

# STRATEGIC ENERGY POLICY

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**Abstract:** Energy policy is the manner in which a given entity (often governmental) has decided to address issues of energy development including energy production, distribution and consumption. The attributes of energy policy may include legislation, international treaties, incentives to investment and guidelines for energy conservation, taxation and other public policy techniques.

As the 21st century opens, the energy sector is in critical condition. A crisis could erupt at any time from any number of factors, from an accident on the Alaskan pipeline to a revolution in a major oil-producing world. Oil is still readily available on international markets, but prices have doubled from levels that helped spur rapid economic growth through much of the 1990s. And with spare capacity scarce and Middle East tensions high, chances are greater than at any point in two decades of an oil supply disruption that would even more severely test the United States' security and prosperity.

In the short term, the energy situation may well improve due to seasonal downturns in demand as well as economic slowdown in the U.S. But from a longer-term perspective, the difficult situation in energy markets may get worse before it gets better. Across much of the developing world, energy infrastructure is being severely tested by the expanding material needs of a growing middle class, especially in the high-growth, high population economies of Asia..

**Keywords:** Prosperity, crisis, decay, revolution, consumption, conservation, taxation

## 1. INTRODUCTION

What is appropriate technology all about? It is a way of thinking about technological change; recognizing that tools and techniques can evolve along different paths toward different ends. It includes the belief that human communities can have a hand in deciding what their future will be like, and that the choice of tools and techniques is an important part of this. It also includes the recognition that technologies can embody cultural biases and sometimes have political and distributional effects that go far beyond a strictly economic evaluation. "A.T." therefore involves a search for technologies that have, for example, beneficial effects on income distribution, human development, environmental quality, and the distribution of political power—as well as productivity—in the context of particular communities and nations.

## 2. MAJOR POLICIES

- Advanced vehicles
- Better fuels to run them
- Carbon sequestration
- A smarter grid
- Financing global energy development
- Renewable and conservation.

## 3. EXPLANATION

Concerning advanced vehicles, the central idea is a major incentive program to help manufacturing plants retools for the production of hybrid vehicles, and to engage American consumers with a significant purchase incentive. These ideas emerged from an industry/UAW/environmental working group, and we are hopeful that this new coalition will be carrying its ideas and political clout to Washington next January. Too little attention is paid to the fuels that drive our transportation system. Working with a broad agriculture industry, trade, and technical group, the Energy Future Coalition has built a program to redirect export subsidies to support a new, farm-based alternative fuel program. This classic win-win-win proposal, based on rapidly emerging technologies in biofuels, can make a major contribution toward reducing our energy dependence, develop clean fuels, give farmers around the world new economic opportunities, and stem the costly and counterproductive flow of agricultural subsidies.

We are also much taken with the need to address the future of coal – an energy resource that is cheap, widely available, and very polluting. Led by the former head of the National Mining Association, Dick Lawson, and the head of the Climate Center for the Natural Resources Defense Council, David Hawkins, a group from coal producers, utilities, and the environment came together. These are not natural allies! But they agreed about this: Technologies that allow the capture and sequestration of carbon dioxide emissions can transform the future of the coal industry. They could allow the United States and others – especially China and India – to exploit vast coal reserves in a climate-friendly fashion. And carbon-capture technology, which leaves behind a hydrogen stream, might eventually make coal a low-cost source of hydrogen for fuel cells in buildings and cars and reduce U.S. dependence on oil.

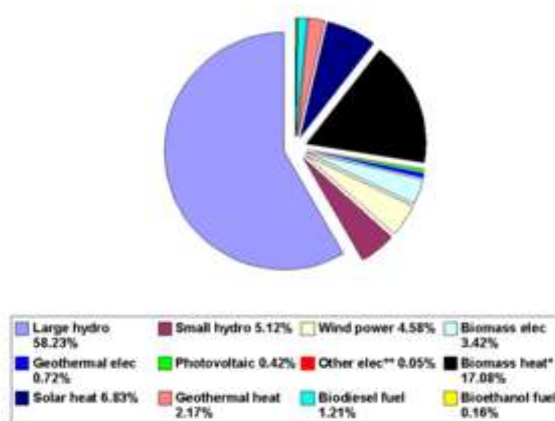


Fig 1: World Renewable Energy

A fourth policy intervention focused on what we have called “the Smart Grid.” The urgent need for this initiative was illustrated by last summer’s vast power outage. The nation’s electrical power system is antiquated, fragile, and inefficient, operating for the most part on 50-year-old technology. Mandating standards for the grid, as currently being discussed in Washington, is an important first step. But much more can and should be done. Introducing microprocessor technologies, rewiring the grid with advanced computer controls, and developing self-healing transmission and distribution elements are among the steps that have to be part of a new “smart grid.” Running today’s digital society through yesterday’s grid is like running the Internet through a telephone switchboard.

A fifth major policy initiative focuses on international energy development. The world is looking at a tripling of energy use by 2050, as the economies of China, India, and other developing nations increase economic output. Even with that growth, the modern energy-services gap faced by nearly two billion people will not be closed. And if that growth occurs using outdated and polluting energy sources, climate-altering emissions will grow dramatically. In human and environmental terms, this scenario presents an unacceptable future and a daunting challenge. Innovative financing techniques are needed that can reduce the risk to the private sector and mobilize investment in energy development. We are exploring the creation of a new category of investment securities, called “Global Development Bonds.” These would combine tax benefits, political risk insurance, and matching funds from the U.S. government to encourage private investment in selected countries (consistent with the President’s Millennium Challenge Account initiative) for sustainable energy development. Finally, we agree with you that the promise of solar is great, and that we must continue to make it more cost competitive and user friendly.

#### 4. LONG TERM POLICY INITIATIVE

##### 1. Review international approaches to build, maintain, and use strategic and commercial crude oil and petroleum product inventories:

a. Enhance and modernize IEA strategic stockpile policies in light of the changed international market, taking into account situations that technically fall short of a supply disruption as well as different regulatory authorities among IEA members.

##### 2. Accelerate demand-management efforts at home and internationally

a. Take a pro-active government position on demand management.

b. Use federal procurement authority to promote use of alternative fuels and develop programs to introduce new efficiency technologies into federal buildings and nascent transportation technologies into government vehicle fleets

##### 3. Maximize efforts to develop every clean source of domestic fuel supply

a. Oil and natural gas

1.) Accelerate completion of the U.S. oil and natural gas reserve inventory, as mandated by Congress, highlighting restrictions on resource development. Such an inventory needs to be completed soon and well before any plan is adopted to develop particular domestic resources

2.) Undertake an accelerated and complete review of tax and fiscal policy as they impact U.S. oil and gas development taking into account the competitive position of the U.S. fiscal regime internationally, in order to attract more capital to the sector

##### 4. Develop mechanisms for a new national approach to energy policy

a. Create an appropriate interagency process to articulate and promote energy security policy and integrate energy policy with overall economic, environmental and foreign policy

b. Review and streamline the allocation of authorities within the federal government, especially in areas of land management and energy

c. Convene a national energy security summit.

#### 5. LATEST STRATEGIC ENERGY REVIEWS

The public consultation was open from 1 July until 10 September 2008. It elicited **280 replies, 159 from individual citizens** and **121 from organisations**. Among citizens, Finland, Belgium, the Netherlands and Poland were relatively highly represented, as well as Croatia. Among organisations, about a fifth were EU-level and of the rest, those based in Belgium.

## 6. FUTURE

- We believe that we can help to mobilize the political coalition necessary for the task.
- New constituencies, from traditional NGOs to an invigorated faith-based community, are arguing for greater justice and opportunity around the world;
- An increasing number of leaders in the farm belt want change, and their voices are being mobilized on Capitol Hill to alter our subsidy policies;
- Organized labor is searching for alternatives to support as they work to keep manufacturing vigorous, and in the United States; and most important, the public can be offered solutions that are right and in our long-term national interest. The key ingredient is leadership – recognizing the problem, identifying the opportunity, and selling the options.

## 7. CONCLUSIONS

Government often needs a kick in the pants; the interest groups often get too cozy; and the future becomes unattended as political vision dwindles. Energy is an excellent example of too much coziness and too little vision.

### Our Mission:

A low budget low cost zero pollution non explosive clean fuel production and delivery system within the reach of common people that can be modulated to tailor the needs of few individuals to large scale utility multi- functional platform of compressed air stations powered by ocean waves as our free driver, we call it **“FUEL OF THE FUTURE”**

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