

PSE Green Direct program authorization
Sound Transit Board
1/26/2017

 **SOUNDTRANSIT**

Overview PSE - Green Direct program

- **Recommend authorization to participate**
- Power purchase agreement = Direct purchase of wind power for fixed rate term (10 years)
- No impact on energy security or O&M
- Commit in 2017 – Product online 2019
- Enrolling PSE Link accounts = Link light rail runs on renewable energy

Skookumchuck Wind Energy project area

52 wind turbines planned



Source: ESRI, TeleAtlas

Staff map

Alignment ST's GHG reduction mandate

2007 Board Resolution

Sustainability will be integrated into all aspects of agency business

2011 & 2015 Sustainability Plan – Board Approved

GHG emissions reduction and carbon neutrality goals – by 2030:

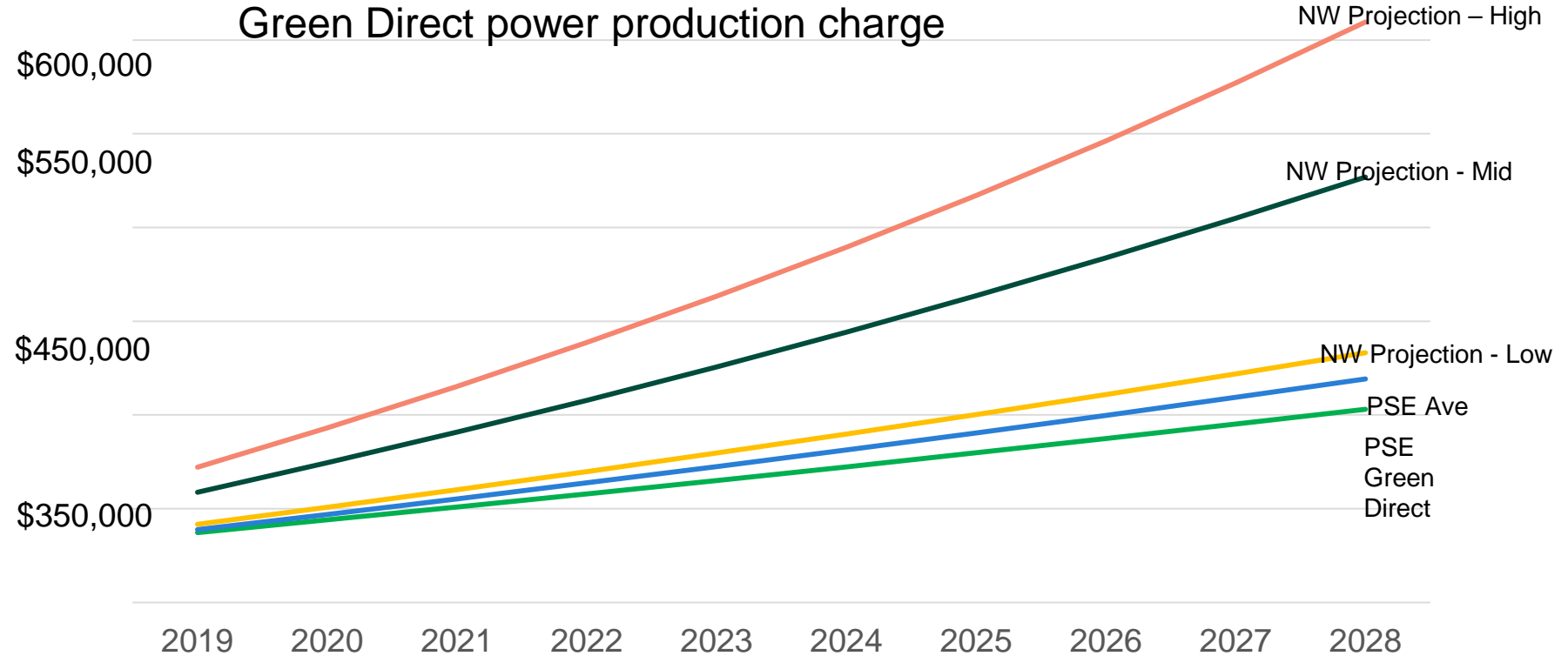
- **Facilities and all electricity are carbon-neutral**

ST3 Plan

Reaffirms agency goals

Cost Power Purchase Agreement

Green Direct power production charge



Alignment **Strong regional GHG commitments**

Carbon Neutrality Goals

- City of Seattle – gov't & community by 2050.
- King County – county operations by 2025.

GHG Reduction Goals

- K4C - 25% by 2020 and 50% by 2035
- WA State – 1990 levels by 2020; 20% below 1990 by 2035

Alignment International leadership

★ Calgary - light rail

★ Netherlands - all rail by 2018

Canberra - light rail ★

Carbon neutral rail systems

Feasibility Pathways to neutrality



Electricity
Conservation

Onsite
Renewables

Change
Power
Source PPA

Feasibility Utility impacts

- GHG emissions vary between utilities serving Link
- As Link grows out of SCL territory, electricity production produces more GHG emissions

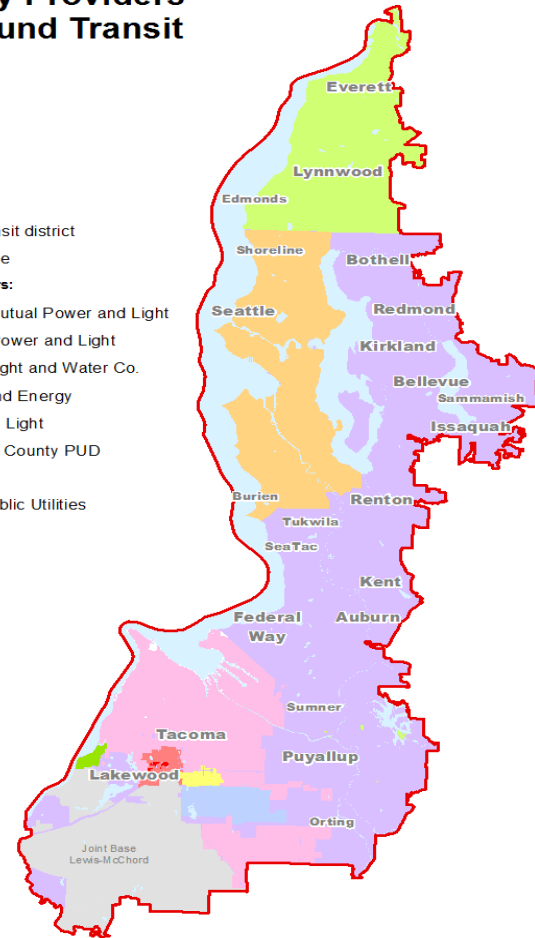
Electricity Providers in the Sound Transit district

Key:

- Sound Transit district
- Military base

Electricity Providers:

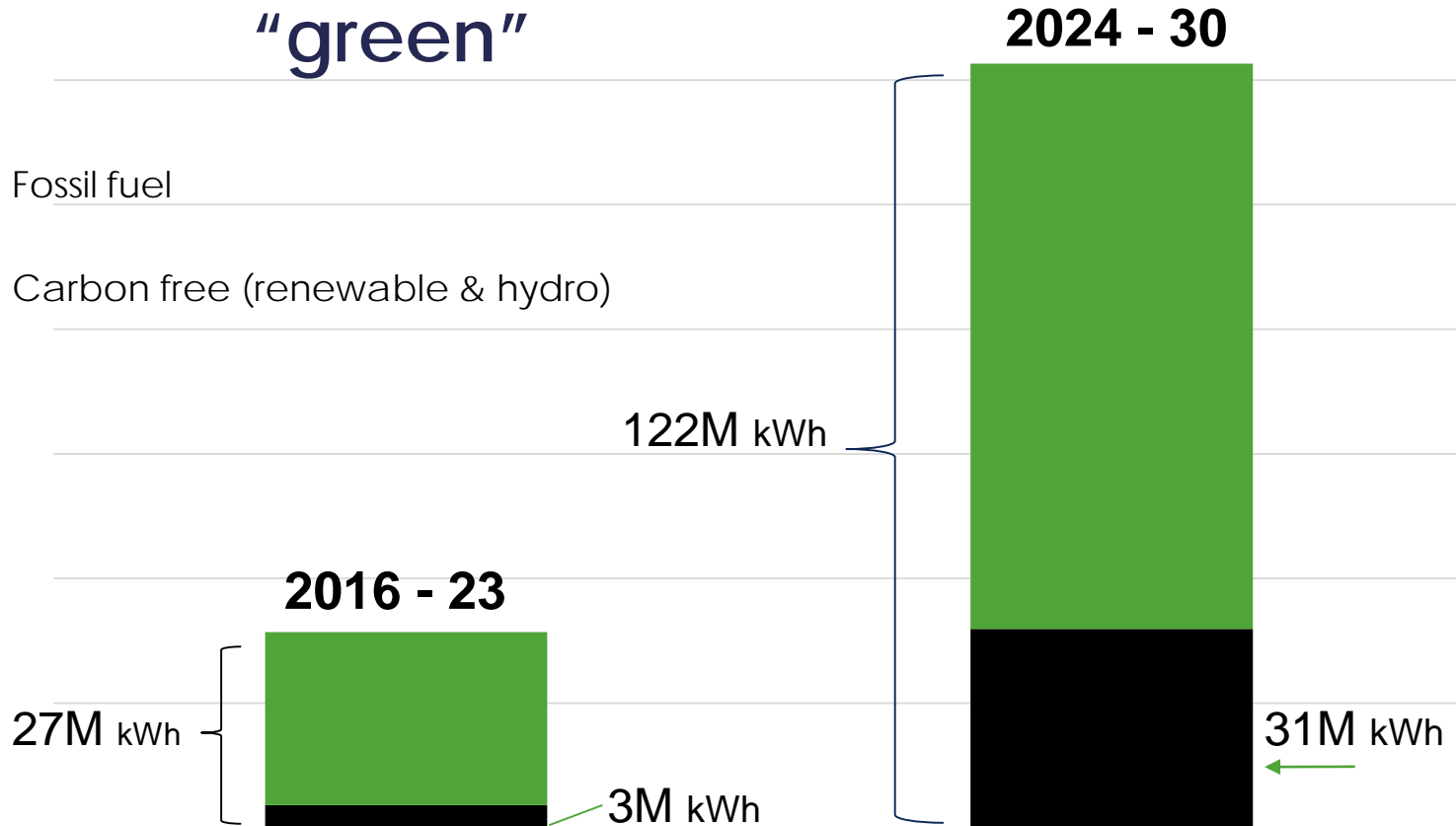
- Elmhurst Mutual Power and Light
- Lakeview Power and Light
- Parkland Light and Water Co.
- Puget Sound Energy
- Seattle City Light
- Snohomish County PUD
- Steilacoom
- Tacoma Public Utilities



ST2 expansion = more kWh to "green"

■ Fossil fuel

■ Carbon free (renewable & hydro)



Feasibility Recalibrating Carbon Neutrality Strategy

- Strategy needs to address Link light rail major expansion phases
- Return to Board with long-term strategy in next 2-3 years



2019-23

2024-29

2030-36

Summary **Green Direct program**

- ✓ The right thing to do
- ✓ Aligns with Agency Mission
- ✓ Aligns with Regional Climate Leadership
 - ✓ Feasible
 - ✓ Cost-effective



Amy.Shatzkin@Soundtransit.org

Sustainability Manager

 **SOUND TRANSIT**