MEASURE: HB 3582
EXHIBIT: I
Joint Committee on Tax Credits 76th Session
DATE: 5/26/11 PAGES: 50
SUBMITTED BY: MARGI HOFFMAN

Dear Oregon Legislators,

We will put Oregon back to work by investing in a clean energy economy. Promoting investment in the clean energy economy will provide long term benefits to tax payers and produce home grown energy. Clean energy tax credits support job creation.

Oregon's investment in clean energy has helped make us a leader. We need to continue our successful economic development strategy to maintain Oregon's leadership, promote economic activity, and to create living wage jobs around the sincerely.

We urge you to support continued financing of clean energy this legislative session.

Sincerely,

Advanced Energy Systems
Associated Oregon Industries
Association of Oregon Counties
Bonneville Environmental Foundation
Cascadia Green Building Council
Center of Design for an Aging Population
CH Bailey House
City of Hillsboro
Cleantech Law Partners
ClearEdge Power
Climate Solutions
Community Renewable Energy Association
Drive Oregon
E2Writer Documentation
Easy Street Online Services
ECOtality
Engineers for a Sustainable Future
Environmental Entrepreneurs (E2)
Essential Consulting Oregon
Focus the Nation
Gencon Solar
Geonomics Consulting
Good Company
Green Lite Motors, Drive Oregon

Helios Resource Center
HM3 Energy
IBEW 48
KersTech Hybrid Vehicle Systems
League of Oregon Cities
Lemelson Vineyards
Main Street Alliance of Oregon
Metro Council
Mr. Sun Solar
Neil Kelly Company
New Castle Solar
Northwest Energy and Environmental Strategies
Northwest Energy Efficiency Council
Northwest Environmental Business Council
Occave Energy
Oregon Conservation Network
Oregon Forest Industries Council
Oregon Small Wind Association
Oregon Solar Energy Industries Association
Oregon Wave Energy Trust
Oregonians for Renewable Energy Policy
Pivotal Investments
Portland Development Commission
Real Energy Solutions
REC Solar
Renewable Northwest Project
Rising Tide Strategies, LLC
Roger Hicks Consulting
Roots Realty
Sequential Biofuels
Smart Grid Oregon
Solar City
Solar Energy Design
St. Vincent DePaul Society of Lane County
Sustainable Solutions Unlimited Inc
Sun Oregon
Sustainable Solutions LLC
Sustainable Solutions LLC
Synchro Solar
Tempa Temporary Assistance
Tom Dwyer Automotive Services
TSE Park Plaza

Umpqua Aqua
Value Clean Laundry Mat
VOIS
Wild Rose Vineyard

I am president of EasyStreet Online Services, specializing in Data Center services for IT Professionals, including collocation and Managed Hosting Services. We have been doing business in Oregon since 1995. We were drawn to Oregon because in a worldwide, competitive market, Oregon's Business Energy Tax Credit/State Energy Loan Program offered us a business climate in which we could grow.

The BETC/SELP helped expand our business by providing financing for our data center expansion project. We had outgrown our existing facilities and SELP helped provide funding that enabled EasyStreet to expand our datacenter from roughly 3,000 square feet to over 11,000 square feet. Now our organization employees 34 full-time individuals offering family-wage jobs. The six month expansion project provided work for local firms in the areas of design, excavation, construction, roofing, electrical, painting, and plumbing, among other others.

We have developed 25 projects and have generated $70,000+ for Oregon through property and income taxes.

We want to continue to invest in Oregon but need a supportive and competitive environment to do so.

Rich Bader, President of EasyStreet

ClearEdge Power

- CASE STUDY for Clean Energy Finance Campaign -

Amidst Oregon's unemployment spiral, one company has been quietly multiplying its workforce in Hillsboro while topping $25 million in venture capital funding just this year. From its original cast of 33 in 2003, ClearEdge Power has grown to over 180 full-time employees who are powering the fuel-cell revolution around the world, from California to Korea. Now in production, the company has its sights set on $50 million in sales in 2011.

Oregon, the clean tech choice

According to Vice President of Marketing Mike Upp, the company chose Oregon as its global manufacturing base because its original innovation team was from here and it was a natural fit with the state's sustainability reputation and hotbed of clean tech talent. In return, ClearEdge has paid a significant share in property and income taxes to support state services over the past seven years.

Building Jobs through the BETC

So what powered this company's growth? The big slingshot was the Business Energy Tax Credit (BETC), which the company qualified for in 2003 under the Research, Development & Demonstration category. Between 2003 and 2009, ClearEdge sold a total of $14.7 million of its credits for a return of $5.9 million in cash. This early investment was pivotal in sending out a strong signal that the fuel cell technology was market ready – and for ClearEdge, that translated into increased equity investments and the ability to keep its manufacturing jobs from migrating overseas or disappearing entirely. As Upp noted, "That's the greatest impact of the BETC dollars – funding jobs here in Oregon and here to stay."

Message to Legislators

However, the reality of keeping Oregon's leading fuel cell company here is a bit more complex. It requires growing a more robust local market, which currently pales in comparison to its primary customer base across the border in California. This is rooted in two challenges, which the company urges state legislators to consider at the upcoming session.

Often overshadowed by solar and wind, emerging technology companies like ClearEdge are often misunderstood and therefore disqualified from manufacturing tax credits. The Oregon Department of Energy, for example, recently lumped fuel cells together with combined heat and power systems. In Upp's view, this comparison is inaccurate from both an energy efficiency and cost standpoint. Fuel cells convert natural gas without any combustion. And, fuel cells represent a cheaper, immediate alternative to reduce our carbon footprint by 40%, compared to decommissioning the Boardman power plant or building a new natural gas plant, for example.

ClearEdge's story also offers a reminder that BETC investments need to be paired with stronger consumer incentives, to ensure local demand keeps pace with business developments. Currently, this equation is not stacked in Oregon's favor; if a homeowner installs a fuel cell unit in Oregon for example, the payback period is about 15 years, compared to a payback period of five years or less in more favorable markets like California.

ClearEdge Power is a supporter of the Clean Energy Finance Campaign, in ensuring that Oregon's economic future is built on clean energy – leading the US in new technology, jobs, and carbon reduction solutions.

St. Vincent de Paul
SOCIETY OF LANE COUNTY

The Business Energy Tax Credit (BETC) has been an integral part of the St. Vincent de Paul Society of Lane County's (SVDP) housing and business developments in the last five years. SVDP is Lane County's largest nonprofit human services organization and serves over 84,000 people every year. Since 1990 we have developed 1,000 units of housing for working families, seniors and people with disabilities in the last 20 years. To help fund our charitable activities we run 10 retail thrift stores and five independent waste-based businesses. All told we employ 360 people in Lane, Linn and Marion counties.

Low-income people are often excluded from "green" technology because of the cost. As a result, they live in housing that is not as energy efficient (which leads to higher costs) and not as healthy for them and their children. The BETC has allowed SVDP to include alternative energy systems (such as solar hot water systems) in five affordable housing projects since 2005. This investment has lowered the utility bills for 165 low-income Lane County citizens. While a decrease of $10 or $20 a month may not seem like a lot, it makes a world of difference to people struggling to pay for groceries and other necessities.

The BETC program has also helped SVDP make our business operations more efficient. We utilized BETC's to pay for energy efficiency upgrades at our main office, cutting our costs as well as our emissions. BETC's also helped purchase an energy-efficient furnace at our Aurora Glass Factory. The furnace has cut our utility bills in half. This cost savings is one of the things that allowed this business (which employs six people and provides job training for up to three people at a time) to stay operational.

We are proud to live and work in a state that recognized the value of investing in alternative energy technology. It's the right thing to do for our environment as well as our economy. We are grateful that the state has the wisdom to extend this program to nonprofit organizations through the pass-through system. The BETC program is a real asset to the state of Oregon and must be preserved.

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SolarCity

BETC Success Story- SolarCity

SolarCity is the nation's leading full-service solar provider for homeowners, businesses and government organizations. We are the first company to provide solar power system design, financing, installation and monitoring services from a single source. We have been operating in Oregon since 2008 and currently employ more than 20 Oregonians in full-time, family wage positions such as sales, installation, project management, warehouse management, and local sales personnel. We are also looking to hire 10 - 20 more employees within the next year.

SolarCity has participated in community programs such as Solarize NE Portland, Solarize Salem and Solar Beaverton as well as commercial programs and will have installed over 200 projects in the state by the end of 2010. Our headquarters are located in **Senator Dingfelder** and **Representative Dembrow's** districts but we have done installations in many of the districts around the state.

We were originally drawn to Oregon because of the state's evident commitment to the development of renewable resources, as indicated by programs such as the Business Energy Tax Credit. We believed that Oregon had a created a business climate in which we could grow and expand, all while providing our customers with a low-cost and low-carbon source of energy. It is thanks to the support provided by the BETC that we have been able to offer solar Power Purchase Agreements to a number of businesses and nonprofit organizations around the state. The PPAs that we offer allow organizations to install solar on their rooftops with no upfront capital expenditures required and then to benefit from using solar power and a 10 – 15% reduction in their energy bills. Without the availability of the BETC, we never would have been able to offer many businesses, including some of the ones profiled below, a low-cost solar option.

Tualatin Valley Water District
1850 SW 170th Avenue
Beaverton, OR 97075
Sen. Suzanne Bonamici (DEM)
Rep. Chris Harker (DEM)

Both SolarCity and TVWD are dedicated to sustainability, responsible business practices, and lowering their (and their customers') impact on the environment, so it made perfect sense to partner up to install solar panels on the main warehouse at the water district's headquarters. Although TVWD offsets all of its greenhouse gas emissions through carbon offsets and renewable energy credits, they were even more interested in reducing their

direct emissions. The fact that they were offered an option to enter into a PPA without any capital needed made it an easy choice to employ solar power.

According to Cheryl Welch, TVWD's strategic planner, "The BETC made it more cost effective to implement a project we would have had a hard time doing otherwise. It allowed us to take steps toward sustainability in directions we wanted to go but would have been more hesitant to pursue without funding."

TVWD's 54.1 kW roof array was completed in June of 2010 and is expected to provide about 8% of their headquarters' energy usage (about 48,922 kWh per year). TVWD was so pleased with their energy savings that they have contracted for an expansion of their solar array on a new dewatering facility that is currently under construction. Once this BETC-supported project is finished, solar panels are expected to provide 20-25% of TVWD's total headquarters energy usage.

Thanks to the BETC, both solar arrays are provided at no upfront capital cost to the water district. SolarCity also provides a production guarantee, monitoring and maintenance services and an option to renew the contract once the PPA term has expired.

Secure Storage
1400 Tucker Rd.
Hood River, OR 97031
Sen. Rick Metsger (DEM)
Rep. Suzanne VanOrman (DEM)

The owner of Secure Storage was looking for a way to offset energy costs of his buildings, particularly at peak usage times, since some of Secure Storage's storage units are climate controlled. Thanks to the availability of the BETC and other incentives, the owner was able to invest in a solar array to put on the Secure Storage buildings. Without any incentives (i.e. if the only return on his investment was his energy savings), it would have taken the owner 35 years to recoup his investment and by that time, the system would be worn out and need to be replaced. He was able to make this investment in his business and in the environment as a direct result of the availability of the BETC.

The Secure Storage project includes three sites in Ashland, Bend and Hillsboro for a total installation size of 130 kW. The solar arrays on the Secure Storage buildings produce 48,546 kWh/year and provide over 90% of the electricity used by the buildings. The buildings were perfectly suited for solar because they are structurally strong and un-shaded.

Through supportive programs such as the BETC, Oregon has proven its commitment to clean energy and attracting world-class companies to the state. As a result, jobs have been

created and communities have benefited from the associated economic growth. It is our sincere hope that Oregon can continue this momentum and enact supportive policies that allow clean energy businesses to grow and thrive in the state. We also believe that good policies will give solar companies such as ours an opportunity to help rebuild the state's economy.

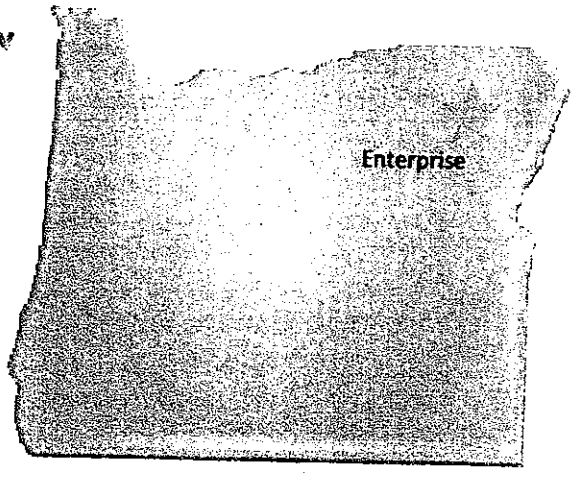
However, there are still a number of challenges facing clean energy companies, SolarCity included. While sunlight is free and solar power's potential is limitless, solar energy production has yet to achieve the economies of scale that fossil fuel production and other polluting power sources have reached. Due to the fairly high cost of installing solar systems and the low price of energy in the Northwest, companies who are interested in solar installations still need assistance in order to make the financial calculus of their projects work out. Without incentives such as the BETC, many companies just can't afford to take the step of going solar.

We hope to continue to invest and expand in Oregon but can only do so within a supportive regulatory environment. With the help of smart policies, we will be able to continue to create new jobs, keep existing ones, reduce the state's carbon emissions and offer a low-cost solar option to businesses throughout Oregon. The most important thing any policy can do to attract business growth and investment is to provide a supportive and predictable policy environment that gives companies and investors with confidence that their investments will not be arbitrarily undone by constantly changing policies.

We applaud Oregon's clearly demonstrated commitment to renewable energy and hope that the state will continue to support businesses in the clean energy sector. During a time of steep economic downturn and job losses, this sector has been one of the bright spots on the horizon. Clean energy's myriad benefits are the answer to many of Oregon's economic, energy and environmental issues and it deserves the overwhelming support of the State Legislature.

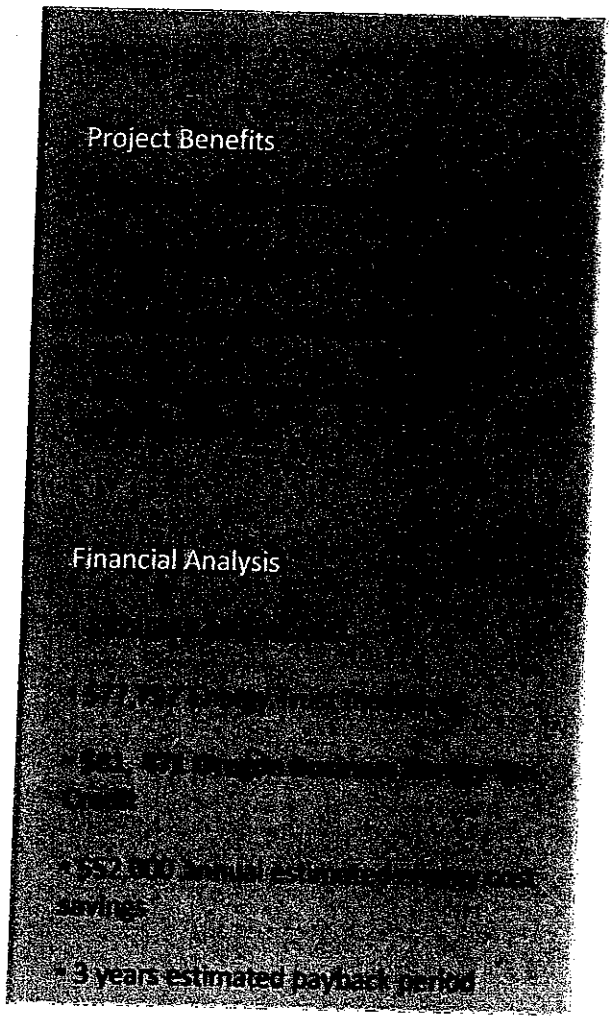
Business Energy Tax Credit Success Story

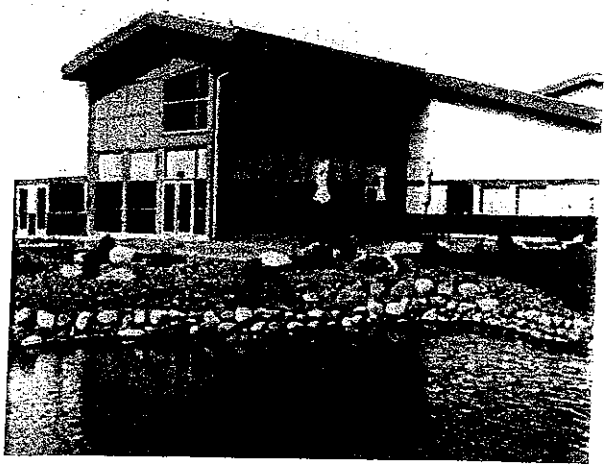
Business Energy Solutions = New Buildings



Summers are hot and winters are cold in Enterprise, which sits at the base of the Wallowa Mountains in northeastern Oregon. So when Wallowa Memorial Hospital began planning for a new 51,000-square-foot facility, the design team led by Clark Kjos Architects worked to incorporate a highly efficient heating and cooling system.

Bouillon Engineering helped design the central water-source heat pump system. The hospital also features high-efficiency lighting and insulation. The combined energy-saving measures, expected to save $52,000 a year in energy costs, earned $77,792 in Energy Trust incentives and an $81,471 Oregon Business Energy Tax Credit pass-through payment.





The Northwest Energy Efficiency Council (NEEC) is a business association of the energy efficiency industry. NEEC's mission is to promote policies and programs that enhance market opportunities for energy efficiency. www.neec.net

NEEC
NORTHWEST ENERGY EFFICIENCY COUNCIL

Persephone Farm

Persephone Farm in Lebanon Oregon has been working towards sustainable farming for the past 25 years. Recently, Jeff Falen was able to convert his gas tractor into an electric tractor with help from the state's Business Energy Tax Credit. In addition, thanks to the BETC, 88% of the farm's electrical demand is provided by on-site solar electric panels, part of a long range plan to meet all of their energy needs through clean, and renewable methods.

In the rough economic times Oregon's facing, it's important for a business to set themselves apart from other businesses. By investing in sustainability, Persephone Farm's has been able to market itself to a growing group of green consumers and work towards their goal of "creating an agriculture capable of feeding humanity far into the future."

LiveLight Energy is a solar installation company that has come out of the ashes of the languishing residential construction market. We were formerly housed in Robert Knowles Construction, a small custom home building and remodeling company my father and I own. When I started working in the family business again in 2005, the housing market was booming, and I was determined to develop net-zero energy homes. Solar was a big piece of that strategy. When I started studying solar, it suddenly became a new offering for us as the recession eroded our core construction business. We now have more than 10 people employed at LiveLight Energy, and we have grown 6-fold in revenue from 2009 to 2010. For context of how we have bucked the recession, in 2005 Robert Knowles Construction had only two employees (still the case today).

Our BETC success story hinges on a little known, but high-job-impact section--High Performance Homes and Builder Installed Solar. This is a section that is a hybrid of residential energy tax credits, but it is considered commercial because it encourages home builders to create more energy efficient housing. The tax credit is more favorable to a home builder than it is to a residential retrofit customer. Compare the PV tax credit:

- Builder Installed: $3 per watt, up to $9,000
- RETC: $2.10 per watt, up to $6,000

This, in part, makes buying solar on a new home the most cost-effective way possible to buy solar.

In early 2009, we got a call from Legend Homes--they asked us to help them take their Edgewater on the Tualatin community solar, close to 140 homes planned. This brought about the decision to spin the solar practice off of Robert Knowles Construction and vaulted LiveLight Energy into the position it holds today. We have completed over 10 homes for Legend homes, and we have also landed deals with Stone Bridge Homes NW, and Exceptional Homes By Andre. To date, this has been nearly 20 homes solar for us as a company, thanks to BETC--with over 200 potential projects planned.

As you may know, a strong housing market creates a lot of jobs. The builders we are working with see solar as a way to differentiate their product and improve sales in a down real-estate market. If solar and energy efficiency helps revitalize housing, then a lot of potential jobs are at stake. All four of our home builder clients represent a possible 200 solar homes. At current PV pricing, 200 new homes with solar represents approximately $3,000,000 in revenue for LiveLight Energy, and a lot of jobs for builders, sub-contractors and suppliers.

In the most recent round of BETC allocation, released on January 3rd, 2011, LiveLight Energy clients were awarded 38 total BETC pre-certifications. Thirty-six of those represent builder business--including 34 with Stone Bridge Homes NW, one for DreamBuilder Homes and one for Exceptional Homes By Andre. Six of the Stone Bridge Pre-Certifications will be used at this year's Street of Affordable Homes--Oregon's first all-solar home show. As you can see, we (our home builder clients included) rely on the BETC program.

We are active in the home building industry, and have a 30 year heritage in it. I am currently serving as a Board Director for the Portland Metro Home Builders Association, and I am Chairing the Building Green Council this year. Our position and heritage in residential home building will bring us more potential BETC business, if BETC stays around. If it goes away, we have a lot to lose--both as a company, and as a housing industry.

ZeaChem

About ZeaChem Inc.

ZeaChem Inc. is a developer of biorefineries for the conversion of renewable biomass into fuels and chemicals. The company is headquartered in Lakewood, Colorado and operates a research and development laboratory and pilot scale facility in Menlo Park, California with a total of 30 employees. ZeaChem is now deploying its technology and constructing a 250,000 gallon per year biorefinery to be located in Boardman, Oregon.

ZeaChem Inc. has developed a platform for converting non-food biomass into renewable fuels, such as cellulosic ethanol, and chemicals. While the process can utilize various feedstocks including wood, grasses, and agriculture and forest residues, ZeaChem has contracted with Portland, Oregon-based GreenWood Resources to supply local hybrid poplar trees as the feedstock of choice. To achieve 40% higher yields than other best in class competitors, ZeaChem is unique by utilizing nearly all carbon in the biomass and producing no CO_2 during fermentation. Life cycle analysis shows that ZeaChem cellulosic ethanol has 94-98% less greenhouse gas emissions than conventional gasoline.

Investment and Jobs for Oregon

ZeaChem is currently constructing a 250,000 gallon per year biorefinery, to be located in Boardman, Oregon at the Port of Morrow. The facility paves the way for first-of-its-kind production of advanced biofuels and bio-based chemicals in Oregon. To date, ZeaChem has raised $40 million from venture capital and strategic partners, including Valero Energy Corporation.

Project support from the state of Oregon in the form of a Business Energy Tax Credit (BETC) was a very significant factor in the decision to locate the facility in Oregon. At this time, ZeaChem has received a preliminary certificate from the Oregon Department of Energy for a Research, Development and Demonstration (RD&D) BETC of $10 million. Alternative site locations in other states were not able to compete with the level of support in Oregon. In addition, ZeaChem's project was recently selected for a U.S. Department of Energy $25 million grant utilizing American Recovery and Reinvestment Act (ARRA) stimulus funding. ZeaChem is honored to receive the competitive grant and utilize the funds to directly support construction and operations at the Boardman facility.

In total, the project will retain or create nearly 300 jobs. The facility is projected to require up to 75 direct jobs during construction and approximately 20 direct operations jobs. Job benefits to Boardman are multiplied in Morrow County and the state of Oregon through additional indirect jobs creation, as calculated by the Oregon Employment Department. Morrow County will realize an additional 21 indirect construction jobs and an additional 51 indirect operations jobs. State-wide indirect construction jobs produce another 22 jobs and indirect operations jobs equal 103 jobs. Commercial scale ZeaChem biorefineries are projected to generate investment and job creation orders of magnitude larger than the demonstration facility.

Perspectives on BETC

While ZeaChem supports revisions to the BETC program that will ensure necessary accountability and maximum return on Oregon tax dollars, we caution against revisions that would stunt Oregon's valuable green sector growth and hurt new Oregon businesses, such as ZeaChem. ZeaChem is concerned that drastic cuts to the program or potential retroactive revisions could put in jeopardy the preliminary certificate awarded. ZeaChem is committed to this project, investing our own capital, and retaining and creating jobs in Boardman and in the state. As a business seeking to deploy first-of-its-kind technology, we need assurance that the financial support committed by the state will be honored when the project is complete in 2011.

For more information about ZeaChem please visit www.zeachem.com or contact Carrie Atiyeh, Director of Public Affairs, (303) 248-7778 or catiyeh@zeachem.com.

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www.zeachem.com

BETC Limbo Puts Solar Jobs at Risk

Near-term power purchase contracts **not possible without BETC**

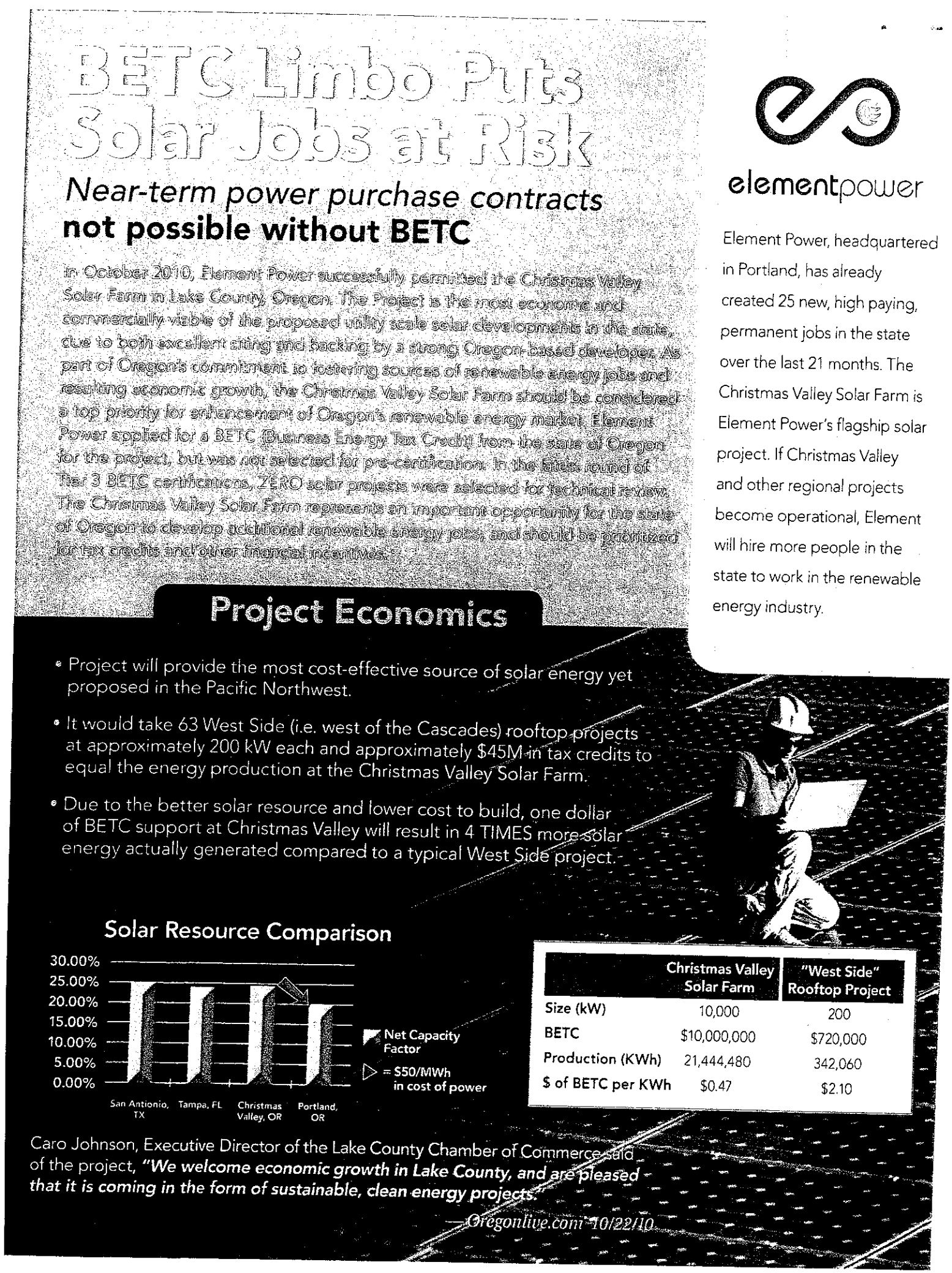
In October 2010, Element Power successfully permitted the Christmas Valley Solar Farm in Lake County, Oregon. The Project is the most economic and commercially viable of the proposed utility scale solar developments in the state, due to both excellent siting and backing by a strong Oregon-based developer. As part of Oregon's commitment to fostering sources of renewable energy jobs and resulting economic growth, the Christmas Valley Solar Farm should be considered a top priority for enhancement of Oregon's renewable energy market. Element Power applied for a BETC (Business Energy Tax Credit) from the state of Oregon for the project, but was not selected for pre-certification. In the latest round of Tier 3 BETC certifications, ZERO solar projects were selected for technical review. The Christmas Valley Solar Farm represents an important opportunity for the state of Oregon to develop additional renewable energy jobs, and should be prioritized for tax credits and other financial incentives.

elementpower

Element Power, headquartered in Portland, has already created 25 new, high paying, permanent jobs in the state over the last 21 months. The Christmas Valley Solar Farm is Element Power's flagship solar project. If Christmas Valley and other regional projects become operational, Element will hire more people in the state to work in the renewable energy industry.

Project Economics

- Project will provide the most cost-effective source of solar energy yet proposed in the Pacific Northwest.
- It would take 63 West Side (i.e. west of the Cascades) rooftop projects at approximately 200 kW each and approximately $45M in tax credits to equal the energy production at the Christmas Valley Solar Farm.
- Due to the better solar resource and lower cost to build, one dollar of BETC support at Christmas Valley will result in 4 TIMES more solar energy actually generated compared to a typical West Side project.



Solar Resource Comparison

	Christmas Valley Solar Farm	"West Side" Rooftop Project
Size (kW)	10,000	200
BETC	$10,000,000	$720,000
Production (KWh)	21,444,480	342,060
$ of BETC per KWh	$0.47	$2.10

Caro Johnson, Executive Director of the Lake County Chamber of Commerce said of the project, ***"We welcome economic growth in Lake County, and are pleased that it is coming in the form of sustainable, clean energy projects."***

—*Oregonlive.com 10/22/10*

"The proximity to the transmission lines is one of the reasons the Element site is a good one for a solar farm," said Brent Fenty, executive director of the Oregon Natural Desert Association. "We think development should be prioritized in areas where transmission already exists, and disturbances have already occurred," he said. "In general, from an environmental perspective, it looks like this is a good site for solar development," Fenty said.

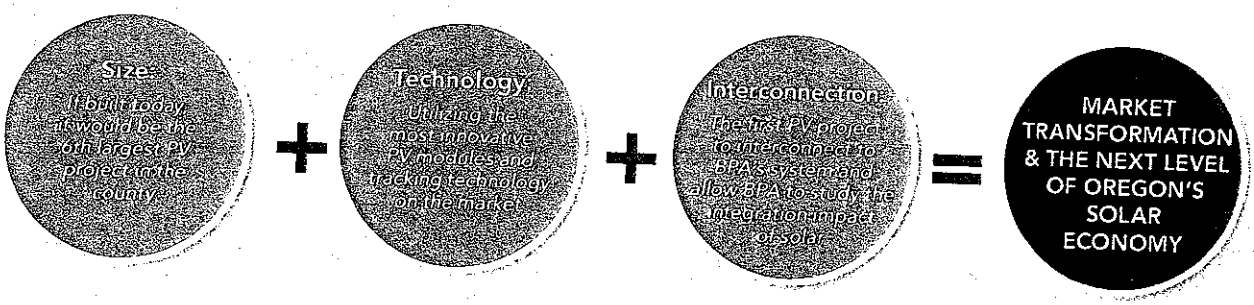
— *Bend Bulletin* 10/28/10

Project Overview

- Christmas Valley Solar is a "shovel-ready" utility scale photovoltaic solar facility located in Christmas Valley, OR
- Will produce enough electricity to power roughly 6,000 homes
- Located directly adjacent to existing BPA transmission facilities
- BPA transmission studies indicate capacity exists and minimal upgrades to the system are needed. Expect a final interconnection agreement January 2011
- No sensitive species or habitat identified during environmental studies
- Received land use permit from Lake County on October 19, 2010

Development Schedule

Land Use Approval	*October 2010*
Begin Construction	*June 2011*
Commercial Operations	*December 2011*



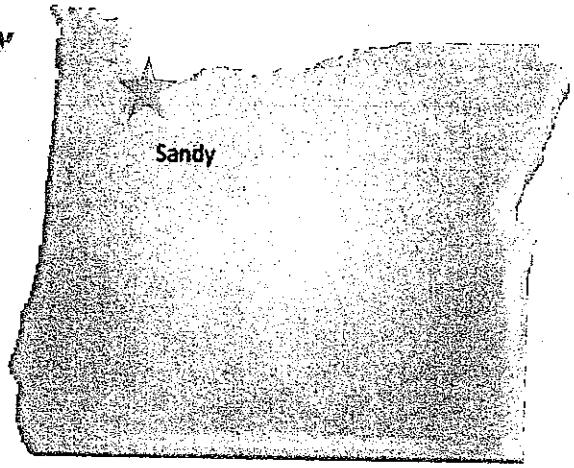
Project Benefits

- Brings well-paying temporary and permanent full-time jobs to the local area (Lake County currently has a unemployment rate of 11.3%).
- An average of 30-40 construction workers will be employed – many of whom will be hired from the local area. Indirect jobs are also generated in the state such as high-tech inverter manufacturing, steel fabrication, transportation logistics, concrete and aggregate production, fencing and lighting supply, and possibly solar cell or module manufacturing and distribution.
- Increased tax revenues, indirect and induced economic benefits will be seen in Lake County and Christmas Valley.
- Successful completion of a project of this size, technology and precedent setting transmission-interconnection will represent a transformation of the regional solar energy market, making Oregon a market leader.

Element Power • 421 SW Sixth Avenue, Suite 1000 • Portland, OR 97204 • 503.416.0800 • www.elpower.com

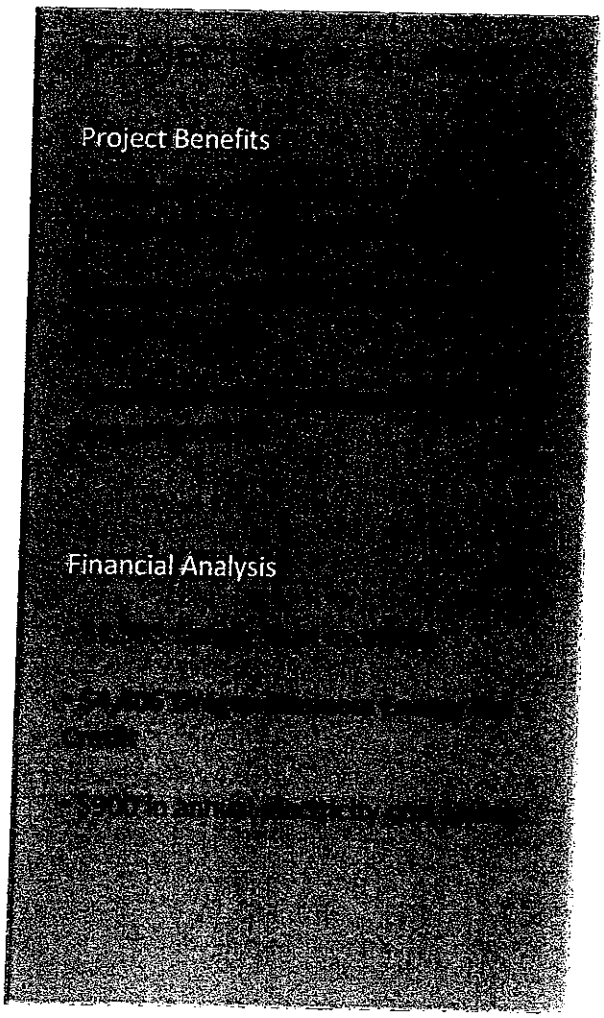
Business Energy Tax Credit Success Story

Business Energy Solutions – Production Efficiency



The Industrial Efficiency Alliance estimates that energy represents approximately 75 percent of the total cost of compressed air. When booming business for etched glass panels pushed its compressed air system beyond capacity, Mood Shadow Etchers turned to an Energy Trust trade ally for an upgrade.

In 2008, Moon Shadow installed a 25 horsepower variable frequency drive air compressor to power sandblasting machines and other equipment at its 8,000-square-foot facility in Sandy, Oregon. With about $900 in annual electricity cost savings, a $1,983 Energy Trust incentive and a $4,406 Oregon Business Energy Tax Credit, Moon Shadow Etchers expects to recover their investment in less than seven years.



The Northwest Energy Efficiency Council (NEEC) is a business association of the energy efficiency industry. NEEC's mission is to promote policies and programs that enhance market opportunities for energy efficiency. www.neec.net

NEEC
NORTHWEST ENERGY EFFICIENCY COUNCIL

November 28, 2010

The Capitol: 900 Court St. NE
Room HRA
Salem, Oregon 97301

Dear House Revenue Committee,

I am the NW Regional Manager for REC Solar, Inc. We are one of the largest solar contractors in the US, with offices in eight states. I was hired three years ago to start our office in Portland and REC Solar made the decision to invest in Oregon when the BETC increased from 35% to 50%.

We now have eight full-time employees and one part-time employee. We've installed dozens of commercial solar systems in Oregon, including the largest ground mounted solar system in Oregon. Most of our projects also include the employment of multiple subcontractors, such as roofers, electricians, engineers, site excavation, etc.

REC Solar has also participated in various job training programs, such as the OJT program with SE Works and the Vocational Rehabilitation Job Training program.

We are in Oregon because of the BETC, and as previously stated we moved to Oregon due to its increase from 35% to 50%. If the BETC volatility continues, or dries up for project under $500,000 in cost, REC Solar will no longer be able to sustain business in Oregon.

While we support revisions to the program that will ensure accountability and maximum return on Oregon tax dollars, we caution against revisions that would stunt Oregon's green sector growth specifically those of the small/medium solar contractors that are employing a unique class of skill sets in Oregon.

Sincerely,

Andy Noel
NW Regional Manager
REC Solar, Inc.
3380 SE 20th Ave
Portland, OR 97214

503.866.1102
anoel@recsolar.com

SolarWorld now employs 1,000 at Hillsboro plant

SolarWorld has reached its goal of employing 1,000 people at its Hillsboro manufacturing plant by 2011 and overhauling its operations in Camarillo, Calif. The company reports it now has the equivalent of four factories in Hillsboro, after adding a automated panel assembly factory in a new building.

Germany-based SolarWorld transformed the former semiconductor plant site in Hillsboro into the largest solar manufacturing plant in the Americas. The plant opened in 2008 with the expectation of employing 1,000 people to meet growing demand for solar power.

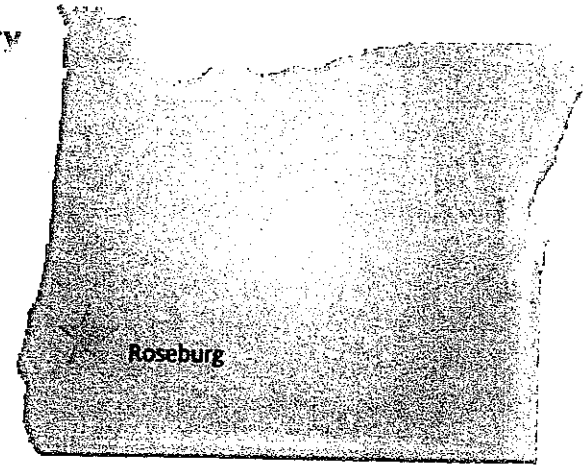
"Our goals here were straightforward: to tool up annual production capacity to 500 megawatts at the U.S. sites and hire 1,000 workers in Hillsboro by 2011," said Bob Beisner, managing director and vice president of the U.S. operations. "We have done just exactly that on the very schedule we laid out. But the feat – rare in these days of off-shoring and industrial recession – has been enormous, requiring the combined passions and dogged commitment of our many partners and employees."

The company's 1000th's worker is 28-year-old Angela Beed of Portland, who grew up in Cove, Oregon. She was hired as a maintenance technician in the wafer-cutting plant.

SolarWorld employs 250 people in Camarillo. In mid- 2006, the company acquired the assets of Shell Solar, featuring the Camarillo plant and its lineage of solar pioneering dating to 1975. In 2007, the company bought the former chip factory in Hillsboro, where it could establish much bigger operations to produce silicon crystal, solar wafers, photovoltaic cells and solar panels.

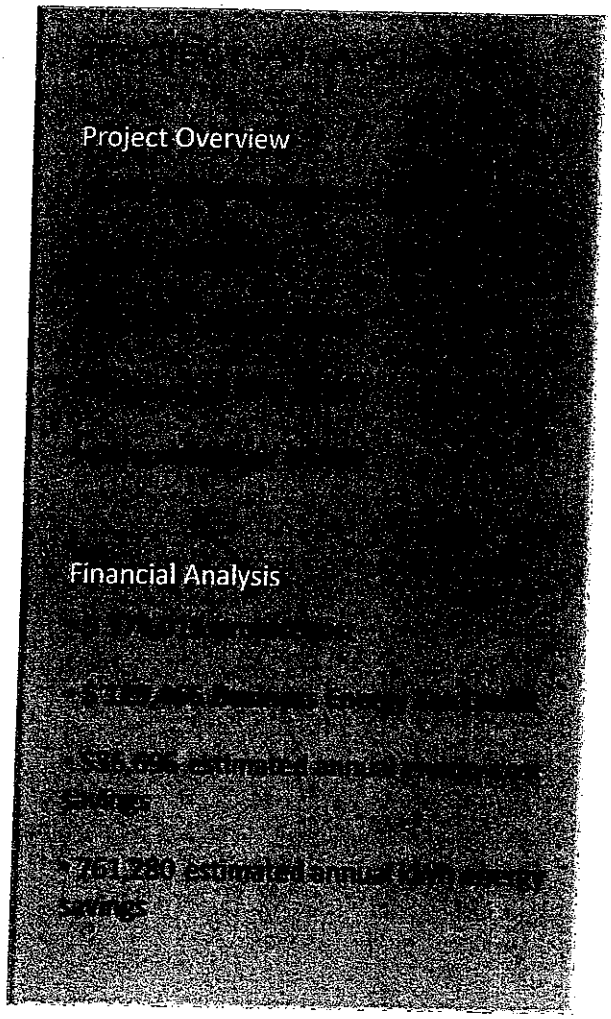
Business Energy Tax Credit Success Story

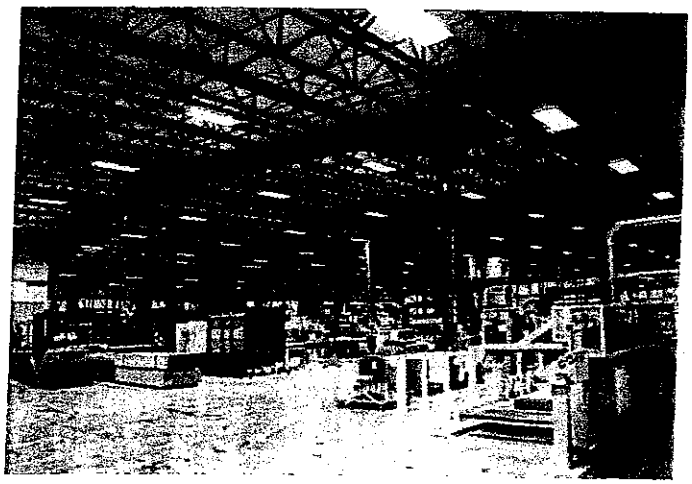
Investment in Energy Efficiency Builds Competitive Edge



FCC Commercial Furniture, located in Roseburg, OR, has grown its business by helping clients build their brands with fresh, contemporary spaces and by investing in improvements that reduce operating costs, boost productivity and create a pleasant working environment.

The company has worked closely with Energy Trust of Oregon to maximize savings and reduce costs at its 140,000-square-foot-plant. Since 2005, FCC's production efficiency projects and high-efficiency lighting investments have trimmed their electricity costs by more than $36,000 annually. Energy Trust incentives and Oregon Business Energy Tax Credits have reduced out-of-pocket investment in the energy-energy saving projects and accelerated payback.





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NORTHWEST ENERGY EFFICIENCY COUNCIL

FOR IMMEDIATE RELEASE

Shorepower Unveils First Level 2 Charger in Portland

New Electric Vehicles Plug-in at OMSI

Portland, OR. December 16, 2010 –Today, Shorepower Technologies unveiled their first public Level 2 Electric Vehicle Charging Station at the *Oregon Museum of Science and Industry* (OMSI). The installation was timed with delivery of the first all-electric, emission-free Nissan LEAF to a private citizen and several local LEAF "showcase" events.

Since deploying its first Level 1 station in 2008, Shorepower continues to pioneer the EV infrastructure space. "This is an exciting time for electric vehicles as we deploy the first of many Level 2 stations in preparation for new cars coming to market," said Jeff Kim, President of Shorepower.

Currently, the OMSI station provides free energy to EVs. Recharging an electric vehicle on a 240V Level 2 Charging Station can provide up to 25 miles of range for every hour of charging depending on the type of electric vehicle.

Over the coming months and years, Shorepower will retrofit existing Level 1 stations and add many new public and private plug-in stations across the country.

About Shorepower Technologies. Shorepower is a transportation electrification infrastructure company offering simple, cost-effective solutions for connecting cars and trucks to the electrical grid including Truck Stop Electrification (TSE) and charging stations for Electric Vehicles (EVs) and Plug-in Hybrid Electric Vehicles (PHEVs). www.shorepower.com

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Contact

Alan Bates, Vice President of Marketing, Shorepower Technologies

O: 503-892-7345 C: 503-810-7396

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Northern
POWER SYSTEMS

29 Pitman Road, Barre, Vermont 05641 USA = TOLL FREE 877 90 NORTH = TEL 802 461 2955 = FAX 802 461 2986

Office of Department of Energy

Salem, OR

To Whom It May Concern:

Northern Power Systems is a reputable US made wind turbine manufacturer out of Vermont. We produce innovative and advanced gear-less wind turbines; they are permanent magnet, direct drive turbines that offer high reliability, high quality, and quiet, clean power. We sell a 100kW Community Wind scale turbine and a soon to be released 2.2 MW turbine. We have our turbines installed in over 17 states and in multiple countries.

About 8 months ago we invested in a full time employee as well as some part time support to develop our business in Oregon. This was based on the attractiveness of the state largely due to the BETC (Business Energy Tax Credit). We were warned when we showed up that BETC was "turning sour" and we should not waste our time. After the general un-winding of the BETC since then, culminating with the recent decision to not forward one single wind project for the next stage of support, the wind industry can officially call the BETC dead.

We are immediately scaling back our business investments and focus and are formerly requesting that AWEA (American Wind Energy Association) cancel the Small and Community Wind Conference to be held in Portland on December 7th 2010 and move it to NV (NV Energy has a great grant program). AWEA conferences traditionally draw large crowds, fill hotels and convention centers, and provide an economic boon to cities that host these conferences.

The cumulative effects of unraveling the BETC will not only cost Oregon jobs from the lack of projects and deter consumers an ability to hedge against rising energy costs, but it shows a failure of leadership, a lack of commitment to forward thinking and a narrow-sided approach to the impact this business has on all our ways of life; whether it be addressing climate change or reduced reliance on foreign oil. Without long term stable policy, the state of Oregon will not be able attract industry investment, and bolster economic development.

Here are the some of the specific problems we have seen that are reasons for our exit from Oregon:

-Once program funding caps were adopted our projects were put into a "pool" with no clarity to whether we would be funded or not. It is nearly impossible to grow a business without any guidance or transparency.

- The current pass through provision for the BETC program has become unattractive to potential pass-through partners. This provision was key to making the program available to those without the tax equity to leverage the BETC. Until there is a stable and consistent pass-through rate, or ODOE allows the market to determine the rate, the pass through program will remain ineffective and render the BETC unusable to a vast majority of project owners and investors in Oregon.

ODOE was once a respected agency you could count on to be there when your project was ready. They would support Oregon's commitment to renewable energy and wind. Now there is no trust that they are there to be good stewards and support RE (renewable energy-wind) projects going forward. Those that were on the wrong end of broken contracts can testify to this. Too many Community Scale Projects in various stages of development have found the policies promised by ODOE if they build projects to be dropped and contracts entered into with developers have been rescinded, causing major financial loss to small project owners.

The Oregon power market is weak. The loss of BETC funding to offset low power prices means that Oregon is no longer competitive; we can do better in other states that have a better market for power. We can sell our power (or projects) in other states for over three times the price available in Oregon. For example, prices in Alaska are ($0.35/kW), MA (&0.18/kW) or WI ($0.15/kW) versus $0.06/kW in Oregon. Every one of those states offer grants for Renewable Energy to try to level the subsidies playing field between fossil fuels and RE.
We strongly urge removal of BETC caps so that projects in the development cycle can be assured that if they spend significant funds getting a project ready for construction, that BETC and SELP will be available. Without these assurances, we can no longer trust ODOE to provide incentives. That lack of trust makes it impossible to develop community scale projects in Oregon. For Community Scale and smaller Renewable Projects to succeed in Oregon BETC and ODOE must encourage increased funding to the program, less restrictive rules for acceptance, less restrictive rules for application etc.

Sadly, we find that as a business, we must move to states where project development is economically feasible. Oregon has given up its competitive edge for Community Renewables to other States in the misguided belief that not offering BETC is somehow saving money. If Oregon rethinks its priorities, we will be glad to return. In the meanwhile, it has been a real pleasure getting to know Oregon and its fine citizens and we hope to have a future in the state once it refocuses on Community Renewables.

Sincerely,

Brett Pingree

Vice President, America's

Northern Power Systems

Barre, VT

Skyron Systems Clean Energy Financing Story

My Company, Skyron Systems had five companies lined up to complete a demonstration project involving the highest VAWT installation on an urban high-rise building in the world. The project site was in Portland and was scheduled for completion in August. The BETC request was for ~$170K – the amount offered was $10K due to the extended payback of the demonstration project. As a result of the funding shortfall,

- the project was not commenced
- five companies who had completed hundreds of hours of project prep work in anticipation of construction commencement were prevented from fulfilling their participation
- many engineering and construction jobs were not realized
- Portand (and the State of Oregon) was prevented from receiving press coverage on a renewable energy project that would have garnered global attention
- our company was negatively impacted as this was our formal product launch, following six months of project preparation; planned hiring did not occur and contingent sales have not occurred

In summary, Oregon lost out on:

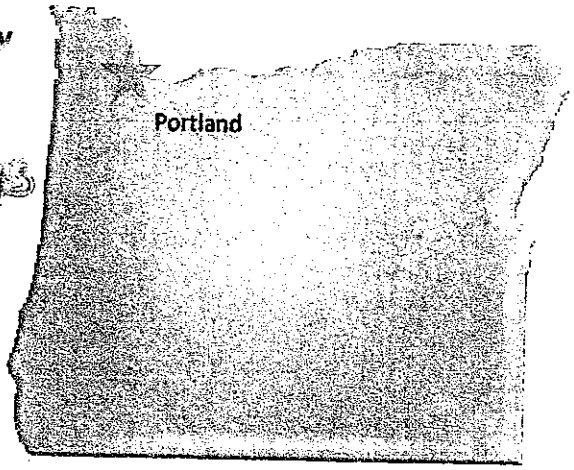
- global media coverage
- jobs
- employment tax revenue
- the exercise of a new renewable energy technology
- added credibility in being "first" in renewable energy business growth

So, for us, the absence of funding that promotes the demonstration of new technology is significant as I'm sure it is for other firms as well. My recommendation for an improvement at the state level would include a fund for facilitating new technology for demonstration projects. This is the best way to exercise technologies that could lead to further development as well as collaboration between firms having complementary technologies (i.e. co-gen applications).

Brian Sheets, CEO Skyron Systems Inc.

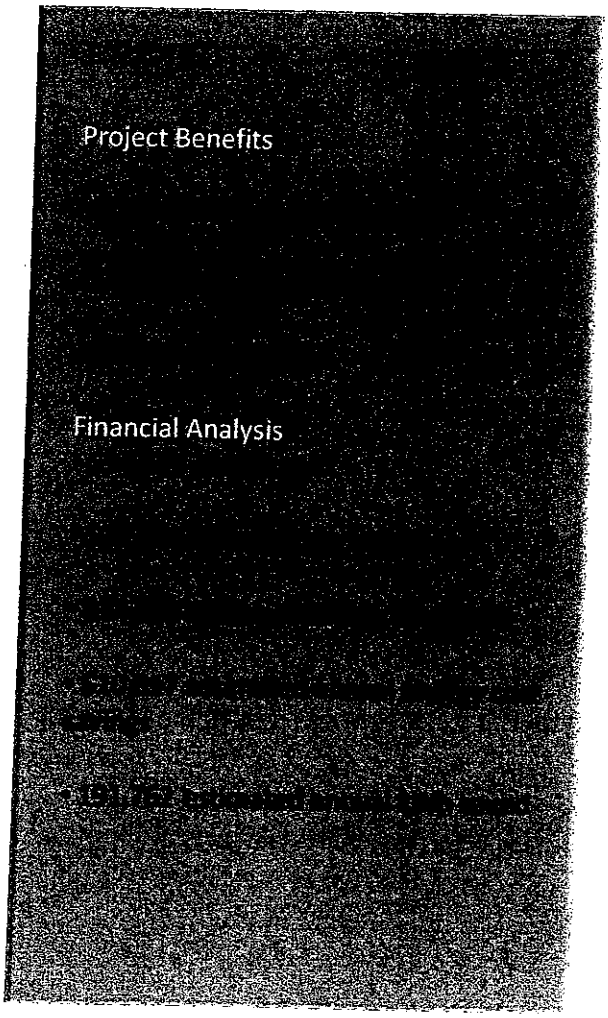
Business Energy Tax Credit Success Story

Combining Energy Savings With Data Center Solutions



Located in Portland, OR, Sterling Communications provides Voice over Internet Protocal, VoIP, phone systems, high-speed internet access, web hosting and colocation facilities for customers throughout the Pacific Northwest.

With energy costs increasing in 2008 due to an increase in servers, the company decided to explore new technology to improve energy efficiency. Sterling consolidated its 50 servers into eight blade servers and installed an air-conditioning economizer to dramatically reduce power consumption. These improvements to their equipment qualified the company for more than $32,000 in incentives and are saving an estimated 191,762 kWh annually.



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PÁTU WIND FARM

December 12, 2010

Ms. Yao Yin
PhD Candidate
Oregon State University
School of Public Policy
301 Gilkey Hall
Corvallis, Oregon 97331

Dear Yao;

It was a pleasure to speak with you yesterday. For your PhD dissertation, I hope you can look hard at the economic returns to the local community. So often in the debate on Federal stimulus funding and the Oregon BETC merits, we hear that renewable wind energy does not create employment. This in my opinion and many others is completely false. Let's put aside the positive environmental impacts and just look at the economics.

There is direct and indirect employment and PáTu Wind pumped in more than $22,000,000 into the direct and indirect economy. WITHOUT THE ARRA 2009 (Grants in Lieu of the ITC) AND THE OREGON BETC PÁTU WIND WOULD NOT HAVE BEEN ABLE TO INJECT THESE FUNDS INTO THE ECONOMY - DURING A TIME THAT THE LOCAL AND NATIONAL ECONOMY NEEDED THE WORK.

Let's look at the facts. On the surface, I would agree that direct employment after startup appears minimal to a politician from Salem or Portland who had made no effort to see the positive and real effects in areas outside of their political districts. However with my contract through enXco for the O&M I have approximately 15 part time employees. This includes service technicians, remote monitor operations personnel (24 hours per day 7 days per week), and supervisory management. Some of these employees are in Oregon, some in the general region - which includes Goldendale, WA, and others are in Minnesota. Additionally during operations I have on going contracts with General Electric, Portland General Electric, Bonneville Power Administration, Wasco Electric Cooperative, Mid-Columbia Cooperative Producers to name a few. And please do not underestimate the positive effects of over a $1,000,000 in local property taxes to be paid into a local economy that has struggled to provide basic services at the county level.

Moreover, during the primary construction period (June 1 through Sept 1) there were at all times 30 - 40 direct employees and during the secondary construction period (Sept 1 through Dec 1) there were 5-10 direct employees. They were employed by the White Construction, GE, Portland General Distribution Services, and others. All were highly paid. And with the

exception management all were union labor of the IBEW Local 48 and Steel Workers Local 330 out of Portland. The actual hourly union wage was in the $35 per hour range plus travel and per diem expenses.

In addition during this time PáTu Wind had a direct impact on hundreds of other workers - from the direct manufacturing employees of General Electric to equipment and service suppliers such as:

- Harris Rebar – pre-fabricated rebar suppliers for the foundations,
- Hood River Sand and Gravel – concrete supplier (a contract for 1,620 cubic yards of concrete requiring 180 truck deliveries.)
- Peterson Equipment, The Dalles, OR – Caterpillar equipment rental supplier (Peterson supplied 4 – Caterpillar D6 dozers, 1- Caterpillar Road Grader, 2 - Caterpillar vibratory compactors, 2 - Caterpillar articulated, fork loaders, 1 - Caterpillar diesel generator, plus weekly service maintenance on site.)
- Powell Farms, Wasco, OR - aggregate suppliers
- DeGrange Construction, Wasco, OR - water tank providers
- Elm Electric, Hire Electric and Platt Electric – misc. electrical service and part suppliers
- Mid-Columbia Cooperative Producers, Wasco, OR, suppliers of misc. hardware, lubricants, and fuel
- Devin Oil - fuel suppliers
- Thompson RV - Pendleton, OR - RV supplier
- ModSpace - mobile office supplier out of Portland
- Campbell Crane, Portland – supplied transformer lifting equipment
- Morgan Industrial – heavy equipment rigging for transformer
- Bragg Crane – provided a 450 ton Liebherr crane
- Trucking Companies - the cranes (total of 2) used to erect the turbines required 75 truck trips (separate trips for delivery to site and return equipment from the site) - some as far away as Los Angeles. For GE there were at least 100 truck trips including safety and escort cars from a far away as Florida. Our shipping bill through GE was in excess of $1.1 M.
- Imperial Building, Lyle, WA - O&M building contractor
- Wallace Plumbing, The Dalles, OR – O&M Building
- Vista Sanitation – portable sanitation equipment
- Bonneville Power Administration - maintenance provider (subcontractor to Wasco Electric Cooperative) to the PáTu substation and transmission provider.
- Wasco Electric Cooperative - Interconnection and transmission provider
- Mountain States Power, contract for interconnection work at substation
- H&N Electric, Pasco, WA – electrical and hydraulic equipment service suppliers

- Tenneson Engineering, The Dalles, OR – Survey and material testing providers
- Pioneer Surveying, Goldendale, WA – substation surveying
- Elcon Associates, Portland, OR – Substation engineering
- Electrical Consultants, Inc., Madison, WI – transformer and substation design
- Power Technology, Inc. Battle Ground, WA – substation steel and electrical work
- Younger Contracting, Oregon City, OR – substation civil works
- Applied Archaeological Research, Inc., Portland, OR – provided the archaeological and cultural studies
- Fullerton & Co, Portland, OR – Construction and operation insurance brokers
- Legal Services – as I mentioned my total legal bill from 2005 through completion is in the $500,000 range. This included law firms such as – McGuireWoods, Charlotte, North Carolina, Ater Wynne, McDowell, Rackner and Gibson and Stoel Rives from Portland and Minnick Hayner of Walla Walla, WA
- Accounting Firms include Hoffman Brobst of Minneapolis, MN, Weaver Tidwell, Houston, TX, and Sharp Associates, Nampa, ID
- And numerous others from suppliers of drinking water and ice, local restaurants, and lodging suppliers,

Yao, I hope you can help me bury the myth that the ARRA 2009 and the Oregon BETC have not created valuable, high paying jobs. Attached you will find the two economic studies from Oregon State University and University of Minnesota. Please let me know if I can be of further help with your study. I enjoyed reminiscing about my time in Jinan and Qingdao – one of these days I hope to return and see the area's development.

Go Beavers!

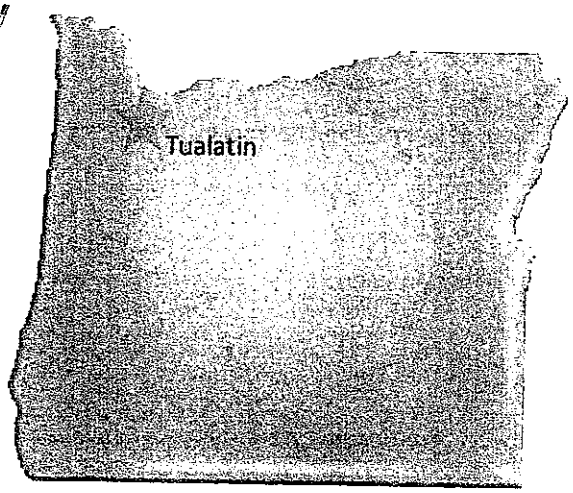
Ormand Hilderbrand
General Manager
PáTu Wind Farm

Cc:
Office of the Honorable U.S. Senator Ron Wyden
Office of the Honorable U.S. Senator Jeff Merkley
Office of the Honorable U.S. Representative Jeff Walden
Office of the Honorable Oregon Representative John Huffman

PáTu Wind Farm
PO Box 347
Wasco, Oregon 97065

Business Energy Tax Credit Success Story

Pacific Natural Foods lights way to greater energy efficiency

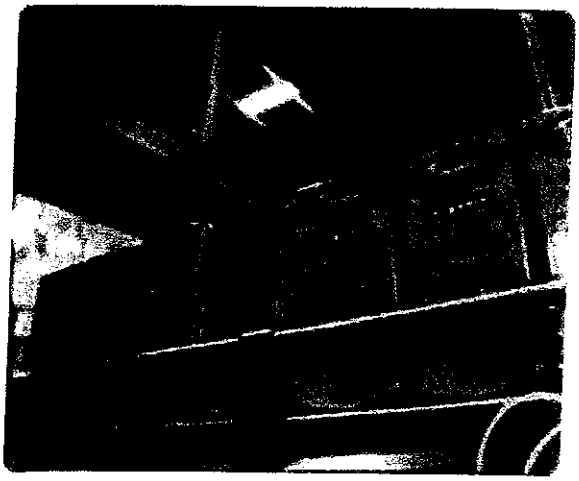


With eleven buildings in their Tualatin operation, Pacific Natural Foods knew where to look for the quickest return on its energy efficiency investment. The company just looked up at the hundreds of lighting fixtures throughout its facility.

With nine buildings now upgraded with high efficiency light fixtures and occupancy sensors, Pacific Natural Foods has cut electricity demand for lighting in half for estimated annual savings of $45, 699. Even better, this project sheds light on other energy savings opportunities, demonstrates the value of the "triple bottom line" (economy, environment, employees) and reinforces the company's core values.

Project Benefits

Financial Analysis



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Wednesday, November 10, 2010, 3:55pm PST | Modified: November 10, 2010, 3:55 PM

Iberdrola begins work on biomass plant

by Christina Williams
Sustainable Business Oregon

-
- 0 Comments

Iberdrola Renewables announced Wednesday the start of construction at its 26.8-megawatt Lakeview Biomass Cogeneration Plant in Eastern Oregon.

The long-anticipated Lakeview project is slated to be producing power, enough for about 18,000 typical homes, by the fall of 2012.

"Iberdrola Renewables, the local community and Collins never lost sight of the vision, and they strongly persevered through numerous setbacks and delays. Now, their faith and effort will pay off in jobs, efficiency, and better health of our forests in the area. As a renewable resource, biomass is a proven technology and will be an important part of Oregon's economic future," said U.S. Rep. Greg Walden, the Republican from Oregon's second congressional district, in a statement.

The project is located about 90 miles east of Iberdrola's Klamath Cogeneration Plant.

The plant will use woody biomass fuel from Collins Pine Company in a combined heat and power facility.

The project, on a 55-acre site, will employ between 150 and 200 construction workers over the next 18 months. The plant is also expected to create 50 jobs in harvesting and transporting fuel for the biomass facility.

The project is valued at about $70 million and may actually improve the region's air quality.

Tim Miller, President and CEO of Green Lite Motors, Discussing BETC and Clean Energy Financing

My name is Tim Miller. I'm the President and CEO of Green Lite Motors. We've prototyped a 100 mile-per-gallon plug-in hybrid vehicle which gives city drivers the safety and comfort of a car along with this super high efficiency.

The BETC and other programs like it are a huge support for companies like ours. It really comes into play when we are talking with investors. They want to see the overall financial picture and how we're getting other forms of support to move our company forward. We would use the BETC both on the manufacturing side (as ours is a plug-in vehicle), and on the sales side. Customers could use the BETC to purchase this vehicle. This would help us as we pursue our business plan -- finding various forms of support and capital to invest in growth here in Oregon.

Green Lite Motors is just one of many companies involved in Drive Oregon, an association of electric vehicle industry companies, all of which could benefit from programs like the BETC -- both in manufacturing, and in sales to businesses in Oregon. One of Drive Oregon's main priorities in the upcoming year is to find ways to use programs like the BETC to help developing electric vehicle industry companies get launched, as well as helping successful, operating companies grow in this industry. We would love to turn Oregon into the clean vehicle capitol of the country, creating jobs and revenue for our state. Programs like the BETC are an essential tool in realizing that goal.

PGE EV installations, Northwest Oregon (districts: 19-22, 23, 33-51)

Source: http://www.oregon.gov/ENERGY/GBLWRM/GWC/docs/09CommissionReport.pdf

A network of electric vehicle (EV) charging stations is emerging in Northwest Oregon as cities search for clean, economical and sustainable transportation options and drivers consider the switch to vehicles that reduce fuel use and emissions contributing to global warming,. Charging stations in key locations will serve drivers using plug-in hybrid vehicles so they can "top off " their batteries and ensure a round trip. The stations also will test the infrastructure to guide further expansion throughout the state as technologies improve and the expected sales of hybrid-electric and all-electric vehicles increase. Nissan, for example, has selected Oregon as one of 2 states to introduce its all-electric car in 2010 for government and commercial fleets. In December 2008 Gresham joined several municipalities offering public charging stations with the unveiling of its two-vehicle plug-in station outside City Hall. The city partnered with Portland General Electric which is developing a network of stations in the region. The PGE network includes 8 locations in Portland, Lake Oswego, Tualatin, Oregon City and Salem, with more to be added. Pacific Power has a station in Corvallis and has plans to expand. Oregon Department of Transportation's Innovative Partnerships Program works with PGE and other partners to encourage demand for EVs by establishing the predictable availability of charging stations at convenient, easy-to-find locations. Oregon's Business Energy Tax Credit helps reduce the costs for businesses and other entities that install the stations.

Oregon Iron Works, Clackamas and Douglas County (district no.19-22; 7)

Source: http://www.oregon4biz.com/story.php?storyID=49

Ocean Power Technologies, Inc., (OPT) recently selected Oregon Iron Works (OIW) to construct its first commercial wave energy PowerBuoy® system in North America, scheduled to be installed off the Oregon coast near Reedsport in 2011. The project is part of the first commercial-scale facility of its type in North America, which will generate approximately 1.5 megawatts of electricity off the Oregon coastal community of Reedsport. The project kicks off a whole new sector in Oregon's renewable energy industry and will mean dozens of full-time, family wage jobs at Oregon Iron Works in Clackamas as well as many others at various subcontractors and vendors working on the project. Eventually, it is hoped the construction of 10 wind power buoys (9 buoys are scheduled to be installed in 2012) would create jobs for another 150 full-time workers at OIW. In addition to the jobs in Clackamas, the building of commercial power buoys, which will be located off the coast of Reedsport, will lead to additional jobs in coastal communities, such as assembly, moorings and maintenance of the wave facility. Sause Bros., headquartered on Oregon's south coast, is expected to play a key role in transporting and deploying the buoy by barge.OPT received a $200,000 matching grant from the Oregon Innovation Council's Oregon Wave Energy Trust (OWET) for permitting and development expenses. OPT also relied on environmental research conducted by OWET, including research into the effect of the buoys on crabs and seabirds as well as sediment studies.

SolarWorld, Hillsboro (33-51)

Source: http://www.oregon4biz.com/story.php?storyID=4

Oregon's semiconductor manufacturing successes are rooted in the groundwork laid by Intel when it located its largest facility in Hillsboro in the early 1970s. That period also marked the beginning of public-private partnerships that helped grow, in Washington County alone, almost five dozen semiconductor firms, which today employ more than 17,600 people. Neighboring communities have thrived with many residents, who comprise the sector's highly skilled workforce, earning on average more than $107,600 per year. The state is a catalyst for bringing together public and private business development partners and industries. In semiconductor manufacturing alone, a vital

cluster has grown that has netted Oregon more than 24,000 jobs, nearly 90 related businesses and annual wages topping $101,000. The state is leveraging these strengths to attract manufacturers of photovoltaic components, and the strategy is working: Oregon has seen four large recruitments over the past year-and-a-half, projecting approximately 1,570 jobs. By next year, Oregon will have more annual photovoltaic production capacity than any other state in North America (more than 600mW). The state played a key role in attracting solar cell producer SolarWorld to Oregon by proposing it take over the never-opened Komatsu silicon wafer production facility in Hillsboro. Similar creative recruiting is high on Business Oregon's agenda for troubled facilities in Forest Grove and Eugene, and the agency is optimistic that Oregon's incentives, skilled workforce and desirability as a place to live and play will help drive similar success stories. In fact, Oregon was recently named the nation's greenest state by *Business Facilities Magazine* in its annual rankings of cities and states, a status the surveyors called "one of the most sought-after accolades for a state or city to receive ..."

Tyree Oil, Eugene (district no.8)

Source: http://www.oregon4biz.com/story.php?storyID=57

Tyree Oil is a distributor of petroleum products and services with branch locations in Eugene, Roseburg, Reedsport and a marine terminal in North Bend. The company is diversified within the industry with significant experience in fuels, heating oils, lubricants, specialty lubricants, cardlocks, fleet fueling, retail stations and common carrier trucking. Most recently, the company has been recognized as a leader in sustainability initiatives and environmentally friendly products, including alternative fuels, such as E-85 ethanol and bio-diesel.Business Oregon helped Tyree Oil's Eugene branch build a new distribution center to supply biofuel for Southern Oregon. This is the first biofuel distribution center in the Willamette Valley. The company received a $100,000 loan from the Governor's Strategic Reserve Fund (SRF) as well as a Business Energy Tax Credit and local matching funds. The SRF loan helped the company retain 64 jobs and create six new jobs.

Rough and Ready Lumber Company, Josephine County, Southern Oregon (district no.3)

Source: http://www.oregon.gov/ENERGY/GBLWRM/GWC/docs/09CommissionReport.pdf

Family-owned and operated for more than 80 years, Rough and Ready Lumber Company in Cave Junction found a way to remain competitive, produce power, reduce carbon dioxide (CO2) emissions and maintain family wage jobs. Located in Josephine County where unemployment is one of the highest in the state, Rough and Ready provides jobs for 85 employees in a community of less than 2,000 residents. The company installed an energy efficient cogeneration facility that both produces electric power and captures waste heat for us in the operation's lumber drying kilns. The renewable energy project qualified for Oregon's Business Energy Tax Credit and Energy Trust of Oregon incentives. Without these incentives, the $5 million project costs would have been prohibitive for a company this size. The energy-efficient 1.2 MW rated wood-fired combined heat and power (CHP) system will produce more than 10 million kWh of electricity from renewable fuel sources, enough for about 700 or more homes. The system burns its sawmill waste, plus logging debris and woody materials from forest thinning operations on nearby private and public forest lands that otherwise would have been burned without the benefit of power and heat generation. Rough and Ready's CHP system provides public land managers with additional options for achieving forest health and economic tools that reduce the cost of thinning national forests at high risk from catastrophic wildfires. Large fires

contribute significantly to CO2 and other emissions that contribute to global warming and create health risks for Oregonians. These activities also keep $100,000 in energy dollars per year in the community by employing locals to thin fire-prone forests or recover waste wood as fuel.

Vestas, Portland, Oregon:

Source:http://www.sustainablebusinessoregon.com/articles/2010/08/vestas_moving_headquarters_to_the_pearl_adding_100_jobs.html?surround=etf

Wind turbine giant Vestas Wind Systems A/S on Wednesday said it will lease an old Meier & Frank warehouse in the Pearl District and turn it into a 172,000-square-foot gleaming new headquarters.Oregon Gov. Ted Kulongoski, Portland Mayor Sam Adams and Vestas Americas President Martha Wyrsch announced the news in a press conference at City Hall at noon. Vestas received both state and city incentives for the $66 million project, which is expected to create 600 construction-related jobs.The company received $1.25 million in state tax credits and another $1 million from the state's strategic reserve fund.

The agreement stipulates that the company, which employs 400 locally, must add at least 100 jobs within the next five years. Once built out, the building will have room to house 600 workers as Vestas continues to grow.The city will give the company a 15-year, interest-free loan for $8.105 million. The company is expected to repay the loan within five years, Adams said.Construction will begin in October. Vestas plans to move to the building in early 2012. It will occupy 133,258 square feet of office space. The remaining 39,000 square feet is a parking garage. (For more on the lease see: "Vestas lease may revive office market.") The announcement will end years of speculation about the company's future in Portland.

In December 2008, the Danish company said it would build a roughly $250 million, 600,000-square-foot new North American headquarters in the South Waterfront. The building could have eventually housed 850 jobs.Vestas employees are spread out across several buildings downtown.

The news is a big win for both Kulongoski and Adams, who have pinned much of the state's economic future to the development of the green economy.Portland-based Gerding Edlen Development Co. bought the Meier & Frank Delivery Depot, 1417 N.W. Everett St. in the Pearl District, in October 2007 for $15 million.

Gerding-Edlen, which is known for its green buildings, planned to start renovating the building in May 2008. That plan also stalled when the economy slowed.The building, 1417 N.W. Everett, was erected in 1927 and added to the National Register of Historic Places in 2001.Also Wednesday, Vestas parent company Vestas Wind Systems A/S reported a 17 percent drop in second-quarter revenue to about $1.3 billion and downgraded its full-year sales and earnings forecast, sending its shares — traded on the Danish stock exchange — down nearly 20 percent to a new yearly low.Yet second-quarter sales for Vestas' Americas division — a region that spans both North and South America — more than tripled to $530 million, living up to its billing as the company's biggest growth market.

ZeaChem

FOR IMMEDIATE RELEASE

ZeaChem Meets Key Financial Milestones in Biorefinery Construction

Project on Schedule to Begin Production of Cellulosic Ethanol in 2011

Lakewood, Colo. – December 7, 2010 – ZeaChem Inc., a developer of biorefineries for the conversion of renewable biomass into sustainable fuels and chemicals, today announced the accomplishment of two key financial milestones in the construction of its 250,000 gallon-per-year biorefinery in Boardman, Ore. First, the company has obtained a guaranteed maximum price (GMP), under the Engineering, Procurement and Construction (EPC) agreements with engineering firm Burns & McDonnell, for construction of the core facility. The core facility will convert sugars into acetic acid and then ethyl acetate, the chemical precursors, under ZeaChem's process, to the production of ethanol. Second, ZeaChem has secured full construction funding for the core facility. The $25 million grant from the U.S. DOE will be used to fund the independent front and back-end cellulosic process components, enabling ZeaChem to produce fuel grade ethanol as well as intermediate chemicals from non-food related biomass.

"Since 1898 we have built a reputation of making our customers successful with practical technology advancements and predictable costs," said John Nobles, President, Process & Industrial Group at Burns & McDonnell. "We look forward to helping ZeaChem deploy their technology."

The core unit of the biorefinery is currently under construction at the site location in Boardman and foundations are being poured.

"ZeaChem has successfully completed the financial milestones to ensure that our biorefinery project can be completed on budget and on schedule," said Jim Imbler, president and CEO of ZeaChem Inc. "We look forward to beginning cellulosic ethanol production in 2011."

ZeaChem will develop commercial scale biorefineries upon successful operations at the Boardman facility.

# # #

WIND: DOE offers loan guarantee to massive Ore. turbine project (10/11/2010)

Emily Yehle, E&E reporter

The Department of Energy plans to provide a loan guarantee to the world's largest wind farm, increasing the agency's total loan guarantees or conditional commitments to almost $16 billion.

If approved, the loan guarantee will help fund the Caithness Shepherds Flat wind project, an 845-megawatt electric generating facility in eastern Oregon. The project was delayed earlier this year when the Pentagon raised concerns that the turbines would interfere with radar signals, but Defense Department officials dropped their opposition in April.

Now, DOE hopes to help get the project off the ground by providing a partial guarantee for a $1.3 billion loan. The conditional commitment brings to 15 the total projects under the DOE's loan guarantee program, which is partly funded by the American Recovery and Reinvestment Act.

"Thanks to the Recovery Act, we are creating the clean energy jobs of the future while positioning the U.S. as a world leader in the production of renewable energy," Energy Secretary Steven Chu said in a press release last Friday. "This project is part of the Administration's commitment to doubling our renewable energy generation by 2012 while putting Americans to work in communities across the country."

Sponsored by Caithness Energy LLC and General Electric Co., the Caithness project consists of 338 GE wind turbines "designed to provide high efficiency and increased reliability, maintainability and grid integration," according to the release. The facility will avoid the equivalent of greenhouse gas emissions from 212,141 passenger vehicles and will provide 400 construction jobs and 30 permanent jobs.

According to the DOE release, the Caithness loan is expected to be funded by "institutional investors and commercial banks" led by Citi, as well as the Bank of Tokyo-Mitsubishi UFJ Ltd., RBS Securities and WestLB Securities Inc.

The facility is the largest project to receive a conditional loan guarantee from DOE so far. The department's program aims to cut greenhouse gas emissions by accelerated private-sector technology.

But the program has often been criticized for delays; DOE authorized its first loan guarantee this year, four years after the program launched. It has now finalized four loans and offered conditional commitments to 11 more. By next October, the agency is required to disburse billions of stimulus dollars in renewable energy loan guarantees, and DOE officials have said they are on track to speed up the awarding of such guarantees.

I am based in Newport and Portland, Oregon, Oregon Senate Districts 5 and 18. An attorney and consultant in energy and sustainability related matters, and also Indian and tribal law, my work is about one-half on the coast and one-half elsewhere.

Several years ago I considered relocating to another state with policies more supportive of sustainability and best practices in energy and water use. Then Oregon began adopting policies that showed the state's governing bodies were aware of the significance of these issues and put state muscle into incorporating them in the government and private sector. The state incentives such as the BETC, in particular, helped move my business along in this direction because, unlike the Energy Trust, the tax credits apply across the state regardless of utility, and much of the central coast is served by a non-Energy Trust utility.

My business has employed part-time assistance, occasional contractors, and helped support a family on the central Oregon coast. In the last three years I have presented to many lay and professional audiences in rural and metro Oregon, in energy and sustainability matters, and provided in depth energy related technical legal and consulting assistance to at least five business clients, not to mention informal consultation to dozens of companies and individuals. I have facilitated several comprehensive energy conservation projects for a large employer through the Energy Star, an agricultural facility from OSU energy conservation, and various residences through the Oregon Energy Trust.

As a ten year member of the Oregon State Bar, I was recently Chair of Bar section in the Bar, an entity with over 125 FTEs, 60,000 square foot building, and membership of around 16,000 lawyers, and assisted the Bar in becoming more aware of sustainability and energy issues. I currently serve on a committee that continues to work with the bar and other lawyers in sustainability and energy conservation. Because the Bar members have a wide-ranging value set, it is far easier to work with this organization and point to the financial value that is gained by implementing energy conservation and renewable technology. It has been very helpful to show how the state's policies support energy use improvements. In order to persuade an entity like the Bar it takes time and consistent policy demonstrating that energy conservation and clean energy make good sense.

Now I have acquired my certification as a Women Business Enterprise and Emerging Small Business. I look forward to employing at least 2-5 people in the next two years, offering full- and part-time jobs, and employing or negotiating for

others to employ contractors to perform energy related work on the coast and elsewhere. I have clients interested in pursuing energy conservation and renewable energy at community, business, and household levels. These clients have put up their own money to help evaluate the resource, seek grants and other means, and they struggle to finance these projects. For example, the feasibility study funding programs for renewable energy projects, such as the Community Renewable Energy Feasibility Fund ("CREFF") are phasing out, and the Business Oregon funding that provides funding to local governments for renewable energy project feasibility studies, therefore a wind energy client who would like to study how a community scale project might work on the coast is uncertain whether there will be any feasibility funding assistance in areas not served by the Energy Trust. Not knowing whether the CREFF funding would continue to next year, the client was obliged to try for the grant at an early stage. In another example a commercial agricultural client will not be able to implement a highly efficient solar thermal improvements due to the cap on the BETC unless some financial incentive allows him a more reasonable return on investment. The uncertainty is extremely difficult to navigate even though clients are willing to try and to put up their own capital, not to mention substantial sweat equity. Frequently these projects are either community or smaller scale and Oregon has a goal to meet 8% of its RPS with community scale renewable energy. With some central coast communities, like the City of Newport, just beginning now to actively plan sustainability improvements in earnest, the community scale is very important and should be fostered.

Also, the Clean Energy Works program which apparently has provided Portland with substantial funding for energy conservation work in existing home in Portland is just now starting to establish in other parts of Oregon, such as Astoria. However, it is difficult to track how to seek more assistance through that avenue, and since that is limited there will be need to have other options available.

Assuring feasibility funding is available for a predictable amount of years would help those just starting to engage either newer technologies, or tested technologies in new places to count on some assistance in the beginning of a project. Extending the BETC through 2016 would provide a level of market confidence that incentives will be there when projects are ready. Just as many studies have demonstrated in other states and countries, investing in energy projects, especially at the community level, will continue to rebuild the Oregon economy and bring multiplier effect benefits to our communities. Clean energy is an important tool we must use to build Oregon's economic, energy and environmental future.

Thank you,

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CENTRAL OREGON IRRIGATION DISTRICT
JUNIPER RIDGE HYDROELECTRIC PROJECT
Business Energy Tax Credit Status

- $24 Million project annually generating renewable power for 1,400 homes in Central Oregon and improved water quality and habitat in Deschutes River by permanently restoring 20cfs instream
- All power purchased by Pacific Power and stays in Central Oregon
- Generated work for 95 people in Oregon
- Project completed on schedule and on budget October 4, 2010
- Issued Pre-Certification letter on July 22, 2009 as Pass-Through Option
- Pre-Certification of preliminary certified eligible cost $12,532,290
- Application for Final Certification delivered to ODOE on October 15, 2010
- Received postcard from ODOE acknowledging receipt of Application for Final Certification post marked October 22, 2010
- Pre-Certification amount of $12,532,290 yields a pass-thru amount of $4,198,317 to COID
  - Federal grant funds received for project $3,250,000
  - Issue of adjusting BETC impact ($1,088,750)

ISSUES

- COID's project financing was carried under ODOE's Small Energy Loan Program that specifically incorporates the originally expected BETC pass-thru amount of $4,198,317 in a loan buy down of $5MM in 2011. If the BETC pass-thru portion is reduced by the $1MM it jeopardizes the loan agreement with ODOE and COID's credit position.
- COID's Application for Final Certification must be deemed "complete" by December 31, 2010 or COID will not be eligible to market its BETCs until 2012. There has been no communication from ODOE or returned calls on the application's status to date.

REQUEST FOR CLARIFICATION FROM ODOE / STATE OF OREGON

- COID is not a taxpayer as it pertains to ORS 315.356 and therefore not subject to the federal grant offset to the BETC pass-thru amounts.
- ODOE must determine Application for Final Certification "complete" before Dec 31, 2010

Yocum & Sun
1788 N Valley View Road
Ashland, OR 97520

The Business Energy Tax Credit (BETC) Story
Of
Yocum & Sun

January 6, 2011

Yocum & Sun is a business named owned by William H and Cathy A Yocum that has been providing commercial products in Oregon for over 30 years. Since 1990 Yocum & Sun has been a commercial operation that is focused on the sale of products from the management of 81 acres of agro-forestry land and residential rentals (e.g., vacation rental). The most recent focus has been the development of Organic Vegetable crops with the specialty of providing vine ripe tomatoes to the local market. We have three active personnel in the business.

In December, 2009, Yocum and Sun installed two 1.2KwH wind generators and in May 2010 we added a 5.5KwH Solar Array. Both products were manufactured and produced in the USA. The electricity from the wind generator and solar array helps to offset a portion of the Yocum and Sun electrical demand. The electrical demand includes the pumping of irrigation water from a 600' deep well, climate control for an 18'X30' greenhouse including grow lights during the non-summer season, stoves and dehydrators, lights and office equipment.

Currently Oregon is not very business friendly but the Oregon Business Energy Tax Credit is a good program and promotes a positive business climate in which we hope to grow.

We have had some positive and negative experiences with the Oregon Department of Energy (ODE) BETC process. We applied for the wind BETC in January of 2010 and were denied the tax credit because application was not submitted prior to installation. I appealed this decision based on the lack of BETC information known by me and my installer plus the outcome is the same if the application was submitted prior to or just after installation. The appeal was denied by ODE and we decided to cut our losses and apply for the Oregon Energy Tax Credit through the Residential Energy Tax Credit (RETC). This reduced our tax credit from $9,700 to $3,000. This cost us not only a greatly reduced tax credit, out-of pocket dollars and much time but it also held up the processing of our Oregon Tax Return until October 18, 2010. The BETC process for the solar array went a lot smoother and at this time we are very pleased with the outcome.

The US Department of Treasury also has an energy business tax credit. This process is quite different than the Oregon process. It would be most efficient if the federal and state coordinated their process and minimized the duplication and application process. I would be willing to provide input on how these two processes could be streamlined.

We will continue to invest in this great State of Oregon. The amount of our investment is influenced by the competitive environment and the business support from the State. Extending the BETC through 2016 would help to improve the business climate for the State of Oregon.

Question can be addressed to Bill Yocum at YocumAndSun@gmail.com. Thanks for your time and interest in making Oregon a better place to live.

William H Yocum, Yocum & Sun

m·nlb
MAZZETTI NASH LIPSEY BURCH

More Smolts, Less Volts

Amy Jarvis, PE, LEED® AP BD+C, Mechanical Engineer, Mazzetti Nash Lipsey Burch

Providence Health Services has been a local, regional, and national leader in providing healthcare services and sustainability within healthcare organizations for over 100 years. Providence Health Services has also been particularly innovative and aggressive with its energy-related sustainability plans and facilities within Oregon due to the presence of the Business Energy Tax Credit (BETC) program. The program offers tax credit to those who invest in energy conservation, recycling, renewable energy resources and less-polluting transportation fuels, while also creating jobs in the process.

Although Providence Health Services has received BETCs for numerous projects throughout their system, this case study focuses on improvements made to the Providence Portland Medical Center (PPMC).

Background. PPMC has been setting a standard for healthcare in Portland for the last 64 years. In 1947, the original facility opened which had self-contained steam and water. In addition, PPMC was the first Portland area hospital to have air conditioning which was accomplished through brine chilled water. This has allowed for increased patient comfort and connection to the community. Furthermore, the facility has achieved an Energy Star rating based on the building's performance over the last several years.

Providence Health Services tracks energy and water usage in all hospitals system-wide on a monthly basis which allows for further energy reduction, setting a standard for healthcare organizations. Their mantra used over the last 20 years, of "more smolts, less volts", underscores the importance of saving energy to maintain a healthy environment for all living creatures.

PPMC Improvements. Approximately eight years ago, Providence Portland Medical Center completed a variety of central plant upgrades to allow significant energy savings. Five years ago, a new 490,000 square foot cancer center was constructed. The combined projects created both construction jobs during the upgrade and for consistent operations and maintenance considerations. The following features of the central plant upgrades are particularly unique:

- The chilled water system uses variable primary pumping with a water side economizer. This allows for both energy savings from pumping and the ability to fully shut off chillers in the winter when cooling loads are low. Moreover, the use of high quality differential pressure valves allows for increased control and thermal comfort in hospital spaces.
- Three existing boilers were reused, retuned, and retrofitted with a stack economizer and O2 sensors. By reusing these boilers, PPMC was able to reduce their carbon footprint from waste disposal while also reducing their energy usage. A fourth boiler was added as part of this project to allow for future expansion.
- The central plant control room design is critical to maximize functional efficiencies. PPMC completed a full mockup of the room, which is extremely unique. In completing this mockup, PPMC not only created additional construction jobs but also allowed facility personnel to shape

Community Renewable Energy Association

COMMUNITY RENEWABLE ENERGY ASSOCIATION

Government

Columbia Gorge Community College

Eastern Oregon Rural Alliance

Farmers Irrigation

Gilliam County

Harney County

Hood River County

Lake County Resources Initiative

Middlefork Irrigation

Morrow County

MCCOG

Oregon Department of Energy

Sherman County

Union County

Wallowa County

Wasco County

Wheeler County

December 8, 2010

USING BETC TO BALANCE OREGON'S BUDGET
*** THE MYTHS ***

Oregon is undergoing severe budget short falls. Oregon public officials are actively looking for ways to reduce budget expenses to save State funds. Some of their measures make financial sense. Unfortunately, mixed in with their actions are some decisions made in good faith that actually cost the State much more than is saved.

Myth 1:

We can save millions of dollars by stopping out-of-control state spending from the Business Energy Tax Credit program (BETC). We need to dramatically reduce/eliminate BETC to the wind industry and put stringent caps on other renewable projects.

Reality:

A BETC is only awarded when a renewable energy development/manufacturing project is built and on-line.

A BETC is only awarded after jobs have been created, new Oregon businesses have been started or expanded, new investments made, new revenue is available from jobs, income taxes, property taxes, and local spending has taken place to support the business and their families.

After the project is built, the state foregoes a certain amount of projected income tax revenues over a period of 5 years in return for the business investing and locating in Oregon. During the tax credit period, the state still benefits from new jobs, new job income taxes, property taxes, project spending, development costs, and many other financial benefits. After the five-year credit period, the full income tax benefit of the business investment and new employees is taxable into the future.

The State writes no check when it approves a BETC tax credit. As will be shown in this document, not making BETC available to eligible renewable projects actually costs the State far more than it saves.

As noted in a 2009 ECONorthwest study "ECONOMIC IMPACTS OF OREGON ENERGY TAX CREDIT PROGRAMS IN 2007 AND 2008" states:

> "Expenditures made through ODOE programs affect the Oregon economy *directly*, through the purchases of goods and services in this state, and *indirectly*, as those purchases, in turn, generate purchases of intermediate goods and services from other, related sectors of the economy. In additions, the direct and indirect increases in employment

Industry

Coats Ranch

Columbia Energy Partners

Ecofys US

Energy Vision LLC

Northern Power Systems

Oregon Community Energy

Oregon Power Solutions

Oregon Rural Action

Oregon Trail Wind Farm

Oregon Wind Farms

Proctor's Transport

Richardson and O'Leary

Symbiotics LLC

Western Community Energy

Western Wind Power

and income enhance overall economy purchasing power, thereby *inducing* further consumption – and investment-driven stimulus.

This cycle continues until the spending eventually leaks out of the local economy as a result of taxes, savings, or purchases of non-locally produced goods and services or "import."

http://www.oregon.gov/ENERGY/CONS/docs/BETC_RETC_Impacts-020209_FINAL.pdf

Myth 2

There are no jobs in Wind Energy Projects

Reality:

One of the barometers Oregon seems to use to promote the idea of jobs in renewables is to point to the emerging solar manufacturing industry.

CREA supports all community renewables including solar and its manufacturing. Their jobs are real and most important. .

Solar development jobs take place at the beginning of a project. Their involvement on any particular project ends once the project is completed

Wind has a similar development cycle to solar. Wind uses highly paid specialists from all over the state:

- Union electricians for everything from turbine wiring to wind farm balance of plant cabling to substation construction
- Union crane operators – 2-4 cranes for every project
- Iron workers for turbine erection
- Truckers for hauling components
- Foundation experts
- Local cement batch plants.
- Civil construction workers for foundation, road and site preparation
- Meteorologists
- Civil engineers
- Electrical engineers
- Biologists consultants for all of the possible environmental impact issues
- Permitting companies like CH2M Hill and others
- Attorneys and accountants for contracts, power purchase agreements, forming of corporations

In the Mid-Columbia region of Oregon, these crews have been in permanent residence for several years, moving from one project to another. With the number of projects in the pipeline that have still not reached the BETC Pre-Certification stage yet, it is likely they will be there well into the future. They shop at local stores, stay at local hotels, eat at local restaurants, pay Oregon property and income taxes and become part of the local economy.

When you look at the ratio of urban solar manufacturing jobs compared to the number of rural high wage wind project construction jobs, the wind industry holds its own and may actually generate more jobs and revenue per project.

The real difference in wind development jobs versus other technologies shows up once the project is built.

A typical 100 MW wind project will retain 7-10 skilled employees as wind turbine technicians, supervisors, secretaries, and others. These well paid jobs will remain for the 20 or so years the project is in operation.

The Columbia Gorge Community College has created a Wind Turbine Technician program to meet the needs of developing wind projects. They have a hard time keeping students in the program because the demand for new jobs is so high that developers frequently hire the students out of class without completing the training. A recent job analysis of existing and anticipated wind jobs in Oregon was conducted by the college. The study shows jobs growing to approximately 600 - 700 permanent skilled wage technical positions over the next 5-10 years with about ½ of these jobs already in place.

Myth 3

Our changes in BETC have not affected business development in Oregon

Some officials have stated that new wind-energy developments are still coming unabated!

Reality:
This is partially correct, but doesn't consider the full impact of what is actually happening.

There are a large number of large, medium and smaller-sized Oregon renewable development projects going through siting at the Energy Facility Siting Council or through the county Conditional Use Permitting process.

These projects have been under development for a number of years with millions of dollars spent to ready them for the BETC pre-certification process. Businesses cannot afford to walk away from their investments late in their development. This trend will continue for a few short months until they get the project defined enough for pre-certification application. The few projects that are now being pre-certified will continue to move toward completion until it is no longer possible to get a pre-certification because of the biennial cap, or because final certification is not possible before the 2012 sunset date.

The commercial and community renewable industry is very discouraged with Oregon's lack of appreciation for the tremendous benefits they have brought to the state. If we cannot reverse some of Oregon's roadblocks, a large number of these developers will quietly move newer projects to more hospitable climates that are more competitive.

Myth 4

We have protected smaller community scale renewable projects. Their benefits will continue.

Reality:

In the last two legislative sessions, the legislature and Oregon Department of Energy (ODOE) recognized the benefits of smaller community scale projects (10 MW and less). They decided to keep the BETC level for community scale projects. To contain "out-of-control" BETC spending, they established spending caps on all renewable projects.

To allocate the remaining BETC amounts under the cap (about $80 million when established in February 2010), the legislature created three tiers to be established by ODOE. **Unfortunately, the cap has essentially stopped all but a few projects from being further developed.**

Reason:
Community renewable energy projects range from 10 MW small hydro, community wind, biomass, wave energy, geothermal, to smaller net metering projects like solar and small wind.

It can take hundreds of thousands of dollars to prepare a community scale project for BETC pre-certification. These dollars come not from corporate

coffers but from local farmers, local governments, small businesses, and citizens. They will only invest these dollars if they believe they have a chance to fully finance and complete a project.

On smaller community scale projects, BETC is a critical component of project financing. This is the real reason the program was implemented many years ago — to provide a program to assist smaller renewable projects. In 99% of community scale projects: **No BETC = No Project**

Engineering design, local permits, planning and siting costs including environmental studies, financial modelings, lining up financial partners are all parts of getting a project ready. The list is endless to prepare a project for submittal for a BETC. On larger community projects, it can take several years to go from concept to BETC pre-certification.

The State's new process requires applicants to spend several years and hundreds of thousands of dollars to prepare for siting the project. When the application is made, projects are periodically reviewed by ODOE in competition with other widely ranging types from Oregon communities. Because of the very limited amount under the cap, few are allowed to move ahead. If the project, however good, is not selected and the applicant still has a viable project, reapplication is required and must compete again with all other projects in yet another queue.

ODOE recently made selections in the Tier Two ($500k to $6M renewable projects) level.

There were 33 applicants. They eliminated several because they didn't meet ODOE's application standards. Of the rest, 10 were chosen.

33 applicants – 10 selected.

- 23 projects will not create Oregon jobs
- 23 projects will not pay income taxes, property taxes, will not support schools, or generate business activity in their communities.
- They would have only received a BETC tax credit if they built their project and if it performed as stated in the BETC pre-certification.
- There would have been no State funds expended to encourage these 23 projects to build and provide the significant benefits they would have generated.

In a letter to ODOE and the Governor's Office, Brett Pingree of Northern Power announced that his company has made a business decision to leave Oregon (His letter is attached at the back of this document).

He states: "Sadly, we find that, as a business, we must move to states where project development is economically feasible. Oregon has given up its competitive edge for community renewables to other states in the misguided belief that not offering BETC is somehow saving money"

Myth 5

Large commercial wind projects are mature and do not need BETC

Reality:

Commercial Wind in Oregon has redefined rural Oregon economic vitality in the Mid Columbia and northern regions of Oregon. These projects have injected more economic funds into depressed rural counties than any state or federal program of job creation or economic stimulus has seen in at least 30 years. New libraries, new school programs, hundreds of good wage jobs for local communities; good union wage jobs for electricians, iron workers, construction

companies, crane operators and many other crafts. Huge cash flow streams for local restaurants, hotels, gas stations, and other merchants.

The loss of BETC becomes a more complex issue when discussing large commercial wind projects. Depending on their individual project financing and size, the lack of a BETC might be correct, and then again, depending on circumstances, losing the BETC might drive projects out of the state, due to competition that is better elsewhere.

Big wind has 50 states to build in. If they chose Oregon over the other 49, it is because something in Oregon brings them here. The reality is that Oregon is not necessarily competitive with other states and cutting BETC only compounds the problem.

A US Department of Energy report titled "2009 Wind Technologies Market Report" contains a study of the condition of commercial wind in the US. In every category of measurement; power prices, wind capacity, installed MW's, installed manufacturing, and other economic indicators, Oregon is middle of the pack or lower when stacked up against other regions in the country.

http://eetd.lbl.gov/ea/ems/emp-ppt.html

Added to Oregon's lower winds, higher taxes, rigorous and costly siting requirements, the unrealistic sun-setting date of BETC, and other disincentive policies, their leaving becomes much more likely.

CONCLUSIONS

Oregon is undergoing some of the worst budget shortfalls seen in years. Dramatic changes to state policies, organizations, and budgets are a necessity. The changes have to be surgical and create real financial benefit, not cause unforeseen financial losses.

The biggest myth is that state dollars will be saved by cutting/eliminating BETC. This "truth" is becoming accepted even though the facts are not on the table.

During this period of Oregon's financial distress, we need to be implementing programs that encourage job growth and business development, not creating policies that stifle development and push businesses out of state.

New community scale and large commercial renewable projects generate jobs, create funding for schools, local governments, entice new manufacturing and actually bring new revenue to the state General Fund. These benefits begin the day the project starts development; creating new jobs, parts procurement, engineering, etc. These benefits continue after the project is built and increase dramatically once the project comes onto full taxability.

In the end BETC is not an expense to Oregon, rather BETC stimulates economic benefits to the State even before the BETC can be used.

Recommendations:

- Reinstate BETC for community renewables energy projects and commercial wind
- Extend the BETC sunset date for renewables. At its current expiration date, all renewables must apply for BETC Pre-Certification by June 30, 2012; but the State will not pre-certify many months before because projects cannot be completed in the short period of time. This is a totally impractical sunset date and is a bad signal to business.

- Consider changing BETC pass-through from an ODOE function to one set by the market place. At present, recent changes have made the pass-through program meaningless because few to no pass-through partners can be found or can afford to take the risks due to current state-established pass-through rates.
- Wherever possible, eliminate caps that create a lottery atmosphere that creates doubt about being selected for development of the project.
- Put back in place the philosophy:

IF YOU BUILD AN ACCEPTABLE RENEWABLE ENERGY PROJECT, THE BETC WILL BE THERE FOR YOU

Project Description: Midwest Community Wind Project

Project Type: Wind
Project Location: Midwest United States

Project Overview/Description:
Located in the Midwest United States, the community location of this project boasts natural wind resources. Using those resources, the county is aiming to be the first community in its state to generate wind power for the benefit of a school corporation and a city. It all started with a science teacher's idea to build a small turbine for classroom education. The school system and city realized that they could also generate profits from the sale of renewable energy.

With the promise of revenue from carbon credits and electricity sales, the community decided to construct two 330 foot, two-blade turbines—one for the school corporation and the other for a nearby city. Each 1 MW turbine is estimated to produce 2,200 MWh's annually, equivalent to powering 250 homes per year.

The project developer will own the turbines for the first five years. It will then transfer ownership to the city and school. However, the city and school will begin receiving revenue from the sale of electricity to a regional utility immediately—generating a key source of funding for local budgets. It will also provide local students with green technology learning opportunities.

The superintendent of the school corporation said: "Students will have an opportunity with our wind project to learn about alternative energy and receive training on the maintenance of an operational wind turbine. This has been a wonderful opportunity to develop a partnership that combines economic development, collaboration, education, and environmental stewardship."

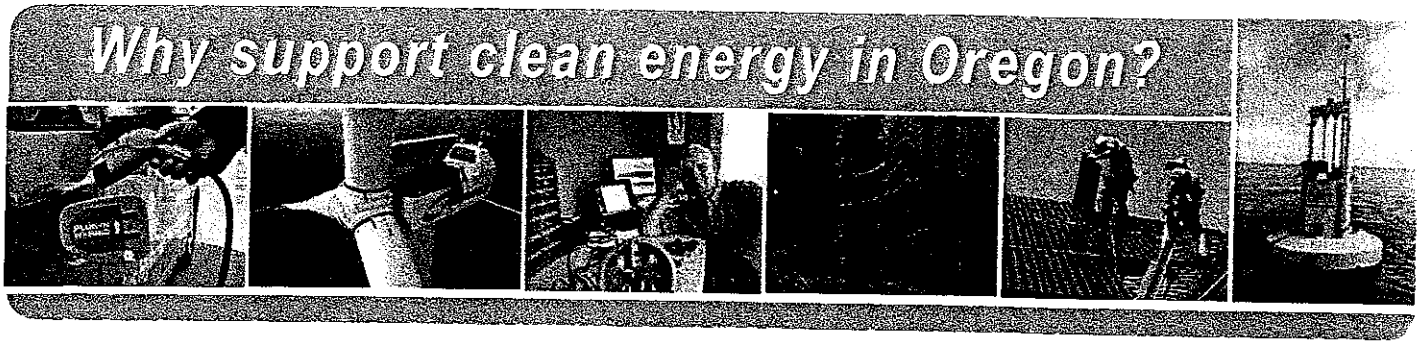
Project development depends on the receipt of revenue from carbon credits. *Native*Energy is making an upfront purchase of the ten year stream of carbon reductions to enable this project to meet its goals. Once built, the turbines are expected to generate income for the city and schools over the next 25 years.

Sustainable Development Benefits
This project will avoid a total of 30,000 tonnes of CO_2 emissions during the first 10 years of operation. The sale of carbon credits and electricity will also provide badly-needed revenue to a local school system and city government. Finally, it will provide green technology education for local students.

Project Participants
This project is a collaborative effort between the school corporation, the city, the developer, and *Native*Energy.

Validation and Verification
The project's emissions reductions will be validated and verified to VCS or Gold Standard.

Why support clean energy in Oregon?



• In 2007, Oregon led the nation with more clean energy jobs per capita than any other state. *1*

• By 2007, Oregon recorded a total of 19, 340 clean energy jobs with an annual average growth of 4.77% from 1998-2007. *1*

• Clean Energy promotes small business growth. Over 75 percent of the clean energy businesses in the Portland area have fewer than 20 employees and their wages are 25% higher than the regional average. *2*

• Direct clean energy jobs in Oregon and Washington, based on medium growth projections, could increase 68% by 2015 in just the solar manufacturing, wind development, green building services, bioenergy, and smart grid industries alone. *3*

• In four years' time, seven solar manufacturers set up operations in Oregon, creating 2,100 jobs and bringing $1.7 billion in capital investment. Within five years these facilities are projected to generate $1.5 billion of revenue annually and add 2,000 more family-wage jobs. *4*

• Oregon is home to some of the most prominent clean energy companies in the world, including Vestas, Solarworld, Clear Edge, Sanyo Solar, Iberdrola Renewables, and Greenwood Resources.

• The 2010 ACEEE State Energy Efficiency Scorecard ranks Oregon 3rd in the nation for local implementation of energy efficiency programs. *5*

• A recent analysis showed that Oregon industries could generate savings of $260 million per year in energy savings. The savings can be used to invest in marketing, new products, labor and more to keep Oregon companies in Oregon. *6*

• Energy efficiency jobs, such as electrical re-wiring, construction engineer, and window-replacement, are performed on-site and cannot be outsourced to other countries. Similarly, Wind projects in the Columbia River Gorge and Eastern Oregon are employing local technicians to provide on-going maintenance for their projects. Many of these rural counties welcome clean energy projects that can boost their recession-hit local economy, and reinvest earned incomes into the community. *7*

• The conversion of woody biomass to energy in Oregon presents a unique opportunity to simultaneously address three challenging needs: restoring forest health, fire resiliency and wildlife habitat, finding renewable energy alternatives, and revitalizing rural economies. *8*

• Delay is costly. Economic benefits of energy efficiency and renewable energy accrue over time. Inaction cedes competitive advantages to other countries. *9*

1 The Clean Energy Economy: Repowering Jobs, Businesses and Investments Across America, PEW Charitable Trusts, June, 2009.
2 City of Portland, Small Business Bill of Rights, 2007.
3 Carbon Free Prosperity, Climate Solutions and Clean Edges, 2008.
4 Renewable Energy & Economic Development: Real Examples from the Pacific Northwest, Renewable Northwest Project, 2010.
5 The 2010 State Energy Efficiency Scorecard, American Council for an Energy Efficient Economy, October, 2010.
6 The "Industrial Use Roadmap to 2020", a report to the Oregon Global Warming Commission, Sept 8, 2010. Research conducted by Mark Kendall
7 County needs wind project, The Observer, October 2010.
8 Biomass Energy and Biofuels from Oregon's Forests, Oregon Forest Resources Institute, June 2006.
9 "http://www.eesi.org/clean-energy-jobs-trends-and-potential-growth-22-oct-2009" http://www.eesi.org/clean-energy-jobs-trends-and-potential-growth-22-oct-2009

Coalition to Support Clean Energy:

Associated Oregon Industries
Association of Oregon Counties
Cascadia Green Building Council
Climate Solutions
Community Renewable Energy Association
Drive Oregon
League of Oregon Cities
Northwest Energy Efficiency Council
Northwest Environmental Business Council
Oregon Conservation Network
Oregon Environmental Council
Oregon Forest Industries Council
Oregon Small Wind Energy Association
Oregon Solar Energy Industries Association
Oregon Wave Energy Trust
Renewable Northwest Project
Smart Grid Oregon

"In 2007, Oregon led the nation with more clean energy jobs."