Climate Action Plan for the Eagle County Community Stakeholders' Meeting Notes

October 1st, 2018

Miller Ranch Community Center

Today's Goals:

- Share working group updates
- Kate Bailey reducing GHGs through recycling
- Holy Cross's 70/30 commitment
- Keep up momentum

Governance Update

- New budget \$139, 798
- Current Fundraising Amount \$85,008

Sector Working Groups

Energy Supply

- SolSmart Minturn
 - o Org that offers free services to municipalities for helping residents implement solar
- Currently reviewing current code to then expand residential solar projects in TOM
- Increased local demand for on site solar
- Tax credits are expiring in 2020
- Commercial and residential increase in solar demand
- Holy Cross Energy's Commitment 70/30
 - o Renewable Energy Purchasing Program
 - Working with buildings group to ensure all are aware of this opportunity
 - Solar supports new array to be built in Gypsum
- Need to get more partners involved
 - Solar installers
 - School district
 - Clean energy collective
 - o Garfield Clean energy
 - Solar-ready through USGBC
- WMSC as the local demo
 - New Borgen Precourt Center for Sustainability
 - o LEED certified
 - 42 kW solar panels
 - No fossil fuels
 - o Electric heat pumps
 - Modulating electric boilers
 - EV Station
 - o Pathway to net zero

Marketing

- Logo, brand, website developed
- Blog has been established; gathering more content
- Paid local campaigns
 - Vail Daily
 - Google PPC
 - o Facebook
 - KZYR
 - Recycling App Eagle County Waste Wizard
 - Initial call to action is the Climate Action Pledge
- Collaborative branded items ordered for use at events

Residential & Commercial Buildings

- Reduction of Co2 needed by 2025: 351,464 metric tons of CO2
- Recognize WMSC for sustainability net zero ready, all electric
- EnergySmart CO
 - o Reaching over 100 homes/year
 - Total reduction thus far of 450 metric tons/year
 - o 2018: 900 metric tons reduced
 - Solar projects have drastically increased
 - Largely thanks to TOV & TOA programs, and EC funding
 - o Group has voiced interest in developing a commercial buildings program
 - For large structures
- Measurement and verification
 - Big building operators generally don't have these ideas in place
 - o Benchmarking buildings
 - Eric Boley working to train building operators in county-operated buildings
 - Energy Star Portfolio Manager used within Eagle County buildings
- USGBC
 - Local chapter within the valley
 - o 2 meetings so far
 - Next topic on Energy Start Portfolio Manager and benchmarking large buildings
- Building Codes
 - Working group forming; Adam Palmer leading this charge
 - ECO Build and exterior energy offsets
 - Will this new group include water efficiency?
 - Only interior water use is being captured right now
 - Intent to include exterior water eventually, but want to work through ERWSD in the future
 - Kim S: Water doesn't play into the building code so far

- Cat (ERWSD): an employee is currently working on water rights with Eagle County, switching out meters with smart meters (up to the second water use readings), working on budgeting now
 - Targeting specific users to reduce large use and ensure compliance
 - Buildings can opt into a water demand program to cap their own usage Avon committee working on this?
- Further discussion on where water efficiency falls in this
- Metric tons of reduction conversions to eliminate any confusion
 - 1 kW solar = 1 metric ton reduction
 - Insulation improvement = 4-5 metric tons
 - We are striving toward 35, 000 metric tons a year
 - Annual goal cutting 5% of county emissions per year (315 tons per year)

Transportation & Mobility

- Bike share ECO Transit decided to step up and become a bike share provider in addition to bus
- First and Last mile study planned for 2019
- Received 1.3 million dollar LoNo FTA grant for electric buses
 - Can create cost savings to increase routes in future years and get more vehicles off the roads
 - o Can encourage other fleets to go electric, reducing emissions
- Transit ridership goals and strategies
 - Bus Ridership subcommittee Oct 23rd
- ICLEI VMT measurement protocol to be included in GHG inventory
- Develop multi modal transit oriented recommendations for master plan
- 2019 Zero Emission vehicle and low emission vehicle rulemaking
 - Large amount of traction led to further strides in rulemaking for zero emission vehicles (rather than just low emission vehicle)
 - o If more choices existed, we'd further electrify local fleets
 - o Pushback: free market argument
- E Bike Share
- EV Sales Event- ends Oct 31
 - Holy Cross also sharing
- State of CO charging station grants
- Sole Power challenge ends today
 - Best year ever
 - o 42,000 lbs of GHGs reduced

Materials Management

- Eagle County Waste Wizard
 - Official launch date: Oct 22nd
 - Working with entities to have as much accurate info in the app as possible
- Waste access audit
 - Avon and Edwards Metro district to determine public access to recycling bins in these areas; update from 2014

- Recs given to Edwards Metro district
- Education and Outreach subcommittee
 - Lake Street village multifamily unit in Edwards
 - Recycling in place but very contaminated
 - Working on engagement for outreach, new signage, education
 - Use as a model to target other multifamily communities and
- Over 60 days of zero waste events this year
 - Over 80% diversion rate
 - Many first time events, vendors and contractors
 - New proposals and partnerships in the works for 2019
- C&D pilot facility
 - Clean concrete and concrete with rebar
 - Wood accepted without adhesives
 - Facility MUST be contacted first; pre-approval required due to contaminants, hazards, etc.
 - Already on track for 1,000 tons per month to be recycled
- Commercial Compost Facility
 - Up and running any day now! Waiting on final air quality permit
- Business Recycling Challenge in Town of Vail
 - 7 businesses involved
 - Sweet Basil, Vail Spa, Manor Vail, Steadman Clinic, McNeill Property Management,
 Mountain Standard, Vail Mountain School
 - Targeted toward education
 - o Will there be another challenge?
 - Hoping for annual challenge

Guest Speaker: Kate Bailey, Eco-Cycle

- One of the oldest and largest NGO recyclers in the world
- Located in Boulder, CO
- Hands on experience
- 65 employees, 50,000 tons per year
- Run the Boulder County Recycling Center
 - o MRF dual stream but converted into single stream
 - In the business realm fee for service
- First hauler to offer compost
- First center for hard to recycle materials
 - o Coffeemaker, mattress, etc.
 - o Add on one new material each year
 - First to take block Styrofoam (EPS)
- How does recycling make a difference on climate? It is the fastest, easiest, cheapest solution.
 How?
- Recycling and climate
 - o 89 million tons recycled in US in 2018
 - 38 million cars off road in the year (all of CA's cars)

- o 3 ways
 - Look at product lifecycle
 - Manufacturing is 57% of a product's footprint (energy)
- 1. Recycling saves energy, and therefore saves GHGs
 - Most energy saved from aluminum, then copper, plastic, paper (68%), steel
 (56%), then glass (34%)
 - Energy Savings offset transportation GHGs from distributing these items and recycling them
- 2. Methane from landfills
 - Traps 84x more heat than CO2
 - 12 year lifetime and short term climate priority
 - Eliminating organics from the landfill will eliminate most methane produced
 - CA example: 75% organics out of the landfill by 2025
 - From their Climate Action goals
 - Targeting methane as a climate pollutant
 - Not looking at it from a diversion perspective, but a carbon impact one
- o 3. Compost
 - ½ inch of compost on some land can reduce carbon emissions
 - Incorporating into farming strategies
 - Carbon sequestration model
 - Apply compost, graze vs no graze, keyline for water retention
 - Helps us pull emissions down
- Recycling as a best kept climate secret why?
 - Waste isn't seen as a priority climate solution in GHG inventories, typically seen as 3-10% of overall emissions
 - Climate is according to geographic boundaries, but this leaves some items out
 - Agriculture food
 - Production of materials we need and use every day
 - Carbon emissions are global!!!!
 - Individual footprints are typically 40% composed of emissions from consumption
 - Nationally 42% of GHG emissions comes from how we produce, consume, and dispose of our stuff and our food
- Why should this be a priority solution?
 - Accessible to everyone, every day
 - Cost effective
 - Short term impacts
 - o Proven solutions, ready to implement

The State of Recycling in Colorado

- CO is one of the worst states at recycling
 - o 12% compared to the national average of 34%
- What are the obstacles?
 - Cheap landfills!

- No state support
- o Limited influence
- Distance to markets

The China Factor

- Recycling → single stream
 - More contamination
- China buying plastic and paper, fueled its economy
 - So much cheaper to send to China than keep in country
- China closed its doors 2 years ago; not buying recyclables anymore
 - Material prices dropped 40%, processing costs up 15%
 - Additional investment in education and better processing is required
 - Hardest hit on west coast cheaper to ship to China from CA than from CO

Plastics!!

- Only 9% of plastics ever made have been recycled
- o By 2050 more plastic in the ocean than fish
- Plastic production on course to quadruple by 2050
- Much of the issue lies in production, not recycling
 - Max 50% plastic can be recycled
 - 30% of products need to be redesigned, changed, gotten rid of, etc.
 - 20% can be reused
 - More emphasis on reduce and reuse

Eagle County

- Waste characterization study done
- 80% of what's in our trash could be recycled and/or composted
- o Landfill fees: average landfills charge 2-13 dollars per ton; we are at \$1.17
- Market development
 - Recycling Business Assistance Center: North Carolina
 - Created jobs, 13 billion dollar impact
 - Momentum Recycling in Broomfield
 - Operating at 60% capacity
 - Goal is to increase glass recycling threefold

Commercial

- Businesses and multifamily units
- Up to 60% of waste stream captured in this area
- Talk about recycling and climate
 - Saves GHG equivalent of taking 19,000 cars off the road each years
- Building code updates
 - Equal space for recycling bins in new buildings
 - Trash dumpster and recycling dumpster
 - Apply compost for commercial landscaping projects
 - Require recycling for C&D materials
 - These areas also save water
 - Make these MANDATORY not optional
- Changing data metrics

- More focus on lbs/capital to landfill and capture rates
- Less focus on diversion rate
 - More items can be recycled, but that doesn't mean they actually are
 - What's available vs. what people are doing

Kate Bailey, Eco-Cycle, Policy & Research Director kate@ecocycle.org

Q&A

- Adam Palmer Eagle County if we can't incorporate countywide policy, what do you suggest?
 - o Cities really make the change and policy; county is more of a key player/stakeholder
 - As a convener of cities and infrastructure development
 - Ex- boulder cty set goal for country facility and also a goal for the cities
- Town of Avon (Sarah) Styrofoam ban being proposed
 - Condenser, recycling facility local
 - Kate: same category as straws and plastic bags
 - Not a huge impact climate-wise, but strong impact via messaging and public awareness
 - There is a state statute that prevents cities from banning Styrofoam
- Concept of dirty MRF
 - o Has been considered here but not next option as it leads to a poor product
- Question about compost collection and how it's worked in other communities in CO
 - 5-7 communities with curbside composting for residents
 - Picked up every 2 weeks
 - Huge potential for businesses
 - Schools, grocery store
 - Push waste reduction and edible food recovery first
 - Roaring Fork Valley does offer curbside composting
- Question about "invisible" contaminants of compost pesticides, herbicides, etc.
 - Commercial compost is actually highly regulated and digested by bacteria but is generally safe
 - Has been tested
 - Compost is the best tool we have for biological remediation, working with statewide and nationwide groups to address that concern
 - Quarterly meetings to prevent spread of these toxins and how to eliminate, reduce, etc. moving forward
 - Businesses get a discount if they tell facility what they are using (for landscaping materials especially) to help determine where compost is being spread

Holy Cross Energy 70/30 update

Jenna Weatherred & Steve Buening

Electric Cooperative

- 2030 goal: supply at least 70% of the power they provide with renewable and clean sources
 - Currently at 40%
 - Complete these goals without charging more than the current price for energy
- Clean vs renewable
 - o Biomass clean (trees don't grow fast enough to be considered clean)
 - Solar renewable

How will they achieve this percentage by 2030?

- Long term goals
 - Must achieve utility scale solar and wind; goal by the fall of 2020
- Lay off production from coal
- Develop more renewable resources already in the pipeline
 - Local attributes Pitkin and Gyspsum
- Create opportunity to replace coal-based energy supply
 - Renewable energy "lower on the stack"
 - Possible replacement for another utility's generation
- Integrate demand-side into power supply planning
 - Shape demand for use of renewable options
 - o Design programs and rates to share benefits with members

EV Program

- If goal is to reduce consumption and demand, then we lose opportunity for incorporating as much renewable supply
- Beneficial electrification
- Keep focus on energy efficiency, but know we can actually increase consumption without increasing emissions and negative impact

Differences between different types of coal generation:

- Comanche 1, 2, and 3
- Issues with Comanche 3 depreciation expenses

Background on Gypsum Solar Array

- 34 acres
- Power purchase agreements

Income qualified rebates for solar energy/farms/etc.

If a private company wants to invest in local renewables, what would you recommend?

- Do they want to manage a project themselves with developers?
- Rebates given to those who put together arrays, even if already built

Next Steps/Meeting:

Social Marketing Campaigns

- Convene Education and Outreach group within the next quarter to develop a plan
- Identify target behaviors to prioritize in terms of climate action
- Which behavior(s) will have the biggest impact on climate change prevention/GHG emissions reductions?

Dec. 10th Next Meeting

How do you envision we put together this plan?

1-2 work sessions in Dec to talk about next year's behavior change campaign