



Seattle City Light

ELECTRIC TRANSPORTATION STRATEGY

Review Panel

June 25, 2019



CONTEXT

How did we get here?

ACTION

The word "ACTION" is rendered 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 these 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**

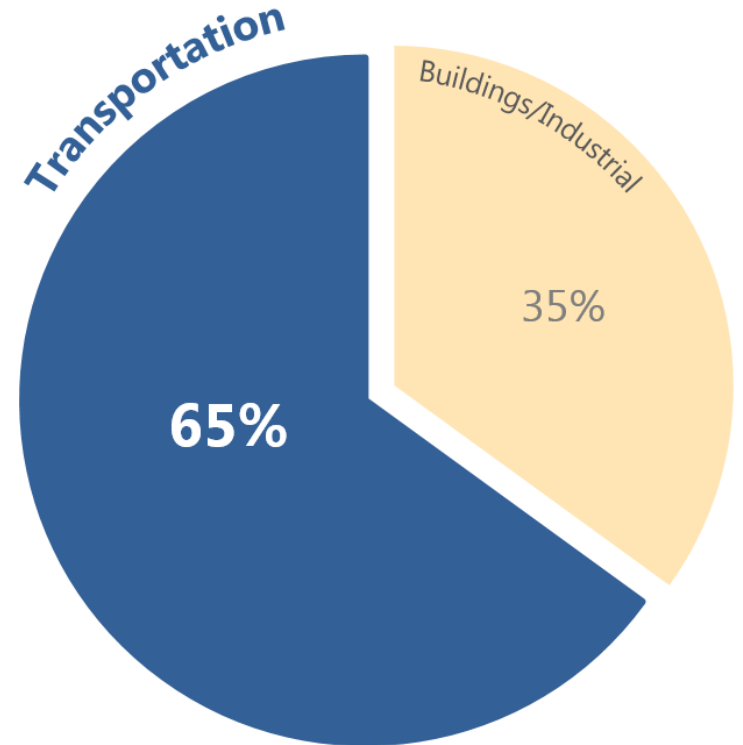
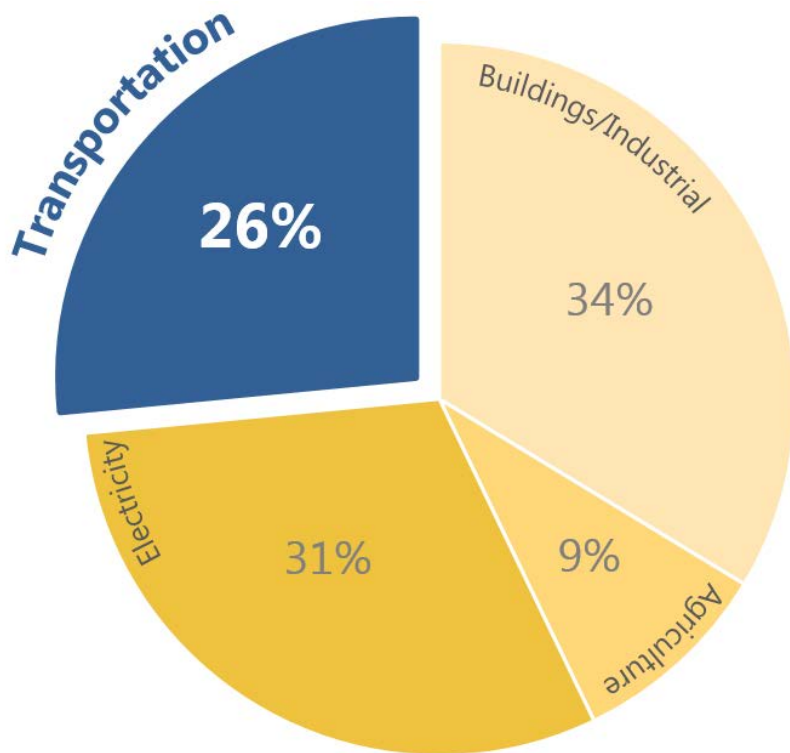
CARBON EMISSIONS



US AVERAGE



SEATTLE



WHAT IS CITY LIGHT DOING NOW?

Public Charging Pilot

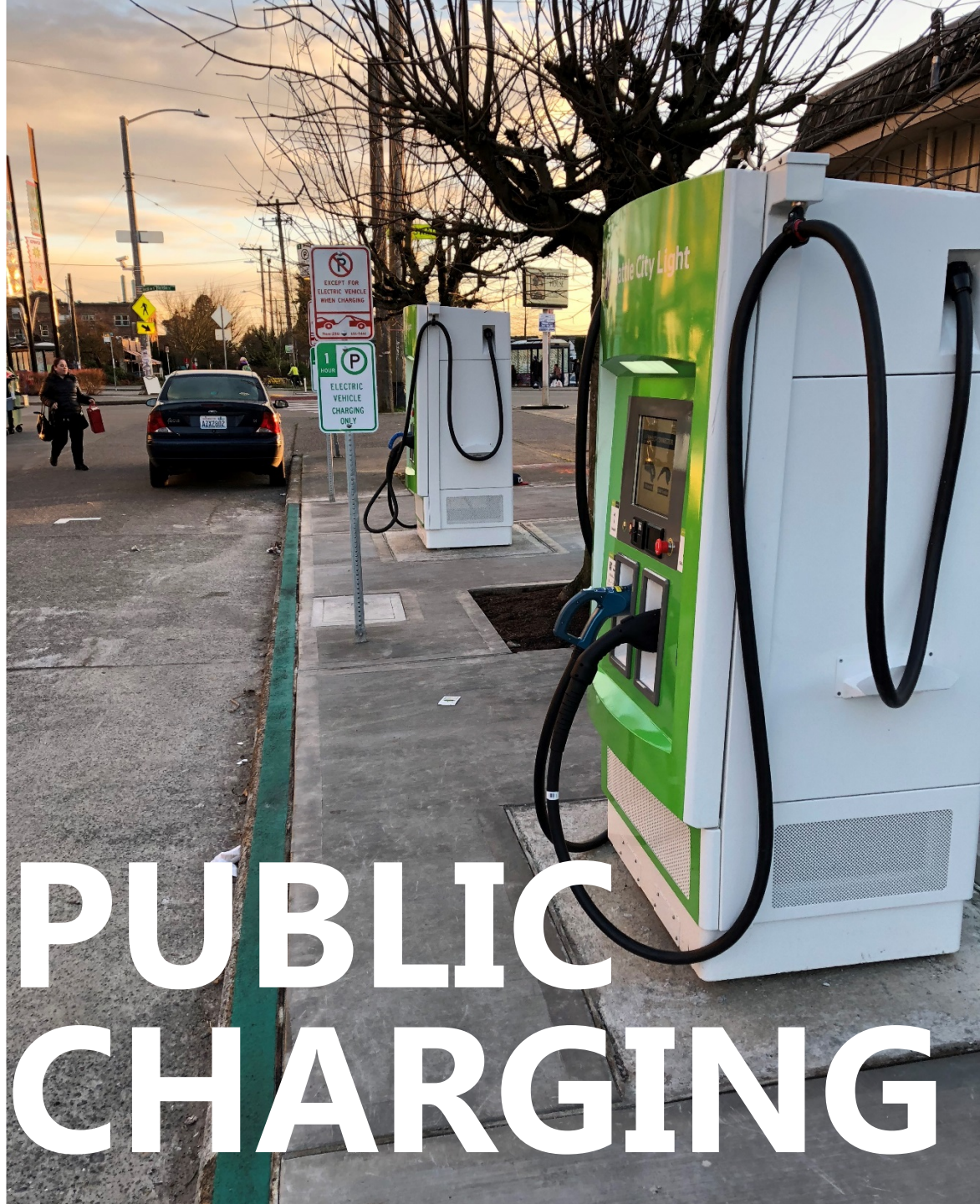
Install 20 public fast charging stations

Residential Charging Pilot

Full service program for equipment & installation

Heavy Duty Pilots

King County Metro & Kenworth/UPS



PUBLIC CHARGING

RESIDENTIAL CHARGING



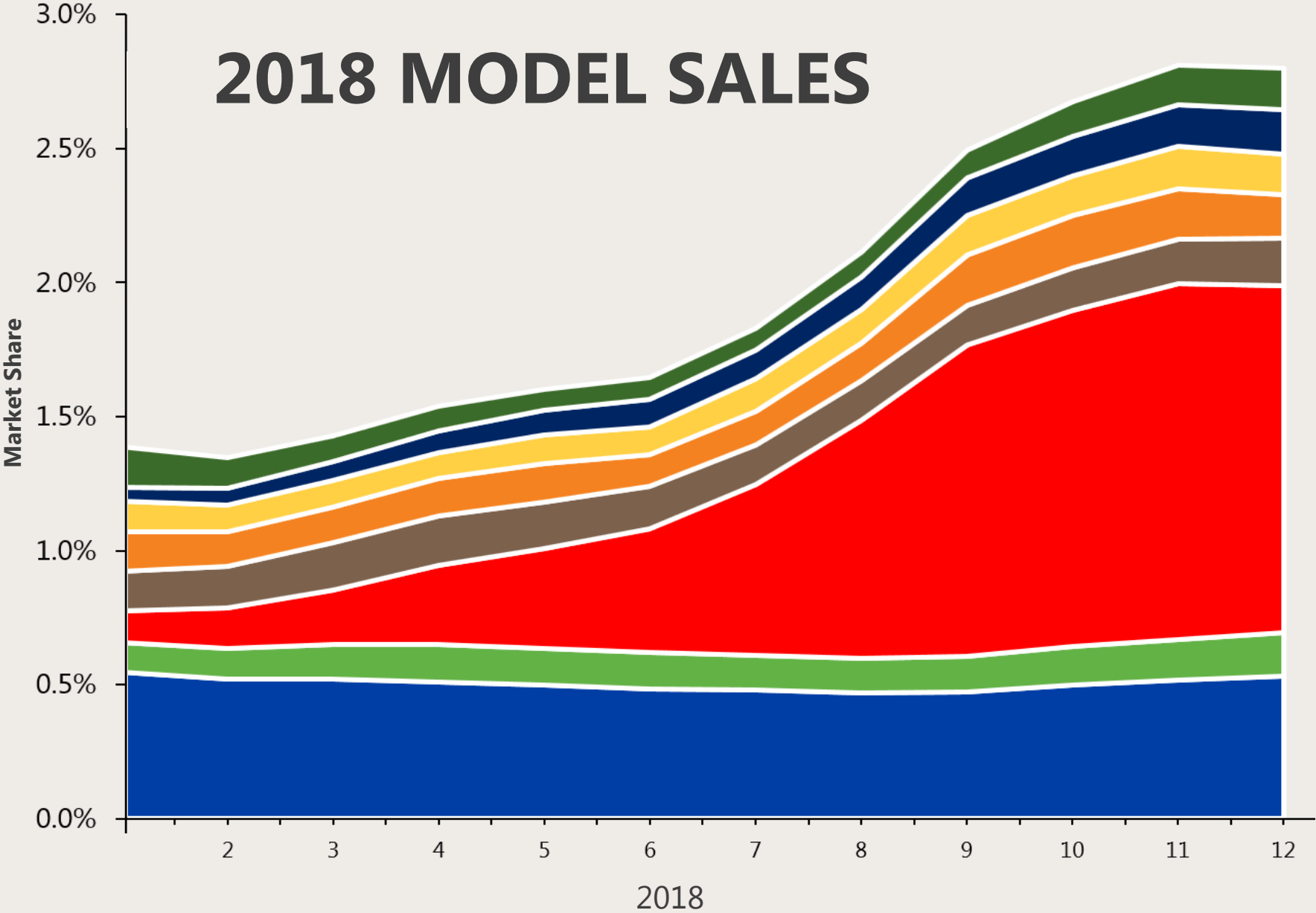
KENWORTH/UPS



WHAT'S CHANGED?

Markets and policy

2018 MODEL SALES



King County
METRO

ZERO EMISSIONS

4603







HB 1512

Strategy

Priorities going forward

KEY QUESTION

What is the ideal role for Seattle City Light in the evolving market?



SEATTLE CITY LIGHT

TRANSPORTATION ELECTRIFICATION STRATEGY FINAL REPORT

BY LYNN DANIELS AND BRENDAN O'DONNELL





SPONSOR
Jim Baggs

+ **EX. STEERING**
Lynn Best, Emeka Anyanwu, Paula Laschober



PM
Brendan O'Donnell



Consultant

Customer Service, Communication & Regulatory Affairs

Administrative Services

Engineering & Technology Innovation

Environment Land, and Licensing

Financial Services

Transmission and Distribution Operations

Seattle Office of Sustainability & Environment

Seattle Department of Transportation



Seema Ghosh
Electric Service



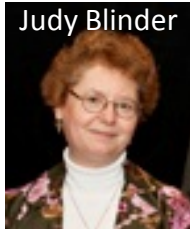
Reagen Price
Race and Social Justice



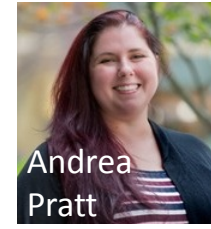
Darrin Kinney
System Planning



Kate Engel
Climate



Judy Blinder
Rates



Andrea Pratt
City Policy



Scott Cooper
Program Management

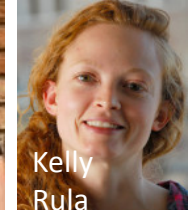


Jaya Bajpai
Risk

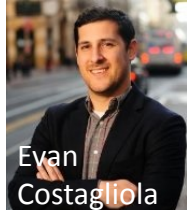
New Mobility Team



Shannon Walker



Kelly Rula



Eyan Costagliola

What is the ideal role for Seattle City Light in the evolving market?

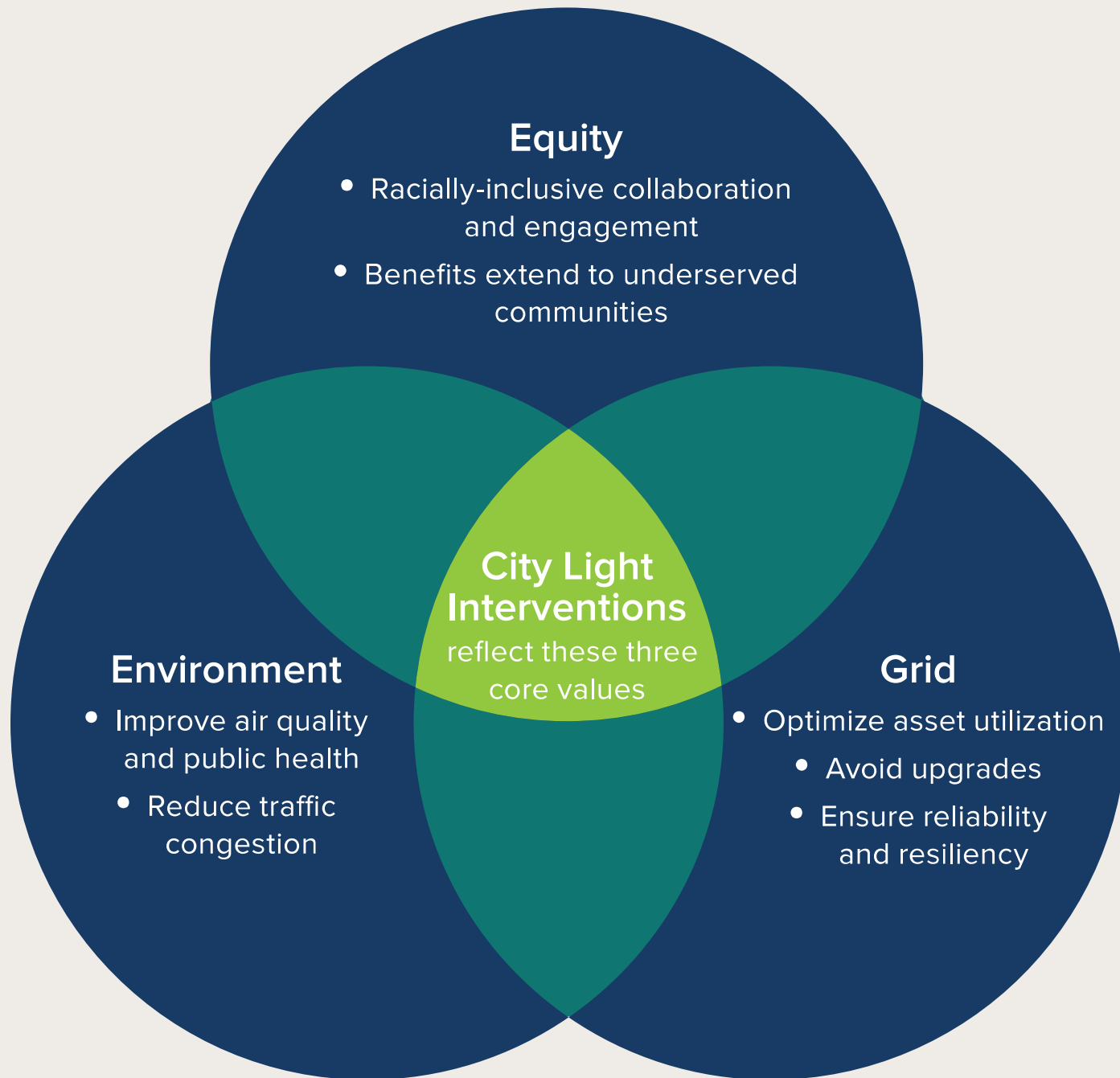
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graph TD; Title[What is the ideal role for Seattle City Light in the evolving market?]; Title --- HLine[ ]; HLine --- Q1[1. Value Framework: What are City Light's priorities?]; HLine --- Q2[2. Market Intelligence: What is the market doing and where are the opportunities?]; HLine --- Q3[3. Impact to the Utility Business: How will electrification impact our system and how we address these risks?]; HLine --- Q4[4. What interventions should we pursue?];
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1. Value Framework:
What are City Light's priorities?

2. Market Intelligence:
What is the market doing and where are the opportunities?

3. Impact to the Utility Business:
How will electrification impact our system and how we address these risks?

4. What interventions should we pursue?





Personally owned vehicles



Buses



Medium-duty trucks



Heavy-duty trucks



Shared mobility



Personally-owned vehicles



Buses



Medium-duty trucks



Heavy-duty trucks



Shared mobility

Battery Price



Model Availability



Total Cost of Ownership



Charging Availability



Charging Operations



Recommendations

1 Invest in charging infrastructure with emphasis on universal access and expanding coverage

Continue to drive the robust development of public charging

Deploy City Light-owned DCFC

Explore make-ready investments or equipment incentives to support private DCFC deployment

Support expanded residential and workplace charging with an emphasis on multi-unit dwellings and underserved communities

Target customers for which cost and feasibility of charging are significant barriers.

Provide incentives and technical expertise for residential and workplace charger installation

Invest in charging infrastructure for shared mobility applications, including car sharing and ride-hailing

2 Develop new rates and improve customer service for the transportation market

Pursue rates that meet the needs of electric transportation customers

- Explore and pilot transportation-specific rate designs
- Understand the impact of demand charges on large customers and DCFC operators

Improve core City Light business processes for customers investing in charging

- Create a streamlined and transparent interconnection and service upgrade process
- Consider new queues for electric vehicle customers
- Evaluate service policies, eg. one site one service

Investigate the viability of managed charging

- Establish standards for residential smart charging
- Explore demand response programs

3 Prepare for heavy duty electrification

Support the aggressive electrification commitments of partner agencies and large customers

Partner directly with King County Metro, the Port of Seattle and Washington State Ferries

Develop a deep expertise of customer needs and respond with a broad suite of solutions—responsive rates, incentives, grid infrastructure, technology demonstration and siting analysis

Proactively plan for large loads

Anticipate how access to charging will influence urban freight and fleets markets

Monitor key market tipping point metrics and engage with local fleets, such as Kentworth, UPS

Develop packaged charging solutions, including financing, make-ready investments, smart charging and incentives charging depots

WHAT HAPPENS NEXT?

HB 1512

Clear authority for
transportation programs

Incentives, rebates, services, etc

Requires plan approved by
City Council

Documents approach and rate impacts (<0.25%)

ACTION PLAN

June 14th – Stakeholder workshop to communicate strategic plan

June – Assemble core team across the utility

Define framework City Light will use to develop new offerings and create Seattle Municipal Code language

Programs

Rates

Standards

Interconnection process

Research

Dec 2019 – City Council



