Advanced Energy Economy (AEE) believes there are significant opportunities to better utilize taxpayer dollars and, at the same time, more effectively promote secure, clean and affordable energy.

AEE is a national organization representing the advanced energy industry. AEE’s mission is to influence public policy, foster advanced energy innovation and business growth, and provide a unified voice for a strong U.S. industry. Founded in 2011, AEE has a national network of business members across states and across industries to help the advanced energy industry succeed. In addition, AEE has partner organizations in Arkansas, Colorado, Illinois, Michigan, North Carolina, New Mexico, Nevada, Ohio, South Carolina and New England, with more to come, as well as active engagements in California, New York and Maryland.

The ongoing conversations about tax reform provide an immediate opportunity to help build a better paradigm for advanced energy based upon business-focused principles. Rather than engage in a political food fight, where only tax provisions supported by the strongest special interest can survive, AEE suggests a fresh approach whereby we refocus the federal energy tax code on its core public purpose – promoting innovation to provide our nation with energy that is secure, clean and affordable.

Tax Reform Based on Energy Principles

Over the decades, the energy tax code has become a complicated patchwork of technology-specific benefits, with the size, scope and length of credits differing greatly even between technologies that compete in the same markets. One reason is the seeming lack of consistent, core principles underlying the use of tax policy to obtain desired results. AEE believes that existing energy tax incentives should be gradually and responsibly phased out and replaced with a structure that more accurately reflects current energy realities and interacts more efficiently with energy markets, based on an explicit and consistent set of principles.

Through a series of discussions with numerous stakeholders, including business and finance leaders, tax policy experts, Members of Congress and their staff, AEE has created the following set of principles designed to serve as a guide to the development of new tax policy as applied to energy:

1) Be targeted: limit federal funds to where innovation is needed to build a more secure, clean and affordable energy future. Federal tax credits should only be provided where there is an essential public purpose. Rather than providing permanent support to mature technologies that already have significant market penetration, the federal government’s role should be limited to driving innovation and deployment of the next generation of technologies or services that promise public benefits such as enhancing energy security through fuel diversity and grid modernization, providing cleaner energy that
better protects public health, reducing energy costs for consumers and businesses, and developing products that can be competitive in world markets.

2) **Sunset automatically when market-based objectives are achieved.** No company or technology should be entitled to permanent subsidies. When left in place too long, tax incentives distort price and market signals and ultimately create barriers to entry for new technologies. Therefore, tax incentives should remain in place only long enough to achieve a measurable, market-based objective (for example, gigawatts installed or share of market) that represents a point at which emerging technologies have reached sufficient maturity that they should stand on their own. Each provision should have an automatic phase-out or periodic update built in from the beginning to send clear signals to businesses and investors.

3) **Provide stability and certainty for businesses and investors.** Businesses and investors need certainty to make the investments and set the plans necessary to grow. Rules that change frequently or unpredictably are disruptive to markets and harmful to the businesses, investors, and consumers participating in them. Expiration dates for many current incentives are short-term, arbitrary in nature, and unrelated to market conditions. When such incentives are allowed to lapse, or are renewed at the eleventh hour and extended until the next short-term, arbitrary deadline the result is a cycle of boom and bust. That creates uncertainty for investors and disrupts the natural cycle of innovation and improvement as an industry grows to scale. Using meaningful performance metrics tied to maturity in the marketplace, rather than calendar deadlines, to sunset a tax benefit would provide certainty to investors, focus businesses on bringing their technologies to scale and down the cost curve, and allow market dynamics to drive business success.

4) **Be technology neutral.** Many of today’s energy tax policies were written with one sector in mind, even favoring a single technology. Such an approach distorts market signals and puts the weight of the government behind investment decisions. This approach is inefficient and imposes unnecessary risks on taxpayers. In addition, this approach can inadvertently freeze out next-generation technologies. The best available technology today will not necessarily be the best down the line. Energy tax benefits should be applied as broadly as reasonable to stimulate innovation across technologies, including those that have not yet emerged.

AEE believes that these four principles represent a common-sense approach that puts federal tax policy squarely behind energy innovation that will pay off in the marketplace. But they equally represent a dramatic break from the status quo. Of the 26 major energy tax provisions analyzed, not a single one meets all four of these principles; in fact, none meet more than two. Reform based on these principles would make federal energy tax policy more focused, accountable, and cost-effective — providing savings for the budget and resulting in secure, clean, affordable energy.

**Overview of Tax Reform Framework**

Based upon the above principles, AEE has developed a framework that provides one possible new structure for the next generation of energy tax policy. The framework is based on breaking the tax code into the following four broad categories of credits: Energy Generation, Fuels, Demand Side and Finance. The diagram below illustrates how the categories overlap.
The tax credit categories themselves would remain permanent, but the ability to access the credits for any given technology would be limited based upon the concepts laid out in the principles. AEE offers the following preliminary thinking on how the criteria could be applied to each category:

**Fuels**

- **Driving innovation**: The proposal would provide a per-gallon tax credit for the production of liquid fuels that are: (1) domestic; (2) cleaner and/or more productive than conventional fuels; and (3) new to the United States.
- **Automatic sunsets**: The credit would sunset for every taxpayer once a certain market objective is reached—for example, when a fuel reaches a certain percent market penetration, or when a taxpayer produces a certain number of gallons of eligible fuel.
- **Stability and certainty**: The credit would be a permanent part of the Tax Code, avoiding the need for Congress to periodically extend the credit.
- **Technology neutrality**: The credit would not be limited to specific categories of fuels defined in the Tax Code. Any fuel that is domestic, cleaner and/or more productive than conventional fuels, and new to the United States would qualify.

**Energy Generation**

- **Driving innovation**: The proposal would provide a per-kilowatt hour tax credit for the generation and sale of electricity from sources that are: (1) domestic; (2) cleaner and/or more productive than conventional electricity generation; and (3) new to the United States.
• **Automatic sunsets:** The credit would sunset for every taxpayer once a certain market objective is reached—for example, when an electricity source reaches a certain percent market penetration, or when a taxpayer produces a certain number of kilowatt hours of electricity from an eligible electricity source.

• **Stability and certainty:** The credit would be a permanent part of the Tax Code, avoiding the need for Congress to periodically extend the credit.

• **Technology neutrality:** The credit would not be limited to any specific categories of electricity sources defined in the Tax Code. Any electricity source that is domestic, cleaner and/or more productive than conventional electricity generation, and new to the United States would qualify.

**Energy Bonds/Financing**

• **Driving innovation:** The proposal would give the Secretary of the Treasury a permanent, annual tax credit bond authority to finance innovative energy facilities.

• **Automatic sunsets:** A project would only be able to receive a one-time benefit from the program.

• **Stability and certainty:** The bond authority would be permanent, allowing the Secretary to allocate a specified amount each year. A bond issuer that applies for allocations in one year can re-apply the next year if there is not sufficient bond authority in a given year.

• **Technology neutrality:** Any project that qualifies as an innovative energy facility could receive an allocation under the proposal. The proposal would limit the tax credit bonds to “innovative energy facilities” producing fuel or electricity that is: domestic, cleaner and/or more productive than existing technologies, and new to the United States, or manufacture equipment for use in innovative energy facilities.

**Demand Technologies: Transport, Buildings, and Industry**

• **Driving innovation:** The proposal would amend various existing tax incentives to direct them more towards new and innovative technologies at the forefront of their respective industries. For instance, in some cases the proposal would require the development of rules to gradually increase efficiency or other performance standards over time.

• **Automatic sunsets:** The proposal would direct the Secretary of the Treasury, in consultation with the Secretary of Energy, to issue rules to sunset various tax incentives over time once market objectives are reached so that individual taxpayers are not able to receive permanent subsidies from the federal government.

• **Stability and certainty:** At the same time, the proposal would make some energy tax incentives a permanent part of the Tax Code so that new businesses and technologies are able to take advantage of the incentives without the need for legislative amendments.

• **Technology neutrality:** The proposal would amend some tax incentives to incorporate technologies that do not currently qualify for credits but meet the same policy objectives as the currently eligible technologies.
A New Approach to Energy Tax Policy

While there is work yet to be done, AEE believes the execution of the four principles through such a framework could provide a more efficient, business focused energy tax code that spurs innovation and avoids market distortion. AEE looks forward to working with Congress to transition to a more principled approach to federal energy tax policy that drive the United States toward a more secure, clean and affordable energy future. If you are interested in more information on this effort, please contact us at sj@aee.net; 202-380-1950.