## SUBSTITUTE HOUSE BILL 1897

State of Washington 64th Legislature 2015 Regular Session

By House Technology & Economic Development (originally sponsored by Representatives Smith, Morris, Tarleton, Young, Hayes, Haler, Sells, Buys, Fagan, and Short)

READ FIRST TIME 02/20/15.

- 1 AN ACT Relating to the joint center for deployment and research
- 2 in earth-abundant materials; amending RCW 42.52.150; and adding a new
- 3 chapter to Title 28B RCW.
- 4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- The legislature finds that to reach our 5 NEW SECTION. Sec. 1. 6 environmental, and economic goals, it is important 7 accelerate the development of next generation clean energy and transportation technologies in Washington. Today, a large number of 8 clean and renewable energy technologies are dependent on rare earth 9 10 elements and other expensive and difficult-to-source 11 components. These technologies are critical to reducing carbon emissions, such as wind turbines, solar panels, and electric and 12 13 hybrid car batteries.
- 14 According to a 2012 environmental protection agency report (EPA/600/R-12/572), no rare earth element mining has been conducted 15 in the United States since 1995, and a legacy of environmental 16 17 destruction has been left in countries where rare earth elements are The same environmental protection agency report notes that 18 19 recovering earth elements from state-of-the-art recycling rare processes is far more efficient than smelting metals from ores, 20 21 generates only a fraction of the carbon emissions, and has

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significant benefits compared to mining in terms of land use and hazardous emissions. The environmental protection report stresses the need for additional research in alternative materials to rare earth materials as well as recycling innovation.

 The legislature acknowledges that the people of Washington desire to leave behind a cleaner planet, and to lead the world in the research and innovations to make that possible. Setting aggressive, renewable energy and clean technology standards at home that result in exporting the environmental harms of improper mineral extraction to other nations is not an acceptable strategy. Fortunately, Washington is home to some of the world's leading researchers who have core competencies in developing material substitutes and extracting rare earth elements for recycling.

Leading research institutions have indicated that a program to accelerate the development of next generation clean energy and transportation technologies using earth-abundant materials would fit within their strategic vision and core mission to increase and coordinate their efforts with the private industry and implement this talent and research to work in accelerating the deployment of clean energy and cleaner transportation solutions. The goal is to develop materials to use in the manufacturing process that can be reliably accessed and acquired in environmentally responsible processes. A joint center established for this purpose can bridge the gap between institutions, encourage private-public partnerships, and increase the ability to compete for federal grants.

The legislature recognizes the opportunity for Washington to lead research and innovation, fostering true in these areas of sustainability environmental stewardship, and providing supply reliability and resiliency in next generation technologies. Doing so contribute to the preservation of national security by increasing energy independence. Therefore, the legislature intends to fund research of earth-abundant materials that can substitute effectively in manufacturing for rare earth elements or other critical materials, with great potential to increase efficiency or reduce emissions in the transportation or energy sector, and to fund research into the recycling of rare earth elements from existing consumer products. The legislature intends to accomplish this by establishing the joint center for deployment and research in earth abundant materials, or JCDREAM, to attract academic talent and

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- 1 research funding to our state, and develop a workforce for
- 2 manufacturing next generation earth-abundant technologies.

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- 3 <u>NEW SECTION.</u> **Sec. 2.** The joint center for deployment and 4 research in earth-abundant materials is created to:
- 5 (1) Establish a transformative program in earth-abundant 6 materials to accelerate the development of next generation clean 7 energy and transportation technologies in Washington;
  - (2) Establish a coordinated framework and deploy resources that can facilitate and promote multi-institution collaborations to drive research, development, and deployment efforts in the use of earth-abundant materials for manufactured clean technologies or recycling of advanced materials used in clean technologies; and
- 13 (3) Promote environmentally responsible processes in the areas of 14 manufacturing and recycling of advanced materials used in clean 15 technologies.
- 16 Sec. 3. The joint center for deployment and NEW SECTION. 17 in earth-abundant materials research must be operated and administered as a multi-institutional education and research center, 18 19 conducting research and development programs in various locations within Washington under the joint authority of the University of 20 and Washington State University. The 21 Washington administrative offices of the center shall be west of the crest of 22 23 the Cascade mountains. In order to meet industry needs, the facilities and resources of the center must be made available to all 24 four-year institutions of higher education. Resources include 25 26 internships, on-the-job training, and research opportunities for 27 undergraduate and graduate students and faculty.
- NEW SECTION. Sec. 4. (1)(a) The powers of the joint center for deployment and research in earth-abundant materials are vested in and shall be exercised by a board of directors consisting of ten voting members and a chair, appointed by the governor, who shall not vote, except as provided in (c) of this subsection.
- 33 (b) Of the ten voting members, one member must be the dean of 34 Washington State University, one member must be the dean of the 35 University of Washington, one member must represent Pacific Northwest 36 National Laboratory, one member must represent an energy institute at 37 a regional university, one member must represent the community

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- colleges engaged in training of the next generation workforce in the relevant areas, one member must represent large industry companies, one member must represent medium industry companies, one member must represent small industry companies, one member must have professional experience in the fields of national security and energy policy, and one member shall have professional experience in innovation and development of policy to address environmental challenges.
- 8 (c) In the event of a tie vote among the voting members, the 9 chair may vote to break the tie.
  - (d) The terms of the initial members must be staggered.
  - director shall hire such staff as the board deems necessary to operate the joint center for deployment and research in earth-abundant materials. Staff support may be provided from among the cooperating institutions through cooperative agreements to the extent funds are available. The executive director may enter into cooperative agreements for programs and research with public and private organizations including state and nonstate agencies consistent with policies of the participating institutions.
    - (3) The board shall:

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- (a) Work with the clean technology and transportation industry associations and firms of all sizes to identify the research areas that will benefit the intermediate and long-term economic vitality of Washington's clean technology and transportation industries;
- (b) Identify entrepreneurial researchers to join or lead research teams in the research areas specified in (a) of this subsection and the steps the University of Washington and Washington State University will take to recruit and retain such researchers;
- (c) Assist firms to integrate existing technologies into their operations and align the activities of the joint center for deployment and research in earth-abundant materials with those of impact Washington to enhance services available to clean technology and transportation firms;
- (d) Develop internships, on-the-job training, research, and other opportunities and ensure that all undergraduate and graduate students enrolled in programs for clean technology and earth-abundant research and deployment-related curriculum have direct experience with the industry;
- (e) Assist researchers and firms in safeguarding intellectual property while advancing industry innovation;

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(f) Develop and strengthen university-industry relationships through promotion of faculty collaboration with industry and sponsor at least one annual symposium focusing on clean energy earth-abundant research and deployment in the state of Washington;

- (g) Encourage a full range of projects from small research projects that meet the specific needs of a smaller company to large scale, multipartner projects;
  - (h) Develop nonstate support of the center's research activities through leveraging dollars from federal and private for-profit and nonprofit sources;
  - (i) Leverage its financial impact through joint support arrangements on a project-by-project basis as appropriate;
- (j) Establish mechanisms for soliciting and evaluating proposals and for making awards and reporting on technological progress, financial leverage, and other measures of impact;
- 16 (k) Allocate appropriated seed funds for at least one of the 17 following purposes:
  - (i) Collaboration on research and product development that would further the commercialization of renewable energy and battery storage technologies that use earth-abundant materials in place of critical materials or rare earth elements;
  - (ii) Collaboration on research for joining dissimilar materials in a way that minimizes titanium content by employing earth-abundant materials for advanced manufacturing commercialization;
    - (iii) Collaboration on research and deployment of technologies and processes that facilitate reclamation and recycling of rare-earth elements from existing products; and
    - (iv) Providing assistance to community colleges and trade schools in program development and equipment for training the skilled workforce necessary for the successful commercialization and integration of earth-abundant technologies, as the workforce training needs are defined by forthcoming deployment opportunities;
- (1)(i) By December 1, 2015, develop an operating plan that includes the specific processes, methods, or mechanisms the center will use to accomplish each of its duties as set out in this subsection (3);
- 37 (ii) The operating plan must also include appropriate performance 38 metrics to measure total research dollars leveraged, total 39 researchers involved, total workforce trained, and total number of

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1 products or processes that have progressed to commercialization and 2 private sector deployment; and

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- (m)(i) Report biennially to the legislature and the governor about the impact of the center's work on the state's economy and the development of next generation clean energy and transportation technologies in Washington using earth-abundant materials. The report must include performance metrics results, projections of future impact, indicators of its current impact, and ideas for enhancing benefits to the state.
- 10 (ii) The report must be coordinated with the governor's office 11 and the department of commerce.
- 12 NEW SECTION. Sec. 5. The joint center for deployment and 13 research in earth-abundant materials may solicit and receive gifts, grants, donations, sponsorships, or contributions from any federal, 14 state, or local governmental agency or program or any private source 15 16 and expend the same for any purpose consistent with this chapter. 17 Members and employees associated with the joint center for deployment 18 and research in earth-abundant materials are presumed not to be in violation of solicitation and receipt of gift provisions in RCW 19 20 42.52.150.
- NEW SECTION. Sec. 6. This chapter may be known and cited as the JCDREAM act.
- 23 **Sec. 7.** RCW 42.52.150 and 2011 c 60 s 29 are each amended to 24 read as follows:
  - (1) No state officer or state employee may accept gifts, other than those specified in subsections (2) and (5) of this section, with an aggregate value in excess of fifty dollars from a single source in a calendar year or a single gift from multiple sources with a value in excess of fifty dollars. For purposes of this section, "single source" means any person, as defined in RCW 42.52.010, whether acting directly or through any agent or other intermediary, and "single gift" includes any event, item, or group of items used in conjunction with each other or any trip including transportation, lodging, and attendant costs, not excluded from the definition of gift under RCW 42.52.010. The value of gifts given to an officer's or employee's family member or guest shall be attributed to the official or employee for the purpose of determining whether the limit has been

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exceeded, unless an independent business, family, or social relationship exists between the donor and the family member or guest.

- (2) Except as provided in subsection (4) of this section, the following items are presumed not to influence under RCW 42.52.140, and may be accepted without regard to the limit established by subsection (1) of this section:
  - (a) Unsolicited flowers, plants, and floral arrangements;
- 8 (b) Unsolicited advertising or promotional items of nominal 9 value, such as pens and note pads;
  - (c) Unsolicited tokens or awards of appreciation in the form of a plaque, trophy, desk item, wall memento, or similar item;
  - (d) Unsolicited items received by a state officer or state employee for the purpose of evaluation or review, if the officer or employee has no personal beneficial interest in the eventual use or acquisition of the item by the officer's or employee's agency;
- 16 (e) Informational material, publications, or subscriptions 17 related to the recipient's performance of official duties;
  - (f) Food and beverages consumed at hosted receptions where attendance is related to the state officer's or state employee's official duties;
  - (g) Gifts, grants, conveyances, bequests, and devises of real or personal property, or both, in trust or otherwise accepted and solicited for deposit in the legislative international trade account created in RCW 43.15.050;
  - (h) Gifts, grants, conveyances, bequests, and devises of real or personal property, or both, in trust or otherwise accepted and solicited for the purpose of promoting the expansion of tourism as provided for in RCW 43.330.090;
  - (i) Gifts, grants, conveyances, bequests, and devises of real or personal property, or both, solicited on behalf of a national legislative association, 2006 official conference of the national lieutenant governors' association, or host committee for the purpose of hosting an official conference under the circumstances specified in RCW 42.52.820 and section 2, chapter 5, Laws of 2006. Anything solicited or accepted may only be received by the national association or host committee and may not be commingled with any funds or accounts that are the property of any person;
- (j) Admission to, and the cost of food and beverages consumed at, sevents sponsored by or in conjunction with a civic, charitable, governmental, or community organization; ((and))

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1 (k) Unsolicited gifts from dignitaries from another state or a 2 foreign country that are intended to be personal in nature; and

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- (1) Gifts, grants, donations, sponsorships, or contributions from any agency or federal or local government agency or program or private source for the purposes of chapter 28B.--- RCW (the new chapter created in section 8 of this act).
- (3) The presumption in subsection (2) of this section is rebuttable and may be overcome based on the circumstances surrounding the giving and acceptance of the item.
- (4) Notwithstanding subsections (2) and (5) of this section, a state officer or state employee of a regulatory agency or of an agency that seeks to acquire goods or services who participates in those regulatory or contractual matters may receive, accept, take, or seek, directly or indirectly, only the following items from a person regulated by the agency or from a person who seeks to provide goods or services to the agency:
- (a) Unsolicited advertising or promotional items of nominal value, such as pens and note pads;
  - (b) Unsolicited tokens or awards of appreciation in the form of a plaque, trophy, desk item, wall memento, or similar item;
  - (c) Unsolicited items received by a state officer or state employee for the purpose of evaluation or review, if the officer or employee has no personal beneficial interest in the eventual use or acquisition of the item by the officer's or employee's agency;
  - (d) Informational material, publications, or subscriptions related to the recipient's performance of official duties;
- (e) Food and beverages consumed at hosted receptions where attendance is related to the state officer's or state employee's official duties;
- (f) Admission to, and the cost of food and beverages consumed at, events sponsored by or in conjunction with a civic, charitable, governmental, or community organization; and
- 33 (g) Those items excluded from the definition of gift in RCW 42.52.010 except:
- (i) Payments by a governmental or nongovernmental entity of reasonable expenses incurred in connection with a speech, presentation, appearance, or trade mission made in an official capacity;

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- 1 (ii) Payments for seminars and educational programs sponsored by 2 a bona fide governmental or nonprofit professional, educational, 3 trade, or charitable association or institution; and
  - (iii) Flowers, plants, and floral arrangements.

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- 5 (5) A state officer or state employee may accept gifts in the form of food and beverage on infrequent occasions in the ordinary course of meals where attendance by the officer or employee is related to the performance of official duties. Gifts in the form of 9 food and beverage that exceed fifty dollars on a single occasion shall be reported as provided in chapter 42.17A RCW.
- 11 <u>NEW SECTION.</u> **Sec. 8.** Sections 1 through 6 of this act 12 constitute a new chapter in Title 28B RCW.
- NEW SECTION. Sec. 9. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

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