

Energy and Sustainability Committee
May 26, 2009
Council Chambers, Portland City Hall

Committee Members In Attendance: Mayor Jill Duson, Councilor David Marshall (Chair), Councilor Dory Waxman

Staff Present: Troy Moon, Pat Finnigan, Michael Bobinsky

Members of the Public Including: Ed Lepore, Kleo Taliadouros, Bill Weber, Joe Moran, Fred Pedulla, Marvin Sachs, representative from League of Young Voters

1. Review Minutes from April 21, 2009

Postponed until next meeting

Public Comment: none

2. Resolution Supporting LD 1140, A Resolve Directing the Department of Education and the Department of Agriculture, Food and Rural Resources to Convene a Work Group to Strengthen Farm to School Efforts in the State

Discussion – Marshall said this was brought to the attention of the committee by Muskie School of Public Service students. Duson asked about the timing of the bill. No one sure if it would be too late for the committee to recommend that the City Council approve it. Duson motioned to make the recommendation. Committee voted 3-0 in favor of doing so.

Public Comment - none

3. Update on Energy Service Performance Contract

Ameresco update – Presentation titled “Street Lighting and ESPC Update” delivered by Ameresco. Presentation covered lumen, efficacy, color rendering index, LED technology, induction technology, maintenance savings, energy conservation measures, and other details related to street lighting efficiency.

A few examples of lighting: High-Intensity Discharge, such as High-Pressure Sodium, lights – typical of what the city has right now. These are high-efficiency lamps that produce a golden light. LED lights are

a low-energy using light source. One problem with them is the housing is susceptible to high temperatures and may get premature failures.

Induction technology – Similar to fluorescent lights in that it uses a blend of gas; efficient source of lighting, good color, resist vibration – typical cause of failure for street lights. Rated life is 100,000 hours (11-22 years), compared to 24,000 hours for many fluorescent or HID lamps. A comparison chart of all of the lighting technologies was shown. Mayor Duson asked about color rendering. Councilor Waxman asked why Induction lighting “may contain” mercury – answer is because can get it without mercury.

Ameresco recommends using an induction-type lamp for replacements in the city.

Project Update: Field work on 55 buildings completed. Focused on the peninsula, but also have Cliff Island and a cemetery in S. Portland, owned by the City of Portland. Have come up with 400 energy conservation measures, and are now trying to determine which are best to prioritize. For example, fuel conversions are a good measure, but not a big return for carbon footprint. Also, looking at boiler upgrades, HVAC controls, and cogeneration (microturbines, fuel cell, etc) as priorities. The Barron Center is a good site for cogeneration.

Other measures include: street lighting, building envelope (roof insulation, window replacement, etc), heat pumps, and renewable energy (solar thermal, solar PV, etc). Specific lighting measures include: lamp and ballast EE upgrades, HID to T5, new Super T8 fixtures, occupancy sensors, day lighting and day light harvesting controls, solar tubes, LED exit signs and fixtures, CFL, and complete redesigns.

Renewable energy development: solar photovoltaic and small wind turbine generators at Fish Pier #35 and PATHS. Good conditions and potential for public education. Ameresco stayed away from large scale wind generation due to the potential issues surrounding proposals in urban areas – focused on small turbines (2,000 kWh) and solar systems (38,000 kWh) at PATHS, and similar systems at the Fish Pier. A big challenge is lack of incentives; however, seeking alternative funding sources and low-hanging fruit such as ECMs (lighting) to help with payback periods. Moon asked for more explanation on “low-hanging fruits.” Ameresco explained that “fruits” include lighting and that by combining these efforts with all of the other efforts in the city, the mix of payback periods will lead to an overall effort with a desirable payback period.

Moon introduced Betty Mammone who is helping the city identify funding sources. She explained that there are a number of angles to take when seeking funding including education, job creation, economic development, demonstration project funding, alternative energy, etc. She has met with the state DECD - \$50,000 grant for renewable energy. DECD helps with leveraging resources and funding streams related to job creation, etc. A good project would be one that combines public education role (such as at PATHS) and job creation, skill enhancements, and renewable energy. In addition to the ECM report on June 12, funding sources from private foundations and state and federal agencies will be identified.

Relationships are a critical piece of this overall effort and the city can help with that. Portland is in a good position to pursue funding from all of these sources because it is prepared.

Waxman said it is great that Ameresco can prepare grant proposals and asked when upcoming grant deadlines are coming – EECBG, June 25 is next deadline. Also, there are opportunities for multi-year funding at the federal level. Duson asked if this process allowed for opportunity to show link between efficiency measures and job creation – good for recovery funding. Duson asked if roofs are appropriate for roof gardens, such as at PATHS, which has an innovative gardening program. Also, good for promoting local food production. Ameresco has been looking at rainwater harvesting at PATHS. Waxman said that during her time on the School Committee, PATHS had an active building program. Moon said Betty will be able to show how these various efforts are impacting the lives of those they are serving, which will be incorporated into grant proposals.

Marshall asked if June 12 is still the date set for the preliminary report from Ameresco. Moon confirmed that is so. An internal city review process will follow. Recommendations will then be made to the committee afterward. Timing on that is the July meeting, Moon said. Marshall said he would like to have third party review and feedback in the process, given the substantial financial investment. Marshall asked about the status of the Jetport in this process – no formal audit done there, but staff there has already done an audit and the city will include them in the conversation. Marshall wanted clarification on why fuel conversion would not yield a big carbon footprint change – answer is because still would be using fossil fuels, but some cleaner than others.

Public Comment: Curt Sachs, architect, acknowledged Marshall's accomplishments, after earlier criticisms of the process. Sachs said Ameresco seems to be doing good work to date. He emphasized that this subject is not "rocket science" and that the upcoming report should include a matrix that can clearly explain the current conditions, as well as projected conditions 5 and 10 years from now. He emphasizes this because much of the technology being discussed depends on sound infrastructure – for example, it would be a shame to invest in solar tubes, only to have to replace the roof of the building. He also cautioned the committee regarding wind power, saying all 55 buildings would have to participate in order to make it cost-efficient. Photovoltaic technology has not improved much over the years – also not good money spent. Ameresco was honest in its presentation about these technologies. Green roofs are a potential solution, though must be coordinated to get real results beyond being an educational tool. In general, begs the committee to be sure when read the report what is realistic and what the payback period is going to be. He commended the committee on its work so far.

Naomi Merman said solar thermal has been one technology with a good payback and the Barron Center would be a very good site for its use. Not sure how that would fit into the vision of cogeneration there. She also raised the issue of the lights at Fitzpatrick stadium and Deering Oaks and asked why those were not included in the process. She fully supports the idea of having a third party review of the report – we all do better when we have someone else reviewing our work.

With regard to the ice arena, solar thermal is an option because it uses a lot of hot water for the ice rink. Moon said water conservation measures are another piece of the puzzle not mentioned in the discussion, and that will be included in the report. Moon said he expects the report to be very useful in decision making efforts. Moon said Fitzpatrick was included in the process, but Deering Oaks was not, though it could be added. He said that one of the upgrades to street lighting would be cleaning the fixtures in order to get maximum light, and making sure all lights are operating properly. Moon said city asked Ameresco to provide information on technologies it may or may not choose to use in order to respond to citizen inquiries. Ameresco said the report will also include information on each of the buildings, such as age, conditions, etc.

Moon said most of the removal of streetlights would take place off peninsula. Few if any lights are targeted on the peninsula. The city has about 7,600 streetlights, and the city owns a little over 1,000 – mostly along Congress and in downtown. The city plans to upgrade those, and then go through the remaining lights to target for removal and upgrades. In cases when city owns pole and fixture, and not leased from CMP, quick action is possible. Moon said the city will retain public safety in identifying streetlights for removal.

4. Energy Efficiency and Conservation Block Grant

Moon reported that the city is eligible to receive \$684,700 from US Department of Energy. It is required to create a strategy for using those funds if it were to receive them. Staff recommendations are the following:

Streetlight upgrades are the primary recommendation for using the funds - \$450,000. Ameresco will determine how far those funds will go in making those upgrades – there are several options the city can choose from, which will be presented in the report. Staff made this recommendation because it offers a broad public benefit and significant savings to the city through greater efficiencies. Waxman asked how much time the city has to spend the money – 36 months to spend it and 18 months to dedicate it.

Moon said the second recommendation addresses education and outreach needs regarding energy efficiency, such as materials, website, meetings – this would be conducted by a new Sustainability Coordinator position. Also, to fund internships and fellowships with local students, particularly the Muskie School of Public Service. Another recommendation is to devote funds to staff development and training. The city has until June 25 to develop this energy strategy as part of the larger proposal for the EECBG grant. Council action would have to take place at the June 15 City Council meeting in order to accept the funds.

Weatherization, climate action plans, recycling, energy audits for businesses and residences, renewable energy sources at municipal buildings, etc are all appropriate strategies for funding, Moon reported. Waxman asked Moon if the new Coordinator would be in charge of the internships – he said he would be working with him to do it, as well further developing the Climate Action Plan and a culture of resource conservation among city staff. Waxman asked if the sustainability coordinator would fall into a

new department – Moon said it would fall under Public Services. Duson wanted to make sure the position is clearly a project position and that it has a termination date to avoid issues down the road. If more funding is available, then continue it if desired – but important to make it clear upfront that the position is a project-based one. She said she likes the internship idea very much and asked who would do the staff training and development. Moon said outside expertise would be sought – Efficiency Maine, Green Building Council, etc. How about data collection and tracking? Duson asked. She said the city has a plan and she appreciates this opportunity to realize it with these recommendations. She would like to see the city assist residences and businesses seeking funding for their individual efforts.

Public Comment: A representative of the League of Young Voters urged the committee to use bond money for projects discussed and stimulus money for something more creative to make a larger impact on Portland citizens. She said the money should go to increasing the efficiency of rental units in the city and renewable. Rental unit owners would conduct audits and the city would work them and provide small grants, as well as help with larger funding sources. She also urged the committee to hire local workers for projects. Right now, landlords don't have a lot of incentive to upgrade their buildings – if the city urged them through incentives, could help renters – roughly 65% of residents.

Curt Sachs suggested, after street lights, prioritizing building inspector training.

Joe Moran, representing the Boys and Girls Club of Southern Maine, recommended to the city a particular project. Right now, its building here is wasting oil, but needs \$105,000 to make necessary conversions. Also considering solar power, but want to make sure it is suitable for their situation. Moran said he works for Efficiency Maine and is a retired executive from CMP, adding that he agrees with the discussion during the meeting with regard to strategies.

One citizen of Portland, and employee of the City of Lewiston, warned the committee not to hold its breath for a second round of EECBG funding, given the competitiveness for the money.

Marshall asked Moon what he needs from the committee at this time, and Moon said that he needs guidance from members in terms of how to strategize use of the EECBG funding. The staff recommendations have been presented, and committee feedback is necessary to develop and finalize the application prior to the June 25 deadline. Duson said she was intrigued by the idea of how to impact renters, perhaps a cost sharing effort. Marshall said one method could be to allow landlords to work with the city to identify state and federal funding and go through the application process with them. Another would be to include language that stresses terms on workers hired. Waxman said the education and outreach position could be used to inform landlords and homeowners on what their options are for getting funding for energy upgrades. Moon said the staff sentiment is that there are many programs coming from the state regarding funding for commercial entities and households so should focus on efforts within the municipal sector (website development, education, training, etc). Duson said she would like to see incorporated in the proposal a call for direct outreach to homeowners and businesses – something other than the website. It could be the work of a new coordinator, and it could be part of staff training. Funding is very complex and unsure right now, she added, so ensuring

robust outreach would be effective. Marshall added that no funding has yet been targeted for renters and landlords, so assistance for them would not be redundant. The new coordinator and ongoing interns could be used for efforts such as this, he said. Moon said that it is fine if the committee wants to go in such a direction, but warned that the new position might get diluted by doing so. Waxman suggested working with the housing department on outreach to landlords and renters – and perhaps Opportunity Maine, Marshall added.

Duson said there must be some existing program with eligibility criteria in the state, rather than setting up a new one in the city alone. Marshall agreed saying every available state and federal funding source should be used in conjunction with local efforts. A member of the public suggested looking at the Cambridge Energy Alliance as a model.

Moon advocated keeping the energy and sustainability program, and using ESCO funding for streetlights as necessary. Marshall said the committee supports this proposed program and developing the culture of conservation outside of City Hall and into the broader community.

5. Staff Reports

Fuel usage report: Bad news, Moon reported. The city is shooting for 5% reduction, but actually exceeding the historical average. Fleet Users Committee and Fleet Manager are taking strides to change this trend. Marshall said the committee continues to be disappointed and hopeful on this matter. Moon said fleet users need to be more aware of their behavior and its consequences. Waxman – how does staff management communicate to staff on efforts to cut fuel usage? Moon – depends on the department, different in each. It might make sense to revisit this issue with City Manager. Duson recommended putting together charts for that meeting so that it is clear who is doing what. Moon said that is doable.

6. Date Set for Next Meeting

Moon said city recently held meeting on preparing for climate change and group assisting the city (ICLEI) would like to present to the committee while in town – available on June 23.

Committee set next meeting date for Tuesday, June 23 at Council Chambers.

7. Meeting Adjourned

Respectfully submitted by Greg Williams

