

Tahoe Climate Resilience Dashboard, Draft Metrics

TRPA Governing Board
August 23, 2023



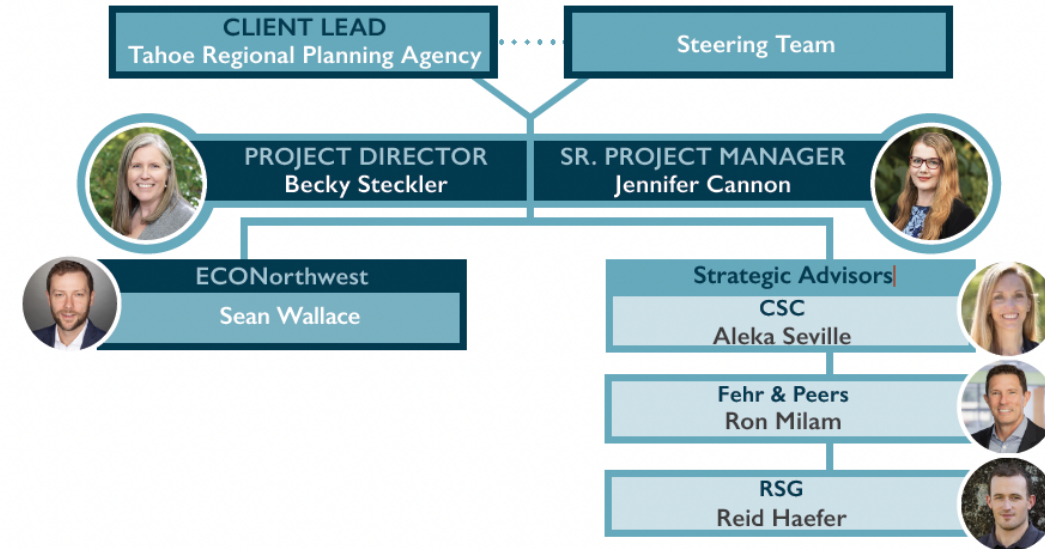


What We Will Cover Today

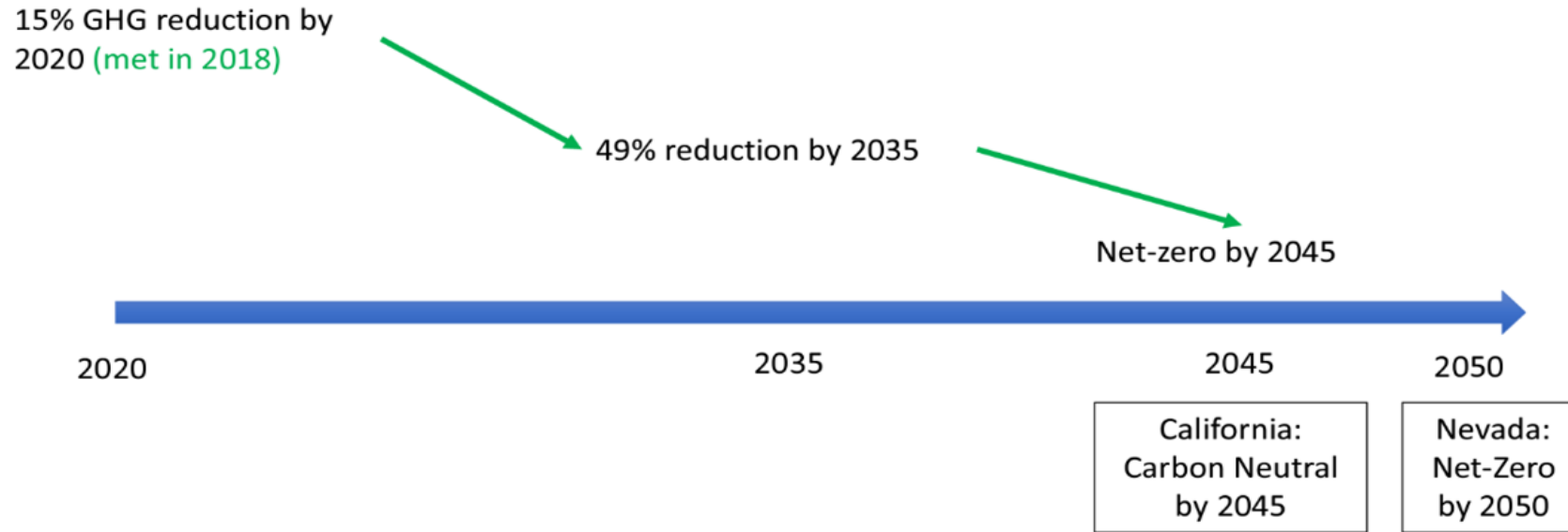
- Project Schedule, Background, & Purpose
- Best Practices & Plan/Policy Guide Review
- Vision for the Dashboard & Metric Evaluation
- Next Steps

Purpose: Staff provides update on dashboard update project and gains input. This is an informational only item (no action requested).

Project Team



Greenhouse Gas Reduction Targets



GHG Reduction Target:

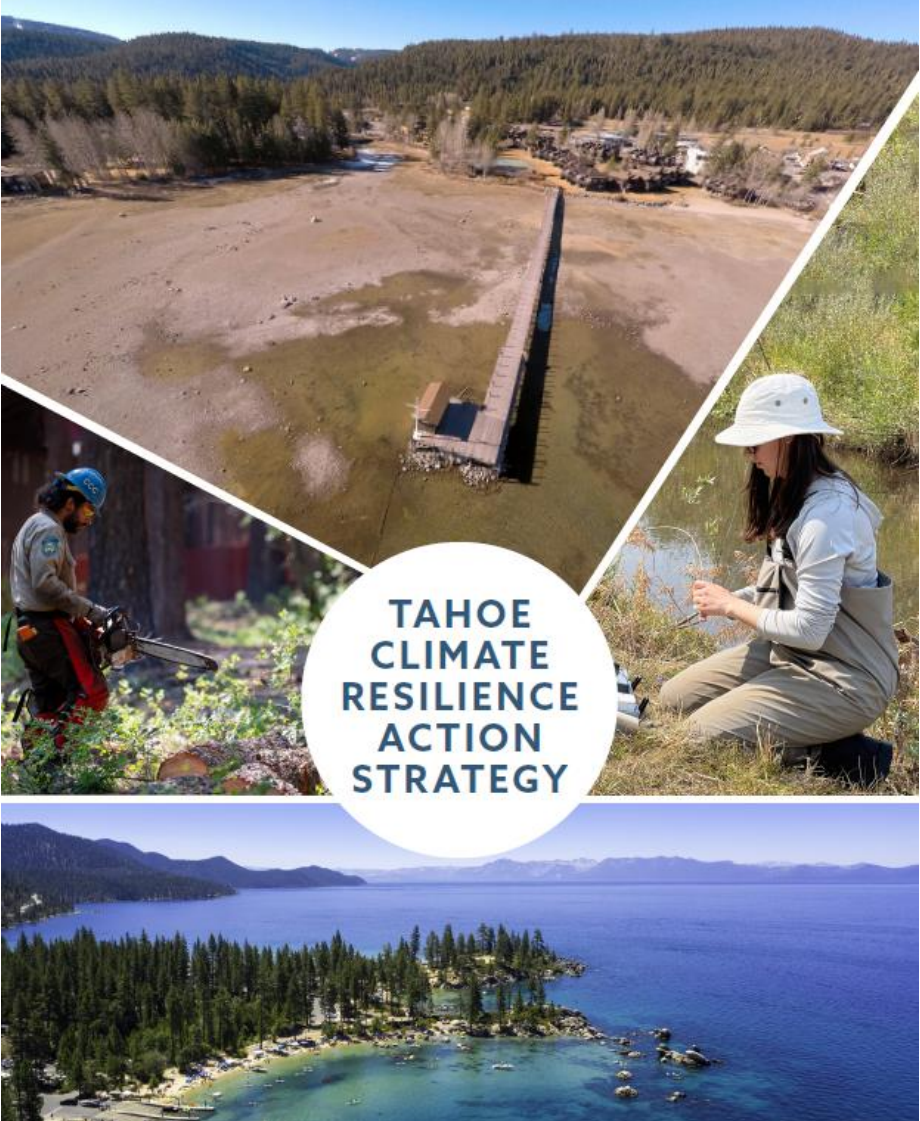
2014 Sustainability Action Plan established a GHG reduction target of 15% by 2020, 49% below the 2005 baseline by 2035, and net-zero by 2045.

Performance:

Overall decline by 39% from 2005 to 2018, on track to meet 49% GHG emission reduction targets for 2035 but will need additional reduction actions to meet the 2045 net-zero target.

**Net zero means achieving a balance where the amount of carbon added to the atmosphere is no more than the amount removed*

Climate Resilience Action Strategy



Top photo by Aerial Flight Productions (CC BY 2.0), middle photos by California Tahoe Conservancy, bottom photo by Lake Tahoe Water Trail



Photo: California Department of Transportation



Photo: CALFIRE



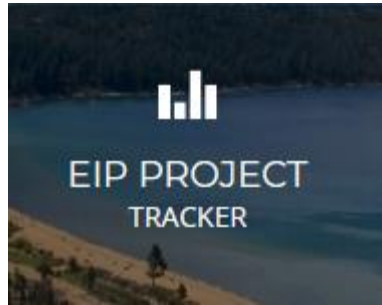
Photo: Tahoe Regional Planning Agency

Tahoe Climate Resilience Dashboard Project Purpose

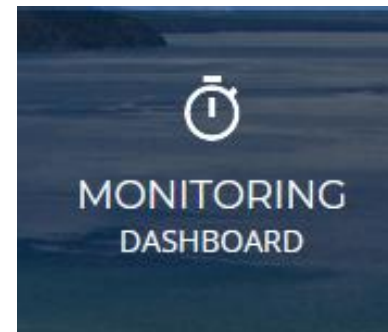
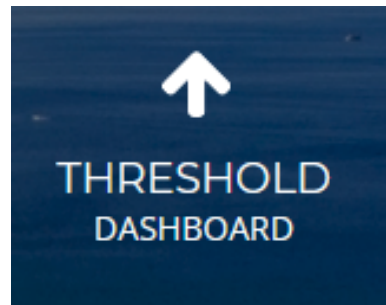
- Create a **new & improved Climate Resilience Dashboard** for the Region, measuring climate resilience at Tahoe.
- Provide **reporting and engagement tools** and **build on previous work** including the original Sustainability Dashboard, EIP, Thresholds, and more.
- Meet with **key stakeholders** to better understand current **challenges, opportunities, & priorities**.



Connecting TRPA Initiatives



Climate Dashboard



Tahoe Dashboard Project Timeline

We are here



BEST PRACTICES RESEARCH, DRAFT METRIC DEVELOPMENT
(FINISH BY END OF AUGUST 2023)



FINALIZE METRICS
(SEPTEMBER 2023)



DRAFT DASHBOARD DEVELOPMENT
(SEPTEMBER TO EARLY JANUARY 2024)



FINAL DASHBOARD LAUNCH
(FEBRUARY TO MARCH 2024)
*DASHBOARD LAUNCH EVENT IN MARCH

Kickoff, Metrics

Interviews

Informational Presentation to CTC & TRPA Board

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ENGAGEMENT



1st Stakeholder Team Mtg



2nd Stakeholder Team Metric Feedback (early August)



3rd Stakeholder Team Mtg (October)



4th Stakeholder Team Mtg (January)



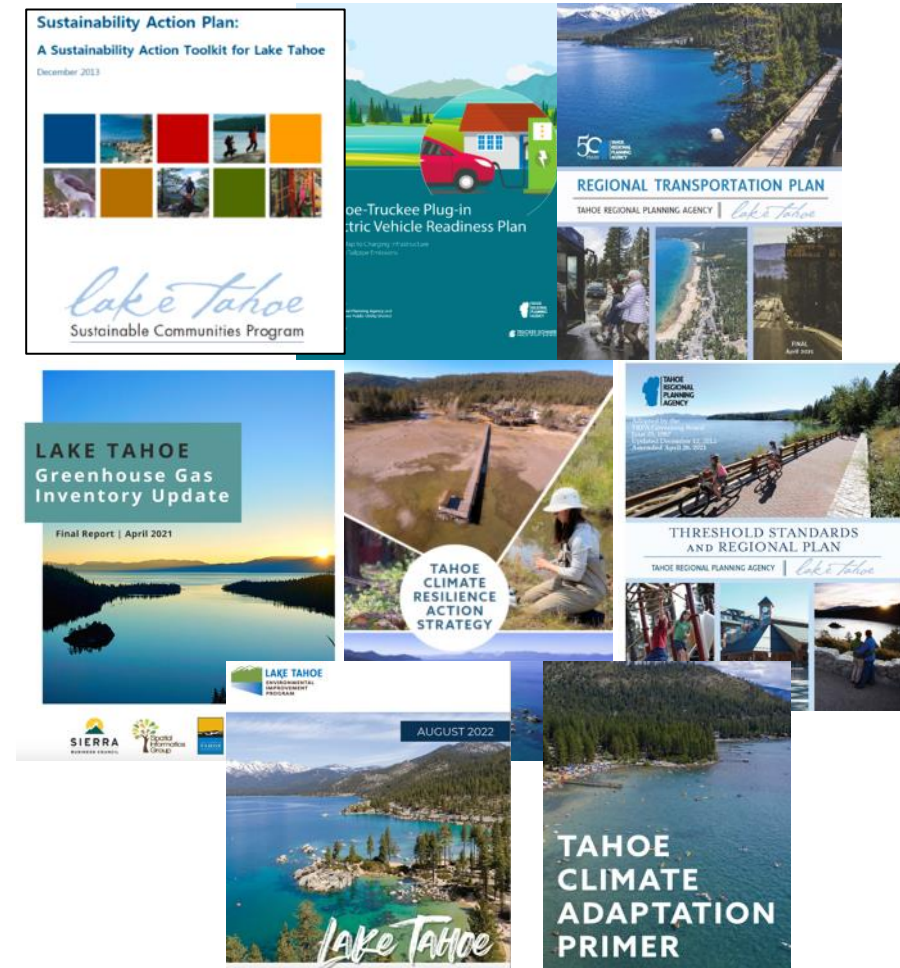
Tahoe Climate Resilience Dashboard Goals

- Design a **new Dashboard** to provide a broad understanding of climate action in Tahoe, aligned with existing goals & metrics.
- Focus on metrics of **regional significance**, connected to Tahoe planning, funding needs, or project investment accountability.
- Provide clear information to increase stakeholder **awareness** of and **preparation** for climate change impacts.



We Gained Guidance in Existing Plans

- Reviewed plans over last decade to identify climate related targets, indicators, goals, and strategies.
- Sustainability Action Plan (2013), first official plan outlining actions and implementation. Basis of dashboard.
- Since then, many plans have addressed climate change adaptation & resilience needs.



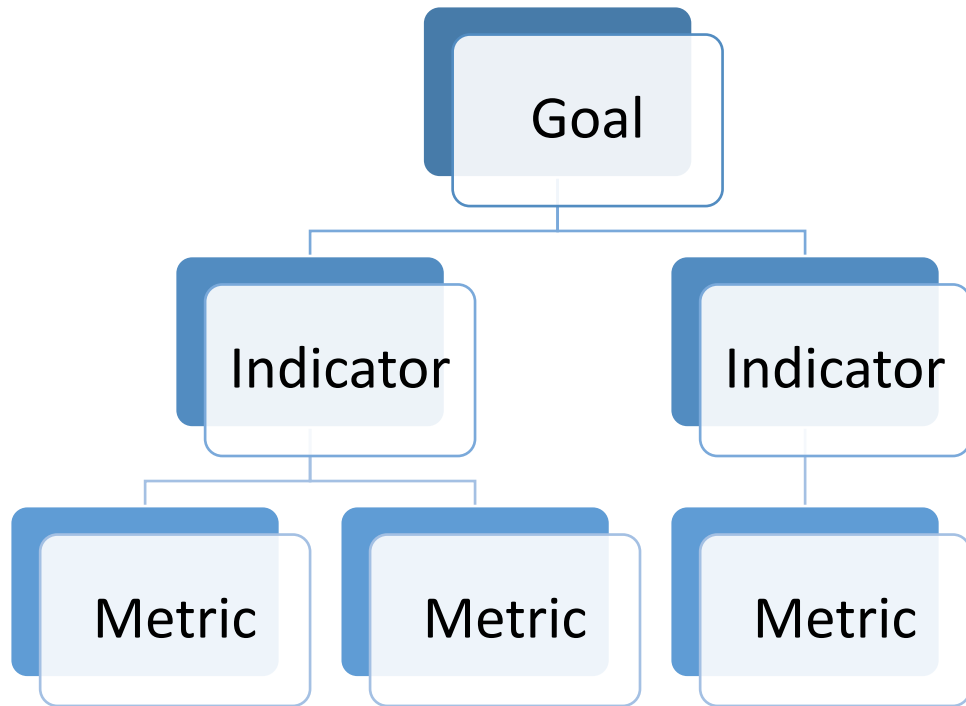
What we Learned from Best Practices Research

- Organize the Dashboard based on long-term outcomes
- Include indicators connected to metrics that can describe a trend useful for tracking progress
- Ensure indicators and metrics reflect local climate action goals and plans
- Be consistent with what the agency is already committed to report on
- Set clear expectations about when metrics will be updated



Tahoe Climate Resilience Action Strategy Pillars of Resilience Infographic, CTC

Propose Organizing the Dashboard to be focused on Tahoe Goals to Support Resilient Natural, Built & Social Systems and Track Local Climate Conditions



Provide Relevant Performance Information Connected to the Achievement of Goals

Goals: *High-level climate related aspirations for Region.*

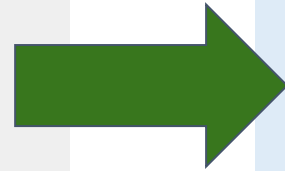
Indicators: *Detail on how to achieve overarching goals.*

Performance Metrics: *Understandable and useful for measuring the progress of meeting an indicator over time.*

Revising Dashboard to be Organized Around Goals

Existing Dashboard organized by:

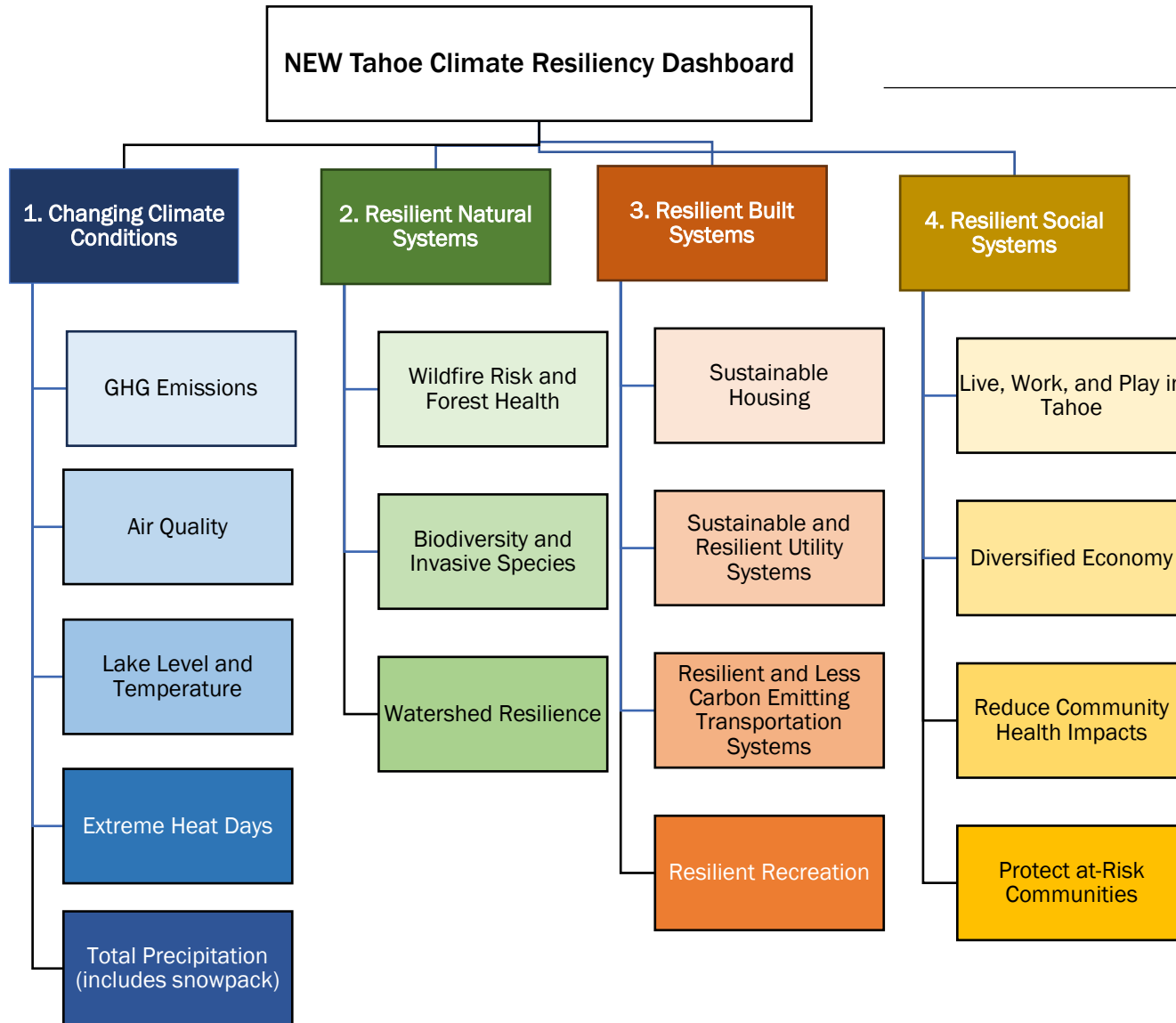
- Environment
- Community
- Economy



New Dashboard Organization:

1. Track Changes in Local Climate Conditions
2. Support Resilient Built Systems
3. Support Resilient Social Systems
4. Support Resilient Natural Systems

New Dashboard Story Board (Draft)



Dashboard Homepage includes 4 Goals

2nd Level: Under each goal, Organizes the indicators and metrics

Indicator Pages with metrics on each page

Dashboard Conceptual Layout

Indicator/Topic Title

Introductory Paragraph (or two)

The Metric (or two or three)

The Science

Related Metrics

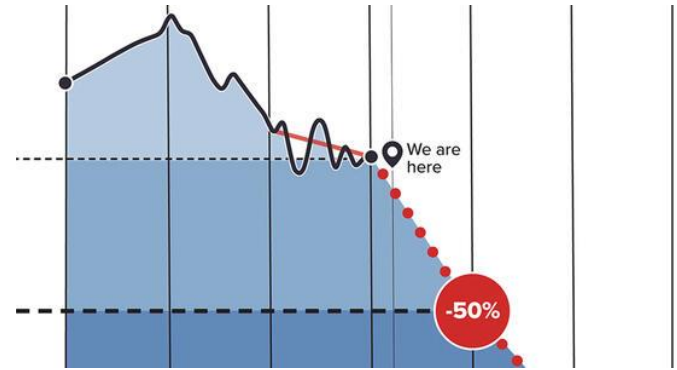
What can you do?

What are TRPA and partners doing?

GHG Emissions from Source

The introductory paragraph tells the story about what the metric is, why we care about it, who it impacts, historical information, where we are now, and how we are trending over time. It will [link](#) to important information, either [on Lake Tahoe Info](#) or [external](#) to the website.

This is also the place where we can link to federal or state requirements, or other important information.



Data Source: <https://youcanfindthedataasourcehere.gov>

RELATED METRICS: [TRANSPORTATION](#) | [HOUSING](#) | [ECONOMIC DEVELOPMENT](#) | [EQUITY](#)



What can you do? This section will [link](#) out to [websites](#) that describe what [individuals](#) or [businesses](#) can do to reduce emissions and become more resilient to a changing climate.









Want to better understand the science behind the topic? We will link to the other scientifically vetted websites ([international](#), [national](#), [state](#), [local](#))

What are TRPA and partners doing? This section will [link](#) out to [websites](#) that describe the work of key organizations (public is doing).

- [US Forest Service](#)
- [California, Nevada](#)
- [El Dorado County](#)
- [Placer County](#)
- [Washoe County](#)
- [South Lake Tahoe](#)
- [Tahoe Conservancy](#)

Evaluation of Draft Metrics

FRAMEWORK FOR EVALUATING AROUND 50 DRAFT METRICS	
KEY	
	Cost
	Utility Rating
	Quality
	Staff Effort
	Understandable
	Regional Scale
** Bonus	

* Reviewed equity and co-benefit considerations

Metric Evaluation Takeaways - Climate Conditions

- Climate conditions are newly proposed, rated as important.

Goal	Indicator
Recognize the Changing Climate Conditions	Greenhouse Gas Emissions
	Air Quality
	Lake Level and Temperature
	Extreme Heat Days
	Total Precipitation

Metric Evaluation Takeaways -Natural Systems

- Resilient natural system metrics often based on established/existing metrics (EIP mostly), rated as important.
- We are expected updates to the forest health & key watershed metrics.

Goal	Indicator
Promote Resilient Natural Systems	Reduce Wildfire Risk and Build Forest Health
	Increase Biodiversity, Reduce & Control Invasive Species
	Increase Watershed Resilience

Metric Evaluation Takeaways - Built Systems

- New metric ideas such as measuring sustainable housing, energy efficiency, and home hardening
- Integrated updated Transportation metrics but added new metrics such as zero emission transportation infrastructure and adaptation of vulnerable transportation facilities.
- Added utility related metrics (energy mix showing renewable energy) which will be refined.

Goal	Indicator
Resilient Built Systems	Support Increased Access to Sustainable Housing
	Support Sustainable and Resilient Utility Systems
	Upgrade Transportation Systems



Metric Evaluation Takeaways - Social Systems

- New metric ideas introduced such as equity related metrics, helping to understand community sectors with greater impacts and challenges with evacuation.
- Proposed resilient economy, work commuting and visitation metrics.

Goal	Indicator
Resilient Social Systems	Live, Work, and Play in Tahoe
	Diversified Economy
	Reduce Community Health Impacts
	Protect At-Risk Communities

Next Steps

Project Next Steps:

- Narrow down, refine & finalize metrics.
- Describe metrics with data and narrative on draft dashboard pages.
- Solicit feedback and finalize the dashboard.



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Thank you for your help!
Questions or Comments?

