CAP2.0 Large-Lever Shareholder Meeting #2

Community Health & Social Services

Agenda

1. Welcome and Introductions
2. Mitigation Analysis: Process, Results, and Questions
3. Break
4. Review Expected Conditions in Eugene and Large Lever Shareholder Actions
5. Equity Panel and Public Outreach
6. Closing Thoughts

CAP2.0
PROJECT TIMELINE

2016
CRO UPDATED

2017
MAYOR'S CRO AD HOC WORK GROUP

LATE 2017
CITY COUNCIL FUNDS CAP 2.0

EARLY 2018
MEETING WITH LLS
SIGNING CONTRACTS
HIRE CRO ANALYST

SUMMER 2018
LLS MEETINGS FIRST ROUND

FALL 2018
COMMUNITY OUTREACH
CAP 2.0 EQUITY PANEL

NOVEMBER 2018
LLS MEETINGS SECOND ROUND

WINTER 2019
COMMUNITY REVIEW PROCESS

MARCH 2019
LLS MEETINGS THIRD ROUND

SPRING 2019
COMPLETED CAP 2.0 PLAN

CRO - Climate Recovery Ordinance
CAP - Climate Action Plan
LLS - Large Lever Shareholder

Eugene

Eugene

Introductions

Mitigation Analysis – Draft Results

* All results presented in this section are draft findings. While we are confident in our analysis, final numbers may change, primarily for two reasons:
  * Large-Lever Shareholder partners may edit and/or add actions
  * More information about existing actions becomes available

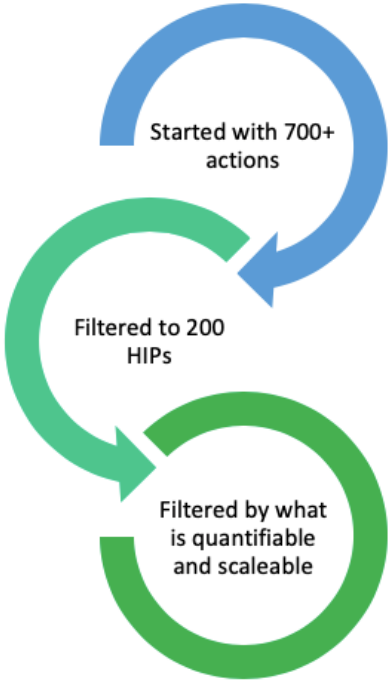
Mitigation Analysis: Process

Initial Policy Review
- Review of public plans, Capital Improvement Programs, and known activities

LLS Meeting #1
- Staff from LLS agencies added missing actions and plans

Filter for HIPs
- Good Company reviewed all actions for scaleable, High Impact Practices

LLS Meeting #2
- Where are we now?



CRO Goals & Targets

Section 6.675 Climate Recovery – **Climate Action Goals**

* (3) By the year 2030, all businesses, individuals, and others living or working in the city collectively shall **reduce the total (not per capita) use of fossil fuels by 50%** compared to 2010 usage.
* (4) By the year 2100, total community greenhouse gas emissions shall be average share of a global atmospheric greenhouse gas level of 350ppm, which is estimated in 2016 to require an **annual average emission reduction level of 7.6%.**

Section 6.685 Climate Recovery - **Targets & Benchmarks**

Reduce fossil fuels 50% (from 2010 levels by 2030)

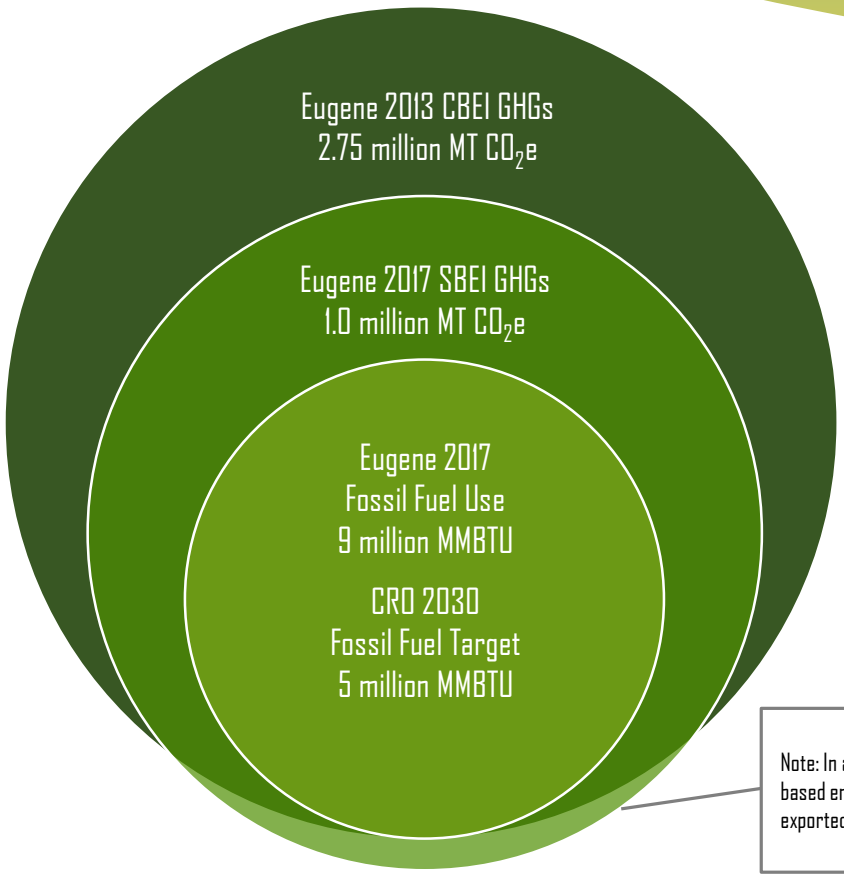
2020: 25% reduction from 2010

2025: 38% reduction from 2010

2030: 50% reduction from 2010

Annual Average, 2010 - 2030: 2.5% reduction

Relationship Between GHG Inventories and CRO Fossil Fuel Target



Consumption-Based Emissions Inventory (CBEI)

Sector-Based Emissions Inventory (SBEI)

Fossil Fuel Emissions (CRO target)

Note: In a consumption-based inventory, a fraction of sector-based emissions is excluded to account for local production exported to other communities.

Mitigation Analysis: Results

Fossil Fuels

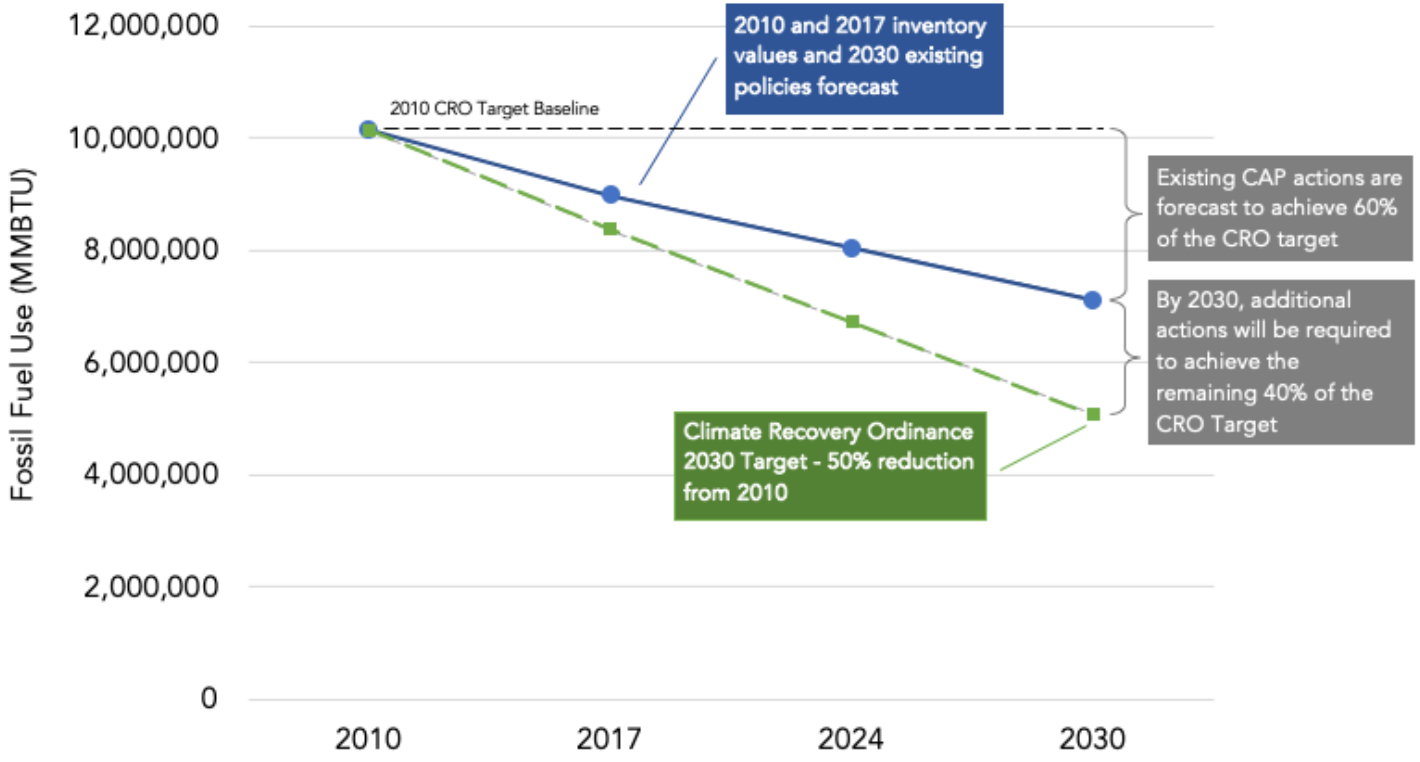
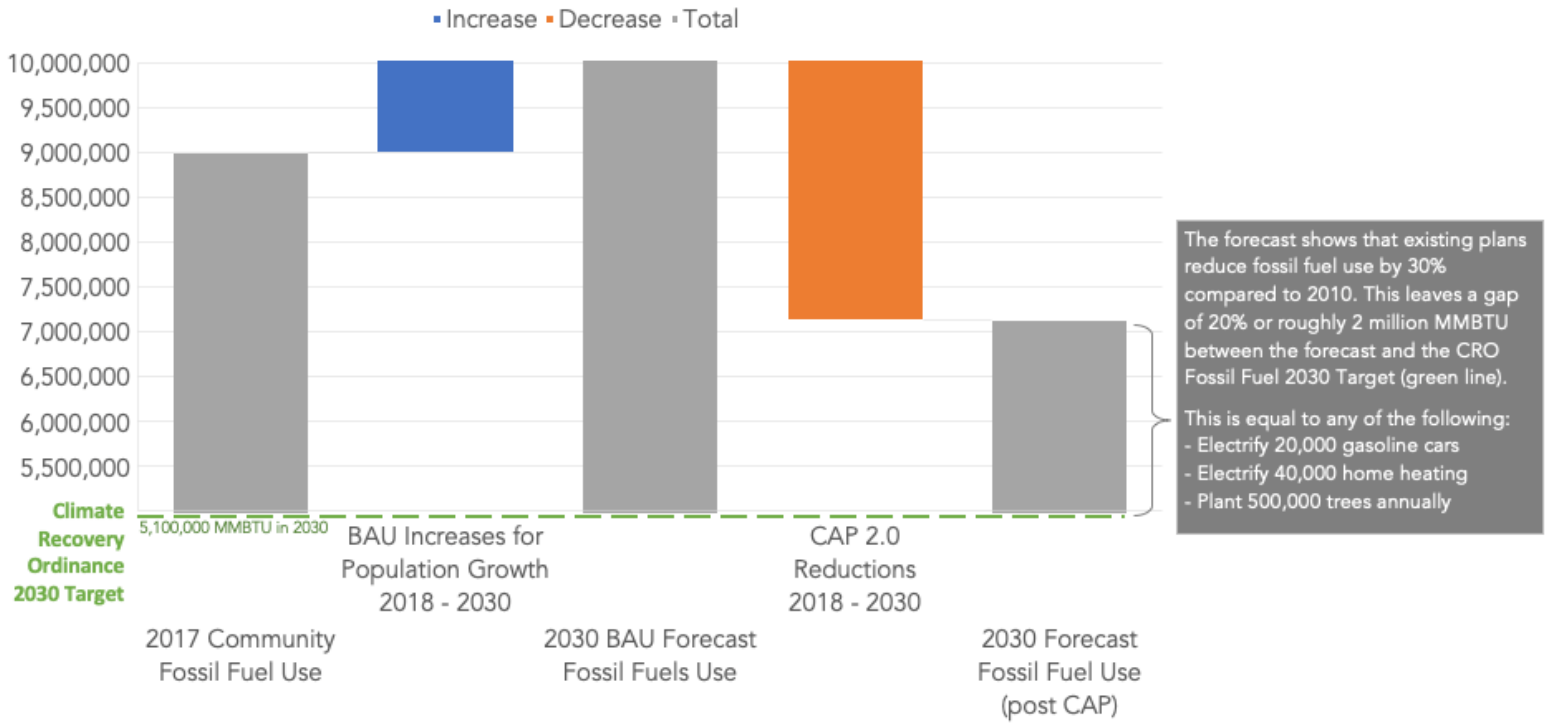


Figure 1: Comparison of actual and forecast fossil fuel use to CRO targets

Mitigation Analysis: Results

Fossil Fuels



Note: The equivalency for home electrification is provided as a sense of scale comparison only as Northwest Natural has about 30,000 residential customers in Eugene.

Figure 2: Comparison of actual and forecast fossil fuel use to CRO targets

Mitigation Analysis: Results

GHG Emissions

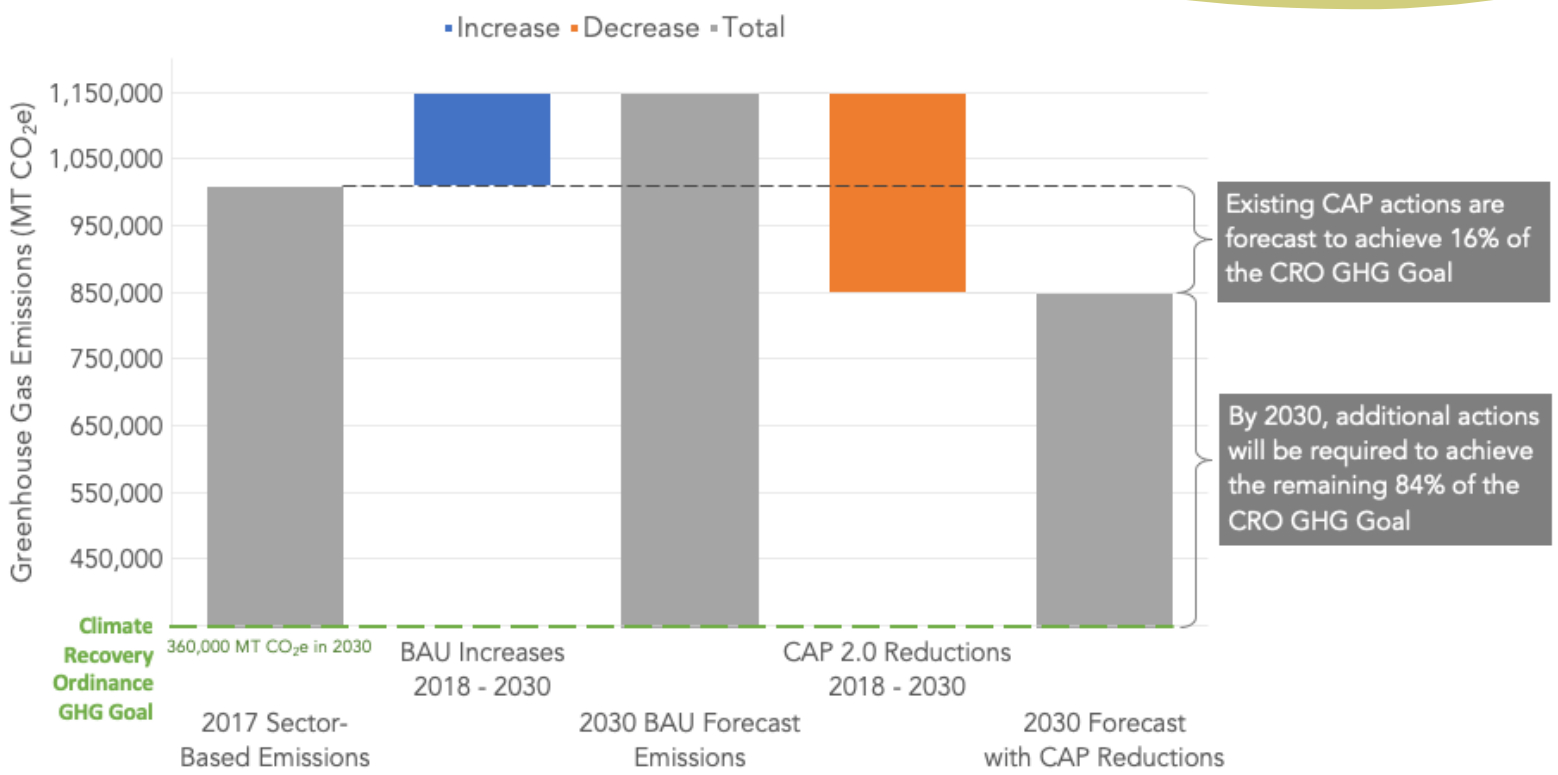


Figure 3: Sector-based emissions and existing policy forecast

Mitigation Analysis: Results

GHG Emissions

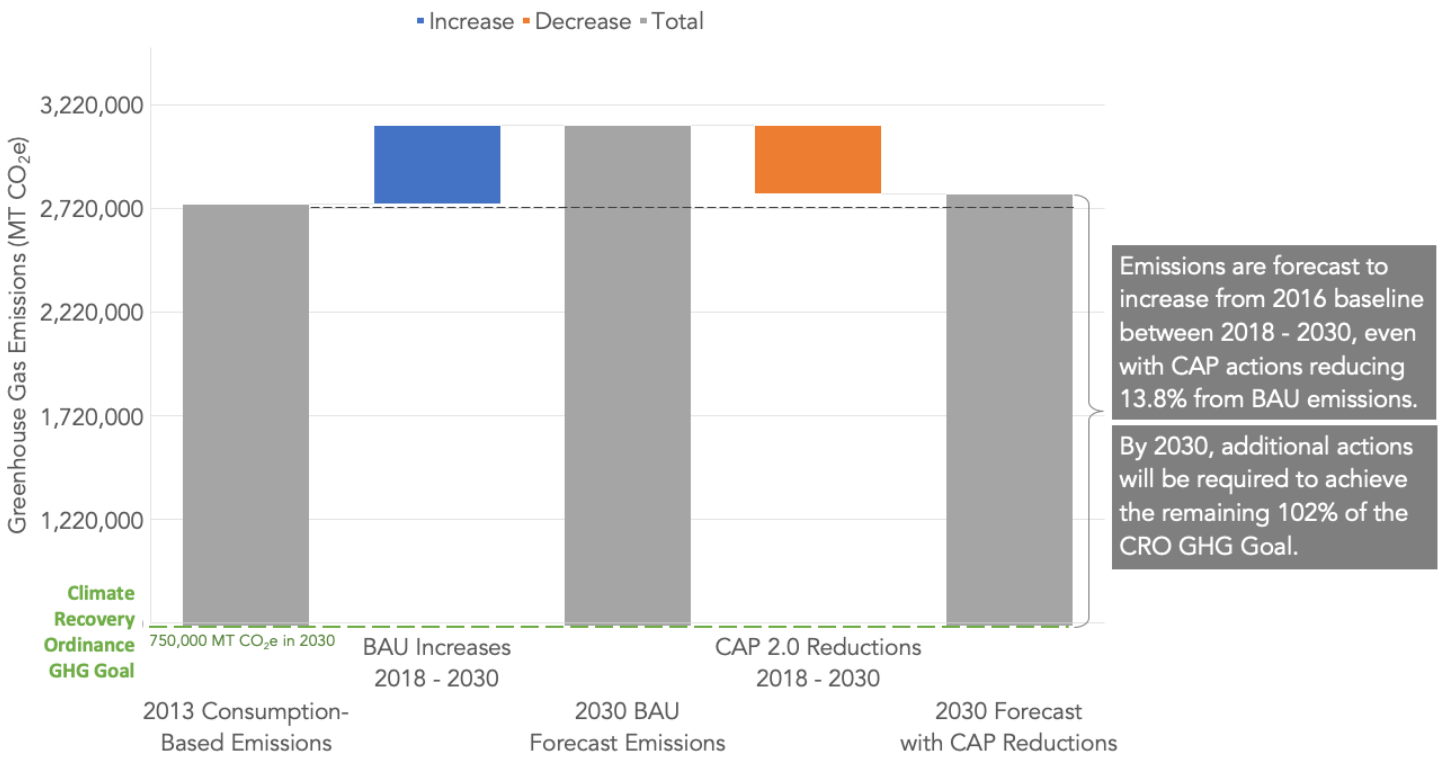


Figure 4: Emissions from community consumption and existing policy actions forecast

Mitigation Analysis: Results

Reduction potential over time

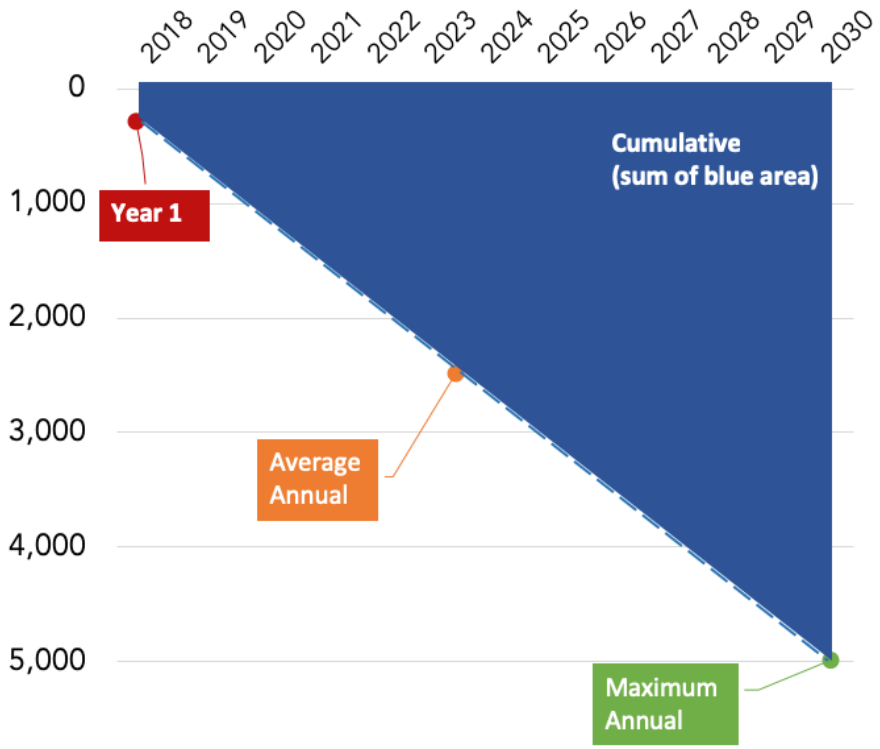


Figure 5: Visual description of reduction potential (unitless; both GHG emissions and Fossil Fuels)

Mitigation Analysis: Results

Fossil Fuels

Large Lever Shareholder Plans and Strategy Bundles	2018 Potential	2030 Potential	Average Annual 2018 - 2030	Cumulative Potential 2018 - 2030
Eugene 2035 Transportation System Plan (active transport, electric vehicles, etc.)	(140,000)	(2,550,000)	(1,000,000)	(24,100,000)
MWMC / NWN Biomethane to natural gas pipeline	(81,600)	(90,200)	(85,800)	(945,000)
LCC Climate Action Plan	(9,900)	(129,000)	(104,000)	(900,000)
NWN Future Conservation (cost effective resources only)	(57,900)	(61,600)	(59,700)	(775,000)
City Operations Climate Action Plan	(23,400)	(57,000)	(40,400)	(520,000)
Oregon Net-Zero Residential Building Code	(19,500)	(98,000)	(22,500)	(295,000)
Oregon Net-Zero Commercial Building Code	(18,900)	(94,000)	(22,000)	(28,300)
City Materials Management - Road Construction	(5,100)	(5,100)	(5,100)	(66,000)
EWEB Future Energy Conservation (market-based)	(2,000)	(6,100)	(3,500)	(45,000)
NWN Smart Energy Program (5% participation rate)	0	0	0	0
Lane County Materials Management - 63% Recovery by 2035	0	0	0	0
City / County Materials Management - Food Waste	0	0	0	0
NWN Upstream Emissions Reductions	0	0	0	0
INFORMATION ONLY: Lane County Food Waste Digestion (25% additional beyond plans)	0	0	0	0
City Urban Forest Management	0	0	0	0
TOTALS	(358,300)	(3,091,000)	(1,343,000)	(27,674,300)

Figure 6: Existing plans sorted by cumulative fossil fuel reduction potential (MMBTU)

Mitigation Analysis: Results

GHG Emissions

Large Lever Shareholder Plans and Strategy Bundles	2018 Potential	2030 Potential	Average Annual 2018 - 2030	Cumulative Potential 2018 - 2030
Eugene 2035 Transportation System Plan (active transport, electric vehicles, etc.)	(13,500)	(243,000)	(95,000)	(1,250,000)
Lane County Materials Management - 63% Recovery by 2035	(86,600)	(90,000)	(88,300)	(440,000)
NWN Smart Energy Program (5% participation rate)	(2,800)	(15,300)	(12,300)	(160,000)
City / County Materials Management - Food Waste	(5,300)	(6,100)	(5,900)	(74,200)
MWMC / NWN Biomethane to natural gas pipeline	(6,000)	(6,600)	(6,300)	(69,000)
LCC Climate Action Plan	(610)	(7,900)	(6,400)	(55,000)
Oregon Net-Zero Commercial Building Code	(2,500)	(12,300)	(2,800)	(36,800)
NWN Future Conservation (cost effective resources only)	(310)	(4,000)	(3,200)	(27,900)
City Urban Forest Management	(340)	(3,700)	(2,100)	(27,500)
NWN Upstream Emissions Reductions	(200)	(2,900)	(1,600)	(20,000)
Oregon Net-Zero Residential Building Code	(1,300)	(6,400)	(1,500)	(19,300)
INFORMATION ONLY: Lane County Food Waste Digestion (25% additional beyond plans)	(2,900)	(3,000)	(3,000)	(18,000)
City Materials Management - Road Construction	(1,300)	(1,300)	(1,300)	(16,700)
City Operations Climate Action Plan	(1,100)	(1,200)	(1,200)	(14,900)
EWEB Future Energy Conservation (market-based)	(110)	(330)	(180)	(2,400)
TOTALS	(124,870)	(404,030)	(231,080)	(2,231,700)

Figure 7: Existing plans sorted by cumulative GHG reduction potential (MT CO_2e)

Mitigation Analysis: Questions

Break

Future Conditions and Adaptation

Dry Season

- Average summer increase of 10°F -12°F by 2100
- Wildfire surface area increasing by 300-400% by 2040
- Reduced stream flow by 40-60% in summer due to reduced snowmelt by 2040

Wet Season

- Annual precipitation unchanged
- Snowpack in the Cascades nearly gone by 2040
- Rain flows in streams in near real time

Other

- Changes in disease patterns
- Population changes and climate migration
- Conversion of subalpine forest to other vegetation types by 2080

For a full list of sources, see the *Changing Climate in Eugene* Adaptation-focused White Paper from LLS meeting #1.

Discussion

See meeting materials for a draft list of LLS actions

Questions

Equity Panel and Community Outreach

Equity Panel

CAP Social Equity Lens

Guiding Questions:

- Who are the most vulnerable and underserved communities impacted by this decision? How will our decision impact these communities?
- Does the decision being made ignore or worsen existing disparities or produce other unintended consequences?
- If there is an investment or resource allocation, how does that advance the social equity leg of the Triple Bottom Line?
- What are the opportunities and barriers to more equitable outcomes? (e.g. mandated, political, emotional, financial, programmatic or managerial)
- How have we intentionally involved stakeholders, impacted communities, technical experts, and other community members affected by this decision? Who else do we need to invite?
- What's the mechanism for including more voices throughout the process?
- How will we modify or enhance our strategies to ensure impacted and vulnerable communities' individual and cultural needs are met?
- Do we have the data we need to understand which communities might be impacted? Can we effectively collect data on impacted or vulnerable communities for this decision or investment?

Community Outreach

Closing Thoughts