

**Increasing Conservation and Renewable Energy
Investment
Through Business Energy State Income Tax Credits
With Pass Through Partner Program**

by

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ABSTRACT

Both Oregon and Vermont have enacted laws that direct their public utility commissions to collect a surcharge from their customers for the purpose of funding energy conservation programs. These programs are managed by independent non-profit organizations created for that purpose, the Energy Trust of Oregon and Efficiency Vermont, respectively. These organizations have successfully achieved similar goals of reducing energy usage.

As recently as March 2008, Vermont enacted a solar corporate tax credit tied to the Federal solar tax credit, thereby demonstrating interest in increasing renewable energy investment within Vermont. Oregon alone has additionally created an energy income tax credit program that funds both business and residential conservation and renewable energy investments. A unique aspect of this energy income tax credit program is the Pass Through Partner provision that allows non-profit and municipal entities with no tax liability to participate. For-profit businesses may also utilize the Pass Through Partner option to monetize their energy income tax credit upfront and thereby quickly fund a significant portion of their project costs.

Oregon's Business Energy Tax Credit Program (BETC) and Residential Energy Tax Credit Program (RETC) have been highly successful in conjunction with the Energy Trust of Oregon at stimulating billions of dollars in investments that further energy conservation and expand renewable energy sources. These Oregon programs are not directly tied to any Federal tax credit legislation, so are not subject to reduction or elimination resulting from political maneuverings at the federal level. The state of Vermont could similarly stimulate capital investment, conservation savings, and renewable energy sources through the introduction of energy conservation and renewable energy income tax credit programs with a Pass Through Partner option.

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ENERGY TRUST OF OREGON PROGRAMS

The Energy Trust of Oregon began in March of 2002, with the goal of stimulating energy market investments in Oregon, specifically investing in cost-effective energy conservation and renewable energy resources.¹ The mission statement of Energy Trust proclaims that the Energy Trust strives “to change how Oregonians produce and use energy by investing in efficient technologies and renewable resources that save dollars and protect the environment.”¹

Prior to the creation of Energy Trust of Oregon, energy efficiency programs were directed independently by the state’s energy utilities. In accordance with a 1999 Oregon energy restructuring law SB 1149, the Energy Trust of Oregon receives their funding from a three percent “public purposes charge” collected from Oregon’s largest investor-owned utilities, which is added to the utilities’ customers’ bills.² The 1999 law also authorized the Oregon Public Utility Commission (OPUC) to direct these funds to a non-governmental entity for investment. Energy Trust of Oregon was therefore created as a non-profit organization and in 2001 implemented a grant agreement with OPUC to guide the use of Energy Trust’s funds.²

Energy Trust of Oregon has residential, business commercial and industrial programs, including renewable energy information and incentives, also trade allies information and incentives. The business commercial and industrial programs include technical assistance and cash incentives for energy efficient construction and installing energy efficient equipment in existing buildings, new buildings, and multi-family residential dwellings. Energy Trust of Oregon also provides technical assistance and cash incentives for solar energy and production efficiency programs for industrial, water, and waste-water treatment processes.³

OPUC has therefore adopted performance measures for Energy Trust’s performance. The benchmarks for 2007 include:

- “Save at least 20 average Mw of electricity, computed on a three-year rolling average basis at a levelized cost of no more than 2 cents per kilowatt hour¹
- Save at least 700,000 therms of gas, computed on a three-year rolling average basis at a levelized cost of no more than 40 cents per therm¹
- Achieve 9 average megawatts (MWa) of new renewable resource development through Energy Trust’s Utility Scale Program¹
- Secure at least 3 MWa of new renewable resources from a variety of small-scale projects”¹

The strategic plan goals of the Energy Trust of Oregon by 2012 include:

- “The introduction of new programs to help consumers save 300 average megawatts (2.6 annual megawatt hours) of electricity and 19 million annual therms of gas from long lasting energy efficiency measures.¹
- Provide at least 10% of Oregon’s electric energy from renewable resources by

2012, regardless if Energy Trust measures are complemented by state, federal and other policies and programs”⁴

In Energy Trust’s 2008-2009 Action Plan, the exponential growth in capital investment with the goal of green technology is mentioned. The Plan cites the historic 800 percent increase in green technology venture capital investments achieved during the last four years. As oil prices and demand for greener energy alternatives rise, energy efficiency programs around the country are aggressively implementing programs to obtain all the cost effective energy efficiency possible. ⁵

Energy Trust is expecting a five-fold increase since 2004 in the number of projects completed in 2008, and a ten-fold increase in the number of participant contacts.⁵

As part of the Energy Trust of Oregon’s evaluation of its progress and market, it has reviewed other states’ programs for best practices. The Energy Trust of Oregon identified Efficiency Vermont as one of the top 12 energy efficiency organizations that demonstrated key best practices. In their report “Best Practices From Energy Efficiency Organizations and Programs”, Energy Trust stated that only the programs offered in Vermont (also Wisconsin and New York) “face a similar environment” to the market of Energy Trust.⁶

BUSINESS ENERGY TAX CREDIT PROGRAM

BETC Program Description

In 1979 the Oregon legislature created the Oregon Business Energy Tax Credit (BETC) and Residential Energy Tax Credit (RETC) programs. The programs are administered by the Oregon Department of Energy (ODOE) to provide incentives for commercial, industrial, and residential investments in energy conservation and renewable energy projects.⁷

The BETC program supplies an Oregon income tax credit for conservation energy projects of 35 percent of the eligible project costs. Business or rental property projects that provide for energy savings are eligible for the BETC program. The 35 percent credit is taken over five years, 10 percent the first and second year, and five percent for the subsequent years. Any unused portion can be carried forward for a maximum of eight years. Credits for projects less than \$20,000 can be redeemed in one year.⁸

BETC eligible projects are classified into the following categories: retrofit projects, new construction projects, co-generation projects, renewable resource projects, recycled material projects, or transportation projects. The ODOE has specific performance measures for each category that include kWh saved, therms saved, reduction in miles driven, and miles of gas and diesel fuel saved. To qualify for a tax credit, projects must be more energy efficient by a hurdle percentage compared to a norm for each project category type, and the tax credit is then based on the incremental costs of the project to exceed that norm. ⁸

Businesses must apply for the BETC before the project begins. Applications and additional information are available on the ODOE webpage. Eligible projects then receive preliminary certification from ODOE, and are therefore positioned for future awarding of the tax credit. Any modifications to the project after the preliminary certification is received must be submitted to ODOE in writing. After the project is complete, the project owner must apply for a final certification in order to receive the tax credit.⁸

Pass Through Partner Option

Businesses with no income tax liability, such as non-profit organizations, schools and other public entities, can use the BETC Pass Through Partnership option. The Pass Through Partnership option allows the project owner to sell its tax credit to a third party, with the stipulation that payment is made in full upfront.⁹ The pass-through tax credit purchase rate for five-year credits is presently set by Oregon Administrative Ruling at 25.5 percent, reflecting the time value of money. The pass-through tax credit purchase rate for one-year credits is presently set at 30.5 percent. The pass-through rates are set by Oregon Administrative Rulings and may be changed over time prospectively.¹⁰

According to a summary report prepared by Oregon Department of Energy staff, the total number and cost of projects by year for non-Pass Through and Pass Through Projects is as shown in Table No. 1 (See page 4).¹¹

It is interesting to note that in 2005 the majority of both the percentage of total number of projects (64%) and percentage of total cost of projects (62%) were for Non-Pass Through Projects. By 2006, the trend had changed such that the majority of the percentage of total number of projects (at 58%) was for Non- Pass Through Projects, but the majority of percentage of total cost of projects (at 70%) was for Pass Through Projects. Thus the larger dollar projects were more likely to be Pass Through Partner Projects by 2006 and thereafter.¹¹

According to reports prepared by Oregon Department of Energy staff, purchasers of Pass Through Partner credits include very large to small for-profit companies and individuals with an Oregon tax liability to offset.¹⁰ One such investor in Pass Through Partner tax credits is Umpqua Bank, which made its first BETC purchase in early 2004.¹²

Table No. 1: BETC Projects by Year¹¹

Projects by Year	Number Projects	Final Cost of Projects	% of Total No. Projects	% of Total Cost	Total Tax Credits	MMBTU Saved*	MMBTU Produced
2005							
Non-Pass Through	1,040	\$ 72,104,226	64%	62%	\$25,236,479	1,444,021	53,409
Pass Through	584	\$ 44,482,429	36%	38%	\$15,568,850	686,891	595
Total Projects	1,624	\$ 116,586,655	100%	100%	\$40,805,329	2,130,912	54,004
2006							
Non-Pass Through	1,088	\$ 52,330,300	58%	30%	\$18,315,605	1,133,195	281,501
Pass Through	773	\$ 121,557,507	42%	70%	\$42,545,127	2,462,820	1,059,617
Total Projects	1,861	\$ 173,887,807	100%	100%	\$60,860,732	3,596,015	1,341,118
* Energy Savings do not include Thermal Energy or Biofuels Production							

As of July 2008, Umpqua Bank has purchased over \$18.8 million in Oregon Business Energy Tax Credits, providing over \$13.3 million in Pass Through Partner payments to project owners in the Oregon communities served by Umpqua Bank. These projects include very small projects (under \$20,000 therefore one year tax credits), medium to large size conservation projects, rural community transportation district projects, and four multi-million dollar renewable energy projects. The Pass Through Partner payments helped fund widely ranging projects that the owners said would otherwise not be financially possible, including small lighting retro-fitting for rural school districts and a public library, a municipal waste product co-generation project, and a LEEDS Gold certified new engineering building for Portland State University.¹²

According to this Pass Through Partner investor, the BETC investments are viable bank investments given the rate of return on the investment and the provision of the ORS which expressly disallows tax credit recapture from the Pass Through Partner.¹² According to the Oregon Administrative Rulings (OAR 330-090-0130(11), under the Pass Through Partner option, the purchaser is not liable for the project costs, success of the project technology, or continuation of the project. The Pass Through Partner's only role is to pay the project owner the specified pass through amount after the Department of Energy's final certification. Once a final tax certificate is issued to the Pass Through Partner, the tax credit cannot be revoked.¹⁰

Instead, the project owner who has transferred the final certification bears those risks. The credit benefits can be revoked for a project owner who does not send the DOE written notice that the project has been moved out of Oregon, that the project is not operating, etc. If the DOE determines that the tax credit benefits should be revoked and the final certification has been transferred to a Pass Through Partner, the project owner may have to pay the State of Oregon an amount equivalent to the net present value of tax credits for the years remaining as of the date the benefits were revoked (OAR 330-090-0130(12)).¹⁰

Also of value to this Pass Through Partner investor is the fact that many BETC projects are located in economic development zones or are projects owned by organizations that serve low to moderate income populations; therefore, Umpqua Bank's investments in such BETC Pass Through Partner investments meet the bank's Community Reinvestment Act ("CRA") investment goals.¹²

2007 Expansion of BETC For Renewable Energy Projects

According to ECONorthwest's "Economic Impacts of Oregon Energy Tax Credit Program in 2006", 61 percent of all projects were for conservation, 20 percent for recycling, and 17 percent for transportation. Only 1 percent of all BETC projects were for renewable project types.¹⁴ However, Governor Kulongoski identified increasing renewable energy investment in the state as one of his goals and proposed expanding the BETC program in 2007.¹¹

As a result, House Bill 2211 passed in 2007. The Bill modified the BETC program to increase the state income tax credit for renewable energy projects to 50 percent of the energy project costs. The cap for each eligible project credit was also increased from \$3.5

million credit to \$10 million credit.¹⁵ The tax credit remains a five-year tax credit, taken 10 percent each year for 5 years. The pass-through tax credit purchase rate for renewable energy projects is currently set by Oregon Administrative Ruling at 33.5 percent.¹⁶

With the implementation of the enhanced 50 percent renewable energy tax credit effective January 1, 2007, the number of project applications submitted to ODOE increased dramatically. By the end of 2007, ODOE received a total of 3,500 BETC preliminary applications; this is double the BETC application volume of 2006. By July 2008, year-to-date BETC applications were already 30% higher than 2007 totals.¹¹

BETC Program Results

The BETC program is the largest of Oregon's tax credit programs.¹¹ The short term and long term economic impacts of BETC have been modeled by ECONorthwest using IMPLAN, which uses input-output analysis to identify direct and indirect impacts on the state economy.¹⁴

The BETC program has been very successful across all industries measured. As of 2006, 34 percent of BETC credits went to projects in the Construction and Manufacturing sector and accounted for 34 percent of the net energy cost savings of the BETC program. 28 percent of BETC credits went to the Wholesale and Retail Trade sector, but accounted for 46 percent of the net energy cost savings of the BETC program. 7.5 percent of the BETC credits went to projects in the Public Administration sector and accounted for 10 percent of the net energy cost savings. The remaining industries accounted for the remaining 31 percent of the credits and 10 percent of the net energy savings.¹⁴ Interesting to note is that the Public Administration sector projects likely all used the Pass Through Partner option given the project owners' lack of tax liability.

The net measure spending of BETC in 2006 was \$135,998,000 leading to a net annual energy cost savings of \$45,929,000.¹⁴ ECONorthwest's 2006 Final Report states:

“ECONorthwest adjusts all measure cost and energy savings numbers to reflect net values. That is, some program participants would have installed energy efficiency equipment even in the absence of the program (“free-riders”). The spending and energy savings attributed to these free-rider participants, therefore, should not be included in overall impacts of the programs. ECONorthwest removed these free-rider participants by using net-to-gross ratios on a measure-by-measure basis.”¹⁴

The gross impact of BETC in 2006 includes \$178 million in additional economic output, another \$70 million in additional wages, more than 2,000 new jobs, and \$10.8 million dollars of additional tax revenues.¹⁴

The increased tax impact indicates that the tax credits are being applied so that economic activity is increased, which helps cover the cost of the tax credits, and stimulates the economy. With the BETC program, \$1 million dollars of energy cost savings equates to higher wages by \$725,400 and creates 19 jobs (often with higher salaries), and will

increase taxes by \$161,600 each year.¹⁴

Given that the tax credits are taken over five years, and the life for equipment covered by BETC averages about 15 years, the potential for incremental and sustained cumulative energy savings with BETC is huge. Energy cost savings in 2010 are projected to reach \$374 million, due solely to efficiency gains made in previous years.¹

Program Recognition and Award

The BETC program with Pass Through Partner option was recognized as a Finalist in the 2004 Harvard University Kennedy School of Government Innovations in American Government Award. The BETC Pass Through Partner option was recognized as “By reducing barriers to the start-up costs of energy-saving measures, the program creates incentives for nonprofits to invest in projects that can reduce their monthly energy bills, leaving more money overall for their core missions. There are environmental benefits as well; for every kilowatt of power saved through this project, 1.4 pounds of carbon dioxide are not released into the atmosphere.”¹³

SYNERGIES OF ENERGY TRUST OF OREGON AND BETC

It is important to note that the BETC and RETC programs, which were created in 1979, pre-date the creation of the Energy Trust of Oregon, which occurred twenty years later. While the BETC program was mature in age, it had not developed much in scope of projects or size of tax credits issued, due to its positioning in the state Department of Energy. The ORS and Oregon Administrative Rulings governing BETC did not provide funding for energy conservation research, and with minimal staffing, ODOE did minimal marketing. When the Energy Trust was created and funded with an ongoing 3 percent utility rate surcharge, the Energy Trust had an operating budget and manpower to proactively market its programs. Furthermore, Energy Trust had funding to conduct energy usage and efficiency research. Therefore, stress arose between the existing BETC and the newly expanding Energy Trust.⁷

After existing uncomfortably side-by-side, program management for BETC and Energy Trust agreed to become more mutually supportive to further their mutual goals. After Energy Trust began to effectively market the BETC program, and share their research results with the Oregon Department of Energy, (ODOE) the BETC program expanded in number, size, and scope of credited projects.⁷ Today, Energy Trust of Oregon and the ODOE have mutual links on their websites and program information in their respective newsletters.

Additionally, the Energy Trust of Oregon offers a variety of programs for business and residential customers including energy audits and other technical assistance, trade allies, and cash incentives, bundling these offerings into a time-efficient and well-marketed package for project owners. With larger companies, Energy Trust works one-on-one to develop a bundled program package to suit the needs of the business. Whenever eligible, the BETC is included in these bundled program packages.¹⁷

It is also important to note that the Energy Trust was created to serve the customers of the state’s largest utility providers (initially two, now five utility providers). However, those

five utility providers do not entirely cover the state geographically. Alternatively, any business with an eligible project anywhere in the state of Oregon is eligible for the BETC. Additionally, BETC is “fuel blind”, providing tax credits for savings of miles driven and thus gallons used of gasoline or diesel, as well as kWh and therms saved.¹¹

Therefore, the Energy Trust of Oregon and BETC complement each other in the five largest utility service areas, but BETC stands alone in serving the entire state. Thus, for some project owners, the program benefits are cumulative, offsetting much of the project costs. Because there is overlap between Energy Trust and BETC programs, both organizations must be careful to define eligible costs and program benefits to ensure that project owners don’t more than fully recover their costs.¹¹

Oddly enough, historically many BETC project owners neglected to take the later years of their five-year tax credit benefit. (This could be due to lack of taxable income for a year or more, but with the BETC tax credit eight year carry-forward provision, it appears that the credit may simply have been overlooked in subsequent years.) Thus, state tax revenue receipts are not reduced by the BETC to the full extent of the tax credits initially issued. Conversely, the Energy Trust cash incentives are paid lump sum right after project completion.¹⁷

EFFICIENCY VERMONT PROGRAMS

Program Overview

Efficiency Vermont began in 2000 with the goal of reducing energy costs through energy efficiency, specifically by providing technical assistance and financial incentives to Vermont businesses and residential areas for energy efficient equipment, construction and renovation.¹⁸

Prior to the creation of Efficiency Vermont, energy-efficiency programs were limited and administered separately by the state’s 22 utility companies. These programs were inefficient and the oversight was negligible. Therefore as part of a 2000 Vermont energy-restructuring plan, the Vermont Public Service Board (PSB) looked to improve the quality and consistency of the individual programs by mandating a single set of programs to be implemented statewide under the name of Efficiency Vermont. The increased scale of operation allowed a more cost-effective delivery via a consolidated statewide administrator.¹⁹ Through a competitive bidding process, a contractor was selected to run Efficiency Vermont under a performance based contract with the PSB. This contractor is currently the non-profit Vermont Energy Investment Corporation (VEIC). Contractually 3.5 percent of VEIC’s compensation is held back pending confirmation that goals for savings including specific energy (kWh) and peak demand (kW) savings targets are met.^{20, 21} Efficiency Vermont originally received their funding from a 2.82 percent “energy efficiency charge” collected from 21 of Vermont’s electric utility companies, with the exception of Burlington Electric Department.²²

Efficiency Vermont has residential, business commercial and industrial programs, including renewable energy information and incentives, also trade allies information and incentives.²³ The business commercial and industrial programs include technical assistance and cash incentives for installing efficient equipment and construction in

existing buildings, new buildings, and multi-family residential dwellings.²⁴ Efficiency Vermont also offers a resource library with information and technical assistance for a variety of energy efficiency projects and questions.²⁵

2006 Expansion of Efficiency Vermont

Act 61 became law in July of 2005, which removed the previous \$17.5 million cap on Energy Efficiency Utility's budget, and included a function through which customers could apply for exemption from paying the Energy Efficiency Charge on their electricity bill. In August, a ten-month process began to expand Efficiency Vermont's budget and programs.²²

In May, 2006, Act 208 became law, which clarified the Efficiency Vermont's objectives, giving particular emphasis to: "(1) reducing the size of future power purchases; (2) reducing the generation of greenhouse gases; (3) limiting the need to upgrade the State's transmission and distribution infrastructure; and (4) minimizing the costs of electricity."²²

As a result of these budget changes, Efficiency Vermont now receives their funding from a 4.5 percent "energy efficiency charge" on ratepayer's electricity bills. The budget for 2007 increased by over 41% that of 2006, at \$23 million, and the budget for 2008 has been set at \$37.5 million.²⁶

The total MWh savings goal was raised by 28% to 261,700 MWh. So far the expansions have been very successful at stimulating energy savings. In June 2007, the American Council for an Energy Efficient Economy ranked Vermont as Number 1 (with California and Connecticut) in its State Energy Efficiency Scorecard for 2006.²⁷

Efficiency measures installed just in 2007 alone are expected to provide a lifetime economic value of approximately \$79 million to Vermont ratepayers, and will result in an \$11 million reduction in Vermont's retail energy costs. Interesting to note is that only 47 percent of these costs were saved by businesses.²⁷

2008 ENACTMENT OF VERMONT FEDERAL SOLAR CREDIT

As recently as March 2008, the Vermont legislature passed SB 209 providing for a state corporate tax credit on solar technologies used for commercial and industrial purposes. This state tax credit is tied to federal solar tax credit legislation whose future is uncertain: for property placed in service in 2008, the federal solar tax credit is set at 30%, to be taken fully in the year the property is placed in service. However, for property placed in service after 2008, the federal solar tax credit will be reduced to 10% unless subsequent legislation is passed.²⁶ At present, federal legislation to extend the federal solar tax credit is stymied by partisan politics that have tied the solar credit to offshore drilling.²⁸ Yet as early as 2009, it is possible that the federal solar tax credit could be substantially increased given America's growing concern about energy dependency and global warming. Vermont's solar tax credit being tied to the Federal solar tax credit thus results in uncertainty of economic impact to Vermont.

COMPARISON OF OREGON AND VERMONT TAX STRUCTURES

The state of Oregon assesses a flat corporate tax rate at 6.6 percent of taxable income. Oregon classifies entities as the Federal Internal Revenue Service does; business partnership and LLC income flows through to individuals for taxation.²⁹ Oregon businesses that apply for BETC, complete their project, and obtain the tax credit may utilize the business energy tax credit to offset their tax liability created by the corporate tax rate. Alternatively, through the Pass Through Partner program, Oregon businesses may sell their BETC to another corporation or individual who has an Oregon tax liability to utilize the credit. The state of Oregon uses a progressive tax rate table for individuals, with rates that vary by filing status and income threshold. The rates vary from 5 percent to 9 percent of taxable income.³⁰ The highest tax rate threshold is for income in excess of \$7,150. That rate ranks 4th highest amongst all states that impose an individual income tax.³¹

The state of Vermont uses a progressive tax rate table for corporations, with rates that vary by income threshold. As of taxable years beginning in 2007, the rates vary from 6 percent to 8.5 percent.³² The highest tax rate threshold is for income in excess of \$25,000.³³ The state of Vermont uses a progressive tax rate table for individuals, with rates that vary by filing status and income threshold. The rates vary from 3.6 percent to 9.5 percent.³⁴ The highest tax rate threshold is for income in excess of \$349,700.³³ According to a study commissioned by the Vermont State Legislature in 1995, the top 3.3 percent of Vermont personal income tax payers account for 35% of personal income tax revenues.³⁵

Given Vermont's corporate and individual tax structures, Vermont corporations and individuals could be expected to have as much or more tax appetite for a similar business energy income tax credit with pass through partner option.

The BETC is a tax credit that offsets the state income tax, thus reducing tax revenue received by the state's general fund for the duration of the tax credit period. Thus the mix of tax revenues to the state, and therefore the impact of a reduction in tax receipts due to a business energy income tax credit, will vary based on a state's weighting of income tax receipts to total state revenue sources.

Both the states of Vermont and Oregon receive a significant percentage of their state tax revenues from federal sources, also selective sales taxes on items such as tobacco, alcohol, gasoline, and public utilities.^{36, 37} However, Vermont has a sales tax (at a rate of 6 percent, certain items excluded) which contributes a significant portion of the state's tax revenues, whereas Oregon does not.³⁸

With the additional income generated through increased sales precipitated by the tax credit itself, and Vermont's reliance on a sales tax and property taxes, Vermont's total tax receipts would not appear to be at risk by the implementation of a business energy tax credit.

IMPACTS OF OREGON'S DUAL PROGRAM APPROACH

A primary benefit of BETC has been the exponential growth of business in Oregon

related to conservation and renewable energy projects. As ECONorthwest Annual Reports highlight, the BETC program provide a substantial net revenue impact to the state.¹⁴ Vermont too could be expected to realize an increase in the number of conservation and renewable energy projects undertaken; as the offering of a business energy tax credit including Pass Through Partner option makes more projects affordable than under Efficiency Vermont programs alone. This would therefore increase the number of conservation and renewable energy projects completed and stimulate the growth of the Vermont economy.

Because BETC is “fuel blind”, the scope of projects and therefore businesses attracted to Oregon’s conservation and renewable energy market has been increased beyond the stimulus provided by the Energy Trust of Oregon cash incentives and programs.¹¹ Vermont would likely experience a similarly increased conservation and renewable energy market.

As a recent example of growth in Oregon for which the BETC program served as a catalyst, SolarWorld Group announced in March 2007 the establishment of “an integrated solar silicon wafer and solar cell production facility that will reach a capacity of 500 MW by the year 2009 and become the largest solar factory on the American continent.”³⁹ Once the production plant is up and running fully, it will hire “several hundreds” of employees.³⁹ These employees will of course pay personal income taxes, buy houses/pay rent, buy groceries, goods and services that support the Oregon economy, and SolarWorld will of course generate additional taxable income in Oregon.

This illustrates the potential cumulative impact from the BETC program to Oregon’s tax revenues. As Vermont has a similar tax structure (with the addition of a sales tax), it seems reasonable that Vermont would also realize a cumulative net increase in tax revenues from a Business Energy Tax Credit with Pass Through Partner option and Residential Energy Tax Credit program.

It is interesting to note that the initial BETC program created in 1979 included a preliminary project monetary cap of \$40 million that could be approved in any year. This cap was removed ten years ago; since then the BETC program has been unlimited by the state.¹¹

During times of significant economic contraction, a five-year BETC tail could negatively impact general fund receipts and thus negatively impact the state budget. Therefore, to reduce the risk of a program growing too large and too fast, and to buffer the general fund in times of significant economic contraction, it would be conservative to include a cap on any business energy tax credit program Vermont may implement.

An alternative approach to provide the legislature with a more immediate ability to ratchet down the program during a time of significant economic contraction would be to structure the BETC conservation project as a three year 30% tax credit, to be taken 15% in year one, 10% in year two, and 5% in year three. Under such a structure, the legislature would have a 50% (15/30th) lever in year one versus the 10/35th lever for conservation

projects under current Oregon legislation. Renewable energy projects might be a three year 50% tax credit, to be taken 25% in year one, 15% in year two, and 10% in year three. Such a structure would provide a 25/50th lever in year one for Vermont versus the 10/50th lever for renewable energy projects in Oregon today. When asked what potential alternatives would make a BETC Pass Through Partner program more attractive from the investor's perspective, one investor stated that so long as the rate of return was set by Administrative Ruling to be adequate to motivate investment, the three year structure would be preferable when forecasting tax appetite.¹²

BETC, Energy Trust of Oregon, and Efficiency Vermont all provide programs to improve efficient use of electricity and natural gas and thereby ensure the adequacy of the energy grid. However, only the BETC program provides reduction of carbon footprint of fossil fuels used for transportation, including biofuel projects.¹¹ Therefore only BETC provides for community sustainability and reduced miles driven via support of fixed route transit systems, also hybrid vehicles, and bio-fuel production, through providing financial resources in the form of tax credit, and monetization of the tax credit through the Pass Through Partner option.¹² BETC with Pass Through Partner option would proactively provide tax credit support to improve fuel efficient transportation in Vermont.

CONCLUSION

Both Oregon and Vermont have realized benefits from energy efficiencies achieved as a result of programs and cash initiatives provided by the Energy Trust of Oregon and Efficiency Vermont, respectively. Oregon alone has realized multiple additional benefits from its Business Energy Tax Credit Program with Pass Through Partner option.

Sometimes following another's lead provides the opportunity for the most rapid achievement of goals; historically, alliance with visionaries and experts, other states and local businesses have increased the reach of various green initiatives across the country. While the nature and mix of Vermont's industry and businesses vary from that existing in Oregon, there is commonality in the energy efficiency goals and tax structures of the two states. Oregon's Business Energy Tax Credit and Pass Through Partner Program could serve as a model to the Vermont's legislature and Governor as an additional impetus to further conservation and renewable energy goals, and spur business investment that would benefit the Vermont economy and the sustainability of Vermont's communities.

REPORT DISTRIBUTION

This research report will therefore be respectfully offered to the following audience that may have interest and who would be key leaders in Vermont in the evaluation of a legislative proposal for a Vermont business energy tax credit with Pass Through Partner program:

- House Committee on Ways and Means – Chair, Representative Obuchowski
- House Committee on Natural Resources and Energy- Chair, Representative Dostis

- Senate Committee on Finance- Chair, Senator Cummings & Vice-Chair Senator Ayer
- Senate Committee on Natural Resources & Energy- Chair, Senator Lyons
- Senate Committee on Economic Development, Housing & General Affairs- Chair, Senator Illuzzi
- Vermont Chamber of Commerce- President, Duane Marsh, and Vice President, Vicky Tebbetts
- Vermont Businesses for Social Responsibility- Director, Will Patten

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