CRAFTING a Clean and Sustainable ENERGY POLICY for Your State



State Environmental Resource Center

PLANNING An Energy Future

Energy. It fuels our nation's economic growth. It makes industrial production possible while providing the lifeblood of our growing information infrastructure. It heats and lights our homes and makes the world more accessible by powering our transportation systems. It is, quite simply, the foundation of the modern economy. Our demand for energy continues to increase while our supply of fossil fuels is being depleted and the public health and global warming impacts continue to increase.

However, with sufficient foresight, planning and investment we can insulate ourselves from both current and future disruptions in the global energy supply. Alternate supplies exist, and these alternatives offer tremendous promise on many fronts.

On one level, renewable resources such as solar, wind and biomass power offer a means of achieving some greater measure of energy diversification. On another, these technologies have the power to free us from the environmentally destructive byproducts of fossil fuel combustion things such as mercury, sulfur and nitrogen emissions, carbon-induced climate change, acid rain, smog and countless other human and environmental health concerns.

Renewable energy sources should comprise a significant portion of our current and future energy consumption. And as technological advances are made in these areas, renewables should gradually play a greater role in our energy portfolio. Investments in clean and renewable energy are only part of the answer, however. Beyond identifying and developing alternative energy sources, we must make a conscious decision and a concerted effort to reduce our energy demand. Simple efficiency improvements, if implemented on a large scale, could have a dramatic impact on the amount of energy that is used.

By supporting increased investment we can encourage businesses to continue developing more energy-efficient and environmentally-friendly products such as home appliances, televisions and computers. Furthermore, common sense standards for building design, weatherization and lighting are needed to minimize energy waste. All of these efficiency programs will save consumers money while reducing our demand for the pollution-laden fuels that currently provide our electricity. In addition, improvements must be made in the efficiency and environmental sensitivity of our transportation systems and infrastructure which account for a great deal of both our energy consumption needs and airborne pollution.

Taken together, clean and renewable technologies, efficiency improvements and demand reductions are the cornerstones of our energy future. We hope that the following principles will help guide you as you attempt to craft a clean and sustainable energy policy for your state.



ENERGY Principles

A Blueprint for a Sustainable Energy Future

SUSTAINABILITY

The fundamental principle of any energy policy should be sustainability — the long-term maintenance of the diverse and productive ecosystems upon which all life depends.

ENERGY EFFICIENCY

Any energy policy should emphasize energy efficiency as a top priority and should fully study the impacts of the policy's provisions on human health, the natural environment and wildlife. And we must continue to push businesses to innovate and sell more energy efficient products for homes, businesses, and transportation. These improvements save consumers money, reduce our demand for dirty fossil fuels, and help improve our environment by minimizing the adverse environmental impacts of traditional energy development.



IMPACTS

Any energy policy should seek to minimize impacts on human health, wildlife, the climate and the environment. And because we recognize that even "green" technologies have some environmental drawbacks, efforts should also be made to minimize the adverse impacts of these technologies.

Resource Management

A sustainable energy policy must skillfully balance the growing needs of human populations while preserving the natural resources, habitat, wildlife and biological diversity that are necessary for a healthy ecosystem.

RENEWABLE RESOURCES

Renewable energy sources can free us from our dependence on fossil fuels while creating new job opportunities and economic growth. Wind, sustainably-managed biomass, solar, and small-flow hydro-power, as well as other clean alternative energy sources currently in development, will help clean up our environment and limit the dangerous and destructive impacts associated with the extraction and combustion of fossil fuels. Furthermore, investments in these new technologies will provide new economic opportunities for people in every state, and especially for those in rural America. Renewable resources should comprise a significant portion of our energy consumption, and that proportion should increase steadily until we have achieved energy sustainability.

DIVERSITY

Total reliance on any given energy resource threatens to undermine the concept of sustainability and energy security. Therefore, we should strive to achieve a high level of diversification of renewable resources.

COMPREHENSIVENESS

All sectors of the economy, from transportation to industry, agriculture to residential, each present unique energy-related challenges. For this reason, energy policy planning should strive to be as inclusive as possible. For an energy policy to be equitable and, ultimately, sustainable, it must consider the dynamic interaction between these sectors and seek to foster improvement and innovation in each.



POLICY Tools

A State Arsenal For Energy Sustainability

POLLUTION CONTROL

A balanced energy policy must push businesses to innovate, particularly with respect to pollution control. Fossil fuel emissions — sulfur dioxide, nitrogen oxide, carbon dioxide and mercury — are major contributors to climate change, urban smog, acid rain and countless other threats to wildlife, habitat and human health. Steps must be taken to limit these emissions and to mitigate their impacts. States should consider all the varied tools at their disposal from point source command and control regulation to carbon sequestration and other, non-traditional policies. Where practicable and enforceable, businesses should be given some flexibility in the processes they use to attain these reductions so long as they produce real reductions to desired levels and have no other offsetting, adverse environmental impacts.



Renewable Portfolio Standard

Steps should be taken to encourage the growth of renewable power capacity and infrastructure. By adopting a Renewable Portfolio Standard (RPS), states can ensure that a specific percentage of their energy needs are provided by clean and renewable energy sources. This percentage should increase steadily as technological advances make renewable energy more reliable and cost-effective, with an aim towards achieving some greater measure of energy sustainability.

Research and Development

States must make significant investments in agencies and businesses participating in research and development of energy efficiency, renewable energy and other green technologies.

EDUCATION AND TRAINING

Individual consumers and businesses alike need to be educated and trained in the potential applications and benefits of clean, green and renewable energy technologies. By educating and training the public about the uses and values of these products, states can maximize the benefits associated with new technologies. In addition, consumer education offers great potential for helping to bring about more widespread and efficient use of existing technologies, thereby limiting energy waste and slowing the growth of our energy demand.

SOCIAL COST PRICING

States must ensure that some measure of the social impacts and costs associated with fossil fuel extraction and combustion be included in the pricing decisions related to those fuels. Or, alternatively, they must ensure that the social benefits — such as cleaner air and water — are rewarded. This can be accomplished with fees, taxes, tax credits or rebates.

Systems Benefit Charge and Public Benefits Fund

By placing a small surcharge on each kilowatt-hour of electricity delivered to customers, states can finance a public benefits fund which would be used to support investment in energy efficient and other green technologies, as well as important conservation and conservation education programs. This fund would help limit dangerous emissions and the other negative externalities associated with fossil fuel extraction, production and combustion.

DISTRIBUTED GENERATION

Small-scale renewable energy generation facilities, be they for residential or commercial use, should be encouraged by states. Efforts should be made to simplify the procedures for consumers wishing to install such facilities, and investment in these technologies should be encouraged through tax incentives. Among other benefits, localized renewable energy generation reduces the need for transmission lines and right-of-ways which eliminate important wildlife habitat and result in a net loss of energy during transmission. Distributed generation technology also reduces the need for centralized power generation systems, thereby insulating consumers from potential disruptions associated with any number of unanticipated circumstances.

NET METERING

Customers who own localized residential or commercial renewable energy generators should be allowed to sell excess electrical production back to the power grid to which they are connected at its fair market value. Doing so would increase the use of renewable energy, encourage local and individual self-sufficiency and limit the amount of fossil-fuel emissions.

FUEL MIX DISCLOSURE

Consumers should be informed about the impacts that their consumption choices have on the environment. To achieve this level of understanding, states should mandate that all utilities, public and private, provide their customers with accurate information about the mix of fuels used to generate their electricity.

STATE GREEN POWER MANDATES

States can set a responsible example for the marketplace by requiring that a certain minimum percentage of the power needs of state-run facilities come from alternative, clean and renewable energy sources.

MANDATORY GREEN POWER OPTION

States should require utilities to offer green power options to their customers. Those consumers who are dissatisfied with the adverse environmental impacts of the traditional fuel mix should have the option to pay a premium to support the development of clean and renewable energy sources. This option should serve as a supplement to, as opposed to a substitute for, an ambitious renewable portfolio standard.

GREEN BUILDING STANDARDS

Building codes must be revised to include higher minimum standards for energy efficiency and environmentally-friendly materials. Furthermore, all efforts should be made to encourage contractors to consider energyefficient design techniques such as day-lighting, waste recycling, windows, office equipment and heating, cooling and ventilation systems. Care should be taken to use environmentally-friendly materials in these projects whenever possible. At a minimum, these standards should be mandatory with respect to state and local government projects. Modernizing building codes is an easy-to-implement, cost-effective means of achieving energy and cost savings.

TAX INCENTIVES

Environmental goals can be achieved at lower economic costs if green taxes are used to provide the right incentives and/or disincentives. States should provide incentives for both producers and consumer in order to level the playing field for renewable energy products and make them attractive choices from both an investment and consumption standpoint. By rewarding those who make environmentally friendly decisions, tax programs can stimulate institutional changes that permanently transform the market — a market which, heretofore, has proven incapable of fully incorporating the environmental benefits of green technologies into the pricing system.

PLANNING

Concerns about energy usage and environmental impacts should be incorporated into our long-term state and local planning processes. In so doing, we can bring about significant reductions in energy usage by developing more efficient communities with respect to business locations, traffic patterns and more.

TRANSPORTATION

Reductions in vehicle emissions and increases in vehicle energy efficiency must be encouraged through strict air quality standards, funding for public transportation projects and incentive programs for the purchase and use of alternative fuel vehicles.

The State Environmental Resource Center (SERC) researches state environmental policies and assembles information and tools to help legislators make important decisions on key environmental issues. SERC identifies the most innovative and effective state policies and practices and exposes anti-environmental legislative trends. Through our website, our free weekly e-mail newsletter, **Wildlines**, and direct access to our knowledgeable staff via our toll-free line, we share our findings with legislators across the country.



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