

CHAPTER 6:

Recommendations

The preceding Chapters in this *Blueprint* have laid out this argument:

Montana stands at a crossroads. We can wisely choose a course today that will lead to a future where Montana’s rural communities are revitalized and urban centers enhanced; energy used in Montana is produced in Montana from clean renewable sources; energy is used as elegantly and efficiently as possible; Montana’s environment—air, water, soil, plants, animals, landscape—is sustained in perpetuity; and this state has become a leader and a model for other states and nations, as we create for ourselves a sustainable society.

The other choice—perhaps made by default—is a path that may seem easier in the short run, but in the end will prove more costly—socially, economically, and environmentally—and unsustainable.

So what do we do next?

First, we all (policy-makers, business-people, and individuals who work and play here) need to recognize that we are at this crossroads, that the choices we make in the next few years will have long-term ramifications.

Second, we need to understand that we face serious challenges. The U.S. is too dependent on foreign oil. In the 2005 State of the Union Address, President Bush admitted that Americans are “addicted to oil.” We can extend this and say we are addicted to too much cheap energy in any form.

Concurrently the climate is changing due in large part to the excessive burning of fossil fuels. This change is occurring more rapidly than most scientists predicted only a few years ago. Global warming will affect Montanans in many ways, including the potential for increasing numbers and severity of wildfires, droughts, storms, and other unusual weather patterns. There will be negative and costly impacts to agriculture, forestry, and recreation—all mainstays of Montana’s economy and way of life.

But we can do something about it, if we *care* enough. Changing long-ingrained habits can be difficult, but if we are motivated to reduce our impact on Earth’s climate, change can be refreshing, especially when we also are rewarded with smaller power bills and less waste. Developing smart habits, like remembering to turn off the lights when we leave the room and turning

down the heat in winter when we leave the house for awhile sets a good example for the whole family. **Small changes, like changing all your light bulbs to compact fluorescents and recycling paper and plastic, really do add up to big savings. But small changes alone are not enough.**

Educating ourselves and then advocating for sound, sustainable energy policies not only help our families but also our broader communities. Likewise, it's smart to support legislators and other political leaders who are willing to do the same.

There are hundreds, perhaps even thousands of useful recommendations on how to conserve energy, become more efficient, implement wind, solar, and biofuels projects; the list is constantly expanding. There are several excellent references at the end of this chapter. The problem isn't "What Do We Do?" so much as "Where Do We Begin?" The answer to this question will differ depending upon whether you are the Governor or a small-business owner; a legislator or a householder; a teacher or a preacher.

The number one thing that ALL stakeholders can contribute to implementing this plan is this: **Understand the difference between supply-side management and demand side management of energy.** Supply-side management relies on meeting the explicit and implicit—often unquestioned—desires of the marketplace; consumers are beholden to whatever prices and flow of goods that providers choose to offer. **Demand-side management of energy shifts responsibility and power to the consumer.** Consumers make the choice and regulate the market by becoming conscious "conservers"—modifying their demands to save money and energy. It's the difference between asking, "How can I get more gasoline and hopefully not pay too much more for it?" versus "How can I use less gasoline?"

From this understanding we can begin making changes in our own habits, in the policies of government at all levels, and in the way we think, to create an effective demand-side managed energy economy. When developing ANY supply-side energy project, run it through the Test Criteria for Energy Resources in Chapter 1. If it doesn't pass, it's not sustainable.

Specifically, we recommend the following:

Governor's Office

Government needs to foster positive change and provide true leadership by becoming a role model. Led by the Governor's office, Montana state government could take the lead by adopting building codes that encourage energy efficiency for new government buildings and energy-conserving retrofits for old ones; adopt transportation practices focused on efficiency and conservation, which also phase in use of biofuels; and reward all state employees who devise aggressive energy conservation strategies. This sets a tone for what is

possible. This also helps build and stabilize markets for alternative energy projects, energy-efficient vehicles, and energy-efficient appliances.

Muster the courage to tell Montanans what is truly at stake, and build support to make the necessary changes. Make sure all information, accompanied by solutions, is freely and readily available. Make conservation and efficiency the underpinnings of a strong energy program. Focus on demand-side management.

Legislators

1. Change the tax structure to reward actions that reduce energy consumption and greenhouse gas emissions. Some of those actions and some possible tax incentives include:
 - Purchasing “green” power;
 - Buying a bicycle or other fuel-efficient vehicle;
 - Planting trees, and also landscaping in ways that use little water and little energy;
 - Completing an energy-efficiency building upgrade;
 - Promoting the production of local foods and their purchase (initially by government entities or public schools).
 - Granting tax-free (or reduced tax) status to projects and investments that introduce clean energy or reduce greenhouse gas emissions;
 - Financing these incentives and tax-reductions through taxes on carbon emissions (for instance, institute a carbon tax on all fossil fuels, with revenues going to support clean power);
 - Charging a motor-fuel tax of \$0.05 per gallon with income going toward property tax reduction;
 - Taxing fossil-fuel-based herbicides and pesticides with income going toward support of organic or other forms of sustainable agriculture;
 - Redirecting taxes on solid waste toward subsidizing recycling and composting.
2. Introduce, maintain, or strengthen programs and policies such as net-metering, Universal Systems Benefits, Renewable Portfolio Standards, renewable fuels standards, and updated building codes that encourage energy efficiency and the switch to home-grown fuels and electricity.
3. Support educational programs that train workers for the “new energy economy”—from designers and manufacturers to builders and installers. Encourage legislation requiring the hiring of personnel trained through state-approved educational and apprentice programs, setting job quality standards, and adopting Best Value Contracting.

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Local/County Government

Like state government, counties and municipalities can step up to a leadership role and serve as role models for their citizens and other communities. Municipalities are encouraged to join Cities for Climate Protection Campaign.¹¹⁶ Another simple leadership step is to buy green power. School buses and government vehicles can begin using biofuels, make their buildings more energy efficient, and where appropriate participate in existing or emerging programs using biomass for heat and co-generation.

High schools, vocational schools, colleges, and universities can develop programs to train workers for the new energy economy, as well as provide information and education to their constituents. Libraries can become resource centers.

Communities

Communities can support building a sustainable, energy efficient town, with design, infrastructure and policies that promote saving energy and enhance the quality of life of its inhabitants.

Promoting ‘Buy Local’ campaigns will keep money and goods circulating within the community and reduce transportation costs and impacts.

Civic Organizations

All civic organizations can actively promote and support the policies and programs needed to make the transition to an energy-efficient, home-grown energy economy.

Churches and fraternal or service organizations can adopt energy-efficiency measures, use energy efficient appliances and construct new buildings or remodel old ones to become highly energy-efficient, thus becoming visible models for the community. Schools and other public buildings can participate in existing and emerging programs using biomass for heat and energy.

Businesses

All businesses can adopt the Natural Step Framework, a program begun in Sweden in 1998 that encourages a step-by-step process for companies to become more environmentally friendly by re-aligning their operations with nature’s laws.¹¹⁷

Businesses can opt to buy green power, become more energy efficient,

¹¹⁶ See <www.iclei.org/index.php?id=800>, website for the International Council for Local Environmental Initiatives (ICLEI), a coalition of local municipalities that are addressing pressing energy issues and sustainability.

¹¹⁷ Natural Step Framework is a systematic approach to evaluating the sustainability of business, manufacturing and citizen actions. Find out more at <www.naturalstep.org>.

invest in fuel efficient vehicles and use biofuels. Just as housing is a high-energy consuming element of our society, so are commercial buildings. Opportunities abound for reducing energy consumption in heating, lighting, air-conditioning and in manufacturing processes.

Businesses can work to insure that the products they provide to consumers are manufactured sustainably and, in total, reduce waste and minimize CO₂ emissions. Experience has shown that businesses that sell environmentally safe products and promote green practices not only play an important role in educating consumers but also enjoy a profitable business advantage in customer appeal and sales.

Agriculture and Forestry

Agriculture and forestry in Montana can make an enormous contribution to the state's switch to a more energy-efficient economy. Agricultural practices that conserve soil and water, minimize the use of fossil-fuel based fertilizers and pesticides, and sequester carbon should be actively promoted. Wind power and biofuels can produce extra income for farmers while reducing on-farm fossil fuel use.

The forest industry can support policies that encourage sustainable forestry including Forest Certification programs and Forest Product "feebates" that penalize products produced by non-sustainable forest practices and subsidize those that are produced through sustainable practices. The U.S. Forest Service, in 2007, instituted a policy where cut trees are transported whole to a site where any salvageable material that can be chipped for biomass must be retained and available to meet energy needs.

Sequestering carbon in both growing forests and grasslands could produce income in the future.

Individuals

Every Montanan needs to understand the situation we are in, how we individually contribute to it, and what we can do about it. Government policies can change, but will not do so until enough people demand it. Given the plethora of climate change related legislation in the 2007 Montana and national legislatures, people are beginning to signal their desire for true leadership that serves them and future generations.

We, as citizens, send a signal to businesses and government through what we purchase as well as how we vote. Responsible citizens need to become educated and involved. Here are some of the ways to send those signals:

1. Support politicians and businesses that promote policies and products that help reduce energy consumption and encourage positive change toward a sustainable energy economy.

2. Conduct an energy audit of your contributions to greenhouse gas emissions, waste, and excess energy consumption. There are a number of websites that provide a simple calculator to estimate your and your family's carbon emissions. These sites provide great ideas for reducing your "carbon footprint"¹¹⁸.
3. Consider what it would take to become carbon neutral. Purchase 'green power' when possible and purchase carbon offsets for the remainder of your carbon 'footprint.'

More excellent recommendations can be found at the following websites: "New Energy for States: Energy Saving Policies for Governors and Legislators" by the Apollo Alliance at <www.apolloalliance.org/docUploads/apollostate_report.pdf>.

"New Energy for Campuses: Energy Saving Policies for Colleges and Universities" by the Apollo Alliance at <www.campusactivism.org/server-new/uploads/newenergypolicy.pdf>.

A great site for learning more about energy saving measures that can be undertaken by consumers, policy-makers, businesses, educators, and Energy Professionals is the Alliance to Save Energy at: <www.ase.org/content/article/detail/3451>.

A source for ideas on energy conservation for schools can be found at "Flex Your Power.", <www.fypower.org/inst/edu.html>.

¹¹⁸ This website offers carbon footprint calculators: <www.carbonfootprint.com/>.