

CAMPAIGN FOR ENVIRONMENTAL LITERACY

Preparing Americans for the Transition to a Green Economy: The Case for the "Education for A Green Economic Revitalization" (EAGER) Act

The U.S. is embarking on a major transition to a green economy, a monumental change requiring all sectors and segments of the population to pull together. 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.

Public engagement in this transition is essential. As President Obama noted in his inaugural address: "For as much as government can do and must do, it is ultimately the faith and determination of the American people upon which this nation relies." Architects, engineers, planners, scientists, business managers, financial experts, lawyers, entrepreneurs, political leaders, resource managers and many others as well as a green manufacturing workforce will all be needed – not to mention environmentally literate citizens and consumers to drive the green economy.

The public will be called upon to implement changes in business and personal practices, to support and help develop new technology and policy, and to address the coming social and economic problems and opportunities arising from a changing climate. Top-down solutions alone simply will not suffice without a broad base of literate citizens to make them happen.

Yet for decades, polls have shown broad public concern for environmental issues – but consistently show a bigger concern for their pocketbooks. This position has held back environmental progress more than any other single element, and will significantly hinder the transition to a green economy. The public clearly views environmental progress and protection above all else as a tradeoff with economic development ("jobs vs spotted owls"). Yet the inescapable truth is that they are mutually dependent: our economy depends on a healthy environment, and our environment depends on a vibrant economy.

Each year, higher education sends over 2 million graduates out into the workforce armed with the attitudes, skills, and knowledge to advance either a green economy, or business as usual. And the impact, good or bad, of each of these 2 million individuals lasts a lifetime.

Education can – and must – help people understand the true connections, the linkages and interdependencies, between the environment, our energy sources, and the economy which underpin and form the very foundation of the concept of a green economy. Only then will a broad segment of the population understand why they can't separate their economic concerns from their environmental concerns, or vice versa. Al Gore succinctly identified one of these key linkages in his comment: "*We're borrowing money from China to buy oil from the Persian Gulf to burn it in ways that destroy the planet.*" How many citizens understand and fully appreciate this critical point?

The education required to accomplish this is a new way of thinking and learning about integrated, systemic solutions to not just our economic and environmental challenges, but also to our interdependent health, social and political challenges. Above all, it uses the green economy as the focal point for understanding the deep connections between economics, energy, the environment, and social well being, often referred to as “sustainability”. It builds on the key insights and concepts in Climate Change Education, Coastal & Marine Education, Conservation Education, Earth Systems Science Education, Economics Education, Energy Education, Environmental Education, Environmental Justice & Cultural Diversity Education, Place-based Education, Service Learning & Community Education, Systems Thinking, and Sustainability Education. As such, education for a green economy is not a new subject, discipline or field per se, but rather a synthesis of the most relevant aspects of many fields.

To produce such a literate workforce and citizenry, America will need to **make major new investments in our educational systems**. While investing in green technology is important, investing also in the *human* capitol to implement the green economy will keep new green jobs from migrating out of America.

It has been well proven that **an investment in education and innovation - in human capital - is without a doubt the best investment that can be made in long-term, across-the-board economic growth**. Public investment in “education for a green economy” will more than pay for itself, just as the post-Sputnik education programs did in the 1950s and '60s and the GI Bill did in the '40s. According to the Subcommittee on Education and Health of the Joint Economic Committee, every dollar invested in the GI Bill generated \$6.90 in returns, and the total added value to national economic output was estimated to be nearly \$200 billion.

“Education for a Green Economy” can be a unifying national agenda:

- A serious commitment to global competitiveness and innovation appeals to a wide range of stakeholders, including Americans concerned with security and energy independence issues, economic development, climate change and the environment, and our current system of education; blue-collar workers and citizens calling for increasing investment in new ‘green jobs’; parents, students, and teachers; clean technology and green venture capital firms; and the academic community.
- Recent legislation authorizing investments to support sustainability programs in higher education, improve education in STEM fields (science, technology, engineering, and mathematics), and build healthy, high performance “green schools” (both k-12 and higher education) have passed with bipartisan support, but have yet to be fully funded.
- Most importantly, such investments will also further many related goals such as improving STEM education and rebuilding America’s schools.

To prepare Americans for the transition to a green economy, new investments are needed to:

- **retool our nation’s universities and colleges** to become centers of research, education and workforce training in green economy-related fields,
- **revitalize K-12 education** by strengthening environmental education and STEM (science, technology, engineering, and math) education to provide all students with a basic understanding of the relationships between environmental, economic and social systems,
- **bolster existing career pathways programs** to provide disconnected and underserved young people with green educational and work options,
- **retrain practicing professionals** for green economy-related fields, and

- **mount major public education programs** to inform the public and develop educated consumers.

The “Education for A Green Economic Revitalization” (EAGER) Act targets the five key audiences above with new grant programs totaling \$500 million/year along two tracks:

1. Programs which provide **all Americans** with a basic understanding of the relationships between environmental, economic and social systems (sustainability education) so they can support the green economy transition by becoming educated and empowered consumers, investors, voters, and citizens, and
2. Programs which provide the specific knowledge needed by the current and future **green economy workforce** so they can successfully fulfill these new jobs.

EAGER authorizes two new initiatives to be administered by a new **Education for a Green Economy Office for Innovation** within the National Science Foundation, with oversight by a multiagency Coordinating Council within the Council for Environmental Quality:

1) The first is an **internal federal initiative to help infuse education for a green economy into existing federal programs**. This will provide support for participating agencies to adapt their existing education, training, and communications programs to include education for a green economy and climate change education, including the development and conduct of training and planning for agency education, outreach, and communications personnel.

2) The second is an **external initiative to fund high leverage projects that influence the system conditions in various formal and informal education systems**:

- a) The largest program is a "**Systemic Change Program**" designed to fund high leverage, systems-changing projects in all five target sectors.
- b) Another grant program funds 10 regional faculty professional development centers to train faculty from all relevant disciplines in the key principles, concepts and skills of education for a green economy.
- c) Another program funds eight **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.
- d) A **Higher Education-Community Partnership Program** will support higher education institutions to engage teams of faculty and students to develop applied research and deliver direct services on green economy issues impacting local communities, with a priority on distressed communities.
- e) A **Public Awareness, Attitudes and Behaviors program** will fund pilot programs to test findings from existing studies of public awareness, attitudes and behaviors on projects in communities to promote actions and behaviors related to advance sustainability, climate change and a green economy.

EAGER is intended to authorize spending **new funds** on education that would be generated from a cap and trade auction, not to take a piece of existing general revenues away from existing federal funding programs. It is intended to infuse an understanding of a green economy and sustainability thinking into existing disciplines and subjects, not to create a new discipline or subject. It is intended to also advance those subjects/disciplines/fields most relevant to sustainability such as ecological economics, earth systems science, environmental education, climate change education, energy

education, geography, civics, systems and industrial ecology, and development education. And it does not include any mandates.

EAGER is currently endorsed by:

American Association of Colleges for Teacher Education (Mary Harrill-McClellan, Director, Government Relations)

American College & University Presidents Climate Commitment (Anthony D. Cortese, Co-organizer)

Association for the Advancement of Sustainability in Higher Education (Judy Walton, Acting Executive Director)

Council for Christian Colleges and Universities (Paul R. Cortis, President)

Second Nature (Anthony D. Cortese, President)

National Wildlife Federation (Kevin Coyle, Vice President for Education)

U.S. Partnership for Education for Sustainable Development (Debra Rowe, President)

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