adapted, made available, and disseminated through those services, as appropriate.

"(h) ADMINISTRATIVE SUPPORT AND FUNDS.—

"(1) **IN GENERAL**.—To the extent administrative support and funds are not provided by other agencies under paragraph (2)(b), the Secretary of Energy and the Secretary of Agriculture may provide such administrative support and funds

(B) MATCHING FUNDS-

- `(i) **IN GENERAL-** The non-Federal share of the cost of a demonstration project under this section shall be not less than 20 percent.
- `(ii) **COMMERCIAL APPLICATIONS-** The non-Federal share of the cost of a commercial application project under this section shall be not less than 50 percent.
- `(C) TECHNOLOGY AND INFORMATION TRANSFER TO
 AGRICULTURAL USERS.- The Administrator of the National Institute of
 Food and Agriculture and the Chief of the Natural Resources Conservation
 Service shall ensure that applicable research results and technologies from
 - `(i) adapted, made available, and disseminated through those services, as appropriate; and
 - `(ii) included in the best practices database established under section 220 of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6920).

`(f) Administrative Support and Funds-

the Initiative are--

`(1) **IN GENERAL-** To the extent administrative support and funds are not provided by other agencies under paragraph (2), 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

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 (e)(2)(C), and the other members appointed under subsection (e)(2)(D), may, and 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 appropriated for each fiscal year under subsection (g)(6) may be used to pay the administrative costs of carrying out this section.

"(i) REPORTS.—

- "(1) **ANNUAL 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—
 - "(A) 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—
 - "(i) is consistent with the objectives, purposes, and additional considerations described in paragraphs (2) through (5) of subsection (g);
 - "(ii) uses the set of criteria established in the initial report submitted under title III of the Agricultural Risk Protection Act of 2000;
 - "(iii) achieves the distribution of funds described in subparagraphs (B) and (C) of subsection (g)(7); and
 - "(iv) takes into account any recommendations that have been made by the Advisory Committee;
 - "(B) the general status of cooperation and research and development efforts carried out at each agency with respect to biobased fuels and biobased products, including a report from the Advisory Committee on whether the points of contact are funding proposals that are selected under subsection (g)(3)(B)(iii); and

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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)(C), and the other members of the Board appointed under subsection (c)(2)(D), may, and 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-

- `(1) **ANNUAL 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--
 - `(A) 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--
 - `(i) is consistent with the objectives, purposes, and additional considerations described in paragraphs (2) through (5) of subsection (e);
 - `(ii) uses the set of criteria established in the initial report submitted under title III of the Agricultural Risk Protection Act of 2000 (7 U.S.C. 7624 note; Public Law 106-224) (as in effect on the date before the date of enactment of the Food and Energy Security Act of 2007); and
 - `(iii) takes into account any recommendations that have been made by the Advisory Committee;
 - `(B) the general status of cooperation and research and development efforts carried out at each agency with respect to biofuels and biobased products, including a report from the Advisory Committee on whether the points of contact are funding proposals that are selected under subsection (d)(3)(B)(iii); and
 - `(C) the plans of the Secretary of Energy and the Secretary of Agriculture

- "(C) 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.
- "(2) **UPDATES.**—The Secretary and the Secretary of Energy shall update the Vision and Roadmap documents prepared for Federal biomass research and development activities.
- "(3) **MANAGEMENT PLAN.**—The Secretary shall every five years, in consultation with the Secretary of Energy, submit to Congress a detailed management plan for the implementation of this section. The management plan shall include—
 - "(A) consideration of the contribution of the section towards achieving the objectives referred to in paragraphs (2) and (3) of subsection (g) and in achieving the goals of the biomass program of the Department of Energy;
 - "(B) consideration of input solicited from the Advisory Committee, State, and private sources; and
 - "(C) specific and quantifiable near and long-term goals.

"(j) FUNDING.—

- "(1) **IN GENERAL.**—Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture shall make available to carry out this section—
 - "(A) \$35,000,000 for fiscal year 2008;
 - "(B) \$60,000,000 for fiscal year 2009;
 - "(C) \$75,000,000 for fiscal year 2010;
 - "(D) \$100,000,000 for fiscal year 2011; and
 - "(E) \$150,000,000 for fiscal year 2012.
- "(2) **ADDITIONAL FUNDING.**—In addition to amounts transferred under paragraph (1), there are authorized to be appropriated to carry out this section \$200,000,000 for each of fiscal years 2006 through 2015.".

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for addressing concerns raised in the report, including concerns raised by the Advisory Committee.

`(2) **UPDATES-** The Secretary of Agriculture and the Secretary of Energy shall update the Vision and Roadmap documents prepared for Federal biomass research and development activities.

No similar provision.

`(h) FUNDING-

- `(1) **COMMODITY CREDIT CORPORATION FUNDS-** Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture, to the maximum extent practicable, shall use to carry out this section, to remain available until expended--
 - `(A) \$15,000,000 for fiscal year 2008;
 - `(B) \$25,000,000 for fiscal year 2009; and
 - `(C) \$35,000,000 for fiscal year 2010.
- `(2) **ADDITIONAL FUNDING-** In addition to amounts described in paragraph (1), there is authorized to be appropriated to carry out this section \$85,000,000 for each of fiscal years 2008 through 2012.

(b) REPEAL .—Title III of the Agricultural Risk Protection Act of 2000 (Public Law 106–224) is hereby repealed.	SEC. 9003. CONFORMING AMENDMENTS. (a) Biomass Research and Development Act of 2000- Title III of the Agricultural Risk Protection Act of 2000 (7 U.S.C. 7624 note; Public Law 106-224) is repealed.
(c) MANAGEMENT PLAN SUBMISSION DATE.—The first management plan required to be submitted under section 9008(i)(3) of the Biomass Research and Development Act of 2000, as added by subsection (a), shall be submitted not later than 180 days after the date of the enactment of this Act.	No similar provision.
SEC. 9007. ADJUSTMENTS TO THE BIOENERGY PROGRAM.	`SEC. 9006. BIOENERGY PROGRAM FOR ADVANCED BIOFUELS.
Section 9010 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8108) is amended—	`(a) DEFINITION OF ELIGIBLE PRODUCER- In this section, the term `eligible
(1) in subsection (a)—	producer' means a producer of advanced biofuels.
(A) in paragraph (1)—	
(i) in subparagraph (A), by striking "and";	
(ii) in subparagraph (B), by striking the final period and inserting a semicolon; and	
(iii) by adding at the end the following new subparagraphs:	
"(C) production of heat and power at a biofuels plant;	
"(D) biomass gasification;	
"(E) hydrogen made from cellulosic commodities for fuel cells;	
"(F) renewable diesel;	
"(G) such other items as the Secretary considers appropriate.";	
(B) by striking paragraph (3) and inserting the following:	
"(3) ELIGIBLE FEEDSTOCK.—	

- "(A) IN GENERAL.—The term 'eligible feedstock' means—
- "(i) any plant material grown or collected for the purpose of being converted to energy (including aquatic plants);
- "(ii) any organic byproduct or residue from agriculture and forestry, including mill residues and pulping residues that can be converted into energy;
- "(iii) any waste material that can be converted to energy and is derived from plant material, including—
 - "(I) wood waste and residue;
 - "(II) specialty crop waste, including waste derived from orchard trees, vineyard crops, and nut crops; or
 - "(III) other fruit and vegetable byproducts or residues; or
 - "(iv) animal waste and byproducts.
- "(B) **EXCLUSION**.—The term 'eligible feedstock' does not include corn starch.";
- (C) in paragraph (4), by striking "an eligible commodity" and inserting "eligible feedstock"; and
 - (D) by adding at the end the following new paragraph:
- "(5) **RENEWABLE DIESEL.**—The term 'renewable diesel' means any type of biobased renewable fuel derived from plant or animal matter that may be used as a substitute for standard diesel fuel and meets the requirements of an appropriate American Society for Testing and Material standard. Such term does not include any fuel derived from coprocessing an eligible feedstock with a feedstock that is not biomass.";
 - (2) in subsection (b)—
 - (A) in paragraph (1)—
 - (i) by striking "The Secretary shall continue" and all that follows through "the Secretary makes" and inserting "The Secretary shall make"; and
 - (ii) by striking "eligible commodities" and inserting "eligible

- `(3) **REFINING CAPACITY-** An eligible producer may not use any funds received under this section for an advanced biofuel production facility or other fuel refinery the total refining capacity of which is more than 150,000,000 gallons per year.
- (b) **PAYMENTS-** The Secretary shall make payments to eligible producers to encourage increased purchases of renewable biomass for the purpose of expanding production of, and supporting new production capacity for, advanced biofuels.
- `(c) CONTRACTS- To receive a payment, an eligible producer shall-
 - `(1) enter into a contract with the Secretary to increase production of advanced biofuels for 1 or more fiscal years; and

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feedstock";

- (B) in paragraph (2)(B), by striking "eligible commodities" and inserting "eligible feedstock";
- (C) in paragraph (3), by striking subparagraphs (B) and (C) and inserting the following:
- "(B) **PRIORITY**.—In making payments under this paragraph, the Secretary shall give priority to contracts by considering the factors referred to in section 9003(e)(2)(B).";
 - (D) by striking paragraph (6) and inserting the following:

"(6) **LIMITATION**.—The Secretary may limit the amount of payments that may be received by an eligible producer under this section as the Secretary considers appropriate."; and

No similar provision.

`(2) submit to the Secretary such records as the Secretary may require as evidence of increased purchase and use of renewable biomass for the production of advanced biofuels.

- `(d) **BASIS FOR PAYMENTS-** The Secretary shall make payments under this section to eligible producers based on--
 - `(1) the level of production by the eligible producer of an advanced biofuel;
 - `(2) the price of each renewable biomass feedstock used for production of the advanced biofuel;
 - `(3) the net nonrenewable energy content of the advanced biofuel, if sufficient data is available, as determined by the Secretary; and
 - `(4) other appropriate factors, as determined by the Secretary.
- `(e) **OVERPAYMENTS-** If the total amount of payments that an eligible producer receives for a fiscal year under this section exceeds the amount that the eligible producer should have received, the eligible producer shall repay the amount of the overpayment to the Secretary, with interest (as determined by the Secretary).

`(f) LIMITATIONS-

- `(1) **EQUITABLE DISTRIBUTION-** The Secretary may limit the amount of payments that may be received by a single eligible producer under this section in order to distribute the total amount of funding available in an equitable manner.
- `(2) **INELIGIBILITY-** An eligible producer that claims a credit allowed under section 40(a)(3), 40(a)(4), or 40A(a)(3) of the Internal Revenue Code of 1986 shall not be eligible to receive payments under subsection (d).

	`(g) OTHER REQUIREMENTS- To receive a payment under this section, an eligible producer shall meet any other requirements of Federal and State law (including regulations) applicable to the production of advanced biofuels.
(E) by adding at the and the following new paragraph:	No similar provision.
(E) by adding at the end the following new paragraph:	
"(8) RENEWAL OF CONTRACTS. —When considering the renewal of a contract under this section, the Secretary shall review such contract to determine whether the production of bioenergy at the facility under contract is economically viable and reconsider the need for the contract based on that determination."; and	
(3) by striking subsection (c) and inserting the following:	
"(c) FUNDING .—Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture shall use to carry out this section—	`(h) FUNDING- Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out this section \$245,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.
"(1) \$225,000,000 for fiscal year 2008;	
"(2) \$250,000,000 for fiscal year 2009;	
"(3) \$275,000,000 for fiscal year 2010;	
"(4) \$300,000,000 for fiscal year 2011; and	
"(5) \$350,000,000 for fiscal year 2012.".	
SEC. 9008. RESEARCH, EXTENSION, AND EDUCATIONAL PROGRAMS ON BIOBASED ENERGY TECHNOLOGIES AND PRODUCTS.	`SEC. 9009. SUN GRANT PROGRAM.
	`(a) Purposes - The purposes of the programs established under this section are- `(1) to enhance national energy security through the development, distribution, and implementation of biobased energy technologies; `(2) to promote diversification in, and the environmental sustainability of, agricultural production in the United States through biobased energy and product technologies;

- `(3) to promote economic diversification in rural areas of the United States through biobased energy and product technologies; and
- `(4) to enhance the efficiency of bioenergy and biomass research and development programs through improved coordination and collaboration between the Department of Agriculture, the Department of Energy, and the land-grant colleges and universities.
- `(b) **DEFINITION OF LAND-GRANT COLLEGES AND UNIVERSITIES-** The term `land-grant colleges and universities' means--
 - `(1) 1862 Institutions (as defined in section 2 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7601));
 - `(2) 1890 Institutions (as defined in section 2 of that Act) and West Virginia State College; and
 - `(3) 1994 Institutions (as defined in section 2 of that Act).
- `(c) **ESTABLISHMENT-** To carry out the purposes described in subsection (a), the Secretary shall provide grants to sun grant centers specified in subsection (d).
- `(d) **GRANTS TO CENTERS-** The Secretary shall use amounts made available for a fiscal year under subsection (j) to provide a grants in equal amounts to each of the following sun grant centers:
 - `(1) **NORTH-CENTRAL CENTER-** A north-central sun grant center at South Dakota State University for the region composed of the States of Illinois, Indiana, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming.
 - `(2) **SOUTHEASTERN CENTER-** A southeastern sun grant center at the University of Tennessee at Knoxville for the region composed of--
 - `(A) the States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia;
 - `(B) the Commonwealth of Puerto Rico; and
 - `(C) the United States Virgin Islands.
 - `(3) **SOUTH-CENTRAL CENTER-** A south-central sun grant center at Oklahoma State University for the region composed of the States of Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Texas.
 - `(4) **WESTERN CENTER-** A western sun grant center at Oregon State University for the region composed of--
 - `(A) the States of Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington; and
 - `(B) territories and possessions of the United States (other than the territories referred to in subparagraphs (B) and (C) of paragraph (2)).

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- (a) **WESTERN INSULAR PACIFIC CENTER.**—Section 9011(d) is amended by adding at the end the following new paragraph:
 - "(6) **WESTERN INSULAR PACIFIC CENTER.**—A western insular pacific center at the University of Hawaii for the region of Alaska, Hawaii, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.".

- `(5) **NORTHEASTERN CENTER-** A northeastern sun grant center at Cornell University for the region composed of the States of Connecticut, Delaware, Massachusetts, Maryland, Maine, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia.
- `(6) **WESTERN INSULAR PACIFIC SUBCENTER-** A western insular Pacific subcenter at the University of Hawaii for the region composed of the State of Alaska, the State of Hawaii, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.

`(e) USE OF FUNDS-

- `(1) **CENTERS OF EXCELLENCE-** Of the amount of funds that are made available for a fiscal year to a sun grant center under subsection (d), the center shall use not more than 25 percent of the amount to support excellence in science, engineering, and economics at the center to promote the purposes described in subsection (a) through the State agricultural experiment station, cooperative extension services, and relevant educational programs of the university.
- `(2) GRANTS TO LAND-GRANT COLLEGES AND UNIVERSITIES-
 - `(A) IN GENERAL- The sun grant center established for a region shall use the funds that remain available for a fiscal year after expenditures made under paragraph (1) to provide competitive grants to land-grant colleges and universities in the region of the sun grant center to conduct, consistent with the purposes described in subsection (a), multi-institutional and multistate--
 - `(i) research, extension, and educational programs on technology development; and
 - `(ii) integrated research, extension, and educational programs on technology implementation.
 - `(B) **PROGRAMS** Of the amount of funds that are used to provide grants for a fiscal year under subparagraph (A), the center shall use--
 - `(i) not less than 30 percent of the funds to carry out programs described in subparagraph (A)(i); and
 - `(ii) not less than 30 percent of the funds to carry out programs described in subparagraph (A)(ii).
- `(3) **INDIRECT COSTS-** A sun grant center may not recover the indirect costs of making grants under paragraph (2) to other land-grant colleges and universities.

`(f) **PLAN-**

`(1) IN GENERAL- Subject to the availability of funds under subsection (j), in

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cooperation with other land-grant colleges and universities and private industry in accordance with paragraph (2), the sun grant centers shall jointly develop and submit to the Secretary, for approval, a plan for addressing at the State and regional levels the bioenergy, biomass, and gasification research priorities of the Department of Agriculture and the Department of Energy for the making of grants under paragraphs (1) and (2) of subsection (e).

`(2) GASIFICATION COORDINATION-

- `(A) IN GENERAL- In developing the plan under paragraph (1) with respect to gasification research, the sun grant centers identified in paragraphs (1) and (2) of subsection (d) shall coordinate with land grant colleges and universities in their respective regions that have ongoing research activities with respect to the research.
- `(B) **FUNDING-** Funds made available under subsection (d) to the sun grant center identified in subsection (e)(2) shall be available to carry out planning coordination under paragraph (1) of this subsection.

`(g) GRANTS TO OTHER LAND-GRANT COLLEGES AND UNIVERSITIES-

- `(1) **PRIORITY FOR GRANTS-** In making grants under subsection (e)(2), a sun grant center shall give a higher priority to programs that are consistent with the plan approved by the Secretary under subsection (f).
- `(2) **TERM OF GRANTS-** The term of a grant provided by a sun grant center under subsection (e)(2) shall not exceed 5 years.
- `(h) **GRANT INFORMATION ANALYSIS CENTER-** The sun grant centers shall maintain a Sun Grant Information Analysis Center at the sun grant center specified in subsection (d)(1) to provide sun grant centers analysis and data management support.
- `(i) **ANNUAL REPORTS-** Not later than 90 days after the end of a year for which a sun grant center receives a grant under subsection (d), the sun grant center shall submit to the Secretary a report that describes the policies, priorities, and operations of the program carried out by the center during the year, including a description of progress made in facilitating the priorities described in subsection (f).

`(j) FUNDING-

- `(1) **COMMODITY CREDIT CORPORATION-** Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out this section, to remain available until expended--
 - `(A) \$5,000,000 for fiscal year 2008;
 - `(B) \$10,000,000 for fiscal year 2009; and

	`(C) \$10,000,000 for fiscal year 2010.
(b) AUTHORIZATION OF APPROPRIATIONS. —Section 9011(j)(1)(C) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8109(j)(1)(C)) is amended by striking "2010" and inserting "2012".	`(2) AUTHORIZATION OF APPROPRIATIONS- `(A) IN GENERAL- In addition to any other funds made available to carry out this section, there is authorized to be appropriated to carry out this section \$70,000,000 for each of fiscal years 2008 through 2012.
	`(B) GRANT INFORMATION ANALYSIS CENTER- Of amounts made available under subparagraph (A), not more than \$4,000,000 for each fiscal year shall be made available to carry out subsection (h).
No similar provision.	`SEC. 9010. REGIONAL BIOMASS CROP EXPERIMENTS.
	`(a) Purpose - The purpose of this section is to initiate multi-region side-by-side crop experiments to provide a sound knowledge base on all aspects of the production of biomass energy crops, including crop species, nutrient requirements, management practices, environmental impacts, greenhouse gas implications, and economics.
	`(b) CROP EXPERIMENTS- `(1) IN GENERAL- The Secretary, in consultation with the Board, based on the recommendations of the Advisory Committee, shall award 10 competitive grants to land-grant colleges and universities (as defined in section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3103)) to establish regional biomass crop research experiments (including experiments involving annuals, perennials, and woody biomass species). `(2) SELECTION OF GRANT RECIPIENTS- Grant recipients shall be selected on the basis of applications submitted in accordance with guidelines issued by the Secretary. `(3) SELECTION CRITERIA- In selecting grant recipients, the Secretary shall consider `(A) the capabilities and experience of the applicant, including `(i) in conducting side-by-side crop experiments; `(ii) engineering and research knowledge and experience relating to biofuels or the production of inputs for biofuel production; and `(iii) demonstrated willingness to contribute significant in-kind resources; `(B) the range of species types and cropping practices proposed for study; `(C) the quality of the proposed crop experiment plan; `(D) the commitment of the applicant of adequate acreage and necessary

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resources for, and continued participation in, the crop experiments; `(E) the need for regional diversity among the 10 institutions selected; and `(F) such other factors as the Secretary may determine. `(c) **GRANTS-** The Secretary shall make a grant to each land-grant college or university selected under subsection (b) in the amount of--`(1) \$1,000,000 for fiscal year 2008; `(2) \$2,000,000 for fiscal year 2009; and `(3) \$1,000,000 for fiscal year 2010. `(d) COORDINATION- The Secretary shall coordinate with participants under this section--`(1) to provide coordination regarding biomass crop research approaches; and `(2) to ensure coordination between biomass crop research activities carried out by land-grant colleges and universities under this section and by sun grant centers under section 9009. `(e) FUNDING-`(1) **COMMODITY CREDIT CORPORATION-** Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out this section, to remain available until expended--`(A) \$10,000,000 for fiscal year 2008; `(B) \$20,000,000 for fiscal year 2009; and `(C) \$10,000,000 for fiscal year 2010. `(2) AUTHORIZATION OF APPROPRIATIONS- In addition to any other funds made available to carry out this section, there are authorized to be appropriated such sums are necessary to carry out this section for each of fiscal years 2008 through 2012. SEC. 9009. ENERGY COUNCIL OF THE DEPARTMENT OF AGRICULTURE. **`SEC. 9017. ADMINISTRATION.** Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is `The Secretary shall designate an entity within the Department of Agriculture to-further amended by adding at the end the following new section: `(1) provide oversight and coordination of all activities relating to renewable "SEC. 9012. ENERGY COUNCIL OF THE DEPARTMENT OF AGRICULTURE. energy and biobased product development within the Department; "(a) IN GENERAL.—The Secretary of Agriculture shall establish an energy council in the `(2) act as a liaison between the Department and other Federal, State, and local Office of the Secretary (in this section referred to as the 'Council') to coordinate the energy agencies to ensure coordination among activities relating to renewable energy and policy of the Department of Agriculture and consult with other departments and agencies of biobased product development; the Federal Government.

"(b) MEMBERSHIP.—	`(3) assist agriculture researchers by evaluating the market potential of new
 "(1) IN GENERAL.—The Secretary shall appoint the members of the Council from among the staff of the agencies and mission areas of the Department of Agriculture with responsibilities relating to energy programs or policies. "(2) CHAIR.—The chief economist and the Under Secretary for Rural Development of the Department of Agriculture shall serve as the Chairs of the Council. "(c) DUTIES OF OFFICE OF ENERGY POLICY AND NEW USES.—The Office of Energy Policy and New Uses of the Department of Agriculture shall support the activities of the Council.". 	biobased products in the initial phase of development; `(4) collect and disseminate information relating to renewable energy and biobased product development programs, including research, within the Federal Government; and `(5) establish and maintain a public database of best practices to facilitate information sharing relating to `(A) renewable energy and biobased product development from programs under this title and other programs; and `(B) best practices for producing, collecting, harvesting, storing, and transporting crops of renewable biomass, as described under section 9004(d)(3)(B) of the Farm Security and Rural Investment Act of 2002.
SEC. 9010. FARM ENERGY PRODUCTION PILOT PROGRAM.	No similar provision.
Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is further amended by adding at the end the following new section:	
"SEC. 9013. FARM ENERGY PRODUCTION PILOT PROGRAM.	
"(a) PROGRAM .—The Secretary of Agriculture shall establish a pilot program to provide grants to farmers for the purpose of demonstrating the feasibility of making a farm energy neutral using existing technologies.	
"(b) AUTHORIZATION OF APPROPRIATIONS .—There is authorized to be appropriated to carry out this section \$5,000,000 for fiscal years 2008 through 2012.".	
SEC. 9011. RURAL ENERGY SELF-SUFFICIENCY INITIATIVE.	`SEC. 9015. RURAL ENERGY SYSTEMS RENEWAL.
Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is further amended by adding at the end the following new section:	`(a) Purpose - The purpose of this section is to establish a Federal program `(1) to encourage communities in rural areas of the United States to establish
"SEC. 9014. RURAL ENERGY SELF-SUFFICIENCY INITIATIVE.	energy systems renewal strategies for their communities; `(2) to provide the information, analysis assistance, and guidance that the communities need; and `(3) to provide financial resources to partially fund the costs of carrying out community energy systems renewal projects.

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"(a) GRANT AUTHORITY.—

- "(1) **IN GENERAL**.—The Secretary of Agriculture (in this section referred to as the 'Secretary') may make grants in accordance with this section to enable eligible rural communities to substantially increase their energy self-sufficiency.
- "(2) **ELIGIBLE RURAL COMMUNITY DEFINED.**—In this section, the term 'eligible rural community' means a community that has a population of fewer than 25,000 individuals, and is not located in a metropolitan statistical area (as defined by the Bureau of the Census).

"(b) APPLICATIONS.—

- "(1) **IN GENERAL.**—A community desiring to receive a grant under this section shall submit to the Secretary an application for the grant, which contains a description of how the community would use the grant to develop an integrated renewable energy system to substantially increase its energy self-sufficiency.
- "(2) **INTEGRATED RENEWABLE ENERGY SYSTEM.**—In paragraph (1), the term 'integrated renewable energy system' includes—
 - "(A) the use of biofuels;
 - "(B) the use of biomass to produce electricity;
 - "(C) the use of animal manure to produce biogas as a substitute for natural gas;
 - "(D) the use of new technologies to provide highly energy efficient lighting, buildings, or vehicles;
 - "(E) the use of wind power to produce electricity and hydrogen; and
 - "(F) the use of solar energy.

- `(b) **PROGRAM AUTHORITY-** The Secretary shall establish and carry out a program of competitive grants to support communities in rural areas in carrying out rural energy systems renewal projects.
- `(c) MOVED TO PAGE 58
- `(d) MOVED TO PAGE 58

"(c) CONSIDERATION OF APPLICATIONS.—

"(1) **EVALUATION**.—In making grants under this section, the Secretary shall

- `(e) **ADMINISTRATION-** The Secretary shall--
 - `(1) issue, an annual basis, requests for proposals from communities in rural areas

evaluate applications based on their ability to demonstrate—

- "(A) integration of different renewable energy sources at lowest total cost;
- "(B) integration of different renewable energy sources with greatest potential for commercialization; and
- "(C) development of best practices, and models for viable rural energy self-sufficiency.
- "(2) **PREFERENCE**.—In making grants under this section, the Secretary shall give preference to those which propose a project developed or carried out in coordination with—
 - "(A) universities or their non-profit foundations;
 - "(B) Federal, State, or local government agencies;
 - "(C) public or private power generation entities; or
 - "(D) government entities with responsibility for water or natural resources.

No similar provision.

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for energy systems renewal projects; and

- `(2) in consultation with the Secretary of Energy and the Secretary of Transportation, as appropriate, establish criteria for program participation and evaluation of projects carried out under this section, including criteria based on-
 - `(A) the quality of the renewal projects proposed;
 - `(B) the probability of success of the community in meeting the energy systems renewal goals of the community;
 - `(C) the projected energy savings (including oil savings) resulting from the proposed projects; and
 - `(D) projected greenhouse gas emission reductions resulting from the proposed projects.

- `(f) **TECHNICAL ASSISTANCE-** The Secretary, in consultation with the Secretary of Energy and the Secretary of Transportation, shall--
 - `(1) develop, and provide through the National Institute of Food and Agriculture or State Energy Offices, information and tools that communities in rural areas can use--
 - `(A) to assess the current energy systems of the communities, including sources, uses, and impacts;
 - `(B) to identify and evaluate options for changes;
 - `(C) to develop strategies and plans for changes; and
 - `(D) to implement changes and assess the impact of the changes; and
 - `(2) provide technical assistance and support to communities in rural areas that receive grants under this section to assist the communities in carrying out projects under this section.

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"(d) GRANTS.—

- "(1) **Cost-sharing**.—The amount of a grant under this section with respect to an application shall not exceed 75 percent of the cost of the activities described in the application.
- "(2) **NUMBER OF GRANTS PER YEAR.**—The Secretary may make not more than 5 grants under this section in each fiscal year.

"(e) **USE OF GRANTS.**—A community to which a grant is made under this section shall use the grant to develop an integrated renewable energy system to improve the energy efficiency of the community, and shall document any energy savings resulting from the use of the grant.

`(d) **FEDERAL SHARE-** The Federal cost of carrying out a project under this section shall be 50 percent of the total cost of the project.

- `(c) **USE OF GRANTS-** A community may use a grant provided under this section to carry out a project--
 - `(1) to conduct an energy assessment that assesses total energy usage by all members and activities of the community, including an assessment of--
 - `(A) energy used in community facilities, including energy for heating, cooling, lighting, and all other building and facility uses;
 - `(B) energy used in transportation by community members;
 - `(C) current sources and types of energy used;
 - `(D) energy embedded in other materials and products;
 - `(E) the major impacts of the energy usage (including the impact on the quantity of oil imported, total costs, the environment, and greenhouse gas emissions); and
 - `(F) such other activities as are determined appropriate by the community, consistent with the purposes described in subsection (a);
 - `(2) to formulate and analyze ideas for reducing conventional energy usage and greenhouse gas emissions by the community, including reduction of energy usage through--
 - `(A) housing insulation, automatic controls on lighting and electronics, zone energy usage, and home energy conservation practices;
 - `(B) transportation alternatives, vehicle options, transit options, transportation conservation, and walk- and bike-to-school programs;
 - `(C) community configuration alternatives to provide pedestrian access to regular services; and
 - `(D) community options for alternative energy systems (including alternative fuels, photovoltaic electricity, wind energy, geothermal heat pump systems, and combined heat and power);

	`(3) to formulate and implement community strategies for reducing conventional energy usage and greenhouse gas emissions by the community;
	`(4) to conduct assessments and to track and record the results of energy system changes; and
	`(5) to train rural community energy professionals to provide expert support to community energy systems renewal projects.
"(f) REPORT TO THE CONGRESS. —The Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report that document the best practices and approaches used by grantees receiving funds under this section.	`(g) Report- Not later than December 31, 2011, and biennially thereafter, the Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry, the Committee on Commerce, Science, and Transportation, and the Committee on Energy and Natural Resources of the Senate a report that documents the best practices and approaches used by communities in rural areas that receive funds under this section.
"(g) LIMITATIONS ON AUTHORIZATION OF APPROPRIATIONS.—For grants under this section, there are authorized to be appropriated to the Secretary not more than \$5,000,000 for fiscal year 2008, and such sums as may be necessary for fiscal years 2009 through 2012.".	`(h) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to the Secretary to make grants under this section \$5,000,000 for each of fiscal years 2008 through 2012.
SEC. 9012. AGRICULTURAL BIOFUELS FROM BIOMASS INTERNSHIP PILOT PROGRAM.	No similar provision.
Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is further amended by adding at the end the following new section:	
"SEC. 9015. AGRICULTURAL BIOFUELS FROM BIOMASS INTERNSHIP PILOT PROGRAM.	
"(a) ESTABLISHMENT .—The Secretary of Agriculture shall establish a structured, academically-oriented internship pilot program (in this section referred to as the 'Program') to provide students from universities in California, Iowa, Missouri, Georgia, Minnesota, and other states with substantial farm-based economies or universities with fields of study capable of developing renewable energy technology or policy with the opportunity to work within the Department of Agriculture, Congress and legislative branch agencies, other Federal	

departments and agencies, corporations, and nonprofit institutions on matters pertaining to policies regarding renewable energy, including the conversion of biomass and other agricultural products to produce ethanol and other biofuels.

- "(b) **ELIGIBILITY**.—To be eligible for an internship under subsection (a) a student shall—
 - "(1) be a third or fourth year undergraduate student or a graduate student at an accredited college or university in California, Iowa, Missouri, Georgia, Minnesota, or another State with a substantial farm-based economy, or at a university with fields of study capable of developing renewable energy technology or policy (including agriculture-related studies, chemistry, environmental sciences, bioengineering, biochemistry, natural resources, and public policy), that commits matching funds in accordance with subsection (g);
 - "(2) be a United States citizen;
 - "(3) be pursuing an undergraduate or graduate program in agriculture and related supporting subjects with direct relevance to the subject of biorefinery, biofuels, and renewable energy; and
 - "(4) meet any other conditions or requirements that the Secretary considers necessary.
- "(c) **PRIORITIES OF INTERNSHIP PILOT PROGRAM**.—In administering the Program (including in the selection of students to participate in the Program), the Secretary shall prioritize the following activities and placements:
 - "(1) Structured internship experiences that feature direct, hands-on assistance to policy makers engaged in the development and implementation of agriculture and related supporting policies and legislation, with direct relevance to the subject of biorefinery, biofuels, and renewable energy.
 - "(2) Internship and academic seminar programs that provide a combination of workforce training, experiential education, and leadership development designed specifically for the Department of Agriculture and Congress, with regard to agriculture-based biorefinery, biofuels, and related renewable energy policies.
 - "(3) Establishment of regional and state networks that partner with the agricultural business, government and academic communities to enhance the prospects for providing financial assistance to students, particularly minority students, from colleges and universities in each participating State who are from

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economically disadvantaged backgrounds.

- "(4) Internship and academic seminar programs that focus on agriculturebased research, development, and policies addressing new technologies to enhance agriculture production and enhanced economic development in the agriculture sector of the United States.
- "(d) **ADMINISTRATION OF THE PILOT PROGRAM**.—The Secretary, in consultation with other executive and legislative branch officials, shall administer the Program. The Secretary may engage the services of an experienced, nonprofit, nonpartisan professional internship and academic seminar organization with extensive experience in developing and carrying out Washington-based or other State-based internship programs and State-based financial assistance initiatives for interns to assist in carrying out the Program.
- "(e) **SCHOLARSHIPS AND OTHER ASSISTANCE FOR INTERNSHIPS.**—The Secretary may make available to undergraduate and graduate students participating in the Program scholarships or other types of financial assistance, including funds to cover the cost of housing, per diem living expenses, transportation, tuition and other educational expenses, and related costs, that would allow participation by eligible undergraduate and graduate students from economically-disadvantaged backgrounds within the Program States.
 - "(f) LONGITUDINAL STUDIES AND REPORTING REQUIREMENTS.—
 - "(1) **LONGITUDINAL STUDIES AND EVALUATION OF INTERNSHIP PROGRAM.**—In developing and implementing the Program, the Secretary shall carry out such longitudinal studies and program evaluations as he or she deems appropriate to ensure that the program is administered in a cost-effective manner and has specific milestones, objectives, and results quantified with regard to such Program.
 - "(2) **REPORTING REQUIREMENTS.**—The Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate periodic reports regarding the development and implementation of the Program, including the longitudinal studies and evaluations required under paragraph (1).
- "(g) **STATE MATCHING REQUIREMENT**.—As a condition of receiving an internship under the Program, the State in which the student receiving the internship is pursuing an undergraduate or graduate degree shall provide matching funds in the amount of one dollar for every two dollars provided by the Secretary under the Program.
- "(h) **FEDERAL CONTRIBUTION LIMIT.**—The Secretary may not expend more than \$200,000 in any fiscal year to provide internships to students pursuing an undergraduate or

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graduate degree in any particular State.

- "(i) **APPLICATION OF FUNDS**.—The Secretary shall, to the maximum extent practicable, use funds made available under subsection (j) to provide scholarships and the other forms of financial assistance described in subsection (e) directly attributable to the participation in the Program by students from rural, economically-disadvantaged backgrounds.
- "(j) **AUTHORIZATION OF APPROPRIATIONS**.—There are authorized to be appropriated such sums as may be necessary to carry out this section.".

SEC. 9013. FEEDSTOCK FLEXIBILITY PROGRAM FOR BIOENERGY PRODUCERS.

Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is further amended by adding at the end the following new section:

"SEC. 9016. FEEDSTOCK FLEXIBILITY PROGRAM FOR BIOENERGY PRODUCERS.

- "(a) **DEFINITIONS**.—In this section:
 - "(1) **BIOENERGY**.—The term 'bioenergy' means fuel grade ethanol and other biofuel.
 - "(2) **BIOENERGY PRODUCER.**—The term 'bioenergy producer' means a producer of bioenergy that uses an eligible commodity to produce bioenergy under this section.
 - "(3) **ELIGIBLE COMMODITY**.—The term 'eligible commodity' means a form of raw or refined sugar or in-process sugar that is eligible to be marketed in the United States for human consumption or to be used for the extraction of sugar for human consumption.
 - "(4) **ELIGIBLE ENTITY**.—The term 'eligible entity' means an entity located in the United States that markets an eligible commodity in the United States.

"(b) FEEDSTOCK FLEXIBILITY PROGRAM.—

"(1) IN GENERAL.—

"(A) **PURCHASES AND SALES.**—For each of fiscal years 2008 through 2012, the Secretary shall purchase eligible commodities from eligible entities and sell such commodities to bioenergy producers for the purpose of producing bioenergy in a manner that ensures that 156 of the Federal

SEC. 1501. SUGAR PROGRAM.

Section 156 of the Federal Agriculture Improvement and Reform Act of 1996 (7 U.S.C. 7272) is amended to read as follows:

`SEC. 156. SUGAR PROGRAM.

- `(f) FEEDSTOCK FLEXIBILITY PROGRAM FOR BIOENERGY PRODUCERS-
 - `(1) **DEFINITIONS-** In this subsection:
 - `(A) **BIOENERGY-** The term `bioenergy' means fuel grade ethanol and other biofuel.
 - `(B) **BIOENERGY PRODUCER-** The term `bioenergy producer' means a producer of bioenergy that uses an eligible commodity to produce bioenergy under this subsection.
 - `(C) **ELIGIBLE COMMODITY-** The term `eligible commodity' means a form of raw or refined sugar or in-process sugar that is eligible--
 - `(i) to be marketed in the United States for human consumption; or
 - `(ii) to be used for the extraction of sugar for human consumption.
 - `(D) **ELIGIBLE ENTITY-** The term `eligible entity' means an entity located in the United States that markets an eligible commodity in the United States.

`(2) FEEDSTOCK FLEXIBILITY PROGRAM-

`(A) **PURCHASES AND SALES-** For each of fiscal years 2008 through 2012, the Secretary shall purchase eligible commodities from eligible entities and sell such commodities to bioenergy producers for the purpose of producing bioenergy in a manner that ensures that this section is operated at no cost to the Federal

Agricultural Improvement and Reform Act (7 U.S.C. 7272) is operated at no cost to the Federal Government by avoiding forfeitures to the Commodity Credit Corporation.

- "(B) **COMPETITIVE PROCEDURES**.—In carrying out the purchases and sales required under subparagraph (A), the Secretary shall, to the maximum extent practicable, use competitive procedures, including the receiving, offering, and accepting of bids, when entering into contracts with eligible entities and bioenergy producers, provided that such procedures are consistent with the purposes of subparagraph (A).
- "(C) **LIMITATION**.—The purchase and sale of eligible commodities under subparagraph (A) shall only be made in fiscal years in which such purchases and sales are necessary to ensure that the program authorized under section 156 of the Federal Agriculture Improvement and Reform Act (7 U.S.C. 7272) is operated at no cost to the Federal Government by avoiding forfeitures to the Commodity Credit Corporation.

"(2) **NOTICE**.—

- "(A) **IN GENERAL**.—Not later than September 1, 2007, and each September 1 thereafter through fiscal year 2011, the Secretary shall provide notice to eligible entities and bioenergy producers of the quantity of eligible commodities that shall be made available for purchase and sale for the subsequent fiscal year under this section.
- "(B) **REESTIMATES**.—Not later than the first day of each of the second through fourth quarters of each of fiscal years 2008 through 2012, the Secretary shall reestimate the quantity of eligible commodities determined under subparagraph (A), and provide notice and make purchases and sales based on such reestimates.
- "(3) **COMMODITY CREDIT CORPORATION INVENTORY.**—To the extent that an eligible commodity is owned and held in inventory by the Commodity Credit Corporation (accumulated pursuant to the program authorized under section 156 of the Federal Agriculture Improvement and Reform Act (7 U.S.C. 7272)), the Secretary shall sell such commodity to bioenergy producers under this section.

"(4) TRANSFER RULE; STORAGE FEES.—

"(A) GENERAL TRANSFER RULE.—Except as provided in subparagraph (C), the Secretary shall ensure that bioenergy producers that purchase eligible commodities pursuant to this subsection take possession

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Government and avoids forfeitures to the Commodity Credit Corporation.

- `(B) **COMPETITIVE PROCEDURES-** In carrying out the purchases and sales required under subparagraph (A), the Secretary shall, to the maximum extent practicable, use competitive procedures, including the receiving, offering, and accepting of bids, when entering into contracts with eligible entities and bioenergy producers, provided that the procedures are consistent with the purposes of subparagraph (A).
- `(C) **LIMITATION-** The purchase and sale of eligible commodities under subparagraph (A) shall only be made for a fiscal year for which the purchases and sales are necessary to ensure that the program under this section is operated at no cost to the Federal Government by avoiding forfeitures to the Commodity Credit Corporation.

`(3) NOTICE-

- `(A) IN GENERAL- As soon as practicable after the date of enactment of the Food and Energy Security Act of 2007, and each September 1 thereafter through fiscal year 2012, the Secretary shall provide notice to eligible entities and bioenergy producers of the quantity of eligible commodities that shall be made available for purchase and sale for the subsequent fiscal year under this subsection.
- `(B) **REESTIMATES-** Not later than the first day of each of the second through fourth quarters of each of fiscal years 2008 through 2012, the Secretary shall reestimate the quantity of eligible commodities determined under subparagraph (A), and provide notice and make purchases and sales based on the reestimates.
- `(4) **COMMODITY CREDIT CORPORATION INVENTORY-** To the extent that an eligible commodity is owned and held in inventory by the Commodity Credit Corporation (accumulated pursuant to the program under this section), the Secretary shall sell the eligible commodity to bioenergy producers under this subsection.

`(5) TRANSFER RULE; STORAGE FEES-

`(A) **GENERAL TRANSFER RULE-** Except as provided in subparagraph (C), the Secretary shall ensure that bioenergy producers that purchase eligible commodities pursuant to this subsection take possession of the eligible

of such commodities within 30 calendar days of the date of such purchase from the Commodity Credit Corporation.

"(B) PAYMENT OF STORAGE FEES PROHIBITED.—

- "(i) IN GENERAL.—The Secretary shall, to the greatest extent practicable, carry out this subsection in a manner that ensures no storage fees are paid by the Commodity Credit Corporation in the administration of this subsection.
- "(ii) **EXCEPTION.**—Clause (i) shall not apply with respect to any commodities owned and held in inventory by the Commodity Credit Corporation (accumulated pursuant to the program authorized under section 156 of the Federal Agriculture Improvement and Reform Act (7 U.S.C. 7272)).

"(C) OPTION TO PREVENT STORAGE FEES.—

- "(i) **IN GENERAL**.—The Secretary may enter into contracts with bioenergy producers to sell eligible commodities to such producers prior in time to entering into contracts with eligible entities to purchase such commodities to be used to satisfy the contracts entered into with the bioenergy producers.
- "(ii) **SPECIAL TRANSFER RULE**.—If the Secretary makes a sale and purchase referred to in clause (i), the Secretary shall ensure that the bioenergy producer that purchased eligible commodities takes possession of such commodities within 30 calendar days of the date the Commodity Credit Corporation purchases such commodities.
- "(5) **RELATION TO OTHER LAWS.**—If sugar that is subject to a marketing allotment under part VII of subtitle B of title III of the Agricultural Adjustment Act of 1938 (7 U.S.C. 1359aa et seq.) is the subject of a payment under this section, such sugar shall be considered marketed and shall count against a processor's allocation of an allotment under such part, as applicable.
- "(6) **FUNDING.**—The Secretary shall use the funds, facilities, and authorities of the Commodity Credit Corporation, including the use of such sums as are necessary, to carry out this section.".

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commodities not later than 30 calendar days after the date of the purchase from the Commodity Credit Corporation.

`(B) PAYMENT OF STORAGE FEES PROHIBITED-

- `(i) **IN GENERAL-** The Secretary shall, to the maximum extent practicable, carry out this subsection in a manner that ensures no storage fees are paid by the Commodity Credit Corporation in the administration of this subsection.
- `(ii) **EXCEPTION-** Clause (i) shall not apply with respect to any commodities owned and held in inventory by the Commodity Credit Corporation (accumulated pursuant to the program under this section).

`(C) OPTION TO PREVENT STORAGE FEES-

- `(i) IN GENERAL- The Secretary may enter into contracts with bioenergy producers to sell eligible commodities to the bioenergy producers prior in time to entering into contracts with eligible entities to purchase the eligible commodities to be used to satisfy the contracts entered into with the bioenergy producers.
- `(ii) **SPECIAL TRANSFER RULE-** If the Secretary makes a sale and purchase referred to in clause (i), the Secretary shall ensure that the bioenergy producer that purchased eligible commodities takes possession of the eligible commodities not later than 30 calendar days after the date on which the Commodity Credit Corporation purchases the eligible commodities.
- `(6) **RELATION TO OTHER LAWS-** If sugar that is subject to a marketing allotment under part VII of subtitle B of title III of the Agricultural Adjustment Act of 1938 (7 U.S.C. 1359aa et seq.) is the subject of a payment under this subsection, the sugar shall be considered marketed and shall count against the allocation of a processor of an allotment under that part, as applicable.
- `(7) **FUNDING-** The Secretary shall use the funds, facilities, and authorities of the Commodity Credit Corporation, including the use of such sums as are necessary, to carry out this subsection.

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SEC. 9014. BIOMASS INVENTORY REPORT.

- (a) **INVENTORY REQUIRED.**—The Secretary of Agriculture shall conduct an inventory of biomass resources on a county-by-county basis.
- (b) **REPORT**.—Not later than one year after the date of the enactment of this Act, the Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report containing—
 - (1) the results of the inventory conducted under subsection (a); and
 - (2) an estimate of the amount of unused crop land in the United States that could be used for dedicated energy crops.
- (c) **BIOMASS RESOURCES DEFINED**.—In this section, the term "biomass resource" has the meaning given the term "eligible commodity" in section 9010(a)(3) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8108(a)(3)).

SEC. 9015. FUTURE FARMSTEADS PROGRAM.

- (a) **ESTABLISHMENT**.—The Secretary of Agriculture shall establish a program to equip, in each of 5 regions of the country chosen to represent different farming practices, a farm house and its surrounding fields, facilities, and forested areas with technologies to—
 - (1) improve farm energy production and energy use efficiencies;
 - (2) provide working examples to farmers; and
 - (3) serve as an education, demonstration, and research facility that will teach graduate students whose focus of research is related to either renewable energy or

SEC. 9024. REPORT ON THE GROWTH POTENTIAL FOR CELLULOSIC MATERIAL.

'Not later than 18 months after the date of enactment of this Act, the Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a comprehensive report that, on a State-by-State basis--

- `(1) identifies the range of cellulosic feedstock materials that can be grown and are viable candidates for renewable fuel production;
- `(2) estimates the acreage available for growing the cellulosic feedstock materials identified under paragraph (1);
- `(3) estimates the quantity of available energy per acre for each cellulosic feedstock material identified under paragraph (1);
- `(4) calculates the development potential for growing cellulosic feedstock materials, based on--
 - `(A) the range of cellulosic materials available for growth;
 - `(B) soil quality;
 - `(C) climate variables;
 - `(D) the quality and availability of water;
 - `(E) agriculture systems that are in place as of the date of enactment of this Act;
 - `(F) available acreage; and
 - `(G) other relevant factors identified by the Secretary; and
- `(5) rates the development potential for growing cellulosic feedstock material, with the ratings displayed on maps of the United States that indicate the development potential of each State, as calculated by the Secretary under paragraph (4).

`SEC. 9025. FUTURE FARMSTEADS PROGRAM.

- `(a) **ESTABLISHMENT-** The Secretary shall establish a program to equip, in each of 5 regions of the United States chosen to represent different farming practices, a farm house and its surrounding fields, facilities, and forested areas with technologies to--
 - `(1) improve farm energy production and energy use efficiencies;
 - `(2) provide working examples to farmers; and
 - `(3) serve as an education, demonstration, and research facility that will teach graduate students whose focus of research is related to either renewable energy or

energy conservation technologies.	energy conservation technologies.
 (b) GOALS.—The goals of the program established under subsection (a) shall be to— (1) advance farm energy use efficiencies and the on-farm production of renewable energies, along with advanced communication and control technologies with the latest in energy capture and conversion techniques, thereby enhancing rural energy independence and creating new revenues for rural economies; (2) accelerate private sector and university research into the efficient on-farm production of renewable fuels and help educate the farming industry, students, and the general public; and (3) accelerate energy independence, including the production and the conservation of renewable energies on farms. 	`(b) Goals of the program established under subsection (a) shall be to- `(1) advance farm energy use efficiencies and the on-farm production of renewable energies, along with advanced communication and control technologies with the latest in energy capture and conversion techniques, thereby enhancing rural energy independence and creating new revenues for rural economies; `(2) accelerate private sector and university research into the efficient on-farm production of renewable fuels and help educate the farming industry, students, and the general public; and `(3) accelerate energy independence, including the production and the conservation of renewable energies on farms.
(c) COLLABORATION PARTNERS .—The program under this section shall be carried out in partnership with regional land grant institutions, agricultural commodity commissions, biofuels companies, sensor and controls companies, and internet technology companies.	`(c) COLLABORATION PARTNERS- The program under this section shall be carried out in partnership with regional land grant institutions, agricultural commodity commissions, biofuels companies, sensor and controls companies, and internet technology companies.
(d) AUTHORIZATION OF APPROPRIATIONS .—There are authorized to be appropriated such sums as may be necessary to carry out this section.	`(d) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated such sums as are necessary to carry out this section.'.
SEC. 9016. SENSE OF CONGRESS ON RENEWABLE ENERGY.	No similar provision.
It is the sense of Congress that—	
(1) energy demand in the United States is projected to increase by more than 30 percent over the next two decades;	
(2) increased production of renewable energy and growth of its infrastructure would assist the United States in meeting the growing energy demand;	
(3) continued, and even accelerated, development of renewable energy inputs and technologies provide numerous benefits to the United States, including improved national security and economic growth;	
(4) while it should be a priority of the Federal Government to continue to promote	

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policies and incentives to stimulate growth and development of renewable energy infrastructure, it should be recognized that the marketplace is also an important instrument to determine which renewable energy sources and technologies will provide the most efficient and effective energy production;

- (5) renewable energy inputs and technology must be available in abundant quantities and provide energy at competitive prices in a reliable manner for the American consumer; and
- (6) it is in the interest of the United States to diversify its energy portfolio and increase the energy independence of the United States by further developing alternative forms of energy.

SEC. 9017. BIODIESEL FUEL EDUCATION PROGRAM.

Section 9004(d) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8104(d)) is amended to read as follows:

"(d) **FUNDING**.—Of the funds of the Commodity Credit Corporation, the Secretary shall make available to carry out this section \$2,000,000 for each of fiscal years 2008 through

`SEC. 9003. BIODIESEL FUEL EDUCATION.

- `(a) **PURPOSE-** The purpose of this section is to educate potential users about the proper use and benefits of biodiesel.
- `(b) **ESTABLISHMENT-** The Secretary shall, under such terms and conditions as are appropriate, make grants to eligible entities to educate governmental and private entities that operate vehicle fleets, oil refiners, automotive companies, owners and operators of watercraft fleets, other interested entities (as determined by the Secretary), and the public about the benefits of biodiesel fuel use.
- `(c) **ELIGIBLE ENTITIES-** To receive a grant under subsection (b), an entity shall-`(1) be a nonprofit organization or institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001));
 - `(2) have demonstrated knowledge of biodiesel fuel production, use, or distribution; and
 - `(3) have demonstrated the ability to conduct educational and technical support programs.
- `(d) **CONSULTATION-** In carrying out this section, the Secretary shall consult with the Secretary of Energy.
- `(e) **FUNDING-** Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out this section, to the maximum extent practicable, \$2,000,000 for each of fiscal years 2008 through 2012.

2012.".	
SEC. 9018. BIOMASS ENERGY RESERVE.	`SEC. 9004. BIOMASS CROP TRANSITION.
Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is amended by adding at the end the following new section:	
"SEC. 9017. BIOMASS ENERGY RESERVE.	
"(a) Purpose .—The purpose of this section is to establish a biomass energy reserve—	
"(1) to encourage production of dedicated energy crops in a sustainable manner that protects the soil, air, water, and wildlife of the United States; and	`(a) DEFINITIONS- In this section:
"(2) to provide financial and technical assistance to owners and operators of eligible cropland to produce dedicated energy crops and crop mixes of suitable quality and in sufficient quantities to support and induce development and expansion of the use of the crop for—	
"(A) bioenergy;	
"(B) power or heat generation to supplement or replace nonbiobased energy sources; or	
"(C) biobased products to supplement or replace non biobased products;	
"(3) to establish biomass energy reserve project areas; and	
"(4) to provide financial and technical assistance to owners and operators for harvesting, storing, and transporting cellulosic material.	
"(b) DEFINITIONS .— In this section:	
"(1) BEGINNING FARMER OR RANCHER. —The term 'beginning farmer or rancher' has the meaning given the term in section 343(a) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)).	
"(2) BER .—The term 'BER' means the biomass energy reserve established under this section.	
"(3) BER PROJECT AREA .—The term 'BER project area' means an area that—	
"(A) has eligible cropland that—	

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- "(i) is owned or operated by eligible participants; and
- "(ii) has specified boundaries that are submitted to the Secretary by eligible participants and subsequently approved by the Secretary; and
- "(B) is physically located within a 50-mile radius of a bioenergy facility.
- "(4) **CONSERVATION RESERVE PROGRAM**.—The term 'conservation reserve program' means the conservation reserve program established under subchapter B of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3831 et seq.).
- "(5) **CONTRACT ACREAGE**.—The term 'contract acreage' means eligible cropland that is covered by a BER contract entered into with the Secretary.
 - "(6) **ELIGIBLE APPLICANT**.—The term 'eligible applicant' means—
 - "(A) a collective group of owners and operators producing or proposing to produce eligible dedicated energy crops;
 - "(B) an energy or agricultural company or refinery; and
 - "(C) an Agricultural Innovation Center established pursuant to section 6402 of the Farm Security and Rural Investment Act of 2002 (Public Law 107–171; 116 Stat. 426; 7 U.S.C. 1621 note).

"(7) ELIGIBLE CROPLAND.—

- "(A) **IN GENERAL**.—The term 'eligible cropland' means land that the applicable county committee of the Farm Service Agency determines—
 - "(i) is currently being tilled for the production of a crop for harvest; or
 - "(ii) is not currently being tilled but has been tilled in a prior crop year and is suitable for production of an eligible dedicated energy crop.
 - "(B) **EXCLUSIONS**.—The term 'eligible cropland' does not include—

`(2) **ELIGIBLE LAND-** The term `eligible land' means private agricultural or forest land that the Secretary determines was planted or considered to be planted for at least 4 of the 6 years preceding the date of enactment of the Food and Energy Security Act of 2007.

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- "(i) Federally-owned land;
- "(ii) land enrolled in—
 - "(I) the conservation reserve program;
 - "(II) the grassland reserve program; or
 - "(III) the wetlands reserve program; and
- "(iii) land with greater than 50 percent cover of native nonwoody vegetation or forest land, as of the date of enactment of this section.

"(8) ELIGIBLE DEDICATED ENERGY CROP.—

- "(A) IN GENERAL.—The term 'eligible dedicated energy crop' means any crop native to the United States, or another crop, as determined by the Secretary, grown specifically to provide raw materials for—
 - "(i) conversion to liquid transportation fuels or chemicals through biochemical or thermochemical processes; or
 - "(ii) energy generation through combustion, pyrolysis, gasification, cofiring, or other technologies, as determined by the Secretary.
- "(B) **EXCLUSIONS**.—The term 'eligible dedicated energy crop' does not include—
 - "(i) any crop that is eligible for payments under title I or a successor title; or
 - "(ii) any plant that is invasive or noxious or has the potential to become invasive or noxious, as determined by the Secretary, in consultation with other appropriate Federal or State departments and agencies.

`(1) ELIGIBLE CROP-

`(A) IN GENERAL- The term `eligible crop' means a crop of renewable biomass.

- `(B) **EXCLUSIONS-** The term `eligible crop' does not include any plant that--
 - `(i) the Secretary determines to be invasive or noxious on a regional basis under the Plant Protection Act (7 U.S.C. 7701 et seq.); or `(ii) has the potential to become invasive or noxious on a regional basis, as determined by the Secretary, in consultation with other appropriate Federal or State departments and agencies.
- `(2) **EXCLUSION-** An agricultural producer shall not be eligible for assistance under paragraph (1) for the establishment and production of--
 - `(A) any crop that is eligible for benefits under title I of the Food and Energy Security Act of 2007; or
 - `(B) an annual crop. (This paragraph moved from subsection (b)).

"(9) **ELIGIBLE PARTICIPANT**.—The term 'eligible participant' means an owner or operator of contract acreage that is physically located within a BER project area.

- "(10) **FEDERALLY-OWNED LAND.**—The term 'Federally-owned land' means land owned by—
 - "(A) the Federal Government (including any department, instrumentality, bureau, or agency of the Federal Government); or
 - "(B) any corporation whose stock is wholly owned by the Federal Government.
- "(11) **FOREST LAND.**—The term 'forest land' means an ecosystem that is at least 1 acre in size (including timberland and woodland) and that (as determined by the Secretary)—
 - "(A) is characterized by dense and extensive tree cover;
 - "(B) contains, or once contained, at least 10 percent tree crown cover; and
 - "(C) is not developed and planned for exclusive nonforest resource

- `(3) **ELIGIBLE PARTICIPANT-** The term `eligible participant' means an agricultural producer, forest land owner, or other individual holding the right to collect or harvest renewable biomass--
 - `(A) that is establishing 1 or more eligible crops on eligible land to be used in the production of advanced biofuels, other biobased products, heat, or power from a biomass conversion facility;
 - `(B) that is collecting or harvesting renewable biomass to be used in the production of advanced biofuels, other biobased products, heat, or power from a biomass conversion facility;
 - `(C) that has a letter of intent or proof of financial commitment from a biomass conversion facility, including a proposed biomass conversion facility that is economically viable, as determined by the Secretary, to purchase the eligible crops; and
 - `(D) the production operation of which is in such proximity to the biomass conversion facility described in subparagraph (C) as to make delivery of the eligible crops to that location economically practicable.

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use.

- "(12) **GRASSLAND RESERVE PROGRAM**.—The term 'grassland reserve program' means the grassland reserve program established under subchapter C of chapter 2 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3838n et seq.).
- "(13) **OPERATOR.**—The term 'operator' means an individual, entity, or joint operation that is in control of the farming operations on a farm during the applicable crop year.

"(14) **OWNER**.—

- "(A) **IN GENERAL.**—The term 'owner' means a person that has legal ownership of eligible cropland.
 - "(B) INCLUSION.—The term 'owner' includes—
 - "(i) a person that is buying eligible cropland under a contract for deed; and
 - "(ii) a person that has a life estate in eligible cropland.
- "(15) **QUALIFIED ORGANIZATION**.—The term 'qualified organization' means—
 - "(A) an Agricultural Innovation Center established pursuant to section 6402 of the Farm Security and Rural Investment Act of 2002 (Public Law 107–171; 116 Stat. 426; 7 U.S.C. 1621 note) with significant experience in the field of renewable energy, as determined by the Secretary; or
 - "(B) in a region not served by a center referred to in subparagraph (A)—
 - "(i) an entity with significant experience in the field of renewable energy that is geographically located in such region, as determined by the Secretary; or
 - "(ii) an accredited college or university with experience providing technical assistance in the field of renewable energy that is geographically located in such region, as determined by the Secretary.
 - "(16) SECRETARY.—The term 'Secretary' means the Secretary of

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Agriculture.

"(17) **SOCIALLY DISADVANTAGED FARMER OR RANCHER.**—The term 'socially disadvantaged farmer or rancher' means a farmer or rancher who is a member of a socially disadvantaged group (as defined in section 355(e) of the Consolidated Farm and Rural Development Act (7 U.S.C. 2003(e))).

"(18) **WETLANDS RESERVE PROGRAM**.—The term 'wetlands reserve program' means the wetlands reserve program established under subchapter C of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3837 et seq.).

"(c) **ESTABLISHMENT**.—Not later than 90 days after the date of enactment of this section, the Secretary shall establish a biomass energy reserve in accordance with this section. The Secretary shall ensure the purposes in subsection (a) are met by including in the reserve projects that include a variety of harvest and post-harvest practices, including stubble height, unharvested strips (including strips for wildlife habitat), and varying harvest dates and a variety of monoculture and polyculture crop mixes, as appropriate, by project area.

"(d) PROPOSALS FOR BER PROJECT AREAS.—

"(1) SELECTION OF QUALIFIED ORGANIZATIONS.—

"(A) IN GENERAL.—The Secretary shall select not more than 10 qualified organizations to assist—

"(i) eligible applicants in submitting proposals under paragraph (2); and

(b) BIOMASS CROP TRANSITION ASSISTANCE-

- `(1) **ESTABLISHMENT OF PROGRAM-** The Secretary shall establish a program to provide transitional assistance, including planning grants, for the establishment and production of eligible crops to be used in the production of advanced biofuels, other biobased products, heat, or power from a biomass conversion facility.
- `(2) MOVED TO PAGE 70.
- `(3) MOVED TO PAGE XX.

`(B) CONTRACTS WITH MEMBER ENTITIES- The Secretary may enter into 1 or more contracts with farmer-owned cooperatives, agricultural trade associations, or other similar entities on behalf of producer members that meet the requirements of, and elect to be treated as, eligible participants if the contract would offer greater efficiency in administration of the program.

- "(ii) the Secretary in selecting BER project areas.
- "(B) **REGION**.—The Secretary shall select not more than 1 qualified organization to assist eligible applicants and the Secretary in any particular region of the United States, as determined by the Secretary.
- "(C) **FUNDING**.—The Secretary shall provide each qualified organization selected under paragraph (1) not more than \$300,000 to carry out this paragraph.
- "(2) **CONSULTATION WITH QUALIFIED ORGANIZATION.**—An eligible applicant may consult with and submit to a qualified organization a written proposal that—
 - "(A) identifies the eligible cropland that will be a part of the proposed BER project area; and
 - "(B) indicates a strong likelihood that the proposed BER project area will generate a sufficient quantity of biomass from eligible dedicated energy crops and acres or other sources to supply an existing bioenergy facility.

- "(3) **MINIMUM REQUIREMENTS.**—The written proposal for a proposed BER project area shall include—
 - "(A) a description of the eligible cropland of each eligible participant that will participate in the proposed BER project area, including—
 - "(i) the quantity of eligible cropland of each eligible participant;
 - "(ii) the physical location of the eligible cropland;
 - "(iii) the 1 or more eligible dedicated energy crops that will be produced on the eligible cropland; and
 - "(iv) the type of land use or crop that will be displaced by the eligible dedicated energy crop;
 - "(B) (i) the name, if available, and type, location, and description of

- `(5) **APPLICATIONS-** An application to the Secretary for assistance shall include--
 - `(A) identification of the proposed biomass conversion facility for which the crop is intended;
 - `(B) letters of intent or proof of financial commitment from the biomass conversion facility to purchase the crop; and
 - `(C) documentation from each eligible participant that describes--
 - `(i) the variety and acreage of the eligible crop the eligible participants have committed to producing; and
 - `(ii) the variety and acreage of crops that the eligible participants

the bioenergy facility that will use the eligible dedicated energy crops to be produced in the proposed BER project area; and

- "(ii) a letter of commitment from a bioenergy facility that the facility will use the eligible dedicated energy crops intended to be produced in the proposed BER project area;
- "(C) a general analysis of the anticipated local economic impact of the proposed BER project; and
- "(D) any additional information needed to determine the eligibility for, and ranking of, the proposal, as determined by the Secretary.
- "(4) **Individual owners and operators**.—A project area proposal may not submit an individual proposal to participate in the BER.

- "(5) **ELIGIBILITY CRITERIA FOR BER PROJECT AREAS.**—The Secretary shall establish a system for ranking BER project areas based on the following criteria:
 - "(A) The probability that the eligible dedicated energy crops proposed to be produced in the proposed BER project area will be used for the purposes of the BER.
 - "(B) The inclusion of adequate potential feedstocks and suitable placement with respect to the bioenergy facility.
 - "(C) The potential for a positive economic impact in the proposed BER project area.
 - "(D) The availability of the ownership of the bioenergy facility in the proposed BER project area to producers and local investors.
 - "(E) The participation rate by beginning farmers or ranchers or socially disadvantaged farmers or ranchers.
 - "(F) The potential to improve soil conservation and water quality, and enhance wildlife habitat, when compared to existing land uses.

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would have grown if the eligible participants had not committed to producing the eligible crop.

- `(6) **SELECTION CRITERIA-** In selecting from applications submitted under this subsection, the Secretary shall consider--
 - `(A) the likelihood that the proposed establishment of the eligible crop will be viable within the proposed locale;
 - `(B) the impact of the proposed eligible crop and conversion system on wildlife, air, soil, and water quality and availability; and
 - `(C) local and regional economic impacts and benefits, including participation of beginning farmers or ranchers and socially disadvantaged farmers or ranchers.

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- "(G) The variety of agronomic conditions the proposed eligible dedicated energy crops will be grown within a project area.
- "(H) The variety of harvest and post harvest practices, including stubble height, unharvested strips (including strips for wildlife habitat), and varying harvest dates.
- "(I) The variety of monoculture and polyculture crop mixes, as appropriate, by project area.

"(6) SELECTION OF PROJECTS.—

- "(A) **Ranking**; **Submission to Secretary**.—Each qualified organization selected by the Secretary under paragraph (1) shall rank proposals submitted to such qualified organization under paragraph (2) using the system for ranking established by the Secretary under paragraph (6) and shall submit to the Secretary up to five of the highest ranked applications.
- "(B) **SECRETARY SELECTION**.—The Secretary shall authorize not less than one proposal submitted to the Secretary from each qualified organization under subparagraph (A).

"(e) FOREST BIOMASS PLANNING GRANTS.—

- "(1) **IN GENERAL.**—The Secretary shall provide forest biomass planning assistance grants to private landowners to develop forest stewardship plans that involve sustainable management of biomass from forest land of the private landowners that will preserve diversity, soil, water, or wildlife values of the land, while ensuring a steady supply of biomass material, through—
 - "(A) State forestry agencies, in consultation with State wildlife agencies; and
 - "(B) technical service provider arrangements with third-parties.
- "(2) **LIMITATION**.—The total amount of funds used to carry out this subsection shall not exceed \$5.000,000.

`(e) ASSISTANCE FOR FOREST BIOMASS PLANNING-

- `(1) **IN GENERAL-** The Secretary shall provide assistance to eligible participants to develop forest stewardship plans that involve management of forest biomass for delivery to a biomass conversion facility through--
 - `(A) a State forestry agency; or
 - `(B) a contract or agreement with a third-party provider in accordance with section 1242 of the Food Security Act of 1985 (16 U.S.C. 3842).
- `(2) MANAGEMENT PRACTICES- The Secretary shall ensure that any plan developed using assistance provided under paragraph (1) includes management practices that will protect soil, water, and wildlife habitat resources on the land

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covered by the plan.

`(7) ELIGIBLE CROP TRANSITION PLANNING GRANTS-

- `(A) IN GENERAL- An eligible participant or member entity (as described in paragraph (3)(B)) may apply for a project planning grant in an amount of not more than \$50,000 to assist in assessing the viability for, or assembling of, a regional supply of 1 or more eligible crops for use by a bioenergy conversion facility.
- `(B) MATCHING REQUIREMENT- To receive a planning grant under subparagraph (A), an eligible participant or member entity shall provide matching funding in an amount equal to 100 percent of the amount of the grant.

"(f) DURATION OF CONTRACT.—

- "(1) **IN GENERAL**.—Subject to paragraph (2), for purposes of carrying out the BER, the Secretary shall enter into contracts of 5 years.
- "(2) **EARLY TERMINATION**.—The Secretary may terminate a contract early if the Secretary determines that—
 - "(A) contract acreage will not be used to produce an eligible dedicated energy crop;
 - "(B) a material breach of the contract has occurred;
 - "(C) the owner or operator has died; or
 - "(D) continuation of the contract will cause undue economic hardship.

No similar provision.

No similar provision.	`(c) Assistance for Production of Annual Crop of Renewable Biomass-
	`(1) IN GENERAL- The Secretary may provide assistance to eligible participants to plant an annual crop of renewable biomass for use in a biomass conversion facility in the form of
	`(A) technical assistance; and
	`(B) cost-share assistance for the cost of establishing an annual crop of renewable biomass.
	`(2) EXCLUSION- An agricultural producer shall not be eligible for assistance under paragraph (1) for the establishment of any crop that is eligible for benefits under title I of the Food and Energy Security Act of 2007.
	`(3) COMPLIANCE- Eligible participants receiving assistance under paragraph (1)(B) shall develop and actively apply a conservation plan that meets the requirements for highly erodible land conservation and wetlands conservation as established under subtitles B and C of title XII of the Food Security Act of 1985 (16 U.S.C. 3811 et seq.).
"(g) CONTRACT ACREAGE REQUIREMENTS.—	`(C) REQUIREMENTS- Under a contract described in subparagraph (A), an eligible participant shall be required, as determined by the Secretary
"(1) IN GENERAL .—On approval of a BER project area by the Secretary, each eligible participant in the BER project area shall enter into a contract with the Secretary that is consistent with the BER.	`(i) to produce 1 or more eligible crops;
"(2) ADDITIONAL ELIGIBLE PARTICIPANTS .—The Secretary may add eligible participants to a BER project area after approval of the BER project area.	`(ii) to develop and actively apply a conservation plan that meets the requirements for highly erodible land conservation and wetlands conservation as established under subtitles B and C of title XII of the
"(3) CONSERVATION PRACTICES. —To ensure the sustainability of farm operations and the protection of soil, air, water and wildlife, the Secretary shall	Food Security Act of 1985 (16 U.S.C. 3811 et seq.); and `(iii) to agree to implement a conservation plan approved by the local

include such terms and conditions in a contract entered into under paragraph (1) as the Secretary considers necessary.

"(4) **Purposes**.—

- "(A) IN GENERAL.—Except as provided in subparagraph (B), to be eligible to participate in the BER, an eligible participant may use eligible dedicated energy crops produced on contract acreage only for the purposes described in subsection (a).
- "(B) **PERSONAL USE**.—During the period before the commercial viability of a bioenergy facility, an eligible participant may use eligible dedicated energy crops produced by the eligible participant on contract acreage for personal use.
- "(C) **SEED PRODUCTION**.—During the period before the commercial viability of a bioenergy facility, an eligible participant may harvest and sell seed produced on contract acreage.
- "(5) **REQUIREMENTS.**—To be eligible to participate in the BER, during the term of the BER contract, an eligible participant shall comply with—
 - "(A) the highly erodible land conservation requirements of subtitle B of title XII of the Food Security Act of 1985 (16 U.S.C. 3811 et seq.); and
 - "(B) the wetland conservation requirements of subtitle C of title XII of that Act (16 U.S.C. 3821 et seq.).

"(h) ADDITIONAL ELIGIBLE BIOMASS.—

- "(1) **IN GENERAL**.—The Secretary may allow on land that is enrolled in the conservation reserve program and located within the BER project area the harvesting of biomass—
 - "(A) in exchange for a reduction of an applicable annual payment in an amount to be determined by the Secretary;

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soil conservation district, in consultation with the local committees established under section 8(b)(5) of the Soil Conservation and Domestic Allotment Act (16 U.S.C. 590h(B)(5)) and the Secretary, or by the Secretary to use such conservation practices as are necessary, where appropriate--

- `(I) to advance the goals and objectives of State, regional, and national fish and wildlife conservation plans and initiatives; and
- `(II) to comply with mandatory environmental requirements for a producer under Federal, State, and local law.

No similar provision.

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- "(B) in accordance with an approved conservation reserve program plan, including mid-contract management and forestry maintenance activities; and
- "(C) in a manner that ensures that biomass harvest activities occur outside the official nesting and brood rearing season for those plans.

- "(i) **DUTIES OF SECRETARY.**—The Secretary shall—
 - "(1) establish and administer the BER;
 - "(2) authorize establishment of BER project areas for the purposes of the BER described in subsection (a);
 - "(3) develop procedures—
 - "(A) to monitor the compliance of eligible participants that have land enrolled in the BER with the requirements of the BER;
 - "(B) to measure the performance of the BER; and
 - "(C) to demonstrate whether the long-term eligible dedicated energy crop production goals are being achieved.
 - "(4) enter into a written contract with each eligible participant that elects to participate in the BER in a BER project area;
 - "(5) not enter into a contract under the BER with an individual owner or operator unless the land of the eligible participant is physically located in an approved BER project area; and
 - "(6) provide all payments under the contract directly to the eligible participant.

No similar provision.

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- "(j) **CONTRACTS**.—A contract entered into between the Secretary and an eligible participant under the BER shall include, at a minimum, terms that cover—
 - "(1) requirements for the eligible participant in carrying out the contract, including requirements described in subsections (f), (g), and (l);
 - "(2) termination provisions;
 - "(3) payment terms and amounts to be provided on an annual basis;
 - "(4) the sales or transfer of contract acreage;
 - "(5) the modification of the contract;
 - "(6) the maximum quantity of contract acreage and an estimated schedule for how much eligible cropland will be enrolled each contract year; and
 - "(7) any additional terms the Secretary considers appropriate.

"(k) PAYMENTS.—

- "(1) **IN GENERAL**.—The Secretary shall provide payments directly to eligible participants who enter into contracts described in subsection (j) in accordance with such subsection.
 - "(2) ESTABLISHMENT PAYMENTS.—
 - "(A) **IN GENERAL**.—The Secretary shall provide to an eligible participant who enters into a BER contract an establishment payment in an amount equal to the costs of establishing an eligible dedicated energy crop on the contract acreage covered by the contract.
 - "(B) **ELIGIBLE ESTABLISHMENT PAYMENTS.**—The costs for which an eligible owner may receive an establishment payment under this paragraph include—

(3) CONTRACTS-

`(A) **IN GENERAL-** The Secretary shall enter into contracts with eligible participants and entities described in subparagraph (B) to provide transitional assistance payments to eligible participants.

`(4) PAYMENTS-

- `(A) **FIRST YEAR-** During the first year of the contract, the Secretary shall make a payment to an eligible participant in an amount that covers the cost of establishing 1 or more eligible crops.
- `(B) **SUBSEQUENT YEARS-** During any subsequent year of the contract, the Secretary shall make incentive payments to an eligible participant in an amount determined by the Secretary to encourage the eligible participant to produce renewable biomass.

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- "(i) the cost of seeds and stock; and
- "(ii) the cost of planting the crop.

"(3) RENTAL PAYMENTS.—

- "(A) IN GENERAL.—The Secretary shall make annual rental payments to an eligible participant who enters into a BER contract.
- "(B) **PERIOD**.—An eligible participant shall receive rental payments for a period of not more than 5 years after entering into a BER contract with the Secretary on contract acreage.
- "(C) **REDUCTION**.—The Secretary shall reduce rental payments under (A) by an amount determined to be appropriate by the Secretary, if an eligible dedicated energy crop is harvested in accordance with subsection (g)(4).

"(1) INFORMATION SHARING.—

- "(1) **IN GENERAL.**—Owners and operators of a farm entering into a contract with the Secretary under this section shall agree to make available to the Secretary, or to an institution of higher education or other entity designated by the Secretary, such information as the Secretary considers to be appropriate to promote the production of bioenergy crops and the development of biorefinery technology; and
- "(2) **BEST PRACTICES DATABASE**.—Subject to section 1770 of the Food Security Act of 1985 (7 U.S.C. 2276), the Secretary shall make available to the public in a database format the best practices information developed by the Secretary in providing bioenergy assistance under this section.

`(f) BEST PRACTICES-

- `(1) **RECORDKEEPING-** Each eligible participant, and each biomass conversion facility contracting with the eligible participant, shall maintain and make available to the Secretary, at such times as the Secretary may request, appropriate records of methods used for activities for which payment is received under this section.
- `(2) **INFORMATION SHARING-** From the records maintained under subparagraph (A), the Secretary shall maintain, and make available to the public, information regarding--
 - `(A) the production potential (including evaluation of the environmental benefits) of a variety of eligible crops; and
 - `(B) best practices for producing, collecting, harvesting, storing, and transporting eligible crops to be used in the production of advanced biofuels.

"(m) PAYMENTS FOR COLLECTING, HARVESTING, STORING, AND TRANSPORTING BIOMASS PRODUCED ON BER CONTRACT ACREAGE, AGRICULTURAL WASTE BIOMASS, AND SUSTAINABLY-HARVESTED

AGRICULTURAL AND FOREST RESIDUES.—

- "(1) **IN GENERAL**.—Subject to paragraph (2), the Secretary may provide matching payments at a rate of \$1 for every \$1 per ton provided by the bioenergy facility, in an amount equal to not more than \$45 per ton for a period of two years—
 - "(A) to eligible participants for biomass produced on BER contract acreage in exchange for a reduction of the annual payment issued under subsection (k)(3), as determined by the Secretary;
 - "(B) to any producer of agricultural waste biomass or sustainablyharvested agricultural and forest residues in the United States for the agricultural waste or residue; and
 - "(C) for residue collected as a result of the removal of noxious and invasive species, in accordance with methods approved by the Secretary.
- "(2) **FOREST LAND OWNER ELIGIBILITY.**—Owners of forest land shall be eligible to receive payments under this subsection only if such owners are acting pursuant to a forest stewardship plan.

"(n) **FUNDING**.—Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out this section such sums as are necessary for each of fiscal years 2008 through 2012.".

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`(d) Assistance for Collection, Harvest, Storage, and Transport of Renewable Biomass-

`(1) **ESTABLISHMENT OF PROGRAM-** The Secretary shall establish a program to provide assistance to eligible participants for collecting, harvesting, storing, and transporting renewable biomass to be used in the production of advanced biofuels, biobased products, heat, or power from a biomass conversion facility.

`(2) PAYMENTS-

- `(A) IN GENERAL- An eligible participant shall receive payments under this subsection for each ton of renewable biomass delivered to a biomass conversion facility, based on a fixed rate to be established by the Secretary in accordance with subparagraph (B).
- `(B) **FIXED RATE-** The Secretary shall establish a fixed payment rate for purposes of subparagraph (A) to reflect--
 - `(i) the estimated cost of collecting, harvesting, storing, and transporting the renewable biomass; and
 - `(ii) such other factors as the Secretary determines to be appropriate.

`(g) FUNDING-

- `(1) **BIOMASS CROP TRANSITION ASSISTANCE-** Of the funds of the Commodity Credit Corporation, the Secretary shall use to carry out subsections (b) and (c) \$130,000,000 for fiscal year 2008, to remain available until expended, of which not more than \$5,000,000 may be used to carry out subsection (b)(7).
- `(2) ASSISTANCE FOR COLLECTION, HARVEST, STORAGE, AND TRANSPORT OF RENEWABLE BIOMASS- Of the funds of the Commodity

	Credit Corporation, the Secretary shall make available to carry out subsection (d) \$10,000,000 for each of fiscal years 2009 through 2011, to remain available until expended.
	`(3) ASSISTANCE FOR FOREST BIOMASS PLANNING- Of the funds made available under paragraph (1), the Secretary shall use not more than 5 percent to carry out subsection (e).
SEC. 9019. FOREST BIOMASS FOR ENERGY.	`SEC. 9013. RENEWABLE WOODY BIOMASS FOR ENERGY.
Title IX of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) is further amended by adding at the end the following new section:	
"SEC. 9018. FOREST BIOMASS FOR ENERGY.	
"(a) IN GENERAL.—The Secretary of Agriculture, through the Forest Service, shall conduct a competitive research and development program to encourage use of forest biomass for energy.	`(a) IN GENERAL- The Secretary, acting through the Chief of the Forest Service (referred to in this section as the `Secretary'), shall conduct a competitive research, technology development, and technology application program to encourage the use of renewable woody biomass for energy.
"(b) ELIGIBLE ENTITIES .—Entities eligible to compete under this program include the Forest Service (through Research and Development), other Federal agencies, State and local governments, federally recognized Indian tribes, land grant colleges and universities, and private entities.	`(b) ELIGIBLE ENTITIES- Entities eligible to compete under the program shall include `(1) the Forest Service (through Research and Development); `(2) other Federal agencies; `(3) State and local governments; `(4) federally recognized Indian tribes; `(5) colleges and universities; and `(6) private entities.
"(c) PRIORITY FOR PROJECT SELECTION.—The Secretary shall give priority to projects that—	`(c) PRIORITY FOR PROJECT SELECTION- The Secretary shall give priority under the program to projects that `(1) develop technology and techniques to use low-value woody biomass sources,
"(1) develop technology and techniques to use low value forest biomass, such as byproducts of forest health treatments and hazardous fuels reduction, for the production of energy;	such as byproducts of forest health treatments and hazardous fuels reduction, for the production of energy; `(2) develop processes that integrate production of energy from woody biomass
"(2) develop processes that integrate production of energy from forest biomass into biorefineries or other existing manufacturing streams;	into biorefineries or other existing manufacturing streams; `(3) develop new transportation fuels from woody biomass; and `(4) improve the growth and yield of trees intended for renewable energy
"(3) develop new transportation fuels from forest biomass; and	production.
"(4) improve the growth and yield of trees intended for renewable energy	

production.	
"(d) FUNDING .—Of the funds of the Commodity Credit Corporation, the Secretary shall make available to carry out this section \$15,000,000 for each of fiscal years 2008 through 2012.".	(d) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2008 through 2012.
SEC. 9019. COMMUNITY WOOD ENERGY PROGRAM.	`SEC. 9014. COMMUNITY WOOD ENERGY PROGRAM.
(a) FINDINGS .— Congress finds that—	
(1) the United States' over-reliance on fossil fuel energy has placed undue strain on the nation by compromising our economy and national security;	
(2) the United States' over-reliance on fossil fuel energy has also created new strains on our natural systems, including carbon emissions that contribute to climate change;	
(3) transportation of energy, such as heating oil, adds to carbon emissions associated with meeting our community energy needs and therefore further feeds climate change;	
(4) it is in the national interest to conserve energy and support adoption of new local, sustainable, efficient, and carbon neutral energy sources, such as wood energy, for community energy needs;	
(5) communities can save as much as 50 percent over natural gas, 80 percent over propane, 80 percent over electric heat, and 50 percent over oil heat by switching to wood energy for heating schools and other public buildings;	
(6) in fast growing communities of all sizes across the United States, municipal and country-owned forest land is playing an essential role in meeting many public needs and could also be used to help support sustainable forestry and local wood energy applications; and	
(7) the rapidly expanding base of private forest land owners nationwide includes many individuals with no experience in forest stewardship who could be given technical assistance to provide locally sourced wood supply through sustainable forest management for local wood energy applications.	
(b) Purpose .—The purpose of this section is to provide grants for community wood energy systems that are intended to—	
(1) meet community energy needs with reduced carbon intensity versus fossil	

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fuel systems;

- (2) promote energy conservation and development of new renewable energy sources;
 - (3) aid local budgets by reducing municipal and county energy costs;
- (4) increase utilization of low value wood supplies and waste, thereby strengthening the forest products economy for the benefit of forest workers and private forest land owners; and
- (5) increase awareness of energy conservation and consumption and the multiple-use values of forests among community members, especially young people.

(c) **Grant program**.—The Secretary of Agriculture, acting through the Forest Service, shall establish a program to be known as the Community Wood Energy Program to provide grants to State and local governments to acquire community wood energy systems for public buildings and to implement a community wood energy plan.

- `(a) **DEFINITIONS-** In this section:
 - `(1) COMMUNITY WOOD ENERGY PLAN- (MOVED TO PAGE 87)
 - `(2) COMMUNITY WOOD ENERGY SYSTEM- (MOVED TO PAGE 88)
- `(b) GRANT PROGRAM-
 - `(1) IN GENERAL- The Secretary, acting through the Chief of the Forest Service, shall establish a program to be known as the `Community Wood Energy Program' to provide--
 - `(A) grants of up to \$50,000 to State and local governments (or designees)--
 - `(i) to conduct feasibility studies related to community wood energy plans; and
 - `(ii) to develop community wood energy plans; and
 - `(B) competitive grants to State and local governments--
 - `(i) to acquire or upgrade community wood energy systems for public buildings; and
 - `(ii) to implement a community wood energy plan.
 - `(2) **CONSIDERATIONS-** In selecting applicants for grants under paragraph
 - (1)(B), the Secretary shall consider--
 - `(A) the energy efficiency of the proposed system; and
 - `(B) other conservation and environmental criteria that the Secretary considers appropriate.

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- (d) **USE IN PUBLIC BUILDINGS**.—A State or local government receiving a grant under subsection (c) shall use a community wood energy system acquired in whole or in part with the use of grant funds for primary use in a public facility owned by such State or local government.
- `(d) **USE IN PUBLIC BUILDINGS-** A State or local government that receives a grant under subsection (b)(1)(B) shall use a community wood energy system acquired, in whole or in part, with the use of the grant funds for primary use in a public facility owned by the State or local government.

- (e) **LIMITATION**.—A community wood energy system acquired with grant funds provided under subsection (c) shall not exceed an output of—
 - (1) 50,000,000 BTU per hour for heating; and
 - (2) 2 megawatts for electric power production.

(f) **COMMUNITY WOOD ENERGY PLAN.**—Within 18 months of receiving assistance under this section, communities shall utilize the technical assistance of the State forester to create a community wood energy plan identifying how local forests can be accessed in a sustainable manner to help meet the wood supply needs of systems purchased under this section.

- `(e) **LIMITATION-** A community wood energy system acquired with grant funds provided under subsection (b)(1)(B) shall not exceed an output of--
 - `(1) 50,000,000 Btu per hour for heating; and
 - `(2) 2 megawatts for electric power production.

`(1) **COMMUNITY WOOD ENERGY PLAN-** The term `community wood energy plan' means a plan that identifies how local forests can be accessed in a sustainable manner to help meet the wood supply needs of a community wood energy system. (MOVED FROM SUBSECTION (a))

`(c) COMMUNITY WOOD ENERGY PLAN-

- `(1) **IN GENERAL-** A State or local government that receives a grant under subsection (b)(1)(A), shall use the grant, and the technical assistance of the State forester, to create a community wood energy plan to meet the wood supply needs of the community wood energy system, in a sustainable manner, that the State or local government proposes to purchase under this section.
- `(2) USE OF PLAN- A State or local government applying to receive a

	competitive grant described in subsection (b)(1)(B) shall submit to the Secretary as part of the grant application the applicable community wood energy plan described in paragraph (1).
No similar provision.	`(3) REQUIREMENT- To be included in a community wood energy plan, property shall be subject to a forest management plan.
(g) MATCHING FUNDS.—A State or local government receiving a grant under subsection (c) shall contribute an amount of non-Federal funds towards the acquisition of community wood energy systems that is at least equal to the amount of grant funds received by such State or local government.	`(f) MATCHING FUNDS- A State or local government that receives a grant under subsection (b) shall contribute an amount of non-Federal funds towards the feasibility study, development of the community wood energy plan, or acquisition of the community wood energy systems that is at least equal to the amount of grant funds received by the State or local government under that subsection.
(h) COMMUNITY WOOD ENERGY SYSTEM DEFINED.—The term "community wood energy system" includes single facility central heating, district heating, combined heat and energy systems, and other related biomass energy systems that service schools, town halls, libraries, and other public buildings.	`(2) COMMUNITY WOOD ENERGY SYSTEM- `(A) IN GENERAL- The term `community wood energy system' means an energy system that `(i) services schools, town halls, libraries, and other public buildings; and `(ii) uses woody biomass as the primary fuel. `(B) INCLUSIONS- The term `community wood energy system' includes single facility central heating, district heating, combined heat and energy systems, and other related biomass energy systems.

(i) APPROPRIATION .— There are authorized to be appropriated such sums as may be necessary to carry out this section.	(g) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2008 through 2012.
SEC. 9020. SUPPLEMENTING CORN AS AN ETHANOL FEEDSTOCK.	No similar provision.
(a) RESEARCH AND DEVELOPMENT PROGRAM. —The Secretary of Agriculture shall establish a program to make grants of not to exceed \$1,000,000 each to no more than 20 universities for a 3-year program of demonstration of supplementing corn as an ethanol feedstock with sweet sorghum and switchgrass.	
(b) PROGRAM GOALS .—The goals of the program under this section shall be to—	
(1) enhance agronomic efficiency of the crop on marginal lands by—	
(A) developing best management practices for maintaining high yields while using less water and nitrogen than corn;	
(B) identifying and selecting plants with a high sugar content; and	
(C) developing cold-tolerant sweet sorghum varieties to enable two crops to be grown per season;	
(2) enhance ethanol processing potential in the crop by—	
(A) developing a robust technology for centralized ethanol production facilities that pair high-performing sweet sorghum lines with different yeasts to produce the best process for converting sweet sorghum juice into ethanol;	
(B) conducting process and chemical analyses of sweet sorghum sap fermentation;	
(C) introducing cellulosic hydrolyzing enzymes into sweet sorghum to promote biomass conversion; and	
(D) performing life-cycle analysis of sweet sorghum ethanol, including analysis of energy yield, efficiency, and greenhouse gas reduction;	
(3) establish a production system optimized for the region of the university conducting the research;	
(4) improve sweet sorghum lines with higher sugar production and performance with minimal agricultural inputs;	
(5) optimize sugar fermentation using selected yeast strains;	

(6) develop sweet sorghum lines with improved cold tolerance and cellulosic degradation; and	
(7) develop agricultural models for predicting agricultural performance and ethanol yield under various growing conditions.	
(c) AWARD CRITERIA .—The Secretary shall award grants under this section only to universities that—	
(1) have access to multiple lines of sweet sorghum for research; and	
(2) are located in a State where sweet sorghum is anticipated to grow well on marginal lands.	
(d) AUTHORIZATION OF APPROPRIATIONS .—There are authorized to be appropriated to the Secretary for carrying out this section \$20,000,000.	
No similar provision.	`SEC. 9011. NEW CENTURY FARM PROJECT.
	`There is authorized to be appropriated to the Secretary to support the development and operation of an integrated and sustainable biomass, feedstock, and biofuels production system to serve as a model for a new century farm \$15,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.
No similar provision.	`SEC. 9012. BIOCHAR RESEARCH, DEVELOPMENT, AND DEMONSTRATION.
	`(a) Purpose - The purpose of this section is to support research, development, and demonstration of biochar as a coproduct of bioenergy production, as a soil enhancement practice, and as a carbon management strategy.
	`(b) DEFINITION OF BIOCHAR- In this section, the term `biochar' means charcoal or biomass-derived black carbon that is added to soil to improve soil fertility, nutrient retention, and carbon content.
	`(c) GRANTS- The Secretary shall award competitive grants to eligible entities to support biochar research, development, and demonstration projects on multiple scales, including laboratory biochar research and field trials, and biochar systems on a single farm scale, local community scale, and agricultural cooperative scale.
	`(d) ELIGIBLE ENTITIES- To be eligible to receive a grant under this section, an entity shall be an eligible entity described in section 9005(d).

	`(e) Areas of Biochar Research, Development, and Demonstration- In carrying out this section, the Secretary shall solicit proposals for activities that include `(1) the installation and use of biochar production systems, including pyrolysis and thermocombustion systems, and the integration of biochar production with bioenergy and bioproducts production;
	`(2) the study of agronomic effects of biochar usage in soils, including plant growth and yield effects for different application rates and soil types, and implications for water and fertilizer needs;
	`(3) biochar characterization, including analysis of physical properties, chemical structure, product consistency and quality, and the impacts of those properties on the soil-conditioning effects of biochar in different soil types;
	`(4) the study of effects of the use of biochar on the carbon content of soils, with an emphasis on the potential for biochar applications to sequester carbon;
	`(5) the study of effects of biochar on greenhouse gas emissions relating to crop production, including nitrous oxide and carbon dioxide emissions from cropland;
	`(6) the study of the integration of renewable energy and bioenergy production with biochar production;
	`(7) the study of the economics of biochar production and use, including considerations of feedstock competition, synergies of coproduction with bioenergy, the value of soil enhancements, and the value of soil carbon sequestration; and
	`(8) such other topics as are identified by the Secretary.
	`(f) FUNDING- There is authorized to be appropriated to carry out this section \$3,000,000 for each of fiscal years 2008 through 2012.
No similar provision.	`SEC. 9016. VOLUNTARY RENEWABLE BIOMASS CERTIFICATION PROGRAM.
	`(a) ESTABLISHMENT- The Secretary, in consultation with Administrator, shall establish a voluntary program to certify renewable biomass that meets sustainable growing standards designed

`(1) to reduce greenhouse gases and improve soil carbon content; `(2) to protect wildlife habitat, and
`(3) to protect air, soil, and water quality.
`(b) VOLUNTARY CERTIFICATION REQUIREMENTS- To qualify for certification under the program established under subsection (a), a biomass crop shall be inspected and certified as meeting the standards adopted under subsection (c) by an inspector designated under subsection (d).
`(c) PRODUCTION STANDARDS-
`(1) IN GENERAL- The Secretary shall adopt standards for the certification of renewable biomass under subsection (b) that will apply to those producers who elect to participate in the voluntary certification program.
`(2) REQUIREMENT- The standards under paragraph (1) shall provide measurement of a numerical reduction in greenhouse gases, improvement to soil carbon content, and reduction in soil and water pollutants, based on the recommendations of an advisory committee jointly established by the Secretary and the Administrator.
`(d) INSPECTORS- The Secretary shall designate inspectors that the Secretary determines are qualified to carry out inspections and certifications under subsection (b) in order to certify renewable biomass under this section.
`(e) DESIGNATION- A product produced from renewable biomass that is certified under this section may be designated as having been produced from certified renewable biomass if
`(1) the producer of the product verifies that the product was produced from renewable biomass; and
`(2) the verification includes a copy of the certification obtained in accordance with subsection (b).

No similar provision.	`SEC. 9018. BIOFUELS INFRASTRUCTURE STUDY.
	`(a) In General- The Secretary, in collaboration with the Secretary of Energy, the Administrator, and the Secretary of Transportation, shall
	`(1) conduct an assessment of the infrastructure needs for expanding the domestic production, transport, and marketing of biofuels and bioenergy;
	`(2) formulate recommendations for infrastructure development needs and approaches; and
	`(3) submit a report describing the assessment and recommendations to `(A) the Committee on Agriculture, Nutrition, and Forestry of the Senate; `(B) the Committee on Commerce, Science, and Transportation of the Senate; `(C) the Committee on Energy and Natural Resources of the Senate; and `(D) the Committee on Environment and Public Works of the Senate.
	`(b) INFRASTRUCTURE AREAS- In carrying out subsection (a), the Secretary shall consider
	`(1) biofuel transport and delivery infrastructure issues, including shipment by rail, truck, pipeline, or barge; `(2) biofuel storage needs;
	`(3) biomass feedstock delivery needs, including adequacy of rural roads; `(4) biomass feedstock storage needs;
	`(5) water resource needs, including water requirements for biorefineries; `(6) education and outreach for agricultural producers transitioning to cellulosic feedstocks; and
	`(7) such other infrastructure issues as the Secretary may determine.
	`(c) CONSIDERATIONS- In carrying out subsection (a), the Secretary shall consider `(1) estimated future biofuels production levels of
	`(A) 20,000,000,000 gallons per year to 40,000,000,000 gallons per year by 2020; and `(B) 50,000,000,000 gallons per year to 75,000,000,000 gallons per year by
	2030; `(2) the feasibility of shipping biofuels through existing pipelines; `(3) the development of new biofuels pipelines, including siting, financing,

	timing, and other economic issues;
	`(4) the environmental implications of alternative approaches to infrastructure development;
	`(5) the resource use and conservation characteristics of alternative approaches to
	infrastructure development; `(6) the impact on the development of renewable energy when public and private utilities do not pay competitive rates for wind, solar, and biogas energy from agricultural sources; and `(7) the environmental benefits of planting perennial grasses for the production of cellulosic ethanol.
	`(d) IMPLEMENTATION- In carrying out this section, the Secretary `(1) shall consult with individuals and entities with interest or expertise in the areas described in subsections (b) and (c); and `(2) may issue a solicitation for a competition to select a contractor to support the Secretary.
	`(e) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to carry out this section \$1,000,000 for each of fiscal years 2008 and 2009.
No similar provision.	`SEC. 9019. RURAL NITROGEN FERTILIZER STUDY.
	`(a) PURPOSES- The purposes of this section are `(1) to assess the feasibility of producing nitrogen fertilizer from renewable energy resources in rural areas; and
	`(2) to formulate recommendations for a program to promote rural nitrogen fertilizer production from renewable energy resources in the future.
	`(b) STUDY- The Secretary shall
	`(1) conduct a study to assess and summarize the current state of knowledge regarding the potential for the production of nitrogen fertilizer from renewable energy sources in rural areas;
	`(2) identify the critical challenges to commercialization of rural production of nitrogen fertilizer from renewables; and
	`(3) not later than 270 days after the date of enactment of this section, submit to the Committee on Agriculture of the House of Representatives and the Committee

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on Agriculture, Nutrition, and Forestry and the Committee on Commerce, Science, and Transportation of the Senate a report that summarizes the results of the activities described in paragraphs (1) and (2).

`(c) NEEDS-

- `(1) **IN GENERAL-** Based on the results of the study described in subsection (b), the Secretary shall identify the critical needs to commercializing the rural production of nitrogen fertilizer from renewables, including--
 - `(A) identifying alternative processes for renewables-to-nitrogen fertilizer production;
 - `(B) identifying efficiency improvements that are necessary for each component of renewables-to-nitrogen fertilizer production processes to produce cost-competitive nitrogen fertilizer;
 - `(C) identifying research and technology priorities for the most promising technologies;
 - `(D) identifying economic analyses needed to better understand the commercial potential of rural nitrogen production from renewables;
 - `(E) identifying additional challenges impeding commercialization, including--
 - `(i) cost competition from nitrogen fertilizer produced using natural gas and coal;
 - `(ii) modifications or expansion needed to the currently-installed nitrogen fertilizer (anhydrous ammonia) pipeline and storage tank system to enable interconnection of on-farm or rural renewables-tonitrogen fertilizer systems;
 - `(iii) impact on nitrogen fertilizer (anhydrous ammonia) transportation infrastructure, safety, and security;
 - `(iv) supply of competitively-priced renewable electricity; and
 - `(v) impacts on domestic water supplies; and
 - `(F) determining greenhouse gas reduction benefits of producing nitrogen fertilizer from renewable energy.
- `(d) **PROGRAM RECOMMENDATIONS-** As part of the report described in subsection (b)(3) and based on the needs identified in subsection (c), the Secretary shall provide recommendations on--
 - `(1) the establishment of a research, development, and demonstration program to support commercialization of rural nitrogen production using renewables;
 - `(2) the appropriate contents of the program;
 - `(3) the appropriate approach to implementing the program, including participants and funding plans; and

	`(4) legislation to support commercialization of rural nitrogen production using renewables.
	`(e) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to carry out this section \$1,000,000 for fiscal year 2008.
No similar provision.	`SEC. 9020. STUDY OF LIFE-CYCLE ANALYSIS OF BIOFUELS.
	`(a) IN GENERAL- The Secretary, in consultation with the Secretary of Energy and the Administrator, shall conduct a study of
	`(1) published methods for evaluating the lifecycle greenhouse gas emissions of conventional fuels and biofuels; and
	`(2) methods for performing simplified, streamlined lifecycle analyses of the greenhouse gas emissions of conventional fuels and biofuels.
	`(b) Report- Not later than 1 year after the date of enactment of this section, the Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report that describes the results of the study conducted under subsection (a), including recommendations for a method for performing a simplified, streamlined lifecycle analysis of the greenhouse gas emissions of biofuels and fossil fuels that includes
	`(1) greenhouse gas emissions relating to the production, extraction, transportation, storage, and waste disposal of the fuels and the feedstocks of the fuels, including the greenhouse gases associated with electrical and thermal energy inputs;
	`(2) greenhouse gas emissions relating to the distribution, marketing, and use of the fuels; and
	`(3) to the maximum extent practicable, direct and indirect greenhouse gas emissions from changes in land use and land cover that occur domestically or internationally as a result of biofuel feedstock production.
	`(c) UPDATE- Not later than 2 years after the date on which the Secretary submits the report under subsection (b), the Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and

	Forestry of the Senate an update containing recommendations for an improved method for conducting lifecycle analysis of the greenhouse gas emissions of biofuels and fossil fuels that takes into account advances in the understanding of the emissions.
No similar provision.	`SEC. 9021. E-85 FUEL PROGRAM.
	`(a) DEFINITIONS- In this section: `(1) E-85 FUEL- The term `E-85 fuel' means a blend of gasoline at least 85 percent (or any other percentage, but not less than 70 percent, as determined by the Secretary, by rule, to provide for requirements relating to cold start, safety, or vehicle functions) of the content of which is derived from ethanol. `(2) ELIGIBLE FACILITY- The term `eligible facility' means an ethanol production facility, the majority ownership of which is comprised of agricultural producers.
	`(b) Program- The Secretary shall make grants under this section to eligible facilities
	`(1) to install E-85 fuel infrastructure, including infrastructure necessary `(A) for the direct retail sale of E-85 fuel, including E-85 fuel pumps and storage tanks; and `(B) to directly market E-85 fuel to gas retailers, including in-line blending equipment, pumps, storage tanks, and load-out equipment; and
	`(2) to provide subgrants to direct retailers of E-85 fuel that are located in a rural area (as defined in section 343(a) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a))) for the purpose of installing E-85 fuel infrastructure for the direct retail sale of E-85 fuel, including E-85 fuel pumps and storage tanks.
	`(c) Cost Sharing-
	`(1) GRANTS- The amount of a grant under this section shall be equal to 20 percent of the total costs of the installation of the E-85 fuel infrastructure, as determined by the Secretary.
	`(2) RELATIONSHIP TO OTHER FEDERAL FUNDING- The amount of a grant that an eligible facility receives under this section shall be reduced by the amount of other Federal funding that the eligible facility receives for the same

	purpose, as determined by the Secretary.
	`(3) LIMITATION- Not more than 70 percent of the total costs of E-85 fuel infrastructure provided assistance under this section shall be provided by the Federal Government and State and local governments.
	`(d) AUTHORIZATION OF APPROPRIATIONS- Subject to the availability of appropriations, there is authorized to be appropriated to carry out this section \$20,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.
No similar provision.	`SEC. 9022. RESEARCH AND DEVELOPMENT OF RENEWABLE ENERGY.
	`(a) In General- The Secretary, in conjunction with the Colorado Renewable Energy Collaboratory, shall carry out a research and development program relating to renewable energy
	`(1) to conduct research on and develop high-quality energy crops that
	`(A) have high energy production values;
	`(B) are cost efficient for producers and refiners;
	`(C) are well suited to high yields with minimal inputs in arid and semiarid regions; and
	`(D) are regionally appropriate;
	`(2) to conduct research on and develop biorefining and biofuels through multidisciplinary research, including research relating to
	`(A) biochemical engineering;
	`(B) process engineering;
	`(C) thermochemical engineering;
	`(D) product engineering; and

`(E) systems engineering;
`(3) to develop cost-effective methods for the harvesting, handling, transport, and storage of cellulosic biomass feedstocks;
`(4) to conduct research on and develop fertilizers from biobased sources other than hydrocarbon fuels;
`(5) to develop energy- and water-efficient irrigation systems;
`(6) to research and develop water-efficient biofuel production technologies;
`(7) to research and develop additional biobased products;
`(8) in cooperation with the Department of Energy and the Department of Defense, to develop storage and conversion technologies for wind- and solar-generated power for small-scale and utility-scale generation facilities; and
`(9) in cooperation with the Department of Energy, to research fuel cell technologies for use in farm, ranch, and rural applications.
`(b) AUTHORIZATION OF APPROPRIATIONS-
`(1) IN GENERAL- There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2008 through 2012, to remain available until expended.
`(2) ADDITIONAL FUNDS- In addition to funds made available under paragraph (1), there are authorized to be appropriated
`(A) \$110,000,000 to the Under Secretary for Research, Education, and Economics, acting through the Agricultural Research Service, for cellulosic biofuel research for each of fiscal years 2008 through 2012; and
`(B) \$110,000,000 to the Secretary and the Secretary of Energy for the development of smaller-scale biorefineries and biofuel plants for each of fiscal years 2008 through 2012.

No similar provision.	`SEC. 9023. NORTHEAST DAIRY NUTRIENT MANAGEMENT AND ENERGY DEVELOPMENT PROGRAM.
	This provision moved to Research Title side-by-side.
No similar provision.	SEC. 9002. SENSE OF THE SENATE CONCERNING HIGHER LEVELS OF ETHANOL BLENDED GASOLINE.
	(a) FINDINGS- The Senate finds that, as of the date of enactment of this Act
	(1) annual ethanol production capacity totals 6,800,000,000 gallons; (2) current and planned construction of ethanol refineries will likely increase annual ethanol production capacity to 12,000,000,000 to 13,000,000,000 gallons by December 31, 2009; (3) under existing regulations, only gasoline blended with up to 10 percent ethanol (commonly known as `E-10') may be consumed by nonflexible fuel vehicles; (4) the total market demand for E-10 (A) is limited to 10 percent of domestic motor fuel consumption; and (B) is further constrained by State-administered reformulated gasoline regulations and regional infrastructure constraints; (5) beyond the market demand for E-10, insufficient E-85 infrastructure exists to absorb the increased ethanol production beyond 12,000,000,000 to 13,000,000,000 gallons in the short term; (6) the approval of intermediate blends of ethanol-blended gasoline, such as E-13, E-15, E-20, and higher blends, is critical to the uninterrupted growth of the United States biofuels industry; and (7) maintaining the growth of the United States biofuels industry is a matter of national security and sustainable economic growth.
	(b) SENSE OF THE SENATE- It is the sense of the Senate that the Secretary should
	(1) collaborate with the Secretary of Energy, the Secretary of Transportation, and the Administrator of the Environmental Protection Agency in conducting a study of the economic and environmental effects of intermediate blends of ethanol in United States fuel supply;
	(2) ensure that the approval of intermediate blends of ethanol occurs after the appropriate tests have successfully concluded proving the drivability,

	compatibility, emissions, durability, and health effects of higher blends of ethanol-blended gasoline; and
	(3) ensure that the approval of intermediate blends of ethanol-blended gasoline occurs by not later than 1 year after the date of enactment of this Act.
No similar provision.	SEC. 9003. CONFORMING AMENDMENTS.
	(a) This provision moved to page 46 – Biomass R and D Act.
	(b) This provision moved to page 13 – Biobased Markets Program.
No similar provision.	SEC. 9004. SENSE OF CONGRESS REGARDING COOPERATIVE REGIONAL RESEARCH, EXTENSION, AND EDUCATION PROGRAMS ON BIOFUELS AND BIOPRODUCTS.
	It is the sense of Congress that the Secretary shall continue to allow and support efforts of regional consortiums of public institutions, including land grant universities and State departments of agriculture, to jointly support the bioeconomy through research, extension, and education activities, including- (1) expanding the use of biomass; (2) improving the efficiency and sustainability of bioenergy; (3) supporting local ownership in the bioeconomy; (4) communicating about the bioeconomy; (5) facilitating information sharing; and (6) assisting to coordinate regional approaches.