

AGENDA
GREENHOUSE GAS WORKING GROUP
January 20, 2022
7:00 P.M.
Remote Meeting via Zoom

Please click the link below to join the webinar:

<https://deerfieldil.zoom.us/j/87524869534?pwd=R21DVnNtR2d3bXVYa2E4NnQ2b3pGUT09>

Passcode: C3wXe+F@

Or Telephone:

US: (312) 626-6799

Webinar ID: 875 2486 9534

Passcode: 95992477

1. Call to Order
2. Roll Call
3. Consideration and Approval of November 4, 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 sustainabilitycomment@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. Pursuant to Restore Illinois Phase 4, the opportunity to view the virtual meeting at Village Hall is available on a “first come, first-served” basis due to limited capacity.

5. Green Region Compact 2
 - Self-Assessment Framework: WATER (Potable, Waste, Storm)
 - i. Q & A with Director of Public Works and Engineering, Robert Phillips

6. GHG Working Group Update

- Recap – Focus Area: Energy
- ICLEI Membership
- 2021 IECC

7. Other Items for Discussion:

- Water Reclamation Facility Tour – Spring Date?

8. Public Comment

9. Next Meeting Date – February 24

**MEETING MINUTES
SUSTAINABLE COMMISSION
NOVEMBER 4, 2021**

A meeting of the Sustainability Commission was held on Thursday, November 4, 2021 at 7:00 p.m. via Zoom. The meeting was called to order at 7:00 p.m.

In attendance were:

Present:

Don Anderson, Chairman
Amy Call
Dick Heller (arrived 7:15)
Karrah Krakoviak
Michael Shalen
Brian Wolkenberg

Absent:

Maria Albuлесcu
Bill Mertes
Deborah Tometz

Also present:

Andrew Lichterman, Assistant Village Manager (at Village Hall)

Consideration of Minutes

Commissioner Call moved, seconded by Commissioner Shalen, to approve the minutes from the September 30, 2021 Sustainability Commission. The motion passed unanimously.

Public Comment

There was no public comment.

Business:

1. Greenhouse Gas Reduction Ad Hoc Working Group - Update

Ch. Anderson reported that the Greenhouse Gas Working Group held their first meeting on October 27. The Working Group will plan to meet twice a month and intends to recommend a draft sustainability plan to the Village Board in approximately six months. At their meeting the Working Group voted unanimously to recommend the Village Board adopt the Green Region Compact 2 Resolution. This matter is being presented to the Board for consideration at the November 15 meeting. The Working Group is evaluating the carbon dioxide emissions of the Village to establish a greenhouse gas emissions baseline.

2. Green Region Compact 2

- **Self-Assessment Framework and Topic Areas**

Chairman Anderson noted that the GRC2 framework was included in the packet and asked everyone to comment on their observations. Commissioner Wolkenberg noted the focus areas of energy and water were of particular interest and thought these were the areas that the Commission could best influence immediately. He also suggested that the Village do more to increase awareness of our sustainability brand as a community. Commissioner Krakoviak also thought that the focus area of water and specifically stormwater were of interest. Commissioner Shalen commented that he observed a lot of the initiatives were “already achieved” or “in progress” and that the Village could work on its messaging so that we get more credit for our achievements. He also noted the focus areas of energy and land were of particular interest. Commissioner Call emphasized the focus area of mobility and opportunities to make improvements, such as with the anti-idling campaign. Commissioner Heller supported various tree initiatives and noted there are resources available on the Jane Goodall website discussing the critical role that trees and plants have in our ecosystem.

Mr. Lichterman noted that many initiatives require on-going and yearly re-education to reach new residents and increase participation and awareness.

Chairman Anderson thanked everyone for their comments and suggested that the Commission invite an expert to speak to the Commission about a specific subject area. He noted there was a lot of interest in water and energy, in particular, and that he would discuss with Mr. Lichterman offline to arrange for a speaker at the next meeting.

2. Water Reclamation Facility (WRF) Tour

Chairman Anderson polled the Commissioners to see who would be able to attend the tour of the WRF tentatively scheduled for November 6. Due to a low turnout, the Commissioners decided to reschedule a tour for the spring.

3. Care of Trees Initiatives

- **Buckthorn Removal**

The Commission discussed the value of hosting a buckthorn education program again. They commented that a free curbside buckthorn removal day would be of value. Commissioner Heller inquired if the Village could achieve economies of scale for a buckthorn removal contractor. Commissioner Call noted that many people expressed interest in buckthorn removal programs and resources at the tree walk program.

4. Energy Efficiency

- **North Shore Gas Small Business and Residential Customer Efficiency Program**

Due to COVID-19 and residents’ reluctance to let contractors into their homes, Commissioner Shalen suggested waiting until the spring or summer to promote the ComEd and North Shore Gas energy efficiency programs.

Public Comment

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

Adjournment

There being no further business or discussion, Commissioner Heller moved to adjourn the meeting. Commissioner Shalen seconded the motion. The motion passed unanimously and the meeting was adjourned at 8:05 p.m.

Respectfully submitted,

Andrew Lichterman

Assistant Village Manager / Director of Community Development

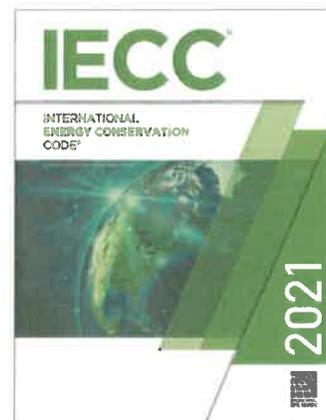
Category	 GOAL	OBJECTIVE		Already achieved	In Progress	Planned for next 6 months	Planned for next 12-18 months	Interested in pursuing	Not planned	Not relevant	Contact Initials	Notes	Link to resource	
		> STRATEGY												
		+ ADVANCED STRATEGY												
WATER	Water Conservation <i>Use and distribute water efficiently</i>	W1	Reduce community water consumption per capita						X					
		<i>W1a</i>	>Implement water efficiency measures at all municipal facilities					X						
		<i>W1b</i>	>Encourage residents and businesses to identify and mitigate water loss		X									Y
		W2	Become a US EPA WaterSense Partner					X						Y
		W3	Designate a staff Water Conservation Coordinator to manage water conservation programs						X					
		W4	Participate in regional efforts and programs to conserve water						X					
		<i>W+5</i>	Provide customer incentives to retrofit using high efficiency, Water Sense appliances and fixtures						X					Y
		<i>W+6</i>	Provide water use audits to customers					X						
		<i>W+7</i>	Collaborate with energy utilities to integrate water conservation into energy audits for residential customers		X									
	<i>W+8</i>	Collaborate to encourage commercial, industrial and institutional customers to conserve water					X						Y	
	Water Quality <i>Protect and improve water quality</i>	W9	Protect surface and groundwater from runoff and contamination		X								ILLICIT DISCHARGE	
		<i>W9a</i>	>Avoid the use of coal tar sealants on municipal property		X								BANNED VILLAG	Y
		<i>W9b</i>	>Resolve to eliminate unnecessary landscape pesticides and fertilizer use on municipal property		X									Y
		<i>W9c</i>	>Use sensible salting strategies to reduce chloride contamination		X									Y
		W10	Collaborate to identify sensitive aquifer recharge areas						X	O				Y
		W11	Support post-development runoff reduction and mitigation		X									
		W12	Inventory and inspect septic systems							X				
		W13	Collaborate with regional initiatives to protect Lake Michigan and the Mississippi River		X									NBWS GROUP
	Water Infrastructure <i>Manage water system assets sustainably</i>	W14	Label storm drains indicating the destination of discharge		X								SOME	
		W15	Operate an efficient water utility that delivers clean, healthful, water		X									
<i>W15a</i>		>Control water loss by auditing water supply system using AWWA protocols		X									Y	
<i>W15b</i>		>Periodically detect system leaks and develop a strategic plan for repair		X									Y	
W16		Comprehensively and sustainably manage water infrastructure		X										
<i>W16a</i>		>Develop a water infrastructure asset management plan to sustain the system		X									Y	
<i>W16b</i>		>Implement the water infrastructure asset management plan to sustain the system		X										
<i>W16c</i>		>Meter 100% of customers with automated reading technology		X										
<i>W16d</i>		>Implement sub-metering for multi-family housing customers							X					
<i>W16e</i>		>Detect and repair water system leaks		X										
<i>W16f</i>		>Repair and replace inefficient water supply infrastructure		X										
<i>W16g</i>		>Support property owners in timely repair of service lines through third-party warranty program							X				Y	
W17		Invest water revenues into sustaining water infrastructure		X										
W18	Coordinate street, utility and water infrastructure projects		X											
W19	Seek both public and private financing partnerships for infrastructure improvements		X											
W20	Riparian communities: Collaborate with other agencies to assess dam performance and support removal when								X			Y		
rastructure	W21	Participate in the Community Rating System for flood mitigation and planning		X									Y	
	W22	Participate in the National Flood Insurance Program allowing residents to access flood insurance		X										
	W23	Implement green infrastructure best management practices on municipal properties						X						
	<i>W23a</i>	>Build or retrofit paved surfaces with permeable materials							X					
	<i>W23b</i>	>Install and maintain bioswales, filter strips, trees, rain gardens, and other functional landscapes		X										

WATER	Category	GOAL	OBJECTIVE	Already achieved	In Progress	Planned for next 6 months	Planned for next 12-18 months	Interested in pursuing	Not planned	Not relevant	Contact Initials	Notes	Link to resource		
				> STRATEGY										Notes	Link to resource
				+ ADVANCED STRATEGY											
WATEI	Stormwater Management and Green Infr	Optimize the use of natural and built systems to manage stormwater	W24	Encourage residents and businesses to adopt green infrastructure practices				X							
			W24a	>Collaborate to provide rain barrels, plants and other resources to allow resident to capture and store rainwater	X										
			W25	Encourage residents and businesses to reduce flood risks on their property	X										
			W25a	>Incentive overhead basement sewer conversion					X						
			W25b	>Encourage property owners to disconnect downspouts from sewers and direct flow to landscaping					X						
			W26	Enhance natural features of stormwater detention and retention systems	X										
			W27	Collaborate to enhance wetlands for improved ecosystem services	X									DETENTION BASINS	
			W28	Collaborate with regional and state agencies to sustainably manage stormwater	X										
			W+29	+ Use USEPA Water Quality Scorecard to develop a systems approach to optimize stormwater	X										Y
			W+30	+ Establish a stormwater utility funding mechanism	X										Y
WATE	Policy	Enact policies to protect water resources	W31	Conduct a water rate study to determine sustainable rate structure	X							2021			
			W32	Adopt full-cost pricing policies for water service					X					Y	
			W33	Amend code to require water efficiency and conservation in commercial and residential development				X				2018 IRC		Y	
			W34	Incorporate conservation practices into new development guidelines and incentives				X							
			W35	Adopt a water conservation policy and/or plan inclusive of all customers and municipal operations	X										Y
			W35a	>Enact and enforce regulation to control of wasteful water practices	X										
			W35b	>Enact and enforce outdoor watering regulations responsive to drought conditions	X										Y
			W35c	>Regulate or incentive water efficiency for customers managing large landscapes						X					
			W36	Update stormwater ordinance to integrate Illinois State Model Local Stormwater Ordinance	X										Y
			W37	Adopt codes that enable rainwater harvesting for non-potable uses					X						
			W38	Adopt a resolution supporting the Great Lakes and St. Lawrence River Basin Water Resources Compact					X						
			W39	Review and adopt codes to eliminate barriers to green infrastructure BMPs including cisterns, green roofs, bioswales, permeable paving					X						
			W40	Allow flexibility (off-site management, payment-in-lieu) to allow developments to meet stormwater management requirements sustainably						X					
W41	Enact codes that protect surface and groundwater from runoff and contamination	X													
WATER	Stewardship	Practice stewardship of water resources	W42	Sustain supply of high-quality public water	X										
			W43	Ensure drinking and wastewater systems are operating efficiently	X										
			W44	Utilize treated effluent as a valuable water resource					X						
			W45	Participate in watershed planning and stewardship efforts	X									Y	
			W46	Implement municipal recommendations from watershed plan					X						
			W46	Allow public access and encourage stewardship of community waterways					X						
			W48	Support regional and statewide water supply planning and stewardship					X					Y	
			W49	Contribute local data on water supply, quality and operations to support state and regional stewardship	X									Y	
			W+50	+ Enact a water offset policy for water neutral community growth					X					Y	
WATER	Outreach	Engage the	W51	Educate and support the community to conserve water	X								Y		
			W52	Educate the community on the value of clean and safe drinking water	X										
			W53	Promote tap water over bottled water	X									Y	
			W54	Educate the community on practices that reduce contamination of water resources	X									Y	
			W55	Support private well-owners in water quality monitoring and stewardship							X			Y	

Category	 GOAL	OBJECTIVE		Already achieved	In Progress	Planned for next 6 months	Planned for next 12-18 months	Interested in pursuing	Not planned	Not relevant	Contact Initials	Notes	Link to resource	
		> STRATEGY												
		+ ADVANCED STRATEGY												
Education and Community	Engage the community in water stewardship	W56	Educate customers about public water supply and wastewater operations through media and events		X									
		W57	Educate the community on benefits and practices of green infrastructure					X						Y
		W58	Educate and support the community in preparing for and managing floods		X									Y
		W59	Collaborate to teach water conservation and stewardship in schools					X						
		W60	Collaborate to raise watershed awareness and foster stewardship					X						

What's New in the 2021 International Energy Conservation Code® (IECC®)

The IECC addresses energy efficiency on several fronts including cost savings, reduced energy usage, conservation of natural resources and the impact of energy usage on the environment. Key changes to the 2021 IECC improve efficiency by 9.4 percent and reduce greenhouse gases by 8.7 percent over the 2018 IECC; these changes include new provisions that increase efficiency and encourage greater flexibility in design and construction as well as changes to existing requirements that provide clarification and improve useability of the code.



The following are key changes in the 2021 IECC by building type and system:

IECC, Commercial

Building Envelope

- Increased insulation requirements and reduced fenestration U-factors and solar heat gain coefficients.
- Extended requirements for envelope air leakage testing and verification.
- New provisions for operable openings interlocking and mandatory controls.

Mechanical Systems

- Updated equipment efficiency requirements.
- Refinement of energy recovery ventilation requirements.
- Updated fan efficiency metric.

Electrical Power and Lighting Systems

- Increased lighting efficacy and decreased lighting power density requirements.
- New provisions for plant growth lighting.
- New provisions for automatic receptacle control.
- New provisions for energy metering and monitoring.

Additional Efficiency Requirements

- Increased number of additional efficiency options and revised structure of Section C406.

Appendices

- New Board of Appeals appendix.
- New provision for system-ready area for electrical energy storage added to Solar-Ready Zone appendix.
- New Zero Energy Commercial Building Provisions appendix.

IECC, Residential

Building Envelope

- Increased insulation requirements and reduced fenestration U-factors and solar heat gain coefficients.
- Revised air leakage requirements.
- Revised duct testing requirements.

Mechanical Systems

- Clarification on duct location and insulation requirements.
- Removed exception for duct testing in conditioned spaces.
- New mechanical ventilation system testing requirements.

Electrical Power and Lighting Systems

- New exterior lighting requirements for limited residential buildings.
- New interior lighting controls requirements.

Energy Rating Index Compliance Alternative

- ERI values have been lowered and an additional 5 percent energy reduction is applied.

Additional Efficiency Package Options

- New section requiring additional efficiency in residential buildings is added. Five options for achieving compliance with this section are included: enhanced envelope performance, more efficient HVAC equipment performance, reduced energy used in service water heating, more efficient duct thermal distribution system, and improved air sealing and efficiency ventilation system.

Appendices

- New Board of Appeals appendix.
- New Zero Energy Residential Building Provisions appendix.

In addition to these changes, the useability of the code has been improved in two ways.

- First, the 2021 IECC removes the terms “prescriptive” and “mandatory” in provision labels throughout Chapter 4 of both the Commercial and Residential IECC.
- Second, the compliance paths available to commercial and residential code users are now provided a name and the requirements of each path are clearly outlined. The code has been restructured such that each compliance path has its own section and the mandatory provisions for each are clearly identified within these sections. All requirements needed to comply with the Total Building Performance (for commercial and residential), Energy Rating Index, and Tropical Climate Region compliance paths are included in user-friendly tables separate from prescriptive code requirements.

These two changes work in tandem to clarify when code provisions are required.

Finally, the climate zone provisions have been comprehensively updated and now include a new Climate Zone 0. Ten percent of U.S. counties have been assigned a new climate zone.

Learn more about significant changes in the forthcoming 2021 International Energy Conservation Code Significant Changes and the 2021 IECC Code and Commentary at shop.iccsafe.org