

**CITY OF URBANA, ILLINOIS  
SUSTAINABILITY ADVISORY COMMISSION  
Council Chambers, Urbana City Building  
Tuesday, June 5, 2018**

**Commissioners Present:** Chairperson Stacy Gloss, Andrew Stumpf, Morgan White, Tesfaye Wolde-Medhin

**Commissioners Absent:** Dustin Allred, Claire Johnson, Todd Rusk

**Staff Present:** Scott Tess, Barb Stiehl, Marcus Ricci

**Call to Order, Roll Call, and Declaration of Quorum**

Chairperson Stacy Gloss called the meeting to order at 7:04 p.m. Barb Stiehl called the roll and a quorum was present.

**Changes to the Agenda**

There were no changes to the agenda

**Approval of Minutes**

Motion was made by Ms. White, second by Mr. Stumpf, to approve the minutes from the May 1, 2018 meeting. Motion carried.

**Public Input**

Neha Kharb provided input and feedback on the Sustainability Advisory Commission meeting held on November 7, 2017. She agreed with suggestions to use LED lighting for streets and parking lots. She suggested that the City consider motion sensors to activate lighting in parking lots only when necessary. Ms. Kharb provided suggestions for reaching the goals of the Climate Action Plan. She recommended development codes that would reduce private transportation and encourage bicycles and shared rides. In addition, she suggested that the codes should integrate with the Leadership in Energy and Environmental Design (LEED) standards. Additional solutions suggested by Ms. Kharb were planting trees, making small changes at home by fixing leaking faucets and reducing plastic waste. She recommended the installation of solar panels for commercial and residential buildings to use renewable energy and the use of certified wood encourage the wise management of forests. She stated that even small actions could be helpful in attaining the goals of the Climate Action Plan.

*NOTE: Chair Gloss asked that a copy of Ms. Kharb's prepared statement be included with the minutes.*

**Communications**

***Staff Report***

Scott Tess reported Solar Urbana-Champaign 3.0 Solar Power Hours have been and will be conducted. He mentioned that a listing of dates and times was available at SolarUrbanaChampaign.com. He said that the first verbal commitment for a solar array had been received. Information about the program would be available at the Farmer's Market and SAC members were welcomed to help.

Regarding discussion last month about the urban street tree data, Mr. Tess said that it was a goal to diversify the City's urban forest to build resiliency so that no one family of trees exceeded 30%, no one genus exceeded 15%, and no one species exceeded 5% of the total street tree population. He said that the goal for family of trees had been met. He explained that the acer species exceeded the 15% goal and there are a few species that exceeded the 5% goal. In spite of that, the City of Urbana's Arbor Division was working toward the Climate Action Plan goal. The division was using grant money to diversify its tree population.

Mr. Tess discussed the efforts of City of Urbana's Sustainability Division to promote public engagement. He spoke before a congress of qualitative inquiry at the University of Illinois regarding his experience at the United Nations Climate Conference. He mentioned that the division helped sponsor a backyard composting class with the Urbana Park District on the same day as the rain barrel and composting bin sale occurred. He said that the program would occur next year, but that it might be scheduled for the week before the rain barrel and compost bin sale occurred. As part of the continuing educational efforts, staff talked to pre-K students about recycling at an academy. Mr. Tess reported that the electronic recycling event was very successful. He said that scheduling times for drop-off greatly improved the efficiency of the process. He said that he would report on the event at the next scheduled meeting of the Sustainability Advisory Commission.

Mr. Tess recommended cancelling the July 3 meeting of the Sustainability Advisory Commission due to the Fourth of July holiday. The next meeting would be August 7, 2018.

### ***Geothermal Energy Presentation***

Frank Holcomb from the US Corps of Army Engineers and a doctoral student at the University of Illinois discussed information about geothermal systems for residential buildings. He listed sources for the information he presented. Mr. Holcomb listed some advantages of the use of geothermal energy for heating and cooling homes. He explained that geothermal energy was renewable; a clean source of energy, free since it used the heat underground as its source of energy, secure because it was located on-site compared to being part of a national power grid, quieter and provided an even distribution of energy compared to other energy sources. He mentioned that the U.S. Government had a goal to be net zero energy and were looking at geothermal energy as a way to attain that goal.

Mr. Holcomb explained how the heat pump worked to cool a structure in the summer and heat a structure in the winter. He stated that a geothermal heat pump was extremely efficient with an energy efficiency ratio of about 30 compared to an air conditioning unit with a ratio of about 10. He further explained that heating a residence was more efficient using geothermal energy than fossil fuels.

Geothermal cost for a 2,500 square foot home would be approximately \$780, while a high-efficiency gas furnace would cost about twice as much. Mr. Holcomb suggested that the use of geothermal energy for new construction was best since the installation could be done as part of building the structure. He recommended that a retrofit should be done when the existing unit was ready for replacement. He listed various tax credits that were currently available. The payback for the system could be anywhere from five to fourteen years. He indicated that CO<sub>2</sub> may or may not be lower when using a geothermal system based upon the electrical source used to run the heat pump.

Matthew Ricci asked what the space need would be for vertical loops.

Mr. Holcomb said that the loops would fit within a typical lot.

Andrew Stumpf mentioned that some neighborhoods had formed geothermal subdivisions to reduce the individual costs of installing geothermal systems.

Chair Gloss asked how to increase capacity of a geothermal system. She wanted to know if a larger system was needed as the square footage of a structure increases.

Mr. Holcomb said that most systems were oversized by design. Once pipes are in the ground, the system would have about a 50-year life. He explained that a residential system might have a 20-year life with the compressors.

Mr. Ricci asked how warm would temperatures reach and how would the system reach comfortable temperatures.

Mr. Holcomb said that there were other ways of increasing the temperature. He said that saving on energy costs would be to approach it systematically. He pointed out that one immediate way to save on energy was to insulate a home. He said that by performing proper insulating techniques energy needs would be reduced.

Chair Gloss asked if there would be any maintenance concerns at the point where the pipes are above the freeze/thaw line.

Mr. Holcomb said that it was similar to plumbing lines in that freezing/thawing would not be a problem.

Scott Tess said that the presentation would be included on the Sustainability Advisory Commission's website.

### **Continuing Business**

There was no continuing business.

### **New Business**

#### ***Recruitment of Youth SAC Member.***

Stacy Gloss reviewed the recent revision of the by-laws of the Sustainability Advisory Commission to provide for the addition of a member between the ages of 14 and 18, who would serve as a non-voting member when binding action was presented, but otherwise provide input and opinions about issues discussed before SAC. Chair Gloss said that applications should be submitted to the Mayor for consideration. She asked for suggestions on recruiting a youth member. She said that she knew of a couple of students who might be interested, but she wanted input from the remainder of the Commission.

Ms. White asked how members were typically recruited.

Mr. Ricci suggested contacting those students who presented the iMatter resolutions.

Mr. Tess said that the teacher who sponsors Urbana High School's sustainability club was contacted to recommend candidates.

Ms. White suggested sending e-mails to youth organizations, the Urbana High School principal and the Parent-Teacher Association to recruit a youth SAC member.

The Commission discussed various venues for recruitment of a youth member.

Chair Gloss stated that she hoped to fill the position prior to the beginning of the school year. She suggested if the position was not filled by then, different approaches might be taken.

Ms. White suggested posting information at Common Grounds, Lincoln Square and the Urbana Free Library.

Mr. Ricci suggested placing the flier at the Market at the Square.

Mr. Tess said that he would create a flier for distribution.

**Announcements**

National Pollinator Week June 18-24, 2018  
UC Solar 3.0 Tables at Market at the Square

**Adjournment**

There being no further business to discuss, the meeting was adjourned at 8:00 p.m.

This meeting was recorded.

Respectfully submitted,

Barbara Stiehl  
Recording Secretary