

# Climate Change and Sustainable Mountain Tourism

## Mountain Partnership IPROMO Oct. 7, 2020



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Colorado Mountain College  
Founder, Senior Sustainability Advisor  
Walking Mountains Science Center  
Mayor Pro-Tem  
Town of Vail

walking mountains<sup>®</sup>  
science center



**COLORADO**  
MOUNTAIN COLLEGE

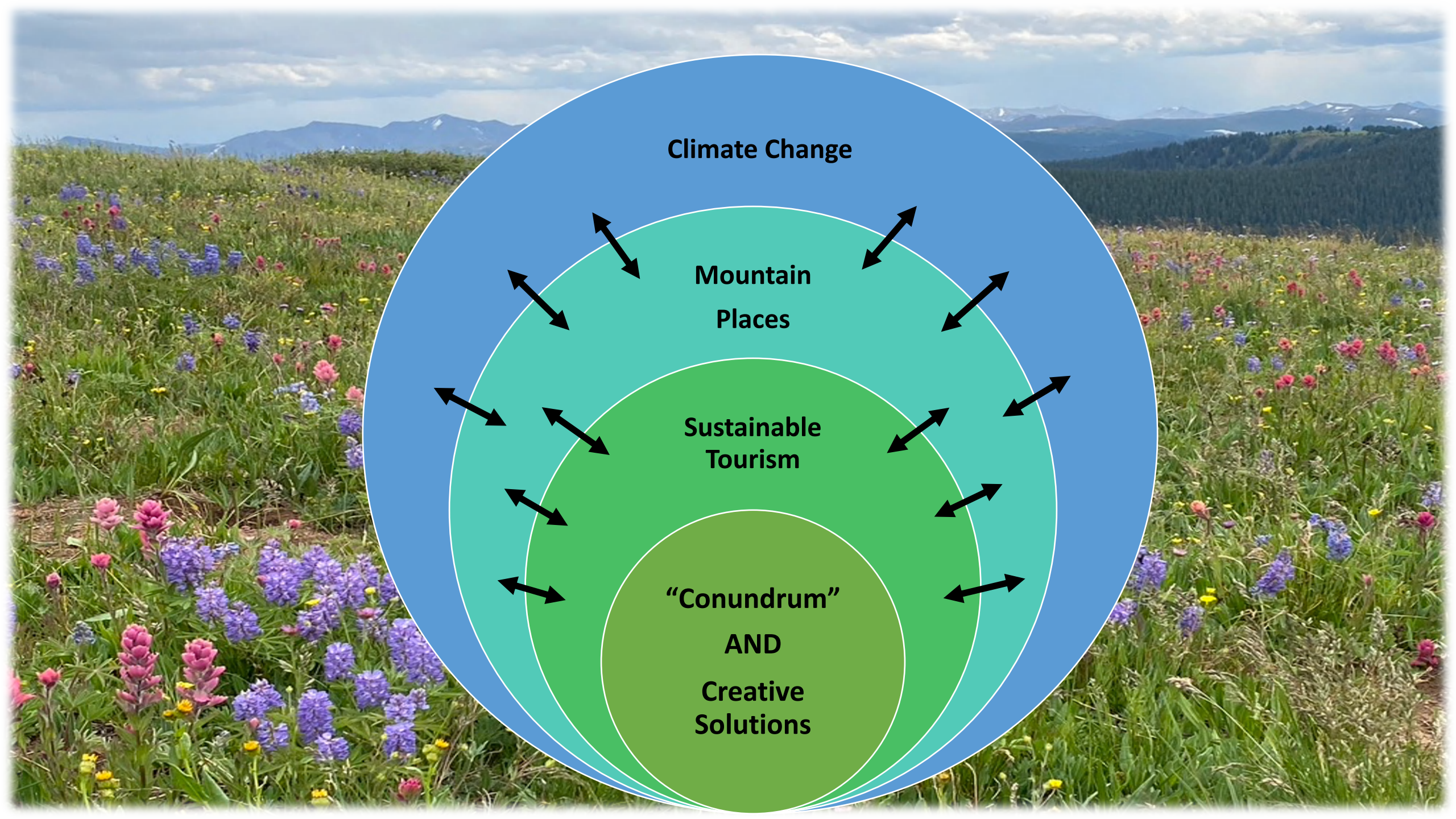
[klangmaid@coloradomtn.edu](mailto:klangmaid@coloradomtn.edu)  
[kiml@walkingmountains.org](mailto:kiml@walkingmountains.org)

## My Home

- Vail, CO, USA
- 2,484 meters
- Eagle River Watershed
- High point is 4,267 meters
- Low point is 2,133 meters
- Colorado River watershed
- Flows could decrease as much as 55% by end of century

Udall & Overpeck (2017)



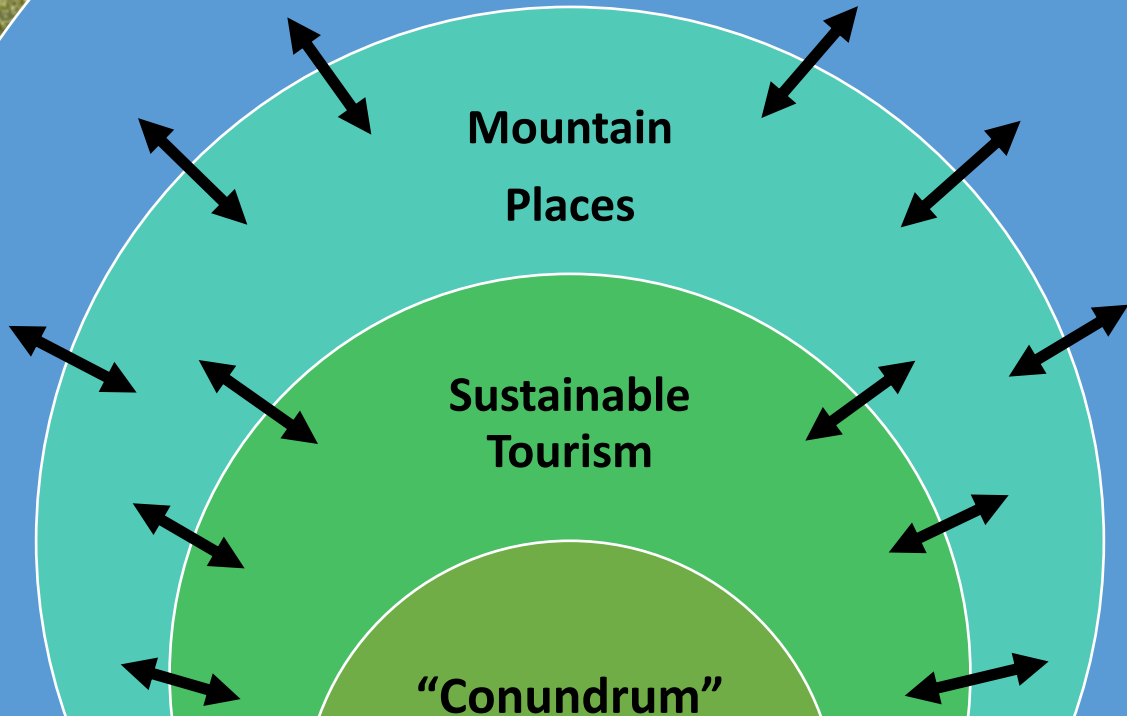


**Climate Change**

**Mountain  
Places**

**Sustainable  
Tourism**

**“Conundrum”  
AND  
Creative  
Solutions**





## **Overview of Presentation**

- Characterizing Mountain Tourism
- Adding Climate Change
- Defining Sustainable Tourism
- Q & A
- Break
- Sustainable Destination Example
- Climate Action Example
- Q & A

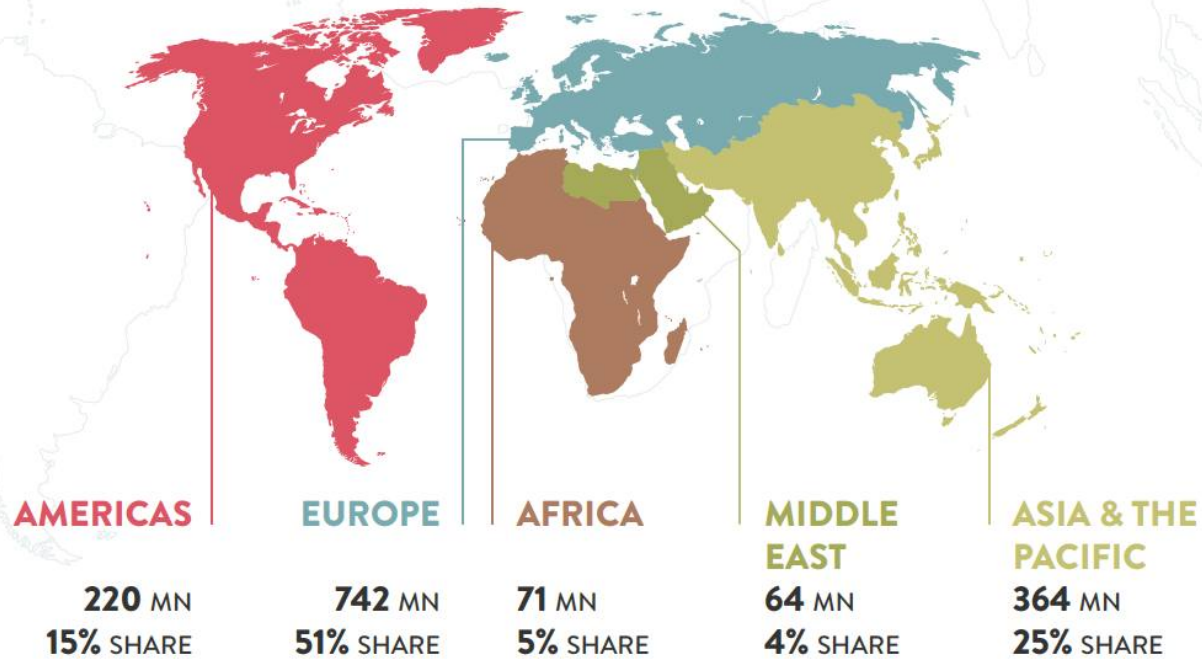
# 2019 TOURISM RESULTS

## ANOTHER YEAR OF GROWTH

**1.5 BILLION**  
INTERNATIONAL TOURIST ARRIVALS

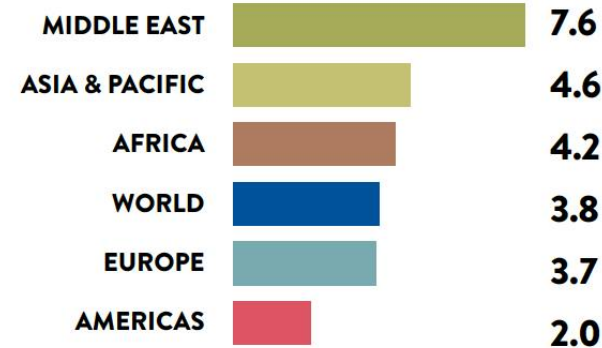
**+4% CHANGE**

**4 MILLION**  
ARRIVALS PER DAY



### MIDDLE EAST LED GROWTH IN 2019

CHANGE BY REGION (%)



### 2020 OUTLOOK

**+3% TO +4%**

UNWTO GLOBAL FORECAST FOR INTERNATIONAL TOURIST ARRIVALS IN 2020

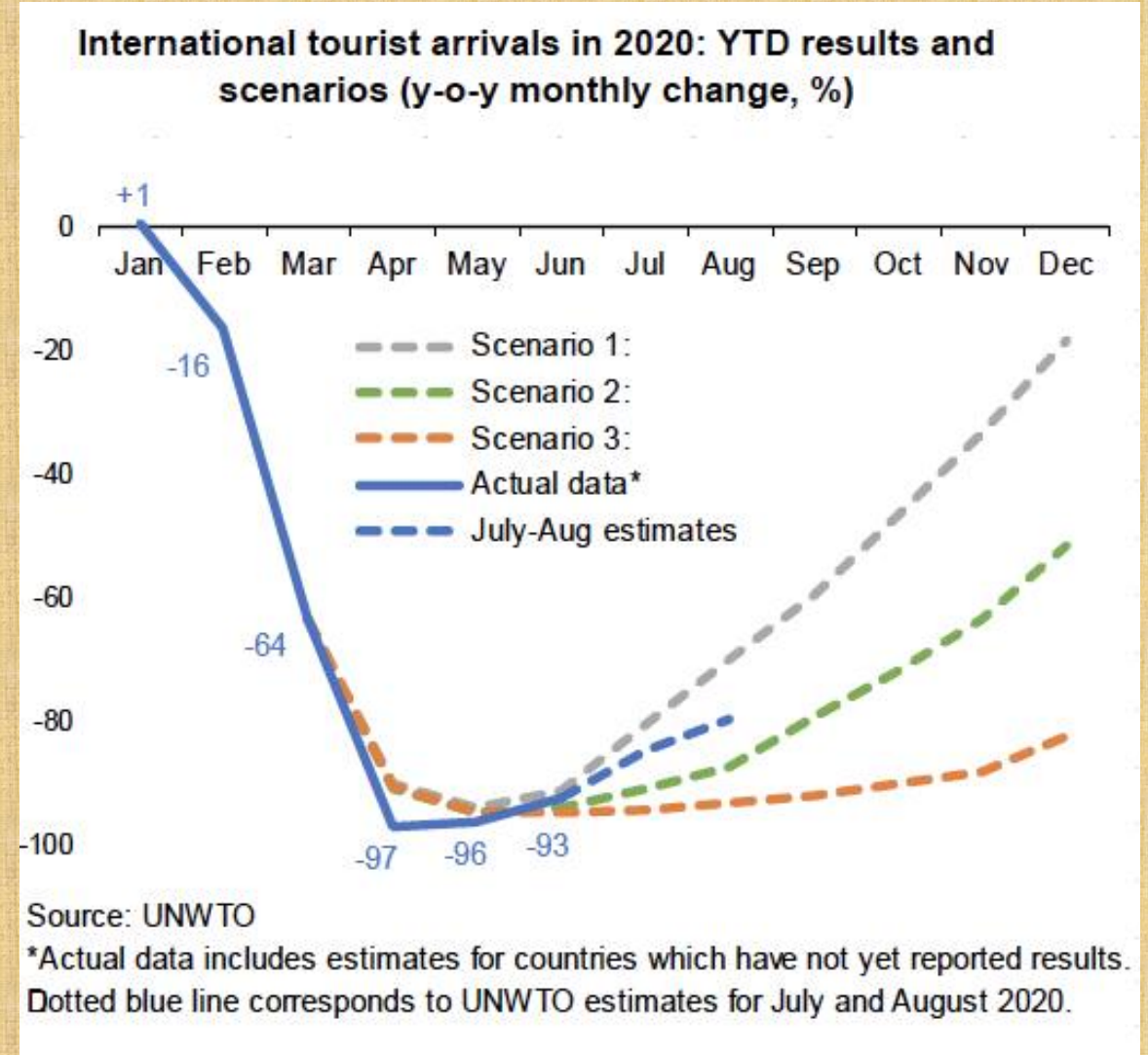
**47%**

OF PARTICIPANTS OF THE UNWTO CONFIDENCE INDEX THINK THAT 2020 WILL BE BETTER OR MUCH BETTER THAN 2019. 43% EXPECT NO CHANGE.

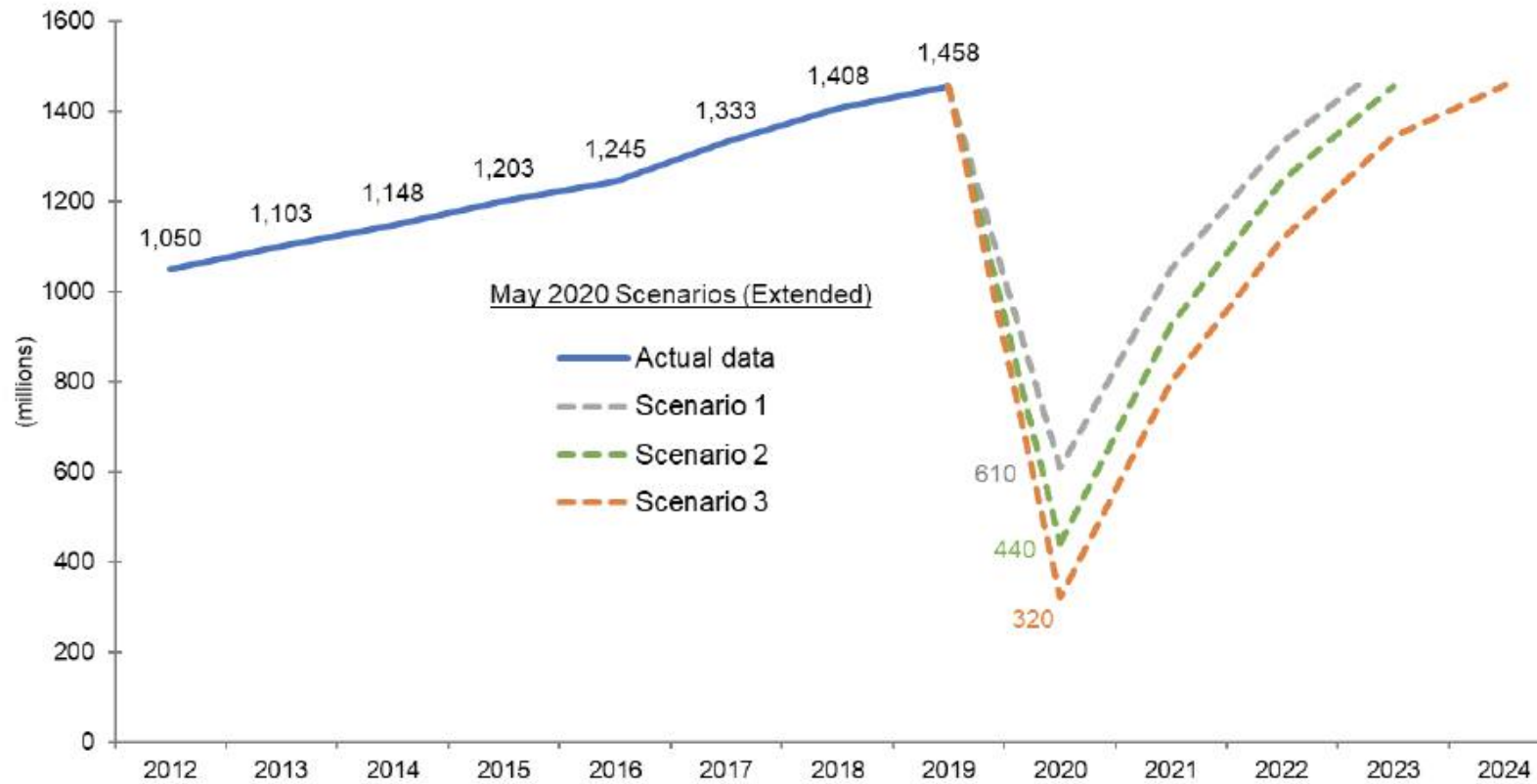
SOURCE: WORLD TOURISM ORGANIZATION (UNWTO), JANUARY 2020



“...the return to 2019 levels in terms of international arrivals would take 2.5 to 4 years.”



### International tourist arrivals: Future scenarios (millions)



Source: UNWTO

**Now is an opportune time to implement sustainable tourism standards, systems and controls in anticipation of a tourism rebound.**



## **Mountain Tourism**

- **15-20% of global tourism**
- **Anticipated to Increase with climate change and COVID-19**
- **Requires sustainable solutions**



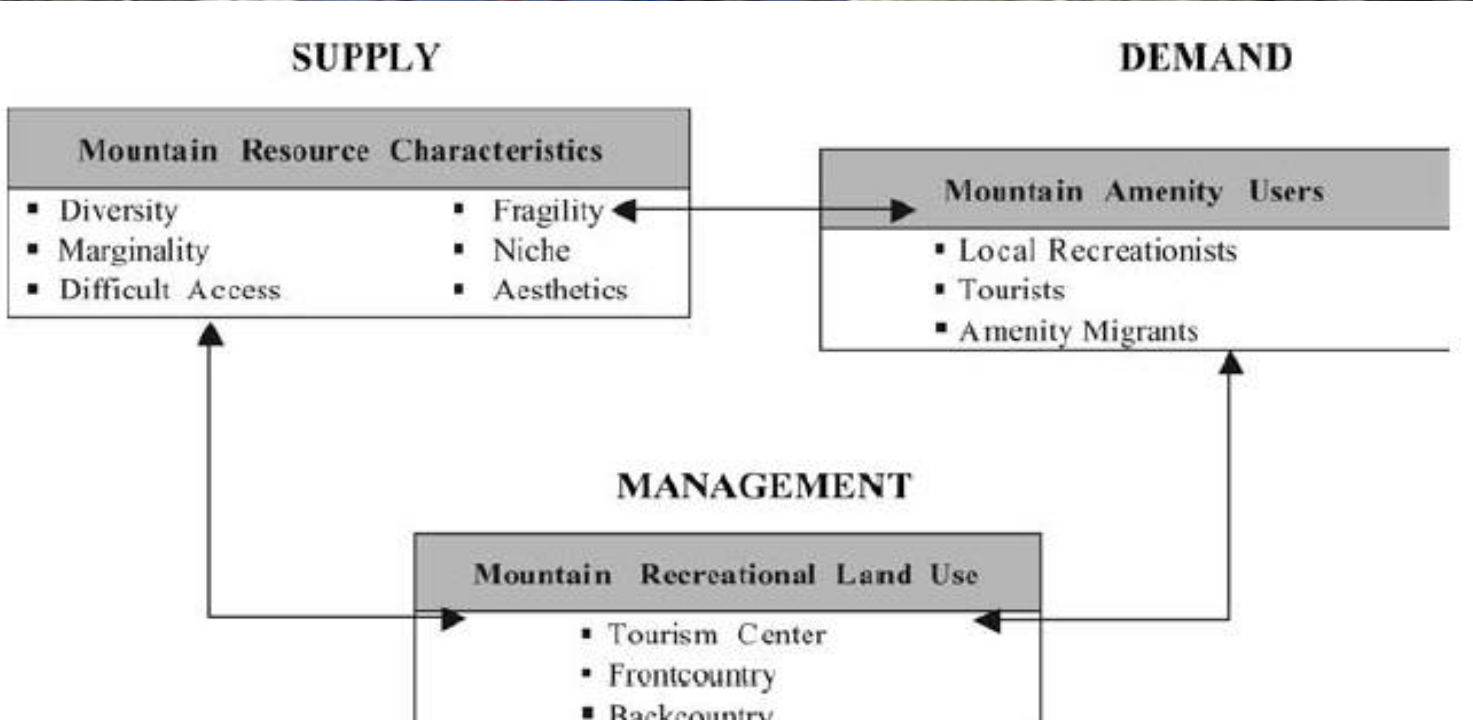
## Mountain Tourism Resource Characteristics

- **Diversity**
- **Marginality**
- **Difficult access**
- **Fragility**
- **Niche**
- **Aesthetics**
- **Interrelated and dynamic**



Nepal, S. K. and Chipeniuk, R. (2005). Mountain tourism: Toward a conceptual framework. *Tourism Geographies*. Vol. 7, No. 3, 313-333.

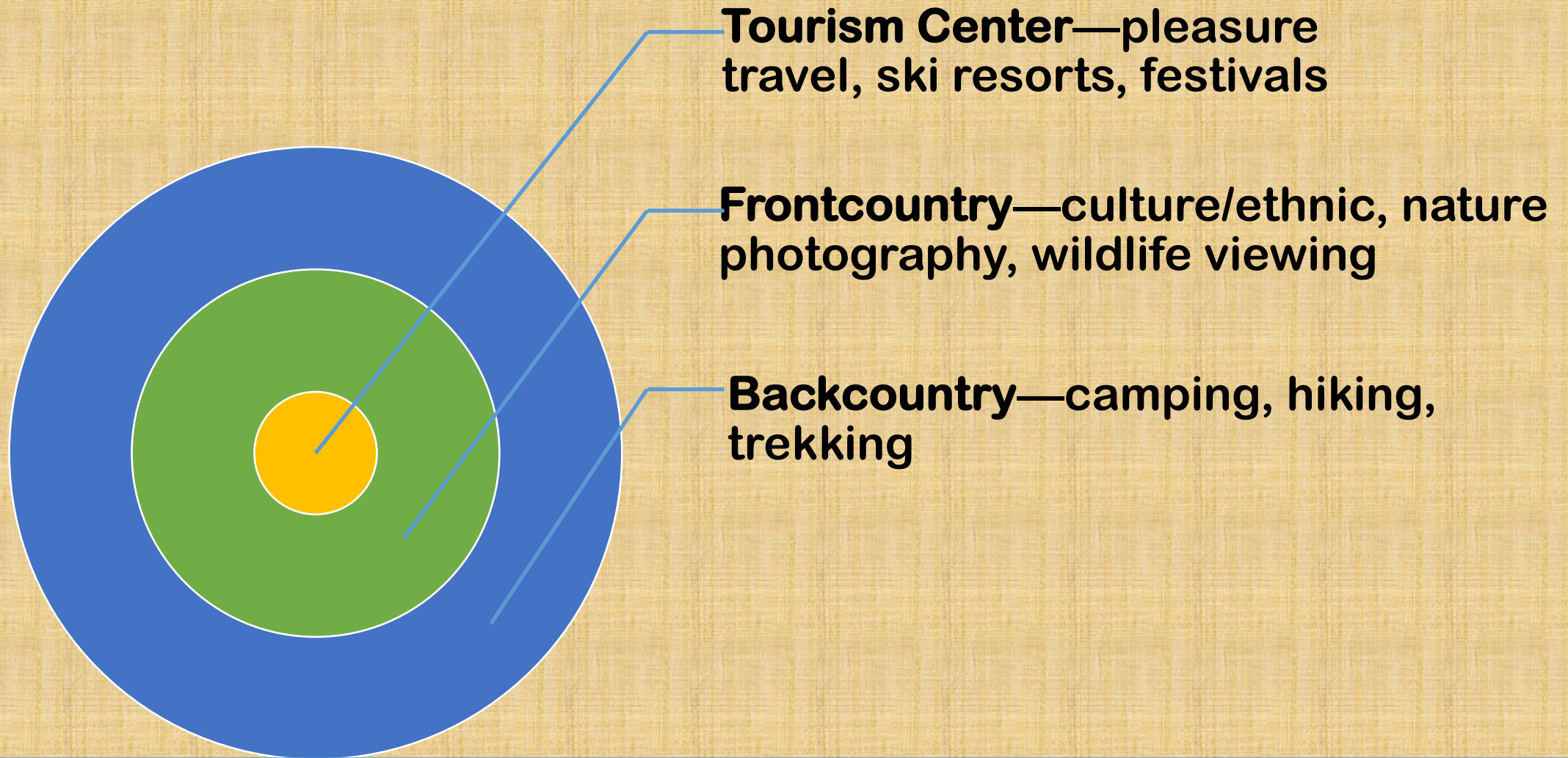
*Image from discovercorps.com  
"Vacations with a Purpose"*

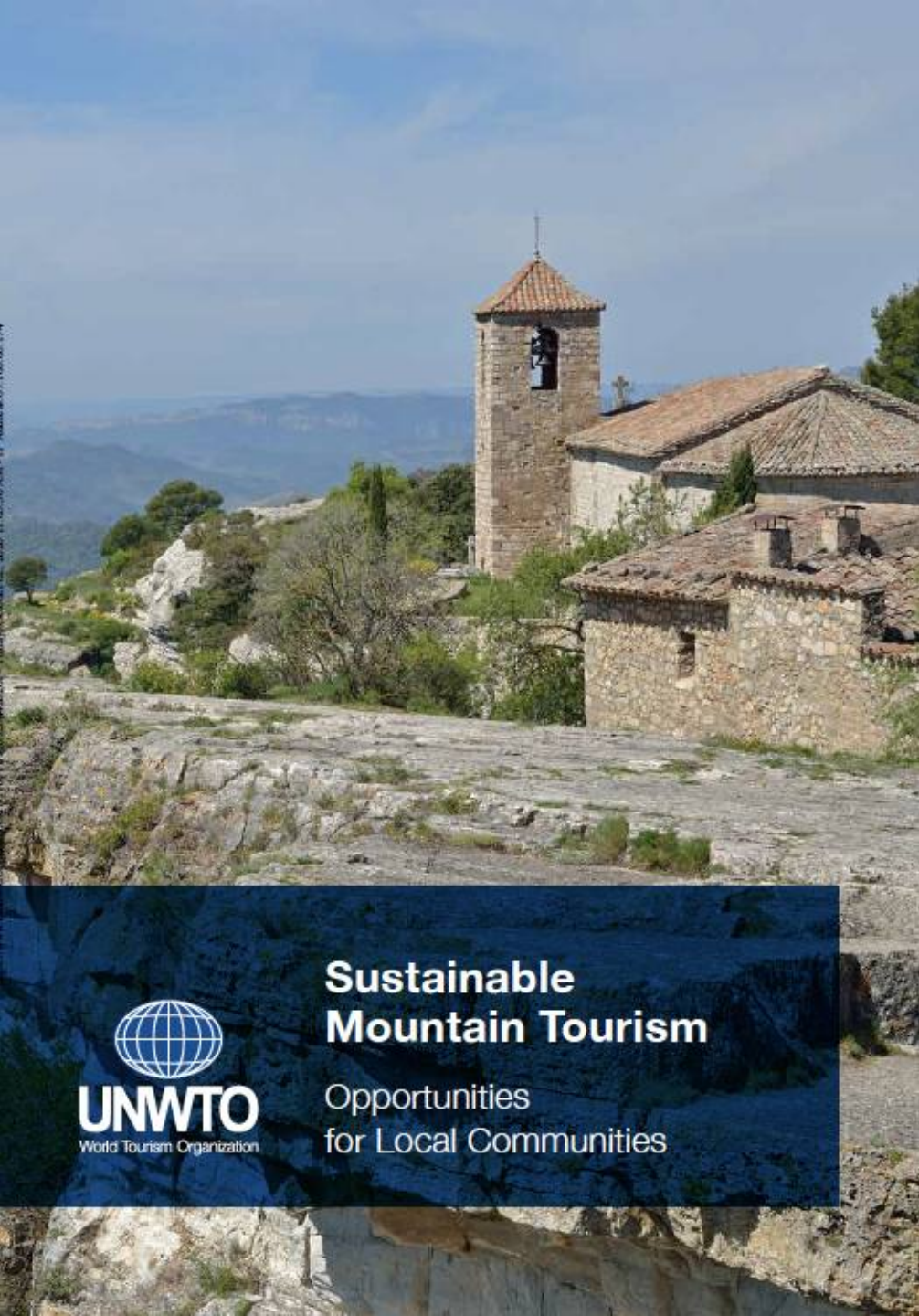


Nepal, S. K. and Chipeniuk, R. (2005). Mountain tourism: Toward a conceptual framework. *Tourism Geographies*. Vol. 7, No. 3, 313-333.

Characteristics of Mountain Resources	Attributes	Implications for Tourism
Diversity	<ul style="list-style-type: none"> <li>Variations in attributes</li> <li>Interdependence of production bases</li> </ul>	<ul style="list-style-type: none"> <li>Use comparative advantage</li> <li>Link with local production</li> <li>Small scale innovation</li> <li>Revival of traditional activities</li> </ul>
Marginality	<ul style="list-style-type: none"> <li>Limited local resources</li> <li>Marginal concern to decision-makers</li> <li>Unfavorable terms of trade</li> </ul>	<ul style="list-style-type: none"> <li>Judicious use of resources</li> <li>Local participatory decision-making</li> <li>Mandatory reinvestment of revenues</li> <li>Human capacity development</li> <li>Monitoring mechanism</li> </ul>
Difficult Access	<ul style="list-style-type: none"> <li>Remoteness</li> <li>Isolation from markets</li> <li>Insular economy and culture</li> </ul>	<ul style="list-style-type: none"> <li>High value</li> <li>Activities tied to inaccessibility</li> </ul>
Fragility	<ul style="list-style-type: none"> <li>Resources vulnerable to degradation</li> </ul>	<ul style="list-style-type: none"> <li>Niche tourism</li> <li>Careers in environmental conservation</li> <li>Restricted use in hotspots</li> <li>Carrying capacity considerations</li> </ul>
Niche	<ul style="list-style-type: none"> <li>Location-specific attractions</li> <li>Endemic flora and fauna</li> <li>Area-specific resources and activities</li> </ul>	<ul style="list-style-type: none"> <li>Special interest tourism</li> <li>Niche marketing</li> <li>Skill-based and culture-specific crafts</li> <li>Area-specific tourist goods and services</li> </ul>
Aesthetics	<ul style="list-style-type: none"> <li>Superior dramatic quality</li> <li>Superior recreational quality</li> <li>Superior spiritual quality</li> <li>Superior habitat quality</li> <li>Relative resistance to human modification</li> </ul>	<ul style="list-style-type: none"> <li>Attraction for the young and vigorous</li> <li>Attraction for the venturesome</li> <li>Attraction for the spiritually exhausted</li> <li>Attraction for the exhibitionist</li> <li>Attraction for potential amenity migrants</li> </ul>

# Spectrum of Activities in Mountain Recreational Zones



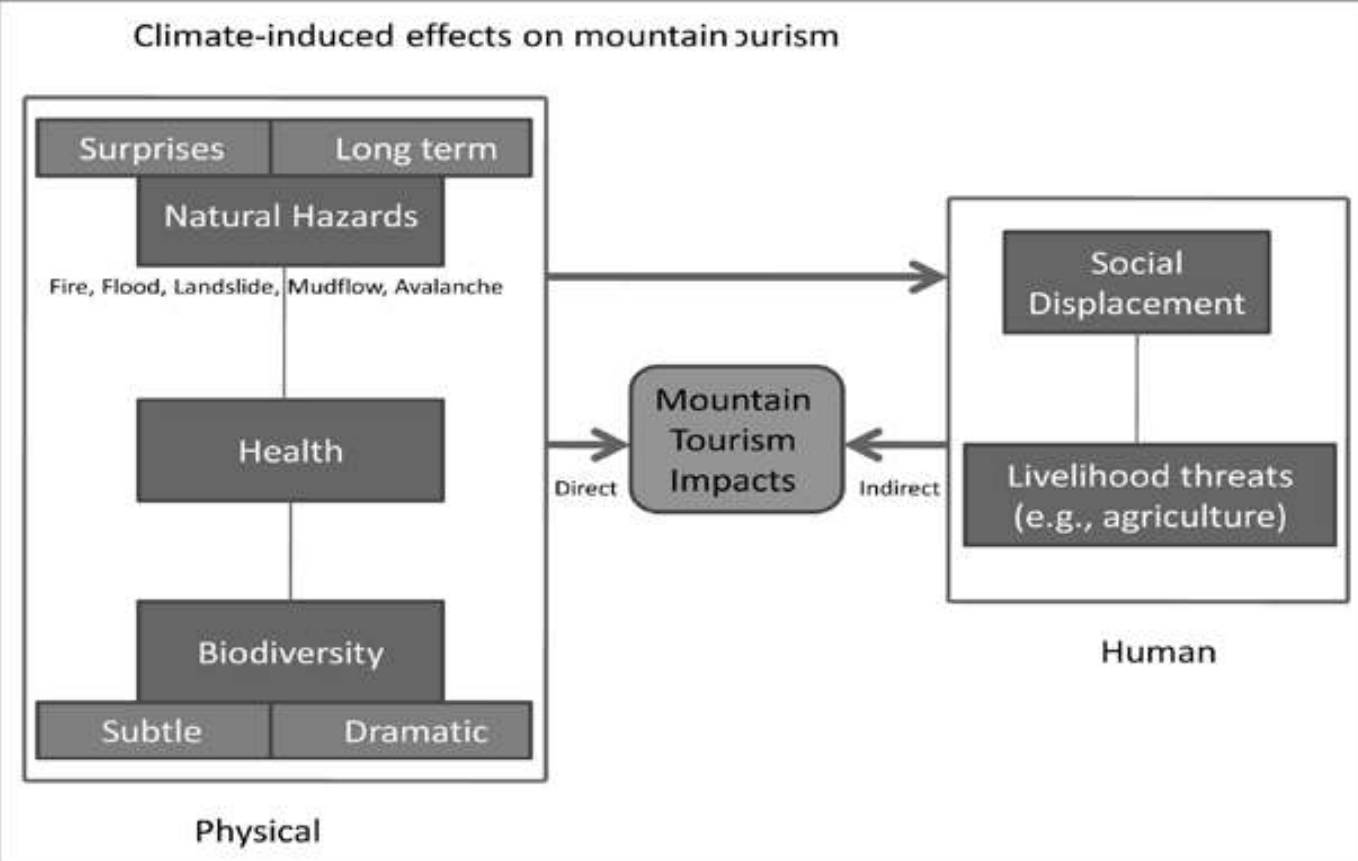
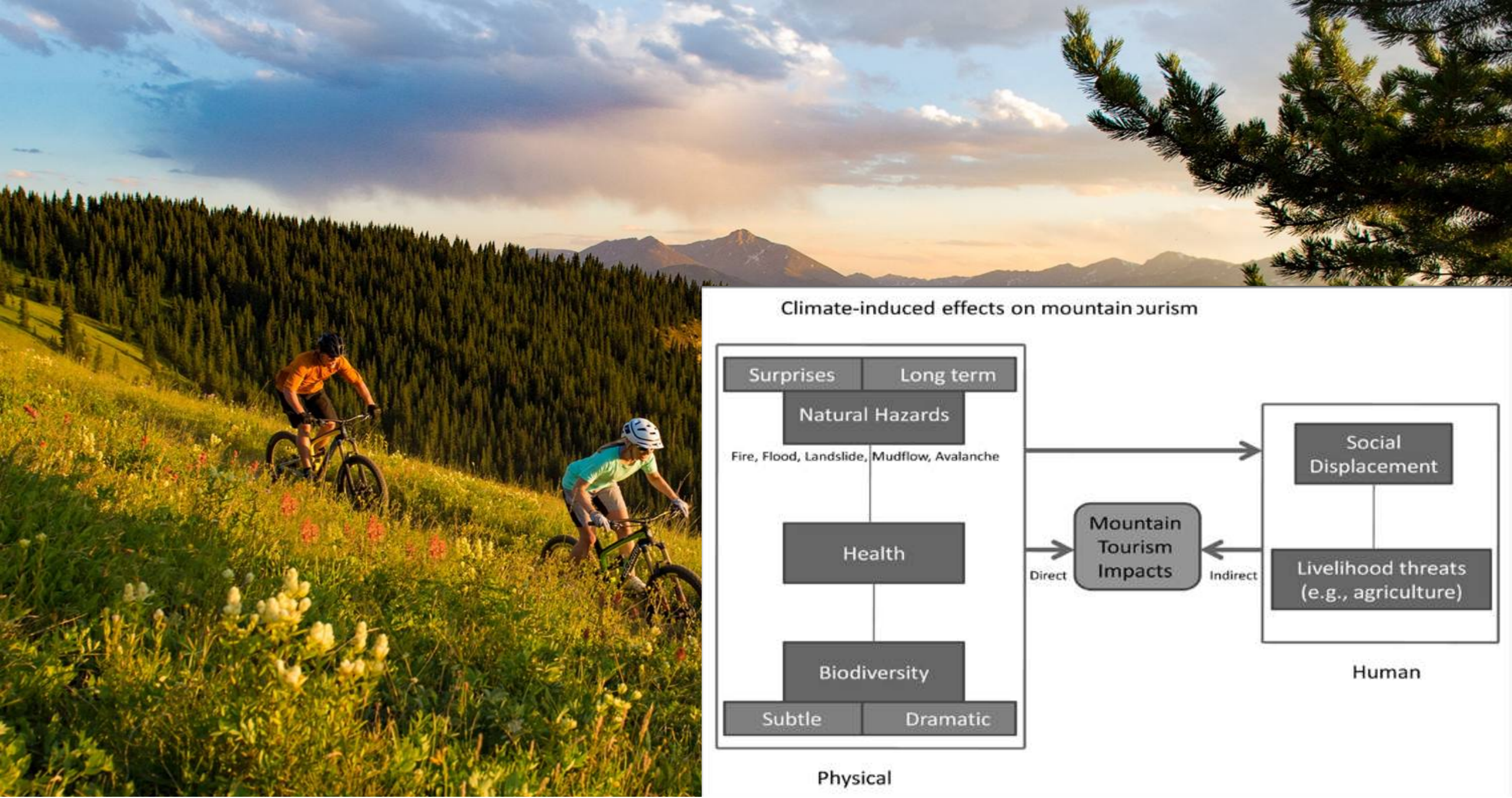


## Sustainable Mountain Tourism

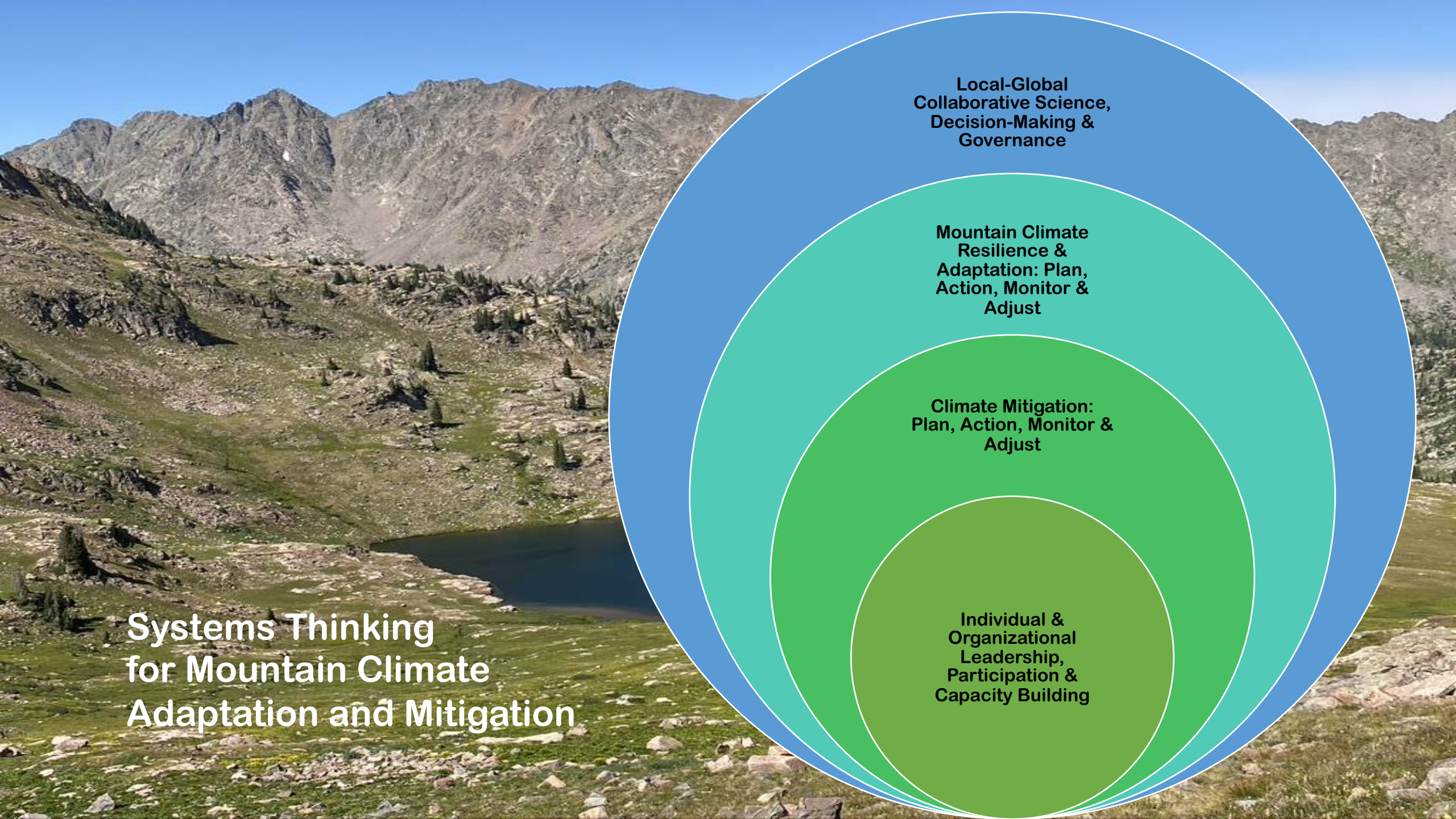
Opportunities  
for Local Communities

**“Tourism is one of the few alternatives for developing mountain areas. As an economic activity, however, it can also do serious harm to both the fragile mountain ecosystem and local cultural resources. ...Mountain tourism can be sustainable on a local level only if participants are willing and able to protect both natural and cultural resources.”**

United Nations World Tourism Organization. (2018). *Sustainable mountain tourism: Opportunities for local communities*. pg. 109.



Nepal, S. K. (2011). Mountain tourism and climate change: Implications for the Nepal Himalaya. *Nepal Tourism and Development Review*. Vol 1, Issue 1.

The image shows a mountain landscape with a lake and a circular diagram overlay. The diagram consists of four concentric circles, each containing text. The outermost circle is blue, the second is teal, the third is green, and the innermost is a darker green. The text in each circle is as follows:

**Systems Thinking  
for Mountain Climate  
Adaptation and Mitigation**

**Local-Global  
Collaborative Science,  
Decision-Making &  
Governance**

**Mountain Climate  
Resilience &  
Adaptation: Plan,  
Action, Monitor &  
Adjust**

**Climate Mitigation:  
Plan, Action, Monitor &  
Adjust**

**Individual &  
Organizational  
Leadership,  
Participation &  
Capacity Building**

**Managing mountain tourism destinations while adapting to climate change and preparing for a rebound from the COVID-19 pandemic requires intentional and systematic sustainable tourism strategies.**

**What is sustainable tourism?**







## UNWTO Definition

*“Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.”*

*“Sustainable tourism development guidelines and management practices are **applicable to all forms of tourism** in all types of destinations, including mass tourism and niche tourism segments.”*

*Making Tourism More Sustainable - A Guide for Policy Makers, UNEP and UNWTO, 2005*



**Sustainable  
tourism  
requires  
collaboration  
across  
sectors and  
among all  
stakeholders.**



**Women of the Andes image from [threadsofperu.com](http://threadsofperu.com)**



**TRAVEL FOREVER**  
GLOBAL SUSTAINABLE TOURISM COUNCIL

## Global Sustainable Tourism Council

The world's leading industry  
standard for tourism sustainability

Establishes and manages global  
sustainable standards with the aim of  
increasing sustainable tourism  
knowledge and practices among  
public and private stakeholders.



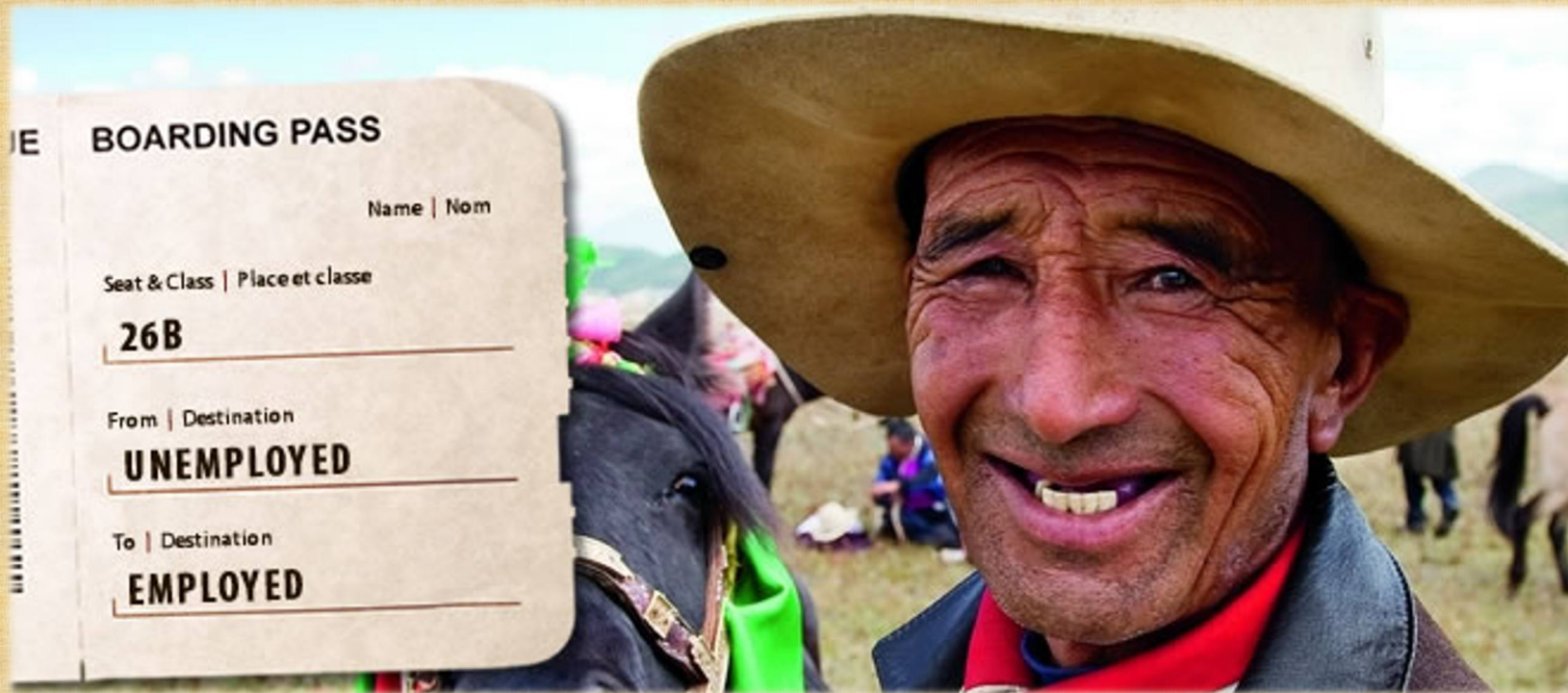
UNITED NATIONS  
FOUNDATION



- **Responsible Tourism = Tourism that maximizes the benefits to local communities, minimizes negative social or environmental impacts, and helps people conserve fragile cultures and habitats.**
- **Sustainable Tourism = Tourism that leads to the management of all resources in such a way that the economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life-support systems.**



**GSTC “Promotes the widespread adoption of global sustainable tourism standards to ensure the tourism industry continues to drive conservation and poverty alleviation.”**



**GSTC “Promotes the adoption of universal sustainable tourism principles and building demand for sustainable travel.”**





# GSTC Criteria as Baseline Standards

- A key role for the GSTC is to define and facilitate adoption of **the Criteria as universal principles for sustainable tourism; a common language to promote sustainable tourism.**
- The Criteria are **minimum requirements for tourism businesses and destinations, in order to help protect and sustain natural and cultural resources, and to help ensure tourism meets its potential as a tool for conservation and poverty alleviation.**



**Two sets of GSTC Criteria:**

- **GSTC Industry Criteria**
  - **GSTC Destination Criteria**
- 

**Criteria Cover 4 Pillars of Sustainability:**

- **Sustainability Management**
- **Social & Economic**
- **Cultural**
- **Environmental**



Image from [eco-business.com](http://eco-business.com)

**Questions?**

**Let's Take a Break!**





## **Four Main Objectives of Sustainable Destinations:**

- **Demonstrate sustainable destination management**
- **Maximize social and economic benefits for the community and minimize negative impacts**
- **Maximize benefits to community, visitors and cultural heritage and minimize impacts**
- **Maximize benefits to the environment and minimize negative impacts**





- **IDEAL =**
  - **Innovation**
  - **Diversity**
  - **Education**
  - **Authenticity**
  - **Leadership**
  
- **44 Criteria & 72 Indicators**
  - **Tourism Management**
  - **Planning**
  - **Community & Culture**
  - **Environmental Resources**

# 1) TOURISM MANAGEMENT & MONITORING:



- Destination Stewardship Council
- Destination Strategy & Action Plan
- Sustainability Standards
- Inventory of Attraction Sites
- Visitor Management System
- Attraction Protection
- Visitor Behavior
- Site Interpretation
- Monitoring (Tourism Impact)



## 2) PLANNING:

- Regulations
- Infrastructure
  - Low Impact Transportation
  - Property Acquisitions
- Asset Protection
  - Sensitive Environments
  - Wildlife
  - Local Access
- Environmental Planning
  - Environmental Risks
  - Climate Adaptation



### 3) COMMUNITY & CULTURE:



- Equality & Preventing Exploitation
- Safety & Emergency Response
- Opportunities
  - Career/Training (Mtn IDEAL)
  - Housing (Mtn IDEAL)
  - Purchasing & Entrepreneurs
- Engagement
  - Stakeholder Participation
  - Promotion
- Cultural Heritage Protection

## 4) ENVIRONMENTAL RESOURCES:



- Waste Reduction
- Water Management
- Energy Conservation
- Greenhouse Gas Emissions
- Light & Noise Pollution
- Environmental Controls
  - Snow Making (Mtn IDEAL)
  - Snow Melting (Mtn IDEAL)

0 1 2 4 Miles

-  Sustainable Vall Destination Extent
-  Vall Town Boundary
-  Private Land - Unincorporated
-  State Land - Multi-Use: Managed by Colorado State
-  Federal Land - Ski Area: Managed by Vall Resorts
-  Federal Land - Multi-Use: Managed by U.S.F.S.
-  Federal Land - Eagles Nest Wilderness Area

~69,687 Acres

~33,163 Acres

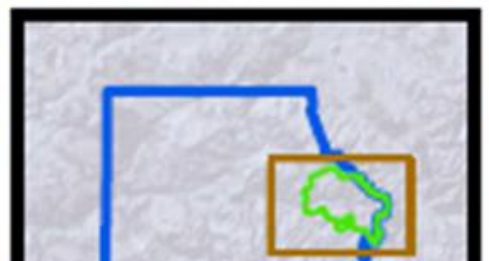
~540 Acres

~2,900 Acres

~24,983 Acres

~119 Acres

~7,900 Acres



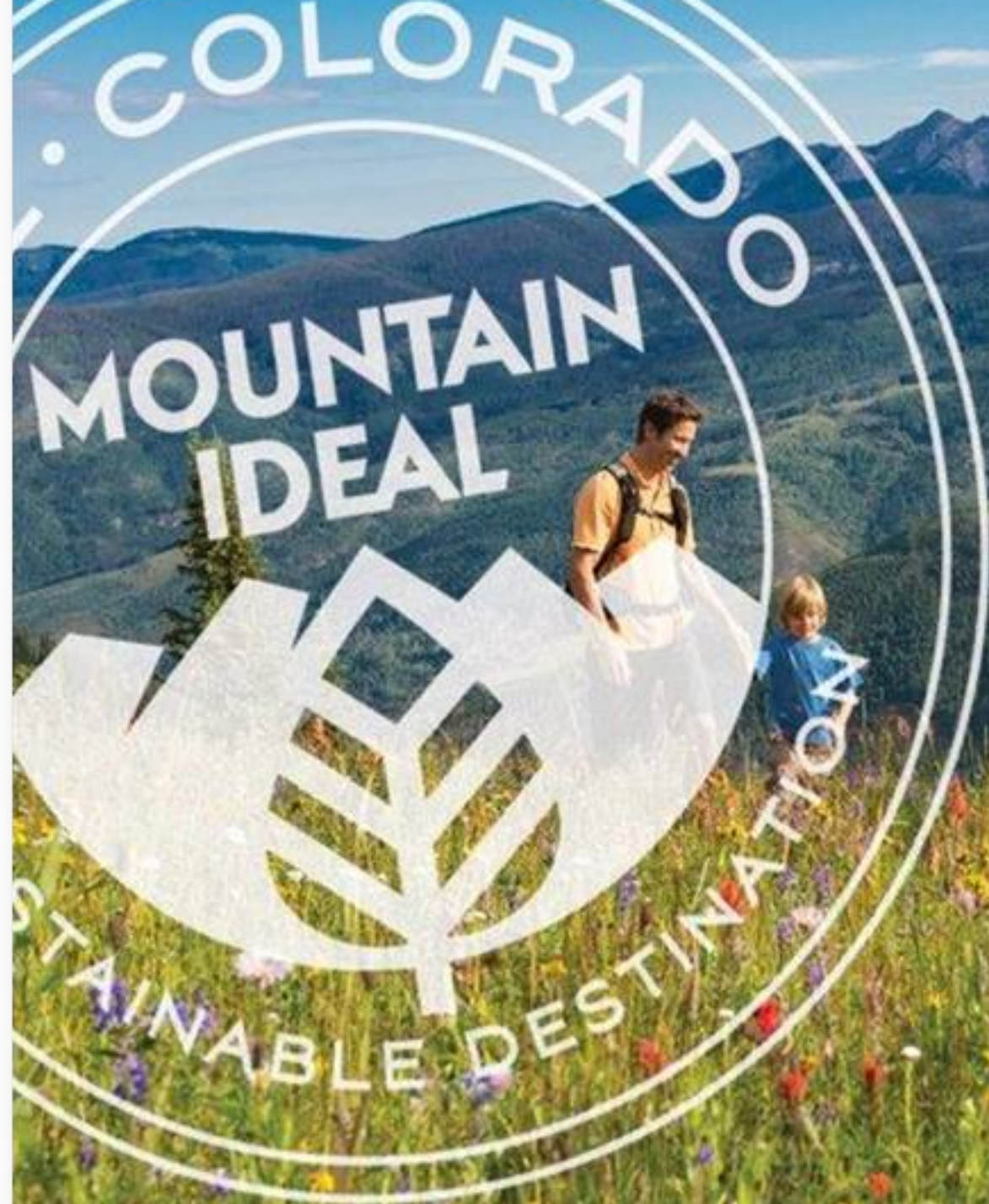


**TRAVEL FOREVER**  
GLOBAL SUSTAINABLE TOURISM COUNCIL



walking mountains<sup>®</sup>  
*sustainability*





LOVE VAIL...



Join Vail on the Journey  
to become a globally  
recognized and certified  
sustainable destination!

JOIN US ON THE JOURNEY  
TO SUSTAINABILITY



The Town of Vail and Vail Mountain ask you to join on this journey and embrace the mountain IDEAL:

### I

**INNOVATION**

Innovate and try something new in sustainability. Support Actively Green certified businesses, eat local food at restaurants and events, celebrate with local artisans and musicians.

### D

**DIVERSITY**

Protect local biodiversity and our mountain community's natural and cultural heritage. Discover how people from around the world make our community unique. Let the diversity of nature be your mentor.

### E

**EDUCATION**

Take an active role in learning what it means to be a sustainable destination. Learn with us, share with your friends and family, and become a lifelong learner on the journey to sustainability.

### A

**AUTHENTICITY**

Seek out meaningful authentic experiences. Celebrate the special character and history of our mountain community. Enhance your well-being. Meet new friends and learn and grow together.

### L

**LEADERSHIP**

Empower yourself and others. Do good. Be a sustainability champion. Lend a hand. Support our community's shared vision of a flourishing future. Be the change you want to see in Vail.

The Community Business Recycling Challenge includes free, customized training, progress reports and awards in three categories.



**TUESDAY, JULY 24 | 12 PM**

The Grand View, 3rd Level  
Lionshead Welcome Center

# LUNCH WITH THE LOCALS

A Complimentary  
Ecology Presentation



**FREE**

LUNCH  
FOR  
ATTENDEES

Come enjoy a complimentary lunch and listen to Kim Langmaid, Founder of Walking Mountains Science Center and Vail Town Council member, describe the Town of Vail's efforts to become the first U.S. Sustainable Destination. Experts from the Town of Vail, Walking Mountains Science Center and Eagle River Watershed Council will be on hand to answer questions about what residents can do to help Restore the Gore. There will also be stickers and informational brochures available to attendees.



TOWN OF VAIL

970.479.2144 | lovevail.org

**WEDNESDAY, APRIL 25 | 12 PM**

Lionshead Welcome Center    A Complimentary  
Lower level of Lionshead    Ecology Presentation  
Parking Structure



**FREE**

FREE LUNCH  
for attendees

Come enjoy a complimentary lunch and listen to Pete Wadden, Town of Vail Watershed Education Coordinator, discuss the history and ongoing controversy surrounding the philosophies of Conservation and Preservation in the United States. Experts from the Town of Vail, Walking Mountains Science Center, and Eagle River Watershed Council will be on hand to answer questions about what residents can do to help Restore the Gore. There will also be stickers and informational brochures available to attendees.



TOWN OF VAIL

970.479.2144 | lovevail.org





walking mountains<sup>®</sup>  
*sustainability*



Sole Power is a free green commuting challenge for the Eagle Valley. Participants can track their mileage and carbon emissions from Memorial Day through Columbus Day. Local business teams compete to and share results on the Team Leaderboard.

[www.solepower.org](http://www.solepower.org)

- Local businesses promote to customers who voluntarily make a 1% donation with their purchase.
- Customers have the opportunity to opt-out of the program.
- The 1% donation is clearly outlined on the sales receipts.
- Funds collected help promote and restore healthy rivers, clean water, conscientious development, preservation of open space, wildlife and fish habitat, agriculture, water rights, and economic diversity throughout the Valley.

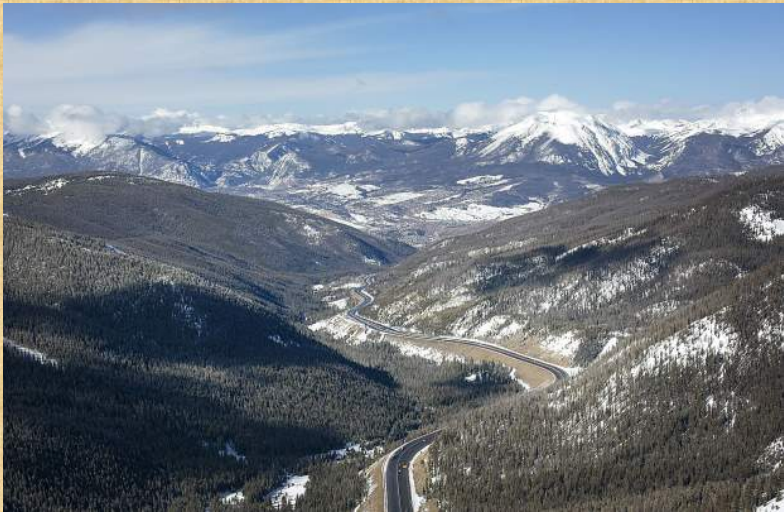
walking mountains®  
*sustainability*





**The National Forest Foundation’s “Ski Conservation Fund” provides funding for action-oriented on-the-ground forest health projects. Award funds come from guest contributions at ski areas and lodges operating on or adjacent to National Forests and are matched by funds from the National Forest Foundation.**







**Americans' love of hiking has driven elk to the brink, scientists say**

**PROPOSED DEVELOPMENT IN COLORADO COULD HARM BIGHORN SHEEP HERDS**





walking mountains<sup>®</sup>  
*sustainability*

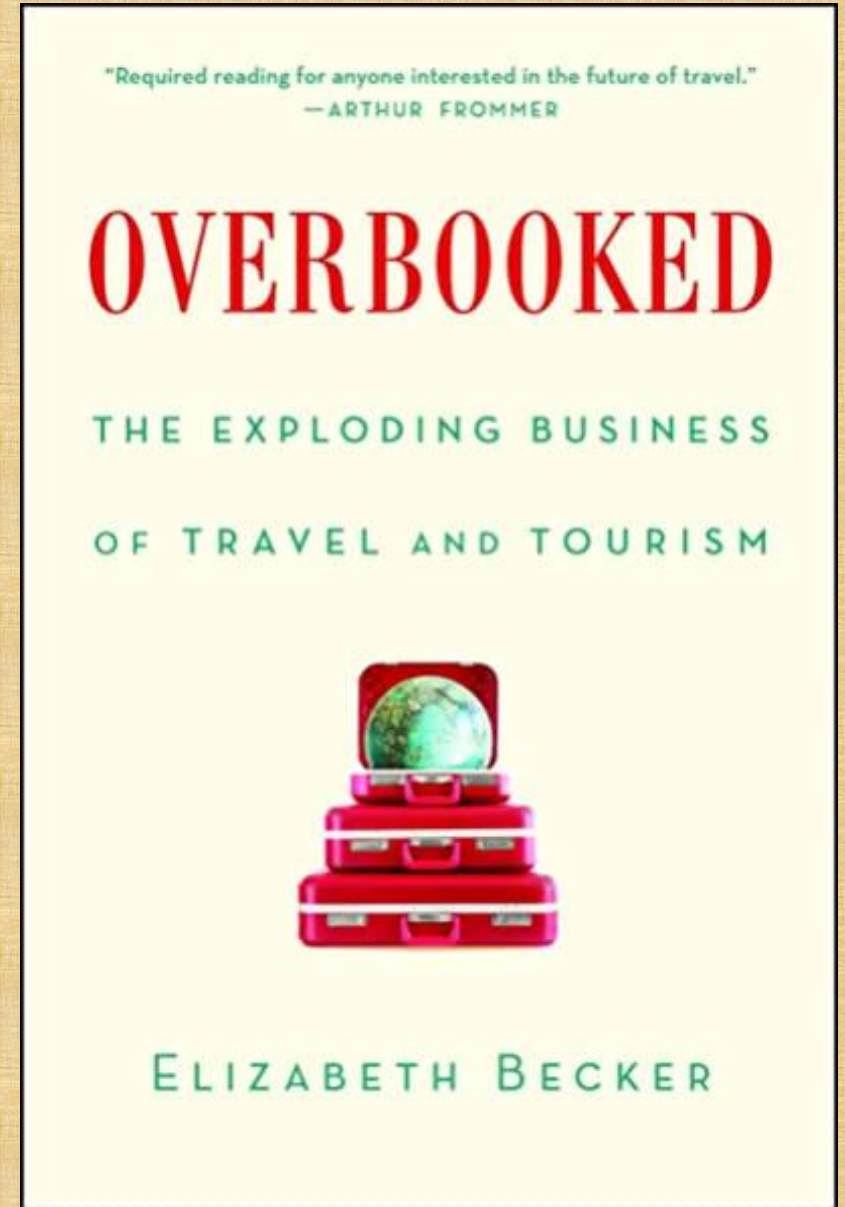


Community Wildlife Roundtable



H  
E  
L  
P  
!

New: Reservations Required to Visit



# CLIMATE ACTION COLLABORATIVE

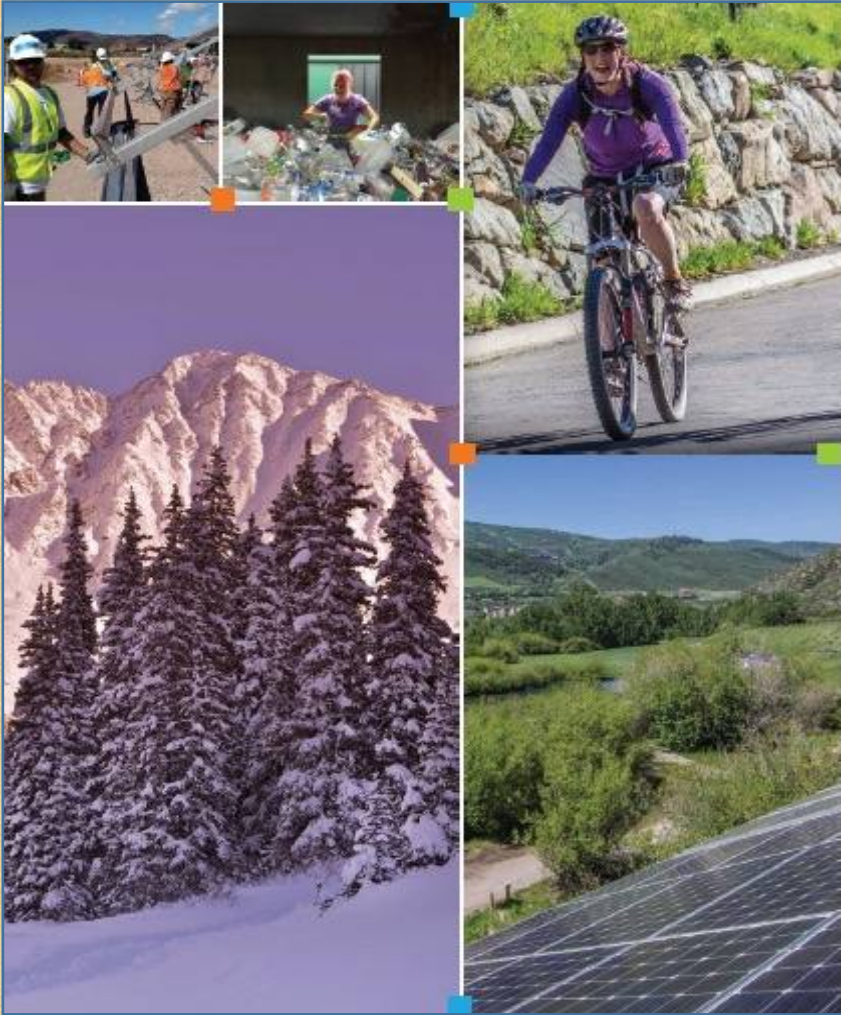


## How Do Your Actions Stack Up?

The graph below shows the ways in which you can reduce your carbon footprint.







# CLIMATE ACTION PLAN



FOR THE  
EAGLE COUNTY  
COMMUNITY

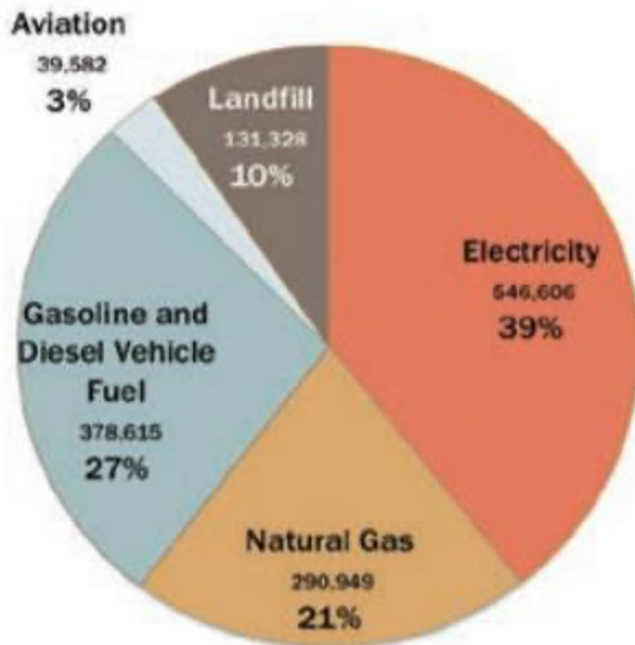
December 2016



CLIMATE  
ACTION  
COLLABORATIVE

# GHG Inventory

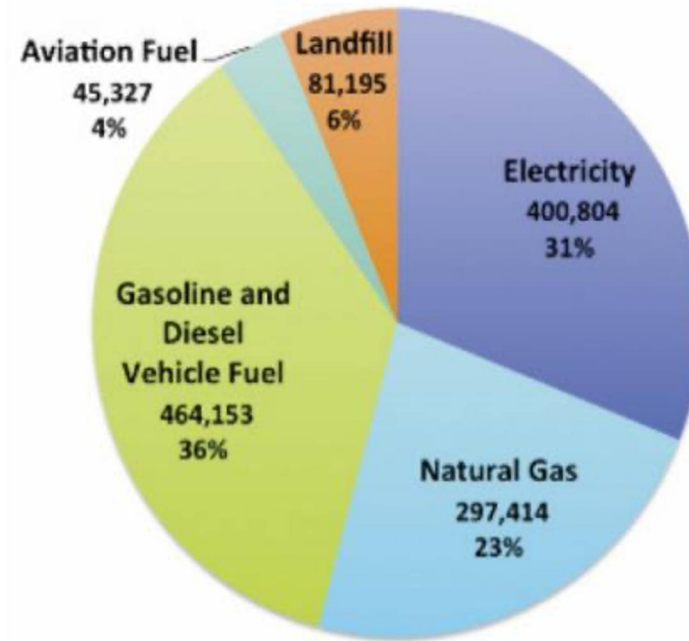
## 3. Emissions by Source, 2014 Metric tons of CO<sub>2</sub>e



1.4 M metric tons  
CO<sub>2</sub>e



## 4. Emissions by Source, 2017 Metric tons of CO<sub>2</sub>e



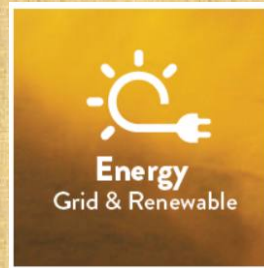
1.28 M metric tons  
CO<sub>2</sub>e



Reduce local carbon emissions

**25% by 2025**  
**and**  
**80% by 2050**

# Sector Working Groups



**Working groups are established for Buildings, Transportation, Waste, Energy Supply, and Education & Outreach.**

**Each group is made up of community experts in each field, who work together to implement community-scale sustainability projects**

**New this year – Citizens Working Group and Water Working Group**

# GHG Modeling Results

## ELECTRIC VEHICLE (EV) ADOPTION

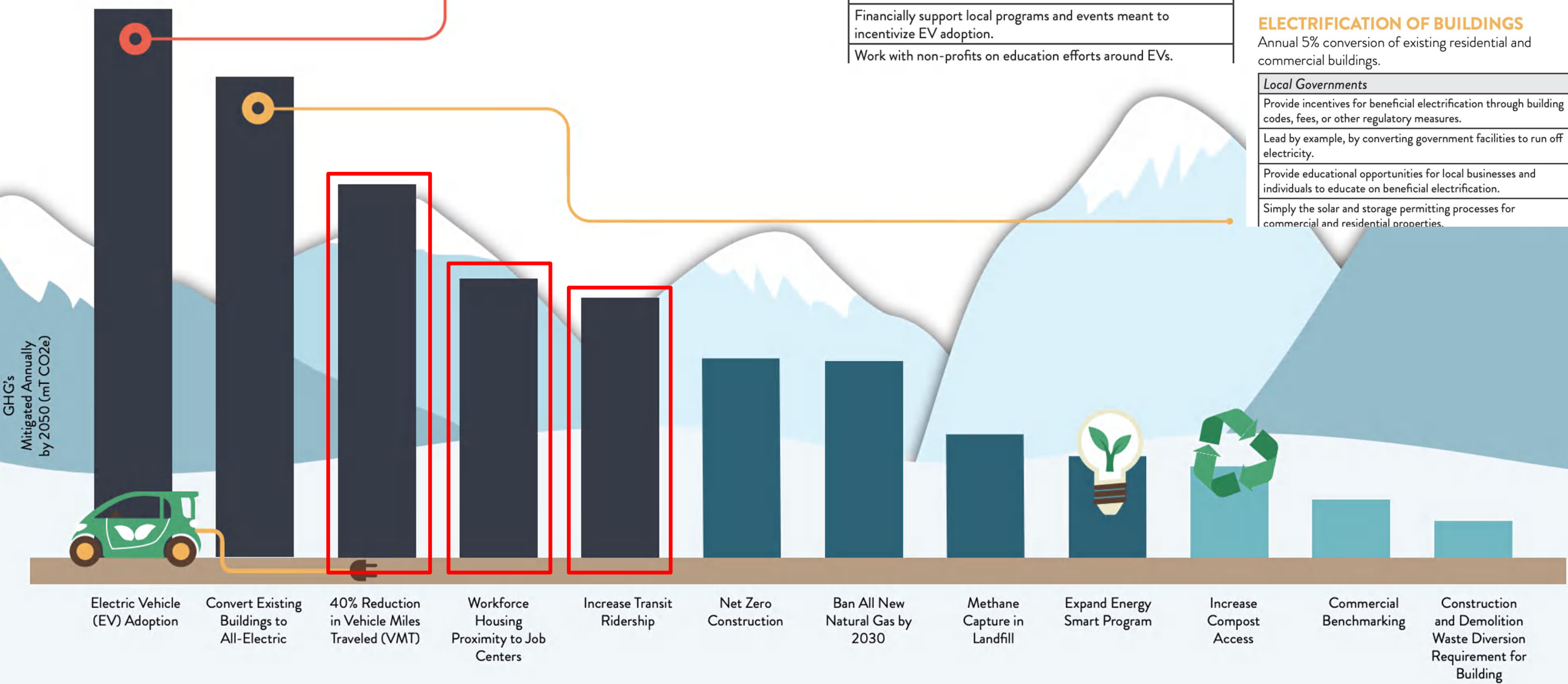
2% EV adoption from 2021 until 2030.  
5% EV adoption from 2030 until 2050.

Local Governments
Support build out of EV charging infrastructure through land-use and building codes.
Lead by example, convert fleet vehicles (bus, car, and other) to all-electric.
Financially support local programs and events meant to incentivize EV adoption.
Work with non-profits on education efforts around EVs.

## ELECTRIFICATION OF BUILDINGS

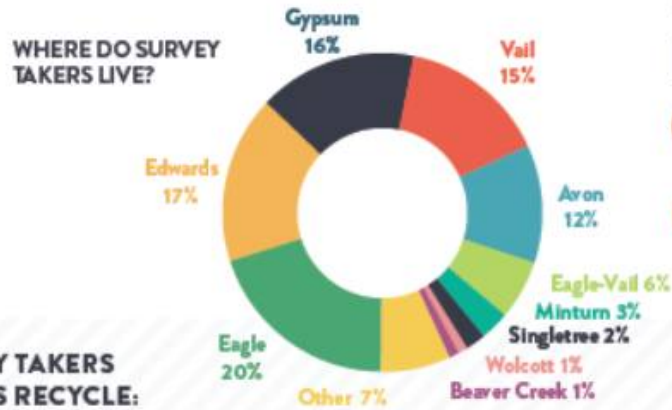
Annual 5% conversion of existing residential and commercial buildings.

Local Governments
Provide incentives for beneficial electrification through building codes, fees, or other regulatory measures.
Lead by example, by converting government facilities to run off electricity.
Provide educational opportunities for local businesses and individuals to educate on beneficial electrification.
Simply the solar and storage permitting processes for commercial and residential properties.



## Climate Action Community Survey Results

In 2018 the Climate Action Collaborative asked the Eagle County community to participate in a Climate Action survey to understand the attitude on climate change locally. The survey asked community members to comment on the sustainability actions they already participate in and what future sustainability efforts they would be in support of. The results of this survey demonstrate that our community is to act on climate change and is supportive of local efforts to do so!



### SURVEY TAKERS ALWAYS RECYCLE:



### SURVEY RESPONDERS WERE SUPPORTIVE OF LOCAL EFFORTS TO:

promote climate change education and promote sustainable practices in local schools

engage school children and their families to create future environmental stewards

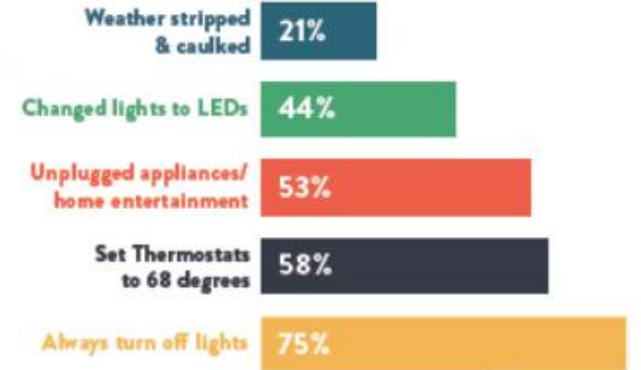
provide incentives to landlords to use more energy efficient appliance

promote sustainable water use in hotels

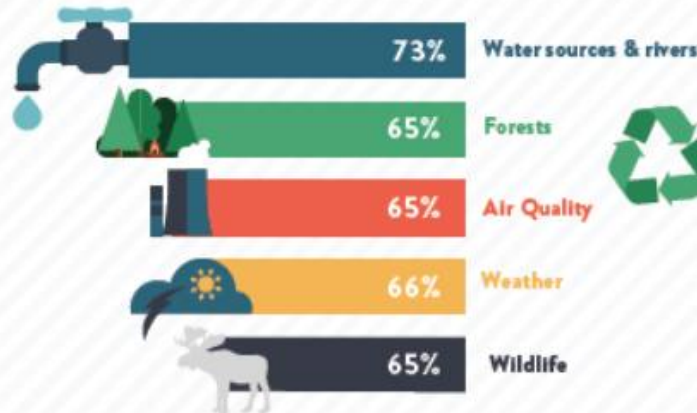
**86% THINK LOCAL GOVERNMENTS NEED TO ACT ON CLIMATE CHANGE**



### WHAT DID YOU DO AT YOUR HOME?



### CONCERN FOR RESOURCES?



### BIGGEST BARRIERS

#### RECYCLING

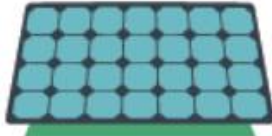
don't know how a lot of effort no recycling at apartment no space

#### ENERGY EFFICIENCY

someone else is in charge of maintaining the residence and they can't afford to fix it

# Example Projects

## COMMUNITY IMPACT HIGHLIGHTS



Rebates for rooftop solar through Walking Mountains Energy Programs

**DOUBLED**

**HOLY CROSS ENERGY  
COMMITTS TO ACHIEVING  
70% RENEWABLE ENERGY  
SOURCES BY 2021**



**ELECTRIC  
BIKE SHARE  
SYSTEM**  
e-assist bike demo



Eagle County  
hosted a 3-month  
**Electric Vehicle  
Sales Event**  
with regional partners

Holy Cross provided  
**FREE EV chargers**  
for homes and businesses



Town of Avon  
**BANS**  
plastic bags

**US GREEN BUILDING COUNCIL**  
starts new chapter in Eagle Valley  
to engage local builders in green  
building best practices.



AVAILABLE TO ALL  
EAGLE COUNTY RESIDENTS



CONSTRUCTION + DEMOLITION    COMPOST    TEXTILE RECYCLING



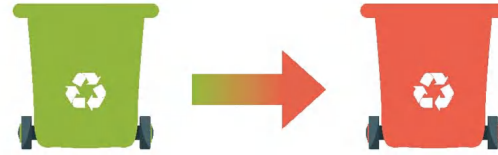
LOCAL GOVERNMENT ENERGY ACADEMY  
FROM COLORADO STATE UNIVERSITY  
HOSTS 2-DAY WORKSHOP  
IN EAGLE COUNTY



**WASTE  
WIZARD**  
EAGLE COUNTY  
RECYCLING APP  
LAUNCH

# Be Better At Recycling

**WHY?** One bad bin can contaminate a truck of good bins. When in doubt, check the Eagle County Waste Wizard App.



## Put In Your Recycling Bin



Glass Jars  
*w/out lids*



Plastic Bottles, Tubs, Jugs & Jars  
*w/ lids*



Tin Cans



Aluminum Cans  
*plz don't crush*



Glass Bottles  
*w/out lids*



Paperboard  
*no frozen food boxes*



Paper



Newspaper



Office/Mixed Paper



Magazines



Junk Mail

## Don't Put in the Recycling Bin It Goes Somewhere Else!

- Electronic-Waste
- Greasy Pizza Boxes *compost if you can!*
- Large metal
- CFL Light Bulbs
- Syringes & Needles
- Textiles

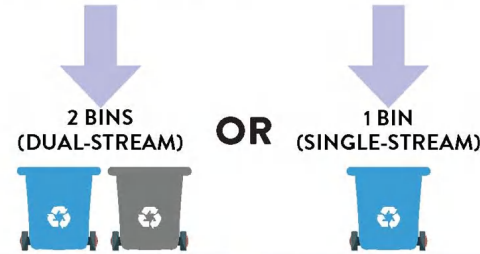
Check the **Waste Wizard** app on where to take these items in the county.

## Never Put in Your Recycling Bin

- Plastic Bags *don't bag your recyclables*
- Broken Stemware or Ceramics
- Small Plastics *utensils, cold/hot drink lids, dressing cups*
- #7 PLA Plastic
- Styrofoam

## To recycle right, start here:

HOW DO YOU RECYCLE AT HOME?  
DO YOU PUT YOUR RECYCLING IN...



Dual-stream (2 bins) recycling requires that you separate your plastics, glass, cans, bottles from the paper and cardboard. In dual-stream, cardboard is not collected curbside and should be taken to a drop-site.

> COMMUNITY DROP-SITE  
> VAIL HONEYWAGON  
in the communities of:  
TOWN OF EAGLE  
TOWN OF MINTURN  
ARROWHEAD

Single-stream (1 bin) recycling allows you to put all recyclables into the same bin.

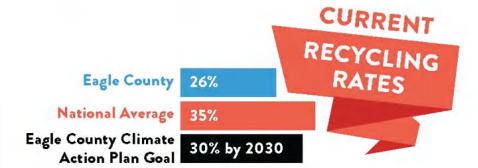
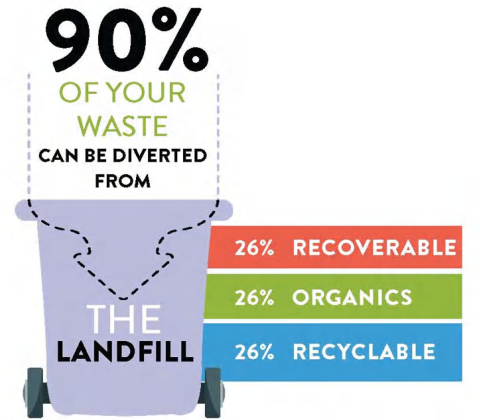
Note that most businesses use single-stream.

> VAIL VALLEY WASTE  
> WASTE MANAGEMENT  
> VAIL HONEYWAGON  
all other residential pick up aside from the dual stream communities on left.

## IT'S TRICKY

- these items depend on your stream-  
check the **Waste Wizard App** for answers

- Aseptic Cartons *juice and milk cartons*
- Cardboard
- Clam-shell containers *plastic fruit & veggies containers*
- Plastic cups
- Shredded Paper
- Starbucks/other hot cups
- Tin Foil *clean and balled up*



ClimateActionCollaborative.org  
#BeBetterTogether

The Eagle County Waste Wizard is Your Free Recycling App



Download on the  
App Store

ANDROID APP ON  
Google play

Ask the Waste Wizard at  
walkingmountains.org/recycle



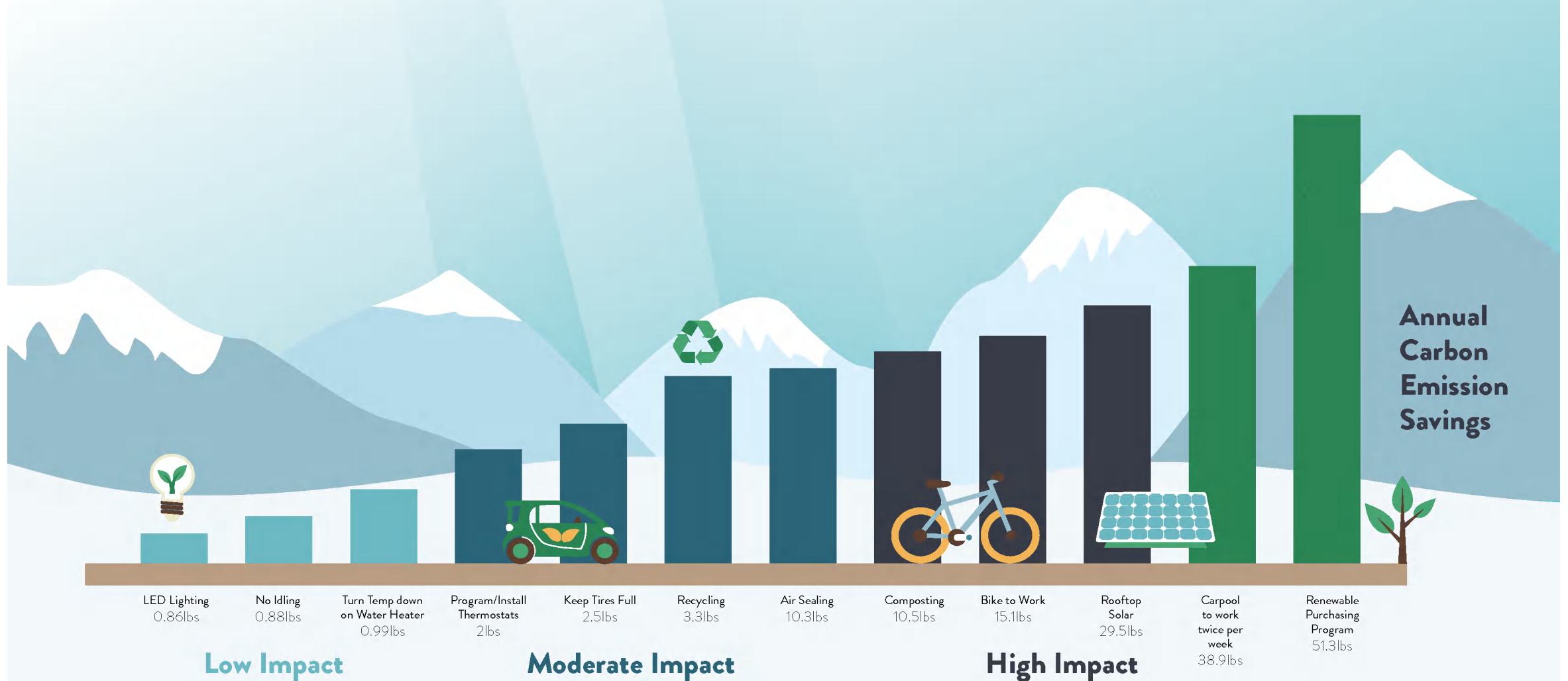
CLIMATE  
ACTION  
COLLABORATIVE

walking mountains  
sustainability



# Behavior Change

## How do your actions stack up?



# CAP Reprioritization

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CAP Addendum + Water, Carbon Sequestration, Education & Outreach Strategies

<b>Commercial Building</b>	Implement benchmarking program
<b>Residential Building</b>	Adopt “above building code” standards
<b>Transportation</b>	New & Improved Infrastructure to support multi-modal transportation; park n rides, complete and connected bike commuting paths and lanes throughout the County
<b>Energy Supply</b>	Explore new technologies, such as storage, to increase renewable energy usage
<b>Materials Management</b>	Divert 100% of organics currently landfilled by 2030 through compost



# Accomplishments

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- ✓ Accelerated the climate conversation in the valley
- ✓ Expansion of or creation of new sustainability departments or positions with partner entities
- ✓ County-wide collaboration on outreach and education efforts
- ✓ Connecting partners to resources
- ✓ Connecting entities to work on co-beneficial projects



**MOUNTAIN  
TOWNS  
2030**

We believe mountain towns have the power to have a global impact on climate change. MT2030 is a coalition of mountain towns committed to work together to aggressively reduce their carbon emissions to net-zero and hopefully by the year 2030.

We help mountain towns accelerate their progress towards their net-zero goal the following workstreams: **Setting Goals** by signing on the MT2030 Pledge, analyzing and tracking carbon emissions, and prioritizing carbon reduction objectives.

**Finding & Implementing Solutions** by applying the Project Drawdown comprehensive framework to identify high-impact opportunities, recommending experts, and sharing know-how and experiences spanning policy-making to technical information.

**Influencing Others** by communicating the successful efforts of MT2030 communities and partners.





## Four Planning Sectors:

- Health and wellness
- Economy
- Infrastructure
- Natural resources



## Health and Wellness Resilience Strategies:

- *Build community equity, trust, and civic engagement*
- *Ensure the health, safety, and well-being of all community residents, visitors, and workers during and after a disaster.*
- *Support frontline communities in preparing for and recovering from extreme weather events.*
- *Enhance community wellness by investing in social infrastructure and increasing community connectivity in neighborhoods.*
- *Increase public awareness of air quality impacts, monitoring, and response.*



## Economy Resilience Strategies:

- *Expand community engagement and education focused on behavior changes that enhance resilience and sustainability.*
- *Support the financial stability of frontline families and communities.*
- *Support affordable housing and living wages for all residents.*
- *Support the growth of a diverse economy.*



## Infrastructure Resilience Strategies:

- *Create redundant and resilient utility infrastructure with a focus on energy, water, and telecommunications.*
- *Foster and enhance coordination between organizations for pre- and post-disaster response.*
- *Ensure safe, effective, and equitable multi-modal evacuation strategies for the County.*
- *Enhance vegetation management, defensible space, and building hardening efforts across the County.*
- *Enforce Wildland Urban Interface (WUI) policies, zoning laws, and regulations.*
- *Facilitate flexible deployment of temporary housing post disaster.*





## Natural Resource Resilience Strategies:

- *Create wildfire resilient landscapes.*
- *Create resilient wildlife populations by maintaining healthy ecosystems and habitat connectivity.*
- *Adopt and enforce requirements that improve water quality and quantity.*
- *Encourage adoption of innovative indoor and outdoor water efficiency programs and strategies.*
- *Create a multi-jurisdictional program to develop and implement best management practices for post-fire recovery.*
- *Implement educational programs to encourage responsible use of resources and protect ecosystem health.*







**Questions?**

**Thank you!**

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