



Office of Energy and Climate Change

Director – Keith Reopelle

Joe Parisi
DANE COUNTY EXECUTIVE

Notes from the Ninth Meeting of the Dane County Council on Climate Change

December 7, 2018, 9:00 am to 12:00 pm
Madison Municipal Building
215 Martin Luther King Jr Blvd, Madison, WI

Agenda

- 9:00 to 9:20 - Welcome, introductions, agenda review and updates, by Keith Reopelle
 - 9:20 to 10:00 - Wind Power Presentation by Tyler Huebner
 - 10:00 to 10:30 - Bio-methane Transportation Fuel Presentation by Keith
 - 10:30 to 11:00 - Discussion of CAP Reduction Targets & Modeling
 - 11:00 to 11:40 - Discussion of All Recommendations
 - 11:40 to 12:00 - CAP Production & Next Steps
- Floating agenda item: Just Bakery introduction by Carmella Glenn, Program Director

Council Members in attendance included

Lauren Azar, Azar Law LLC
Mary Blanchard, Wisconsin Energy Institute
Jim Bradley, Home Savings Bank
Brad Bruun, City of Monona
Tom Content
Jamie Derr, Derr Farms
Mary Evers Statz, UW-Health
Ellen Geisler, City of Fitchburg
John Haeckel, Clean Fuel Partners
Brett Halverson, Greater Madison Chamber of Commerce
Tyler Huebner, RENEW Wisconsin
Jeff Jaeckels, Madison Gas & Electric

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Elizabeth Katt Reinders, Sierra Club
Erik Lincoln, Ho Chunk
Michele Pluta, Alliant Energy
David Poklinkoski, IBEW Local 2304
Mark Redsten, Clean Wisconsin
Stacey Reece, City of Madison
Joel Schriever, Exact Sciences
Charles Tubbs, Dane County Emergency Management
Libby Tucci, YWCA of Madison
Gary Werner, CRANES

Welcome, introductions and updates

Stacey Reese welcomed attendees to the newly remodeled Madison Municipal Building and announced the open house event for the building on Saturday, December 8.

Updates

- There are currently 60-70 recommendations before the Climate Council.
- Some of the working groups plan to meet more times before the Council's last meeting in late January or early February.
- The working groups are encouraged to continue to convene during the transition to implementation phase of the Climate Action Plan (CAP).
- The process oriented working groups are meeting more frequently of late.
 - Modeling group will meet a few times to finish the modeling.
 - Public Engagement group is looking at branding, developing messaging.
- A draft version of the CAP will be distributed for public input before it is released on Earth Day, April 22, 2019.
- Recap of recent activities of the DC4 Community Team by Kelly Osborn, Office of Energy and Climate Change.
 - Participation in workshop held in Milwaukee helped to solidify the team.
 - Meeting bi-weekly
 - Working to identify individuals, formal and informal groups in frontline communities (those disproportionately impacted by climate change and environmental degradation).
- Reminder to distribute draft CAP recommendations for review and comment.
- Ellen Geisler announced a tour of the Badger Prairie Needs Network facility on Wednesday, December 12.

Wind Power Presentation by Tyler Huebner

Wind will be discussed today, geothermal and electrified heating at a later date.

Recommendation: 50% of projected electricity needs comes from wind energy.

- 570 to 715 MW of wind power needed to meet this goal.
- Mix of Wisconsin-based and Midwest/Regional wind projects, based on a variety of factors.
- Best wind resources are in states west of Wisconsin, yet 750 MW of wind power currently in the state, with 1100 MW in development.

Greenhouse Gas Reductions: 2.43 billion tons of CO₂.

Project cost: \$970 million to \$1.2 billion. Cost effective to utilities.

Economic benefits: job creation, rural landowner revenue, local government shared revenue.

Feasibility: High.

Timing: Projects could be built and operational by 2030, or sooner.

Bio-methane Transportation Fuel Presentation by Keith Reopelle

Dane County Public Works - Sustainability and Renewable Energy Projects video was played as an introduction. (<https://tinyurl.com/DaneCountySustainability>)

Overview of Dane County Landfill Project

- First such project in the nation.
- In early 2019, Renewable Natural Gas (RNG) will begin to be pumped into pipeline.
- Should be ready to fuel additional heavy duty vehicles (HDV) by May, 2019.
- \$450 million PSC grant will be used to double the capacity of the fueling station, enabling the accommodation of other municipal and private waste fleets.
- Will dramatically improve the economics of biodigesters in the County, when methane is converted to RNG.

Recommendation: Convert 60% of the HDV in Dane County to Renewable Natural Gas (RNG) by 2026. (11,975 HDV registered in the County)

Equity benefits: A decrease in NOX and particulates on main thoroughfares will be a positive for communities that live in the vicinity.

Economic benefits: The project will be paid for in 2.5 - 3 years. Afterwards, there is potential for local municipalities to reduce fuel costs significantly, especially with more users of the facility. Fueling equipment is manufactured locally.

Discussion

- Will it be possible for a municipality to purchase RNG in bulk and transport it for distribution from their own fueling station?
- How does RNG compare in fuel efficiency?
 - Good question. We will get back to you on that.
- A feasibility study is looking at potential for a network of digesters in northern Dane County. Results should be ready by the year's end.
 - A similar project in Brown County will reduce CO2 emissions by 80,000 tons/yr, with additional environmental benefits.

CAP Reduction Targets & Modeling

- Setting the CAP goals will be an iterative process.
- IPCC report sets an intermediate goal of 45% GHG reduction by 2030, using a 2010 baseline. Others use 2005 as a baseline.
- The CAP will use 2017 as a baseline, with updated the data from 2013 Dane County emissions inventory.
- This modeling effort is piggybacking on a larger modeling effort that is looking at the power sector, transportation sector and building sector across the Midwest.
- In the most recent modeling work group discussion we noted that the agriculture emissions are not only very large, but are made up of roughly equal parts of methane and nitrous oxide emissions. We knew that methane was a major component, but the N2O is surprising. We'll take a closer look at the methodology behind the N2O number because that number is on the same order of magnitude as another analysis gives for the entire state.

Discussion

- Council member: strongly supports using IPCC goals. Suggests 80% by 2050.
- Several Council members: the nitrous oxide emissions are partially a fertilizer problem.
- Council member: look at the nitrous oxide emissions as an opportunity for Dane County to make a bigger contribution globally by taking a deep dive.

Just Bakery intro by Carmella Glenn

Discussion of All Recommendations

CAP Production & Next Steps

- Next steps, running the proposals through the model.
- Share the recommendations for review. Deadline for feedback is December 21.
- Any additional recommendations from Council member groups due by 1/11/19.