Clean Cities Portfolio

Reduce

Fuel Economy

Replace

Biodiesel

Electricity

Hydrogen

Natural Gas

Propane

Ethanol

Eliminate

Idle Reduction

U.S. Department of Energy
Clean Cities coalitions are locally based with the ability to tap national resources.
• **Argonne National Laboratory** – Provide Direct Technical Expertise, Develops & Operates Emissions Modeling Tools, and Manage CC Intern Program.

• **Idaho National Laboratory** – Advanced Vehicles Technology

• **National Renewable Energy Lab** – Manages Alternative Fuels Data Center, Supports Clean Cities Programs

• **Oak Ridge National Lab** – Researches Fuel Economy

CC Also Works with U.S. EPA & FHWA, including the

• **(DOT) Volpe National Transportation Lab** – which works closely with U.S. DOE on Providing Cross Disciplinary Expertise
Clean Cities National Clean Fleets Partnership

• Helps Large Private Fleets Significantly Cut Petroleum Use
• Provides Tools, Expertise and Technical Support to Incorporate Alternative Fuels and Fuel-Saving Measures
• Positions Partners as Pace-Setters for Others to Follow

More Than 25 Partners

More up-to-date information may be available. See the Clean Cities website: https://cleancities.energy.gov/fleets
Local Partnerships: Clean Cities Coalitions

Nearly 100 Local Coalitions

15,000 Stakeholders
52% Private
48% Public

Nearly 500,000 Alternative Fuel Vehicles (AFVs)
Alamo Area Clean Cities – Key Efforts

Alternative Fuels and Vehicles
- Fuel Neutral

Outreach Activities
- Meetings, Workshops, Media Events, and Conference Participation

Works with MPO, Military and City Public Services

Monthly Newsletter to inform Stakeholders

Clean Cities Coordinator: Lily Lowder, 210-362-5277
llowder@aacog.com
www.aacog.com/102/Alamo-Area-Clean-Cities-Coalition/
Dallas-Fort Worth Clean Cities – Key Efforts

Subgrants for Alternative Fuel and Vehicle Replacement Activities
- Approximately $51 Million Since 2006
- Public and Private Fleets
- Heavy-Duty CNG, Electric, Propane

Electric Vehicles North Texas

Webinars or Meetings Approximately Once a Month

Clean Cities Coordinator: Lori Clark, 817-695-9232
cleancities@nctcog.org
www.dfwcleancities.org
Houston-Galveston Clean Cities – Key Efforts

Alternative Fuel and Vehicle Replacement Activities:

- **$90M** - Approx. 3,300 public/private vehicle
  - Marine engines, tug/tow, & ferries
  - Construction equipment, and
  - Alternative fuel stations.
- **$12M in SEP funding supporting Clean School Bus Program**
  - replacing over 350 buses (111 use either LPG or LNG).
- **$26.6M in Loan and Grant funds in Drayage Program,**
  - replaced 224 trucks.
- **Funded 18 Plug-In 100% EV Delivery Vehicles.**
- **Outreach Activities: webinars, meetings, & conferences**

Clean Cities Coordinator: Shelley Whitworth, 713-499-6695
cleancities@h-gac.com
Houston-CleanCities.org
Lone Star Clean Fuels Alliance – Key Efforts

Coverage Area: Bastrop, Caldwell, Hays, Travis, Williamson Counties, City of Temple & Fort Hood

Grant recipient funding for training workshops, tank installation, education and outreach

Assistance provide to fleets for Alternative Fuel and Vehicle Replacement Activities & Station Building

Fleet Manager Meetings, AFV & Smart Technology Workshops and Experiences throughout the year

Clean Cities Coordinator: Elizabeth Munger, 512-694-1004
elizabeth@lonestarcfa.org
lonestarcfa.org
Alternative Fuel Growth Over Last Decade

193% Increase in Number Stations

Petroleum Displacement:
18.5 Million in 2006
55.9 Million in 2016
202% Increase

Number of Alternative Fuel Stations

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>2007</th>
<th>2017</th>
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<tbody>
<tr>
<td>Biodiesel</td>
<td>42</td>
<td>18</td>
</tr>
<tr>
<td>CNG</td>
<td>16</td>
<td>125</td>
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<tr>
<td>Ethanol</td>
<td>27</td>
<td>217</td>
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<tr>
<td>LNG</td>
<td>2</td>
<td>19</td>
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<tr>
<td>LPG</td>
<td>556</td>
<td>474</td>
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<tr>
<td>Hydrogen</td>
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<td>1</td>
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U.S. Department of Energy
Clean Cities
Texas Coalitions – Volkswagen Coordination

Collecting Fleet Project Interest Through Annual Survey
- Fleet Responses due in February 2018

Vehicle Technology Workshops and Technical Information
- Workshop Series Early April
- Workshops Organized by Sector
  - Delivery/Other Local Freight Trucks
  - Port Trucks & Off-Road Equipment
  - Refuse Haulers/Dump Trucks/Cement Mixers
  - School Buses
  - Transit & Shuttle Buses
- All Available by Webinar

Contact you local Clean Cities Coalition for more information
For More Information

<table>
<thead>
<tr>
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Bulk Orders:
Statement of Intent
Bulk Orders: Statement of Intent

Promotion of Bulk or Group Purchases

– Helps to more easily document emission reductions
– Lower costs
– Encourage more production of cleaner zero or near-zero emission technologies
– Attract more manufacturing interest in the State of Texas
Promotion of Bulk or Group Purchases

- Some Clean Cities coalitions throughout the U.S. have been involved in joint purchase efforts. One example is the Fleets for the Future initiative at the National Associate of Regional Councils (NARC) and NCTCOG.
- Funding formulas need to be amended to incentivize cleaner technologies.
- Cooperative purchasing agencies do not directly procure joint purchases, however entities such as H-GAC Buy can assist or provide guidance during this process.