THURSTON CLIMATE MITIGATION PLAN

Steering Committee

THURSTON CLIMATE MITIGATION PLAN

Meeting #8

January 23, 2020

Today's Agenda

1. Project Updates
2. Multicriteria Analysis Discussion
3. Scenarios Discussion
4. Project Schedule for 2020
5. Jurisdiction Updates on Early & Ongoing Actions
6. Public Comments

Today's Materials

- Agenda
- Meeting #7 Summary
- Draft Communitywide Action List (on tables)
- Top Actions – Three Ways to Sort

Since we last met…

5 Sector Focus Group Meetings

300 Actions → 250 Actions

COMBINED actions that seemed similar or related

DEPRIORITIZED actions that were too vague or had little benefit.

ADDED actions with potential that were not already on the list

All actions scored for all criteria

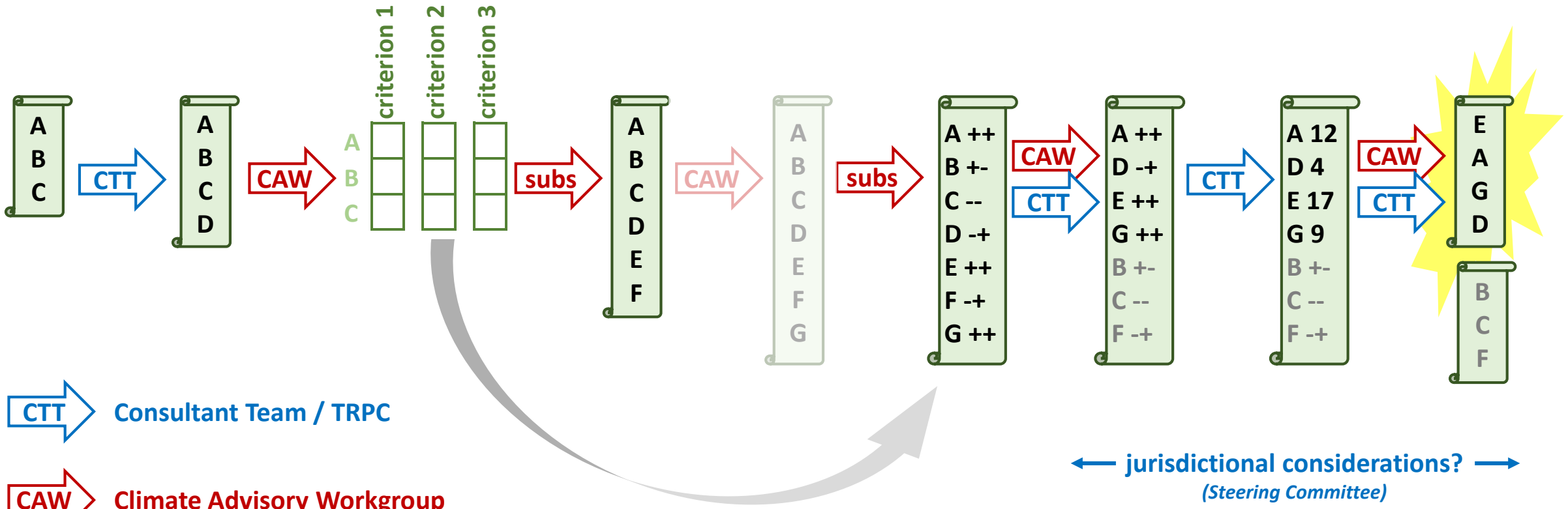
Criteria – Adopted 10/24/2019

Criteria	Description
GHG reduction potential	The annual quantity of greenhouse gas emissions (GHG) an action will avoid or sequester as of 2030.
Speed of deployment	Minimum time possible between decision to recommend an action, and achievement of the annual GHG reduction potential.
Control	One or more of the four project partners can likely influence the implementing party(ies), or can create the necessary regulatory structure.
Co-benefits ❑ Ecosystem health ❑ Social equity ❑ Economic benefit ❑ Other	Supports one or more of the regional goals (aside from #9 – carbon neutrality)

GP = Guiding Principles, adopted 8/29/2019

Actions and Criteria

develop criteria & candidate actions | *qualitative sieve* | *evaluation & prioritization*



CTT — Consultant Team / TRPC

CAW — Climate Advisory Workgroup

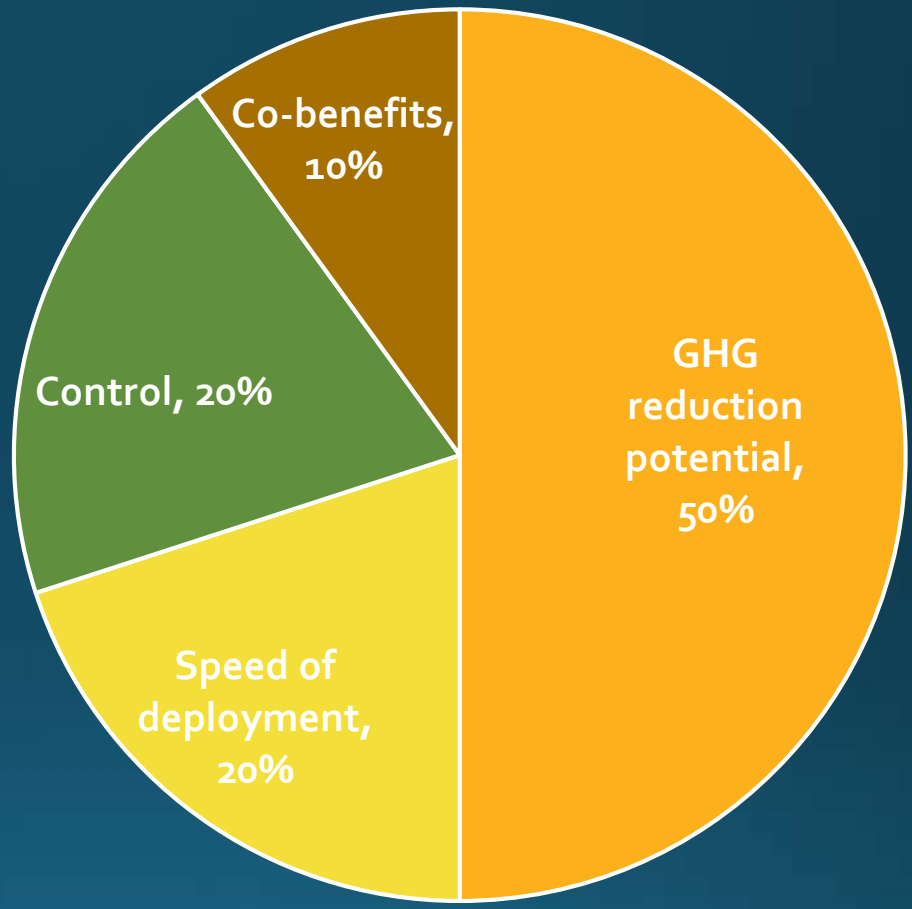
subs — Climate Advisory Workgroup topic subgroups

← jurisdictional considerations? →

(Steering Committee)

Total Priority Score

Criteria	Weight
GHG reduction potential	0.5 (50% of score)
Speed of deployment	0.2 (20% of score)
Control	0.2 (20% of score)
Co-benefits	0.1 (10% of score)



Total Priority Score - Example

B1.1: Residential energy performance ratings – Require energy performance ratings and disclosures for homes at time of sale, lease, or rent so that owners, tenants, and prospective buyers are informed before making purchasing or rental decisions.

Criteria	Rank	Weight	Weighted Score
GHG reduction potential	4	0.5 (50% of score)	2.0
Speed of deployment	3	0.2 (20% of score)	0.6
Control	1	0.2 (20% of score)	0.2
Co-benefits	2	0.1 (10% of score)	0.2
TOTAL		**1**	**3.0**

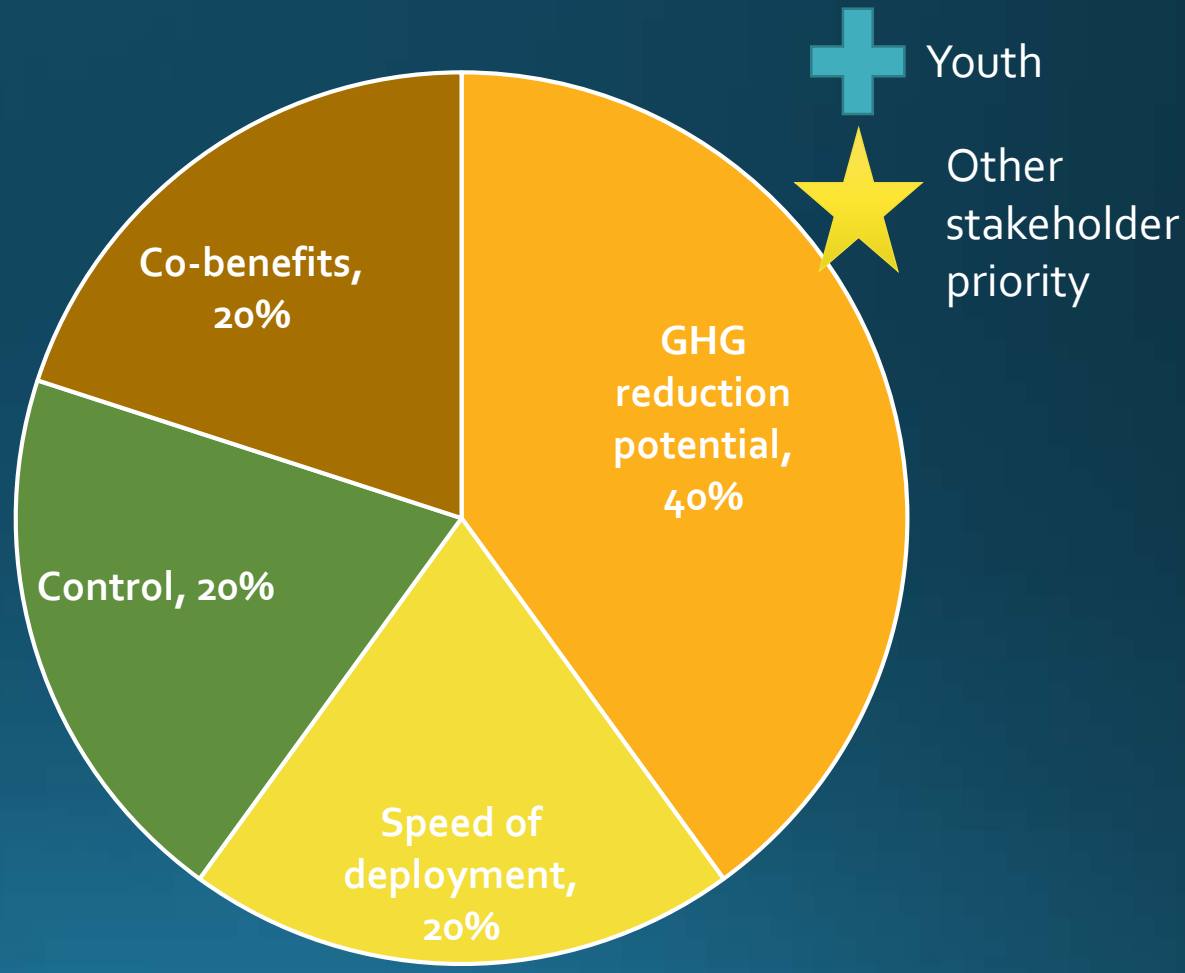
Prioritizing Actions

- How should actions be prioritized?
  - By total score?
  - By sector?
  - By strategy?
  - Some other way?

Advisory Workgroup Feedback

1. Adjust Priority Score

- Increase Co-benefits weight
- Incorporate Youth Priority
- Maintain priority actions for stakeholders and priority adaptation actions



- ➢ Maintain some actions for each sector
- ➢ Maintain a special track for sequestration actions

Advisory Workgroup Feedback

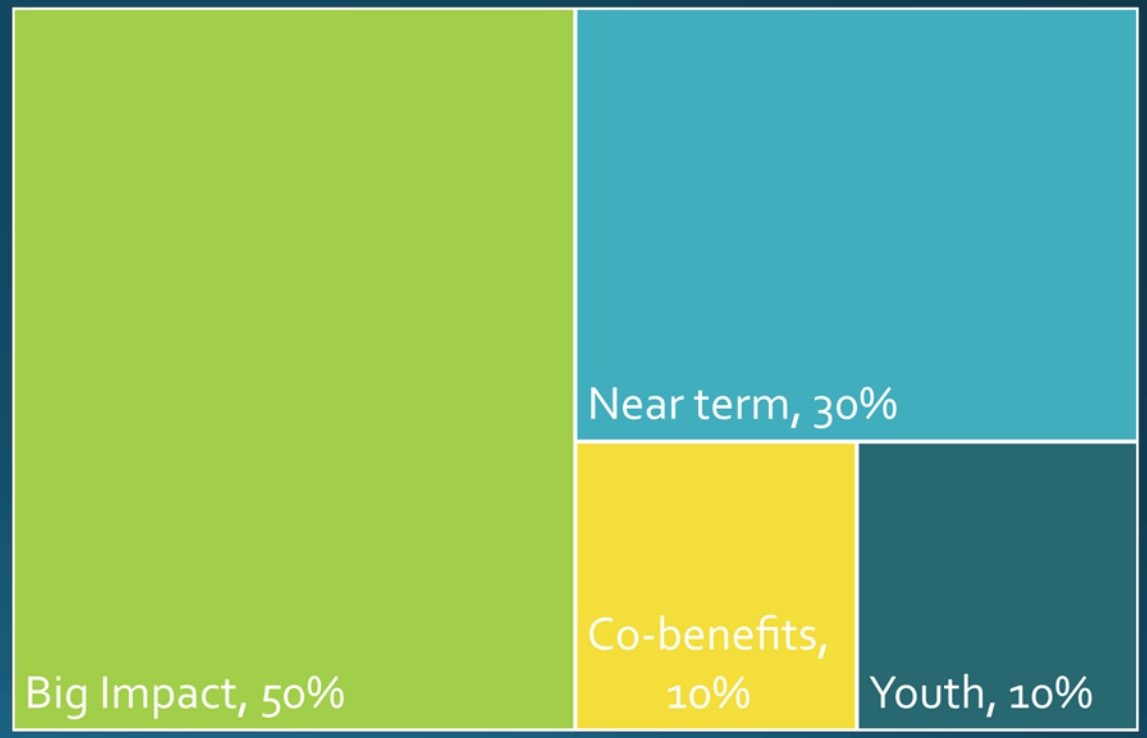
2. Use Tiers/Buckets

A. Near-term
   - Rank high for Speed and Control

B. Big Impact
   - Rank high for GHG reduction

C. Co-benefits
   - Rank highest for co-benefits

D. Youth
   - Rank highest for youth



Top Actions – across 3 methods

- G5.5: legislative agenda – Top Score
- B2.8: EE performance standard for small commercial
- T4.4: fareless transit system
- B1.6: rental housing EE baseline
- T3.5: EV-ready building code
- T3.11: EV education
- G4.6: social cost of carbon
- B4.5: permitting incentives
- T2.2: congestion mitigation
- B6.4: natural gas ban

Top Actions – across 3 methods

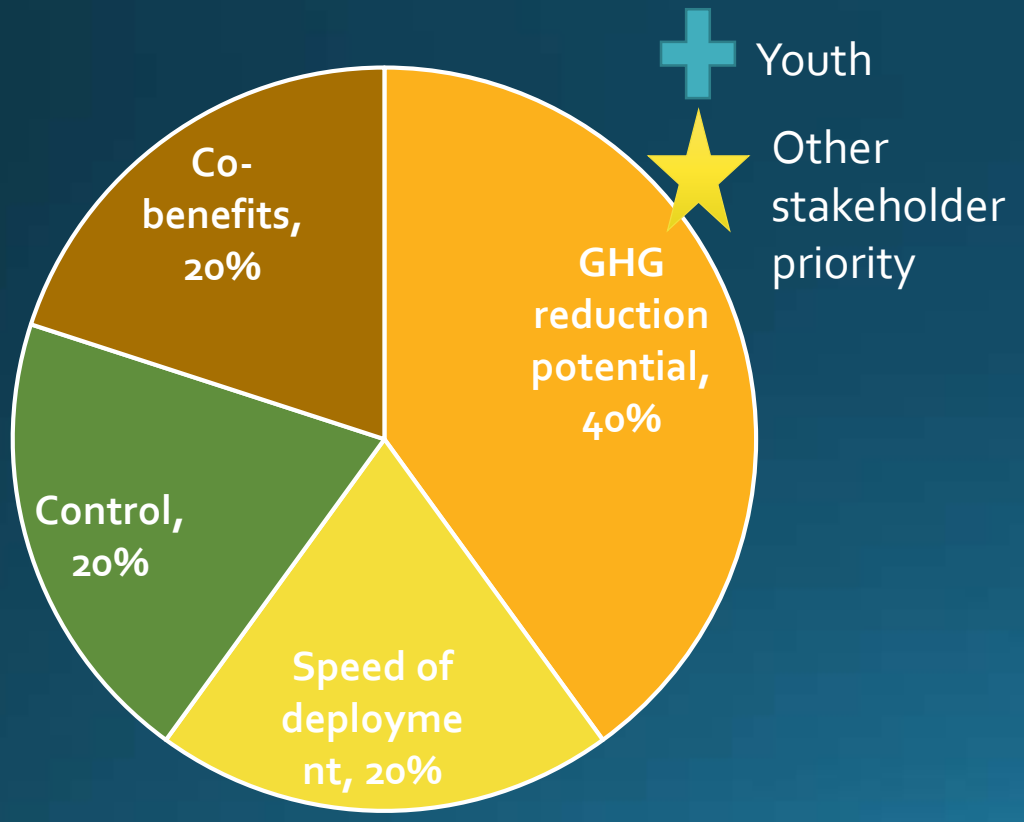
- B3.2: efficiency rebate
- B5.10: group purchasing
- T1.1: coordinate long-term infill planning
- T1.4: 20-minute neighborhoods
- T1.2: middle density housing
- T5.13: telecommuting infrastructure
- A5.1: reforestation & afforestation program

Multicriteria Analysis- Discussion

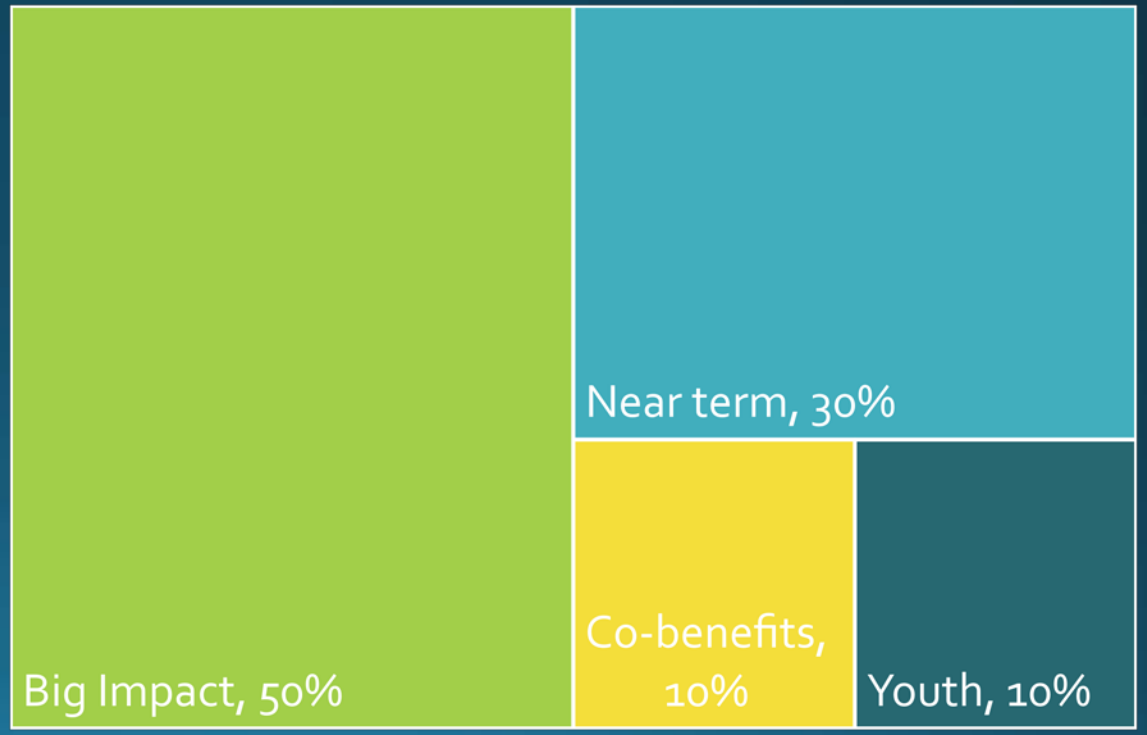
- Review Actions
  - How should criteria be weighted?
  - How should actions be prioritized?

Multicriteria Analysis- Discussion

Option 1: Priority Score

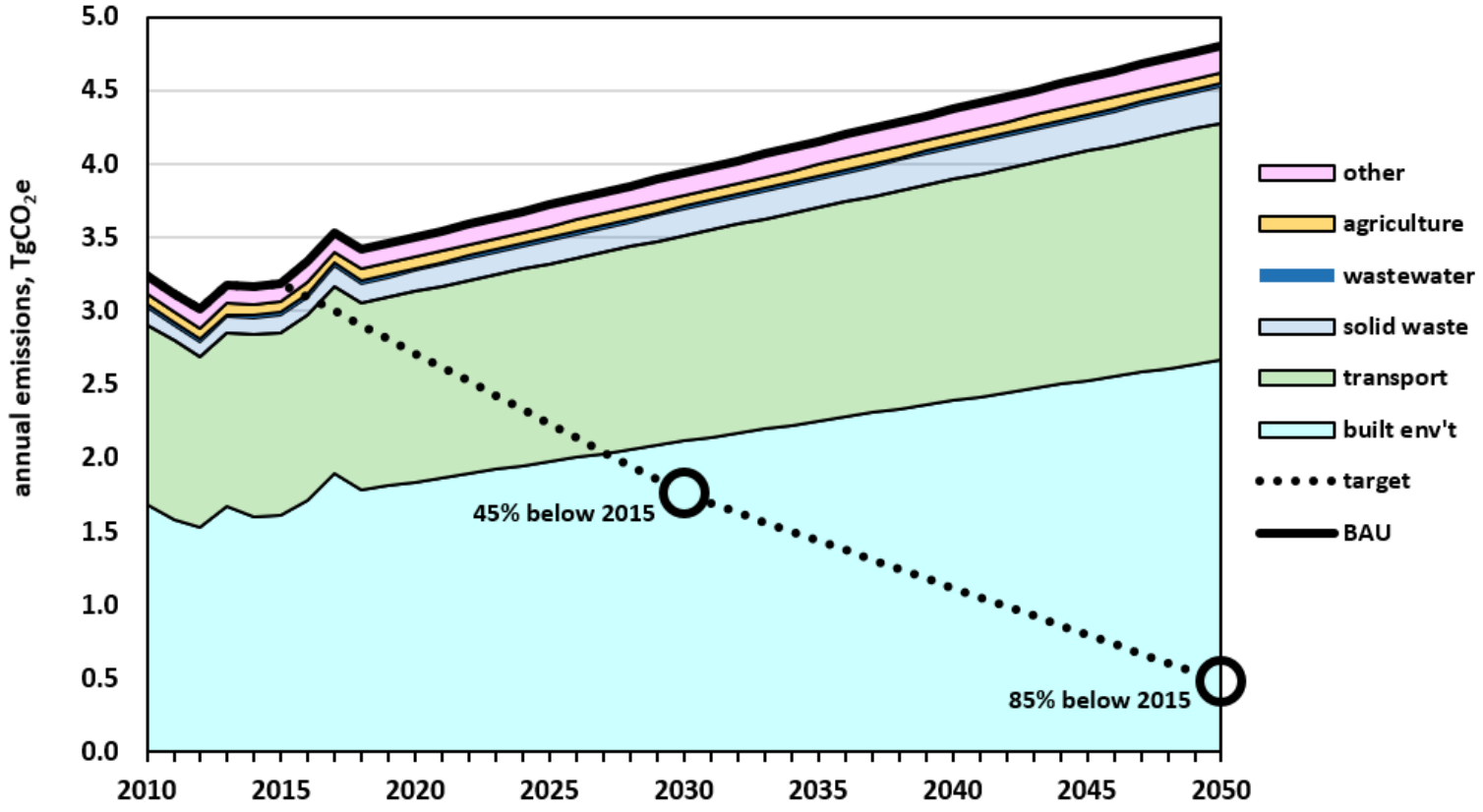


Option 2: Tiers

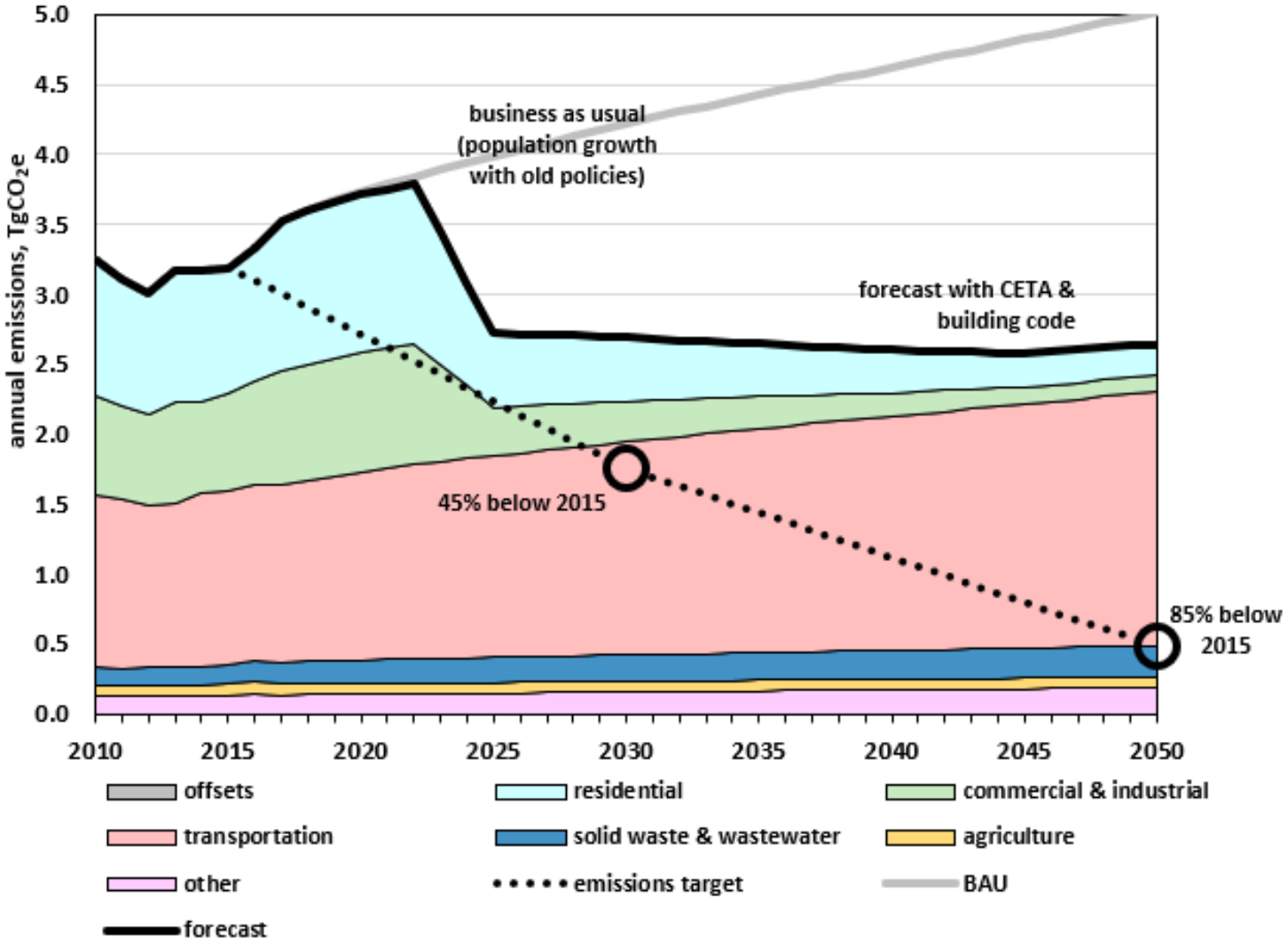


Scenarios

Business As Usual (BAU) Scenario



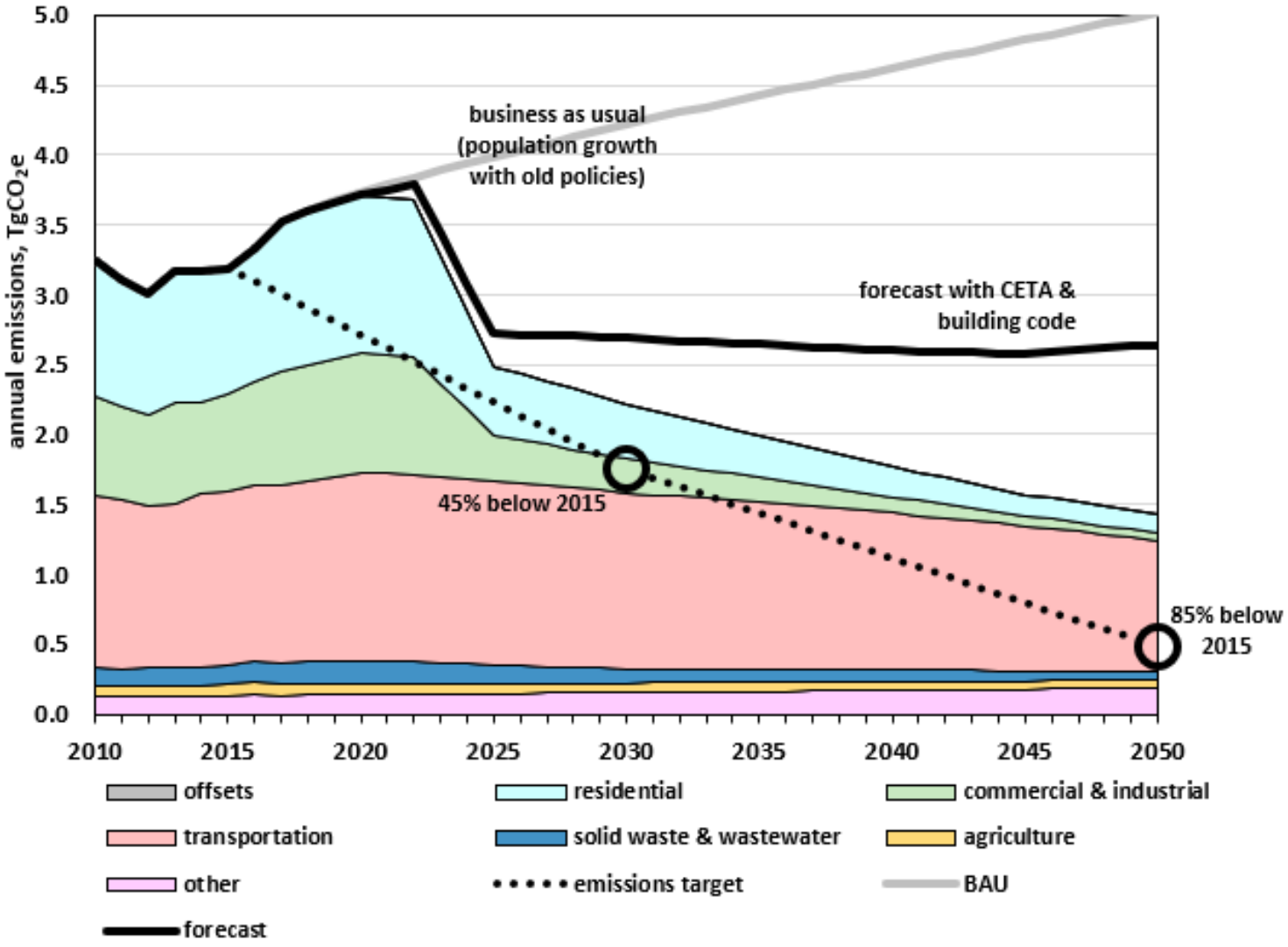
Business As Usual (BAU) Scenario with CETA



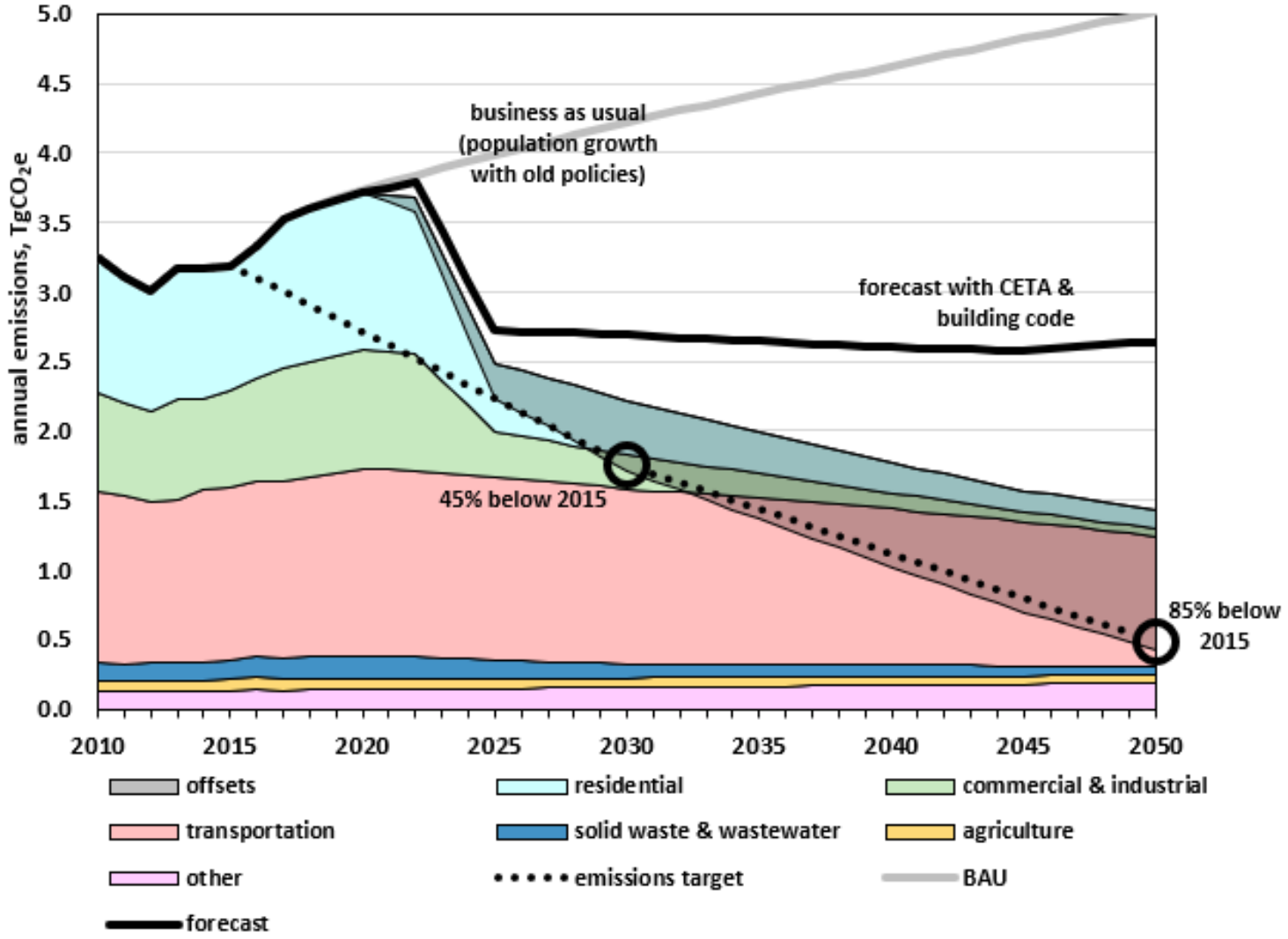
Dashboard for Estimating Reduction Activities

sector	% reduction as of 2030	% reduction as of 2050	physical values 2017		physical values 2030	physical values 2050	GHG forecast
residential energy consumption							
electricity			11,570	kWh per household	11,570	11,570	population
natural gas			31.40	mmBtu/household	31	31	population
fuel oil			711	households	711	711	flat
LPG			4,755	households	4,755	4,755	flat
wood			6,231	households	6,231	6,231	flat
commercial energy consumption							
electricity			3,634	kWh per capita	3,634	3,634	population
natural gas			7.82	mmBtu per capita	8	8	population
industrial energy consumption							
electricity			126,265	MWh	126,265	126,265	flat
natural gas			117,972	mmBtu	117,972	117,972	flat
passenger vehicles							
use			1,734	million VMT	1,734	1,734	population
emission intensity			337	gCO_2e/mi	337	337	flat
light duty trucks							
use			512	million VMT	512	512	population
emission intensity			480	gCO_2e/mi	480	480	flat
medium & heavy duty trucks							
use			237	million VMT	237	237	population
emission intensity			1,432	gCO_2e/mi	1,432	1,432	flat
waste & wastewater							
solid waste generation			0.71	ton per capita	1	1	population
landfill emisssion rate			0.68	$MgCO_2e$/ton	1	1	flat
septic tanks			53,586	sites	53,586	53,586	flat
agriculture							
animal farming			12,544	head	12,544	12,544	flat
fertilization of land			5,755	acres	5,755	5,755	flat
other							
street lighting			10,073	MWh	10,073	10,073	flat
OUTPUTS							
total GHGs	0%	0%	3,530,555	tCO_2e	2,690,575	2,642,736	
GHGs re 2015	16%	17%					
GHGs target re 2015	45%	85%	per interlocal agreement				

Results



What about sequestration actions?



	by 2030	by 2050		
add offsets (tCO_2e/yr):	500,000	1,000,000	2050-2030 offset rate diff:	500,000 tCO_2e
use OFM population projection:	medium		population lookup index:	2

Scenarios

Sample pathways:

1. Maximum 2030 GHG reductions
2. Focus on one sector (ex. Transportation & land use)
3. Maximum sequestration
4. Maximum personal changes
5. Maximum structural/regulatory changes

Scenarios- Discussion

- What are some pathways that you think we should explore to achieve the target?

Next Steps:
Proposed 2020 Schedule

THURSTON CLIMATE MITIGATION PLAN

	January	February	March	April	May	June
Steering Committee	Meeting #8	Meeting #9			Meeting #10	Meeting #11
Advisory Workgroup	Meeting #4	Meeting #5			Meeting #6	
Community Engagement	Interviews	Website Updates	Network check in Survey, Open House		Public Comment	Public Comment

Individual Jurisdictions: Actions & Implementation

Jurisdiction Updates

Thank You!

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