ACEEE Testimony
American Council for an Energy-Efficient Economy

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American Council for an Energy-Efficient Economy (ACEEE)

Comments for the Record

**Hearing on
Framework for Evaluating Certain Expiring Tax Provisions**

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I am writing to provide the comments of the American Council for an Energy-Efficient Economy (ACEEE) for the record of the hearing on Framework for Evaluating Certain Expiring Tax Provisions. ACEEE is a nonprofit research organization formed in 1980 that acts as a catalyst to advance energy efficiency policies, programs, technologies, investments, and behaviors. We now employ more than 40 researchers and publish dozens of well-regarded studies each year. Additional information on our organization can be found at http://aceee.org. ACEEE has conducted substantial research on energy efficiency tax incentives and has also done research on how broader tax policy affects investment in energy efficiency.

Regarding tax extenders, many of the witnesses at the hearing discussed a variety of criteria including economic efficiency. We believe that Congress should go further and explicitly examine the benefits of the various expiring tax provisions relative to their costs. Given current budget deficits, we assume that funds for tax incentives will be very limited. In such an environment, only those incentives with benefits substantially greater than their cost should be considered. We also favor establishing an explicit budget for tax expenditures and allocating this budget to a limited number of specific incentives that maximize benefits per federal dollar. Evaluation of benefits should be relative to what would happen in the absence of a tax incentive. Thus, if $10 billion is invested by consumers under a tax credit for efficient windows but without the credit $8 billion would have been invested, the net benefit for the federal investment is only $2 billion.

Regarding energy tax incentives, we recommend that the limited available funds be targeted at instances where the technology or practice is not widespread, but with medium-term support (e.g., five years), markets can be transformed so that these technologies or practices become much more widely used even after tax incentives end. We can no longer afford long-term subsidies but instead should use limited dollars in ways that can use “jujitsu” to leverage lasting changes in markets.

Recent examples of such tax credits include the energy efficiency appliance tax credit (Section 45M) and the new homes tax credit (Section 45L). In the case of appliances, incentives have targeted very high efficiency appliances, substantially raising market share and energy savings. Many of the products incentivized under the original 2005 legislation now represent the majority of product sales. This progress has allowed eligibility levels to be tightened several times so that incentives are only available for the very most efficient products on the market, with incentives phased out for lower efficiency levels that no longer need support. This credit expired at the end of 2011, but given its success, we recommend that the credit be renewed for 2013, but with the least stringent clothes washer and dishwasher incentives deleted (ending these lower tiers is part of an agreement between appliance manufacturers and groups such as ACEEE).

Likewise, the new homes tax credit has targeted very high levels of performance, raising qualifying homes from less than 1% of new construction to more than 10%. We recommend extending this credit, which expired at the end of 2011, but also adding a new, higher efficiency tier. When the market share of the original tier grows some more, incentives can be phased out, leaving only incentives for the new, higher tier.

On the other hand, the residential weatherization credit (Section 25C) has had much higher costs to the Treasury. For example, GAO found that $5.3 billion was claimed by taxpayers in

2009.[1] The residential weatherization credit includes useful credits for high-efficiency heating and cooling systems and installation of insulation, but also a less useful credit for windows where much of the money appears to have gone to consumers who would have installed qualifying windows without the credit – our analysis indicates that nearly 90% of residential window sales qualified for the credit. Due to its high cost, Section 25C is a lower priority for extension. Furthermore, if 25C is considered for extension, the qualifying level for windows needs to be substantially increased.

Our analysis of the impact of these and other energy efficiency tax incentives can be found in an ACEEE white paper available at http://aceee.org/white-paper/energy-efficiency-tax-incentives.

Based on this analysis of experience, we recommend that future energy incentives:

- Target energy-saving equipment and practices with substantial energy savings and target energy sources that can produce a substantial amount of energy over the long term (we want "mountains" not "molehills");
- Target efficiency levels and new energy sources that currently have a very small market share to keep costs down and minimize the number of "free riders" (purchasers who would have bought equipment anyway, even without incentives);
- Pay substantial incentives to motivate significant sales;
- Continue to incentivize investment in research and development; and
- Leave incentives in place for a medium period of time (e.g., five years) so manufacturers and other market players know incentives will be available for long enough that it is worth making investments. Short-term incentives do not provide such assurance. After this medium period of time, incentives should either be phased out or eligibility levels increased, starting a new market transformation process.

In addition, for measures that are expensive and for which quick market transformation is not possible, such as comprehensive home and building energy efficiency retrofits, Congress should consider repayable incentives after the initial five-year incentive ends. Under such a system, a tax credit could be made when investments are made, but then the taxpayer would gradually repay the investment in subsequent-year taxes. For example, if a business receives an initial tax credit of $100,000 on a combined heat and power (CHP) system the year the system was placed into service, they might repay the federal credit at the rate of $20,000 per year over the next five years or some other reasonable rate. The initial credit encourages the original investment, and the subsequent repayments channel the value of some of the energy bill savings back to the federal government, so that the long-term cost to the federal government is very low – just defaults plus interest costs. Essentially this would be a zero-interest loan.

This idea has already begun to circulate in Congress. In 2011, Senator Shaheen from New Hampshire circulated a draft bill that would provide a repayable tax incentive for CHP systems. Under the proposal, an incentive would be given to electric utilities that finance CHP systems. The amount of the incentive would then be repaid to the Treasury through an annual

[1] GAO. 2012. *Energy Conservation and Climate Change, Factors to Consider in the Design of the Nonbusiness Energy Property Credit.* GAO-12-318. Washington, DC: General Accounting Office.

installment payment paid by the customer who owns the CHP system equal to the amount of the subsidy divided by an installment period, specified in years. In this case, the installment period is 3 years (e.g., the customer repays the subsidy over 3 years) but payments don't begin until the third year after the subsidy is paid (i.e., the customer repays nothing for the first two years, then repays 1/3 of the subsidy each year for the next three years). However, this particular proposal is complicated by the fact that the electric utility receives the tax incentive, but a business that hosted the CHP system would make the repayment, resulting in some tricky legal issues. These issues would be much more limited if the same firm received the credit and then made the repayments.

Concluding Thoughts

Tax reform is a monumental challenge but one that we hope Congress takes up next year in a pragmatic and bipartisan fashion. In the meantime, we encourage Congress to extend the most important incentives for another year or two so that the momentum that has been built up is not lost.

In addition to our work evaluating current tax incentives, we have also prepared a series of working papers on tax reform issues. We would be happy to discuss these issues in a hearing, a briefing, or discussions with staff.