

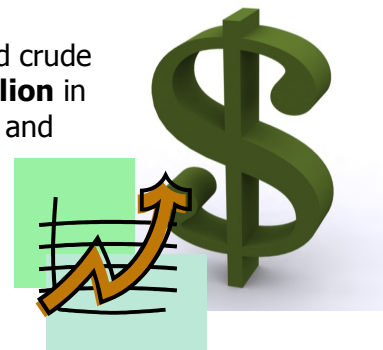
*** Please Note: This document is intended to discuss future possibilities for wind power development in Maine, not the current offshore wind demonstration sites being discussed off the coast of Maine. ***



The United States is at a critical crossroads in terms of energy production. With population levels and energy consumption continuing to rise, everyone agrees that the current method of energy production must change. The price of oil is unstable and fluctuates dramatically. Our country must transform the way it powers the world's largest economy. The current system is too expensive and financially unstable.

Consider heating oil. Eighty percent of Maine homes heat with oil. On August 17, 2009, heating oil in Maine averaged \$2.42 per gallon, according to the Maine Office of Energy Independence and Security, with crude oil selling at just over \$65 per barrel.

Just one year earlier, heating oil peaked at **\$4.71 per gallon**, and crude oil prices hit **\$147 per barrel**. Maine spent approximately **\$6 billion** in 2008 on petroleum products, nearly all of which went out of state and overseas. The world oil market is fragile and prices are reactive. Coal is also prone to price spikes, **rising 43.3 %** in New England between 2008 and 2009, according to the Federal Energy Information Administration. Coal is also one of the biggest contributors to global warming through carbon emissions.



At the turn of the last century, the world economy was changed by oil. Now, some 100 years later, we have experienced the worst recession since the Great Depression. Climate change and related environmental issues are creating the same dynamic for change that revolutionized the world at the beginning of the 20th Century. The opportunities that exist as a result of that dynamic need to be embraced.



The push for renewable energy is strong. Congress and the President are focused on key goals, such as reducing carbon emissions; stabilizing and diversifying the country's energy supply; reducing our dependence on fossil fuels; encouraging energy conservation, efficiency and renewable generation of electricity; and transforming our transportation and heating needs to cleaner, renewable sources of energy.

President Barack Obama stated his firm optimism in the renewable energy market on Earth Day 2009, saying, "The nation that leads the world in creating new energy sources will be the nation that leads the 21st Century global economy."

President Obama has put significant resources behind the development of renewable energy. The American Recovery and Reinvestment Act of 2009 includes funds to help create renewable power projects and encourage private investment. The Recovery Act extends the renewable energy production tax credit through 2012, includes grants from the Treasury Department and a loan-guarantee program for renewables.

The conversation about renewable resources has evolved rapidly, even in just the past five years. The question has gone from "If?" to "When, where, and in what form?"

why wind?

Wind power is one of the cleanest, greenest forms of renewable energy. Wind is created naturally and leaves behind no residue or debris. As long as the earth continues to rotate and the sun continues to shine, nature will continue to create wind.

Wind has been harnessed for generations to turn wheat into flour, power ships and international commerce and pump water for hundreds of years.

The goal is to continue to advance the use of wind and harness it on a much larger scale to power – and ultimately to heat – our homes and businesses in an environmentally friendlier way than is currently being done. To do this, large wind turbines must be erected in areas with an appropriate amount of wind capacity.

The idea itself is not a new one. Windmills have been erected from Holland to the southern tip of Hawai'i and many points in between for years. However, as the urgency for renewable forms of energy grows, so does the popularity of siting and building wind farms.

In July 2009, the Wall Street Journal said that wind is "still a fast-growing sector." Despite the difficult economy and credit crisis, during the second quarter of 2009 the United States installed 1210 megawatts of wind power according to the American Wind Energy Association. That investment puts this country ahead of the record-setting pace set in 2008 through the first half of 2009 for wind power development. The Global Wind Energy Council predicts growth of wind power production at about 22 % per year over the next five years.



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And with the development of wind farms comes economic development. Wind farms generally are built in sparsely populated areas, creating much needed jobs and tax revenue for rural towns and counties. For example, the Stetson Wind Project in the Washington County town of Danforth, Maine is the largest commercial wind farm in New England. The Stetson Wind Project is operated by First Wind, headquartered in Newton, Mass. The construction of the Stetson Wind Project created 350 jobs and First Wind spent \$50 million with Maine businesses to complete the construction. These jobs can best be described as "green-collar" jobs, constructing and maintaining structures to produce clean, renewable power.

There are also considerable tax benefits for residents in host communities. For example, the property tax rate in Mars Hill decreased by 20 percent in 2007 as a result of the tax payments associated with the Mars Hill wind power project. At the Stetson Wind Project, tax payments are collected and spread out among towns in Washington County and Penobscot County.

Why Maine?

Maine is the most oil-dependent State in the country and is below the national average in personal income. The citizens of Maine cannot afford to pay for an unstable, unpredictable and financially unreliable source of energy any longer.

The question should not be "Why Maine," but rather "Why NOT Maine?"

- Maine is currently the region's leader in wind power development, and the size of our onshore and offshore wind resource is truly significant. If all of the available wind resource in the Gulf of Maine could be harnessed, we could install 100 GW (100,000 MW) worth of wind turbines. And, on a windy day when they were all producing power, this would provide three to four times the current New England peak demand.
- There are currently 300 megawatts operating or under construction in Maine with another 450 megawatts in various stages of development from companies such as TransCanada Maine Wind Development, Endless Energy, Independence Wind, and First Wind.
- Wind power development has the support of elected officials, a benefit that not all New England states share. Maine Governor John E. Baldacci has said that he wants to see about 30 times the current installed capacity of wind power by 2020.
- These initiatives have the support of the Maine State Legislature as well. During the 124th session of the Legislature, earlier this year, LD 1465, An Act To Facilitate Testing and Demonstration of Renewable Ocean Energy Technology, was enacted without opposition in the Maine House and Senate.



The 57 megawatt Stetson Wind Project in Danforth, Maine can power about **23,500 homes** in Maine each year. According to the American Wind Energy Association, Maine has the potential to site **6,390 megawatts** of wind power, ranking Maine **19th in the country** and **first in New England** in wind energy potential. Maine is in a unique position to become a hub for wind power with the state's onshore and offshore resources. Maine's offshore wind potential has been estimated at 100 gigawatts or **three to four times the current New England peak demand**.



By building wind farms and harnessing wind energy in Maine, construction money stays in Maine, jobs are created in Maine, more of our energy

dollars stay in Maine. As mentioned earlier, First Wind spent \$50 million with Maine businesses during the construction of the Stetson Wind Project. Reed and Reed of Woolwich, in business for nearly 80 years, has evolved with the changing times to begin constructing wind farms in Maine.

Additionally, Maine lawmakers have created an environment that is open to the creation of wind farms and the production of wind energy. First Wind CEO Paul Gaynor stated in an Aug. 20, 2009, story published in the Phoenix newspaper, "The rules of the road are very clear in Maine, in terms of permitting and so forth. That clarity, quite frankly, is appealing compared to other states where there's not a whole lot of clarity."



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why now?

The race is on to become the wind energy hub not just in New England, but in the country. There are states stumbling over permitting, zoning issues, political resistance and siting issues. However, many states are doing everything they can to move forward. Coastal states are highlighting the advantage of both land-based wind resources, and offshore wind as well.

- Rhode Island is planning 5-8 offshore wind turbines by 2012 and an additional 100 offshore wind turbines by 2014.
- New Jersey has issued leases for 8 offshore wind turbines by 2011 and the company involved is planning an additional 66 turbines in federal waters by 2013.
- Delaware has plans for 55 wind turbines 12-miles from the coast by 2012.
- Massachusetts has been working toward 130 wind turbines in federal waters by 2010, initially met with strong resistance but headway has been made.
- New York could have 160 wind turbines 13-miles off its coast by 2015.



The majority of the population of the United States lives on the East and West coasts. The



development of offshore wind can provide much of the energy needed in the more densely populated areas. Additionally, the U.S. Department of Energy estimates wind power capacity within 50 miles of the coastline to be roughly equivalent to the country's current total capacity. The states where the infrastructure is built and the production of wind energy occurs first will be the states that have the advantage in the wind power marketplace.

The time is now to invest in the infrastructure that will produce clean, renewable energy. These resources will help end the region's and the nation's overdependence on oil, coal and gas, which is costing billions of dollars annually and changing our climate. The investments in wind energy will keep dollars in this state, it will create jobs, it will expand this state's economy and it will improve our environment and national security. Our current energy mix carries great risk. It is not sustainable financially and it is not sustainable environmentally.

Wind is a significant piece of this country's energy solution; Maine can play a critical role in wind power production, while creating jobs and boosting the economy; and now is the time to invest in Maine's future as a renewable energy leader.

