California's AB 32 Scoping Plan Update

NOVEMBER 2, 2021

Transparency on Oral Comment Process

- Dedicated time for EJAC Members after the conclusion of presentation

- During general comment period:
  - CARB staff will periodically announce approximate number of hands raised
  - No ceding of time to others
  - Any EJAC Members should use the dedicated time after presentations to make any comments to ensure they are heard
  - Please do not email us directly to ask that we give you priority

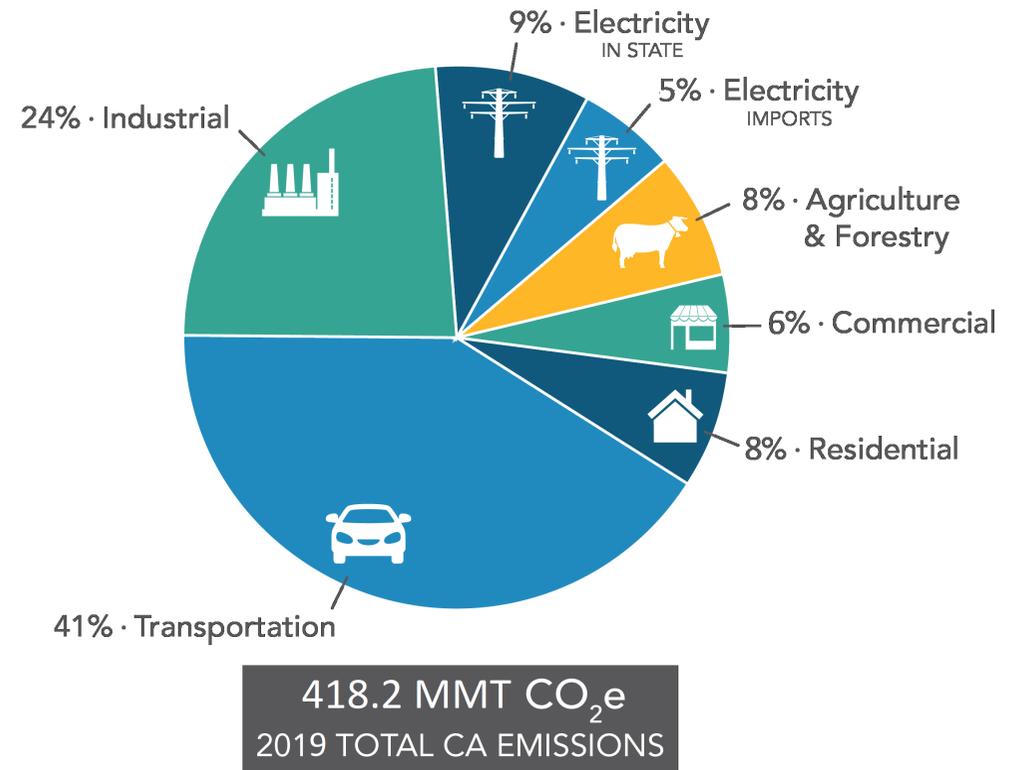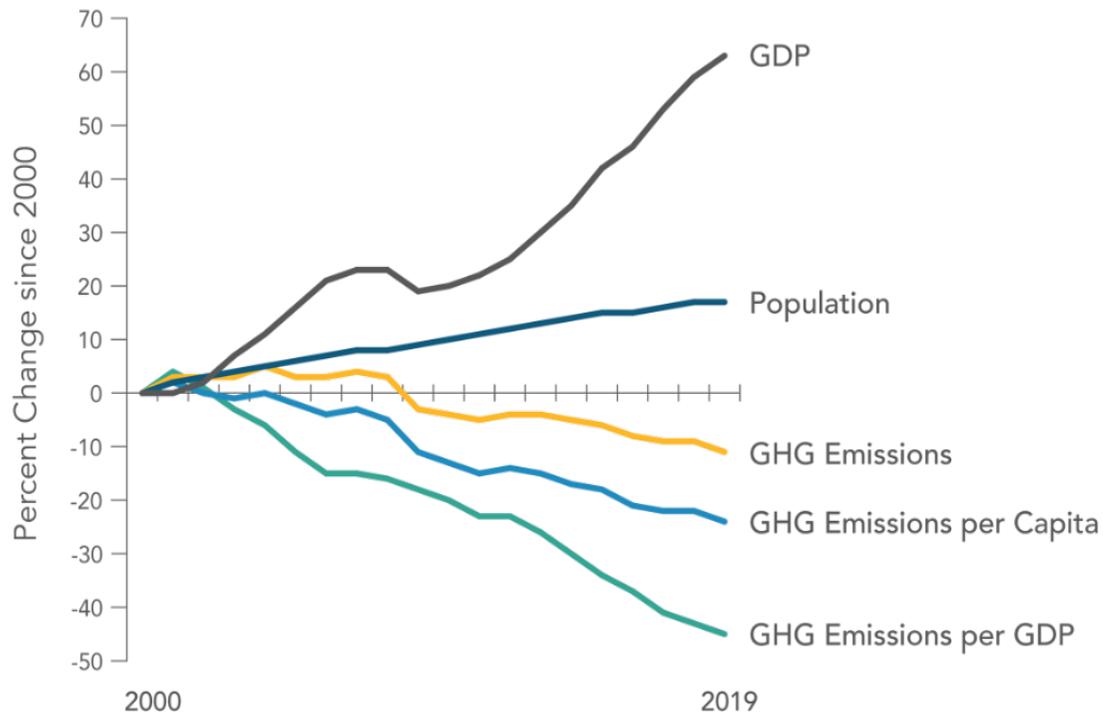- Goal to post agendas for workshops at least 48 hours in advance

Public Participation

- Today:
  - Environmental Justice Advisory Committee Members (up to 15 minutes)
  - Principals
  - Public
- Questions and Feedback
  - Use the "Raise Hand" function in the GoToWebinar toolbar, which should be located to the right of your screen as shown
  - When staff calls your name, please "Unmute" yourself by clicking the red button, and proceed to introduce yourself

California's Trends Achieved AB 32 Target in 2016

Line chart — Percent Change since 2000, from 2000 to 2019:
- GDP
- Population
- GHG Emissions
- GHG Emissions per Capita
- GHG Emissions per GDP

Pie chart — 2019 CA Emissions:
- 41% · Transportation
- 24% · Industrial
- 9% · Electricity IN STATE
- 5% · Electricity IMPORTS
- 8% · Agriculture & Forestry
- 6% · Commercial
- 8% · Residential

418.2 MMT CO_2e
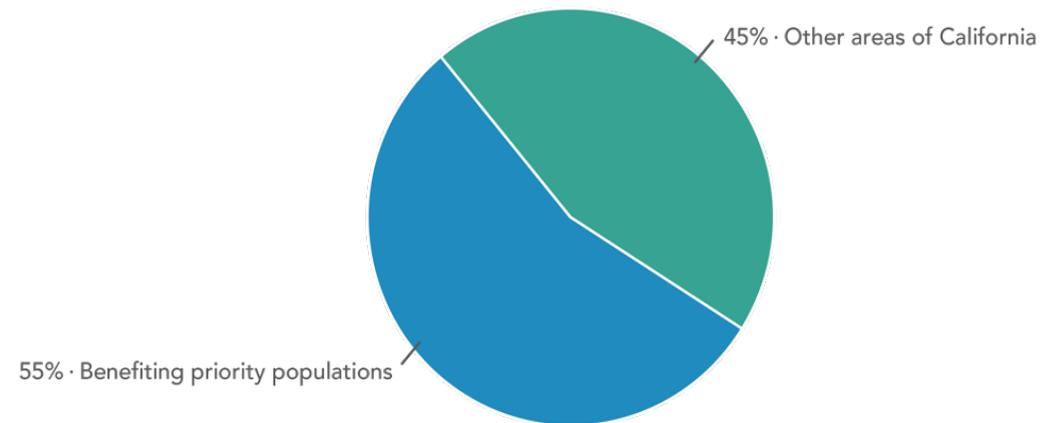2019 TOTAL CA EMISSIONS

Source: 2021 Edition, California Greenhouse Gas Emission Inventory: 2000-2019
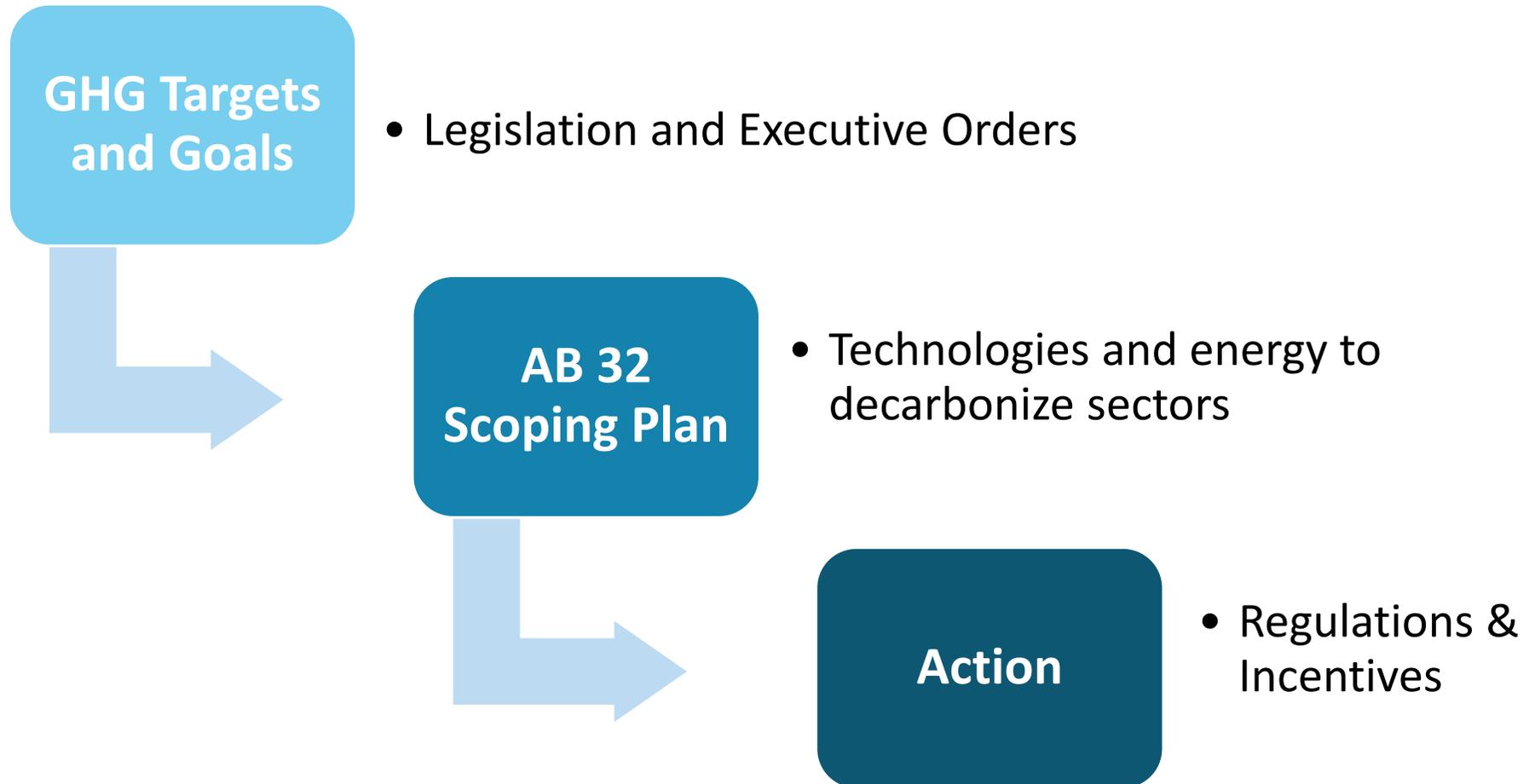
Climate Mitigation and Racial Equity

- Actions must protect public health and address opportunity gaps

- Residents in heavily burdened communities must be first to benefit from climate action

- Moving away from combustion of fossil fuels will bring critical air quality and health benefits

- Carbon pricing funds must be reinvested to benefit burdened communities

California Climate Investments Cumulative Benefits to Priority Populations

45% · Other areas of California

55% · Benefiting priority populations

California's Climate Action Framework

GHG Targets and Goals

- Legislation and Executive Orders

AB 32 Scoping Plan

- Technologies and energy to decarbonize sectors

Action

- Regulations & Incentives

AB 32 Climate Change Scoping Plan

- Scoping Plan(s) are action plans to ensure CA meets statewide GHG reduction targets (mandated in AB 32)
  - Scoping Plan(s) rely on a suite of climate policies to address emissions across all sectors
  - Required to be updated at least every 5 years
  - 2017 SP (most recent) – cost-effective and technologically feasible path to achieve the 2030 target
- Provide direct GHG emissions reductions and air quality benefits
- Minimize emissions "leakage" – increase to non-CA GHG emissions
  - Ensure high-road jobs remain
- Facilitate sub-national and national collaboration
- Support cost-effective and flexible compliance

2017 Scoping Plan Portfolio
40% below 1990 levels by 2030

Double building efficiency

More clean, renewable fuels

Cleaner zero or near-zero emission cars, trucks, and buses

Walkable/bikeable communities with transit

Cleaner freight and goods movement

60% renewable power

Slash potent "super-pollutants" from dairies, landfills and refrigerants

Cap emissions from transportation, industry, natural gas, and electricity

Invest in communities to reduce emissions

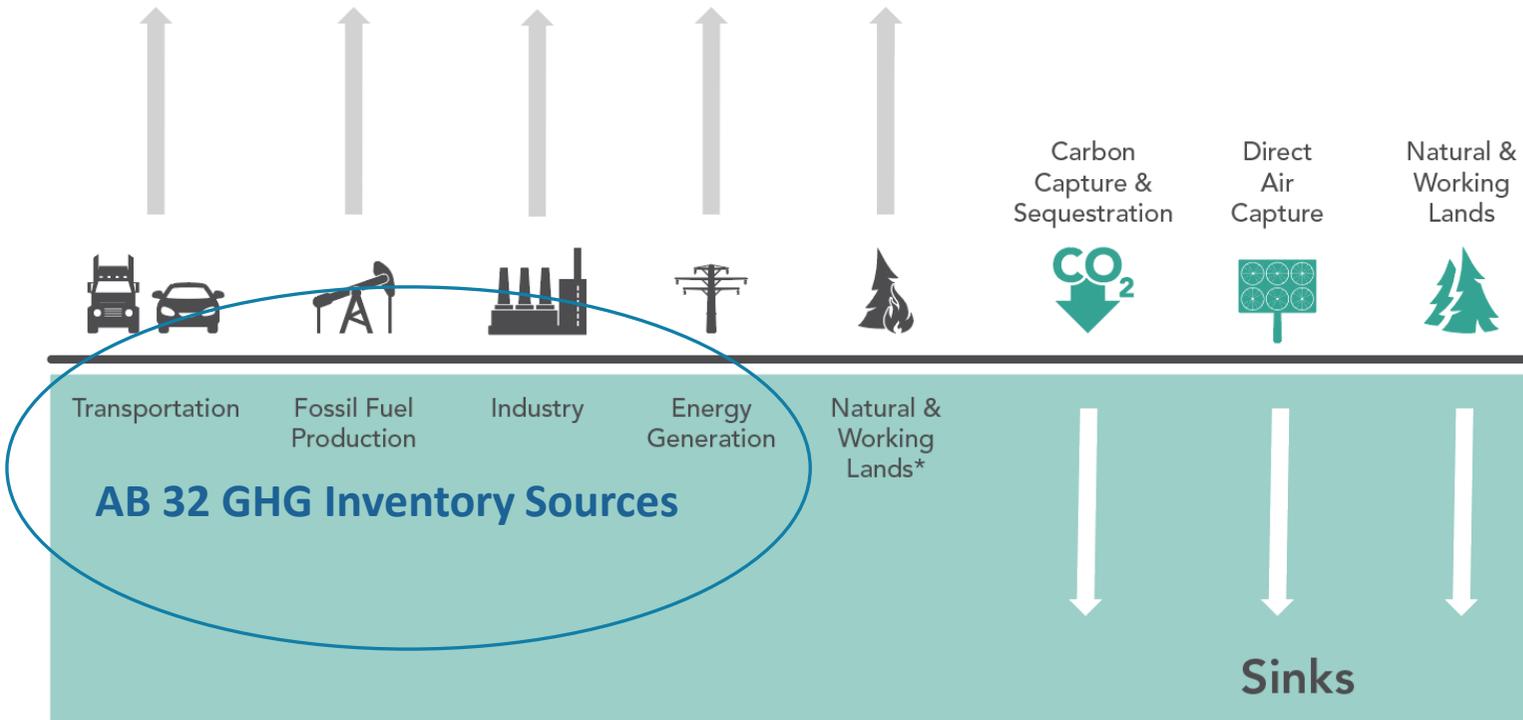Protect and manage natural and working lands

AB 32 Scoping Plan Implementation

✓ Governors, Legislature, Californians want action to address climate change

✓ Steady state-level policy signals are attracting private investment in clean technology

? Delays in permitting and opposition at local level

Science-based Target: Achieve Carbon Neutrality (CO_2e) Mid-Century

Sources equal Sinks

Sources

Transportation | Fossil Fuel Production | Industry | Energy Generation | Natural & Working Lands*

AB 32 GHG Inventory Sources

Carbon Capture & Sequestration CO_2

Direct Air Capture

Natural & Working Lands

Sinks

*Natural and working land emissions come from wildfires, disease, land and ag management practices, and others
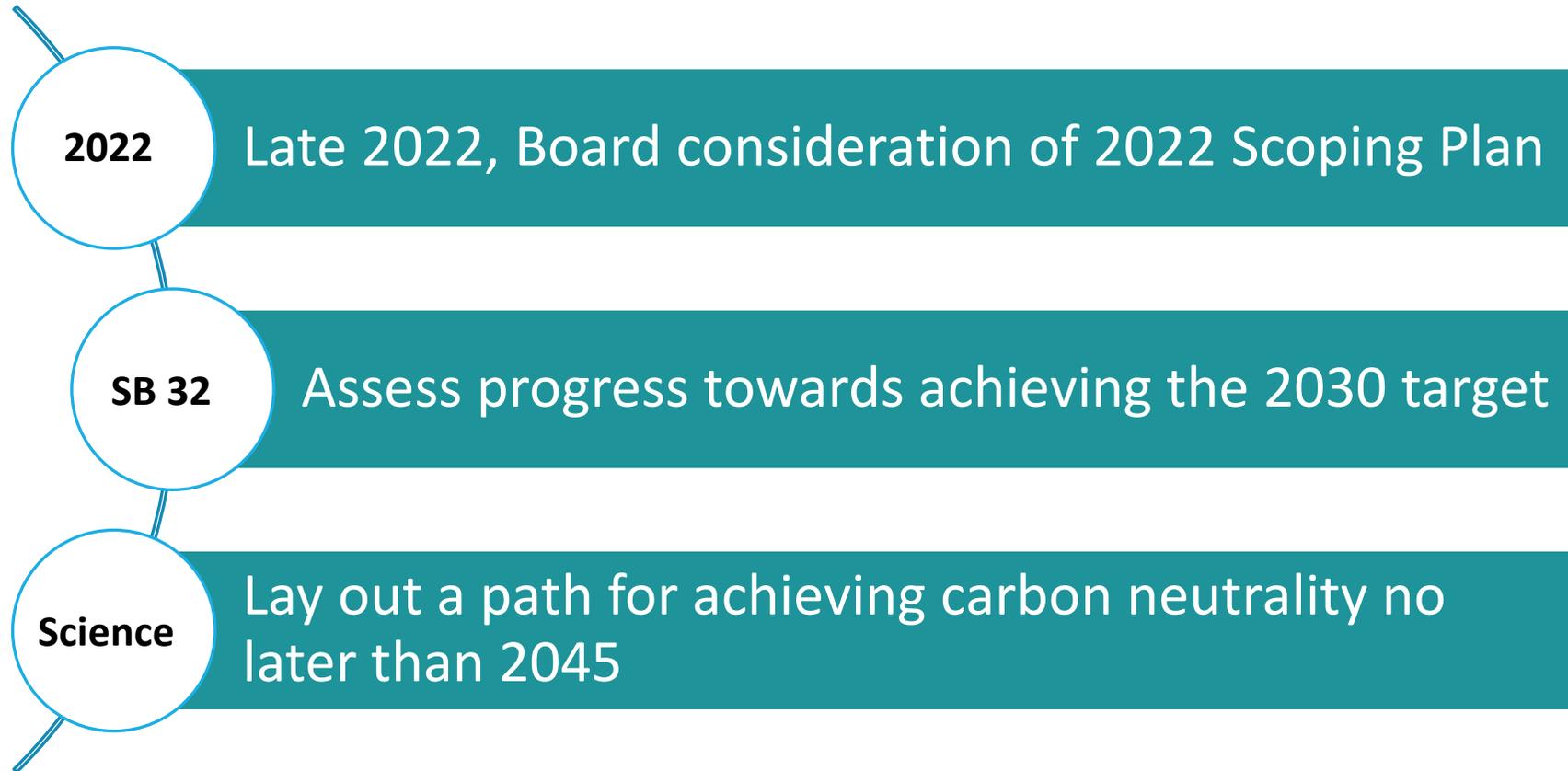
- Continue to reduce emissions from sources in AB 32 GHG Inventory

  - All potential scenarios will drastically reduce or eliminate fossil fuel combustion

- Reduce emissions and increase sequestration in Natural and Working Lands

- Maximize all sinks with goal of achieving net negative
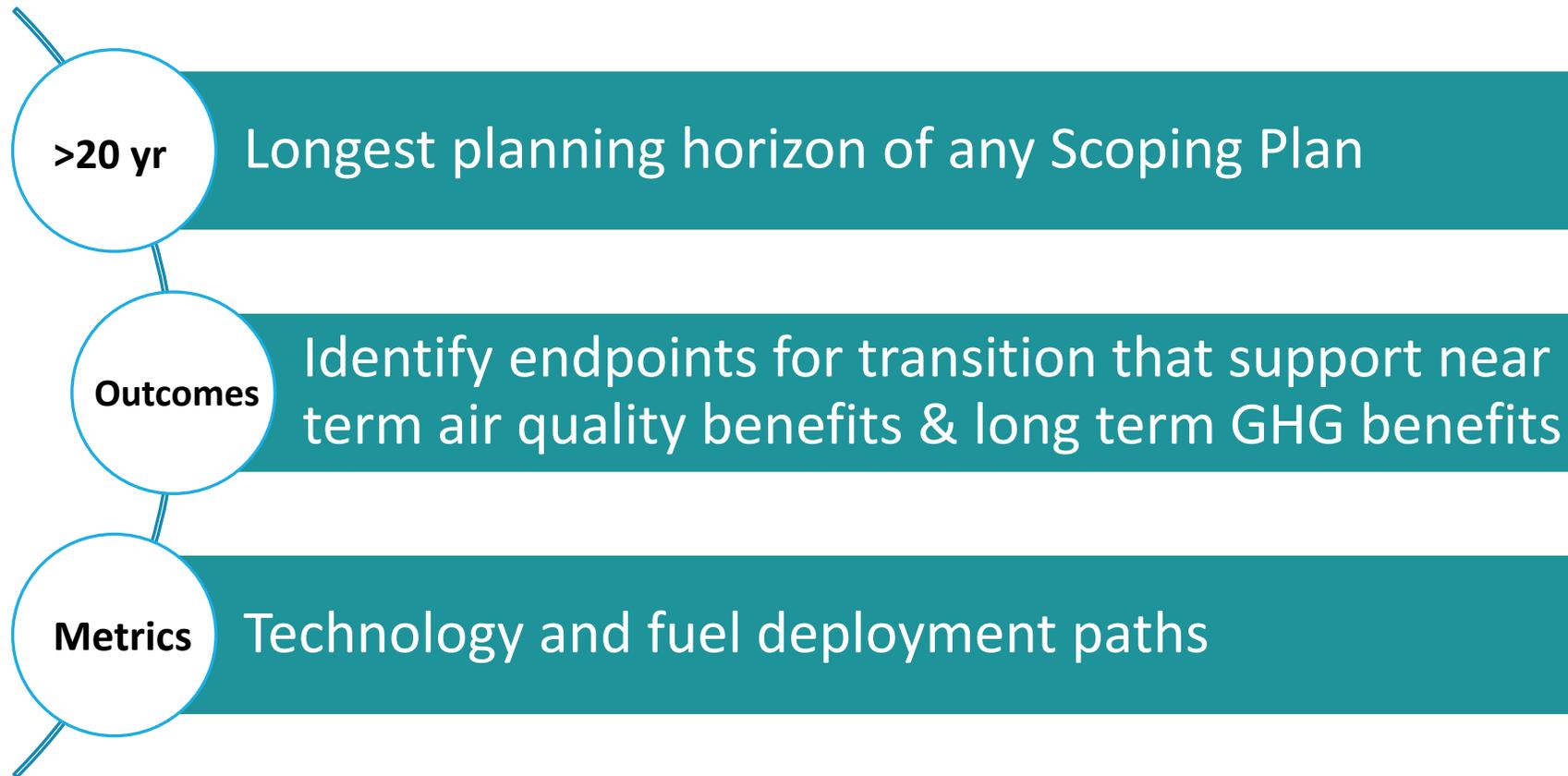
Immediate Call to Action

IPCC AR6 WG1 suggests that limiting global warming to 1.5°C by the end of the century is still within reach, but requires transformational change:

- Cut global GHG emissions in half by 2030

- Reach global net zero CO_2 emissions by the middle of this century

- Not mutually exclusive

2022 Scoping Plan Update: Key Objectives

2022 — Late 2022, Board consideration of 2022 Scoping Plan

SB 32 — Assess progress towards achieving the 2030 target

Science — Lay out a path for achieving carbon neutrality no later than 2045

2022 Scoping Plan Update: Key Objectives, cont.

>20 yr — Longest planning horizon of any Scoping Plan

Outcomes — Identify endpoints for transition that support near term air quality benefits & long term GHG benefits

Metrics — Technology and fuel deployment paths

2022 Scoping Plan Update: Electricity Sector

SB 350 — Integrated Resource Plans

SB 100 — Plan for zero-carbon retail sales by 2045

Evolving Role — Sector is decarbonizing while also seen as path to decarbonize other sectors