

**Senate Finance Committee**

**Hearing on the Tax Code's Role in Energy Policy**

**Testimony of**

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Good morning, Chairman Baucus, Ranking Member Grassley, and Members of the Committee.

My name is John M. Urbanchuk. I am a Director at LECG LLC, a global expert services consulting firm, where I specialize in agriculture and the economics of alternative fuels with particular emphasis on biofuels. I am pleased to be here this morning to discuss the role of the tax code in energy policy and whether technology-neutral energy incentives, including in the areas of fuels, vehicles, electricity, and efficiency, should be developed.

**Optimal Structure for Energy Incentives:**

Experience, both in the U.S. and around the globe, has demonstrated that well crafted tax incentives are an effective means to encourage the production and use of renewable energy.

Alternative sources of energy, specifically renewable forms, have been deemed in the national interest as a way of reducing dependence on imported energy and enhancing national security; improving environmental quality; and facilitating economic growth.

As with all tax policy, Congress should conduct prudent oversight to ensure that over time, various tax incentives continue to reflect the nation's tax and energy policy goals. As Congress

considers both new tax incentives and revisits existing ones, there are *three major factors* that should be considered when determining the form and structure of an incentive.

### Industry Economics

The value of a tax incentive that is designed to encourage the production and use of a particular energy source should be set at responsible levels. Common sense dictates that the incentive should be structured in a manner that makes an activity economically viable but does not provide an unintended windfall for recipients. In addition, the value of the incentive should not create perverse incentives that encourage activities counter to responsible energy policy, or those that impede achievement of national energy policy goals.

### Innovation and Technology Development:

Energy tax policy should be structured in a manner that incentivizes and spurs the development of cleaner and more efficient ways to generate and distribute energy. A corollary to this is the role energy tax policy can play in promoting conservation and in helping direct the flow of private investment capital to cleaner and more efficient sources of energy, and industries with the potential for rapid commercialization. An additional consideration is the role of energy tax policy on stimulating job creation and economic growth, particularly in nascent industries such as wind and solar, and second generation biofuels. Thus, Congress should consider the potential to develop new technology, promote innovation and build needed infrastructure when considering energy tax policy.

### Technology Neutrality:

To the degree possible, energy tax incentives should be structured in a manner that treats competing technologies and processes in an equitable fashion. That said, Congress should set parameters, such as requiring various fuels to meet quality standards and specifications established by ASTM International, that ensure the desired policy goal of an incentive is being met.

These three equally important factors should be weighed when Congress considers energy tax policy. It is instructive to note that these three factors do not exist in isolation. Rather they interact with each other, thereby complicating the job of the policy maker.

### **A Technology-Neutral Tax Policy Would Counteract Existing Energy Policy**

The issue of technology neutrality is particularly vexing, especially with regard to the development of alternative fuels. In its purest form a technology neutral energy tax policy would apply equally to all forms of energy and not give preferential treatment to one energy source over another. However, national policy as outlined by the Energy Independence and Security Act of 2007 (EPAC07), mandates the use of 36 billion gallons of renewable fuels by 2022 and provides important research and development incentives for solar and geothermal sources as well as for programs aimed at improving energy efficiency and conservation.

The development of energy tax policy that supports the national goals embodied by EPAC07 would effectively violate the basic premise of technology neutrality by providing favorable tax incentives for renewables such as cellulosic ethanol, advanced biofuel feedstocks including biomass biodiesel, solar, and geothermal. Specifically, EPAC07 establishes a cap of 15 billion

gallons of ethanol from corn starch, calls for one billion gallons of biomass biodiesel, and requires the remaining 20 billion gallons of renewable fuels to come from cellulose and other advanced biofuel feedstocks. While we are on track to meet the 15 billion gallons of renewable fuels from traditional corn ethanol, the ability to produce the required amount of cellulose ethanol and biodiesel is, frankly, questionable.

The technology exists to process ethanol from cellulose feedstocks. However, commercialization of cellulosic ethanol remains a question of economics. While operating costs for cellulosic ethanol are expected to be lower than for corn ethanol, the capital investment necessary to build cellulosic ethanol facilities remain about five times that of grain-based facilities. The economic viability of any alternative fuel or energy source in today's environment of relatively low oil and gasoline prices and reduced demand as a result of recession is seriously threatened. This makes the continuance of existing tax incentives such as the Volumetric Ethanol Excise Tax Credit (VEETC), the Small Ethanol Producer Tax Credit and the biodiesel blenders excise tax credit all the more important in helping level the playing field for these alternatives to petroleum based fuels. The ethanol tax incentives, which continue through 2010, also play a major role in helping attract the investment capital needed to build and commercialize the second-generation (cellulose) ethanol industry.

The biodiesel tax incentive is scheduled to expire at the end of this year. In its absence the price of biodiesel will be significantly higher than petroleum diesel, further reducing demand and making it nearly impossible for biodiesel plants to produce fuel at a profit. Thus, it is safe to assume that if the biodiesel tax incentive lapses, biodiesel production in the U.S. will halt or at a minimum be severely curtailed, and the energy security, environmental, and job creation benefits that the nation realizes from biodiesel production will be lost.

Further, the short-term nature of the incentive under current law inadvertently sends the signal to the marketplace that the federal commitment to biodiesel is tenuous. At a time when market conditions are less than ideal and investor confidence is strained, the temporary nature of the incentive undermines overall confidence in the stability of the industry. A multi-year extension of a reformed tax incentive that is structured in a manner to promote a stable, viable domestic industry would address this situation and allow the U.S. to reap the multiple long-term benefits associated with the enhanced production and use of biodiesel.

Moving forward, in addition to the certainty provided by a multi-year extension, the biodiesel tax incentive can be reformed in a manner that will improve the form and function of the incentive. Specifically, changing the blenders excise tax credit to a production excise tax credit would improve administration of the credit for both taxpayers and the Treasury; help eliminate unintended abuses of the credit; and focus the incentive on the development of a domestic industry that is meeting the nation's energy needs.

### **Technology-Neutral Tax Policy Can Provide Unintended Consequences**

Providing a technology-neutral tax policy can result in outcomes that provide an unintended windfall for recipients and create perverse incentives that encourages activities counter to responsible energy policy. Perhaps the most notable example of such an unintended consequence is the current outrage over "black liquor". The 2005 highway bill created a subsidy that provided a 50-cents-per-gallon tax credit for blending alternative fuels with traditional fossil fuels. In 2007 the law was later expanded to include other alternative fuels that would qualify for the credit as well as allowing "non-mobile" entities to qualify. This allowed the pulp and paper industry to claim the credit for blending a byproduct known as "black liquor," (already used as a

fuel in plants) with a small amount of petroleum diesel. This has invoked the ire of environmental groups who claim that this use of the credit is actually encouraging the use of fossil fuels, and has increased the cost of the credit. The paper industry is only following long-standing industry practices and taking advantage of an existing technology-neutral tax incentive. Revoking the paper industry's eligibility for this incentive would violate the technology-neutrality concept.

Other examples of unintended consequences resulting from technology-neutral tax policies would include incentives to improve mileage or reduce emissions without regard to fuel type and incentives for the development of "clean coal" and coal-derived transportation fuels. The requirement to improve mileage without regard to fuel type could work to the disadvantage of flex-fuel vehicles that use renewable fuels, and end up increasing the use of petroleum based motor fuels compared to a policy that incented the use of renewable fuels. Incentives for coal could increase coal production and use, with the consequent environmental considerations.

These outcomes may be positive or negative, depending on the viewpoint of the interest group involved. The key point is that the full range of outcomes and consequences must be evaluated when tax policy is being developed.

## **Conclusion**

Tax incentives have long supported public policies designed to stimulate the development of renewable energy markets and industries both in the U.S. and globally. Tax incentives are often complementary to other types of renewable energy incentive programs. They are powerful and highly flexible policy tools that can be targeted to encourage specific renewable energy

technologies and to impact selected renewable energy market participants, especially when used in combination with other policy tools

The design of tax incentives deserves careful attention. The three equally important factors of industry economics, innovation and technology development, and technology-neutrality should be weighed when Congress considers energy tax policy. It is important that tax policy be consistent with and supportive of national energy policy goals and objectives and that careful thought be given to the full range of potential outcomes.