

Providing for our Future Energy Needs
One of the Great Challenges of this Century

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Providing for our world's future energy needs is one of the great challenges of this century. Increasing world populations demand higher standards of living that require more access to energy. Indeed, the U.S. Department of Energy (DOE) projects global energy demand to increase by 20% by 2025. Without energy, our entire industrial and cultural infrastructure would collapse, including agriculture, transportation, information technology, communication, and many of the essentials that the public takes for granted.

China, India, Middle East, and the rest of Asia are industrializing with astonishing speed. China is projected to account for 20%-25% of global energy demand growth over the next 15 years. If the per capita energy consumption in the developing world were increased to only 50% of that presently consumed by citizen of industrialized nations, and if everyone in the industrialized nations were to conserve down to the same level, energy production worldwide would have to increase by more than 40% to meet the energy demands.

Conservation and efficiency can slow the increase in energy demand, but they cannot stop the increase. Believing that global energy production does not have to increase significantly in the remaining decades of the 21st century is to ignore those in developing nations who demand access to energy resources.

Global energy production must increase. The global energy pie keeps growing larger and larger. Despite growth in alternative energy sources, world consumption of oil and gas continues to increase. Alternative energy resources like wind, solar, hydrogen, photovoltaic, etc. are the answer to our long-term energy needs. But these technologies are still in their infancy. As the total energy pie continues to grow larger, alternative energy sources, while improving significantly, remain a very small portion of the total energy mix. The technology and efficiencies of alternative energy sources must be improved by an order of magnitude for these resources to become a major factor in the global energy mix. Until then, the world will continue to move on oil and gas.

Credible studies have shown a clear link between per capita income of a nation and per capita oil consumption of a nation. The studies verify the relationship between the wealth of nations and oil consumption and suggest that measures to reduce a nation's oil consumption absent a viable alternative energy resource would result in a decrease in that nation's standard of living.

We are faced with a significant energy challenge. To meet this challenge, America must embrace all forms of American energy for the future – wind, solar, biomass, nuclear, and fossil fuels. Today, fossil fuels provide over 80% of U.S. energy supply and oil and natural gas will supply more than 60% of our nation's energy needs 20-25 years in the future. The fact remains, that for the foreseeable future, oil and natural gas will be our main energy source.

Meeting our future energy needs will require deliberate action, extremely high technology, and high capital investment for many years.

We must recognize the extraordinary scale of this effort. Installing compact fluorescent lights in every U.S. light fixture meets 4% of our energy needs. A million wind generators addresses only 1/7th of our energy needs and would require a surface area nearly as large as all of Kansas and Oklahoma covered border-to-border with wind generators. Replacing 10% of the gasoline in the U.S. with ethanol would require every inch of Illinois, Indiana, and Ohio just for feedstock. We need all forms of American energy for the future, but the point being made here is that the pace of transition from fossil fuels to viable alternative energy sources will be much slower than is commonly assumed by the public and promoted in political advertisements.

Every energy forecast from every energy agency in the U.S., Europe, and elsewhere predicts the vast majority of our energy will be fossil fuels through 2050. Coalbed methane (CBM) and shale gas took 30 years to develop to the point of providing 15% of U.S. production. A similar time horizon and billions of dollars have been invested to begin developing the huge oil and gas fields in the deep-water Gulf of Mexico and tar sands of Canada. We are obligated to develop these future fossil fuel energy resources to heat, cool, and light our homes, power our computers, and transport our children and grandchildren.

Oil and gas is and will be the most critical and strategic component of the global energy mix for decades to come. Our nation needs energy policy that recognizes these realities. We need an energy policy that includes conservation, efficiency, alternatives, oil and natural gas. Out of absolute necessity, American oil and natural gas production must provide us with a bridge to our alternative energy future. Ignoring the problems of today while we search for that perfect tomorrow is a sure formula for economic disaster. A “Just Say No” energy policy that extends to all viable energy supply solutions, including nuclear energy, hydroelectric projects, coal, oil, and natural gas is simply unworkable. Americans deserve more than talk about what won’t work. This country needs energy solutions and it should begin with freedom of American companies to develop American natural resources.