

**Newton Citizens Commission on Energy
April 25, 2017 Agenda
City of Newton**

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



**Setti D. Warren
Mayor**

Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz (*ex-officio*)

Advisory Members:

Peter Barrer, Edward Craddock
Frank Gundal, Brant Davis

Telephone 617-796-1019
c/o Office of the Sustainability Director
Newton City Hall, 1000 Commonwealth Avenue
Newton Centre, MA 02459

**The April 2017 meeting of the Newton Citizens Commission on Energy will be held:
Tuesday evening, April 25th, 2017 at 7:30 p.m. in Room A of the Newton Free Library. (The
room directly across from Drucker Auditorium.)**

Agenda (Any other business properly brought to the Commission's attention)

(Review of March 2017 minutes)

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New Business To be discussed

1. Update on Community Choice Aggregation: Recent meetings with community partners, agenda shaping up; conversation 25 April with Ann Berwick on current time line
2. Review of Lexington Energy Action Plan, do we encourage a similar plan? What are the costs and benefits? Is there a marketing role for glossy plans?
http://www.lexingtonma.gov/sites/lexingtonma/files/uploads/lexington_energy_emissions_inventor_y_report_3-2017_0.pdf
3. Update on Memorial Spaulding school, and City –wide efforts to incorporate energy and climate education linked to efficiency and student/teacher/staff behavior (teachers are swamped).
4. Update on Solar-On-Newton properties. “Solar porn” lets look at some photos oh yeah
5. Conversation with Betsy Harper, Sustainability Manager, MA Department of Housing and Community Development (DHCD) on a) geothermal geexchange HVAC for buildings; CEC grants, AEC market

betsy.a.harper@state.ma.us

Also, John Ballam is the guy at DOER who is in charge of monitoring and making sure that the credits that are sent into the AEC market are verifiable.

He didn't answer my question about how much the monitoring system will cost, but I'm projecting \$30k – plus \$5k for a one-year contract with a service company (ClearRESULT – the old CSG) so that the monitoring data is actually looked at.

These are costs that aren't often included in the original design of geothermal. We've had some hiccups with our first, smaller system. The monitoring equipment still isn't working, and the system needed to be rebalanced. And the contractor didn't follow the spec's and failed to install an air vent at the highest point of the system. And the original design assumed three phase power, which any layman should know was not going to be available on a rural road. So we had to go from continuous pumping to VSD's, which sounds good, but changes the diameter of the pipes and a fair amount of other things. There is a LOT of technical expertise involved in making sure these things work.

Ridiculous that I'm just now finding out about these design changes and contractor sloppiness 6 months after start-up. For a school in Newton to install one of these, there would need to be a Project Manager like me in charge for many years. I actually don't have time for this – at all, given that I oversee 30+ projects. So I'm going to hire third party commissioning for the larger 30 ton system. There will still be problems, but hopefully fewer.

-betsy

did not finish reading your email before responding. Regarding your questions about pricing and selling the AECs:

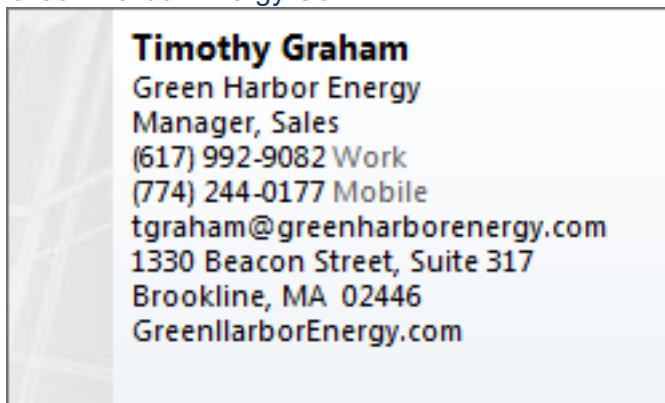
1) A conservative estimate of the current gross value per AEC would be \$19.00.

2) Late fall is more realistic for the incentive start date. However, AECs based on system meter reading data that has been accumulated by an approved metering system for operations prior to the start date can be credited back to the account.

3) Below are contact info. for a couple of firms that provide authorized representative services which include brokering the AECs as well as preparing, submitting and following the system statement of qualification application through to final approval. There will be a brokerage charge that will be deducted from the gross sale price.

Nexant Inc.
Christina Powell
cpowell@nexant.com
[\(480\) 768-6018](tel:(480)768-6018)

Green Harbor Energy Co.



Both of these firms will require that meter data be transmitted by the data acquisition system to the independent meter reader electronically with remote access.

Josh,

As you know from our conversation, the Attleboro Housing Authority is very likely going to install a 50 ton geothermal system. Our architect, Fay (copied above) is attempting to determine if this falls under the C&I program, or a Res/Multi-family program. The requirements Josh laid out for me were pretty simple – using an Energy Star piece of equipment and making sure there is a test boring hole drilled. The payments happen in two lump sums – the first (30% of the payment) is after the final design is complete and the equipment is ordered. (For our procurement, this would mean a bidding contractor would have needed to be chosen.) The remaining 70% is paid at certified project completion (requiring commissioning???). Josh, for you to know, we will commission the system at installation, and will hire ClearResult to monitor the operations of the system for the entire first year. These requirements are spelled out in detail on MassCEC's website.

John,

Fay is looking to determine exactly the requirements of the monitoring system needed for the AEC market. By the way, we're carrying an approximate \$30k cost for this

monitoring system (which needs Internet conductivity). There is no public Internet to the site yet, so I'm not clear whether this \$30k includes the price of establishing the latter. Perhaps you have a rule of thumb on how much a monitoring system would cost for this size installation. Also, I know that the AEC market isn't anticipated to be live for geothermal technology until sometime later this spring or summer. But is there documentation on the market that you could share? Also, is there typically a broker/aggregator who files the paperwork and transmits the funds to the HA? If so, is the price of that aggregator fixed (at what level?), or a % (and again, approximately how much \$)?

Many thanks. You can each respond directly to Fay, but it's a good idea to cc both me and the DHCD staff engineer, John Donoghue, on all your emails.

-betsy

Betsy Harper

Sustainability Program Developer

Department of Housing and Community Development
(DHCD)