



# COMMUNITY CLIMATE ACTION PLAN

UPDATE TO BEDAB

JUNE 3, 2019



**Community Climate  
Action Plan**

## Purpose of Today's Meeting

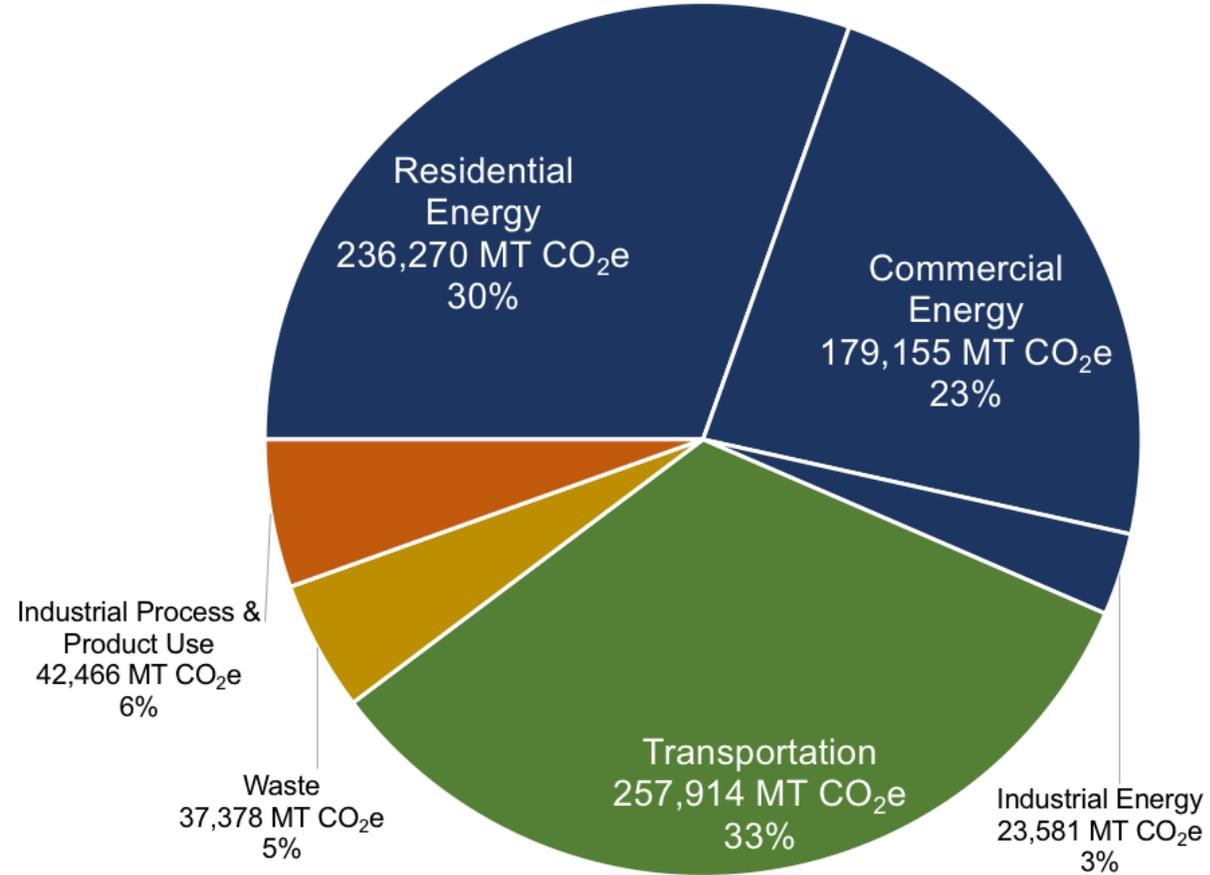
- Share an update on Community Climate Action plan work
- Show preliminary data results from project modeling
- Listen to BEDAB member thoughts on economic vitality scores and general strategies

## What's Next

- Final data in July for 15 strategies
- **Public Comment Period/Online Open House – July 1-31**
- CASC Select ~5 additional CCAP strategies
- Council subcommittee engagement
- Present to Council for consideration – November



Bend Sector-Based Greenhouse Gas Emissions  
776,765 MT CO<sub>2</sub>e  
9.3 MT CO<sub>2</sub>e per capita



*How were the strategies selected and developed?*

1. Working groups in Fall – industry experts, major stakeholders, interested community members
2. Community Survey
3. Feedback from BEDAB
4. Stakeholder calls



## Energy Supply

1. Expand distributed commercial and residential solar PV
  - Support community education that increases knowledge of renewable energy, promotes using renewable energy, increases awareness of available incentives for renewable energy.
  - City-led outreach to increase awareness of existing renewable energy incentives, targeted during the permitting process.
  - Create new incentives through the building permitting process to expand renewable energy projects on residential and commercial buildings
  - Create revolving loan funds from the City for financing renewable energy projects, with funds prioritizing low and moderate income residents
  - Develop community solar projects
  - Create solar easements to protect access to solar energy
  - Pilot microgrid and battery storage projects
  - Support workforce development programs in renewable energy fields to build a skilled workforce in the community, such as a solar installer program
2. Install solar panels on public buildings like schools, libraries, and city buildings
3. Provide 100% renewable electricity supply to community
  - Develop a roadmap to achieve 100% renewable electricity supply for community
4. Build/explore a biodigester at the wastewater treatment facility
5. Contract for a natural gas offset program for community gas use



## Energy in Buildings

1. Improve voluntary uptake of energy efficiency projects in buildings
  - Support community education that promotes the benefits of energy efficient buildings, improves awareness of energy efficiency practices, and improves awareness of existing incentives
  - City-led outreach to increase awareness of existing energy efficiency incentives, targeted during the permitting process.
  - Create new incentives through the building permitting process to expand energy efficiency projects on residential and commercial buildings
  - Create revolving loan funds from the City for financing energy efficiency projects, with funds prioritizing low and moderate income residents
  - Support workforce development programs in energy efficiency skills to build a skilled workforce in the community for energy efficiency
  - Explore demand response programs with utilities
  - Create C-PACE program
2. Implement benchmarking and disclosure programs for energy performance
  - Implement a Home Energy Score program
  - Develop disclosure and benchmarking programs for commercial buildings and rental properties (i.e. require disclosure and build a database)
  - Create and implement a low cost energy audit program
3. Support policies that increase energy efficiency of buildings, i.e. advocating for stricter energy efficiency state codes
  - Actively participate in code update processes and vote for advancing energy efficiency in code

## Transportation

1. Increase bicycle and pedestrian trips as transportation mode
  - Prioritize Bend's Bike/Pedestrian/Complete Streets policies in the Transportation System Plan, prioritizing projects in neighborhoods that have been historically underserved.
2. Support the transition to EV's with an EV Readiness Plan
3. Increase transit ridership
  - Create a Mobility Hub program
  - Expand frequent services routes (BRT)
  - Expand number and frequency of transit routes
4. Convert City and other public agency fleets to electric vehicles and alternative fuels (CNG, renewable diesel, and biodiesel)



## Waste and Materials

1. Promote smaller home size with new incentives that encourage building smaller homes.
2. Develop outreach and education materials that promote waste prevention (support repair and reuse, reduce wasted food)
  - Outreach campaigns that promote reducing consumption and preventing waste, and connecting with resources available
  - Implement education and training programs in the community that train industry to use less waste
3. Improve waste recovery
  - Expand curbside composting program
  - Expand education for residents of single family homes to promote recovering food waste
  - Work with regional stakeholders to develop standard multifamily recycling program
  - Develop a recycling and food waste collection program targeting businesses, hotels and resort communities to reach tourist population
  - Investigate and invest in facility and infrastructure upgrades to meet long term needs of solid waste system
  - Expand and develop new programs aimed at increasing recycling of C&D materials

# PRELIMINARY DATA RESULTS



## Highest Potential to Reduce GHGs (DRAFT RESULTS):

Strategy	2020-2050 Cumulative Reduction (MT CO <sub>2</sub> e)	Life Cycle Net Cost to <u>Community</u> per MT CO <sub>2</sub> e
Provide 100% renewable electricity supply to community	5,300,000	+ \$15-50
Transportation System Improvements (increase bikes, transit, and electric vehicles)	3,500,000	TBD
Net Zero Residential Energy Codes (assumes 2025) – state driven	2,400,000	TBD
Develop a natural gas offset program	2,000,000	+ \$15-50
Voluntary residential and commercial energy efficiency	1,050,000	- \$50 – (+)10
Benchmarking programs (Home Energy Score)	490,000	-\$50 – (+)100



Strategy	2020-2050 Cumulative Reduction (MT CO <sub>2</sub> e)	Life Cycle Net Cost to <u>Community</u> per MT CO <sub>2</sub> e
Incentivize smaller single family home size	350,000	- \$1,000
City wastewater biodigester	90,000	TBD
Expanding Solar PV on households and commercial buildings	60,000	TBD
City Fleet Transition to EV and renewable biodiesel	52,000	-\$50 – (+) 75
Expand solar on City Facilities	7,000	TBD

Existing Oregon Electric Policy	2020-2050 Cumulative Reduction (MT CO <sub>2</sub> e)
Renewable Portfolio Standard, Removal of Coal from OR rates	14,900,000



## Co-Benefits Analyzed:

- Economic Vitality
- Affordability
- Supports the natural environment
- Community health and safety
- Adaptation and resilience
- Social Equity

- Co-benefits measured on 0-10 scale, with qualitative descriptions
- Economic Vitality Scale: # of jobs, scale from “loses jobs” to “creates many permanent jobs”
  - Temporary jobs middle scores
- Affordability Scale: how affordable to person bearing the cost.
  - Scale from net loss to immediate savings
  - Middle scores for those with high immediate costs and lower lifecycle costs



- High Economic Criteria Strategies (job creation + affordability criteria):
  - Increase voluntary residential and commercial energy efficiency projects (incentives, outreach, workforce development)
  - Incentivizing smaller home size
  - Increasing bike mode share
  - Increasing transit use
  - Reducing consumption by supporting repair and reuse
  - Converting City and other public agency fleets to electric vehicles and renewable biodiesel

- Medium-High Economic Criteria Strategies:
  - Build a biodigester at the wastewater treatment facility
  - Expand distributed commercial and residential solar PV (incentives, outreach, workforce development)
  - Installing solar panels on public buildings
  - Improving waste recovery
  - Supporting transition to electric vehicles with an EV Readiness Plan



- Agree with strategies with high economic impact?
  - Other strategies that have higher economic impact?
- General thoughts on CCAP strategies?
- Other questions?



- Final data results at end of June
- Online Open House: July 1-31
  - Opportunity for public comment on draft strategies
- Council Stewardship Sub committee meetings – July, August, September
- Present to Council – first or third week of November

