Mass Insight Survey Research Group

Strategic Issue Report - Energy/Clean Energy/Climate Change



Importance

Massachusetts faces a number of challenges and constraints to building a strong, sustainable energy future. The state is heavily reliant on imported fuel, and its electricity prices have traditionally been among the highest in the nation. Natural gas plays a major role in the state's energy portfolio, which can leave residents vulnerable to sharp price hikes as demand increases. Meanwhile, the state's building stock is old and aging, and though progress has been made on weatherization and efficiency measures, this still represents a major challenge.

Among Massachusetts consumers, there is significant concern about climate change and global warming, and strong support for energy policies that would mitigate the effects of those two issues. Policy makers should seize this moment to craft comprehensive and strategic energy policies for the state that will create a diverse and stable pool of energy sources while combating and adapting to the effects of climate change.

Challenges/Key Issues

Educate consumers about energy issues in an understandable and accessible way. The state's energy policies will not be successful without consumer support – and it will be impossible to build that support if consumers don't understand the problems and the proposed solutions.

Diversify the state's energy portfolio to bridge gaps and to reduce vulnerability. A significant portion of the state's generation capacity will retire in the next decade. The state will need a diverse portfolio of energy sources to fill those holes while reducing the risk associated with overreliance on any one source.

3

Modernize energy systems and regulatory structures to enable more intelligent and efficient energy use. The state's energy grid and regulatory system have not adapted to changes in energy usage or available technologies. Updating systems and structures would allow for smarter and more efficient energy usage.

Mass Insight's 25 Years of Public Opinion Polling

Tracking over 25 years of data, Mass Insight, in partnership with Opinion Dynamics Corporation, conducts **quarterly public opinion surveys** on state and national issues identified by executives as strategic concerns, and on state government policies and investments that support economic growth.

In addition, the polls feature four strategic issue annual reports with expert summaries focused on high-impact sectors driving the state economy. Research for these new publications may include longitudinal tracking items as well as polling that address onetime topics which provide a high-level view of the key issues that drive the Massachusetts economy.

What the Public Is Saying

The state's consumers express strong concerns about climate change and global warming, but are less uniform in their support for funding mitigation efforts. More than seven in 10 express some level of concern over climate change and global warming, and 68 percent of respondents think the issues should be a priority for the next governor.

Support starts to break down when it comes to paying for these efforts. While about half of consumers would pay something additional on their electric bills each month to combat the effects of global warming, a significant minority (38 percent) of respondents said they wouldn't pay anything additional and 13 percent weren't sure.

Solar and wind have widespread public support. Nine in 10 consumers are in favor of increase use of solar technology, and 80 percent register support for wind. Consumers also believe these technologies are a good deal for the state, identifying the two energy sources as the most cost-effective and practical solutions for Massachusetts.

There is strong support for immediate infrastructure investments to prepare the state for the effects of severe weather events and rising sea levels. Three in four consumers agreed that it was prudent for the state to take action now to prepare its infrastructure for the effects of climate change that manifest in more severe storms and rising sea levels.

Consumers strongly endorse leveraging the growth of clean energy as a catalyst for jobs creation. More than eight in 10 consumers polled support state funding for clean-energy training programs in order to create new job opportunities, making that policy the most popular of those tested.

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The Experts

Robert Rio Senior Vice President, Associated Industries of Massachusetts

Alicia Barton CEO, Massachusetts Clean Energy Center

> Ralph Child Member, Minz Levin

Anuj Goel Vice President, Massachusetts Hospital Association

> William Schnoor Partner, Goodwin Procter

Robert Wilson Partner, etaPartners

What the Experts Say

The state should set clear goals for its energy policy – and then align spending against those goals. If the state's top priority is reducing greenhouse gas emissions, the most cost-effective investment might be in fixing natural gas leaks – not a heavy play on solar. The state needs to ensure it is directing funding to efforts that will effectively and efficiently meet its goals.

The natural gas pipelines to the northeast need to be expanded in order to meet the region's demand for natural gas. The combination of a fuel mix that is overly reliant on natural gas with an insufficient supply of that resource makes Massachusetts vulnerable to dramatic price increases (as happened in January). Increasing the available supply of natural gas addresses one half of this problem.

Increasing clean energy imports – such as hydroelectric power – and other renewable energy sources will be critical to relieving the pressure on natural gas. One third of the region's generation capacity will be retiring over the next 10 y ears. While natural gas will be critical to bridging that gap, it can't be the only piece of the puzzle. Proposals to create up to 3,600 megawatts of transmission capacity to carry hydroelectric and wind power from Canada to Massachusetts and other New England states will address this issue, as would judicious increases in the state's solar and wind capacity. A new concept in nuclear power – small, modular reactors that can be built in factories and then shipped to their ultimate location – is also worthy of exploration.

The grid needs to be modernized to allow for smarter, more efficient energy use. The grid is still architected in the same way it was 75 years ago even as our energy needs and available technologies have evolved dramatically. Creating a system and a regulatory structure that allows for demand response would enable the rise of smarter cities that use energy more intelligently.

The state could play a leadership role in climate adaptation efforts by coordinating key stakeholders behind a collaborative and strategic approach. Thoughtful planning and coordinated action have the potential to make adaptation less painful and ultimately to provide economic opportunities.

A continued focus on energy conservation efforts can yield significant cost savings while reducing impacts on the climate. The state has strong energy efficiency programs that have already targeted much of the low-hanging fruit, but there is still more than can be done, particularly in the industrial and commercial sectors. Efforts like the Healthier Hospitals Initiative, through which hospitals commit to reducing their baseline energy use, showcase what can be done in the private sector. The Massachusetts Hospital Association kicked off the initiative in January and already has 36 hospitals signed up.

Energy/Clean Energy/Climate Change

Clean Energy Data

Additional Resources:

Mass Clean Energy Center Annual Clean Energy Industry Report, focused on Massachusetts clean energy economy -

http://www.masscec.com/ content/2013-clean-energyindustry-report Gas and nuclear top energy generation sources.



The public is generally concerned about climate change.

Energy Information Administration look at household energy use in MA

http://www.eia.gov/consumption/residential/reports/2009/ state_briefs/pdf/ma.pdf When asked in general, how concerned are you about the effects of global warming or climate change? - 7 in 10 expressed some level of concern.



Gas will continue to lead electric production based on trend projections.

According to a recent WPI report, *projections for electric production* will continue to be led by more economical natural gas with more costly renewables including solar, wind, and hydro contributing less to the total production.



Mass Insight Survey Research Group

A leadership group of organizations focused on public policy and strategic messaging, The Survey Research Group (SRG) is Mass Insight's premier tool for public engagement based on its longitudinal quarterly public opinion polling and its strategic issues briefs focused on thought leadership and expert analysis.