

## City of Wilsonville Renewables Narrative

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## Wilsonville's Objective & Goals



## Objective & goals

### Objective:

Tell the story of how Wilsonville is increasing usage of renewables (2016-2021)

## Story goals:

- 1. Provide an overview of the city and community's increasing use of renewable power in the context of regional and US EPA national context
- 2. Present PGE's various renewable programs over time
- 3. Segment the market among residential and commercial/industrial customers
- 4. Include PGE customer contacts by customer segment

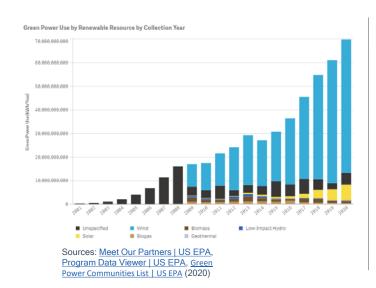


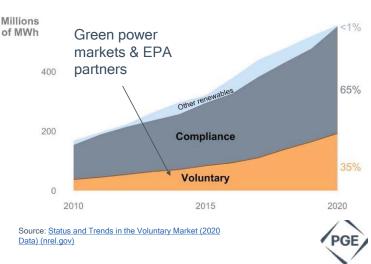




## We're part of a national trend

- 7.5 million customers procured 192 billion kWh of renewable energy through voluntary green power markets. (In 2020 U.S. electricity sales totaled 3.7 trillion kWh).
- 100s of EPA Green Power Partners together purchased a total of 44.76 billion kWh
- 11 EPA Green Power Communities (GPCs) in Oregon and 118 in the US purchased 7.46 billion kWh









## Our renewables journey began in 2014

2014: Entered EPA Green Power challenge and joined PGE's Clean Wind<sup>1</sup> program

2015: Became an EPA Green Power Partner<sup>2</sup> & EPA Green Power Community<sup>3</sup>

2016: Enrolled City of Wilsonville SMART in PGE's Clean Wind<sup>1</sup> program at 100%

2019: Enrolled in PGE's bundled renewable energy program to bring Oregon's largest solar facility to Gilliam County

2020-2021: Increased annual participation in PGE Clean Wind<sup>1</sup> by over 300 MWh

2022: Committed to reaching 100% renewable energy matching with a purchase of renewable energy certificates through PGE's Green Future Enterprise (from 94,913 to 278,558 kWh).

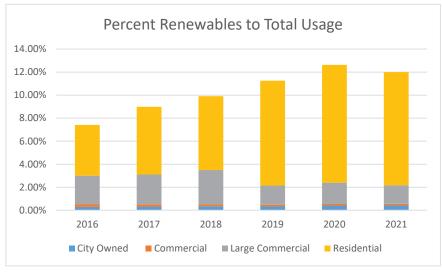


<sup>&</sup>lt;sup>1</sup> PGE rebranded its Clean Wind program under the Green Future program umbrella. The program is now called Green Future Enterprise (GFE). GFE is a renewable energy certificate program. Renewable Energy Certificates (REC) do not contain electricity. A REC represents the environmental benefits of 1 megawatt hour (MWh) of revenewable energy that can be paired with electricity. Green Future Enterprise is a Green-e® Energy certified REC product. PGE is also supplying your electricity. Green-e® Energy has only certified the RECs, which may be sourced from outside of your local electricity distribution area. For more information, see www.green-e.org/rec

<sup>&</sup>lt;sup>2</sup> EPA Green Power Partner requires 7% of total usage to be renewable energy purchases (over 100,000,001 kWh/year)

<sup>&</sup>lt;sup>3</sup> EPA Green Power Community requires at least 5% of a community's total usage to be renewable energy purchases

## Increased renewable energy<sup>1</sup> purchases, as a percent of total usage, from 8% to 12% in 5 years



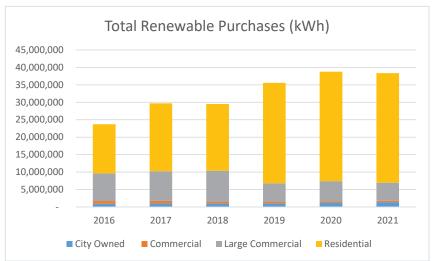
- Residential customers lead renewables growth from 4.5% to
- City owned renewables purchases (blue bar) increased from 0.29% to 0.42%

Source: PGE EPA Reports 2016-2021. 2016 and 2017: Total commercial usage included large commercial usage.

2018 - 2021 Total commercial usage excluded large commercial usage.

¹ GFE is a renewable energy certificate program. Renewable Energy Certificates (REC) do not contain electricity. A REC represents the environmental benefits of 1 megawatt hour (MWh) of renewable energy that can be paired with electricity. Green Future Enterprise is a Green-e® Energy certified REC product. PGE is also supplying your electricity. Green-e® Energy has only certified the RECs, which may be sourced from outside of your local electricity distribution area. For more information, see www.green-e.org/rec

## The Wilsonville community increased renewable kWh¹ purchases by 62%



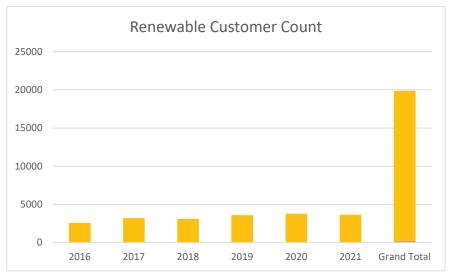
Source: PGE EPA Reports 2016-2021. 2016 and 2017: Total commercial usage included large commercial usage. 2018 - 2021 Total commercial usage excluded large commercial usage.

FGFE is a renewable energy certificate program. Renewable Energy Certificates (REC) do not contain electricity. A REC represents the environmental benefits of 1 megawatt hour (MWh) of renewable energy that can be paired with electricity. Green Future Enterprise is a Green-e® Energy certified REC product. PGE is also supplying your electricity. Green-e® Energy has only certified the RECs, which may be sourced from outside of your local electricity distribution area. For more information, see www.green-e.org/rec

- Residential customers lead renewables growth from 14mm to 31mm kWh
- City owned renewables purchases (green bar) increased 45% - from 927k kWh to 1,347k kWh



## Wilsonville increased the number of customers purchasing renewable energy<sup>1</sup> by 41% in 5 years



 The residential segment drove this trend increasing from 2,542 customers purchasing renewables in 2016 to 3,624 in 2021

Source: PGE EPA Reports 2016-2021. 2016 and 2017: Total commercial usage included large commercial usage. 2018 - 2021 Total commercial usage excluded large commercial usage. 2021 Customer Count: Residential: 3624, City Owned: 1, Commercial: 18, Large Commercial: 7



## Wilsonville's estimated annual generation from onsite solar is just under 2 m kWh per year

Customer Segment	Number of Customers	kW Installed Capacity	kWh Est. Annual Generation
Residential	155	1,069	1,218,000
Small Commercial	5	133	151,000
Large Commercial	8	528	602,000
Total	168	1,729	1,971,000

Installed capacity from PGE (PowerClerk). Estimated annual generation based on solar radiation data and average system assumptions from PVWatts. PGE does not report solar generation in the EPA annual reports

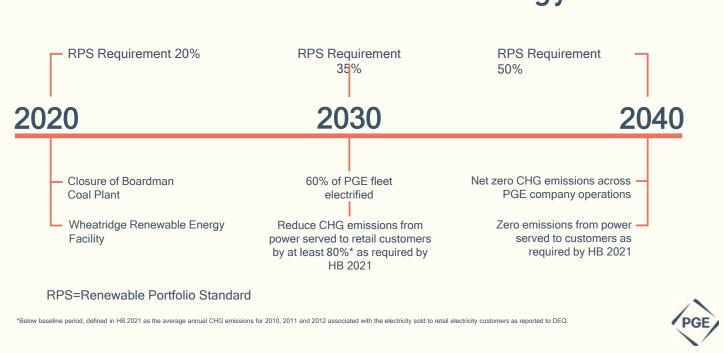


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# PGE & Clean Energy



## PGE Milestones for a clean energy future



# PGE's voluntary programs help customers achieve their clean energy goals faster

The City of Wilsonville is part of a community of more than 225,000 like-minded leaders, who've made PGE's Green Future the No. 1 renewable power program in America.<sup>1</sup>

Wilsonville's participation in PGE's Green Future programs supports renewable energy projects and jobs in Oregon.

Residents, businesses and the city lower the carbon footprint associated with their electricity use.



<sup>1</sup> According to National Renewable Energy Laboratory Top 10 rankings of Green Power Sales, Customers, Sales Rate, Participation Rate, <u>Top Ten Utility Green</u> Pricing Programs (2020 data) (nrel.gov)

## Recognition benefits offered through Green Future Enterprise







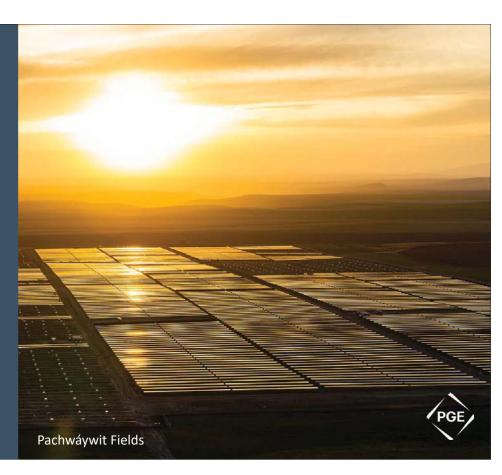


# City of Wilsonville and PGE partnership



## Thank you for your partnership!

- Electric Avenue
- EV charging
- Smart street lighting pilots
- · Water meter readings
- Green Future Programs



# Let's meet the future together.



**Appendix** 



#### **PGE** website links

Home (portlandgeneral.com)

Clean Energy Choices (portlandgeneral.com)

<u>Green Power | Green Future Choice Renewable Power | PGE (portlandgeneral.com)</u>

Green Future Enterprise | PGE (portlandgeneral.com)

<u>Green Future Impact for Business - PGE (portlandgeneral.com)</u>



## **PGE** contacts

Commercial and industrial renewable programs

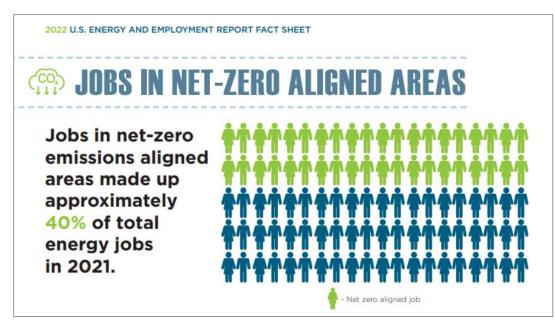
GreenFutureEnterprise@pgn.com GreenFutureImpact@pgn.com Lisa.DiMartino@pgn.com Tiffany.Delgado@pgn.com 1-800-542-8818

Residential renewable programs

<u>GreenFuture@pgn.com</u> 1-800-542-8818



## Clean energy jobs are growing in the U.S. and globally



"The transition to clean energy is expected to generate 10.3 million net new jobs globally by 2030.

That will offset the 2.7 million jobs expected to be lost in fossil fuel sectors. "

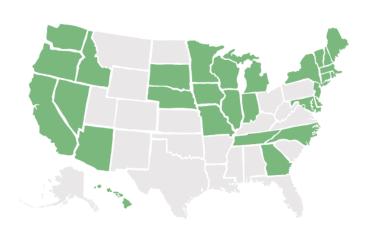
Source: World Economic Forum (weforum.org)



Source: U.S. Energy & Employment Jobs Report (USEER) 2022 Fact Sheet

## Oregon is leading the way in creating clean energy jobs

The 30 states in green show where wind and solar energy jobs outnumber coal and gas jobs.



Solar jobs: 5,265

Coal jobs: 166

Source: USEER 2022 National Report (energy gov) based on Union Data by State.

Source: Environmental Defense Fund report January 2018

