

June 20th, 2017

Testimony in Support of S. 1821, S. 1869 & H. 1726

Dear Chairmen Golden, Barrett, and Members of the Committee:

On behalf of Acadia Center and the Alliance for Clean Energy Solutions, I provide this testimony in support of S1821, *An act combatting climate change*, S 1869, *An Act to protect our environment and lower our carbon footprint* and H1726, *An act to promote green infrastructure, reduce greenhouse gas emissions, and create jobs*.

Acadia Center is a non-profit, research and advocacy organization committed to advancing the clean energy future. The Alliance for Clean Energy Solutions (ACES) is a “coalition of coalitions” comprised of environmental organizations, business groups, clean energy companies, health, and consumer advocates dedicated to advancing clean energy and climate policy for Massachusetts. ACES’ goal is to ensure that the Commonwealth can attain a cost-effective, reliable and diverse energy supply to power its businesses, communities and households, which will reduce our reliance on fossil fuels, create a stable and prosperous business environment and meet the Commonwealth’s greenhouse gas (GHG) emissions requirements.

ACES is coordinated by Acadia Center and the Northeast Clean Energy Council (NECEC) and includes support from following organizations:

- A Better City
- Alliance for Business Leadership
- Boston Community Capital
- Clean Water Action
- Climate Action Business Association
- Environment Massachusetts
- Environmental Entrepreneurs (E2)
- Environmental League of Massachusetts
- Health Care Without Harm
- LISC Boston
- Mass Audubon
- Mass Energy Consumers Alliance
- MassSolar
- RENEW Northeast
- Renovate America
- SunPower
- Union of Concerned Scientists
- US Green Building Council Massachusetts Chapter
- Vineyard Power
- Vote Solar.

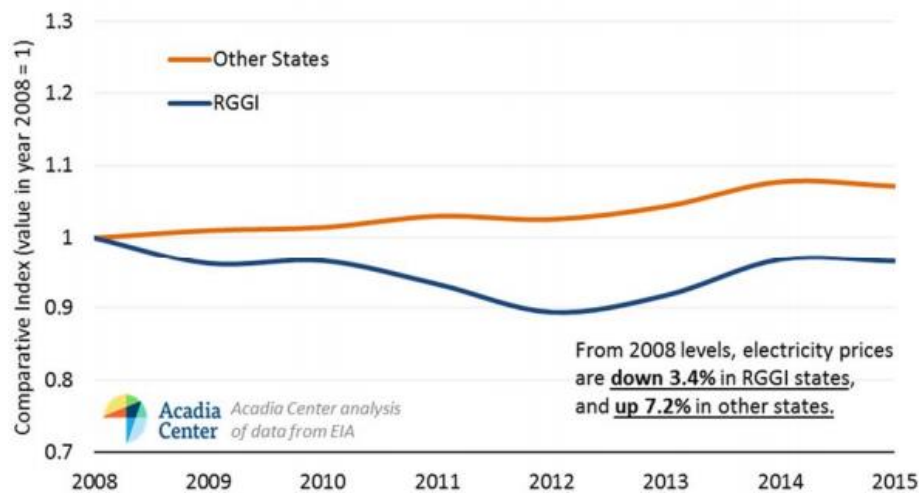
In order to support the logic and benefits of carbon pricing, this testimony focuses on the successful precedent provided by the Regional Greenhouse Gas Initiative (RGGI). Testimony also describes the importance and potential impact of leadership by Massachusetts and other states pursuing carbon pricing legislation.

RGGI Experience

The successful RGGI program demonstrates that well designed market-based climate policy can promote innovation to reduce GHG emissions while boosting state economies. Improved energy efficiency, growing renewable energy output, and fuel-switching have caused CO₂ emissions to drop by 45% since 2005¹. The rate of pollution reductions continues to outpace expectations, with emissions in 2016 falling 8.4% below a stringent cap set in 2014.² RGGI allowance prices are now at a 5-year low, and Massachusetts and other member states are currently finalizing reforms to further strengthen the program.

Contrary to expectations, electricity prices have declined since RGGI took effect. Comparing average retail electricity prices³ from 2008 (before RGGI's launch) to 2015 shows that prices have dropped by an average of 3.4% across the region. During the same 2008-2015 period electricity prices in non-RGGI states increased by 7.2%. While RGGI's precise impact on electricity is difficult to isolate from other factors, it is important to note that the program has not caused electricity prices to increase across the region. Furthermore, investments in energy efficiency funded by RGGI have helped to reduce consumer bills and wholesale electric prices.

Figure 1: Volume-Weighted Electricity Prices, 2008 and 2015 (Cents/kWh)



¹ See comments from Katie Dykes, Chair of the RGGI, Inc. Board of Directors, in 'Mass. Joins Other States to Fulfill US Pledges on Carbon', David Abel, Boston Globe, June 2, 2017, available at:

http://www.bostonglobe.com/metro/2017/06/02/climate/qELM7JPNpKnORMMqkzi2XJ/story.html?s_campaign=8315.

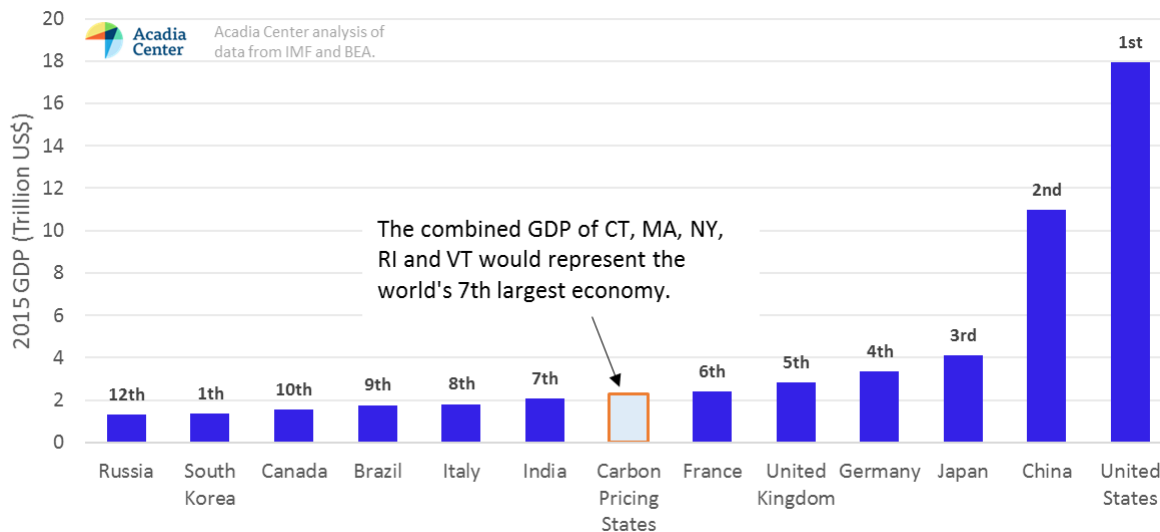
² See: <http://acadiacenter.org/rggi-emissions-fell-again-in-2016/>

³ Energy Information Administration (EIA) 826 Dataset, <http://www.eia.gov/electricity/data/eia826/>.

The RGGI program has generated significant economic benefits for states participating in the program. By selling allowances (permits to emit CO₂), RGGI states raise revenue to reinvest in energy efficiency, renewable energy, and other consumer programs that increase economic activity in participating states. The majority of program revenue (62% through 2013⁴) has been invested in energy efficiency programs that reduce consumers' bills and reduce demand for power. Lower power demand means fewer emissions from power plants, and less money leaving the region to pay for imported fossil fuels. Consumers' energy bill savings are spent in part within the local economy, benefiting businesses that offer goods and services in the region. Independent macroeconomic analysis found that programs supported with revenue raised over RGGI's first six years of operation would generate over \$1.73 billion in energy bill savings. These savings create over \$2.76 billion in net economic gains and 28,500 job-years of employment.⁵

Importance of State Action

Massachusetts' 2015 GDP was \$488 billion, comparable to the GDP of Sweden or Nigeria, the 22nd and 23rd largest economies in the world. Carbon pricing legislation in Massachusetts would align with similar proposals in four other states in the region. As shown below, the combined GDP of Connecticut, Massachusetts, New York, Rhode Island and Vermont is \$2.28 trillion, which would represent the 7th largest economy in the world.



⁴ RGGI, Inc., 2015, *Regional Investment of RGGI CO₂ Allowance Proceeds, 2012*, available at: <http://rggi.org/docs/ProceedsReport/Investment-RGGI-Proceeds-Through-2013.pdf>.

⁵ These figures are based on the combined findings from two separate reports from the Analysis Group, the first of which covered impacts from 2009 through the first half of 2011 (New Jersey impacts have been excluded from this analysis), the second report covering 2012-2014. As a result, the combined benefits included above only account for five and a half years of revenue reinvestment, rather than the full six years from 2009-2014.

Global Context

By implementing economy-wide carbon pricing, Massachusetts would be taking leadership strides and building on global momentum. According to the World Bank, almost 40 countries and more than 20 states, cities and other jurisdictions have developed or implemented policies to price carbon. When paired with additional countries considering carbon pricing, almost half of global emissions come from jurisdictions already placing a price on carbon or planning to do so.⁶

Even China – the world’s largest GHG emitter – is implementing carbon pricing and similar efforts are taking root around the globe. Barclays estimates that decarbonization measures needed to achieve the goals of the Paris Climate Agreement will require \$30 trillion in investment by 2040.⁷ Implementing economy-wide carbon pricing in Massachusetts’ will position the Commonwealth to benefit from developing, implementing, and selling clean energy innovations while showing meaningful leadership in addressing climate change.

Peter Shattuck
Massachusetts Director
pshattuck@acadiacenter.org
617-742-0054 ext.103

⁶ See: <http://www.worldbank.org/en/programs/pricing-carbon>

⁷ See: <http://www.telegraph.co.uk/finance/economics/12021394/COP-21-climate-deal-in-Paris-spells-end-of-the-fossil-era.html>