

# Eugene Climate Action Plan 2.0

## Vehicles and Fuels Chapter Meeting

Wednesday, July 11, 2018 • 9 am–12 p.m.

University of Oregon, EMU Miller Room

1395 University St, Eugene, OR 97403

**PRESENT:** Jesse Fittipaldi, Arcimoto representing the Chamber of Commerce members; Richard Petty, City of Eugene; Joe Zaludek, Eugene-Springfield Fire; Juan Serpa Munoz, EWEB; Andrew Martin, Lane Transit District; Josh Newman and Michelle Miranda, MWMC; Shanna Brownstein, NW Natural; Ian Hill, Sequential; Ron Tyree, Tyree Oil; Kassy Fisher and David Reesor, University of Oregon

Climate Action Plan 2.0 Project Team: Chelsea Clinton, City of Eugene; Brittany Judson, City of Eugene; Jessica Lisiewski, City of Eugene; Ethan Nelson, City of Eugene; Joshua Proudfoot, Good Company

### Opening Remarks

Chelsea Clinton gave an overview of the project vision including a review of the core project commitments (Triple Bottom Line, Strategic Doing and Adding Value) and an overview of the project equity initiatives.

### Introductions

Participants and community members introduced themselves and provided what they hoped to get out of the meeting or process. Common themes included connecting with each other and across organizations, learning about other endeavors and new ideas, sharing, looking to the future, partnership, best practices for reducing single occupancy vehicle travel, and mapping out our community investments.

### CAP 2.0 project goals and process

Chelsea Clinton provided a more detailed overview of the CAP2.0 project including the CRO Goals, 2017 Mayor's CRO Ad Hoc Work Group, core project commitments, equity initiatives, Large Lever Shareholders, CAP2.0 project timeline, and project team.

### Equity Discussion

Chelsea Clinton facilitated the discussion. The group discussed the difference between equality and equity. Then the group reviewed the project equity lens. Last, the larger group broke out into smaller groups to share their organization's equity framework.

### Scope of Today's Meeting – Josh Proudfoot

There are many different buckets to the overall discussion, with some overlaps. Planning shapes about 50% of the conversation, whereas fleet and fuels other 50%. The time scales are different enough that we keep these separate.

### Discussion of Best Management Practices – facilitated by Josh Proudfoot

Josh Proudfoot presented some Best Management practices (page 3 of agenda).

- Definition of **mitigation vs. adaptation** discussion: Mitigation is reducing greenhouse gas emissions, including buying offsets. Ideally, it's addressing emissions at the source. Adaptation is anticipating changes to come and preparing accordingly.
- Definition of **high impact practices vs. important triple bottom line practices**: High impact practices have system level impacts that have a very high impact on greenhouse gas emissions. Important triple bottom line practices are climate related actions that have a variety of benefits across our community, but have a smaller impact on total greenhouse gas emissions or climate adaptation. Keep in mind that community solutions often have great community benefits but cost a lot for very little greenhouse gas reduction benefits, when a technical solution, such as a fuel switch in fleet, might have much greater greenhouse gas benefits with the same money. For example, bike repair stations and a bike share program cost on average \$32,000/metric ton of reduction. Or planting trees to sequester carbon, which is a great idea but doesn't scale up without huge land mass.

#### *Additional high impact best management practices:*

The group brainstormed additional best management practices, and those practices that should be reclassified as high impact practices or triple bottom line practices.

- Congestion grants, which have great community benefit.
- Renewable Natural Gas from dairy or wastewater
- Beer production – codigestion
- Concrete – displace it from slag from fly ash. Certain concretes that absorb CO2 over time. Pavement is 30% of GHG emissions.
- Identify methane leaks upstream from production to natural gas delivery
  - Shanna Brownstein, NW Natural mentioned that NW Natural newest system in the country so it's the tightest. Not leaky. Transmission – production – also very tight.
  - We're currently looking upstream. There are a number of different gas buyers, and NW Natural is a small player. How can we start to value gas that's produced in an environmentally friendly way? Does the market support paying producers more for more responsible practices? There are regulatory barriers.
  - No Natural gas RNG facilities in Eugene. Money is staying in our communities.
  - Use less vehicles for more trips, ultra-efficient and autonomous.
- Low carbon fuels for waste feedstocks – new multifamily housing – charging stations EV charger ready.

#### *Equity Discussion of Best Management Practices*

- Impacts to the public via service costs: how much we are charging for basic services and how those costs are distributed.
- Not everyone can afford an EV – St Vincent de Paul – making EVs accessible to those who qualify.
- Land use – people who work living wage jobs can't afford to live close to work.

#### *Discussion*

- Ridesharing – community owned.

- An idea was brought up in negotiating the Uber and Lyft contracts. One solution would require as part of the contract Uber or Lyft drivers to have an EV or hybrid to operate Uber and Lyft.
  - Chelsea Clinton, project team brought up an equity concern– who are the Uber and Lyft drivers? What cars do they have access to?
- Josh Proudfoot, project team - One note on Uber and Lyft – it’s displacing walking, biking and mass transit more than other modes.
- Josh Proudfoot, project team - Lyft is carbon neutral – they offset every mile they drive. They buy credits as part of the solution.

## Mitigation Actions of Each Organization – Facilitated by Josh Proudfoot

The group shared their high impact and important TBL mitigation actions that their organizations are working on.

### MWMC - Michelle Miranda

#### *Actions:*

- Wastewater treatment plant – We participate in the EMS program certification – focuses on meeting compliance and going above and beyond in achieving environmental priorities. Focuses on:
  - energy efficiency
  - reduced rideshares
  - no idling
- Cogen system – converts some of our methane to power.
- Gravity fed collection systems.

### MWMC - Josh Newman

#### *Actions:*

- Renewable natural gas project. Anaerobic digesters that convert solid waste to biogas – 60% methane, 39% CO<sub>2</sub>. After we strip out the CO<sub>2</sub> and impurities – get natural gas. We are designing a system that will do that.
  - We flare it – substantial amount – 800 gas gallon equivalents. GHG reduction – 2500 – 7500 tons annually.
- Resiliency planning – consider flooding.

#### *Equity:*

- \$9,000,000 project. This will impact user rates and the local economy – if it stays local. Current plan is to export it where most value.

### NW Natural –Shanna Brownstein

#### *Actions:*

- Transitioning internally to CNG and RNG transitioning for operating our vehicles.
- Anti-idling initiative for fleets.
- Community – Outreach to heavy duty fleets for CNG and Renewable Natural Gas.
- We’re hiring people in these positions – indicates that the company serious.

- Benefits from equity perspective.
- Dipping its toe into hydrogen. No one knows what it looks like – talking to Portland’s transit agency about it.

### Sequential – Ian Hill

- We operate a lot of trucks – 50% of our fuel is low carbon biodiesel – get that up to as close to 100 % as we can. Some is supply.
- Looking at increasing efficiency on routing - Reducing miles driven.
- 14 is score – low CI.
- Opportunities – supply looking at using RNG, but can’t purchase RNG from supplier currently.
- Actions to get more low carbon fuel to the public?
  - We’re always trying to scale up. Difficult for liquid fuel producers – Renewable diesel facility is an expensive endeavor. Federal level policy is not comforting to investment.

### Tyree Oil - Ron Tyree

We are in the business of recycled lubricants - ethanol supply and biodiesel supply.

- E85 at retail pump.
- New distribution of low emissions gasoline – Swedish made product – expensive (for chainsaws, tight constricted areas).
- Partnering with Portland – collect used oil and antifreeze.
- New warehouse with solar

### Barriers

- Struggles – r99 supply is difficult on manufacturing side– trying to figure it out and prepared to invest.
- Planned CNG station – economics of those and there’s demand, but difficult for groups to commit because of use that made it economically viable.
- Observation – we go to access R99, military has bought every drop. If we could have a local r99 refinery, we could use what we produce – make the case to put confidence.

### Eugene-Springfield Fire - Chief Joe Zaludek

#### Actions:

- Rewrite our apparatus configurations to be more favorable in terms of emissions.
- Cahoots had success using a hybrid for non-emergencies –medium size emergency vehicles.
- Look at our emergency vehicle response – reduce responses that history tells us are non-critical. Utilize a nurse triage to listen and not go to lowest 10% of calls.
- Looking intersect vehicle for low acuity calls - hybrid or EV that evaluates potential need.
- Technology – LED lighting, auto shuts vehicles down.
- Bring out the big stuff when we need it.
- Don’t burn fuel, or use a lower carbon alternative. Adopted renewable diesel and implement across fleet.
- Police vehicles have idle monitors – electric to save battery, and alternative sources for AC.

### *Barriers:*

- Vehicle Manufacturers – not hearing from enough customers to warrant investment in electric trucks. Small markets for these manufacturers. Not too many trucks sold compared to cars.– It’s changing: Large hybrid vehicles now available on the market – not available 10 years ago. Conversations with other agencies on West Coast who may be interested.

### City of Eugene Fleet - Richard Perry

#### *Actions:*

- Reduce use –we’re using AVL for trips and data – how can we reduce trips.
- For department owns vehicles – trying to implement a policy about climate recovery when they buy vehicles.
  - Barrier: Within departments to spec a vehicle is a long process –For example, to spec a fire truck is at least a year-long process. Climate recovery considerations don’t happen unless someone is pushing it throughout the process. We might need an extra employee dedicated to this specifically.
  - Equity: this would mean increased cost and government overhead.
- No electric bikes. Parks use electric chainsaws and electric lawn mowers.
- Looking at smart grid opportunities to reduce trips, for example with garbage cans. Technology opportunities that we haven’t thought of yet.

### Arcimoto – Jesse Fitipaldi

Company that is developing an autonomous electric vehicle – rideshare. Will get the cost down very low per trip – to a nickel or free with rideshare.

### EWEB – Juan Serpa-Muñoz

#### *Actions:*

- Carbon reduction is being added to our plan – electrification of vehicles.
- Electrify America – charging infrastructure to charge electric vehicle in 30 minutes. Working with the City of Eugene to have electrify America invest in charging stations for our community.
- Buses and school buses.
- Partnering with ridesharing for limited income buildings so that limited income individuals can access EVs.
- Clean fuels program.
- Working with the University of Oregon on Rev Up Eugene program – oftentimes the sales person at dealers doesn’t know much about electric vehicles, so they don’t sell. Dealerships offer discounts on EV if participate in workshops to learn about EVs.
- Nissan is providing a 3000 incentive to EWEB customers.

### U of O – Kassy Fisher

#### *Actions:*

- Climate action plan – revisions have gone to the President’s desk for approval.
- Strategic energy management plan
- We’ll be doing a campus transportation plan.
- Analysis of fleet service vehicles – how many do we actually need?
- Utilize golf carts

- David Reesor was just hired as Transportation Director
- Incentivize active commuting to campus.

## LTD – Andrew Martin

### *Actions:*

- No idle policy.
- V20 – exploring it, but back off. Look into it again.
- APTA – go for gold – greenhouse gas inventory of facilities, fleet and fuels. This fall – committing to reducing categories by 3% a year.
- Fleet procurement plan – 5 electric buses, money for 5 more. Doesn't have the range to replace the diesel buses.
- Maintain our service to displace SOV trips.
- Replacing older diesel with newer diesel – 3 mpg more.
- Possibly looking at solar charging – demand charging buses all at one time.
- Capital projects – multimodal improvements – investing in people walking and biking.
- Question from Jesse: Are you investing in technology to track buses?
  - Yes, we track them.
  - Certain trips of the day can be +/- 10 minutes.
- Long-term planning protecting investments in frequency, putting in capital investments too. More surgical and targeted, so not acquiring land.

### *Equity*

- Which neighborhoods benefit where we run the electric buses and how we're distributing the newer buses? The limitation is the charging station is in Glenwood. Vehicles don't have range, need to be able to charge them elsewhere.
- New Santa Clara transit center, part of planning includes charging busses there.

## Josh Good Company – Equity Considerations from this Conversation

- Air quality
- Price of fuel and energy
- Shared vehicles at multifamily housing
- Barrier to charging, most of charging is occurring at home and workplace
- Support of active modes is making it more affordable and healthy.
- Fuel can be very good or very bad depending on what it's made from.

## Future Climate Conditions in Eugene – presented by Josh Proudfoot

Josh presented on the Future Climate Conditions whitepaper - what we can expect the future conditions in Eugene to be in the next 30 – 100 years from climate change. Some key anticipated changes included:

- Increase population - Increased economic activity in Oregon with decrease in the South and Midwest.
- Hotter and drier summers 10-12 degrees Fahrenheit warmer by 2100.
- Warmer winters with the same amount of precipitation, but less snow/more rain. Snowpack in Cascades nearly gone by 2040.

- Increased wildfires – 500-600 percent more surface area by 2040.
- Halved summer stream flows by 2040.
- Turnover of vegetation to a different vegetation regime by 2080.

## Adaptation Discussion – Facilitated by Josh Proudfoot

Josh Proudfoot kicked off the discussion with some considerations:

- Need FEMA on better maps or not count on FEMA.
- Batteries perform worse in hot weather – range goes down.
- Equity piece – prices – homeless. Moving around - streets get narrow – use that for housing.

### *Discussion of impacts*

- Josh Newman, MWMC - Scale needed to get from one end to the other. Parking is a huge liability. Oregon land use law and rules – build vertically.
- David Reesor, University of Oregon - Transit – autonomous vehicle piece will aid, but increasing populations we'll have to be more efficient. Congestion will cause an issue.
- Andrew Martin, LTD - Policy will either push toward shared fleets, or it's going to be wealthy people driving into town every day – autonomous vehicles. The policy will drive it so it's priced right.
- Shanna Brownstein, NW Natural – Creating a dense core will lead to more traffic if there's not a corresponding investment in transit. Different budgets and different political actions moving in different directions – We need density increased + public transit.
- Josh Newman, MWMC - There's a tendency for folks to not want to see change and cherry pick data to support what they have an investment in. How we talk about it is key to get the policy changes. There is resistance in Eugene.

Chelsea Clinton, project team asked if there are threats to fuel supply.

- Shanna Brownstein, NW Natural - Fuel comes in by truck on 84. So whenever 84 is shut down by fire/snow, fuel shortage occurs. Solution is to diversify fuel types. Hood River County.

Josh Proudfoot, project team asked if there will be a reduction in hydro. Can we create more storage or not if we don't have snow storage?

- Josh Newman, MWMC - McKenzie River shed – is porous western cascade mountain range so it creates some buffer of storage. However there's not enough hydrostatic pressure from the snow to push that river out the bottom of the lava sponge. We're better off than other river sheds, but it won't all get pushed out. The side effect is that Eugene becomes more attractive to migrate to.

## Key Takeaways and Next Steps – Facilitated by Chelsea Clinton

Everyone shared what they learned or took away from the meeting today.

Themes: Enjoyed imagination exercise of a future of autonomous vehicles without ownership, next steps for fuel production locally, refreshing discussion, desire to learn more, fear of future, overlap of

efforts in other agencies, thankful to work in this community where there is possibility, we're moving in the right direction, opportunities to co-create and do innovative work, leaders and model for the country.

Next steps: The City of Eugene will follow up on information you gave today.