TITLE IX—ENERGY

Sec. 9001. Energy.

"TITLE IX—ENERGY

- "Sec. 9001. Definitions.
- "Sec. 9002. Biobased markets program.
- "Sec. 9003. Biodiesel fuel education.
- "Sec. 9004. Biomass crop transition.
- "Sec. 9005. Biorefinery and repowering assistance.
- "Sec. 9006. Bioenergy program for advanced biofuels.
- "Sec. 9007. Rural Energy for America Program.
- "Sec. 9008. Biomass Research and Development Act of 2000.
- "Sec. 9009. Sun grant program.
- "Sec. 9010. Regional biomass crop experiments.
- "Sec. 9011. Biochar research, development, and demonstration.
- "Sec. 9012. Renewable woody biomass for energy.
- "Sec. 9013. Community wood energy program.
- "Sec. 9014. Rural energy systems renewal.
- "Sec. 9015. Voluntary renewable biomass certification program.
- "Sec. 9016. Administration.
- "Sec. 9017. Biofuels infrastructure study.
- "Sec. 9018. Rural nitrogen fertilizer study.
- "Sec. 9019. Study of life-cycle analysis of biofuels.

Sec. 9002. Conforming amendments.

TITLE IX—ENERGY

- 2 SEC. 9001. ENERGY.
- 3 Title IX of the Farm Security and Rural Investment
- 4 Act of 2002 (7 U.S.C. 8101 et seq.) is amended to read
- 5 as follows:

1

6 "TITLE IX—ENERGY

- 7 "SEC. 9001. DEFINITIONS.
- 8 "Except as otherwise provided, in this title:
- 9 "(1) ADMINISTRATOR.—The term 'Adminis-
- trator' means the Administrator of the Environ-
- 11 mental Protection Agency.

1	"(2) Advisory committee.—The term 'Advi-
2	sory Committee' means the Biomass Research and
3	Development Technical Advisory Committee estab-
4	lished by section $9008(d)(1)$.
5	"(3) Advanced biofuel.—
6	"(A) IN GENERAL.—The term 'advanced
7	biofuel' means fuel derived from renewable bio-
8	mass other than corn starch.
9	"(B) Inclusions.—The term 'advanced
10	biofuel' includes—
11	"(i) biofuel derived from cellulose
12	hemicellulose, or lignin;
13	"(ii) biofuel derived from sugar and
14	starch (other than ethanol derived from
15	corn starch);
16	"(iii) biofuel derived from waste mate-
17	rial, including crop residue, other vegeta-
18	tive waste material, animal waste, food
19	waste, and yard waste;
20	"(iv) diesel-equivalent fuel derived
21	from renewable biomass, including vege-
22	table oil and animal fat;
23	"(v) biogas (including landfill gas and
24	sewage waste treatment gas) produced

1	through the conversion of organic matter
2	from renewable biomass;
3	"(vi) butanol or other alcohols pro-
4	duced through the conversion of organic
5	matter from renewable biomass; and
6	"(vii) other fuel derived from cel-
7	lulosic biomass.
8	"(4) BIOBASED PRODUCT.—The term 'biobased
9	product' means a product determined by the Sec-
10	retary to be a commercial or industrial product
11	(other than food or feed) that is—
12	"(A) composed, in whole or in significant
13	part, of biological products, including renewable
14	domestic agricultural materials and forestry
15	materials; or
16	"(B) an intermediate ingredient or feed-
17	stock.
18	"(5) BIOFUEL.—The term 'biofuel' means a
19	fuel derived from renewable biomass.
20	"(6) BIOMASS CONVERSION FACILITY.—The
21	term 'biomass conversion facility' means a facility
22	that converts or proposes to convert renewable bio-
23	mass into—
24	"(A) heat;
25	"(B) power;

1	"(C) biobased products; or
2	"(D) advanced biofuels.
3	"(7) BIOREFINERY.—The term 'biorefinery'
4	means equipment and processes that—
5	"(A) convert renewable biomass into
6	biofuels and biobased products; and
7	"(B) may produce electricity.
8	"(8) Board.—The term 'Board' means the
9	Biomass Research and Development Board estab-
10	lished by section 9008(c).
11	"(9) Indian tribe.—The term 'Indian tribe'
12	has the meaning given the term in section 4 of the
13	Indian Self-Determination and Education Assistance
14	Act (25 U.S.C. 450b).
15	"(10) Institution of higher education.—
16	The term 'institution of higher education' has the
17	meaning given the term in section 102(a) of the
18	Higher Education Act of 1965 (20 U.S.C. 1002(a)).
19	"(11) Intermediate ingredient or feed-
20	STOCK.—The term 'intermediate ingredient or feed-
21	stock' means a material or compound made in whole
22	or in significant part from biological products, in-
23	cluding renewable agricultural materials (including
24	plant, animal, and marine materials) or forestry ma-

1	terials, that are subsequently used to make a more
2	complex compound or product.
3	"(12) Renewable biomass.—The term 're-
4	newable biomass' means—
5	"(A) materials, pre-commercial thinnings,
6	or removed exotic species that—
7	"(i) are byproducts of preventive
8	treatments (such as trees, wood, brush,
9	thinnings, chips, and slash), that are re-
10	moved—
11	"(I) to reduce hazardous fuels;
12	"(II) to reduce or contain disease
13	or insect infestation; or
14	"(III) to restore ecosystem
15	health;
16	"(ii) would not otherwise be used for
17	higher-value products; and
18	"(iii) are harvested from National
19	Forest System land or public lands (as de-
20	fined in section 103 of the Federal Land
21	Policy and Management Act of 1976 (43
22	U.S.C. 1702)), in accordance with—
23	"(I) Federal and State law;
24	"(II) applicable land manage-
25	ment plans; and

1	"(III) the requirements for old-
2	growth maintenance, restoration, and
3	management direction of paragraphs
4	(2), (3), and (4) of subsection (e) of
5	section 102 of the Healthy Forests
6	Restoration Act of 2003 (16 U.S.C.
7	6512) and the requirements for large-
8	tree retention of subsection (f) of that
9	section; or
10	"(B) any organic matter that is available
11	on a renewable or recurring basis from non-
12	Federal land or land belonging to an Indian or
13	Indian tribe that is held in trust by the United
14	States or subject to a restriction against alien-
15	ation imposed by the United States, including—
16	"(i) renewable plant material, includ-
17	ing—
18	"(I) feed grains;
19	"(II) other agricultural commod-
20	ities;
21	"(III) other plants and trees; and
22	"(IV) algae; and
23	"(ii) waste material, including—
24	"(I) crop residue;

7

1	"(II) other vegetative waste ma-
2	terial (including wood waste and wood
3	residues);
4	"(III) animal waste and byprod-
5	ucts (including fats, oils, greases, and
6	manure);
7	"(IV) construction waste; and
8	"(V) food waste and yard waste
9	"(13) Renewable energy.—The term 'renew-
10	able energy means energy derived from—
11	"(A) a wind, solar, renewable biomass
12	ocean (including tidal, wave, current, and ther-
13	mal), geothermal, or hydroelectric source; or
14	"(B) hydrogen derived from renewable bio-
15	mass or water using an energy source described
16	in subparagraph (A).
17	"(14) Rural area.—Except as otherwise pro-
18	vided in this title, the term 'rural area' has the
19	meaning given the term in section 343(a)(13)(A) of
20	the Consolidated Farm and Rural Development Act
21	(7 U.S.C. 1991(a)(13)(A)).
22	"(15) Secretary.—The term 'Secretary
23	means the Secretary of Agriculture.

1	"SEC. 9002. BIOBASED MARKETS PROGRAM.
2	"(a) Federal Procurement of Biobased Prod-
3	UCTS.—
4	"(1) Definition of Procuring Agency.—In
5	this subsection, the term 'procuring agency
6	means—
7	"(A) any Federal agency that is using
8	Federal funds for procurement; or
9	"(B) a person that is a party to a contract
10	with any Federal agency, with respect to work
11	performed under such a contract.
12	"(2) Application of Section.—Except as
13	provided in paragraph (3), each procuring agency
14	shall comply with this subsection (including any reg-
15	ulations issued under this subsection), with respect
16	to any purchase or acquisition of a procurement
17	item for which—
18	"(A) the purchase price of the item ex-
19	ceeds \$10,000; or
20	"(B) the quantity of the items or of func-
21	tionally-equivalent items purchased or acquired
22	during the preceding fiscal year was at least
23	\$10,000.
24	"(3) Procurement preference.—
25	"(A) In general.—Except as provided in
26	subparagraph (B), after the date specified in

1	applicable guidelines prepared pursuant to
2	paragraph (5), each procuring agency that pro-
3	cures any items designated in the guidelines
4	and items containing designated biobased inter-
5	mediate ingredients and feedstocks shall, in
6	making procurement decisions (consistent with
7	maintaining a satisfactory level of competition,
8	considering the guidelines), give preference to
9	items that—
10	"(i) are composed of the highest per-
11	centage of biobased products practicable;
12	"(ii) are composed of at least 5 per-
13	cent of intermediate ingredients and feed-
14	stocks (or a lesser percentage that the Sec-
15	retary determines to be appropriate) as
16	designated by the Secretary; or
17	"(iii) comply with the regulations
18	issued under section 103 of Public Law
19	100–556 (42 U.S.C. 6914b–1).
20	"(B) Flexibility.—Notwithstanding sub-
21	paragraph (A), a procuring agency may decide
22	not to procure items described in that subpara-
23	graph if the procuring agency determines that
24	the items—

1	"(i) are not reasonably available with-
2	in a reasonable period of time;
3	"(ii) fail to meet—
4	"(I) the performance standards
5	set forth in the applicable specifica-
6	tions; or
7	(Π) the reasonable performance
8	standards of the procuring agencies;
9	or
10	"(iii) are available only at an unrea-
11	sonable price.
12	"(C) CERTIFICATION.—After the date
13	specified in any applicable guidelines prepared
14	pursuant to paragraph (5), contracting offices
15	shall require that, with respect to biobased
16	products, vendors certify that the biobased
17	products to be used in the performance of the
18	contract will comply with the applicable speci-
19	fications or other contractual requirements.
20	"(4) Specifications.—Each Federal agency
21	that has the responsibility for drafting or reviewing
22	procurement specifications shall, not later than 1
23	year after the date of publication of applicable
24	guidelines under paragraph (5), or as otherwise
25	specified in the guidelines, ensure that the specifica-

1	tions require the use of biobased products consistent
2	with this subsection.
3	"(5) Guidelines.—
4	"(A) IN GENERAL.—The Secretary, after
5	consultation with the Administrator, the Ad-
6	ministrator of General Services, and the Sec-
7	retary of Commerce (acting through the Direc-
8	tor of the National Institute of Standards and
9	Technology), shall prepare, and from time to
10	time revise, guidelines for the use of procuring
11	agencies in complying with the requirements of
12	this subsection.
13	"(B) REQUIREMENTS.—The guidelines
14	under this paragraph shall—
15	"(i) designate those items that are or
16	can be produced with biobased products
17	(including biobased products for which
18	there is only a single product or manufac-
19	turer in the category) and the procurement
20	of which by procuring agencies will carry
21	out the objectives of this subsection;
22	"(ii) designate those intermediate in-
23	gredients and feedstocks and finished prod-
24	ucts that contain significant portions of
25	biobased materials or components the pro-

1	curement of which by procuring agencies
2	will carry out the objectives of this sub-
3	section;
4	"(iii) set forth recommended practices
5	with respect to the procurement of
6	biobased products and items containing
7	such materials and with respect to certifi-
8	cation by vendors of the percentage of
9	biobased products used;
10	"(iv) provide information as to the
11	availability, relative price, performance
12	and environmental and public health bene-
13	fits, of such materials and items; and
14	"(v) automatically designate those
15	items that are composed of materials and
16	items designated pursuant to paragraph
17	(3), if the content of the final product ex-
18	ceeds 50 percent (unless the Secretary de-
19	termines a different composition percent-
20	age).
21	"(C) Information provided.—Informa-
22	tion provided pursuant to subparagraph (B)(iv)
23	with respect to a material or item shall be con-
24	sidered to be provided for another item made
25	with the same material or item.

1	"(D) Prohibition.—Guidelines issued
2	under this paragraph may not require a manu-
3	facturer or vendor of biobased products, as a
4	condition of the purchase of biobased products
5	from the manufacturer or vendor, to provide to
6	procuring agencies more data than would be re-
7	quired to be provided by other manufacturers or
8	vendors offering products for sale to a pro-
9	curing agency, other than data confirming the
10	biobased content of a product.
11	"(E) STATE PROCUREMENT.—Not later
12	than 180 days after the date of enactment of
13	this section, the Secretary shall offer procure-
14	ment system models that States may use for
15	the procurement of biobased products by the
16	States.
17	"(6) Administration.—
18	"(A) Office of federal procurement
19	POLICY.—The Office of Federal Procurement
20	Policy, in cooperation with the Secretary,
21	shall—
22	"(i) coordinate the implementation of
23	this subsection with other policies for Fed-
24	eral procurement:

14

1	"(ii) annually collect the information
2	required to be reported under subpara-
3	graph (B) and make the information pub-
4	licly available;
5	"(iii) take a leading role in conducting
6	proactive research to inform and promote
7	the adoption of and compliance with pro-
8	curement requirements for biobased prod-
9	ucts by Federal agencies; and
10	"(iv) not less than once every 2 years,
11	submit to Congress a report that—
12	"(I) describes the progress made
13	in carrying out this subsection, includ-
14	ing agency compliance with paragraph
15	(4); and
16	"(II) contains a summary of the
17	information reported pursuant to sub-
18	paragraph (B).
19	"(B) OTHER AGENCIES.—To assist the Of-
20	fice of Federal Procurement Policy in carrying
21	out subparagraph (A)—
22	"(i) each procuring agency shall sub-
23	mit each year to the Office of Federal Pro-
24	curement Policy, to the maximum extent
25	practicable, information concerning—

1	"(I) actions taken to implement
2	paragraphs (3), (4), and (7);
3	"(II) the results of the annual re-
4	view and monitoring program estab-
5	lished under paragraph (7)(B)(iii);
6	"(III) the number and dollar
7	value of contracts entered into during
8	the year that include the direct pro-
9	curement of biobased products;
10	"(IV) the number of service and
11	construction (including renovations
12	and modernizations) contracts entered
13	into during the year that include lan-
14	guage on the use of biobased prod-
15	ucts; and
16	"(V) the types and dollar value
17	of biobased products actually used by
18	contractors in carrying out service
19	and construction (including renova-
20	tions and modernizations) contracts
21	during the previous year; and
22	"(ii) the General Services Administra-
23	tion and the Defense Logistics Agency
24	shall submit each year to the Office of
25	Federal Procurement Policy, to the max-

1	imum extent practicable, information con-
2	cerning the types and dollar value of
3	biobased products purchased by procuring
4	agencies through GSA Advantage!, the
5	Federal Supply Schedule, and the Defense
6	Logistic Agency (including the DoD
7	EMall).
8	"(7) Procurement Program.—
9	"(A) In general.—Not later than 1 year
10	after the date of publication of applicable guide-
11	lines under paragraph (5), each Federal agency
12	shall develop a procurement program that—
13	"(i) will ensure that items composed
14	of biobased products will be purchased to
15	the maximum extent practicable; and
16	"(ii) is consistent with applicable pro-
17	visions of Federal procurement law.
18	"(B) MINIMUM REQUIREMENTS.—Each
19	procurement program required under this para-
20	graph shall, at a minimum, contain—
21	"(i) a biobased products preference
22	program;
23	"(ii) an agency promotion program to
24	promote the preference program adopted
25	under clause (i); and

17

1 "(iii) annual review and monitoring of
2 the eff	fectiveness of the procurement pro-
gram o	of the agency.
4 "(C) C	ONSIDERATION.—
5 "(i) In General.—In developing a
6 prefere	ence program, an agency shall—
7	"(I) consider the options de-
8 se	ribed in clauses (ii) and (iii); and
9	"(II) adopt 1 of the options, or a
10 su	abstantially equivalent alternative,
fo fo	r inclusion in the procurement pro-
12 gr	am.
"(ii) Case-by-case policy develop-
MENT	
15	"(I) In General.—Subject to
16 pa	aragraph (3)(B), except as provided
in	subclause (II), in developing a pref-
er er	ence program, an agency shall con-
19 sie	der a policy of awarding contracts to
20 th	e vendor offering an item composed
of of	the highest percentage of biobased
22 pr	roducts practicable.
23	"(II) CERTAIN CONTRACTS AL-
24 LC	OWED.—Subject to paragraph
25 (3	(B), an agency may make an

1	award to a vendor offering items with
2	less than the maximum biobased prod-
3	ucts content.
4	"(iii) Minimum content stand-
5	ARDS.—In developing a preference pro-
6	gram, an agency shall consider minimum
7	biobased products content specifications
8	that are established in a manner that en-
9	sures that the biobased products content
10	required is consistent with this subsection,
11	without violating paragraph (3)(B).
12	"(b) Labeling.—
13	"(1) In general.—The Secretary, in consulta-
14	tion with the Administrator, shall establish a vol-
15	untary program under which the Secretary author-
16	izes producers of biobased products to use the label
17	'USDA Certified Biobased Product'.
18	"(2) Eligibility criteria.—
19	"(A) Criteria.—
20	"(i) In general.—Not later than 90
21	days after the date of the enactment of
22	this section, except as provided in clause
23	(ii), the Secretary, in consultation with the
24	Administrator and representatives from
25	small and large businesses, academia,

1	other Federal agencies, and such other
2	persons as the Secretary considers appro-
3	priate, shall issue criteria (as of the date
4	of enactment of this section) for deter-
5	mining which products may qualify to re-
6	ceive the label under paragraph (1).
7	"(ii) Exception.—Clause (i) shall
8	not apply to final criteria that have been
9	issued (as of the date of enactment of this
10	section) by the Secretary.
11	"(B) Requirements.—Criteria issued
12	under subparagraph (A)—
13	"(i) shall encourage the purchase of
14	products with the maximum biobased con-
15	tent;
16	"(ii) shall provide that the Secretary
17	may designate as biobased for the purposes
18	of the voluntary program established under
19	this subsection finished products that con-
20	tain significant portions of biobased mate-
21	rials or components; and
22	"(iii) to the maximum extent prac-
23	ticable, should be consistent with the
24	guidelines issued under subsection (a)(5).

1	"(3) Use of label.—The Secretary shall en-
2	sure that the label referred to in paragraph (1) is
3	used only on products that meet the criteria issued
4	pursuant to paragraph (2).
5	"(4) Recognition.—The Secretary shall—
6	"(A) establish a voluntary program to rec-
7	ognize Federal agencies and private entities
8	that use a substantial amount of biobased prod-
9	ucts; and
10	"(B) encourage Federal agencies to estab-
11	lish incentives programs to recognize Federal
12	employees or contractors that make exceptional
13	contributions to the expanded use of biobased
14	products.
15	"(c) Limitation.—Nothing in this section (other
16	than subsections (f), (g), and (h)) shall apply to the pro-
17	curement of motor vehicle fuels, heating oil, or electricity.
18	"(d) Inclusion.—
19	"(1) IN GENERAL.—Not later than 90 days
20	after the date of enactment of the Food and Energy
21	Security Act of 2007, the Architect of the Capitol,
22	the Sergeant at Arms of the Senate, and the Chief
23	Administrative Officer of the House of Representa-
24	tives shall establish procedures that apply the re-

1	quirements of this section to procurement for the
2	Capitol Complex.
3	"(2) Annual Showcase.—Beginning in cal-
4	endar year 2008, the Secretary shall sponsor or oth-
5	erwise support, consistent with applicable Federal
6	laws (including regulations), an annual exposition at
7	which entities may display and demonstrate biobased
8	products.
9	"(e) Testing of Biobased Products.—
10	"(1) IN GENERAL.—The Secretary may estab-
11	lish 1 or more national testing centers for biobased
12	products to verify performance standards, biobased
13	contents, and other product characteristics.
14	"(2) Requirement.—In establishing 1 or more
15	national testing centers under paragraph (1), the
16	Secretary shall give preference to entities that have
17	established capabilities and experience in the testing
18	of biobased materials and products.
19	"(f) BIOENERGY AND OTHER BIOBASED PRODUCTS
20	EDUCATION AND AWARENESS CAMPAIGN.—
21	"(1) In General.—The Secretary in consulta-
22	tion with the Secretary of Energy, shall establish a
23	program to make competitive grants to eligible enti-
24	ties to carry out broad-based education and public

1	awareness campaigns relating to bioenergy (exclud-
2	ing biodiesel) and other biobased products.
3	"(2) Eligible entities.—An entity eligible to
4	receive a grant described in paragraph (1) is an en-
5	tity that has demonstrated a knowledge of bioenergy
6	and other biobased products and is—
7	"(A) a State energy or agricultural office;
8	"(B) a regional, State-based, or tribal en-
9	ergy organization;
10	"(C) a land-grant college or university (as
11	defined in section 1404 of the National Agricul-
12	tural Research, Extension, and Teaching Policy
13	Act of 1977 (7 U.S.C. 3103)) or other institu-
14	tion of higher education;
15	"(D) a rural electric cooperative or utility;
16	"(E) a nonprofit organization, including an
17	agricultural trade association, resource con-
18	servation and development district, and energy
19	service provider;
20	"(F) a State environmental quality office;
21	or
22	"(G) any other similar entity, other than a
23	Federal agency or for-profit entity, as deter-
24	mined by the Secretary.
25	"(g) Reports.—

1	"(1) In general.—Not later than 180 days
2	after the date of enactment of this section and each
3	year thereafter, the Secretary shall submit to Con-
4	gress a report on the implementation of this section.
5	"(2) Contents.—The report shall include—
6	"(A) a comprehensive management plan
7	that establishes tasks, milestones, and
8	timelines, organizational roles and responsibil-
9	ities, and funding allocations for fully imple-
10	menting this section; and
11	"(B) information on the status of imple-
12	mentation of—
13	"(i) item designations (including des-
14	ignation of intermediate ingredients and
15	feedstocks); and
16	"(ii) the voluntary labeling program
17	established under subsection (b).
18	"(h) Funding.—
19	"(1) In general.—Of the funds of the Com-
20	modity Credit Corporation, the Secretary shall use,
21	to the maximum extent practicable, \$3,000,000 for
22	each of fiscal years 2008 through 2012—
23	"(A) to continue mandatory funding for
24	biobased products testing as required to carry
25	out this section; and

1 "(B) to carry out the bioenergy education 2 and awareness campaign under subsection (f). 3 "(2) Authorization of appropriations.—In 4 addition to any other funds made available to carry 5 out this section, there are authorized to be appro-6 priated to carry out this section such sums as are 7 necessary for each of fiscal years 2008 through 8 2012. 9 "(3) Priority.—At the discretion of the Sec-10 retary, the Secretary may give priority to the testing 11 of products for which private sector firms provide 12 cost sharing for the testing. 13 "SEC. 9003. BIODIESEL FUEL EDUCATION. 14 "(a) Purpose.—The purpose of this section is to 15 educate potential users about the proper use and benefits of biodiesel. 16 17 "(b) Establishment.—The Secretary shall, under 18 such terms and conditions as are appropriate, make grants 19 to eligible entities to educate governmental and private en-20 tities that operate vehicle fleets, oil refiners, automotive 21 companies, owners and operators of watercraft fleets, 22 other interested entities (as determined by the Secretary), 23 and the public about the benefits of biodiesel fuel use. 24 "(c) Eligible Entities.—To receive a grant under 25 subsection (b), an entity shall—

1	"(1) be a nonprofit organization or institution
2	of higher education (as defined in section 101 of the
3	Higher Education Act of 1965 (20 U.S.C. 1001));
4	"(2) have demonstrated knowledge of biodiesel
5	fuel production, use, or distribution; and
6	"(3) have demonstrated the ability to conduct
7	educational and technical support programs.
8	"(d) Consultation.—In carrying out this section,
9	the Secretary shall consult with the Secretary of Energy.
10	"(e) Funding.—Of the funds of the Commodity
11	Credit Corporation, the Secretary shall use to carry out
12	this section, to the maximum extent practicable,
13	\$2,000,000 for each of fiscal years 2008 through 2012 .
14	"SEC. 9004. BIOMASS CROP TRANSITION.
15	"(a) Definitions.—In this section:
16	"(1) ELIGIBLE CROP.—The term 'eligible crop'
17	means a crop of renewable biomass.
18	"(2) ELIGIBLE PARTICIPANT.—The term 'eligi-
19	ble participant' means an agricultural producer or
20	forest land owner—
21	"(A) that is establishing 1 or more eligible
22	crops on private land to be used in the produc-
23	tion of advanced biofuels, other biobased prod-
24	ucts, heat, or power from a biomass conversion
25	facility;

1	"(B) that has a financial commitment
2	from a biomass conversion facility, including a
3	proposed biomass conversion facility that is eco-
4	nomically viable, as determined by the Sec-
5	retary, to purchase the eligible crops; and
6	"(C) the production operation of which is
7	in such proximity to the biomass conversion fa-
8	cility described in subparagraph (B) as to make
9	delivery of the eligible crops to that location
10	economically practicable.
11	"(b) BIOMASS CROP TRANSITION ASSISTANCE.—
12	"(1) Establishment of program.—The Sec-
13	retary shall establish a program to provide transi-
14	tional assistance for the establishment and produc-
15	tion of eligible crops to be used in the production of
16	advanced biofuels, other biobased products, heat, or
17	power from a biomass conversion facility.
18	"(2) Exclusion.—An agricultural producer
19	shall not be eligible for assistance under paragraph
20	(1) for the establishment and production of—
21	"(A) any crop that is eligible for benefits
22	under title I of the Food and Energy Security
23	Act of 2007; or
24	"(B) an annual crop.
25	"(3) Contracts.—

1	"(A) In General.—The Secretary shall
2	enter into contracts with eligible participants
3	and entities described in subparagraph (B) to
4	provide transitional assistance payments to eli-
5	gible participants.
6	"(B) Contracts with member enti-
7	TIES.—The Secretary may enter into 1 or more
8	contracts with farmer-owned cooperatives, agri-
9	cultural trade associations, or other similar en-
10	tities on behalf of producer members that meet
11	the requirements of, and elect to be treated as,
12	eligible participants if the contract would offer
13	greater efficiency in administration of the pro-
14	gram.
15	"(C) Requirements.—Under a contract
16	described in subparagraph (A), an eligible par-
17	ticipant shall be required, as determined by the
18	Secretary—
19	"(i) to produce 1 or more eligible
20	crops;
21	"(ii) to develop and actively apply a
22	conservation plan that meets the require-
23	ments for highly erodible land conservation
24	and wetlands conservation as established
25	under subtitles B and C of title XII of the

1	Food Security Act of 1985 (16 U.S.C.
2	3811 et seq.); and
3	"(iii) to use such conservation prac-
4	tices as are necessary, where appropriate—
5	"(I) to advance the goals and ob-
6	jectives of State, regional, and na-
7	tional fish and wildlife conservation
8	plans and initiatives; and
9	"(II) to comply with mandatory
10	environmental requirements for a pro-
11	ducer under Federal, State, and local
12	law.
13	"(4) Payments.—
14	"(A) First year.—During the first year
15	of the contract, the Secretary shall make a pay-
16	ment to an eligible participant in an amount
17	that covers the cost of establishing 1 or more
18	eligible crops.
19	"(B) Subsequent Years.—During any
20	subsequent year of the contract, the Secretary
21	shall make incentive payments to an eligible
22	participant in an amount determined by the
23	Secretary to encourage the eligible participant
24	to produce renewable biomass.

1	"(c) Assistance for Production of Annual
2	Crop of Renewable Biomass.—
3	"(1) In General.—The Secretary may provide
4	assistance to eligible participants to plant an annual
5	crop of renewable biomass for use in a biomass con-
6	version facility in the form of—
7	"(A) technical assistance; and
8	"(B) cost-share assistance for the cost of
9	establishing an annual crop of renewable bio-
10	mass.
11	"(2) Exclusion.—An agricultural producer
12	shall not be eligible for assistance under paragraph
13	(1) for the establishment of any crop that is eligible
14	for benefits under title I of the Food and Energy Se-
15	curity Act of 2007.
16	"(3) Compliance.—Eligible participants re-
17	ceiving assistance under paragraph (1)(B) shall de-
18	velop and actively apply a conservation plan that
19	meets the requirements for highly erodible land con-
20	servation and wetlands conservation as established
21	under subtitles B and C of title XII of the Food Se-
22	curity Act of 1985 (16 U.S.C. 3811 et seq.).
23	"(d) Assistance for Collection, Harvest,
24	STORAGE, AND TRANSPORT OF RENEWABLE BIOMASS.—

1	"(1) Establishment of program.—The Sec-
2	retary shall establish a program to provide assist-
3	ance to eligible participants for collecting, har-
4	vesting, storing, and transporting eligible crops to be
5	used in the production of advanced biofuels,
6	biobased products, heat, or power from a biomass
7	conversion facility.
8	"(2) Payments.—
9	"(A) In General.—An eligible participant
10	shall receive payments under this subsection for
11	each ton of eligible crop delivered to a biomass
12	conversion facility, based on a fixed rate to be
13	established by the Secretary in accordance with
14	subparagraph (B).
15	"(B) FIXED RATE.—The Secretary shall
16	establish a fixed payment rate for purposes of
17	subparagraph (A) to reflect—
18	"(i) the estimated cost of collecting,
19	harvesting, storing, and transporting the
20	applicable eligible crop; and
21	"(ii) such other factors as the Sec-
22	retary determines to be appropriate.
23	"(e) Best Practices.—
24	"(1) Recordkeeping.—Each eligible partici-
25	pant, and each biomass conversion facility con-

1	tracting with the eligible participant, shall maintain
2	and make available to the Secretary, at such times
3	as the Secretary may request, appropriate records of
4	methods used for activities for which payment is re-
5	ceived under this section.
6	"(2) Information sharing.—From the
7	records maintained under subparagraph (A), the
8	Secretary shall maintain, and make available to the
9	public, information regarding—
10	"(A) the production potential (including
11	evaluation of the environmental benefits) of a
12	variety of eligible crops; and
13	"(B) best practices for producing, col-
14	lecting, harvesting, storing, and transporting el-
15	igible crops to be used in the production of ad-
16	vanced biofuels.
17	"(f) Funding.—
18	"(1) BIOMASS CROP TRANSITION ASSIST-
19	ANCE.—Of the funds of the Commodity Credit Cor-
20	poration, the Secretary shall use to carry out sub-
21	sections (b) and (c) \$130,000,000 for fiscal year
22	2008, to remain available until expended.
23	"(2) Assistance for collection, harvest,
24	STORAGE, AND TRANSPORT OF RENEWABLE BIO-
25	MASS.—Of the funds of the Commodity Credit Cor-

1	poration, the Secretary shall make available to carry
2	out subsection (d) \$10,000,000 for each of fiscal
3	years 2009 through 2011, to remain available until
4	expended.
5	"SEC. 9005. BIOREFINERY AND REPOWERING ASSISTANCE.
6	"(a) Purpose.—The purpose of this section is to as-
7	sist in the development of new or emerging technologies
8	for the use of renewable biomass or other sources of re-
9	newable energy—
10	"(1) to develop advanced biofuels;
11	"(2) to increase the energy independence of the
12	United States by promoting the replacement of en-
13	ergy generated from fossil fuels with energy gen-
14	erated from a renewable energy source;
15	"(3) to promote resource conservation, public
16	health, and the environment;
17	"(4) to diversify markets for raw agricultural
18	and forestry products, and agriculture waste mate-
19	rial; and
20	"(5) to create jobs and enhance the economic
21	development of the rural economy.
22	"(b) Definition of Repower.—In this section, the
23	term 'repower' means to substitute the production of heat
24	or power from a fossil fuel source with heat or power from
25	sources of renewable energy.

1	"(c) Assistance.—
2	"(1) In general.—The Secretary shall make
3	available to eligible entities described in subsection
4	(d)—
5	"(A) grants to assist in paying the costs
6	of—
7	"(i) development and construction of
8	pilot- and demonstration-scale biorefineries
9	intended to demonstrate the commercial vi-
10	ability of 1 or more processes for con-
11	verting renewable biomass to advanced
12	biofuels;
13	"(ii) repowering a biomass conversion
14	facility, power plant, or manufacturing fa-
15	cility, in whole or in part; or
16	"(iii) conducting a study to determine
17	the feasibility of repowering a biomass con-
18	version facility, power plant, or manufac-
19	turing facility, in whole or in part; and
20	"(B) guarantees for loans made to fund—
21	"(i) the development and construction
22	of commercial-scale biorefineries; or
23	"(ii) the repowering of a biomass con-
24	version facility, power plant, or manufac-
25	turing facility, in whole or in part.

1	"(2) Preference.—In selecting projects to re-
2	ceive grants and loan guarantees under this section,
3	the Secretary shall give preference to projects that
4	receive or will receive financial support from the
5	State in which the project is carried out.
6	"(d) Eligible Entities.—An eligible entity under
7	this section is—
8	"(1) an individual;
9	"(2) a corporation;
10	"(3) a farm cooperative;
11	"(4) a rural electric cooperative or public power
12	entity;
13	"(5) an association of agricultural producers;
14	"(6) a State or local energy agency or office;
15	"(7) an Indian tribe;
16	"(8) a consortium comprised of any individuals
17	or entities described in any of paragraphs (1)
18	through (7); or
19	"(9) any other similar entity, as determined by
20	the Secretary.
21	"(e) Grants.—
22	"(1) In general.—The Secretary shall award
23	grants under subsection (c)(1)(A) on a competitive
24	basis.
25	"(2) Selection criteria.—

1	"(A) Grants for development and
2	CONSTRUCTION OF PILOT AND DEMONSTRATION
3	SCALE BIOREFINERIES.—
4	"(i) In General.—In awarding
5	grants for development and construction of
6	pilot and demonstration scale biorefineries
7	under subsection (c)(1)(A)(i), the Sec-
8	retary shall select projects based on the
9	likelihood that the projects will dem-
10	onstrate the commercial viability of a new
11	or emerging process for converting renew-
12	able biomass into advanced biofuels.
13	"(ii) Factors.—The factors to be
14	considered under clause (i) may include—
15	"(I) the potential market for 1 or
16	more products;
17	"(II) the level of financial partici-
18	pation by the applicants;
19	"(III) the availability of adequate
20	funding from other sources;
21	"(IV) the participation of pro-
22	ducer associations and cooperatives;
23	"(V) the beneficial impact on re-
24	source conservation, public health,
25	and the environment;

1	"(VI) the timeframe in which the
2	project will be operational;
3	"(VII) the potential for rural eco-
4	nomic development;
5	"(VIII) the participation of mul-
6	tiple eligible entities; and
7	"(IX) the potential for developing
8	advanced industrial biotechnology ap-
9	proaches.
10	"(B) Grants for repowering.—In se-
11	lecting projects to receive grants for repowering
12	under clauses (ii) and (iii) of subsection
13	(c)(1)(A), the Secretary shall consider—
14	"(i) the change in energy efficiency
15	that would result from the proposed
16	repowering of the eligible entity;
17	"(ii) the reduction in fossil fuel use
18	that would result from the proposed
19	repowering; and
20	"(iii) the volume of renewable biomass
21	located in such proximity to the eligible en-
22	tity as to make local sourcing of feedstock
23	economically practicable.
24	"(3) Cost sharing.—
25	"(A) Limits.—

1	"(i) Development and construc-
2	TION OF PILOT AND DEMONSTRATION
3	SCALE BIOREFINERIES.—The amount of a
4	grant awarded for development and con-
5	struction of a biorefinery under subsection
6	(c)(1)(A)(i) shall not exceed 50 percent of
7	the cost of the project.
8	"(ii) Repowering.—The amount of a
9	grant awarded for repowering under sub-
10	section $(c)(1)(A)(ii)$ shall not exceed 20
11	percent of the cost of the project.
12	"(iii) Feasibility study for
13	REPOWERING.—The amount of a grant
14	awarded for a feasibility study for
15	repowering under subsection $(c)(1)(A)(iii)$
16	shall not exceed an amount equal to the
17	lesser of—
18	"(I) an amount equal to 50 per-
19	cent of the total cost of conducting
20	the feasibility study; and
21	"(II) \$150,000.
22	"(B) Form of grantee share.—
23	"(i) IN GENERAL.—The grantee share
24	of the cost of a project may be made in the

1	form of cash or the provision of services,
2	material, or other in-kind contributions.
3	"(ii) Limitation.—The amount of
4	the grantee share of the cost of a project
5	that is made in the form of the provision
6	of services, material, or other in-kind con-
7	tributions shall not exceed 15 percent of
8	the amount of the grantee share deter-
9	mined under subparagraph (A).
10	"(f) Loan Guarantees.—
11	"(1) Conditions.—As a condition of making a
12	loan guarantee under subsection (c)(1)(B), the Sec-
13	retary shall require—
14	"(A) demonstration of binding commit-
15	ments to cover, from sources other than Fed-
16	eral funds, at least 20 percent of the total cost
17	of the project described in the application; and
18	"(B) in the case of a new or emerging
19	technology, demonstration that the project de-
20	sign has been validated through a technical re-
21	view and subsequent operation of a pilot or
22	demonstration scale facility that can be scaled
23	up to commercial size.

1	"(2) Local ownership.—The Secretary shall
2	give preference under subsection (c)(1)(B) to appli-
3	cations for projects with significant local ownership.
4	"(3) APPROVAL.—Not later than 90 days after
5	the Secretary receives an application for a loan
6	guarantee under subsection (c)(1)(B), the Secretary
7	shall approve or disapprove the application.
8	"(4) Limitations.—
9	"(A) MAXIMUM AMOUNT OF LOAN GUAR-
10	ANTEED.—
11	"(i) Commercial-scale biorefin-
12	ERIES.—Subject to clause (iii), the prin-
13	cipal amount of a loan guaranteed under
14	subsection $(e)(1)(B)(i)$ may not exceed
15	\$250,000,000.
16	"(ii) Repowering.—Subject to clause
17	(iii), the principal amount of a loan guar-
18	anteed under subsection $(c)(1)(B)(ii)$ may
19	not exceed \$70,000,000.
20	"(iii) Relationship to other fed-
21	ERAL FUNDING.—The amount of a loan
22	guaranteed under subsection $(c)(1)(B)$
23	shall be reduced by the amount of other
24	Federal funding that the entity receives for
25	the same project.

1	"(B) MAXIMUM PERCENTAGE OF LOAN
2	GUARANTEED.—A loan guaranteed under sub-
3	section (c)(1)(B) shall be in an amount not to
4	exceed 80 percent of the project costs, as deter-
5	mined by the Secretary.
6	"(C) AUTHORITY TO GUARANTEE ENTIRE
7	AMOUNT OF THE LOAN.—The Secretary may
8	guarantee up to 100 percent of the principal
9	and interest due on a loan guaranteed under
10	subsection (e)(1)(B).
11	"(g) Consultation.—In carrying out this section,
12	the Secretary shall consult with the Secretary of Energy.
13	"(h) Funding.—Of the funds of the Commodity
14	Credit Corporation, the Secretary shall use for the cost
15	of grants and loan guarantees to carry out this section
16	\$300,000,000 for fiscal year 2008, to remain available
17	until expended.
18	"SEC. 9006. BIOENERGY PROGRAM FOR ADVANCED
19	BIOFUELS.
20	"(a) Definition of Eligible Producer.—In this
21	section, the term 'eligible producer' means a producer of
22	advanced biofuels.
23	"(b) Payments.—The Secretary shall make pay-
24	ments to eligible producers to encourage increased pur-
25	chases of renewable biomass for the purpose of expanding

1	production of, and supporting new production capacity for,
2	advanced biofuels.
3	"(c) Contracts.—To receive a payment, an eligible
4	producer shall—
5	"(1) enter into a contract with the Secretary to
6	increase production of advanced biofuels for 1 or
7	more fiscal years; and
8	"(2) submit to the Secretary such records as
9	the Secretary may require as evidence of increased
10	purchase and use of renewable biomass for the pro-
11	duction of advanced biofuels.
12	"(d) Basis for Payments.—The Secretary shall
13	make payments under this section to eligible producers
14	based on—
15	"(1) the level of production by the eligible pro-
16	ducer of an advanced biofuel;
17	"(2) the price of each renewable biomass feed-
18	stock used for production of the advanced biofuel;
19	"(3) the net nonrenewable energy content of the
20	advanced biofuel, if sufficient data is available, as
21	determined by the Secretary; and
22	"(4) other appropriate factors, as determined
23	by the Secretary.
24	"(e) Overpayments.—If the total amount of pay-
25	ments that an eligible producer receives for a fiscal year

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biofuels.

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- 1 under this section exceeds the amount that the eligible
- 2 producer should have received, the eligible producer shall
- 3 repay the amount of the overpayment to the Secretary,
- 4 with interest (as determined by the Secretary).
- 5 "(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
- "(2) INELIGIBILITY.—An eligible producer that claims a credit allowed under section 40(a)(3) or 40A(a)(3) of the Internal Revenue Code of 1986 shall not be eligible to receive payments under subsection (d).

funding available in an equitable manner.

- "(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.
- "(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

1	"(h) Funding.—Of the funds of the Commodity
2	Credit Corporation, the Secretary shall use to carry out
3	this section \$245,000,000 for the period of fiscal years
4	2008 through 2012, to remain available until expended.
5	"SEC. 9007. RURAL ENERGY FOR AMERICA PROGRAM.
6	"(a) Establishment.—The Secretary, in consulta-
7	tion with the Secretary of Energy, shall establish a Rural
8	Energy for America Program to promote energy efficiency
9	and renewable energy development for agricultural pro-
10	ducers, cooperatives, rural small businesses, and other
11	similar entities through—
12	"(1) grants for energy audits and renewable en-
13	ergy development assistance;
14	"(2) financial assistance for energy efficiency
15	improvements and renewable energy systems; and
16	"(3) financial assistance for facilities to convert
17	animal manure to energy.
18	"(b) Energy Audits and Renewable Energy
19	DEVELOPMENT ASSISTANCE.—
20	"(1) IN GENERAL.—The Secretary shall make
21	competitive grants to eligible entities to provide as-
22	sistance to agricultural producers and rural small
23	businesses—
24	"(A) to become more energy efficient; and

1	"(B) to use renewable energy technology
2	and resources.
3	"(2) Eligible entity
4	under this subsection is—
5	"(A) a State agency;
6	"(B) a regional, State-based, or tribal en-
7	ergy organization;
8	"(C) a land-grant college or university or
9	other institution of higher education;
10	"(D) a rural electric cooperative or public
11	power entity;
12	"(E) a nonprofit organization; and
13	"(F) any other similar entity, as deter-
14	mined by the Secretary.
15	"(3) Merit review.—
16	"(A) MERIT REVIEW PROCESS.—The Sec-
17	retary shall establish a merit review process to
18	review applications for grants under paragraph
19	(1) that uses the expertise of other Federal
20	agencies, industry, and nongovernmental orga-
21	nizations.
22	"(B) Selection Criteria.—In reviewing
23	applications of eligible entities to receive grants
24	under paragraph (1), the Secretary shall con-
25	sider—

1	"(i) the ability and expertise of the el-
2	igible entity in providing professional en-
3	ergy audits and renewable energy assess-
4	ments;
5	"(ii) the geographic scope of the pro-
6	gram proposed by the eligible entity in re-
7	lation to the identified need;
8	"(iii) the number of agricultural pro-
9	ducers and rural small businesses to be as-
10	sisted by the program;
11	"(iv) the potential for energy savings
12	and environmental and public health bene-
13	fits resulting from the program; and
14	"(v) the plan of the eligible entity for
15	providing information to agricultural pro-
16	ducers and rural small businesses on the
17	benefits of energy efficiency and renewable
18	energy development.
19	"(4) Use of grant funds.—
20	"(A) REQUIRED USES.—A recipient of a
21	grant under paragraph (1) shall use the grant
22	funds to conduct and promote energy audits for
23	agricultural producers and rural small busi-
24	nesses to provide recommendations on how to

1	improve energy efficiency and use renewable en-
2	ergy technology and resources.
3	"(B) Permitted Uses.—In addition to
4	the uses described in subparagraph (A), a re-
5	cipient of a grant may use the grant funds to
6	make agricultural producers and rural small
7	businesses aware of—
8	"(i) financial assistance under sub-
9	section (c); and
10	"(ii) other Federal, State, and local fi-
11	nancial assistance programs for which the
12	agricultural producers and rural small
13	businesses may be eligible.
14	"(5) Cost sharing.—A recipient of a grant
15	under paragraph (1) that conducts an energy audit
16	for an agricultural producer or rural small business
17	under paragraph (4)(A) shall require that, as a con-
18	dition of the energy audit, the agricultural producer
19	or rural small business pay at least 25 percent of
20	the cost of the energy audit, which shall be retained
21	by the eligible entity for the cost of the energy audit.
22	"(c) Financial Assistance for Energy Effi-
23	CIENCY IMPROVEMENTS AND RENEWABLE ENERGY SYS-
24	TEMS.—

1	"(1) In general.—In addition to any similar
2	authority, the Secretary shall provide loan guaran-
3	tees, grants, and production-based incentives to agri-
4	cultural producers and rural small businesses—
5	"(A) to purchase renewable energy sys-
6	tems, including systems that may be used to
7	produce and sell electricity; and
8	"(B) to make energy efficiency improve-
9	ments.
10	"(2) Award considerations.—In determining
11	the amount of a grant, loan guarantee, or produc-
12	tion-based incentive provided under this section, the
13	Secretary shall take into consideration, as applica-
14	ble—
15	"(A) the type of renewable energy system
16	to be purchased;
17	"(B) the estimated quantity of energy to
18	be generated by the renewable energy system;
19	"(C) the expected environmental benefits
20	of the renewable energy system;
21	"(D) the quantity of energy savings ex-
22	pected to be derived from the activity, as dem-
23	onstrated by an energy audit comparable to an
24	energy audit under subsection (b);

1	"(E) the estimated period of time for the
2	energy savings generated by the activity to
3	equal the cost of the activity;
4	"(F) the expected energy efficiency of the
5	renewable energy system; and
6	"(G) other appropriate factors.
7	"(3) Feasibility studies.—
8	"(A) IN GENERAL.—The Secretary may
9	provide assistance in the form of grants to an
10	agricultural producer or rural small business to
11	conduct a feasibility study for a project for
12	which assistance may be provided under this
13	subsection.
14	"(B) Limitation.—The Secretary shall
15	use not more than 10 percent of the funds
16	made available to carry out this subsection to
17	provide assistance described in subparagraph
18	(A).
19	"(C) Avoidance of duplicative assist-
20	ANCE.—An entity shall be ineligible to receive
21	assistance to carry out a feasibility study for a
22	project under this paragraph if the entity has
23	received Federal or State assistance for a feasi-
24	bility study for the project.
25	"(4) Limits.—

1	"(A) Grants.—The amount of a grant
2	under this subsection shall not exceed 25 per-
3	cent of the cost of the activity carried out using
4	funds from the grant.
5	"(B) Loan guarantees.—
6	"(i) MAXIMUM AMOUNT.—The
7	amount of a loan guaranteed under this
8	subsection shall not exceed \$25,000,000.
9	"(ii) Maximum percentage.—A loan
10	guaranteed under this subsection shall not
11	exceed 75 percent of the cost of the activ-
12	ity carried out using funds from the loan.
13	"(5) Production-based incentive pay-
14	MENTS IN LIEU OF GRANTS.—
15	"(A) IN GENERAL.—In addition to the au-
16	thority under subsection (b), to encourage the
17	production of electricity from renewable energy
18	systems, the Secretary, on receipt of a request
19	of an eligible applicant under this section, shall
20	make production-based incentive payments to
21	the applicant in lieu of a grant.
22	"(B) Contingency.—A payment under
23	subparagraph (A) shall be contingent on docu-
24	mented energy production and sales by the re-

1	newable energy system of the eligible applicant
2	to a third party.
3	"(C) Limitation.—The total net present
4	value of a production-based incentive payment
5	under this paragraph shall not exceed the lesser
6	of—
7	"(i) an amount equal to 25 percent of
8	the eligible project costs, as determined by
9	the Secretary; and
10	"(ii) such other limit as the Secretary
11	may establish, by rule or guidance.
12	"(d) Financial Assistance for Facilities to
13	CONVERT ANIMAL MANURE TO ENERGY.—
14	"(1) Definition of Animal Manure.—In this
15	subsection, the term 'animal manure' means agricul-
16	tural livestock excrement, including litter, wood
17	shavings, straw, rice hulls, bedding material, and
18	other materials incidentally collected with the ma-
19	nure.
20	"(2) Grants and Loan guarantees.—The
21	Secretary shall make grants and loan guarantees to
22	eligible entities on a competitive basis for the instal-
23	lation, operation, and evaluation of facilities de-
24	scribed in paragraph (4).

1	"(3) Eligible entities.—To be eligible to re-
2	ceive a grant or loan guarantee under this sub-
3	section, an entity shall be—
4	"(A) an agricultural producer;
5	"(B) a rural small business;
6	"(C) a rural cooperative; or
7	"(D) any other similar entity, as deter-
8	mined by the Secretary.
9	"(4) Eligible facilities.—
10	"(A) In General.—Subject to subpara-
11	graphs (B) through (E), an eligible entity may
12	receive a grant or loan guarantee under this
13	subsection for the installation, first-year oper-
14	ation, and evaluation of an on-farm or commu-
15	nity facility (such as a digester or power gener-
16	ator using manure for fuel) the primary func-
17	tion of which is to convert animal manure into
18	a useful form of energy (including gaseous or
19	liquid fuel or electricity).
20	"(B) Subsystems included.—Funds
21	from a grant and loan guarantee under sub-
22	paragraph (A) may be used for systems that
23	support an on-farm or community facility de-
24	scribed in that subparagraph, which may in-

1	clude feedstock gathering systems and gas pip-
2	ing systems.
3	"(C) Conversion of Renewable Bio-
4	MASS.—An eligible entity may use a grant or
5	loan guarantee provided under this subsection
6	to convert renewable biomass other than animal
7	manure (such as waste materials from food
8	processing facilities and other green wastes)
9	into energy at a facility if the majority of mate-
10	rials converted into energy at the facility is ani-
11	mal manure.
12	"(D) Development and demonstra-
13	TION OF NEW TECHNOLOGIES.—An eligible en-
14	tity may use a grant or loan guarantee provided
15	under this subsection for the installation, dem-
16	onstration, and first 2 years of operation of an
17	on-farm or community facility that uses ma-
18	nure-to-energy technologies—
19	"(i) that are not in commercial use, as
20	determined by the Secretary; and
21	"(ii) for which sufficient research has
22	been conducted for the Secretary to deter-
23	mine that the technology is commercially
24	viable.

1	"(5) SELECTION OF ELIGIBLE ENTITIES.—In
2	selecting applications for grants and loan guarantees
3	under this subsection, the Secretary shall consider—
4	"(A) the quality of energy produced; and
5	"(B) the projected net energy conversion
6	efficiency, which shall be equal to the quotient
7	obtained by dividing—
8	"(i) the energy output of the eligible
9	facility; by
10	"(ii) the sum of—
11	"(I) the energy content of animal
12	manure at the point of collection; and
13	"(II) the energy consumed in fa-
14	cility operations, including feedstock
15	transportation;
16	"(C) environmental issues, including poten-
17	tial positive and negative impacts on water
18	quality, air quality, odor emissions, pathogens,
19	and soil quality resulting from—
20	"(i) the use and conversion of animal
21	manure into energy;
22	"(ii) the installation and operation of
23	the facility; and
24	"(iii) the disposal of any waste prod-
25	ucts (including effluent) from the facility;

1	"(D) the net impact of the facility and any
2	waste from the facility on greenhouse gas emis-
3	sions, based on the estimated emissions from
4	manure storage systems in use before the in-
5	stallation of the manure-to-energy facility;
6	"(E) diversity factors, including diversity
7	of—
8	"(i) sizes of projects supported; and
9	"(ii) geographic locations; and
10	"(F) the proposed project costs and levels
11	of grants or loan guarantees requested.
12	"(6) Amount.—
13	"(A) Grants.—
14	"(i) SMALLER PROJECTS.—In the
15	case of a project with a total eligible cost
16	(as described in paragraph (4)) of not
17	more than \$500,000, the amount of a
18	grant made under this subsection shall not
19	exceed 50 percent of the total eligible cost.
20	"(ii) Larger projects.—In the case
21	of a project with a total eligible cost (as
22	described in paragraph (4)) of more than
23	\$500,000, the amount of a grant made
24	under this subsection shall not exceed the
25	greater of—

1	"(I) \$250,000; or
2	"(II) 25 percent of the total eligi-
3	ble cost.
4	"(iii) Maximum.—In no case shall the
5	amount of a grant made under this section
6	exceed \$2,000,000.
7	"(B) Loan guarantees.—The principal
8	amount and interest of a loan guaranteed under
9	this subsection may not exceed the lesser of—
10	"(i) 80 percent of the difference be-
11	tween—
12	"(I) the total cost to install and
13	operate the eligible facility for the
14	first year, as determined by the Sec-
15	retary; and
16	"(II) the amount of any Federal,
17	State, and local funds received to sup-
18	port the eligible facility; and
19	"(ii) \$25,000,000.
20	"(7) Prohibition.—A grant or loan guarantee
21	may not be provided for a project under this sub-
22	section that also receives assistance under subsection
23	(b) or (c).
24	"(e) Role of State Rural Development Direc-
25	TOR.—

1	"(1) Outreach and availability of infor-
2	MATION.—
3	"(A) Outreach.—A State rural develop-
4	ment director, acting through local rural devel-
5	opment offices, shall provide outreach regarding
6	the availability of financial assistance under
7	this section.
8	"(B) AVAILABILITY OF INFORMATION.—A
9	State rural development director shall make
10	available information relating to the availability
11	of financial assistance under this section at all
12	local rural development, Farm Service Agency,
13	and Natural Resources Conservation Service of
14	fices.
15	"(2) Application review.—Applications for
16	assistance under this section shall be reviewed by the
17	appropriate State rural development director.
18	"(f) Small Projects.—
19	"(1) Application and review process.—
20	The Secretary shall develop a streamlined applica-
21	tion and expedited review process for project appli-
22	cants seeking less than \$20,000 under this section
23	"(2) Percentage of funds.—Not less than
24	20 percent of the funds made available under sub-
25	section (k)(1) shall be made available to make

- 1 grants under this section in an amount of less than
- 2 \$20,000.
- 3 "(g) Preference.—In selecting projects to receive
- 4 grants under this section, the Secretary shall give pref-
- 5 erence to projects that receive or will receive financial sup-
- 6 port from the State in which the project is carried out.
- 7 "(h) Rural Energy Star.—The Secretary, in co-
- 8 ordination with the Administrator and the Secretary of
- 9 Energy, shall extend the Energy Star program established
- 10 by section 324A of the Energy Policy and Conservation
- 11 Act (42 U.S.C. 6294a) to include a Rural Energy Star
- 12 component to promote the development and use of energy-
- 13 efficient equipment and facilities in the agricultural sector.
- 14 "(i) Reports.—Not later than 4 years after the date
- 15 of enactment of the Food and Energy Security Act of
- 16 2007, the Secretary shall submit to Congress a report on
- 17 the implementation of this section, including the outcomes
- 18 achieved by projects funded under this section.
- 19 "(j) Funding.—
- 20 "(1) Commodity credit corporation.—Of
- 21 the funds of the Commodity Credit Corporation, the
- Secretary shall make available \$230,000,000 to
- carry out subsections (c) and (d) for fiscal year
- 24 2008, to remain available until expended, of which

1	not less than 15 percent shall be used to carry out
2	subsection (d).
3	"(2) Authorization of appropriations.—In
4	addition to any other funds made available to carry
5	out this section, there are authorized to be appro-
6	priated such sums as are necessary to carry out this
7	section for each of fiscal years 2008 through 2012.
8	"SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT ACT
9	OF 2000.
10	"(a) Definitions.—In this section:
11	"(1) BIOBASED PRODUCT.—The term 'biobased
12	product' means—
13	"(A) an industrial product (including
14	chemicals, materials, and polymers) produced
15	from biomass; and
16	"(B) a commercial or industrial product
17	(including animal feed and electric power) de-
18	rived in connection with the conversion of bio-
19	mass to fuel.
20	"(2) Demonstration.—The term 'demonstra-
21	tion' means demonstration of technology in a pilot
22	plant or semi-works scale facility.
23	"(3) Initiative.—The term 'Initiative' means
24	the Biomass Research and Development Initiative
25	established under subsection (e).

1	"(4) National Laboratory.—The term 'Na-
2	tional Laboratory' has the meaning given that term
3	in section 2 of the Energy Policy Act of 2005 (42
4	U.S.C. 15801).
5	"(5) Point of contact.—The term 'point of
6	contact' means a point of contact designated under
7	this section.
8	"(b) Cooperation and Coordination in Biomass
9	RESEARCH AND DEVELOPMENT.—
10	"(1) In General.—The Secretary of Agri-
11	culture and the Secretary of Energy shall cooperate
12	with respect to, and coordinate, policies and proce-
13	dures that promote research and development lead-
14	ing to the production of biofuels and biobased prod-
15	ucts.
16	"(2) Points of Contact.—
17	"(A) In General.—To coordinate re-
18	search and development programs and activities
19	relating to biofuels and biobased products that
20	are carried out by their respective depart-
21	ments—
22	"(i) the Secretary of Agriculture shall
23	designate, as the point of contact for the
24	Department of Agriculture, an officer of
25	the Department of Agriculture appointed

1	by the President to a position in the De-
2	partment before the date of the designa-
3	tion, by and with the advice and consent of
4	the Senate; and
5	"(ii) the Secretary of Energy shall
6	designate, as the point of contact for the
7	Department of Energy, an officer of the
8	Department of Energy appointed by the
9	President to a position in the Department
10	before the date of the designation, by and
11	with the advice and consent of the Senate
12	"(B) Duties.—The points of contact shall
13	jointly—
13 14	jointly— "(i) assist in arranging interlabora-
14	"(i) assist in arranging interlabora-
14 15	"(i) assist in arranging interlabora- tory and site-specific supplemental agree-
14 15 16	"(i) assist in arranging interlabora- tory and site-specific supplemental agree- ments for research and development
14 15 16 17	"(i) assist in arranging interlabora- tory and site-specific supplemental agree- ments for research and development projects relating to biofuels and biobased
14 15 16 17	"(i) assist in arranging interlabora- tory and site-specific supplemental agree- ments for research and development projects relating to biofuels and biobased products;
14 15 16 17 18	"(i) assist in arranging interlabora- tory and site-specific supplemental agree- ments for research and development projects relating to biofuels and biobased products; "(ii) serve as cochairpersons of the
14 15 16 17 18 19 20	"(i) assist in arranging interlabora- tory and site-specific supplemental agree- ments for research and development projects relating to biofuels and biobased products; "(ii) serve as cochairpersons of the Board;
14 15 16 17 18 19 20 21	"(i) assist in arranging interlabora- tory and site-specific supplemental agree- ments for research and development projects relating to biofuels and biobased products; "(ii) serve as cochairpersons of the Board; "(iii) administer the Initiative; and

1	"(c) Biomass Research and Development
2	Board.—
3	"(1) Establishment.—There is established
4	the Biomass Research and Development Board,
5	which shall supersede the Interagency Council on
6	Biobased Products and Bioenergy established by Ex-
7	ecutive Order No. 13134 (7 U.S.C. 8101 note), to
8	coordinate programs within and among departments
9	and agencies of the Federal Government for the pur-
10	pose of promoting the use of biofuels and biobased
11	products by—
12	"(A) maximizing the benefits deriving from
13	Federal grants and assistance; and
14	"(B) bringing coherence to Federal stra-
15	tegic planning.
16	"(2) Membership.—The Board shall consist
17	of—
18	"(A) the point of contact of the Depart-
19	ment of Energy designated under subsection
20	(b)(2)(A)(ii), who shall serve as cochairperson
21	of the Board;
22	"(B) the point of contact of the Depart-
23	ment of Agriculture designated under sub-
24	section (b)(2)(A)(i), who shall serve as cochair-
25	person of the Board;

1	"(C) a senior officer of each of the Depart-
2	ment of the Interior, the Environmental Protec-
3	tion Agency, the National Science Foundation,
4	and the Office of Science and Technology Pol-
5	icy, each of whom shall—
6	"(i) be appointed by the head of the
7	respective agency; and
8	"(ii) have a rank that is equivalent to
9	the rank of the points of contact; and
10	"(D) at the option of the Secretary of Ag-
11	riculture and the Secretary of Energy, other
12	members appointed by the Secretaries (after
13	consultation with the members described in sub-
14	paragraphs (A) through (C)).
15	"(3) Duties.—The Board shall—
16	"(A) coordinate research and development
17	activities relating to biofuels and biobased prod-
18	ucts—
19	"(i) between the Department of Agri-
20	culture and the Department of Energy;
21	and
22	"(ii) with other departments and
23	agencies of the Federal Government;

1	"(B) provide recommendations to the
2	points of contact concerning administration of
3	this title;
4	"(C) ensure that—
5	"(i) solicitations are open and com-
6	petitive with awards made annually; and
7	"(ii) objectives and evaluation criteria
8	of the solicitations are clearly stated and
9	minimally prescriptive, with no areas of
10	special interest; and
11	"(D) ensure that the panel of scientific
12	and technical peers assembled under subsection
13	(e) to review proposals is composed predomi-
14	nantly of independent experts selected from out-
15	side the Departments of Agriculture and En-
16	ergy.
17	"(4) Funding.—Each agency represented or
18	the Board is encouraged to provide funds for any
19	purpose under this section.
20	"(5) Meetings.—The Board shall meet at
21	least quarterly to enable the Board to carry out the
22	duties of the Board under paragraph (3).
23	"(d) Biomass Research and Development
24	TECHNICAL ADVISORY COMMITTEE.—

1	"(1) Establishment.—There is established
2	the Biomass Research and Development Technical
3	Advisory Committee, which shall supersede the Advi-
4	sory Committee on Biobased Products and Bio-
5	energy established by Executive Order No. 13134 (7
6	U.S.C. 8101 note)—
7	"(A) to advise the Secretary of Energy, the
8	Secretary of Agriculture, and the points of con-
9	tact concerning—
10	"(i) the distribution of funding;
11	"(ii) the technical focus and direction
12	of requests for proposals issued under the
13	Initiative; and
14	"(iii) procedures for reviewing and
15	evaluating the proposals;
16	"(B) to facilitate consultations and part-
17	nerships among Federal and State agencies, ag-
18	ricultural producers, industry, consumers, the
19	research community, and other interested
20	groups to carry out program activities relating
21	to the Initiative; and
22	"(C) to evaluate and perform strategic
23	planning on program activities relating to the
24	Initiative.
25	"(2) Membership.—

1	"(A) IN GENERAL.—The Advisory Com-
2	mittee shall consist of—
3	"(i) an individual affiliated with the
4	biofuels industry;
5	"(ii) an individual affiliated with the
6	biobased industrial and commercial prod-
7	ucts industry;
8	"(iii) an individual affiliated with an
9	institution of higher education who has ex-
10	pertise in biofuels and biobased products;
11	"(iv) 2 prominent engineers or sci-
12	entists from government or academia who
13	have expertise in biofuels and biobased
14	products;
15	"(v) an individual affiliated with a
16	commodity trade association;
17	"(vi) 2 individuals affiliated with an
18	environmental or conservation organiza-
19	tion;
20	"(vii) an individual associated with
21	State government who has expertise in
22	biofuels and biobased products;
23	"(viii) an individual with expertise in
24	energy and environmental analysis;

1	"(ix) an individual with expertise in
2	the economics of biofuels and biobased
3	products;
4	"(x) an individual with expertise in
5	agricultural economics;
6	"(xi) an individual with expertise in
7	plant biology and biomass feedstock devel-
8	opment; and
9	"(xii) at the option of the points of
10	contact, other members.
11	"(B) APPOINTMENT.—The members of the
12	Advisory Committee shall be appointed by the
13	points of contact.
14	"(3) Duties.—The Advisory Committee
15	shall—
16	"(A) advise the points of contact with re-
17	spect to the Initiative; and
18	"(B) evaluate whether, and make rec-
19	ommendations in writing to the Board to en-
20	sure that—
21	"(i) funds authorized for the Initiative
22	are distributed and used in a manner that
23	is consistent with the objectives, purposes,
24	and considerations of the Initiative;

1	"(ii) solicitations are open and com-
2	petitive with awards made annually and
3	that objectives and evaluation criteria of
4	the solicitations are clearly stated and
5	minimally prescriptive, with no areas of
6	special interest;
7	"(iii) the points of contact are funding
8	proposals under this title that are selected
9	on the basis of merit, as determined by an
10	independent panel of scientific and tech-
11	nical peers predominantly from outside the
12	Departments of Agriculture and Energy;
13	and
14	"(iv) activities under this section are
15	carried out in accordance with this section.
16	"(4) Coordination.—To avoid duplication of
17	effort, the Advisory Committee shall coordinate the
18	activities of the Advisory Committee with activities
19	of other Federal advisory committees working in re-
20	lated areas.
21	"(5) Meetings.—The Advisory Committee
22	shall meet at least quarterly to enable the Advisory
23	Committee to carry out the duties of the Advisory
24	Committee.

1	"(6) Terms.—Members of the Advisory Com-
2	mittee shall be appointed for a term of 3 years.
3	"(e) Biomass Research and Development Ini-
4	TIATIVE.—
5	"(1) In General.—The Secretary of Agri-
6	culture and the Secretary of Energy, acting through
7	their respective points of contact and in consultation
8	with the Board, shall establish and carry out a Bio-
9	mass Research and Development Initiative under
10	which competitively awarded grants, contracts, and
11	financial assistance are provided to, or entered into
12	with, eligible entities to carry out research on, and
13	development and demonstration of, biofuels and
14	biobased products, and the methods, practices, and
15	technologies, for the production of the fuels and
16	product.
17	"(2) Objectives.—The objectives of the Initia-
18	tive are to develop—
19	"(A) technologies and processes necessary
20	for abundant commercial production of biofuels
21	at prices competitive with fossil fuels;
22	"(B) high-value biobased products—
23	"(i) to enhance the economic viability
24	of biofuels and bioenergy;

1	"(ii) as substitutes for petroleum-
2	based feedstocks and products; and
3	"(iii) to enhance the value of coprod-
4	ucts produced using the technologies and
5	processes; and
6	"(C) a diversity of sustainable domestic
7	sources of renewable biomass for conversion to
8	biofuels, bioenergy, and biobased products.
9	"(3) Purposes.—The purposes of the Initiative
10	are—
11	"(A) to increase the energy security of the
12	United States;
13	"(B) to create jobs and enhance the eco-
14	nomic development of the rural economy;
15	"(C) to enhance the environment and pub-
16	lie health; and
17	"(D) to diversify markets for raw agricul-
18	tural and forestry products.
19	"(4) TECHNICAL AREAS.—To advance the ob-
20	jectives and purposes of the Initiative, the Secretary
21	of Agriculture and the Secretary of Energy, in con-
22	sultation with the Administrator of the Environ-
23	mental Protection Agency and heads of other appro-
24	priate departments and agencies (referred to in this

1	subsection as the 'Secretaries'), shall direct research,
2	development, and demonstration toward—
3	"(A) feedstocks and feedstock systems rel-
4	evant to production of raw materials for conver-
5	sion to biofuels and biobased products, includ-
6	ing—
7	"(i) development of advanced and
8	dedicated crops with desired features, in-
9	cluding enhanced productivity, broader site
10	range, low requirements for chemical in-
11	puts, and enhanced processing;
12	"(ii) advanced crop production meth-
13	ods to achieve the features described in
14	clause (i) and suitable assay techniques for
15	those features;
16	"(iii) feedstock harvest, handling,
17	transport, and storage;
18	"(iv) strategies for integrating feed-
19	stock production into existing managed
20	land; and
21	"(v) improving the value and quality
22	of coproducts, including material used for
23	animal feeding;
24	"(B) development of cost-effective tech-
25	nologies for the use of cellulosic biomass in the

1	production of biofuels and biobased products,
2	including—
3	"(i) pretreatment in combination with
4	enzymatic or microbial hydrolysis;
5	"(ii) thermochemical approaches, in-
6	cluding gasification and pyrolysis; and
7	"(iii) self-processing crops that ex-
8	press enzymes capable of degrading cel-
9	lulosic biomass;
10	"(C) product diversification through tech-
11	nologies relevant to production of a range of
12	biobased products (including chemicals, animal
13	feeds, and cogenerated power) that eventually
14	can increase the feasibility of fuel production in
15	a biorefinery, including—
16	"(i) catalytic processing, including
17	thermochemical fuel production;
18	"(ii) metabolic engineering, enzyme
19	engineering, and fermentation systems for
20	biological production of desired products,
21	coproducts, or cogeneration of power;
22	"(iii) product recovery;
23	"(iv) power production technologies;
24	"(v) integration into existing renew-
25	able biomass processing facilities, including

1	starch ethanol plants, sugar processing or
2	refining plants, paper mills, and power
3	plants;
4	"(vi) enhancement of products and co-
5	products, including dried distillers grains;
6	and
7	"(vii) technologies that allow for cost-
8	effective harvest, handling, transport, and
9	storage; and
10	"(D) analysis that provides strategic guid-
11	ance for the application of renewable biomass
12	technologies in accordance with realization of
13	improved sustainability and environmental qual-
14	ity, cost effectiveness, security, and rural eco-
15	nomic development, usually featuring system-
16	wide approaches, including the harvest, han-
17	dling, transport, and storage of renewable bio-
18	mass.
19	"(5) Additional considerations.—Within
20	the technical areas described in paragraph (4), and
21	in addition to advancing the purposes described in
22	paragraph (3) and the objectives described in para-
23	graph (2), the Secretaries shall support research and
24	development—

1	"(A) to create continuously expanding op-
2	portunities for participants in existing biofuels
3	production by seeking synergies and continuity
4	with current technologies and practices, such as
5	improvements in dried distillers grains and
6	other biofuel production coproducts for use as
7	bridge feedstocks;
8	"(B) to maximize the environmental, eco-
9	nomic, and social benefits of production of
10	biofuels and biobased products on a large scale
11	through life-cycle economic and environmental
12	analysis and other means; and
13	"(C) to assess the potential of Federal
14	land and land management programs as feed-
15	stock resources for biofuels and biobased prod-
16	ucts, consistent with the integrity of soil and
17	water resources and with other environmental
18	considerations.
19	"(6) Eligible entities.—To be eligible for a
20	grant, contract, or assistance under this subsection,
21	an applicant shall be—
22	"(A) an institution of higher education;
23	"(B) a National Laboratory;
24	"(C) a Federal research agency;
25	"(D) a State research agency;

1	"(E) a private sector entity;
2	"(F) a nonprofit organization; or
3	"(G) a consortium of 2 or more entities de-
4	scribed in subparagraphs (A) through (F).
5	"(7) Administration.—
6	"(A) IN GENERAL.—After consultation
7	with the Board, the points of contact shall—
8	"(i) publish annually 1 or more joint
9	requests for proposals for grants, con-
10	tracts, and assistance under this sub-
11	section;
12	"(ii) require that grants, contracts,
13	and assistance under this section be
14	awarded competitively, on the basis of
15	merit, after the establishment of proce-
16	dures that provide for scientific peer review
17	by an independent panel of scientific and
18	technical peers;
19	"(iii) give partial preference to appli-
20	cations that—
21	"(I) involve a consortia of experts
22	from multiple institutions;
23	"(II) encourage the integration
24	of disciplines and application of the
25	best technical resources; and

1	"(III) increase the geographic di-
2	versity of demonstration projects; and
3	"(iv) require that not less than 15
4	percent of funds made available to carry
5	out this section is used for research and
6	development relating to each of the tech-
7	nical areas described in paragraph (4).
8	"(B) MATCHING FUNDS.—
9	"(i) In general.—The non-Federal
10	share of the cost of a demonstration
11	project under this section shall be not less
12	than 20 percent.
13	"(ii) Commercial applications.—
14	The non-Federal share of the cost of a
15	commercial application project under this
16	section shall be not less than 50 percent.
17	"(C) TECHNOLOGY AND INFORMATION
18	TRANSFER TO AGRICULTURAL USERS.—The Ad-
19	ministrator of the National Institute of Food
20	and Agriculture and the Chief of the Natural
21	Resources Conservation Service shall ensure
22	that applicable research results and tech-
23	nologies from the Initiative are—

1	"(i) adapted, made available, and dis-
2	seminated through those services, as ap-
3	propriate; and
4	"(ii) included in the best practices
5	database established under section 220 of
6	the Department of Agriculture Reorganiza-
7	tion Act of 1994 (7 U.S.C. 6920).
8	"(f) Administrative Support and Funds.—
9	"(1) In general.—To the extent administra-
10	tive support and funds are not provided by other
11	agencies under paragraph (2), the Secretary of En-
12	ergy and the Secretary of Agriculture may provide
13	such administrative support and funds of the De-
14	partment of Energy and the Department of Agri-
15	culture to the Board and the Advisory Committee as
16	are necessary to enable the Board and the Advisory
17	Committee to carry out their duties under this sec-
18	tion.
19	"(2) OTHER AGENCIES.—The heads of the
20	agencies referred to in subsection (c)(2)(C), and the
21	other members of the Board appointed under sub-
22	section (c)(2)(D), may, and are encouraged to, pro-
23	vide administrative support and funds of their re-
24	spective agencies to the Board and the Advisory
25	Committee

1	"(3) Limitation.—Not more than 4 percent of
2	the amount made available for each fiscal year under
3	subsection (h) may be used to pay the administrative
4	costs of carrying out this section.
5	"(g) Reports.—
6	"(1) Annual reports.—For each fiscal year
7	for which funds are made available to carry out this
8	section, the Secretary of Energy and the Secretary
9	of Agriculture shall jointly submit to Congress a de-
10	tailed report on—
11	"(A) the status and progress of the Initia-
12	tive, including a report from the Advisory Com-
13	mittee on whether funds appropriated for the
14	Initiative have been distributed and used in a
15	manner that—
16	"(i) is consistent with the objectives,
17	purposes, and additional considerations de-
18	scribed in paragraphs (2) through (5) of
19	subsection (e);
20	"(ii) uses the set of criteria estab-
21	lished in the initial report submitted under
22	title III of the Agricultural Risk Protection
23	Act of 2000 (7 U.S.C. 7624 note; Public
24	Law 106–224); and

1	"(iii) takes into account any rec-
2	ommendations that have been made by the
3	Advisory Committee;
4	"(B) the general status of cooperation and
5	research and development efforts carried out at
6	each agency with respect to biofuels and
7	biobased products, including a report from the
8	Advisory Committee on whether the points of
9	contact are funding proposals that are selected
10	under subsection (d)(3)(B)(iii); and
11	"(C) the plans of the Secretary of Energy
12	and the Secretary of Agriculture for addressing
13	concerns raised in the report, including con-
14	cerns raised by the Advisory Committee.
15	"(2) UPDATES.—The Secretary of Agriculture
16	and the Secretary of Energy shall update the Vision
17	and Roadmap documents prepared for Federal bio-
18	mass research and development activities.
19	"(h) Funding.—
20	"(1) Commodity credit corporation
21	FUNDS.—Of the funds of the Commodity Credit
22	Corporation, the Secretary of Agriculture, to the
23	maximum extent practicable, shall use to carry out
24	this section, to remain available until expended—
25	"(A) \$15,000,000 for fiscal year 2008;

1	"(B) $$25,000,000$ for fiscal year 2009; and
2	"(C) $$35,000,000$ for fiscal year 2010.
3	"(2) Additional funding.—In addition to
4	amounts described in paragraph (1), there is author-
5	ized to be appropriated to carry out this section
6	\$85,000,000 for each of fiscal years 2008 through
7	2012.
8	"SEC. 9009. SUN GRANT PROGRAM.
9	"(a) Purposes.—The purposes of the programs es-
10	tablished under this section are—
11	"(1) to enhance national energy security
12	through the development, distribution, and imple-
13	mentation of biobased energy technologies;
14	"(2) to promote diversification in, and the envi-
15	ronmental sustainability of, agricultural production
16	in the United States through biobased energy and
17	product technologies;
18	"(3) to promote economic diversification in
19	rural areas of the United States through biobased
20	energy and product technologies; and
21	"(4) to enhance the efficiency of bioenergy and
22	biomass research and development programs
23	through improved coordination and collaboration be-
24	tween the Department of Agriculture, the Depart-

1	ment of Energy, and the land-grant colleges and
2	universities.
3	"(b) Definition of Land-Grant Colleges and
4	Universities.—The term 'land-grant colleges and uni-
5	versities' means—
6	"(1) 1862 Institutions (as defined in section 2
7	of the Agricultural Research, Extension, and Edu-
8	cation Reform Act of 1998 (7 U.S.C. 7601));
9	"(2) 1890 Institutions (as defined in section 2
10	of that Act) and West Virginia State College; and
11	"(3) 1994 Institutions (as defined in section 2
12	of that Act).
13	"(c) Establishment.—To carry out the purposes
14	described in subsection (a), the Secretary shall provide
15	grants to sun grant centers specified in subsection (d).
16	"(d) Grants to Centers.—The Secretary shall use
17	amounts made available for a fiscal year under subsection
18	(j) to provide a grants in equal amounts to each of the
19	following sun grant centers:
20	"(1) NORTH-CENTRAL CENTER.—A north-cen-
21	tral sun grant center at South Dakota State Univer-
22	sity for the region composed of the States of Illinois.
23	Indiana, Iowa, Minnesota, Montana, Nebraska
24	North Dakota, South Dakota, Wisconsin, and Wyo-
25	ming.

1	"(2) Southeastern center.—A southeastern
2	sun grant center at the University of Tennessee at
3	Knoxville for the region composed of—
4	"(A) the States of Alabama, Florida, Geor-
5	gia, Kentucky, Mississippi, North Carolina,
6	South Carolina, Tennessee, and Virginia;
7	"(B) the Commonwealth of Puerto Rico;
8	and
9	"(C) the United States Virgin Islands.
10	"(3) South-central center.—A south-cen-
11	tral sun grant center at Oklahoma State University
12	for the region composed of the States of Arkansas,
13	Colorado, Kansas, Louisiana, Missouri, New Mexico,
14	Oklahoma, and Texas.
15	"(4) Western center.—A western sun grant
16	center at Oregon State University for the region
17	composed of—
18	"(A) the States of Alaska, Arizona, Cali-
19	fornia, Hawaii, Idaho, Nevada, Oregon, Utah,
20	and Washington; and
21	"(B) territories and possessions of the
22	United States (other than the territories re-
23	ferred to in subparagraphs (B) and (C) of para-
24	graph (2)).

- 1 "(5) Northeastern center.—A northeastern 2 sun grant center at Cornell University for the region 3 composed of the States of Connecticut, Delaware, 4 Massachusetts, Maryland, Maine, Michigan, New 5 Hampshire, New Jersey, New York, Ohio, Pennsyl-6 vania, Rhode Island, Vermont, and West Virginia. "(6) 7 Western INSULAR PACIFIC SUB-
- 8 CENTER.—A western insular Pacific subcenter at the
 9 University of Hawaii for the region composed of the
 10 State of Alaska, Guam, American Samoa, the Com11 monwealth of the Northern Mariana Islands, the
 12 Federated States of Micronesia, the Republic of the
 13 Marshall Islands, and the Republic of Palau.
 - "(e) Use of Funds.—

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"(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 for administration 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.

1	"(2) Grants to land-grant colleges and
2	UNIVERSITIES.—
3	"(A) IN GENERAL.—The sun grant center
4	established for a region shall use the funds that
5	remain available for a fiscal year after expendi-
6	tures made under paragraph (1) to provide
7	competitive grants to land-grant colleges and
8	universities in the region of the sun grant cen-
9	ter to conduct, consistent with the purposes de-
10	scribed in subsection (a), multi-institutional and
11	multistate—
12	"(i) research, extension, and edu-
13	cational programs on technology develop-
14	ment; and
15	"(ii) integrated research, extension
16	and educational programs on technology
17	implementation.
18	"(B) Programs.—Of the amount of funds
19	that are used to provide grants for a fiscal year
20	under subparagraph (A), the center shall use—
21	"(i) not less than 30 percent of the
22	funds to carry out programs described in
23	subparagraph (A)(i); and

1	"(ii) not less than 30 percent of the
2	funds to carry out programs described in
3	subparagraph (A)(ii).
4	"(3) Indirect costs.—A sun grant center
5	may not recover the indirect costs of making grants
6	under paragraph (2) to other land-grant colleges and
7	universities.
8	"(f) Plan.—
9	"(1) In general.—Subject to the availability
10	of funds under subsection (j), in cooperation with
11	other land-grant colleges and universities and pri-
12	vate industry in accordance with paragraph (2), the
13	sun grant centers shall jointly develop and submit to
14	the Secretary, for approval, a plan for addressing at
15	the State and regional levels the bioenergy, biomass,
16	and gasification research priorities of the Depart-
17	ment of Agriculture and the Department of Energy
18	for the making of grants under paragraphs (1) and
19	(2) of subsection (e).
20	"(2) Gasification coordination.—
21	"(A) IN GENERAL.—In developing the plan
22	under paragraph (1) with respect to gasification
23	research, the sun grant centers identified in
24	paragraphs (1) and (2) of subsection (d) shall
25	coordinate with land grant colleges and univer-

1	sities in their respective regions that have ongo-
2	ing research activities with respect to the re-
3	search.
4	"(B) Funding.—Funds made available
5	under subsection (d) to the sun grant center
6	identified in subsection (e)(2) shall be available
7	to carry out planning coordination under para-
8	graph (1) of this subsection.
9	"(g) Grants to Other Land-Grant Colleges
10	and Universities.—
11	"(1) Priority for grants.—In making
12	grants under subsection (e)(2), a sun grant center
13	shall give a higher priority to programs that are con-
14	sistent with the plan approved by the Secretary
15	under subsection (f).
16	"(2) TERM OF GRANTS.—The term of a grant
17	provided by a sun grant center under subsection
18	(e)(2) shall not exceed 5 years.
19	"(h) Grant Information Analysis Center.—The
20	sun grant centers shall maintain a Sun Grant Information
21	Analysis Center at the sun grant center specified in sub-
22	section (d)(1) to provide sun grant centers analysis and
23	data management support.
24	"(i) Annual Reports.—Not later than 90 days
25	after the end of a year for which a sun grant center re-

1	ceives a grant under subsection (d), the sun grant center
2	shall submit to the Secretary a report that describes the
3	policies, priorities, and operations of the program carried
4	out by the center during the year, including a description
5	of progress made in facilitating the priorities described in
6	subsection (f).
7	"(j) Funding.—
8	"(1) Commodity credit corporation.—Of
9	the funds of the Commodity Credit Corporation, the
10	Secretary shall use to carry out this section, to re-
11	main available until expended—
12	"(A) \$5,000,000 for fiscal year 2008;
13	"(B) $$10,000,000$ for fiscal year 2009; and
14	"(C) $10,000,000$ for fiscal year 2010.
15	"(2) Authorization of appropriations.—
16	"(A) In general.—In addition to any
17	other funds made available to carry out this
18	section, there is authorized to be appropriated
19	to carry out this section \$70,000,000 for each
20	of fiscal years 2008 through 2012.
21	"(B) Grant information analysis cen-
22	TER.—Of amounts made available under sub-
23	paragraph (A), not more than \$4,000,000 for
24	each fiscal year shall be made available to carry
25	out subsection (h).

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1	"SEC.	9010.	. K.E.GHONAL	BIOMASS	CKOP	EXPERIMENTS.

- 2 "(a) Purpose.—The purpose of this section is to ini-
- 3 tiate multi-region side-by-side crop experiments to provide
- 4 a sound knowledge base on all aspects of the production
- 5 of biomass energy crops, including crop species, nutrient
- 6 requirements, management practices, environmental im-
- 7 pacts, greenhouse gas implications, and economics.
- 8 "(b) Crop Experiments.—
- 9 "(1) In General.—The Secretary, in consulta-
- tion with the Board, based on the recommendations
- of the Advisory Committee, shall award 10 competi-
- tive grants to land-grant colleges and universities (as
- defined in section 1404 of the National Agricultural
- 14 Research, Extension, and Teaching Policy Act of
- 15 1977 (7 U.S.C. 3103)) to establish regional biomass
- 16 crop research experiments (including experiments in-
- volving annuals, perennials, and woody biomass spe-
- 18 cies).
- 19 "(2) Selection of grant recipients.—
- Grant recipients shall be selected on the basis of ap-
- 21 plications submitted in accordance with guidelines
- issued by the Secretary.
- 23 "(3) Selection Criteria.—In selecting grant
- 24 recipients, the Secretary shall consider—

1	"(A) the capabilities and experience of the
2	applicant in conducting side-by-side crop experi-
3	ments;
4	"(B) the range of species types and crop-
5	ping practices proposed for study;
6	"(C) the quality of the proposed crop ex-
7	periment plan;
8	"(D) the commitment of the applicant of
9	adequate acreage and necessary resources for,
10	and continued participation in, the crop experi-
11	ments;
12	"(E) the need for regional diversity among
13	the 10 institutions selected; and
14	"(F) such other factors as the Secretary
15	may determine.
16	"(c) Grants.—The Secretary shall make a grant to
17	each land-grant college or university selected under sub-
18	section (b) in the amount of—
19	"(1) \$1,000,000 for fiscal year 2008;
20	"(2) $$2,000,000$ for fiscal year 2009; and
21	"(3) $$1,000,000$ for fiscal year 2010.
22	"(d) Coordination.—The Secretary shall coordi-
23	nate with participants under this section—
24	"(1) to provide coordination regarding biomass
25	crop research approaches; and

1	"(2) to ensure coordination between biomass
2	crop research activities carried out by land-grant col-
3	leges and universities under this section and by sun
4	grant centers under section 9009.
5	"(e) Funding.—
6	"(1) Commodity credit corporation.—Of
7	the funds of the Commodity Credit Corporation, the
8	Secretary shall use to carry out this section, to re-
9	main available until expended—
10	"(A) \$10,000,000 for fiscal year 2008;
11	"(B) $$20,000,000$ for fiscal year 2009; and
12	"(C) $10,000,000$ for fiscal year 2010.
13	"(2) Authorization of appropriations.—In
14	addition to any other funds made available to carry
15	out this section, there are authorized to be appro-
16	priated such sums are necessary to carry out this
17	section for each of fiscal years 2008 through 2012.
18	"SEC. 9011. BIOCHAR RESEARCH, DEVELOPMENT, AND
19	DEMONSTRATION.
20	"(a) Purpose.—The purpose of this section is to
21	support research, development, and demonstration of
22	biochar as a coproduct of bioenergy production, as a soil
23	enhancement practice, and as a carbon management strat-
24	egy.

- 1 "(b) Definition of Biochar.—In this section, the
- 2 term 'biochar' means charcoal or biomass-derived black
- 3 carbon that is added to soil to improve soil fertility, nutri-
- 4 ent retention, and carbon content.
- 5 "(c) Grants.—The Secretary shall award competi-
- 6 tive grants to eligible entities to support biochar research,
- 7 development, and demonstration projects on multiple
- 8 scales, including laboratory biochar research and field
- 9 trials, and biochar systems on a single farm scale, local
- 10 community scale, and agricultural cooperative scale.
- 11 "(d) Eligible Entities.—To be eligible to receive
- 12 a grant under this section, an entity shall be an eligible
- 13 entity described in section 9005(d).
- 14 "(e) Areas of Biochar Research, Develop-
- 15 MENT, AND DEMONSTRATION.—In carrying out this sec-
- 16 tion, the Secretary shall solicit proposals for activities that
- 17 include—
- 18 "(1) the installation and use of biochar produc-
- 19 tion systems, including pyrolysis and
- thermocombustion systems, and the integration of
- 21 biochar production with bioenergy and bioproducts
- 22 production;
- 23 "(2) the study of agronomic effects of biochar
- usage in soils, including plant growth and yield ef-

1	fects for different application rates and soil types,
2	and implications for water and fertilizer needs;
3	"(3) biochar characterization, including analysis
4	of physical properties, chemical structure, product
5	consistency and quality, and the impacts of those
6	properties on the soil-conditioning effects of biochar
7	in different soil types;
8	"(4) the study of effects of the use of biochar
9	on the carbon content of soils, with an emphasis on
10	the potential for biochar applications to sequester
11	carbon;
12	"(5) the study of effects of biochar on green-
13	house gas emissions relating to crop production, in-
14	cluding nitrous oxide and carbon dioxide emissions
15	from cropland;
16	"(6) the study of the integration of renewable
17	energy and bioenergy production with biochar pro-
18	duction;
19	"(7) the study of the economics of biochar pro-
20	duction and use, including considerations of feed-
21	stock competition, synergies of coproduction with
22	bioenergy, the value of soil enhancements, and the
23	value of soil carbon sequestration; and
24	"(8) such other topics as are identified by the
25	Secretary.

- 1 "(f) Funding.—There is authorized to be appro-
- 2 priated to carry out this section \$3,000,000 for each of
- 3 fiscal years 2008 through 2012.
- 4 "SEC. 9012. RENEWABLE WOODY BIOMASS FOR ENERGY.
- 5 "(a) IN GENERAL.—The Secretary, acting through
- 6 the Chief of the Forest Service (referred to in this section
- 7 as the 'Secretary'), shall conduct a competitive research,
- 8 technology development, and technology application pro-
- 9 gram to encourage the use of renewable woody biomass
- 10 for energy.
- 11 "(b) Eligible Entities.—Entities eligible to com-
- 12 pete under the program shall include—
- 13 "(1) the Forest Service (through Research and
- 14 Development);
- 15 "(2) other Federal agencies;
- 16 "(3) State and local governments;
- 17 "(4) federally recognized Indian tribes;
- 18 "(5) colleges and universities; and
- 19 "(6) private entities.
- 20 "(c) Priority for Project Selection.—The Sec-
- 21 retary shall give priority under the program to projects
- 22 that—
- "(1) develop technology and techniques to use
- low-value woody biomass sources, such as byproducts

1	of forest health treatments and hazardous fuels re-
2	duction, for the production of energy;
3	"(2) develop processes that integrate production
4	of energy from woody biomass into biorefineries or
5	other existing manufacturing streams;
6	"(3) develop new transportation fuels from
7	woody biomass; and
8	"(4) improve the growth and yield of trees in-
9	tended for renewable energy production.
10	"(d) Authorization of Appropriations.—There
11	is authorized to be appropriated to carry out this section
12	\$5,000,000 for each of fiscal years 2008 through 2012.
13	"SEC. 9013. COMMUNITY WOOD ENERGY PROGRAM.
14	"(a) Definitions.—In this section:
15	"(1) COMMUNITY WOOD ENERGY PLAN.—The
16	term 'community wood energy plan' means a plan
17	that identifies how local forests can be accessed in
18	a sustainable manner to help meet the wood supply
19	needs of a community wood energy system.
20	"(2) Community wood energy system.—
21	"(A) IN GENERAL.—The term 'community
22	wood energy system' means an energy system
23	that—
24	"(i) services schools, town halls, li-
25	braries, and other public buildings; and

1	"(ii) uses woody biomass as the pri-
2	mary fuel.
3	"(B) Inclusions.—The term 'community
4	wood energy system' includes single facility cen-
5	tral heating, district heating, combined heat
6	and energy systems, and other related biomass
7	energy systems.
8	"(b) Grant Program.—
9	"(1) In General.—The Secretary, acting
10	through the Chief of the Forest Service, shall estab-
11	lish a program to be known as the 'Community
12	Wood Energy Program' to provide—
13	"(A) grants of up to \$50,000 to State and
14	local governments (or designees)—
15	"(i) to conduct feasibility studies re-
16	lated to community wood energy plans; and
17	"(ii) to develop community wood en-
18	ergy plans; and
19	"(B) competitive grants to State and local
20	governments—
21	"(i) to acquire or upgrade community
22	wood energy systems for public buildings;
23	and
24	"(ii) to implement a community wood
25	energy plan.

1	"(2) Considerations.—In selecting applicants
2	for grants under paragraph (1)(B), the Secretary
3	shall consider—
4	"(A) the energy efficiency of the proposed
5	system; and
6	"(B) other conservation and environmental
7	criteria that the Secretary considers appro-
8	priate.
9	"(e) Community Wood Energy Plan.—
10	"(1) In general.—A State or local govern-
11	ment that receives a grant under subsection
12	(b)(1)(A), shall use the grant, and the technical as-
13	sistance of the State forester, to create a community
14	wood energy plan to meet the wood supply needs of
15	the community wood energy system, in a sustainable
16	manner, that the State or local government proposes
17	to purchase under this section.
18	"(2) USE OF PLAN.—A State or local govern-
19	ment applying to receive a competitive grant de-
20	scribed in subsection (b)(1)(B) shall submit to the
21	Secretary as part of the grant application the appli-
22	cable community wood energy plan described in
23	paragraph (1).

1 "(3) REQUIREMENT.—To be included in a com-2 munity wood energy plan, property shall be subject 3 to a forest management plan. "(d) Use in Public Buildings.—A State or local 4 government that receives a grant under subsection 5 (b)(1)(B) shall use a community wood energy system ac-6 7 quired, in whole or in part, with the use of the grant funds 8 for primary use in a public facility owned by the State 9 or local government. 10 "(e) Limitation.—A community wood energy system 11 acquired with grant funds provided under subsection 12 (b)(1)(B) shall not exceed an output of— 13 "(1) 50,000,000 Btu per hour for heating; and 14 "(2) 2 megawatts for electric power production. 15 "(f) Matching Funds.—A State or local government that receives a grant under subsection (b) shall con-16 17 tribute an amount of non-Federal funds towards the feasibility study, development of the community wood energy 18 plan, or acquisition of the community wood energy sys-19 20 tems that is at least equal to the amount of grant funds 21 received by the State or local government under that sub-22 section. 23 "(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section 25 \$5,000,000 for each of fiscal years 2008 through 2012.

1	"SEC. 9014. RURAL ENERGY SYSTEMS RENEWAL.
2	"(a) Purpose.—The purpose of this section is to es-
3	tablish a Federal program—
4	"(1) to encourage communities in rural areas of
5	the United States to establish energy systems re-
6	newal strategies for their communities;
7	"(2) to provide the information, analysis assist-
8	ance, and guidance that the communities need; and
9	"(3) to provide financial resources to partially
10	fund the costs of carrying out community energy
11	systems renewal projects.
12	"(b) Program Authority.—The Secretary shall es-
13	tablish and carry out a program of competitive grants to
14	support communities in rural areas in carrying out rural
15	energy systems renewal projects.
16	"(c) Use of Grants.—A community may use a
17	grant provided under this section to carry out a project—
18	"(1) to conduct an energy assessment that as-
19	sesses total energy usage by all members and activi-
20	ties of the community, including an assessment of—
21	"(A) energy used in community facilities
22	including energy for heating, cooling, lighting
23	and all other building and facility uses;
24	"(B) energy used in transportation by
25	community members;

1	"(C) current sources and types of energy
2	used;
3	"(D) energy embedded in other materials
4	and products;
5	"(E) the major impacts of the energy
6	usage (including the impact on the quantity of
7	oil imported, total costs, the environment, and
8	greenhouse gas emissions); and
9	"(F) such other activities as are deter-
10	mined appropriate by the community, consistent
11	with the purposes described in subsection (a);
12	"(2) to formulate and analyze ideas for reduc-
13	ing conventional energy usage and greenhouse gas
14	emissions by the community, including reduction of
15	energy usage through—
16	"(A) housing insulation, automatic controls
17	on lighting and electronics, zone energy usage,
18	and home energy conservation practices;
19	"(B) transportation alternatives, vehicle
20	options, transit options, transportation con-
21	servation, and walk- and bike-to-school pro-
22	grams;
23	"(C) community configuration alternatives
24	to provide pedestrian access to regular services;
25	and

1	"(D) community options for alternative en-
2	ergy systems (including alternative fuels, photo-
3	voltaic electricity, wind energy, geothermal heat
4	pump systems, and combined heat and power);
5	"(3) to formulate and implement community
6	strategies for reducing conventional energy usage
7	and greenhouse gas emissions by the community;
8	"(4) to conduct assessments and to track and
9	record the results of energy system changes; and
10	"(5) to train rural community energy profes-
11	sionals to provide expert support to community en-
12	ergy systems renewal projects.
13	"(d) Federal Share.—The Federal cost of car-
14	rying out a project under this section shall be 50 percent
15	of the total cost of the project.
16	"(e) Administration.—The Secretary shall—
17	"(1) issue, an annual basis, requests for pro-
18	posals from communities in rural areas for energy
19	systems renewal projects; and
20	"(2) establish criteria for program participation
21	and evaluation of projects carried out under this sec-
22	tion, including criteria based on—
23	"(A) the quality of the renewal projects
24	proposed;

1	"(B) the probability of success of the com-
2	munity in meeting the energy systems renewal
3	goals of the community;
4	"(C) the projected energy savings (includ-
5	ing oil savings) resulting from the proposed
6	projects; and
7	"(D) projected greenhouse gas emission re-
8	ductions resulting from the proposed projects.
9	"(f) Technical Assistance.—The Secretary, in
10	consultation with the Secretary of Energy, shall—
11	"(1) develop, and provide through the National
12	Institute of Food and Agriculture or State Energy
13	Offices, information and tools that communities in
14	rural areas can use—
15	"(A) to assess the current energy systems
16	of the communities, including sources, uses, and
17	impacts;
18	"(B) to identify and evaluate options for
19	changes;
20	"(C) to develop strategies and plans for
21	changes; and
22	"(D) to implement changes and assess the
23	impact of the changes; and
24	"(2) provide technical assistance and support to
25	communities in rural areas that receive grants under

- this section to assist the communities in carrying out
 projects under this section.
- 3 "(g) Report.—Not later than December 31, 2011,
- 4 and biennially thereafter, the Secretary shall submit to the
- 5 Committee on Agriculture of the House of Representatives
- 6 and the Committee on Agriculture, Nutrition, and For-
- 7 estry of the Senate a report that documents the best prac-
- 8 tices and approaches used by communities in rural areas
- 9 that receive funds under this section.
- 10 "(h) AUTHORIZATION OF APPROPRIATIONS.—There
- 11 is authorized to be appropriated to the Secretary to make
- 12 grants under this section \$5,000,000 for each of fiscal
- 13 years 2008 through 2012.
- 14 "SEC. 9015. VOLUNTARY RENEWABLE BIOMASS CERTIFI-
- 15 CATION PROGRAM.
- 16 "(a) Establishment.—The Secretary, in consulta-
- 17 tion with Administrator, shall establish a voluntary pro-
- 18 gram to certify renewable biomass that meets sustainable
- 19 growing standards designed—
- 20 "(1) to reduce greenhouse gases and improve
- 21 soil carbon content;
- 22 "(2) to protect wildlife habitat, and
- 23 "(3) to protect air, soil, and water quality.
- 24 "(b) Voluntary Certification Requirements.—
- 25 To qualify for certification under the program established

- 1 under subsection (a), a biomass crop shall be inspected
- 2 and certified as meeting the standards adopted under sub-
- 3 section (c) by an inspector designated under subsection
- 4 (d).
- 5 "(c) Production Standards.—
- 6 "(1) IN GENERAL.—The Secretary shall adopt
- 7 standards for the certification of renewable biomass
- 8 under subsection (b) that will apply to those pro-
- 9 ducers who elect to participate in the voluntary cer-
- tification program.
- 11 "(2) REQUIREMENT.—The standards under
- paragraph (1) shall provide measurement of a nu-
- merical 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 Sec-
- 17 retary and the Administrator.
- 18 "(d) Inspectors.—The Secretary shall designate in-
- 19 spectors that the Secretary determines are qualified to
- 20 carry out inspections and certifications under subsection
- 21 (b) in order to certify renewable biomass under this sec-
- 22 tion.
- "(e) Designation.—A product produced from re-
- 24 newable biomass that is certified under this section may

be designated as having been produced from certified re-
newable 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 cer-
tification obtained in accordance with subsection (b).
"SEC. 9016. ADMINISTRATION.
"The Secretary shall designate an entity within the
Department of Agriculture to—
"(1) provide oversight and coordination of all
activities relating to renewable energy and biobased
product development within the Department;
"(2) act as a liaison between the Department
and other Federal, State, and local agencies to en-
sure coordination among activities relating to renew-
able energy and biobased product development;
"(3) assist agriculture researchers by evaluating
the market potential of new biobased products in the
initial phase of development;
"(4) collect and disseminate information relat-
ing to renewable energy and biobased product devel-
opment programs, including research, within the
Federal Government; and

1	"(5) establish and maintain a public database
2	of best practices to facilitate information sharing re-
3	lating to—
4	"(A) renewable energy and biobased prod-
5	uct development from programs under this title
6	and other programs; and
7	"(B) best practices for producing, col-
8	lecting, harvesting, storing, and transporting
9	crops of renewable biomass, as described under
10	section 9004(d)(3)(B) of the Farm Security
11	and Rural Investment Act of 2002.
12	"SEC. 9017. BIOFUELS INFRASTRUCTURE STUDY.
13	"(a) In General.—The Secretary, in collaboration
14	with the Secretary of Energy, the Administrator, and the
15	Secretary of Transportation, shall—
16	"(1) conduct an assessment of the infrastruc-
17	ture needs for expanding the domestic production,
18	transport, and marketing of biofuels and bioenergy;
19	"(2) formulate recommendations for infrastruc-
20	ture development needs and approaches; and
21	"(3) submit to the appropriate committees of
22	Congress a report describing the assessment and
23	recommendations.
24	"(b) Infrastructure Areas.—In carrying out sub-
25	section (a), the Secretary shall consider—

"(1) biofuel transport and delivery infrastruc-
ture issues, including shipment by rail or 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 re-
quirements for biorefineries; and
"(6) 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 eco-
nomic issues;

1	"(4) the environmental implications of alter-
2	native approaches to infrastructure development;
3	and
4	"(5) the resource use and conservation charac-
5	teristics of alternative approaches to infrastructure
6	development.
7	"(d) Implementation.—In carrying out this sec-
8	tion, the Secretary—
9	"(1) shall consult with individuals and entities
10	with interest or expertise in the areas described in
11	subsections (b) and (c); and
12	"(2) may issue a solicitation for a competition
13	to select a contractor to support the Secretary.
14	"(e) Authorization of Appropriations.—There
15	is authorized to be appropriated to carry out this section
16	1,000,000 for each of fiscal years 2008 and 2009.
17	"SEC. 9018. RURAL NITROGEN FERTILIZER STUDY.
18	"(a) Purposes.—The purposes of this section are—
19	"(1) to assess the feasibility of producing nitro-
20	gen fertilizer from renewable energy resources in
21	rural areas; and
22	"(2) to formulate recommendations for a pro-
23	gram to promote rural nitrogen fertilizer production
24	from renewable energy resources in the future.
25	"(b) Study.—The Secretary shall—

1	"(1) conduct a study to assess and summarize
2	the current state of knowledge regarding the poten-
3	tial for the production of nitrogen fertilizer from re-
4	newable energy sources in rural areas;
5	"(2) identify the critical challenges to commer-
6	cialization of rural production of nitrogen fertilizer
7	from renewables; and
8	"(3) not later than 270 days after the date of
9	enactment of this section, submit to the Committee
10	on Agriculture of the House of Representatives and
11	the Committee on Agriculture, Nutrition, and For-
12	estry of the Senate a report that summarizes the re-
13	sults of the activities described in paragraphs (1)
14	and (2).
15	"(c) Needs.—
16	"(1) IN GENERAL.—Based on the results of the
17	study described in subsection (b), the Secretary shall
18	identify the critical needs to commercializing the
19	rural production of nitrogen fertilizer from renew-
20	ables, including—
21	"(A) identifying alternative processes for
22	renewables-to-nitrogen fertilizer production;
23	"(B) identifying efficiency improvements
24	that are necessary for each component of re-
25	newables-to-nitrogen fertilizer production proc-

1	esses to produce cost-competitive nitrogen fer-
2	tilizer;
3	"(C) identifying research and technology
4	priorities for the most promising technologies;
5	"(D) identifying economic analyses needed
6	to better understand the commercial potential
7	of rural nitrogen production from renewables;
8	"(E) identifying additional challenges im-
9	peding commercialization, including—
10	"(i) cost competition from nitrogen
11	fertilizer produced using natural gas and
12	coal;
13	"(ii) modifications or expansion need-
14	ed to the currently-installed nitrogen fer-
15	tilizer (anhydrous ammonia) pipeline and
16	storage tank system to enable interconnec-
17	tion of on-farm or rural renewables-to-ni-
18	trogen fertilizer systems;
19	"(iii) impact on nitrogen fertilizer (an-
20	hydrous ammonia) transportation infra-
21	structure and safety regulations;
22	"(iv) supply of competitively-priced re-
23	newable electricity; and
24	"(v) impacts on domestic water sup-
25	plies; and

1	"(F) determining greenhouse gas reduction
2	benefits of producing nitrogen fertilizer from re-
3	newable energy.
4	"(d) Program Recommendations.—As part of the
5	report described in subsection (b)(3) and based on the
6	needs identified in subsection (c), the Secretary shall pro-
7	vide recommendations on—
8	"(1) the establishment of a research, develop-
9	ment, and demonstration program to support com-
10	mercialization of rural nitrogen production using re-
11	newables;
12	"(2) the appropriate contents of the program;
13	"(3) the appropriate approach to implementing
14	the program, including participants and funding
15	plans; and
16	"(4) legislation to support commercialization of
17	rural nitrogen production using renewables.
18	"(e) Authorization of Appropriations.—There
19	is authorized to be appropriated to carry out this section
20	\$1,000,000 for fiscal year 2008.
21	"SEC. 9019. STUDY OF LIFE-CYCLE ANALYSIS OF BIOFUELS.
22	"(a) In General.—The Secretary, in consultation
23	with the Secretary of Energy and the Administrator, shall
24	conduct a study of—

1	"(1) published methods for evaluating the
2	lifecycle greenhouse gas emissions of conventional
3	fuels and biofuels; and
4	"(2) methods for performing simplified, stream-
5	lined lifecycle analyses of the greenhouse gas emis-
6	sions of conventional fuels and biofuels.
7	"(b) Report.—Not later than 1 year after the date
8	of enactment of this section, the Secretary shall submit
9	to the Committee on Agriculture of the House of Rep-
10	resentatives and the Committee on Agriculture, Nutrition,
11	and Forestry of the Senate a report that describes the re-
12	sults of the study conducted under subsection (a), includ-
13	ing recommendations for a method for performing a sim-
14	plified, streamlined lifecycle analysis of the greenhouse gas
15	emissions of biofuels and fossil fuels that includes—
16	"(1) greenhouse gas emissions relating to the
17	production, extraction, transportation, storage, and
18	waste disposal of the fuels and the feedstocks of the
19	fuels, including the greenhouse gases associated with
20	electrical and thermal energy inputs;
21	"(2) greenhouse gas emissions relating to the
22	distribution, marketing, and use of the fuels; and
23	"(3) to the maximum extent practicable, direct
24	and indirect greenhouse gas emissions from changes
25	in land use and land cover that occur domestically

1	or internationally as a result of biofuel feedstock
2	production.
3	"(c) UPDATE.—Not later than 2 years after the date
4	on which the Secretary submits the report under sub-
5	section (b), the Secretary shall submit to the Committee
6	on Agriculture of the House of Representatives and the
7	Committee on Agriculture, Nutrition, and Forestry of the
8	Senate an update containing recommendations for an im-
9	proved method for conducting lifecycle analysis of the
10	greenhouse gas emissions of biofuels and fossil fuels that
11	takes into account advances in the understanding of the
12	emissions.".
13	SEC. 9002. CONFORMING AMENDMENTS.
14	(a) Biomass Research and Development Act of
15	2000.—Title III of the Agricultural Risk Protection Act
16	of 2000 (7 U.S.C. 7624 note; Public Law 106–224) is re-
17	pealed.
18	(b) Marketing Program for Biobased Prod-
19	UCTS.—
20	(1) Implementation.—
21	(A) IN GENERAL.—The Secretary shall
22	continue to carry out the designation and label-
23	ing of biobased products in accordance with sec-
24	tion 9002 of the Farm Security and Rural In-
25	vestment Act of 2002 (7 U.S.C. 8102) as in ef-

fect 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.

1	(2) BIOENERGY EDUCATION AND AWARENESS
2	CAMPAIGN.—Section 947 of the Energy Policy Act
3	of 2005 (42 U.S.C. 16256) is repealed.