

AGENDA
GREENHOUSE GAS WORKING GROUP
December 1, 2021
3:00 P.M.
Remote Meeting via Zoom

Please click the link below to join the webinar:

<https://deerfieldil.zoom.us/j/83403231653?pwd=aU9WOWJ2R2JXeUpqeEx2OERmQW92Zz09>

Passcode: hq=yPj.3

Or Telephone:

US: (312) 626-6799

Webinar ID: 834 0323 1653

Passcode: 88147315

1. Call to Order
2. Roll Call
3. Consideration and Approval of the November 10, 2021 Meeting Minutes
4. Public Comment

Village residents wishing to respectfully share thoughts about any matter concerning the Village may do so by submitting an email to ghgcomment@deerfield.il.us prior to the meeting. Emails received will be read aloud during Public Comment. Any e-mails received during the meeting will be read during the second public comment before the end of the meeting. We ask that you keep your emailed response to under 200 words to allow time for others to be heard and for the Commission to progress through the public meeting agenda. In addition, members of the public may provide oral comments by telephone or web-based video conference during all meetings of the Commission during the time designated for public comment provided that such comments do not exceed three minutes in duration. The Commission typically does not immediately respond to public comments or engage in open dialogue, but we are of course actively listening to your comments.

At least one representative from the Commission will be present at Village Hall and the virtual meeting will be simulcast at Village Hall for members of the public who do not wish to view the virtual meeting from another location. The opportunity to view the virtual meeting at Village Hall is available on a “first come, first-served” basis due to limited capacity.

5. Discussion of Possible Policies, Programs and Resources
 - Focus Area: Energy
6. Other Items for Discussion
 - Update:
 - i. GRC2 Adopted by the Village Board on November 15

- ii. GHG Baseline Inventory Spreadsheet – further refinement underway
- iii. ICLEI Membership

7. Public Comment

8. Next Meeting Date – Wednesday, December 15 @ 3PM via Zoom

**Greenhouse Gas Reduction Ad Hoc Working Group
Meeting Minutes
November 10, 2021**

A meeting of the Greenhouse Gas Reduction Ad Hoc Working Group was held on Wednesday, November 10, 2021 at 3:00 pm via Zoom. Chairperson Mary Oppenheim called the meeting to order at 3:00 pm.

Present:

Trustee Mary Oppenheim, Chairperson
Camilla Dadey, Go Green Deerfield
Elaine Jacoby, Village Trustee
Bill Mertes, Sustainability Commission
Victoria Street, Executive Director, DBR Chamber of Commerce
Art Wilde, Go Green Deerfield

Also Present:

Clint Case, Building & Code Enforcement Supervisor
Andrew Lichterman, Assistant Village Manager/Dir. of Community Development
Dan Nakahara, Village Planner
Robert Phillips, Director of Public Works and Engineering

Absent:

Don Anderson, Sustainability Commission

Public Comment

There were no Public Comments received via Zoom or email or in person.

Business

1. Discussion of Carbon Emissions Baseline

Chairperson Oppenheim recapped that the group is working to agree on a greenhouse gas emissions baseline. Mr. Wilde summarized how the inventory spreadsheet was created by Go Green Deerfield and noted that it is broken down by focus area and offers a 2017 baseline of approximately 431,000 metric tons of carbon dioxide emissions. Mr. Lichterman noted that the conversion factors used in the inventory spreadsheet are derived from global and national protocols that have been developed as best practices by various reputable sustainable organizations. The source data on various focus areas may be more or less reliable and we need to acknowledge when assumptions are made. For example, the source data for electricity and natural gas comes directly from the utility companies compared to source data for topics such as food and transportation, which are more difficult to ascertain.

As a follow-up item from the last meeting, Mr. Lichterman noted that the Transportation Management Association (TMA) of Lake-Cook did not have historical data on vehicle emissions from the lake-cook road corridor study that was completed in the early 2000's.

Mr. Wilde noted that as long as we pick a base year that we think makes sense, such as 2017, and then just consistently measure so that we are always comparing off the same base using the same methodology, then we have a meaningful evaluation tool to compare emissions year over year.

Ch. Oppenheim commended Mr. Wilde for the work that has already done and the group expressed consensus that they are comfortable moving forward with the data presented in the greenhouse gas inventory. Mr. Lichterman and Mr. Wilde will work together to refine the working document so that it is presentation ready.

Ch. Oppenheim discussed the ICLEI membership noting that members also receive access to a greenhouse gas inventory software. Mr. Lichterman reported that the annual membership price is \$1,200. Mr. Mertes noted he would be in favor of trying the membership and software for one-year. Mr. Wilde noted that we could use the software as a check against the inventory that was created in-house.

Ms. Dadey made a motion to recommend that the Village join ICLEI with a one-year membership which includes obtaining the greenhouse gas inventory software. Ms. Street seconded the motion. The motion passed by the following vote:

AYES: Dadey, Jacoby, Mertes, Street, Wilde (5)

NAYS: None (0)

Ch. Oppenheim reported that her feeling is that we do not need to contract with a third-party consultant at this time to prepare a sustainability plan because we have already done so much work in-house and have a handle on where we need to begin. She suggested that we consider this again at a later date. The group concurred with her recommended approach.

2. Discussion of Possible Policies, Programs and Resources (Focus Areas)

Ch. Oppenheim reported that she would like to prioritize the focus areas (i.e. energy, transportation, food, waste, water and land) and pick one to study in further detail so that the group can recommend programs and policies around a specific focus area. Mr. Wilde pointed out that electricity is a significant area as it is 35% of the total footprint. Ch. Oppenheim stated that based on that information she would recommend that the group look into the focus area of energy first. Ms. Dadey noted that of the total electricity footprint, small commercial is the most significant area. Ms. Street noted that small business electricity bills are very expensive relative to the square footage of a comparable residential space. Mr. Lichterman noted small businesses do qualify to participate in the community solar program but it is an opt-in program that requires them to act. Ms. Jacoby noted that community solar is a great program that we should further promote and educate residents and small businesses about since it is readily available and has a relatively low barrier to entry.

The group agreed to study the topic area of energy first. Ch. Oppenheim requested commissioners to bring suggested programs and policies around energy that the group can review collectively at the next meeting.

Ch. Oppenheim noted there are several resources that have been provided to the group, such as the GRC2 and sample sustainable plans from other communities, that commissioners can use to draw ideas from.

3. Other items for Discussion

Ch. Oppenheim noted the next meeting will be held on Wednesday, December 1 at 3:00 p.m., via Zoom.

Public Comment

There was no Public Comment.

Adjournment

There being no further business or discussion, Mr. Mertes moved to adjourn the meeting. Ms. Dadey seconded the motion. The motion passed by the following vote:

AYES: Dadey, Jacoby, Mertes, Street, Wilde (5)

NAYS: None (0)

The meeting was adjourned at 4:07 pm.

Respectfully submitted,

Andrew S. Lichterman

Assistant Village Manager / Director of Community Development

Overall Goal

Reduce GHG Emissions 45% by 2030

100% Carbon Neutral by 2050

Energy Overview

Source	MTCO2 2017	Percent
<i>Scope 1 (In Boundary)</i>		
Natural Gas	60,185	14%
Transportation	45,750	11%
<i>Scope 2 (Out of Boundary)</i>		
Electricity	153,097	35%
Municipal Energy	2,184	1%
<i>Scope 3 (Purchases: Goods & Services)</i>		
Goods/ Services*	117,000	27%
Food	42,185	10%
Waste	11,581	3%
Total	431,982	100%

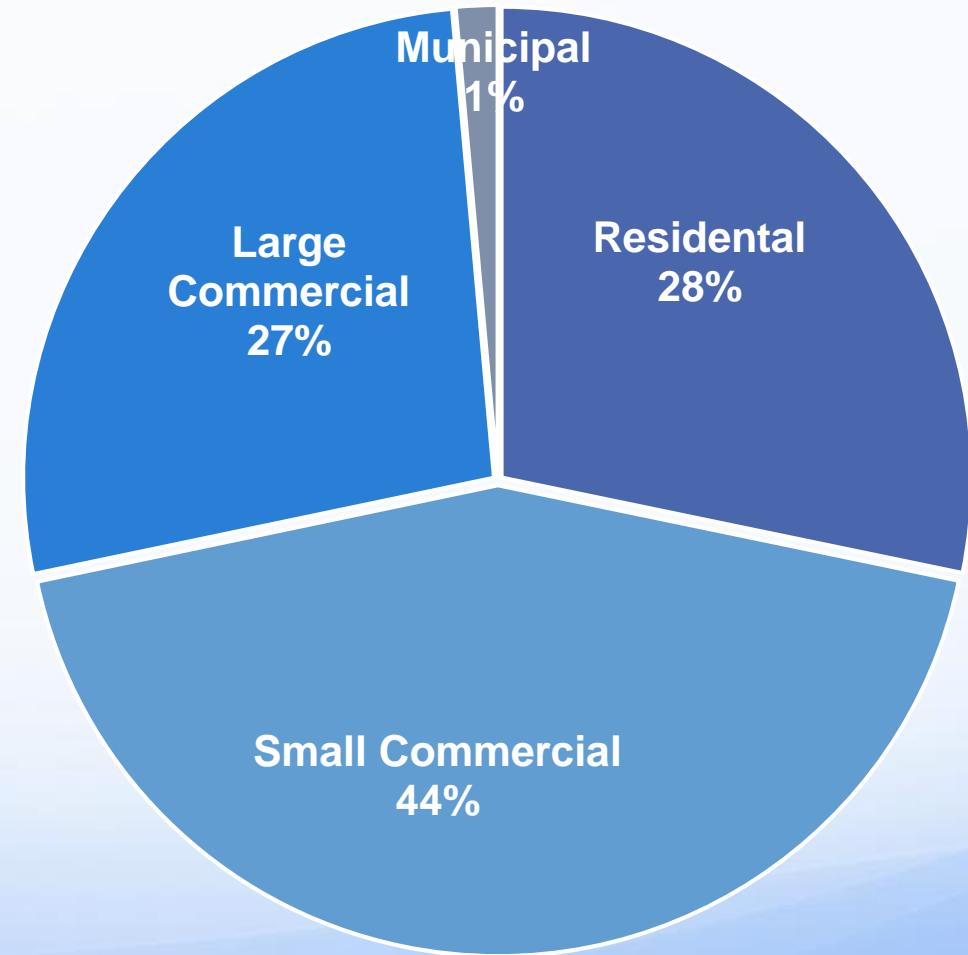
Electricity

Source	MTCO2 2017	Percent	2030	2050
Scope 1 (In Boundary)				
Natural Gas	60,185	14%		14%
Transportation	45,750	11%	6%	5%
Scope 2 (Out of Boundary)				
Electricity	153,097	35%	35%	
Municipal Energy	2,184	1%	1%	
Scope 3 (Purchases: Goods & Services)				
Goods/ Services*	117,000	27%		27%
Food	42,185	10%		10%
Waste	11,581	3%	2%	1%
Total	431,982	100%	45%	55%

Possible solution toward 45% Goal:
 Convert 100% of Electricity to renewable sources by 2030.

Electricity Use: Target Segments

Residential	29%
Small Commercial	44%
Large Commercial	27%
Municipal	1%



Target Segment Profile

	% MT/ CO2	# Buildings/ Businesses	Type
Residential	29%	6,334 HH's	Single Family (Detached): 92% Multi-Family (Attached): 8%
Small Commercial	44%	? # businesses	Sole Proprietor: Retail Chain:
Large Commercial	27%	? # companies	
Municipal	1%	3 buildings plus 16 satelite facilities	VH, PW, WRF and various pump stations

Renewable Energy Options

Aggregation

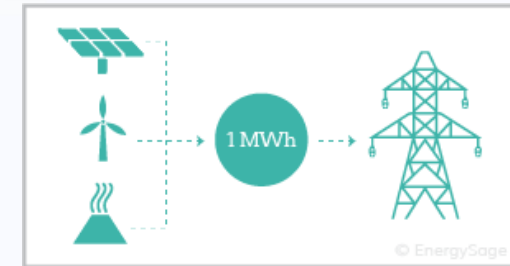


VILLAGE OF DEERFIELD

Community Solar



Renewable Energy Credits (REC's)



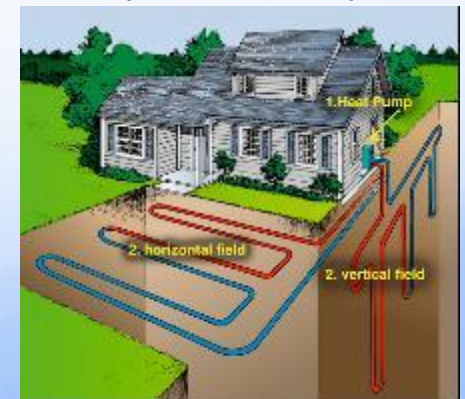
Rooftop Solar



Wind Turbine (Residential)



Alt to Natural Gas . . . Geothermal (Heat/ AC)



Suggested Prioritization Tool

Feasibility

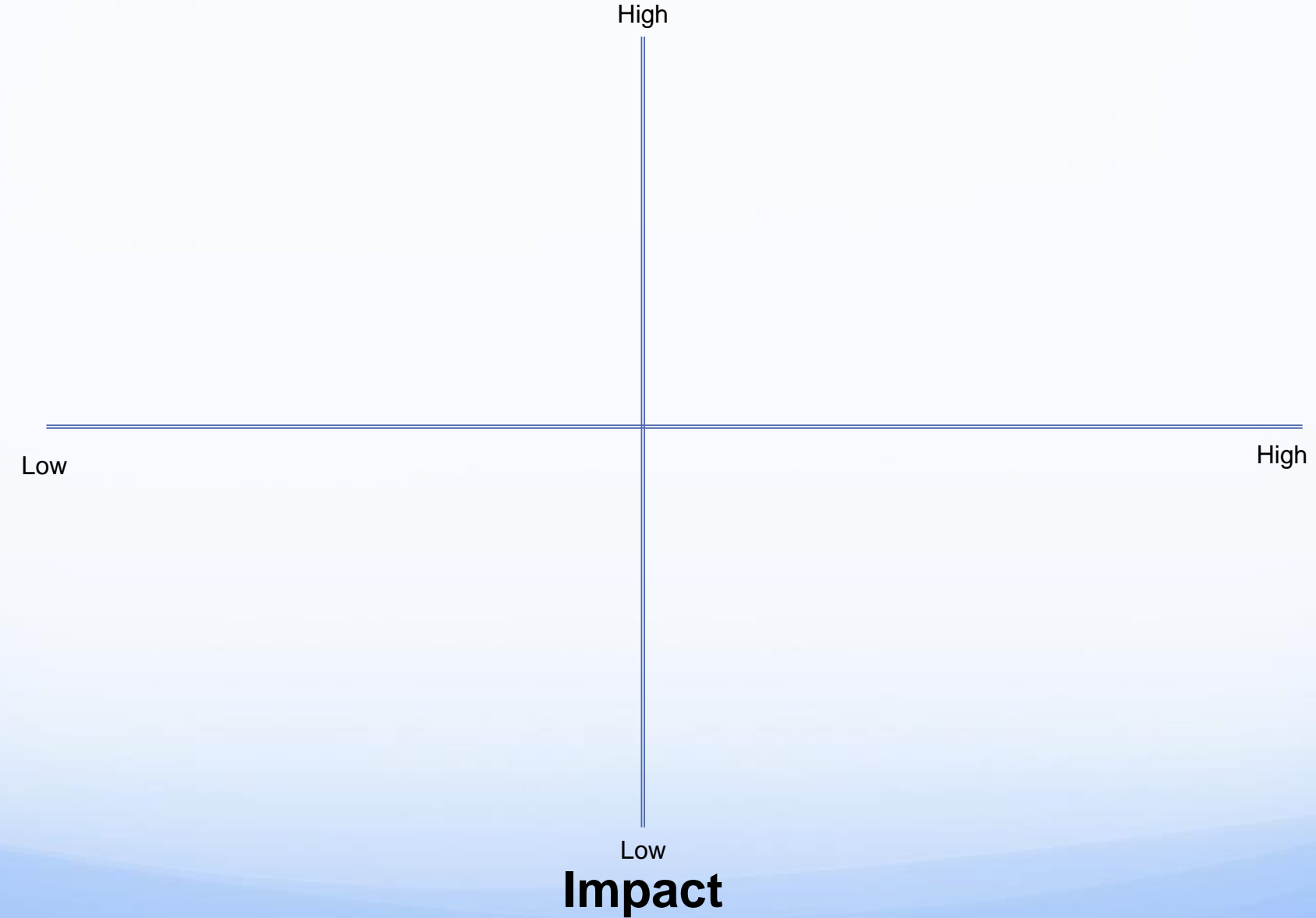
Low

High

High

Low

Impact



Assessment of Potential Options

Feasibility

Low

High

High

Low

Impact

Rooftop Solar
(Residential)



Geothermal



Wind Turbine
(Residential)



REC's
(Large Biz)



Aggregation
(Residential)



VILLAGE OF DEERFIELD



Community Solar
(Small Biz/ Muni)

Community Solar
(Residential)



Is a 100% renewables goal realistic?

One Possible Scenario . . . suggests it's possible:

- Residential >>> Aggregation
- Small Business >>> REC's
- Large Biz >>> REC's
- Municipal >>> Community Solar / REC's/ Rooftop Solar

Deerfield Programs to Date

- Residential Agg: 48% of HH's bringing renewable energy to grid (reduction of 28,347 metric tons)
- Community Solar: 113 HH's enrolled (731.6 kW subscriptions); 260 accounts on waitlist
- ComEd Energy Efficiency Program (i.e. home energy assessments):
 - 2018 – 120 assessments completed;
 - 2019 – 152 assessments completed =
 - 8,616 LEDs installed for free;
 - 457,704 kWh of savings per year of installed measures;
 - \$62,430 savings on electrical bills each year
- North Shore Gas Energy Efficiency program
- Municipal building retrofits (VH, PW, WRF); LED streetlight conversions, etc
- And more....

Other Info

- Building Efficiency
 - Northbrook set 15% building efficiency gain goal
 - While lower impact, easy way to engage community
 - Sustainability Commission focus area via ComEd
- Legislation
 - IL passed Climate & Equitable Jobs Act Fall 2021
 - Monitor for programs and grants we can leverage in future

Suggested Brainstorm Outline

- Possible 2030 Focus Goals (Discussion point)
 - Convert 100% Electricity (Village Wide) to renewable sources
 - Increase building efficiency 15%
- Suggested Programs & Policies for each segment
 - Residential
 - Small Commercial
 - Large Commercial
 - Municipal