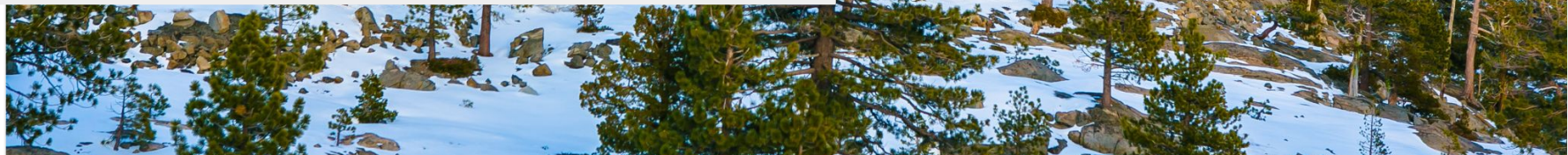


Powering Local Climate Action: Strategies for Collaboration, Workforce, and Decarbonization



Presenters

Anna Klovstad

Town of Truckee, Vice Mayor

Courtney Henderson

Town of Truckee,
Council Member



David Jaeger

SBC Project Manager



Kaeleigh Reynolds

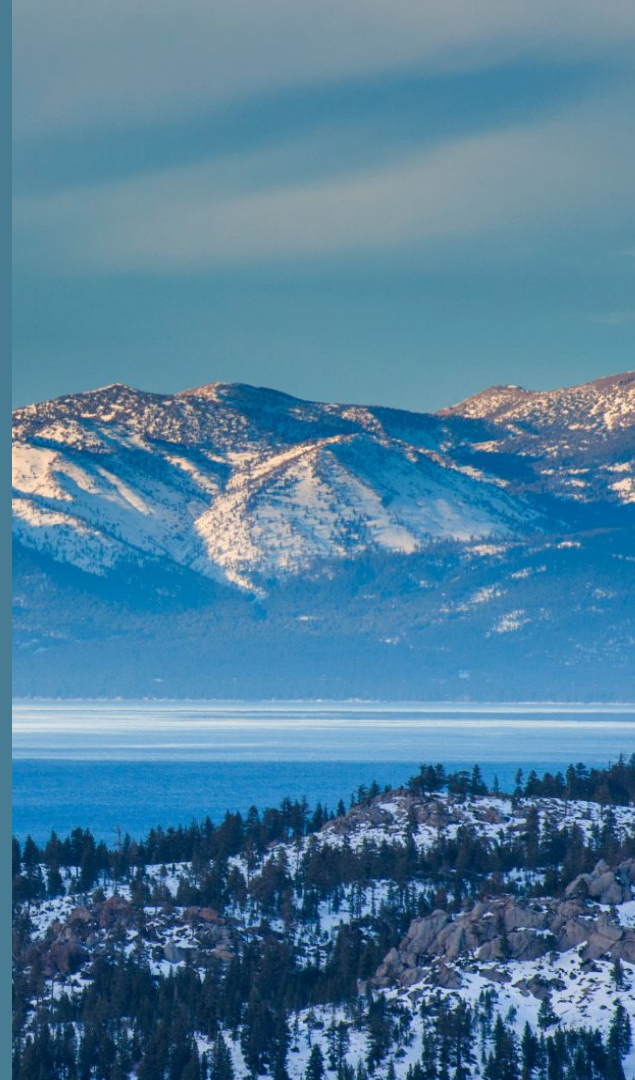
SBC Project Manager



5-Minute Group Breakout Discussion

What are the top barriers to organizing a local climate coalition in your community?

05:00





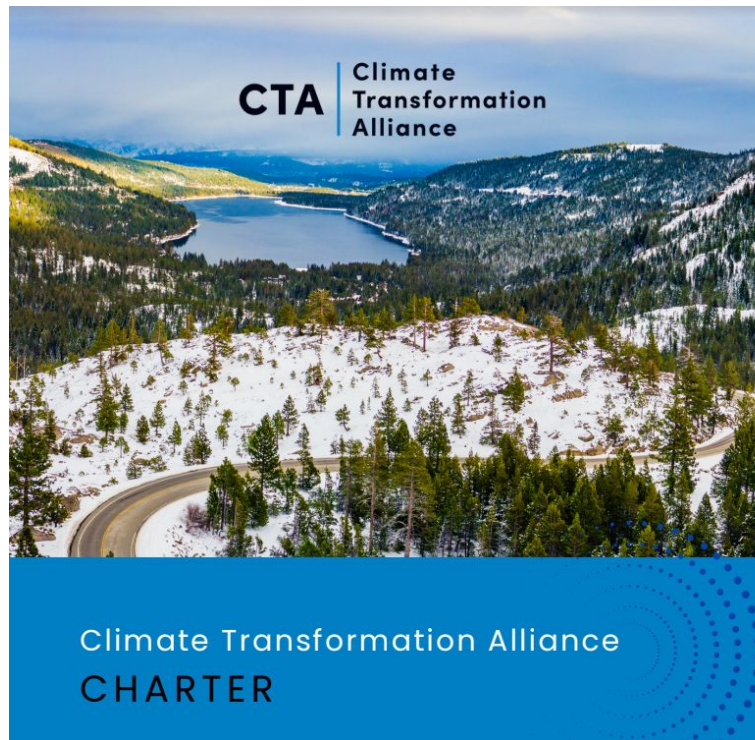
Make carbon zero a reality
in Truckee Tahoe.



Public Private Partnership

Vision

The Truckee North Lake Tahoe region will be **net carbon neutral by 2045** through a combination of greenhouse gas **(GHG) emission reduction** and **sinking or storing carbon in natural lands**. Carbon neutrality will improve the environment, reduce the risk of wildfire, create new opportunities for innovation and business creation, diversify our economy, improve public health, equity and safety, and meet our commitment to steward the region for the benefit of future generations.



Mission



- Work together with focus on reducing regional GHG emissions
- Engage in a process to help increase public understanding about climate change
- Identify, explore, and support interim projects
- Explore funding opportunities
- Communicate goals and successes to members and public



How did this start?

In Truckee Tahoe.



Membership

- Local Governments
- Community Organizations
- Non-profits
- Businesses
- Individuals
- Governing Partners = Truckee Donner PUD, Truckee Tahoe Airport and Town of Truckee
- Founding Members = *all entities signing the charter*



The Program

1. Technical Support
2. Research/Knowledge Management and Sharing (clearinghouse)
3. Public Education and Advocacy
4. Project & GHG impact tracking

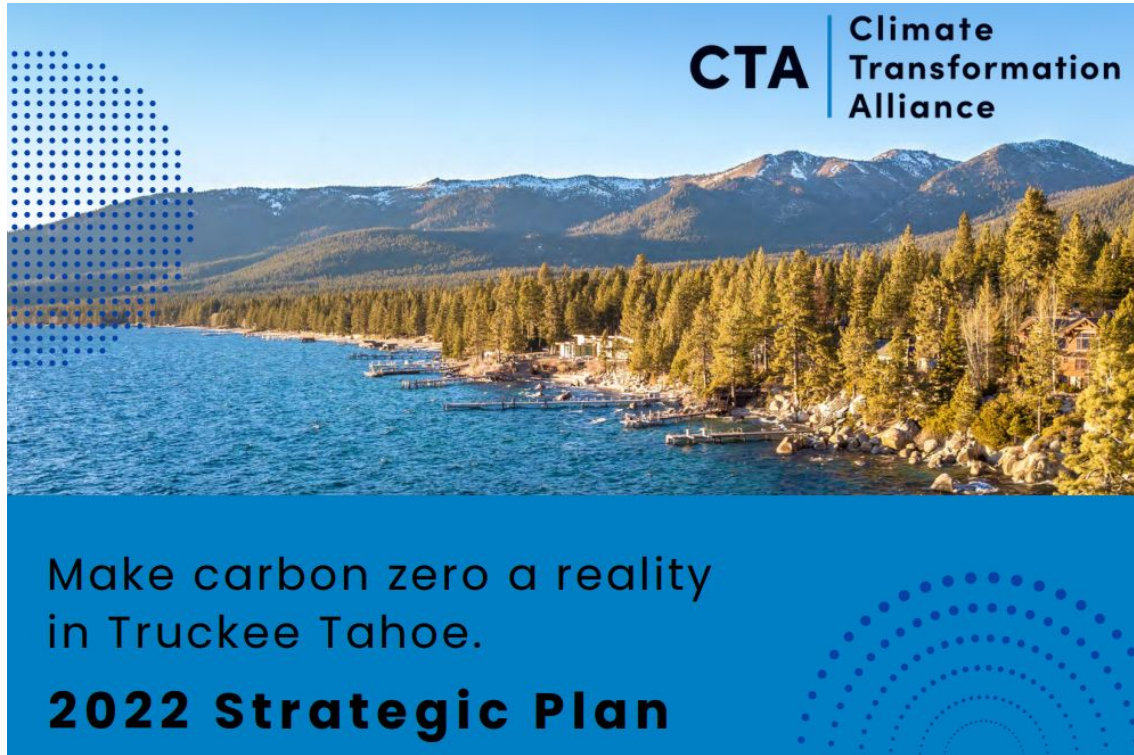


CTA | Climate
Transformation
Alliance

Climate Transformation Alliance
CHARTER

Core Values

- Positivity
- Collaboration
- Consensus on Action
- Respect
- Integrity
- Equity
- Transparency





Make carbon zero a reality

Scope

Greenhouse gas reductions through improvements to the built environment, transportation networks, waste stream, green procurement, natural working lands, and behavior modifications



CTA

2022 Strategic Plan

1. Organizational Development
 - Define who, what, why, when, where
 - Develop a charter: define the challenge & the vision to address the challenge
3. Communications – develop material & perform outreach
4. Data and Information – measure and track projects, programs, and GHG
5. Project Development – 2 short term, 2 longer-term, & community action plan for climate resilience



CTA

2024 Strategic Plan – continual improvement

1. Organizational Sustainability – Grow and sustain CTA
 - Expand membership
 - Budget & Funding development for continual operation
 - Formalize our resource sharing – Clearinghouse and Project Tracking
3. Communications – Establish the CTA brand and expand areas of influence
4. Data and Information – Aggregate the GHG inventories, track progress!
5. Project Development – track and report on short and longer-term projects, membership subcommittees, webinars, and quarterly spotlights

Accomplishments:

Membership:

- 28 Charter Members including:
- 12 public agencies (Nevada County & Placer County, hospital, school district, PUD's, etc.)
- 3 major ski resorts
- Tahoe Truckee Community Foundation & Tahoe Conservancy
- Active members include Tahoe Regional Planning Agency, Liberty Utilities and Tahoe Conservancy
- **187 Email Subscriptions**

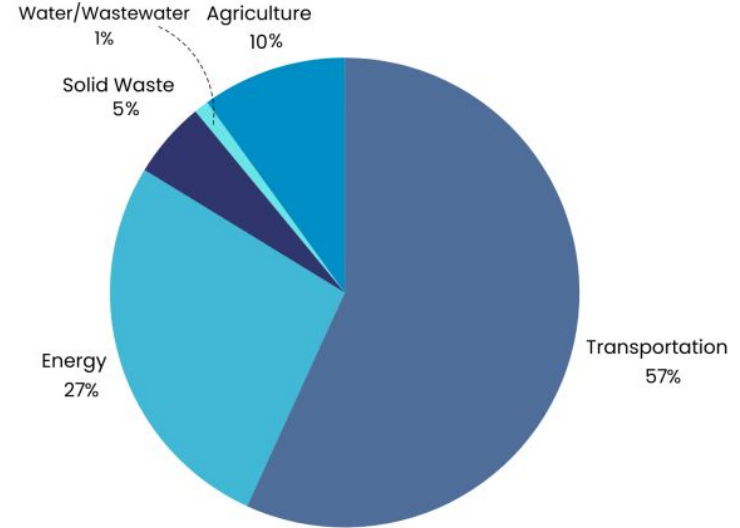


Accomplishments:

Projects:

- Website
- Logo & Branding
- GHG reduction policy/program clearinghouse
- Community Dashboard: Project and GHG tracking
- 5 large agencies engaging in GHG inventories
- \$650,000 State grant:
 - ~County wide Climate Action Plan
 - ~CTA management costs for 2 years
 - ~New CTA for County.

Emissions by Sector Across CTA



Accomplishments:

Programs:

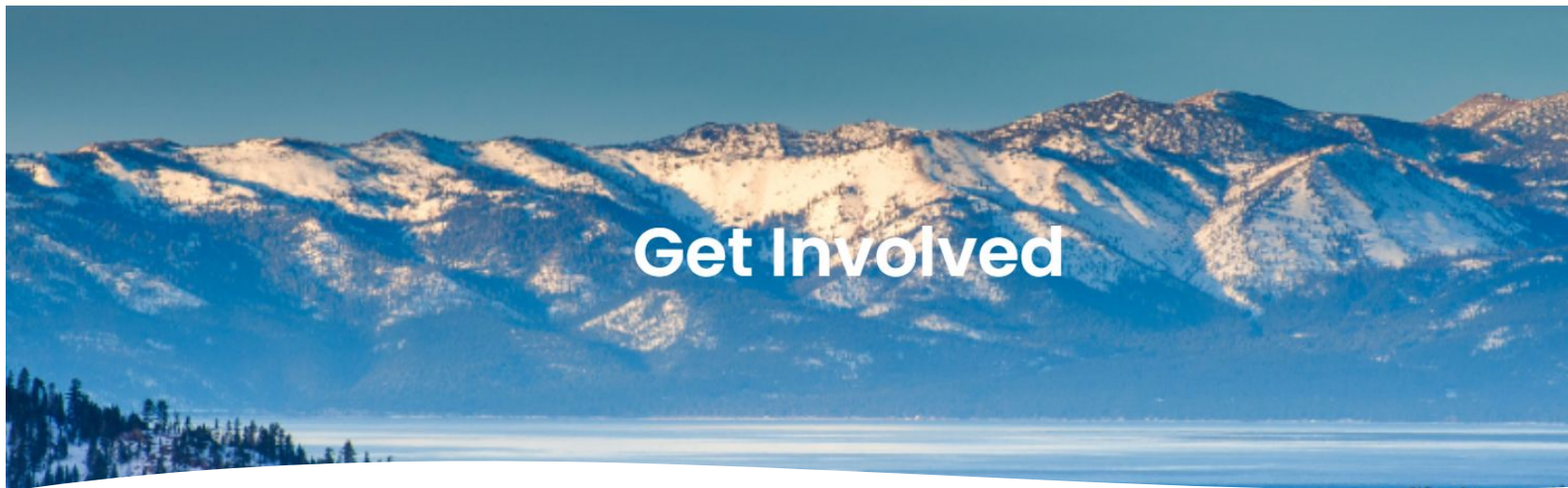
- Pitch Camp
- 4 subcommittees with full participation
 - *Membership
 - *Communications
 - *Funding & Finance
 - *Programming
- Webinar Series with Citizen's Climate Lobby
- Blog
- Go Electric Truckee Tahoe pilot



Challenges

1. Getting an alliance started
2. Funding
 - *Overhead
 - *We are not a granting body
3. Engagement is good but could be a lot better
4. Carbon neutrality as common goal
5. No regulatory authority



**Website:**

www.ClimateTransformationAlliance.org

Contact:

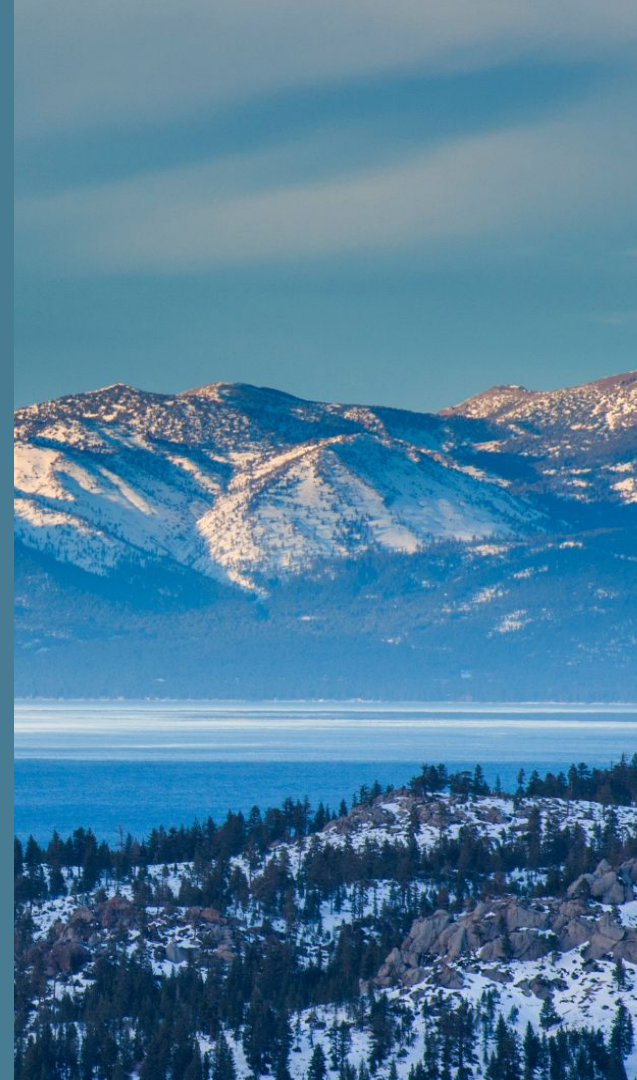
Sierra Business Council
cta@SierraBusiness.org

Anna Klovstad
aklovstad@TownOfTruckee.gov

5-Minute Group Breakout Discussion

What are some solutions to the barriers discussed in the previous breakout?

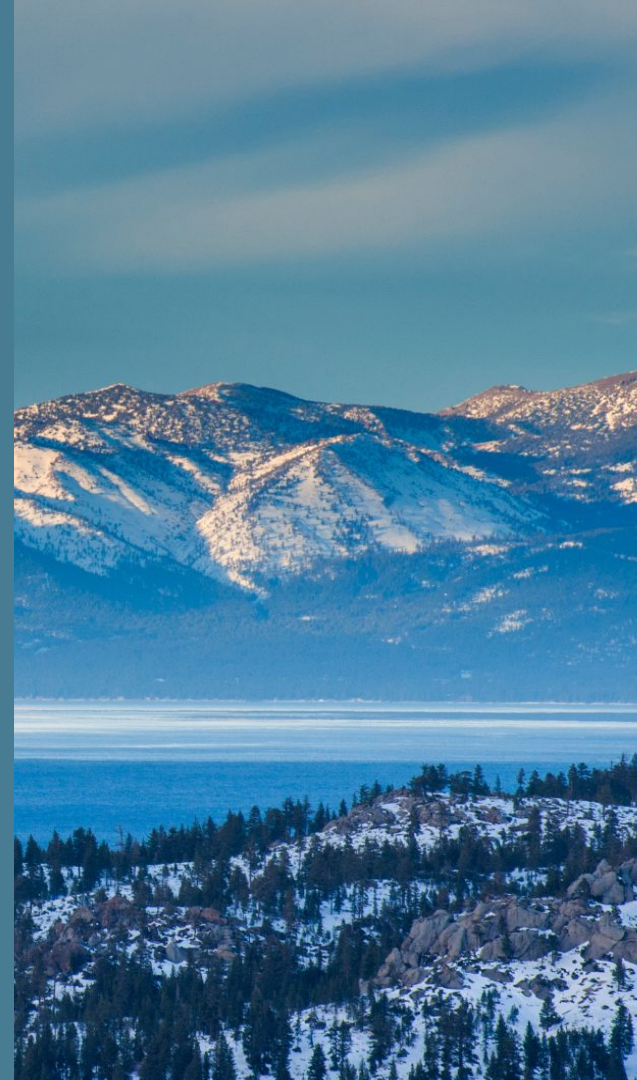
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5-Minute Group Breakout Discussion

What are the top barriers to engaging homeowners and contractors about electrification?

05:00





Go Electric Truckee Tahoe



Launched in May 2024

Program components include:

- Free workforce education & training for Truckee Tahoe contractors
- Free electrification coaching for home & building owners
- Website resources

Evolution of Funding

- Initial Funding: Local private funder
- Program Continuation: CEC
Decarbonization Grant
- Future Funding: ?



Program Goals & Outcomes

Expand Contractor Training

- Goal: 30 contractors upskilled
- Result: 33 participating contractors

Increase Public Educational Efforts

- Goal: Electrification guidance for 20 home/building owners, leading to active projects.
- Result: 27 clients coached, 2 projects completed



Workforce Education & Training (WE&T) Components



Online Classes

- 10 online classes
- Live Webinars
- Addresses challenges unique to the Truckee Tahoe region

In-person Training

- Locally based in-person trainings
- Home tours

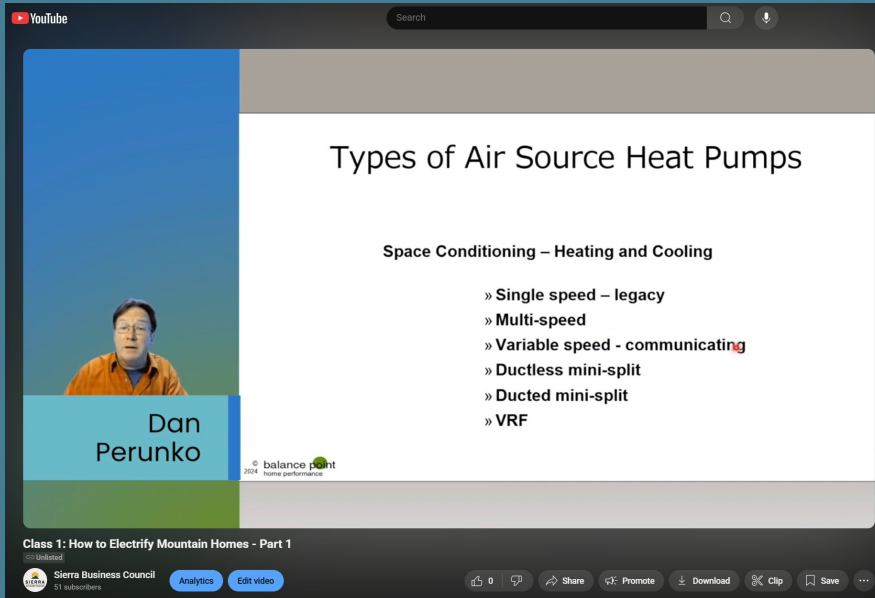
Personalized Mentoring

- 1-on-1 contractor mentoring
- Both general and project specific questions

Resources & Information

- Funding Opportunities
- Local Codes & Standards
- Marketing Tips
- Other Trainings

WE&T: Online Classes



YouTube

Search

Types of Air Source Heat Pumps

Space Conditioning – Heating and Cooling

- » Single speed – legacy
- » Multi-speed
- » Variable speed - communicating
- » Ductless mini-split
- » Ducted mini-split
- » VRF

© balance point
2024 home performance

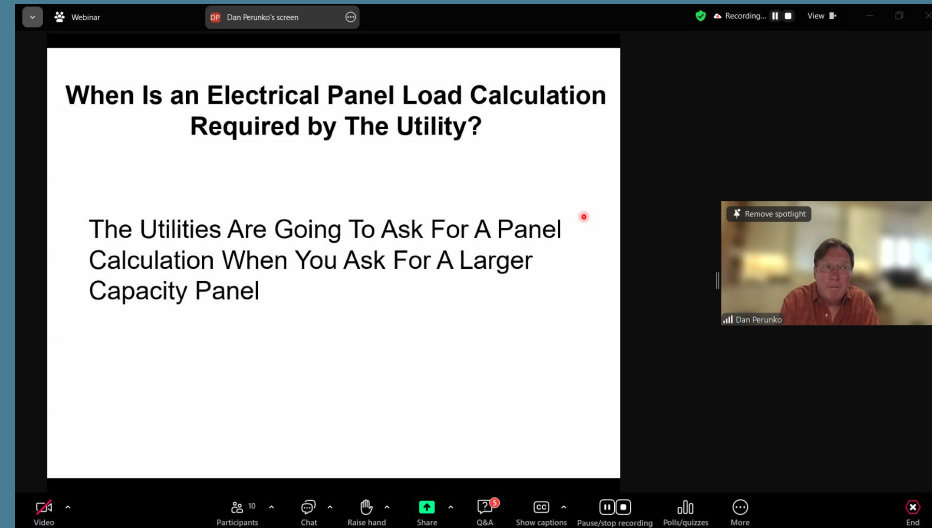
Dan Perunko

Class 1: How to Electrify Mountain Homes - Part 1

Sierra Business Council
51 subscribers

Analytics Edit video

Like 0 Comment Share Promote Download Clip Save



Webinar

Dan Perunko's screen

When Is an Electrical Panel Load Calculation Required by The Utility?

The Utilities Are Going To Ask For A Panel Calculation When You Ask For A Larger Capacity Panel

Remove spotlight

Dan Perunko

Video Participants Chat Raise hand Share Q&A Show captions Pause/stop recording Polls/quizzes More End

WE&T: In Person Classes



Electrification Coaching Service



Assist home & building owners navigate electrification and heat pump installations in the Truckee Tahoe region



Connect with
local qualified
contractors



Navigate
available funding
opportunities



Provide resources
& personalized
technical
assistance

Electrification Coaching Service

- Officially launched in August 2024
- Provide info & resources
- Quarterly newsletter
- Electrification guidance
- Funding tracker

Energy Audits & Building Envelope Guidance

GO ELECTRIC TRUCKEE TAHOE

To begin your electrification journey, it is first important to understand your home's building enclosure or envelope performance. A building's envelope consists of the insulation and building materials that surround the conditioned areas of a building, and air quality of the conditioned areas.

Home & Building Energy Audit

To install a heat pump for space heating and cooling, it is highly recommended to conduct an energy audit, including a blower door test. This will help assess your building's energy usage, efficiency, and identify areas of improvement within the building's envelope. Since energy audits can vary in scope, be sure to ask whether the audit includes a blower door test.

Blower Door Test

A blower door test is a diagnostic tool that measures how much air is leaking in or out of a building. This test helps to reveal and quantifies hidden leaks throughout the building. Air leakage can account for up to 10-50% of a home's heat load and without testing, it is difficult to determine and prioritize areas of improvements.

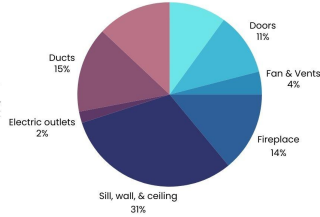
Why is it important?

Improving your building's envelope not only decreases energy consumption but also helps to accurately size equipment and maximize its efficiency. Additionally, a manual J heat load report is also recommended. A manual J load report determines the size of HVAC equipment needed to heat and cool a building.

Correctly sizing your heat pump system can help you avoid purchasing large and expensive units and will help to maintain the comfort of your home. Some of the most common areas of heat loss can occur in the attic/ceiling, floors, walls, windows, doors, and ventilation or air infiltration systems.

An energy audit may also help determine if your building or home's electrical service can fully support the increased electrical load.

Enclosure Heat Loss by Component



Component	Percentage
Sill, wall, & ceiling	31%
Ducts	15%
Plumbing penetrations	13%
Windows	10%
Fireplace	14%
Doors	11%
Fan & Vents	4%
Electric outlets	2%

WE&T Barriers

- Heat pump complexity
- Different knowledge levels
- Taking the next step
- Heat pump skepticism
- Scheduling
- Maintaining interest

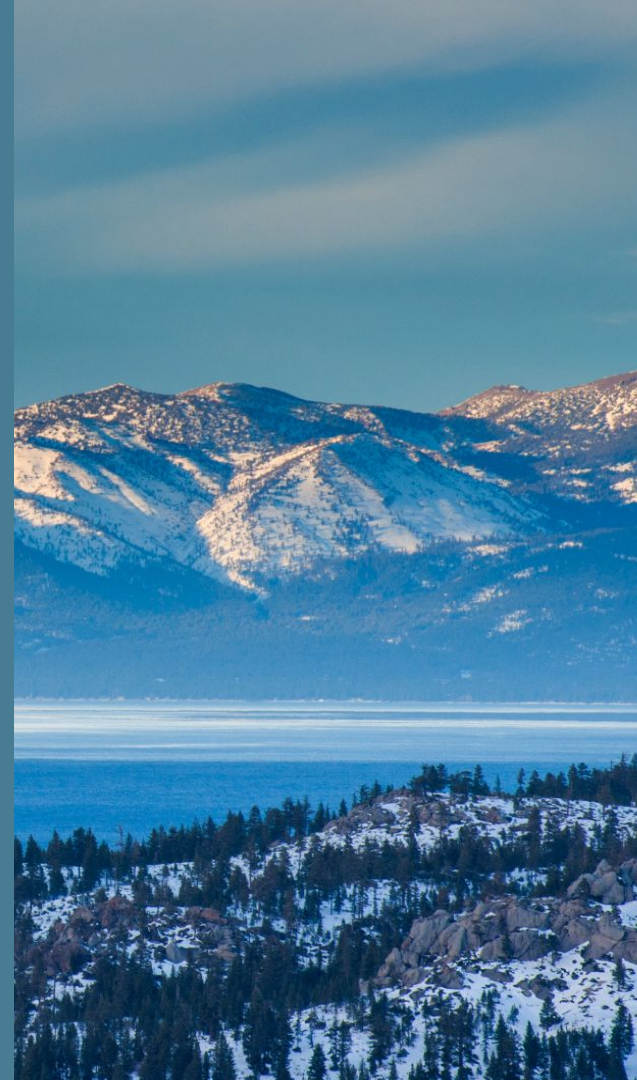
Coaching Barriers

- Every home is unique
- Timelines
- Rebate timing and funding uncertainty
- Lack of contractors

5-Minute Group Breakout Discussion

What are some solutions to the barriers discussed in the previous breakout?

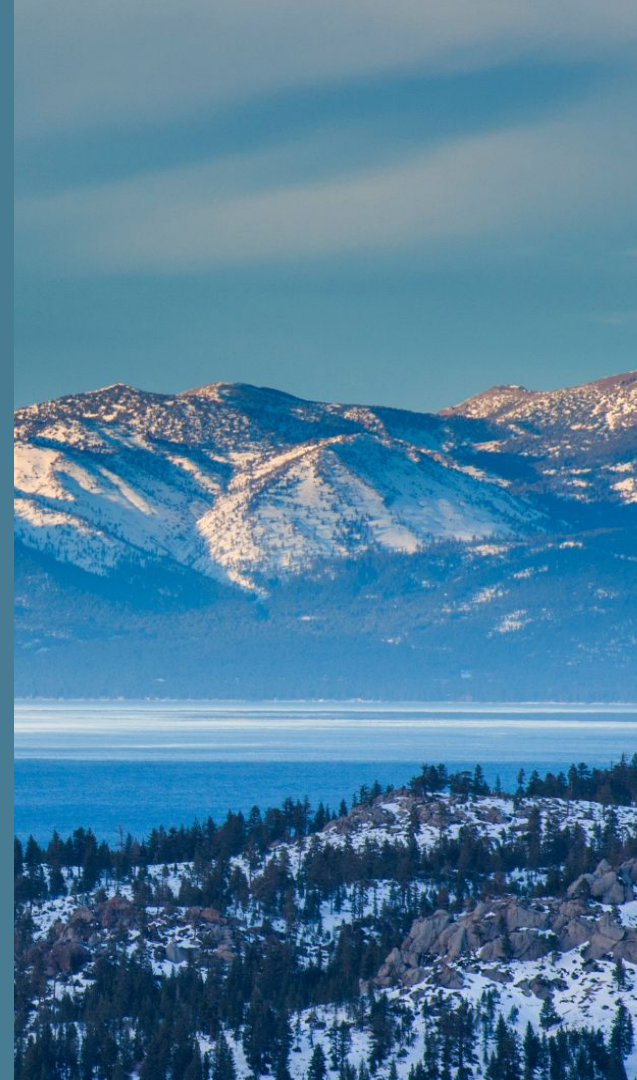
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5-Minute Group Breakout Discussion

What are the top barriers for local governments trying to pursue climate action?

05:00



Town of Truckee: Climate Action Through a Local Government Lens



Background



Climate Action and Electrification Efforts



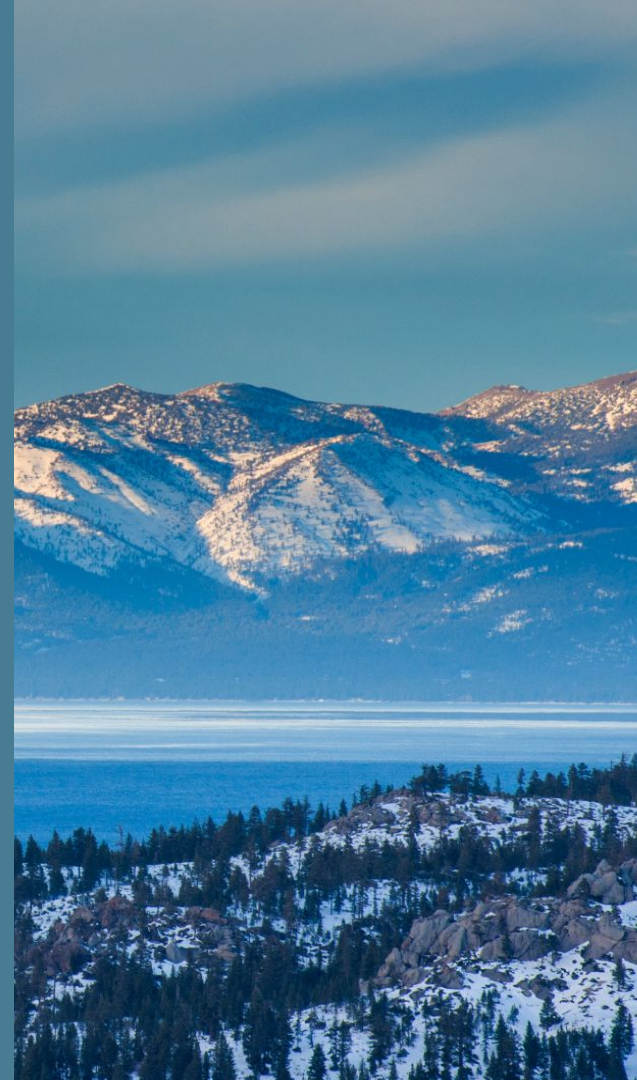
Challenges and Outcomes



5-Minute Group Breakout Discussion

What are some solutions to the barriers discussed in the previous breakout?

05:00



Thank You!



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