

114TH CONGRESS
2D SESSION

S. _____

To accelerate the use of wood in buildings, especially tall wood buildings,
and for other purposes.

IN THE SENATE OF THE UNITED STATES

Ms. STABENOW (for herself, Mr. CRAPO, Ms. KLOBUCHAR, Mr. DAINES, and
Ms. CANTWELL) introduced the following bill; which was read twice and
referred to the Committee on _____

A BILL

To accelerate the use of wood in buildings, especially tall
wood buildings, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Timber Innovation Act
5 of 2016”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

8 (1) wood products play a significant role in the
9 United States economy;

1 (2) the United States wood products industry
2 employs more than 548,000 individuals in manufac-
3 turing and forestry;

4 (3) private forest owners in the United States
5 support approximately 2,400,000 jobs and
6 \$87,000,000,000 in payroll;

7 (4) support for wood buildings and growing
8 market opportunities for the use of wood products,
9 such as tall wood building markets, could—

10 (A) help ensure that forests in the United
11 States remain healthy; and

12 (B) create income streams for private for-
13 est owners that may help the owners keep their
14 land forested instead of selling the land for de-
15 velopment;

16 (5) developing new markets for wood use in
17 buildings may drive additional investment in haz-
18 ardous fuels treatments on forest land;

19 (6) innovative wood product technologies and
20 building systems—

21 (A) have enabled longer wood spans, taller
22 walls, and higher buildings; and

23 (B) continue to expand the possibilities for
24 wood use in construction;

1 (7) wood, because it is a building material that
2 sequesters carbon, has the potential to reduce the
3 overall carbon footprint of a project that uses wood
4 as a building material;

5 (8) research helps to modernize building codes
6 on an international basis, and that modernization is
7 needed in the United States for tall wood buildings;

8 (9) building codes specify a level of safety that
9 each building material and system shall meet and
10 that level of safety is the same regardless of the con-
11 struction materials used;

12 (10) in the case of wood, building codes ensure
13 that the allowable size, configuration, and required
14 structural and fire protection features of a construc-
15 tion project allow for the safety of all occupants; and

16 (11) mass timber buildings, due to the thick,
17 solid wood panels of which the buildings are com-
18 posed, are slow to burn and have inherent fire resist-
19 ance that, under many configurations, establishes a
20 fire performance equal to or better than other con-
21 struction materials, allowing mass timber to be used
22 appropriately for buildings that are significantly tall-
23 er and larger than traditional wood buildings.

24 **SEC. 3. DEFINITIONS.**

25 In this Act:

1 (1) MASS TIMBER.—The term “mass timber”
2 means a type of building component or system that
3 uses large panelized wood construction, including—

4 (A) cross-laminated timber;

5 (B) nail laminated timber;

6 (C) glue laminated timber;

7 (D) laminated strand lumber; and

8 (E) laminated veneer lumber.

9 (2) SECRETARY.—The term “Secretary” means
10 the Secretary of Agriculture.

11 (3) TALL WOOD BUILDING.—The term “tall
12 wood building” means a building designed to be—

13 (A) constructed with mass timber; and

14 (B) more than 85 feet in height.

15 **SEC. 4. ESTABLISHMENT OF RESEARCH AND DEVELOP-**
16 **MENT PROGRAM FOR ADVANCING TALL**
17 **WOOD BUILDING CONSTRUCTION.**

18 (a) IN GENERAL.—The Secretary shall establish a
19 performance-driven research and development program for
20 the purpose of advancing tall wood building construction
21 in the United States (referred to in this section as the
22 “program”).

23 (b) ACTIVITIES.—In carrying out the program, the
24 Secretary, in consultation with the State and Private For-
25 estry deputy area of the Forest Service, shall—

1 (1) after receipt of input and guidance from,
2 and collaboration with, the wood products industry,
3 conservation organizations, and institutions of high-
4 er education, conduct research at the Forest Prod-
5 ucts Laboratory that meets measurable performance
6 goals for the achievement of the priorities described
7 in subsection (c); and

8 (2) after coordination and collaboration with
9 the wood products industry and conservation organi-
10 zations, make competitive grants to institutions of
11 higher education to conduct research that meets
12 measurable performance goals for the achievement
13 of the priorities described in subsection (c).

14 (c) PROGRAM PRIORITIES.—The research carried out
15 under the program shall give priority to—

16 (1) ways to improve the commercialization of
17 tall wood building materials;

18 (2) analyzing the safety of tall wood building
19 materials;

20 (3) calculations by the Forest Products Labora-
21 tory of the life cycle environmental footprint, from
22 extraction of raw materials through the manufac-
23 turing process, of tall wood building construction;

24 (4) identifying the building code modifications
25 necessary to construct tall wood buildings;

1 (5) analyzing methods to reduce the life cycle
2 environmental footprint of tall wood building con-
3 struction;

4 (6) analyzing the potential implications of the
5 broad adoption of tall wood building technology and
6 architecture in the commercial and residential build-
7 ing market on wildlife and forest biodiversity; and

8 (7) 1 or more other research areas identified by
9 the Secretary, in consultation with the State and
10 Private Forestry deputy area of the Forest Service,
11 conservation organizations, institutions of higher
12 education, and the wood products industry.

13 (d) TIMEFRAME.—To the maximum extent prac-
14 ticable, the measurable performance goals for the research
15 carried out under the program shall be achievable within
16 a 5-year timeframe.

17 (e) FUNDING.—There are authorized to be appro-
18 priated to carry out this section such sums as are nec-
19 essary.

20 **SEC. 5. TALL WOOD BUILDING COMPETITION.**

21 Subject to availability of appropriations, not less fre-
22 quently than once during each fiscal year for the period
23 of fiscal years 2017 through 2021, the Secretary shall
24 carry out a competition for a tall wood building design

1 in accordance with section 24 of the Stevenson-Wydler
2 Technology Innovation Act of 1980 (15 U.S.C. 3719).

3 **SEC. 6. WOOD INNOVATION GRANT PROGRAM.**

4 (a) DEFINITION OF ELIGIBLE ENTITY.—In this sec-
5 tion, the term “eligible entity” means—

6 (1) an individual;

7 (2) a public or private entity (including a center
8 of excellence that consists of 1 or more partnerships
9 between forestry, engineering, architecture, or busi-
10 ness schools at 1 or more institutions of higher edu-
11 cation); or

12 (3) a State, local, or tribal government.

13 (b) GRANTS AUTHORIZED.—The Secretary, in car-
14 rying out the wood innovation grant program of the Sec-
15 retary described in the notice of the Secretary entitled
16 “Request for Proposals: 2016 Wood Innovations Funding
17 Opportunity” (80 Fed. Reg. 63498 (October 20, 2015)),
18 may make a wood innovation grant to 1 or more eligible
19 entities each year for the purpose of the acceleration of
20 the adoption of emerging technologies in the development
21 of innovative wood products for tall wood building con-
22 struction.

23 (c) MATCHING REQUIREMENT.—As a condition of re-
24 ceiving a grant under subsection (b), a recipient shall pro-

1 vide funds equal to the amount the recipient receives
2 under the grant, to be derived from non-Federal sources.

3 (d) FUNDING.—There are authorized to be appro-
4 priated to the Secretary to award grants under subsection
5 (b) such sums as are necessary.

6 **SEC. 7. TECHNICAL ASSISTANCE.**

7 (a) IN GENERAL.—The Secretary, in cooperation
8 with State foresters and State extension directors (or
9 equivalent State officials), shall carry out a program of
10 education and technical assistance for mass timber appli-
11 cations (referred to in this section as the “program”).

12 (b) ACTIVITIES.—Activities under the program shall
13 include—

14 (1) the provision of assistance to an individual,
15 a public or private entity, or a local or tribal govern-
16 ment in the development of skills and knowledge re-
17 lating to the use of wood in mass timber applications
18 and other wood technologies;

19 (2) the provision of assistance to an individual,
20 a public or private entity, or a State, local, or tribal
21 government in the identification of opportunities for
22 the use of mass timber; and

23 (3) activities to increase public understanding
24 of—

1 (A) the environmental, economic, and so-
2 cial values associated with using wood in the
3 construction of buildings; and

4 (B) the relationship between the develop-
5 ment of markets for wood products and the
6 ability to carry out sustainable forest manage-
7 ment.

8 (c) METHODS.—The program may include the devel-
9 opment and distribution of educational materials and
10 holding events designed to transfer knowledge.

11 (d) EXPERTISE.—The Secretary shall—

12 (1) maintain, within the Forest Service, suffi-
13 cient professional expertise relating to the uses of
14 wood products to conduct the program; and

15 (2) improve that expertise by collaborating with
16 other Federal and non-Federal experts on the uses
17 of wood products.

18 (e) PARTNERS.—The Secretary shall collaborate and
19 partner with 1 or more non-Federal entities, including the
20 governments of other countries, States, local governments,
21 not-for-profit organizations, businesses, and institutions of
22 higher education—

23 (1) to enhance tall wood building commer-
24 cialization in the United States;

1 (2) to develop technical assistance relating to
2 tall wood building commercialization; and

3 (3) to carry out the program.

4 (f) FUNDING.—There are authorized to be appro-
5 priated to the Secretary to carry out the program such
6 sums as are necessary.