

## **Education for A Green Economic Revitalization (EAGER) Act**

### **Title I)**

#### **A) FINDINGS: Congress finds that-**

1. Transforming our nation's economic, energy, and environmental systems to move towards a green economy will require a level of expertise, innovation, and cooperative effort unseen since the 1940s to meet the challenges involved.
2. To successfully transition to a green economy, a broad base of engaged citizens who are literate about green economy issues is necessary to create innovative green business and personal practices, to support and help develop new green technology and policy, and to address the coming social and economic problems and opportunities arising from a changing climate.
3. To ensure that members of both the current and future green economy workforce can successfully participate in the transition to the green economy, the U.S must support new programs to provide education and training for workers entering green jobs and careers at all levels and for all sectors of the economy as well as social awareness of more environmentally and energy sustaining practices.
4. Our nation's education systems can and must help our citizens understand the connections, the linkages and interdependencies, between the environment and the economy which underpin and form the very foundation of the concept of a green economy.

**B) PURPOSE:** To significantly increase national literacy about the key concepts, principles, tools, and skills essential for understanding and participating in a green economy by equipping:

- 1) all Americans with a basic understanding of the relationships between environmental, economic and social systems as well as the economic opportunities in a green economy so they can support the transition from the old to the new economy by becoming educated and empowered consumers, investors, voters, workers and citizens; and
- 2) the current and future workforce with the specific knowledge and training required to successfully fulfill family-supporting jobs in the new green economy.

#### **C) DEFINITIONS:**

- 1) **“Green economy”** means the development and use of products and services that simultaneously promote environmental protection, reduced dependence on foreign sources of energy, reduction of carbon footprint, social justice and economic development.
- 2) **“Education for a green economy”** means the interdisciplinary study of the systemic relationships between economics, energy, the environment, and societal and community well being; and includes key principles and concepts from sustainability education as well as ecological economics, earth systems science, environmental education, climate change education, energy education, geography, civics, systems and industrial ecology, and development education.

3) **“Green collar” workforce** means the workers in the jobs in industries most directly involved in the green economy such as:

- alternative energy, including wind and solar energy;
- green construction, green retrofitting, and green design;
- green chemistry and technology;
- ecosystem management, restoration and remediation;
- water and energy conservation;
- recycling, pollution prevention, and waste reduction;
- sustainable agriculture, farming, forestry and fishing;
- public health services;
- coastal, urban and transportation planning; and
- sustainable food supply practices.

4) **“Climate change education”** means formal and informal interdisciplinary learning about the relevant interrelationships between dynamic environmental, social and economic systems as exemplified in climate change.

5) **“High leverage projects”** mean projects which use given resources in such a way that the potential outcome is highly magnified and/or enhanced.

6) **“Target population”** means five audiences: public and consumers, K-12 students, undergraduate and graduate students, career pathways students, and practicing professionals.

## **Title II) OFFICE FOR INNOVATION**

**A) Purpose:** To stimulate educational innovation, research and development that systemically advances education for a green economy.

**B)** There is hereby established an **Education for a Green Economy Office for Innovation** within the National Science Foundation.

**C) Authorization to make grants:**

The Office is authorized to administer grants pursuant to this title.

**D) Activities.-**

The Office shall, either directly or through grants and contracts:

1) work with education and industry stakeholders to identify and regularly refine and update the key concepts and principles of education for a green economy and widely disseminate the results;

2) produce an annual, public plan detailing the coordinated goals, objectives, and intended outcomes for the upcoming year and the roles of each participating agency in meeting these goals, to be submitted to the CEQ Coordinating Council for review and approval;

3) serve as a national coordinator and incubator for strategic, high leverage efforts to infuse education for a green economy into mainstream education,

4) collect nationally relevant information on education for a green economy, identify and provide a clearinghouse and network for information and best-practices, and encourage implementation of those practices,

5) develop and engage a broad, national learning community by providing for a for communication and collaboration among governmental and nongovernmental stakeholders, practitioners, and educators for sharing assessments, plans learning activities, professional standards and related topics,

6) conduct evaluation and research to determine the effectiveness of the initiatives under this Act in meeting the purposes of this Act on topics which shall include but are not limited to –

(1) a regular assessment of the nation’s green economy literacy as well as additional indicators of national progress,

(2) regular evaluations of the effectiveness of the grant programs under this title,

(3) regular assessment of education for a green economy initiatives among the participating federal agencies involved in such initiatives, and

(4) the taxpayer return on investment for the education for a green economy initiatives under this Act.

7) Provide support for participating agencies to adapt their existing education, training, and communications programs to include education and training for a green economy and climate change education, including the development and conduct of training and planning for agency education, outreach, and communications personnel.

**E) Authorization of Appropriations**

\$9.5 million shall be available to the National Science Foundation to carry out the functions and tasks described in Title 2 Section (D).

**Title III) COORDINATING COUNCIL**

**A) Coordinating Council:** There is hereby established an Interagency Council on Education for a Green Economy within the Council for Environmental Quality, comprised of one education representative each from the Departments of Agriculture, Education, Energy, Health and Human Services, Interior, and Labor, and the Environmental Protection Agency, National Oceanic and Atmospheric Administration, and National Science Foundation. The National Science Foundation shall hold 51 percent of the vote in cases where consensus cannot be reached on Council decisions.

**B) The Council shall:**

- 1) make recommendations concerning the director and staff of the Education for a Green Economy Office for Innovation,
- 2) make recommendations for interagency considerations for the grants administered under Title IV,
- 3) ensure that interagency coordination is strengthened and maintained among existing federal programs addressing environmental education, climate change education, renewable energy education and education for a green economy,
- 4) make recommendations for how existing federal education and training programs can better integrate the concepts of education for a green economy,

- 5) receive reports from the Education for a Green Economy Office for Innovation, and
- 6) meet regularly to coordinate efforts to advance education for a green economy and to review and approve the annual plans produced by the National Science Foundation for all programs under this Act.

**C) Authorization of Appropriations**

\$500,000 shall be available to the Council for Environmental Quality to carry out the functions and tasks described in Title III.

## **TITLE IV) GRANT PROGRAMS**

**A) Purpose:** To fund innovative, high leverage solutions that address target audiences currently underserved by federal programs in a manner that produces enduring change.

**B)** \$490 million of the funds made available under this Act shall be provided to the Education for a Green Economy Office for Innovation to establish and administer the following competitive grants programs:

- 1) SYSTEMIC INNOVATION PROGRAM** (\$250 million): Grants will be made to nonprofit organizations, State educational agencies, local educational agencies, k-12 and higher education disciplinary societies and professional associations, or institutions of higher education with demonstrated expertise and experience in the development of the institutional, intellectual, or policy resources to help education for a green economy become more effective and widely practiced within each target population, or partnerships of the same, as follows -
  - a) **Citizen Readiness and Consumer Education** by supporting major public education, outreach, and communication programs to engage the public in supporting the transition to a green economy and understanding climate change while developing educated and empowered consumers, investors, and citizens,
  - b) **K-12 education** by encouraging and supporting environmental education, STEM (science, technology, engineering, and math) education, and social studies to adopt and include a sustainability perspective,
  - c) **Undergraduate and graduate education** by improving the quality of and access to higher education in green collar workforce and green economy-related fields such as green business, technology, engineering, policy studies, and sustainability science,
  - d) **Career pathways** programs by including career education expanding green collar workforce training, and secondary school preparation or work-based experiences in green collar fields, or
  - e) **Practicing professionals** by developing continuing education for practicing professionals needed for green economy-related fields.

Priority shall be given to projects that seek to incorporate a sustainability perspective into large formal or informal education systems and that show

high promise of sustaining this change well beyond the period of the grant, including projects that:

- a) address restructuring institutional incentives and reducing institutional barriers to widespread faculty and teacher adoption of key aspects of education for a green economy such as interdisciplinary teaching and community engagement,
- b) develop and implement new policy approaches to advancing education for a green economy at the State and national level,
- c) advance widespread State and local educational agency adoption of education for a green economy, including funding for State education agencies to integrate key principles of education for a green economy into existing k-12 State academic content standards, student academic achievement standards, or State curriculum frameworks; to create model state curricula; or to create green school building standard or policies, or
- d) reach substantial numbers of the public with essential and effective messages about the green economy.

**2) FACULTY PROFESSIONAL DEVELOPMENT CENTERS (\$100 million)** Grants will be made to establish and maintain 10 regional faculty professional development centers, each with a focus on community colleges as well as 4 year college and university faculty, at colleges and universities, professional associations and disciplinary societies, or NGOS or partnerships of the same, to train faculty from all relevant disciplines in the key principles, concepts and skills of education for a green economy and how to infuse the same into their teaching and course materials. As part of their purpose and plans, each center will closely collaborate with the others to collectively establish education for a green economy within the higher education system, including but limited to identification of successes that can be implemented by other centers and development of a national clearinghouse to document and share informational resources, assessments, and successful precedents, and facilitate communication among faculty.

**3) CENTERS FOR EXCELLENCE (\$60 million):** Grants will be made to establish and maintain eight cost-sharing Centers for Excellence at colleges and universities, professional associations and disciplinary societies, or NGOS or partnerships of the same, each Center to focus on integrating the key concepts and principles of education for a green economy into professional education (including continuing education) and training in one of the following fields:

- 1) renewable energy and energy efficiency technologies and policies;
- 2) architecture and landscape architecture;
- 3) engineering;
- 4) urban, coastal, transportation and community planning;
- 5) natural resource management, with an emphasis on the agriculture, wildlife, and forestry sectors;
- 6) public health;
- 7) business management and economics; and
- 8) rural economic development

Each center for excellence will be a recognized leader in the center's field, and with respect to the center's designated focus, shall –

- a) serve as a national coordinator and incubator for strategic, high leverage efforts to infuse sustainability education into the center's field;
  - b) provide a clearinghouse and network for information and best-practices;
  - c) provide a forum for communication and collaboration among governmental and nongovernmental stakeholders and educators;
  - d) provide support for undergraduate, graduate, and continuing education curriculum revisions to ensure that students achieve sustainability literacy;
  - e) develop resources, bodies of knowledge, and professional standards relating to education for a green economy; and
  - f) provide professional training for in-service educators and administrators to create interdisciplinary approaches to education for a green economy.
- 6) serve as a national leader in understanding the skill needs of green jobs in the center's field and convening partners in education, workforce development, industry, and economic development to inform the workers about education and training opportunities in skills identified by industry partners in the center's field as in demand.

**4) HIGHER EDUCATION - COMMUNITY PARTNERSHIPS (\$50 million):**

1/1 matching grants will be made, with funds shared between the community/higher education partners, to higher education institutions to engage teams of faculty and students to develop applied research (up to 25% of the grant) and deliver direct services, such as technical assistance, capacity building support, or project execution, to relevant government or non-profit agencies on green economy issues impacting local communities, with a priority on distressed communities. One third of these funds shall be spent on national, state and regional projects which seek to increase the role and importance of community engagement and community-based participatory research within higher education policy and State higher education policy.

**5) PUBLIC AWARENESS, ATTITUDES AND BEHAVIORS (\$15 million):**

Fund pilot programs to test findings from existing studies of public awareness, attitudes and behaviors on projects in communities that promote actions and behaviors to advance sustainability, climate change mitigation and adaptation, and a green economy.

C) Five percent of funds appropriated for this Title shall be available to the National Science Foundation's Office for Innovation for administrative purposes in carrying out the grant making programs described in Title IV.

**D) ADMINISTRATIVE PROVISIONS.—**

1) EVALUATION: - All grants made under this title shall contain an evaluation and accountability plan for activities assisted under this section that includes rigorous objectives that measure the impact of activities funded under this section.

2) FEDERAL SHARE.—Unless otherwise noted, the Federal share under this section shall not exceed—

(A) 90 percent of the total cost of a program assisted under this section for the first year for which the program receives assistance under this title;

(B) 75 percent of such cost for the second; and

(C) 50 percent of such cost for each subsequent such year.

2) REPORT TO CONGRESS.—Not later than one year after enactment of this bill and each year thereafter, the Director of the National Science Foundation shall submit to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate a report that -

(A) describes the programs assisted under this Act;

(B) documents the success of such programs in improving national and State capacity for education for a green economy; and

(C) makes such recommendations as the Director in consultation with the Coordinating Council determines appropriate for the continuation and improvement of the programs assisted under this Act.

**E) SUPPLEMENT, NOT SUPPLANT.**—Funds made available under this section shall be used to supplement, and not supplant, any other Federal, State, or local funds available for similar activities.

**Title V) AUTHORIZATION OF APPROPRIATIONS.** - There are authorized to be appropriated to carry out this Act \$500,000,000 for fiscal year 2010 through fiscal year 2015.