## United States Department of Energy State Energy Advisory Board (STEAB) *Resolution 10-01*

## Topic:U.S. Department of Energy, Cooperative Extension Service, and State<br/>Energy Offices Collaboration on energy efficiency and renewable energy<br/>education for America.

**Background**: Record energy prices and a heavy reliance on foreign oil are resulting in increased interest in energy efficiency and the utilization of renewable energy. National and world efforts to set low-carbon emission standards are also driving demand for conservation, efficiency and renewable energy. The adoption of new technologies, energy-conserving practices, and renewable energy could be significantly enhanced through demonstration and educational efforts that provide knowledge and focus on behavior change. The U.S. Department of Energy (DOE) and U.S. Department of Agriculture (USDA) through land-grant universities are actively engaged in developing new energy technologies, researching energy-efficiency practices, evaluating renewable energy sources, and supporting the market transformation of these activities. Significant energy savings could be realized if end-users adopt these technologies and practices, and make behavior changes. By embracing these practices, jobs can be created, energy dependency can be reduced, and environments can be improved.

The Cooperative Extension Service (CES) is the major educational outreach agency of land-grant universities and is affiliated with the USDA National Institute for Food and Agriculture.

CES has a strong history of consumer trust. Research shows that establishing trust and integrity in communities is essential prior to observing and documenting changes in human behavior. This level of trust takes time to develop as an organization. Evaluated results show that CES faculty are valued and trusted sources of information.

CES also has a premier youth education program called 4-H and a network of over 3,000 County Extension Offices that reaches into virtually every community across the country and provides life-long learning for citizens. This educational work is facilitated through community partnerships (local governments, home weatherization programs, community action agencies, etc.) that provide a platform for transformational learning. This approach seeks actionable change in behavior, habits and practices.

Recently, CES launched a national, on-line educational environment called "eXtension" designed to provide continuous learning opportunities for consumers. Energy-efficiency and renewable energy education is being incorporated into this educational system that will have a significant impact on getting consumers to adopt clean-energy practices. Combining these activities with ongoing State Energy Office (SEO) initiatives (e.g., State Energy Program, Energy Efficiency and Conservation Block Grants, and Weatherization Assistance Program activities) will help leverage DOE's efforts to maximize the acceptance and adoption of energy-efficiency and renewable energy practices across the nation.

**Issue:** Most Americans do not fully appreciate or understand the significant benefits that renewable energy and energy efficiency technologies offer. Community education leading to transformational learning is needed to capture the hearts and minds of Americans on the benefits

of clean energy and its applicability to their lives. The CES's history of consumer trust and strong community partnerships could provide cost effective and rapid adoption of energy efficiency and renewable energy practices across the United States. Not since the early 1980s has funding been provided for CES to integrate energy efficiency and renewable energy into land-grant universities' outreach and deployment channels.

SEOs provide leadership to maximize the benefits of energy efficiency and renewable energy through awareness, technology development, and partnerships. Every state supports an SEO, but funding limitations restrict the SEO's capacity to educate residents statewide on a local community level. Together, these organizations, CES and SEOs, could leverage enhanced resources from DOE and USDA to improve practices of Americans to use and generate clean energy to improve local economies on a national basis.

**Recommendation**: STEAB respectfully encourages the DOE to initiate an active dialogue with USDA to establish formal agreements among EERE, CES and the SEOs to enhance the education of American citizens regarding energy efficiency and renewable energy. The end result would be a broader-scale adoption of renewable energy and energy efficiency practices. STEAB could serve as the national convener for the dialogue necessary to establish these agreements and facilitate the exchange of information among DOE, the CES and SEOs that will be necessary for these collaborative efforts to succeed. STEAB would also collect and provide DOE with success stories from these efforts.

Several arrangements could be used to establish this unique partnership. STEAB recommends that the DOE consider the following options for establishing the formal agreements needed for this partnership and to identify the needed funding resources:

1) Establish a Memorandum of Agreement (MOA) between the Office of Energy Efficiency and Renewable Energy and the USDA National Institute of Food and Agriculture. The MOA would identify the national leadership and management needed to establish and deliver this effort within states across the country. The shared resources needed to accomplish this effort would also be identified through the MOA.

2) The Office of Energy Efficiency and Renewable Energy establish program guidance and resources directed through the SEOs that creates the collaboration between CES and the SEOs. This arrangement would look to individual SEOs to partner with their state CES to establish the educational partnership outlined in this document.

## **Next Steps:**

Authorize STEAB to initiate a dialogue with USDA and EERE / DOE to:

- a. Explore interest in this proposed partnership; and if positive,
- b. Convene a meeting between USDA and EERE / DOE to develop formal agreements that would establish this proposed partnership.