Request: Renewable Energy and Sustainability Center (RESC) Update

- 1. Overview of the Federal Appropriations request for the Renewable Energy and Sustainability Center (RESC)
- 2. Funding request
- 3. Purpose
- 4. Outcomes
- 5. Implementation
- 6. Hiring requests

### **Overview/Perspective:**

- Federal Appropriations 2010 was written in the winter of 2009 and awarded winter, 2010 to establish the Renewable Energy and Sustainability Center (RESC)
- Another grant was written last fall (weatherization, support for the RET program, support for the de-construction industry, etc. Not funded, but generated 3 additional grants/sub-contracts from WICCO/State of Oregon.
- There are 4 revenue streams including the Federal Appropriations.
- All 4 together have common sustainability industry elements and supports the emerging REST program.
- A symbiotic relationship exists between all 4: the sum is stronger than the parts separately.
- FY Appropriations forms the umbrella.
- One project manager for the four is best because easier to manage, easier to leverage resources, efficient, measureables easier to control, and provides continuity.
- "Project Manager" is included in all 4 funding streams equaling a full time position with benefits.

# **Overview of the Fed appropriations request for the Renewable Energy and Sustainability Center (RESC):**

- 1. Title: Renewable Energy and Sustainability Center (RESC)
- 2. Funding Request:
  - Amount: \$400,000
  - Source: Federal Appropriations: FIPSE (Fund for the Improvement of Secondary Education/Office of Post Secondary Education.
  - Duration: 2 years
    - Status: Federal Appropriations Submitted (Merkeley/Wyden/Schrader) Fed. Appropriations "awarded" "Grant" written and has been submitted. Expecting notification within the next three weeks.
- 3. Purpose: <u>"Clackamas Community College (CCC) will use its</u>

<u>Congressionally- directed grant of \$400,000 to develop</u> education and training programs in renewable energy fields, which may include equipment and technology."

- 4. Outcomes:
  - a. "Raise community awareness by creating a clearinghouse for renewable energy and sustainability information and resources for campus, community, business/industry and workforce agencies that promote wise use of alternative energy resources and encourage sustainability practices. More than 5000 reached."
  - b. "Grow the Renewable Energy Systems Technology and Renewable Energy Management degree programs with advanced curriculum, purchase of new technology equipment, and increased instructional capacity at CCC and area high schools. Fifteen instructors, 264 students trained."
  - c. "Develop and provide customized training for business and industry to meet the changing needs for skilled workers. Outreach to 75 businesses; 250 new and incumbent workers reached."
  - d. "Partner with business and industry to identify jobs for alternative energy and sustainability, and opportunities for on-the-job-training (OJT) and cooperative work experience (CWE). Twenty-five (25) workers will be placed in OJT or CWE programs with employers."
  - e. "Create academic and career pathways that lead people to credentials for jobs and careers in renewable energy. 250 new and incumbent workers reached."
- 5. Implementation: Outcomes will be accomplished by the following investments:
  - a. The Outreach Specialist (.25FTE) will work with the Workforce Development Specialist (.5FTE) to identify Oregon-based renewable energy and sustainability business and industry, assist with identifying needs and job opportunities, and determine potential Cooperative Work Experience and OJT for workforce development.
  - b. The Outreach Specialist will also develop an outreach plan for the RESC, coordinate development & implementation of the Renewable Energy Field Lab and self-guided campus tour (aka, "Walk-about"), and work with the Project Manager to design the RESC website.
  - c. Outreach: A website will be developed that reflects the goal of the RESC and emphasizes CCC's commitment to renewable energy and sustainability and that of our statewide partners, with links to appropriate business, industry, educational, informational resources. Short clips of CCC and high school students engaged in hands-on, interactive classes and projects, a short "walking tour" of sustainability on the CCC campus, including the field lab will be included. A developer and videographer will be retained (\$8,850) to produce a website that will serve as a source of information about renewable energy and sustainability topics, resources, workshop, seminar and course offerings, etc. Newspaper ads will be developed and placed (\$4,000) to promote the RESC

- d. <u>Outreach Materials and supplies</u>: Promotional brochures and signage for the Campus Walk-About, the Field Lab, and the Renewable Energy and Sustainability Resource Center, signage for the two outreach events. (\$25,000); Books, DVD's, curriculum, interactive models, visuals and other outreach and marketing tools (\$4,500); Outreach events speaker fees and rentals (\$8,000)
- e. <u>Equipment and supplies</u>: Purchase two (2) Solar Wind Energy Training Units (\$20,000) and two (2) Power Electronics Training Systems equipment and software (\$78,164). This equipment will also be available for short-term electrical installer and pre-apprenticeship training. Instructor Guides and Student Manuals for 16 students/class (\$6,314); Materials for two (2) Build Your Own Wind Turbine courses to be offered.- (\$2,000)
- f. <u>Training</u>: To increase instructional capacity for CCC's REST degree programs and the Project Lead the Way partnership with area high schools, funds will be used to train three (3) instructors in Wind-turbine construction (one week training, including materials - \$2,325), two (2) instructors in Project Lead-the-Way (two weeks of training, incl. room/board (\$10,000), and five (5) instructors in each of the Solar/Wind equipment install/training (CCC/HS instructors -\$1,500) and Power Electronics Training (CCC/HS instructors - \$1,500). CCC and high school instructors will build capacity and instruct high school and college students in pre-engineering programs with Project Lead-the-Way (PLTW) and RET 200, and instruct community members in "build-your-own" wind turbine seminars. An estimated 500 high school and college students will receive PLTW instruction over the two-year grant period.
- g. <u>Job Profile:</u> Services will be retained to produce the Industrial Maintenance Technician job profile (\$2,500), identified as a need by industry.

#### 6. Hiring Requests to Implement Appropriations:

- Project Manager (0.5 FTE)
- Outreach Specialist (.25FTE)
- Workforce Development Specialist (.5FTE)

# ADDITIONAL SUSTAINABILITY GRANTS/CONTRACTS: "QUICK" SUMMARY

### 1. <u>Project</u>: Greening of Oregon's Workforce State Energy Sector Partnership (SESP)

Applicant:	WICCO
Funding:	\$272,224
Primary Focus:	Out of work construction workers retrained with "green"
	certifications

# 2. <u>Project:</u> Renewable Northwest (ReNW): Creating new jobs in renewable energy in the Portland-Salem-Vancouver economic region.

Applicant:	Oregon Manufacturing Extension Partnership (OMEP)/WICCO
Funding:	\$434,000
Primary Focus:	-Unemployed and dislocated workers; Individuals in need of updated training related to the renewable energy industry.
	-Supports REST Program (instructor)
	-Career Pathway development

# **3.** <u>Project:</u> Oregon Weatherization and Energy Training Center and Programs Project (WETCAPP)

Applicant:	OECA/WICCO
Funding:	\$236,106 (OECA/WICCO) – Federal Department of Energy
Primary Focus:	-REAP Certification/Weatherization
	-Energy Efficiency

#### Staffing summary for all four funding sources:

Appropriations:	
Project Manager	0.50 FTE
Outreach Specialist	0.25 FTE
Workforce Development Specialist	0.50 FTE
PT Faculty	Teach RET 200 (88hrs)
SESP:	
Project Manager	0.25 FTE
Outreach Spec.	0.25 FTE
Workforce spec	0.20 FTE
PT Classified	0.25 FTE committed to WIA
ReNW/OMEP:	
Project Manager	0.25 FTE)
1-Temporary, Full Time Faculty	1.0 FTE
PT Classified	0.25 FTE committed to WIA

Workforce Specialist.	1.0 FTE
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## OECO/WICCO:

Project Manager	0.25 FTE
Workforce Spec	0.50 FTE

## TOTAL SUSTAINABILITY FUNDING TO DATE:

•	Appropriations:	\$400,000
•	SESP	\$272,224
•	<b>ReNW/OMEP</b>	\$434,000
•	OECO/WICCO:	\$236,106
	Total	\$1,129,840

# **<u>Project Title</u>:** Greening of Oregon's Workforce State Energy Sector Partnership (SESP)

### Funding: \$272,224 (WICCO)

<u>Targeted:</u> Construction trade workers; dislocated supervisors and managers of construction trades; installation, maintenance and repair worker and supervisors. 225 trained

<u>Outcomes:</u> The Clackamas County Local Team will build on the County's central focus on green building in its economic development strategy (Clackamas County Fifth Community Congress, 2007). Although Clackamas County has had one of the fastest growing construction industries in the state, the economic downturn means increased unemployment in the industry.

- This project will retrain 190 unemployed construction and other workers with the green building skills that are in demand.
- Training will be provided by Clackamas Community College, in partnership with Earth Advantage Institute and the Western Regional Training Center.

Training will include:

- Introduction to the LEED for Homes
- Applying LEED for Homes to Your Next Project
- Residential Green Building Codes
- Lead Safe Work Practices
- Customized curriculum and training materials will be developed to specifically address efficient and safe deconstruction methods to ensure quality reclaimed materials with high resale and reuse value.

# **<u>Project</u>:** <u>Renewable Northwest (ReNW)</u>: Creating new jobs in renewable energy in the Portland-Salem-Vancouver economic region.

Applicant: Oregon Manufacturing Extension Partnership (OMEP)

Funding: \$434,000 (WICCO)

<u>Target industries</u>: Renewable electric power (solar, wind); manufacturers that produce sustainable products using environmentally sustainable practices and have potential to be a supply chain distributor to the renewable electric power industry.

<u>Target Populations</u>: Unemployed and dislocated workers; Individuals in need of updated training related to the renewable energy industry.

Outcomes:

- Training:
  150 people begin training over two years
  136 complete training
  136 receive a degree or certificate
  120 placed in a job
  102 placed in a training-related job
  Train up to 30 incumbent workers at Miles Fiberglass Five (5) new courses,
  developed through a WIRED grant, will be the training materials used.
- *Career pathways* two new pathways will be developed: Wind Energy Composite Technician and Energy Systems Maintenance Technician.
- *One PT Faculty* position will be created to support the RET program, work with local employers to research emerging occupational needs and identify soecific career pathway, short-term trainings that will articulate with the Renewable Energy Systems Technology Certificate and AAS Degree at CCC.
- *One Workforce Specialist* position will work with OED, OMEP, local businesses, and college outreach to recruit existing workers needing skill upgrades and to screen and assess the suitability of applicants for training.

# **<u>Project Title:</u>** Oregon Weatherization and Energy Training Center and Programs Project (WETCAPP)

Funding Requested: \$236,106 (OECA/WICCO) – Federal Department of Energy

- Two (2) new Trainers will be trained and certified to provide REAP training
- 100 new technicians/students will receive REAP certification training

#### <u>Targets:</u>

Energy efficient building, construction, and retrofit; Energy efficiency assessment serving residential, commercial, industrial sectors; Manufactures that produce or provide sustainable products using environmentally sustainable processes and materials.

- Heating, air conditioning and refrigeration mechanics and installers
- Maintenance workers, machinery
- Installation, maintenance and repair worker's helpers
- Unemployed workers and individuals in need of updated training related the energy efficiency and renewable industries. Workers who can benefit from training in the targeted industries listed above.

<u>Objective:</u> Expand existing training capacity by supplementing existing facilities and programs, create additional training options to serve a more diverse population, standardize training across the region to existing state weatherization standards, and furnish the Oregon Weatherization and Energy Training, Research, Development and Operations Center (TRDOC).