

Agenda

Time	Item
9:00 am	<ul style="list-style-type: none">• Coffee & Pastries Networking
9:15 am	<ul style="list-style-type: none">• Welcome & Introductions
9:30 am	<ul style="list-style-type: none">• CTA Program Updates & Announcements
9:40 am	<ul style="list-style-type: none">• Subcommittee Structure & Recruitment
9:55 am	<ul style="list-style-type: none">• Member Presentations<ul style="list-style-type: none">◦ Sugar Bowl◦ Palisades Tahoe◦ Vail Resorts
10:55 am	<ul style="list-style-type: none">• Wrap Up & Adjourn

Sign In Here:



Climate Transformation Alliance Quarterly Meeting

July 12th, 2024
Truckee Tahoe Airport



Welcome & Introductions



- **Continue networking at CTA
HAPPY HOUR! Tonight at RMU
from 4-6pm!**
- Popcorn project updates



CTA Updates



- Updated Documents on Website
 - Member Expectations, Strategic Plan, Charter
- Subcommittee Recruitment
 - Communications
 - Membership
 - Fundraising
 - Program
- Webinar Series
 - July 24, 12-1 on “Financing the Costs of Building Decarbonization”



Truckee Tahoe Building Decarbonization Pilot Program



- On-demand and in-person contractor training
 - All 10 virtual courses are available on the online platform
 - In-person training: July 17
 - Mentorship
- Electrification coaching service live!
 - Available for home and building owners in the Truckee Tahoe region



Town of Truckee Dark Sky Outdoor Lighting Rebate Program



- Available for Residential and Commercial buildings
 - 57 lighting fixtures replaced
- Additional \$20 bonus per fixture for fixtures with motion sensors

Applicant Testimonial

“It makes me happy to gaze up at our beautiful skies..sans glaring light. Thank you and the Town of Truckee for encouraging this!”

CTA Subcommittees – Overview



Program

Guide and inform the overall programming of CTA to ensure it is aligned with the mission & vision and community needs through member engagement, monitoring of CTA programs, and development of new initiatives.

Membership

Recruit and retain members by maintaining a membership database, increasing member engagement through member-only events and resources, and ensuring member needs are met through CTA programming.

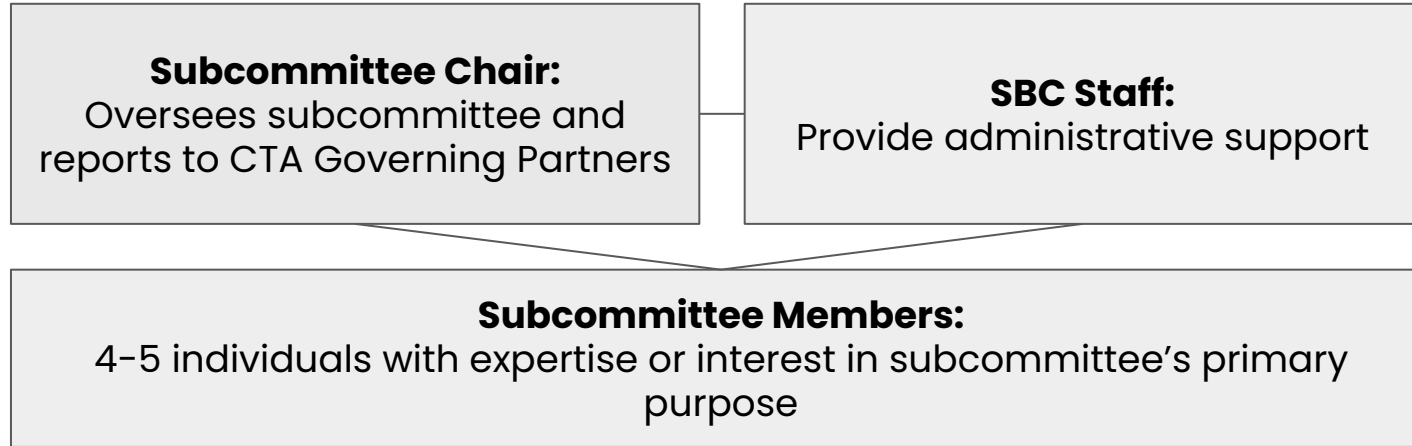
Communications

Develop and implement a CTA communications strategy that promotes membership, member engagement, and brand recognition.

Finance & Fundraising

Provide budget oversight and develop and implement a fundraising strategy that identifies eligible competitive funding (i.e., grants), philanthropic funding, and potential for membership fees to ensure CTA has funds to meet its programmatic goals.

CTA Subcommittees – Structure



Subcommittee Time Commitment – One Year Terms

Recurring Monthly: 2-4 hours on subcommittee meetings & tasks

Recurring Quarterly: 3 hours on CTA meetings & share out to Governing Partners

One-time Annually: 5 hours on supporting CTA Community Event

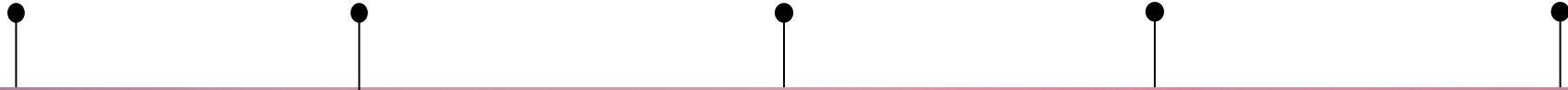
CTA Subcommittees - Timeline



Subcommittee Kickoff Meetings

Finalize Subcommittee Rosters

Chair and Member Recruitment



July

August

September

October

November

Ski Resort Presentations



Sugar Bowl
Katya Christian
Sustainability Manager

Palisades Tahoe
Erik Miller
Risk, Safety, and
Sustainability Specialists

Vail Resorts/Northstar
Ryan Groat & Lila Peterson
Sustainability Manager



Sugar Bowl Resort Climate Transformation Alliance

—

Climate Transformation Alliance
July 12, 2024

Sustainability at Sugar Bowl

- Dedicated position since 2021, sits in the Planning & Development Department
- Started by designing sustainability focus areas modeled after NSAA Sustainable Slopes, and other ski resorts' websites
- Pillars of Sustainability:
 - **Engagement** - Community & industry collaboration, workplace culture, sharing with guests
 - **Waste Reduction** - Food waste management, reducing landfill waste & single-use items
 - **Forest Health** - Wildfire resilience & fuels reduction projects, Firewise Community
 - **Energy & Emissions** - Tracking GHG emissions, seeking cleaner energy alternatives

Greenhouse Gas Emissions: How We Measure

Using NSAA Climate Challenge framework and current EPA emissions factors

Scope 1: Direct Emissions

- Propane (Building Heat & Appliances) - *0.0057 MTCO₂e/gal*
- Diesel - *0.0102 MTCO₂e/gal*
- Gasoline - *0.0088 MTCO₂e/gal*

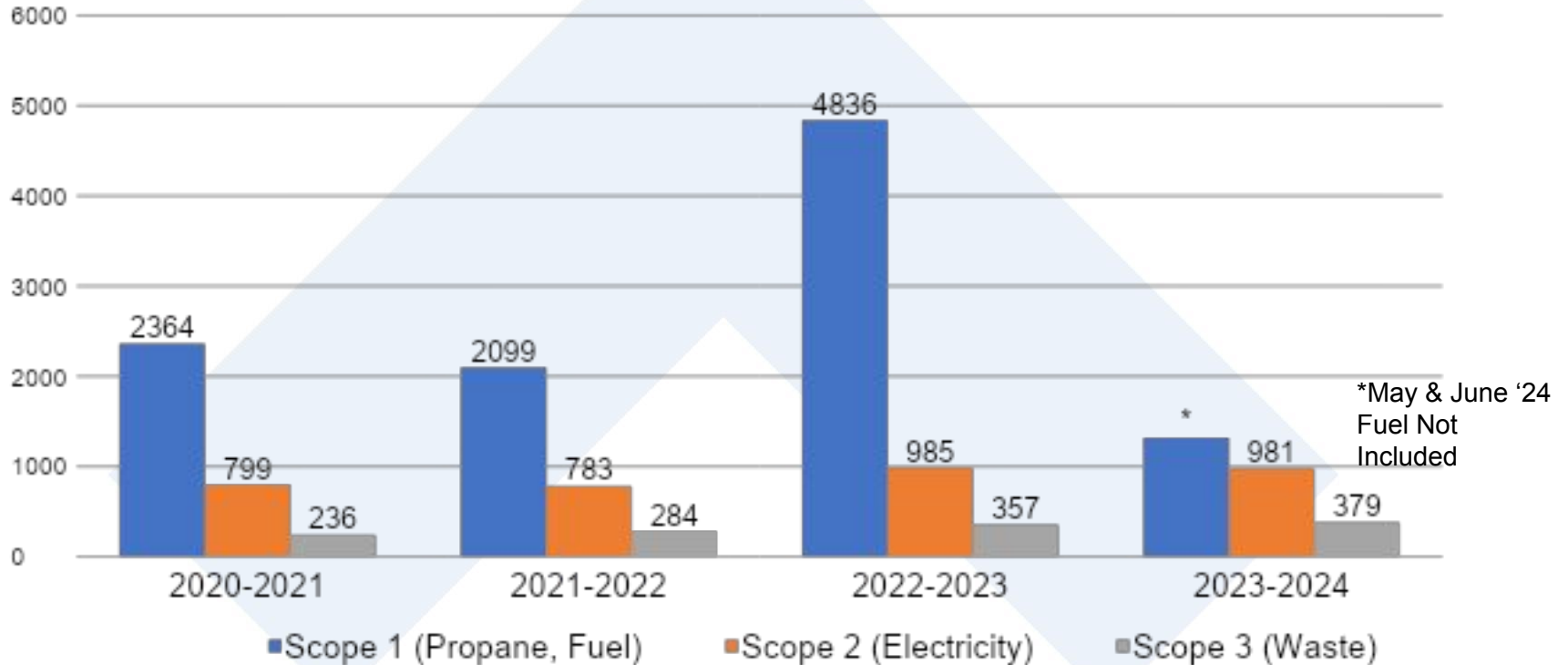
Scope 2: Indirect Emissions (Electricity)

- Electricity Delivery from PG&E
- Electricity Generation from Pioneer Community Energy - *0.242 MTCO₂e/MWh*

Scope 3: Other Indirect Emissions

- Solid Waste - *0.52 MTCO₂e/ton*

Annual Greenhouse Gas Emissions (MTCO₂e)



Sustainability Projects

LED Lighting

- Summer 2024
- A few buildings have been completed □ seeing 2/3 electricity reduction already
- Made possible by PG&E On-Bill Financing incentive program

Fuels Reduction Projects

- 2022-2025
- 291 Acres
- Over \$600,000 in local grants from Truckee Fire (Measure T) and TTCF

Waste Reduction

- 2023-2024 move to reusables at Judah Lodge
 - Space challenges at Village Lodge and Mid Mountain Lodge
- Seeking possible solutions for onsite composting
- Moving the needle toward zero landfill waste

Transportation

- Seeking possible solutions for employee & public transportation to Donner Summit

Woody Biomass Energy

- 2024: Received USFS Wood Innovations Grant to help fund initial design, engineering, & fuel supply logistics
- Seeking funding opportunities

Challenges

- Small, independent resort with limited resources
- Remote location with extreme weather and road conditions in the winter
- Snowbound during the winter
- Within multiple jurisdictions and agency boundaries
- Climate and weather are increasingly dynamic, with a direct impact on Sugar Bowl's profitability and ability to spend on projects
- **Grants, incentive programs, and partnerships are essential**
- **Focus on moving the needle**

- **Sierra Business Council**
- **Climate Transportation Alliance**
- **Summer Quarterly**
 - July 12, 2024





Alterra Forward Stance 2030 Commitments

18

1 Reduce Carbon Emissions by Over 50%

Innovating in the ski industry, our partnership with the Science Based Targets Initiative (SBTI) secures third-party validation for our aggressive emissions reduction goal. By 2030, we're determined to outpace scientists' recommendations, aiming for a 1.5°C limit. Our commitment extends beyond emissions from our direct operations, urging suppliers and partners to join our accelerated journey.

2 Transition to 100% Renewable Energy

By 2030, our pledge is unwavering: 100% renewable electricity. We're strategically blending onsite and offsite renewable projects and fostering proactive partnerships with utility providers across our diverse portfolio to bring this commitment to fruition.

3 Attain Carbon Neutrality

At the heart of our mission is slashing our carbon footprint through operational upgrades and decarbonization. Committed to absolute reduction, we simultaneously embrace high-quality carbon offset opportunities when needed. This dual strategy propels us toward carbon neutrality in our owned operations by 2030.

Sustainability at Palisades Tahoe

1. Efficiency
2. Electrification
3. Renewables
4. Waste Reduction and Diversion
5. Advocacy and Collaboration





Energy Reduction and Efficiency

2023-24

20



Energy Audits

McKinstry-led audits of existing buildings and infrastructure



Active Energy Management

Reveal cloud-based facilities management
Anticipated impact: 142 mtCO₂ per annum



Sustainability is integral to future capital improvement and expenditure



Renewable Diesel Transition

2023-24

21



Neste MY R99 Renewable Diesel

OEM-approved
Hydrotreated
Vegetable
Oil-derived diesel
Fully compatible
with all diesel
engines
Up to -75%
lifecycle GHG
emissions vs fossil
diesel



**100% uptake in
all Palisades
Tahoe diesel
vehicles and
machinery**



**Currently:
21,000gal tank**



**Summer '24:
Tank
replacement
with 50,000gal
tank**



Parking and Transportation

2023-24

22



Parking Reservations

Great success with water
Less so with other products



Park-and-Ride and Alternative Transit

10X increase in Park-and-Ride usage
Private charter buses eliminated 300k VMT



The Mountaineer

Micro-Transit



Employee Carpool

Monetary incentives
Eliminated 5914 car trips
Average 3.5 employees per car



EV Charging

Plans to expand capacity with 8 additional chargers (+133%) in the immediate short-term

2023-24 Transit Reduction Strategy yielded 205 mtCO₂ emissions reductions



Electrification

2023-24



Converting snowmobile fleet to Taiga EV snowmobiles



On-road fleet electrification

2 EVs ordered



Exploring opportunities for on-site generation



Significant barriers with cost and utility



Waste Reduction and Diversion

2023-24

24



Single-Use Plastic

Great success with water

Less so with other products



EcoChit Receipt Paper

Recycled and Recyclable

Reforestation
Moving toward
Alterra-wide adoption

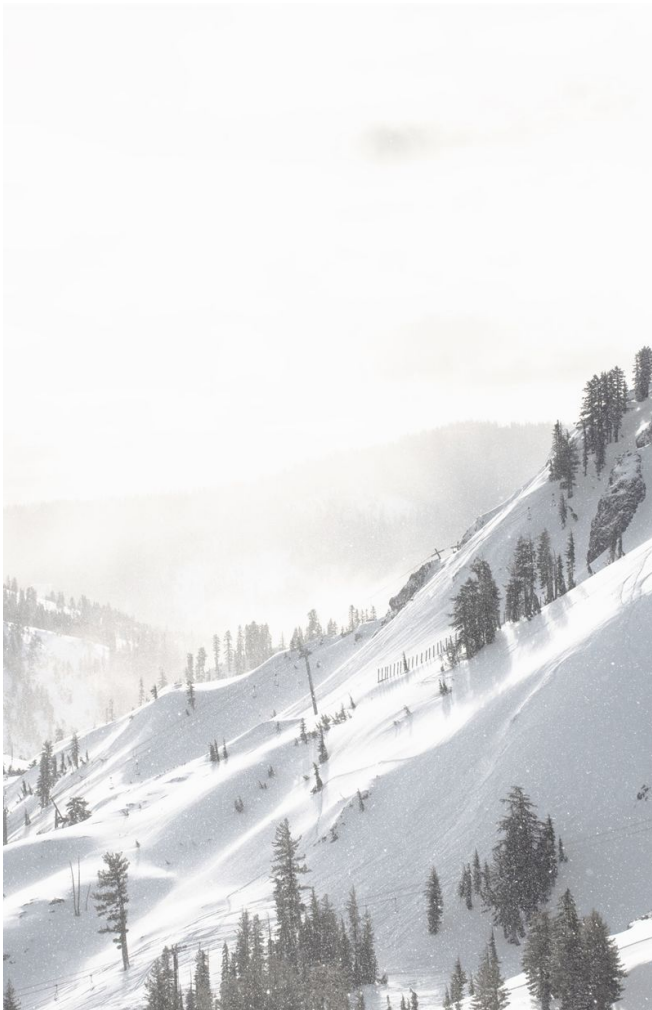


Cooking Oil Recycling



Food Waste Composting

On-site composter
Compostable disposables



Advocacy and Collaboration

2023-24



Paid Volunteer Opportunities

Sugar Pine Foundation
Truckee River Days
Pilot program with planned expansion Alterra-wide



Tahoe Earth Day

Lake Tahoe's Largest Earth Day Gathering



Carbon Neutral and Waste Neutral Events

All Palisades Tahoe-hosted events pledge to conduct their events sustainably



Community Partnerships

SBC
POW
Tahoe Food Hub
And many more



Barriers and Challenges

2023-24

26



Liberty Energy

Fossil Fuels



Scope 3 Emissions

Vendors
Induced Travel



Cost

ROI



Technology

Mountain
Environment
Logistics

A skier wearing a bright yellow jacket and dark pants is captured in mid-turn, carving down a pristine, snow-covered mountain slope. The skier is positioned on the left side of the frame, leaving a trail of fresh powder. The background features a vast, sunlit mountain range with several evergreen trees heavily laden with snow, creating a serene and majestic winter scene. The sky is a clear, bright white, suggesting a sunny day.

VAIL RESORTS - TAHOE ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

SUSTAINABILITY

Zero net operating footprint by 2030

Announced in 2017, Commitment to Zero is our bold goal to reach a zero net operating footprint by 2030, including zero net emissions, zero waste to landfill, and zero net operating impact on forests and habitat.

100%

**RENEWABLE
ELECTRICITY AT OUR
NORTH AMERICAN
RESORTS**

15%

**ENERGY EFFICIENCY
SAVINGS FROM OUR 2017
BASELINE ACHIEVED
AHEAD OF OUR 2030
TARGET**

6.1M

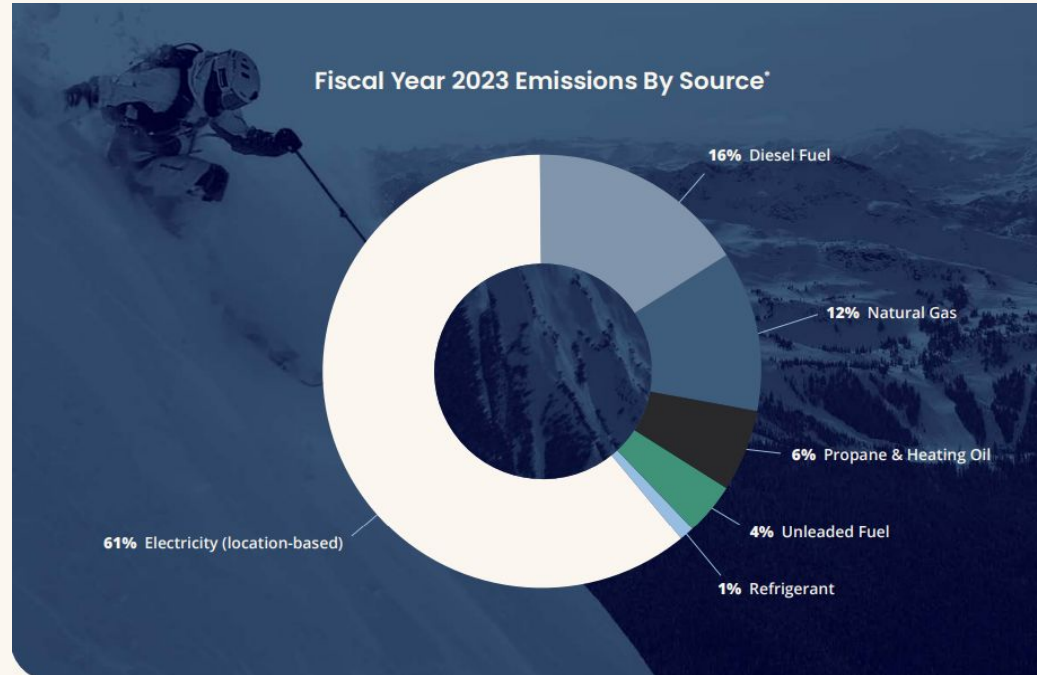
**POUNDS OF LANDFILL
WASTE REDUCTION
FROM BASELINE**



SUSTAINABILITY

Zero net emissions

Vail Resorts is adapting our business to be more resilient to climate change, while also mitigating our impact by targeting zero net emissions by 2030. Our holistic strategy, and investments in renewable electricity development and energy efficiency are driving results.



SUSTAINABILITY

Emission Reduction Programs



NORTHSTAR[®]
CALIFORNIA

- Carpool program
- EV charging stations
- Energy reduction projects
 - Purchasing high efficiency snow guns
 - LED lighting retrofits
 - Programable thermostats
- Idlewise program for reducing vehicle idling including SNOWSat data from snowcats
- Energy management program
 - Monthly investigations & internal reporting
 - F&B/Maintenance energy checklists
- GHG inventory collected and reported yearly
- Supporting Biomass project through our Epic Promise Foundation
- Habitat Management Plan



Basic Checklist (Maintenance Techs) - Monthly	Facility: <i>insert name</i>	
	Applicable?	Date Checked, Name, Notes
Check-in with facility manager (F&B, VRR, etc.) (discuss any energy concerns)		
Snowmelt systems working properly (sensors, setpoints, no overrides)		
Exhaust hoods working properly (sensors and controls working properly, etc.)		
VFDs & pumps working properly (not in-hand, running per schedule)		
Domestic hot water system checked (setpoints, temp setback after hours, circ pumps off after hours)		
Thermostats checked (setpoints, schedule, temp setback after hours)		
Outside air dampers working properly (controls, actuators, linkages)		

SUSTAINABILITY

Waste Reduction Initiatives

- Enterprise and resort level landfill reduction goals
- Employee waste sorting in FB outlets
- Shift to durables supported by increased dishwashing capacity
- Supply Chain Sustainability
- Hard to recycle programs
 - Nitrile gloves
 - Snack wrappers
 - Pass media
 - Hard goods
 - Uniforms
 - Soft Plastics



EMPLOYEE UNIFORMS

48,000 pounds of retired uniforms were recycled into a composite material that is used to manufacture other items.



SNOWCATS AND EQUIPMENT

527,000 pounds of retired snowcats and heavy equipment were sold to a vendor partner in FY 2023 to keep decommissioned equipment out of landfills.



NITRILE GLOVES

18,000 pounds of nitrile gloves were diverted from the landfill through the Kimberly Clark *Right Cycle* program since 2018. These recycled gloves are turned into plastic pellets for a variety of uses.



UKRAINE UNIFORM DONATION

700 pairs of winter pants and nearly 1,000 jackets were donated to the Ukrainian citizens in need during 2022. SCS team members helped Gear re-Store, our uniform repair vendor, to sort serviceable pants to send to Ukraine.



SKI AND SNOWBOARD EQUIPMENT

159,000 pounds of usable ski and snowboard equipment was diverted from the landfill by auctioning it to used gear distributors. In addition, 7,000 pounds of retired helmets were recycled into plastic pellets for an array of future uses and 90 damaged snowboards were sent to the *Jones Snowboards Re-Up Tech* pilot program to be recycled into new boards.

SUSTAINABILITY

Challenges and Opportunities

Ski industry is dynamic

Technology

Scale, growth and change

2023 Vail Resorts Environmental & Social Responsibility Report



CTA Announcements & Action Items



- Action Items
 - Subcommittee Recruitment
 - CTA Community Dashboard Development
- CTA Events
 - CCL & 100% Renewable Truckee Webinar
 - July 24th 12pm-1pm on Zoom
- CTA Happy Hour @ RMU!
 - Today! 4pm-6pm
 - No-host bar
- 2024 Quarterly Meetings
 - *October 11th, 2024*



Thank you!

Please reach out to Sierra Business Council with any questions

Website: climatetransformationalliance.org

Email: cta@sierrabusiness.org

Phone: (530)582-4800

Sign In Here:

CTA

**Climate
Transformation
Alliance**

