

# Climate Action & Adaptation Plan

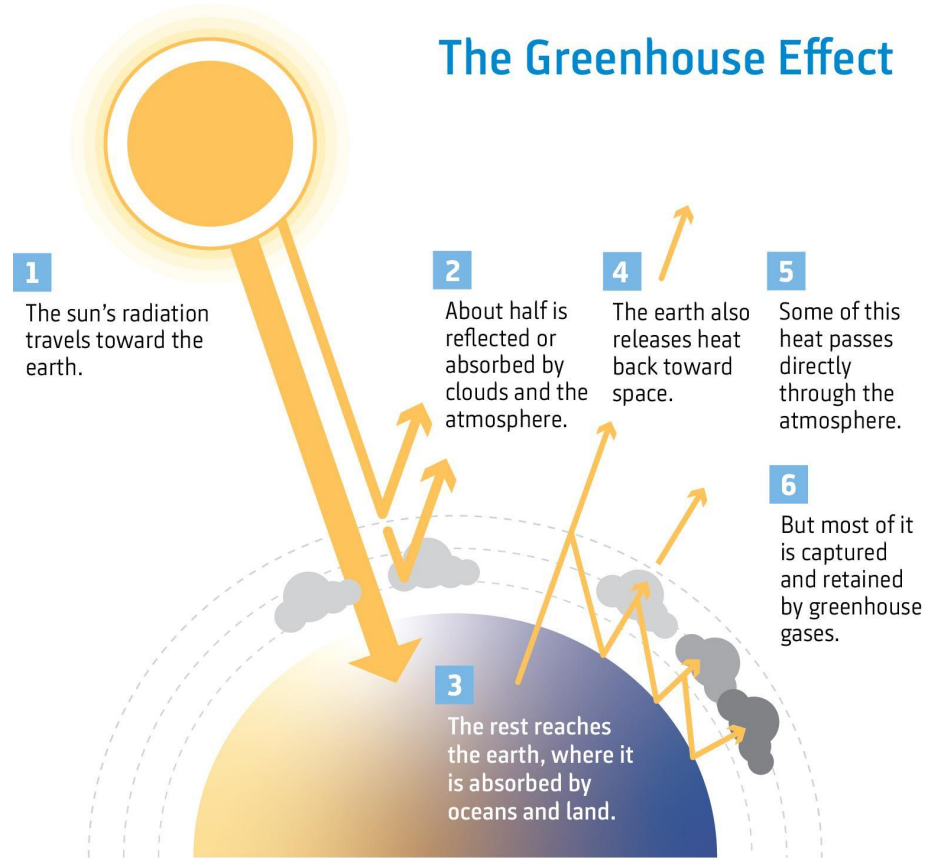
CAAP Foundations Series  
*Presented by the Office of Sustainability*

# What is climate change?

Climate change is a long-term shift in climate patterns including temperature and precipitation.

Greenhouse gas (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, etc.) emissions from human activities are the primary cause of the current climate change and pace of climate change effects.

## The Greenhouse Effect

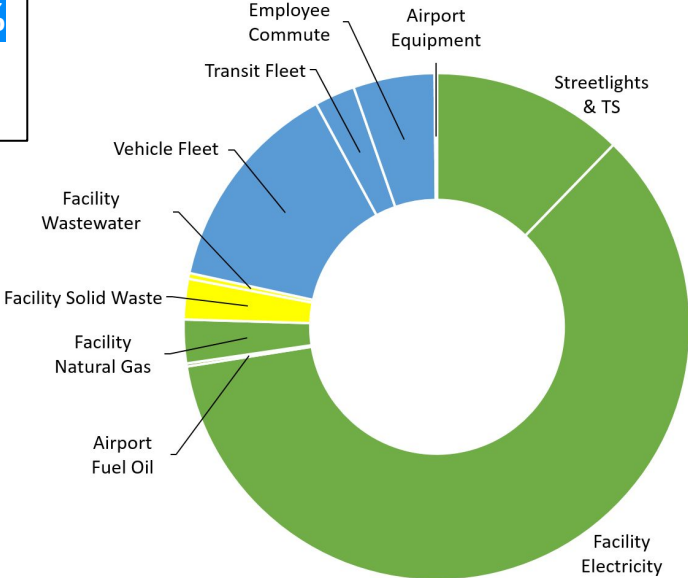
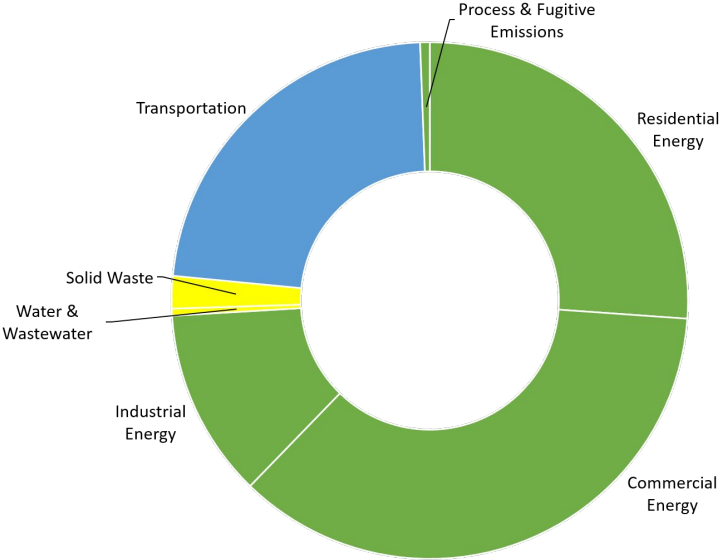
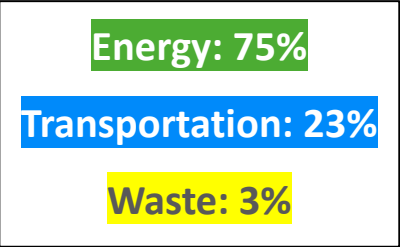


# Where do GHGs come from in our community?



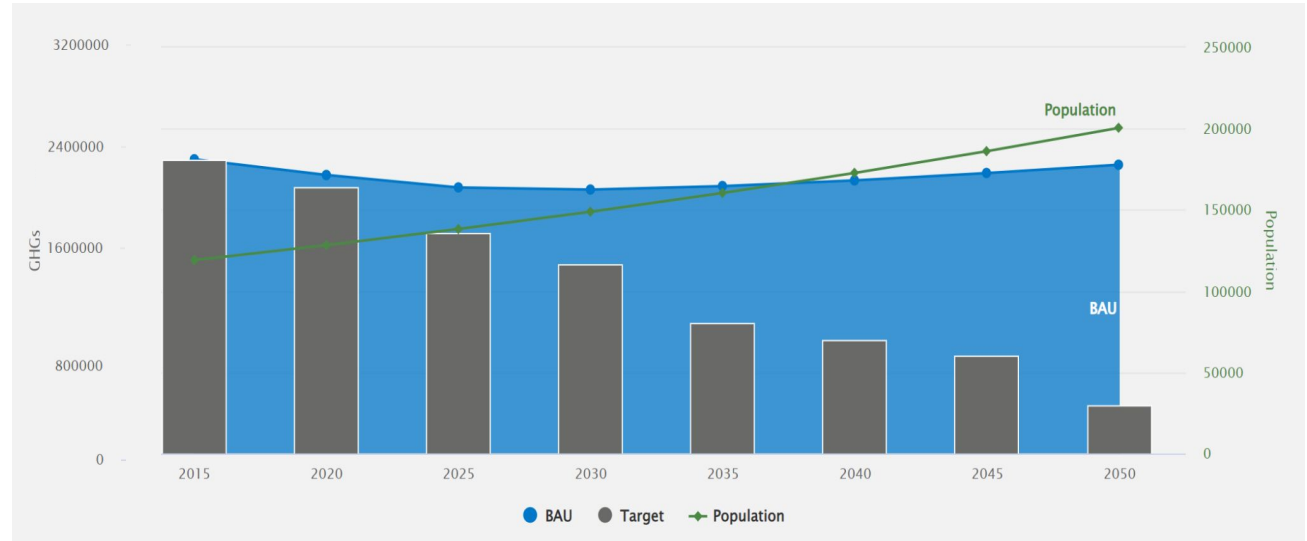
Total Community Emissions

Municipal Ops.



# Where are we headed if we continue current trends?

If we continue with Business as Usual (BAU), we will see little to no reduction in total GHG emissions.

















If we fail to reduce GHG emissions, we will see significant impacts in our ability to live, work, learn, and play in Columbia.

# Why do we need to act urgently?

The climate vulnerability analysis assessed Columbia's exposure to climate risk.

- Columbia has already begun to experience impacts of climate change with **increased average temperatures, increased precipitation, poorer air quality, and a longer tornado season.**
- Action is vital to prepare for the effect of GHGs already in our atmosphere and to minimize future consequences.

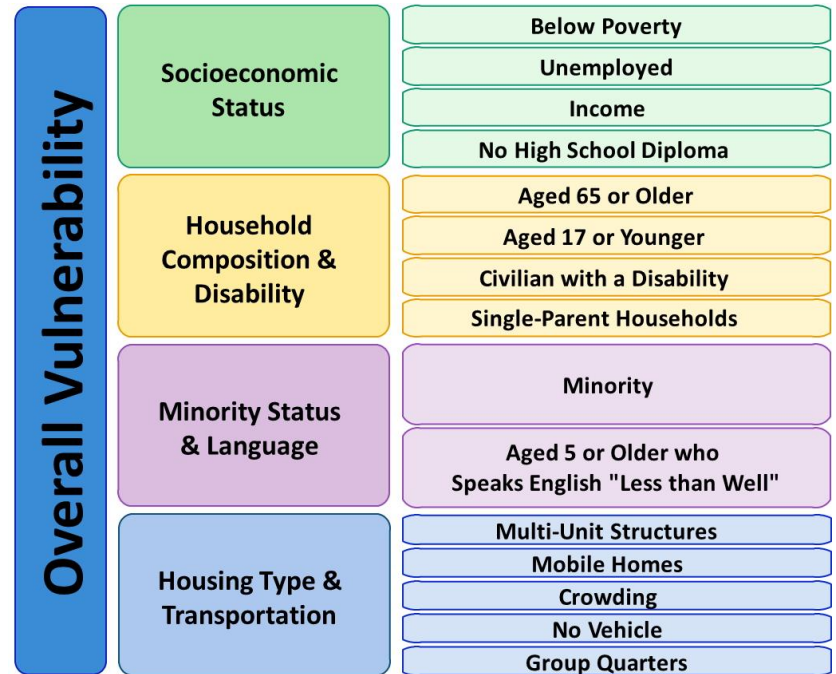
Maintaining the health of our community demands action.

HIGH	 Heat Stress	 Air Quality	 Vector-borne diseases
MEDIUM - HIGH	 Housing	 Mental Health	
MEDIUM	 Agriculture	 Stormwater Management	
LOW - MEDIUM	 Transportation	 Surface Water Quality	
	 Trees & Open Space	 Drinking Water Supply	
LOW	 Solid Waste	 Energy	 Drinking Water Quality

# Why do we need to consider equity?

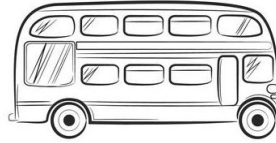
While the entire community will experience the effects of climate change, existing inequalities and vulnerabilities will cause some in our community to bear more of the negative impacts and/or have less ability to adapt.

- Vulnerable populations face more barriers to prepare for, cope with, and recover from the impacts of climate change
- Understanding the comparative risks to vulnerable community members is vital to ensuring just climate action



# What is the purpose of the CAAP?

1. To reduce greenhouse gas (GHG) emissions communitywide through targeted municipal, residential, industrial and commercial activities.

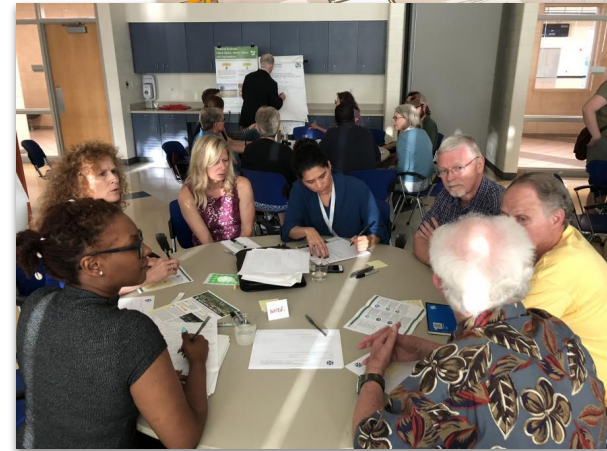


2. To prepare Columbia's natural and built environments (neighborhoods, resources and systems) and people to be more resilient to the impacts of climate change.



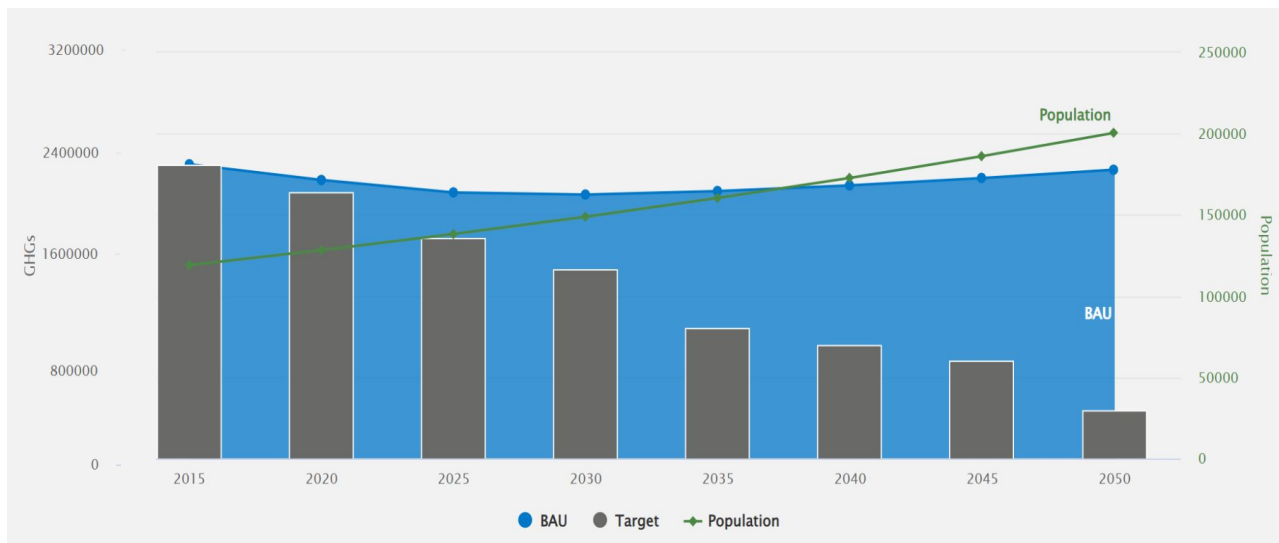
# What did the community support?

- Immediate action to reduce GHG emissions from energy and land use
- Immediate action to prepare for a changing climate.
- Columbia being a leader when it comes to proactively addressing climate change.
- The CAAP, believing it effectively provides direction to City leaders on actions to address climate change.





# What are the CAAP GHG Reduction Goals?



**Communitywide Target:** 35% by 2035 | 80% by 2050 | 100% by 2060

**Municipal Operations Target:** 50% by 2035 | 100% by 2050

# What sectors are included in the CAAP?



Natural Resources



Health, Safety & Well-Being



Waste



Transportation



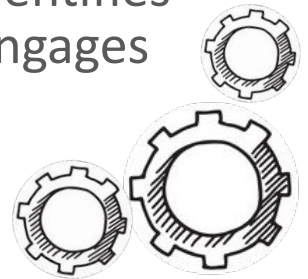
Housing, Building & Development



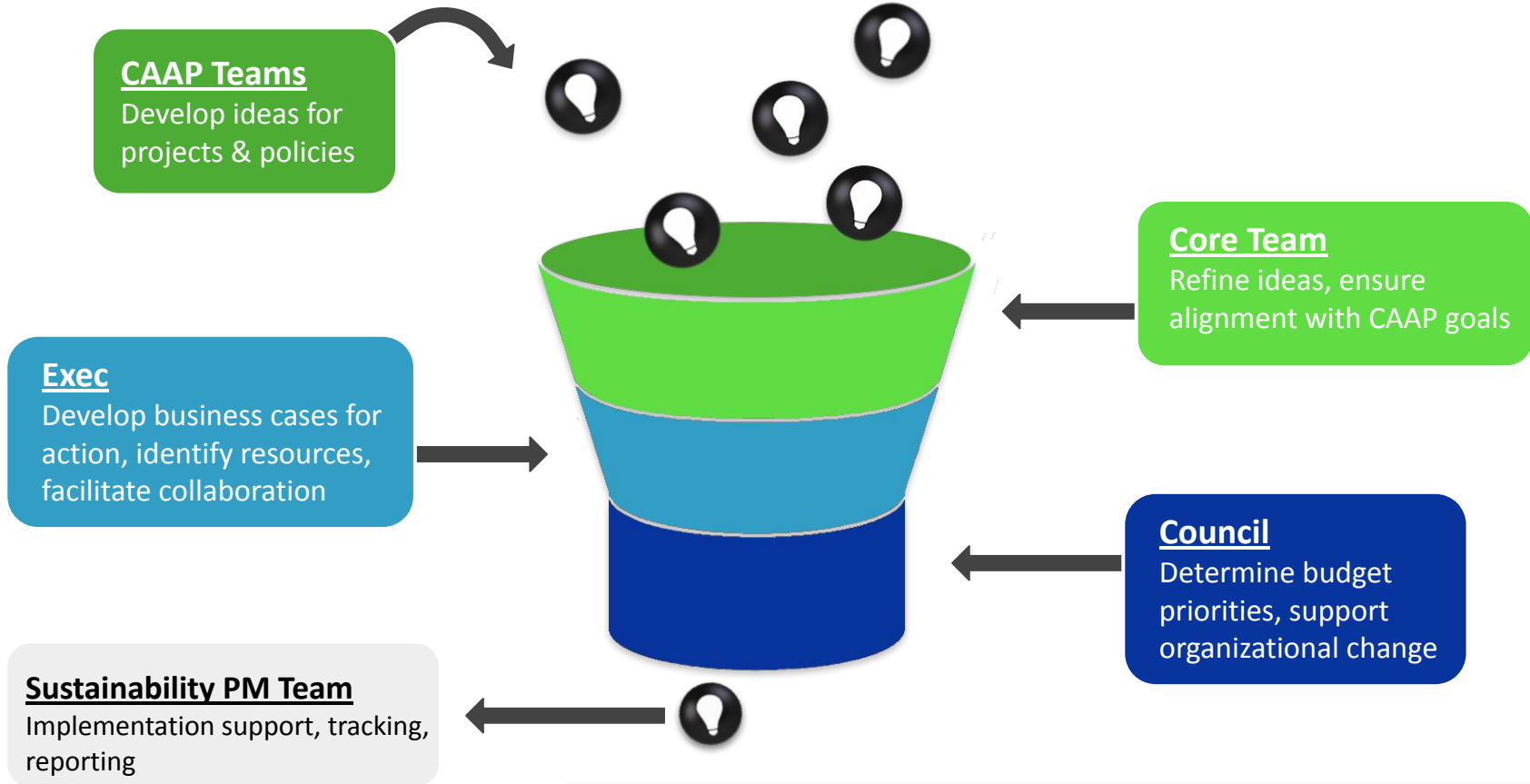
Energy

# Who is involved in the CAAP?

- **Interdepartmental Teams:** Clean Energy, Healthy Housing, Clean Transportation, Good Stewards, and Resource Stewardship
- **Office of Sustainability:** Tracks progress and provides reports to City Council and the public
- **Climate and Environment Commission:** Advises on reports, identifies opportunities for and barriers to equitable implementation, engages the public, and evaluates potential additions to CAAP.



# How do CAAP-related actions move from idea to implementation?



# What do CAAP-aligned actions look like?



Use of native  
vegetation in  
green infrastructure



Energy Efficient  
Building Design



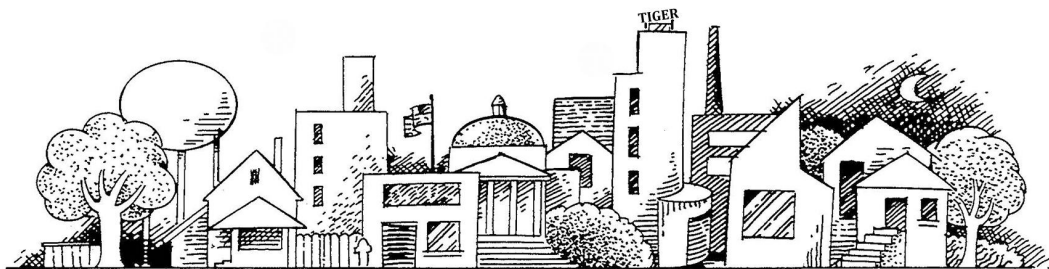
Golf Cart Fleet  
Electrification

# What do equity-conscious CAAP strategies look like?

Transportation	Housing	Natural Resources
<p>Increase transportation accessibility:</p> <ol style="list-style-type: none"><li>1) Continue to improve a public transit/transportation system that benefits vulnerable populations</li><li>2) Improve walk- and bikeability in the community to reduce the burden of transportation</li></ol>	<p>Make Home Energy Scores publicly available to:</p> <ol style="list-style-type: none"><li>1) Increase accessibility and transparency of home energy usage and cost</li><li>2) Encourage landlords/ support all homeowners to increase energy efficiency in homes</li></ol>	<p>Create a community heat map to:</p> <ol style="list-style-type: none"><li>1) Understand how areas within the community are impacted by extreme heat</li><li>2) Inform strategies to reduce the impact of extreme heat in areas of highest need and vulnerability</li></ol>

# What levers are used to enact change?

<b>LEVER</b>	<b>EXAMPLE - Reduce Travel by Car</b>
Policy	Evaluate zoning codes to favor walkability
Capital Improvement Project (CIP)	Build on-street protected bike lanes
Monetary Instrument	Incentivize carpooling/last mile travel options,
Education / Information	Publicize Go COMO App, promote incentives
Partnership / Collaboration	Coordinate with CIDs to improve walk/ride pathways, Partner with employers to increase use of transit
Management Practice	Supervisor participation in Bike, Walk & Wheel Week



# Questions?

Learn more at [comoclimateaction.org](http://comoclimateaction.org)