



# HINGHAM MUNICIPAL LIGHTING PLANT

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**Board Members**  
**Laura Burns, Chair**  
**Michael Reive, Vice-Chair**  
**Tyler Herrald, Secretary**

## MEETING HINGHAM MUNICIPAL LIGHT BOARD

May 14, 2024  
Zoom Meeting  
<https://us02web.zoom.us/j/88534166252>

### **Meeting Called to Order**

A meeting of the Board of Commissioners of the Hingham Municipal Light Plant (HMLP) was called to order by the Board's Chair, Laura Burns, at approximately 7:30 am on Wednesday, May 14, 2024, via Zoom.

Present:

Board Members:      Laura Burns -Chair  
                                 Michael Reive -Vice-Chair  
                                 Tyler Herrald -Secretary

HMLP:                      Thomas Morahan -General Manager  
                                 Mark Fahey -Asst. General Manager  
                                 Joan Griffin - Business Manager  
                                 Stephen Girardi - Engineer  
                                 Mike Menten - Division Line Manager  
                                 Brianna Bennett -Sustainability Coordinator

Guest:                      Ashley Muspratt (Center for EcoTechnology- CET)

Ms. Burns read the following disclaimer into the record:

*This meeting is being held remotely as an alternative means of public access pursuant to Chapter 107 of the Act of 2022 and all other applicable laws temporarily amending certain provisions of the Open Meeting Law. You are hereby advised that this meeting and all communications during this meeting may be recorded by the Hingham Municipal Light Plant in accordance with the Open Meeting Law. If any participant wishes to record this meeting, please notify the chair at the start of the meeting in accordance with M.G.L. c. 30A, § 20(f) so that the chair may inform all other participants of said recording.*

### **Financing Options for Ratepayers (Solar, Heat Pumps, etc.) by Ashley Muspratt of CET**

This presentation is a result of the Board's discussions about how to finance ratepayers' energy efficiency changes in their homes.

Ashley Muspratt is the CEO of The Center for EcoTechnology (CET). Ms. Muspratt will be discussing inclusive utility investments (IUI). Their mission is to innovate, implement, and scale the environmental solutions that communities need to survive. They have residential energy programs, customer support and innovation programs for inclusive utility investments (IUI) and carbon-based incentives. The two main reasons CET was started was because of the race for decarbonization and to ensure that the adoption of these technologies is equitable for all customers.

CET has been working with Ipswich Light Plant on an IUI program. The metrics that they found in their customer survey suggested the following:

- 28% stated that upfront capital is the biggest barrier to energy efficiency.
- 80% who accepted meaningful incentives live in homes above median value
- More than 95% of the incentives go to homeowners. One third of town are renters.
- 42% of the residents in Ipswich are of low or moderate income.  $\frac{2}{3}$  of whom are “cost burdened”

The type of IUI that was developed is called Tariff On-Bill Financing. Tariff On-Bill Financing is when the utility makes the investment in the building measure so it is not a loan to the customer but they recover the investment through a tariff tied to the meter. The tariff is guaranteed to be less than or equal to historic energy costs. This type of IUI gives very broad access to the program so renters and low-income homeowners can participate. Ms. Muspratt stated that IUI's have a strong market response which accelerates adoption and deepens retrofits due to its PAYS (pay as you save) structure. In addition, she expressed that these programs have shown to be a secure investment for utilities. There are two of the differences in the IUI program versus MassSave loans, home equity loans and pay out of pocket and there are no credit checks and no single payer. Without a credit check there is easy access and without a single payer, it is not tied to one individual because it is tied to the meter. If the renter or owner leaves the residence, the tariff is passed onto the next person. Ms. Muspratt stated that with an IUI you are saving at an almost equal rate to which you are paying.

In working with Ipswich Light, there were three parts to the feasibility study; (1) market analysis-would there be interest (2) measure analysis - which measures we could finance with IUI and (3) economic & regulatory study - business case analysis. Based on the residential survey, 75% were very interested and this was supported by Town Meeting and local ballot vote. Analysis of Ipswich was based on housing type. CET looked at three (3) housing types; 2-bedroom apartments, small houses and large houses and then determined the upfront costs for financing these measures, the tenure of the tariff on the bill and the size of the tariff. CET's analysis found that they could easily finance weatherization, heat pumps, heat pump water heaters if there was a good efficiency opportunity. Ms. Muspratt explained that the utilities incentives are still very important and that the IUI cannot take the place of the incentives as they are crucial to bringing the capital costs down and guaranteeing savings. CET and Ipswich worked with Clean Energy Works, national leader in building awareness of IUIs, to model a strong return on investment by controlling infrastructure costs, smoothing demand and increasing customer engagement.

Ms. Muspratt discussed the pilot program with Ipswich. They created Terms and Conditions, developed an IUI offer team to calculate the tariff and terms, developed the work and financial flow between CET, the utility and the contractors, and readied the utility billing system for the tariff. The upfront costs were determined by the 80-80 rule so that the maximum amount of money that can be recovered toward the capital investment is 80% of the estimated savings. In addition, the maximum tenure of the tariff is also 80% of the measure of life. Based on the three projects that they did complete in Ipswich, the total cost of upgrades was approximately \$35,000, of that \$23,000 was financed using inclusive utility investment, \$6,000 was utility incentives, and that left an upfront cost of \$6,000 for the customer. Ms. Muspratt stated that these figures show that CET was able to eliminate 84% of the upfront cost to the customers. The projected annual savings estimates for these three projects show that they maintained the 20% annual savings compared to

what they had historically paid in energy costs. CET developed a Municipal Utility Toolkit which is online with many resources and steps necessary to be ready to scale a program such as this. The timeline for this toolkit is approximately 12 months from exploring IUI, running a pilot, securing capital financing, and then installing the energy efficient changes. Ipswich was able to qualify as a rural utility so they could access a USA DA loan.

Ms. Griffin asked if each customer has the same amount of tariff or is it cost-specific to each particular customer. Ms. Muspratt responded that tariffs are tailored to the customer. Mrs. Griffin then commented that if every tariff is different, that sounds very complicated as far as implementation to our billing system. Ms. Muspratt stated that CET does not have anything to do with the billing system changes but she offered the help of Dylan Allen at Ipswich Light who claims that it was very easy to do. The tariff is a fixed charge and a separate line item on the bill.

Ms. Griffin asked how a renter can benefit from the IUI. Ms. Muspratt explained that the renter has to assume payment for the tariff while they are renting the unit but if the unit is empty, then the landlord must pay the tariff. There is a separate landlord agreement that has to be signed by the landlord. The landlord understands that they have to pay the upfront cost but they reap the benefit of lower utility bills and a healthier unit.

Ms. Griffin asked who determines the eligibility for the program. Ms. Muspratt stated that two things' determinants of eligibility are good standing on their bills and the building must be in good condition so that the investment is worthwhile.

Mr. Morahan asked how this program was funded by Ipswich. Ms. Muspratt stated that Ipswich received a \$5 million line of credit at 0% interest from USDA Rural Utility Service loan. They also got a grant for the pilot with the Mass Clean Energy Center. You must be a member of the Mass Clean Energy Center to get the grant.

Mr. Reive asked who makes the decisions for what is installed in a customer's home. Ms. Muspratt stated that it is a collaborative effort. The pilot did not include solar but they focused on weatherization, heat pumps, and heat pump hot water heaters. CET conducts the energy audits (SnugPro) and they do the specifications for the contractors. From that audit, CET develops an initial IUI offer to determine upfront costs, tenure of the tariff and the size of the tariff. They have a network of contractors they use but they encourage customers to get multiple quotes. CET will then work with the chosen contractor to ensure their quotes and designs are best for the property. Currently CET makes the design review a compulsory component to the process.

Ms. Burns asked if the review goes as far as the manual J. Ms. Muspratt responded in the affirmative. The utility is responsible for these review costs.

Ms. Burns asked if the three housing types were terms of the Ipswich pilot program or the general program. Ms. Muspratt responded that it was for the general program based on their feasibility study. CET uses town records to obtain ownership status, square footage of homes and number of bedrooms which would lead to the three archetypes (2-bedroom apartment, 1500-1700 sq ft home, and +2500 sq ft home) as defined in Ipswich. Ms. Muspratt also stated that CET reviews the existing incentives from the utility and MassSave to balance and understand the size of the investment. Ms. Burns questioned whether the size of the investment is limited by the ability to save on the investment for the customer. Ms. Muspratt responded that the customer will be paying more to the light plant because they are paying the former energy cost plus the tariff but they will have more efficient systems and will have removed the fossil fuels. She then stated that the mission of Ipswich is to accelerate the deployment of whole home heat pump systems and whole home electrification in a way that is more affordable because the customer does not have to take on major personal debt or pay a large amount of money upfront. Ms. Muspratt also stated that the utility can "pay down" the upfront cost. Ipswich, has an estimated \$10,000 return on investment per customer so they are willing to pay a few thousand dollars more to pay down the upfront cost for the

customer. In addition, Ipswich is considering increasing incentives to entice customers. Ms. Burns has despaired over the idea that Hingham can never offer incentives equal to MassSave but this may give us the opportunity. Ms. Muspratt stated that Ipswich did make some adjustments to their incentives based on their feasibility study. Ms. Burns stated that the \$6,000 investment figure which was stated in the pilot still seems like an “insurmountable” block to those on the lower end of the earning scale.

Ms. Burns asked if CET knew about the new Green Bank that the Commonwealth has established and Ms. Muspratt responded that “CET is running it.” Ms. Burns asked if the \$6,000 can be paired with a loan from the Green Bank. Ms. Muspratt stated that one of the key restrictions to the home energy saver loan is that you have to own the home so that is not an option for renters.

Ms. Burns questioned the 99.9% collection rate because if the investment is being made by the utility and therefore the utility has some ownership aspect in someone's home, then what happens if there is a default? Ms. Muspratt stated that Ipswich is not taking any ownership and has put this information in their terms and conditions which they established with the help of KP Law. The terms and conditions are on their website and you can access them in the CET toolkit. The terms and conditions state very clearly that the occupant is responsible for maintenance and fixes unless it is under warranty. Ms. Burns reiterated that this is actually an unsecured loan. Ms. Muspratt responded that CET is careful not to call it a loan because there is no single player obligation. CET prefers to call it a betterment, but not a legal betterment.

Mr. Morahan stated that if an owner sells the home, then HMLP would collect the money. Ms. Muspratt responded that Ipswich is allowing homeowners to accelerate payment if they are selling their home or they can transfer the tariff to the next occupant. Ms. Muspratt pointed out that the new homeowner would be getting a home with state-of-the-art equipment and lower energy bills. Mr. Morahan stated that the owner would have to disclose this is on their bill and that would be part of the negotiation with buying the home. Ms. Muspratt said that CET does have a separate disclosure for renters that the landlord is obligated to share with future tenants.

Ms. Burns questioned what source of capital other municipalities would be seeking to fund the IUI. Ms. Muspratt has been speaking with Massachusetts Community Climate Bank about IUI and they are interested and another meeting has been scheduled. She said that MMWEC does have a pooled loan program for their members with high limits and below market interest rates.

Mr. Reive commented that the IUI is very encouraging for homeowners because it provides them with a plan to work with. He asked for the costs and time period for an individual home upgrade. Ms. Muspratt stated that the average cost was \$35,000 with an upfront cost of approximately \$6,000 and the payoff can be calculated over different periods. For instance, the maximum period for a heat pump is 14 years (80% of the measure of life) and heat pump hot water heater is 8 years. Weatherization is a bit longer although it can be paid back in a shorter period if desired. The longer the period, the smaller the tariff. If a customer installs a heat pump and weatherization then the measure of the weatherization will be stretched out to match the time frame of the heat pump. Ms. Muspratt emphasized that the MassSave heat loan is a 7-year loan so the payments are quite high; whereas, the IUI can spread those payments over 14 years which is helpful to customers. Mr. Reive questioned how easy it would be for an owner to obtain a payoff amount if they wanted to accelerate payments and Ms. Muspratt responded that it would be very easy.

Mr. Morahan asked if each unit would be a separate line on the bill. Ms. Muspratt responded that each measure is separated out on the bill because they are implemented at different times and have different payoff times.

Ms. Burns comments that she thought that the IUI program would be most valuable for people heating with oil because they are moving to electric heating so they are going to save. Ms. Muspratt replied that given the massive incentives currently being offered by Mass Save for conversion from gas the programs are equivalent. Ms. Muspratt stated that by improving your home with state-of-

the-art equipment, lowering the utility expenses and showing that you are climate conscious are all very attractive attributes for a young first-time home buyer. CET can do an analysis for Hingham that would provide a more accurate estimate of the likely upfront costs with our existing incentives.

Ms. Burns asked the cost of the feasibility study. Ms. Muspratt said that she did not have that number but that a proposal was ready to be sent over to HMLP which would break down each of the steps of the study.

### **Board Reorganization**

Ms. Burns asked if her fellow board members were interested in reorganizing the Board since this is the first meeting since the town election. There was a motion to keep the positions on the Board the same.

*Vote:*

Mr. Herrald -Aye

Mr. Reive - Aye

Ms. Burns - Aye

### **Income Adjusted Rate for General Heating Residential Customers**

Mr. Morahan explained that there are some residential customers that qualify for the Income Adjusted rate but because they are on the GH-R rate (General Service Heating - Residential) a new rate would have to be approved. Ms. Burns asked that an analysis of creating an Income Adjusted Rate for GH-R be done so that the Board can understand the impact. This discussion has been tabled until the next meeting.

### **Approval of Meeting Minutes**

The following meeting minutes were approved with minor adjustments

- March 12, 2024
- March 27, 2024
- March 14, 2023

There was a motion to approve all meetings with edits.

*Vote:*

Mr. Reive - Aye

Mr. Herrald -Aye

Ms. Burns - Aye

### **Financials**

Mr. Morahan stated that kWh sold are higher than the past 3 years. Revenue is in line and expenses are slightly lower. Mrs. Griffin will be closely monitoring the net income so that we do not exceed 8%. HMLP may have to lower the PCA (power cost adjustment) to ensure we remain under the 8%. Mr. Morahan stated that HMLP is running below what was budgeted for the power cost analysis which is based on dollars per megawatt hour.

## Updates:

- **Transmission Line:** Mr. Morahan stated he hopes to file with the Siting Board in early June 2024. He has a combined meeting schedule on June 4, 2024 with the Zoning and Planning Board. This meeting is to ensure that HMLP gets any and all input from these Boards. A flyer will be placed in the May 2024 statements so that customers are aware of the meeting.
- **HMLP solar:** Mr. Morahan stated that the HMLP solar canopy is complete; however, it cannot be energized until we receive equipment that is not due until October 2024.
- **EV chargers:** Mr. Morahan stated all chargers are operational.
- **Municipal Solar:** Mr. Morahan stated that the task force is working with the PACE program to reach out to commercial building owners regarding energy efficient improvements to their buildings with very favorable financing. The task force did submit a proposal to the Town in January 2024 but as of today, they have not received any response. There is one commercial customer that is very interested in the program.
- **Landfill solar:** This item will be removed from updates.
- **Capital projects:** Work on Circuit 9 will begin shortly.
- **Demand Response Program:** Mr. Morahan reported that Energy New England (ENE) was trying to work with MMWEC on a demand response program but MMWEC is not willing to collaborate. Mr. Morahan spoke with the CEO of ENE, John Tzimirangas, and he asked for more time as his team is hoping to have a program in June 2024. Ms. Burns asked Mr. Morahan what are his thoughts and although he is disappointed that the collaboration did not happen, he would like to grant ENE's request for June 2024.
- **Time of Use (TOU) Metering Project:** This item will be removed from updates.

## Other New Unforeseen Business:

Mr. Morahan stated that the financials are complete so he will have the auditors come in June followed by ENE's annual update.

Mr. Herrald asked if we could make sure that when ENE comes in that they cover how we are matching up our contractual energy with our actual usage on an hourly basis and seasonally. In addition, he would like to know what the net cost is to the light plant of being unbalanced on an hourly basis.

Motion to adjourn the meeting.

Mr. Herrald - Aye

Mr. Reive -Aye

Ms. Burns - Aye

Meeting adjourned at 9:09 am

**Attachment:** CET PowerPoint Presentation