

Climate Action Collaborative for the Eagle County Community Collaborative Members' Meeting – Agenda

Monday, March 9th, 2020, 1:00pm - 4:00pm
Town of Avon, Town Hall (100 Mikaela Way, Avon CO 81620)

1:00 Gather (refreshments provided)

1:10 Welcome and meeting goals!

1:15 Session 1: Eagle County Drawdown Review

Overview of Modeling Approach

- Speakers: Dr. Abel Chavez & Valeda Scribner from Community Solutions Incubation & Innovation (CS2I) Lab

CS2I Lab & Eagle County

- In 2016, the lab assisted in forecasting Eagle County's GHG emissions to 2050 using our 2014 GHG Emissions Inventory
 - Forecasts are grounded in the BAFT (baseline, accounting & forecasting tool) developed by the lab, which is used for measuring, benchmarking & forecasting community-wide GHG emissions
 - CS2I Lab modeled actions based on literature reviews, assumption for plausibility & information the lab received from Kim S. & John Gitchell
 - These were then narrowed by the Climate Action Collaborative Members

Results of Forecasting

- Highest Emissions Reduction Potential:
 - (1) Transportation
 - increase transit ridership (until 2030)
 - other actions having to do with transportation
 - (2) Beneficial Electrification of Existing Buildings
 - 5% turnover starting in 2021, eventually reaching 100% electric buildings by 2040
- Other Actions modeled as well
 - Such as C&D diversion

Deeper Dive: Buildings - Group Lead Kim S

- **Assumptions**
 - The BAU projection is based on jobs in Eagle County, which is a bit wonky
 - Job growth rate is 1% or 2%
 - Assumptions: Commercial Projections
 - (1) HCE achieves 70% renewable electricity by 2022
 - (2) HCE achieves 100% renewable electricity by 2030

- (3) Xcel Energy achieves 100% renewable electricity by 2050
 - **Actions Modeled: Commercial Buildings: 6**
 - **Scenarios**
 - Scenario 1: Smart Regs: has least impact
 - Scenarios 2 & 3 emissions plateau
 - Scenario 4: 5% conversion every year in existing building → gets us to net zero emissions by 2040 (beginning in 2021)
 - Scenarios 4, 5 & 6 have greatest impact & similar
 - & 5 and 6 more impact than 4
 - *How will Scenario 4- with 5% conversion every year in existing buildings work?*
This scenario may not be feasible right now, but is this where we want to focus our efforts moving forward? That's what we're asking right now.
 - **Discussion**
 - *What is considered commercial?* 4-8 story multi-family buildings are sometimes considered residential, and sometimes considered commercial. In this case, we aren't sure where those buildings fit into these projections.
 - Ex.: Falcon Point has both commercial and residential
 - *Net zero?* Building consumes as much as it generates with its own solar power
 - *What about snowmelt?* We can't pull that data separate from each buildings' data, so it's included in here, but we can't look at that separately
 - Waste Scenario: anaerobic digester & harness natural gas reduced natural gas usage and landfill emissions simultaneously
 - Going after the end-of-life conversion is easier than asking people to convert equipment that's life hasn't reached its end
- **Actions Modeled: Residential Buildings: 6**
 - **Scenarios**
 - Scenario 4: Home energy assessments scenario assumes the assessments lead to additional energy conversion, retrofits, and other improvements
 - Scenario 6: Adopting a program similar to Boulder's Smart Regs for rental properties, which requires long & short-term rental properties to meet a certain HERS score
 - The result of this action is negligible because property owners have no incentives to upgrade so they don't comply thus defeating the purpose of the program
 - Cons: Difficult to administer; a wide variety of types of properties
 - Assumptions: current buildings meet a 50 HERS score
 - **Discussion**
 - Some scenarios can't be stacked or considered in aggregate with others, because the emissions reductions overlap

Deeper Dive: Transportation - Group Lead John G

- **Actions Modeled: 4**
 - **Scenarios**
 - Scenario 1: 40% reduction in VMT

- Scenario 2: 2% adoption of EVs annually thru 2030 and 5% annually thru 2050
 - Scenario 3: 5x transit ridership by 2030
 - Scenario 4: 50% of workers live within 5 miles of place of employment
- **Discussion**
 - EV adoption strategy (2% to 2030, 5% to 2050)
 - Q - What is the current adoption rate in CO and nationally, and how do these % targets compare to what is happening already?
 - We talked through some community strategies to support rapid adoption –
 - fleet adoption by local governments, workplace charging, providing home chargers, incentives for HOAs in MF,
 - concept of "future proofing" EV charging sites, support for sales events, EV car share or "Borrow and EV" program,
 - "EV charging" signs on I-70 to raise awareness
 - Barriers - high demand for AWD high clearance SUVs and short supply of these vehicle types
 - Cost barrier and lack of charging stations in multifamily neighborhoods
- On the topic of reducing VMTs - no questions about the modeling, topics discussed -
 - Need for alternate pathways - designated traffic lanes for BRT, railroad, bike paths off of roadways
 - Support for incentive programs (Holy Cross, ERWS, Sole Power)
- Increasing Transit Ridership - no questions about the modeling
 - Observation on behavior / preferences - people don't like to ride on big buses, prefer smaller vehicles -
 - Suggested that transit providers consider a mixed fleet that uses smaller vehicles (sprinter vans etc)
 - Importance of transportation for events and recreation, and encouraging transit / carpooling

Deeper Dive: Materials & Waste - Group Lead Melissa K

- **Actions Modeled: 6**
 - **Scenarios**
 - Scenario 1: 100% of yard waste diverted from landfill
 - Scenario 2: Cardboard ban at landfill in 2022
 - Scenario 3: 100% Composting Action: 1 of 2 most significant impacts
 - Scenario 4: Install Anareobic digester at landfill for organics
 - Scenario 5: C&D Diversion: 2nd of 2 most significant impacts
 - assumption that 40% overall waste is C&D in Eagle County
 - Scenario 6: 20% Food Waste Reduction: small impact
 - **Discussion**
 - Together, these 6 actions modeled would have significant impact
 - Modeling CO2e
 - **Questions**
 - Scenario 1 – 100% of yard waste divereted from landfill by 2030
 - Could the Compost facility take all the yard waste being diverted?
(Shawn Bruckman question)

- 4 k to 6 K tons in landfill a year
- Concerns about contaminants and herbicides in yard waste going into the compost facility (mostly concerned about Ag waste)
- Do we have an end market for end product using yard waste?
(MMTF question)
- Scenario 2 – Cardboard Ban at landfill by 2022
 - No concerns
 - Would all of the 100% Diversion of cardboard be through recycling?
 - Does this model take into account the transportation of the material to MRF or end-markets? **No (answered yesterday)**
 - What about using fungi to break down material? **(MMTF Question)**
- Scenario 3 – 50% of organics composted by 2025 and 100% composted by 2030
 - What is the definition of organics in this scenario? – Cardboard, paper, etc?
 - What are the numbers used/Where did the numbers come from this modeling scenario?
 - Could the compost facility take 100% of the organics? **(Shawn Bruckman)**
 - Do we have an end-market for this much compost? **(MMTF Question)**
- Scenario 4 – Install Anaerobic digester at landfill in 2022
 - Sounds expensive
 - Does this include the biosolids from the waste water treatment or just organics from study?
 - What about something that can take all the waste – not just organics?
 - What other bi-products come out of the anaerobic digester?
- Scenario 5 – 100% diversion of C&D waste from landfill by 2022
 - Are we sure this only includes the materials described in the Building Code recommendation?
 - How was this calculated was it the WARM Model? What's the breakdown of assumed material types in this 40%? If there isn't a breakdown what was the assumed emissions per ton?
 - What was clean wood defined as in this model?
 - Want to make sure this scenario and Jesse's definition for the C&D program are the same
 - Implementation would be a challenge
 - Space constraints would be a challenge
- Scenario 6 – 20% reduction in food waste produced by 2025
 - Where did this baseline number come from? *More around the tonnage/percent of the food waste specifically.*
- General Questions

- Why not the MRF to single-stream as a scenario? This could be a hard one, because we will need more data from VH on all of their transportation, etc. Some of the group were interested.
- What about scenario of collection routes changing? **(MMTF Question and Research needed)**
- Sequestration – how can we include other emissions from waste and scenarios around this topic?

Conclusions from Review of Forecasted Climate Actions

- Eagle County would achieve GHG emission goals IF they implemented the full suite of actions

Session 1 Continued: Full group discussion on CAC Priorities using Drawdown Report with Valeda Scribner

- *[Shawn]* Did we model carbon sequestration solutions?
 - *[Valeda]* We did not, but as technology improves and changes, perhaps
 - *[Adam Palmer]* Would like to include sequestration options!
- *[Matt]* Was any analysis done to find which solutions we are most likely to implement and barriers to entry? We need to consider the cost secondarily
 - *[Valeda]* Did not analyze implementation and barriers, but would be happy to help the continuation of analyzing different methods.
- *[Shawn]* Why did we not look at recycling?
 - *[Kim]* Our emissions from waste are not considering Scope 2 & 3. It is only counting organics going to the landfill.

2:45 Committee, Task Force & Project Updates

Building Code Task Force Recommendations Progress

- **Review of Recommendations**
 - Considered cost effectiveness & parameters
 - Presented to Council for implementation in January 2022
 - Not much change for building codes in 2021 (changes were waste reduction, EV infrastructure, prescriptive improvements)
 - Solar ready, EV infrastructure, C&D conversion requirement,
 - Support Social Cost of Carbon
 - CO adopted this
 - Incorporated this recommendation to move away from natural gas
 - Town of Avon has Amendments Ready for Council Meeting Tomorrow
 - Solar ready amendment to the code as a design standard & EV readiness
 - 92% efficiency on gas appliances
 - C&D diversion as a developmental standard
- **Discussion**
 - *[Shawn]* Did you push for minimum standards for organic matter in soil

- *[Kim]* Recommendation is to adopt water/soil ordinance from Northwest Colorado Council of Governments which Kim can share
 - *Link to NWCCOG Ordinance:* <https://nwccog.org/water-savings-guidance/>
- Want to have landscaping code that is enforceable and builds on the things they are focused on
- *[James]* Why has no action taken place with Town of Gypsum & Town of Eagle?
 - *[Kim]* We are slowly chipping away at working with them

Behavior Change Campaign

- **Major Progress**
 - Transportation Survey Ready!
 - Giving away a bat bike
 - Can't narrow it down to give each entity all of their organization's data, but will share total survey data
- **Next Steps**
 - Draft RFP for creative design firm
 - Please share this with anyone you would like
 - Demoing ridesharing apps & platforms
 - Thinking about how to work in conjunction with Sole Power
 - This tool will hopefully fill the gaps that some of the other tools do not yet
 - May 2020: select finalists to demo with CAC
 - Alternative Commuting Toolkit
 - Incentivize employees to carpool, work from home
 - Will be shared with all employers based on the survey
 - May 2020: draft
 - September 2020: VVP Mixer hosted by CAC at Walking Mountains

Water Working Group

- **Review of First Water Working Group Meeting**
 - Identified Gaps: some of which are being filled, but some need additional attention
 - No common water efficiency goal in this community
 - New landscaping standards & irrigation system commissioning
 - Leadership from town/special districts
 - Culture change
 - Education
 - Real time data
- **Next Steps**
 - Goal Setting

Administrative Updates

- **CAC Intern Coming Soon**
 - Please do not ignore

- **C&D Subcommittee Starting**
 - Roundtable discussion with 40+ attendees
 - Continuing working w/ conversation w/ contractors and landfill
 - Next meeting April 16th
- **DOLA Grant Award**
 - Solar Master Plan
 - CLEER will be leading the charge on this
 - Streamlining solar permitting process
 - Sole Smart Process: receive ranking on how easy it is to increase solar in your town, which we will receive. Then CLEER will dedicate some time to helping some of our towns with their solar permitting process
 - Web-based toolbox
 - Economic impact & transition solutions assessment for Garfield County

CAC Upcoming Events – [PLEASE NOTE THESE MAY BE POSTPONED OR CANCELED WITH COVID-19]

- **March**
 - March: LED Swap @ Gypsum Rec
 - March 11th: Actively Green Waste Diversion Workshop for Restaurants
 - March 11th: Sustainable Film Series, The Wild
 - March 25th: Actively Green Waste Diversion Workshop for Hotel Events
- **April**
 - April 15th - Waste Diversion for Hotel Events, Conferences, and Weddings
 - April 14th – Next community MRF Tour
 - April 17th CMC Sustainability Conference
 - April 22nd - Earth Day – 50th Anniversary!
 - April 22nd - Beneficial Electrification Workshop
 - March through May - EV Sales Event!
 - April 22nd – 24th – QWEL Training @ Town of Vail
 - April 27th & 28th EV Ride & Drive Event
- **May**
 - May 7th: Hard to Recycle Event – Town of Vail
 - LED Swap @ Alpine Bank – Avon, Edwards, & Eagle
 - May 2nd – Town of Eagle Clean up & Hard to Recycle Day
 - May 7th - USGBC Presentation & Tour of WM Center for Sustainability
 - May 9th - Lake Creek Village Clean up Day
- **July**
 - July – LED Swap @ Eagle-Vail Pool
- **September**
 - CAC VVP Mixer

3:10 Session 3: CC4CA Legislative Update

- **PSAs**

- **if you are not on the CC4CA Legislative Updates newsletter, feel free to ask for the list of updates on each
 - Eagle County, Town of Eagle, Town of Avon, Town of Vail are on the list
- **Updates**
 - Bill on Single Use Plastics & Polystyrene Bans
 - Did not pass [Shawn] Statewide Organics Management Plan passed

3:15 Session 4: Earth Day 50th Anniversary is April 22nd

Updates & Alignment on Events & Efforts for Earth Day

- **Beneficial Electrification Event**
 - 5:00-7:00 p.m. @ Walking Mountains
 - 2 Speakers
 - (1) Dan Hillegas, Sales & Technical Training, TM
 - (2) Shawn Lamonz, from Mitsubishi
 - Local businesses who install & promote use of the equipment we'll be discussing and sharing will also be there
 - Cooking Demonstration with Hovey & Harrison Owner, Molly Hovey
- **Green Commuter Week**
 - Encouraging everyone to get out of their car at least 2 days that week
- **QWEL Training**
 - ERWSD offering this to anyone interested who manages water use outdoor and/or indoor
 - April 22nd-24th
- **Vail Daily Takeover**
 - April 19-25 (Saturday-Sunday of Earth Week)
 - Discounted ads if related to CAC, climate, Earth Day, etc.
- **Climate Reality Project**
 - April 23rd documentary @ CMC
- **Lunch with the Locals: Vail Valley Mountain Trails**
 - Earth Day
 - Trail closures & importance of these

3:30 Thank you and adjourn!

Next Meeting: June 1st