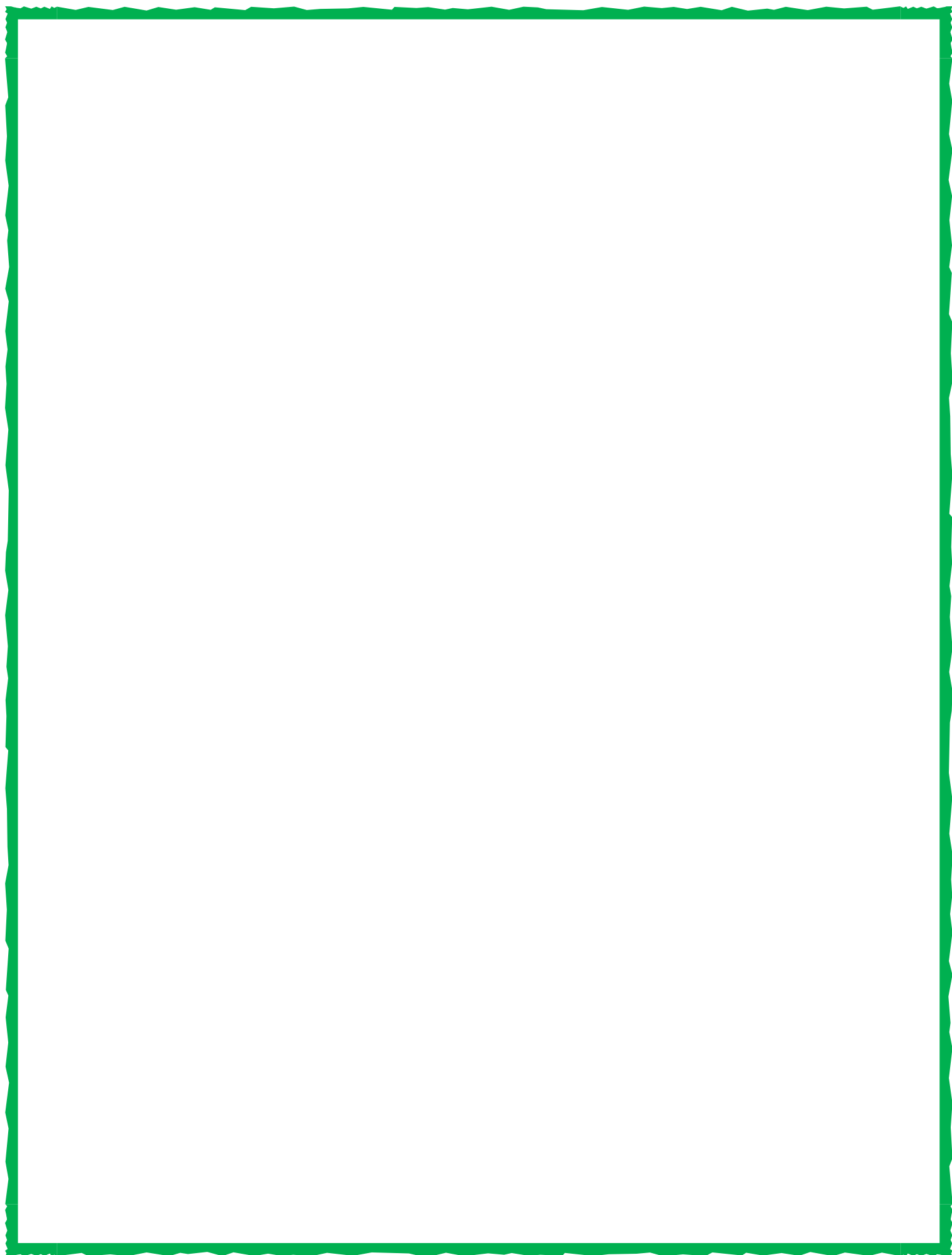


# **Oregon Community College Green Initiative**

## **Green Framework**

### **Appendix 3**

**May 10, 2010**



## Current Training Assessment for Green Planning

| Program Area<br>(Choose all that apply)  | Description of current program,<br>courses, activities. Include number<br>of students served and<br>whether credit or non credit   | Who are<br>your<br>students?  | Partners and their<br>contributions and<br>commitments? Include any<br>known leveraged resources<br>Please list.  | Additional information in targeted<br>areas (Please mark and describe all<br>that apply.)  |
|--|--|---|---|--|
| <b><i>1) Nascent Renewable Energy Jobs</i></b><br><br>These include those jobs in the infancy stage of development such as in wave, geothermal, and biomass<br><br>(BMCC – Biomass – Forest, Agriculture, Municipal Waste) | Renewable Energy Tech AAS Clackamas in approval (45 s/y)<br><br><br>TVCC -Adobe Brick Recycling-Noncredit 40 students<br><br>COCC- None at this time. Task force evaluating “green” jobs in the area. Conversations still very informal—no info available to list in last column.<br><br>LBCC- Automotive Technology AAS, 2yr Certificate, Alternate Fuels class-Hydrogen fuel cells, Electric vehicles. 36 enrolled 2008-2009<br><br>LCC- Water Conservation Technician Program: Two-Year AAS Degree (credit) with ability to seek professional certificate. <ul style="list-style-type: none"> <li>• Training to work as water efficiency technicians and workers, coordinators, specialists or managers or as water management specialists and technicians.</li> <li>• The program prepares students to design, implement and evaluate water conservation programs.</li> </ul> 30 students / year | CC, DL,HS<br>CW<br><br><br>CE<br><br><br>DL, CW<br><br><br>CC,DL<br><br><br>Those seeking AAS to become technicians | NW Biofuels Assoc, PGE, Amer Hydrogen AssocNW, OIT, UM, OSU, Clackamas County Sustainability Office,Perkins funds and Pathways to Sustainability funds<br><br>None<br><br>COIC, Workforce OR, 3E Strategies<br><br>Toyota, Honda<br><br>Eugene Water and Electric Board | <input checked="" type="checkbox"/> Career Pathways (Clackamas)<br>_____ Bridge Programs for ABS<br><input checked="" type="checkbox"/> Career Pathways Certificates (Clackamas will evolve)<br><input checked="" type="checkbox"/> Career Pathways Roadmaps (Clackamas Under development), LBCC,LCC<br><input checked="" type="checkbox"/> Other K-12 connections (Clackamas – dual credits to manuf), LBCC<br><input checked="" type="checkbox"/> Program of Study (Clackamas)LBCC,LCC<br><input checked="" type="checkbox"/> Short term trainings (TVCC),BMCC<br>_____ Apprenticeships<br>_____ Career Readiness Certificate<br><input checked="" type="checkbox"/> Distributed Education (Clackamas some online classes)BMCC<br><input checked="" type="checkbox"/> Small Business Development BMCC<br>_____ Contracted Training |

## Current Training Assessment for Green Planning

| Program Area<br>(Choose all that apply)   | Description of current program,<br>courses, activities. Include number<br>of students served and<br>whether credit or non credit  | Who are<br>your<br>students?                                | Partners and their<br>contributions and<br>commitments? Include any<br>known leveraged resources<br>Please list.  | Additional information in targeted<br>areas (Please mark and describe all<br>that apply.)  |
|---|---|---|---|--|
|   | <p>BMCC-Small Business Development Center (SBDC) counselors are working with entrepreneurial companies to develop green technologies and markets. One-on-one counseling, non-credit, 5-10 companies currently, Increasing steadily. Also Hosting workshops by OSU Extension on bio products including biomass for energy generation. Total approx 80 attendees at two workshops so far.</p> <p>PCC – Climate Action Plan: Sustainability Mgmt – Business (future degree option)</p>   | <p>Business Owners<br/>Contractors<br/>Public agencies</p>  | <p>OSBDCN, OSU Extension</p>  |  |
| <p><b>2) Emerging Renewable Energy Jobs</b></p> <p>These include the jobs that are on the ground and increasing such as in solar, wind, utilities</p> <p>(BMCC – Wind Turbine Tech)</p> | <p>Clackamas-Wind turbine tech articulated with CGCC 20 students</p> <p>TVCC- Waste/water recycling and wetlands preservation. Credit classes in Nat Res and Ag degree Prog in gr landscaping, pesticides, irrig, watershed management and noxious weed 30 students a year</p> <p>PCC- Electronic Engineering Technology AAS Degree and 1-year certificate<br/>-- Renewable Energy Systems Option</p> <p>Micro Electronics Technology AAS Degree and 1-year certificate – Options in Solar Manufacturing</p> <p>TBCC- Building a solar water heater course non-credit 12 students</p> | <p>CC,DL,CW</p> <p>CC,DL,CW</p> <p>CC, DL, CW</p> <p>CE</p> | <p>Same companies/CGCC</p> <p>Private citizen with recycling pond, college and armory share wetland area working on dev gr laboratories BLM</p> <p>Vistas, Wide variety of other RE Energy Companies WIA</p> <p>Solar World Wide variety of manufacturing related companies WIA</p> | <p><input checked="" type="checkbox"/> Career Pathways (Clackamas, PCC,LCC, Chem)</p> <p>_____ Bridge Programs for ABS</p> <p><input checked="" type="checkbox"/> Career Pathways Certificates (Clackamas will evolve)</p> <p><input checked="" type="checkbox"/> Career Pathways Roadmaps (Clackamas Under development)CGCC,LBCC,LCC,PCC)</p> <p><input checked="" type="checkbox"/> Other K-12 connections (Clackamas – dual credits to manuf),LBCC,LCC</p> <p><input checked="" type="checkbox"/> Program of Study (Clackamas,TVCC, CGCC)LBCC,LCC, Chem</p> <p><input checked="" type="checkbox"/> Short term trainings –TBCC,LBCC</p> <p><input checked="" type="checkbox"/> Apprenticeships LCC</p> <p>_____ Career Readiness Certificate</p> <p><input checked="" type="checkbox"/> Distributed Education Clackamas (Some online classes) CGCC (in development), LCC, LBCC</p> |





## Current Training Assessment for Green Planning

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|---|---|--|---|---|
| <b>3) Energy Efficiency Jobs</b><br>These include jobs that involve increasing efficiency of the built environment such as jobs in weatherization, energy auditors, and some trades<br><br>(BMCC – Contractors) | OCCC-Trainings for bus owners on tax credits for energy efficiencies<br><br>TVCC-Weatherization Training noncredit CE<br><br>PCC- Architecture -- two year degree AAS. Sustainable design and construction concepts are embedded in all applicable courses and a certificate has been created.<br><br>Sustainable Building (1-year) Certificate -- builds on the Architectural program by combining additional coursework in sustainable design, products, materials, and construction with Environmental science, sociology and ethics.<br><br>Building Construction – two year AAS and one year certificate. In the process of integrating sustainability practices throughout the curricula.<br><br>Building Inspection Program: Green Building Inspection-Residential only.<br><br>Facilities Maintenance Technology (FMT) and Industrial Technology (IT), two year AAS and one year HVAC certificate. In the process of integrating sustainability practices throughout the curricula.<br><br><i>Interior Design two year AAS Degree. In the process of integrating sustainability practices throughout the curricula.</i> | CE<br><br>CC,DL,CW<br><br>CC,DL,CW<br><br>CC, DL, CW<br><br>CC, DL, CW<br><br>CC, DL, CW<br><br>CC, DL, CW<br><br>CC, DL, CW | Working on partnership with Harney-Malheur Community Action<br><br>NSF, Earth Advantage, City of Portland, wide variety of architectural firms and public agencies related to sustainable design and development.<br><br>NSF, Earth Advantage, City of Portland, wide variety of construction firms involved with sustainable building practices.<br><br>NSF, Earth Advantage, City of Portland, wide variety of architectural firms and public | ____X____ Career Pathways: PCC/RCC/LCC, LBCC<br>____ Bridge Programs for ABS<br>____X____ Career Pathways Certificates/RCC, Clatsop<br>____X____ Career Pathways Roadmaps/RCC, LCC, LBCC<br>____x____ Other K-12 connections?RCC,LCC, LBCC<br>____X____ Program of Study Clatsop(Historic),RCC,LCC<br>____X____ Short term trainings TVCC, Clatsop (Weatherization), MHCC, COCC,LCC, LBCC<br>____X____ Apprenticeships Chem<br>____X____ Career Readiness Certificate RCC,LCC<br><u>X</u> ____ Distributed Education BMCC, LBCC<br>____X____ Small Business Development (OCCC)<BMCC<br>____ Contracted Training |

## Current Training Assessment for Green Planning

| Program Area<br>(Choose all that apply) | Description of current program, courses, activities. Include number of students served and whether credit or non credit   | Who are your students?  | Partners and their contributions and commitments? Include any known leveraged resources Please list.   | Additional information in targeted areas (Please mark and describe all that apply.) |
|---|---|---|--|---|
|   | <p>Chem- Apprenticeships (Electrician, Heating, Ventilation, Air-Cond and HVAC) renewable energy activities credit</p> <p>Clatsop-Weatherization and Lead Removal non credit; Historic Preservation and Restoration credit 15 students per year</p> <p>MHCC- Sustainable Building Advisor National Certification non credit; Building Analyst and Envelope Prof non-credit (prepares students for the Building Performance Institute cert testing); Weatherization Tech/Installer (non credit)</p> <p><b>COCC- Sustainable Building Advisor</b><br/>9-month course (1 wkend/month)<br/>2006/07-14 students<br/>2007/08-30 students<br/>2008/09-29 students<br/>2009/10 – begins Oct. 2009</p> <p>Noncredit – students who qualify can take industry certification exam to become a ‘Certified Sustainable Building Advisor’</p> <p><b>Home Energy Analyst Trainings</b> Three separate trainings planned for fall 2009 (Oct-Dec) including 5-day core training, 3-day building envelope training and 3-day heating/cooling training. Course content covers knowledge needed for certification as Home Energy Analyst through Building Performance</p> | <p>CW<br/>CC/CW/DL</p> <p>CW<br/>CC, DL,CW</p> <p>CC,</p> <p>CC, DL</p> | <p>agencies related to sustainable design and development.</p> <p>Community businesses</p> <p>Area small business, Community Action Team, Advisory Board &amp; local businesses</p> <p>Business and Industry Incumbent Workers skill upgrade<br/>Partner with WIA</p> <p>COCC - <b>SBA</b>: Some industry partners donate instructional expertise (value varies).<br/>Energy Trust of OR provides scholarships for ETO Trade Ally Network members (~\$3000/year).<br/>COCC Foundation Turner Fund provided scholarships in 07/08 and 08/09 (~\$5000/year).<br/>BetterBricks provided advertising matching dollars in first two yrs (~\$800/year)</p> <p><b>Home Energy Analyst Trainings</b><br/>Currently in the process of</p> |   |





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|---|--|--|--|---|
|   | <p>troubleshooting and repair</p> <ul style="list-style-type: none"> <li>• Motor replacement and sizing</li> <li>• Selecting energy efficient control options</li> </ul> <p>24 first yr. enrolled 2008-2009</p> <p>LCC -</p> <ol style="list-style-type: none"> <li>1. Energy Management Technician (credit)<br/>AAS<br/>Thirty Students / year</li> <li>2. Renewable Energy technician (credit)<br/>AAS<br/>Thirty students / year</li> <li>3. Resource Conservation Management<br/>Technician (credit) AAS Thirty Students /<br/>year</li> <li>4. Energy Management /Renewable Energy<br/>Technician 18-month Accelerated Program<br/>(credit)</li> <li>5. Leading Alternatives in National Energy<br/>Solutions (Lanes) (credit)</li> <li>6. Summer Youth Career Academy in<br/>Clean/Green Technology<br/>This youth career academy will be offered<br/>for the first time this summer from July 1<br/>through August 13, 2009.<br/>Students will be introduced to the industry,<br/>learn entry-level skills in weatherization,<br/>develop strong employability skills, and be<br/>set up with a paid work experience.<br/>The academy will serve 20-25 at-risk</li> </ol> | <p>Dislocated<br/>Workers</p> <p>At risk youth<br/>Between the<br/>ages of 16 and<br/>24</p> | <p>EWEB \$136,000</p> <p>Fees from Custom trainings.</p> <p>SESP grant of \$423,536</p> <p>NSF grant of \$810,000</p> <p>Lane Workforce Partnership is<br/>providing \$198,793 for three<br/>academies this summer. Source of<br/>funding: American Recovery and<br/>Reinvestment Act (ARRA)</p> |   |

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|---|--|---|---|---|
|   | <p>youth. Students will earn college credits.</p> <p>7. Residential Weatherization Auditor 1 and Residential Weatherization Technician 1 training (non-credit)</p> <p>BMCC- SBDC referring contractors to Oregon Energy Trust Programs<br/>Non-Credit<br/>5-10 initially; growing</p>  | <p>Low income/DL</p> <p>Contractors</p>   | <p>Lane Workforce Partnership is providing \$180,000 for the training and an additional \$450,000 for paid work experiences that would include other career technical areas as well.</p> <p>Oregon Energy Trust</p> |   |
| <p><b>4) Greening of existing jobs</b></p> <p>These include jobs where workforce need skills upgraded such as plumbers trained in solar hot water installation, carpenters trained in green building techniques and materials, landscapers trained in green landscaping techniques and plants.</p> <p>(BMCC-Apprenticed Trades)</p> | <p>Clackamas-Horticulture AAS and one year cert, Irrigation Tech CP cert, Landscape AAS, Landscape Practices one year certificate, Plant Healthcare CP cert 200 students</p> <p>TVCC- Pesticide workshop CE 40 students a yr, Intro to Lean Manuf non credit Biz C -9 students, Wildland Fire Training CE 750 students per year</p> <p>PCC Automotive AAS Degree, Alternative Fuels Option.<br/>Integrating focus on hybrid automobiles and light trucks and offering as CEUs</p> <p>Civil/Mechanical Engineering Technology AAS Degree– Sustainability and Green Technology Option.</p> | <p>CC, DL, CW</p> <p>Ag businesses<br/>Small Businesses</p> <p>CW</p> <p>CC, DL, CW</p> | <p>BLM,USFS, Or/Id State Dept of Lands, local structure fire agencies</p>   | <p><input checked="" type="checkbox"/> Career Pathways -Clackamas – Statewide apprenticeship cert and degrees, PCC,BMCC</p> <p>_____Bridge Programs for ABS</p> <p><input checked="" type="checkbox"/> Career Pathways Certificates (Clackamas listed), Clatsop (Historic), BMCC</p> <p>_____X_____Career Pathways Roadmaps Clackamas BMCC, LBCC</p> <p>_____X_____Other K-12 connections (Clackamas – some dual credit)</p> <p>_____x_____Program of Study LCC,BMCC, Clatsop</p> <p>_____x_____Short term trainings TVCC, SOCC, COCC,LCC, LBCC, Clatsop</p> <p>X_____Apprenticeships TVCC,LCC,BMCC</p> <p>_____Career Readiness Certificate</p> <p><input checked="" type="checkbox"/> Distributed Education (Clackamas some landscape classes online)</p> |

## Current Training Assessment for Green Planning

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|---|--|----------------------------------|--|--|
|   | <p>Building construction, 2 yr AAS and 1 yr Certificate</p> <p>Building Performance Institute Certification in Partnership with Conservation Service Group</p> <p>Advanced Framing and Building Envelope Training – modifications to existing curriculum on going</p> <p>Landscape Technology – 2 yr AAS degree &amp; 2 yr certificates – sustainability design, construction and maintenance concepts and practices embedded in all applicable courses</p> <p>Clatsop-Meteorology 40 students</p> <p>MHCC Green Building Principles- non credit</p> <p>SOCC-Photovoltaic Entry Level Certificate non-credit</p> <p><b>COCC- NABCEP Entry Level PV Solar Exam Prep course for Electricians.</b> 16 hour class covering information to prepare licensed electricians to sit for the North American Board of Certified Energy Practitioners (NABCEP) Entry Level exam.</p> <p>Noncredit 26 students May 15 &amp; 16, 2009. Of 26 students, 23 took exam and 20 passed. This entry level certificate is required by OR Dept of Energy to become a Tax Credit Certified technician to do work on residential tax incentive jobs.</p> | <p>CC</p> <p>CW</p> <p>CW,DL</p> | <p>National Science Foundation</p> <p>Oregon Home Builders Association</p> <p>Building Performance Institute iLevel</p> <p>Advisory Committee</p> <p>Business and Industry</p> <p>RCC grant</p> <p>COCC contracted with Lane Community College for instruction, which assisted us in getting started with well-developed instructors and curriculum.</p> | <p><input checked="" type="checkbox"/> Small Business Development TVCC,LCC</p> <p><input checked="" type="checkbox"/> Contracted Training Clackamas, TVCC,MHCC,LCC</p> |

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|---|--|---|--|---|
|   | <p>Plans to offer this 2 times per year for now.</p> <p>LBCC – Mechatronics/RHVAC:<br/>Effective maintenance and troubleshooting</p> <ul style="list-style-type: none"> <li>Operating a computerized maintenance system for maximum energy efficiency</li> <li>Preventing defects in production</li> <li>Preventing energy wasting operations or breakdowns</li> </ul> <p>Green repair options in maintenance, troubleshooting and repair</p> <ul style="list-style-type: none"> <li>Motor replacement and sizing</li> <li>Selecting energy efficient control options</li> <li>24 first yr. 2008-2009</li> </ul> <p>LCC-</p> <ol style="list-style-type: none"> <li>Energy Management Certification Program (certificate) (non-credit) 18 students</li> <li>Building Operator Certification (non-credit) 40 students</li> <li>Bonneville Power Administration Residential Energy Auditor and Inspector Certification (non-credit) 27 students</li> </ol> | <p>Industry</p> <p>HVAC<br/>elect/plumbers</p> <p>BPA and utility<br/>CW</p> <p>CC, DL, CW,<br/>HS</p> <p>1. industry</p> <p>2.H-vac/<br/>electricians,<br/>plumbers</p> <p>3. BPA and<br/>utility ee's</p> | <p>NW Public Power Assn</p> <p>Bonneville Power \$1200</p> <p>1. Northwest Public Power Association</p> <p>3.Bonneville Power Admin. \$1200 for teachers</p> |   |

## Current Training Assessment for Green Planning

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|---|--|--|---|---|
|   | <p>4. Sustainable Building Advisor Program (certificate) (non-credit) 20 students</p> <p>5. State apprenticeship Program for PV and solar water heater installation (non-credit/credit) 18 active apprentices.</p> <p>6. Sustainability Coordinator AAS degree program</p> <p>7. Statewide Basic Manufacturing Technician Certificate Program with Solar Emphasis (credit)</p> <p>8. Sustainable Building Practices Course with LEEDS option (credit)</p> <p>9. Culinary Arts and Food Service Management AAS has a strong focus on sustainability. 50 students /credit</p> <p>10. Hospitality Management AAS and 1 yr cert have strong focus on sustainability. 35 students/credit</p> <p>11. 11 BOLI Registered Apprenticeship programs (will all be credit in Fall 2009)</p> <p>Approximately 300 students, 60 are in Limited energy technician on line course.</p> | <p>4. architects, engineers, developers, etc.</p> <p>5. electricians / plumbers</p> <p>20 students</p> <p>7 and 8:<br/>Low-income adults and dislocated workers.</p> | <p>7 and 8:<br/>Lane Workforce Partnership is providing \$180,000 for the training and an additional \$450,000 for paid work experiences that would include other career technical areas as well.</p> |   |

### Current Training Assessment for Green Planning

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|---|---|--|---|---|
|   | <p>12. Climate Masters at Work – Non-Credit Course included 10 Week class sessions focused on assisting businesses and organizations with lessening their carbon footprint and saving money; followed by 6 monthly seminars and one-on-one business evaluations and process advising with a sustainable environmentalist. Course curriculum includes: Climate Change Basics, Practical Strategies for Saving Money and Reducing Greenhouse Gas Emissions Through Energy and Resource Efficiency in Facilities, Packaging, Materials Selections, Transportation and Other Opportunities, Developing a Greenhouse Inventory and Action Plan to Target the Greatest Leverage Points for Your Business, Organizational Change, Marketing and Outreach, Product and Service Design and Student Related Issues Intern Support from trained LCC Energy Management Students was available. Businesses were given assistance during their one-on-one advising sessions to carry out their plan to reduce emissions.</p> <p>Purpose of the program is to grow participants' knowledge base and provide an avenue of practical application within the business so participants can see the environmental and fiscal advantages for the company.</p> <p>BMCC- Credit. Lead college with Chemeketa in statewide curriculum development for apprenticeship training. Apprenticeship</p> | <p>12.Students consist of private sector business leaders and owners, organizational managers and non-profit managers.</p> <p>Apprentices<br/>Business leaders and</p> | <p>12.University of Oregon –Climate Leadership Initiative – collaborated on curriculum, marketed program, facilitated some of the classes.</p> <p>Business Development Center contracted with Good Company – a privately held company that assesses businesses sustainability efforts and develops renewal energy to provide two associates to facilitate classes and seminars as well as perform one-on-one advising sessions with participants. Good Company underwrote a portion of their time.</p> <p>Eugene Water and Electric Board provided sustainable energy and wastes water information and guidance.</p> <p>Eugene Chamber of Commerce provided classroom space and marketing. Springfield Chamber of Commerce provided marketing.</p> <p>Oregon Community College Apprenticeship Network</p> |   |

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|--|---|--|---|---|
|  | <p>program partners are infusing curriculum with green processes and systems, not stand-alone courses. Instructors modify courses to include latest green technology as it evolves. Specific Trades have made progress using green technologies – plumbers using green materials, energy modalities, water delivery systems, waste water systems, passive and active water systems. Electricians are incorporating photovoltaic, heating, energy efficient lighting, passive and active heating systems, and energy conservation automation. HVAC/R is teaching elements of convection air movement, innovative design for structure to heat and cool, conduit and pipe modifications for efficiency. Sheet metal focuses on structural design, ambient air movement, appliance placement, and conservation of materials.</p> <p>Students are 4-year apprentice students – approximately 160 inside electrician apprentices, 95 plumber apprentices, 50 HVAC/R apprentices, and 40 sheet metal apprentices.</p> | <p>owners,organizational managers and non-profit managers</p> <p>Apprentices, Contractors, Employers</p> | <p>(OCCAN)</p> <p>Oregon Bureau of Labor and Industries (BOLI) Apprenticeship and Training Division (ATD)</p> <p>Contractors</p> <p>Trade Unions</p> <p>Apprenticeship Committees</p> <p>Trade Materials and Services Suppliers</p> |   |
| <p><b>5) Curriculum Infusion</b></p> <p>Modification of curriculum to reflect triple bottom line of sustainability/green principles and practices (i.e., construction, sustainable manufacturing, ‘green’ apprenticeship models)</p> | <p>Clackamas Credit transfer classes: Pathways to Sustainability, Sustainability &amp; Ethics, Sustainable Cities 75 students Sustainability HS Pathways to Postsecondary</p> <p>TVCC- Credit classes in: Biology several hundred students Physical Science Energy 30 students, Range Management and other Ag certificates and degrees (Soils, crop prod, pesticides, Coop Work Exp) 50 students, Nat Res cert and degrees including Wildfire (GIS, Noxious Weed, Forest Practices,</p>   | <p>CC,DL,CW</p> <p>CC</p>  | <p>OUS System, CCWD strategic fund Pathways to Sustainability</p> <p>Faculty on sabbatical did research in hydrology/geothermal w Boise SU</p> <p>Soil and water conservation potential partners</p>                                | <p><input checked="" type="checkbox"/> Career Pathways PCC, Clatsop (Auto), RCC, Clackamas</p> <p>_____ Bridge Programs for ABS</p> <p><input type="checkbox"/> X _____ Career Pathways Certificates RCC</p> <p>_____ Career Pathways Roadmaps</p> <p>_____ Other K-12 connections Clatsop (auto), RCC</p> <p><input type="checkbox"/> X _____ Program of Study TVCC, Clatsop (auto), LBCC</p> <p><input type="checkbox"/> X _____ Short term trainings Clatsop</p> |



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|---|---|---|---|---|
|   | <p>Watershed Management, Fire Effects, Nat Resource Ecology, Coop Work Exp) 20 students</p> <p>PCC- Biology, Environmental Studies, Chemistry, Engineering, Sociology, Philosophy, Writing, Building Construction, Construction Management, Building Construction Technology, Design/Build, Economics – Mindful Economics, Geography: GIS Certificate includes environmental science focus</p> <p>UCC-Environmental Lit Course</p> <p>Clatsop- Clatsop Leadership Forum non credit 20 students per yr</p> <p>SOCC-Instructors embedded sustainability assignments CS120, ENG111;<br/>SOCC-Phyto remediation as part of the Chem lab curriculum –</p> <p>COCC- GS 105, CH 105, and CH223 content related to alternative energy , all organic Chem labs are “green” and use Roto-evaporator to recycle solvents</p> | <p>K,CC,DL,CW<br/>CC (for all the listed areas)</p> <p>CC</p> <p>CW</p> <p>CC</p> | <p>BLM provides outdoor lab opportunities</p> <p>Individual courses in all these disciplines have integrated sustainability/green principles and practices in the curricula. In many cases these courses are either elective courses or required courses included several of the current and future Green Technology Degree options.</p> <p>Advisory board</p> <p>Chamber of Commerce, Sunset Empire Transportation District, Western Or Waste</p> <p>Rich Gurney, Simmons College (Boston)<br/>Greener Education Materials</p> | <p>(leadership)</p> <p>_____Apprenticeships</p> <p>_____ Career Readiness Certificate</p> <p>_____ Distributed Education</p> <p>_____ Small Business Development</p> <p>_____ Contracted Training</p> |

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| Program Area<br>(Choose all that apply) | Description of current program, courses, activities. Include number of students served and whether credit or non credit   | Who are your students?    | Partners and their contributions and commitments? Include any known leveraged resources Please list. | Additional information in targeted areas (Please mark and describe all that apply.) |
|---|---|---------------------------|--|---|
|   | <p>RCC-Ecoeducational House Project student designed and built house; Construction Tech – greened, Electronics Program –embedded in EET240/241 (use solar panels ) Sustainability HS Pathways to Postsecondary</p> <p>LBCC-Composting area constructed with (3) separate bays within Horticulture programs</p> <p>-Emphasizing biofuel production, genetic crop enhancement, and organic production in horticulture programs</p> <p>-New Science building will be LEED Silver Certification</p> <p>LCC- Sustainability course of study for transfer degree to be printed in the 2010 course catalogue.</p> <p>Lane is currently administering an EPA grant funded Sustainability Infusion Project in which 20 faculty trainers are training a total of 200 faculty to infuse triple bottom line sustainability into courses. To date, we have trained about 60 faculty.</p> <p>Sustainability infused throughout many classes at Lane including General Chemistry, Organic Chemistry, Biology, Automotive Technology, Diesel Technology, Health, Culinary Arts, Hospitality Management, Religious Studies, Economics, Philosophy, Political Science, ESL,</p> | 20 new students this year | <p>For Chemists website</p> <p>Home Builders Eagle Point HS</p>                                      |   |

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|---|--|--|--|---|
|   | <p>and GED.</p> <p>Lane has an application for sustainability course status which faculty may use to have their classes officially considered a “Sustainability” class. This application was based on the application used to determine whether a class can be considered a class that fulfills the “Ethnic/Gender/Cultural Diversity” requirement. Approved classes will have a sustainability designation in the course catalogue and the class schedule.</p> <p>BMCC- ENG 269 Nature Lit, Ag infused sustainability courses credit and non credit 100 students, Diesel Tech includes env sound practices 50 students; Civil Eng includes sustainability standards and codes 80 students</p> | <p>HS CC<br/>Contractors<br/>/material<br/>suppliers<br/>/designers</p>                                |  |   |
| <b>6) Other Green activities</b>        | <p>Clackamas CCC Sustainability Series 1500 students/year , Green industry mini summits 50 students/year</p> <p>KCC-Working w/ Local Gr Building Cluster</p> <p>TVCC-CE noncredit –organic gardening, family recycling 20 members, climatology for viticulture 132 participants</p>  | <p>CC,DL,ABS,E<br/>SL,HS,CW</p> <p>CW,DW</p> <p>Community<br/>Winemakers<br/>and grape<br/>growers</p> |  | <p><input checked="" type="checkbox"/> Career Pathways- Chem, RCC</p> <p>_____ Bridge Programs for ABS</p> <p><input checked="" type="checkbox"/> Career Pathways Certificates</p> <p>_____ Career Pathways Roadmaps</p> <p><input checked="" type="checkbox"/> Other K-12 connections Chem, SOCC</p> <p><input checked="" type="checkbox"/> Program of Study Chem, Clatsop,MHCC,RCC,LCC</p> <p><input checked="" type="checkbox"/> Short term trainings TVCC, UCC, Clatsop, SOCC,COCC,RCC,LBCC,LCC,BMCC</p> <p><input checked="" type="checkbox"/> Apprenticeships LCC</p> <p>_____ Career Readiness Certificate</p> |

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|---|--|---|---|--|
|   | <p>PCC – Community Education Program Planning</p> <p>Biology, Environmental Studies &amp; Resources &amp; Landscape Technology</p> <p>Resource Management AAS 2 yr transferrable degree to 4yr institution, Includes Certificate in Wetlands Restoration, Mitigation and Management.</p> <p>Chem-Hort program and courses w/sustain. Practices 30-40 students credit and non credit</p> <p>UCC- Earth Day Celebration 100-150 students; Workshops on Energy Tax Credits</p> <p>Clatsop- CE “Green Makes Cents”; Campus recycling (Student driven)</p> <p>MHCC-Sustainability Health and Safety AAS or 1yr cert.; Natural resource Tech AAS or 1yr cert; Introduction to Solar Power; Urban Farming Fundamentals; Sustainable Landscaping and Design</p> <p>SOCC- CBJT Grant includes lab run on biodiesel. Green awareness and Green Jobs Career Info will be conducted within each community in college district</p> <p>COCC- Personal enrichment classes for living green are offered as part of our Community Learning program. These classes vary each</p> | <p>E,K,CW,CC, DL</p> <p>Community businesses</p> <p>CC/Bus owners</p> <p>Community Members/CC</p> <p>CC HS/CW</p> <p>CC,HS,CW</p> <p>CC, CW, DW</p> | <p>A wide array of non-credit Green Living courses are offered to help community members save money, conserve resources and build skills while enhancing environmental awareness.</p> <p>CC,CW,DW</p> | <p><input checked="" type="checkbox"/> Distributed Education RCC</p> <p><input type="checkbox"/> Small Business Development UCC, COCC,LCC,BMCC</p> <p><input checked="" type="checkbox"/> Career Pathways (CGCC)</p> <p><input type="checkbox"/> Bridge Programs for ABS</p> <p><input type="checkbox"/> Career Pathways Certificates</p> <p><input type="checkbox"/> Career Pathways Roadmaps</p> <p><input type="checkbox"/> Other K-12 connections</p> <p><input type="checkbox"/> Program of Study</p> <p><input checked="" type="checkbox"/> Short term trainings LBCC, Clatsop, COCC</p> <p><input type="checkbox"/> Apprenticeships</p> <p><input type="checkbox"/> Career Readiness Certificate</p> <p><input type="checkbox"/> Distributed Education</p> <p><input checked="" type="checkbox"/> Small Business Development COCC</p> <p><input checked="" type="checkbox"/> Contracted Training LCC</p> <p>Note: KCC marked most of the above with no explanation and no reference</p> |

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|---|--|--------------------------------------|--|---|
|   | <p>term and usually run 3-8 hours and range from \$29-\$89. Current offerings include: Building Green, Green Remodeling, Sustainable gardening, Xeroscaping, Understanding solar energy, Straw Bale construction, Making Biodiesel</p> <p>Business classes for incorporating green are offered through our Business Development Cent and Community Learning. These classes vary each term and usually run 3-8 hours and range from \$29-\$89. Current offerings include: Greening Your Business, One-on-one Business Sustainability advising</p> <p>COCC also models for students sustainable operating and building practices including:<br/> Purchase renewable power<br/> Storm water kept on site<br/> Shuttle bus with bike racks<br/> Covered and uncovered bike parking<br/> Organic fertilizers<br/> Earth friendly cleaning supplies<br/> High efficiency HVAC controls<br/> Insulated buildings<br/> Decreased water usage for landscaping</p> <p>RCC-member of AASHE and formed a green team who sponsor green events to public, Summer Institute for Green</p> <p>LBCC-Water/Wastewater Technology AAS, One year Certificate in W/W Plant Operations. Aquatic Chemistry and Microbiology, Water Purification Systems, Treatment.</p> | <p>CC,faculty,CE</p> <p>CC,DL,CW</p> | <p>Area Sanitation Co, SOU, County Gov, OSu</p>  |   |

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|---|---|------------------------|--|---|
|   | <p>36 enrolled 2008-2009</p> <p>-Facility transition to better practices(utilizing BETC credits): lighting, recycling, construction management, low-flow plumbing fixtures, chemicals, HVAC, transportaion</p> <p>-Clean Cities Program Grant for electrical vehicle charging stations, purchasing of hybrid vehicles, and conversion to plug-in hybrid vehicles</p> <p>-National Teach-in on global warming</p> <p>-Sustainability Committee formed</p> <p>Lane has many opportunities for students to gain experience with green projects outside of the classroom including a Green Chemistry Club, an active Oregon Student Public Interest Group chapter, and a Learning Garden Club. The Learning Garden Club has cultivated about an acre of land on which they grow food that is sold to the campus cafeteria and Culinary Program.</p> <p>Lane provides an opportunity for students in the Renewable Energy Technology program to do a solar installation each year. This year will be the 4<sup>th</sup> year that these installations have occurred and about 6.5 kW of solar PV will be helping to power the college.</p> <p>Students in Lane's Water Conservation program have worked closes with college operations to install a rainwater harvesting</p> | CC                     | <p>Solar Oregon</p> <p>PaciCorp</p> <p>Regional Governments</p>                                      |   |

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|---|---|------------------------|--|---|
|   | <p>system and to retrofit bathroom faucets and showerheads.</p> <p>Lane recently received a grant from our utility for solar covered parking connected to electric vehicle charging stations. The grant funds will be coupled with bond funds to install about 75 kW of solar panels to power charging stations for 36 electric vehicles. Lane plans to work with students in the Renewable Energy Technology program to help with the installation of this project. Lane also plans to work with our Automotive Technology program to convert three standard Priuses to plug-in electric hybrids.</p> <p>Lane is a signatory of the American College and University Presidents Climate Commitment. The college has completed a comprehensive greenhouse gas emissions inventory and is currently in the process of developing a plan for becoming carbon neutral.</p> <p>Lane always offers sustainability-related continuing education courses. Classes this summer include Permaculture and Organic Gardening.</p> <p>Sustainability is one of Lane's core values (<a href="http://www.lanecc.edu/cml/PDFs/CML-LCCmission.pdf">http://www.lanecc.edu/cml/PDFs/CML-LCCmission.pdf</a> )</p> |                        |  |   |

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|---|--|---|---|---|
|   | <p>See <a href="http://www.lanecc.edu/sustainability/susprog.html">http://www.lanecc.edu/sustainability/susprog.html</a> for more information on green activities at Lane.</p> <p>BMCC Workshops in solar energy principles using internet video; Led PacifiCorp “Blue Sky” initiative; Hosted sustainable materials use conference w/ city of Pendleton</p> <p>CGCC- Participating college in SESP grant through TOC/OWA. Still working out the details on content.</p> | <p>Home Owners<br/>Property owners</p> <p>Unemployed;<br/>underemployed<br/>; low &amp; basic skills;<br/>dislocated workers;<br/>incumbent workers to “skill up”</p> | <p>The Oregon Consortium &amp; 9 colleges including CGCC: LBCC, TBCC, BMCC, SWCC, Rouge, COCC, UCC, possibly TVCC</p> |   |