



STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

MEETING MINUTES

Thursday, June 11, 2015

3:30 - 5:30 PM

Conference Room B, 2nd Floor
Department of Administration
One Capitol Hill, Providence, RI

- Members Present:** Abigail Anthony, Joe Cirillo, Marion Gold, Jennifer Hutchinson, Joe Newsome, Chris Powell, Paul Ryan
- Members Absent:** Dan Justynski, Michael McAteer
- Consultants Present:** Mike Guerard
- OER Staff Present:** Ryan Crowley, Chris Kearns, Danny Musher, Becca Trietch, Nicholas Ucci
- Others Present:** Matthew Banoub, H. Robert Bacon, Brian D. Buckley, Roberta Fagan, Doug Gablinske, Angela Li, Sam Milton, Jeremy Newberger, Shigeru Osada, Fred Paine, Ellen Richer, Betsy Stubblefield Loucks, Karen Verrengia, Alysse Vindeed, Chon Wong

1. Call to Order

Chairman Paul Ryan called the meeting to order at 3:34 PM.

2. Approval of April Meeting Minutes

Joe Cirillo made a motion to approve the minutes. Chris Powell seconded and all approved.

3. Executive Director Report

Commissioner Marion Gold noted that new Council members, who are expecting to be approved by the Senate by the next meeting, were in attendance. She introduced all current council members and OER staff. New members Robert Bacon, Roberta Fagan, Betsy Stubblefield Loucks, Karen Verrengia and Shigeru Osada each introduced themselves. Nick Ucci briefly outlined the regional challenges Rhode Island faces as part of an integrated system that runs from Maine to Connecticut for the new members that were in attendance. He noted that there are significant supply constraints in New England, which have resulted in high energy prices. He stated that New England consumers are paying multiples of what other regions in the country are paying for gas and electricity. Commissioner Gold closed by sharing that

the State Planning Council has approved the State Energy Plan for public hearing and a date is forthcoming.

4. Executive Committee Report

Chairman Ryan suggested sharing Executive Committee updates as part of the relevant agenda items.

5. Policy & Planning Issues

Vote to move meeting from October 8, 2015 to October 1, 2015

Jeremy Newberger briefed the Council on the reasoning for the suggested change. This year, National Grid must file its Annual Energy Efficiency Program Plan by October 15. Changing the meeting date will allow the Council to acknowledge and address any issues it may have before approving it. Chris Powell noted that the Executive Committee meeting will also need to be changed. **Joe Cirillo made a motion to move the EERMC meeting from October 8, 2015 to October 1, 2015. Abigail Anthony seconded and all approved.**

6. General Updates on Energy Efficiency Programs and System Reliability Procurement

Combined heat and power presentation

Mr. Newberger gave a presentation on behalf of National Grid regarding combined heating and power (CHP) for the 2016 Energy Efficiency Program Plan. Mr. Newberger provided background on CHP and outlined how the company is promoting CHP. Mr. Powell asked if National Grid also looks at the local impacts on the gas pipeline issues. Mr. Newberger said the cost effectiveness test does not consider those impacts. Danny Musher asked if the alternative credits available in Massachusetts make it a more active location for CHP. Mr. Newberger said that it was possible and National Grid was looking into this. He added that more information would be made available just before the release of the 2016 Plan or in the 2016 Plan itself. He also confirmed that National Grid has not yet committed to an incentive with Narragansett Bay Commission for its project.

2015 Plan implementation and 2016 Plan development issues

Angela Li of National Grid presented on Rhode Island weatherization contractor pricing. She compared the pricing of insulation contractors and noted that there are many measures that make it difficult to calculate. Joe Newsome requested that there be a comparison of 20 items that are most often bought by customers and compare the rate to Massachusetts. Ms. Li stated that she could not share the individual items because they are under a proprietary contract but she could share a group for comparison. She also reported there is a balance between interested companies that want to work in the program and jobs that are available to them. Matthew Banoub said the difference in price can be as much as 60%. Mr. Powell asked if independent insulation contractors have a set price that is 60% less than in Massachusetts. National Grid representatives in attendance confirmed. Mr. Guerard stated that Massachusetts and Rhode Island are exploring how to better set prices for the contractors in both states.

7. Other Business

Rhode Island Alliance for Healthy Homes presentation

Ms. Stubblefield Loucks presented on behalf of the Rhode Island Alliance for Healthy Homes, with the purpose of updating the Council on the recommendations it made during a past presentation. Commissioner Gold shared that there has been substantial work done by the Alliance to bring stakeholders together to talk about mutual issues and address them. Mr. Powell asked if RIAHH gets energy efficiency funds. Ms. Stubblefield Loucks said there is no direct funding provided and the Alliance serves as more of a link. The Attorney General's Office also provides funding for other gaps. Mr. Guerard stated that the Alliance makes it easier to reach more homes of customers who otherwise would not have participated in energy efficiency. Ms. Stubblefield Loucks stated that there is a cost-effectiveness component to improving homes all at once and not just implementing efficiency measures. Commissioner Gold said the Department of Human Services and National Grid have been great partners on this initiative.

Vote on consultant team budget supplement

Mr. Powell felt that some of the proposed tasks could be done by OER. Mr. Guerard said that the tasks identified in the memo are substantial and that the consultant team and OER have been working together to complete tasks in an efficient manner. He added that the consultant team would not necessarily spend all of the supplemental funds. Ms. Anthony asked why it was important to vote on the approval of funds now. Mr. Guerard said that the consultant team did not want to presume that there would be money available later in the year. He added that the goal is to avoid getting to the consultant team's burn rate and disrupting the work of the Council at the end of the year. **Joe Newsome made a motion to approve an additional \$40,000 in funding for the consultant team. Ms. Anthony seconded the motion and all approved.**

Vote to allow EERMC legal counsel to advise consultant team

Chairman Ryan noted that for the purposes of attorney-client privilege, Marisa Desautel needs the council to authorize her to give legal opinions to the consultant team. **Abigail Anthony made a motion that the council wave its attorney client privilege to allow Marisa Desautel to speak with the consultant team on the council's behalf. Chris Powell seconded and all approved.**

Vote on EERMC FAQ

Ms. Anthony noted that the Council thought it would be helpful for new members and Council staff to have a frequently asked questions sheet. Joe Newsome asked if a vote would be necessary to amend the document, should any additional questions be posed. Mr. Newberger suggested adding Commissioner Gold's contact information to the fact sheet. **Joe Cirillo made a motion to make the proposed EERMC FAQ an official EERMC document. Chris Powell seconded and all approved.**

8. Public Comment

Mr. Osada noted that he wanted to review past meeting minutes of the Council.

9. Adjournment

Joe Newsome made a motion to adjourn the meeting. Joe Cirillo seconded the motion and all approved. Chairman Ryan adjourned the meeting at 5:20 PM.

Next Meeting: Thursday, July 9th, 2015; 3:30-5:30 PM; Conference Room B



STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

MEETING AGENDA

Thursday, June 11, 2015

3:30 - 5:30 PM

Conference Room B, 2nd Floor
Department of Administration
One Capitol Hill, Providence, RI

1. Call to Order
2. Approval of May Meeting Minutes
3. Executive Director Report *(10 min)*
 - New member welcome
4. Executive Committee Report *(10 min)*
5. Policy & Planning Issues
 - Vote to move meeting from October 8th to October 1st *(5 min)*
6. General Updates on Energy Efficiency Programs and System Reliability Procurement
 - Combined heat and power presentation *(30 min)*
 - 2015 Implementation and 2016 Plan development issues
7. Other Business
 - Rhode Island Alliance for Healthy Homes presentation *(30 min)*
 - Vote on consultant team budget supplement
 - Vote to allow EERMC legal counsel to advise consultant team
 - Vote on EERMC FAQ
8. Public Comment
9. Adjournment

Next Meeting: Thursday, July 9th; 3:30-5:30 PM; Conference Room B



Green & Healthy Homes Initiative[®] Rhode Island

Presentation to the Energy Efficiency Resources
Management Council

Betsy Stubblefield Loucks
GHHI Rhode Island Outcome Broker
June 11, 2015



EERMC and GHHI

- EERMC included GHHI in its 2012 and 2013 Annual Reports:

Rhode Island has already demonstrated success in aligning efforts through Green & Healthy Homes Initiative Providence: Neighborhood Innovation Pilot. Through sustained focus on supporting these joint efforts, additional success in expanding the implementation of enhancements to the affordable housing stock will be achieved. The Council will also advise the Assembly, the OER and other state agencies to help maximize coordination, design and delivery of comprehensive service models to meet the needs of this sector.

GHHI Providence:
- 135 Unit Initial
Providence Pilot

Rhode Island
Alliance for
Healthy Homes

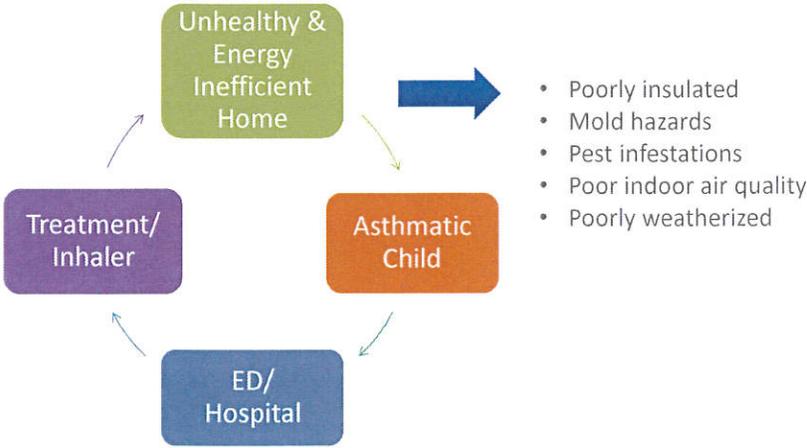
The Challenge: Achieving Healthy Homes & Communities

- 82% of low-income children in RI live in older housing
- From 2009-2013 in Rhode Island:
 - 2,094 children hospitalized for asthma; half from core cities
 - 10,636 Emergency Department Visits
 - 6,744 children chronically absent from school due to asthma
- In 2016, nearly 1,000 children under age 6 will have elevated lead levels

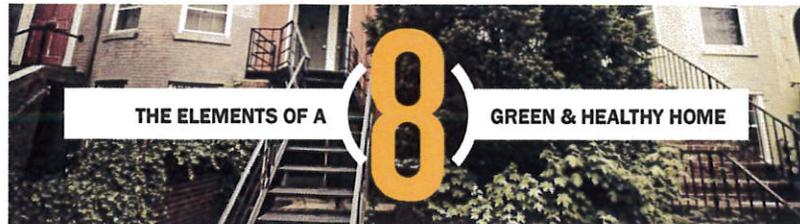


Low-income households spend 14-20% of income on energy vs. 3.5% for other households

Root Causes



The Solution:



1. Dry
2. Clean
3. Safe
4. Well-Ventilated
5. Pest Free
6. Contaminant-Free
7. Well-Maintained
8. Energy Efficient

About GHHI

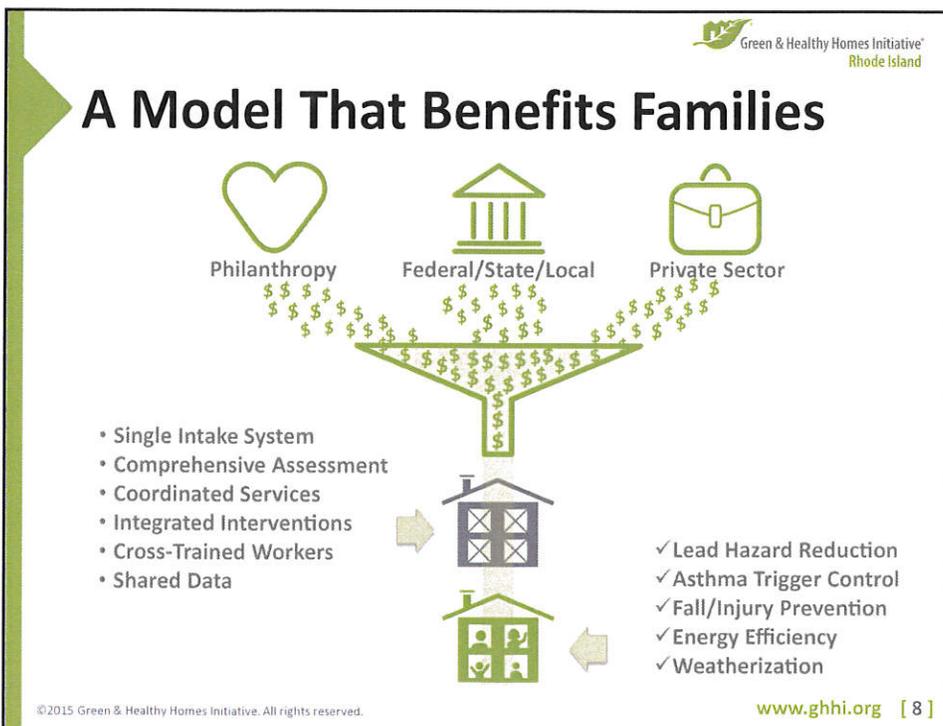
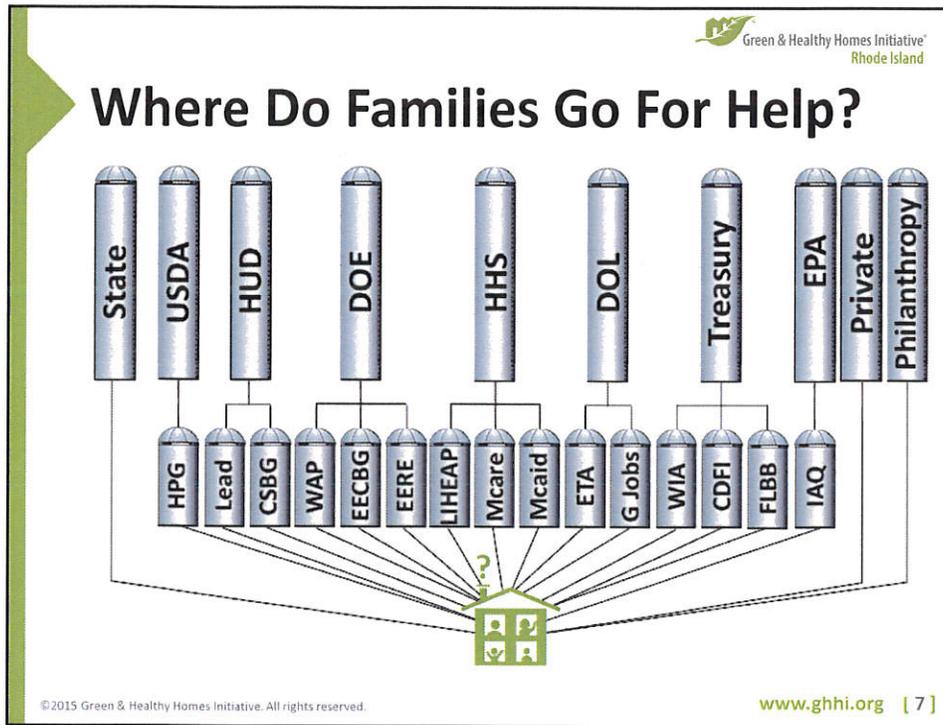
Mission

To break the link between unhealthy housing and unhealthy families by creating and advocating for healthy, safe and energy efficient homes.

Vision

A world where no child's potential is limited by unhealthy housing conditions.







GHHI Process

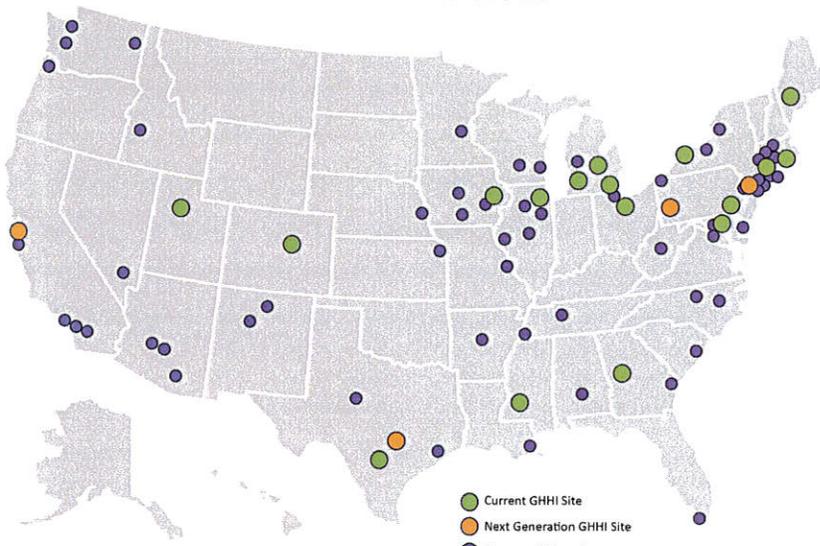


| National Efforts | Funding Streams | Partners |
|---|---|--|
| <ul style="list-style-type: none"> • DOE, HUD, CDC, CMS • Healthy Homes Work Group • Strategy for Action | <ul style="list-style-type: none"> • Federal • State • Private • Philanthropy | <ul style="list-style-type: none"> • Single application • Common eligibility • Single audit, improvements • Education • Data and evaluation |

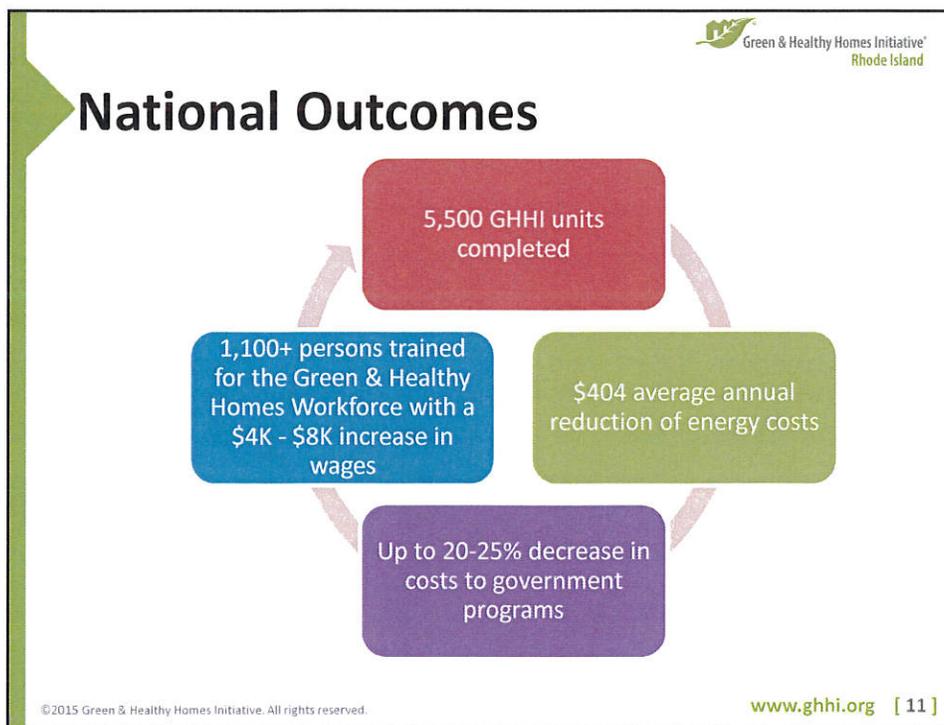
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GHHI's National Reach



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Other Family Impacts

Green & Healthy Homes Initiative: Improving Health, Economic and Social Outcomes Through Integrated Housing Intervention

- **66-70%** reduction in asthma-related client hospitalizations
- **28-60%** reduction in asthma ER visits
- **50%** increase in participants never having to visit the doctor's office due to asthma episodes
- **62%** increase in participants reporting asthma-related perfect attendance for their child (0 school absences due to asthma episodes)
- **88%** increase in participants reporting never having to miss a day of work due to their child's asthma episodes

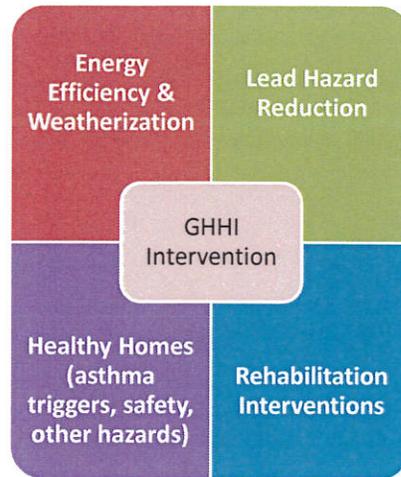
Environmental Justice, Vol 7, Number 6, 2014

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GHHI Rhode Island

Approach:

- Comprehensive Environmental Assessment/Energy Audit
- Triage Teams (2 levels)
- Braid Funding Sources (e.g.):
 - HUD Lead Hazard Control and Lead Demonstration Grants
 - HUD Healthy Homes Grant
 - RI Attorney General Settlement
 - Local CDBG and Rehabilitation LIHEAP and WAP



Rhode Island Alliance for Healthy Homes

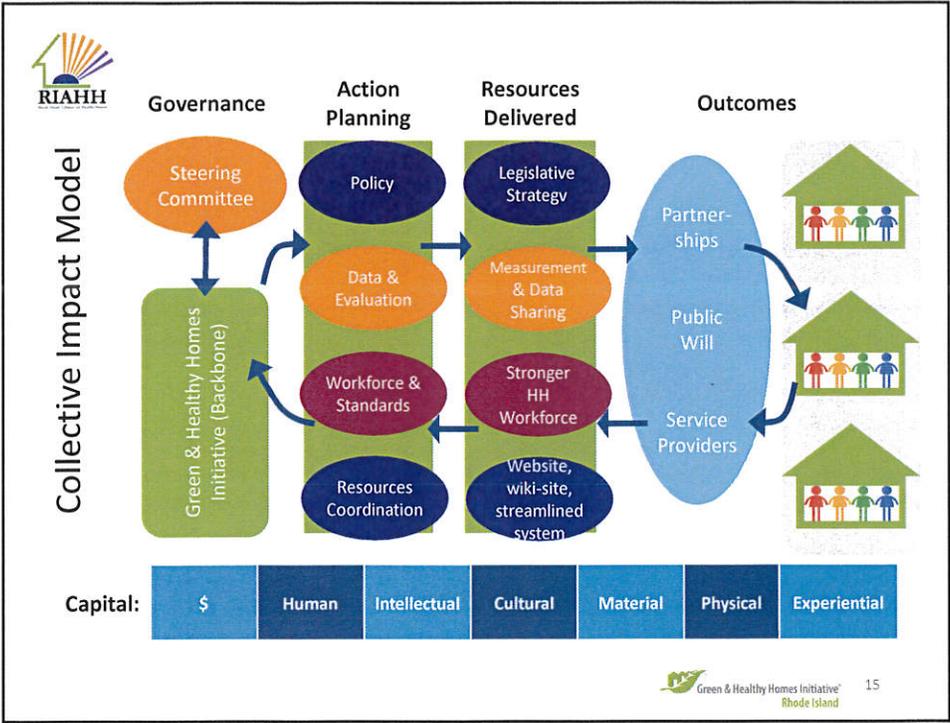


Mission: To align, braid and coordinate information, resources and services for improving the health, safety and energy efficiency of all Rhode Island homes.

Vision: To see homes that both contribute positively to an individual's health and prosperity and enhance the vitality of Rhode Island's communities.

- Executive Steering Committee**
 RI Attorney General's Office
 RI Department of Health
 RI Housing Resources Commission
 RI Department of Human Services
 RI Office of Energy Resources
 RI Housing
 City of Providence (Municipality Seat)
 Green & Healthy Homes Initiative RI







Leadership Team

| | |
|---|---|
| <p>Executive Steering Committee:</p> <p>Liz Tobin-Tyler RIAHH Chair</p> <p>Betsy Stubblefield Loucks GHHI RI*</p> <p>Brian Hull Providence DPD</p> <p>Meghan Towle HEALTH</p> <p>Darlene Price Housing Resources Commission</p> <p>Greg Schultz RI Office of the Attorney General</p> <p>Marion Gold RI Office of Energy Resources</p> <p>Michelle Kollett Almeida HEALTH</p> <p>Mike Guerard EERMC</p> <p>Russ Johnson RI Housing</p> | <p>Action Team Co-Chairs:</p> <p>Helen Anthony Handy Law LLC } Policy</p> <p>Jessica Cigna HousingWorks RI } Resources</p> <p>Ron Clarke Blue Cross Blue Shield RI } Data</p> <p>John Eastman Providence DPD } Workforce</p> <p>Sean Murphy National Grid</p> <p>Meghan Towle HEALTH</p> <p>Matt Banoub A10 Energy</p> <p>Lori Bettencourt RIPIN</p> |
|---|---|

*Supported by GHHI Team: Ruth Ann Norton, Wes Stewart, Margarita Robledo

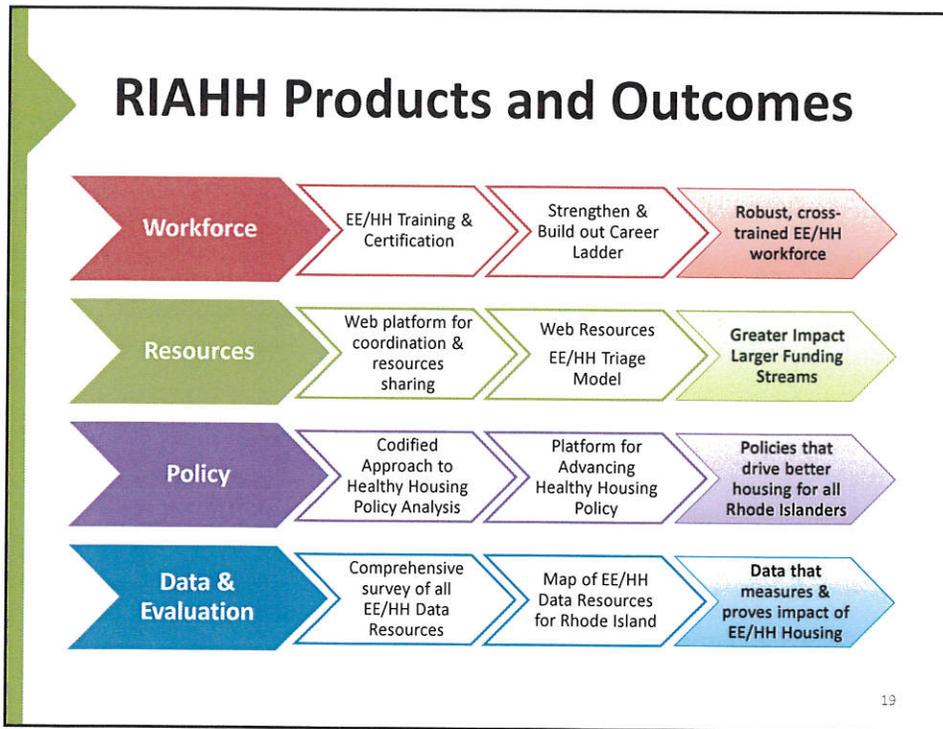
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75 Organizations and Counting...

| | | |
|--|---|---|
| <p>A10 Energy</p> <p>Apeiron Institute</p> <p>Beauchemin Design</p> <p>Blackstone Valley CAPP</p> <p>Blue Cross Blue Shield</p> <p>Brown University</p> <p>CAPP</p> <p>CCRI</p> <p>CHAPA</p> <p>City of Providence Office of Sustainability</p> <p>City of Warwick Housing Rehab</p> <p>CLAP</p> <p>ClearResult</p> <p>Community Health Worker Association</p> <p>Comprehensive CAP</p> <p>Conservation Services Group</p> <p>ConvergenciaRI</p> <p>Dwell at Ease</p> <p>Emerald Cities</p> <p>Environmental Justice League of RI</p> <p>EPA</p> <p>Family Services of RI</p> <p>Green & Healthy Homes Initiative</p> <p>Haig & Associates</p> <p>Handy Law</p> <p>Housing Network of RI</p> | <p>Housing Works of RI</p> <p>Innovative Safety Services</p> <p>International Institute</p> <p>Kelly Taylor Interior Decoration</p> <p>LISC RI</p> <p>Memorial Hospital</p> <p>Milenio Associates</p> <p>National Grid</p> <p>Neighborhood Health Plan</p> <p>Neighborworks Blackstone Valley</p> <p>New Ecology/ WEGO Wise</p> <p>Ocean State Energy Audits</p> <p>OIC of RI</p> <p>Optimal Energy</p> <p>People's Power & Light</p> <p>Providence Center</p> <p>Providence Housing Authority</p> <p>Providence Plan</p> <p>Providence Preservation Society</p> <p>Rebuilding Together</p> <p>Rhode Island Foundation</p> <p>RI Builders Association</p> <p>RI Center for Law and Public Policy</p> <p>RI Coalition for the Homeless</p> <p>RI Collage</p> <p>RI Committee on Occupation Health & Safety</p> | <p>RI DCYF</p> <p>RI DHS (Weatherization)</p> <p>RI DOH</p> <p>RI EE Management Council</p> <p>RI Housing</p> <p>RI Housing Resource Commission</p> <p>RI Legal Services</p> <p>RI Office of Energy Resources</p> <p>RI Office of Housing & Community Development</p> <p>RI Office of the Attorney General</p> <p>RI Parent Information Network</p> <p>RISE Engineering</p> <p>Smith Hill Community Development Corp</p> <p>St. Joseph's Hospital</p> <p>State of RI Office of Planning</p> <p>Taubman Center for Public Policy</p> <p>the City of Providence Department of Planning and Development</p> <p>The House of Hope CDC</p> <p>URI</p> <p>US Green Building Council</p> <p>USDA</p> <p>Westbay Community Action</p> |
|--|---|---|

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Questions?

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2016 Energy Efficiency Plan Schedule
May 29, 2015

1. June

- 11th – EERMC Meeting
- 25th – RI Collaborative Meeting

2. July

- 9th – EERMC Meeting
- 22nd – First draft of the TRM circulated
- 29th – Collaborative Meeting

3. August

- 12th – Collaborative Meeting
- 13th – EERMC Meeting
- 24th – First Draft of 2015 Plan circulated externally
- 28th – Second Draft of the TRM circulated
- TBD – CHP Public Meeting (OER)

4. September

- 2nd – RI Collaborative Meeting
- 4th – Comments back on First Draft of 2015 Plan
- 10th – EERMC Meeting
- 21st – Second and Final Draft of 2016 Plan circulated
- 28th – TRM Finalized
- 28th – Collaborative Meeting

5. October

- 1st – EERMC Meeting (*request vote to change meeting date*)
 - Vote for approval pending final adjustments
- 5th – Collaborative Call
- 7th – Final version of 2016 Plan circulated for settlement approval
- 15th – 2016 Plan Filed

RI Energy Efficiency and Resource Management Council

Frequently Asked Questions

June, 2015

What is Least Cost Procurement?

Least Cost Procurement is the principle of ensuring that the utility purchases the lowest cost energy resource- energy efficiency- first. Rhode Island law requires National Grid to invest in all cost-effective energy efficiency that is less expensive than buying electricity or natural gas (R.I.G.L. § 39-1-27.7). Electricity from a combined cycle natural gas power plant costs about 12-16 cents per kilowatt-hour (kWh) (Synapse Energy Economics, 2013), while it costs about 4 cents to save a kWh through efficiency (Acadia Center, 2015(c)). Rhode Island's Least Cost Procurement strategy is based on economics, flexible to changing market conditions, and designed to maximize consumer benefits.

What is the Energy Efficiency & Resource Management Council (EERMC)?

The EERMC is made up of representatives of a wide range of consumer interests, including low income, residential, business, industrial, and environmental. The EERMC has a statutory responsibility to oversee National Grid's energy efficiency programs, guide energy efficiency program planning and budgeting, provide stakeholder involvement in program planning, monitor and evaluate the effectiveness of efficiency programs, and promote public awareness and understanding of energy efficiency (R.I.G.L. § 42-140.1). Rhode Island- and other states with similar stakeholder engagement- is seeing among the highest market penetration of efficiency goods and services, the largest savings rates in the country, and the largest per capita economic benefits (Acadia Center, 2015 (c)).

If energy efficiency is such a good deal, why don't people do it on their own?

There are many well-documented market barriers, market failures, and other reasons why consumers consistently fail to adopt cost-saving efficiency measures that are in their own economic best interest (Acadia Center, 2012, 2015 (d)). For example, it's impossible to identify inefficiencies by looking at a typical energy bill. Consumers cannot easily pinpoint what appliance to replace with a more efficient model or what building energy improvements to make to lower their energy costs. It is hard for consumers to calculate and be relatively certain that making an efficiency investment will save money by reducing their energy bills over time. In addition, energy consumers- especially businesses- typically want a 2- to 3- year payback for an efficiency project, but are happy with an 8-year or longer payback for other investment choices (Acadia Center, 2015(c)). Often, it just seems like too much time and effort to research an efficient upgrade, fill out a loan application, find a contractor and get quotes, and supervise workers in their home or business.

How do Rhode Island's Energy Efficiency Programs work?

RI's comprehensive energy efficiency programs are designed to overcome most of these impediments through three primary tools (Acadia Center, 2015(c)):

- **Technical assistance and information:** Guidance from energy efficiency professionals can make energy efficiency improvements more understandable, accessible, and easily implemented by homeowners and business people. Experts help consumers work through the available information about upfront costs, how to choose a contractor, quotes and pricing, available incentives, and resulting energy savings. Experts also provide back-end assistance through commissioning and training on the use of new equipment to make sure the customer knows how to operate it as intended.
- **Financial incentives and rebates:** Incentives help by reducing the risk (or perceived risk) of not recouping an energy efficiency investment and by guiding customers to the best options. Energy efficiency incentives reduce the length of the payback period and make the project feasible, even for business customers that must conform to strict payback periods. Financial incentives come in several forms. For example, a residential customer is eligible to receive a free home energy assessment during which the auditor will install energy efficient lighting and other measures at no-cost. The customer may also be eligible to have his home weatherized and pay only 50% of

the total project cost. Sometimes, the rebate is already built into the price of the energy efficient product. For example, National Grid buys down the price of LED lightbulbs at retailers like Home Depot, Lowes, and local hardware stores so that the sticker price is significantly lower than it otherwise would be. The objective is to design the incentive to the market and fuel type, while simultaneously minimize the costs of saving energy.

- **Efficiency financing:** Access to capital is a barrier to implementing efficiency for some customers, and various forms of financing have been used to cost-effectively address this in many markets. Loans can help homeowners or business owners with efficiency upgrades when access to capital is a problem.

Energy rates are too high already! Doesn't the Energy Efficiency Program Charge just make my bills higher?

One perspective is that RI's energy efficiency programs make our energy bills more expensive. This is misleading at best. Far from being any sort of "extra," the Energy Efficiency Program Charge is the only portion of the bill that helps us save money. Energy efficiency is the least-cost fuel source (Acadia Center, 2015(a)). Buying electricity from a power plant like the natural-gas fired Manchester Street Station costs 12-16 cents per kWh, yet saving power through energy efficiency actions costs about 4 cents per kWh. The Division of Public Utilities--the state agency charged with watching out for consumer interests-- recently commissioned the research firm Synapse Energy Economics to see what efficiency is really doing for our electric bills. The analysis finds that a homeowner who gets a home energy assessment can save approximately 12% on her electric bill by replacing inefficient lighting and appliances and upgrading home insulation and weatherization. Factor in savings on natural gas or fuel oil use and total spending on energy is even lower. And small business customers, who are eligible for free energy audits, can save as much as 37% to 47% by installing high efficiency equipment and making recommended retrofits (Synapse Energy Economics, 2014).

What if I'm already energy efficient? Why do I have to keep paying?

The energy system is fairly unique in that everyone benefits from energy efficiency. Even consumers who do nothing to their own houses or offices (or have already made energy efficiency upgrades) benefit from their neighbors' energy efficiency actions. By reducing the state's demand for power, we drive down the average price and those savings are passed on to all electric customers. The Division's study finds that these bill savings significantly outweigh the amount--an average of just over 1%-- that we all pay to finance low cost, low risk energy efficiency investments (Synapse Energy Economics, 2014). We benefit from system savings in other ways too. In 2012 and 2013, energy efficiency policies in Massachusetts and Vermont allowed regulators to defer indefinitely more than 10 planned transmission upgrades, saving all New England ratepayers about \$416 million in transmission costs (Acadia Center, 2015 (c)). During the winter of 2014 along, without savings from energy efficiency programs, wholesale electricity prices would have been 24% higher and Rhode Island's electricity costs would have been about \$98,000,000 higher during the three-month winter period (Acadia Center, 2015(b)).

What is "decoupling?"

In the past, promoting energy efficiency was bad business for most electric and natural gas utilities. Utility revenue increases with sales, and when customers invested in efficient, the utility lost money. Decoupling is an increasingly common way to regulate how a utility gets paid. It breaks the link between the utility's revenue and the amount of energy it sells, removing the disincentive for the utility to be a full partner in energy efficiency and clean resource investments. In order to ensure that National Grid is a full partner in delivering on RI's energy goals, the General Assembly adopted decoupling in 2010 (R.I.G.L § 39-1-27.7.1). Decoupling changes only the way the utility is compensated for its distribution costs. Under decoupling, delivery charges are not based on sales, but rather on how much it costs to run the system and maintain the grid. This revenue cap is determined in a rate proceeding before the Public Utilities Commission, and the utility must justify and manage to these costs. If the utility collects more revenue than allowed by the cap, customers get a credit on their bill next year; if the utility collects less, customers will see a small surcharge. Customer savings achieved through energy efficiency benefit them directly and do not impact the utility's bottom line. As of September 2014, 21 states have electric decoupling and 25 have natural gas decoupling. In the Northeast, Maine,

Vermont, Massachusetts, Rhode Island, Connecticut, and New York all have electric decoupling (American Council for an Energy Efficient Economy, 2015).

Rhode Island's real problems are jobs and the economy. Why are we spending money on energy efficiency?

In addition to enabling nation-leading levels of energy savings, Rhode Island's investments in cost-effective, low cost energy efficiency are creating jobs and boosting economic activity. Energy efficiency reduces the cost of doing business in Rhode Island and lowers residents' energy bills, leaving them with more disposable income to spend on other goods and services. These two effects lead to job creation and economic growth. Every \$1 million invested in energy efficiency leads to the creation of 45 job-years of employment, and every \$1 invested boosts Gross State Product by \$4.20 (National Grid, 2014). The results speak for themselves:

- Since 2008, Rhode Island has invested \$558 million in energy efficiency and consumers have realized \$1.99 billion in economic benefits.
- The state's energy efficiency investments will create over 25,000 job-years of employment economy-wide and add \$2.34 billion to Gross State Product.

Rhode Island's 2014 Energy Efficiency investments alone will generate the following benefits over a 13 year period (Rhode Island Energy Efficiency and Resource Management Council, 2015):

- Create 3,607 job-years of employment
- Boost Gross State Product by \$331 million
- Increase personal income by \$244 million
- Increase state tax revenue by \$15 million
- In 2014, 618 full-time equivalent jobs were directly related to the delivery of the state's energy efficiency programs, a 15.7% increase from 2013.
- 899 companies were involved with delivering Rhode Island's energy efficiency programs, with 77% of those companies located in Rhode Island.

Why does National Grid earn a "performance incentive" energy efficiency?

There is an inherent conflict between the traditional utility business model and Rhode Island's Least Cost Procurement policy to reduce the state's energy costs by investing in all cost-effective energy efficiency. Under the traditional business model, the utility earns revenue when it sells electricity (or natural gas) – energy efficiency directly undermines the utility's bottom line by reducing sales. Rhode Island adopted decoupling in order to address this conflict. Decoupling keeps a utility from over or under-collecting an approved revenue cap due to increases or decreases in sales. However, decoupling only removes the *disincentive* for energy efficiency; it does not provide an *incentive* for the utility to be a full partner in implementing Least Cost Procurement. Performance incentives are a key tool to motivate the utility to achieve high levels of energy efficiency savings by:

- Allowing energy efficiency activity by the utility to be a source of earnings, rather than just a pass-through expense.
- Putting energy efficiency investments on a more comparable footing with other types of utility investments, such as in new power plants or transmission and distribution, which are allowed to earn a rate of return.
- Offering a financial reward and motivation directly tied to achieving measurable successes in saving energy.

The performance incentive is one effective tool for delivering economic benefits and cost savings to Rhode Islanders that far exceed the amount invested. Between 2011 and 2014, Rhode Island has invested about \$140 million in cost-effective energy efficiency and National Grid has been rewarded approximately \$11 million for achieving those energy savings. As a result, Rhode Island consumers have realized \$745 million in net economic benefits- an amount 66 times greater than the total performance incentive reward. National Grid is given the opportunity to earn 5% of the total energy efficiency spending budget for achieving 100% of the

energy savings goals approved by the Public Utilities Commission. It is worth noting that Rhode Island offers one of the lowest performance incentives for energy efficiency in the country, while achieving highest-in-the-nation energy savings goals. The median award among states with similarly-designed performance incentives is 8%, with a low of 4.2% and a high of 15% (American Council for an Energy Efficient Economy, 2015). The performance incentive signals that utility executives must take energy efficiency seriously in Rhode Island, and devote the necessary resources to achieving the energy savings goals set by the Public Utilities Commission. The benefits to Rhode Island consumers far outweigh the cost of both the energy efficiency investment and the performance incentive reward.

References:

Acadia Center, February 2012, [Best Practices for Advancing State Energy Efficiency Programs: Policy Options and Suggestions](#).

----- Support Efficiency Investments for a Clean, Affordable Energy Economy. Guest column in GoLocal Prov. January 2015 (a)

----- [Winter Impacts of Energy Efficiency in New England](#), April 15, 2015(b).

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Note: This document was authored by Abigail Anthony, Rhode Island Director of Acadia Center and has been endorsed by the Energy Efficiency and Resource Management Council for official use.



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CHP Topics for 2016 EE Plan

Presentation to EERMC

June 11, 2015



- Background
- Current state
 - Qualifying for CHP
 - Screening cost effectiveness
 - Customer potential and barriers
- Promoting CHP in 2016
- Topics for 2016 plan discussion

- Combined Heat and Power (CHP) is an electric retrofit EE offering because onsite co-generation is more efficient than producing thermal and electric energy separately and reduces energy and demand from the grid
- 2012 Amendment to Least Cost Procurement to promote CHP and incorporate additional benefits into screening
- Installed a few small systems since 2010, and Toray's 12.5 MW

- 2015 EE Plan conditions include:
 - Minimum total system efficiency 55% or greater
 - Thermal leading, and sized so recoverable heat offsets thermal load or uses waste energy to generate electricity
- Customer incentives vary based on system efficiency and whether customer has installed/installs additional EE measures

- Monetized benefits include:
 - Energy savings consistent with the avoided costs (same as all other EE)
 - Economic development benefits
 - Environmental benefits
 - Current screening counts local greenhouse gas benefits consistent with EPA co-benefits risk assessment (COBRA) for VOC, NH₃, NO_x, SO₂, particulate matter
 - CO₂ benefits included in avoided costs, described above
 - System Reliability
 - Use local distribution benefits instead of system values

- Potential for CHP
 - Potential is hard to determine, many potential customers are not suitable or interested
 - Company envisions 2 projects per year
- Barriers to CHP
 - Significant investment with longer payback period compared to other investments
 - perception as a risky investment
 - perception of continued economic uncertainty in RI
 - Significant operations and maintenance responsibilities and costs
 - Small system developers have been more active in MA than RI

- Work with vendors and manufacturers to lure business to RI
- Hire a program manager to guide customers through the process
- Complete the customer-facing CHP manual and improve information and communications
- Explore if Advanced Gas Technology fund can be more complementary to recent changes in EE incentives

- Clarify eligibility
 - Conditions specific to waste energy systems
 - Net output
- Benefits for methane
- Re-evaluate local environmental benefits (see next slide) and confirm economic development benefits

- Compare grid emissions baseline from ISO data to emissions from CHP host facility
 - For CHP, site emissions are combination of new CHP emissions and reduced boiler use or other fuel use
- Difference in emissions valued in \$/ton at COBRA table (2015 Plan Attachment 4, page 11)
- Discuss whether location of net environmental benefit is relevant in benefit cost calculation and requirement to “factor greenhouse gas emissions standards and air quality benefits” in CHP program
 - We will complete case study analysis for both Toray and NBC projects and share with Collaborative for recommendation to Council in 2016 Plan

Memorandum

To: The RI Energy Efficiency & Resource Management Council (EERMC)
From: VEIC/Optimal Energy Consultant Team (C-Team)
Date: June 11, 2015
Subject: Approve use of 2015 Supplemental Budget

The C-Team requests the EERMC consider appropriate budget allocations to support ongoing activities of the C-Team as we approach the second half of the year. The 2015 Consultant Team Scope of Work (SOW), approved at the December 2014 EERMC meeting, set a core budget of \$702,000 with an additional as-needed supplemental budget of \$80,000. As was noted in the SOW, *"...as has been the case in most years, unforeseen or unexpectedly more labor intensive issues may arise requiring increased funding to support satisfactory coverage of the issue(s). We look forward to establishing an effective process with the Executive Committee and full EERMC that effectively identifies when these needs arise, and facilitates appropriate funding commitments in a timely manner to expedite necessary activities/services."* To date, the C-Team has maintained a monthly billing rate under the core budget anticipated "burn rate" through May. However, we anticipate a series of new activities will begin, as well as some current activities expanding, over the next few months. To a lesser degree, some planned activities in the proposed core SOW will require less time. (These are documented below.) This will all coincide with an expected and significant increase in pace of hours used for core funding for the 2016 EE Program Plan and System Reliability plan development from June through October.

We understand the intent of the core-plus-supplemental budget was designed to assure effective use of the Council's budget, and that allocation of the supplemental portion would be made when the need was justified to allow the C-Team to fulfil Council expectations and needs. We raise this issue with the Council now out of prudence to assure any increase in budget spending pace without the funding firmly committed does not result in a compromise of core services later in the year. Although the process for the release was not clearly detailed, it was expected that it would be administratively easy while allowing for effective fiduciary control. As a suggestion, the C-Team proposes that a percentage of the supplemental budget is voted to be made available to the C-Team to support the anticipated increase in activities over the next few months. This would allow us to exceed the core budget pace of spending without having concern that there would be a constraint in funds later in the year to deliver necessary services for the Council through the end of the year.

Specifically, we suggest allocating up to 50% of the supplemental budget (\$40,000). This does not necessarily mean all \$40,000 would be spent, and we'd continue to only bill what is appropriate and necessary. For reference, historical budgets and actual spending have been:

| Year | Core Budget / Actual (%) | Supplemental Budget / Actual (%) |
|------|--------------------------------|--|
| 2013 | \$774,720 / \$740,101 (95%) | \$0 |
| 2014 | \$789,810 / \$738,432 (93%) | \$60,000 ¹ / \$51,867 (87%) |
| 2015 | \$702,000 / (~37% through May) | \$80,000 / TBD |

As referenced above, we have identified several essential activities that are forthcoming which will require additional hours beyond the core work. These included:

- New Council Member Orientation – planning, coordination and presentations at half day “retreat” for all members; support development of reference materials and “library”; follow-up one-on-one meetings to support topic/constituency-specific issues for each member; and on-going ad hoc support as requested
- Financing: expanding activities to support the coordination of stakeholders in the effective design and delivery of effective financing offers to be led by the RI Infrastructure Bank (RIIB), as well as furthering the outcomes identified in the EERMC’s financing study delivered by DEC. The potential scale of supporting RIIB was not anticipated under the “financing” item in the SOW.
- Project-related areas potentially requiring significant ongoing support including SIRI; Block Island EE support; and expanding coordination with renewable initiatives.
- Additional challenges in the development of the 2016 EEP and SRP – in addition to factoring some of the issues above (SIRI, Financing, renewables) in the 2016 Plan, additional issues such as delivered fuels, CHP and strategic electrification present challenging topics that will require significant analysis, research and stakeholder coordination to support effective integration in the Plan. Also, National Grid has migrated its entire Technical Reference Manual over to a new Technical Reference Library, which provides a web-enabled interface to review approved energy efficiency measures in Rhode Island. As part of this new tool, National Grid will include illustrative costs for each approved measure. As part of the 2016 TRM/L review process, the C-Team will now need to review these costs to ensure they are reasonable, and properly aligned with measures. Additionally, since this is a new tool, the C-Team fully expects there to be a learning curve associated with fully understanding the new Library, its features, and functions.
- Areas that may require less time than originally anticipated include fewer hours billed in support of the Annual Report to the General Assembly; less involvement than anticipated in legislative items in the January- July General Assembly; as well as potentially diminished likelihood of review and engagement on regional and federal developments on carbon mitigation and energy pricing.

The C-Team appreciates the EERMC’s consideration of this request.

¹ An additional supplemental allocation of \$51,867 was paid, primarily for the branding/awareness project led by subcontractor CRPP.