

Statement of the New Jersey Petroleum Council

July 24, 2008

New Jersey's Energy Master Plan (EMP)

The New Jersey Petroleum Council, a division of the American Petroleum Institute, has a long history of representing the petroleum and natural gas industry in this State. We engage in many facets of this worldwide industry, including refining, transportation, research, development, and marketing of fuels. It is a privilege to offer comments on the draft of New Jersey's Energy Master Plan (EMP) and we anticipate being afforded the opportunity to comment on its ongoing development.

Energy from all sources will be required to realize a secure energy future for New Jersey, businesses, and for America. The keystone of any workable energy strategy will be responsible diversification of the nation's energy supplies – allowing consumer demand and the market to integrate alternatives and new fuels into the energy landscape without government mandates that jeopardize the larger goal of sufficient, reliable supplies.

We believe there is much work to be done to elevate the level of understanding of New Jersey's energy policy. To that end, within the past year, the New Jersey Petroleum Council, along with the New Jersey State Chamber of Commerce, hosted an Energy Summit in New Brunswick that featured senior executives from the State's major energy sectors including utility, pipeline, transportation, research and development officials. This day long conference represented a significant initiative in underscoring New Jersey's critical role in New Jersey's energy supply to the Northeast. As a Conference highlight, the President of the American Petroleum Institute made a featured presentation on the Economics of Energy, focusing on understanding the energy needs of today and initiating better planning for tomorrow. The keynote speaker was the President of BP Gas Americas who spoke of the plans of BP to construct a LNG facility in Paulsboro, NJ. Coincidentally, the conference was held the day after Blue Ocean Energy announced planning to construct a second LNG facility to serve northern New Jersey. There has, since the Conference, been an announcement of a third proposed facility, Liberty Natural Gas. These are very positive developments for New Jersey's energy future.

The New Jersey Petroleum Council has worked diligently to participate in efforts to enhance our state's security and serves as an industry leader in the field of safety and security. Working through the New Jersey Division of Homeland Security, we have further responded to the challenge of anticipating hurricanes striking the New Jersey Coast, participating in conferences and seminars designed to build a thorough base of understanding of emergency response.

We appreciate the chance to offer these initial comments designed to broaden the scope of New Jersey's draft Energy Master Plan.

New Jersey is 47th in the nation in terms of geographic size, yet the state ranks 13th in its total energy use. New Jersey has three nuclear power plants, four full operable oil and gas refineries, and 3,608 retail gasoline stations. Overall, the energy industry employs more than 30,000 people in New Jersey.

Let's begin by taking a look at some quick facts with regard to the presence of the petroleum industry in New Jersey.

- New Jersey is home to the 6th largest state refining capacity in the nation, trailing nearby Pennsylvania by a small margin.
- In Northern New Jersey, between New York and New Jersey, there are over 40 million barrels of refined product storage capacity, most of which is in New Jersey making it the largest petroleum product hub in the United States.
- This area is also home to the New York Mercantile Exchange which acts as the regional exchange for petroleum products where extensive trading establishes the East Coast benchmark for product prices.
- The largest of the 4 United States federal mandated heating oil reserves is located in New Jersey.
- The New Jersey refineries located along the Delaware River are part of the Nation's largest petroleum refining complex on the East Coast.
- New Jersey presently has 4 operating full refineries and 2 asphalt refining plants.
- New Jersey is home to a sophisticated network of liquid pipelines. One, the Colonial Pipeline, comes from Houston, Texas to its northern terminus in Linden, New Jersey, and supplies product direct from the Gulf Coast.
- New Jersey presently has over 3,000 service stations throughout the state and on an average day dispenses almost 11 million gallons per day to those that reside, work and travel through New Jersey.
- New Jersey has the third lowest motor fuel tax in the nation, at 14.5 cents per gallon, and nearby states such as New York and Connecticut rank among the highest in the nation.
- Despite the fact that self service was originally introduced here in the early 1950's, New Jersey remains only one of two states nationally to require attended service in dispensing gasoline.

Let's turn to the product picture. Simply stated, our products continue to evolve and improve – it is not the same old gasoline or diesel fuel – they are a new generation of fuels poised to compete as the fuels of the future. New Jersey energy policy should continue to adhere to following a federal motor fuel standard and time schedule for planned changes rather than follow a state specific recipe or what is commonly called a 'boutique fuel'.

New Jersey presently requires, statewide, a gasoline known as Federal Reformulated Gasoline Phase II that reduces mobile source emissions in what is the cleanest gasoline permitted under federal law. Recently, that requirement included an advanced reduction in sulfur in gasoline which represents yet another significant step in the continued fuel improvements in gasoline.

Gasoline suppliers in New Jersey use ethanol, an oxygenate. This federal oxygenate requirement comprises approximately 10% of our state gasoline supply to help make this new cleaner gasoline. As a result, the blend stock of gasoline has been changed to accommodate the more volatile ethanol, while continuing to meet air quality standards. The new Blendstock is commonly called RBOB. (Reformulated Blendstock for Oxygen Blending)

Diesel fuel, as many of you are aware, has recently undergone a major transformation by removing almost 90 % of sulfur from the product that used to be sold. This new product is called Ultra Low Sulfur Diesel (ULSD) and is presently available for highway use. This product successfully debuted this past fall, and there are Federal mandates to expand this product to off-road diesel, as well as locomotive and marine engines. It is important that New Jersey energy policy be respectful of the federal schedule for product introduction to avoid precipitating supply difficulties during this transition period.

Looking forward, consideration of lowering sulfur levels in heating oil is underway with policy discussions within the industry and government regulators.

In summary, products are continuing to change and improve via a series of significant steps. Total combined investment for these fuel changes by US refiners' approaches \$17 billion dollars, combined with the investment for all environmental improvements that approaches almost \$50 billion dollars in refining.

At the same time, United States refineries produced record amounts of gasoline and distillate, and refinery capacity expanded for the tenth straight year. Since 1996, US refiners have expanded capacity by more than 2 million barrels per day or approximately 14%.

It is important to recognize that the petroleum industry is very cyclical. Right now, we are at the top of the cycle, revenues and profits are high and so is investment in new capacity. At the bottom of the cycle the reverse is true. History has shown this time and again. At present, the outlook for investment in the refining industry remains strong.

New Jersey should adopt policies in the Energy Master Plan to give New Jersey refiners the predictability they need in attracting new investment in our states refining sector. Decisions by refiners to expand refinery capacity are primarily based on business factors such as available capital, competition with other investments for funding, and return on investments which have historically been rather low. Other considerations include extensive regulatory requirements, international capacity to supply products and public acceptance. Increasing capacity at refineries can be a challenge for a number of reasons.

One would be cost. Expanding capacity at an existing refinery typically runs into hundreds of million of dollars. If one were able to get a new refinery permitted, it could easily cost \$3 billion dollars. These are huge capital investments by any standard. Ironically, the return on capital investment for the petroleum refining and marketing is historically below the average return for the Standard and Poor's Industrials.

Another is permitting. The permit process required to construct a new refinery or modify existing facilities is very complex and time consuming, involving federal, state and local permitting authorities. The combination of these regulations, reformulated fuels and reducing emissions from refinery operations make the refining industry one of the most heavily regulated industries in the United States. Yet, it is important to recognize that massive investments at refineries will be required as the industry seeks to expand refining capacity to meet demand and comply with environmental regulations.

New Jersey should adopt policies that compete to attract a share of these investment dollars, to create these new fuels, retain and expand our work force, and improve our standard of living.

Experts, including the Energy Information Agency, predict that the world will require more energy in the year 2030 than it did this past year. Population and economic growth in developing countries will drive much of that increase, but energy demand is expected to increase in the United States as well.

In New Jersey, it is our intention to continue to advocate for sound state policies that promote opportunities for the growth of the industry here in the state. To that end, we need to attract our share of employees, engineers and marketers. We have forged academic relationships with the state's university and higher education network, directly developing specialty courses where appropriate to assist us in this mission. In addition, we have provided our universities with opportunities to develop partnerships to assist us in reviewing potential energy strategies.

In looking at the future, we anticipate New Jersey as an attractive location for investment in liquefied natural gas as a fuel of the future, as an appropriate place for new bio- fuels, the challenges of investing in solar and wind technology, as well as improving or expanding on our existing co-generation, and the research and development of improved vehicle technologies -- all remain viable possibilities for an enhanced energy future.

The petroleum industry remains committed to operating in a secure environment and participating in the development of federal and state security initiatives in the State of New Jersey to protect our work force, communities, customers and facilities.

We continue to seek timely resolutions of permits necessary to operate and continue to grow petroleum refineries in a way that mirrors the sound, statewide business community initiatives. We welcome the opportunity to act, in partnership with the New Jersey Department of Environmental Protection to secure the necessary operating permits in a timely fashion. The Energy Master plan should recognize this possible bottleneck and work to advance timely resolution of these efforts.

We trust that New Jersey will continue to adopt tax policies that are based on sound principles, as well as mechanisms to discourage evasion of excise taxes.

We advocate that New Jersey encourage investment in areas that have been historic pro-growth development areas by policies intended to attract investment. As an example, an industrial node can generate local capacity for economic development, including significant job opportunities, which often involve skilled trades and professional careers that tend to be at the higher end of the wage and benefits scale. Industrial facilities can lead to a more stable tax base and attract service and support businesses, further enhancing the community.

Benefits include effective strategic planning for municipalities and companies, comprehensive security protection, and, as we mentioned, appropriate infrastructure. By locating industrial nodes in communities that sanction them, state-wide land use planning can also be more practical, in line with current land use realities and strategies. This initiative should be a cornerstone of New Jersey Energy Master Plan policy.

We would also advocate for a commitment to improve waterway navigation as an essential part of our overall energy infrastructure. The ability to access and navigate in an environmentally appropriate and safe manner is critical to development of our shore side facilities. To ignore this need places a considerable strain on a razor tight energy transportation network.

The oil and gas industry is currently investing hundreds of millions of dollars in developing new advanced energy technologies to reduce greenhouse gas emissions. These large investments are critical to provide the low carbon energy we will need years from now. These strategies include developing energy technologies and uses of clean burning natural gas. Research and developing and marketing new energy alternatives, including solar, bio-fuels, fuel cells and wind energy, and carbon capture storage technology are underway.

The petroleum industry, as one of New Jersey's earliest industries, has always been committed to meeting our energy needs through products, research, investments and workforce development. We share a commitment to secure New Jersey's role in meeting our future energy needs.

The ability to provide a stable supply of oil, natural gas, and all forms of energy to every sector of the economy will greatly influence the future prosperity of our state. Now is a critical time for making important decisions on programs and policies needed to address New Jersey's energy demands.

We wish to include a specific comment featured in an attached addendum. There is mention of a biofuel mandate for heating oil that should be addressed.

In review of the Energy Master Plan, specific comment is offered referenced to the use of the term "biofuel". We would suggest the use of the word "biofuel" is appropriate, however, on several occasions the "biofuel" word is replaced by "biodiesel." There is a significant and distinct difference between biofuel over biodiesel. We support very strongly the concept of "biofuel" however object to the specific use of the word "biodiesel" as it directly points to one specific product.

We do not believe State-level mandates are necessary to achieve greater use of renewable fuels and we urge policymakers to consider incentives as the means to promote biofuel production and use in NJ, rather than mandates. An incentivized marketplace will sort out how and where biofuels can be used most cost-effectively in NJ, while still meeting the objectives stated in the EMP to: 1) wean the State from dependence on foreign oil; 2) improve the environment; 3) create a market for recoverable biomass produced in the State; and 4) jump start demand for biofuel and promote biofuel production in the State (Source: Companion Document to the Draft New Jersey Energy Master Plan p. 34, paragraph 3 under Program Design).

Traditionally, natural gas has not been transported in significant distance because of the difficulty of shipping a gas. Technology now allows us to store and ship the gas safely at extremely low temperatures in a liquid state. It will take ongoing public education and forward looking policy makers to make this clean energy source accessible, however, make no mistake, LNG is the increasingly preferred mechanism for delivering ample supplies of clean burning natural gas to locations in New Jersey. New Jersey Energy Master plan policy should work to aggressively facilitate development of these proposed LNG plants.

Finally, a major component of any useful energy strategy entails the development of domestic U.S. resources. We agree with many people that urge states to move forward with a safe and environmentally friendly method of tapping in to our United States oil and natural gas supply. The U.S. Outer Continental Shelf, federally controlled lands off the east and west coasts and in the Eastern Gulf, is estimated to hold 77 billion barrels of oil and 420 trillion cubic feet of natural gas. These resources would be enough to heat 100 million homes for 60 years. However, the vast majority of this land remains off limits to energy exploration. As the only developed country that substantially restricts access to known domestic energy resources, we must take a realistic look at the impending long-term effects of this circumstance. Increased dependence on foreign oil is one of these very real potential effects. U.S. energy demand is not declining, and if not met by domestic sources, foreign sources will step in to fill that disparity.

New Jersey had one of the most sophisticated development proposals for off shore exploration in the late 1970's and 1980's. It was widely accepted by New Jersey policy leaders. There is no reason an ecumenical approach to resolving policy concerns can't lead to consideration and possible development of this critical supply potential. By developing more of our own oil and natural gas resources, we can provide more domestic fuel for consumers, add to well paying jobs, and bring much needed revenues – paid for by the investor owned exploration companies – into state and federal coffers. At a minimum, we need to encourage initiation of an inventory of resources in the OCS using technology not available when previous resource estimates were made.

We look forward to working with you to develop a public policy framework to ensure future energy security. We need to promote better understanding of the energy challenges we as a State face from both our elected and appointed officials. We will work to position New Jersey to enhance our energy technologies and remain on the cutting edge of advanced technology.

There is no question that our nation's economy will depend on more energy from a more diverse set of sources in the decades to come. Thoughtful consideration of how we will most effectively develop these new sources, while we continue to reliably meet growing demand, is of crucial importance to business owners, policymakers and American consumers. Vigorous deliberation will be necessary to logically align our nation's priorities and achieve this objective, and the United States and New Jersey businesses will be the better for it in the years to come.

Thank you for the opportunity to offer these comments. We stand ready to participate in the development of a sound Energy Master Plan

ADDENDUM – Use of Terminology in Draft EMP: Biofuel v. Biodiesel

In review of the Energy Master Plan specific comment is offered referenced to the use of the term "biofuel". We would suggest the use of the word "biofuel" is appropriate, however, on several occasions the "biofuel" word is replaced by "biodiesel." There is a significant and distinct difference between biofuel over biodiesel. We support very strongly the concept of "biofuel" however object to the specific use of the word "bio-diesel" as it directly points to one specific product.

There are two places where this is presented:

1) in the "Companion Document to the Draft New Jersey Energy Master Plan" in the Renewable Energy section which discusses Biofuels on pp. 34-35.

2) in the main Draft New Jersey Energy Master Plan under the Plan for Action section, Goal 3: Meet 22.5% of the State's electricity needs from renewable sources, Action Item 3: Increase amount of biofuels and biomass in State's energy portfolio on p. 66.

[Companion Document to the Draft New Jersey Energy Master Plan \(pp. 34-35\)](#)

The Biofuel Strategy Description reads: [Mandate 2% biofuel on all sales of space heating oil in New Jersey beginning 2015 increasing to 5% by 2020 at the wholesale level.](#)

The Timeline of Action reads: [By December 2008, enact biofuels mandate legislation on wholesale sales of heating oil beginning with 2% in 2015 and ramping up to 5% by 2020.](#)

The relevant paragraph in the Biofuels discussion reads:

[In the long run, market forces will determine the optimal use of bio-feedstock. However, in order to wean the state from dependence on foreign oil, improve the environment and create a market for recoverable biomass produced in the state, and in the short run to jump start and establish reasonable and consistent demand for biofuel and promote biofuel production in the State, New Jersey should follow the lead of states like Minnesota and Washington that have enacted legislation mandating fuel dealers to sell 2% biodiesel out of their total diesel sales. New Jersey, by enacting a biofuel mandate can open new markets for biofuels in the state, attract jobs, better use the current biomass that is land-filled and reduce concerns about oil prices and global warming. Further it would complement a similar Federal law called the Renewable Fuels Standard \(RFS\) that mandates the US reach 7.5 billion gallons of biofuel use by 2012. A modest 2% biofuel mandate on all sales of space heating oil in New Jersey beginning in 2015 and a 5% mandate by 2020 would push the development of biofuel in the most cost effective manner.](#)

Draft New Jersey Energy Master Plan (p. 66)

The relevant paragraph in the Plan for Action, Goal 3: Meet 22.5% of the State's electricity needs from renewable sources, Action Item 3: Increase amount of biofuels and biomass in State's energy portfolio reads:

[Currently, approximately 7000 customers in South Jersey are currently using 5% biodiesel blended with 95% petroleum-based heating oil for space heating purposes. If this blend were to be adopted by the State, based on 2020 projected consumption, it would require approximately 31 million gallons of biodiesel by 2020 and result in over 4 trillion BTUs of space heating savings.](#)

[This blend should be expanded to cover the entire State, and the Administration will work with the Legislature to create a 2% biofuel standard for all sales of space heating oil in New Jersey beginning in 2015 and increasing 5% by 2020.](#)

It is important to take note of the choice of words in the paragraphs cited above. The writers of the Draft EMP and its Companion Document seem to use the word biofuel interchangeably with the word biodiesel. However, there is a big difference and we always prefer to see the generic word biofuel over biodiesel. Biofuel connotes technological neutrality, a concept that is strongly supported by API. On the other hand, biodiesel is very narrow in scope as its ASTM definition refers to only one process for converting animal fats or vegetable oils into one type of molecule (a methyl ester). We need to do all we can to educate policymakers that there are a wide range of biofuels that can be produced and a wide array of processes that can be applied to make renewable fuels. See attached schematic below.

In addition, States are rationalizing these biofuel mandate proposals for heating oil with a mindset that "it's just a modest amount more" than the federal mandate already in place for transportation fuels. This mindset is very problematic as explained below.

The NJPC wishes to include these comments on the EMP:

- The American Petroleum Institute and its member companies fully endorse the need for energy diversity and energy security. Biofuels will certainly play an important role in contributing to energy diversity, especially advanced biofuels produced without adverse impacts on GHG emissions and without using food crops as feedstocks. As the final version of the NJ EMP is prepared, we encourage policymakers to *emphasize* the importance of technological neutrality in policies to promote the use of renewable fuels.
- It is also critically important to encourage broad market participation to make meaningful strides in diversifying our energy supply in the most cost-effective manner.
- The Renewable Energy section of the Companion Document to the Draft NJ EMP discusses Biofuels on pp. 34-35. The federal Renewable Fuel Standard (RFS) is referenced as requiring 7.5 billion gallons of biofuel across the US by 2012. However, it is important to note that the volume cited pertains to the Energy Policy Act of 2005 and that the renewable fuel requirement was increased 480% in the Energy Independence and Security Act of 2007, reaching 36 billion gallons by 2022 nationwide. The final version of the NJ EMP should reference the much higher federal RFS that became law in December 2007.
- The Energy Independence and Security Act of 2007 establishes a very aggressive national Renewable Fuel Standard (RFS) that comprises a suite of biofuels, including corn and sugar-based ethanol, biodiesel, renewable diesel and cellulosic-biomass derived fuels. In 2008 alone, the mandated renewable content is 67% higher than it was under the Energy Policy Act of 2005. Meeting the new federal RFS will not be easy. It will require massive investment and real innovation. It will stretch our nation's agricultural productivity, technological ingenuity and infrastructure capabilities. Overlaying State-level mandates, such as the one proposed for heating oil in the NJ EMP, will add tremendous complexity to the challenges that lie ahead just to meet the federal RFS. The proliferation of *state-by-state* mandates will make our nation's fuel production even more complicated and create a very inefficient fuel delivery system. As a result, the system will be much less flexible in responding to supply dislocations.
- We do not believe State-level mandates are necessary to achieve greater use of renewable fuels and we urge policymakers to consider incentives as the means to promote biofuel production and use in NJ, rather than mandates.

An incentivized marketplace will sort out how and where biofuels can be used most cost-effectively in NJ, while still meeting the objectives stated in the EMP to: 1) wean the State from dependence on foreign oil, 2) improve the environment, 3) create a market for recoverable biomass produced in the State, and 4) jump start demand for biofuel and promote biofuel production in the State (Source: Companion Document to the Draft New Jersey Energy Master Plan p. 34, paragraph 3 under Program Design).