

Path to Carbon Neutral

*Setting ambitious targets
to achieve meaningful benefits*



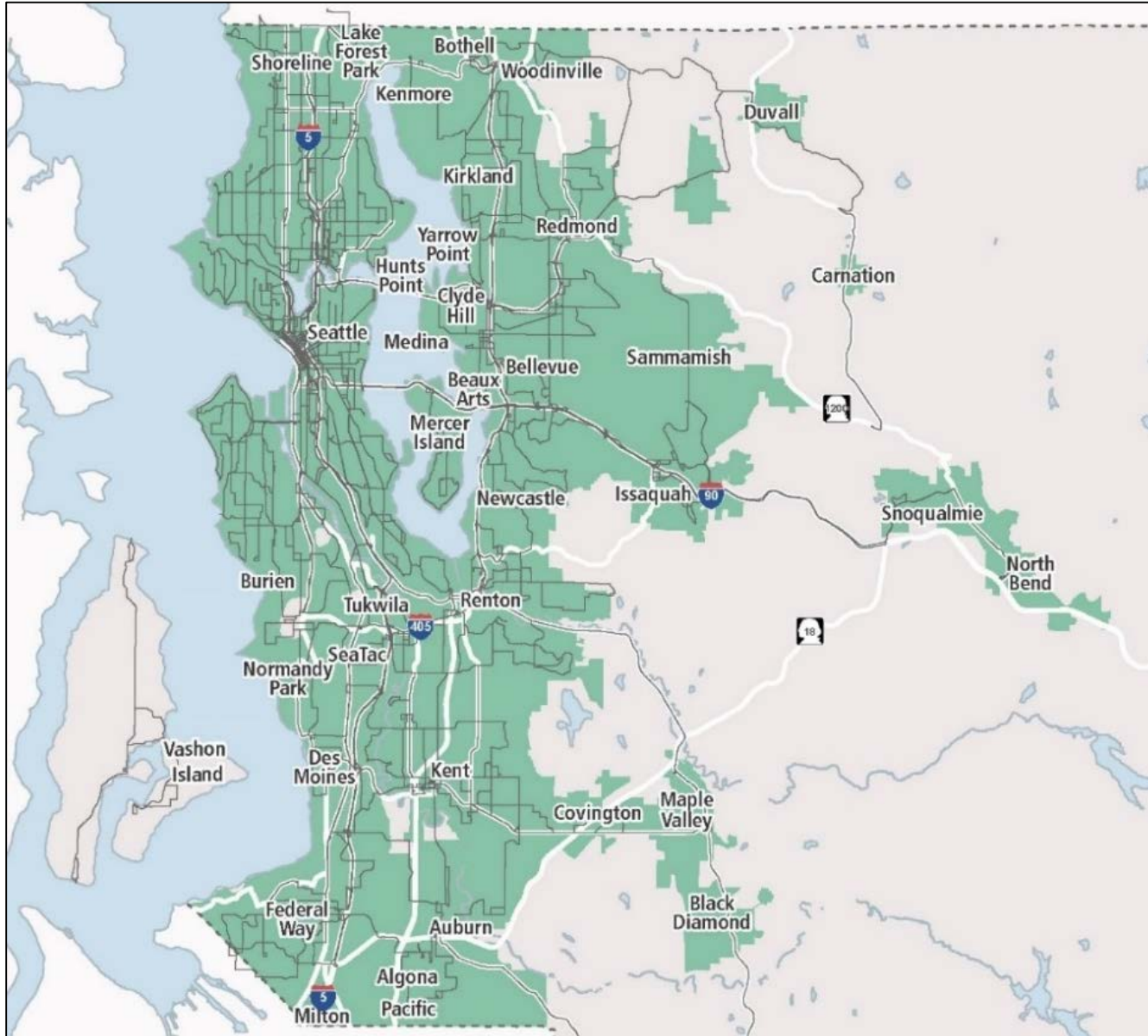
Chester Knapp, King County Metro
Seattle, WA

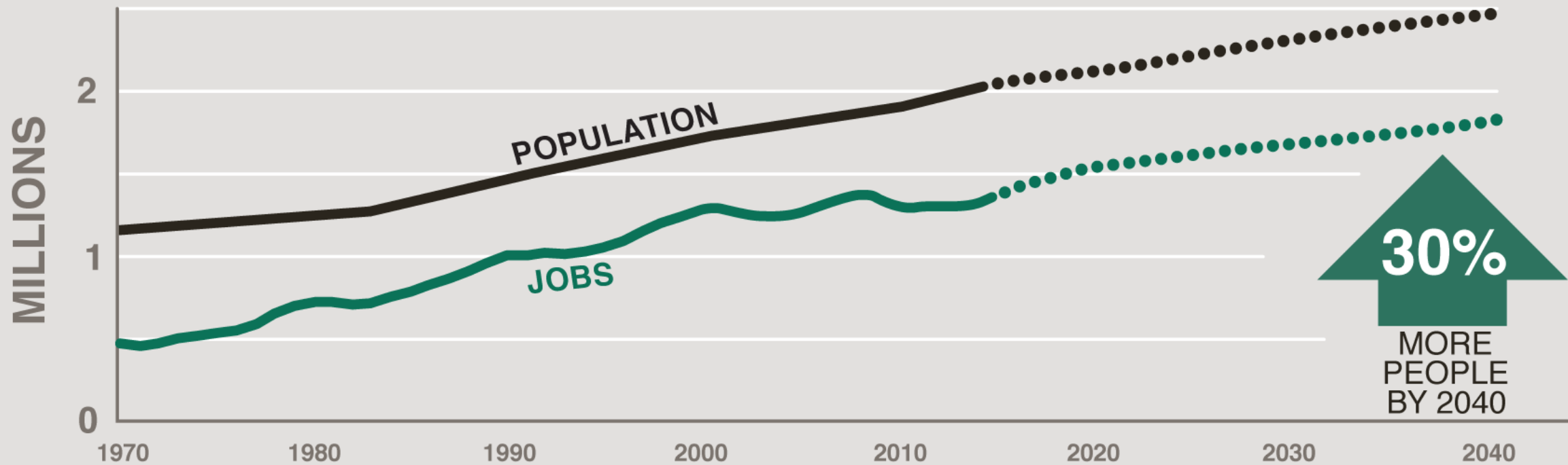
cknapp@kingcounty.gov



King County

King County





What is Our Call to Action?

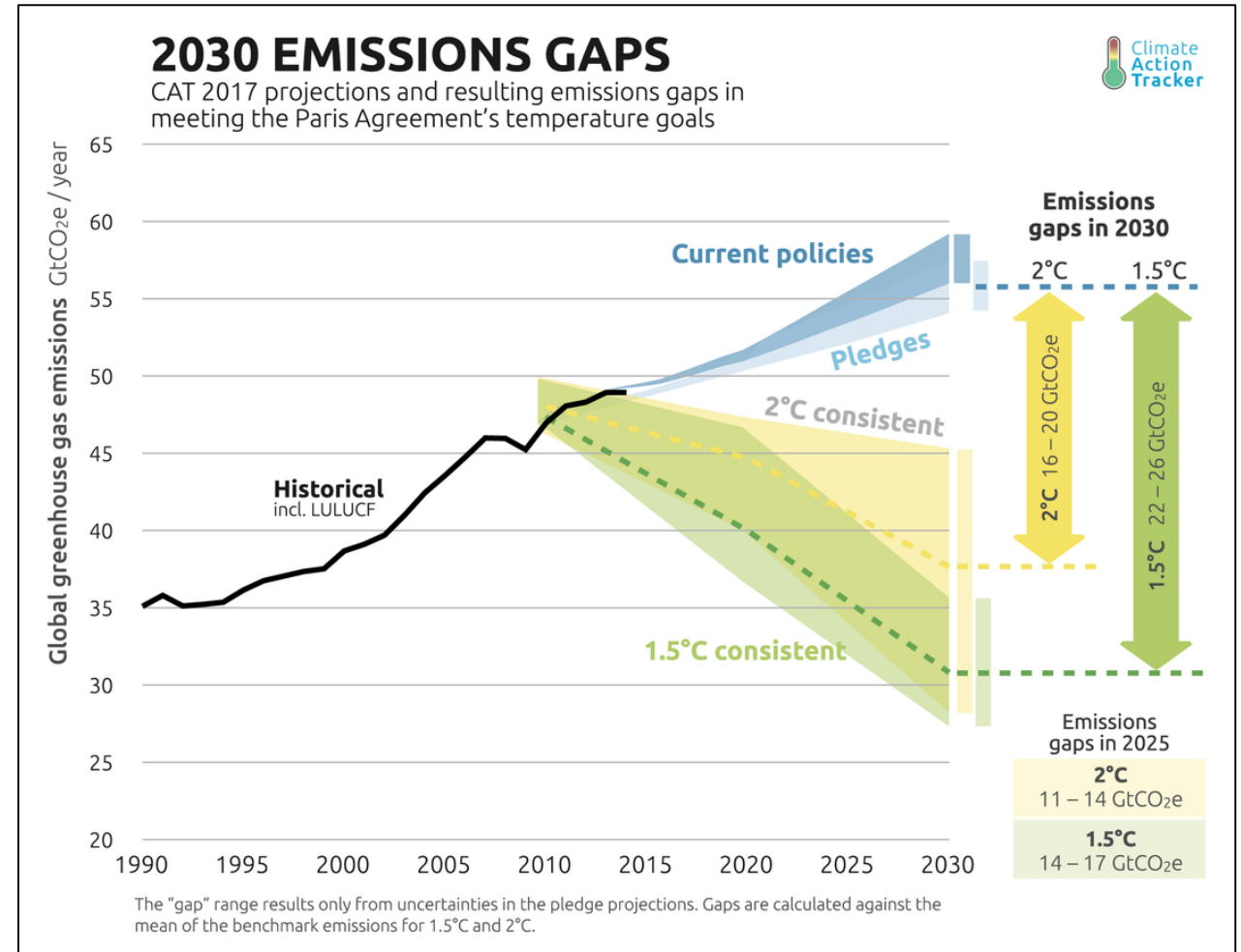
Scientific consensus for **global GHG reductions of at least 80%** by 2050 to stay below 2°C of warming

New emerging evidence that avoiding most severe impacts required **limiting warming to 1.5°C**

“There is no documented historic precedent” for the scale of changes required, the IPCC found.

Now through 2030 is a critical window of opportunity to affect change.

Aggressive action needed to achieve King County’s 2015 Strategic Climate Action Plan goals



If we don't act now, the costs and consequences will grow

ENVIRONMENT



Increasing stress for salmon.



Impacts on forests from insects, disease and fire.



Changes in habitat important to local species.



More harmful algal blooms in lakes and Puget Sound.

ECONOMY



Greater risks to homes, businesses, and infrastructure from increased coastal and river flooding.



Marine-based economies suffer as fish and shellfish diminish.



Increased summer drought stress.

HEALTH



Health impacts from heat exposure.



Changes in illnesses carried by ticks and mosquitos.



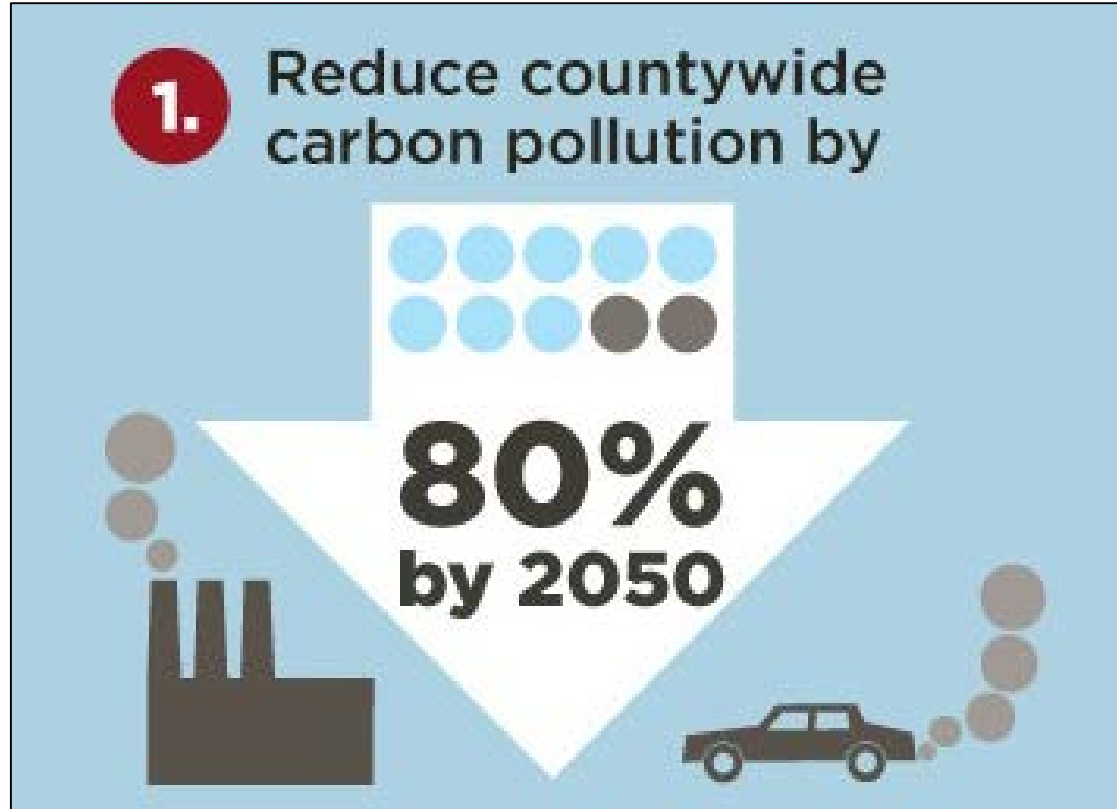
Increased risks for people with asthma and heart illness due to more summer air pollution.



Greater risk of injury and property damage from more extreme weather events.

We need to reduce emissions and prepare for climate impacts

Strategic Climate Action Plan (SCAP)



King County SCAP (2015)

Goals & Strategies to achieve carbon neutrality community-wide

5 year SCAP update (2020)

Refine and update goals & actions
Address operations, services and community wide reductions

Carbon Neutral Implementation Plan

Focus on goal for County operations
Technical analysis & recommendations
1) *Definition of an operational goal*
2) *Analysis of key strategies & feasibility*
Feed into 2020 SCAP Update



Government Operations



Countywide Services

Defining Goals for Carbon Neutrality

Strategies, actions, and benefits depend heavily on how goal is defined.

(Direct, Indirect, Offsets?)

How should King County define a Carbon Neutral Goal for Operations?

Key Questions	Primary Criteria
1. How should the goal be defined?	1. Climate benefits
2. Where should the boundaries be drawn?	2. Feasibility
3. How to set the timeline?	3. Alignment with county priorities <i>(Including equity & social justice)</i>
4. What direct emission reduction strategies?	4. Community and partner engagement

1. How should the goal be defined?

Net
Neutral

Absolute
Neutrality

Easy to achieve

Quick to
implement

More funds for
direct reductions

More benefits
(especially local)

Transformational
Change

Primary Tradeoff

Fossil Fuel
Free

100%
Renewable

Zero
Emissions

Targets for specific operation segments

2. Where should the boundaries be set?

Near Term:

Scope 1 & 2

Focus on organizational change

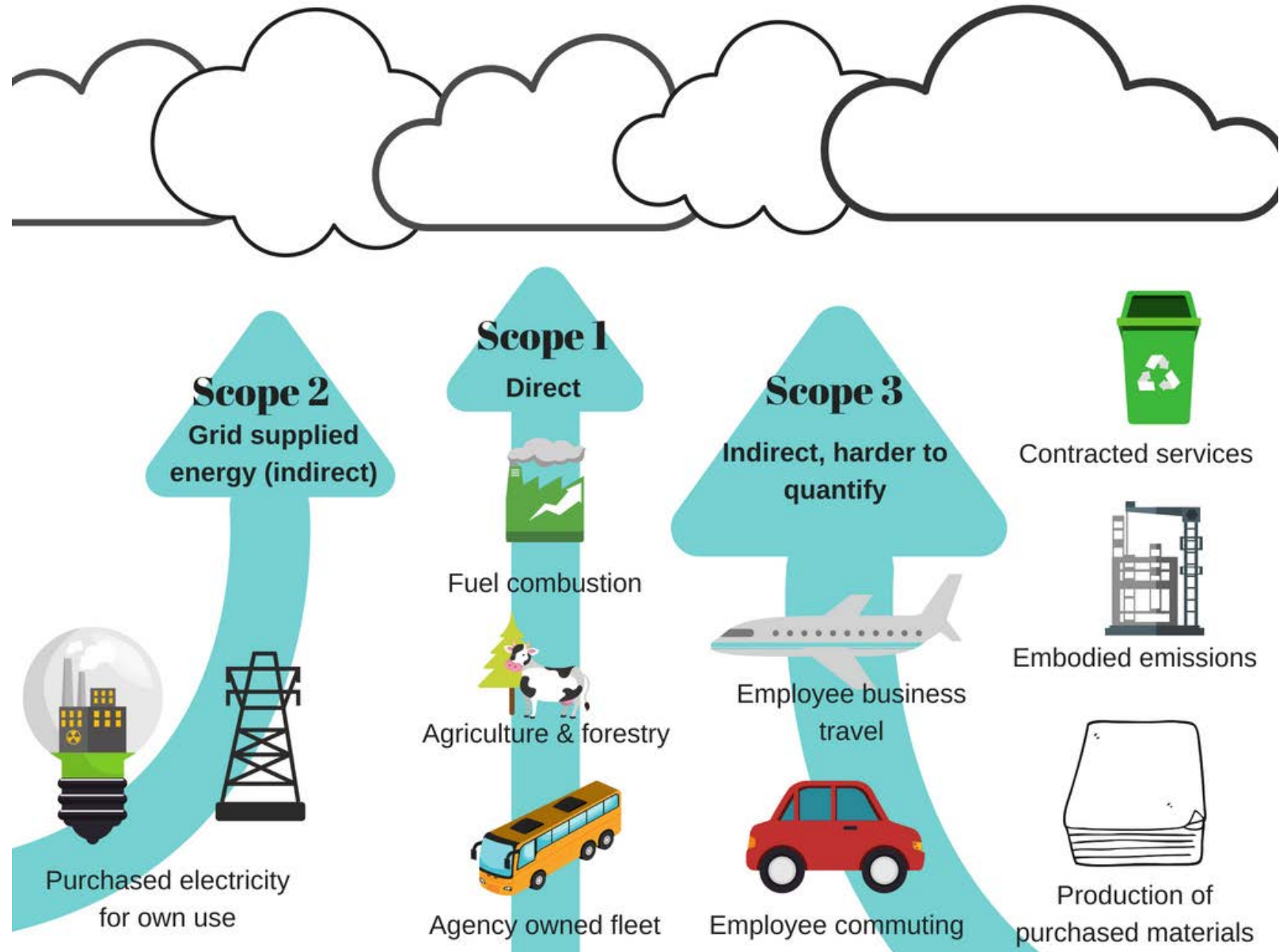
Inventory Scope 3

Prepare for future action

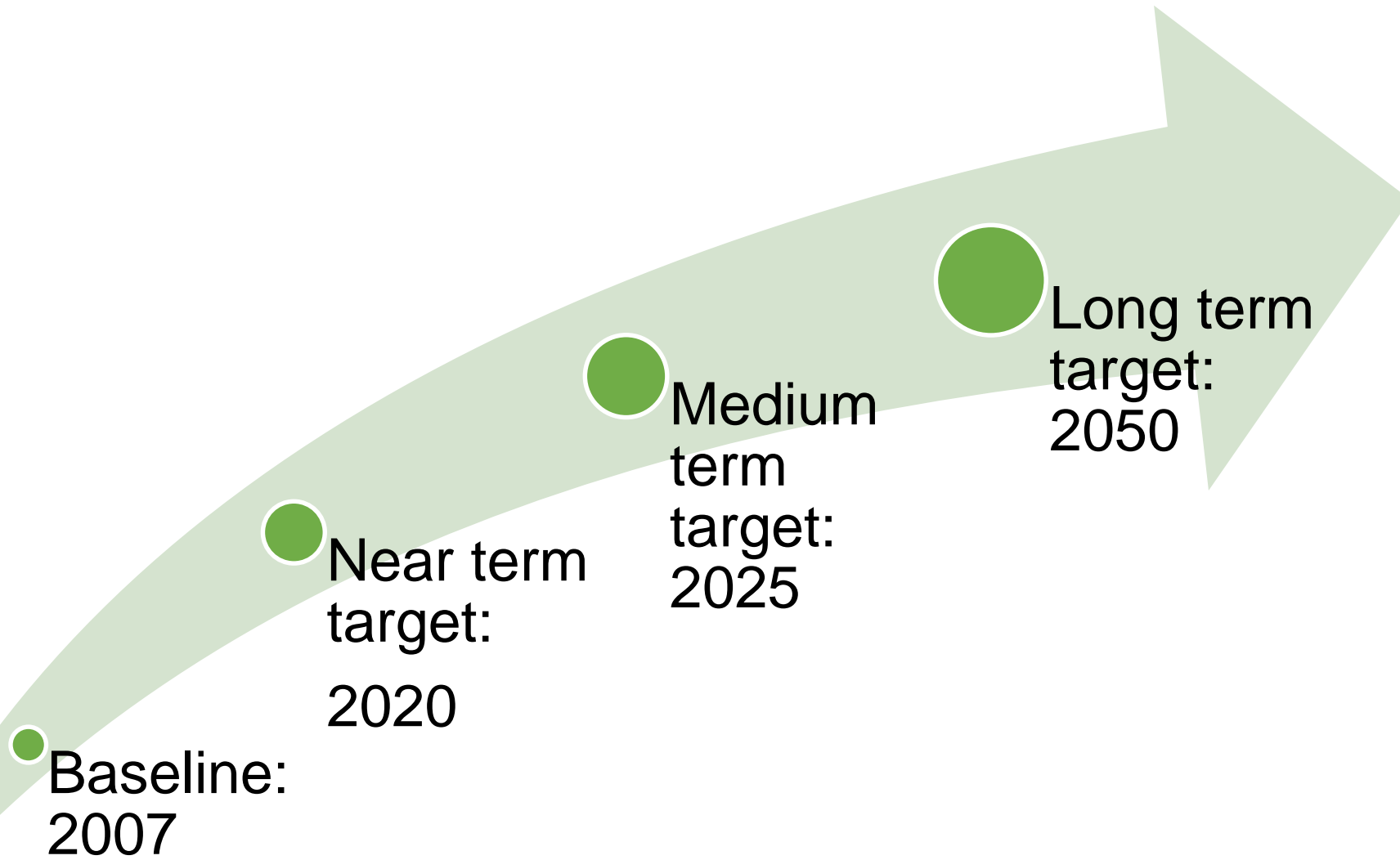
Long Term

Include actionable Scope 3

Expand boundary over time



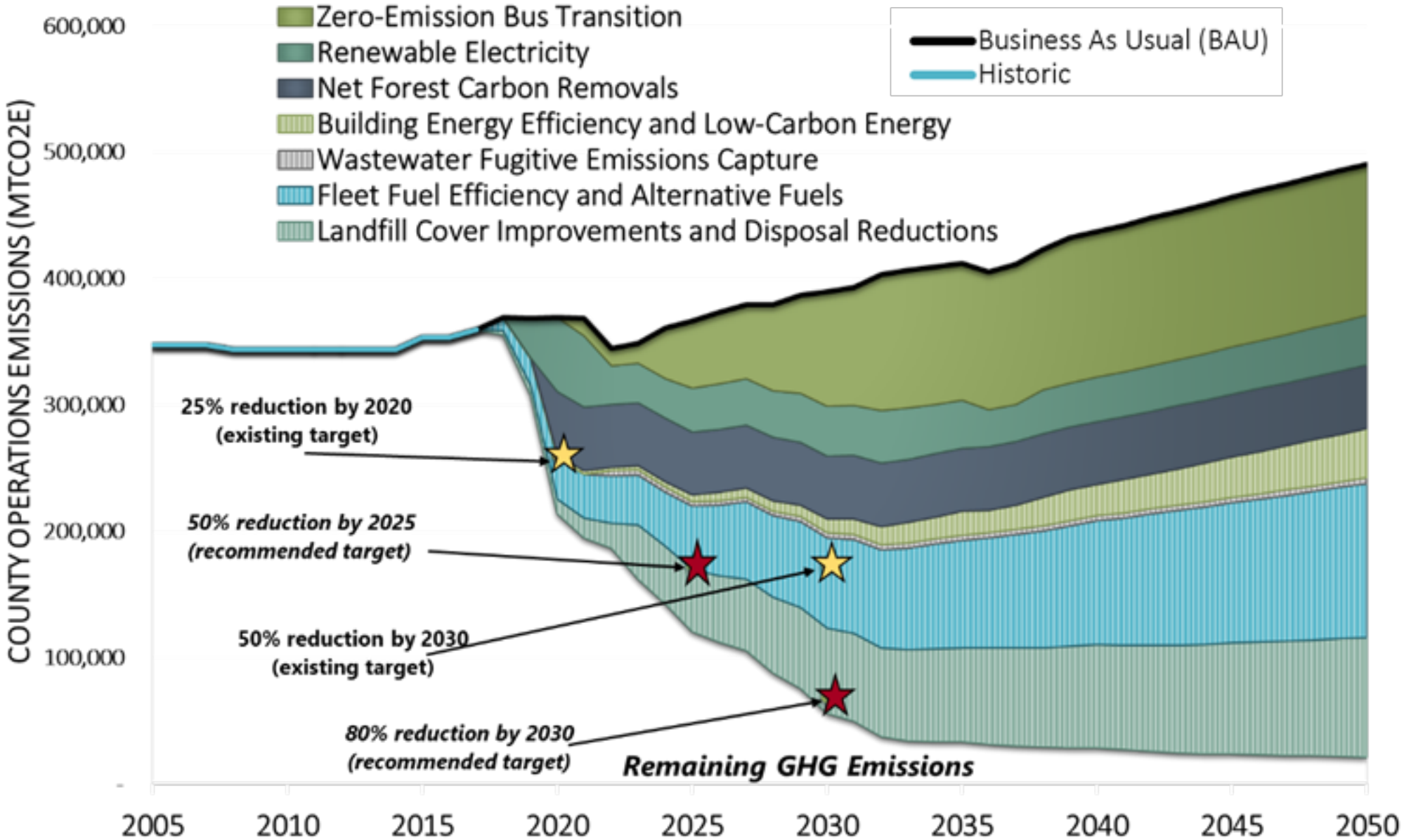
3. How to set timeline for a carbon neutral goal?



4. What direct reduction strategies should be prioritized?

Energy Efficiency	Achieving the same level of service with less energy. <i>Cost effective, feasible, within County's control.</i>
Renewable Energy	Replacing fossil-fuel generated power with renewables. <i>Feasible, perceived well by the public.</i>
Internal Carbon Fee	Fee charged internally per ton of carbon, reinvest in direct reduction. <i>Makes direct reduction more feasible & cost effective.</i>
Shadow Price of Carbon	Price per ton of carbon used in financial analysis for major decisions. <i>Monetizes emission reductions, improves cost/benefit assessments.</i>
Zero Emissions Fleet	Fleet powered by renewable energy with no generation emissions. <i>Major climate, pollution, & equity benefits.</i>

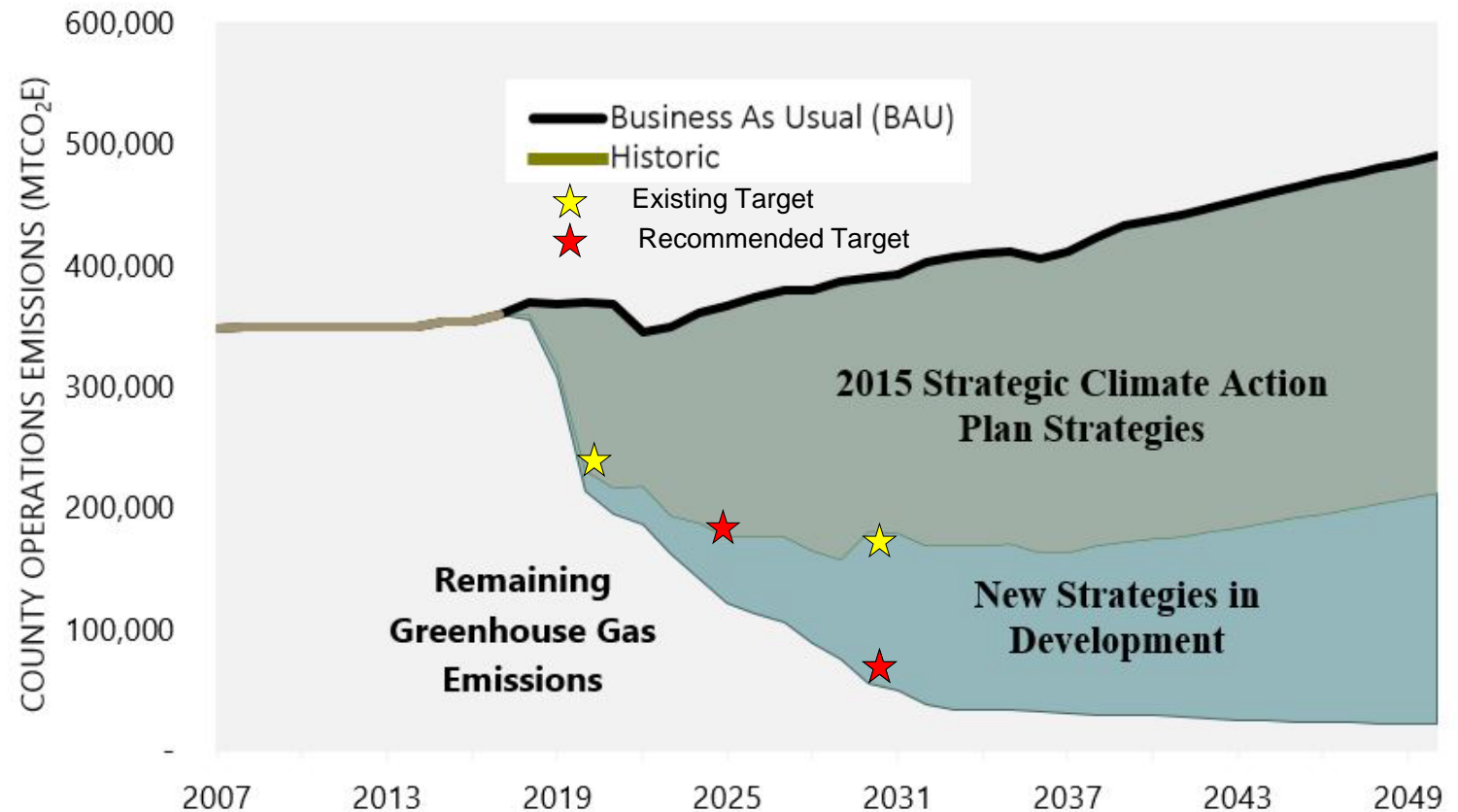
Feasibility and Reductions from Key Actions



Impact: More Ambitious Reductions are Feasible

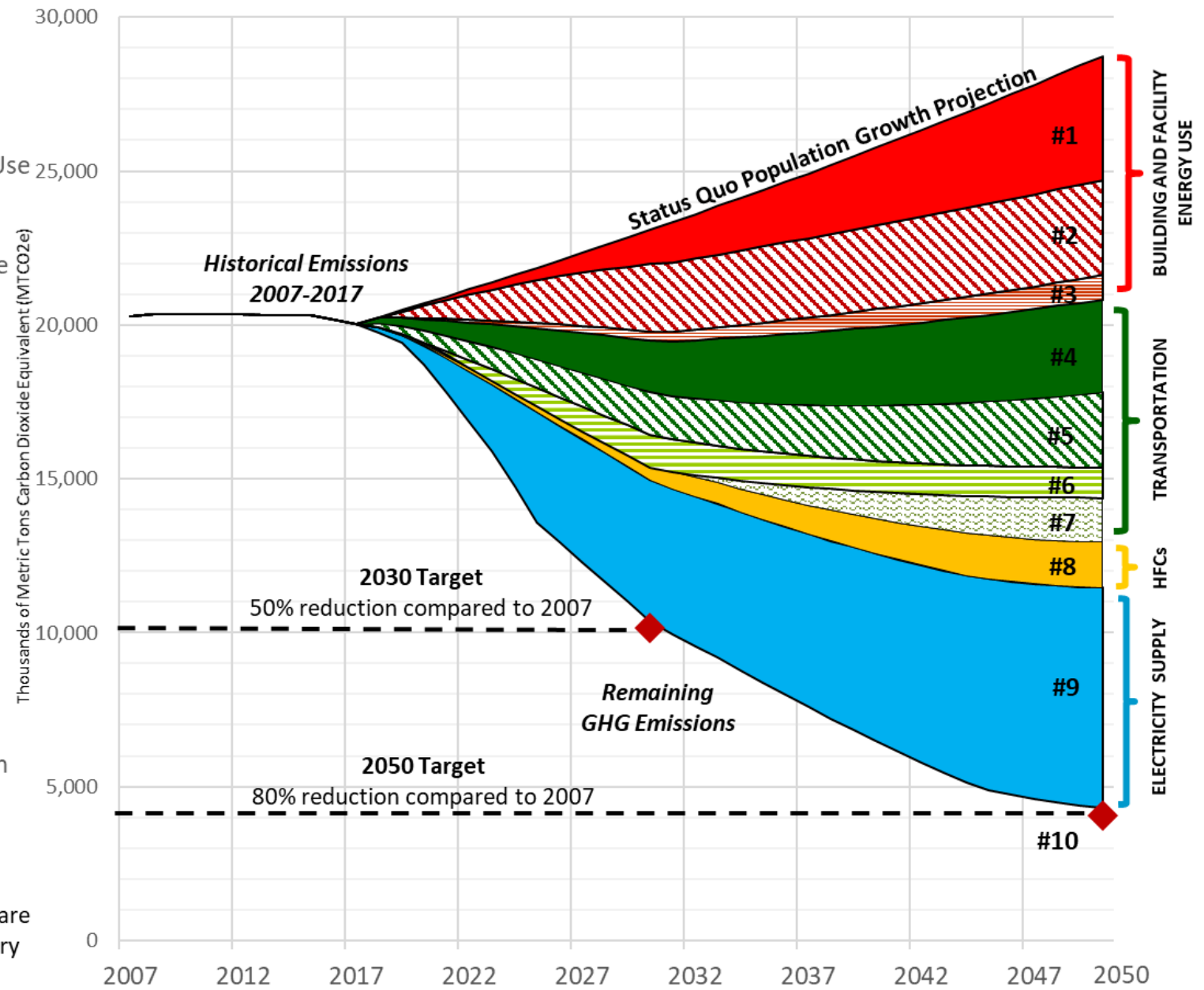
1. On track to achieve current 2020 target
2. Feasible to strengthen and accelerate 2025 and 2030 targets
3. Meeting these goals will require additional investment and/or policy changes

King County Operational GHG Emissions and Modeled Reductions



Parallel Effort: Community Scale Assessment

- 1. Strengthen Building Energy Codes
 - ▨ 2. Reduce Energy Use in Buildings and Industry
 - ▨ 3. Transition Fossil Fuel Use in Buildings to Electricity
 - 4. Protect Federal Vehicle Efficiency Standards
 - ▨ 5. Reduce Car Trips
 - ▨ 6. Adopt a Clean Fuels Standard
 - ▨ 7. Increase Adoption of Electric Vehicles
 - 8. Phase Out Hydrofluorocarbons
 - 9. Implement 100% Clean Electricity Law
 - ◆ 2030 and 2050 Goals
- Note: Solid colored wedges are based on adopted regulatory pathways.



Integration with the 2020 Strategic Climate Action Plan

OPERATIONAL REDUCTIONS

Define Operational Reduction Goals

Inventory and Assess Feasibility of Operational Reduction Goals

Operational Reduction Strategies Cost Assessment

COMMUNITY WIDE REDUCTIONS

Inventory for Community-wide Emissions

Community Wide Reduction Strategies Cost Assessment

Assess Tradeoffs

2020 SCAP Update

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