CAC and AFC Development

- Charge Ahead Colorado (CAC) and ALT Fuels Colorado (AFC) started at different times and have been in operation for the past 2-3 years.

- CAC and AFC taken together address the needs to develop the electric, natural gas and propane vehicle and infrastructure markets.

- Multiple stakeholder groups have been formed to develop infrastructure, policy and marketing for these programs.

- We fund applications that are submitted to us. It’s up to local governments and the private sector to apply for these funds.
RAQC Charge Ahead Colorado
Charge Ahead Colorado (CAC)

- Charge Ahead Colorado is a partnership between RAQC and Colorado Energy Office
  - Designed to incentivize the wide-spread, early adoption of electric vehicles and provide geographically dispersed charging points at key locations to address the charging concerns of the motoring public.

- The RAQC has DRCOG awarded CMAQ funding for electric vehicles (EV) and electric vehicle charging stations (EVSE)

- CEO has State funding for EVSE for applicants located outside the seven-county Denver Metro Area.
CAC Funding Overview

• RAQC and CEO will fund public, private and non-profit entities to pay 80% of the cost of EVSE up to:

<table>
<thead>
<tr>
<th>EVSE Type</th>
<th>Maximum Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level II, Single Port Station</td>
<td>$3,260</td>
</tr>
<tr>
<td>Level II, Multi-port Station</td>
<td>$6,260</td>
</tr>
<tr>
<td>Level III, Single Connection Standard Station</td>
<td>$13,000</td>
</tr>
<tr>
<td>Level III, Multiple Connection Standard Station</td>
<td>$16,000</td>
</tr>
</tbody>
</table>

• RAQC has funding to pay 80% of the incremental cost of an EV up to $8,260 per vehicle for government and non-profit organizations ineligible for Colorado state tax credits.
RAQC Awards To-Date

• $2.7 million allocated and available funds
  – RAQC has funded $1.2 million in electric vehicle and charging station projects and $1.5 million remaining for electrification
  – We plan on having more funding available in the future

• 70 awarded charging station projects
  – 68 Level 2 installed and 89 in progress
  – 2 Level 3 installed and 2 in progress

• 37 electric vehicles for government and non-profit fleets
Denver Metro Area Funded Organizations

- Adams County
- Boulder County
- City of Arvada
- City of Aurora
- City of Brighton
- City of Boulder
- City and County of Denver
- City of Golden
- City of Lafayette
- City of Lakewood

- City of Littleton
- City of Longmont
- City of Louisville
- City of Westminster
- Multiple hospitals
- Multiple private companies, HOAs
CEO Charge Ahead Colorado
• CEO has funded $450,000 in charging station projects and has $350,000 in SFY2015 for electrification.

• Current funding total outside of the Denver Metro Area
  • 81 Level 2 chargers
  • 2 Level 3 fast chargers

• 79 publicly accessible charging stations in Colorado at the beginning of 2013.

• With CEO and RAQC there are more than 250 publicly accessible charging stations currently either planned or available.
Charging Stations Statewide
RAQC AFC Vehicle Program
ALT Fuels Colorado Program

- CEO/RAQC/CDOT/DOLA/FHWA/Noble Energy partnership on a $45M project.
  - $15 million CMAQ from RAQC is dedicated to vehicles in the 11 county program area
  - $15 million CMAQ from CEO is dedicated to infrastructure statewide
  - DOLA has $10 million for infrastructure and vehicles
  - Noble Energy has $2 million for matching funds in the RAQC vehicle program area and $2.8 designated only for Weld
RAQC Vehicle Program:

Fleets in the following counties are eligible for funding:
- Adams
- Arapahoe
- Boulder
- Broomfield
- Denver
- Douglas
- Jefferson
- Parts of Larimer
- Parts of Weld
- Parts of El Paso and
- Parts of Teller counties
AFC Program Funding

• How much?
  – 80% of the incremental cost between the AFV and the comparable conventionally fueled diesel or gas vehicle up to the caps below
  – Private fleets may be eligible for added tax credits

<table>
<thead>
<tr>
<th>Description</th>
<th>Public and Non-profit Fleets</th>
<th>Private Fleets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light-duty AFV (6,001-10,000 lbs.)</td>
<td>$7,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Medium-duty AFV (10,001-26,000 lbs.)</td>
<td>$25,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Heavy-duty AFV (26,001 + lbs.)</td>
<td>$35,000</td>
<td>$22,000</td>
</tr>
</tbody>
</table>
AFC Awards To-Date

• Incentivize the purchase of class 2-8 OEM CNG, CNG bi-fuel, electric and propane vehicles

• $7 million allocated by CDOT to-date with $4.5 million in awards

• 253 vehicles funded for 26 fleets

• Investigating funding transit vehicles with CDOT but it’s complicated
  – These funds are FHWA CMAQ and must be flexed to FTA for transit
  – Or could switch CMAQ funds for State funds to simplify matters
AFC Vehicles by Fuel and Class

**Vehicles Funded by Fuel Type**
- Electric, 0%
- MD/HD Propane, 27%
- LD CNG Bi-Fuel, 7%
- MD/HD CNG, 66%

**Vehicles by Type**
- Pick Up Truck, 21
- Delivery Truck, 46
- School Bus, 35
- Tractor, 106
- Refuse Truck, 45

**Notes:**
- Pick Up Truck is the largest category in the vehicles by type chart.
County of Operations

- Weld, 54, 21%
- Adams, 98, 38%
- Larimer, 9, 3%
- El Paso, 18, 7%
- Denver, 30, 12%
- Arapahoe, 20, 8%
- Boulder, 29, 11%
CEO ALT Fuels Colorado
### ALT Fuels Colorado - Station Incentives

<table>
<thead>
<tr>
<th>Front Range</th>
<th>Statewide Corridor</th>
<th>Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Over half of the state’s existing stations</td>
<td>• Overcoming range anxiety is crucial to vehicle adoption</td>
<td>• 80% equipment capped at $500,000 for CNG stations</td>
</tr>
<tr>
<td>• Many within the Denver Metro Area</td>
<td>• Key station locations</td>
<td>• Additional $50,000 grants available for co-located EV and propane stations</td>
</tr>
<tr>
<td></td>
<td>• 20-30 new CNG stations</td>
<td></td>
</tr>
</tbody>
</table>
$7.5 million for 15 stations awarded within first 1.5 years

~4.5 million gasoline gallon equivalent (GGE) sales projected in first full year

January, 2016 – Next funding round for CNG station development

Station rounds to be announced approximately every 6 months
CNG Fueling Stations & Awarded Sites

Also available at www.Colorado.gov/Energy

Co-located electric charging awarded at Fort Collins, Loveland, and Greeley sites
RAQC Retrofits

• RAQC has operated its Clean Air Fleets Program since 2002

• Program has allocated $5.2 million in CMAQ and EPA funding focused primarily on older diesel vehicle retrofits within the Denver metro area
  – Vehicles retrofitted include school buses, trash trucks, delivery vehicles, etc.

• These retrofits include telematics equipment, tailpipe retrofits and idling reduction equipment for mobile source emissions reductions
Denver Metro Area Funded Organizations

- All school districts
- City and County of Denver
- City of Arvada
- City of Aurora
- City of Boulder
- City of Brighton
- City of Broomfield
- City of Commerce City
- City of Englewood
- Jefferson County
- City of Thornton
- City of Longmont
- City of Louisville
- City of Westminster
- Dozens of private companies
RAQC and CEO Program Contacts

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