1

[DISCUSSION DRAFT] TITLE IX—ENERGY

Sec. 1. Federal procurement of biobased products.

	 Sec. 2. Loan guarantees for biorefineries and biofuel production plants. Sec. 3. Biodiesel fuel education program. Sec. 4. Renewable energy systems and energy efficiency improvements. Sec. 5. Adjustments to the bioenergy program. Sec. 6. Research, extension, and educational programs on biobased energy technologies and products. Sec. 7. Biomass energy transition reserve. Sec. 8. Forest Bioenergy Research Program.
	Sec. 9. Energy Council of the Department of Agriculture.Sec. 10. Dedicated ethanol pipeline feasibility studies.Sec. 11. Biomass Research and Development Act of 2000.
2	SEC. 1. FEDERAL PROCUREMENT OF BIOBASED PRODUCTS
3	(a) In General.—Section 9002 of the Farm Secu-
4	rity and Rural Investment Act of 2002 (7 U.S.C. 8102)
5	is amended—
6	(1) in subsection $(c)(1)$, by inserting ", com-
7	posed of at least five percent of intermediate ingredi-
8	ents and feedstocks (such as biopolymers, methyl
9	soyate, and soy polyols) as designated by the Sec-
10	retary," after "highest percentage of biobased prod-
11	ucts practicable"; and
12	(2) by striking subsection (h)(2) and inserting
13	the following:
14	"(2) Eligibility criteria.—
15	"(A) IN GENERAL.—Not later than 90
16	days after the date of the enactment of the

1	[2007 Farm Bill], the Secretary, in consulta-
2	tion with the Administrator and representatives
3	from small and large businesses, academia,
4	other Federal agencies and departments, and
5	other persons as the Secretary considers appro-
6	priate, shall issue criteria for determining which
7	products may qualify to receive the label under
8	paragraph (1). The criteria shall encourage the
9	purchase of products with the maximum
10	biobased content, and should, to the maximum
11	extent possible, be consistent with the guide-
12	lines issued under subsection (e).
13	"(B) Intermediate ingredients.—The
14	criteria issued under subparagraph (A) shall
15	provide that the Secretary may designate inter-
16	mediate ingredients and feedstocks (such as
17	biopolymers, methyl soyate, and soy polyols) as
18	biobased for the purposes of the voluntary pro-
19	gram established under this subsection.".
20	(3) by striking subsection (k)(2)(A) and insert-
21	ing the following:
22	"(A) IN GENERAL.—There is authorized to
23	be appropriated \$2,000,000 for each of fiscal
24	years 2008 through 2012 to continue manda-
25	tory funding for bio-product testing and sup-

1	port ongoing operations of the Designation Pro-
2	gram, the Voluntary Labeling Program, pro-
3	curement program models, procurement re-
4	search, promotion, education, and awareness of
5	the BioPreferred Program.".
6	(b) Contingency Amendment.—In title XI of this
7	Act—
8	(1) if a change in law or laws not pertaining to
9	the Federal procurement of biobased products re-
10	duces outlays and/or increases revenue by an
11	amount sufficient to offset the increased outlays that
12	would occur over the period of fiscal years 2007
13	through 2012 and the period of fiscal years 2007
14	through 2017 if total funding for the Federal pro-
15	curement of biobased products were increased to
16	\$2,000,000 in each of fiscal years 2008 through
17	2012 to continue mandatory funding for bio-product
18	testing and support ongoing operations of the Des-
19	ignation Program, the Voluntary Labeling Program,
20	procurement program models, procurement research,
21	promotion, education, and awareness of the BioPre-
22	ferred Program (as estimated by the House Com-
23	mittee on the Budget at the time of enactment of
24	this act); and

1	(2) if such reductions in outlays or increases in
2	revenue in paragraph (1) are specifically and exclu-
3	sively dedicated to increasing total funding for the
4	Federal procurement of biobased products to
5	\$2,000,000 in each of fiscal years 2008 through
6	2012 to continue mandatory funding for bio-product
7	testing and support ongoing operations of the Des-
8	ignation Program, the Voluntary Labeling Program,
9	procurement program models, procurement research,
10	promotion, education, and awareness of the BioPre-
11	ferred Program; then
12	(3) in subsection $(k)(2)(A)$ of such section, as
13	amended by subsection (a)(3), strike "There is au-
14	thorized to be appropriated" and insert "Of the
15	funds of the Commodity Credit Corporation, the
16	Secretary of Agriculture shall use".
17	SEC. 2. LOAN GUARANTEES FOR BIOREFINERIES AND
18	BIOFUEL PRODUCTION PLANTS.
19	(a) In General.—Section 9003 of the Farm Secu-
20	rity and Rural Investment Act of 2002 (7 U.S.C. 8103)
21	is amended—
22	(1) in the section heading, by inserting ";
23	LOAN GUARANTEES FOR BIOREFINERIES AND
24	BIOFUEL PRODUCTION PLANTS" after
25	"GRANTS";

1	(2) in subsection (c), by redesignating sub-
2	sections (d) through (h) as subsections (e) through
3	(i), respectively, and inserting after subsection (c)
4	the following:
5	"(d) Loan Guarantees.—
6	"(1) IN GENERAL.—The Secretary shall make
7	loan guarantees to eligible entities to assist in pay-
8	ing the cost of development and construction of bio-
9	refineries and biofuel production plants (including
10	retrofitting) to carry out projects to demonstrate the
11	commercial viability of 1 or more processes for con-
12	verting biomass to fuels or chemicals.
13	"(2) Limitations.—
14	"(A) MAXIMUM PERCENTAGE OF LOAN
15	GUARANTEED.—A loan guarantee under para-
16	graph (1) shall be for not more than 90 percent
17	of the principal and interest due on the loan.
18	"(B) Total amounts guaranteed.—
19	The total amount of principal and interest
20	guaranteed under paragraph (1) shall not ex-
21	ceed —
22	"(i) \$1,000,000,000, in the case of
23	projects valued at not more than
24	\$100,000,000; or

1	"(ii) \$1,000,000,000, in the case of
2	projects valued at more than \$100,000,000
3	but not more than \$250,000,000.
4	"(C) Maximum term of loan guaran-
5	TEED.—The Secretary shall determine the max-
6	imum term of a loan guarantee provided under
7	paragraph (1).";
8	(3) in subsection (e) (as so redesignated), by in-
9	serting "or a loan guarantee under subsection (d)"
10	before the period;
11	(4) in subsection (f) (as so redesignated)—
12	(A) in paragraph (1), by inserting "and
13	loan guarantees under subsection (d)" after
14	"(e)"; and
15	(B) in paragraph (2)(A), by inserting "or
16	loan guarantees under subsection (d)" after
17	"(e)"; and
18	(5) by striking subsection (i) (as so redesig-
19	nated) and inserting the following:
20	"(i) Funding.—There is authorized to be appro-
21	priated such sums as may be necessary for the cost of
22	providing not more than \$2,000,000,000 in loan guaran-
23	tees under subsection (d) for the period of fiscal years
24	2008 through 2012.".

1	(c) Contingency Amendment.—In title XI of this
2	Act—
3	(1) if a change in law or laws not pertaining to
4	loan guarantees for biorefineries and biofuel produc-
5	tion plants reduces outlays and/or increases revenue
6	by an amount sufficient to offset the increased out-
7	lays that would occur over the period of fiscal years
8	2007 through 2012 and the period of fiscal years
9	2007 through 2017 if total funding for loan guaran-
10	tees for biorefineries and biofuel production plants
11	were increased to the amount necessary for the cost
12	of providing not more than \$2,000,000,000 in loan
13	guarantees for the period of fiscal years 2008
14	through 2012 (as estimated by the House Com-
15	mittee on the Budget at the time of enactment of
16	this act); and
17	(2) if such reductions in outlays or increases in
18	revenue in paragraph (1) are specifically and exclu-
19	sively dedicated to increasing total funding for loan
20	guarantees for biorefineries and biofuel production
21	plants to the amount necessary for the cost of pro-
22	viding not more than \$2,000,000,000 in loan guar-
23	antees for the period of fiscal years 2008 through
24	2012; then

1	(3) in subsection (i) of such section, as amend-
2	ed by subsection (a)(5), strike "There is authorized
3	to be appropriated" and insert "Of the funds of the
4	Commodity Credit Corporation, the Secretary of Ag-
5	riculture shall use".
6	SEC. 3. BIODIESEL FUEL EDUCATION PROGRAM.
7	(a) In General.—Section 9004(d) of the Farm Se-
8	curity and Rural Investment Act of 2002 (7 U.S.C.
9	8104(d)) is amended to read as follows:
10	"(d) Funding.—There is authorized to be appro-
11	priated to carry out this section \$2,000,000 for each of
12	fiscal years 2008 through 2012.".
13	(b) Contingency Amendment.—In title XI of this
14	Act—
15	(1) if a change in law or laws not pertaining to
16	the biodiesel fuel education program reduces outlays
17	and/or increases revenue by an amount sufficient to
18	offset the increased outlays that would occur over
19	the period of fiscal years 2007 through 2012 and
20	the period of fiscal years 2007 through 2017 if total
21	funding for the biodiesel fuel education program
22	were increased to \$2,000,000 in each of fiscal years
23	2008 through 2012 (as estimated by the House
24	Committee on the Budget at the time of enactment
25	of this act); and

1	(2) if such reductions in outlays or increases in
2	revenue in paragraph (1) are specifically and exclu-
3	sively dedicated to increasing total funding for the
4	biodiesel fuel education program to \$2,000,000 for
5	each of fiscal years 2008 through 2012; then
6	(3) in subsection (d) of such section, as amend-
7	ed by subsection (a), strike "There is authorized to
8	be appropriated" and insert "Of the funds of the
9	Commodity Credit Corporation, the Secretary of Ag-
10	riculture shall make available".
11	SEC. 4. RENEWABLE ENERGY SYSTEMS AND ENERGY EFFI-
12	CIENCY IMPROVEMENTS.
13	(a) In General.—Section 9006 of the Farm Secu-
14	rity and Rural Investment Act of 2002 (7 U.S.C. 8106)
15	is amended by striking subsection (f) and inserting the
16	following new subsections:
17	"(f) SMALL PROJECTS.—The Secretary shall use not
18	less than 15 percent of the funds available under this sec-
19	tion to provide grants for projects that have a total cost
20	\$50,000 or less.
21	"(g) Funding.—There are authorized to be appro-
22	priated to carry out this section—
23	"(1) \$50,000,000 for fiscal year 2008;
24	"(2) \$75,000,000 for fiscal year 2009;
25	"(3) \$100,000,000 for fiscal year 2010;

1	"(4) $$125,000,000$ for fiscal year 2011; and
2	"(5) $$150,000,000$ for fiscal year 2012.".
3	(b) Contingency Amendment.—In title XI of this
4	Act—
5	(1) if a change in law or laws not pertaining to
6	renewable energy systems and energy efficiency im-
7	provements reduces outlays and/or increases revenue
8	by an amount sufficient to offset the increased out-
9	lays that would occur over the period of fiscal years
10	2007 through 2012 and the period of fiscal years
11	2007 through 2017 if total funding for renewable
12	energy systems and energy efficiency improvements
13	were increased to \$50,000,000 in fiscal year 2008,
14	75,000,000 in fiscal year 2009, $100,000,000$ in
15	fiscal year 2010, \$125,000,000 in fiscal year 2011,
16	and $$150,000,000$ in fiscal year 2012 (as estimated
17	by the House Committee on the Budget at the time
18	of enactment of this act); and
19	(2) if such reductions in outlays or increases in
20	revenue in paragraph (1) are specifically and exclu-
21	sively dedicated to increasing total funding for re-
22	newable energy systems and energy efficiency im-
23	provements to \$50,000,000 in fiscal year 2008,
24	\$75,000,000 in fiscal year 2009, \$100,000,000 in

1	fiscal year 2010, \$125,000,000 in fiscal year 2011,
2	and \$150,000,000 in fiscal year 2012; then
3	(3) in subsection (g) of such section, as amend-
4	ed by subsection (a), strike "There are authorized to
5	be appropriated" and insert "Of the funds of the
6	Commodity Credit Corporation, the Secretary of Ag-
7	riculture shall make available".
8	SEC. 5. ADJUSTMENTS TO THE BIOENERGY PROGRAM.
9	(a) In General.—Section 9010 of the Farm Secu-
10	rity and Rural Investment Act of 2002 (7 U.S.C. 8108)
11	is amended—
12	(1) in subsection (a)—
13	(A) by redesignating paragraphs (1)
14	through (4) as paragraphs (2) through (5) re-
15	spectively;
16	(B) by inserting before paragraph (2), as
17	redesignated by subparagraph (A), the following
18	new paragraph:
19	"(1) AGRICULTURAL CELLULOSIC BIOMASS.—
20	The term 'agricultural cellulosic biomass' means—
21	"(A) any plant material grown or collected
22	for the purpose of being converted to energy
23	(including aquatic plants);
24	"(B) any organic byproduct or residue
25	from agriculture and forestry (including wastes

1	from food production and processing, used vege-
2	table oil, mill residues (including pulping resi-
3	dues), and storm-damaged, insect-damaged, and
4	diseased-damaged crops and trees) that can be
5	converted into energy; or
6	"(C) any waste material that can be con-
7	verted to energy and is derived from—
8	"(i) vegetative waste material (includ-
9	ing wood waste and wood residues);
10	"(ii) invasive plants;
11	"(iii) fibers; or
12	"(iv) animal waste and byproducts.".
13	(C) in paragraph (2), as redesignated by
14	subparagraph (A)—
15	(i) in subparagraph (A), by striking
16	"and";
17	(ii) in subparagraph (B), by striking
18	the final period and inserting a semicolon;
19	and
20	(iii) by adding at the end the fol-
21	lowing new subparagraphs:
22	"(C) production of heat and power from
23	agricultural cellulosic biomass materials at a
24	biofuels plant;
25	"(D) biomass gasification;

1	"(E) hydrogen made from cellulosic com-
2	modities for fuel cells; and
3	"(F) such other items as the Secretary
4	considers appropriate.";
5	(D) in paragraph (4), as redesignated by
6	subparagraph (B)—
7	(i) in subparagraph (A), by inserting
8	"(but excludes corn starch)" after "corn";
9	and
10	(ii) in subparagraph (B), by striking
11	"a cellulosic commodity (such as hybrid
12	poplar and switch grass)" and inserting
13	"agricultural cellulosic biomass"; and
14	(2) by striking subsection (c) and inserting the
15	following:
16	"(c) Funding.—There is authorized to be appro-
17	priated to carry out this section \$1,500,000,000 for the
18	period of fiscal years 2008 through 2012.".
19	(b) Contingency Amendment.—In title XI of this
20	Act—
21	(1) if a change in law or laws not pertaining to
22	the bioenergy program reduces outlays and/or in-
23	creases revenue by an amount sufficient to offset the
24	increased outlays that would occur over the period of
25	fiscal years 2007 through 2012 and the period of

1	fiscal years 2007 through 2017 if total funding for
2	the bioenergy program were increased to
3	\$1,500,000,000 for the period of fiscal years 2008
4	through 2012 (as estimated by the House Com-
5	mittee on the Budget at the time of enactment of
6	this act); and
7	(2) if such reductions in outlays or increases in
8	revenue in paragraph (1) are specifically and exclu-
9	sively dedicated to increasing total funding for the
10	bioenergy program to \$1,500,000,000 for the period
11	of fiscal years 2008 through 2012; then
12	(3) in subsection (c) of such section, as amend-
13	ed by subsection (a), strike "There is authorized to
14	be appropriated" and insert "Of the funds of the
15	Commodity Credit Corporation, the Secretary of Ag-
16	riculture shall use".
17	SEC. 6. RESEARCH, EXTENSION, AND EDUCATIONAL PRO-
18	GRAMS ON BIOBASED ENERGY TECH-
19	NOLOGIES AND PRODUCTS.
20	Section 9011(j)(1)(C) of the Farm Security and
21	Rural Investment Act of 2002 (7 U.S.C. $8109(j)(1)(C)$)
22	is amended by striking "2010" and inserting "2012".

1 SEC. 7. BIOMASS ENERGY TRANSITION RESERVE.

- 3 (a) In General.—The Secretary of Agriculture,
- 4 working through the Forest Service, in cooperation with
- 5 other Federal agencies, land grant colleges and univer-
- 6 sities, and private entities, shall conduct a competitive re-
- 7 search and development program to encourage new forest-
- 8 to-energy technologies. The Secretary may use grants, co-
- 9 operative agreements, and other methods to partner with
- 10 cooperating entities on projects that the Secretary deter-
- 11 mines shall best promote new forest-to-energy tech-
- 12 nologies.
- 13 (b) Priority for Project Selection.—The Sec-
- 14 retary shall give priority to projects that—
- 15 (1) develop technology and techniques to use
- low value forest materials, such as byproducts of for-
- est health treatments and hazardous fuel reduction,
- 18 for the production of energy;
- 19 (2) develop processes for the conversion of cel-
- 20 lulosic forest materials that integrate production of
- energy into existing manufacturing steams or in in-
- tegrated forest biorefineries;
- 23 (3) develop new transportation fuels that use
- forest materials as a feedstock for the production of
- such fuels; or

1	(4) improve the of growth and yield of trees for
2	the purpose of renewable energy and other forest
3	product use.
4	(c) Funding.—There is authorized to be appro-
5	priated to carry out this section \$15,000,000 for each of
6	fiscal years 2008 through 2012.
7	(d) Contingency Amendment.—In title XI of this
8	Act—
9	(1) if a change in law or laws not pertaining to
10	the forest bioenergy research program reduces out-
11	lays and/or increases revenue by an amount suffi-
12	cient to offset the increased outlays that would occur
13	over the period of fiscal years 2007 through 2012
14	and the period of fiscal years 2007 through 2017 if
15	total funding for the forest bioenergy research pro-
16	gram were increased to \$15,000,000 in each of fiscal
17	years 2008 through 2012 (as estimated by the
18	House Committee on the Budget at the time of en-
19	actment of this act); and
20	(2) if such reductions in outlays or increases in
21	revenue in paragraph (1) are specifically and exclu-
22	sively dedicated to increasing total funding for the
23	forest bioenergy research program to \$15,000,000 in
24	each of fiscal years 2008 through 2012; then

1	(3) in subsection (c), strike "There is author-
2	ized to be appropriated" and insert "Of the funds of
3	the Commodity Credit Corporation, the Secretary of
4	Agriculture shall make available''.
5	SEC. 9. ENERGY COUNCIL OF THE DEPARTMENT OF AGRI-
6	CULTURE.
7	(a) In General.—The Secretary of Agriculture shall
8	establish an energy council in the Office of the Secretary
9	(in this section referred to as the "Council") to coordinate
10	the energy policy of the Department of Agriculture and
11	consult with other departments and agencies of the Fed-
12	eral Government.
13	(b) Membership.—
14	(1) In General.—The Secretary shall appoint
15	the members of the Council from among the staff of
16	the agencies and mission areas of the Department of
17	Agriculture with responsibilities relating to energy
18	programs or policies.
19	(2) Chair.—The chief economist of the Depart-
20	ment of Agriculture shall serve as the Chair of the
21	Council.
22	(c) Duties of Office of Energy Policy and
23	New Uses.—The Council shall assume the duties of the
24	Office of Energy Policy and New Uses of the Department
25	of Agriculture.

1	(d) Termination of Office of Energy Policy
2	AND NEW USES.—
3	(1) Repeal.—Section 220 of the Department
4	of Agriculture Reorganization Act of 1994 (7 U.S.C.
5	6920) is hereby repealed.
6	(2) Termination.—The Secretary shall wind-
7	up and terminate the operations of the Office of En-
8	ergy Policy and New Uses of the Department of Ag-
9	riculture.
10	SEC. 10. DEDICATED ETHANOL PIPELINE FEASIBILITY
11	STUDIES.
12	(a) In General.—The Secretary of Agriculture, in
13	coordination with the Secretary of Energy and the Sec-
14	retary of Transportation, shall spend up to \$1,000,000 to
15	fund feasibility studies for the construction of dedicated
16	ethanol pipelines.
17	(b) Conduct of Studies.—
18	(1) In General.—The Secretary of Agriculture
19	shall—
20	(A) through a competitive solicitation proc-
21	ess, select 1 or more firms having capabilities in
22	the planning, development, and construction of
23	dedicated pipelines to carry out the feasibility
24	studies described in subsection (a): or

1	(B) carry out the feasibility studies in con-
2	junction with such firms.
3	(2) Timing.—
4	(A) IN GENERAL.—If the Secretary elects
5	to select 1 or more firms under paragraph
6	(1)(A), the Secretary shall award funding under
7	this section not later than 120 days after the
8	date of enactment of this Act.
9	(B) Studies.—As a condition of receiving
10	funds under this section, a recipient of funding
11	shall agree to submit to the Secretary a com-
12	pleted feasibility study not later than one year
13	after the date on which the recipient is awarded
14	funds pursuant to paragraph (1)(A).
15	(c) Study Factors.—Feasibility studies funded
16	under this section shall include consideration of—
17	(1) existing or potential barriers to dedicated
18	ethanol pipelines, including technical, siting, financ-
19	ing, and regulatory barriers;
20	(2) potential evolutionary pathways for the de-
21	velopment of an ethanol pipeline transport system,
22	such as starting with localized gathering networks as
23	compared to major interstate ethanol pipelines to
24	carry larger volumes from the Midwest to the East
25	or West coast:

1	(3) market risk, including throughput risk, and
2	ways of mitigating the risk;
3	(4) regulatory, financing, and siting options
4	that would mitigate risk in these areas and help en-
5	sure the construction of dedicated ethanol pipelines;
6	(5) financial incentives that may be necessary
7	for the construction of dedicated ethanol pipelines,
8	including the return on equity that sponsors of the
9	first dedicated ethanol pipelines will require to invest
10	in the pipelines;
11	(6) ethanol production of 20,000,000,000,
12	30,000,000,000, and $40,000,000,000$ gallons per
13	year by 2020; and
14	(7) such other factors that the Secretary con-
15	siders to be appropriate.
16	(d) Confidentiality.—If a recipient of funding
17	under this section requests confidential treatment for crit-
18	ical energy infrastructure information or commercially-
19	sensitive data contained in a feasibility study submitted
20	by the recipient under subsection (b)(2)(B), the Secretary
21	shall offer to enter into a confidentiality agreement with
22	the recipient to maintain the confidentiality of the sub-
23	mitted information.
24	(e) Review; Report.—The Secretary of Agriculture
25	shall—

1	(1) review the feasibility studies submitted
2	under subsection (b)(2)(B) or carried out under sub-
3	section (b)(1)(B); and
4	(2) not later than 90 days after the date on
5	which all studies are completed under subsection (b),
6	submit to Congress a report that includes—
7	(A) information about the potential bene-
8	fits of constructing dedicated ethanol pipelines;
9	and
10	(B) recommendations for legislation that
11	could help provide for the construction of dedi-
12	cated ethanol pipelines.
13	(f) Funding.—There are authorized to be appro-
14	priated to the Secretary of Agriculture to carry out this
15	section \$1,000,000 for fiscal year 2008, to remain avail-
16	able until expended.
17	SEC. 11. BIOMASS RESEARCH AND DEVELOPMENT ACT OF
18	2000.
19	(a) Restatement of Act.—
20	(1) In general.—Section 9008 of the Farm
21	Security and Rural Investment Act of 2002 (116
22	Stat. 486) is amended to read as follows:

1	"SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT ACT
2	OF 2000.
3	"(a) Short Title.—This section may be cited as the
4	'Biomass Research and Development Act of 2000'.
5	"(b) FINDINGS.—Congress finds that—
6	"(1) conversion of biomass into biobased indus-
7	trial products offers outstanding potential for benefit
8	to the national interest through—
9	"(A) improved strategic security and bal-
10	ance of payments;
11	"(B) healthier rural economies;
12	"(C) improved environmental quality;
13	"(D) near-zero net greenhouse gas emis-
14	sions;
15	"(E) technology export; and
16	"(F) sustainable resource supply;
17	"(2) the key technical challenges to be overcome
18	in order for biobased industrial products to be cost-
19	competitive are finding new technology and reducing
20	the cost of technology for converting biomass into
21	desired biobased industrial products;
22	"(3) biobased fuels, such as ethanol and bio-
23	diesel, have the clear potential to be sustainable, low
24	cost, and high performance fuels that are compatible
25	with both current and future transportation systems
26	and provide near-zero net greenhouse gas emissions;

1	"(4) biobased chemicals have the clear potential
2	for environmentally benign product life cycles;
3	"(5) biobased power can—
4	"(A) provide environmental benefits;
5	"(B) promote rural economic development;
6	and
7	"(C) diversify energy resource options;
8	"(6) many biomass feedstocks suitable for in-
9	dustrial processing show the clear potential for sus-
10	tainable production, in some cases resulting in im-
11	proved soil fertility and carbon sequestration;
12	"(7)(A) grain processing mills are biorefineries
13	that produce a diversity of useful food, chemical,
14	feed, and fuel products; and
15	"(B) technologies that result in further diver-
16	sification of the range of value-added biobased in-
17	dustrial products can meet a key need for the grain
18	processing industry;
19	"(8)(A) cellulosic feedstocks are attractive be-
20	cause of their low cost and widespread availability;
21	and
22	"(B) research resulting in cost-effective tech-
23	nology to overcome the recalcitrance of cellulosic bio-
24	mass would allow biorefineries to produce fuels and
25	bulk chemicals on a very large scale, with a commen-

1	surately large realization of the benefit described in
2	paragraph (1);
3	"(9) research into the fundamentals to under-
4	stand important mechanisms of biomass conversion
5	can be expected to accelerate the application and ad-
6	vancement of biomass processing technology by—
7	"(A) increasing the confidence and speed
8	with which new technologies can be scaled up;
9	and
10	"(B) giving rise to processing innovations
11	based on new knowledge;
12	"(10) the added utility of biobased industrial
13	products developed through improvements in proc-
14	essing technology would encourage the design of
15	feedstocks that would meet future needs more effec-
16	tively;
17	"(11) the creation of value-added biobased in-
18	dustrial products would create new jobs in construc-
19	tion, manufacturing, and distribution, as well as new
20	higher-valued exports of products and technology;
21	"(12)(A) because of the relatively short-term
22	time horizon characteristic of private sector invest-
23	ments, and because many benefits of biomass proc-
24	essing are in the national interest, it is appropriate
25	for the Federal Government to provide

1	precommercial investment in fundamental research
2	and research-driven innovation in the biomass proc-
3	essing area; and
4	"(B) such an investment would provide a valu-
5	able complement to ongoing and past governmental
6	support in the biomass processing area; and
7	"(13) several prominent studies, including stud-
8	ies by the President's Committee of Advisors on
9	Science and Technology and the National Research
10	Council—
11	"(A) support the potential for large re-
12	search-driven advances in technologies for pro-
13	duction of biobased industrial products as well
14	as associated benefits; and
15	"(B) document the need for a focused, in-
16	tegrated, and innovation-driven research effort
17	to provide the appropriate progress in a timely
18	manner.
19	"(c) Definitions.—In this section:
20	"(1) Advisory committee.—The term 'Advi-
21	sory Committee' means the Biomass Research and
22	Development Technical Advisory Committee estab-
23	lished by this section.

1	"(2) BIOBASED FUEL.—The term 'biobased
2	fuel' means any transportation fuel produced from
3	biomass.
4	"(3) BIOBASED PRODUCT.—The term 'biobased
5	product' means an industrial product (including
6	chemicals, materials, and polymers) produced from
7	biomass, or a commercial or industrial product (in-
8	cluding animal feed and electric power) derived in
9	connection with the conversion of biomass to fuel.
10	"(4) BIOMASS.—The term 'biomass' means any
11	organic matter that is available on a renewable or
12	recurring basis, including agricultural crops and
13	trees, wood and wood wastes and residues, plants
14	(including aquatic plants), grasses, residues, fibers,
15	and animal wastes, municipal wastes, and other
16	waste materials.
17	"(5) Board.—The term 'Board' means the
18	Biomass Research and Development Board estab-
19	lished by this section.
20	"(6) Demonstration.—The term 'demonstra-
21	tion' means demonstration of technology in a pilot
22	plant or semi-works scale facility.
23	"(7) Initiative.—The term 'Initiative' means
24	the Biomass Research and Development Initiative
25	established under this section.

1	"(8) Institution of higher education.—
2	The term 'institution of higher education' has the
3	meaning given the term in section 102(a) of the
4	Higher Education Act of 1965 (20 U.S.C. 1002(a)).
5	"(9) NATIONAL LABORATORY.—The term 'Na-
6	tional Laboratory' has the meaning given that term
7	in section 2 of the Energy Policy Act of 2005.
8	"(10) Point of Contact.—The term 'point of
9	contact' means a point of contact designated under
10	this section.
11	"(d) Cooperation and Coordination in Biomass
12	RESEARCH AND DEVELOPMENT.—
13	"(1) In General.—The Secretary of Agri-
14	culture and the Secretary of Energy shall cooperate
15	with respect to, and coordinate, policies and proce-
16	dures that promote research and development lead-
17	ing to the production of biobased fuels and biobased
18	products.
19	"(2) Points of Contact.—
20	"(A) In General.—To coordinate re-
21	search and development programs and activities
22	relating to biobased fuels and biobased products
23	that are carried out by their respective Depart-
24	ments—

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

1	"(iv) respond in writing to each rec-
2	ommendation of the Advisory Committee
3	made under subsection (f).
4	"(e) Biomass Research and Development
5	Board.—
6	"(1) Establishment.—There is established
7	the Biomass Research and Development Board,
8	which shall supersede the Interagency Council on
9	Biobased Products and Bioenergy established by Ex-
10	ecutive Order No. 13134, to coordinate programs
11	within and among departments and agencies of the
12	Federal Government for the purpose of promoting
13	the use of biobased fuels and biobased products by—
14	"(A) maximizing the benefits deriving from
15	Federal grants and assistance; and
16	"(B) bringing coherence to Federal stra-
17	tegic planning.
18	"(2) Membership.—The Board shall consist
19	of—
20	"(A) the point of contact of the Depart-
21	ment of Energy designated under subsection
22	(d), who shall serve as cochairperson of the
23	Board;
24	"(B) the point of contact of the Depart-
25	ment of Agriculture designated under sub-

1	section (d), who shall serve as cochairperson of
2	the Board;
3	"(C) a senior officer of each of the Depart-
4	ment of the Interior, the Environmental Protec-
5	tion Agency, the National Science Foundation,
6	and the Office of Science and Technology Pol-
7	icy, each of whom shall—
8	"(i) be appointed by the head of the
9	respective agency; and
10	"(ii) have a rank that is equivalent to
11	the rank of the points of contact; and
12	"(D) at the option of the Secretary of Ag-
13	riculture and the Secretary of Energy, other
14	members appointed by the Secretaries (after
15	consultation with the members described in sub-
16	paragraphs (A) through (C)).
17	"(3) Duties.—The Board shall—
18	"(A) coordinate research and development
19	activities relating to biobased fuels and biobased
20	products—
21	"(i) between the Department of Agri-
22	culture and the Department of Energy;
23	and
24	"(ii) with other departments and
25	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	(g) 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 on
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	"(f) BIOMASS RESEARCH AND DEVELOPMENT TECH-
24	NICAL 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—
6	"(A) to advise the Secretary of Energy, the
7	Secretary of Agriculture, and the points of con-
8	tact concerning—
9	"(i) the technical focus and direction
10	of requests for proposals issued under the
11	Initiative; and
12	"(ii) procedures for reviewing and
13	evaluating the proposals;
14	"(B) to facilitate consultations and part-
15	nerships among Federal and State agencies, ag-
16	ricultural producers, industry, consumers, the
17	research community, and other interested
18	groups to carry out program activities relating
19	to the Initiative; and
20	"(C) to evaluate and perform strategic
21	planning on program activities relating to the
22	Initiative.
23	"(2) Membership.—
24	"(A) In General.—The Advisory Com-
25	mittee shall consist of—

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

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

1	minimally prescriptive, with no areas of
2	special interest;
3	"(iii) the points of contact are funding
4	proposals under this title that are selected
5	on the basis of merit, as determined by an
6	independent panel of scientific and tech-
7	nical peers predominantly from outside the
8	Departments of Agriculture and Energy;
9	and
10	"(iv) activities under this section are
11	carried out in accordance with this section.
12	"(4) Coordination.—To avoid duplication of
13	effort, the Advisory Committee shall coordinate its
14	activities with those of other Federal advisory com-
15	mittees working in related areas.
16	"(5) Meetings.—The Advisory Committee
17	shall meet at least quarterly to enable the Advisory
18	Committee to carry out the duties of the Advisory
19	Committee.
20	"(6) Terms.—Members of the Advisory Com-
21	mittee shall be appointed for a term of 3 years, ex-
22	cept that—
23	"(A) one-third of the members initially ap-
24	pointed shall be appointed for a term of 1 year;
25	and

1	"(B) one-third of the members initially ap-
2	pointed shall be appointed for a term of 2
3	years.
4	"(g) Biomass Research and Development Ini-
5	TIATIVE.—
6	"(1) In General.—The Secretary of Agri-
7	culture and the Secretary of Energy, acting through
8	their respective points of contact and in consultation
9	with the Board, shall establish and carry out a Bio-
10	mass Research and Development Initiative under
11	which competitively awarded grants, contracts, and
12	financial assistance are provided to, or entered into
13	with, eligible entities to carry out research on, and
14	development and demonstration of, biobased fuels
15	and biobased products, and the methods, practices
16	and technologies, for their production.
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 biobased
21	fuels at prices competitive with fossil fuels;
22	"(B) high-value biobased products—
23	"(i) to enhance the economic viability
24	of biobased fuels and power; and

1	"(ii) as substitutes for petroleum-
2	based feedstocks and products; and
3	"(C) a diversity of sustainable domestic
4	sources of biomass for conversion to biobased
5	fuels and biobased products.
6	"(3) Purposes.—The purposes of the Initiative
7	are—
8	"(A) to increase the energy security of the
9	United States;
10	"(B) to create jobs and enhance the eco-
11	nomic development of the rural economy;
12	"(C) to enhance the environment and pub-
13	lie health; and
14	"(D) to diversify markets for raw agricul-
15	tural and forestry products.
16	"(4) Technical areas.—To advance the ob-
17	jectives and purposes of the Initiative, the Secretary
18	of Agriculture and the Secretary of Energy, in con-
19	sultation with the Administrator of the Environ-
20	mental Protection Agency and heads of other appro-
21	priate departments and agencies (referred to in this
22	subsection as the 'Secretaries'), shall direct research
23	and development toward—
24	"(A) feedstock production through the de-
25	velopment of crops and cropping systems rel-

1	evant to production of raw materials for conver-
2	sion to biobased fuels and biobased products,
3	including—
4	"(i) development of advanced and
5	dedicated crops with desired features, in-
6	cluding enhanced productivity, broader site
7	range, low requirements for chemical in-
8	puts, and enhanced processing;
9	"(ii) advanced crop production meth-
10	ods to achieve the features described in
11	clause (i);
12	"(iii) feedstock harvest, handling,
13	transport, and storage; and
14	"(iv) strategies for integrating feed-
15	stock production into existing managed
16	land;
17	"(B) overcoming recalcitrance of cellulosic
18	biomass through developing technologies for
19	converting cellulosic biomass into intermediates
20	that can subsequently be converted into
21	biobased fuels and biobased products, includ-
22	ing—
23	"(i) pretreatment in combination with
24	enzymatic or microbial hydrolysis; and

1	"(ii) thermochemical approaches, in-
2	cluding gasification and pyrolysis;
3	"(C) product diversification through tech-
4	nologies relevant to production of a range of
5	biobased products (including chemicals, animal
6	feeds, and cogenerated power) that eventually
7	can increase the feasibility of fuel production in
8	a biorefinery, including—
9	"(i) catalytic processing, including
10	thermochemical fuel production;
11	"(ii) metabolic engineering, enzyme
12	engineering, and fermentation systems for
13	biological production of desired products or
14	cogeneration of power;
15	"(iii) product recovery;
16	"(iv) power production technologies;
17	and
18	"(v) integration into existing biomass
19	processing facilities, including starch eth-
20	anol plants, sugar processing or refining
21	plants, paper mills, and power plants; and
22	"(D) analysis that provides strategic guid-
23	ance for the application of biomass technologies
24	in accordance with realization of improved sus-
25	tainability and environmental quality, cost ef-

1	fectiveness, security, and rural economic devel-
2	opment, usually featuring system-wide ap-
3	proaches.
4	"(5) Additional considerations.—Within
5	the technical areas described in paragraph (4), and
6	in addition to advancing the purposes described in
7	paragraph (3) and the objectives described in para-
8	graph (2), the Secretaries shall support research and
9	development—
10	"(A) to create continuously expanding op-
11	portunities for participants in existing biofuels
12	production by seeking synergies and continuity
13	with current technologies and practices, such as
14	the use of dried distillers grains as a bridge
15	feedstock;
16	"(B) to maximize the environmental, eco-
17	nomic, and social benefits of production of
18	biobased fuels and biobased products on a large
19	scale through life-cycle economic and environ-
20	mental analysis and other means; and
21	"(C) to assess the potential of Federal
22	land and land management programs as feed-
23	stock resources for biobased fuels and biobased
24	products, consistent with the integrity of soil

1	and water resources and with other environ-
2	mental considerations.
3	"(6) ELIGIBLE ENTITIES.—To be eligible for a
4	grant, contract, or assistance under this subsection,
5	an applicant shall be—
6	"(A) an institution of higher education;
7	"(B) a National Laboratory;
8	"(C) a Federal research agency;
9	"(D) a State research agency;
10	"(E) a private sector entity;
11	"(F) a nonprofit organization; or
12	"(G) a consortium of two or more entities
13	described in subparagraphs (A) through (F).
14	"(7) Administration.—
15	"(A) In General.—After consultation
16	with the Board, the points of contact shall—
17	"(i) publish annually one or more
18	joint requests for proposals for grants,
19	contracts, and assistance under this sub-
20	section;
21	"(ii) require that grants, contracts,
22	and assistance under this section be
23	awarded competitively, on the basis of
24	merit, after the establishment of proce-
25	dures that provide for scientific peer review

1	by an independent panel of scientific and
2	technical peers; and
3	"(iii) give some preference to applica-
4	tions that—
5	"(I) involve a consortia of experts
6	from multiple institutions;
7	"(II) encourage the integration
8	of disciplines and application of the
9	best technical resources; and
10	"(III) increase the geographic di-
11	versity of demonstration projects.
12	"(B) DISTRIBUTION OF FUNDING BY
13	TECHNICAL AREA.—Of the funds authorized to
14	be appropriated for activities described in this
15	subsection, funds shall be distributed for each
16	of fiscal years 2007 through 2012 so as to
17	achieve an approximate distribution of—
18	"(i) 20 percent of the funds to carry
19	out activities for feedstock production
20	under paragraph (4)(A);
21	"(ii) 45 percent of the funds to carry
22	out activities for overcoming recalcitrance
23	of cellulosic biomass under paragraph
24	(4)(B);

1	"(iii) 30 percent of the funds to carry
2	out activities for product diversification
3	under paragraph (4)(C); and
4	"(iv) 5 percent of the funds to carry
5	out activities for strategic guidance under
6	paragraph $(4)(D)$.
7	"(C) Distribution of funding within
8	EACH TECHNICAL AREA.—Within each technical
9	area described in subparagraphs (A) through
10	(C) of paragraph (4), funds shall be distributed
11	for each of fiscal years 2007 through 2012 so
12	as to achieve an approximate distribution of—
13	"(i) 15 percent of the funds for ap-
14	plied fundamentals;
15	"(ii) 35 percent of the funds for inno-
16	vation; and
17	"(iii) 50 percent of the funds for dem-
18	onstration.
19	"(D) Matching funds.—
20	"(i) In General.—A minimum 20
21	percent funding match shall be required
22	for demonstration projects under this sec-
23	tion.
24	"(ii) Commercial applications.—A
25	minimum of 50 percent funding match

1	shall be required for commercial applica-
2	tion projects under this section.
3	"(E) TECHNOLOGY AND INFORMATION
4	TRANSFER TO AGRICULTURAL USERS.—The Ad-
5	ministrator of the Cooperative State Research,
6	Education, and Extension Service and the Chief
7	of the Natural Resources Conservation Service
8	shall ensure that applicable research results and
9	technologies from the Initiative are adapted,
10	made available, and disseminated through those
11	services, as appropriate.
12	"(h) Administrative Support and Funds.—
13	"(1) In general.—To the extent administra-
14	tive support and funds are not provided by other
15	agencies under paragraph (2)(b), the Secretary of
16	Energy and the Secretary of Agriculture may pro-
17	vide such administrative support and funds of the
18	Department of Energy and the Department of Agri-
19	culture to the Board and the Advisory Committee as
20	are necessary to enable the Board and the Advisory
21	Committee to carry out their duties under this sec-
22	tion.
23	"(2) OTHER AGENCIES.—The heads of the
24	agencies referred to in subsection (e)(2)(C), and the
25	other members appointed under subsection

1	(e)(2)(D), may, and are encouraged to, provide ad-
2	ministrative support and funds of their respective
3	agencies to the Board and the Advisory Committee.
4	"(3) Limitation.—Not more than 4 percent of
5	the amount appropriated for each fiscal year under
6	subsection (g)(6) may be used to pay the adminis-
7	trative costs of carrying out this section.
8	"(i) Reports.—
9	"(1) Annual reports.—For each fiscal year
10	for which funds are made available to carry out this
11	section, the Secretary of Energy and the Secretary
12	of Agriculture shall jointly submit to Congress a de-
13	tailed report on—
14	"(A) the status and progress of the Initia-
15	tive, including a report from the Advisory Com-
16	mittee on whether funds appropriated for the
17	Initiative have been distributed and used in a
18	manner that—
19	"(i) is consistent with the objectives,
20	purposes, and additional considerations de-
21	scribed in paragraphs (2) through (5) of
22	subsection (g);
23	"(ii) uses the set of criteria estab-
24	lished in the initial report submitted under

1	title III of the Agricultural Risk Protection
2	Act of 2000;
3	"(iii) achieves the distribution of
4	funds described in subparagraphs (B) and
5	(C) of subsection (g)(7); and
6	"(iv) takes into account any rec-
7	ommendations that have been made by the
8	Advisory Committee;
9	"(B) the general status of cooperation and
10	research and development efforts carried out at
11	each agency with respect to biobased fuels and
12	biobased products, including a report from the
13	Advisory Committee on whether the points of
14	contact are funding proposals that are selected
15	under subsection (g)(3)(B)(iii); and
16	"(C) the plans of the Secretary of Energy
17	and the Secretary of Agriculture for addressing
18	concerns raised in the report, including con-
19	cerns raised by the Advisory Committee.
20	"(2) UPDATES.—The Secretary and the Sec-
21	retary of Energy shall update the Vision and Road-
22	map documents prepared for Federal biomass re-
23	search and development activities.
24	"(j) Funding.—

1	"(1) Commodity credit corporation
2	FUNDS.—There is authorized to be appropriated to
3	carry out this section—
4	"(A) \$50,000,000 for fiscal year 2008,
5	"(B) $$75,000,000$ for fiscal year 2009,
6	"(C) $100,000,000$ for fiscal year 2010,
7	"(D) $$125,000,000$ for fiscal year 2011,
8	and
9	"(E) $$150,000,000$ for fiscal year 2012,
10	"(2) Additional funding.—In addition to
11	amounts authorized to be appropriated under para-
12	graph (1), there are authorized to be appropriated to
13	carry out this section \$200,000,000 for each of fis-
14	cal years 2006 through 2015.".
15	(2) Contingency amendment.—In title XI of
16	this Act—
17	(A) if a change in law or laws not per-
18	taining to the Biomass Research and Develop-
19	ment Act of 2000 reduces outlays and/or in-
20	creases revenue by an amount sufficient to off-
21	set the increased outlays that would occur over
22	the period of fiscal years 2007 through 2012
23	and the period of fiscal years 2007 through
24	2017 if total funding for the Biomass Research
25	and Development Act of 2000 were increased to

1	\$50,000,000 in fiscal year 2008, \$75,000,000
2	in fiscal year 2009, \$100,000,000 in fiscal year
3	2010, \$125,000,000 in fiscal year 2011, and
4	\$150,000,000 in fiscal year 2012 (as estimated
5	by the House Committee on the Budget at the
6	time of enactment of this act); and
7	(B) if such reductions in outlays or in-
8	creases in revenue in paragraph (1) are specifi-
9	cally and exclusively dedicated to increasing
10	total funding for the Biomass Research and De-
11	velopment Act of 2000 to \$50,000,000 in fiscal
12	year 2008, \$75,000,000 in fiscal year 2009,
13	\$100,000,000 in fiscal year 2010,
14	\$125,000,000 in fiscal year 2011, and
15	\$150,000,000 in fiscal year 2012; then
16	(C) section 9008(j) of the Farm Security
17	and Rural Investment Act of 2002, as amended
18	by paragraph (1), is amended—
19	(i) in paragraph (1) in the matter pre-
20	ceding subparagraph (A), by striking
21	"There is authorized to be appropriated"
22	and inserting "Of the funds of the Com-
23	modity Credit Corporation, the Secretary
24	of Agriculture shall make available"; and

1	(ii) in paragraph (2), by striking
2	"amounts authorized to be appropriated"
3	and inserting "amounts transferred".
4	(b) Repeal.—Title III of the Agricultural Risk Pro-
5	tection Act of 2000 (Public Law 106-224) is hereby re-
6	pealed.