



# Building Energy Sourcing and Efficiency Workshop Notes

*Workshop Date: February 15, 2018*

## Welcome and introductions

Peter Passarelli with the City of Milwaukie welcomed participants and invited each person to introduce themselves.

- Peter Passarelli: Public Works Director and Project Manager for the CAP
  - Came in 2017 in part due to the Council goal to develop a Climate Action Plan.
  - Guided the recruitment of the Climate Action Plan Committee
  - Hoping to put a plan together that meets the size, scale, needs of Milwaukie, both with respect to mitigation and adaptation
  - Emphasized that green building and energy has a huge role
  - Outlined implementation partner workshops; explained purpose - to hear from technical experts about their experience and ideas for mitigation and adaptation strategies
  - Agrees with the Mayor that this is an existential threat to humanity. What we need to do is take care of it.
- Melinda Shumaker, Facilities Director, North Clackamas School District
  - Interested; here to learn.
- Damien Farwell, Fleet and Facilities Supervisor, City of Milwaukie Public Works
  - Recognizing fleet and facilities have a role in Milwaukie's carbon footprint, interested in working with ETO to apply best practices
- Vince Alvarez, CPAC Member, Lake Grove/Kellogg Creek Neighborhood District Association (NDA), Chair, Milwaukie Citizens Utility Board
  - Lifetime of being involved in the world around us and where we are headed. Need to help ensure people take the minimum steps to reduce their impact.
- Garrett Harris, Portland General Electric
  - Responsible for marketing and demand responses systems, renewable power. Works closely with Energy Trust. Has a passion for energy efficiency.
- Brooke Berglund, Government Affairs, PGE
  - Had a "save the world" cup as early as 4<sup>th</sup> grade. Really interested to help define and execute this plan; identify cool energy ways to encourage citizens to participate.
- Mark Hilton, Citizen member of the CAPC. Former energy director in the UK where they had a 2008 EU directive to mitigate carbon emissions within the built environment. Currently works in finance but glad to contribute to this effort.
- Eric Corey Freed, Architect, Builder, Author
  - Served on the Mayor's Green Building Task Force in San Francisco and the Sustainability Task Force in Palm Springs and Palm Desert. Finds the big arena that matters is policy. It's not a matter of solving for climate change, it's how hard of a decade do we want to have. What can we do to keep us below that degree and one half so that we can continue to live on this planet.
- Jeni Hall, Program Manager for Solar at the Energy Trust of Oregon
  - Works to provide financial incentives and technical assistance to help business owners, cities, homeowners invest in energy efficiency like solar. Interested in helping Milwaukie meet their goals. Fortunate to be work in a field they feel strongly about. Learned by designing solar systems for schools, working in the field.



# CITY OF MILWAUKIE Climate Action Plan

- Jay Ward, Senior Community Relations Manager, Energy Trust of Oregon
  - Serves as the public facing role for ETO in Oregon. ETO is an independent non-profit that serves utility customers.
  - Works with PGE, Cascade, Avista, NW Natural, Pacific Power. Help customers save energy. Ratepayers incentives and measures are accountable to the Public Utility Commission. Must operate under a cost effectiveness test. There to save energy but aren't tasked w/ climate change mitigation. Likes forests, drinking water, skiing.
- Anthony Roy, Earth Advantage
  - Earth Advantage is a mission based non-profit high-performance home and building construction and remodeling. Relatable formed a coalition of organizations to promote zero energy construction in Oregon. Helps advocate and move that process forward through code change process in the state. Would be great if Milwaukie could join that effort. Works w/ cities on the home energy score ordinance; City of Hillsboro on south Hillsboro community development. Personally, Al Gore baby; read his first book right out of college; first job community organizing around climate change.
- Tanya Barham, PECE
  - Helping communities thrive in a new energy economy. Interested in tactical measures, e.g., electrification and a grid that gives community a better seat at the table.
- Shauna Brownstein, NW Natural
- Josh Proudfoot, Good Company
- Kirstin Greene, EnviroIssues

## Presentation

- Please see PowerPoint under separate cover.

## Identified adaptation actions (listed in priority order by topic)

Blue font = will be characterized for mitigation benefit (we will be following up soon),

Green font = will be scaled for adaptation benefits

Number of dots	Action	Agencies/Resources Involved
5	Community solar project for those without rooftop exposure	City of Milwaukie, utilities
5	Advocate for, participate in code updates at the state level (energy as well as seismic)	City of Milwaukie, committee members
5	Implement a comprehensive sustainability plan for Clackamas County	City, County
4	Adopt a commercial and residential disclosure program of energy scores	City of Milwaukie
3	Implement the PACE (Property Assessment for Clean Energy) program in Milwaukie	County and City
2	Implement NEST residential home thermostat program	PGE, ETO, NW Natural
2	Adopt the Clean Energy Future Challenge	PGE, NWN
2	Create a Strategic Energy Management system/more responsive market signals	(could be): Milwaukie HS, City of Milwaukie, ETO
1	Negotiate variable pricing with utilities	
1	Initiate the LEAP program for K-12 in Milwaukie	ETO [suggested by PECE]
1	Policy incentives for Green Building	City of Milwaukie



**Not happening yet but needs to:**

Number of dots	Action	Agencies/Resources Involved
4	Solar and battery storage/ resilience	PGE, ETO, City
4	Create distributed energy systems (rooftop solar)	ETO, ODOE
3	Multifamily energy efficiency (equity)	PGE, City
1	Support heavy duty fleet conversion	Clean Cities
1	Distributed generation of solar hot water (energy management behind the meter)	
1	Conduct commercial and industrial audits	City
1	Set climate stabilization goals	City

**Good Company’s interpretation of what can be scaled given list above and number of actions to scale per workshop - 8 total.**

1. Energy Efficiency potential – technical potential at *varying* price points for the entire community (not just today’s cost effectiveness test). Break out for multifamily and by sector (residential, commercial, industrial, institutional).
2. PV solar potential for the community – (Challenge – determining rooftop with tree canopy cover. Identifying a few open land areas and major rooftops where large solar could happen).
3. Battery Storage onsite.

**These require follow up to understand further:**

4. Implement a comprehensive sustainability plan for Clackamas County.
5. Adopt a commercial and residential disclosure program of energy scores.

**These are indicated by best practice and will be scaled as well to round out the voted for list:**

6. Refrigerants – already built in for conversion based on Montreal Protocol. (Baked into cake). No title 5 permit for refrigerants in Milwaukie. Will do research to scale or see if folks are following the Montreal Protocol.
7. Solar hot water.
8. Fuel switching from gas to electricity for thermal loads such as hot water, steam and heat by sector (residential, commercial, industrial, institutional).
9. Purchasing offsets for the community at large.