

**Considerations for discussion of 15 Climate Change Advisory Committee
Recommendations
Environmental Quality Council
Draft April 2008**

The information below is a summary of key points from the Montana Climate Change Action Plan and the associated appendices. The legislative and administrative options prepared by staff and participating agencies do not include an economic analysis.

AFW-7

Expanded use of Biomass Feedstocks for Energy Use

(69% of participating EQC members voting 4 or 5 and 51% of the public voting 4 or 5)

✓ Increase the use of woody biomass residue for renewable electricity, heat and steam generation to 450,000 tons/year by 2020 and agricultural biomass to 540,000 tons annually by 2020.

***Note:** Much of the information below was prepared and offered by the Department of Natural Resources and Conservation.

Conservation Considerations:

- Reduce fossil fuel use
- Pages I-36 through I-42 Appendices

What's Being Done:

- UM Western installed a biomass boiler in 2007 with grant from DNRC and State Building Energy Program from DEQ (will be repaid through energy savings). UM Western, DNRC, A&E, and DEQ have worked to sell the carbon offsets from the boiler to The Climate Trust and received \$117,000 for the project in carbon offsets.
- Eight additional wood biomass boiler systems have been installed in Montana public schools under the DNRC Fuels for Schools and Beyond Program since 2003.
- Montana Renewable Portfolio Standards. Requires public utilities to obtain 15% of their retail electricity sales from eligible renewable resources by 2015.
- Renewable Energy Credits. Create market for clean power generated by biomass. Western Governors' Association and California Energy Commission are developing Western Renewable Energy Generation Information System, a regional renewable energy tracking and registry system.
- Alternative Energy Revolving Loan Program. Provides loans to individuals, small businesses, local government agencies, units of the university systems, and nonprofit organizations to install alternative energy systems that generate energy for their own use. Maximum loan amount is \$40,000 with a fixed interest rate, and the loan must be paid back within 10 years, 75-25-101, MCA.
- Capital investment in biomass combustion devices are exempt from taxation for a period of 10 years following installation of the property: (1) \$20,000 in the case of a single-family residential dwelling and (2) \$100,000 in the case of a multifamily residential dwelling or a nonresidential structure, 15-6-224, MCA.
- Small electrical generation equipment exemption, including biomass equipment, 15-6-

- 225, MCA. Additional incentives in 15-32-101, MCA. Tax credits also in law.
- House Bill No. 3 approved during May 2007 Special Session provides tax incentives for use of biomass, Title 15, Chapter 24, part 31, MCA.
- Montana Electric Cooperatives–Net-metering. Under the model policy, customers generating their own electricity using (but not limited to) wind, solar, geothermal, hydro, biomass, or fuel cells may participate in net-metering.
- Mandatory Green Power Program. NorthWestern Energy offers its customers the option of purchasing a product composed of or supporting power from certified environmentally preferred resources generated by renewables, including biomass.
- DNRC Biomass Utilization and Fuels for Schools and Beyond Program. Promote the use of forest biomass as an energy source for heating schools and other public facilities.
- DNRC Forestry Assistance Programs. Maintain and improve the health of Montana's forests, forested watersheds, and the communities that depend on them. Tools include information and education, technical assistance, and financial assistance.
- USFS Woody Biomass Utilization policy. Recently implemented, it requires that contractors doing work on federal lands haul and pile slash at landings to help facilitate removal of biomass during forest operations for utilization.
- DNRC State Trust Lands Forest Management Program. Timber sale bid process incentivizes removal of biomass residues for utilization.

Potential Actions:

* Legislative or EQC options (not complete, intended to be starting point for discussion):

- State lead by example. Require consideration of renewable energy resource systems (including biomass heat/energy) in all new state building constructions and renovations, including public schools, where cost-effective.
- Provide continued state support to the DNRC Biomass Utilization and Fuels for Schools and Beyond Program, which identifies financially viable opportunities for biomass utilization and energy generation. Includes conducting project feasibility assessments and assisting facilities in identifying funding, securing fuel supply, and providing technical assistance and support from project design to installation and operation.
- Expand the Alternative Energy Revolving Loan Program. Increase the maximum loan amount to \$500,000, lower interest rate to $\leq 2\%$ and make more funds available.
- Source reduction. Reduce the amount of open slash pile burning on all lands and/or provide viable alternatives to open burning. Revise DEQ air quality permits and local ordinances to discourage open burning and encourage alternatives.
- Provide full spectrum of tax incentives, or revisit existing incentives, to reduce the capital costs of biomass energy production, including electricity generation and heating of residences and public buildings.
- Establish utility “buyback rates” for biomass-derived energy where utilities offer a standard rate for which they purchase biomass-generated energy (electricity and/or heat).
- Modify Montana Renewable Portfolio Standards to include mandatory standard for energy generation from renewables and include standards for thermal energy production. Heat production is the highest value, most efficiently derived energy product from wood biomass when compared to electricity production.
- Pilot projects on the use of different forestry (e.g., bio-refineries) and agriculture residues (e.g., cellulosic ethanol plants) for energy and liquid fuel production (e.g. cellulosic

ethanol plants and bio-refineries) are needed.

- Research and development. Research on techniques for the collection, processing, transportation, storage, and distribution of forestry and agriculture residues, as well as market development or expansion for these materials.
- Research to characterize emissions from biomass boilers and their impacts on community air pollution and development of ways to minimize those impacts.
- Market-based mechanisms. Incentives (e.g., preferential tax rates).
- Expand the Montana Renewable Energy Tax Credit. Lower the eligible threshold capacity from 10 MW to 1 MW and expand the classification of corporate taxpayers and include general income taxpayers.
- Expand existing net-metering regulations to enable smaller projects of up to 2 MW to net-meter at retail energy rates.

* Resolution or recommendation of intent

* No action

* Administrative options:

- Voluntary/negotiated agreements. Voluntary, incentive based programs used to foster the development of the industry and associated economic markets. Provide landowners and/or corporations with opportunity to enter into agreements to better utilize biomass for energy.
- Work with local communities to develop responsible ordinances and continue to evaluate and discuss those that allow the use of EPA–certified wood/pellet burning equipment (instead of broad burn bans that apply to all wood-burning equipment). Work with regional and national efforts to increase efficiency standards and cost-effective emission control technologies for wood-burning equipment (e.g., furnaces, stoves, boilers).