

# Climate Action Collaborative for the Eagle County Community

## Collaborative Members' Meeting – Notes

**Date: Monday, June 17th, 2019 Time: 8:45 a.m. – 12:00 p.m.**

**Location: Miller Ranch Community Center, 25 Mill Loft St., Edwards, CO**

8:45 a.m. Gather (refreshments provided)

9:00 a.m. Welcome and meeting goals!

9:05 a.m. Session 1: Administrative Updates

- Review updated forecast and key takeaways
  - looked at BAU Scenarios
  - included the two clean energy commitments from Holy Cross and Xcel
    - 70% by 2030
  - Commercial and residential emissions are slowly going down over time by 2030, then increase slightly due to the community's growth rate
  - Surface travel: increase by 2025 (emission reduction interim goal), takes up huge chunk of emissions by 2050
    - total BAU + Clean Energy Commitments will be a 9% reduction in emissions by 2025 and a 6% reduction by 2030
      - buildings by 2025 with the Clean Energy Commitments by 2030, we will have achieved a 28% reduction in residential and commercial building emissions
      - transportation by 2025 with BAU transportation emissions will increase by 21%
      - air travel by 2025 with BAU air travel emissions will increase by 33%
      - landfill will increase by 3%
  - takeaways: moving in the right direction - GHG reduced slightly
    - reduction so far is mostly from power supply - HCE + Xcel emissions factor
    - we need to continue GHG reduction efforts in landfill and buildings
    - But! Transportation is the biggest emission source...
- Update on Regional Effort between Pitkin, Eagle, Garfield and priorities
  - Regional Clean Energy Corridor being run by Clear and Holy Cross Energy in Pitkin, Eagle, and Garfield counties
  - priorities
    - public sector RE Development
    - benchmarking/data management & tracking
    - electrification of transportation

- aiming to align goals and create regional cohesiveness
- moving forward Kim will try to pull these conversations in to include the regional efforts and other stakeholders in Pitkin and Garfield counties

9:15 a.m.      Session 2: Sector Working Group Updates

- Materials Management - Melissa Kirr
  - annual waste education blitz
    - annual or bi-annual waste education ad
      - first in july, second possibly in November when more seasonal folks come in
    - large ad in the Vail Daily with information about recycling, with a shareable digital version
      - **things anyone can recycle → things no one can recycle**
      - recycling information about different haulers, stream, pickup vs drop off
      - “always check with your hauler”
      - waste wizard shout out
    - comes with linked blog posts, tips, did you knows, etc
    - everyone please share!
  - Lake Creek Village clean up
    - Total Trash picked up on the property
      - 575lbs of trash collected
      - 79lbs of recycling collected
    - Collaboration with Walking Mountains Sustainability, EVOM, Eagle River Watershed Council, Forest Service
    - reached some extra people in the community
  - Eagle County Diversion Rate 2018 updates
    - **recycling rate trending upward -- 22.2% → 26%**
    - 17% overall diversion
      - overall goal is 30% by 2030
    - organics takes up the largest part of GHG emissions
    - huge bump in total MSW
      - huge year for C&D (hospital renovation called out specifically), some was divertable due to a C&D pilot program
- Transportation - Jared Barnes
  - Bike to Work Day - June 26th
    - grab your bikes and ride!
  - EV Subcommittee to establish a roadmap for deploying DC fast chargers in Eagle County using Charge Ahead grant funding
    - John Gitchell has a list of possible county facilities, some other facilities in the works
  - Bike Share
    - TOV may pilot e-assist bike share

- TOA and County are looking to expand the Zagster system in Eagle-Vail and Edwards
  - looking for funding to expand
- FLM (first-last mile study) - plan for outreach to communities
  - transportation demand tools
  - partner with ride-hailing
    - Mountain Family Health Center as a hub for free ride-hailing
  - expand bike share
  - focus on pedestrian and bike infrastructure around bus stops
- ECO updates
  - marketing plan
    - looking to expand partnerships
  - bikes on buses
    - **how can we improve this system → only two racks currently**
  - transit working with CAC on behavior change work
- Buildings - Nikki Maline
  - LED Swaps for Summer 2019
    - June at Eagle Pool
    - July at Bonfire (free beer!)
    - August at TOA Rec Center
    - September at TOM Town Hall
    - R&H Mechanical booth at Eagle Flight Days
  - USGBC Eagle Valley Green Building Group
    - August 19th LEED GA Training
    - October 3rd green building challenge mini presentations
      - 5 minute presentations for people in the group to share what we're all working on, get feedback, etc
  - Sustainable Building Code Task Force
    - goal is to have one consistent code for the county
    - draft codes by the end of this month, outreach in july and august, finalization in september
  - CAC Energy Services Program
    - ERWSD and R&H Mechanical have signed up
    - free energy walk throughs to CAC organization with Eagle County and Energy Smart/Walking Mountains
    - contact Kim S if you're interested!
  - Benchmarking
    - platforms to engage with more benchmarking in commercial buildings
  - Energy Smart Update
    - data updates
      - 75 residential assessment projecting 20.68 MICO2e annual savings
      - 63 residential rebates
      - 14 commercial rebates issued

- 13 CARE assessment visits
  - total projected savings: 629.58 MICO2e
- Energy Supply Update - Mike Steiner
  - Clean Energy Corridor Effort with CLEER & CORE & HCE
  - 100% RE resolutions from CAC partners
    - great buy in from partners!
    - would like to get some updates for next meeting
  - PuRE calculator
  - RPF for local renewable resource ready by end of year
    - should have more by fall
  - New things from HCE
    - new rates → no expected revenue
      - energy cost adjusted will be rolled into energy costs
    - new board member → Larissa Read
    - priorities for this year
      - hoping to buy into a solar farm on the front range
      - peak time rebate program → piloting and then roll out next year
        - allows members to get credited for reducing usage during peak time events
    - Basalt Vista project should be online by the end of this month
      - families moving in July
      - great data should come out of that, will share accordingly
- Education & Outreach - Paul Abling
  - update on summer campaigns (both ads shared on the slides)
    - REC calculator - June 5-Labor Day
      - quarter and half page in Vail Daily (23 runs)
      - :30 radio spot
      - digital, etc
      - data shows positive, consistent usage, although we can only capture data if people opt to send their results to their email
    - Waste Wizard - June 20-Sept
      - quarter page Vail Daily (41 runs)
      - :15 radio spot
      - digital
      - different than the ad from MMTF section
  - Behavior Change update
    - not quite ready to invest in an app - budget is there but true behavior change work needs to happen first
    - campaigns in the fall through winter
      - alternative commuting

- Hill Avieum or Agency Partner worked with CDOT and some similar but larger campaigns on the front range that we can learn from
- Climate Action Earth Day Pledge
  - soft way to grab information so we can generate emails to send out
  - proved we could get pledges if we push it
  - CAC information given out at the LED swap
- email and web performance
  - one off emails are performing well
    - fewer people but more targeting and engagement
  - increase in evergreen content, working group traffic flat
  - new WM website, not sure what will happen to the CAC website

9:45 a.m.

### Session 3: Community-Wide Efforts

- Education & Outreach
  - Annual Recycling Blitz
    - please send out! we will format it appropriately, but please send to whatever communities your group has access to
    - the goal is to get people to start paying attention to waste and take responsibility for waste management
    - will be out mid-july in english and spanish
  - Behavior change - alternative commuting
    - milestone 1: business & community engagement
      - marketing campaign around carpooling, business engagement, etc
      - now-winter
    - milestone 2: carpooling into existing community initiative - SOLE power
      - track bus trips, carpooling, working from home
      - people could still win prizes!
    - milestone 3: work with CAC partners to build carpooling infrastructure into existing infrastructure
      - parking benefits at ski resort?
- Implementation
  - Building Code Task Force
    - please send feedback on draft codes (to be out soon)
    - update to existing exterior building energy offset program, hope to get others in the community to adopt
    - goal is consistency among the region
  - Benchmarking
    - B3 benchmarking platform - a tool that kicks Energy Smart up a notch
    - we can get 50 buildings on the platform through the pilot program

- let Kim S know if you are interested in participating in the pilot
- Local PV Development – HCE RFP
  - shout out - there may be some great partnerships available in the Collaborative!

10:00 a.m. Break

10:15 a.m. Session 4: The Water and Climate Change Nexus - guest speaker: [Heather Schrock](#), Director, Environmental Partnerships, [Bonneville Environmental Foundation](#)

- helps a variety of national stakeholders get sustainability goals on track
  - large presence and work in Colorado
- BFF water programs
  - Business for Water Stewardship
    - large businesses engage in water stewardship
  - Change the Course
    - marketing platform for all participants to utilize water campaigns
  - Water Restoration Certificate
    - available for anyone to engage in water stewardship
  - Model Watershed Program
    - best-practices funding models
- nexus: connection, link → how are water and climate causally connected?
  - water cycle, water quality, water in the oceans, water and energy
  - <1% of earth's water is both fresh & accessible
- beyond the tap thinking
  - water embedded in everything we use
    - 37 gallons for one cup of coffee, 634 gallons to make a burger, 700 gallons to make a cotton t-shirt
- water/energy connection
  - using water to make energy, using water to transport energy
  - 143 billion gallons of water per day nationwide to run power plants
  - 1200 gallons of water used per household per day when considering direct AND indirect water use
- water cycle
  - changes in the water cycle are increasing the risk of droughts and floods
  - leads to extreme rain and extreme drought due to deluges
  - snowpack decline
- water quality and pollution
  - leads to more run off, algae blooms, changes in CO2 storage
- water in the oceans
  - drawdown of stores
    - most of our water is stored in glaciers
    - warming oceans are undercut glacial storages

- expected to lead to hydrofracturing: an accelerated loss of ice sheets
- sea level rise
  - expansion and quantity
- ocean acidification
  - most urgent effect → seen in coral reef loss, aquatic ecosystem changes
  - ocean is trying to absorb in the increase in CO<sub>2</sub> in the atmosphere, leading to acidification
- locally - Colorado River
  - generates \$1.4 trillion in economic benefits annually
  - more than 2 million jobs rely on a healthy river system
  - river reached its final destination (Sea of Cortez) for the first time in 16 years
    - minute 319 - agreement between the US and Mexico to experiment with pulse flow that mimics the natural flow
      - gave water back to the river, restore the ecology of the area
    - conservations groups have planted trees, restored wildlife habitats in delta areas
  - water rights - built on use it or lose it
    - favors over-consumption, especially by farmers with water rights so they don't lose their rights next year
    - Colorado River Delta Water Trust - working on changing water leasing rights
    - collaborative group working to change water rights
- lowest hanging fruit - Colorado businesses can sign the agreement on the engagement pledge!
- questions
  - fracking?
    - built into the stats above
  - has policy been changed around water rights?
    - yes, especially in Colorado, also in Oregon, Arizona
  - magchloride usage on roads policy? (what CDOT uses)
    - not that BEF is involved in yet, but starting to get into water quality so stay tuned
- Heather will be leading the Actively Green small business water workshop this wednesday (June 19)

11:05

Sessions 5: Green Building - guest speaker: Steve Novy, [GreenLine Architects](#)

- are building contributing to climate change?
  - why is energy efficiency so important?
  - can't we just add renewable energy systems?
- how do you design a high-performance building?
  - through a whole systems approach, aka integrative design
  - shell

- the design should be tight, well-ventilated, using sustainable materials
- mechanical systems
  - most energy-efficient systems
- renewable energy systems
  - solar hot water, PV, micro-hydro, wind power
- design charrette process
  - brings all stakeholders together, including owner, contractor, architect
  - able to come away with a clear design, task list, and buy in
- collaborate
  - Joe Lstiburek says to use science! Build tight, insulate right!
- overall goal: reduce energy requirements
- what about existing buildings?
  - roughly 50 million US homes need energy retrofits
  - we can't necessarily just go in and renovate, we have to add insulation
- standards for high performance homes
  - LEED - Leadership in Energy and Environmental Design
  - Passivhaus - reduction of space heating and cooling
  - Energy Star - products, certification
  - HERS - Home Energy Rating System
    - can think of a project in terms of its HERS goal
- Green Building Codes - commercial and residential
  - 2018 IGCC - International Green Construction Code
  - 2018 IECC - International Energy Conservation Code
  - locally adopted codes - example: Carbondale's efficient building program
- case studies
  - next gen high performance homes
    - affordable homes with energy efficiency built in
  - smart design: affordable green-building seminars at ACES Urban Farmhouse
    - teacher housing for a local environmental non-profit (ACES)
    - donated land with the stipulation to keep a garden and chicken coop
    - videos available online about the project
    - main features
      - whole systems approach
      - SFPPF
      - insulation, airtightness, and ventilation
      - heat exchange (HRVs)
      - roof venting
      - HERS rating
      - advanced framing
      - all-electric - why does it matter?
      - electric air source heat pump with radiant slab-on-grade



- PV system - 7kw (roughly home's electricity use on a yearly basis)
  - ReStore Roaring Fork Valley - a 'home' for habitat
    - 60watt PV system
    - LED lighting system
    - insulated locking roofing system (sample passed around)
    - about \$24,000/year in energy savings for ReStore
    - designed to reflect the area's ranching history - more aesthetic than a box
  - small home in Lenado
    - most efficient home they've built
    - off-grid
- consistency in codes would be great!
  - works in 5-6 jurisdictions all with different codes, very confusing
- questions
  - insulated metal panels - is air coming in or out?
    - it's airtight
  - budget on the carbondale house?
    - \$500,000 (not including land)

12:00 p.m. Thank you and adjourn!