ARRA State Energy Program (SEP) Awards
Last Revised: June 2012

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U.S. DOE’s SEP Strategic Plan establishes the following four goals:

- Increase energy efficiency to reduce energy costs and consumption for consumers, businesses and government.
- Reduce reliance on imported energy.
- Improve the reliability of electricity and fuel supply and the delivery of energy services.
- Reduce the impacts of energy production and use on the environment.

**Energy Efficiency & Renewable Energy Loan & Grant Program – $38.5M**
In October 2009 Commerce reviewed over 100 applications for the first round of the State Energy Program (SEP) Energy Efficiency & Renewable Energy Loan & Grant Program. Requests totaled approximately $200 million, 10 times the amount of available funding. We selected 19 high quality projects. In February 2010 Commerce received 48 applications for the second and final round of competitive funding. A variety of public and private entities from across the state requested nearly $60 million, about three times the amount of available funding. The funding awarded to grantees that opted out in rounds one and two was reallocated to qualified projects in a non-competitive third round.

*Successfully negotiated Round One Loan & Grant Program agreements:*

- **Barr-Tech**
  Project: Anaerobic digester
  Award: $799,734 ($527,824 loan / $271,909 grant)
  (Lincoln County) Project involves an anaerobic digester for processing local food waste.
  Estimating 117 permanent, 41 temporary jobs, and leveraging $9.7 million in additional funding.

- **Cedar Grove Composting**
  Project: Food and yard waste anaerobic digester
  Award: $1,000,000 grant
  (Snohomish County) Project involves planning for a food and yard waste anaerobic digester.
  Estimating four permanent jobs and 24 temporary jobs, and leveraging $8 million in additional funding. Largest single dedicated yard waste composting facility in the U.S.

- **Farm Power Lynden – Contract Closed**
  Project: Manure digester to produce electricity
  Award: $1,063,000 grant
(Whatcom County) Farm Power Lynden produces energy from what many would consider an unlikely source – cow manure. In a process known as anaerobic digestion, microbes produce biogas as they break down manure piped in from a nearby dairy. The biogas is burned in a generator to produce electricity that is sold under a 10-year contract to Puget Sound Energy. Anaerobic digestion of agricultural waste is a proven and rapidly growing source of renewable energy generated at more than 150 other facilities around the country.

- **General Biodiesel**
  Project: Biodiesel plant expansion  
  Award: $1,000,000 loan  
  (King County) Project involves general plant expansion. Estimating 60 permanent and nine temporary jobs, and leveraging $10 million in additional funding.

- **GR Silicate Nanofibers and Carbonates**
  Project: Nanomaterials to reduce greenhouse gas emissions  
  Award: $1,400,000 million loan  
  (Pierce County) Project involves use of nanomaterials to reduce greenhouse gas emissions by capturing CO2 gas from flue gas and converting to calcium carbonate for use in paper. Estimating 15 permanent and 280 temporary jobs, and leveraging $5 million in additional funding.

- **Green Energy Today – Commerce Project Complete**
  Project: Columbia Basin Renewable Energy Project  
  Award: $898,175 grant  
  (Franklin County) Green Energy Today’s Esquatzel Project generates energy from a source most people would never notice – the excess water from an agricultural canal that drains into the Columbia River. By diverting the water into a conduit that leads to a cross-flow turbine, hydroelectric energy is produced, after which the water is discharged to the river. Beginning in November, 2011, the Esquatzel Project will begin generating enough power for approximately 225 homes in the area.

- **MacDonald-Miller Facility Solutions**
  Project: Utility-based energy efficiency project development and finance program  
  Award: $1,500,000 loan  
  (King County) Project involves the Seattle Steam Company’s utility-based energy efficiency project development and finance program. Estimating six permanent and 22 temporary jobs, and leveraging $12 million in additional funding.

- **NCS Power – Contract Closed**
  Project: LED manufacturing  
  Award: $2,000,000 loan  
  (Clark County) Project involves relocating LED manufacturing. Estimating 290 permanent and 90 temporary jobs, and leveraging $6.9 million in additional funding.
- **Port Townsend Paper – Commerce Project Complete**
  Project: Biomass cogeneration plant  
  Award: $2,000,000 grant  
  (Jefferson County) Project involves a biomass cogeneration plant that will generate energy from solid organic fuels such as wood waste and logging debris. Estimating 290 permanent and 108 temporary jobs, and leveraging $53 million in additional funding.

- **Renewal Energy Composite Solutions – Commerce Project Complete**
  Project: Repurpose boat manufacturing plant for small wind turbine production  
  Award: $137,000 grant  
  (Clark County) Project involves repurposing a portion of a boat manufacturing plant for small wind turbine production. Estimating 101 permanent and 99 temporary jobs, and leveraging $5 million in additional funding.

- **SeaFreeze – Commerce Project Complete**
  Project: Energy efficiency upgrades  
  Award: $561,862 loan  
  (King County) SeaFreeze, a venerable cold storage warehouse with local and international customers, took advantage of a low-interest loan from the State Energy Program to invest in energy efficiency. With daunting utility bills due to its refrigeration facilities, the company was looking for creative ways to cut costs. Today the company’s energy bills are nearly one-quarter lower, thanks to an array of improvements made to its warehouse and processing stockrooms.

- **SGL Automotive Carbon Fibers – Commerce Project Complete**
  Project: Energy efficiency project  
  Award: $2,000,000 grant  
  (Grant County) SGL Automotive Carbon Fibers LLC is a joint venture of the SGL Group and BMW, both based in Germany. The company’s new Moses Lake facility employs 80 workers manufacturing carbon fiber, a cutting-edge material strong enough to replace steel in some of BMW’s automotive frames. SGL and BMW were drawn to eastern Washington because of the abundance of clean and renewable hydropower. The State Energy Program provided a grant to encourage the company to invest in energy-efficient equipment.

- **Innovate Washington – Commerce Project Complete**
  Project: Clean technology growth funding  
  Award: $250,000 loan  
  (Spokane, Pierce, and King Counties) Project involves clean technology growth funding. Estimating 186 permanent and 106 temporary jobs, and leveraging $2 million in additional funding.
Whole Energy Fuels #2
Project: Biorefinery in Anacortes
Award: $350,000 loan
(Skagit County) Project involves creating a biorefinery in Anacortes. Estimating 18 permanent and 19 temporary jobs, and leveraging $350,000 in additional funding.

Successfully negotiated Round Two Loan & Grant Program agreements:

AltAir Fuels – Commerce Project Complete
Project: Advanced biofuels refinery
Award: $2,000,000 grant
(King County) AltAir Fuels LLC plans to produce biofuels for airplanes from Camelina oil. The production will be at an in state refinery and connect into the fuel pipeline. This project will create 350 engineering and construction jobs, 20 permanent jobs in operations and maintenance, and 107 permanent and seasonal agricultural jobs.

Borgford BioEnergy
Project: Springdale BioEnergy
Award: $771,4SP05 ($539,984 loan / $231,421 grant)
(Stevens County) A grant and loan from the State Energy Program enabled a small company in eastern Washington to purchase a mill and put 27 people back to work. Borgford BioEnergy has developed a novel way to burn mill waste in its patented gasifier system. The resultant heat dries lumber for the mill, which produces high-end lumber beams and other architectural products. The energy generated powers the mill, produces biochar for agricultural applications, and supplies surplus electricity to the grid in Stevens County.

Center for Advanced Manufacturing Puget Sound (CAMPS) – Commerce Project Complete
Project: Supply and manufacturing retool
Award: $1,000,000 grant
(King County) CAMPS is an organization of traditional suppliers to the aerospace, marine, and transportation industries. This project will provide support to enable members to collaboratively retool and diversify to advance innovation in the wind and solar markets. This will increase the local production of parts. This project will provide an estimated 212 jobs during the three-year life of the contract.

Clark Public Utilities – Commerce Project Complete
Project: WaferTech free cooling for process cooling water
Award: $402,000 ($282,000 loan / $120,000 grant)
(Clark County) Saving enough energy to power 350 homes every year, WaferTech, a TSMC Company, has installed a $1.6 million energy efficient Process Cooling Water (PCW) Free Cooling system at its Camas, Washington manufacturing facility. Expected to reduce energy use by up to four million kilowatt-hours annually, the new system uses cool Pacific NW weather to
bring down the temperature of warm, post-manufacturing water down instead of relying on traditional chillers year-round. The project required 2,000 construction man-hours and annual cost savings going forward are equal to six WaferTech production specialists.

- **Demand Energy Networks**  
  Project: Distributed electricity storage devices and network management software  
  Award: $1,500,000 grant  
  (Spokane County) Demand Energy Networks, Inc., develops distributed energy storage technology products, which it markets internationally. Located just outside of Spokane, Demand Energy Networks employs roughly 20 people. The firm was founded in 2008 and is now beginning to sell its Demand Shifter product for residential and business use. In March 2010, Demand Energy was awarded a $1.5 million grant in Recovery Act funding under the State Energy Program (SEP) to commercialize the Demand Shifter.

- **FPE Renewables** – *Contract Closed*  
  Project: Vander Haak anaerobic digester  
  Award: $320,000 ($224,000 loan / $96,000 grant)  
  (Whatcom County) Enhances the capacity and performance of an existing digester, doubling power output to provide clean energy to an additional 200 homes. Other partners include Northwest Farm Credit Services, USDA Rural Development and WSU. Estimating that three new jobs will be created.

- **Gen-X Energy Group**  
  Project: Phoenix advanced biofuels refinery project  
  Award: $720,000 grant  
  (Grant County) Supports construction of the first unit of a biodiesel refinery in Moses Lake. The grant will fund the manufacture and installation of a new technology biodiesel module. The new technology significantly reduces costs through process simplification and heat integration; simplifies permitting and reduces emissions. Also allows access to the technical-grade glycerol market for the refinery byproduct (glycerol). Estimating that ten permanent jobs will be created.

- **Nippon Paper Industries**  
  Project: Port Angeles co-generation biomass boiler  
  Award: $2,000,000 ($1,400,000 loan / $600,000 grant)  
  (Clallam County) This project replaces an existing process steam boiler with a new biomass boiler and adds a 20 MW condensing turbine-generator. The new generator is expected to operate at 90% of capacity 355 days a year. It allows increased use of forest byproducts as fuel qualifying the project as a biomass combined heat and power generator under most western renewable portfolio standards. The Washington State Department of Natural Resources is expected to be a major supplier of forest waste products for the new plant. The addition of generation capacity in this part of the state will provide an additional resource in a capacity-constrained portion of the
grid. Estimating that 234 jobs will be retained at the mill and ten jobs will be added during the conversion phase.

- **Rainier Biogas**  
  Project: Anaerobic digester  
  Award: $1,392,500 ($974,750 loan / $417,750 grant)  
  (King County) This project will install an anaerobic digester that will process dairy manure from over 1,000 cows at three dairy farms on Enumclaw Plateau. The digester will produce 3,582 MWh biopower, enough to serve over 300 area homes. Four jobs created during implementation phase, and four permanent jobs. This project will provide a model for addressing long-standing King County concerns about water quality in east county watersheds.

**Round Three Loan & Grant Program reallocation:**

- **Cascade Community Wind**  
  Project: Community Wind Turbines  
  Award: $1,000,000 ($700,000 loan / $300,000 grant)  
  (King and Kittitas Counties) CCWC plans to install eight mid-scale wind turbines funded by, and financially supporting, communities in Kittitas and Whatcom counties. They are working with utilities, agencies, lenders, vendors, service providers and the public to remove barriers to development of community-supported wind, a replicable model found throughout Europe and several Midwestern states. CCWC has nine wind leases on land capable of supporting more than 16 turbines. All eight turbines included in this project already have power purchase agreements with Puget Sound Energy.

- **EnerG2**  
  Project: Ultracapacitors for Electric Vehicles  
  Award: $1,800,000 ($1,260,000 loan / $540,000 grant)  
  (King County) Grant will support Phase 3 of EnerG2’s aggressive growth plan. The company’s technical foundation rests on proprietary synthesis of carbon-based nanomaterials that radically improve the performance of energy storage devices, specifically, vehicular ultracapacitors. Phase I was fueled by investment of venture capital, DOD SBIR funds, and WA Technology Center sponsorship. The results convinced DOE in 2009 to fund 2/3 of a new nano-carbon manufacturing plant to be built by September 2011. The project plan will (1) develop an ultracapacitor electrode optimized for EnerG2’s unique nanostructured carbon and large format storage devices, and (2) design and specify the product to be mass manufactured in a new plant. This product will be a large format can-shaped high-performance ultracapacitor that will fit into future electric drive vehicle power modules. Its development will require build-out of a $1.17M pilot-scale ultracapacitor assembly line in Seattle.
Kadlec Regional Medical Center – Commerce Project Complete
Project: Medical Center Efficiency Retrofit
Award: $2,000,000 ($1,400,000 loan / $600,000 grant)
(Franklin County) Activities include implementing a number of energy efficiency and renewable energy production components, including solar thermal hot water, a 20 kW solar PV array, a 5 kW wind turbine, and various energy system upgrades. Given the facility’s high community visibility, it provides an opportunity for outreach and education about clean energy solutions.

Innovate Washington
Project: Clean Energy Innovation Fund
Award: $500,000 loan / $750,000 grant
(Spokane, King, & Snohomish counties) Projects involve clean technology growth funding.

Snohomish County Public Utilities District – Commerce Project Complete
Project: Water System Microhydro
Award: $94,882 grant
(Snohomish County) The PUD developed plans to modify a pressure-reducing valve in their water distribution system to produce hydroelectric power, and make the project design replicable for other water system managers. The project is projected to generate 220 kW, enough to power 170 average homes, and have an exceptionally long lifespan (50-100 years).

Van Dyk Dairy – Contract Closed
Project: Anaerobic Digester
Award: $731,000 loan / $313,000 grant
(Whatcom County) DariTech, a major service provider for the dairy industry based in Lynden, has long sought to enter the digester business. This project would bring state-of-the-art technology to the region, and potentially offer a less expensive approach to manure management and biogas production. The gen set would produce 450 kW of power. Their proposal was the first below the cut-off line in the second round Waste-to-Energy category.

Washington State Department of Enterprise Services
Award: $1,204,496 grant
(Thurston and additional counties) The Department of Enterprise Services will coordinate energy efficiency work in state buildings. The buildings updated will include the old capital building in Olympia, currently housing the Office of the Superintendent of Public Instruction, the Old Soldiers Home in Orting, and buildings housing the Department of Corrections.

Washington State Department of Transportation
Project: Interurban Electric Vehicle Infrastructure Project
Award: $1,610,000 grant
(Thurston and additional counties) This project will deploy up to ten plug-in vehicle fast charging stations along I-5 and a West-East corridor. In the first stage, fast chargers will be installed.
between Seattle and the Oregon border; one between Seattle and the Canadian border, and two in a West-East corridor. Two medium-speed chargers will be installed at gateway rest areas on I-5. The fast charging stations will be installed in locations determined by a quantitative analysis led by Commerce and a university. WSDOT is expected to contribute an additional $500,000 to $650,000 in federal funding. This funding supports the vehicle electrification goals of HB 1481.

- **Washington State University Bio Systems Engineering**
  Project: Commercialization of Nutrient Recovery from Anaerobic Digestion  
  Award: $500,000 grant  
  (Whatcom, Whitman and King Counties) WSU’s Center for Bioprocessing and Bioproducts Engineering is commercializing nitrogen and phosphorus recovery technology for anaerobic digestion. They’ve been working with research and industrial collaborators for the last seven years, and have developed patents and licensing agreements of international significance. This grant would serve as match funding for a $1.5 million Natural Resources Conservation Service Conservation Innovation Grant proposal to incorporate the technology into two digesters in the state: Vander Haak (Whatcom) and Ritter (King). The result will be Class A biosolids using only waste engine heat, removal of 80% of phosphorus in solid form, and removal of 60% of total nitrogen (primarily ammonia) as biofertilizer slurry. These coproducts displace mined or petroleum-based fertilizers that have significant imbedded energy costs. The process also scrubs H2S, reducing corrosion on biogas turbines, all at a cost substantially less than competing Danish technology.

- **Washington State University Extension Energy Program**
  Project: Blower Door Training and Equipment  
  Award: $170,000 grant  
  (Thurston County) The newly adopted version of the Washington State Energy Code requires that all new homes be tested for air leakage control. To ensure successful code implementation, builders and subcontractors need access to blower door equipment and operational training. Through a competitive process, 40 geographically distributed candidates will be selected to participate. Candidates who pass a proficiency test will be granted blower door test equipment, which may be sourced from a Washington State manufacturer (RetroTech, Everson). This project will also help participants take an active role in the proposed federal HomeStar program. We expect most of the equipment and training to be directed to rural and smaller code jurisdictions. With the delay in implementation of the energy code adding the training and tools for local jurisdictions may be even more valuable as a way to ensure the code is rapidly and cost-effectively implemented when it comes into force.

- **Whole Energy Fuels #1 – Contract Closed**
  Project: Biodiesel Refueling Infrastructure  
  Award: $165,000 loan
(Skagit County) Bellingham’s Whole Energy Corporation produces and distributes alternative fuels, primarily biodiesel. The company started business in 2004 with the goal of developing economically, environmentally, and socially sustainable alternatives to petroleum fuels. Whole Energy operates production facilities and distribution terminals in Washington, California, and Oregon. The company’s distribution facility in Anacortes features more than 100,000 gallons of heated storage, in-line filtration, and injection dye systems. The Anacortes location is also a short distance from Interstate 5 and a number of major petroleum distribution centers.

Community Energy Efficiency Pilot Program – $14.5M
Administered by the Washington State University (WSU) Extension Energy Program, eight projects across the state were selected to receive approximately $14 million in ARRA grants. Awardees were selected by an independent review committee based on their ability to increase energy efficiency in residential and small commercial buildings, create or retain jobs in Washington, and leverage other funds. Contracts have been signed and projects are moving forward. For a description of each project, visit www.energy.wsu.edu and click on the Building Efficiency link. Contact: William Ranes, RanesW@energy.wsu.edu. Projects include:

- **Clark Public Utilities**
  Award: $1,000,000 grant
  (Clark County) Canvass residences and small commercial businesses, provide energy conservation education kits, conduct energy audits and complete weatherization retrofits or commercial lighting & refrigeration upgrades per target area; provide a community-based model that coordinates multiple stakeholders in ensuring energy consumption reduction and the creation/retention of 7.5 jobs in the first year.

- **City of Ellensburg**
  Award: $344,000 grant
  (Kittitas County) Provide weatherization to Ellensburg natural gas residential customers, and space and water heating system upgrades to natural gas residences; provide weatherization to small commercial businesses and provide space and water heating systems upgrades to small commercial businesses. Expand retrofit program beyond 2012.

- **Opportunity Council**
  Award: $2,793,190 grant
  (Whatcom County) The Community Energy Challenge is an initiative to reduce consumption of electricity and natural gas by making energy efficiency affordable, accessible, and attractive for businesses and households throughout Whatcom County. This project is a partnership between the Opportunity Council and Sustainable Connections and aims to save over $1 million dollars in energy costs by 2012.
Puget Sound Energy
Award: $1,500,000 grant
(Island, King, Kitsap, Pierce, Skagit, Spokane, Thurston, Whatcom, Whitman and Yakima Counties) Achieve penetration rates of 70 percent in mobile home parks and 80 percent in multi-family units within each urban neighborhood identified as having substantial potential for cost-effective energy efficiency improvements, resulting in significant residential and small commercial upgrades; create jobs for disadvantaged populations.

Snohomish County PUD
Award: $2,169,599 grant
(Snohomish County) Provide energy retrofits and upgrades within communities to residential and small commercial customers; provide public education, marketing and outreach to communicate the benefits of energy efficiency, establishing community-driven development of sustainable and replicable energy efficiency service delivery models.

Sustainable Living Center
Award: $700,000 grant
(Walla Walla County) Conduct home performance assessments and energy retrofit assistance to owner-occupied neighborhoods such as Jefferson Park, Edith-Carrie/Penitentiary, Washington Park, Burbank, Green Park Addition Historic Neighborhood, Downtown Walla Walla Business District, and World War II buildings serving as startup business incubators at Walla Walla Airport. Create jobs for unemployed construction industry workers.

Sustainable Works
Award: $4,000,000 grant
(King, Pierce, Snohomish and Spokane Counties) Perform energy audits and install cost-effective measures in homes occupied by homeowners ineligible for low-income weatherization programs. Education and outreach will involve hosting 40-120 informational meetings and training 40-120 volunteers per neighborhood.

Thurston Economic Development Council
Award: $1,000,000 grant
(Thurston County) Perform energy audits and complete community-wide urban residential and commercial energy efficiency upgrades; create and retain contractor and vendor jobs as a sustainable energy retrofit industry and workforce in Thurston County; provide education, marketing and outreach to homeowners and businesses to communicate the value of energy efficiency.
Energy Efficiency Credit Enhancement (EECE) Program – $5M

In late 2009, Commerce awarded grants totaling $4.96 million to six applicants. The awards are expected to support approximately $50 million in total project expenditures, including lender funds, tax credits, utility incentives, other community funds, and borrower investments. The projects will create energy efficiency retrofits in both residential and commercial buildings. Projects include:

- **Avista Utilities**
  Award: $1,000,000 grant
  (Spokane County) Avista’s EECE Lending Program will fund a component of Avista Utilities’ new Energy Efficiency Initiative for Residential and Small Business Customers. The first component of the Initiative, the Energy Efficiency Audit Program, will provide free online and low-cost on-site energy audits to residential and small business customers; it will be funded entirely by Avista, contributions of EECBG funds from participating local jurisdictions, and by customer audit fees. EECE grant funds will be used to fund the Initiative’s second component: the EECE Lending Program. In partnership with Sustainable Local Investment Partners (SLIP), a nonprofit Spokane community development organization, Avista has assembled three initial Lenders for the EECE Lending Program: Numerica Credit Union, Spokane Teachers Credit Union, and SNAP Financial Access.

- **City of Bellingham**
  Award: $500,000
  (Whatcom County) EECE funds will be used to offer lower interest rates to borrowers who participate in the Whatcom County Community Energy Challenge program (CEC) by utilizing EECE funds to buy down the cost of the interest rates (“interest rate buy-downs”). An essential part of the CEC is to arrange financing solutions for energy efficiency customers and borrowers, allowing them to overcome the first-cost barrier and pay for energy efficiency improvements over time, matching energy cost savings with loan payments.

- **City of Seattle**
  Award: $1,000,000 grant
  (King County) The City of Seattle proposes to use EECE funds to establish a robust loan loss reserve fund for the Seattle Energy Loan Fund (SELF) to support a new EECE Lending Program. This loan loss reserve fund will allow the SELF to offer more loans, at lower rates, and thereby create more opportunities for Energy Efficiency Improvement Projects in homes and businesses in Seattle. Furthermore, by seeding the loan loss reserve with the EECE grant funds, this allows the SELF to provide continuity for the marketing and delivery of multiple energy efficient loan programs throughout the city, and creates a collaborative environment whereby lessons learned will be shared with participating partners. Seattle and its selected Lenders, ShoreBank Enterprise Cascadia (SBEC) and Grow America Fund, Inc. (GAF), will create three EECE Lending Programs: two that target commercial borrowers and one that targets residential.
- **Sustainable Works**
  Award: $960,000 grant
  (King and Spokane Counties) EECE funds will be used as loan loss reserves to support financial institutions to lower their interest rates and expand their credit underwriting criteria to increase investment in energy efficiency improvement projects. The EECE program will lend to the property owners that are participants of the Sustainable Works (SW) program. SW is also a recipient of a $4 million Community Energy Efficiency Pilot grant, which will complement the EECE grant and fund SW project development activities. SW is currently operating in Spokane and King Counties, and will soon begin operating in Snohomish and Pierce Counties.

- **Thurston County Economic Development Council**
  Award: $500,000 grant
  (Thurston County) Thurston EDC and the Thurston Climate Action Team will create an EECE Lending Program with Thurston County-based financial institutions, namely community banks and credit unions, to provide capital for energy efficiency improvement projects in private homes and commercial buildings. A Loan Loss Reserve Fund will facilitate the most preferential loan terms for the greatest number of borrowers.

- **Washington State Housing Finance Commission**
  Award: $1,000,000 grant
  (King County) WSHFC has partnered with MacDonald-Miller Facilities Solutions to establish an EECE Lending Program for financing energy efficiency improvement projects in facilities owned by 501c3 private, nonprofit institutions, including hospitals, and low income multi-family housing property owners which are eligible for tax-exempt bond financing via the WSHFC.

**Energy Efficiency in Northwest Agriculture – $500,000**
WSU Extension Energy Program, in partnership with the Washington State Department of Agriculture, Washington Conservation Commission, and the Washington State Dairy Federation, is working with dairy and dryland farmers to comprehensively assess their energy use, and develop practical conservation and efficiency measures. This $500,000 innovative approach examines cropping systems, irrigation and fuel and fertilizer usage.

**Clean Energy Leadership Council – $200,000 – Award Closed**
CELC conducted an in-depth analysis of what Washington State government and industry could do to grow the clean energy sector and promote economic development and green job creation in Washington. Consultant issued final report to CELC in October 2010 and final recommendations submitted to Governor and Legislature in January 2011. For details see, www.washingtoncelc.org