



DRIVE CLEAN SEATTLE – FAQs

Q: What is Drive Clean Seattle?

A: Drive Clean Seattle is a comprehensive strategy to transition our transportation sector from polluting fossil fuels to clean, carbon-neutral electricity. The strategy includes actions to spur this shift for passenger cars, trucks, transit and maritime transportation.

Q: Why is Drive Clean Seattle important?

A: Sixty-five percent of Seattle's core greenhouse gas emissions come from the transportation sector. Seattle's climate goal of carbon neutrality by 2050 means we must transition the transportation sector away from oil.

In developing Drive Clean Seattle, we are building on the legacy of Seattle City Light – our carbon neutral municipal electric utility. We have the clean energy at our fingertips.

Q: What makes Drive Clean Seattle different?

- A: Drive Clean Seattle is a sector-wide, comprehensive transportation electrification initiative which works to accelerate the transition away from oil.
 - Leading by Example: Electrifying the City's fleet at scale
 - Supporting a robust network of charging infrastructure: Investing in publicly accessible charging
 - Influencing the growing car share market: Collaborating with car share service providers to facilitate electrification
 - Supporting continued transit electrification
 - Partnering with the private sector: Forming public/private partnerships to increase the availability of public charging infrastructure
 - Maximizing the value to the utility: Conducting innovative pilot projects to understand the impact of price signals on charging and how to benefit from this growing source of demand

The fleet electrification and emissions reduction components of this agenda are already among the most innovative solutions proposed by municipal governments across the country. This agenda, which leverages our clean electricity, will mark Seattle as a bold and innovative leader in clean transportation.

Q: Do you have details for how you will transform the City's fleet?

A: With Drive Clean Seattle, our city government is leading by example. We are committing to reducing greenhouse gas emissions from the City's fleet 50 percent by 2025.

The 50 percent reduction will come from a combination of cleaner fuels, more efficient vehicles, and significant investment in electric vehicles. The Green Fleet Action Plan developed for Drive Clean Seattle calls for replacing approximately 120,000 gallons of gasoline with Seattle City Light's carbon-neutral electricity – about 10% of the emissions reduction goal and the equivalent of almost all of the city's passenger sedans.

Half of the additional emissions reductions will come from replacing petroleum diesel with a blend of clean renewable diesel and biodiesel and the rest will come from advanced automotive and equipment technology for heavy and medium duty use, federal fuel efficiency standards, fleet rightsizing, driver behavior, and anti-idling technology.

Q: How many electric vehicles does the City currently have?

A: The City of Seattle fleet currently includes 79 battery electric vehicles – all Nissan Leafs. We also have 10 plug in hybrids which are a mix of Toyota Prius, Chevrolet Volt, and Ford Fusions and 300+ regular hybrid vehicles.

Q: When and how will the City be making these new investments in electric vehicles?

A: We will begin by installing 400 charging stations over the next 5-7 years for Seattle fleet vehicles.

Q: What is the financial impact?

A: Information and costs are being gathered and the proposal will be part of the regular budget review and approval process. We anticipate expenses to be mostly in the retrofit of existing city-owned parking garages to upgrade electrical service. Electrification will not only save on fuel costs but also significantly reduce maintenance costs.

Q: What is renewable diesel?

A: While primarily an electrification initiative, there are still many transportation applications for which electrification is not yet practical. For this reason, Drive Clean Seattle will also include a commitment to investigating renewable diesel as an alternative fuel.

Renewable diesel is chemically similar to petroleum diesel, but is 100% renewable and when sourced correctly, sustainable. Like biodiesel, renewable diesel uses nonpetroleum renewable resources such as waste oils, greases, and agricultural waste products as a feedstock. Renewable diesel does not require any engine retrofits nor does it impact vehicle warranties. The City of Seattle is committed to only pursuing renewable diesel and biodiesel from sustainable sources that do not further food insecurity or deforestation.

More details about renewable diesel and the experience of some West Coast fleets who have already made the switch is in this month's Government Fleet Magazine: http://digital.government-fleet.com/MarApr2016#&pageSet=8

How will city government facilitate charging infrastructure **Q**: throughout the city?

Program design decisions are still very much in process. Seattle City Light will design and A: implement two pilot programs to investigate how to facilitate more electric vehicle charging infrastructure in Seattle: one focused on residential charging and one focused on public DC fast chargers. Additionally, the City will commit to additional investments in public DC fast chargers.

Q: What is DC fast charging?

A: DC fast charging provides a rapid recharge of battery electric vehicles. Generally, in less than 30 minutes. DC fast charging requires 440v 3-phase power.

Does Seattle currently have DC fast charging stations? **Q**:

A: Yes, currently there are approximately 6 public DC fast chargers located throughout Seattle. Additionally, there are several hundred Level 2 charging stations which charge battery electric vehicles in 4-8 hours. Many of these stations have experienced limited availability or are challenging to access by the public. So, a more robust network of charging stations is required to support the electric vehicle goals of Drive Clean Seattle. More information about existing charging stations can be found here:

http://www.afdc.energy.gov/fuels/electricity_locations.html

How much will this cost and how will it work? **Q**:

Seattle City Light estimates ~\$80,000 for each DC fast charging station. Most of this cost will fund A: installation and electric service upgrades. Stations themselves cost around \$10-15k. Stations will be located on City-owned property or private sites. Siting will be based on outreach and coordination with the Equity and Environment Initiative's Community Partners Steering Committee and other stakeholders. We have a preference for highly visible and easy to access locations. City Light will collect a modest fee for charging stations. This will either be per kWh or per session – program design is still ongoing. We will likely issue an RFP for a network provider. The network provider will install and maintain the stations, collect revenue and process transactions.

What is the residential program? **Q**:

A: The program is still being designed so we do not have specific details yet. The residential pilot program will support the installation of level 2 chargers in the residential sector by providing innovative on-bill repayment and a time-of-day pricing model for EV charging.

What other actions will be part of Drive Clean Seattle? **Q**:

A: Action #1: Transform the City of Seattle Fleet

Action #2: Enable and support the adoption of 15,000 electric vehicles by 2025

Action #3: Ensure Equity in Transportation Electrification

- Drive Clean Seattle will consult with the Equity and Environment Initiative's Community Partners Steering Committee on the best ways to ensure equity across the program.
- We will design programs and policies which ensure equitable access to the electric transportation economy and that the air quality benefits of clean transportation accrue to those communities which are most negatively impacted by poor air quality.

Action #4: Incorporate Electricity into the Sharing Marketplace

• Increase the number of electric vehicles available through car share, taxi, and transportation network companies.

Action #5: Review City codes and policies to identify opportunities to facilitate greater EV adoption

• Align City regulations, policies, codes, and plans to encourage electric vehicles and private sector investment in cleaner transportation choices.

Action #6: Deploy Electric Transit Options to Move Seattle

- Double down on existing transit options that use Seattle City Light's clean electricity.
 Trolley bus system, Seattle Streetcar, Link Light Rail
- Support Sound Transit 3 to expand light rail throughout the region.
- We will partner with King County Metro and other regional transit agencies to identify opportunities to continue to use our clean electricity as a transit fuel.

Action #7: EV and Renewable Diesel Availability

- Support, participate, and lead regional partnerships to advance EVs
- Investigate pathway to building a market for clean renewable diesel in Washington