OTC 21077

Jobs and the Economy: How the Energy Industry is Creating Jobs, Leading the Economy and Impacting Consumers

David Holt/Consumer Energy Alliance; Sandeep Khurana/ Devon Energy Corporation

Preface

This manuscript is intended to set the stage for two panel discussions, "Jobs and the Economy: How the Energy Industry is Creating Jobs, Leading the Economy and Impacting Consumers", scheduled for Monday, May 3rd, 2010. The panel participants include:

Government's Role in Supporting Energy & Creating Jobs (2:00 – 3:10pm):

- The Honorable Sean Parnell, Governor of the State of Alaska
- The Honorable Bob McDonnell, Governor of the Commonwealth of Virginia
- The Honorable Bob McLeod, Minister of Industry, Tourism and Investment, Legislative Assembly of the Northwest Territories
- Jack Gerard, President & CEO, American Petroleum Institute
- Dave Lawrence, Executive Vice President, Exploration and Commercial, Shell Upstream Americas

Private Sectors Role in Supporting Energy & Creating Jobs (3:15 – 4:30pm):

- Dr. Michael Webber, Instructor, The University of Texas at Austin
- Randall Luthi, President, National Ocean Industries Association
- Ken Bromfield, US Commercial Director, Energy Business, Dow
- Jeff Moseley, President, Greater Houston Partnership
- David Holt, President, Consumer Energy Alliance

Moderator:

- Paul Bledsoe, Vice President, National Commission on Energy Policy (confirmed)

Organizers

- David Holt, President of Consumer Energy Alliance
- Sandeep Khurana, Advisor, Devon Energy Corporation

Abstract

Energy is the lifeblood of our economy, the backbone of our security and essential to our way of life. It powers American businesses and homes, fuels the flow of goods and services around the world, and generates tens of millions of jobs that support and sustain our communities. Whether we're referring to energy derived from oil, gas, wind, water or waste — the sun, the moon or deep inside the earth — Americans need it all. And they need it in a form and function that's stable, affordable, constant and environmentally sound.

While the national economy struggles to recover, many Americans remain unaware of the integral role that energy plays in sustaining economic capacity, maintaining productivity and providing opportunities for growth. Understanding the role our current resources play in driving commerce, while we move to diversify and expand our nation's energy portfolio to improve energy security and create jobs and economic benefits are at the core of some of the country's most pressing needs.

Today's energy problems remain a critical issue for America's consumers, businessmen and political leaders, and we must do everything we can now to create economic stability, energy security and stable prices over the near- and long-term. Elected officials,

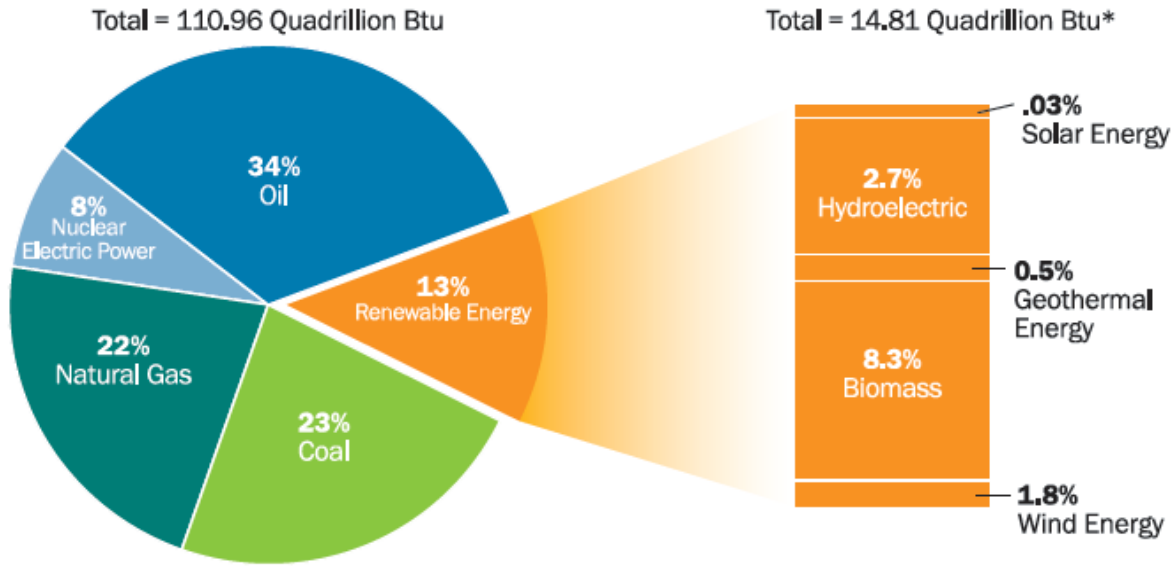
affected stakeholders and consumers must work together to create a national energy policy that fully recognizes the need to invest in new technology that encourages conservation and allows for advances in development of oil & gas resources, alternative energy, and energy efficiency. Our nation has the extraordinary potential to fuel and power itself, and we must act today to leverage those resources into new jobs, more revenue, expanded security and greater affordability in the future.

This panel brings together consumers, businesses, energy providers, Members of Congress and State Governors to discuss the complex relationship between energy and economic sustainability along with the importance of energy production in boosting state and national economies and providing jobs while properly protecting the environment.

A Growing Demand for Energy

While energy continues to drive the American economy, domestic supply is not keeping pace with demand – a troublesome prospect for future economic growth. In fact, the U.S. Department of Energy estimates that in 2025 the U.S. will consume 40 percent more oil and 36 percent more natural gas than is consumed today. As a result, imports of petroleum from foreign sources will continue to grow and likely persist at economically unsustainable levels as demand for energy increases. The U.S. Energy Information Administration estimates that oil imports through 2030 could cost the U.S. approximately $8.5 trillion. Though recent national energy policy initiatives have called for a heavier reliance on alternative energy sources, these sources are only expected to increase to 13 percent of demand by 2030 – a moderate increase from the seven percent of demand they currently represent. It is clear that oil and natural gas are needed for the next couple of decades to provide a bridge to an alternative energy future.

The Role of Renewable Energy Consumption in the Nation's Energy Supply, 2030



Note: Sum of components may not add exactly to 100 percent due to rounding.
*Includes non-marketed renewable energy from residential and commercial sectors.
Source: EIA, Updated AEO 2009 Tables A1 and A17

Energy and the Economy

A wide range of economic sectors are highly dependent on energy – from truckers to farmers to the airline industry. Together, these sectors contribute significantly to the overall health of the American economy. There are 2.9 million Class 8 trucks and 580,000 employers of interstate motor carriers in the U.S., and the U.S. trucking industry alone hauled 69 percent of total U.S. freight in 2006, according to the American Trucking Association. The agricultural industry which produces America's top exports employs approximately 21 million people and runs more than two million farms, according to the U.S. Department of Agriculture. Similarly, the airline industry accounts for a considerable portion of the U.S. economy. According to the Federal Aviation Administration, the total, direct, indirect and induced impact of the entire commercial aviation sector is equal to $1.142 trillion of economic output and 10.2 million jobs.

Access to affordable sources of energy has been essential to supporting these economic sectors and sustaining a vibrant U.S. economy. And, as the economy's latest struggles have shown, volatile energy prices can be devastating to the domestic job market and extremely harmful to energy consumers. The high energy costs seen in recent years contributed to the loss of millions of American jobs, according to the National Association of Manufacturers. Specifically, 2.9 million manufacturing jobs were lost due to high energy prices, according to the Bureau of Labor Statistics. More than 100,000 jobs in the chemicals industry were lost, as more than 100

chemical facilities closed. The forest and paper industry shed almost 200,000 jobs when more than 230 mills closed, and the American Chemistry Council reported that approximately 36 percent of the fertilizer industry has been shut down or mothballed.

The Energy Industry and the Economy

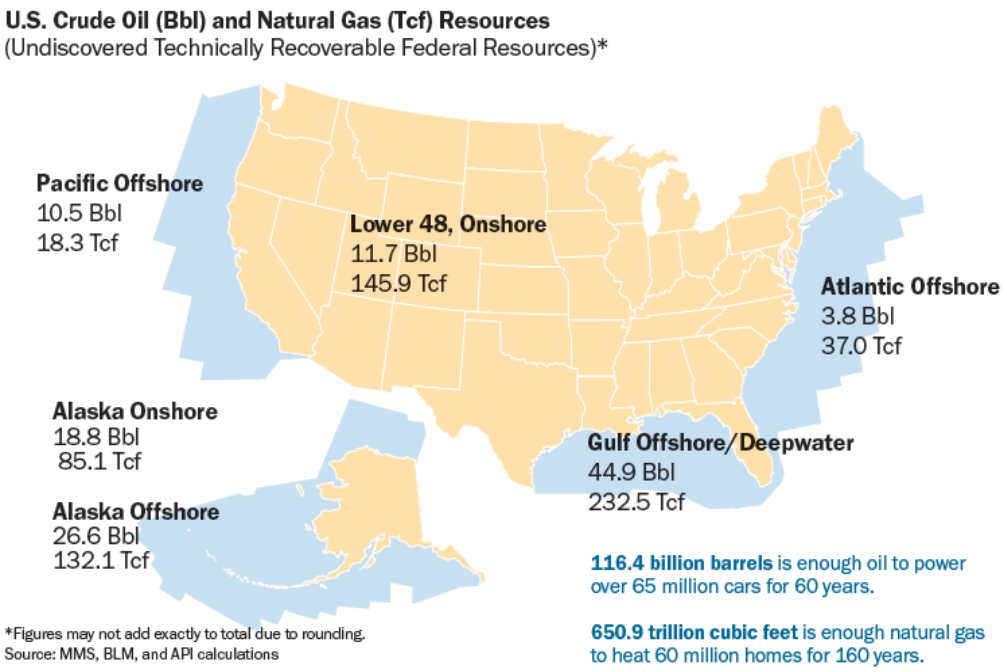
Clearly, energy plays an integral role sustaining economic capacity, maintaining productivity and providing opportunities for growth. For that reason, an investment in domestic energy production is an investment in our economy, as sensible energy policy spurs economic growth. According to the American Petroleum Institute, the oil and gas industry currently supports more than nine million American jobs and has made a total value-added contribution to the American economy of more than $1 trillion – approximately 7.5 percent of the U.S. GDP in 2007.

Opening U.S. offshore and onshore areas to development would mean more domestic jobs and create additional revenue for federal, state & local governments – a huge boost to the overall economy. However, if access to domestic energy resources is continually denied, especially those resources located in federal offshore waters, it would lead to an increase in the cost of oil and natural gas, as well as an increase in the billions of barrels of oil from OPEC nations, and the decrease of the national real disposable income in the trillions, according to the Draft National Energy Modeling study comissioned by the National Association of Regulatory Utility Commissioners (NARUC).

Specifically, if drilling moratoria were maintained from 2009-2030, the NARUC study shows:

- Domestic oil and natural gas production would decrease by 21 percent and 10 percent, respectively;
- The average natural gas price would increase by 28 percent & the average gasoline price would increase by 8.4 percent;
- The net present value (NPV) of consumer purchases of electricity and natural gas would increase by $325 billion;
- National real disposable income would decrease by $1.163 trillion, or $4,000 per capita;
- Oil imports from the Organization of the Petroleum Exporting Countries **(**OPEC) would increase by 4.1 billion barrels; and
- National payments to OPEC would increase by $607 billion, or $295 billion NPV.

In fact, the development of leases for the undiscovered technically recoverable oil and natural gas resources in federal offshore areas could lead to the production of 86 billion barrels of oil and 420 trillion cubic feet of natural gas, according to the U.S. Minerals Management Service. The development of currently unavailable onshore resources would be just as staggering – 31 billion barrels of oil and 231 trillion cubic feet of natural gas, according to the U.S. Bureau of Land Management.



Together, these resources could fuel American vehicles, homes, businesses and industry for decades to come, secure the energy future of the U.S. by reducing foreign imports from unstable regions and provide Americans with much-needed jobs. In particular, the development of U.S. offshore and onshore oil and natural gas resources could lead to more than 160,000 well-paying new jobs and could create as much as $1.7 trillion in additional revenue for federal, state & local governments, according to the American Petroleum Institute. As new jobs are created, the tax base for federal and state governments widens. Additionally, the responsible development of domestic energy resources provides new opportunities for direct and indirect support of those operations, such as retail, manufacturing and other services.

Developing off-limits federal oil and natural gas means:

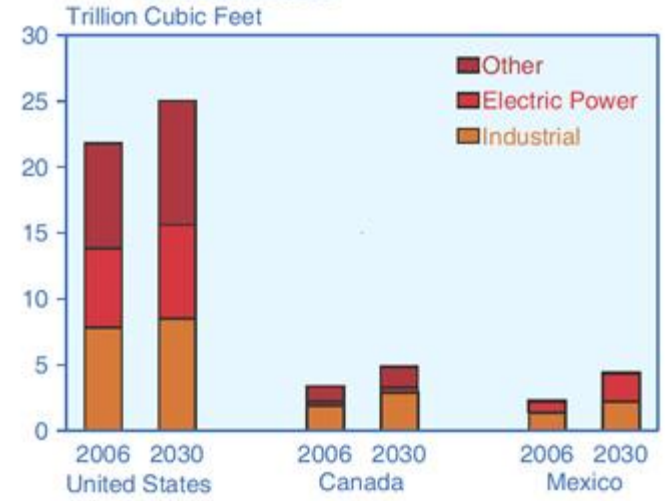
- **160,000 new jobs**
- **$1.7 trillion in government revenue**
- **Increased energy security**

Building a Bridge to a Clean Energy Future with Natural Gas

The transition to a renewable energy future will require the use of more economically-feasible and environmentally-friendly traditional resources. As the cleanest-burning fuel currently available, natural gas stands as the likely choice to provide such a bridge to alternative and renewable technologies, particularly as policies to reduce emissions garner greater legislative focus in the U.S.

Furthermore, natural gas is a vital energy source for the industrial sector, electric power generation and will continue to serve as a feedstock for plastics, fertilizer and other products. It is also expected to play a significantly greater role as a transformation fuel. Given these conditions, the U.S. Energy Information Administration predicted last year that natural gas consumption will continue to rise through 2030. Based on its abundance of domestic natural gas, the United States is poised to meet this increase in demand for decades to come if it can responsibly develop these resources.

Figure 34. Natural Gas Consumption in North America by Country and Sector, 2006 and 2030



Sources: **2006:** Energy Information Administration (EIA), *International Energy Annual 2006* (June-December 2008), web site www.eia.doe.gov/iea. **Projections:** EIA, World Energy Projections Plus (2009).

One country that has turned to safely developing its own domestic forms of energy in order to sustain itself in the 21st Century is Canada. Studies show that Canada's total natural gas consumption will increase steadily by 1.5 percent per year from 3.3 trillion cubic feet in 2006 to 4.7 trillion cubic feet in 2030. The strongest growth is expected to come from the industrial sector, averaging 1.8 percent increase per year, and the electric power sector at a 1.3 percent increase per year. Experts from the Canadian Association of Petroleum Producers have said that "the energy supply mix includes increasing the role of renewables, continuing the reliance on oil and gas, as well as compensating the declining conventional supply means by increasing role the of unconventional crude oil and natural gas".

Like Canada, the U.S. has the extraordinary potential and capability to safely and responsibly power itself. However, these opportunities must be seized today in order to leverage our natural resources into new jobs, increased revenue, expanded security and affordability for the future.

Panel members will discuss:

Representatives from government and the private sector will discuss their roles in supporting energy and creating jobs, as well as elaborate on ways we can build a bridge to a clean energy future.

References

1. American Petroleum Institute (API), Policy Issues, http://www.api.org/policy
2. Consumer Energy Alliance (CEA), http://consumerenergyalliance.org
3. Energy Information Administration (EIA), Official Energy Statistics from the U.S. Government, http://www.eia.doe.gov
4. Canadian Association of Petroleum Producers on Environment and Community website link " http://www.capp.ca/environmentCommunity/Pages/default.aspx#wDnoNGbLAPbC"
5. Devon Energy Corporation Website, Link Corporate Responsibility and Newsroom Feature Stories "http://www.dvn.com/CorpResp/Pages/corporate_responsibility.aspx"; "http://www.dvn.com/Newsroom/Pages/feature_stories.aspx"