
Massachusetts can embrace an energy future that offers lower costs, greater consumer control and achieves significant progress toward state and regional greenhouse gas (GHG) emissions reduction goals. Indeed, the Commonwealth has made substantial progress toward an energy system that reduces emissions even while promoting economic growth. This trend must continue and even pick up the pace.

Here's why it is so important. In ClimateVision 2020, Acadia Center found that the six New England states had met 2010 emissions targets due largely to reductions achieved in the electric generating sector. These same states, however, are not yet on a clear trajectory to meet 2020 and later goals, including the necessary 80% reduction by 2050. In response, Acadia Center released its EnergyVision report in February 2014, mapping a pathway to a deep emissions reduction target through interconnected solutions in four areas:

- 1) Substitution of no-/low-carbon electricity in place of fossil fuels in transportation and building heating and cooling;
- 2) Significant increase in renewable electric supply;
- 3) Reform of utility regulatory structures that shape state and regional power grids in order to support electrification, smart energy management, and consumer control;
- 4) Fully maximize investments in energy efficiency.

The transition to a broadly electrified energy system that is low-carbon, efficient, and consumer-friendly is already underway. Yet, key policy decisions will determine how quickly and cost-effectively Massachusetts can establish a 21st system that meets our energy and climate mitigation needs. Acadia Center calls on the new Legislature take action on three key clean energy proposals.

I. Accelerate Clean Energy Uptake through a package of policy proposals to ensure clean energy supply, reduce over-reliance on natural gas, and drive regional economic development:

- **Use clean, distributed indigenous energy resources** such as renewable generation, targeted energy efficiency, and energy storage to meet local reliability needs and replace retiring generation;
- **Enable utilities to pursue large-scale competitive procurement of renewable generation** including up to 2,400 MW of onshore wind and hydroelectricity with related transmission by 2020, and up to 2,000 MW of offshore wind by 2025;
- **Lock in a Massachusetts target to deploy 1600 MW of solar energy by 2020**, using a “Value of Solar” utility rate structure to reflect the unique benefits of distributed generation and to address the perceived inequity of net metering;
- **Increase the state’s Renewable Portfolio Standard growth rate to 2% annually** in order to attain 20% renewable energy supply by 2020 and 80% by 2050 and to ensure continuing market-based incentives for greater quantities of renewable generation;
- **Direct the Department of Public Utilities (DPU) to promote energy storage** with targets and funding for cost-effective deployment of energy storage technologies that integrate variable

renewable electricity generation, avoid costly grid investments, and drive Massachusetts' clean technology cluster.

II. Advance Electric Vehicles (EVs) to achieve state and regional GHG reduction goals and reduce costs of transportation. Electrification of transportation, combined with increasing percentages of renewable electricity generation, is one of the most effective ways to reduce GHG emissions from the transportation sector. Right now, an EV produces less than half the GHG emissions of a comparable gasoline car. EVs provide cost savings for consumers — only 6 cents per mile to drive at current electricity prices — while boosting the regional economy, supporting energy independence, and improving public health. In the future, EVs can serve as a grid resource and improve the energy system. As a part of the legislatively created Zero Emission Vehicle Commission, Acadia Center is promoting a comprehensive suite of proposals to remove barriers to EV adoption:

- **Provide financial and non-financial incentives** including a permanent structure for the consumer rebate program known as MOR-EV, and HOV lane access;
- **Create a utility framework to increase EV adoption and maximize benefits** through electricity rate design, vehicle-grid integration programs, and grid planning for EVs;
- **Facilitate build-out of charging infrastructure** by eliminating barriers to ownership and operation, providing consumer-friendly rules for charging stations, and ensuring that new construction will have the ability to install charging stations in the future;
- **Educate consumers, businesses, workplaces, dealerships, and municipalities** by publicizing programs to incentivize EV purchases and creating EV events (e.g. ride-and-drives);
- **Lead by example** through the adoption of binding targets for state fleet acquisitions and commissioning a study of state fleet electrification opportunities.

III. Price Carbon Emissions across the Massachusetts economy in order to mobilize clean energy investments and align consumer behavior with carbon reduction requirements. Experience shows that markets react quickly and cost-effectively to price signals. The Regional Greenhouse Gas Initiative (RGGI) drove deep reductions in emissions for the power sector more quickly than expected, while the economies of participating states grew faster than the rest of the country. Carbon pricing in Massachusetts should:

- **Include fossil fuel importers and large emitters** other than power plants currently covered by RGGI;
- **Return revenue to businesses/consumers** through refunds or energy efficiency investments.

Conclusion: These proposals are part of a path that will guide energy infrastructure investments and policies toward a decentralized energy system that is more consumer- and technology-friendly and will bring deep reductions in GHG emissions. The technology is available and will improve rapidly in the years to come. Acadia Center is committed to supporting these proposals through advocacy action, stakeholder collaboration and in-depth economic and emissions analysis. We look forward to working with the Legislature to ensure success of these proposals in order to adopt forward-looking policies, uproot outdated technologies and apply new ways of thinking about energy options.

For more information:

Peter Shattuck, Massachusetts Director, pshattuck@acadiacenter.org/617-742-0054 x103

Amy Boyd, Senior Attorney, aboyd@acadiacenter.org/617-742-0054 x102

Mark LeBel, Staff Attorney, mlebel@acadiacenter.org/617-742-0054 x104