

Renewable Energy Action Plan: Update on Action Items Delegated to the REWG

2-4-09 Working Draft

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| Key to "Status" column: 1 = significant progress made 2 = some progress made 3 = needs additional attention |
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| Task | General (cross-cutting) Action Items: | Status |
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| 1 | Set priorities on actions where Oregon has an advantage or need greater than other states, define the role of major stakeholders, and estimate the budget impact and other funds needed. | 2 |
| 2 | Assist in reaching the long and short-term goals of this Plan and coordinate the implementation of the action items outlined in this Plan. | 2 |
| 3 | Work with the Oregon's congressional delegation to support a national renewable portfolio standard, as well as support a federal cap on CO2 emissions or caps on the CO2 emissions per kWh of load-serving entities (emissions portfolio standards). | 3 |
| 4 | Work with the Oregon's congressional delegation to make sure that the federal Production Tax Credit and the Renewable Energy Production Incentive are maintained. | 2 |
| 5 | Assess the feasibility and effectiveness of production-based incentives for electricity generated by small to medium scale renewable resource facilities. | 2 |
| 6 | Assess the feasibility of a state Renewable Portfolio Standard and compare it with production-based incentives as to its effectiveness to encourage renewable energy development. | 1 |
| 7 | Work with the state's consumer and privately owned utilities, the Northwest Power and Conservation Council and Bonneville Power Administration (BPA) to develop a process and protocols for expediting interconnection requests and developing more distributed generation. | 2 |
| 8 | Work with Oregon's congressional delegation, BPA and consumer owned utilities to expand BPA's Conservation and Renewables Discount Program. | 3 |
| 9 | Work with BPA and consumer owned utilities to promote PURPA's Qualifying Facilities using renewable resources, while avoiding financial harm to the utilities such as a reduction in a utility's "net requirements" (loss of a portion of a utility's long term allocation). | 2 |
| 10 | Support research and demonstration projects that modernize the electric system by combining advanced telecommunications, information and control methods with the electricity infrastructure for more efficient (economically and environmentally) "smart" grid operation. | 2 |
| 11 | Explore whether transmission constraints for community owned renewable energy projects could be overcome if: (1) a new or upgraded, privately owned transmission project were to be slightly increased in size, and (2) that this increase would be reserved for such community owned projects in exchange for a reduction in property taxes equal to the incremental costs for the transmission owner. | 3 |
| 12 | Identify growing Oregon renewable energy businesses and assist them with expansion planning and workforce development. | 3 |
| 13 | Help improve coordination and provide tools to attract new renewable energy businesses to build facilities in Oregon. | 2 |
| 14 | Focus efforts to solidify the strength of a Brand Oregon renewable energy market for our technology services and commodities. | 3 |
| 15 | Help develop a framework for valuation of environmental and other externalities. | 3 |
| Biofuels – Biodiesel: | | |
| 16 | Help form partnerships with growers, state agencies and interested investors for building a crushing plant to separate oils from crop feedstock. | 1 |
| 17 | Assist in the completion of a demonstration project where oil seed crops are grown as a healthy rotational crop, are crushed and refined on-site, and produce all of the farm's fuel. | 1 |
| 18 | Develop a program to support school districts that use B-20 biodiesel fuel in their entire school bus fleet. The program will include public information on the public health benefits of clean-burning, renewable biodiesel fuel. | 3 |
| 19 | Support work that focuses on the identification of an oilseed that produces a high value meal product and a generous supply of low-value oil. | 1 |

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| | Biofuels – Ethanol: | |
| 20 | Support Oregon university system’s research on alcohol fuels produced from cellulosic materials. | 1 |
| 21 | Continue and enhance efforts to work with the national Governor’s Ethanol Coalition. | 1 |
| 22 | Support policies and actions to promote government and private purchases of hybrid vehicles fueled with E-85. | 2 |
| | Biomass: | |
| 23 | Help determine whether financial support (such as a per ton transportation incentive) for forest treatment projects is needed to move biomass feedstock from the forest to renewable energy plant sites. Particular attention should be paid to 1) existing facilities for which utility contracts expire, and 2) how the cost of such projects can be spread out over a larger geographic area than the local utility’s service territory. | 2 |
| 24 | Help the formation of partnerships between private companies and consumer owned utilities to develop energy systems for local communities. | 3 |
| 25 | Support efforts to develop integrated bio-refineries that produce liquid fuels, high-value chemicals and materials, and electric power within the same facility. | 3 |
| 26 | Encourage the development and utilization of small energy efficient biomass heating and electrical systems for heating and providing power to institutions, state offices, schools, etc., especially in rural Oregon. | 3 |
| 27 | Help identify and address barriers to securing stable, long-term biomass supplies from federal forestlands. | 2 |
| 28 | Promote greater public awareness of the primary and secondary benefits of biomass energy production. | 3 |
| 29 | Support efforts to develop Material Recovery Facilities (MRF) to remove the biomass from municipal solid waste and convert the biomass into fuel. | 3 |
| 30 | Investigate the feasibility and desirability of a biomass Emission Reduction Credit (ERC) initiative to encourage development of a private market for trading of Biomass ERCs. | 3 |
| | Combined Heat and Power: | |
| 31 | Work with state agencies and others to give waste heat the same status as renewable energy in state legislation, rules and miscellaneous programs or projects that benefit renewable energy resources. | 3 |
| | Fuel Cells: | |
| 32 | Support Oregon companies in attracting funding from regionally targeted federal fuel cell and hydrogen generation programs including regional US Department of Energy (DOE) and US Environmental Protection Agency (EPA) programs. | 3 |
| 33 | Encourage the Oregon University System to explore fuel cell technology and to establish a fuel cell technology center. | 3 |
| 34 | Support a revision of the federal tax credit language for renewable fuels to include off-road and stationary uses instead of exclusively supporting transportation applications. | 3 |
| 35 | Support and highlight one or more demonstration projects that generate electricity using Oregon-made fuels with energy technologies engineered and manufactured in Oregon. | 3 |
| | Geothermal: | |
| 36 | Work with the federal government and others to provide a forgivable loan or grant program for drilling exploratory holes. | 3 |
| 37 | Work with the Energy Trust of Oregon (ETO), the utilities, BPA and others to expedite a Power Purchase Agreement with added incentives based on above-market costs for a 20 MW or larger demonstration project. | 3 |
| 38 | Review the royalty and tax implications of geothermal production facilities and explore funding means to help promote geothermal development. | 3 |
| 39 | Help develop a partnership plan between state and federal agencies for further development of projects on federal land or involving federal leases. | 3 |
| | Hydroelectric: | |
| 40 | Work with state agencies and interested stakeholders to explore the feasibility multi-purpose upstream small storage facilities for use in micro-hydro the context of ORS 536.238’s “environmentally and financially feasible.” | 2 |

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| 41 | Seek funding to defray costs of water rights permitting for micro-hydro projects | 3 |
| 42 | Identify and support generation efficiency improvements, such as those by the utilities, as hydro facilities come up for Federal Energy Regulatory Commission re-licensing and State of Oregon reauthorization. Support generation efficiency for new projects in Oregon, while safeguarding environment. | 3 |
| 43 | Continue to support the state's policy of re-authorizing hydroelectric the development of new hydroelectric facilities on existing dams and are found to be in the public interest if they balance the region's generation with the enhancement or maintenance of the natural resources of the state. | 3 |
| 44 | Assist irrigation and water service districts as they identify sites in Oregon untapped micro-hydro could be developed using irrigation piping channels. | 2 |
| 45 | Help develop irrigation canal systems that use pipes to reduce evaporation percolation losses, concentrate water pressure which reduces irrigation energy use, and provides sites for hydroelectric generation. | 2 |
| 46 | Help complete an environmentally enhancing hydroelectric demonstration case study that involves multi-agency analysis and collaboration. | 3 |
| Ocean: | | |
| 47 | Encourage the ongoing ocean energy research at Oregon State University (OSU) to include technology cost reduction, improvement in efficiency and reliability, identification of sites, interconnection with the utility grid, and study of the impacts of the technology on marine life and the shoreline. | 2 |
| 48 | Coordinate efforts to attract one of EPRI's 500 kW demonstration projects to the Oregon coast by 2006. | 2 |
| Wind: | | |
| 49 | Work with BPA to use the federal hydropower system and BPA's new wind integration services to reduce the cost of energy to customers. | 1 |
| 50 | Help develop a project to collect wind characteristics data at ten sites throughout the state, and make them publicly available, to help community and locally owned wind farm developments as well as large-scale wind farm development and wind energy integration with the grid, if funds become available. OSU would manage such a program. | 2 |
| 51 | Work with BPA and others to expand the anemometer loan program that is currently offered by ETO and OSU. | 3 |
| Solar: | | |
| <i>No action items for Renewable Energy Working Group outlined in REAP. (However, the following actions were recommended to the REWG by the Oregon Solar Coalition in April 2006.)</i> | | |
| S-1 | Recommend state workforce development grants be used for training programs that can build a qualified workforce across the state. Special emphasis should be given those programs that can enable distance or non-work hour education and involve current higher education and research centers. | 2 |
| S-2 | Recommend the OPUC adopt net metering rules that require PGE and PacificCorp to implement annualized net metering and to increase the maximum allowable system size. No legislative change is needed. | 1 |
| S-3 | Provide financial incentives or reduced risk for manufacturers of solar equipment to locate in Oregon. Potential mechanisms: establish a PV manufacturing grant, increase BETC maximum size to \$20M, provide bond financing specific to PV manufacturing, and require new state buildings to include Oregon built PV or ST technologies. | 1 |
| S-4 | Recommend ODOE host a stakeholder workshop to help establish statewide uniform interconnection, permitting, and inspection criteria for solar equipment with recommendations submitted to the Governor's office and state legislature. | 2 |
| S-5 | Recommend legislation that enables speculative home builders to use state business energy tax credits for new residential construction that incorporates solar technologies which results in "zero net energy" homes. | 1 |
| S-6 | Include PV and ST set aside in financial support recommendations. | 3 |

| Forest Biomass: | | |
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| | <i>The following key state and federal action items were indicated in the Forest Biomass Working Group Report which was presented to the REWG in January 2007. The REWG adopted the actions at their March 2007 meeting.</i> | |
| B-1 | Call for Congress to fully fund and support development of the US Forest Service Biomass Strategic Plan and the commensurate Bureau of Land Management plan. | 3 |
| B-2 | Request that the US DOE offer solicitations for funding research focusing on the conversion of biomass, such as poplars and grass straw, to cellulosic ethanol. | 2 |
| B-3 | Build a cellulosic ethanol commercial demonstration facility in Oregon within the next 2 1/2 years using public/private funds. Public funds could come from USDA Rural Development's 9006 or 9008 programs. | 2 |
| B-4 | Expedite forest stewardship contracting on federal lands through increased appropriations to staff federal lands management agencies. | 3 |
| B-5 | Address the cost of forest biomass, by encouraging funding of the existing federal transportation credit for biomass that was authorized by Congress. | 3 |
| B-6 | Address inequity in the federal production tax credit. Currently the credit for energy generated from biomass is less than for other renewable sources, and the credit is renewed for too short a time period to send the right signal to investors. | 3 |
| B-7 | Provide funding for a coordinator to facilitate community forums to increase understanding of benefits and consequences of biomass utilization | 3 |
| B-8 | Build on harvesting and research projects that have already been completed and fund new studies to fill in the information gaps | 3 |
| B-9 | Support actions that will help coordinate research and development advances in forest biomass utilization with commercial technology development (Renewable Energy Signature Research Center, SB 580). | 2 |
| B-10 | Continue to develop administrative collaboration under Enrolled Senate Bill 1072 - 2005 session. Points to funding needs for ODF and other state agencies as articulated in the Governor's budget. | 3 |
| B-11 | Consider developing/ expanding Oregon incentives to off-set capital cost of biomass energy facilities. (HB 2210, HB 2211 from 2007) | 1 |