

05.01.08 - Comprehensive Clean Energy Strategy

Governor Deval L. Patrick

Clean Energy Strategy Remarks to Greater Boston Chamber of Commerce

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As Delivered

Good morning.

What I'd like to do this morning is offer some observations on the Commonwealth's economy, some of the steps we are taking to adjust in the short run, and at least one of the areas where I believe there is potential for significant long-term growth. And then we can have some conversation which is really the fun part.

We are connected to and influenced by national economic trends, of course, and the news on the national front is worrisome. There's no doubt about that. Employment has declined nationally for four straight months, and economists forecast a fifth straight month of job losses for April. Although the financial houses on Wall Street appear - at least for the time being- to be stabilizing, the shakeout from the credit meltdown continues to affect communities nationwide.

Now Massachusetts, at least so far, is holding her own, faring better than most parts of the country. At 4.4 percent, our unemployment rate remains below the national average, where it has been for nearly a year. Though we have lost ground in retail, and in construction and manufacturing, we are gaining in education, health care and high tech. Over the last three months, the Massachusetts economy added 3600 jobs, 4600 when you add in December, the 8th highest number of jobs added in the country, while the nation was loosing jobs - over 200,000. Yesterday, a University of Massachusetts study indicated that the state's economy grew five times faster than the national economy during this same period. State revenues have continued to run ahead of benchmark through April, for every month of this fiscal year so far.

Now all of that is a distinct change from the last two U.S. recessions, when the downturns hit us earlier and harder.

But still, no single state's economy is recession proof. If things get worse nationally, we will feel it here. And let's face it, if the job just cut is yours or the sales that are tanking are yours, the

relative strength of the Massachusetts economy is cold comfort.

Foreclosures topped 2,800 in the first three months of this year - more than double the first quarter of last year. Many, many of our fellow residents - maybe some of you in this room- are anxious about their circumstances today and in the near future.

Last month, with the help of the Speaker and the Senate President, I laid out a four-part plan to address some of our current and future economic needs and opportunities. That plan involved restraining discretionary state spending; accelerating investment in our infrastructure and people; positioning ourselves for long-term growth in a couple of key areas; and securing the safety net for vulnerable people and small businesses.

Since that address, I have implemented spending controls that will generate nearly \$200 million in savings. I've signed a \$3.5 billion transportation bond bill. I've developed with the Legislative Leadership and the Treasurer a means to finance the repair of hundreds of structurally deficient bridges. I've released \$1.4 million dollars in Workforce Training grants to train nearly two thousand workers in hospitals, banks, clean tech and manufacturing; and announced 4 of the 16 growth districts so called -- the ones in Chicopee, Haverhill, Weymouth and Worcester -- that will serve as regional economic engines and hubs for development planning.

As of today, homeowners are entitled to a 90-day "right-to-cure" mortgage delinquencies. The 90-day period acts as a mandate for lenders to try to restructure loans, a result that not only preserves homeownership for residents and avoids the destabilizing effect foreclosures have on entire neighborhoods, but also produces a continuing revenue stream for lenders.

We are implementing other measures - many of which were announced yesterday with the Attorney General - to help homeowners and communities struggling with foreclosures, and we are working with Congressman Frank and the others members of the congressional delegation on a more sweeping national response to the foreclosure issues.

Now there is more that we can and must do; but we are making progress.

The Life Sciences Package as Paul mentioned the Energy Packages have passed out of the House and Senate and will be on my desk soon. The Legislative Leaders have pledged both publicly and privately to enact the several pending bond bills before the end of the session. That will enable some \$16 billion of investment in our roads and bridges, in our public and affordable housing, in public colleges and universities, broadband expansion, beaches, parks and other recreational facilities.

Investing in our infrastructure and ourselves creates the foundation for the state's economic growth over the coming decade, and creates good jobs right now.

But I want to focus today on one permanent fact about our economic future. I am talking about energy. Here in Massachusetts I believe this presents both a challenge and an opportunity.

Today, crude oil is trading around \$115 a barrel. Gasoline as you know is at \$3.50 a gallon for regular at the pump. Diesel is at \$4.38 a gallon, a buck fifty higher than just a year ago. And those costs find their way into every single thing that we buy. Home heating oil recently hit \$4 a gallon, just six months after it broke the \$3 a gallon record. The average household in Massachusetts spent \$2,500 last year to heat their home with oil, up from \$1,800 the winter before. Now that average will be \$3,200 next winter - if, if the price of home heating oil doesn't go any higher than it is right now.

The rise in crude oil prices hasn't made its way fully into electricity costs yet, but it will. The price of electricity in Massachusetts generally tracks natural gas prices, and that is expected to rise significantly over the course of the year. When it does, we will see it in our electric bills. It effects every family, every individual, every business in this state.

And even if the volatility of oil and gas sources becomes less of a factor over time, demand is likely to continue to rise. The entry of China and India into the global economy as consumers is unlike any phenomenon in economic history. With no oil, coal or natural gas supplies of our own here in Massachusetts, we have always been at the end of the pipeline and at an economic disadvantage. High prices for fuel oils, for fossil fuels are likely to be with us for a very long time indeed.

Add to that the threat of global climate change and Massachusetts is very much at risk. In fact, it's affecting us in some respects already. With hundreds of miles of coastline threatened by sea level rise, many property/casualty insurers are already forecasting catastrophic events as a basis for exorbitant increases in home insurance premiums.

I believe the age of fossil fuels is coming to end - and that the age of clean energy will follow.

And I really believe we must think of this as a shift in age, not merely a shift in resource. The Stone Age didn't end, as someone said, because we ran out of stone; it ended because humankind had a better idea. Clean energy is a better idea - better for our pocketbooks, better for the planet, and better for our economy, as well.

Massachusetts has what it takes to lead a clean energy economy -- because in the age of clean

power, will be power not from fossil fuels, but from technology, innovation and skill. Those are resources we have in abundance - here in Massachusetts and they are infinitely renewable.

Speaker DiMasi was among the first on Beacon Hill to recognize this and to act on it. He filed a comprehensive energy reform bill last year. Secretary Ian Bowles and I have been working hard, hand-in-hand with the Speaker, Chairman Dempsey on the House side, and Senate President Murray and Chairman Morrissey on the Senate side, to craft a piece of legislation that will put Massachusetts at the forefront of energy innovation. It comes just as the Nation, at long last, is awakening to the need for it. And this is very, very good news.

This legislation will unleash energy efficiency - the cleanest energy of all, and the ultimate defense against rising energy prices. For years, we've given electric utilities a fixed amount of ratepayer funds - \$125 million a year - to spend on energy efficiency upgrades - and not a penny more, no matter how much more we could save by consuming less. The pending energy bill will require electric utilities to obtain any and all energy efficiency whatever costs less. or whenever it costs less than power generation. That means the utility will work with you in your homes, and offices and factories on lighting, appliances, insulation, and other tactics to deliver your energy needs through greater efficiency rather than simply by generating more power. And it will be done not as an add-on to your utility bill, but as an integral part of the way your utility company meets your energy needs.

It will work this way: when your electric utility - NStar, National Grid, or any other - looks at how much electricity it's going to need to buy to meet the demands of its customers, it will become required to identify all the cost-effective opportunities available to save electricity. That means replacing lighting, air conditioning, and industrial equipment with more efficient models through customer incentives that cost the utility less than it would to contract for the same amount of electricity from power plants.

Giving you the tools to take charge of your energy use will be good news for controlling costs and good news for clean energy.

The legislation will also require utilities to enter into long-term contracts for renewable energy. That means that renewable power developers will have a more stable basis on which to get financing for their projects. The bill's "net metering" provisions will make it easier for people who own smaller scale solar, wind or distributed power to sell their extra power back into the grid at a favorable rate. And it will integrate our state building code with the standards of the International Energy Conservation Code, keeping Massachusetts at the forefront of energy efficiency in new buildings.

Energy efficiency is a real thing; this is not some abstract concept. I want to tell you why; give you an example. Crane & Co., a venerable company in Western Massachusetts, has been making fine paper products, including the specialized paper used for currency, for more than 200 years. On a visit to their Dalton facilities, I learned they were groaning under the weight of their energy costs. Phil Giudice, our Commissioner of the Division of Energy Resources - is Phil here? There is Phil. You should stand up Phil because everybody's gunna' want to know you. Commissioner Giudice went out to see Crane and he led one of our new Commonwealth Energy Resource Teams - the SWAT teams of professionals from various state agencies, all focused on solving energy challenges for industry. The Industrial Assessment Center at UMass-Amherst conducted a full energy audit. Crane Paper has decided to implement all but one of the efficiency measures recommended. Here's the punch line: that implementation will save them \$600,000 a year. \$600,000 a year.

We all stand to gain from energy efficiency, by learning to manage energy the same way we manage other kinds of consumption.

Under the new energy legislation, this will become easier to do. The utilities and independent energy services companies will be coming to you, looking for ways to improve your energy efficiency - at your company, or at home - saving you money, and saving all of us by reducing electricity demand overall. It's all about meeting the energy needs in the smartest, cheapest, and most environmentally sensitive way.

When efficiency competes with generation by the way on the basis of cost, efficiency generally wins. ISO New England, which operates our power grid, recently held its first auction of the Forward Capacity Market, accepting bids for ways to meet future electricity needs. Two-thirds of the awards in that auction went to demand-management resources (translation: efficiency applications); only one third to new generating resources.

Besides saving money, energy efficiency represents an economic growth opportunity. It means jobs for people who remove old light fixtures and install new ones, folks who replace old furnaces and air conditioners, and swap out old motors with new variable frequency ones - even people who go door to door, replacing incandescent light bulbs with compact fluorescents today, or light-emitting diodes tomorrow.

Energy efficiency is just one part of the clean energy economy of the future. And the energy legislation is just one of the ways that state government is leveraging Massachusetts's strengths in basic and applied research, venture capital, and technology innovation. We are already growing the clean tech sector in Massachusetts and you know about that.

Take solar power. Evergreen Solar - and I saw Rick Fedt here earlier today. Where are you Rick? Here is Rick, the Chairman and CEO of Evergreen Solar headquarters in Marlboro, building its first full-scale U.S. manufacturing operation in Devens right now. By next year, Evergreen will have tripled its Massachusetts workforce, up to 1,000 workers in just two years.

Now Evergreen is expanding here, not just because we were able to offer a package of incentives that was competitive with several other states. What made the difference was the commitment we are making to grow the market for solar photovoltaic energy

To that end, in January, we launched Commonwealth Solar, a rebate program that uses existing renewable energy funds to defray the cost of solar installations. The program offers rebates of up to 60 percent of the cost for homeowners, and up to 40 percent for businesses - up to \$1 million for a large commercial installation. In just three months of operation, Commonwealth Solar has approved nearly 60 applications, for rebates totaling more than \$1 million and 350 kilowatts in generating capacity.

Clean energy technology creates jobs, too, and not just in the lab. One of the biggest boosters of solar and wind energy in Massachusetts is Marty Aikens of IBEW Local 103 - the proud owners of the wind mill and rooftop solar panels you see as you drive - where are you Marty are you here? Marty stand up. (applause) - you down the Southeast Expressway and you see the windmill and the solar installation on their roof that is Marty's doing. Where environmentalists see carbon-free energy, Marty sees jobs for electricians installing solar panels and assembling wind turbines and the beauty of that is they're both right.

The point is: green-collar jobs come in shades of both blue and white. Over the last few years, our state colleges, community colleges and 40 Vocational Technical High Schools have begun to develop clean energy technology training programs. YouthBuild is including green building techniques in their training of at-risk youth in construction trades. The clean energy sector in Massachusetts employs more than 14,000 people right now today, and is growing fast. Graduates of these programs will be in high demand.

Now Dan Leary needs that talent. Where's Dan? You here Dan? There's Dan Leary. I'm gonna tell you about Dan Leary. Dan was a student at the Isenberg School of Management at UMass-Amherst when he was called to serve his country in the Army. While leading a unit in Kuwait, Captain Leary worked on his master's thesis in his spare time. That thesis was a business plan for a solar power delivery company.

He finished his tour of duty, finished his thesis, and - with the help of a grant from the Renewable Energy Trust - he started a company called Nexamp. At first Nexamp was Dan, his laptop and his

pickup truck. But in two years, Nexamp has become a 12-person operation, most of them fellow veterans - if I understand it correctly - and located in North Andover. Dan is looking to add 5 more jobs by the end of the summer. And good for you Dan. Keep it up. (Applause) Did you bring business cards today by the way? That's the way. Solar power is just one of the clean energy technologies where Massachusetts can use our expertise to solve our own energy problems -- and then show the world how to solve theirs as well.

Wind power is another. Wind is the fastest-growing power generation source on the planet right now. For a time, thanks to the vigor of opposition to Cape Wind, Massachusetts was regarded as hostile to wind power. In fact, there are thoughtful concerns raised in opposition to that project; but I believe on balance Cape Wind is good for Massachusetts, both practically and symbolically. The project has received state environmental approval and is moving toward a final decision from federal authorities. Before too long, I believe, the first offshore wind farm in America will be located just off the coast of Massachusetts, a powerful statement of our commitment to a clean energy future.

There are other promising developments in wind technology that you should know about as well. Last year, we were chosen, we in Massachusetts were chosen by the federal Department of Energy as the location for one of just two Wind Technology Testing Centers in the country. That means we'll be soon testing wind blades in Charlestown for projects everywhere. Hull has two turbines generating its municipal electricity needs today. And the MWRA will erect two wind mills soon to help meet its needs -- at the same time symbolizing for every traveler landing at Logan that we aim to become the world's hub for clean energy innovation.

The Oceans bill, which the Senate President has championed, is a further component of our energy strategy. This legislation will make Massachusetts the first state in the nation to have a comprehensive management plan for our state waters, including identification of sites appropriate for renewable energy development. That means balanced, thoughtful planning that allows for development of offshore wind, wave and tidal power generation - leadership not just among states, but a model for federal waters as well.

Biofuels represents another opportunity for Massachusetts. Now you may have read concerns about bio around the country and the world about the unintended consequences of biofuels made from corn and from soy, particularly their impact on food prices and the energy used and emissions generated by making the stuff. Well, Massachusetts researchers and companies are at the forefront of the next generation of biofuels, which come from the cellulose that's found in non-food sources like wood, agricultural wastes, and switchgrass. Indeed, researchers at UMass Amherst have discovered what they call the QMicrobe, bacteria that convert cellulose to ethanol

in a single step - a transformational breakthrough.

We need to encourage the commercialization of these breakthroughs. So, the Speaker, the Senate President and I are working on a bill to exempt cellulosic biofuel from the state's gasoline tax. That measure will provide stimulus for Massachusetts companies like Mascoma and SunEthanol - SunEthanol is the company that's based on that UMass-Amherst research I mentioned - to bring their products to market.

Long-term support for advanced fuel and vehicle technologies will come from the Low Carbon Fuel Standard the Senate President, Speaker and I have agreed to develop as well. We would be the first state after California to create such a standard. But frankly, given our relative geographic size and our footprint, this policy would be much, much more effective on a regional basis, where it can match our regional distribution system and take advantage of economies of scale.

So, I am reaching out to the Northeast states who, like the Commonwealth, are members of the Regional Greenhouse Gas Initiative, to ask them to work with us on this mechanism for. Indeed, I believe that New England Governors can develop a common agenda to reduce emissions from vehicle fuels and in the process make New England the most energy-efficient region in the country. And we've even launched a New England Clean Energy Council to foster collaboration within the sector.

So the idea is a simple one: if Massachusetts gets clean energy right, the whole world will be our customer. And today, I can tell you, we are well on our way, thanks to the incredible technological and entrepreneurial talent we have already here in our great Commonwealth, and thanks to a set of policy leaders in state government who share this vision, and are willing to work shoulder to shoulder to pursue it. Like I said, the age of fossil fuels is passing. If we act now, the age of clean energy is ours.

Thanks for having me I appreciate it.