



City of Ann Arbor

301 E. Huron St.
Ann Arbor, MI 48104
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Action Minutes

Energy Commission

Tuesday, January 8, 2019

6:00 PM

Larcom City Hall, 301 E Huron St,
Second floor, City Council Chambers

CALL TO ORDER

Chair Appleyard called the meeting to order at 6:05 PM

ROLL CALL

Present: 10 - Charles Hookham, Brigit Macomber, Mark Clevey, Shoshannah Lenski, Wayne Appleyard, Noah Levin, John Mirsky, Carlene Colvin-Garcia, Jack Eaton, and Jay Zocher

Absent: 3 - Mike Shriberg, Charlotte Jameson, and Jeff Hayner

APPROVAL OF AGENDA

A motion was made by Clevey, seconded by Mirsky, that the Agenda be Approved. On a voice vote, the Chair declared the motion carried.

APPROVAL OF MINUTES

A motion was made by Mirsky, seconded by Lenski, that the Minutes be Approved. On a voice vote, the Chair declared the motion carried.

PUBLIC INPUT

No public input.

ENERGY REPORT - NEWS FROM THE ENERGY OFFICE AND COMMISSIONERS

Staff MacDonald informed the commission of efforts made by the Office of Sustainability and Innovations to consider (1) pilot-scale energy-recovering turbines for use in the Water Treatment Plant and (2) using electricity

generated from landfill gas to power the Wheeler Service Center and its associated costs. Staff MacDonald informed the commission that the office of sustainability was looking into the possibility of volunteer labor for installing solar arrays on fire stations.

Staff MacDonald informed the commission of updates to solar tax exemption bills. Chair Appleyard discussed the two bills passed by the State House of Representatives and Senate that were vetoed. Commissioner Clevey informed the commission of GLREA's activity on the topic of the pair of bills, and discussed the background of the bills.

Chair Appleyard informed the commission that reported US greenhouse gas emissions have increased between 3 and 4% this year, despite significant reductions in the use of coal-powered electricity.

Pee-Cycling Presentation

University of Michigan Masters Student Stephen Hilton of the School for Environment and Sustainability and the Center for Sustainable Systems presented to the commission on the topic of the environmental impact of urine diversion and recycling, or pee-cycling. The nitrogen and phosphorous used in fertilizer requires large amounts of natural gas and phosphate mining, which then requires energy and resources to remove from wastewater. While urine comprises about 1% of wastewater, it contains 70-80% of nitrogen and 50-60% of phosphorus.

A Life Cycle Assessment (LCA) evaluated a urine diversion and recycling system compared to the conventional system to better inform municipalities. The LCA compared global warming potential, energy demand, water consumption, acidification potential, and eutrophication potential metrics. Benefits of the system included reducing flush water by 50%; there was also a reduced carbon footprint from offsetting synthetic fertilizers. Environmental benefits included reduced global warming potential, water consumption, and eutrophication potential. For more information, a published report and Excel-based tool are available at werf.org.

Commissioner Clevey discussed previous legislation that blocked low-flow toilets, and the potential for specific industries to oppose the proposed system. Presenter Hilton informed the commission that another group is interviewing stakeholders and evaluating perceived support. Chair Appleyard and Presenter Hilton discussed the inclusion of the environmental impacts of acid-based processes. Chair Appleyard and Presenter Hilton discussed comparing applications of urine diversion and recycling to composting toilets. Commissioner Mirsky, Commissioner Hookham, and Presenter Hilton discussed pilot-scale systems currently operating. Commissioner Mirsky discussed that the topic may also be of interest to the Environmental Commission.

Tubingen Germany Energy Presentation

Commissioner Mirsky presented on what representatives from Tübingen, Germany, sister city of Ann Arbor, shared on their most recent visit to Ann

Arbor. Both cities are university towns located on rivers experiencing growths in population, habitation, and jobs. Tübingen has a tradition of sustainable city development related to traffic planning, transportation and mobility, and energy usage.

Tübingen has enacted a goal of reducing energy-related carbon emissions by 25% by 2022 relative to 2014 levels. They have already achieved an 18% reduction. Tübingen focused on building infrastructure that provides options for energy savings.

Tübingen funds photovoltaic systems through a solar roof market, placing citizen PV systems on municipal roofs. They also enacted an obligation to install photovoltaic systems as part of property purchase contracts. As a result, photovoltaic capacity has increased 10 fold since 2007.

Tübingen municipal operations were powered by 100% green electricity generation in 2007. The City of Tübingen's goal of having 50% of energy come from renewables, was reached in 2017. Commissioner Mirsky discussed tracking similar metrics for Ann Arbor.

The German government provides retraining for unemployed citizens at the federal and state level. Tübingen provides training to become energy consultants and auditors. The programs are funded by a revenue/savings sharing plan, with 50% of savings flowing back into the community.

Commissioner Macomber and Commissioner Mirsky discussed the role of stricter building regulations and higher utility costs to incentivize building standards. Chair Appleyard informed the commission that Germany previously incentivized installing solar with feed-in tariffs. Councilmember Eaton and Commissioner Mirsky discussed the relationship and lack of building standard discrepancies across local, state, and federal German government.

Received and Filed

Solar Access Draft Resolution

Commissioner Hookham provided an update on the draft of the Solar Access Resolution that was also presented in December. Commissioner Hookham informed the commission that the motivation behind the resolution is to account for solar installation disruptions by shading from other buildings and developments, and to encourage a smart approach to land use planning.

Commissioner Hookham informed the commission that the City of Ann Arbor, Washtenaw County, and State of Michigan currently do not provide protection of solar access, but encourage individual land owners to install solar. Commissioner Hookham suggested an ordinance-driven idea to address potential consequences, and proposed that the City Council, City Administrator, City Planning Manager, and Energy Commission consider protecting landowners with existing solar installations.

Commissioner Mirsky suggested involving the Planning Commission in addition

to the Energy Commission, and informed the commission of the need to name the Planning Commission to be considered. Commissioner Mirsky suggested including language for SMART goals, including timeline expectations to provide a sense of priority. Commissioner Hookham and Commissioner Mirsky discussed timelines ranging from 12 to 18 months.

Councilmember Eaton discussed the importance of involving the Planning Commission to address development-related concerns, with the interests of the two commissions balancing one another, and the importance of addressing this issue in residential neighborhoods. Commissioner Mirsky and Commissioner Lenksi discussed language in the resolution supporting the Climate Action Plan, which focuses on improving greenhouse gas emissions.

On a voice vote, the Chair declared the motion to approve the resolution carried.

Received and Filed

Solar Metrics

Commissioner Clevey informed the commission of the current solar capacity goal 24 MW of solar by 2025 at rate of 2.5 MW per year in order to reach greenhouse gas reduction goals, which was set in 2016. Commissioner Clevey informed the commission of the purpose of the resolution to update solar target metrics and suggested advising the Energy Office and the Office of Sustainability and Innovations to update solar energy targets.

Staff MacDonald informed the commission of an analysis completed by the Office of Sustainability and Innovations using PVWatts, Google Sunroof, and LiDAR data. Staff MacDonald informed the commission that the solar potential estimate does not include sites outside City boundaries. Commissioner Mirsky suggested that metrics be re-evaluated based on new knowledge.

Chair Appleyard and Commissioner Lenski discussed prioritizing action over access the full potential of solar in Ann Arbor, especially as energy consumption, solar capacity, and solar efficiency continue to change.

Minutes

Council Member Eaton informed the commission of recent City Council actions concerning minutes, and the importance of consistently publicizing agendas prior to the meeting as consistent with City Council. Staff MacDonald informed the commission that all materials are requested a week in advance of a meeting.

COMMITTEE UPDATES

Staff MacDonald informed the commission that calendars for committees have been approved, with a committee meeting occurring each Tuesday at 6:00 PM. Chair Appleyard recommended commissioners sign up for committees to maximize combined efforts.

100% Clean Municipal Operations

Lighting Ordinance

Energy Audit Discloser Ordinance

EV Readiness Ordinance

Commissioner Colvin-Garcia informed the commission that Ann Arbor is one of the cities being considered for a pilot to install DC fast chargers along highways.

Outreach to Schools

Community Outreach (Solar/EE)

Report from Environmental Commission

Council Member Eaton informed the commission that the Environmental Commission has passed a resolution declaring a climate emergency, and will be bringing a resolution forward to the Energy Commission to provide direction and receive input to encourage residents to take action.

PUBLIC INPUT

A community member came to the meeting to learn more how the public can get involved to make progress on the Climate Action Plan, noting that the public could use more direction for active steps to take. Commissioner Mirsky, Commissioner Clevey, and Chair Appleyard discussed the proposed listening tour to visit various locations throughout the city to learn what citizens need in terms of energy and the environment, with a meeting planned with the Office of Sustainability and Innovations Manager. Council Member Eaton encouraged involving respective council members before selecting a time and place.

ITEMS FOR NEXT AGENDA

Presentation from on the budget
Updating Bylaws
Resolution for Climate Emergency passed by Environmental Commission

ADJOURNMENT

The chair adjourned the meeting at 8:00 pm.

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City Clerk's Office
301 E. Huron St.
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Requests made with less than two business days' notice may not be able to be accommodated.

Visit www.a2energy.org for community energy information in Ann Arbor,
or
www.a2gov.org/energy to learn more about the City's Energy Programs

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www.a2gov.org/ctn