

Statement of Red Cavaney, API President and CEO, before the House Energy and Commerce Committee

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I am Red Cavaney, President and CEO of API, the national trade association of the U.S. oil and natural gas industry. API represents more than 400 companies involved in all aspects of the oil and natural gas industry, including exploration and production, refining, marketing and transportation, as well as the service companies that support our industry.

Introduction

The oil and natural gas industry understands the frustrations that consumers have expressed about energy prices. We recognize that high energy prices are adversely impacting individual households and potentially our economy. The industry is also cognizant of the criticism for what may appear to some as unreasonable or unjustified prices and high earnings. I will attempt to address those concerns and to offer the proper context in which to view both prices and earnings.

Factors in the cost of gasoline

In order to understand the higher costs of gasoline and other motor fuels, we need to consider them in the context of the world energy supply and demand situation.

We currently import more than 60 percent of the crude oil and petroleum products we consume. American refiners pay the world price for crude and distributors pay the world price for imported petroleum products. It is important to understand that oil companies do not set the price of crude oil. Crude oil is bought and sold in international markets, and the price paid for a barrel of crude oil reflects the market conditions of the day. Whether a barrel is produced in Texas or Saudi Arabia or elsewhere, it is sold on the world market, which is comprised of hundreds of thousands of buyers and sellers of crude oil from around the world.

There is a fragile balance between the world's supply and demand for crude oil. Because of this tight market, any disruption of oil supply – or even the threat of a disruption – can push prices upward as buyers and sellers in the worldwide marketplace look to secure supplies for their customers.

It is well recognized that the market for crude oil has tightened. World oil demand reached unprecedented levels in 2005 and continues to grow due to strong economic growth, particularly in China and the United States. EIA reports that global oil demand in 2004 grew by 3.2 percent – the strongest growth since 1978 – and grew 1.4 percent in 2005 to nearly 83.6 million barrels a day. EIA projects growth for 2006 at 1.8 percent. By comparison, world demand between 1993 and 2003 grew at an average rate of 1.6 percent. EIA, in its Annual Energy Outlook (April 2006) estimates world oil consumption to be 85.2 million barrels per day, which is about 100,000 barrels a day less than estimated average 2006 production.

World oil spare production capacity – crude that can be brought online quickly during a supply emergency or during surges in demand – is at its lowest level in 30 years and is a critical factor to observe. Current spare capacity is equal to only about 1 percent of world demand. Accordingly, the world’s oil production has lagged, forcing suppliers to struggle to keep up with the strong growth in demand.

The delicate supply/demand balance in the global crude oil market makes this market extremely sensitive to political and economic uncertainty, unusual weather conditions, and other factors. Over the past several years, we have seen how the market has reacted to such diverse developments as dollar depreciation, cold winters, the post-war insurgency in Iraq, hurricanes in the Gulf of Mexico, the Venezuelan oil workers’ strike in 2002-2003, uncertainty in the Russian oil patch, ongoing ethnic and civil strife in Nigeria’s key oil producing region, and decisions taken by OPEC, as well as here in Washington, D.C..

This year has been described by some as the “worst political-risk year” for energy supplies since 1973, the year of the oil embargo. Recent weeks have seen increasing concern about potential supply interruptions from political turmoil, conflicts, and uncertainty in such countries as Bolivia, Iran, Iraq, Nigeria, and Venezuela.

Additional factors in the increased fuel prices include the end of the reformulated gasoline (RFG) oxygen requirement on May 5, and the phase-out by some refiners of the gasoline additive MTBE. According to the U.S. Energy Information Administration

(EIA), refiners are maximizing their effort to switch to ethanol, but they must deal with logistical challenges in its transport. Unlike MTBE, ethanol cannot be shipped through pipelines and must be carried by barge, railcar or tanker truck. As the market is currently structured, ethanol is considerably more expensive than gasoline, and imports face a 54 cent per gallon tariff. The oil and gas industry, however, is the largest consumer of ethanol and will continue to play a key role in facilitating and expanding our nation's use of ethanol as a key component of our nation's transportation fuels mix.

How U.S. oil and natural gas companies are responding to current energy challenges

U.S. oil and natural gas companies have been working hard to provide additional supplies to the marketplace, while, at the same time, meeting stringent new environmental requirements:

- Domestic oil production from the Gulf of Mexico continues to recover from the damage incurred by Hurricanes Katrina and Rita. According to the U.S. Minerals Management Service, 22 percent of the oil production and 13 percent of the natural gas production from the Gulf remains shut in. Nevertheless, drilling activity remains at a high level and has helped offset this reduction. As of May 5, 1,624 drilling rigs were at work in the U.S., the highest level in 20 years.
- Crude oil inventories have been building and are at record levels. For the week ending April 28, crude stocks were 346.9 million barrels, or 12 million barrels above the level of a year ago. Inventories must be built ahead of heavy summer demand.

- Refineries were operating at 86.7 percent of capacity during March. Some refineries are undergoing routine maintenance that had to be delayed because of the hurricanes. Moreover, the industry is still recovering from the hurricanes' extensive damage. Through March, roughly 5 percent of refining capacity was not yet fully operational. When this is taken into consideration, the refinery utilization rate was actually higher than in March 2005, at 90.8 percent versus 90.2 percent. One refinery returned to normal operations of more than 400,000 barrels per day in late April after seven months of repairs following Hurricane Katrina. Two others are not yet fully operational and represent a combined capacity of 247,000 barrels per day or 3.3 percent of total U.S. refinery capacity. As of the week ending April 21, refineries were operating at 90.1 percent of capacity, only the fourth time that refineries were operating above 90 percent since Hurricane Rita.
- Despite the logistical challenges in blending ethanol in gasoline, the industry anticipates no problems in meeting the 4 billion gallon Renewable Fuels Standard for 2006. In fact, in many regions of the country, consumers are already driving on a mixture of gasoline and 5.7 percent to 10 percent ethanol.
- Refiners are completing the third year of a three-year schedule to eliminate 90 percent of the sulfur in gasoline. This already has enabled automobile manufacturers to begin equipping new passenger cars and light trucks with the advanced technology necessary to comply with the stringent Tier 2 emissions standards promulgated by the Environmental Protection Agency. As a result, it

now takes 33 vehicles running on low-sulfur gasoline today to equal the pollution emissions of just a single 1970 vehicle.

- Finally, refiners are reducing the maximum amount of sulfur allowed in on-road diesel fuel by 97 percent to enable the production of substantially cleaner new diesel engines. When the current on-road heavy-duty vehicle fleet has been fully replaced by 2030, the combination of the new fuel and new diesel engines should have eliminated 90 percent of the pollution that today's trucks and buses produce.

Importance of increased energy efficiency

API supports increased energy efficiency in all sectors of the economy, including transportation, as an essential part of efforts to meet U.S. energy challenges.

An important reason why hydrocarbons have been the choice of consumers worldwide is due to the fact that they contain nearly twice the energy per gallon as many other energy sources. Thanks to advances in technology and market forces, our hydrocarbon-based economy is getting more and more energy efficient. In 1970, the United States used about 1.4 barrels of oil for each thousand dollars of real GDP. By 2000, that had fallen almost in half to about seven-tenths of a barrel. And, by 2025, our nation is projected to consume only about one-half a barrel of oil for each thousand dollars of GDP.

An example of how technology increases energy efficiency is the use of cogeneration to save energy in refineries and other industrial facilities. Cogeneration is the simultaneous generation of heat and electricity, can be more than twice as efficient as conventional

generation, and is increasingly being implemented by refiners to help power their facilities. In some instances, excess electricity is generated at the refinery, which can be sold off-site for use by schools, hospitals and many other facilities.

Cogeneration is an important tool helping oil companies become more energy efficient. To demonstrate their commitment to continued improvement in aggregate energy efficiency, API member refiners have voluntarily agreed to a 10 percent improvement between 2002 and 2012 as part of API's Climate Challenge Program. That program is contributing to a national goal of reducing greenhouse gas emissions by 18 percent by 2012. The most recent reporting cycle indicates that API members are on track to achieve their 10 percent improvement goal. These efforts have already produced ongoing daily energy savings equal to that needed to power 475,000 cars or heat 450,000 homes with natural gas.

However, while increased energy efficiency is a critical component of a meaningful U.S. energy policy, it is not, and can not be, the only component. The U.S. energy Information Administration projects that by 2030, total U.S. energy demand will increase by 41 percent – even with a 39 percent increase in energy efficiency.

Anti-competitive pricing

Some are again accusing the industry of “price gouging.” Our industry has been repeatedly investigated over many decades by the Federal Trade Commission, other federal agencies, and state attorneys-general. Of the more than 30 investigations, none

have ever found our companies to have engaged in anti-competitive behavior to drive up fuel prices, and we are confident current reviews will arrive at the same conclusion.

Some allege that recent oil company mergers have caused higher crude oil and gasoline prices. But the price of crude oil is the consequence of thousands upon thousands of transactional decisions made on the world market every day. No one company or group of companies has control over that price. In terms of market power, large international oil companies own less than 10 percent of the world's oil resources. According to the Federal Trade Commission's August 2004 report, *The Petroleum Industry: Mergers, Structural Change, and Antitrust Enforcement*, "recent large mergers among major oil companies have had little impact on concentration in world crude oil production and reserves." And, as noted by the FTC in its June 2005 report, *Gasoline Price Changes: The Dynamic of Supply, Demand, and Competition*, "The world price of crude oil is the most important factor in the price of gasoline. Over the last 20 years, changes in crude oil prices have explained 85 percent of the changes in the price of gasoline in the U.S."

We are concerned about the adverse impact of the proposed Oil and Gas Industry Act of 2006 (S. 2557) recently introduced by Senator Specter. Section 2 of that proposed act would amend the Clayton Act to make it illegal to refuse to sell or to export or divert petroleum products or natural gas supplies with the intention of increasing prices or creating a shortage in a geographic market. In evaluating whether a marketer has illegal intent, a court must consider whether the cost of the products has increased, and

if the defendant has obtained a higher price in the market to which the product has been exported or diverted.

The bill has the potential of interfering with legitimate business decisions that are made by individuals in the oil and natural gas industry. Unilateral decisions to move supplies from one area to another based on supply and demand issues could be challenged under this provision. Moreover, the bill makes it illegal to “intend” to take certain actions even if the entity does not have the ability to impact supplies or prices and there is no showing of an actual or likely anticompetitive effect. This is contrary to traditional antitrust analysis. In addition, Section 2 is ambiguous and contains a variety of key terms such as “divert” that have not been defined. As a result, there could be significant questions related to compliance and enforcement. This uncertainty could adversely affect legitimate business decisions related to supply and ultimately have an adverse impact on consumers. Finally, the bill does not identify who has standing to enforce the provisions of the bill.

If enacted, Section 2 could have a chilling affect on the oil and gas industry, make it more difficult for the industry to meet the fuel needs of U.S. consumers, and prevent the industry from responding quickly to emergencies such as those that occurred with Hurricanes Katrina and Rita.

Fuel transitions

Complicating the overall U.S. fuel supply/demand situation are numerous contributing factors. The Energy Policy Act of 2005 eliminated the reformulated gasoline (RFG) oxygen requirement, and also set a new renewable fuel standard, requiring that the industry use 4 billion gallons of renewable fuel in 2006 – increasing to 7.5 billion gallons in 2012 and increased amounts thereafter. In addition, ultra-low sulfur diesel (15 ppm sulfur) will be introduced starting June 1.

Eliminating the RFG oxygen requirement is a change in the law that the industry has long supported as one that will add to refiners' flexibility to produce gasoline and allow those who so choose to eliminate the use of MTBE in gasoline. Similarly, the introduction of ultra-low sulfur diesel, despite the \$8 billion in costs incurred by the nation's refiners, will have major benefits and is strongly supported by the U.S. oil and natural gas industry. However, both of these are major fuels changes and present significant challenges to fuel providers. Our companies are dedicated to ensuring that these transitions go smoothly as possible and are making the substantial investments required to complete these transitions.

API believes that, to be successful, fuel transitions should be based on the free and unfettered functioning of fuel markets. Market mechanisms are most effective in providing companies with appropriate indicators and in ensuring a rapid response to changes in market conditions or transitional problems that may occur. Changes to these market indicators by government – such as calling for waivers from clean fuel regulations

in light of concerns about possible volatility in fuel prices – will only cause market uncertainty and send confusing information to markets in transition. There are already mechanisms in place to deal with true market supply disruptions, and we urge the government to use appropriate caution in exercising this existing authority.

Operating in a free marketplace, the U.S. oil and natural gas industry has the technical expertise and decades of experience in successfully handling fuel specification transitions. Our companies have repeatedly demonstrated their capability for making these transitions on the national level in dealing with RFG, low-sulfur gasoline and diesel fuel and in meeting so-called “boutique fuels” requirements at the state level.

Since the Energy Policy Act of 2005 did not provide for a national, ordered phase-out of MTBE, individual companies made individual decisions on how best to deal with the end of the RFG oxygen mandate and the use of oxygenates. Companies took into account various factors such as customer preference, state laws, pipeline decisions, distribution system capabilities, and information from government agencies such as EIA.

U.S. oil and natural gas companies have the expertise, experience, and resources required to make the fuel transitions that are required – provided fuel markets are allowed to function freely. We think a valuable role for the government is to help create as clear and transparent a picture as possible of what is occurring in the marketplace during this summer’s upcoming transitions. In this vein, we strongly support continued efforts by EIA to monitor the supply and demand dynamics of the market, and provide timely

updates to their initial study. API and its members are very willing to cooperate in any such effort.

Boutique Fuels

While the patchwork of localized “boutique fuels” is not principally responsible for the recent higher gasoline prices, the proliferation of these fuels in recent years has presented significant challenges to U.S. refiners and resulted in an inflexible fuel system. (See the attached map of boutique fuels.)

Boutique fuels contribute to the tight supplies and price volatility so decried by consumers. A classic example of the disadvantage of boutique fuels is in the Atlanta area, which has a one-of-a-kind gasoline blend in the summer. Most gasoline on the major pipelines that service Atlanta cannot be used to address any supply shortage in that market. Refiners and suppliers have made the refinery and distribution system investments to handle the Atlanta gasoline. However, if a serious infrastructure problem occurs in the refineries, the pipelines, or the terminals that supply this area with gasoline, the boutique fuel involved could lead to serious supply disruptions.

Of utmost importance in our business is the reliability of supply. Fuel providers need the flexibility to get fuel to where it is most needed and to quickly adjust to changes in demand. Additionally, marketers need some assurance that, if they do not have access to a particular supplier or terminal, they will be able to go elsewhere for product. However,

a rigid system of state-specific boutique fuels reduces the reliability of supply and increases the risk of spot shortages and price volatility.

Our industry has worked long and hard to discourage the spread of boutique fuels. Some success was realized when the Energy Policy Act of 2005 included a provision requiring EPA to publish a list of fuels identified in state implementation plans, with states barred from adopting new formulations unless they were to replace one fuel on the list with another on the list. These provisions clearly indicated that policy-makers were finally recognizing the harmful effects of widespread adoption of boutique fuels.

API supports the boutique fuels provisions in the Energy Policy Act as they should help address the issue by limiting the number of fuels that states may adopt. In addition, EPA and DOE are directed to undertake two studies. The first is due to Congress August 8, 2006 and is a study about the effects of SIP-adopted fuels programs on air quality, the number of fuel blends, fuel availability, fungibility and cost.

The second study on "Fuel System Harmonization" is due June 1, 2008. This report is to contain recommendations for legislative and administrative actions that may be taken to improve air quality, reduce costs to consumers and producers and increase supply liquidity. DOE and EPA are directed to consult with Governors, automobile manufacturers, state and local air pollution regulators, public health officials, motor fuel producers and distributors, and the public. Last week, EPA announced that it has begun a dialogue with Governors to discuss boutique fuels, and we believe this is an important

step in Congress's desired consultation process. API looks forward to providing input to this process.

The results of these required studies should provide guidance to Congress as to whether further steps should be taken regarding boutique fuels.

Ethanol and Boutique Fuels

Some are erroneously claiming that our industry is "opposed to ethanol" and is doing all it can to discourage its use. We believe that America needs all the energy resources it can obtain, and that ethanol is one of those resources. Our industry supports the use of ethanol as a valued gasoline additive. In our view, ethanol is here to stay, and it is a very important part of the nation's gasoline pool. In fact, in many regions of the country, consumers are already driving on a mixture of gasoline with 5.7 percent to 10 percent ethanol.

However, we need to keep in mind that no energy alternative is a panacea. Each has its plusses and minuses, but they can each play an important role. For example, based on various studies, the energy savings from corn-based ethanol are moderate – 3 to 20 percent – because production from corn requires significant energy input. And, Dow Jones News Service reported on May 1 that Warren Staley, Chairman and Chief Executive Officer of Cargill, Inc., estimated that, even if 100 percent of the U.S. corn crop were used to produce ethanol, it would only replace about 20 percent of motor fuel.

Some ethanol proponents are focused almost exclusively on E-85 fuel, which consists of 85 percent ethanol and 15 percent gasoline. While the industry does not object to E-85, so long as it meets technical specifications and is of reliable quality, a sole national focus on growing ethanol volumes through E-85 is a risk-laden approach to achieving significant growth in ethanol.

A couple of points are worth noting in that regard:

- Of the 169,000 retail gasoline marketing outlets, only 600 are currently equipped to distribute E-85, and these are concentrated principally in the upper Midwest where the corn crop grows; and
- Currently, there are about 6 million flex-fuel vehicles (FFVs) on the road (3 percent of the fleet) and, even if that number increases by 1 million per year over the next several years, the percent share of the fleet would still be small. For example, 10 million FFVs in 2010 would be 4 percent of the fleet; 15 million in 2015 would be between 5 and 6 percent. It is important to understand that the 97 percent of the fleet today not designed to operate on fuels containing more than 10 percent ethanol could well incur damage by using higher ethanol blends - a fact rarely mentioned by "E-85 only" proponents.

Industry is concerned that, were government and key opinion leaders to place the entire focus for success in introducing ethanol on the number of new E-85 outlets, it will be the football equivalent of throwing a Hail Mary pass as the last play of the game -- and the odds for success will be equally as long.

Our industry's prescription for success with ethanol is to concentrate on ethanol integration into the full gasoline pool and to permit E-85 to grow in those locations where it meets the test of the commercial and regulatory marketplace.

We also think that individual states should not force the use of ethanol by devising their own blend of gasoline/ethanol mandates. The last thing our nation needs now is an expansion of the boutique fuels patchwork of state-by-state laws by mandating ethanol use at different concentrations and/or under different terms. Integrating ethanol into the gasoline marketplace is too important – and presents too many challenges – to be approached in an individual, state-by-state manner. In order to meet consumer fuel needs, we want to produce more, refine more, and distribute more – but state ethanol mandates would make this difficult. Ethanol cannot be moved by common carrier pipeline, as is more than 70 percent of U.S. oil products, and requires a long supply chain to serve consumers. That means a longer reaction time when problems occur. State ethanol mandates would significantly add to that reaction time. We oppose this patchwork approach, whose adverse impacts are felt most by individual gasoline consumers.

What we do support is the uniform national plan enacted last year that will integrate more ethanol into the nation's gasoline pool at concentrations of up to the maximum permissible 10 percent per gallon, which can be utilized in the entire U.S. automotive fleet without vehicle modifications.

Earnings

There is considerable misunderstanding about the oil and natural gas industry's earnings and how they compare with other industries. The oil and natural gas industry is among the world's largest industries. Its revenues are large, but so are its costs of providing consumers with the energy they need. Included are the costs of finding and producing oil and natural gas and the costs of refining, distributing and marketing it.

It should not be forgotten that the energy Americans consume today is brought to us by investments made years or even decades ago. Today's oil and natural gas industry earnings are invested in new technology, new production, and environmental and product quality improvements to meet tomorrow's energy needs. *Oil & Gas Journal* estimates that the industry's total U.S. reinvestment in 2006 will reach \$124.1 billion, compared with \$115 billion in 2005 and \$102.4 billion in 2004. This represents an increase of 21 percent in just two years. *Oil & Gas Journal* also estimates that exploration and production spending in the U.S. will grow 11.8 percent this year and that total upstream oil and gas spending will reach nearly \$88.9 billion. A single deepwater production platform can cost more than \$1 billion.

Moreover, since 1992, the five largest U.S. oil and natural gas companies have reinvested more than their total net income. Between 1992 and 2005, the industry invested more than \$1 trillion – on six continents – in a range of long-term energy initiatives: from new exploration and expanding production and refining capacity to applying industry leading

technology. In fact, over this period, our cumulative capital and exploration expenditures exceeded our cumulative earnings.

Figures on earnings from investment show clearly that the oil and natural gas industry is in line with other industries. The U.S. Energy Information Administration reports that in 2004 (the latest available data), the return on investment – specifically, the net income divided by net investment in place – was 18.9 percent for the oil and gas industry and 17.4 percent for the S&P Industrials. From 2000 to 2004, the average was 13 percent for the oil and gas industry and 12.5 for the S&P Industrials. And from 1995 to 2004, oil and gas realized 10 percent compared to 13.9 for the S&P Industrials.

Furthermore, the industry's future investments are not focused solely on traditional hydrocarbon projects. It is important to note that – from 2000 to 2005 – the oil and natural gas industry invested \$98 billion in emerging energy technologies, including renewables, in North America alone – this investment represents 73 percent of the total \$135 billion spent by all U.S. companies and the federal government. For example, one oil company is among the world's largest producers of photovoltaic solar cells; another oil company is the world's largest developer of geothermal energy; and the oil and gas industry is the largest producer and user of hydrogen.

It also requires billions more dollars to maintain the delivery system necessary to ensure a reliable supply of energy and to make sure it gets where it needs to go: to industry

customers. Americans' energy use is expected to grow by one-third in the next 25 years. The industry is committed to making the reinvestments that are critical to ensuring our nation has a stable and reliable supply of energy today and tomorrow.

The industry's earnings are very much in line with other industries – and often they are lower. This fact is not well understood, in part, because the reports typically focus on only half the story – the total earnings reported. Earnings reflect the size of an industry, but they're not necessarily a good reflection of financial performance. Earnings per dollar of sales (measured as net income divided by sales) provide a good way to measure how industries perform compared to other industries. It is a figure that is the most widely understood and relevant to consumers interested in knowing how much companies earn for every gallon of gasoline sold.

Last year, the oil and natural gas industry earned 8.5 cents for every dollar of sales compared to an average of 7.7 cents for all U.S. industry. Over the last five years (2001-2005), the oil and gas industry's earnings averaged 5.9 cents compared to an average for all U.S. industry of 5.6 cents.

It is also important to understand that those benefiting from healthy oil and natural gas industry earnings include numerous private and government pension plans, including 401K plans, as well as many thousands of individual American investors. While shares are owned by individual investors; firms, and mutual funds, pension plans own 41

percent of oil and natural gas company stock. To protect the interest of their shareholders and help meet future energy demand, companies are investing heavily in finding and producing new supplies and in new refinery capacity.

Windfall profits tax

The U.S. oil and natural gas industry is not earning “windfall profits.” As explained in the previous section, the industry’s earnings have been very much in line with those of other industries, and often are lower.

A “windfall profits” tax (WPT) discourages new domestic oil production, and makes it more attractive to produce foreign energy resources – thereby increasing our dependence on imported oil. The Congressional Research Service (CRS) concluded that, between 1980 and 1986, the WPT reduced domestic oil production by as much as 1.26 billion barrels. In all, the CRS estimated that the WPT caused domestic oil production to fall between 1 percent and 5 percent, and caused oil imports to rise between 3 percent and 13 percent (1980-86).

Adopting such a tax, even one that exempts new domestic investment, would set a precedent that could have a chilling effect on investment in U.S. energy development, since investors would be concerned that the tax eventually could be imposed on revenues from new domestic production as well.

The WPT in the 1980s, combined with subsequent low oil prices, led to 20 years in which the domestic oil and gas industry was not able to attract sufficient capital for investment, which is contributing to the tight supply markets of today. According to the CRS, before the WPT was repealed in 1988, it generated about \$38 billion in net revenues (\$80 billion in gross revenues)—money that could have been used by the industry to invest in new energy production and infrastructure. The National Petroleum Council projects that producers will have to invest nearly \$1.2 trillion through 2025 to fund U.S. and Canadian natural gas exploration and production activities. Investments of this magnitude require long-term fiscal stability.

The Congressional Budget Office (CBO) estimated that the energy sector sustained between \$18 billion and \$31 billion in capital losses from Hurricanes Katrina and Rita. These costs will be in addition to the new capital investments that will be required of the oil and gas industry to meet future U.S. energy demand.

The recent increase in crude oil prices should encourage greater production from existing U.S. resources and promising new, but costly, alternative sources of energy. Those increased supplies could help to reduce energy costs in the long run. A WPT could reverse that trend toward expanded production of new resources, by making many of those high-cost alternatives non-economic to produce in the United States. For example, a company that invests in the development of oil from shale could make little or no profit, and still pay a significant windfall profit tax.

Domestic oil and gas companies, which are already heavily taxed relative to their foreign competitors, must compete for foreign investment opportunities with those competitors. The WPT would increase this already substantial tax burden and reduce the ability of domestic companies to compete for those foreign investment opportunities needed to diversify our nation's energy supply and, in turn, support the employment of U.S. personnel in jobs related to those activities both here and abroad.

Almost all large oil and gas companies are publicly-traded entities, whose shares are owned by millions of investors through their 401(k)s, retirement plans and pension funds. Taxing away the earnings of those companies negatively impacts the ability of hard-working Americans to achieve a more financially secure future. Moreover, taxes, not unlike amounts paid for raw materials and employee salaries, are a cost of doing business and are ultimately reflected either in the price paid by consumers for a company's products (e.g., gasoline and heating oil) or in reduced returns to shareholders.

Fuel prices: what can be done?

In attempting to meet the fuels challenges we face, it is important to do no harm. The worst thing Congress could do now would be to repeat the mistakes of the past by overriding the structures of the free marketplace. Imposing new controls, allocation schemes, new taxes on industry, or other obstacles will only serve to make the situation much worse.

Because the market remains healthy and competitive, it is imperative that it be permitted to continue functioning as freely of artificial restraints as possible. As we have consistently maintained, the answer to our energy situation is to increase supply, reduce demand, and expand and diversify infrastructure. The nation also needs to increase energy efficiency in all sectors of the economy, including transportation.

The Energy Policy Act of 2005 signals a first step in a much-needed effort to enhance energy security and ensure the reliable delivery of affordable energy to consumers. Nevertheless, much remains to be done.

We can no longer afford to place off limits vast areas of the Eastern Gulf of Mexico, off the Atlantic and Pacific coasts, and offshore Alaska. Similarly, we cannot afford to deny Americans consumers the benefits that will come from opening the Arctic National Wildlife Refuge and from improving and expediting approval processes for developing the substantial resources on federal lands in the Mountain West.

In fact, we do have an abundance of competitive domestic oil and gas resources in the U.S. According to the latest published estimates, there are 112 billion barrels of oil and 656 trillion cubic feet (Tcf) of natural gas remaining to be discovered in the United States. Consider that 112 billion barrels are enough oil to power more than 60 million cars for 60 years and heat more than 25 million homes for 60 years. And 656 Tcf is enough natural gas to heat 60 million homes for 160 years.

Much of these oil and gas resources – 78 percent of the remaining to be discovered oil and 62 percent of the gas – are expected to be found beneath federal lands and coastal waters. Federal restrictions on leasing put significant volumes of these resources off limits, while post-lease restrictions on operations effectively preclude development of both federal and non-federal resources. Addressing these restrictions is critical.

And, while we must focus on producing more energy here at home, we do not have the luxury of ignoring the global energy situation. In the world of energy, the U.S. operates in a global marketplace. What others do in that market matters greatly.

For this country to secure energy for our economy, government policies must create a level playing field for U.S. companies to ensure international supply competitiveness. With the net effect of current U.S. policy serving to decrease U.S. oil and gas production and to increase our reliance on imports, this international competitiveness point is vital. In fact, it is a matter of national security.

Ten of the 12 largest oil companies in the world are controlled by foreign governments, and only one of the two investor-owned companies in the top 12 – ExxonMobil – is American. Based on potential oil and gas reserves – resources essential for future operations – only one of the 16 largest oil companies in the world is headquartered in the U.S. Most of the others are national oil companies owned by foreign governments.

Nearly 80 percent of the world's reserves are owned by these national oil companies, and a mere 6 percent are owned by investor-owned companies.

While our nation is going through challenging times at the gasoline pump right now, it is important to understand how we operate in a global commodity business, and that these same problems are being experienced worldwide. It is critically important to note that the oil and gas price changes over the last two decades are in line with, and in some cases lag behind, other commodities. Thus, oil and gas price trends are not anomalies.

Refineries

In considering the U.S. refining situation, it is also important to remember that the oil and natural gas industry operates in a global marketplace. Many oil and gas companies are global companies, whose U.S. investment decisions compete not only with decisions as to how to allocate capital investments in the U.S. among various sectors of the industry, but also with competing demands and investment needs overseas. In a global marketplace, companies will make the best economic investment decisions in order to bring affordable petroleum products to consumers. Imports may be the more economical option than new U.S. refineries, but that is a decision to be left to the global marketplace. Government policies should encourage, not interfere with, the global marketplace.

While domestic refiners have strived to increase the efficiency, utilization and capacity of existing refineries, these efforts have not enabled the U.S. refining industry to keep up with growing demand. Imports have been helping to meet the growing U.S. demand, although announced capacity additions through 2011 will exceed historic demand

increases. We have been importing an average of about 10 percent of our gasoline nationally for the past three years into PADD 1 (East Coast) where the harbors have facilitated imports.

During the 1990s, the oil and natural gas industry earned relatively poor rates of return on its investments. This was especially true in the refining sector, which was hard hit with the need for new investment in technology and equipment to produce cleaner-burning fuels, as well as additional emissions control technology on the refineries themselves, to meet clean air standards set by the Clean Air Act of 1990. This Act had a major impact on the operation of refineries in the United States and the return on investment realized at the time.

Technological advancements have helped refineries produce more from existing facilities than they did in the past. In addition, the elimination of subsidies under government regulations after 1981 led to the closure of many smaller, less efficient refineries throughout the 1980s and 1990s. Those refineries left standing did a better job of bringing product to market for less.

The last two years have been extremely challenging for consumers and refiners. The industry has been working very hard to meet the needs of consumers. In 2004, the refinery system set records for production of gasoline and diesel fuel. In 2005, about 30 percent of the U.S. refining industry was shut down at one point as a result of Hurricanes

Katrina and Rita. The industry is resourceful and quickly imported record amounts of gasoline and diesel fuel to augment this production to meet all-time high consumer demand and limit supply disruptions.

Massive investments at refineries will be required in the next 10 years to expand refinery capacity to meet growing demand and to comply with environmental regulations.

Domestic refining capacity has increased over the last decade to about 17 million barrels per day and several capacity expansion projects are currently underway. Though the actual number of refineries has decreased, actual refining capacity has been growing.

While no new refineries have been built in the U.S. since 1976, expanding and upgrading existing refineries is an ongoing process. The U.S. refining industry has been expanding a little more than 1 percent per year over the past decade – the equivalent of 12 new 200,000-barrels-per-day refineries. And it continues to grow.

Based on publicly available data on announced refinery capacity expansion plans, over 1.3 million barrels per day of additional refinery capacity projects are either planned or under strong consideration for the years 2006 to 2011. Such expansions will boost domestic refining capacity to nearly 18.5 million barrels per day - near the all-time high for U.S. operable refinery capacity. (This aforementioned information covers only expansion plans announced to the public; additional plans may be under initial consideration or kept confidential.)

Some recent examples of refinery capacity expansion plans mentioned in publicly available information and individual company press releases include:

- ConocoPhillips plans to invest \$4 billion to \$5 billion by 2011 for expansion and upgrade projects in nine refineries to increase its U.S. refining capacity and improve utilization. An overall capacity increase of 230,000 barrels per day is planned, with 40,000 barrels per day of added crude capacity to its Los Angeles refinery.
- Marathon Petroleum Company is evaluating a \$2.2 billion investment to increase the capacity of its Garyville, Louisiana refinery by 180,000 barrels per day to a total of 425,000 barrels per day.
- Sunoco plans to invest \$1.8 billion over the next three years in its refineries, with an emphasis on increasing capacity by 11 percent to one million barrels per day.
- Valero plans to increase its North American refining capacity by 400,000 barrels per day – the equivalent of two mid-sized refineries – by 2009 at a cost of \$5 billion.
- Motiva (a Shell and Saudi Refining joint venture) completed initial project scoping and process design for a potential 325,000 barrels-per-day/ \$3.5 billion expansion project being considered at its Port Arthur, Texas refinery.

Increasing capacity at existing refineries can be a challenge for a number of reasons.

These challenges are typically even more difficult when building new refineries. A new refinery location must have access to crude and product pipelines and other utilities to

obtain the multitude of required permits, gain community acceptance, and attract the significant capital investments to design, permit, and construct. Take the effort to build a new refinery in Arizona, for example: the project has been under development for more than a decade, the site for its location was moved, and, while EPA issued its air permit last year, the project has not been able to attract the financial capital necessary to start construction.

Some obstacles to additional capacity expansion or new refineries include:

- Huge capital investments, often running into the tens to hundreds of millions of dollars for existing refineries (\$9,000-\$12,000 per daily barrel to expand), and \$2 billion to \$3 billion or more for a new refinery (\$17,000 per daily barrel to build new);
- The return on capital investment for petroleum refining and marketing was 7.7 percent between 1995 and 2004, which is below the average return of 13.9 percent for the S&P Industrials, according to the U.S. Department of Energy. In addition, it takes several years to realize a return on a refinery investment.
- The permitting process required to construct new refineries or modify existing facilities is very complex and time-consuming, involving federal, state, and local permitting authorities;
- The combination of regulations to reformulate fuels and those aimed at reducing emissions from refinery operations make the refining industry one of the most heavily regulated industries in the U.S.;

- The refining industry has spent more than \$47 billion over the last decade to comply with environmental and fuels regulations – nondiscretionary expenditures that generally yield little or no return on investment. Moreover, by 2010, the U.S. refining industry will have invested upwards of \$20 billion to comply with new clean fuel regulations. All this investment results in severely reduced funding available for discretionary capacity expansion projects.
- Public opposition to siting a new refinery in almost any community in the U.S. is highly likely, an obstacle difficult to overcome.

In order to further increase U.S. refining capacity, government policies are needed to create a climate more conducive to investments in refining capacity. Many of the steps the federal government could take to help the refinery capacity situation are covered in the December 2004 National Petroleum Council (NPC) study, *Observations on Petroleum Product Supply – A Supplement to the NPC Reports “U.S. Petroleum Product Supply – Inventory Dynamics, 1998” and “U.S. Petroleum Refining – Assuring the Adequacy and Affordability of Cleaner Fuels, 2000.”*

The NPC study suggested that the federal government should take steps to streamline the permitting process to ensure the timely review of federal, state and local permits to expand capacity at existing refineries. For example, new-source review (NSR) requirements of the Clean Air Act need to be reformed to clarify what triggers these reviews. Some refineries may be able to increase capacity with relatively minor

adjustments, but are unsure if the entire facility's permit review would be triggered – a burdensome and time-consuming process.

The best long-term solution is investment toward finding new supplies and continuing to improve efficiency when producing and using energy. Decisions about how much capacity is needed and where it is needed are best left to the marketplace. There is spare global refining capacity, and it is important to remember that the oil and natural gas industry operates in a global market. It is important that government policies not interfere with the global market.

Conclusion

The U.S. oil and natural gas industry is doing all it can to produce the fuel supply needed to meet consumer energy needs. However, the industry cannot meet U.S. energy challenges alone. Our nation's energy policy needs to focus on increasing supplies; encouraging energy efficiency in all sectors of the economy, including transportation; and promoting responsible development of alternative and non-conventional sources of energy.

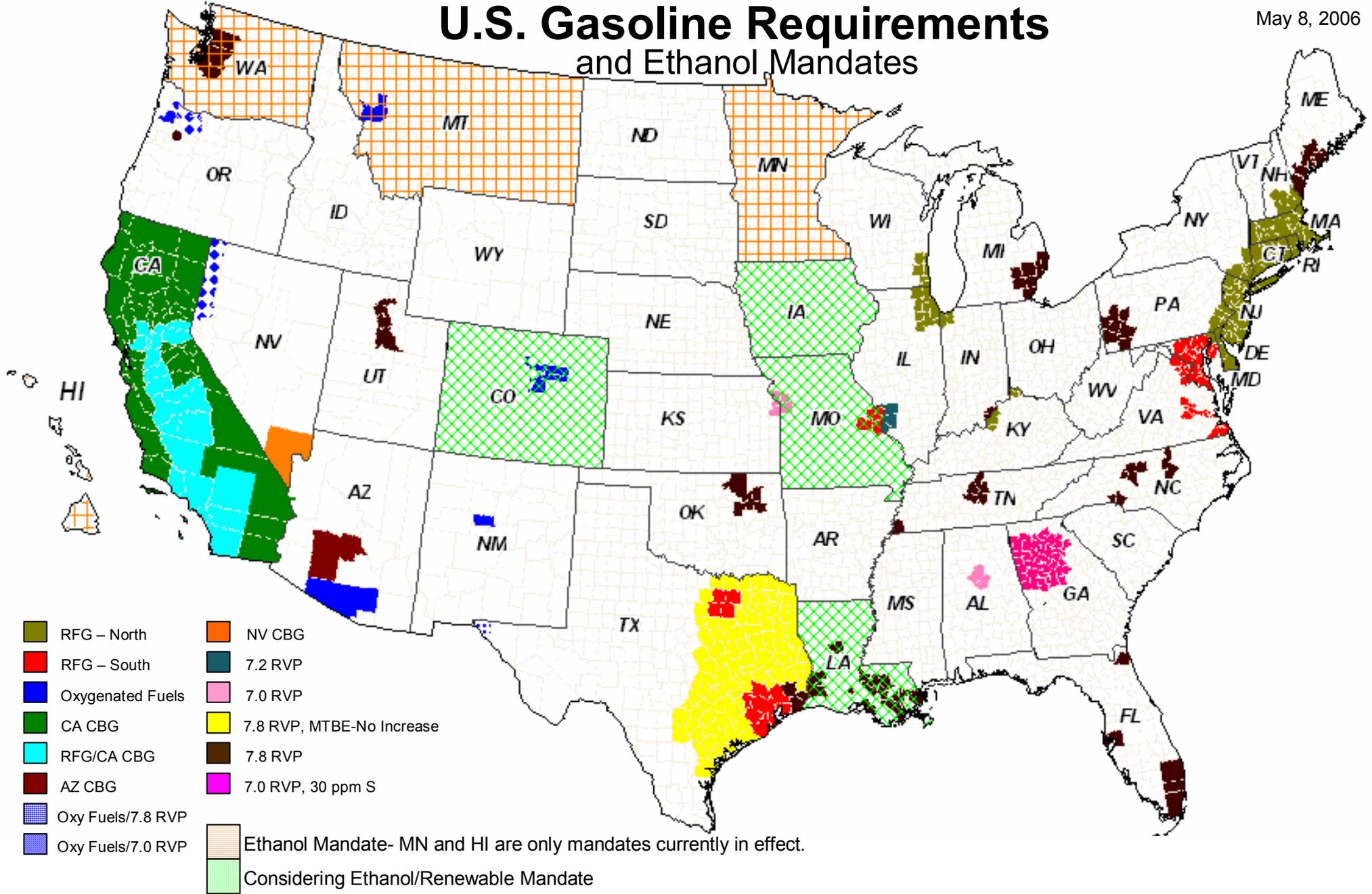
Congress needs to allow the oil and gas industry to invest today's earnings in meeting tomorrow's energy needs. To do otherwise will threaten our energy future. Congress can help by opening up more of the resource-intensive areas in our nation that are off-limits to new production. Because the market remains healthy and competitive, it is imperative

that it be permitted to continue functioning as freely of artificial restraints as possible.

That is the most efficient way to provide affordable fuel to meet U.S. consumer needs.

U.S. Gasoline Requirements and Ethanol Mandates

May 8, 2006



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|-------------------|---|
| RFG – North | NV CBG |
| RFG – South | 7.2 RVP |
| Oxygenated Fuels | 7.0 RVP |
| CA CBG | 7.8 RVP, MTBE-No Increase |
| RFG/CA CBG | 7.8 RVP |
| AZ CBG | 7.0 RVP, 30 ppm S |
| Oxy Fuels/7.8 RVP | Ethanol Mandate- MN and HI are only mandates currently in effect. |
| Oxy Fuels/7.0 RVP | Considering Ethanol/Renewable Mandate |