Utilities Committee Sustainable Energy Referral

July 15, 2019



Green Direct Renewable Energy Program

- Cities, other government institutions and major commercial customers have the opportunity to source their electricity from renewable energy sources (solar and wind).
- Customers enter into Power Purchase Agreements to purchase renewable energy, which provides certainty for development of renewable energy sources.
- PSE has completed two phases of the program. No new customers are currently being accepted.
- Other cities in the program include Issaquah, Redmond and Kent.
- PSE is requesting the UTC to approve a third phase of the program in 2020.

Green Power Program

- Utilizes renewable power from resources that are naturally replenishing;
 solar, low impact hydroelectric, wind, biogas from dairy farms.
- Any home or business that is a customer of PSE can match some or all of their electricity usage with green power.
- A typical customer using electricity (1,000 kWH/month) can reduce their carbon footprint by an estimated 10,500 pounds (5.25 tons) annually by paying as little as an extra \$10 per month.
- Larger customers (commercial/industrial business and governmental agencies) can join the program and pay a slightly higher rate.
- PSE uses the additional revenue to add renewable energy sources.

Solar Choice Program

- Allows a PSE customer to match some or all of the power they use with just clean solar energy.
- The solar panels will not need to be installed on the customer's property. Instead, solar power is generated at a separate location in Washington and Idaho that is added to the PSE power grid.
- A typical customer using electricity (1,000 kWH/month) can reduce their carbon footprint by an estimated 6,300 pounds (3.15 tons) annually, by paying as little as an extra \$20 per month.



Customer Connected Solar – Net Metering Program

- Allows customers to produce their own renewable energy by installing solar panels on the customer's own property to lower their electric cost and reduce their carbon footprint. Customers can also generate power with wind, biogas or other renewable energy sources.
- If the customer uses more energy than they produce during a billing period, then they pay PSE only for the net amount of electricity that was used.
- If the customer produces more energy that what is used in a billing period, the excess power generation is added to the customer's net metering reserve, which can be applied to charges in another billing period.

Carbon Balance Program

- Participating in the Carbon Balance program lets customers reduce their carbon footprint by purchasing third-party verified carbon offsets from local projects that work to reduce or capture greenhouse gases.
- Residential natural gas customers can purchase offset blocks for \$4 each. With each block equivalent to removing 400 pounds of carbon dioxide from the environment, the average customer can be carbon neutral for as little as \$8 per month.
- **PSE does not make a profit on the Carbon Balance program.** The carbon offsets for the program are sourced from the Bonneville Environmental Foundation, which is a nonprofit organization.



What is the City of Renton doing now?



State & Regional Collaboration

The City of Renton is a member of the King County-Cities Climate Collaboration (K4C), which includes King County and 16 partners that consist of cities and the Port of Seattle.

- Council passed Resolution 4229 supporting the Joint County-City Climate Commitments.
- ESSB 5116 State electricity supply is to be 100% carbon neutral by 2030 and carbon free by 2045.

State & Regional Collaboration

King County and cities are partnering on:

- Outreach to develop, refine, and utilize messaging and tools for climate change outreach to engage decision makers, other cities, and the general public.
- Coordination to adopt consistent standards, benchmarks, strategies, and overall goals related to responding to climate change.
- Solutions to share local success stories, challenges, data and products that support and enhance climate mitigation efforts by all partners.
- Funding and resources to secure grant funding and other shared resource opportunities to support climate related projects and programs.



Reducing our City's Carbon Footprint

Transportation

- City Street Light LED Conversion Program 6,458 lights converted. Reduced power usage by 4,800 MWh annually = 461 residential customers.
- City Hybrid Fleet Vehicles 18 hybrid vehicles currently.
- City Commute Trip Reduction program promotes alternatives to reduce SOV's (ORCA cards, transit, carpool, Flex-schedules).
- Transit Access City transit centers and increasing bus routes for better access to transit.



Reducing our City's Carbon Footprint

Utilities

- Water Utility Automatic Meter Reading (AMR) Program eliminated the need for manually reading over 18,000 water meters.
- Pump Station Motor Replacement (7-Variable Frequency Drives)
- City Solid Waste Contractor CNG Use A fleet of 25 trucks use CNG fuel to collect solid waste in the City which reduces greenhouse gases by 20-30%.
- Solid Waste Collection Frequency Change Every other week garbage collection reduced vehicle trips.
- Solid Waste Utility Waste Prevention & Recycling
 Program Recycled 27,306 tons of material.

Reducing our City's Carbon Footprint

Community Services & Planning

- City Facilities HVAC Upgrades Energy savings of \$43,754 annually, reduced 337 tons of CO2 gases or equivalent to planting 83 trees.
- Renton Urban Forestry Program Protects and increases the number of trees in the City that remove CO2 gases and store carbon.
- City Land Use Plan Promotes higher densities in urban centers near transit alternatives.



City Recognition / Awards



The City of Renton was recognized as one of the "greenest" cities in Washington by Insurify.



The City was also recently recognized as a "Green Star Leader" from the Puget Soundkeeper and the Washington Environmental Council.

