

Presentation to
Air & Climate Public
Advisory Committee

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One of approximately 100 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

GWRCCC is a public-private partnership (501 (c) 3 organization housed in the offices of the DC Department of Public Works



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
- ★ Individual Activists

2017 Initiatives

Propane and Biodiesel School Buses

Regional school district initiative to educate Districts about availability of new propane school buses, their environmental benefits and incentives available; also the merits of using biodiesel in diesel buses to both reduce emissions and save in fuel costs



The Long Road to Safer School Buses

A landmark NRDC study showed that standard-issue *diesel-spewing school buses could put kids at risk of cancer*—and drove a national effort to clean the vehicles up.

Two events to be scheduled during May in Maryland and Northern VA – focused to attract school administrators, fleet managers, school board members, county and local officials, teachers and parents.



2017 Initiatives

Electrify America

Part of the set-aside from the VW/Justice Department settlement that will inject tens of millions of dollars to invest in EV infrastructure and public outreach in the DC Metro area – one of 11 cities to receive this funding.



VW Powers Up Electrify America Initiative

300+ community-based charging station sites will be installed outside of California in workplaces, retail, multifamily residential locations and municipal lots and garages in **11 target metropolitan areas**.

Metropolitan areas include: Boston, Chicago, Denver, Houston, Miami, New York City, Philadelphia, Portland, Raleigh, Seattle and **Washington, D.C.**

Impact

Charging stations will offer the most advanced charging technology ever deployed, allowing rapid charging for some next generation vehicles.

As part of the effort, Electrify America will launch an **educational campaign** to impart the benefits of ZEVs and address consumer barriers to adoption.

GWRCCC also hoping to work with organizers of Washington Auto Show to establish special EV pavilion at 2018 show.

2017 Initiatives

Working with MWCOG on the **F4F** (Fleets for the Future) program to lower the cost of alternative fuel vehicles through aggregate purchasing

Working on the Federal Highway Administration's **Alternative Fuels Corridor** Project to increase the number of EV, natural gas and propane stations along the region's major interstate highways. Good signage too.



National Electric Vehicle Charging and Hydrogen, Propane, and Natural Gas Fueling Corridors



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.



Special Transformational Projects for the DC Area

Potomac River Compressed Natural Gas Passenger Ferry



Finding a funding source for
environmentally-friendly
passenger ferry boat service:
Fast, quiet, ultra-low emissions,
low wake, low draft,
150-passenger capacity



Market Analysis Finds Commuter Ferry Service Viable

(July 14, 2015 – Merrifield, Virginia) A market analysis performed for the Northern Virginia Regional Commission has found that commuter ferry services on the Occoquan, Potomac and Anacostia Rivers has a sustainable market and, through earlier studies is feasible. The study was conducted by Nelson/Nygaard Consulting Associates.

"I am excited about the results of the market analysis", said NVRC Executive Director Mark Gibb. "Funding is available to establish adequate shore-side facilities and assist in service startup. Several of these routes have strong long-term, viable markets that could add depth to the greater metropolitan Washington, DC multi-modal transportation options."

We have seen it work in other cities," said Prince William Supervisor Frank Principi (D-Woodbridge District). "Fast ferry service gets cars off the road and doubles as a draw for tourists who want to experience all that the region has to offer, from the Smithsonian Museums in D.C. to the National Museum of the Marine Corps in Prince William. Adding fast ferry service to our transportation options would be an economic boon for the entire National Capital Region."

The market analysis revealed the following:

- Four corridors were found to have financially sustainable market demand.
- One corridor was found to be a viable market for access to a military installation.
- One corridor was found to have potential, but is not financially sustainable under today's conditions.

The six corridors selected were based on market size and travel time, they include:

- SE and SW Washington, DC to the City of Alexandria
- National Airport/Crystal City to SE and SW Washington, DC
- Joint Base Anacostia/Bolling and Department of Homeland Security HQ to City of Alexandria
- Woodbridge (Eastern Prince William County) to SE Washington, DC

The shorter connections between Alexandria and Washington, DC including Joint Base Anacostia-Bolling and Reagan National Airport and Washington, DC have the market potential that could be pursued and are likely, in the long-term, to be commercially viable and operate without a public subsidy.

The key issues for the next implementation steps include: governance, environmental review, finance and operations planning.

Please join us in our efforts
to achieve transportation
efficiency, cleaner air and
congestion mitigation!

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