Montana Environmental Information Center (MEIC)

MEIC works to educate citizens about reducing their own energy usage, lobbies the legislature to make conservation part of Montana's energy policy, supports energy efficiency in new building construction (such as the LEED green building rating program), and encourages increased investment in appropriate energy saving measures and technologies.

Montana's Energy Future

Montana's vibrant energy industry has helped the state avoid much of the economic downturn; however, there remains a lack of consensus about what it means to have an economically stable and sustainable energy future. Montana's Energy Future Summit brings together diverse national, regional and local perspectives on the challenges and opportunities facing Montana.

Montana's Restoration Program

The mission of Montana's Restoration Program is to work cooperatively to restore the natural environment, provide restoration education and employment opportunities, and create economic growth without environmental degradation.

The Montana Restoration Program envisions a future where Montanans are employed to restore degraded land and water to healthy ecosystems with self-sustaining ecological structure and function. Success will be measured by the acreage of lands and waterways restored; by the number of Montanans employed in restoration occupations; by the availability of restoration education and training opportunities for Montana's students, professionals, and work force; by the increased awareness of the benefits of a restoration economy; and by the sustained growth of available restoration funding.

National Center for Appropriate Technology (NCAT)

NCAT is a 501 (c)(3) nonprofit organization that aims to improve the lives of economically disadvantaged people by helping individuals and communities adopt technologies that save energy+ and resources. Since 1976 NCAT has been serving economically disadvantaged people by providing information and access to appropriate technologies that can help improve their lives. During the organization's rich and varied history, NCAT projects have ranged from low-tech to high-tech, addressing complex issues of housing, economics, and environmental quality. Weatherizing houses, training farmers, monitoring energy use, demonstrating renewable energy technology, testing new products and providing information on building construction are just a few of the many ways that NCAT has contributed to fostering healthy quality of life for everyone.

NorthWestern Energy

NorthWestern Energy is a small-cap company serving approximately 665,000 customers in Montana, Nebraska and South Dakota. Compared nationally, NorthWestern is a relatively small, entirely regulated utility. NorthWestern provides electric services to over 335,000

customers in 187 communities and gas services to over 180,000 customers in 105 communities. They also serve 15 rural electric cooperatives and serve smaller distribution companies that provide gas service to approximately 31,000 customers. NorthWestern offers energy efficiency programs, rebates and incentives for energy efficiency, commercial energy appraisals and renewable activities through participation in the Universal System Benefits and E+ programs.

PPL Montana

PPL Montana, headquartered in Billings, generates electricity at its coal-fired and hydroelectric power plants around the state.

In Montana's electricity market, deregulated since 1997, PPL Montana is solely a generator of electricity. The electricity produced is sold by a marketing operation in Butte — PPL EnergyPlus — to wholesale customers such as NorthWestern Energy, to large industrial customers and to electricity cooperatives.

Energy is PPL's "core competency." Today, with all the energy choices and options facing us, it is more important than ever that students and teachers are accurately informed about energy needs, energy realities, energy alternatives, energy conservation and energy-producing industries. Of critical importance to PPL is reaching educators to provide them with the knowledge, resources and confidence to address critical energy issues.

Big Horn County Government Commitment

The ECP for Big Horn County draws upon leadership provided by local government officials and staff and agency officials with Montana Department of Environmental Quality. The Big Horn County Commissioners will work collaboratively with Big Horn County facility managers, directors and administrators in developing and instituting energy guidelines and goals, and will work to disseminate information pertaining to energy conservation and the environment through implementation and management of the Big Horn County ECP. Preferences expressed by local residents will also be considered.

The Big Horn County Commission will host annual meetings specific to all County staff to support this mission through educational awareness, as well as, the management of the ECP. Reducing energy consumption shall be a continuing priority with all County staff, and this message will be conveyed regularly to all employees through educational awareness programs and email updates provided by the Big Horn County Commission. The intent is to focus on balancing energy usage, to help reduce the carbon footprint, while managing Big Horn County budgetary concerns and costs. This mission shall be reviewed continuously so that all Big Horn County facilities goals can be attained.

Big Horn County facilities directors will be invited to attend annual meetings for the purpose of reviews and refinement of the Big Horn County ECP. Managers and directors will include:

- Ed Auker, Director, Big Horn County Disaster Emergency Services
- William Doyle, Undersheriff, Big Horn County Sheriff's Office
- Eric Halverson, Director, Big Horn County Public Library
- Bill Hodges, Foundation Director, Big Horn Hospital Association
- Joe Lovato, Public Works Director, Town of Lodge Grass
- Daniele O'Banion, Director, Big Horn County Ambulance
- Kathy Real Bird, Director, Little Bighorn Center
- Matt Redden, Superintendent, Big Horn County Roads Department
- Kasey Roan, Asst. Fire Chief, Big Horn County Rural Fire Department
- Diana Scheidt, Executive Director, Big Horn County Historical Museum
- Henry Speelman, Mayor, Town of Lodge Grass
- Craig Taft, Sanitarian, Big Horn County
- Sandy Watts, Superintendent, Big Horn County Schools

Working together as one, while increasing staff awareness on energy policies and plans, overall usage and costs, will positively assist in reducing energy consumption and assist in improving the environment, while reducing utility costs.

Interrelationship of Energy Conservation to Big Horn County

Land Use and Transportation – The amount and type of energy used to move people and goods in a community is determined in part by patterns of development and the transportation system. The spatial relationships of individual buildings, neighborhoods, communities and regions determine how far and by what means people find it convenient to travel to work, recreational facilities, schools, religious centers, stores and entertainment venues and will send and receive their supplies and products. Zoning practices from the mid- to late 20th century increasingly separated residential neighborhoods from other destinations, resulting in increased vehicular travel and more expansive public infrastructure. Land use policies that promote a mix of compatible uses and transportation policies that promote multi-modal travel options, can reduce the energy demands of residents, businesses, industries and community facilities and services.

Community Facilities and Services – The location and design of various community facilities and services has an impact on energy use. Promoting the location of schools and recreational facilities, religious centers and other community facilities near residential neighborhoods encourages people to walk or bike to these destinations. Compact forms of development also limit the distance that public safety and emergency personnel have to travel to reach someone in need. Additionally, the condition of water and sewer infrastructure also influences energy demand for these utilities. Inefficiencies in treatment equipment and transmission lines can lead to higher operational costs for authorities, companies and, ultimately, consumers.

Housing – The location and design of housing can contribute to the amount of energy that is required for home heating and general operation. Homes sited or screened for winter winds and shaded from summer sun tend to reduce energy costs for seasonal heating and cooling. Detached and single story homes tend to use more energy than attached and multi-story homes. Building design and construction materials also contribute to energy efficiency. Buildings that are oriented to the south will absorb more thermal energy and be warmer in the winter because of the angle of the sun.

Big Horn County and Energy

Big Horn County is bounded by the Big Horn and Pryor Mountains to the south and the Wolf and Rosebud Mountains to the east. Located in south eastern Montana, the County has a year-round population estimated by the U.S. Census Bureau in 2009 at 13,015. The population density is estimated at 2 persons per square mile, compared to 6.2 persons per square mile for the State of Montana and an average density of 86.2 for the entire United States.

A rural area, Big Horn County encompasses 3,198,200 acres and includes most of the area of the Crow Indian Reservation and less than half of the area of the Northern Cheyenne Indian Reservation. Municipalities located in Big Horn County include the City of Hardin, the Town of Lodge Grass and the communities of Aberdeen, Busby, Crow Agency, Decker, Fort Smith, Garryowen, Pryor, St. Xavier and Wyola.

Mineral resources in Big Horn County include coal, natural gas (including coalbed methane gas), oil and sand, gravel and bentonite deposits. Reserves of high quality, accessible coal are estimated to exceed 11 billion tons. The County has nine oil and gas fields and the largest identified reserves of coalbed methane gas in the State of Montana.

Big Horn County's primary use of energy is electricity provided by two suppliers: NorthWestern Energy (NWE) in much of the County and Montana Dakota Utilities (MDU) in the southern portions of the County. Other electric cooperatives serving Big Horn County include Big Horn County Electric Cooperative, Tongue River Electric Cooperative and Yellowstone Valley Electric Cooperative.

NWE and MDU provide natural gas services throughout Big Horn County; and, multiple Billings and Hardin area suppliers provide propane to residents and businesses, reflecting another highly used resource for heating.

The Montana Climate Change Advisory Committee developed an inventory and forecast of greenhouse gas emissions in Montana and presented Governor Schweitzer with the Montana Climate Change Action Plan. This plan establishes a goal of reducing greenhouse gas emissions in 2020 by 20 percent relative to emissions in 2005. Local government actions taken to assist meeting this goal can provide multiple local benefits, including decreasing air pollution, creating jobs, extending landfill life, and reducing energy expenditures for the county, its businesses and its citizens.