Committee on Ways & Means
United States House of Representatives

"Energy Tax Incentives Driving the Green Job Economy"

David Bohigian, Managing Director, E2 Capital Partners

Written Testimony, April 14, 2010

Energy Efficiency in the Built Environment is Key to Meeting National Goals

Chairman Levin, Ranking Member Camp and members of the Committee, thank you for the opportunity to appear before you today to discuss how the United States can deploy energy efficient equipment and develop renewable energy to drive job creation and economic growth.

My name is David Bohigian, and I am working to establish a small business, E2 Capital Partners. E2 Capital Partners seeks to help deploy energy efficient equipment to reduce energy consumption and operating costs within commercial buildings and industrial facilities. We will help finance the installation of equipment such as lighting, climate control systems, HVAC, and windows so that the end-user avoids up-front costs that have precluded many building owners from deploying equipment that would generate immediate energy savings and improve competitiveness.

My partner and I started this company after my tenure as an Assistant Secretary of Commerce, and his as a successful entrepreneur, because we believe there is an enormous opportunity if we can solve key market barriers that have prevented the deployment of the cleanest form of energy – energy that isn't used. This business model has been proven to work within government facilities, universities, and hospitals, but we would extend it to where most of the buildings are – the private sector. Our success will not depend on government grants, tax incentives or subsidies – each of our projects has a positive rate of return for investors without using taxpayer dollars.

Over the past year, we have worked to develop a program that has attracted the support of major equipment providers and other key industry participants from the Clinton Climate Initiative to major investment banking firms. In the coming months, we hope the company can raise investor capital to begin to deploy projects throughout the United States, creating jobs, conserving energy, and reducing greenhouse gas emissions.

Energy Efficiency – an Overlooked Resource with Positive Rates of Return

By using existing energy efficient equipment that pays for itself, independent of subsidies or tax incentives, the United States could cap its increase in energy demand and greenhouse gas emissions. While policymakers and the public have focused primarily on renewable energy production, minimal consideration has been paid to conservation projects that deploy commercially proven energy efficient equipment such as lighting, windows, climate control systems, and heating, ventilation and air conditioning units into existing commercial and industrial buildings.

According to the McKinsey Global Institute ("McKinsey"), the reduction of energy consumption through the use of energy efficient equipment is one of the cleanest, most cost-effective and timely "sources" of energy. This study concluded that investment in energy efficiency equipment creates an average internal rate of return of 17 percent. McKinsey estimates there could be $80 billion in potential cumulative net savings from energy efficiency projects in the United States by 2012.

Over the past 40 years, energy efficiency has met nearly three quarters of the demand for new energy related services. Today, the size of the market for deploying energy efficiency projects is more than double the size of the renewable energy market. That is, if we were to meet all the projections for deploying renewable energy, energy savings would cut our dependence on all energy sources far more.

Buildings consume more energy than any other sector of the economy, accounting for approximately:

- 40 percent of energy use;
- 70 percent of electricity consumption; and
- 40 percent of greenhouse gas emissions.

80 percent of lifetime building energy use occurs during occupancy, rather than during construction. Almost three-quarters of our nation's 81 million buildings were built before 1979. Therefore, replacement and retrofitting of existing equipment is crucial to reducing energy use.

Energy accounts for approximately 30 percent of a building's ongoing operating costs, making energy efficiency enhancements critical in today's cost-sensitive economy. In addition, improving the deployment of energy efficient equipment would spur new product development.

Increasing Demand for Energy Efficiency

Businesses understand they must conserve energy to remain competitive. Several key forces have intensified private sector focus on energy efficiency investment, including:

- Cost pressure from global competition;
- Escalating electricity prices and volatile fossil fuel prices;
- Increased stakeholder urgency regarding sustainability and the climate challenge;
- Technological advancements and increased awareness of energy efficient equipment; and
- Legislative and regulatory pressure to conserve energy and reduce pollution.

For commercial and industrial companies, improved energy efficient operations generates significant immediate and long-term cost savings, creates asset value, improves reputational benefits and achieves compliance with rapidly evolving municipal, state, and federal changes in energy and environmental policy.

Investment Gap

Though the benefits of energy efficiency retrofits and equipment upgrades are well-documented and the demand for energy efficiency continues to grow, companies frequently choose not to deploy proven equipment that generates immediate savings. There is a long-standing structural imbalance between private sector demand for energy efficient operations and investment in projects that can deliver energy savings. The initial capital cost of installing energy efficient equipment deters building owners and corporate managers from deploying proven technologies with favorable payback periods. Major corporate obstacles include:

- Desire to invest in projects that cover capital outlays in two years or less;
- Preference to invest in core operating opportunities, rather than energy savings;
- Reluctance to use their balance sheet and add additional debt obligations;
- Lack of information regarding existing or available energy efficient equipment;
- Lack of expertise in calculating return on investment from energy savings;
- Misaligned or “split” incentives where building developers and owners don’t invest in energy efficiency for buildings because they do not pay the energy bill; and
- Difficulty for small and medium-sized businesses and building owners to obtain financing.

The Department of Energy’s Industrial Assessment Center (“IAC”) found that even with a median payback of less than 1.3 years, 53% of projects were rejected, establishing an extremely high implicit hurdle rate for energy efficiency equipment deployment. Further, this 20 year survey of more than 5,000 end-use customers that evaluated almost 40,000 projects concluded that the majority of projects were rejected for financing reasons.

Vendors, on the other hand, are not structured to provide "paid from savings" programs to their customers. Most major vendors guarantee performance, but are unwilling to finance their equipment and services to the private sector through "paid from savings" mechanisms. Vendors will guarantee a project's construction, installation, realized energy cost savings, and required maintenance. However, they are unwilling to take any credit risk to finance their equipment sales. Vendors give several reasons for not addressing this customer need: preference to use their capital for core business activities such as research and development, desire to recognize revenue immediately on a sale, and unwillingness to use their balance sheet to finance the sales of their own equipment.

The financing gap between commercial and industrial firms and vendors causes companies to defer thousands of energy efficiency recommendations each year and has created a long-term, structural underinvestment in energy efficiency projects.

Current Incentives for Energy Efficiency

Realizing the potential of energy efficiency requires overcoming these obstacles to deployment. Where the United States Government has focused on the issue of energy efficiency, it has largely focused on retrofitting federal buildings, and incentivizing the residential sector. To my knowledge there are only four programs targeting the commercial and industrial sectors.

- Innovative Technology Loan Guarantee Program
- Energy-Efficient Commercial Buildings Tax Deduction
- Energy-Efficient Appliance Manufacturing Tax Credit
- Qualifying Advanced Energy Manufacturing Investment Tax Credit

Conspicuously, three of these are primarily targeted to encourage commercialization and manufacturing, leaving only the commercial buildings tax deduction as the only federal program targeted at encouraging commercial and industrial properties. The Innovative Technology Loan Guarantee Program from Title XVII of the federal Energy Policy Act of 2005 (EPAct 2005) authorized the U.S. Department of Energy to issue loan guarantees for projects that were intended to encourage early commercial use of new or significantly improved technologies in energy projects, but does not extend to the vast majority of commercially viable projects that would significantly reduce energy use in commercial and industrial settings.

Policy Barriers to Energy Efficiency

A national goal shouldn't be choosing specific energy production or efficiency technologies to receive taxpayer assistance; it should be generating measurable and verifiable savings in energy usage. In addition, while tax incentives have a role in incentivizing markets, other mechanisms may be better suited to encourage and leverage private investment without additional burdens to taxpayers.

The primary market barriers are financial – and present a dilemma for the deployment of energy efficiency technology. First, potential lenders and business and building owners are not comfortable with adding additional debt to the capital structure. If a building owner is to use a "paid from savings" approach, lenders need to understand their security interest in the equipment. The issues of financing and structuring are the key to unlocking wide scale adoption of energy efficiency projects in the buildings in which most of us work.

While some clean energy business models depend on taxpayer assistance, energy efficiency projects pay for themselves and offer strong returns on investment to end-users and our economy.

Our business model relies on measured and verifiable savings that creates income streams without taxpayer assistance. However, public policy can play a role in accelerating the deployment of energy efficient equipment. Some measures would include:

- Allow commercial building owners to pay for energy efficiency equipment through an annual assessment on their tax bill. This model has been adopted at the state and local level, but primarily targeted at residential property owners financing efficiency retrofits by annual assessment on their property tax bill. These Property Assessed Clean Energy Bonds (PACE) bonds are senior to existing mortgages and can be issued by municipal financing districts or finance companies.
- Extending the Title XVII loan guarantee program to clearly target energy efficiency projects with proven equipment, not just new technology, in commercial and industrial settings;
- Extending and expanding the energy efficient commercial buildings tax deduction, and considering performance based reductions;
- Allowing more rapid depreciation of capital equipment in energy efficiency retrofits; and
- Developing model building codes to encourage energy efficiency through retrofits.

Deploying Energy Efficient Equipment Boosts Competitiveness & Creates Jobs

Building owners and policymakers at all levels understand that improving energy efficiency is a key driver for industrial competitiveness in the years ahead.

Businesses throughout the United States stand ready to deploy energy efficient equipment, but lack the financing. These firms see the financial, competitive and reputational benefits of creating more with less. Energy efficient firms are market leaders, beyond the clear environmental, social and corporate governance implications.

Manufacturers and contractors in lighting, windows, heating, insulation and other fields across the United States have the ability and desire to serve this market, creating jobs to make and install this equipment.

Unlocking this market entails solving business challenges that have slowed the deployment of energy efficiency solutions. Even without taxpayer support, there are very attractive risk adjusted returns through investing in energy efficiency – as I have noted, this stands in contrast to many other forms of clean energy today.

We stand ready to assist Congress in making American businesses become more efficient, competitive, and create the jobs of the future.