

Presentation to the
Air and Climate
Public Advisory
Committee

June 17, 2019

Ira H. Dorfman
Executive Director



One of approximately 90 Clean Cities Coalitions designated by the US Department of Energy

Primary objective is to promote the use of domestic, clean transportation fuels other than gasoline and diesel fuel



Key Stakeholders include:

- ★ MWCOG
- ★ DC Department of Public Works
- ★ Natural Gas Vehicles of America
- ★ Propane Education and Research Council
- ★ Electric Drive Transportation Association
- ★ National Biodiesel Board
- ★ Washington Gas
- ★ PEPCO
- ★ DC Water
- ★ Washington Area New Automobile Dealers Assn.
- ★ County/Local Governments
- ★ Public and Private Companies
- ★ Environmental Organizations/Individual Activists

Electrification Initiatives

Working with the Federal Highway Administration, DDOT and MDOT on **Alternative Fuels Corridors** to increase the number of EV stations along the DMV's major highways. Good signage too.



National Electric Vehicle Charging Corridors

2019 Designation of NY Avenue and DC295;

Rhode Island Ave. (US 1) Next Designation Target

ALTERNATIVE
FUELS
CORRIDOR



Electrification Initiatives

Expand Available Charging Sites for EV Taxis, Uber and Lyft



Electric Vehicle Charging Infrastructure to Support Ride Share Community



DC government owned "sliver" properties

Site characteristics	
Location	OZ site
Land	1/4 - 1/2 acre
Structure	5,000 sf
Est. Build Cost	\$125 - \$135 sf
2 - 6 50 - 90 kw EVCS	\$100 K / EVCS

DC.gov
Mamie Handwerker
Department of General Services

What are you looking for today?

Department of General Services

Property Research Tools

Tax Records, Square Feet and Use Codes

Land Records and Deeds

Vacant Properties

Zoning Regulations and Maps




Electrification Initiatives

School Buses



Providing School Districts with the Information Necessary to Make Prudent Procurement Decisions





THE LION ELECTRIC CO.
INVITES YOU TO AN
EDUCATIONAL RIDE & DRIVE

WEDNESDAY JANUARY 16TH
FROM 12:30PM TO 2:30PM


WEDNESDAY JANUARY 16TH
FROM 3:00PM TO 4:00PM

ALEXANDRIA CITY PUBLIC SCHOOLS
3540 WHEELER AVENUE, ALEXANDRIA, VA 22304

THOMAS JEFFERSON HIGH SCHOOL FOR SCIENCE AND TECHNOLOGY
IN CONJUNCTION WITH THE CLEAN FAIRFAX COUNCIL
6560 BRADDOCK RD., ALEXANDRIA, VA 22312



FOR INFORMATION REQUESTS, PLEASE CONTACT STEVE KANAREK WITH LION ELECTRIC AT 512-986-2994 OR STEVE.KANAREK@THELIONELECTRIC.COM





Electrification Initiatives

2019 Washington Auto Show



Providing Consumer Education about EV Choices Available



<https://vimeo.com/twogentsdigital/review/332491220/576d6b197a>



Electrification Initiatives

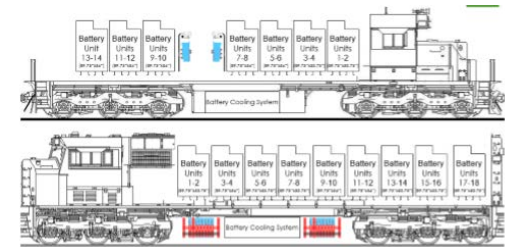
Off-Road Electrification



Rail and Marine Opportunities



[ABOUT](#) [GET INVOLVED](#) [NEWS AND P
STAKEHOLDERS](#)



Electrification Initiatives

Circulator Bus



Educating Transit Agencies



DC Circulator Electric Bus and Charging Facility Tour Agenda

March 26, 2019
9:30 am – 2:00 pm

COG Third Floor Board Room
777 North Capitol Street NE, Ste. 300
Washington, DC

- 9:30 AM: Registration/Continental Breakfast
- 10:00 AM – Welcoming, Opening Remarks and Agenda Review:
 - Leah Boggs welcoming on behalf of MWCOG
 - Ira Dorfman makes brief remarks and introduces DDOT's Carla Longshore
 - A member of the DDOT team provides an overview of the agenda then introduces speakers
- 10:15 AM – *Circe Torruellas*: genesis of the electric bus program
 - Introduction to DC Circulator
 - Genesis of the electric bus program
 - Process for bus selection and purchase
 - Project plan and procurement
 - Purchase plans
 - Outreach to Proterra customers
 - Research
 - Charging Facility Identification and Construction
 - Selection process of a charging facility
 - Operational constraints
 - Construction process
 - Challenges



Electrification Initiatives

Upcoming Events



Upcoming EV Workshops and Conferences

- *2019 EV Showcase & Workshop*
Prince George's County Sports and Learning Complex
- *Circulator Workshop #3*
- *2020 Washington Auto Show*
January 24 - February 2, 2020
Washington Convention Center



Special Transformational Projects for DC Area

Renewable Natural Gas (Bio-methane) Production



A proposal to maximize DC Water's bio-methane value – both environmentally and monetarily



This groundbreaking project is the **first to employ thermal hydrolysis technology** in North America, and the **largest such facility in the world**. The project efficiently provides clean, green renewable power by **converting collected sewage solids into methane**, which is cleaned and then sent through turbines for the production of electric power and recoverable heat.



Combustion Turbines Three 5 Megawatt (MW) turbines onsite convert digester gas into power, producing enough power to run one third of Blue Plains, the largest advanced wastewater treatment plant in the world. In addition, heat is recovered and converted to steam, which is used to heat the thermal hydrolysis process, so that there is no external energy needed for the project.

Special Transformational Projects for the DC Area

Renewable Natural Gas (Bio-methane) Production



Re-purposing the bio-methane (RNG) by injecting the RNG into the Washington Gas pipeline system and utilizing it for general transportation use and other purposes.



Taking full advantage of renewable natural gas' (RNG) value as a transportation fuel through **renewable identification numbers (RINs)** – part of the **Renewable Fuel Standard (RFS) Program**

RNG from wastewater is classified as a cellulosic pathway and therefore generates D3 RINs.

As a transportation fuel, the RNG value increases dramatically for both the producer and fleet end user. That's why many major national fleets have expressed willingness to replace their dirty diesel trucks with cleaner natural gas ones in the DC Metro area if the RNG is accessible to them.

WSSC is now considering a similar project in Maryland!



Propane Initiatives

Food Truck Proposal



Propane Initiatives

Prince George's County Workshop and Tour



May 30, 2019 Event



Thanks!

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