



AGENDA OF THE SUSTAINABILITY COMMISSION

**WEDNESDAY, MAY 13, 2020, 2:00 PM
CITY HALL, ROOM 604 - THE HARRY MAIER ROOM**

A. Zoom Meeting Information

1. Please find Zoom meeting information and instructions.

B. Roll Call.

1. Chair--Seth Hoffmeister; Vice Chair--Ned Dorff; Ald. Scannell; Kaurie Mihm--PRF; Prof. John Arendt; Deb Hutchison; Julia Noordyk; Cody Sandhal; Mark Walter

C. Approval of Minutes.

1. Approval of the minutes from March 11, 2020.

D. Approval of the Agenda.

1. Approval of the agenda for May 13, 2020.

E. Informational.

1. Presentation by Heather Allen from Renew Wisconsin.
2. Updates from commission members and workgroups.
3. Update on Eland Electric's work on solar array at Leicht Park.
4. Update from Chair Hoffmeister.
5. Staff update.

F. Regular Business.

1. Discussion with possible action on developing a policy which would address the tree canopy in Green Bay. (Mayor Eric Genrich)

2. Discussion with possible action on the Sustainability Commission members taking a tour of NEW Water facility, held from 3/11/20 meeting.

G. Adjournment.

- 1) THIS MEETING IS RECORDED: THE VIDEO OF THIS MEETING AND MINUTES ARE AVAILABLE ONLINE AT www.greenbaywi.gov
- 2) ACCESSIBILITY: Any person wishing to attend who requires special accommodation because of a disability, should contact the City Safety Manager at 920-448-3125 at least 48 hours before the scheduled meeting time so that arrangements can be made.
- 3) QUORUM: Please take notice that a majority or quorum of the Common Council will attend this Sustainability Commission meeting and will constitute a meeting of the Common Council for purposes of discussion and information gathering relative to this agenda.
- 4) REPRESENTATION: The party requesting the communication, or their representative, should be present at this meeting.

Virtual Meeting Instructions



Sustainability Commission 2020-05-13

Zoom Meeting Information

City Of Green Bay is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

<https://us02web.zoom.us/j/81733019115?pwd=eXJoMlE2b2szazcwTWJhOHJhUlhuQT09>

Meeting ID: 817 3301 9115

Password: 888254

One tap mobile

+13017158592,,81733019115#,,1#,888254# US (Germantown)

+13126266799,,81733019115#,,1#,888254# US (Chicago)

Dial by your location

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

Meeting ID: 817 3301 9115

Password: 888254

Find your local number: <https://us02web.zoom.us/u/kdKSSaOLNg>

Additional Information

1. Wisconsin Open Meetings Law still applies
 - a. Persons interested in speaking to an item must give their name and address
 - b. Committee/Commission/Board members will still follow *Roberts Rules of Order*
2. All zoom meetings will have a password in the instructions. Please enter when prompted.
3. Please log into the Zoom meeting 10 minutes before the meeting starts to ensure proper technology is working.
 - a. If you are a Board Member, please log into [CivicClerk](#) with a computer, laptop, or tablet device.
4. Once you are in the meeting please mute yourselves.
 - a. You may unmute yourself when you are called upon to speak.
5. Waiting room
 - a. When you call in, all callers/participants will be placed in a “waiting room.”
 - b. Persons on the agenda will be admitted to the meeting, and then once the item is concluded, the host will permanently mute you from the meeting (you can still hear the meeting).
6. Using Zoom with a tablet or computer
 - a. Tablet—you will be asked to sign in. Download the app either with the Apple Store or the Play Store
 - b. Computer—you will be asked to sign in. You may download the app or click on the link to open Zoom in your browser.
7. Registering
 - a. The host may ask you to register for the meeting. A registration link will be sent to you along with the invite. You’ll receive another email confirming that you’re registered for the meeting.
 - b. If you’re using a phone, your registration will still be tied to an email.
8. Raising your hand
 - a. Committee members—you can either use CivicClerk and request to speak or you can “raise your hand” in the zoom meeting (you’d need to use a computer or tablet) to let the host know you’d like to speak. You can also un-mute yourselves and start speaking.
 - b. Persons on the agenda—you can “raise your hand” but you’d need to use a computer. You will be allowed to speak, per Wisconsin Open Meetings Rules, once the committee has “opened the floor for interested parties to speak.” Once the committee is finished with your agenda item, the host will mute you permanently, unless the committee opens the floor again.
9. What devices should I use?
 - a. Smart phone (please see more detailed instructions on page 3)
 - b. Land line
 - c. Tablet—well in advance of the meeting, please download the Zoom Meeting app before you join a meeting by using either the Apple Store or the Play Store. You will be asked to input your name, thus identifying you for the meeting. You’ll also be asked to verify your email.
 - d. Computer—well in advance of the meeting, please download the Zoom Meeting app, but you can also click on a link to open the Zoom Meeting in your browser. You will be asked to input your name, thus identifying you for the meeting.
 - e. For tablet and computer users—if you download the app you will be asked to verify your email.
10. Zoom etiquette
 - a. Muting yourselves when you’re not talking will prevent your background noise from interfering with others’ ability to listen to and participate in the meeting.
 - b. If you’re using a telephone, please identify yourself with your phone number and name before you speak. Zoom meeting hosts can see only your telephone number and will ask you to identify yourselves.
11. Closed session
 - a. Persons in the Zoom meeting will be put into a waiting room while the committee meets in Closed Session. Participants will be admitted back into the Zoom meeting once the committee reconvenes in Open Session.
 - b. Persons watching live on YouTube will see a gray screen with the City logo during closed session.
12. Persons interested in listening to the meeting can go to www.youtube.com/CityofGreenBay

Calling into the Zoom meeting using a smartphone

1. Dial the phone number listed at the beginning of this document.
2. When prompted, enter the Meeting ID number followed by #
 - a. If you're using a smartphone, you can access the keypad by clicking "Keypad" on your screen



3. Once you are in the meeting, notify the meeting host that you are in and state your name.
4. If you do not need to talk, please make sure your phone is on **Mute**
 - a. If you're using a smartphone, look at your screen and click the Mute button



- b. If you're using a computer, you should see a Mute button in the Zoom application





Report to the
Sustainability Commission
of the City of Green Bay

MEETING DATE

May 13, 2020

PREPARED BY

AGENDA ITEM # D.I

Approval of the agenda for May 13, 2020.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None



CLEAN ENERGY FOR LOCAL GOVERNMENTS

HEATHER ALLEN, RENEW WISCONSIN



RENEW WISCONSIN:

FOUNDED 1991

SUPPORT FOR:

- SOLAR
- WIND
- BIOMASS & BIOGAS
- GEOTHERMAL
- HYDROPOWER
- ELECTRIC VEHICLES



LOCAL GOVERNMENTS LEAD THE WAY!



147 Wisconsin communities committed to 25% clean energy by 2025

LaCrosse, Middleton, Menominee, Madison, Eau Claire (City and County), Fitchburg, Monona and Green Bay have all committed to 100% renewable energy!



CLEAN ENERGY CONSIDERATIONS

Why?

- Clean Energy Jobs
- Reduce Operating Expenditures and Expenses for Residents
- Protect Health
- Community Priorities & Attract Employers

How?

- Community Engagement
- Planning
- On-site
- Off-site
- Allies and Partnerships
- Financing





76,000 CLEAN
ENERGY JOBS
IN WISCONSIN

FASTEST
GROWING:

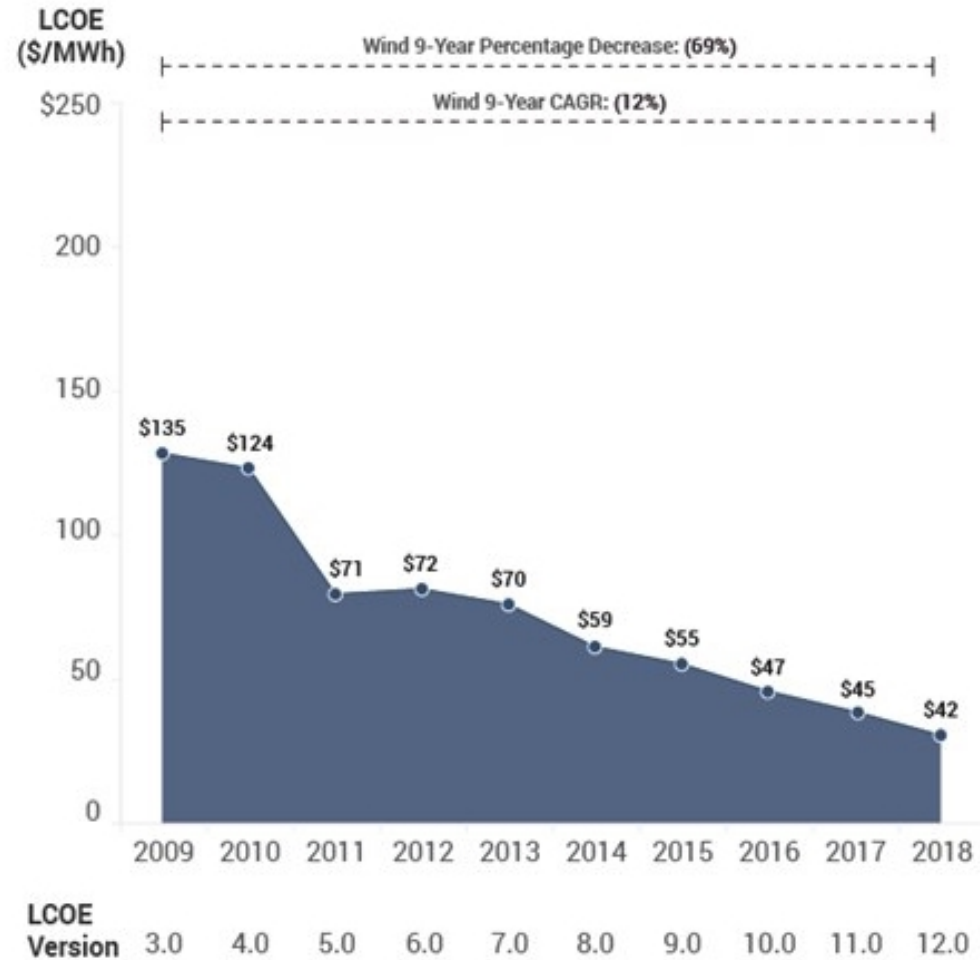
ADVANCED
TRANSPORTATION
WIND
STORAGE

CLEAN ENERGY WORKERS: MIKE, LAMONT, TYLER AND APRIL

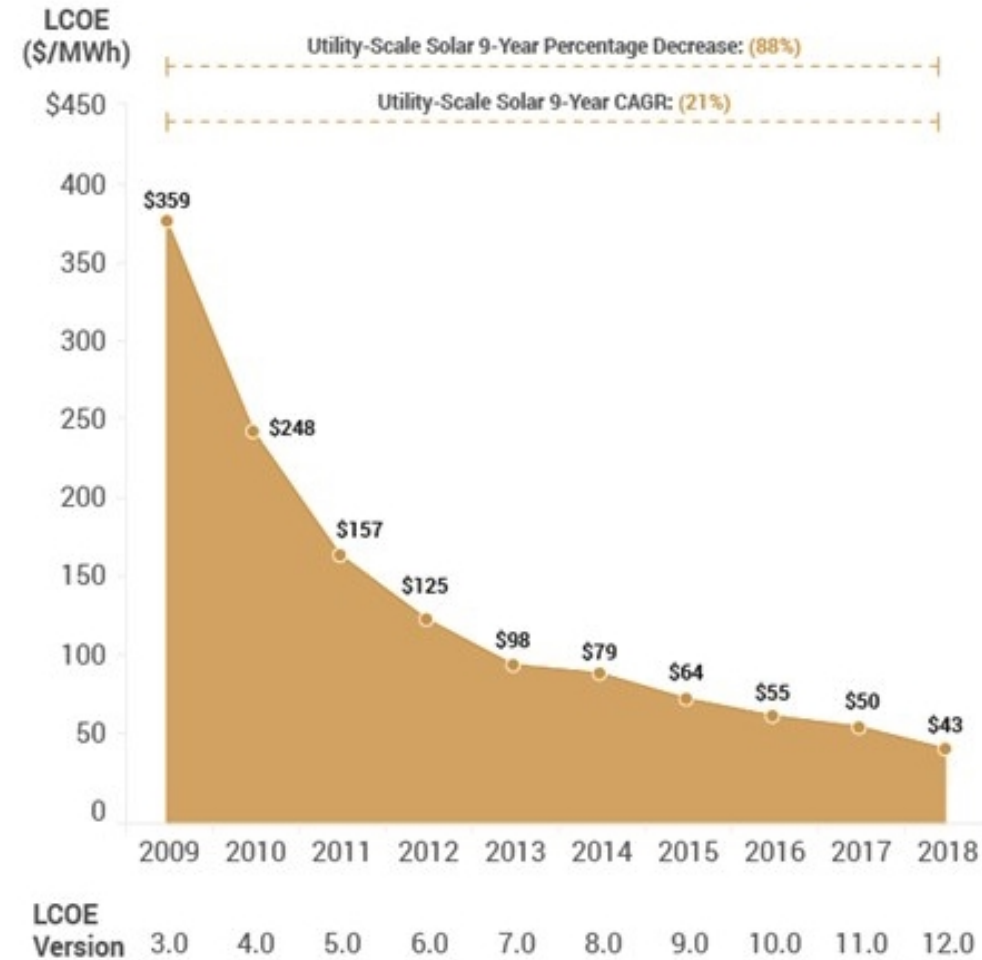


WIND & SOLAR COSTS HAVE DECREASED DRAMATICALLY SINCE 2009

Unsubsidized Wind LCOE



Unsubsidized Solar PV LCOE



WIND: ▼ 69%

SOLAR: ▼ 88%

A Comparison of the Health Impacts of Energy Choices

Source: Health Care Without Harm 2016

PUBLIC HEALTH RISKS



COAL Mining causes ecological damage, stresses nearby communities, increases risk of mudslides, and contaminates water. Transport causes air pollution, noise, and injuries. Combustion results in significant air pollution including particulate matter, ozone, and mercury. Coal waste contains toxic metals and radioactive materials.



OIL Communities near refineries are exposed to a range of air toxics. Large-scale spills can cause injuries and fatalities, food contamination, and mental health disorders. Combustion yields a range of air pollutants as with coal. Waste may have health effects similar to those of coal waste.



GAS Conventional gas: Air pollution from power plant operations. Unconventional gas: Hydraulic fracturing is highly water intensive and can contaminate water. Communities near production sites could also be exposed to air pollution, seismic activity, and radioactivity.



NUCLEAR Each step in nuclear energy production leads to radioactive and chemical emissions and waste streams, which carry a low risk of water contamination and cancer in nearby communities. Accidents are rare but result in highly damaging radiation exposure.



BIOFUELS Combustion creates less air pollution compared to fossil fuels. Diversion of farmland can threaten nutrition and food security. Depending on the feedstock, biofuel production may result in land use changes, high water consumption, water contamination, and ecological damage.



HYDROELECTRIC Large hydro: Construction can displace vulnerable populations. Alteration of local hydrology may increase risk of infectious diseases. Dam failures can be catastrophic to downstream communities. Small hydro: Public health risks are not well-documented but assumed to be minimal.



GEOHERMAL Relatively low public health risks from air pollution, water contamination, water use, and land use in modern systems with appropriate controls. Some systems generate air pollutants and hazardous waste.



SOLAR Public health risks are likely far lower than that of any fossil fuel, as there are no emissions during operation and no routine waste stream. Health concerns center around the management of toxic materials during manufacturing and end-of-life disposal.



WIND Public health risks are likely far lower than that of any fossil fuel, as there are no emissions during operation and no routine waste stream. Health concerns center on noise from moving gear trains and turbine blades, which can disturb sleep or contribute to stress related disorders.



OCCUPATIONAL HEALTH RISKS

Accidents, silica and coal dust, carcinogens, heat, noise, and vibration.



Accidents, chronic musculoskeletal repetitive stress, noise, vibration, airborne hydrocarbons, and carcinogens.



Varies by drilling method; includes accidents, air borne particulates, carcinogens, and pulmonary asthmagens and irritants.



Accidents, heat stress, leaks causing airborne carcinogens including ionizing radiation, and psychological stress.



Injuries, ultraviolet radiation, exposure to dust and other toxins, and other risks from commercial forestry.



Toxic chemical exposures, diesel fumes, drowning, electrocution, noise, and other hazards involved in construction and operation, primarily for large dams.



Injuries, silicosis, noise, and toxic chemical exposures.



Hazards typical of manufacturing industries, including injuries, noise, and toxic chemical exposures.



Hazards typical of manufacturing industries, including injuries, noise, and toxic chemical exposures.



CLIMATE RISKS

44% of global CO₂ from fuel combustion; methane; and short-lived pollutants.



35% of global CO₂ from fuel combustion; methane; and short-lived pollutants.



20% of global CO₂ from fuel combustion; methane; and short-lived pollutants.



Minor climate impact from construction and mining-related land use changes.



Climate benefit from reduced combustion emissions may be negated by fossil fuel inputs, land use changes, and other factors.



Variable climate impact from construction and operation, including significant emissions from reservoirs.



Minor climate impact from construction and operation. Open-loop systems emit relatively small amounts of CO₂ and methane.



Minor climate impact from equipment manufacture.



Minor climate impact from equipment manufacture.



CORPORATIONS WITH RENEWABLE COMMITMENTS AND WISCONSIN OPERATIONS



COMMUNITY ENGAGEMENT



PLANNING

ESTABLISHING A BASELINE

INVENTORY OF ALL FACILITIES AND CITY-OWNED TRANSPORTATION VEHICLES

COLLECT AT LEAST 12 MONTHS OF ENERGY DATA (36 MONTHS, IF AVAILABLE)⁹

ANALYZE ENERGY CONSUMPTION TRENDS TO IDENTIFY UNDERLYING ENERGY CONSUMPTION PATTERNS

CREATE AN ACTION PLAN TO REDUCE ENERGY CONSUMPTION AND INCORPORATE RENEWABLE ENERGY

Focus on least-cost solutions to reducing energy consumption by facility

Focus on highest impact areas (facility with the highest energy use per square foot)

TRACK AND REPORT PROGRESS

Set yearly or 5-year targets to reduce energy consumption from base year



PLANNING FOR EQUITY

- MAINTAINING AND/OR IMPROVING THE AFFORDABILITY OF ENERGY FOR LOWER INCOME HOUSEHOLDS
- REDUCING THE DISPARATE IMPACT OF FOSSIL FUEL RELATED POLLUTION ON COMMUNITIES OF COLOR
- UTILIZING THE NECESSARY INVESTMENT TO CREATE JOBS AND CAREERS FOR DISADVANTAGED COMMUNITIES
- ASSURING EQUAL ACCESS TO THE BENEFITS OF GREATER EFFICIENCY, RENEWABLE ENERGY AND SUSTAINABILITY
- RECOGNIZING AND PREVENTING UNINTENDED CONSEQUENCES OF CLIMATE ACTION PLANS, SUCH AS GENTRIFICATION
- COUNTERING THE DISPROPORTIONATE NEGATIVE IMPACT OF CLIMATE CHANGE ON LOWER INCOME COMMUNITIES





Affordable housing

Sawyer County Housing Authority

Project capacity: 133 kW
(6 locations, 52 households in the
Hayward, WI area)

Legacy Solar Co-op

CE Carlson Electric

Solar on Multifamily Buildings
Solar on Affordable Housing Developments
Shared Solar & Community Gardens



INCREASING ACCESS TO SOLAR

T. Wall Enterprises Multifamily Apartment Building in Madison Wisconsin

Photo: Courtesy of SunPeak

ACTION STEPS

ENERGY EFFICIENCY

ON-SITE RENEWABLES – solar and geothermal

REDUCING SOFT COSTS – permitting and inspections (Sol Smart)

SOLAR GROUP BUYS

OFF-SITE RENEWABLES – Renewable Energy Credits, Renewable Energy Riders/Green Tariffs, Utility partnerships, Community Solar

ELECTRIC VEHICLES – Transportation Infrastructure



RESOURCES



FINANCING CLEAN ENERGY



RESOURCES

Office of Energy Innovation

MEETAP

Energy Independent Communities

Energy Innovation Grants

Focus on Energy

Direct Buy

Public Private Partnerships

Legacy Solar Cooperative

Group Buys

PACE

Green Power Purchase

Board of Commissioners of Public Lands Loans

Green Bonds





CLEAN ENERGY FOR LOCAL GOVERNMENTS

HEATHER ALLEN, RENEW WISCONSIN





Report to the
Sustainability Commission
of the City of Green Bay

MEETING DATE

May 13, 2020

PREPARED BY

AGENDA ITEM # E.3

Update on Eland Electric's work on solar array at Leicht Park.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None