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PROPOSED MONTANA ENERGY PLAN AND ENERGY POLICIES

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America has experienced energy shortages in the past with the 1973 oil embargo and the rolling electricity black outs in California a few years ago, but these market warnings were not enough for the United States or Montana to develop a serious long range energy supply plan. Many years have past, but this country is stuck between a future of more abundant, lower-cost energy and a future of restricted energy options and higher prices.

Montana's energy supply includes hydropower, coal, gas, oil, natural gas, biomass, ethanol, biodiesel, wind and solar. All of these options must be available because we are in an energy crisis and all of these options contribute to supply. The United States imports more, not less oil each year. About 50% of our oil is imported. Importing energy from countries that want to crush us economically is unacceptable. Drilling for oil and gas now is critical to our economy and national security.

Montana's diverse energy supply provides the opportunity to provide both low cost, plentiful, reliable energy to home owners and businesses and the wealth necessary to maintain a healthy environment. Wise state energy policies will guide Montana's energy production to provide for such needs as local and state infrastructure, modern schools and raising the standard of living for Montana citizens.

ELECTRICITY ENERGY POLICIES:

1. Increase the supply of low cost electricity by using coal fired generation.

Rationale: Plentiful, affordable and reliable electricity will reduce home and business energy costs by heating our structures, cooking our food, heating our water, drying our clothes and providing a portion of our automobile transport cost. Pollution at the point of use will be greatly reduced. Air quality in our cities and towns would be greatly enhanced. Low cost electric will increase the use of electric cars, especially for in-town use and further enhance air quality.

Montana has 44 electricity generation facilities located across the state with generating capacity of 5,500 megawatts. Coal fired generation makes up 64%, hydro facilities 34%, petroleum 1%, natural gas and wind the other 1%. Montana's coal reserves are estimated at 119 billion tons, roughly 25% of the total United States reserves. The total United States production of coal is 1.1 billion tons per year. **Electricity produced in Montana is not dependent on imported oil.**

Montana has a plentiful coal supply. The power plant in Colstrip, Montana is one of the cleanest plants in the United States. It is way below all of the EPA minimums on pollution. Also technologies are being developed to reduce pollution even further by treating the coal before it is burned. Coal is the logical choice for Montana because the

cost of coal is currently $1 per million BTU while natural gas is $7 and predicted to increase dramatically. The national demand for electricity is expected to increase by 50% in the next 25 years.

Note: Electricity generation with coal is the bridge to reduce dependence on foreign oil and provide economic growth and research for long term solutions such as nuclear, hydrogen, fuel cells, etc.

2. Rebuild and extend electrical transmission lines both local and statewide.

Rationale: Existing electrical transmission lines are aging and need repair. Transmission lines need to be constructed to enable Montana to sell more electricity out of state. It is cheaper and easier to ship electricity than coal.

3. Increase income to schools by selling coal and/or generating electricity next to the mine.

Rationale: The purpose of school trust lands according to the Federal Enabling Act, which transferred the land to Montana when it became a state, is to generate money for Montana schools. The 5.8 million acres generates only 50 to 60 million dollars each year for schools. The K-12 public schools spent $1.3 billion in 2007. Development of the coal on school trust land could fulfill the purpose of the school trust land by funding most of the yearly cost and free up millions of dollars for road improvements and local and state infrastructure.

4. Increase energy efficiency standards for new construction and continue to retrofit existing structures.

Rationale: The efficient use of energy reduces demand which lowers the price of electricity for everyone. Energy efficient construction has a very quick pay back, especially when electricity is used for heating and cooling.

5. Limit energy incentives to products that actually save consumers money. Pay back in savings must be a reasonable amount of time, eg. 10 years.

Rationale: An incentive to do the right things for the greater good works much better than a regulation.

6. Regulations which increase the cost of producing electricity must be made public including the impact it will have on home owners and businesses. Energy targets and goals must not be based on technology that does not exist.

Rationale: Regulations that get ahead of technology or have no scientific basis will lower our standard of living and may also increase the dependence of the United States on foreign oil.

TRANSPORTATION ENERGY POLICIES:

1. Develop the infrastructure and incentives needed to make natural gas vehicles viable in Montana. The first step is to start converting public transportation and government vehicles to natural gas. The trucking industry would be next.

Rationale: Natural gas is much cleaner than gasoline and vehicle oil changes and engine wear are greatly reduced. Natural gas can be used to reduce pollution in our cities and towns. The dependence of the US on oil imports is primarily in the transportation sector. Ninety six percent of the energy used for transportation comes from oil. About ½ of the oil used by the United States is imported. The US is the third largest producer of oil behind Saudi Arabia and Russia. The United States imports 11% of its oil from the Middle East and most of the rest of it comes from Mexico, Canada and Venezuela. Increasing demand for oil by China, India and other developing countries will keep the price of oil high. Also, the amount of oil the United States is importing is continuing to increase.

Note: Using natural gas to generate electricity will likely make it more difficult for the United States to supplant imported oil with natural gas. The United States imports natural gas almost exclusively from Canada.

Natural gas could be our bridge for the next 10 to 15 years to completely eliminate the importing of foreign oil. The next challenge will be the production, storage and use of natural gas. Abundant natural gas supplies are available in the United States, but we will likely face grid lock in making it available.

2. Increase gas and diesel supply by coal liquefaction and gasification.

Rationale: It is a matter of security and national defense to shift the transportation sector to a different fuel source. New electric automobiles, natural gas and flex fuel vehicles are viable, but it is difficult and expensive to retrofit existing vehicles. Hydrogen, non-food biomass (cellulosic ethanol) and fuel cells require years of additional research. In the meantime, public transportation and government vehicles can start switching over to natural gas. Oil will continue to climb in price faster than natural gas because oil contains more energy and has many uses besides powering vehicles such as making plastic. Oil is much too valuable to continue to burn to power our transportation industry.

OTHER ENERGY OPTIONS:

1. Continue to provide for the integration of wind and solar generated electricity into the grid as well as installations in individual homes.

Rationale: Wind and solar add to the electricity supply and could prevent disruptions such as rolling black outs. Although wind and solar do not presently have the capacity or

affordability to provide for future increases in electricity needs at the home or grid level, research is improving these technologies.
Solar and wind at the home level are becoming more cost effective with new technology. Even if it is too expensive to generate the total amount of electricity needed for the home, self generation will reduce some of the demand on the grid and make the home somewhat self sufficient in case there is a grid failure.

2. Expand the use of Biomass for heating and gasification purposes. Eliminate the wasteful practices of burning slash piles and managing timber by burning it. Salvage burned and bug killed timber for energy and lumber.

Rationale: Biomass is a renewable energy source which has great potential in providing heat, gasification and cellulosic ethanol. Currently valuable wood products from our forests are being wasted. For example, many slash piles are burned each summer on public and private timber land adding to the summer smoke pollution and impacting the tourism trade and health of Montana's citizens. However, some of the slash piles are run through a chipper and the product sold to be used to generate heat for industrial processes and to heat buildings which add valuable energy supply.

3. Increase the production of oil and gas from existing and new fields on private and public lands.

Rationale: Gasoline prices have risen because the US and global demand for oil has risen dramatically. Prices are high in the US, but not as high as in most other countries. Gas in Alberta, Canada is presently $5.50 a gallon, China $5.62, Germany $5.29, and Japan $3.84. US Oil companies are presently making more money, but are also paying more taxes. ExxonMobil had after tax earnings of $40 billion and paid $30 billion in taxes in 2007 which is a tax rate of about 40%. Their net income was 5.7 cents for each dollar of revenue which is about the same as the average for all industries. The Federal and state governments charged an average of 43 cents per gallon at the pumps excise tax. This amounts to 10.8 cents for each dollar at $4.00 per gallon. This tax is almost twice the net income of oil companies. Also, government biofuel mandates have raised the cost of gasoline about 27 cents per gallon.

Oil and gas production in the US must be increased now to stabilize gasoline prices to provide time for the US to reduce and eventually eliminate the need to import oil. Natural gas could play a major role in reducing oil imports and pollution, but the US production of gas is flat and many new electricity generation plants are using natural gas.

Although US consumers are beginning to cut back on the miles they travel, 4.3% between March 2006 and March 2007, demand is still outstripping supply. China, India and other developing countries are buying more oil. Clearly high prices and conservation will not solve the problem of insufficient supply. The discovery of the huge Bakken oil field may give the United States the opportunity to stop importing oil from the Middle East in a few years.

4. Increase refinery capacity by expanding existing plants or building new ones.

Rationale: Uncertainty in the market place and the cost has made oil companies reluctant to build additional refineries. There has to be some assurance that their long term commitment will be honored and that they will not be put out of business with a new regulation.

5. Suspend state mandates to use ethanol until production and pollutions problems are solved.

Rationale: Montana does not have an ethanol plant which means that the ethanol would need to be trucked in. An ethanol plant in Montana is not likely because most ethanol is made from corn. In 2007, 25% of the corn crop (3.3 billion bushels) was used to make ethanol. Ethanol and biodiesel compete with our food supply. Food prices are impacted when grains are used for fuel. Also, ethanol is still not competitive without subsidies and mandates. Ethanol has only 2/3 the energy content of gasoline which dramatically reduces gas millage. Currently most ethanol plants burn natural gas.

The future of ethanol making it on its own merits depends primarily on the cost. However, cellulosic ethanol plants that use non food biomass such as raw sewage, sawdust and other waste carbon products can be very competitive if built in tandem with a cheap source of electricity and waste heat from a coal or nuclear plant. The cost could come down to the point consumers would not have to be forced to buy it.

6. Increase recycling, especially of finite resources.

Rationale: There are many excuses not to recycle, but given the opportunity people would find a use for most of the items which end up in the land fill. We must not continue to waste our natural resources.

7. Exempt excise road taxes on recycled oil and grease.

Rationale: Exemption from road taxes provides an incentive for people to recycle rather than discard.

8. Utilize our free enterprise system and competitive markets to come up with the solutions and technology to meet our energy needs and maintain a healthy environment at the lowest cost.

Rationale: Freedom, compassion and competition has made the United States what it is today.