



CLEAN CITIES COALITION

INAUGURAL MEETING

OCTOBER 13, 2022

AGENDA

- **Introductions**
- **Clean Cities Background**
- **Clark County Objectives**
- **Benefits**
- **Upcoming Events**

INTRODUCTIONS

Clark County Department of Environment and Sustainability

Marci Henson, Director

Jodi Bechtel, Assistant Director

Rina Taviv, Planning Manager of Air Quality and Climate

Sam Baker, Sustainability Program Administrator

Nicole Wargo, Clean Cities Fellow



Please introduce yourself in the chat

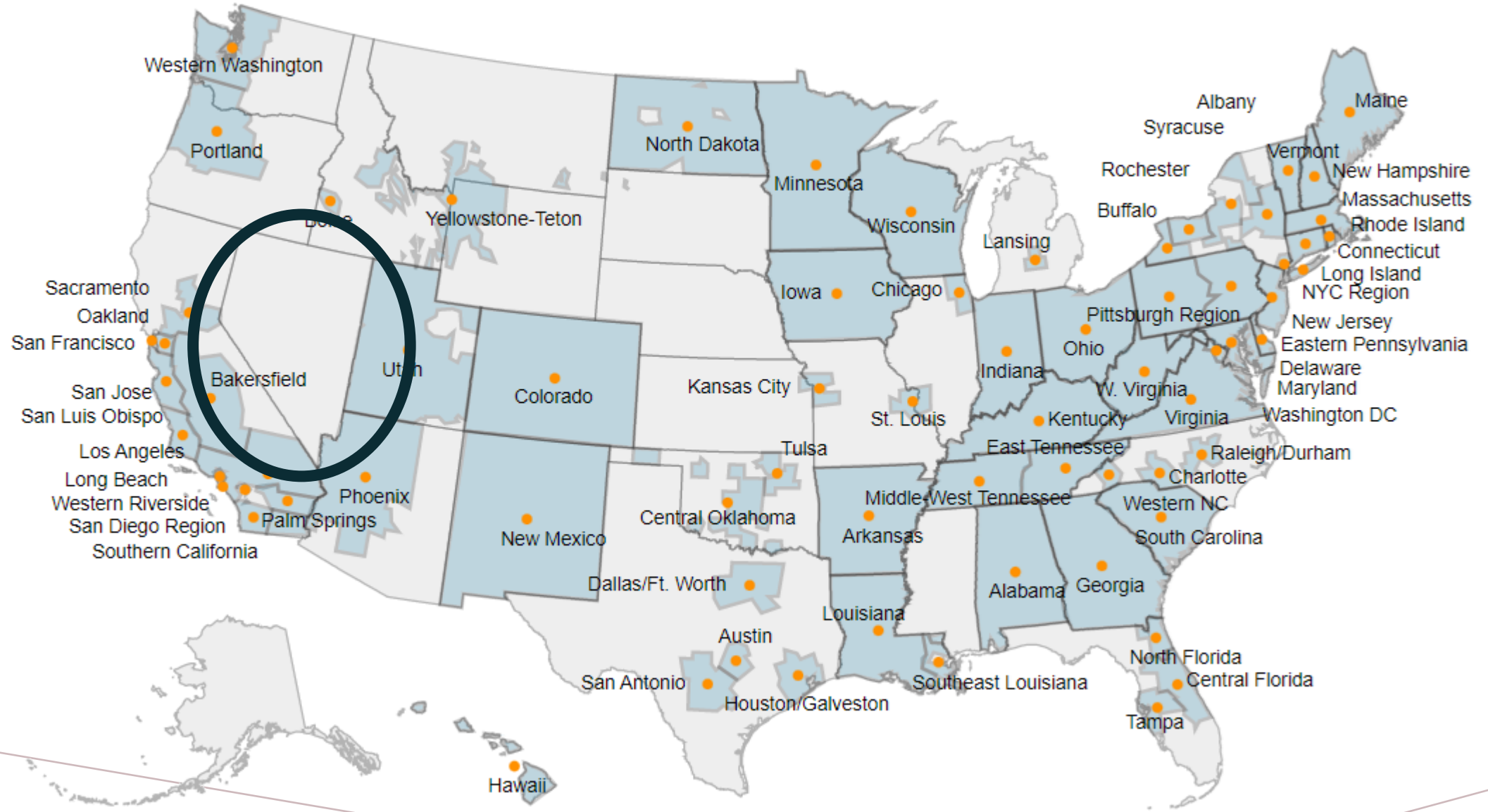
CLEAN CITIES COALITION

- A network to reduce petroleum fuel use
 - Approved alternative fuels
 - Idling reduction
- Purpose:
 - Reduce dependence on foreign oil
 - Provide cleaner air
 - Lower greenhouse gas emissions
- Created in 1993
- Run by The US Department of Energy (DOE)
- Requires steps to receive designation
- Over 75 coalitions in the country



Building Partnerships to Advance Affordable, Efficient, and Clean Transportation Fuels and Technologies

Coalitions Across the US



WHY CLEAN CITIES?

Funding opportunities

National recognition

Collaborative space for community

Capacity building

Cleaner air and fewer greenhouse gas emissions

Education and technical support from DOE

CLEAN CITIES ACHIEVEMENTS

Coalition projects have helped to put more than

1 million alternative fuel vehicles on the road.²



Vehicle miles traveled reduction projects avoided over **26 million hours** of driving.⁴



Clean Cities coalitions have forged partnerships with more than **20,000 stakeholders** nationwide. Through their collective efforts, they are transforming local and regional transportation markets and offering consumers additional transportation choices.²

Coalition projects have resulted in a cumulative impact in energy use equal to nearly **12 billion** gasoline gallon equivalents resulting from reduced fuel use and increased fuel diversity.¹



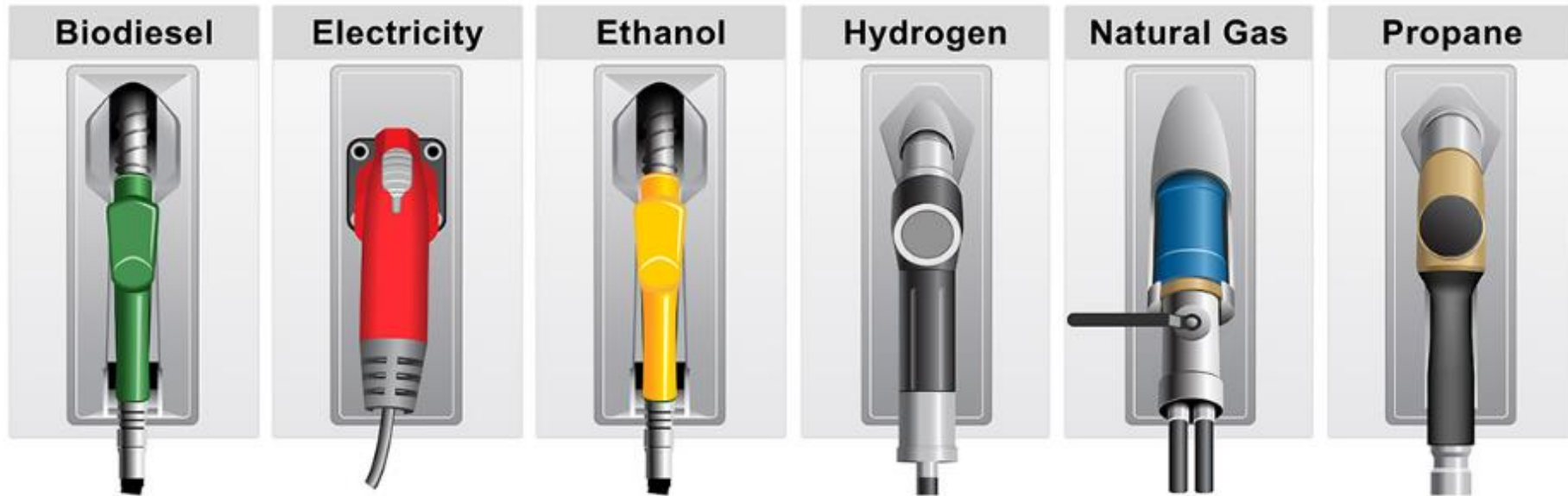
WHO IS A STAKEHOLDER?

Anyone interested in reducing petroleum fuels!

- We want to work with:
 - Fleet managers
 - Car dealerships
 - Nonprofits
 - Municipalities
 - Fuel providers
 - Public organizations
 - Trade unions and mechanics



WHICH FUELS?



US Department of Energy, [Alternative Fuels Data Center](#)

Information about these fuels
can be found on our [website](#)



VEHICLE AND EQUIPMENT TYPES

Construction equipment

Light duty vehicles

Medium duty vehicles

Heavy duty vehicles

Lawn equipment

Recreational vehicles

Ground support vehicles for operational use

Any type of equipment that uses gasoline or diesel

ORGANIZATIONAL STRUCTURE

CLARK COUNTY

- Run through County government
- Provides funding for Coordinator
- Hosts meetings and events

COORDINATOR/DIRECTOR

- Clark County Employee
- Oversees Coalition
- Coordinates meetings and events
- Ensures progress

ADVISORY COMMITTEE & WORKING GROUPS

GENERAL STAKEHOLDERS

GOALS



**INCREASE NUMBER
OF ALTERNATIVE
FUEL VEHICLES IN
REGION**



**INCREASE NUMBER
OF REFUELING/
RECHARGING
STATIONS**



**RECRUIT NEW
STAKEHOLDERS**



**DEVELOP AND
PROMOTE
INCENTIVES**



**COMMUNICATE
MESSAGE TO THE
PUBLIC**



**ACHIEVE FINANCIAL
AND MEMBERSHIP
SUSTAINABILITY**



**EDUCATE POLICY
MAKERS ABOUT
BENEFITS OF
ALTERNATIVE FUEL
VEHICLES**



DESIGNATION PROCESS

- **Level One: Apprenticeship**
 - Begin meetings and events
 - Formation of Advisory Committee
 - Submission of Application
 - Letters of Commitment
- **Level Two: Full Designation**
 - Demonstrated commitment
 - Strong stakeholder base
 - Formation of Working Groups
 - Submission of Four-Year Plan

QUESTIONS?



ALL-IN CLARK COUNTY

Sustainability and Climate Action Initiatives

Sam Baker

Sustainability Program Administrator

DIRECTION FROM CLARK COUNTY COMMISSION

- Restructure Department of Air Quality
 - New name
 - Office of Sustainability
 - Sustainability Program Administrator
- Joined County Climate Coalition
 - Reduce greenhouse gas emissions to meet Paris Climate Agreement
- Set goal of “Net Zero by 2050”
- Prepare a Sustainability and Climate Action Plan



Planning Process

All-In Clark County Planning Timeline

● Phase 1 ● Phase 2 ● Ongoing

Community-Wide Sustainability & Climate Action Plan

Climate Vulnerability Assessment

Sustainability Audit

Pt 1: County Operations Plan & Implementation Strategy

Pt 2: Regional Greenhouse Gas Inventory

Stakeholder Engagement



2 WAYS CLARK COUNTY CAN ADDRESS CLIMATE CHANGE



1 Reduce greenhouse gas emissions



2 Prepare for impacts of climate change

Sustainability and Climate Action Plan for County Ops



CLEAN & RELIABLE ENERGY



RESILIENT COUNTY OPERATIONS

5



SMART WASTE MANAGEMENT & REDUCTION

KEY
AREAS



SUSTAINABLE TRANSPORTATION



WATER CONSERVATION & PROTECTION



SUSTAINABLE TRANSPORTATION

GOALS

- Reduce emissions from vehicles in County operations.
- Support County employee commuting alternatives.
- Promote policies, programs, and infrastructure investments that prioritize multi-modal, clean, efficient transportation options throughout Clark County.

POTENTIAL ACTIONS

Shifting the way the County's employees commute, the composition of its vehicle fleet, as well as the way the County thinks about transit-oriented development can significantly reduce the County's greenhouse gas emissions. The following actions have been identified to help the County achieve its goals for transportation.

✓ ACTION

☰ DESCRIPTION

Adopt policies and employ technology that allows for remote work/meetings, where practical and appropriate.

Technology and software for remote work options have become robust and readily available in recent years. While practicality and optimization of service must be taken into consideration, transitioning appropriate County employees to flexible work arrangements can reduce transportation emissions and traffic congestion. Given demands for remote work during the current pandemic, the County has already begun identifying and implementing additional telecommuting practices and policies that will be further expanded upon in the coming months.

Expand employee commuting programs that incentivize and encourage alternative commuting modes.

By expanding incentives programs, including the County's participation in ClubRide, the County can encourage commuters who have the ability to take alternative modes of transportation to do so. Many employee commuting programs offer rewards such as gift cards, tax benefits, social recognition, and subsidies.

Establish a formal vehicle purchasing and replacement policy that considers right-sizing of vehicles, assesses life-cycle costs and benefits, and shifts the County fleet to low-/zero-emission vehicles.

Establishing a formal policy for County fleet purchasing and replacement can help the County set centralized standards for vehicle performance, type, cost, and emissions potential, such that the County can easily monitor fleet contributions to greenhouse gas emissions and other embodied costs. While the County currently follows a framework for these procedures, it is informal.

Install electric vehicle charging infrastructure needed to support County staff vehicles.

While the County currently has infrastructure in place for fleet and public charging, there are no stations dedicated for employee use. Installing electric charging infrastructure can encourage employees to make the transition to electric vehicles knowing there is charging available at the workplace.

Apply to become a Clean City through the Clean Cities Coalition.

The Clean Cities Coalition supports transportation efficiency at local, state, and national levels. Clark County can amplify its transportation efforts and funding opportunities by joining the Coalition as a Clean City.

CLARK COUNTY OPERATIONS ACTIONS

TRANSPORTATION ELECTRIFICATION WORKING GROUP



“develop, coordinate, and implement local programs and strategies to support transportation electrification in Southern Nevada in an equitable manner.”

- Discover current transportation electrification efforts
- Uncover barriers and challenges
- Develop model EV charging infrastructure ordinance – including costs
- Work with core collaborators to house actionable goals
- Work with utilities and PUCN to accelerate electrification strategically



ALL-IN COMMUNITY PLAN



**CLARK COUNTY'S
SUSTAINABILITY AND
CLIMATE ACTION PLAN**

GREENHOUSE GAS EMISSIONS INVENTORY - 2019

ALL-IN CLARK COUNTY
BOLD ACTION FOR A SUSTAINABLE FUTURE

**SOUTHERN NEVADA REGIONAL PLANNING COMMISSION
REGIONAL COMMUNITY GREENHOUSE GAS INVENTORY REPORT**
PREPARED BY Clark County, NV and Kim Lundgren Associates, Inc.

UNINCORPORATED CLARK COUNTY
#ALLINCLARKCOUNTY

55% REGIONAL EMISSIONS
44% REGIONAL POPULATION

In Unincorporated Clark County, building-related energy usage makes up 39.8% of GHG emissions, followed by off-road transportation, including aviation emissions, at 21.3%. On-road transportation contributes 18.3% to GHG emissions and wastewater account makes up 17.0% of emissions. Water treatment and delivery respectively. Lastly, agriculture, forestry, makes up 2.5% and less than 1% of GHG emissions. Unincorporated Clark County is the only jurisdiction in which this data is available.

The Inventory for Unincorporated Clark County included data collected from both local and regional sources including NV Energy, Southwest Gas, Republic Services, and the Silver State Energy Association. All regional data that could not be disaggregated by city, such as off-road mobile emissions, are categorized as Unincorporated Clark County.

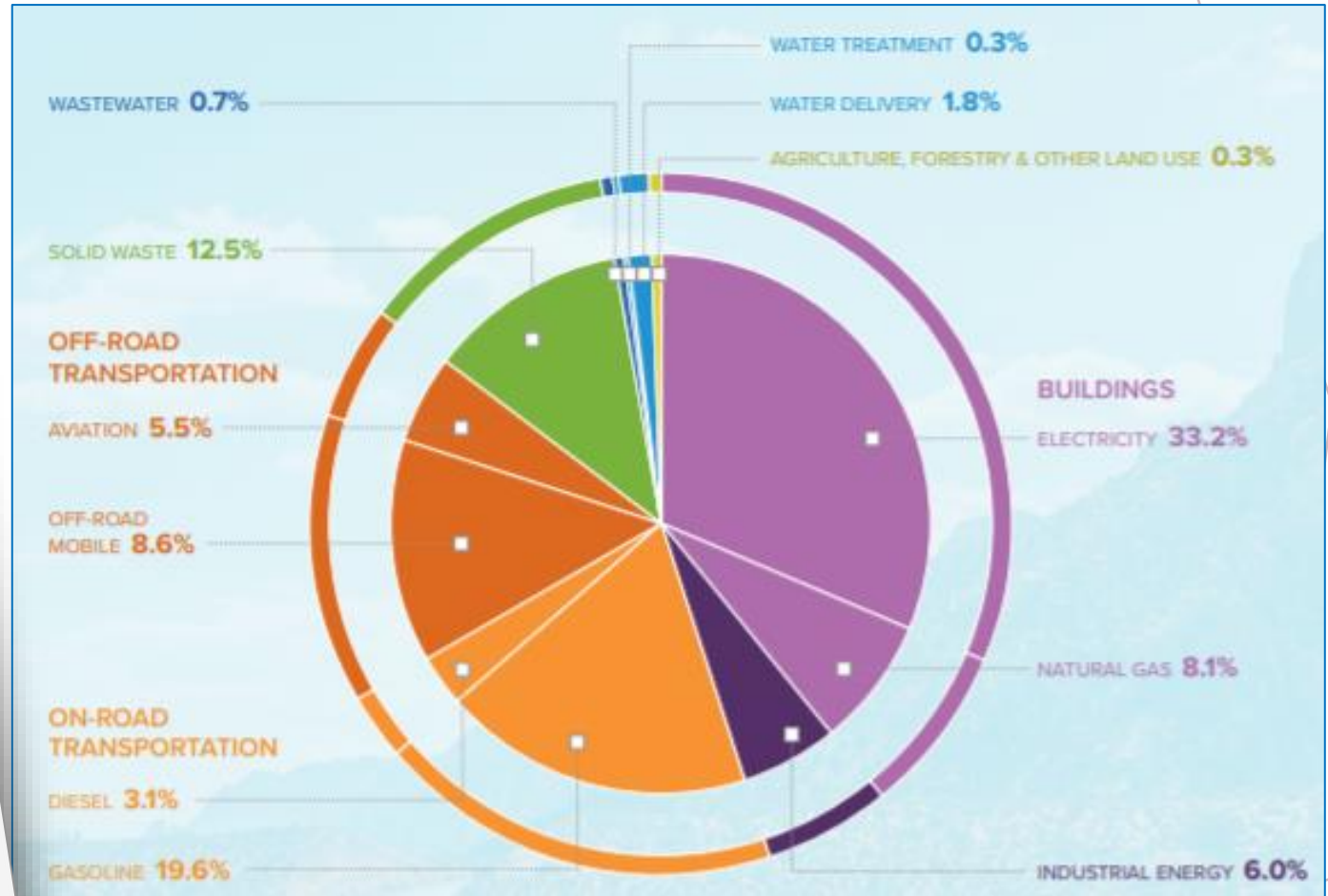
FIGURE 21. Unincorporated Clark County GHG Emissions by Sector, 2019

- Residential Buildings | 13% (2,471,170 MTCO₂e)
- Commercial Buildings | 20% (3,758,316 MTCO₂e)
- Industrial Energy | 6% (1,122,960 MTCO₂e)
- On-Road Transportation | 18% (3,380,382 MTCO₂e)
- Off-Road Transportation | 14% (2,527,032 MTCO₂e)
- Airport | 6% (1,405,779 MTCO₂e)
- Solid Waste | 12% (2,184,994 MTCO₂e)
- Wastewater | 17% (3,134,984 MTCO₂e)
- Water Treatment & Delivery | 3% (564,162 MTCO₂e)
- Land Use, Land-Use Change, & Forestry | 1% (223,398 MTCO₂e)

FIGURE 22. Unincorporated Clark County: By The Numbers

- 18.3 MTCO₂e per capita
- 86.7 Residential MMBtu per Household
- 52.6 Commercial MMBtu per 1,000 sq.ft.
- 8.3 1,000 Vehicle Miles Traveled per capita
- 0.9 Residential Tons of Waste Per Household

25

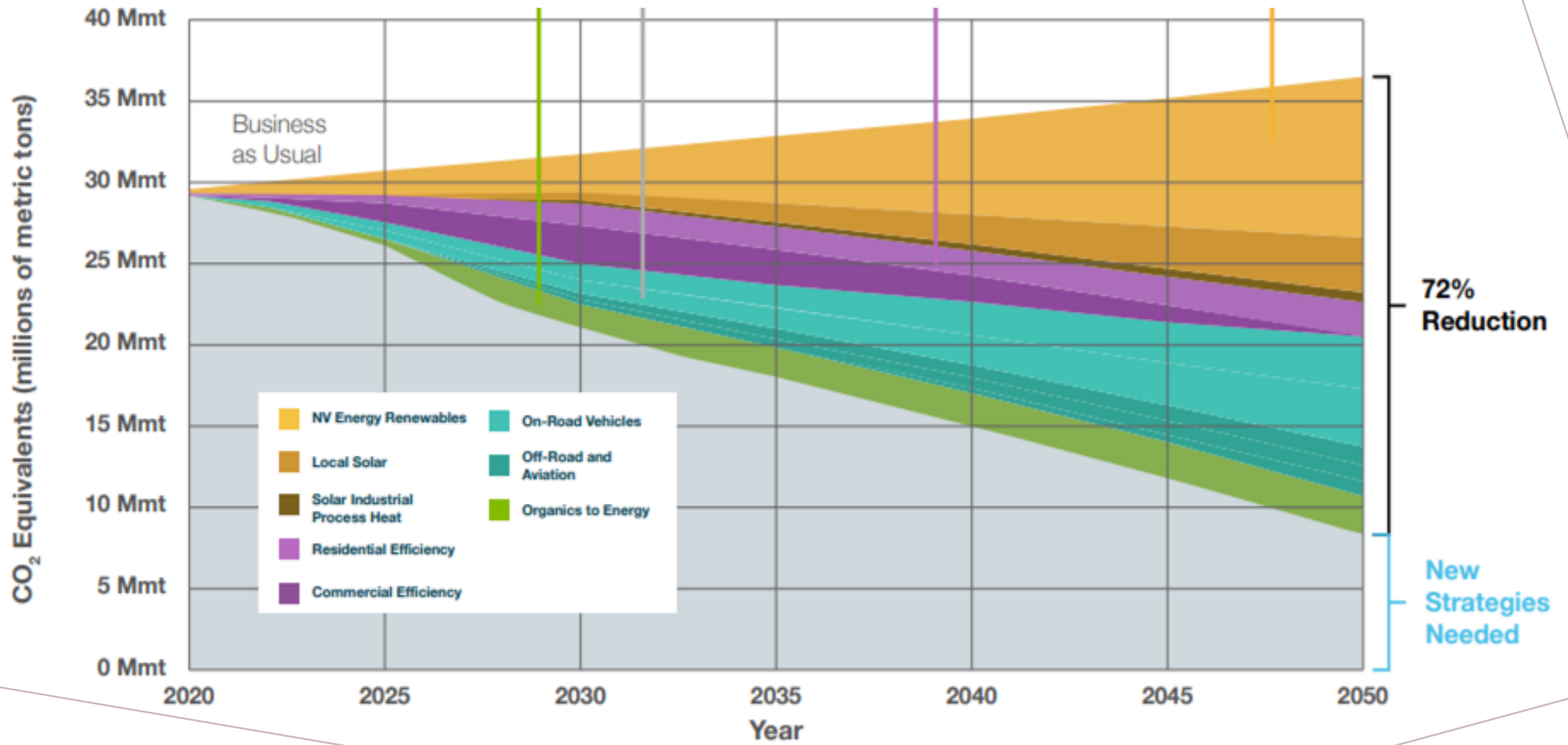


GREENHOUSE GAS EMISSIONS FROM TRANSPORTATION

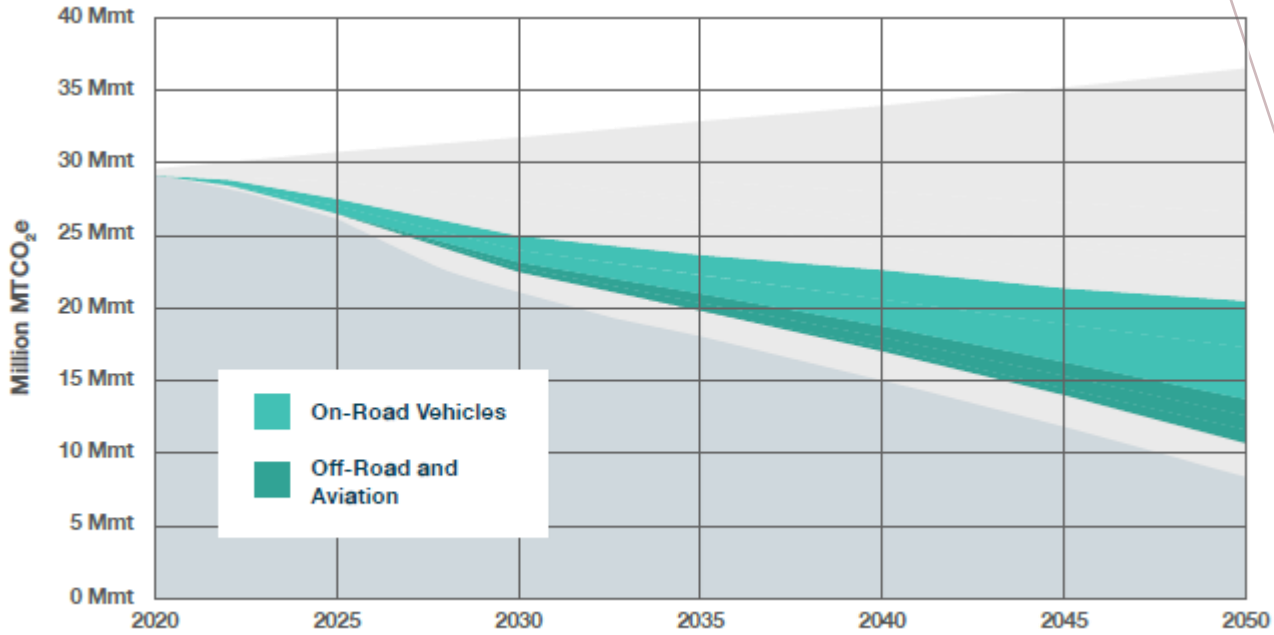
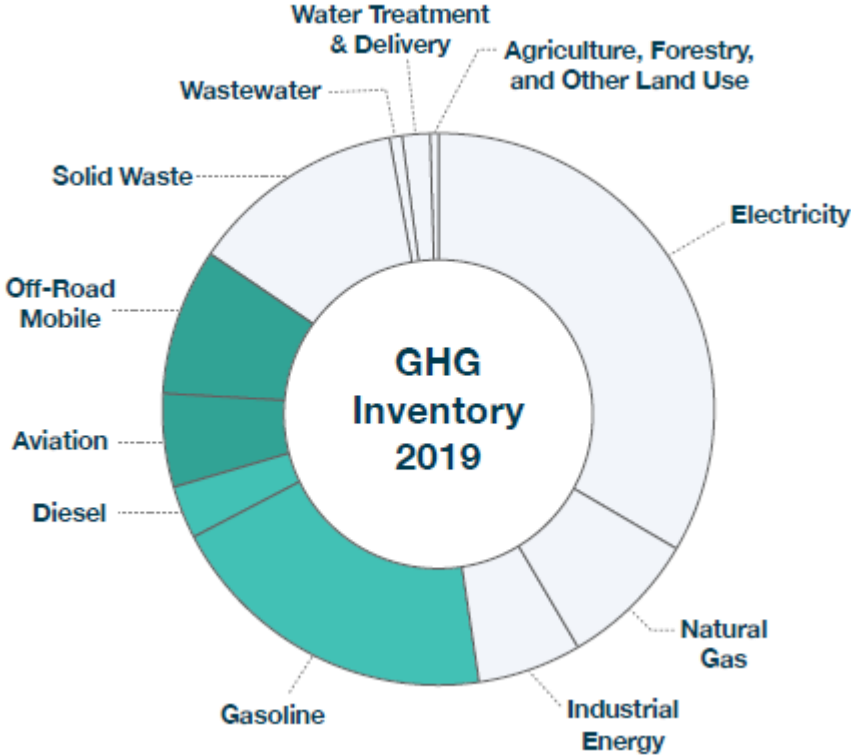
SOURCE	MTCO ₂ e	% OF TOTAL
On-Road Transportation	6,734,219	23.0%
Gasoline	5,747,487	19.6%
Diesel	904,285	3.1%
Electric	8,705	0.0%
CNG	6,483	0.0%
Transit CNG	51,029	0.2%
Transit Biodiesel	16,230	0.1%

SOURCE	MTCO ₂ e	% OF TOTAL
Off-Road Transportation	4,145,745	14.1%
Off-Road Mobile	2,511,500	8.6%
Aviation	1,608,713	5.5%
Waterborne Navigation	17,589	0.1%
Railways	7,944	0.0%

GREENHOUSE GAS REDUCTION PATHWAYS



GHG PATHWAYS ANALYSIS FOR TRANSPORTATION



Community-Wide Plan Six Key Areas



**Clean & Reliable
Energy**



**Connected &
Equitable Mobility**



**Diverse &
Circular Economy**



**Sustainable
Water Systems**



**Resilient & Healthy
Community**



**Smart Buildings
& Development**

Connected and Equitable Mobility



***Vision:** Developing a safe, connected, and accessible transportation system that prioritizes low-carbon mobility, public transportation, and active lifestyles.*

Goal #2: The transportation system minimizes energy use and eliminates fossil fuels.

- **Transition 25% of passenger and light-duty vehicles to zero emissions by 2030.**

Potential Actions Include:

- **Advocate for equitable access to fossil-fuel-free transportation resources.**

NEXT STEPS FOR ALL-IN INITIATIVES

- Continue with implementation of actions in County operations plan
- Release draft All-In Community Plan Jan 2023
 - Develop implementation strategies



QUESTIONS?

BENEFITS OF THE CLEAN CITIES COALITION

OUTREACH TO DATE

Participated on panel at
the International Car
Rental Show

Exhibitor Booth at
FleetCon

Notices at
Transportation
Electrification Working
Group

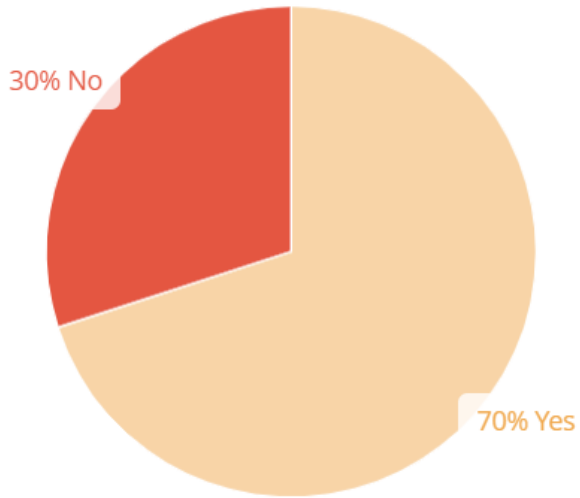
Surveys

Email and digital
communications

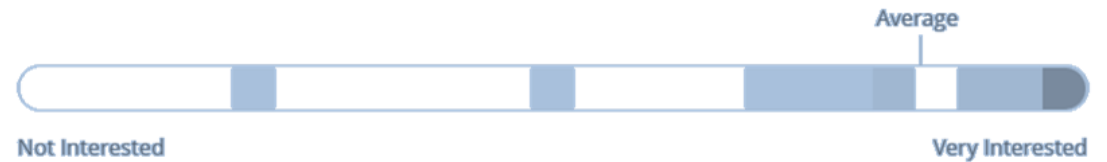
Exhibitor Booth at
NV Energy &
NV Franchised Auto
Dealers Association
EV Ride and Drive

SURVEY RESULTS

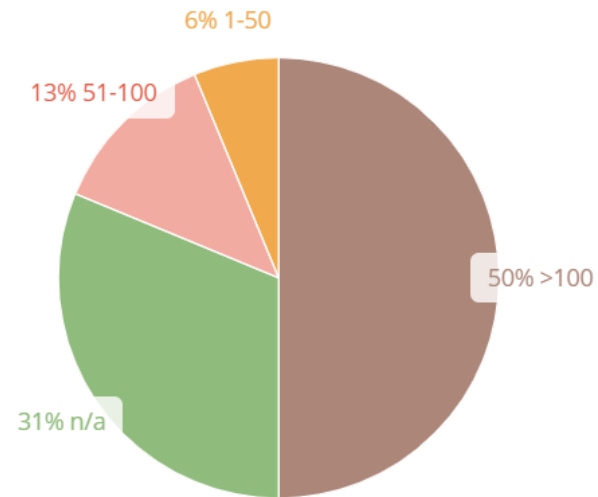
Have you heard of the Clean Cities Coalition?



What is your level of interest in alternative fuel use, including electric, in Southern Nevada?



How large is your organization's fleet?





GENERAL STAKEHOLDER MEETINGS

- Quarterly
- Presentations from local stakeholders
 - Including you!
- Opportunity to network
- Opportunities to have joint meetings with other transportation-related organizations
- Community to share best practices



EVENTS & OUTREACH

- Programming during months without meetings
 - Funding opportunities
 - Technical trainings
 - New products and technology
 - Ride and Drives
- Resources via website and newsletters



FUNDING OPPORTUNITIES

- Local/State Funding and Grant Writing Workshops
- Incentives posted on website
- Additional opportunities through Department of Energy
 - 2021: 20 projects awarded \$71 million

Applicant	Location	Project	Federal Share
Metropolitan Energy Center (nonprofit)	Kansas City, MO	EV Market Stimulation in Divested Economies	\$5,222,326
Columbia-Willamette Clean Cities Coalition	Tualatin, OR	Equitable Mobility Powering Opportunities for Workplace Electrification Readiness (EMPOWER)	\$3,970,539
BorgWarner Inc. (automotive supplier)	Auburn Hills, MI	Technology & Design Innovations to Maximize the Reduction Effect on DCFC Unit Cost Economics (MAX-REDUCE)	\$4,093,880

[US Department of Energy](#)

GENERAL STAKEHOLDER

- Anyone!
- Those here to learn

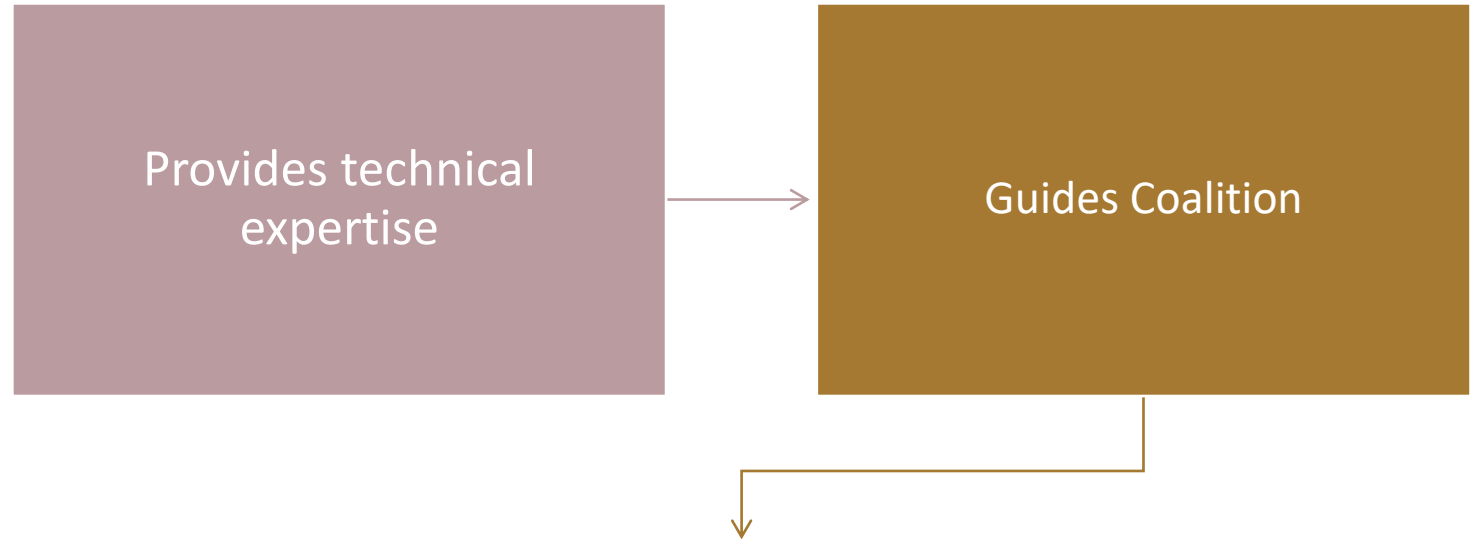
- Organizations outside community
- Providers of available products and technologies to support Clean Cities efforts

ADVISORY COMMITTEE

- Subject matter experts
- Connected to community

- Local service agencies
- Municipalities/government agencies
- Utilities and fuel providers
- Vehicle and equipment providers
- Fleet managers (large and small)

ADVISORY COMMITTEE



Expectations:

- 1 year commitment
- Attend Committee meetings
- Champion Coalition mission through active participation
- Deliver needed information to Coordinator/Director
- Recommend programming, funding opportunities, etc.
- Coordinates and organizes working groups
- Note: this is not a formal board

Looking for 9 to 15 committed stakeholders



WORKING GROUPS

- Examples:
 - Fuels and Infrastructure
 - Communications/Outreach
 - Education/Training
 - Idle Reduction
 - Coalition Membership



Clean Fuels • Clean Strategies • Clean Air

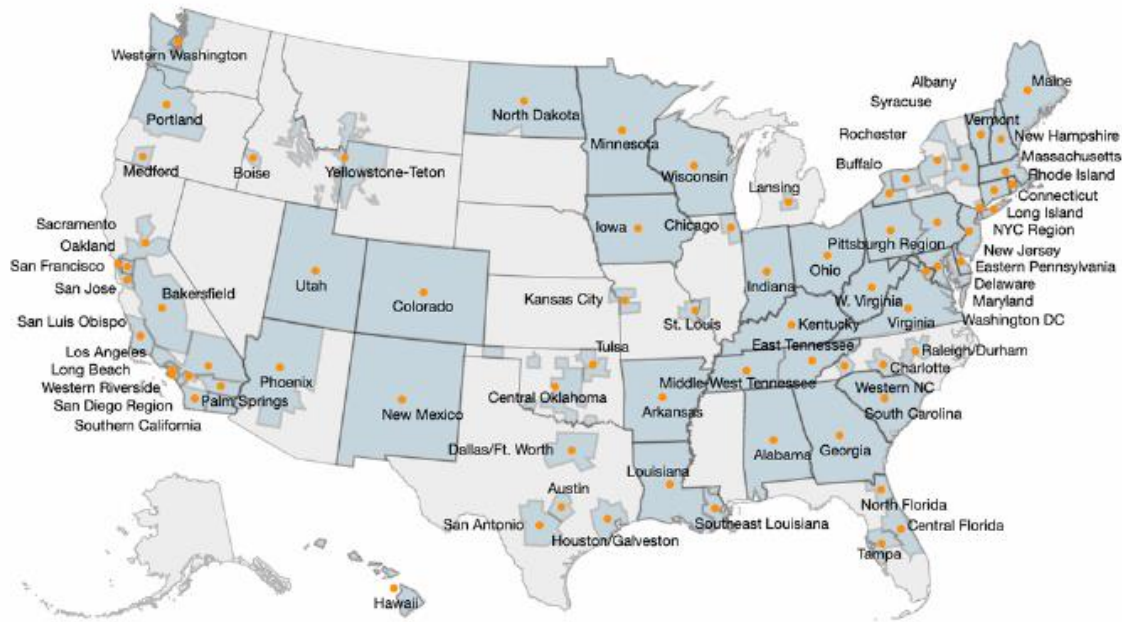
Good
Afternoon!

Tammie Bostick

Executive Director

Tammie.Bostick@utahcleancities.org

801.580.1922



Clean American Fuels

Advanced Fuels for Americas Fleets

Clean Cities coalitions foster the economic, environmental, and energy security of the United States by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices.

75+
Coalitions

OVER 75 CLEAN CITIES SUPPORTING CLEAN FUEL STRATEGIES THROUGHOUT THE UNITED STATES.

2:1
Match

CLEAN CITIES COALITION-SUPPORTED PROJECTS HAVE HISTORICALLY LEVERAGED ALMOST 2:1 IN MATCHING FUNDS AND IN-KIND CONTRIBUTIONS FROM PRIVATE AND PUBLIC SECTOR PARTNERS.

\$460
Million

SINCE 1993, THE U.S. DEPARTMENT OF ENERGY'S (DOE) VEHICLE TECHNOLOGIES OFFICE (VTO) HAS DISTRIBUTED CLOSE TO \$460 MILLION IN TRANSPORTATION PROJECT AWARDS

CLEAN FUEL | CLEAN STRATEGIES | CLEAN AIR



ASPIRE

- Ace Recycling & Disposal
- Breathe Utah
- Canyons School District
- ChargePoint
- Clean Fuels Utah
- Dominion Energy of Utah
- Draper City
- Electriphi
- FreeWire Technologies
- Geneva Rock
- Holladay City
- Kane County
- Lancer Energy
- Leaders for Clean Air
- Lewis Bus Group
- Moab City
- Momentum Recycling
- Murray City
- Ogden City
- Orange EV
- Packsize
- Park City School District



Provo City

- ReFuel Energy Partners
- Rocky Mountain Power | Pacifcorp
- Rocky Mountain Propane
- SLCgreen & Salt Lake City
- Salt Lake Chamber of Commerce
- Sandy City
- Santa Clara City
- Semi-Service
- Transportation Energy Partners, TEP
- Utah's Clean Air Partnership, UCAIR
- United Parcel Service, UPS
- University of Utah
- Utah Dept. of Environmental Quality
- Utah Dept. of Transportation, UDOT
- Utah Governor's OED
- Utah Inland Port Authority
- Utah Transit Authority, UTA
- Utah State School District
- Utah State University
- Weber State University
- Washington City
- Zion National Park



EVZion
Shuttle

EVZION Shuttle Pilot

PROOF of CONCEPT



- Pilot EV
- Scale
- Replicate
- Regional
- National



UTAH OFFICE OF
ENERGY DEVELOPMENT



RURAL MOBILITY

UNDER-RESOURCED
REGIONS

COMMUNITY &
WORKPLACE

FREIGHT & PORT
ADVANCED FUELS

DESTINATION
HIGHWAYS



Rural Gateway Counties

CLEAN FUELS | CLEAN STRATEGIES | CLEAN AIR



UTAH CLEAN CITIES

ALABAMA CLEAN FUELS

CLEAN FUELS OHIO

SOUTH SHORE CLEAN CITIES

COLUMBIA - WILLAMETTE

VIRGINIA CLEAN CITIES

WISCONSIN CLEAN CITIES





West Electric HIGHWAY

Supporting Electric Vehicle
Infrastructure Deployment along Rural
Corridors in the Intermountain West



DRIVE ELECTRIC



Drive Electric USA Priority Areas:

1. *Statewide Branded EV Programs*
2. *Consumer Education*
3. *Utility and Regulator Education*
4. *EV Charging Infrastructure Planning*
5. *Education of Government Officials*
6. *Dealer Engagement*
7. *Fleet Engagement and EV Adoption*

UPCOMING

SMALL AND MEDIUM BUSINESS FUNDING WORKSHOP

- Proposed for November
- Learn what opportunities exist in Nevada to help your business convert to alternative fuels!
- Webinar
- Presented by Kirsten Stasio
Executive Director, Nevada Clean Energy Fund

SURVEY PARTICIPATION

- **Due by: November 3**
- Determine level of interest
- Advisory Committee
- Reach out to Nicole with questions
Nicole.Wargo@ClarkCountyNV.gov

FINAL DISCUSSION

- Goal: reduce petroleum fuel use
- Currently no representation in Nevada
- Requires designation process
- Run by Clark County government
- Requires at least 9 Advisory Committee members
- Access to funding only available to Coalitions
- Opportunity to collaborate with other Coalitions

Please complete survey by November 3 to determine level of interest

QUESTIONS?



THANK YOU

Nicole Wargo

Clean Cities Coalition Fellow

Clark County Department of Environment and Sustainability

Nicole.Wargo@ClarkCountyNV.gov



Or search:
"Clark County
Clean Cities Coalition"