A BILL FOR AN ACT

RELATING TO STATE BUILDING CODE.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1   SECTION 1. The legislature finds that the expansion of the

2   use of sustainable building materials with low embodied energy

3   to be in accord with the State's goal to reduce greenhouse gas

4   emissions as mandated by Act 234, Session Laws of Hawaii 2007.

5   In addition to the ecological imperative in Act 234, the

6   legislature finds locally-grown, non-invasive, tropical timber

7   bamboo, which is known for its fast growth, high strength,

8   minimal irrigation needs, soil-renewing properties, and

9   excellent carbon sequestration rates, to be a viable source for

10   the future of Hawaii's diversified agriculture, construction

11   industries, and possible carbon credit trading market.

12   The legislature finds that landmark research on the

13   structural characteristics of timber bamboo was conducted at the

14   University of Hawaii at Manoa in 2002, which ultimately led to

15   the first-ever acceptance of a bamboo species, Bambusa

16   stenostachya, into the United States' building codes. This

17   research also led to an innovation and amendment to the standing

1 internationally-recognized testing methodology and acceptance

2 criteria for bamboo.

3   However, the structural engineering tests that officially

4 led to this first-ever code acceptance were conducted not at the

5 University of Hawaii at Manoa, but rather at an International

6 Code Council-certified engineering laboratory on the mainland.

7 These mainland tests were conducted under the exact protocols

8 that were refined at and originated from the University of

9 Hawaii at Manoa, yielded identical results, but cost the very

10 high, privately-financed price of $500,000.

11   Yet in addition to Bambusa stenostachya, five other elite

12 species of commercial timber bamboo underwent structural

13 engineering tests at the University of Hawaii in 2002. If these

14 species were to undergo another round of tests for acceptance

15 nationally and internationally, the cost would be up to and in

16 excess of $2,500,000. Although this is a goal being undertaken

17 by private stakeholders in the diversified agriculture and

18 sustainable construction industries, Hawaii's use of bamboo as a

19 construction material should be expedited.

20   The legislature finds that it is advisable to develop

21 criteria and standards for use of bamboo as a construction

22 material in Hawaii in order to expedite the use of bamboo for

1 sustainable building in Hawaii, encourage diversified

2 agriculture in the islands, and strategically position the State

3 for regional, national, or international greenhouse gas

4 offsetting and the carbon credit trading markets.

5 The purpose of this Act is to require the state building

6 code council to review studies and structural tests on the use

7 of bamboo as a construction material and to recommend standards

8 and criteria for the use of bamboo as an accepted construction

9 material under the state building code.

10 SECTION 2. The state building code council shall review

11 studies and structural tests on the use of bamboo as a

12 construction material and recommend standards and criteria for

13 the use of bamboo as an accepted construction material under the

14 state building code. The state building code council shall

15 submit a report of its findings and recommendations to the

16 legislature no later than twenty days prior to the convening of

17 the regular session of 2011.

18 SECTION 3. This Act shall take effect upon its approval.

Report Title:
State Building Code; Bamboo

Description:
Directs the state building code council to review studies and structural tests of bamboo as a construction material, and to recommend standards and criteria for the use of bamboo as an accepted construction material. (SD1)