



TRANSPORTATION ELECTRIFICATION

Brendan O'Donnell
Customer Energy Solutions



ACTION

The word "ACTION" is written in large, bold, grey letters. The letter "O" is replaced by a circular logo with four horizontal bands of color: blue at the top, green, light green, and teal at the bottom. The text "SEATTLE CLIMATE ACTION PLAN" is written in white, sans-serif capital letters across the bands. The letters "A", "C", "T", and "N" contain black and white photographs of the Seattle skyline, including the Space Needle.

Seattle aims to be carbon neutral by **2050**

Carbon neutrality requires a rapid transition from fossil fuels in the **transportation sector**

Building on the legacy of Seattle City Light by leveraging **clean electricity**

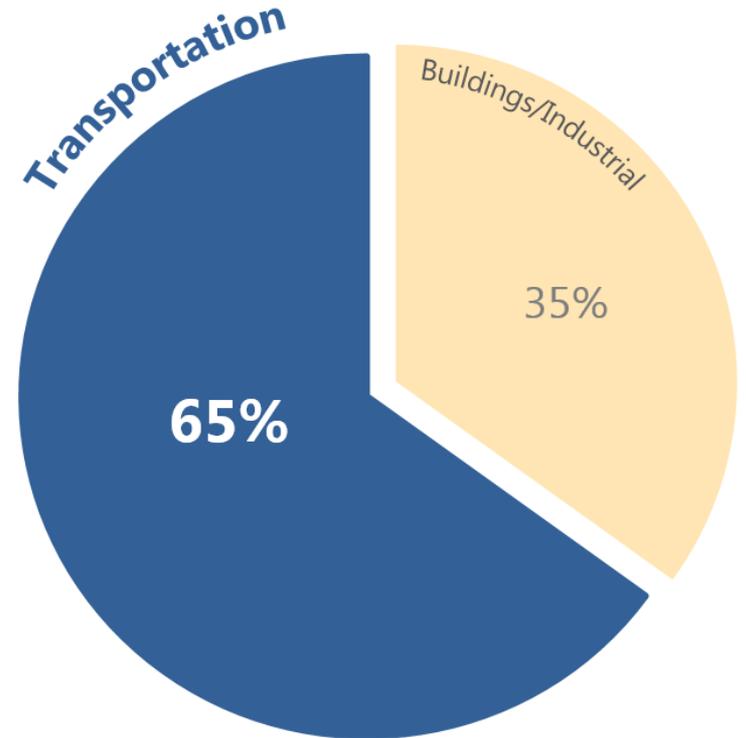
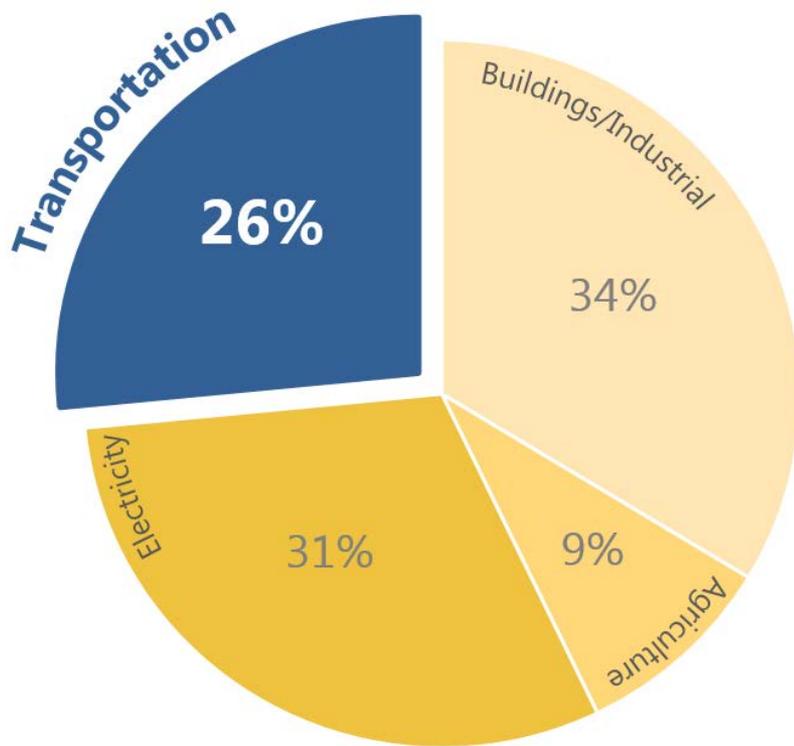
CARBON EMISSIONS



US AVERAGE



SEATTLE





CITY LIGHT BUSINESS PLANNING

- Late 2015-early 2016 completed business case with a cross function team from across utility
- Findings:
 - There is a net benefit for vehicle charging
 - The distribution system can largely handle the increase in transportation load
 - Strong customer demand, particularly electrification of our transportation sector in socially responsible ways.

EVSE PILOT PROGRAMS

1

Public DC Fast Charging Pilot

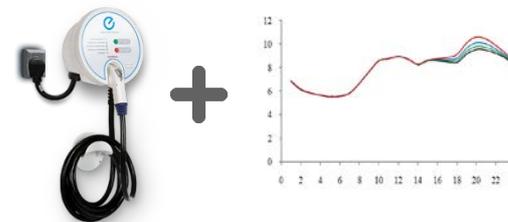
- 20 stations starting in 2017



2

Residential Charging Pilot

- Focus on data and grid services



SEEKING EXPANDED AUTHORITY

- City Light has introduced a bill in the current legislative session (HB 1335, Tarleton)
- Establish authority to using ratepayer funding to support private charging stations
- With expanded authority, would consider
 - Equipment incentives
 - Infrastructure support

1. PUBLIC CHARGING PILOT

Expand the network – install 20 DC fast charging stations

- City Light will own, operate and maintain infrastructure

Objectives

- Value to our customers
- Impact to distribution system loads
- Role of the public utility in advancing transportation electrification



2. RESIDENTIAL CHARGING PILOT

Offer rebate to reduce upfront cost of Level II chargers and maximize participation

Objectives

- Facilitate collection of data about locations & usage
- Understand impact to distribution system loads and benefits to customers
- Reduce air pollution and greenhouse gas emissions

Supplemental Slides



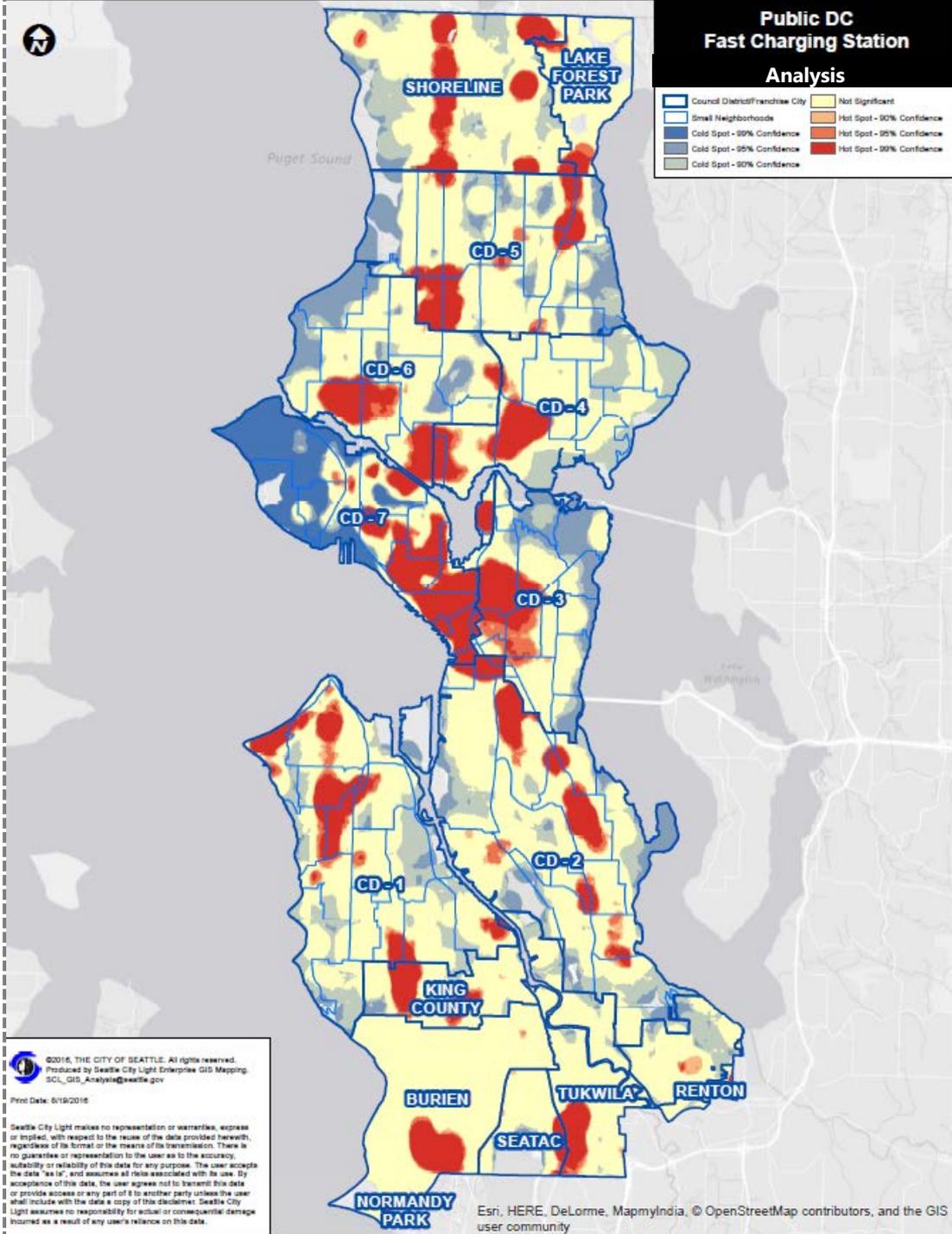
PUBLIC LAND

PRIVATE STATION

WHAT MAKES A GOOD SITE?

- High visibility and accessibility
 - Ideally, located in areas with retail, recreation or food service facilities nearby
 - 24 hr access for all customers
 - No barriers, gates or other restrictions
- Sufficient electric service
 - City Light can help potential site hosts understand this
- 2 parking spaces per station

GIS APPROACH



PUBLIC CHARGING PILOT

Timeline:

- April: Issue design RFQ/RFP
- May: Finalize award and vendor contract
- July: Site selection
- Aug/Sept: One test site complete
- October: Construction and Commissioning
- Nov/Dec: At least 10 stations operational

RESIDENTIAL CHARGING PILOT

Timeline

- April: Finalize business case and program design
- May: Legislative outcome announced
- June-Sept: Implementation plan developed
- Oct-Dec: Stakeholder outreach (i.e Auto manufacturer/dealerships, electricians, EVSE installers, etc.)
- January 2017: Launch rebate