Extreme weather and higher temperatures are causing sea levels to rise and decreasing biodiversity on Earth. In 2015 alone, Massachusetts emitted 65.8 million metric tons of carbon dioxide with the electric power sector emitting 11.3 million metric tons. If we want to ensure a clean and safe future for generations to come, we need to take immediate action. In order to change these statistics in favor of the environment, we need to change our energy consumption patterns and switch to more sustainable sources. Bill H. 2700, as presented by Representative Kay Kahn, is part of the solution in creating a future for renewable energy by raising renewable portfolio standards. This bill would push the market towards renewable energy and in turn create more jobs, decrease carbon emissions, and set Massachusetts on the right path to meet the Global Warming Solutions Act.

**The Bill**

H.2700: An Act to increase the renewable portfolio standard and ensure compliance with the Global Warming Solutions Act

**Elevator Speech**

We are Gerrianna Cohen and Mia Dorris, and we are students at Brandeis University. Responsible planning ensures an economically competitive energy market and allows for the Commonwealth to protect the environment. We are at risk of increasing traumatic weather events, rising sea levels, and drastic climate change effects. Currently the electric sector emits 29% of the total greenhouse gases.

Increasing the Renewable Portfolio Standard is the best solution to mitigate these issues. The Renewable Portfolio Standard is the percentage of electricity that utilities and suppliers are required to use from renewable energy. By increasing the renewable portfolio standard from 1% to 2% or more will allow for a shift in market demand towards renewable energy and allow for complying with the Global Warming Solutions Act. This will help keep the Massachusetts energy market economically competitive, the environment clean and protect against the increasing force of climate change.

We urge you to vote Bill H. 2700 favorably out of the House Telecommunications, Utility, and Energy committee.
Excerpts from Storybook

Expert Testimony from Pat Knight, Synapse Energy: “Throughout the country, RPS have sparked half of all growth in U.S. renewable energy generation and production. Massachusetts has to adjust their RPS by quite a bit to really make a difference.”

Expert Testimony from Gary Dorris, CEO of Ascend Analytics: “The RPS sets a clear transition plan for Massachusetts to realize energy independence.”

Op-Ed

Mia

This past winter Massachusetts experienced four Nor’easters and serious flooding. It is clear Massachusetts is facing the effects of climate change, and these extreme weather events will only increase with time if no action is taken. Massachusetts prides itself on being a state that is ahead of the others. After all, Massachusetts was the first state to allow gay marriage and to pass minimum wage laws. Yet, Massachusetts is falling behind in one of the most prominent issues today: climate change.

Climate change is leading to extreme weather events, loss of consistent water and agriculture supplies, and many more adverse effects. Human emitted greenhouse gases have been shown to be the primary cause of climate change. In reducing climate change effects, establishing a renewable energy infrastructure is vital. Renewable portfolio standards (RPS) demand that utility and energy companies use a certain percentage of renewable energy as part of their overall energy supply. RPS would decrease carbon emissions which, in turn, would reduce climate change effects, thus, setting up Massachusetts for a more sustainable future.

When retiring nuclear plants serving the state, Massachusetts has a unique opportunity, because renewable energy can fill the expected energy gap. Currently, natural gas is acting as a substitute for nuclear energy in Massachusetts. However, during the long winter months, there is not enough natural gas pipeline capacity to maintain a dependable energy source. Increasing RPS would create a more reliable and secure energy grid. Also, natural gas contains 50% carbon, whereas renewable energy is 100% carbon free. RPS not only serves as an integral strategy to reduce emissions, it also can enhance energy grid reliability while paving the way to energy independence.

Bill H.2700 demands an increase in RPS from 1% to 2% each year. In the long run, this will allow for a gradual market shift towards a renewable energy future for Massachusetts. Since the 1990s, RPS has enhanced the economy while decreasing emissions. In order for Massachusetts to meet the goals instituted by law in the Global Warming Solutions Act, RPS must increase because the Commonwealth will fail to meet 2030 goals if no action is taken.

Instituting RPS not only yields a cleaner energy source, but also has economic benefits. Although some people believe that establishing a renewable energy infrastructure is more expensive, it will lead to over 37,000 more jobs by 2030. Establishing renewable sources such as solar farms and wind power will also lead to increases in tax revenue. An increase in RPS would lead to large reductions in emissions from the electric sector. Establishing a renewable infrastructure allows Massachusetts to have more energy independence, because the Commonwealth will not need to continue purchasing fuel from other states. Overall, this bill allows for a gradual economic transition towards a renewable infrastructure within the energy market, an important feature of the solution to creating a more sustainable future.

RPS would decrease air pollution and emissions, leading to cleaner air. Massachusetts’ data mirrors the national trend of high asthma rates. Air pollutants initiate asthma attacks, and also have been found to lead to adverse cardiovascular and respiratory effects. Therefore, reducing pollution by changing our energy sources to be cleaner and more sustainable has significant health benefits. As someone who suffers from asthma, I personally recognize the severe risks of poor air quality. The largest predictor of life expectancy is the state of the environment, which is defined as the air, water, occupation and where you live. In order to keep current and future generations healthy, the Commonwealth needs to be as clean and sustainable as possible. A step in this direction involves establishing a renewable energy structure through RPS to reduce emissions which, in turn, will lead to a cleaner environment. The savings in health benefits from reduced morbidity are estimated to be greater than electric costs.

By increasing RPS, monthly energy bills are expected to increase by 15 cents to $2 per month. Considering that the average energy bill is $80 to $100 per month, this increase is relatively small bearing in mind the ecological and economic benefits. However, in the long run electric bills will decrease. If the Commonwealth constituents and governance does not pay upfront costs now to create a renewable and sustainable future, then even more drastic costs and effects will be expected in the future. If we do not mitigate climate change quickly, significant consequences are predicted for current and future generations.

We have the power to act now to work towards environmental protection within our state by calling representatives on the Telecommunications, Utility and Energy Committee, and encouraging them to pass Bill H.2700.
House Ways and Means Script

Responsible planning ensures an economically viable energy future. As a former investment banker, you understand the importance of stability and the stability of energy costs for ratepayers. With the rise of fossil fuel and natural gas energy generation prices rising, shifting the market towards renewable energy ensures a stable, and economically viable future energy source.

Massachusetts can take a position on the world stage for taking proactive measures to decrease the effects of anthropogenic emissions. If aggressive measures are not taken soon to curb the effects of anthropogenic emissions, there will be significant consequences for the environment and on the economy. Greenhouse gases are emitted by human activity into the atmosphere, and since the 20th century have had a large impact on climate change. In 2015, it was found by the EPA that US electricity is the largest contributor to greenhouse gas emissions at 29%.

In order to reduce emissions from the production of electricity, Massachusetts has adopted Renewable Portfolio Standards as the solution. Renewable portfolio standards mandate the percentage of renewable energy generation that utilities and suppliers are required to use as a portion of their energy supply. Presently, the Massachusetts Renewable Portfolio Standard is 12% and is increasing at 1% per year. Under this existing legislation, the RPS will not achieve the goals of the Global Warming Solutions Act for 2030. We advocating for Bill H. 2700, which increases the RPS to 2% to meet these goals and grow the renewable energy market.

Currently, Massachusetts cannot import enough natural gas in the winter to meet energy demands. Natural gas demand is increasing with the retirement of nuclear plants, which leads to volatile prices. Renewable energy is now economically competitive with fossil fuel generation due to advances in technology. Increasing the RPS will act as a hedge against the natural gas price increases, helping with the winter natural gas energy constraints, and help shift the market towards renewable energy yielding greater future energy independence and supply reliability.

The increase in renewable energy will allow for more tax revenue and jobs. Opponents of the bill argue that this will become a burden on lower income families and that the infrastructure needed to increase renewable energy in Massachusetts will be too expensive. However, as fossil fuels and natural become increasingly costlier and more to import and procure, renewable energy provides a stable energy source at a stable price. The average energy bill for a household is $80-$100/month, and the initial increase in electricity bills after implementing RPS ranges from 15 cents to $2/month. Over the course of ten years, the switch to renewables will more than pay for itself. Even with the loss of jobs from shutting down nuclear power plants, this bill will add 37,000 jobs and decrease carbon emissions by 66 percent. Massachusetts is known to be a forward-thinking leader within the United States. Under present law, Massachusetts will fall behind the other 28 states who have passed aggressive Renewable Portfolio Standards. We must take action now.

Massachusetts now has a supply of renewable energy because of the RPS. The RPS also contributes to even more green energy production through the RECs (Renewable Energy Certificate). When a utility purchases a REC mandated by the standard, they are putting money into renewable energy. This gives the renewable energy market the revenue it needs to build more infrastructure and clean energy systems. Throughout the country, RPSs have sparked about half of all growth in U.S. renewable electricity generation and capacity and accounted for 44% of all U.S. REC capacity additions in 2016. This shows the impact that RPS has on increasing the renewable energy market. Fiscally, this enables revenue growth for the state government. The government itself does not have to invest in the energy, but it is setting up the necessary arrangements for a mutually beneficial system. Also, wind and solar farms property are worth more than nuclear and natural gas plants, therefore developing renewable infrastructure will generate more property tax revenue.

We are asking you as the Chair of the Ways and Means Committee to support renewable energy and increase the Renewable Portfolio Standard from 1 percent to 2 percent or more by voting Bill H. 2700 favorably out of committee.

Letter to the Legislator

My name is Gerrianna Cohen, and along with my colleague Mia Dorris, we are students at Brandeis University and residents of Waltham. We are writing to you because we are concerned about the state’s ability to responsibly plan for a comfortable, affordable and clean future. As a real estate professional and a proponent of environmental issues, you should support Bill H. 2700 relating to Renewable Portfolio Standards. Climate change is substantially changing the world as we know it. As shown by the bills you have co-sponsored, you care about environmental issues, and we do not want to see Waltham impacted by climate change. If aggressive measures are not undertaken soon to curb the effects of anthropogenic emissions, temperature will continue to rise with consequences such as an increase in extreme weather events and significant human health risks from extreme weather events. In protecting Massachusetts against these substantial changes, strong efforts must be taken in reducing greenhouse gas emissions.

The electric sector makes up 29% of emissions. In order to decrease the electric sectors emissions, we must shift the market toward renewable energy. The Renewable Portfolio Standard (RPS) mandates the percentage of renewable electricity generation that utilities and suppliers...
are required to use as a portion of their energy supply. RPS helps address reducing carbon emissions in order to mitigate climate change effects. Currently, three nuclear plants in New England are retiring, and Massachusetts is using natural gas as a substitute. There is not enough natural gas pipeline capacity to achieve a dependable energy source especially during the winter months. In order to solve this, we are advocating for increasing the RPS from 1% to 2% or more, as put forth in Bill H.2700.

This bill would push the market towards renewable energy and in turn create more jobs, decrease carbon emissions, and set Massachusetts on the right path to meet the goals set by the Global Warming Solutions Act. Even with the loss of jobs from shutting down nuclear power plants, this bill will add 37,000 jobs and decrease carbon emissions by 66 percent. Compared with the 28 other states that have Renewable Portfolio Standards, Massachusetts is significantly behind.

Opponents of the bill argue that this will become a burden on lower income families and that the infrastructure needed to increase renewable energy in Massachusetts will be too expensive. However, as fossil fuels become increasingly rare and cost more and more to import and procure, renewable energy provides a stable energy source at a stable price. According to a Synapse Energy Report, this bill will only add 15 cents to $2 to the average monthly household bill. This is a small price to pay considering the average electricity bill is around $80-$100. We need this bill to ensure that we meet the goals of the Global Warming Solutions Act, which are necessary for a healthy and clean future.

Representative Khan then was motivated to put forward the bill Mia and I followed. This shows how constituents can really make an impact in the legislative process.

One of the greatest things I learned in this meeting is that it is important to express your concerns to the people in power if you want something to be done about it. Emily Norton is on her city council and explained that even at the local level, she is most moved by people who come up to her and share their stories. She also mentioned that she sometimes looks up to see if that person voted previously or if they can vote in the next election. This was a wakeup call to me about how my vote really matters and representatives care about this.

Mia

Meeting with Jacob Stern, Cleaner Energy Organizer at the Sierra Club

Throughout the semester, Jacob has been a great resource and has been extremely helpful in our meetings with us. In meeting with Jacob, I realized how vital it is to look outside just the economic perspective of RPS. He discussed various selling points of the proposed bill, ranging from the health perspective to industry production, and also gave an historical context. Thus, Jacob helped me see how valuable it is to view an issue in a multifaceted manner because it is so important to understand how many different areas the bill could have an impact.

At the beginning of the semester, when talking to legislators, I didn't realize how broad the impact of policy can be, and how important it is to evaluate all the different areas that potentially affect various aspects of our lives. One of the key points was that I realized the importance of looking seriously at the health effects of not establishing Renewable Portfolio Standards and was surprised to find many important health effects to consider. Jacob also discussed how vital it is to understand the opposition in order to argue your point effectively, a point which expanded my viewpoint in how to fight for policy change.

Excerpts from Campaign Journals

Gerrianna

Attending an activist training session hosted by the Sierra Club

The meeting started with Emily Norton providing an overview of the energy system and how the Renewable Portfolio Standard plays a role. Because this meeting was towards the beginning of the semester, it was a great introduction to the topic and a great way to see what the coalition was saying about RPS. Emily Norton is a constituent of Kay Khan, the representative who introduced the bill. Emily expressed her concerns to Representative Khan about carbon emissions and sees increasing the RPS as a good way to make an impact.

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Update

As of July 16, 2018, the bill has been ordered to study.

For more information

View the bill: malegislature.gov/Bills/190/h2700

Sierra Club sierraclub.org/massachusetts