



CLIMATE ACTION PLAN



FOR THE
EAGLE COUNTY
COMMUNITY

December 2016

Climate Action
Collaborative Meeting
June 18, 2018



Agenda

- I. Welcome & Meeting Goals
- II. Session 1: CAC Governance Update
- III. Session 2: Sector Working Group Structure & Updates
- IV. Session 3: Education & Outreach Marketing Update & Survey Results
- V. Session 4: CNG Presentation
- VI. Session 5: ICLEI Membership & Tools
- VII. Adjourn!





Meeting Goals

- #1 Share updates on working group initiatives
- #2 Reveal the CAC brand, logo, and marketing plan
- #3 Learn about Natural Gas for heavy duty vehicles
- #4 Keep Up Momentum!

Congratulations
ERWSD!

Wired
Workplace
Award



Session #1

CAC

Governance Update

- Approval of March 2018 Minutes
- Update on income and expense
- New member payments
- Revised purpose and principles document
- Update on fiscal sponsor letter
- 2019 membership fees

Income

Organization	2018 Contributions Confirmed
CMC, Edwards Campus	In-kind
Eagle County	\$56,000.00
Eagle County Schools	In-Kind
Edwards Metro District	\$5,000.00
ERWSD/UERWA	\$6,000.00
Eagle River Youth Coalition	\$250.00
Holy Cross Energy	\$15,000.00
RA Nelson	\$3,333.00
Town of Avon	\$14,034.00
Town of Basalt	\$ -
Town of Eagle	\$5,000.00
Town of Gypsum	\$ -
Town of Minturn	\$2,091.00
Town of Red Cliff	\$ -
Town of Vail	TBD
Vail Health	TBD
Vail Honeywagon	TBD
Vail Resorts	TBD w FY 2019 budget
Vail Valley Foundation	In-Kind
VMS	In-Kind
Walking Mountains	In-kind
WECMRD	\$5,000.00
Total Income to Date 2018	\$111,708.00


Expenses

Expense	Amount
Staff Time Expense (Kim & Walking Mountains Admin)	\$78,100
Staff Time Expense (Walking Mountains Marketing)	\$28,000
Total Expenses	\$106,100
Amt Remaining for Education & Outreach Efforts	\$12,608

Other Governance Updates

1. Update to Purpose & Principles Document
 - Removed thumb voting – all decisions will be made through consensus
2. Update on Fiscal Sponsor Letter

2019 Anticipated Budget



2019 Expenses	Amount
Staff Time Expense (Kim & WMSC Admin)	\$78,100
Staff Time Expense (WMSC Marketing)	\$28,000
Marketing Budget	\$37,200
Total CAC Budget for 2019	\$143,300

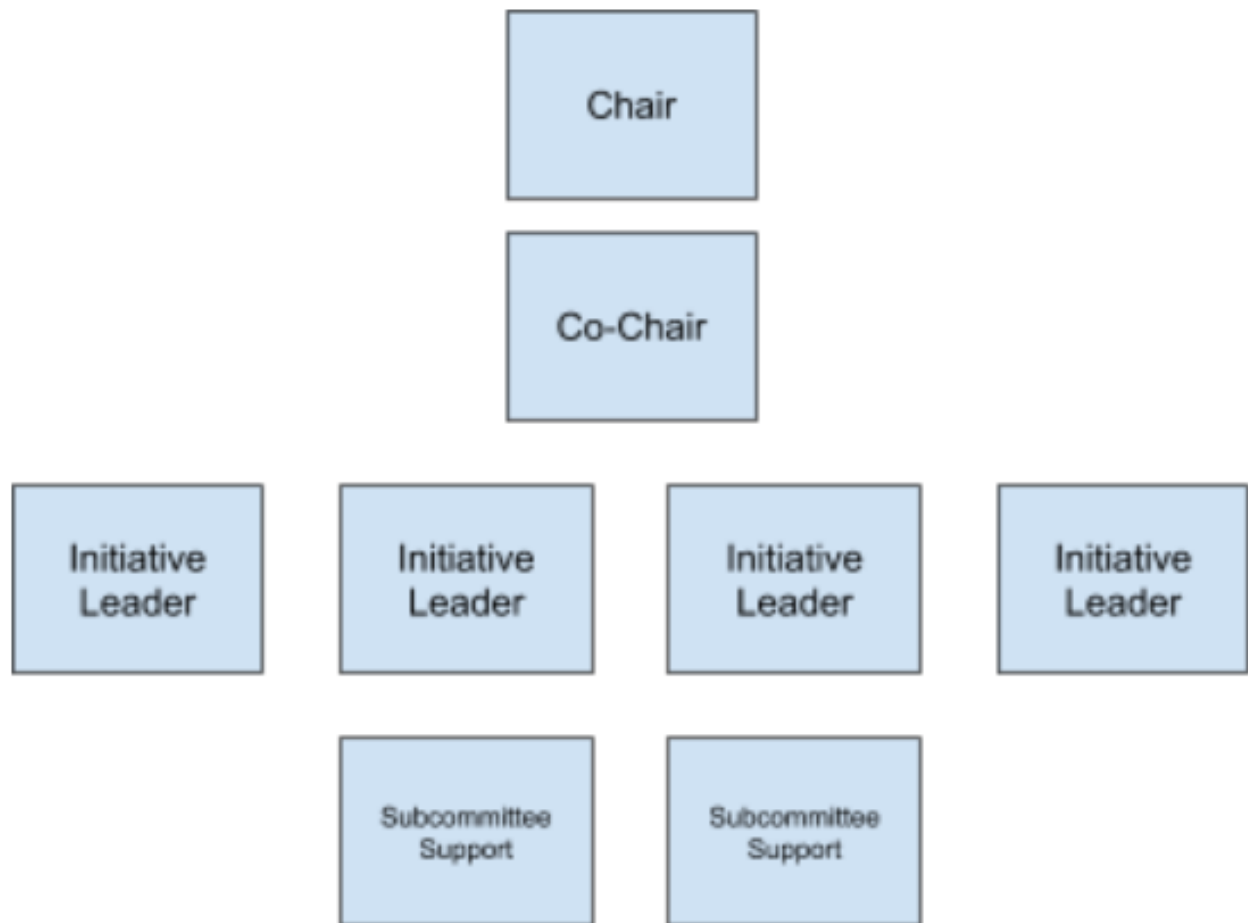


Session #2

Sector Working Group Structure & Updates

1. Review of Guiding Principles
2. File Sharing Platform - DropBox
3. Updates from Sector Groups
 - Materials Management – Melissa
 - Buildings – John-Ryan
 - Transportation – Chris
 - Energy Supply – Fritz

Guiding Principles



Dropbox

 Upgrade account



Name ↑	Modified ↓	Members ↓	⋮ ↓
 01 Buildings Committee	--	Only you	⋮
 02 Transportation Committee	--	Only you	⋮
 03 Materials Management Committee	--	Only you	⋮
 04 Ed & Outreach Committee	--	Only you	⋮
 05 Energy Supply Committee	--	Only you	⋮
 CAC Admin	--	Only you	⋮
 Climate-Action-Plan-for-the-Eagle-County-C...	6/4/2018 12:41 pm	Only you	⋮

Upload files

 New shared folder

 New folder

 Show deleted files


... Privacy





Working Group Updates

- Buildings – John-Ryan
- Materials Management – Melissa
- Transportation – Chris
- Energy - Fritz



Session #3

Education & Outreach Update & Survey Results

- Marketing plan and collateral presentation
- Logo unveiling
- Newsletter update
- CAC survey results

Anticipated Marketing Budget

Anticipated Expenses		Notes
Website + e-newsletter	\$1,250	Is this a capital expense? Could be tied to larger WMSC website
Print Media (Vail Daily)	\$6,174	Roughly 2 full pages of space per month
Radio Media	\$1,000	TBD CPR/NPR or KZYR for Events
Paid Digital	\$1,200	Facebook, VD Digital, Others?
Content Production/Writer	\$1,500	In-Depth Opportunities
Stickers/Window Clings	\$230	Other Promo Ideas
Collateral/Brochure	\$500	TBD
Event/Promo Materials	\$750	Signage, Tent, Event Materials?
Total Anticipated	\$ 12,608	

Preliminary Monthly Topic Plan

<u>Month</u>	<u>Newsletter Theme</u>	<u>Topic Ideas</u>
June - 18	Welcome to the Collaborative!	Working group updates, overall welcome to the CAC
July - 18	Water Efficiency	Free irrigation audits, waste water system, state of the Gore/Eagle, indoor water use reduction, efficient fixture target flush/flow rates.
August -18	Compost	Commercial composting, how to backyard compost, what products to use that make compost manageable/not smelly, why compost and not landfill? what can be composted.
September - 18	Sustainable Purchasing	Avoid plastics 3-7 (no end market), products with recycled content (give certified logos to look out for), healthy cleaning products (certified logos), online stores w/out packaging, buying used not new.
October - 18	Be local	Buy local food, support local businesses, enjoy local settings, live like a local campaign, see Summit County campaign.
November - 18	Home Energy Efficiency	LED swap out, get HVAC system checked for updates, check insulation and air sealing, perform weather stripping, smart thermostats, comfort parameters.
December - 18	Idling	Avoid warming car up before driving, give rules to follow when warming up your car to do it efficiently, when to idle when to not, laws on idling around the county.
January - 19	Recycling	What can you recycle in curb side, what can you recycle at drop stations? end markets map for where our recyclables go, how to recycle app, what can NEVER go in a recycle bin.
February - 19	How to ride the bus and why you should?	free drop off at ski resorts, cheaper than parking, identify routes that people from each county could use to get to mountain at good time
March - 19	Light Pollution	Shield your lights at home, keep them on a timer, dark sky requirements, how to audit your business for light pollution, protect natural environment and dark sky for community.
April - 19	Business Energy Efficiency	Different level of audits and what they mean, where to start with energy efficiency, how to talk to your employees about energy efficiency, means of tracking energy use.
May - 19	Walkability	Do you have sidewalks in your neighborhood to connect you with services? How many services are within walking distance to you? benefits of streets with trees, benefits of multi-mode streets, can you get to a bus stop by walking?

Marketing Plan & Budget

CAC Marketing/Education Values & Vision:

- Be inclusive
- Simplify information & break it down

Marketing/Education & Outreach Goals:

- Increase participation in CAC
- Establish CAC identity
- Establish target marketing personas for geographic regions & demographic characteristics based off CAP data (e.g. renter/landlord/business owner/employee/homeowner)

Marketing/Education & Outreach Strategies:

- Tell success stories
- Vary communication style by target audience/personas
- Roll out CAP results in compelling and consistent fashion
- Simplify the challenge by “pillar/wedge”
- Encourage positive consumer sustainability behavior
- Simplify the challenge by providing consistent quick tips anyone can understand and implement in their homes or businesses.
- Leverage the Collaborative. Tie into existing partner marketing, event activations etc.

Marketing
Plan & Budget
(PAUL CAN
YOU UPDATE
THIS WVAIL
DAILY &
HOMEGOOD
S COLUMN?)

Marketing/Education & Outreach Earned Media Tactics:

- Secured Editorial Opportunities
 - Monthly Vail Daily Column
 - Monthly Vail Valley HOME Magazine Column
 - Weekly Vail Daily & Daily Weekly Sustainability Tips
- Monthly Collaborative email newsletter & content plan
- Walking Mountains Sustainability/Climate Action Collaborative blog
- We need your help! We want to tell stories about what's coming out of the Collaborative

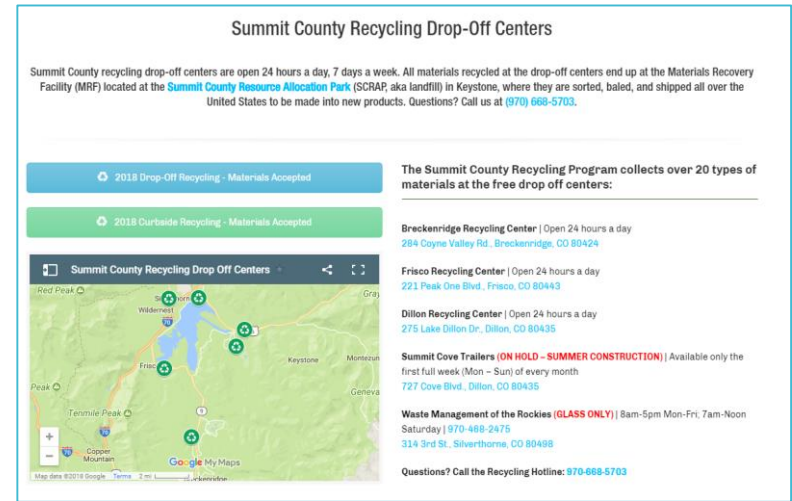
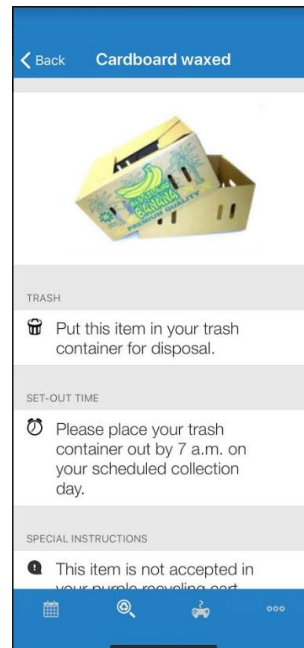
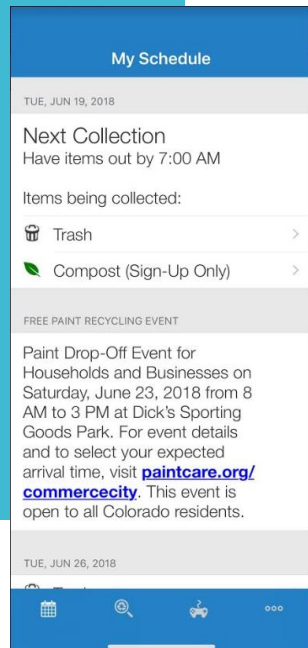
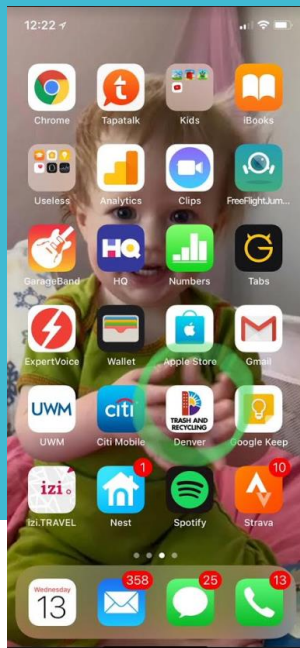
Marketing/Education & Outreach Paid Media Tactics:

- 2 full pages space equivalent/month Vail Daily
- Paid Facebook/Digital for events & Climate Action Pledge
- Paid Radio for new member recruitment & events
- Eagle County Waste Wizard

Eagle County Waste Wizard

Eagle County Waste Wizard

- Website Widget & Mobile App
- Sharable. You can use it on your websites
- Aggregates data to identify consumer pain points
- Fully configurable to address different community procedures for waste/recycling
- Will showcase waste events or Sustainability events.



CLIMATE ACTION COLLABORATIVE // PRELIMINARY LOGO CONCEPTS & MARKETING PLAN





CLIMATE
ACTION
COLLABORATIVE

#BeBetterTogether



CLIMATE
ACTION
COLLABORATIVE

#BeBetterTogether



#BeBetterTogether



Primary Logo

Solid Backgrounds
As Traditional Logo



Window Logo

Placed Over Photos in Creative
A Window Into Climate
Color Depends on Imagery

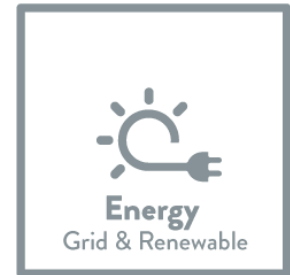


Brandmark Color

Solid Backgrounds / No Window
Color of Mark Adapts to Color of
Creative/Solid Color Only



#BeBetterTogether



Imagery

Showcase Eagle County landmarks

Vary imagery where possible by target personas.

Periodic Table

Simplify the challenge by sector

Educate elements to meet the goal

Keep the verbiage consumer friendly



#BeBetterTogether

Use The Logo In Your Efforts

The Collaborative is not a “sponsor” or “partner”

Logo should include the “why”

They “why” can be specific to your business or the goal

Avoid listing your business as a “member” or “partner”

A flyer for an "Actively Green Workshop" is shown. It features logos for "walking mountains science center" and "activelygreen". The title is "Actively Green Workshop: Be Effective and Efficient with Your Energy". It lists three bullet points: "Take an active role in your community", "Save on costs and support the environment", and "Collaborate and network with other businesses to build a community dialogue on sustainability". It includes the Climate Action Collaborative logo and the goal of reducing Eagle County greenhouse gas emissions by 25% by 2025. The event is on Wednesday, May 9th, from 2:00 pm to 4:00 pm at the Walking Mountains Science Center, Avon CO. It also lists supporting sponsors: Sustainable Travel International, Vail Valley Partnership, Eagle County, and Town of Vail.

walking mountains science center

activelygreen

Actively Green Workshop:

Be Effective and Efficient with Your Energy

- Take an active role in your community
- Save on costs and support the environment
- Collaborate and network with other businesses to build a community dialogue on sustainability

CLIMATE ACTION COLLABORATIVE Working to meet our goal of reducing Eagle County greenhouse gas emissions 25% by 2025

Wednesday, May 9th | 2:00 pm-4:00 pm
Walking Mountains Science Center, Avon CO
Register & learn more: www.walkingmountains.org/ag

Supporting Sponsors:

SUSTAINABLE TRAVEL INTERNATIONAL
VAIL VALLEY PARTNERSHIP
EAGLE COUNTY
TOWN OF VAIL

Examples

Mountain Games | The GoPro Mountain Games is committed to being a ZeroWaste event.

Sole Power | Sole Power is dedicated to getting commuters out of their cars and into alternative forms of transportation, helping to reduce our emissions associated with transportation!

Vail Resorts | Vail Resorts has committed to an EpicPromise of having a net zero operating footprint for all resorts by 2030.



Climate Action Collaborative
For The Eagle County Community
Founding Partners

- Colorado Mountain College
- Edwards Campus
- Eagle County
- Eagle County Schools
- Edwards Metro District
- Eagle River Water & Sanitation District
- Eagle River Youth Coalition
- Holy Cross Energy
- Matt Inden Photography
- RA Nelson
- R&H Mechanical
- Town of Avon
- Town of Basalt
- Town of Eagle
- Town of Minturn
- Town of Red Cliff
- Town of Vail
- Upper Eagle River Water Authority
- Vail Daily
- Vail Health
- Vail Honeywagon
- Vail Resorts
- Vail Valley Foundation
- Vail Mountain School
- Walking Mountains Science Center
- WECMRD

Our Goal

Reduce Eagle County
Greenhouse Gas Emissions
25% by 2025

Climate Action Collaborative
For The Eagle County Community
Founding Partners

- Colorado Mountain College
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- Vail Honeywagon
- Vail Resorts
- Vail Valley Foundation
- Vail Mountain School
- Walking Mountains Science Center
- WECMRD

Take The Climate Action Pledge
CLIMATEACTIONCOLLABORATIVE.ORG

Photo By Matt Inden, Climate Action Collaborative



Take The Climate Action Pledge
CLIMATEACTIONCOLLABORATIVE.ORG

Photo By Matt Inden, Climate Action Collaborative

#BeBetterTogether



#BeBetterTogether

Photo By Matt Inden, Climate Action Collaborative

Our Goal: Reduce Eagle County Greenhouse Gas Emissions 25% by 2025

The Climate Action Collaborative for the Eagle County Community




Waste
Materials Management



Transportation
Fuel Emissions



Buildings
Residential & Commerical



Energy
Grid & Renewable



TAKE THE CLIMATE ACTION PLEDGE

CLIMATEACTIONCOLLABORATIVE.ORG



The Climate Action Collaborative for the Eagle County Community

Our Goal
Reduce Eagle County Greenhouse Gas Emissions 25% by 2025



Waste
Materials Management



Transportation
Fuel Emissions



Buildings
Residential & Commerical



Energy
Grid & Renewable

TAKE THE CLIMATE PLEDGE
CLIMATEACTIONCOLLABORATIVE.ORG

Photo By Matt Inden, Climate Action Collaborative

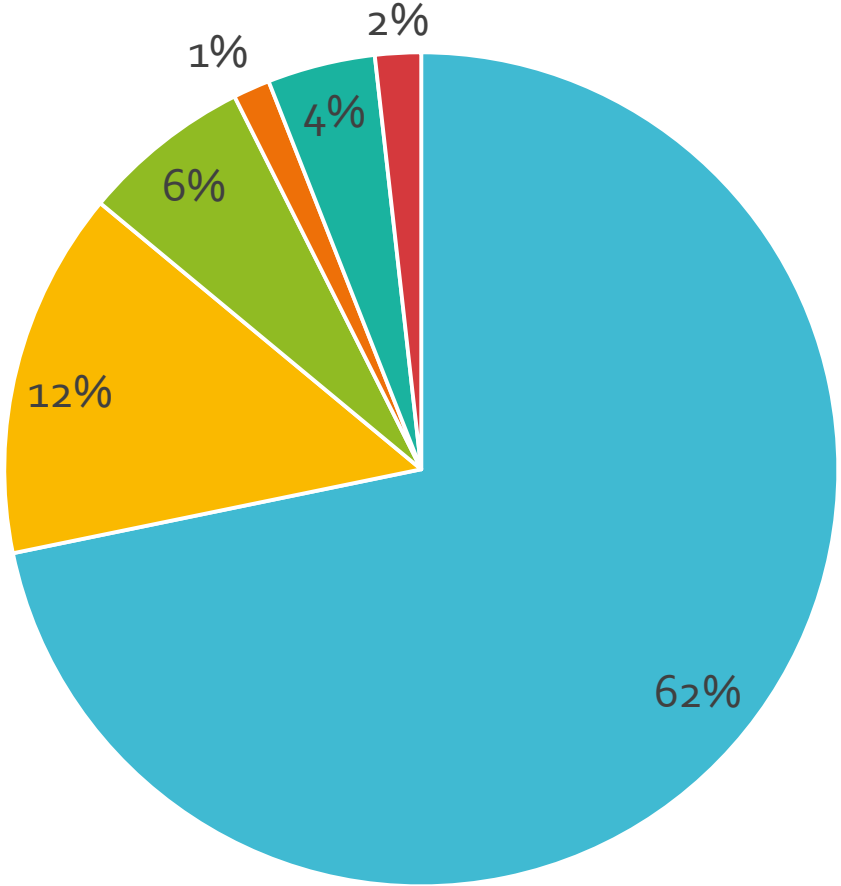
Newsletter
Launch this
week

MEMBER REQUEST!

1. Please send along the contact information of any stakeholders that you would like to receive the CAC newsletter by **EOD June 19th**
2. Please share your stories with us!



Climate Change Attitudes in Eagle County



- Alarmed
- Concerned
- Cautious
- Disengaged
- Doubtful
- Dismissive

Survey Demographics

- Homeowners 64%
- Renters 30%
- Own a business 15%
- Male 35%
- Female 63%
- College degree 48%
- Graduate 25%
- Eagle 20%
- Edwards 17%
- Gypsum 16%
- Vail 14%
- Avon 12%



Survey Results – Next Steps

- Provide survey results to working groups
- Create executive summary 1-2 pages to share with broad public
- Include press release of survey results in future issue for CAC Newsletter
- Education & Outreach committee to develop strategy for targeted ad campaign based on results

Time for a BREAK!



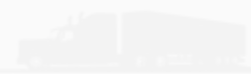
Session #4:
CNG
Presentation

Guest Speaker
Chad Schlaepfer
AMP CNG

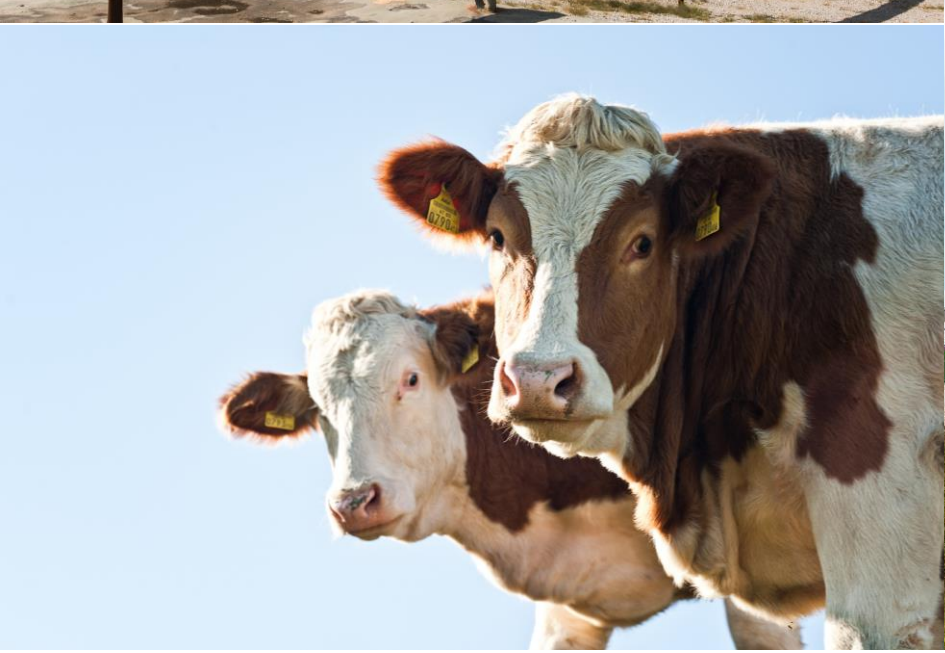




CNG & RNG Fueling Solutions



Intro to Amp





Emission Mitigation

20% well-to-wheel GHG emission reductions with fossil CNG

100+% well-to-wheel GHG emission reductions from organic waste sources

99% reduction in NOx emissions- respiratory hazard and primary source of smog



Cost Savings and Stability

\$1+ per gallon fuel savings

EIA estimates stable prices through 2035

90+ year supply of natural gas



American Made

Colorado is net exporter of natural gas - every molecule consumed in CO was produced in CO

97% of natural gas consumed in the US comes from the US

99.9% of natural gas consumed in the US comes from North America



Why CNG?



Renewable Natural Gas (RNG)

Potential for 100% renewable fuel without changing equipment

Over 80 RNG projects currently online, with hundreds more in the pipeline

Federal and state incentives are spurring growth in RNG supply market

RNG potential from landfills, waste-water, and organic waste sources



Proven technology

Modern CNG engines around since 2008

Fleets with over 1,000,000 miles on CNG engines

Minimal performance difference



Availability

42 CNG stations in Colorado

900+ public CNG stations nationwide

1,500+ CNG stations in the US



Fleets Running CNG



Los Angeles (LA Metro)



Dallas (DART)

Cleveland (GCRTA)



Orange County (OCTA)

Orlando (LYNX)



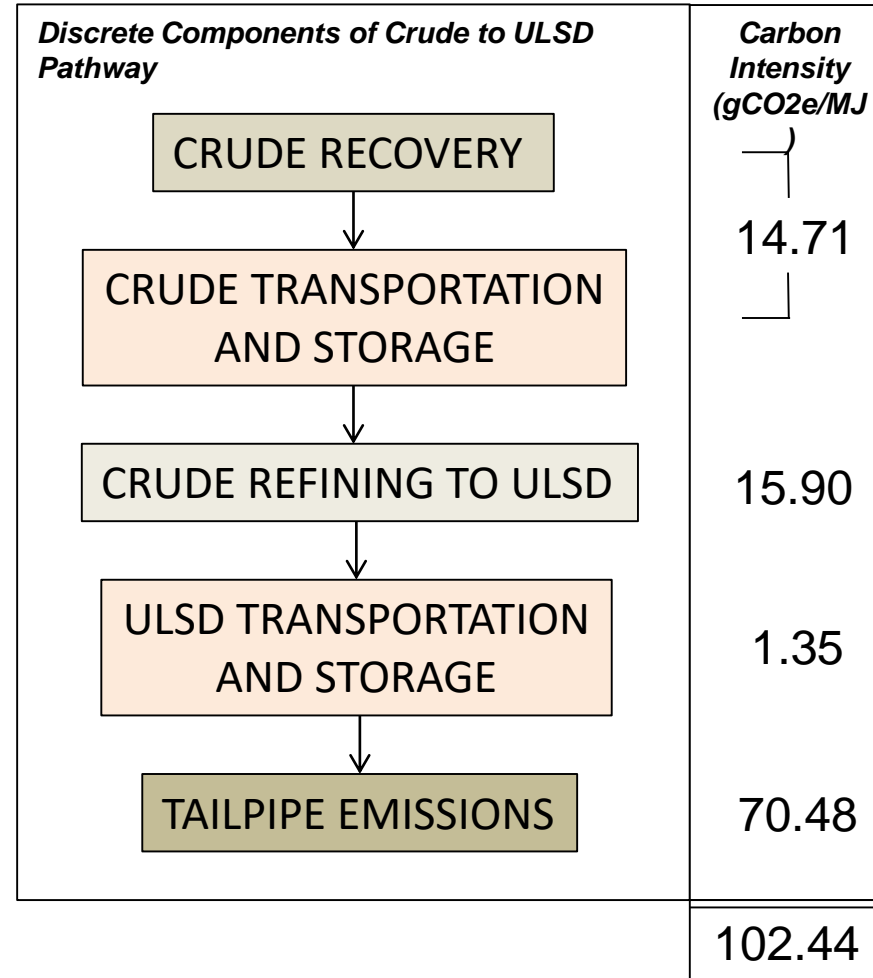
Tampa (HART)

Denver International
Airport

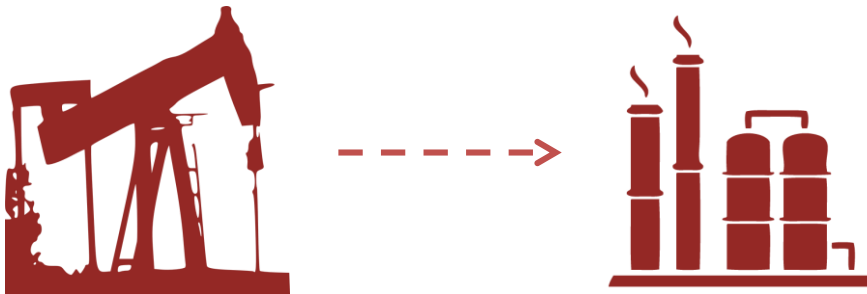


Carbon Intensity Score

- Measures greenhouse gas (GHG) emissions
- Takes into account the entire well-to-wheels GHG emissions impact of a fuel pathway
- Measured in grams of CO2 equivalent per megajoule of energy consumed
- Based on Department of Energy's Argonne National Lab studies and methodology



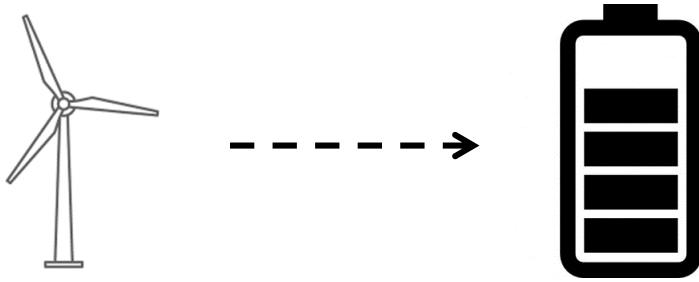
A Bad Current State: Diesel



CI Score: 102



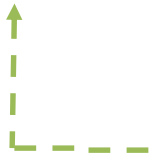
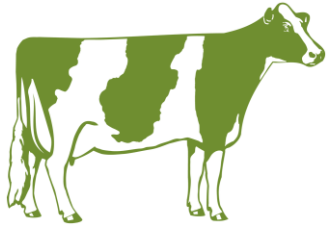
Good: Renewable Electric



CI Score: 0



Great: Renewable Natural Gas



CI Score: -255

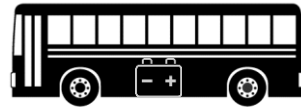


Impact of GHG Reduction



137 MT GHG
emissions per year

0 cars



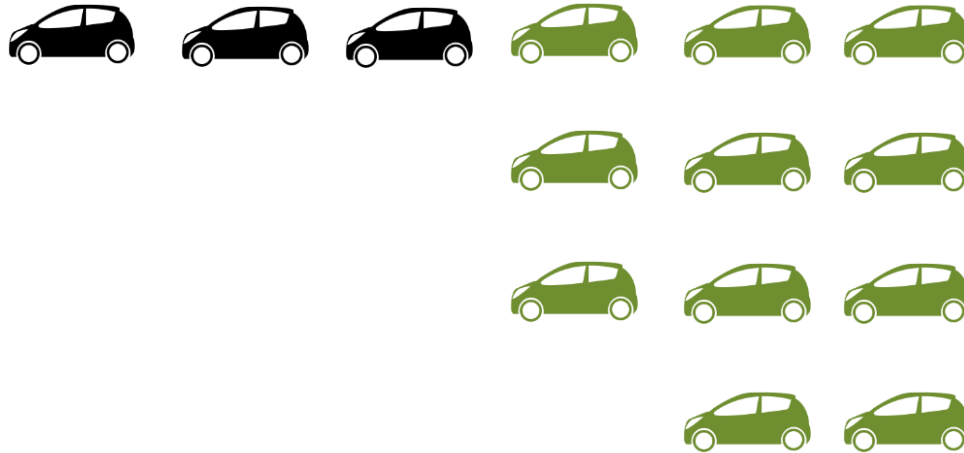
0 MT GHG
emission per year

29 cars

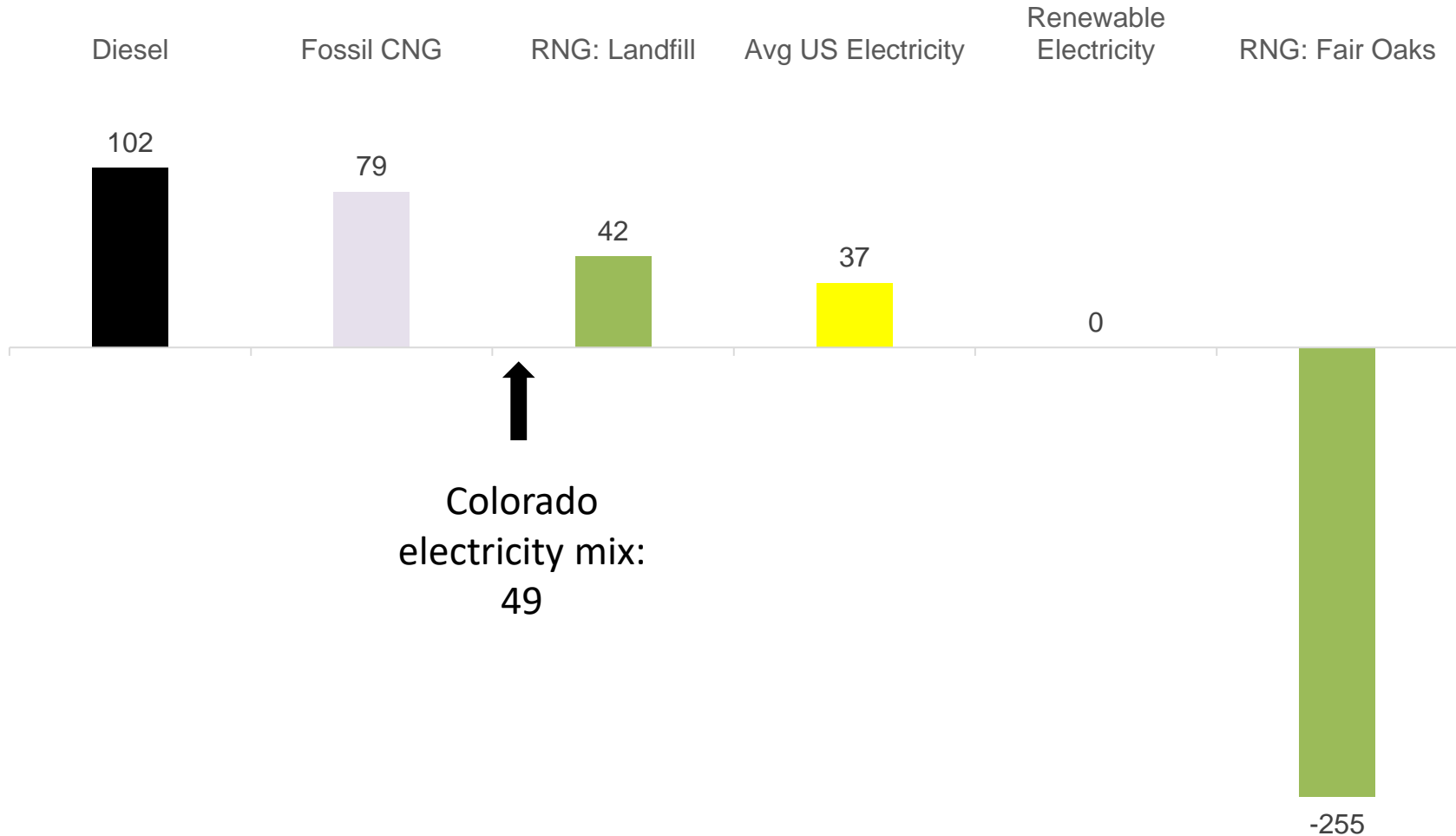


-375 MT GHG
emissions per year

110 cars

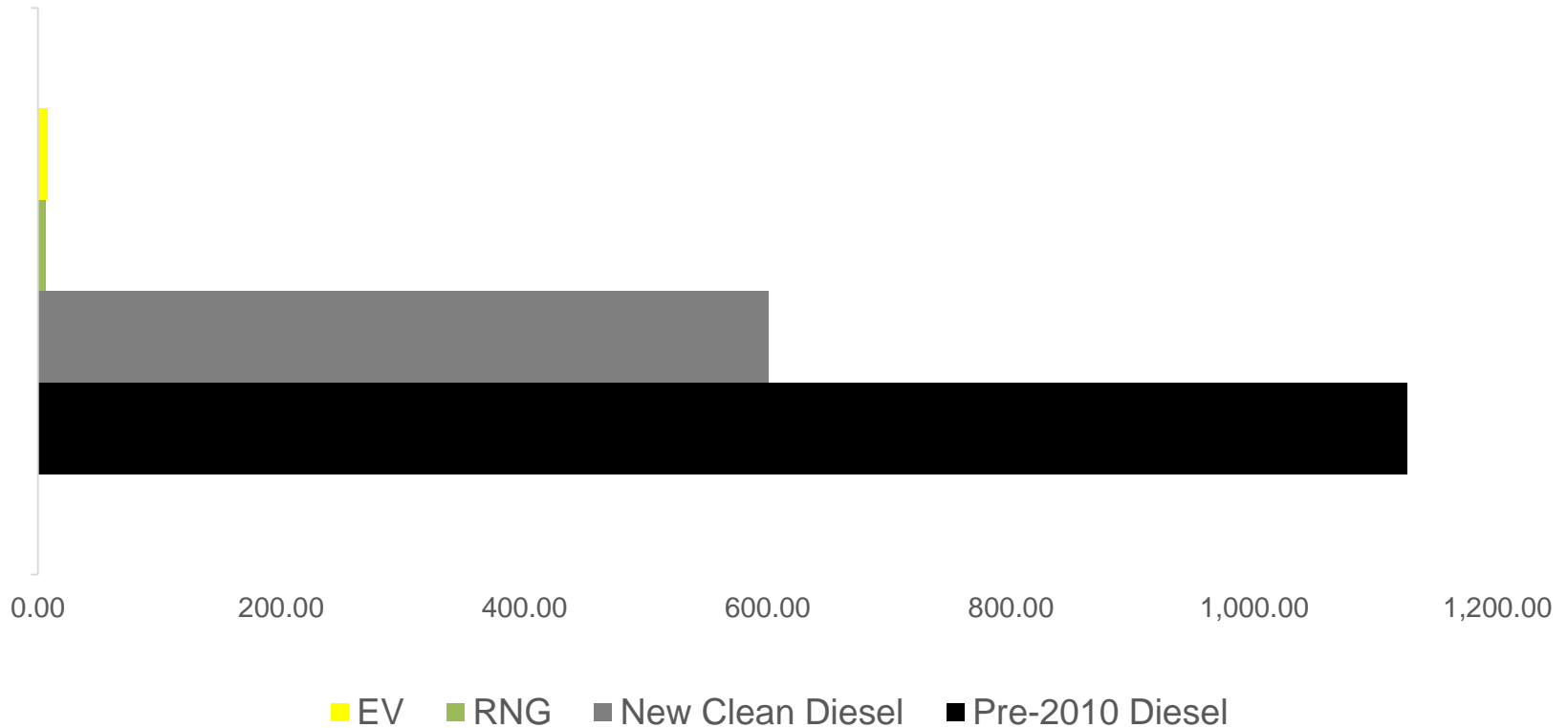


Carbon Intensity Scores by Pathway



NOx Tailpipe Emissions

Annual NOX Emissions (lb)



Waiting?

One year of delay with new clean diesel = **95 years** of CNG NOX emissions

One year of delay with pre-2010 diesel = **178 years** of CNG NOX emissions



CNG vs Electric

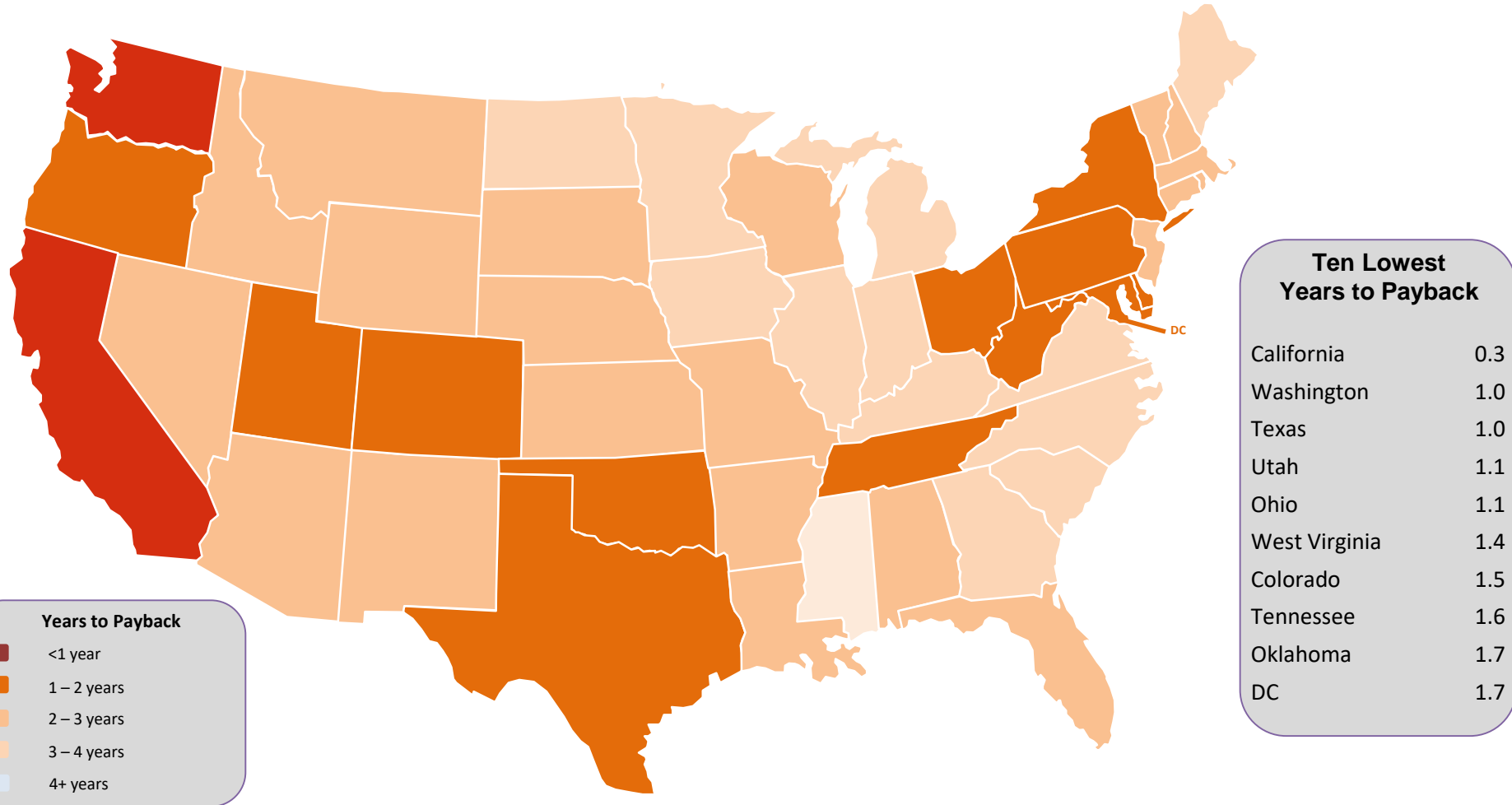
	Station Build	Vehicle Up-Charge	Cost to be Renewable
CNG	\$0 - \$2M	\$40K	- \$0.10
EV	\$40K per plug	\$250K	+ \$0.01



CNG Offers Quick ROI



Colorado is one of the best places to run CNG in the country.



Source: afdc.energy.gov, state governments, NGV America, AAA.com for diesel prices, CME group, and ampCNG analysis.

Note: Assumes \$50k truck premium for new CNG truck and 120k miles traveled per year. Includes estimated \$0.30/DGE discount for large Diesel users, \$0.70/GGE compression fee for large CNG users. Includes State incentives. Does not include the AFTC.

CNG Incentives for Eagle County



VW Settlement Money

Available this summer - CO one of the first states in-line for money!

Reimbursement program

Public Fleets – up to \$80,000 incentive available per vehicle

Private Fleets – up to \$55,000 incentive available per vehicle

Scrap required

Alternative Fuel Vehicle Tax Credit – private fleets only

\$10,000- \$20,000 per purchased vehicle

\$5,000- \$10,000 per leased vehicle

CNG station incentive

Up to \$500,000 available per station

Requires public access fueling



Economics

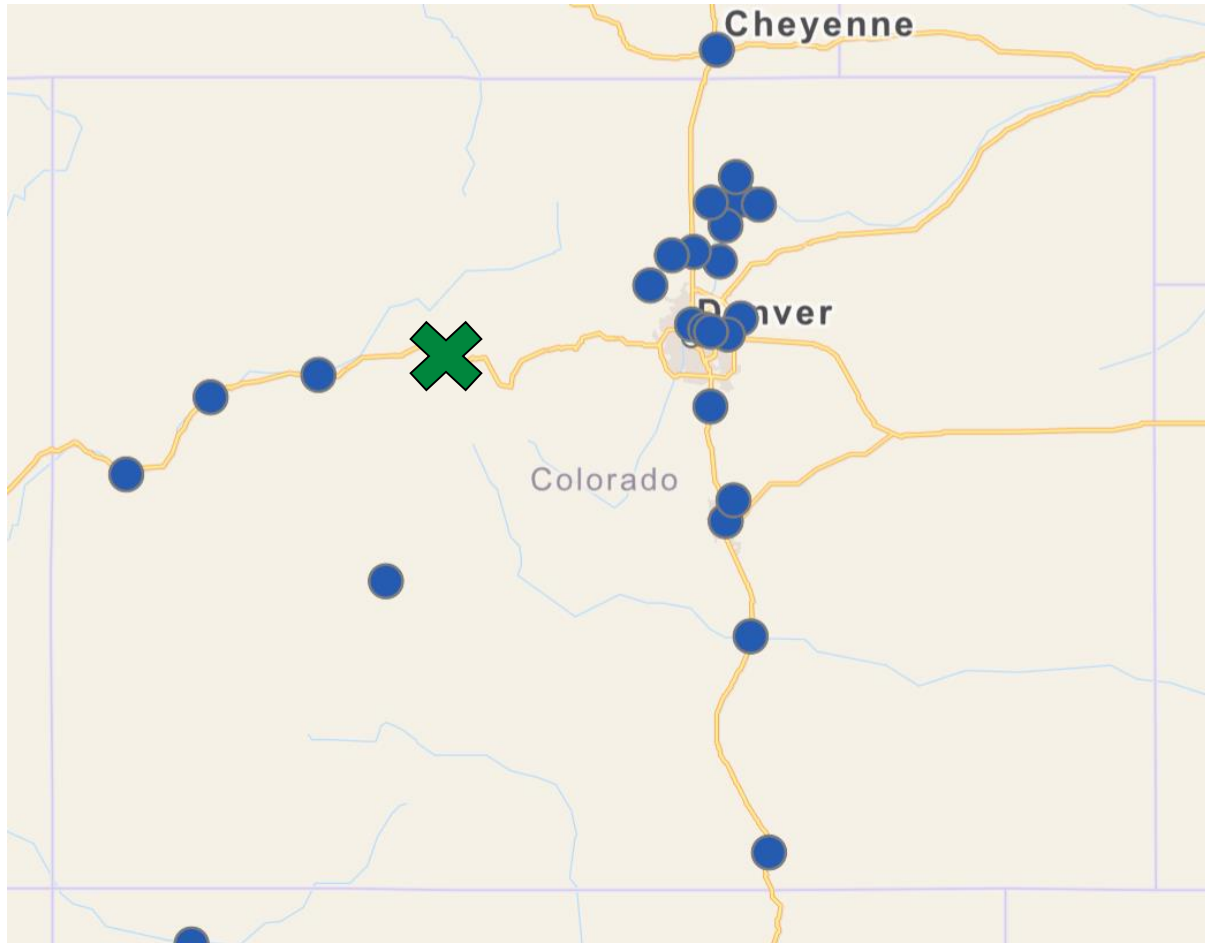


Item	Value	Units	Comment
Diesel price	3.15	\$/gallon	EIA average retail price minus \$0.20 (as of 6/4/2018)
CNG price	2.00	\$/DGE	
Environmental credit	0.00	\$/DGE	
Annual mileage of vehicle	40,000	mile/year	
Diesel fuel mileage	3	mi/DGE	
CNG fuel mileage	2.5	mi/DGE	
Life cycle of vehicle	1,000,000	miles	
Upfit cost for vehicle	40,000	\$	Market-based estimate
State grant	55,000	\$	
Net premium for vehicle	-15,000	\$	
Diesel fuel cost annual	42,000	\$/year	
CNG fuel cost annual	32,000	\$/year	
Fuel cost savings - unit			
Per gallon	1.15	\$/gallon	
Per mile	0.25	\$/mile	
Per year	10,000	\$	
Over lifetime	250,000	\$	
Diesel Maintenance Cost	0.090	\$/mile	
CNG Maintenance Cost	0.090	\$/mile	
Annual maintenance savings	0	\$/year	
Annual cost savings CNG v Diesel	10,000	\$/year	
Payback Period	-1.5	years	



CNG Map in Colorado

CNG station in Eagle County would fill hole along I-70 corridor



Contact Information



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Session #5: ICLEI Tools & GHG Inventory

- 2017 Inventory data collection has begun
- ICLEI has tools to track emissions reductions per initiative – training how to do this



Eagle County Energy Inventory

2014 data on energy use, costs and GHG emissions

KEY FINDINGS

- Greenhouse gas emissions from energy use in Eagle County in 2014 totaled 1.4 million metric tons of carbon
- Consistent with national findings, Eagle County



Data Access for Stakeholders in Inventory

- Energy data specific to your organization?
- Does not need to be public facing, but can be used by internal CAC groups to hone in on reduction strategies
- Email Kim after this meeting if interested!



That's a wrap!

Next meeting: Oct 1, 2018