Dear Friends,

There is no doubt that the impacts of the November 2016 election loom large, particularly on the environmental front. From reversing critical coal mining regulations to withdrawing the United States from the Paris climate agreement, the Trump administration continues to deny fundamental science on climate and turn back the clock on building a clean energy economy.

Despite this reality, at Acadia Center we remain determined and optimistic. We have seen first-hand the major progress that can be made when states, cities, and communities lead efforts to control carbon emissions and bolster clean technologies. In fact, we have been at the forefront of many of these efforts. Armed with sound research and data, Acadia Center has reframed issues, shaped opinions, and built strong networks of support for progressive policies that reduce emissions and make economic sense. For example, a widely circulated 2016 analysis by Acadia Center shows that among the nine states participating in the Regional Greenhouse Gas Initiative (RGGI), which caps pollution from power plants, carbon emissions have fallen more than 40% since 2009. Meanwhile, electric power rates have dropped 3%, and those state’s economies have grown 25%. All of these indicators outperform the national average. Another Acadia Center report forecasts that if these states agree to reduce climate pollution by 5% annually—an achievable level—this region would see $2 billion in avoided health costs.

While it is hard to argue with the facts, having the data isn’t always enough. For this reason, Acadia Center is increasingly focused on innovative messaging strategies and engaging web-based tools to better communicate complex ideas to business leaders, policy makers, and citizens. Of course, nothing has proven to be more effective over the years than having our talented staff at the table, working directly with stakeholders to shape policy, and staying at the table to make sure those policies succeed. Our track record shows that our approach is working.

We will never stop advocating for national leadership on climate and energy issues, but today’s reality doesn’t allow for that leadership—which is why it is more important than ever that states and regions continue to move forward and fill the void by redoubling their efforts to build a low carbon future that benefits consumers, improves public health, and strengthens our economy.

We invite you to read our 2016 Annual Report, to learn more about the many ways Acadia Center has produced meaningful results by advancing important policy changes and stopping bad ideas from taking hold. While much of our work is focused in the Northeast, our efforts have national significance because they set important precedents that other states can and do replicate. Your support has made this possible. The following is just a small sample of Acadia Center’s recent accomplishments:
Our work has continued to gain support and attention from numerous key media outlets such as the New York Times, Huffington Post, ClimateWire, Hartford Courant, and Boston Globe—with frequent references to our effectiveness as an organization. Last year, we were named one of 28 non-profits in New York Magazine’s “(Particularly Timely) Charities to Donate to,” and once again we ranked in the top 1% of charities rated by Charity Navigator.

We are always deeply grateful to the foundations and individuals whose support allows us to do our work and tackle new challenges. At this critical time in history, we are especially appreciative of the growing recognition of our solutions-oriented work at the state and regional level. We hope you will read more about how your contribution has helped us move toward our long-term vision for a clean energy future.

Sincerely,

Elizabeth Carroll, Chair, Board of Directors
Daniel L. Sosland, President

- Jointly coordinating a large coalition in Massachusetts that helped enact the largest wind power purchases in any state.
- Creating a detailed, web-based analysis — EnergyVision 2030 — showing how seven northeast states can be on a viable path to cut climate pollution 45% by 2030.
- Preparing analyses and reports showing the health benefits of emissions reductions in RGGI states.
- Increasing investments in energy efficiency by sustaining nation-leading efforts in Massachusetts, Rhode Island, and Connecticut and garnering greater support for efficiency efforts in New Hampshire and New York.
- Preparing widely disseminated reports and graphics on modernizing the electric power grid, which propose solutions to correct outdated incentives that cause utilities to avoid investments in lower cost, cleaner energy.
- Winning regulatory decisions that will advance electric vehicles and increase the use of low-carbon heating systems, replacing fossil fuels with cleaner electricity.
- Demonstrating how the regional grid operator can improve its energy forecasting, rebutting claims that more natural gas infrastructure is needed and showing communities how they are an essential part of the emerging energy revolution.
Advancing the Clean Energy Future

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Carrie Armbricht – Finance and Operations Director
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Daniel L. Sosland – President
Maya Sosland – Environmental Policy Volunteer Summer Intern
Jordan Stutt – Policy Analyst, Clean Energy Initiative
Krydia Wazny – Communications Director & Coordinator, Public Engagement Initiative

Board of Directors

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Elizabeth Carroll – Chair
Howard Gray – Treasurer
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John DeVillars (term began March 2017)
Eric Graber-Lopez (term began March 2017)
Joyce Kung (term began June 2017)
Mitch Tyson
Don E. Wineberg
# Table of Contents

*Note clickable links to each section, and links to publications throughout the document*

## Clean Energy & Carbon Markets

- Priorities, Opportunities & Accomplishments.................................................. 8
- Ramping up Renewables.................................................................................... 9
- Building Clean Energy Infrastructure to Bring Resources to Consumers........... 10
- Speeding the Transition to Cleaner Power Generation..................................... 11-12
- Pricing Carbon............................................................................................... 13-14

## Energy Efficiency

- Priorities, Opportunities & Accomplishments.................................................. 16-17
- Advancing All Cost-Effective Efficiency Investments........................................ 18-19
- Using Efficiency to Optimize the Grid.............................................................. 20
- Accounting for Efficiency in Grid Planning.................................................... 21-22
- Efficient Building Codes and Product Standards............................................ 23

## Energy Grid

- Priorities, Opportunities & Accomplishments.................................................. 25
- Consumer-Friendly and Efficient Electricity Rates.......................................... 26-27
- Smart Value-Based Reforms to Net Metering.................................................. 28-29
- Updating the Utility Business Model................................................................. 30
- Innovative Grid Planning.................................................................................. 31

## Transportation & Electrification

- Priorities, Opportunities & Accomplishments.................................................. 33-34
- Increasing Market Penetration of Electric Vehicles and Heat Pumps by
  Removing Barriers to Their Adoption............................................................... 35
- Lowering Operating Costs for EVs and Heat Pumps through Innovative Electric
  Rates that Reduce Grid Impacts....................................................................... 36
- Promoting the Grid Benefits of Electrification................................................. 37
- Advancing Market-Based Climate Policy for Transportation............................ 38
Table of Contents

*Note clickable links to each section, and links to publications throughout the document

Acadia CLEAN Center ................................................................. 39-44
  Priorities, Opportunities & Accomplishments ........................................ 40
  Major Reports – EnergyVision 2030 ...................................................... 41
  Rapid Response & Watchdog Reporting ................................................ 42-43
  Tracking Trends and Other Information ............................................... 44

Public Engagement ......................................................................... 45-50
  Priorities, Opportunities & Accomplishments ........................................ 46
  Communicating a Clean Energy Future .................................................. 47
  Empowering Consumers and Communities .......................................... 48
  Community | EnergyVision & Action Guide ........................................... 49
  Broadening Support and Building Networks ......................................... 50

Publications .................................................................................. 51-53

Financial Summary ......................................................................... 54-61
Clean Energy & Carbon Markets
OPPORTUNITIES

Energy production is one of the leading contributors to climate change. Policies that address all energy supply sectors can reduce the impacts of our energy sources on the climate and local environment. The Clean Energy & Carbon Markets Initiative works to put renewable energy on a level playing field with traditional power sources and spur investments to deploy clean energy projects. Having phased out coal in the region, the Northeast now has the opportunity to move beyond natural gas and fossil fuels of all kinds. Building on progress cleaning up the electric sector, the Clean Energy Initiative works to extend climate policy to the transportation and heating sectors, which now produce the largest share of regional climate pollution.

ACCOMPLISHMENTS

• Co-led legislative coalition with Northeast Clean Energy Council supporting landmark Massachusetts legislation enabling offshore wind, clean energy procurement, and energy storage

• Coordinated regional network working to strengthen the country’s first power plant carbon pollution reduction program

• Worked to defeat two major subsidized natural gas pipelines, avoiding billions of tons of carbon pollution

• Developed analyses and policy to advance distributed solar across the region
Ramping Up Renewables

Transition to a renewable energy future depends on replacing conventional power plants with clean energy sources to green the grid and provide clean electric “fuel” to electric vehicles and efficient heat pumps. Renewables are deployed by requiring utilities to purchase increasing quantities of clean energy through renewable energy standards and providing long-term contracts that enable project financing. In the past year, Rhode Island and New York increased renewable energy standards, and Massachusetts, Rhode Island, and Connecticut collaborated on bulk purchases of clean energy.
Building Clean Energy Infrastructure

Because energy resources like wind and hydropower are located away from population centers, replacing conventional power plants with renewable energy will require well-designed and appropriately sited transmission to transport wind and hydro to those centers. Competing transmission projects have been proposed in New England and New York, many of which raise concerns over land use and site impacts. A clean energy future need not come at the expense of important environmental and community values.

In order to enable the best projects among many proposed, Acadia Center worked with conservation, consumer, and clean energy interests to establish criteria that maximize competition, minimize environmental impacts, and reduce costs. In the near term, clean energy infrastructure will be enabled by individual and multi-state clean energy procurements, such as the clean power purchases authorized in 2016 Massachusetts legislation that Acadia Center helped enact. Longer-term, Acadia Center will press the region to proactively build appropriate, well sited transmission extensions needed to facilitate renewables.

PRIORITIES

- Ramping up renewables
- Building clean energy infrastructure to bring resources to consumers
- Cleaning up power plants
- Pricing carbon to extend proven market based models to transportation and heating fuels
Speeding the Transition to Cleaner Power Generation

Market-based incentives are effective in transitioning power supply away from fossil-fueled power plants towards clean energy options. The successful Regional Greenhouse Gas Initiative (RGGI) has helped to cut power plant CO2 emissions by almost half since 2005, while at the same time reducing other hazardous emissions to deliver $5.7 billion in health benefits. Acadia Center is leading efforts to build on this success by further strengthening the program and expanding to additional states. Acadia Center analyses demonstrate that RGGI states have outpaced the rest of the country in both emissions reductions and economic growth since launching this first-in-the-nation program.
PRIORITIES

• Ramping up renewables

• Building clean energy infrastructure to bring resources to consumers

• Cleaning up power plants

• Pricing carbon to extend proven market-based models to transportation and heating fuels

Speeding the Transition to Cleaner Power Generation

Breaking the Link:
Emissions vs. Growth in RGGI and non-RGGI States
Pricing Carbon

Success in reducing power sector carbon pollution through renewables, efficiency, and RGGI now means that transportation and heating fuels are the largest sources of climate pollution in the region. Acadia Center is providing analysis and thought-leadership in state-level efforts to expand carbon pricing models beyond power plants through policy initiatives in Massachusetts, Rhode Island, Vermont, Connecticut, and New York. Pricing carbon would create an incentive for clean alternatives — such as electric vehicles or efficient electric heat pumps — and would raise significant revenue for states to reinvest in solutions and protect consumers and businesses from disproportionate cost impacts.
Pricing Carbon

Comparative GDP World Ranking
CT, MA, NY, RI and VT represent the world’s 7th largest economy

Source: Acadia Center analysis of data from IMF and BEA.
Energy Efficiency
Energy Efficiency

**PRIORITIES**

- Maximizing all cost-effective efficiency investments
- Using efficiency to optimize the grid
- Accounting for efficiency in grid planning
- Efficient building codes and product standards

**OPPORTUNITIES**

Energy efficiency is the region’s “first fuel.” Cost effective investments in energy efficiency replace energy from fossil fuel, lowering costs and emissions. While the region is a national leader in energy efficiency, there is still work to be done. Through its positions on the stakeholder oversight boards in Massachusetts, Rhode Island, and Connecticut, as well as its other advocacy efforts in the region, Acadia Center remains a driving force behind expanding or maintaining nation-leading levels of efficiency savings.

Energy efficiency programs in the region are also poised to begin efforts to become a grid resource to create a more flexible energy system. By using smart and connected controls, efficient end-use devices can not only use less energy, but use it at times that will help lower grid costs and integrate renewables.
Energy Efficiency

ACCOMPLISHMENTS

• Massachusetts, Rhode Island, Connecticut, New York, and Vermont ranked in the top 10 of states rated in ACEEE’s annual scorecard. Massachusetts was tied for first place nationally, its sixth straight year in the top spot.

• EnergyVision 2030 was released, calling for high levels of efficiency as an integral component of overall low emissions strategy.

• Demand management pilots began in Connecticut and Massachusetts.

• New Hampshire set 3-year energy efficiency resource standard, culminating in 1.6% annual savings, far exceeding previous targets.

• Rhode Island set 2.5% average electric savings goals for next 3 years.

• Acadia Center paper on advanced load management was presented at ACEEE summer study, Intelligent Efficiency conference, DOE better buildings webinar, and Efficiency Maine annual meeting.

• 2017 ISO New England forecast includes highest levels of efficiency to date.

PRIORITIES

• Maximizing all cost-effective efficiency investments

• Using efficiency to optimize the grid

• Accounting for efficiency in grid planning

• Efficient building codes and product standards
Advancing All Cost-Effective Efficiency Investments

In the past year, Acadia Center has continued its work to maintain the Northeast’s status as a leader in energy efficiency and push to new levels of achievement. This and prior years’ work was reflected in last year’s American Council for an Energy Efficient Economy’s (ACEEE) annual state scorecard. In the Northeast, Massachusetts, Rhode Island, Connecticut, New York, and Vermont were ranked in the top 10. Massachusetts was tied for first place, its sixth straight year in the #1 spot. Massachusetts approved a new year plan to achieve nearly 3% annual savings each year – the highest such planned savings to date. Nearly as noteworthy is New Hampshire’s new 3-year Energy Efficiency Resource Standard that reaches 1.6% savings in its final year, a huge step for what has been the lagging state in the region.

PRIORITIES

- Maximizing all cost-effective efficiency investments
- Using efficiency to optimize the grid
- Accounting for efficiency in grid planning
- Efficient building codes and product standards
Advancing All Cost-Effective Efficiency Investments

PRIORITIES

• Maximizing all cost-effective efficiency investments
• Using efficiency to optimize the grid
• Accounting for efficiency in grid planning
• Efficient building codes and product standards

Acadia Center Proposed Energy Efficiency Targets for New York

ELECTRIC EFFICIENCY ANNUAL SAVINGS

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Source: Acadia CLEAN Center analysis using Electric Efficiency Data for RI and VT from Electric Efficiency Program Administrator Annual Reports, Plans and State Efficiency Database. Sales are for Program Administrator Area for RI from State Efficiency Reports and Plans. For VT sales are statewide from EIA. NY data is from ACEEE.
Energy Efficiency

PRIORITIES

- Maximizing all cost-effective efficiency investments
- Using efficiency to optimize the grid
- Accounting for efficiency in grid planning
- Efficient building codes and product standards

Using Efficiency to Optimize the Grid

Like so many components of the energy system, energy efficiency is evolving. While capturing overall savings through more efficient use of energy is still paramount, new efforts are underway to optimize how and when efficient products use energy. Acadia Center has used its position on stakeholder oversight councils to advocate for pilot programs to explore adding demand management to existing programs. It has also advocated at the national level, with analysis work that was presented at multiple events and featured on a U.S. Department of Energy webinar.
Accounting for Efficiency in Grid Planning

As energy efficiency has grown, Acadia Center has also advocated for the proper accounting of it in energy grid forecasting and planning. When ISO New England first included efficiency in its forecast, over $400 million of planned transmission upgrades were cancelled because they were determined to not be needed. The inclusion of efficiency in ISO New England forecasts has been plagued by overly conservative estimates of future efficiency. Acadia Center introduced original analysis highlighting just how inaccurate older predictions had been. The latest 2017 forecast brings much needed improvements to the forecasting methodology, and the result is the largest prediction of declining electric use to date. These updated forecasts will help avoid unnecessary infrastructure in the region.

PRIORITIES

- Maximizing all cost-effective efficiency investments
- Using efficiency to optimize the grid
- Accounting for efficiency in grid planning
- Efficient building codes and product standards
**Energy Efficiency**

PRIORITIES

- Maximizing all cost-effective efficiency investments
- Using efficiency to optimize the grid
- Accounting for efficiency in grid planning
- Efficient building codes and product standards

**Accounting for Efficiency in Grid Planning**

**Energy Usage Forecast**

With and Without Efficiency and PV through 2026

![Energy Usage Forecast Chart](chart.png)

Source: ISO New England
Efficient Building Codes and Product Standards

Acadia Center advocates for improved standards that control the minimum efficiency of buildings and appliances. Building codes in many states are advancing, but continued vigilance is needed to fight against weakening amendments that decrease the benefits for building owners.
Energy Grid
Energy Grid

PREFERENCES

• Consumer-Friendly and Efficient Electricity Rates
• Smart Value-Based Reforms to Net Metering
• Updating the Utility Business Model
• Innovative Grid Planning

OPPORTUNITIES

Today’s electric grid is built around technologies that date back to the time of Thomas Edison. The grid—and the policies that govern it—are increasingly out-of-step with new technological advances and consumer expectations for a clean, affordable, resilient, and reliable energy system. Acadia Center’s Grid Modernization and Utility Reform Initiative confronts the reforms needed to advance a consumer- and environmentally-friendly energy grid. Acadia Center presents innovative recommendations for achieving a new energy system that puts the consumer at the center of the modern grid and advances our climate, economic, and consumer goals.

ACCOMPLISHMENTS

• Linked consumers and environment: won lower fixed charges in Connecticut and rejection of National Grid’s proposals for higher, tiered, fixed charges in MA and RI.
• Made comprehensive, innovative rate design proposals, most recently in the Eversource rate case in MA.
• Were fully involved and had significant influence in NY and NH proceedings to reform net metering.
• Gave expert critique of utilities’ Grid Modernization Plans for Massachusetts.
• Raised awareness of the barriers of the utility business model.
• Advanced the Power Sector Transformation in Rhode Island.
Consumer-Friendly and Efficient Electricity Rates

Electric bills should be designed to empower consumers to make smart energy and economic decisions to save money and energy. Acadia Center opposes attempts by utilities to move backwards. It has opposed these efforts by producing analyses to show how high flat monthly customer charges lower incentives for efficiency and self-generation, and how the burden hits low-income and small energy users the hardest. Acadia Center counters these negative proposals with a positive rate design agenda that provides better opportunities for consumers to save money and help make the grid more efficient.
PRIORITIES

• Consumer-Friendly and Efficient Electricity Rates
• Smart Value-Based Reforms to Net Metering
• Updating the Utility Business Model
• Innovative Grid Planning

Consumer-Friendly and Efficient Electricity Rates

Billing Impact of Fixed Charge Scenarios
For CT Residential Customers

Approximately 7 million monthly bills or 61% of Eversource’s residential rate 001 customer bills per year would be lower with a $10 fixed charge.
Smart Value-Based Reforms to Net Metering

Across the United States, a debate is underway about the proper way to structure net metering in order to provide fair charges and credits for customers who install solar panels or other forms of distributed generation. Acadia Center initially developed the forward-looking Next Generation Solar Framework to credit exported energy based on value in a simple flat credit structure. Since then, Acadia Center has worked to advance the concept of value-based crediting in more complex, technology-neutral ways. Reforms along these lines are taking place in New York, where Acadia Center has successfully influenced the outcome, and represent the logical next step in many other jurisdictions as well.
Smart Value-Based Reforms to Net Metering

Grid and Societal Value of Solar PV
In Massachusetts — 25-year Levelized Cost (2014$)
Updating the Utility Business Model

Outdated utility financial incentives are inhibiting the transition to a clean energy future, increasing consumer costs, and stifling new technologies. Under current rules, utilities can earn more money on infrastructure expenditures like substations and pipelines than on cleaner, local resources like energy efficiency and rooftop solar. Acadia Center presents the case for reforms to align utilities’ bottom line with consumer and environmental priorities.
Innovative Grid Planning

Traditionally, utilities and grid planners focused on maintaining the power grid for one-way power flow from fossil-fuel power stations over miles of power lines to homes and businesses. Increasingly, clean, cost-effective local energy solutions like energy efficiency and load control can be strategically deployed to improve the functioning of the grid at lower cost than traditional infrastructure solutions. Acadia Center has presented legislative proposals to require holistic grid planning that merges the traditional world of “poles and wires” with new technologies and modern strategies.

PRIORITIES

- Consumer-Friendly and Efficient Electricity Rates
- Smart Value-Based Reforms to Net Metering
- Updating the Utility Business Model
- Innovative Grid Planning

Energy Grid
Transportation & Electrification
PRIORITIES

• Increasing Market Penetration of Electric Vehicles and Heat Pumps by Removing Barriers to Their Adoption

• Lowering Operating Costs for EVs and Heat Pumps through Innovative Electric Rates that Reduce Grid Impacts

• Promoting the Grid Benefits of Electrification

• Advancing Market-Based Climate Policy for Transportation

OPPORTUNITIES

The Northeast states are ideally positioned to become national leaders in vehicle and building electrification. At 10% of the nation’s new car sales, the New England states and New York have significant capacity to impact the vehicle market. At the same time, the region has the highest dependence on fuel oil for home heating, making heat pump conversions both economically and environmentally attractive.

All the Northeast states have emissions reduction goals that can only be met by reducing fossil fuel use in vehicles and buildings through electrification. Many states have nascent programs to promote electrification, but more action is needed. The Electrification Initiative works to ensure progress continues and fossil fuel industries are kept at bay. Progress in the Northeast will set an important precedent for additional states to follow, and growing the EV and heat pump markets will reduce costs and advance these technologies.
Transportation & Electrification

ACCOMPLISHMENTS

• Successfully advocated for legislation to advance electric vehicles, such as through incentives and regulatory changes in MA, CT, and NY.

• Advocated regionally and nationally, helping to end the regulatory loophole that limited zero-emission vehicle sales in many Northeast states.

• Were appointed to and continued to lead on commissions and working groups for strategic electrification, zero-emission vehicles, and heat pumps.

• Continued to participate in state proceedings related to electrification.

• Convened and led a regional coalition to drive states to adopt transportation climate policy.

PRIORITIES

• Increasing Market Penetration of Electric Vehicles and Heat Pumps by Removing Barriers to Their Adoption

• Lowering Operating Costs for EVs and Heat Pumps through Innovative Electric Rates that Reduce Grid Impacts

• Promoting the Grid Benefits of Electrification

• Advancing Market-Based Climate Policy for Transportation
Increasing Market Penetration of Electric Vehicles and Heat Pumps by Removing Barriers to Their Adoption

In the past year, Acadia Center has been successful in advocating for many policies to promote electrification technologies throughout the Northeast region. We were instrumental to the passage of multi-faceted legislation to support electric vehicles in MA and CT, and supported the creation of consumer EV rebates in NY. Acadia Center staff served on the MA Zero-Emission Vehicle (ZEV) Commission, led a subcommittee for the RI ZEV Working Group, and participated in NEEP’s Air Source Heat Pump Working Group and Strategic Electrification Advisory Committee to promote policies to advance electrification. Acadia Center staff also have leading roles on the energy efficiency stakeholder councils in CT, MA, and RI and have advocated for effective heat pump incentive programs in those utility-administered efficiency programs. Acadia Center continues to participate in regional and national campaigns to advance leadership by states that have adopted California’s ZEV program, which successfully resulted in the expiration of a regulatory loophole that limited sales of ZEVs in many Northeast states.
Lowering Operating Costs for EVs and Heat Pumps through Innovative Electric Rates that Reduce Grid Impacts

Outdated electric rates are a poor match for new technologies and a modern grid. Residential customers are typically charged a flat rate for electricity, yet costs to supply electricity vary throughout the day, with the most expensive costs during peak demand periods. Acadia Center has been working to promote rate designs that align with the actual costs of supplying power, which could help to incentivize EVs and heat pumps by lowering their operating costs for users who take advantage of the lower off-peak rates. Time-of-use (TOU) rates are an important part of Acadia Center’s legislative proposals, and we successfully included a provision on EV TOU rates in CT’s 2016 EV law. Acadia Center also promoted adoption of TOU rates in rate cases and other administrative proceedings in NY, RI, MA, and NH.

Promoting the Grid Benefits of Electrification

Both EVs and heat pumps have the potential to benefit the grid by consuming power at times of peak generation and storing it for later use, either in a battery in the case of EVs or as heat in the case of heat pumps. Acadia Center has and will continue to participate in dockets across the region that relate to modernizing the grid to support the use and compensation of electrification technologies as distributed energy resources. Proceedings include Reforming the Energy Vision in NY, grid modernization proceedings in MA and NH, and the Power Sector Transformation initiative in RI. Acadia Center also serves on NEEP’s Strategic Electrification Advisory Board to contribute to the regional dialogue on best practices for promoting and integrating these technologies.
Advancing Market-Based Climate Policy for Transportation

Northeast states can lead the nation by implementing a regional cap and invest program for transportation fuels, drawing on the track record of collaboration through the successful, bipartisan Regional Greenhouse Gas Initiative (RGGI). In 2016, Acadia Center began laying the groundwork for ongoing action on transportation climate policy by educating and mobilizing key advocacy and industry partners, developing a strategic coalition plan, and engaging with state decision-makers. Federal rollbacks of climate policies have increased the need for state and regional leadership, and Acadia Center will frame tackling transportation as the logical next step.
PRIORITIES

• Major reports – EnergyVision 2030
• Rapid response analysis to counter misinformation
• Watchdog reporting
• Tracking trends and other information

OPPORTUNITIES

The Acadia Climate and Energy Analysis Center maintains the core of Acadia Center’s strength of advocacy, its foundation in data and analysis, to bolster the success of that advocacy. The CLEAN Center provides the ability to quickly respond to misinformation in the press and other public forums with data-based rebuttals. It supports existing advocacy efforts with analysis as needed, and it also opens avenues to new advocacy and outreach. In addition, it provides energy policy related research and consulting services to government agencies and other organizations.

ACCOMPLISHMENTS

• Successfully launched EnergyVision 2030.
• Released updated emissions inventory for Connecticut, which helped apply political pressure to increase mitigation efforts.
• Released “Incentives for Change” utility incentives infographic through combined effort of in-house and consultant analysis.
• Maintained up to date information on energy efficiency program performance in Northeastern states.
Major reports – EnergyVision

The Acadia-CLEAN Center’s most significant piece of work in the past year was the EnergyVision 2030 report. To produce this report, we expanded our toolbox of capabilities to include the LEAP model from Stockholm Environmental Institute, which allowed us to model the complete energy system for the Northeast. EnergyVision 2030 was also the first time we simultaneously launched a report in multiple original formats – an interactive website, a series of accessible topical reports, and a full technical paper.
Rapid Response Analysis and Watchdog Reporting

Acadia Center conducts most of its analytical work in-house. Unlike other groups that depend on outside consultants for any significant technical work, we use them only for targeted specialized needs. This gives us the flexibility to quickly respond to time-sensitive opportunities, such as countering misinformation produced by groups funded by the fossil-fuel industry. Acadia Center also has a track record of producing short-form reports using original analysis to change the dynamic around a current issue. In the past year, the Acadia CLEAN Center has produced analytical reports on the health benefits of the Regional Greenhouse Gas Initiative, greenhouse gas emissions in Connecticut, the accuracy of ISO-New England forecasting, and more. These small reports can have significant impact because they frequently bring to light a new piece of information. The Connecticut report, for example, showed that GHG emissions had begun to increase after years of decline, helping to spur more action in the state’s climate planning process.
PRIORITIES

- Major reports – EnergyVision 2030
- Rapid response analysis to counter misinformation
- Watchdog reporting
- Tracking trends and other information

Rapid Response Analysis and Watchdog Reporting

President Trump’s “Energy Week” address today is expected to express strong support for U.S. exports of natural gas, currently on the rise. For the Northeast, these exports exacerbate the risk of the region’s already-dangerous overreliance on fossil fuel that has a history of volatile prices and will not allow the region to reach its commitments to reduce greenhouse gases.

With the arrival of two weeks ago in Taiwan of a liquefied natural gas (LNG) tanker ship loaded with American natural gas, June has been a month marked with milestones for the nascent export industry in the United States. Preceding this delivery by a few days were the first ever U.S. LNG shipments to Poland and the Netherlands. U.S. Energy Secretary Rick Perry deemed these events significant enough to warrant a statement from his office. These deliveries from a new LNG export facility in Louisiana signify a new era for the natural gas industry in this country, and residents of Northeastern states should be paying attention to these events.

This export plant, the Sabine Pass LNG Terminal, is the first of several such facilities planned to be constructed or converted from import use. When it is fully online, it will be able to liquify nearly 3,300 billion cubic feet (bcf) per year of natural gas. Three other facilities under construction in Hackberry, Louisiana; Freeport, Texas; Corpus Christi, Texas; Elba Island, Georgia, and Lusby, Maryland, will be able to Liquify twice that volume. In total, these facilities will be able to Liquify and export the equivalent of 15% of current U.S. natural gas consumption. Several additional projects have been approved but are not yet under construction.

Having this large a portion of U.S. natural gas consumption subject to world market prices will likely have an impact on markets at home. Such a rapid surge in demand will likely increase domestic natural gas prices. What does this mean for Northeastern states? They need to carefully scrutinize analyses of any projected benefits from natural gas conversions or new natural gas infrastructure projects in the region. The levels of promised benefits increase dramatically if domestic sources of LNG are assumed.
Tracking Trends and Other Information

The Acadia CLEAN Center maintains a database of information culled from a wide array of public sources. This allows it to efficiently produce both outward-facing publications and internal information to support advocacy efforts. In the past year we have updated the information we track on all efficiency programs in the region and added the latest residential housing survey data from DOE.

Benefits of Rhode Island Energy Efficiency Programs

- Since 2008, Rhode Island has invested $569 million in energy efficiency and consumers have realized $2.3 billion in economic benefits.
- 2,465,998 MMBTU of total natural gas savings
- In 2016, 923 firms were involved in delivering Rhode Island’s energy efficiency programs, with 82% of those companies located in Rhode Island.
- GHG Reduction will avoid 7 million metric tons from investments since 2006.
- In 2016, 702 full-time equivalent jobs were directly related to the delivery of the state’s energy efficiency programs.
- 1,301,132 MWh of total electricity savings
- The state’s energy efficiency investment since 2008 will create over 23,000 job-years of employment economy-wide and add $2.3 billion to Gross State Product.
- Rhode Island ranked #1 for Efficiency Policies and Programs
Public Engagement
Public Engagement

The future presented in Acadia Center’s EnergyVision reports offers tremendous benefits for consumers, communities, and a host of other interests. In the Northeast, a clean energy system can improve public health, save consumers billions of dollars, spur the growth of local economies, and empower consumers. To advance a modern, equitable system, Acadia Center must engage with stakeholders at all levels of this process. The Public Engagement Initiative works to guide Acadia Center messaging and communications so that its vision reaches and inspires action among policymakers, traditional stakeholders, consumers, and communities. The Initiative supports key program goals for renewables, carbon markets, efficiency, electrification, and climate at the state and regional levels.

OPPORTUNITIES

ACCOMPLISHMENTS

• Organized Community|EnergyVision forums in Massachusetts, Rhode Island, and Connecticut.
• Coordinated production of and release strategy for EnergyVision 2030 website and print materials.
• Acadia Center featured as one of 28 “particularly timely charities” to donate to in New York Magazine.
• Engaged one-on-one and through coalitions with communities where an interest in clean energy has been identified.
• Acadia Center experts featured in the Christian Science Monitor, Boston Globe, Washington Post, Bloomberg BNA, the Financial Times, NPR, and more.
Communicating a Clean Energy Future

Acadia Center research was distributed to stakeholders and the general public through coalitions, events, email marketing, press, and social media. In 2016, planning, strategy, and drafting began for EnergyVision 2030, the Community|EnergyVision Handbook, and the Incentives for Change infographic about an imbalance in utility financial incentives. EnergyVision 2030, released in Spring 2017, analyzes the Northeast’s energy system and details how much clean energy technologies will need to expand to meet state goals to transition to a low-carbon energy system. The Public Engagement initiative uses EnergyVision 2030 to help stakeholders and the public visualize clean energy systems in their communities and then inspire them to make those systems a reality.
Empowering Consumers and Communities

In collaboration with the other five initiatives, the Public Engagement Initiative works to promote policies that empower consumers to take control of their energy future. In 2016, through presentations at community events, including forums organized by Acadia Center, local audiences in the Northeast learned more about how to embrace their interests in the energy system. Acadia Center presentations focused on applying EnergyVision to the local community. They also highlighted policies that can provide significant savings and health benefits while strengthening local economies.
Public Engagement

Community|EnergyVision and Action Guide

The Public Engagement Initiative coordinates the production of visually interesting and highly accessible materials for print and digital consumption. The initiative also supports dialogue between Acadia Center and groups working at the grassroots level to identify opportunities for collaboration and gaps that Acadia Center can help fill. In 2016, Acadia Center continued to promote the substance of Community|EnergyVision through community forums and presentations at community group meetings. Acadia Center also began research for a companion piece to Community|EnergyVision, a guide indicating what policies supporting or prohibiting local clean energy adoption are already in place in each of seven Northeast states. The Community|EnergyVision Action Guide is designed to provide information, previously unavailable in one easy-to-access format, to community groups exploring their first steps toward a clean energy future.
Public Engagement

PRIORITIES

• Communicating a Clean Energy Future
• Empowering Consumers and Communities
• Community EnergyVision & Handbook
• Broadening Support and Building Networks

Broadening Support and Building Networks

Acadia Center builds support for the vision captured in its reports by reaching out to traditional and non-traditional stakeholders. Networks created through outreach and the planning of Acadia Center’s public events have evolved to become collaborative spaces for identifying regional and state policy needs. Furthermore, in 2016, Acadia Center reached a readership of millions through press coverage of its reports and advocacy. Acadia Center earned media placements in the Christian Science Monitor, Boston Globe, Washington Post, Bloomberg BNA, and the Financial Times, as well as many local and trade publications. Acadia Center also published a series of pieces in CommonWealth Magazine on clean energy solutions and opportunities in Massachusetts.
Publications
Distribution Reliability Charge: Transitioning to Sustainable Rate Design
Report proposing the Distribution Reliability Charge to address two electricity rate design issues: (1) inadequate incentives for customers to help manage the cost of infrastructure driven by local and regional peak electricity demand and (2) potential under-recovery of distribution system costs from customers with distributed generation who typically still use the grid for deliveries at many times during the month. The Distribution Reliability Charge would improve the recovery of distribution system costs from customers with distributed generation as an alternative to higher customer charges and minimum bills.

RGGI Status Report Part I: Measuring Success
A report focused on key trends since RGGI’s launch, including electric sector drivers, economic impacts, and the status of the RGGI market. The report demonstrates RGGI’s success in reducing emissions, fostering a clean energy transition, and supporting regional economic growth.

RGGI Status Report Part II: Achieving Climate Commitments
A report describing the reforms RGGI states should make to achieve both state and federal climate requirements while continuing to generate benefits for the region. Released as the 2016 RGGI Program Review commenced, Part II of the RGGI Report details what RGGI states should do to build on their legacy of climate leadership.

Charge Without a Cause?
Co-authored by Acadia Center’s Mark LeBel; Paul Chernick with Resource Insight in Massachusetts; John T. Colgan, a former Commissioner at the Illinois Commerce Commission; Rick Gilliam with Vote Solar in Colorado; and Douglas Jester with 5 Lakes Energy in Michigan. This paper assesses an approach to electricity rate design now being proposed by some utilities around the country in response to a changing energy landscape — imposing “demand charges” on residents and small businesses in addition to the large commercial and industrial customers to whom these types of charges have typically applied.

The Hidden Costs of Energy: Overpaying for an Outdated System
A handout that identifies and gives recommended solutions for four basic problems with the Northeast’s electricity transmission system and the way it is regulated. Addressing these problems will help build a reliable, modern energy system that fairly evaluates all viable options to meet our energy needs and advances clean energy as well as new energy technologies.
Updated Greenhouse Gas Emissions Inventory for Connecticut:
An analysis of new data on greenhouse gas (GHG) emissions in Connecticut to develop an updated emissions inventory for the 1990 to 2015 time period. The analysis also looks at possible drivers of recent emissions increases, including fuel prices, economic activity, and policy developments. The updated emissions inventory was intended to help inform and guide both the 2016 Comprehensive Energy Strategy proceeding and the ongoing deliberations of the Governor’s Council on Climate Change.

Commonwealth Series on 2016 Energy Analysis:
Commentary from Acadia Center staff on the breakdown of the historic model for New England’s grid as more distributed energy resources come online. The series addresses controversial proposals to subsidize gas pipelines, the transformation of the energy system and centralized utility model, and the legislative opportunity to bring on large-scale clean energy sources in Massachusetts.

Residential Load Control – How Efficiency Programs Can Help Integrate Renewables:
A paper that quantifies the benefits that could be provided in the future by a large deployment of load control in residential products that are commonly incentivized by utility efficiency programs. This paper was authored by Abigail Anthony, Jamie Howland, and Leslie Malone. After it was presented at the American Council for an Energy Efficient Economy, the authors were invited to present it at the ACEEE Intelligent Efficiency Conference and the Efficiency Maine annual meeting.
Financial Summary
### Financial Summary

For Fiscal Years 2015 (audited) and 2016 (not-audited)

#### Revenues

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>2015 (audited)</th>
<th>2016</th>
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<tbody>
<tr>
<td>Grants</td>
<td>$1,858,000</td>
<td>$2,138,000</td>
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<tr>
<td>Contributions</td>
<td>$150,432</td>
<td>$197,873</td>
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<td>CLEAN Center Reports</td>
<td>$35,000</td>
<td>$0</td>
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<tr>
<td>Investment and other income</td>
<td>$7,015</td>
<td>$12,016</td>
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<td><strong>TOTAL REVENUES</strong></td>
<td><strong>$2,050,447</strong></td>
<td><strong>$2,347,890</strong></td>
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Financial Summary

For Fiscal Years 2015 (audited) and 2016 (not-audited)

Revenues

2015 audited

- Grants: 91%
- Contributions: 7%
- CLEAN Center Reports: 2%
- Investment and other income: 0%

2016

- Grants: 91%
- Contributions: 8%
- CLEAN Center Reports: 1%
- Investment and other income: 0%
Financial Summary

For Fiscal Years 2015 (audited) and 2016 (not-audited)

<table>
<thead>
<tr>
<th>Expense Category</th>
<th>2015 (audited)</th>
<th>2016</th>
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<tr>
<td>Program</td>
<td>$1,499,258</td>
<td>$1,669,177</td>
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<tr>
<td>Management</td>
<td>$91,985</td>
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<tr>
<td>Development</td>
<td>$75,508</td>
<td>$87,412</td>
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<td><strong>TOTAL EXPENSES</strong></td>
<td><strong>$1,663,751</strong></td>
<td><strong>$1,876,073</strong></td>
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Financial Summary

For Fiscal Years 2015 (audited) and 2016 (not-audited)

Expenses

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Management</th>
<th>Development</th>
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<tr>
<td>2015 audited</td>
<td>90.1%</td>
<td>5.5%</td>
<td>4.4%</td>
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<tr>
<td>2016</td>
<td>89.0%</td>
<td>6.4%</td>
<td>4.6%</td>
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Financial Summary

For Fiscal Years 2015 (audited) and 2016 (not-audited)

<table>
<thead>
<tr>
<th>Net Assets</th>
<th>2015 (audited)</th>
<th>2016</th>
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<tr>
<td>Total Assets (at end of year)</td>
<td>$2,826,499</td>
<td>$3,303,361</td>
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<td>Total Liabilities (at end of year)</td>
<td>$10,471</td>
<td>$15,516</td>
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<tr>
<td>Fund Balance</td>
<td>$2,816,028</td>
<td>$3,287,844</td>
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<tr>
<td>Increase to Fund Balance from Previous Year</td>
<td>$386,653</td>
<td>$471,816</td>
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Financial Support

Acadia Center work is funded through the generosity of individuals and foundations. Each year, we strive to keep our overhead and expenses as low as possible in order to ensure that contributions are used to directly implement programs and achieve our goals. We invite new donors to consider partnering with us in our efforts to combat global warming with solutions that promote clean energy, clean air and healthy forests and we also extend a sincere appreciation to all past supporters. In particular, we would like to acknowledge the following for significant contributions in 2016:

- Anonymous Donor
- Barr Foundation
- The Bernard and Anne Spitzer Charitable Trust
- Broderick J. Hehman Memorial Fund of the New York Community Trust
- Buck Family Fund of the Maine Community Foundation
- Charles Spear Charitable Foundation
- Combined Jewish Philanthropies of Greater Boston
- Common Sense Fund
- Daniel Hildreth
- Doppelt Family Foundation of the Jewish Federation of Palm Beach County, Inc
- The Educational Foundation of America
- Emily Hall Tremaine Foundation (EHTF)
- The EMWIGA Foundation
- The Energy Foundation
- The Grantham Foundation for the Protection of the Environment
- Heising - Simons Foundation
- Horizon Foundation, Inc.
- Island Foundation
- The John Merck Fund
- Johnson Charitable Gift Fund
- Krevans Brieger Family Fund of the Sacramento Region Community Foundation
- Leaves of Grass Fund
- Merck Family Fund
- The New York Community Trust
- Overbrook Family Advised Fund
- The Porpoise Fund
- The Prospect Fund
- Rhode Island Foundation
- Transportation for Massachusetts
- V. Kann Rasmussen Foundation
- Wiesler Family Foundation
EarthShare New England

Acadia Center thanks the hundreds of people who support our work each year through payroll contributions in workplace giving campaigns. Acadia Center is a member of EarthShare New England, a federation of New England’s most respected environmental and conservation charities. Federal employees can support Acadia Center through the Combined Federal Campaign (CFC) by selecting #33903 on their pledge forms. To learn how you and your workplace colleagues can support Acadia Center through an EarthShare New England charitable giving campaign, please visit [www.earthsharenewengland.org](http://www.earthsharenewengland.org).

Charity Navigator

In 2016, for the tenth year, Charity Navigator awarded Acadia Center its highest 4-star rating for our ability to efficiently manage and grow finances. Charity Navigator is America’s premier independent charity evaluator. They help charitable givers make intelligent giving decisions by providing in-depth, objective ratings and analysis of the financial health and accountability & transparency of America’s largest charities. According to Charity Navigator, Acadia Center “adheres to good governance and other best practices that minimize the chance of unethical activities and consistently executes its mission in a fiscally responsible way... [and] outperforms most other charities in America.”