114TH CONGRESS 1ST SESSION	<b>S.</b>
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To require the Secretary of Energy and the Secretary of Agriculture to collaborate in promoting the development of efficient, economical, and environmentally sustainable thermally led wood energy systems.

## IN THE SENATE OF THE UNITED STATES

Mr.	Wyden intro	duced the	following bill;	which was	read twice	and refe	erred
	to	the Comm	nittee on				

## A BILL

- To require the Secretary of Energy and the Secretary of Agriculture to collaborate in promoting the development of efficient, economical, and environmentally sustainable thermally led wood energy systems.
  - 1 Be it enacted by the Senate and House of Representa-
  - ${\it 2\ tives\ of\ the\ United\ States\ of\ America\ in\ Congress\ assembled},$
  - 3 SECTION 1. SHORT TITLE.
  - 4 This Act may be cited as the "Bioenergy Act of
  - 5 2015".
  - 6 SEC. 2. DEFINITIONS.
- 7 In this Act:

1	(1) BIOHEAT.—The term "bioheat" means the
2	use of woody biomass to generate heat.
3	(2) Biopower.—The term "biopower" means
4	the use of woody biomass to generate electricity.
5	(3) Initiative.—The term "Initiative" means
6	the Bioheat and Biopower Initiative established
7	under section 3(a).
8	(4) Secretary.—The term "Secretary" means
9	the Secretary of Energy.
10	(5) STATE WOOD ENERGY TEAM.—The term
11	"State Wood Energy Team" means a collaborative
12	group of stakeholders that—
13	(A) carry out activities within a State to
14	identify sustainable energy applications for
15	woody biomass; and
16	(B) has been designated by the State and
17	Private Forestry organization of the Forest
18	Service as a State Wood Energy Team.
19	SEC. 3. BIOHEAT AND BIOPOWER INITIATIVE.
20	(a) Establishment.—The Secretary, acting jointly
21	with the Secretary of Agriculture, shall establish a collabo-
22	rative working group, to be known as the "Bioheat and
23	Biopower Initiative", to carry out the duties described in
24	subsection (e).
25	(b) Board of Directors.—

1	(1) IN GENERAL.—The Initiative shall be led by
2	a Board of Directors.
3	(2) Membership.—The Board of Directors
4	shall consist of—
5	(A) representatives of the Department of
6	Energy and the Department of Agriculture,
7	who shall serve as cochairpersons of the Board;
8	(B) a senior officer or employee, each of
9	whom shall have a rank that is equivalent to
10	the departmental rank of a representative de-
l 1	scribed in subparagraph (A), of each of—
12	(i) the Department of the Interior;
13	(ii) the Environmental Protection
14	Agency;
15	(iii) the National Science Foundation;
16	and
17	(iv) the Office of Science and Tech-
18	nology Policy; and
19	(C) at the election of the Secretary and the
20	Secretary of Agriculture, such other members
21	as may be appointed by the Secretaries, in con-
22	sultation with the Board.
23	(3) Meetings.—The Board of Directors shall
24	meet not less frequently than once each quarter.
25	(c) Duties.—The Initiative shall—

1	(1) coordinate research and development activi-
2	ties relating to biopower and bioheat projects—
3	(A) between the Department of Agriculture
4	and the Department of Energy; and
5	(B) with other Federal departments and
6	agencies;
7	(2) provide recommendations to the Depart-
8	ment of Agriculture and the Department of Energy
9	concerning the administration of this Act; and
10	(3) ensure that—
11	(A) solicitations are open and competitive
12	with respect to applicable annual grant awards;
13	and
14	(B) objectives and evaluation criteria of so-
15	licitations for those awards are clearly stated
16	and minimally prescriptive, with no areas of
17	special interest.
18	SEC. 4. GRANT PROGRAMS.
19	(a) Demonstration Grants.—
20	(1) Establishment.—The Secretary shall es-
21	tablish, within the Bioenergy Technologies Office, a
22	program under which the Secretary shall provide
23	grants to relevant projects to support innovation and
24	market development in bioheat and biopower.

1	(2) APPLICATIONS.—To be eligible to receive a
2	grant under this subsection, the owner or operator
3	of a relevant project shall submit to the Secretary an
4	application at such time, in such manner, and con-
5	taining such information as the Secretary may re-
6	quire.
7	(3) Allocation.—Of the amounts made avail-
8	able to carry out this section, the Secretary shall al-
9	locate—
10	(A) \$15,000,000 to projects that develop
11	innovative techniques for preprocessing biomass
12	for heat and electricity generation, with the
13	goals of—
14	(i) lowering the costs of—
15	(I) distributed preprocessing
16	technologies, including technologies
17	designed to promote densification,
18	torrefaction, and the broader
19	commoditization of bioenergy feed-
20	stocks; and
21	(II) transportation and logistics
22	costs; and
23	(ii) developing technologies and proce-
24	dures that maximize environmental integ-
25	rity, such as reducing greenhouse gas

1	emissions and local air pollutants and bol-
2	stering the health of forest ecosystems and
3	watersheds; and
4	(B) \$15,000,000 to innovative bioheat and
5	biopower demonstration projects, including—
6	(i) district energy projects;
7	(ii) innovation in transportation and
8	logistics; and
9	(iii) innovative projects addressing the
10	challenges of retrofitting existing coal-fired
11	electricity generation facilities to use bio-
12	mass.
13	(4) REGIONAL DISTRIBUTION.—In selecting
14	projects to receive grants under this subsection, the
15	Secretary shall ensure, to the maximum extent prac-
16	ticable, diverse geographical distribution among the
17	projects.
18	(5) Cost share.—The Federal share of the
19	cost of a project carried out using a grant under this
20	subsection shall be 50 percent.
21	(6) DUTIES OF RECIPIENTS.—As a condition of
22	receiving a grant under this subsection, the owner or
23	operator of a project shall—
24	(A) participate in the applicable working
25	group under paragraph (7);

1	(B) submit to the Secretary a report that
2	includes—
3	(i) a description of the project and
4	any relevant findings; and
5	(ii) such other information as the Sec-
6	retary determines to be necessary to com-
7	plete the report of the Secretary under
8	paragraph (8); and
9	(C) carry out such other activities as the
10	Secretary determines to be necessary.
11	(7) Working groups.—The Secretary shall es-
12	tablish 2 working groups to share best practices and
13	collaborate in project implementation, of which—
14	(A) 1 shall be comprised of representatives
15	of feedstock projects that receive grants under
16	paragraph $(3)(A)$ ; and
17	(B) 1 shall comprised of representatives of
18	demand and logistics projects that receive
19	grants under paragraph (3)(B).
20	(8) Reports.—Not later than 5 years after the
21	date of enactment of this Act, the Secretary shall
22	submit to Congress a report describing—
23	(A) each project for which a grant has
24	been provided under this subsection;

1	(B) any findings as a result of those
2	projects; and
3	(C) the state of market and technology de-
4	velopment, including market barriers and op-
5	portunities.
6	(b) THERMALLY LED WOOD ENERGY GRANTS.—
7	(1) Establishment.—The Secretary of Agri-
8	culture, acting through the Chief of the Forest Serv-
9	ice, shall establish a program under which the Sec-
10	retary of Agriculture shall provide grants to support
11	commercially demonstrated thermally led wood en-
12	ergy technologies, with priority given to projects pro-
13	posed by State Wood Energy Teams.
14	(2) Applications.—To be eligible to receive a
15	grant under this subsection, the owner or operator
16	of a relevant project shall submit to the Secretary of
17	Agriculture an application at such time, in such
18	manner, and containing such information as the Sec-
19	retary of Agriculture may require.
20	(3) Allocation.—Of the amounts made avail-
21	able to carry out this section, the Secretary of Agri-
22	culture shall allocate \$10,000,000 for feasibility as-
23	sessments, engineering designs, and construction of
24	thermally led wood energy systems, including pellet

1	boilers, district energy systems, combined heat and
2	power installations, and other technologies.
3	(4) REGIONAL DISTRIBUTION.—In selecting
4	projects to receive grants under this subsection, the
5	Secretary of Agriculture shall ensure, to the max-
6	imum extent practicable, diverse geographical dis-
7	tribution among the projects.
8	(5) Cost share.—The Federal share of the
9	cost of a project carried out using a grant under this
10	subsection shall be 50 percent.
11	[(c) AUTHORIZATION OF APPROPRIATIONS.—There
12	are authorized to be appropriated to carry out this sec-
13	tion—]
14	[(1)] \$30,000,000 to the Secretary to provide
15	grants under subsection (a); and
16	$\llbracket (2) \$10,000,000$ to the Secretary of Agri-
17	culture to provide grants under subsection (b).]
18	SEC. 5. LOAN PROGRAMS; STRATEGIC ANALYSIS AND RE-
19	SEARCH.
20	(a) Low-interest Loans.—
21	(1) Establishment.—The Secretary of Agri-
22	culture shall establish, within the Rural Develop-
23	ment Office, a low-interest loan program to support
24	construction of thermally led residential, commercial
25	or institutional, and industrial wood energy systems.

1	(2) REQUIREMENTS.—The program under this
2	subsection shall be carried out in accordance with
3	such requirements as the Secretary of Agriculture
4	may establish, by regulation, in taking into consider-
5	ation best practices.
6	(3) Authorization of appropriations.—
7	There is authorized to be appropriated to the Sec-
8	retary of Agriculture to carry out this subsection
9	\$50,000,000.
10	(b) Energy Efficiency and Conservation Loan
11	Program.—In addition to loans under subsection (a)
12	thermally led residential, commercial or institutional, and
13	industrial wood energy systems shall be eligible to receive
14	loans under the energy efficiency and conservation loan
15	program of the Department of Agriculture under section
16	2 of the Rural Electrification Act of 1936 (7 U.S.C. 902).
17	(c) Strategic Analysis and Research.—
18	(1) In General.—The Secretary, acting jointly
19	with the Secretary of Agriculture (acting through
20	the Chief of the Forest Service), shall establish a
21	bioheat and biopower research program—
22	(A) the costs of which shall be divided
23	equally between the Department of Energy and
24	the Department of Agriculture;

1	(B) to be overseen by the Board of Direc-
2	tors of the Initiative; and
3	(C) to carry out projects and activities—
4	(i)(I) to advance research and analysis
5	on the environmental, social, and economic
6	costs and benefits of the United States
7	biopower and bioheat industries, including
8	associated lifecycle analysis of greenhouse
9	gas emissions and net energy analysis; and
10	(II) to provide recommendations for
11	policy and investment in those areas;
12	(ii) to identify and assess, through a
13	joint effort between the Chief of the Forest
14	Service and the regional combined heat
15	and power groups of the Department of
16	Energy, the feasibility of thermally led dis-
17	trict wood energy opportunities in all re-
18	gions of the Forest Service regions, includ-
19	ing by conducting broad regional assess-
20	ments, feasibility studies, and preliminary
21	engineering assessments at individual fa-
22	cilities; and
23	(iii)(I) to offer to communities tech-
24	nical assistance to explore thermally led
25	wood energy opportunities; and

1	(II) to provide enhanced services to
2	smaller communities that have limited re-
3	sources and capacity to pursue new ther-
4	mally led wood energy opportunities.
5	(2) Authorization of appropriations.—
6	There are authorized to be appropriated to the Sec-
7	retary and the Secretary of Agriculture—
8	(A) \$2,000,000 to carry out paragraph
9	(1)(C)(i);
10	(B) \$1,000,000 to carry out paragraph
11	(1)(C)(ii); and
12	(C) \$1,000,000 to carry out paragraph
13	(1)(C)(iii).