## <sup>111TH CONGRESS</sup> 1ST SESSION S. 137

To create jobs and reduce the dependence of the United States on foreign and unsustainable energy sources by promoting the production of green energy, and for other purposes.

## IN THE SENATE OF THE UNITED STATES

JANUARY 6, 2009

Mr. BROWN introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

# A BILL

- To create jobs and reduce the dependence of the United States on foreign and unsustainable energy sources by promoting the production of green energy, 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 "Green Energy Produc-
- 5 tion Act of 2009".

## 1 SEC. 2. PURPOSE.

| 2  | The purpose of this Act to is make the United States     |
|----|--|
| 3  | the world leader in green energy production and manufac- |
| 4  | turing by—   |
| 5  | (1) promoting green technology innovation;               |
| 6  | (2) assisting in the transition to a green energy        |
| 7  | economy; and   |
| 8  | (3) increasing scientific knowledge that may re-         |
| 9  | veal the basis for new or enhanced products, equip-      |
| 10 | ment, or processes.                                      |
| 11 | SEC. 3. DEFINITIONS.                                     |
| 12 | In this Act:   |
| 13 | (1) BIOMASS.—The term "biomass" has the                  |
| 14 | meaning given the term "renewable biomass" in sec-       |
| 15 | tion $211(0)(1)$ of the Clean Air Act (42 U.S.C.         |
| 16 | 7545(0)(1)).   |
| 17 | (2) Environmentally protective.—The                      |
| 18 | term "environmentally protective" means, with re-        |
| 19 | spect to technology, technology that—                    |
| 20 | (A) is most likely to result in the least im-            |
| 21 | pact to land, forests, water quantity and qual-          |
| 22 | ity, air quality, and wildlife habitat; and              |
| 23 | (B) possesses the highest potential for                  |
| 24 | long-term sustained production of green energy.          |
| 25 | (3) GREEN ENERGY.—                                       |

| 1  | (A) IN GENERAL.—The term "green en-                    |
|----|--|
| 2  | ergy" has the meaning given the term "renew-           |
| 3  | able energy".  |
| 4  | (B) INCLUSION.—The term "green en-                     |
| 5  | ergy" includes energy derived from coal pro-           |
| 6  | duced in a manner that—                                |
| 7  | (i) sequesters carbon from carbon di-                  |
| 8  | oxide emissions at a minimum 85 percent                |
| 9  | capture rate on an annual basis; and                   |
| 10 | (ii) complies with section 1421(d) of                  |
| 11 | the Safe Drinking Water Act (42 U.S.C.                 |
| 12 | 300h(d)).  |
| 13 | (4) INSTITUTION OF HIGHER EDUCATION.—The               |
| 14 | term "institution of higher education" has the         |
| 15 | meaning given the term in section 101 of the Higher    |
| 16 | Education Act of 1965 (20 U.S.C. 1001)).               |
| 17 | (5) RENEWABLE ENERGY.—The term "renew-                 |
| 18 | able energy" means electric energy generated at a      |
| 19 | facility (including a distributed generation facility) |
| 20 | from solar, wind, fuel cells, biomass, geothermal,     |
| 21 | ocean energy, or landfill gas.                         |
| 22 | (6) Secretary.—The term "Secretary" means              |
| 23 | the Secretary of Energy.                               |
| 24 | (7) TARGET AREA.—The term "target area"                |
| 25 | means—   |

| 1  | (A) an area that has experienced a signifi-   |
|--|---|
| 2  | cant loss of manufacturing employment;  |
| 3  | (B) an area with a large manufacturing  |
| 4  | capacity;   |
| 5  | (C) an area with an unemployment rate   |
| 6  | that is higher than the national average unem-  |
| 7  | ployment rate; and  |
| 8  | (D) priority for an area that includes a  |
| 9  | brownfield site (as defined in section 101 of the   |
| 10   | Comprehensive Environmental Response, Com-  |
| 11   | pensation, and Liability Act of 1980 (42 U.S.C.   |
| 12   | 9601)).   |
|  |   |
| 13   | SEC. 4. GREEN TECHNOLOGY INVESTMENT CORPORATION.  |
| 13<br>14   | <b>SEC. 4. GREEN TECHNOLOGY INVESTMENT CORPORATION.</b><br>(a) ESTABLISHMENT.—  |
|  |   |
| 14   | (a) Establishment.—   |
| 14<br>15   | <ul><li>(a) ESTABLISHMENT.—</li><li>(1) IN GENERAL.—There is established in the</li></ul>   |
| 14<br>15<br>16   | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the Department of Energy a corporation to be known as</li> </ul>  |
| 14<br>15<br>16<br>17<br>18   | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the<br/>Department of Energy a corporation to be known as<br/>the "Green Technology Investment Corporation".</li> </ul>   |
| 14<br>15<br>16<br>17   | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the Department of Energy a corporation to be known as the "Green Technology Investment Corporation".</li> <li>(2) MEETINGS.—The Corporation shall meet at</li> </ul>  |
| 14<br>15<br>16<br>17<br>18<br>19   | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the Department of Energy a corporation to be known as the "Green Technology Investment Corporation".</li> <li>(2) MEETINGS.—The Corporation shall meet at least 4 times during each fiscal year.</li> </ul>   |
| <ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>                         | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the Department of Energy a corporation to be known as the "Green Technology Investment Corporation".</li> <li>(2) MEETINGS.—The Corporation shall meet at least 4 times during each fiscal year.</li> <li>(3) RULES FOR CORPORATION BUSINESS.—Not</li> </ul>  |
| <ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>             | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the Department of Energy a corporation to be known as the "Green Technology Investment Corporation".</li> <li>(2) MEETINGS.—The Corporation shall meet at least 4 times during each fiscal year.</li> <li>(3) RULES FOR CORPORATION BUSINESS.—Not later than 1 year after the date of enactment of this</li> </ul>  |
| <ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol> | <ul> <li>(a) ESTABLISHMENT.—</li> <li>(1) IN GENERAL.—There is established in the Department of Energy a corporation to be known as the "Green Technology Investment Corporation".</li> <li>(2) MEETINGS.—The Corporation shall meet at least 4 times during each fiscal year.</li> <li>(3) RULES FOR CORPORATION BUSINESS.—Not later than 1 year after the date of enactment of this Act, the Corporation shall establish rules for the</li> </ul> |

| 1  | (A) subchapter II of chapter 5, and chap-            |
|----|--|
| 2  | ter 7, of title 5, United States Code (commonly      |
| 3  | known as the "Administrative Procedure Act");        |
| 4  | and  |
| 5  | (B) all other Federal law applicable to              |
| 6  | quasi-autonomous agencies within the Depart-         |
| 7  | ment of Energy.                                      |
| 8  | (5) Administrative costs.—The Secretary              |
| 9  | shall—   |
| 10 | (A) be responsible for paying all adminis-           |
| 11 | trative costs of the Corporation; and                |
| 12 | (B) in conjunction with the Board of Di-             |
| 13 | rectors of the Corporation, take every reason-       |
| 14 | able action to reduce and minimize administra-       |
| 15 | tive costs of carrying out this section and the      |
| 16 | program.   |
| 17 | (b) BOARD OF DIRECTORS.—                             |
| 18 | (1) IN GENERAL.—The Board of Directors of            |
| 19 | the Corporation shall consist of 7 members, ap-      |
| 20 | pointed by the President, by and with the advice and |
| 21 | consent of the Senate, who are—                      |
| 22 | (A) leaders from industry, labor, academia,          |
| 23 | government, and nongovernment organizations;         |
| 24 | and  |

| 1  | (B) selected based on having the necessary             |
|----|--|
| 2  | expertise—   |
| 3  | (i) to build world-class applied re-                   |
| 4  | search capability;                                     |
| 5  | (ii) to assist entrepreneurial                         |
| 6  | innovators in accelerating formation and               |
| 7  | attraction of technology-based businesses;             |
| 8  | (iii) to create product innovation;                    |
| 9  | (iv) to market the manufacturing                       |
| 10 | competitiveness of the United States;                  |
| 11 | (v) to create domestic jobs and skills                 |
| 12 | development opportunities in emerging do-              |
| 13 | mestic markets; and                                    |
| 14 | (vi) to evaluate and advise on environ-                |
| 15 | mental sustainability and climate change.              |
| 16 | (2) CHAIRPERSON.—The President shall ap-               |
| 17 | point, by and with the advice and consent of the       |
| 18 | Senate, 1 member of the Board of Directors to serve    |
| 19 | as Chairperson.  |
| 20 | (c) TERM OF SERVICE.—                                  |
| 21 | (1) IN GENERAL.—Each member of the Board               |
| 22 | of Directors shall be appointed for a term of 5 years. |
| 23 | (2) Additional terms.—The President may                |
| 24 | appoint, by and with the advice and consent of the     |

Senate, a member of the Board to serve additional
 terms of service.

3 (d) RESPONSIBILITIES.—The Corporation shall allo4 cate funds, provide grants, and carry out programs under
5 this Act, for all phases of technology commercialization,
6 in accordance with this Act.

#### 7 SEC. 5. GREEN TECHNOLOGY INVESTMENT FUND.

8 (a) ESTABLISHMENT.—There is established in the 9 Treasury of the United States a fund, to be known as the 10 "Green Technology Investment Fund" (referred to in this 11 section as the "Fund"), consisting of such amounts as are 12 appropriated to the Fund under section 11.

13 (b) EXPENDITURES FROM FUND.—

(1) IN GENERAL.—Subject to paragraph (2), on
request by the Corporation, the Secretary of the
Treasury shall transfer from the Fund to the Corporation such amounts as the Corporation determines are necessary to provide grants, loans, and
other assistance, and otherwise carry out programs,
under this Act.

(2) ADMINISTRATIVE EXPENSES.—An amount
not exceeding 10 percent of the amounts in the
Fund shall be available for each fiscal year to pay
the administrative expenses necessary to carry out
this Act.

| 1  | (c) Transfers of Amounts.—   |
|--|--|
| 2  | (1) IN GENERAL.—The amounts required to be   |
| 3  | transferred to the Fund under this section shall be  |
| 4  | transferred at least monthly from the general fund   |
| 5  | of the Treasury to the Fund on the basis of esti-  |
| 6  | mates made by the Secretary of the Treasury.   |
| 7  | (2) ADJUSTMENTS.—Proper adjustment shall   |
| 8  | be made in amounts subsequently transferred to the   |
| 9  | extent prior estimates were in excess of or less than  |
| 10   | the amounts required to be transferred.  |
| 11   | SEC. 6. GREEN REDEVELOPMENT, OPPORTUNITY, AND  |
|  |  |
| 12   | WORKFORCE (GROW) GRANTS.   |
| 12<br>13   | <b>WORKFORCE (GROW) GRANTS.</b><br>The Corporation shall establish and carry out a grant   |
|  |  |
| 13   | The Corporation shall establish and carry out a grant  |
| 13<br>14   | The Corporation shall establish and carry out a grant program—   |
| 13<br>14<br>15   | The Corporation shall establish and carry out a grant<br>program—<br>(1) to assist small and medium-sized businesses   |
| 13<br>14<br>15<br>16   | The Corporation shall establish and carry out a grant<br>program—<br>(1) to assist small and medium-sized businesses<br>in accelerating new product development and com-   |
| <ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>                                     | The Corporation shall establish and carry out a grant<br>program—<br>(1) to assist small and medium-sized businesses<br>in accelerating new product development and com-<br>mercialization of technology products;   |
| <ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>                         | The Corporation shall establish and carry out a grant<br>program—<br>(1) to assist small and medium-sized businesses<br>in accelerating new product development and com-<br>mercialization of technology products;<br>(2) to assist small and medium-sized businesses  |
| <ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>             | The Corporation shall establish and carry out a grant<br>program—<br>(1) to assist small and medium-sized businesses<br>in accelerating new product development and com-<br>mercialization of technology products;<br>(2) to assist small and medium-sized businesses<br>in capitalizing on early-stage investment, particularly   |
| <ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol> | The Corporation shall establish and carry out a grant<br>program—<br>(1) to assist small and medium-sized businesses<br>in accelerating new product development and com-<br>mercialization of technology products;<br>(2) to assist small and medium-sized businesses<br>in capitalizing on early-stage investment, particularly<br>those businesses that provide evidence of a capability |

| 1  | (4) to assist local governments in improving in-       |
|----|--|
| 2  | frastructure for related businesses in accordance      |
| 3  | with this section;                                     |
| 4  | (5) to seek and develop innovative ways of as-         |
| 5  | sisting businesses and communities in achieving the    |
| 6  | goals of this Act;                                     |
| 7  | (6) to redeploy underused manufacturing capac-         |
| 8  | ity;   |
| 9  | (7) to capitalize on export opportunities;             |
| 10 | (8) to revitalize depressed manufacturing com-         |
| 11 | munities; and  |
| 12 | (9) to search for and develop innovative ways to       |
| 13 | design environmentally protective technologies and     |
| 14 | best practices and demonstrate commercial green en-    |
| 15 | ergy production.                                       |
| 16 | SEC. 7. GREEN ENERGY TECHNOLOGY INTERNSHIP PRO-        |
| 17 | GRAM.  |
| 18 | (a) IN GENERAL.—The Corporation shall establish a      |
| 19 | green energy technology internship program under       |
| 20 | which—   |
| 21 | (1) students and educators at institutions of          |
| 22 | higher education in the United States are paired       |
| 23 | with businesses of all sizes in the United States; and |
| 24 | (2) those businesses are encouraged—                   |

| <ol> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> </ol> | <ul> <li>(2) application contents and procedures.</li> <li>SEC. 8. GREEN ENERGY TECHNOLOGY APPRENTICESHIP<br/>PROGRAM.</li> <li>(a) IN GENERAL.—The Corporation shall establish a<br/>green energy technology apprenticeship program under</li> </ul> |
|--|---|
| 20<br>21   | (2) application contents and procedures.<br>SEC. 8. GREEN ENERGY TECHNOLOGY APPRENTICESHIP<br>PROGRAM.  |
| 20   | <ul><li>(2) application contents and procedures.</li><li>SEC. 8. GREEN ENERGY TECHNOLOGY APPRENTICESHIP</li></ul>   |
|  | (2) application contents and procedures.  |
| 19   |   |
|  | businesses to participate in the program; and   |
| 18   | businesses to participate in the program; and   |
| 17   | (1) the eligibility of students, educators, and   |
| 16   | lating to—  |
| 15   | technology internship program, including requirements re-   |
| 14   | lish requirements for participation in the green energy   |
| 13   | (c) REQUIREMENTS.—The Corporation shall estab-  |
| 12   | after graduation.   |
| 11   | for the possibility of full-time employment of the student  |
| 10   | in the case of a participating student, the business strives  |
| 9  | participating student or educator, on the condition that,   |
| 8  | greater of 50 percent or \$5,000 of the wages paid to a   |
| 7  | reimbursement by the Corporation, of not more than the  |
| 6  | for the green energy technology internship program the  |
| 5  | (b) GOAL.—The Corporation shall establish as a goal   |
| 4  | ment to those students after graduation.  |
| 3  | (B) to ultimately offer full-time employ-   |
| 2  | in participating students; and  |
| 1  | (A) to develop cutting-edge, high-tech skills   |

| 1  | (1) apprentices and employers in the United               |
|----|---|
| 2  | States are paired with businesses of all sizes in the     |
| 3  | United States; and  |
| 4  | (2) those businesses are encouraged—                      |
| 5  | (A) to develop cutting-edge, high-tech skills             |
| 6  | in participating students;                                |
| 7  | (B) to ultimately offer full-time employ-                 |
| 8  | ment to those students after completion; and              |
| 9  | (C) to work closely with organized labor.                 |
| 10 | (b) GOAL.—As a goal for the green energy technology       |
| 11 | apprenticeship program, the Corporation shall, to the     |
| 12 | maximum extent practicable, provide reimbursement for     |
| 13 | not more than the higher of 50 percent or $$5,000$ of the |
| 14 | wages paid to a participating apprentice, if the business |
| 15 | paired with the apprentice agrees to make every effort to |
| 16 | offer full-time employment to the apprentice on the com-  |
| 17 | pletion of the apprenticeship.                            |
| 18 | (c) REQUIREMENTS.—The Corporation shall estab-            |
| 19 | lish requirements for participation in the green energy   |
| 20 | technology apprenticeship program, including require-     |

21 ments relating to—

(1) the eligibility of apprentices, organized
labor, trades, and businesses to participate in the
program;

| 1  | (2) partnerships with organized labor appren-        |
|----|--|
| 2  | ticeship programs; and                               |
| 3  | (3) application contents and procedures.             |
| 4  | SEC. 9. CRITERIA FOR PROVISION OF GRANTS, LOANS, AND |
| 5  | OTHER ASSISTANCE.                                    |
| 6  | (a) ELIGIBLE PROJECTS.—                              |
| 7  | (1) IN GENERAL.—The Corporation shall pro-           |
| 8  | vide grants, loans, and other assistance in accord-  |
| 9  | ance with the programs under this Act for projects   |
| 10 | that, as determined by the Corporation—              |
| 11 | (A) offer the best technology, research, and         |
| 12 | commercialization for the United States;             |
| 13 | (B) permit anticipation and action on mar-           |
| 14 | ket opportunities;                                   |
| 15 | (C) encourage industry involvement;                  |
| 16 | (D) facilitate investment at the intersec-           |
| 17 | tion of core competency areas;                       |
| 18 | (E) recruit world-class talent and high-             |
| 19 | growth companies;                                    |
| 20 | (F) create economic opportunity for target           |
| 21 | areas;   |
| 22 | (G) engage regional partners;                        |
| 23 | (H) emphasize accountability and metrics;            |

| 1  | (I) upon completion, will serve as sites and       |
|----|--|
| 2  | facilities primarily intended for commercial, in-  |
| 3  | dustrial, or manufacturing use; and                |
| 4  | (J) advance environmental protection.              |
| 5  | (2) PRIORITY.—In carrying out paragraph (1),       |
| 6  | the Corporation—                                   |
| 7  | (A) shall give priority to—                        |
| 8  | (i) renewable energy, carbon-neutral               |
| 9  | projects; and                                      |
| 10 | (ii) projects that advance environ-                |
| 11 | mentally protective goals, with a particular       |
| 12 | emphasis on best practices and innovative          |
| 13 | technology that reduce negative impacts on         |
| 14 | a commercial scale; and                            |
| 15 | (B) may consider and give priority to the          |
| 16 | potential of a project to develop or improve in-   |
| 17 | novative, cutting-edge technology for green en-    |
| 18 | ergy projects that are carbon neutral.             |
| 19 | (b) BASIS.—A grant, loan, or other assistance pro- |
| 20 | vided under this Act—                              |
| 21 | (1) shall be based on the best available tech-     |
| 22 | nology, research, and commercialization, with a    |
| 23 | focus on diversity of green technologies; and      |
| 24 | (2) shall not be provided solely on a geo-         |
| 25 | graphical basis.                                   |

| 1  | (c) ELIGIBLE APPLICANTS.—The Corporation may                |
|----|---|
| 2  | provide a grant, loan, or other assistance under this Act   |
| 3  | to—   |
| 4  | (1) a political subdivision or nonprofit economic           |
| 5  | development organization;                                   |
| 6  | (2) a municipality, local government, commu-                |
| 7  | nity, or institution of higher education (including a       |
| 8  | technical educational institution); and                     |
| 9  | (3) a private, for-profit entity, with the unani-           |
| 10 | mous approval by the Board of Directors of the Cor-         |
| 11 | poration.   |
| 12 | (d) FUNDS ALLOCATED.—The Corporation shall de-              |
| 13 | termine the maximum and minimum amount provided for         |
| 14 | each program and program recipient under this Act in        |
| 15 | order to maximize the purposes of this Act.                 |
| 16 | (e) REPORT.—Not later than 1 year after the date            |
| 17 | of enactment of this Act, and annually thereafter, the Cor- |
| 18 | poration shall submit to Congress a report that describes   |
| 19 | all activities of the Corporation carried out using funds   |
| 20 | made available under this Act, including, for the year cov- |
| 21 | ered by the report, a description of—                       |
| 22 | (1) each grant, loan, or other award of assist-             |
| 23 | ance provided under this Act; and                           |
| 24 | (2) the reason for each grant, loan, or other               |
| 25 | award.  |

## 1 SEC. 10. ADMINISTRATION.

Notwithstanding any other provision of this Act, none
of the funds made available to carry out this Act may be
used to carry out any project, activity, or expense that
is not located within the United States.

### 6 SEC. 11. AUTHORIZATION OF APPROPRIATIONS.

7 There are authorized to be appropriated to the Fund8 to carry out this Act, to remain available until expended—

9 (1) \$1,000,000,000 for fiscal year 2009;

10 (2) \$5,000,000,000 for fiscal year 2010; and

11 (3) \$10,000,000 for each of fiscal years
12 2011 through 2013.

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