Tucson Regional Clean Cities Coalition

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Sponsored by the U.S. Department of Energy’s (DOE) Vehicle Technologies Program (VTP), Clean Cities is a government-industry partnership designed to reduce petroleum consumption in the transportation sector. Clean Cities contributes to the energy, environmental, and economic security of the United States by supporting local decisions to reduce our dependence on imported petroleum. Established in 1993 in response to the Energy Policy Act (EPAct) of 1992, the partnership provides tools and resources for voluntary, community-centered programs to reduce consumption of petroleum-based fuels.

• **COORDINATOR STATUS**
  - Full time
  - 40 + hours per week devoted to Coordinator Duties
  - The Southern Arizona Regional Solar Partnership (SARSP)

• **TUCSON CLEAN CITIES STAFF**
  - Project Technical Assistant
  Possible US DOE intern
Coalition Organization and Governance

• Tucson Clean Cities is a non-profit program housed at Pima Association of Governments, the metropolitan planning organization for Pima County

• The coalition is made up of both dues paying and non-dues paying stakeholders.

• Coalition meetings are held bi-monthly to discuss current projects, give updates on coalition member activities, and hear presentations on topics related to alternative fuels

• There are two co-chairs that assist with coalition meetings
  – Marc Lappitt, Amphitheater School District
  – Dave Clement, CNG Services of Southern Arizona
Coalition Statistics

2008 Annual Survey

• Stakeholders = 78
• Fueling Sites = 21
• Vehicles = 7,718
• GGE’s Displaced = 12.1 million

2009 Annual Survey

• Stakeholders = 94
• Fueling Sites = 25
• Vehicles = 149,194*
• GGE’s Displaced = 11.7 million gallons
Why Clean Cities
Fuels and their benefits

**Compressed Natural Gas (CNG)**

<table>
<thead>
<tr>
<th>Emission Type</th>
<th>Reduction from Gasoline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulated</strong></td>
<td></td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>25%</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>90% 97%</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>Little to no pm</td>
</tr>
<tr>
<td>Nox</td>
<td>35% 60%</td>
</tr>
<tr>
<td><strong>Non-Regulated</strong></td>
<td></td>
</tr>
<tr>
<td>No evaporative emissions</td>
<td></td>
</tr>
<tr>
<td>Non- methane hydrocarbons</td>
<td>50% 70%</td>
</tr>
</tbody>
</table>
## Fuels and their benefits

### Propane

<table>
<thead>
<tr>
<th>Emission Type</th>
<th>Reduction from Gasoline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>0%</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>20% 40%</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>80%</td>
</tr>
<tr>
<td>Methane</td>
<td>10% increase</td>
</tr>
</tbody>
</table>
Local Outreach Events/Energy Expo

Tucson Clean Cities hosts a number of outreach events throughout the year. Some events are nationwide participation, some are local efforts.

• 2009 Alt Energy Expo – This event was a local event which we supported for two years. We have decided to make this a bi-annual event due to the enormous undertaking.

• Legislative Breakfast-The Arizona Clean Cities (both Phoenix and Tucson host the Legislative Breakfast annually on the grounds of the AZ Capitol.

• National AFV Odyssey Day-This event is hosted bi-annually across the nation.

• Annual Day After Thanksgiving Grease Recycling event-Each year collection points are picked to collect grease to be made into biodiesel.

• REVERB-This event is hosted nationally through concert tours. Artists request to run their buses on biodiesel and REVERB works with local outreach efforts to give info on sustainability and alternative fuels.
Significant Projects/Activities

- US Capitol Christmas Tree
  Assisted in organizing the transport of the Capitol Christmas Tree from Arizona to Washington DC using biodiesel blends. This was the first time the entire tree transport has been done using alternative fuels in the program’s 45-year history.
Significant Projects/Activities

Nissan LEAF

• Tucson was chosen as one of five early roll-out locations for the LEAF in December of 2010.
• In March of 2010 Tucson Clean Cities signed an MOU with Nissan North America and ECOtality North America
• In December we welcomed the Nissan LEAF to Tucson for the “Zero Emission Tour”
Southern Arizona Solar Partnership

To foster and encourage a political and business environment in which solar energy is seen to be and becomes a major source of economic activity within southern Arizona.
Southern Arizona Regional Solar Partnership

- Formed in early 2008
  - Diverse membership
  - About 40 members
  - Flexible fee structure

- Principal products
  - Providing a local focus
  - Greater Tucson Solar Development Plan
  - Facilitation
Southern Arizona Regional Solar Partnership

• Providing a connection
  – A reason to interact
  – An opportunity to share information
  – Feedback and validation
  – A starting point for action
  – A coordinated response
  – Maintaining momentum
Southern Arizona Regional Solar Partnership

• Greater Tucson Solar Development Plan
  – Access the plan at

• Website
  – Through PAGnet.org
In closing.....