

## Increasing Energy Efficiency in Municipal Buildings: Successes, Challenges, Strategies

### Virtual Workshop

June 22<sup>nd</sup> 2022

#### Copy of the Zoom Chat

00:52:30 Sarah Concannon: Register for next week's workshop here:  
<https://www.cmrpcregionalservices.org/municipal-energy-planning>

00:53:29 Sarah Concannon: CMRPC AARC: <https://centralmassrpc.wixsite.com/aarc>

01:06:47 Pamela Cady: Can you share information on costs to add ASHPs to schools?

01:19:53 pete dunbeck: Luba, can you elaborate on the economic model for the ESCO, Does Worcester carry the \$100M debt? What timeframe is the \$164M savings over? Are each phase independently economically justified?

01:23:10 Carolyn Dann: Can Luba also elaborate on the \$100mm of bonds. What kind of bonds? Who issued them?

01:23:58 Eric Rumsey: Is the existing electric grid able to support the switching of municipal buildings/schools to purely electric heating/cooking/etc.?

01:27:39 Maria De La Cruz: MASS Save incentives should include air condition. A regular AC transmit and waste too much energy

01:28:02 Luba Zhaurova, City of Worcester: Some more info about our ESCO - <https://worcesterenergy.org/leading-by-example/esp>

01:29:34 Luba Zhaurova, City of Worcester: Each muni has the right to sell municipal bonds - it's like loaning \$ from a bank. Here our CFO took care of the logistics. I am checking on whether it is a 10 year or 20 year bonds.

01:30:22 Luba Zhaurova, City of Worcester: Yes - every phase was a separate contract amendment and had to be independently financed (i.e. selling bonds) and justified in terms of payback.

01:30:29 Priscilla Ryder: Who did Chris use for the technical studies and what were the costs of those studies.

01:30:30 Lauren Mattison: Maria, Mass Save offers incentives for heat pumps, which provide high efficiency heating and cooling. If you aren't familiar with heat pumps, you can learn about them in our training at <http://ceere.org/heatpumpworkshop.html>

01:32:47 Luba Zhaurova, City of Worcester: No, the current grid cannot handle upcoming building electrification. Utilities have been studying grid modernization for a while and have been doing some upgrades... That is often the biggest obstacle for each individual project currently - exceeding existing electrical capacity (of the building, or worse - of the local electricity transformer for the local area)

01:34:44 Luba Zhaurova, City of Worcester: Just confirmed - the municipal bonds in Worcester were for 20 years, which stretches out payments enough to be largely offset by energy savings due to the project.

01:35:48 Luba Zhaurova, City of Worcester: I need to say that the city gets to be credit verified every year by credit agencies, which affects the interest rate on our bonds (we are in pretty good standing, but it is a stressful process for the CFO every year, as you can imagine :))

01:37:49 Jeff Legros, MRPC: Maria,  
<https://www.masssave.com/en/saving/residential-rebates/air-source-heat-pumps>

01:39:06 Adele Franks: What is the best way to insulate brick walls and how much does it cost?

01:40:41 Anita Roy Dobbs: [It's not possible for attendees to save chat; could you save it and make it available with slides of the presentations? Thank you.]

01:41:50 CMRPC: Yes, the chat will be available on the right side of the Zoom recording. The recording will be posted on the workshop webpage:  
<https://www.cmrpcregionalservices.org/energy-efficiency-in-buildings>

01:44:15 Anita Roy Dobbs: Chris mentioned Seven City Facilities; is that a project / program ... or just meaning 7 of the city's facilities?

01:48:52 David Wasielewski Dalton: did META grants cover the engineering studies?

01:49:34 claire chang: there is a grid mod legislation being considered right now in the statehouse.

01:50:05 Luba Zhaurova, City of Worcester: Yes, but it is \$15,000 max, so it is often not enough to cover all the costs of engineering study. depends on each scope of course.

01:50:46 Mary Quigley/Ashfield: Re: insulating masonry buildings. [www.buildingscience.com](http://www.buildingscience.com). Kohta Ueno did great work advising Conway School of Landscape Design in retrofitting an old brick building at the former Northampton State School. Moisture control is essential.

01:51:14 Maria De La Cruz: Solar panel agencies are not saying the truth about cost, and consequences if you want to sell your house

01:52:17 claire chang: we had a ESCO with Siemens which didn't work out because they didn't do any insulation.