

Cavanev address Forum Club of Palm Beaches

May 19, 2008

Thank you for inviting me to appear before your highly respected forum. The Forum Club of the Palm Beaches is widely renowned for its role in fostering public discourse about the challenges facing your community, our nation, and the world. I appreciate the opportunity to address one of those challenges today.

The American Petroleum Institute, or API as it is typically referred to, represents an industry directly employing nearly two million Americans, with another four million jobs indirectly tied to the oil and natural gas industry. Our 400 members are largely public companies owned by tens of millions of average Americans, who have invested their hard-earned savings on the expectation of a reasonable return on their investment risk. In fact, 41 percent of industry equities are held in pension funds and IRAs, and another 30 percent is in mutual funds. Less than 1-1/2 percent is held by company senior officers and directors. In fact, I suspect many of you in this room have a direct ownership stake in our industry.

Before addressing the energy challenges facing our nation, I'd like to take a few minutes to give you some background about the oil and natural gas industry in Florida. Unknown to most citizens, Florida has a more-than-70-year history of oil and natural gas development.

The history of the Florida industry began in the mid-1930s, when the Governor and Cabinet offered \$50,000 in cash for the first oil discovery in the state. Humble Oil and Refining Company (later to become ExxonMobil) claimed the prize with a wildcat well in west Collier County. In the decades that followed, many wells were drilled in the search for oil and natural gas.

Onshore, it's also worth noting that Florida has rich prospects. In June 1970, the largest oil field east of the Mississippi River was discovered near Jay in Santa Rosa County, followed shortly thereafter by the discovery of the Blackjack Creek Field just south of Jay in 1972. The production from these fields made Florida the ninth largest oil producing state in the nation at the time.

The last well in Florida waters was drilled in 1983 on a state lease in Pensacola's East Bay. Florida laws and federal drilling moratoria have precluded any further exploration in state and federal waters.

This history highlights some of the energy realities that Florida and our nation face. I know all of you recognize that we live in a global economy, and that there is a strong link between energy and economic growth. If we are to continue to grow economically, both in this state as well as nationwide, we need all viable sources of energy and an increased commitment to energy efficiency and conservation. We do not have the luxury of limiting ourselves to one energy source to the exclusion of others. Nor can we afford to write off our leading sources of energy – oil and natural gas -- before we have found cost-competitive and readily available alternatives.

Florida's major industries – tourism and agriculture – depend heavily on secure sources of energy. Consider how oil provides almost 97 percent of U.S. transportation fuels, which power nearly all of the cars and trucks traveling on our nation's highways. More than 60 million American households are cooled and/or heated by natural gas. And plastics, medicines, fertilizers, and countless other products that extend and enhance our quality of life are derived from oil and natural gas.

The U.S. Energy Information Administration (EIA) recently revised its forecast of future energy demand to include the impact of the Energy Independence and Security Act enacted late last year. EIA forecasts total U.S. primary energy consumption to grow by 19 percent between 2006 and 2030. And, although the share of non-fossil fuels is growing rapidly, oil and natural gas will still meet nearly 55 percent of consumption in 2030, compared with more than 62 percent today.

This continued reliance on oil and natural gas is all the more significant for Florida with its burgeoning tourism industry and growing population and economy. Your tourism industry runs on oil and natural gas. Tourists flying or driving in Florida rely on jet fuel, gasoline or diesel to bring them here. Hotels and spas rely on natural gas for cooling and heating, while restaurants depend on it for cooling and cooking. And, everyone needs electricity -- much of it -- 55 percent here in Florida -- produced using oil and natural gas.

Currently, Florida ranks third among all states in total energy consumption and third in total petroleum consumption. However, Florida accounts for less than 1 percent of U.S. crude oil production and less than 1 percent of U.S. crude oil proved reserves. Given this profile, Florida has an unusually high stake in the national energy policy debate currently underway. As a leading fuel consumer, Florida must consider how best to draw upon our still plentiful energy resources, in both this state and nationwide, in order to meet the heavy demand for natural gas, gasoline, diesel, and other fuels at a time when other states and, especially, developing nations, are increasing their calls on energy.

I would like to share with you some thoughts about the role of oil and natural gas, both today and in coming decades. First, it's important to offer some context. Having been one of the tens of millions of Americans who waited endlessly in gasoline lines in the 1970s, I understand and sympathize with the burden high gasoline prices are placing on U.S. consumers. However, what is not generally understood is that crude oil -- the raw material that represents 72 percent of the price of gasoline -- is a global commodity and its cost is determined in global markets exchanges like the NYMEX. Rapid growth and development in the non-OECD, developing world is responsible for significant upward pressures on demand for a range of commodities, such as steel, copper, cement, grains, coal, rubber, oil and much more – all up triple-digits this decade.

Why has demand for commodities surged in recent years? Since the 1950s, the U.S. and other developed economies have advocated to emerging economies that economic development is best facilitated by the adoption of market-oriented policies. Acceptance of this message was slow in coming, but the poor economic performance of countries that relied heavily on regulation and a strong government hand eventually led countries like China and India to adjust their economies to increase their market orientation. As countries migrated to more free enterprise policies, their economic growth rates boomed.

This surge in demand for commodities came after a prolonged period of very low commodity prices. Those low prices discouraged investment in surplus capacity. When the world economy began growing at a faster rate following the beginning of this decade, the demand for commodities took off. Unfortunately, capacity expansion takes time, and it is that time lag that has contributed to upward pressures on prices. These new pressures, however, will remain until capacity additions come on stream and/or economic growth slows.

This commodity price cycle is a global phenomenon and not unique to oil and natural gas, or to the U.S. The current cycle, however, is particularly problematic for the U.S. This is due, in part, to the fall in the value of the dollar and to the unusual rush of investments into commodities as a result of poor returns in equity and bond markets and in real estate. These factors, in particular, have contributed to higher commodity prices for crude oil, especially for those who trade in dollars, such as the U.S. In terms of U.S. energy needs, the government should encourage, not discourage, domestic energy production, making available selective areas with oil and natural gas development potential. Increasing capacity at home is something policymakers can do that will have a positive impact on global markets.

These are realities that neither the American public nor policymakers seem to fully recognize. It is one example of a lack of what I call “energy literacy.” Yet, it is more important than ever that energy policies be aligned with the geopolitical realities we face aboveground, as well as the technical realities faced below ground.

This lack of energy literacy hampers the ability of the United States to achieve this needed alignment. We know from recent opinion research studies that both the public and policymakers hold attitudes toward energy that are largely unchanged from the 1970s. This intellectual time warp is manifest in a whole series of proposals to address energy problems in ways that would actually make these problems worse, not better.

Our industry’s challenge is to do more than just produce enough oil and natural gas to meet ever-growing consumer demand. We must also help educate public opinion leaders, the media, and elected and appointed government officials on the energy realities we all face. These audiences need to better understand the field over which they have legislative, regulatory or public policy oversight before weighing in. Uninformed actions, regardless of intent, can do more harm than good in a long lead-time, high-risk business like oil and natural gas.

Despite repeated entreaties for well over a decade by the energy industry, the federal government chose not to expend resources educating the American public about our nation’s energy challenges, as they have through EPA in informing the public about our nation’s environmental challenges. Absent this education by government, API, several years ago, began trying to fill this void by embarking on a broad-based educational advocacy effort to inform audiences about the basic facts regarding our nation’s energy challenges. We recognize we have a long educational journey ahead, but early results indicate discussions are increasingly reflecting energy realities.

An important part of this educational effort is API's Tech Tour exhibit, which highlights how our industry employs state-of-the-art technology in all sectors of its operations. If you have not yet done so, I hope you'll visit the exhibit which is set up just outside this room.

Looking to the future, most energy analysts agree that sustaining even modest economic growth worldwide for the next several decades will require massive new investments in oil and natural gas. New investment by our industry in 2008 is expected to reach \$197 billion – a more than 12 percent increase over the prior year. Reinvestment between 1992 and 2006 is equally impressive. During that period, the industry reinvested more than \$1.25 trillion, while its total earnings over the period were \$900 billion – for a total reinvestment rate of 130 percent.

When it comes to our nation's future energy security, I want to reiterate a well-documented fact - that the United States needs all the economically viable, market-driven energy it can produce in an environmentally sensitive manner. We cannot afford to take any one energy source off the table, or punitively tax another, in order to grow yet another evolving energy source. Such was proposed in Congress last year, but reason prevailed; and punitive taxes on our industry were rejected. Unfortunately, these punitive taxes have again been proposed in Congress this year. Those who support these proposals have failed to learn from the energy policy mistakes of the 1970s and early '80s, when a punitive windfall profits tax resulted in one-third less domestic oil production and ushered in the era of huge increases in oil imports.

To understand the energy industry, generally, and oil and natural gas, specifically, one must recognize it as an industry characterized by long lead times, massive capital requirements and returns realized only decades later in the face of very real investment risks. Significant oil and natural gas discoveries that are announced today often result from investments begun by companies as far back as a decade or more ago. Planning and investment cannot be turned on and off like a spigot, without entailing huge, potentially non-recoverable costs and delaying urgently needed projects.

Because the industry must plan and operate under these long lead times, it is hyper-sensitive to minimizing risk over the course of its investments. Industry cannot do it alone; government has a critically important policy role to play as well. It should not be surprising for an industry that must manage such huge risks to expect that government will provide an energy policy framework that is responsive to – and not at odds with – this risk-management exposure.

It is also important to understand how the energy world has changed. Forty years ago, world oil reserves were largely the domain of the investor-owned, international oil companies, based principally in the United States. Most people today assume that international oil companies are little changed from decades ago, still holding the bulk of these world oil reserves. However, that's no longer the case. Today, world oil reserves are 80 percent owned by the national oil companies of foreign governments, many formed during the past 30 years. Only 6 percent of world-wide oil reserves are now held by investor-owned oil companies.

Faced with such competition, the investor-owned oil companies have scaled up within this new world -- principally through mergers and acquisitions -- by creating ever larger efficiencies,

greater technological and project management prowess, and substantially broader competitive access to capital markets.

In this changed energy world, our nation's energy security requires policies that do not disadvantage these investor-owned oil companies, but rather enables them to compete in the global marketplace. Our nation needs policies that promote greater attention to energy efficiency and greater supplies of oil and natural gas, not policies that hinder our industry's ability to provide American consumers the energy they demand and need.

Another important challenge we face is global climate change. As research and the policy debate continue, our member companies are taking action to reduce greenhouse gas (GHG) emissions now -- and to invest in, and develop, cost-effective technologies that will reduce them even more in the future. Through such technologies as combined heat and power -- using excess heat from refinery processes to produce additional energy -- refiners are becoming more energy efficient, which reduces energy use and emissions. For example, in 2006, improvements in energy efficiency at API member company refineries -- compared to the technology used in 2002 -- produced energy savings equivalent to taking more than 528,000 cars off the road.

A key factor in any climate discussion is the role of natural gas, which plays such a major energy role here in Florida, meeting between 30 and 35 percent of this state's energy needs. That's a share which, by some estimates, could grow to 45 or 50 percent over the next seven years. And, according to your Public Service Commission (PSC), natural gas is the leading fuel for energy generation in Florida utilities, accounting for 38 percent of energy generation in 2006, compared to 29 percent for coal and 12.9 percent for nuclear. The Commission projects that the natural gas share of energy generation will rise to 45 percent by 2016.

Natural gas is a critical fuel in addressing climate change, because of its efficiency and clean-burning nature. Coal requires further technological breakthroughs -- clean coal technologies and carbon capture and storage to enhance its GHG emissions profile. Nuclear power faces challenges in getting sufficient permitting and even greater constraints in expanding quickly. Other alternative energy sources like wind and solar are not yet fully developed for widespread commercial use. That leaves natural gas as the key fuel to achieve desired GHG reductions, certainly in the near and intermediate term.

Congress must recognize that any approach to mitigate GHG emissions is likely to increase demand for natural gas. Therefore, an important first policy step should be to ensure increased domestic access to natural gas resources, both onshore and offshore, as well as assuring the availability of infrastructure support for its import and distribution.

We have abundant volumes of natural gas, as well as oil -- resources beneath federal lands and coastal waters. However, the bulk of these resources have been placed off-limits to development. For example, according to federal government estimates, there is enough oil in these areas to power more than 60 million cars for 60 years. And, there is enough natural gas to heat 60 million homes for 160 years. However, more than 85 percent of the U.S. waters out to 200 miles from our shores, are off-limits to oil and natural gas exploration -- and 75 percent of

the available federal U.S. onshore areas are either off-limits or accessible only with significant restrictions.

I am aware of Floridians' sensitivity to production in its offshore waters. As technology and environmental safeguards continue improving in the industry, I'm hopeful that future operations may be considered at respectful distances from your shoreline. Our record of no production-related spills during the 200 mile per hour winds and 100 foot seas associated with Hurricanes Katrina and Rita in the Gulf of Mexico are testament to our technological skill and commitment to the environment.

Our nation's past history is replete with short-term energy "fixes" and searches for "silver bullets" to solve our nation's energy problems. Price controls, allocation schemes, limitations on natural gas, picking winners and losers among fuels, and punitive taxes have all been tried by government – and none have worked to benefit the consumer.

What we need is a public policy framework that learns from our past energy mistakes and works to ensure future energy security for our nation. We need elected and appointed officials who understand the energy challenges we face. We need a greater commitment to increased energy efficiency. We need to diversify our energy resources, drawing upon the full range of energy sources, including alternatives. We also need to increase and diversify our oil and natural gas supplies, both within this country and abroad. And, we need to enhance energy technologies in order to remain on the cutting edge of advanced technology.

Above all, we need, as a nation, to be more energy literate. I invite you to visit our website – energytomorrow.org – to assist you in your search for more knowledge regarding energy. We cannot meet our energy challenges, if we do not understand the solutions to overcome those challenges. And, we must recognize the critically important link between energy policy and investment. If oil and natural gas companies are to attract the investment they need to meet America's energy needs, our nation must get its energy policy aligned with realities – that is essential to shaping a favorable climate that will attract investment. Our industry stands ready to play a constructive role with both government and consumers in developing an energy and climate change policy that ensures economic prosperity, jobs, and a secure energy future for both Florida and for our nation, in general.