

General Observations: PSE Clean Energy Implementation Plan

Nov 4, 2021

Whatcom County Climate Impact Advisory Committee

Does the County have a role in the CEIP process?

- CETA compliance is a long-term process that will require *continuous public input*.
- Clearly this activity will be a key responsibility of Whatcom's new Climate Manager. Unknown whether any current staff at the County are following this issue.
- All electric utilities are required to produce a CEIP – so this includes all four utilities in Whatcom County: PSE, Whatcom PUD-1, Blaine MUD, and Sumas MUD.
- May be valuable to have Whatcom County comment at the UTC hearing on the CEIP in early 2022.

The consensus of independent analysts is that the CEIP is flawed: some believe PSE provided the bare minimum of what is required; others feel that PSE's CEIP does not meet the letter of the law. A few issues that come to the top:

1. PSE's Integrated Resource Plan indicates a new natural gas peaker plant operational by 2026, but it is not mentioned in the CEIP. Will this new plant be located in Whatcom County?
2. PSE's choice of Customer Benefit Indicators are confusing and may reinforce their corporate direction as opposed to benefit customers.
3. Multiple issues with Cost Calculations in the CEIP – Is the intent to load costs in the CEIP in order to exceed the 2% CETA cost cap to avoid CETA compliance?

Customer Benefit Indicators appear to be selected to avoid the cost of PSE adding their own utility-scale renewables.

- PSE used the following CBIs:

- **Reduced GHG emissions**
- **Improved outdoor air quality**
- **Affordability of clean energy**
- **Reduced cost impacts**
- **Increased clean energy jobs**
- Decreased outages

- **Improved community health**
- **Reduced climate change impacts**
- Improved home comfort
- Improved participation from named communities
- Improved fish & wildlife habitat
- Increased resiliency

Yellow = key clean energy objectives of CETA

- PSE selected overly simplified metrics/scoring for ranking DER programs that eliminated meaningful differences between DER programs.
- **Red = PSE prioritized five CBIs by applying increased weighting – some by a factor of two.**

A surprising result from these rankings -

- Of the five weighted metrics only three make any difference in the final score: *affordability of clean energy, reduced cost impacts, and increased clean energy jobs.*
- For example, PSE's method makes clean energy jobs twice as important as reducing power outages or increasing resiliency during emergencies.

Would a customer actually say, *"I don't care if my lights go out as long as there are more jobs."*

As one reviewer commented: *Are these Customer Benefit Indicators or actually Corporate Benefit Indicators?*

Does the County have a role in the CEIP process?

- CETA compliance is a long-term process that will require *continuous public input*.
- Clearly this activity will be a key responsibility of Whatcom's new Climate Manager. Are there current staff at the County that have the technical background to follow this issue?
- All electric utilities are required to produce a CEIP – so this includes all four utilities in Whatcom County: PSE, Whatcom PUD-1, Blaine MUD, and Sumas MUD.
- It is important to have Whatcom County comment at the UTC hearing on the CEIP in early 2022.

Using PSE's Current Fuel Mix,* the Efficiency Gains from EV's & Heat Pumps Would Cut GHG Emissions Nearly in Half by 2035

Baseline growth in electricity demand requires a 35.4% increase in electricity from 2018 to 2035.

EV's & Heat Pumps use about 1/3 less energy compared to their fossil fuel predecessors.

Universal fuel switching for vehicles and building heating would see a 119% increase in electricity demand from 2018 to 2035 (worse case scenario – e.g., no reductions in VMT from urbanization, mode-shifting, etc.).

From: Bellingham Climate Action Task Force report, 2019. pages 94-96.

Baseline residential and commercial natural gas emissions compared to universal conversion of gas appliances to electricity (tonnes)

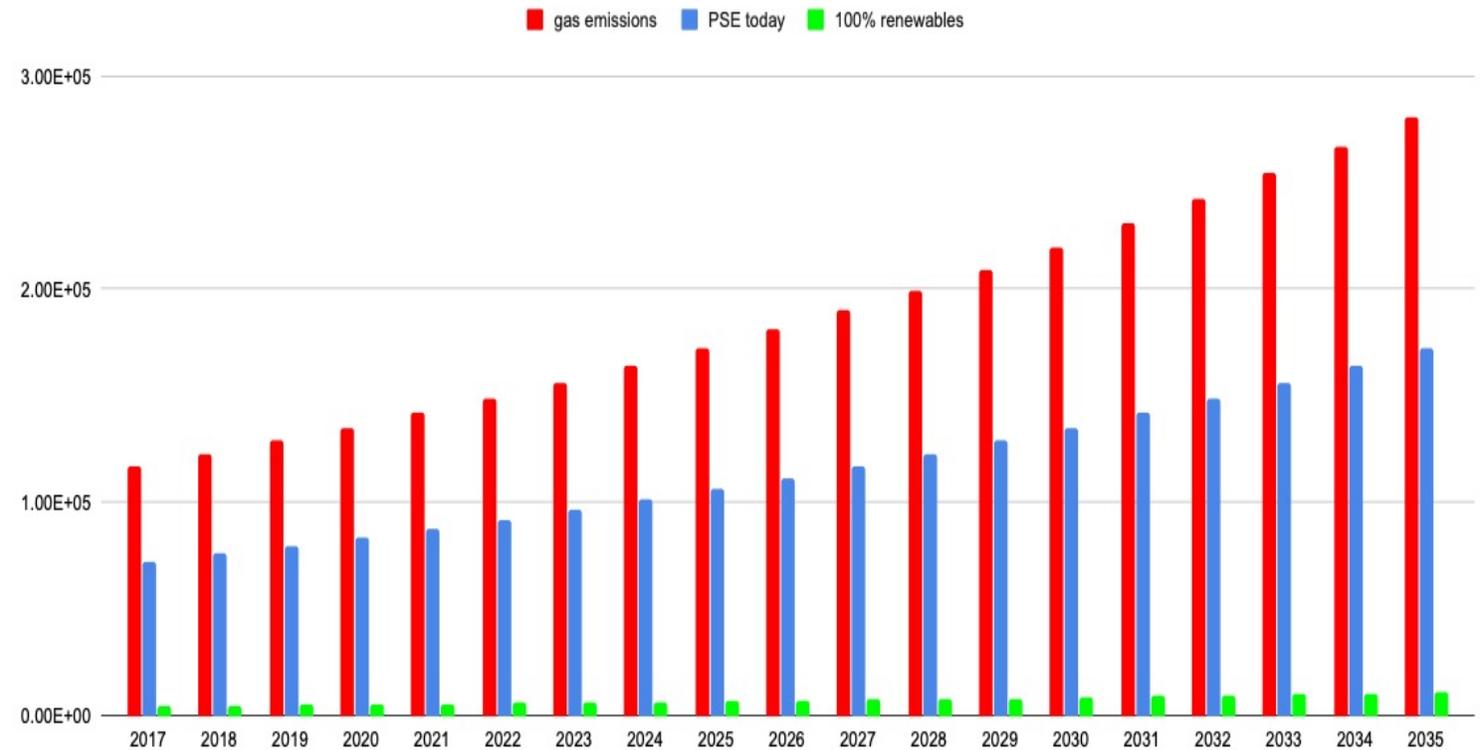


Chart shows impact of conversion of residential and commercial natural gas appliances over time.

*2017 PSE fuel mix of 59% fossil fuel used in emissions calculations (2017-2035). PSE's 2018 & 2019 fuel mix was even higher, 66%, as reported by PSE. CETA will lower fossil fuel generation to 20% by 2030, which would result in greater emissions savings than indicated in graph.