

House Interim Committee on Energy and Environment

Update on State Agency Work to Reduce Greenhouse Gas Emissions

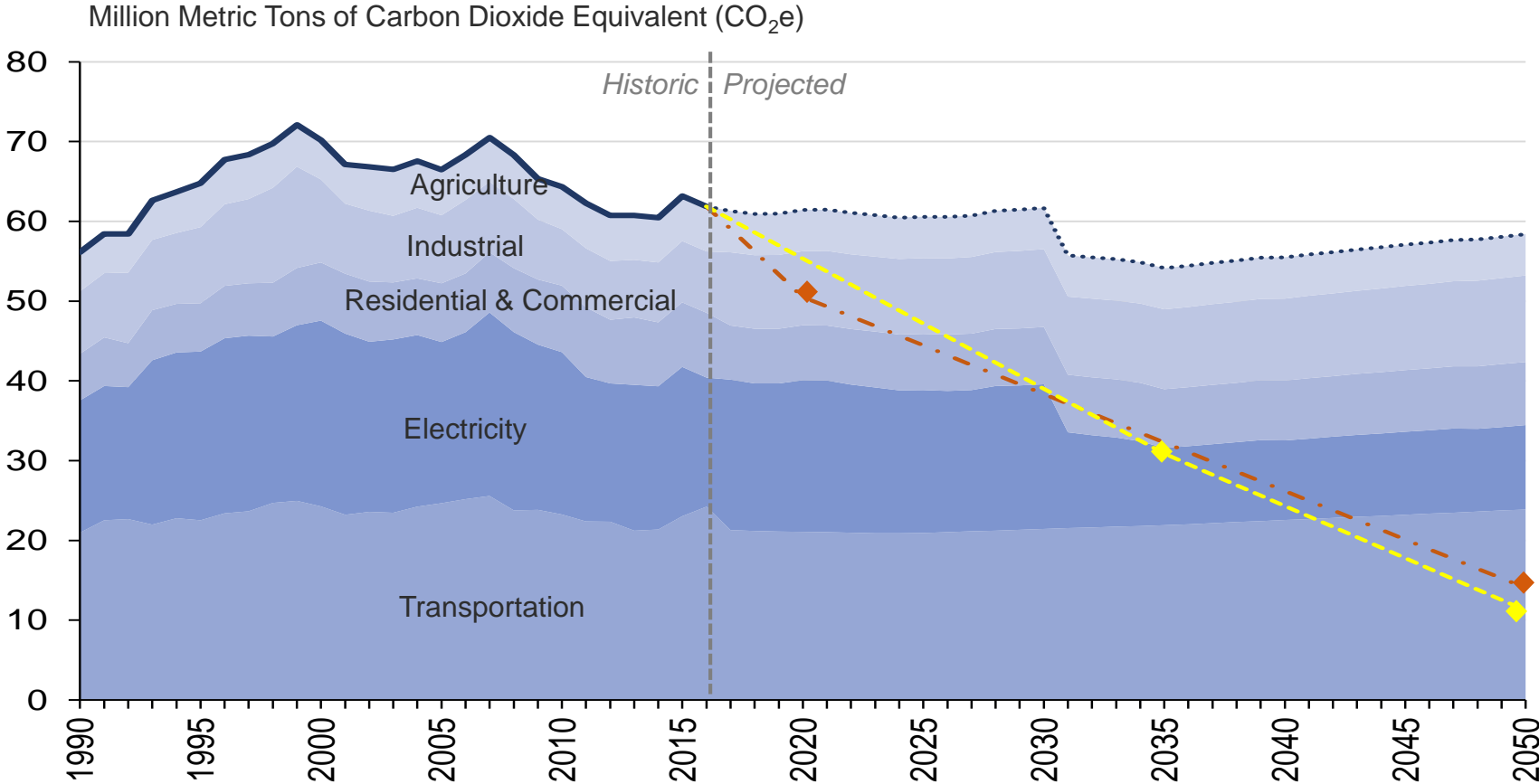
Oregon Department of Environmental Quality

December 18, 2020

We Are Running Out of Time to Reduce GHG Emissions

- Increasing temperatures and their cascading effects threaten our health, our communities, and our natural resources. Without further action, *average* temperatures will rise by as much as 9°F over the course of this century.
- We must limit global warming to less than 4°F (2.2°C) “* * * to avoid potentially catastrophic climate change impacts, and remaining below this threshold requires accelerated reductions in GHG emissions to levels at least 80 percent below 1990 levels by 2050.” EO 20-04

Oregon GHG Emissions and Trajectories



**Oregon Legislature
(2007)**

10% below 1990 by 2020
51 Million MT CO₂e

75% below 1990 by 2050
14 Million MT CO₂e

**Executive Order 20-04
(2020)**

45% below 1990 by 2035
31 Million MT CO₂e

80% below 1990 by 2050
11 Million MT CO₂e

Oregon GHG Emissions Detail

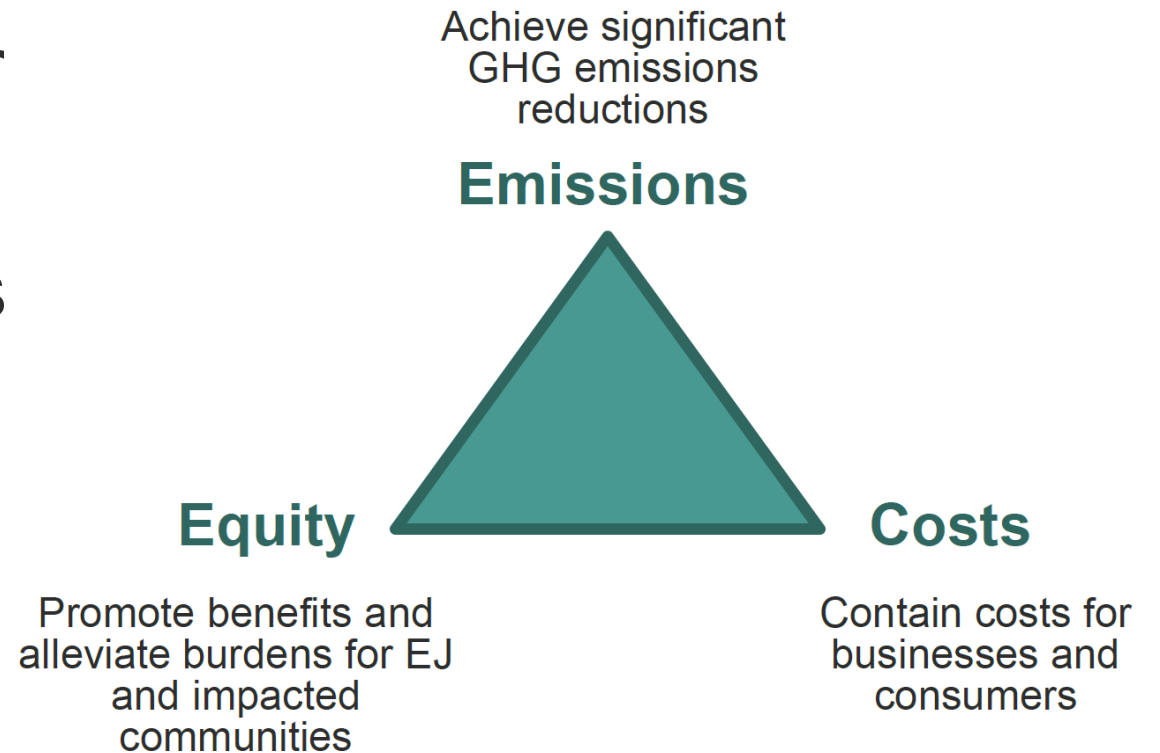
Sector-tons/yr	'90	'95	'00	'05	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	% in '19
Transportation	21	23	24	25	23	22	22	21	21	23	24	24	24	23	36%
Natural Gas Use	5	7	8	7	8	8	8	8	8	7	7	8	7	8	13%
Other Industrial	5	6	6	5	4	4	4	4	4	4	4	4	4	4	6%
Electricity Use	17	21	23	20	20	18	17	18	18	19	16	17	17	19	30%
Other Residential & Commercial	3	3	4	4	4	4	4	4	4	4	4	4	4	4	6%
Agriculture	7	7	6	7	7	7	7	7	7	7	7	7	7	7	11%
Total	58	66	71	68	65	63	61	62	62	64	62	64	64	64	

Climate Protection Program

Reduce GHG emissions by at least 80% (from 1990 levels) over the next 30 years **(80 by 50)**

Limit, and then reduce, emissions in three sectors (to the extent not already reduced by other programs):

- Transportation fuels
- Natural gas and other fuels
- Large stationary sources



The Interplay of Climate Programs

Climate Protection Program (aka “Cap & Reduce”)

DEQ/EQC Programs

Extend &
Expand
Clean
Fuels
Program

Strengthen
Vehicle
Emissions
Standards
and
Incentives

Expand
Employee
Commute
Options
(ECO)

Strengthen
Landfill
Methane
Controls

Reduce
Food
Waste

Other State/Local Programs

Building &
Appliance
Standards/
Energy
Efficiency
Investments

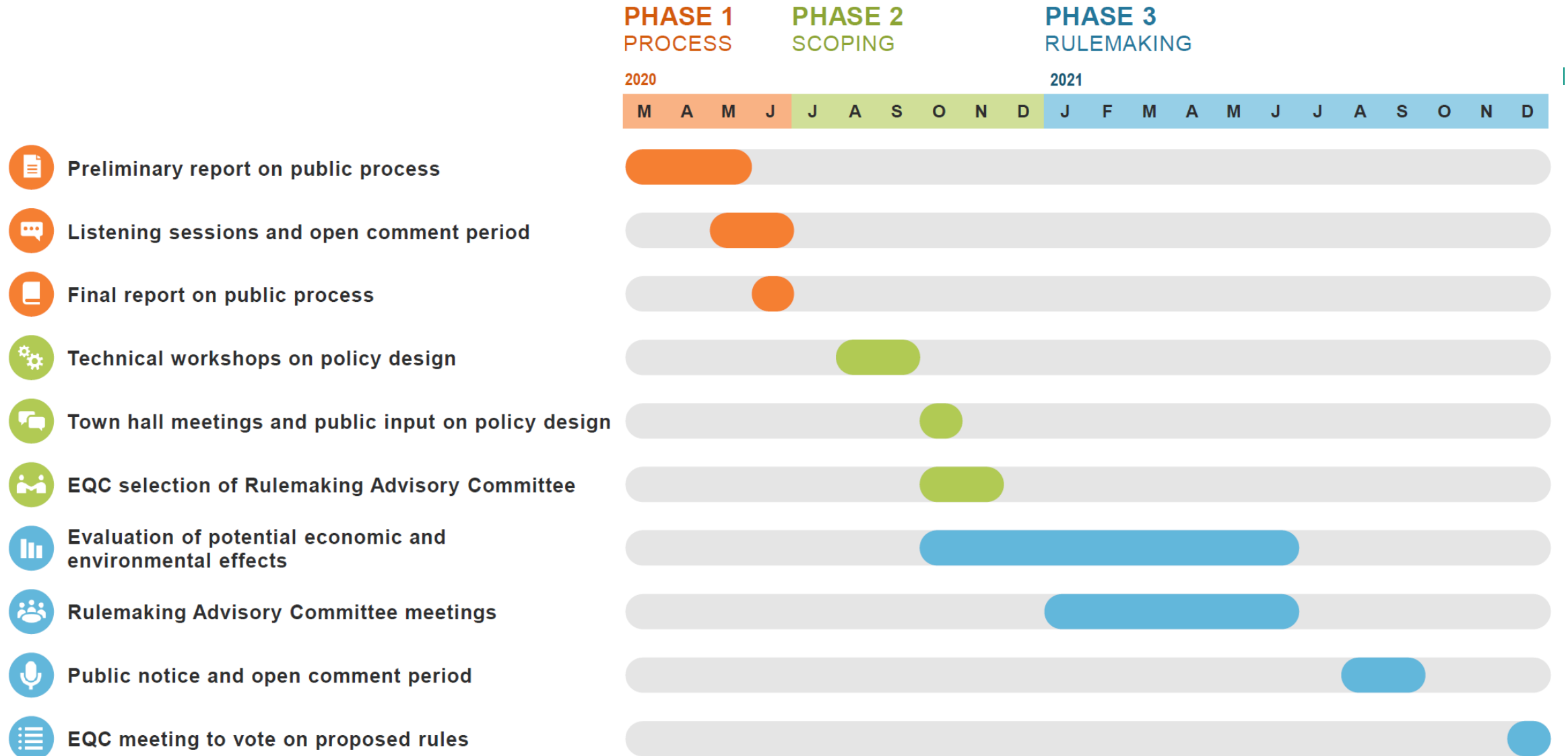
Every Mile
Counts-STS/
Climate
Friendly
Communities

SB 98/
RNG

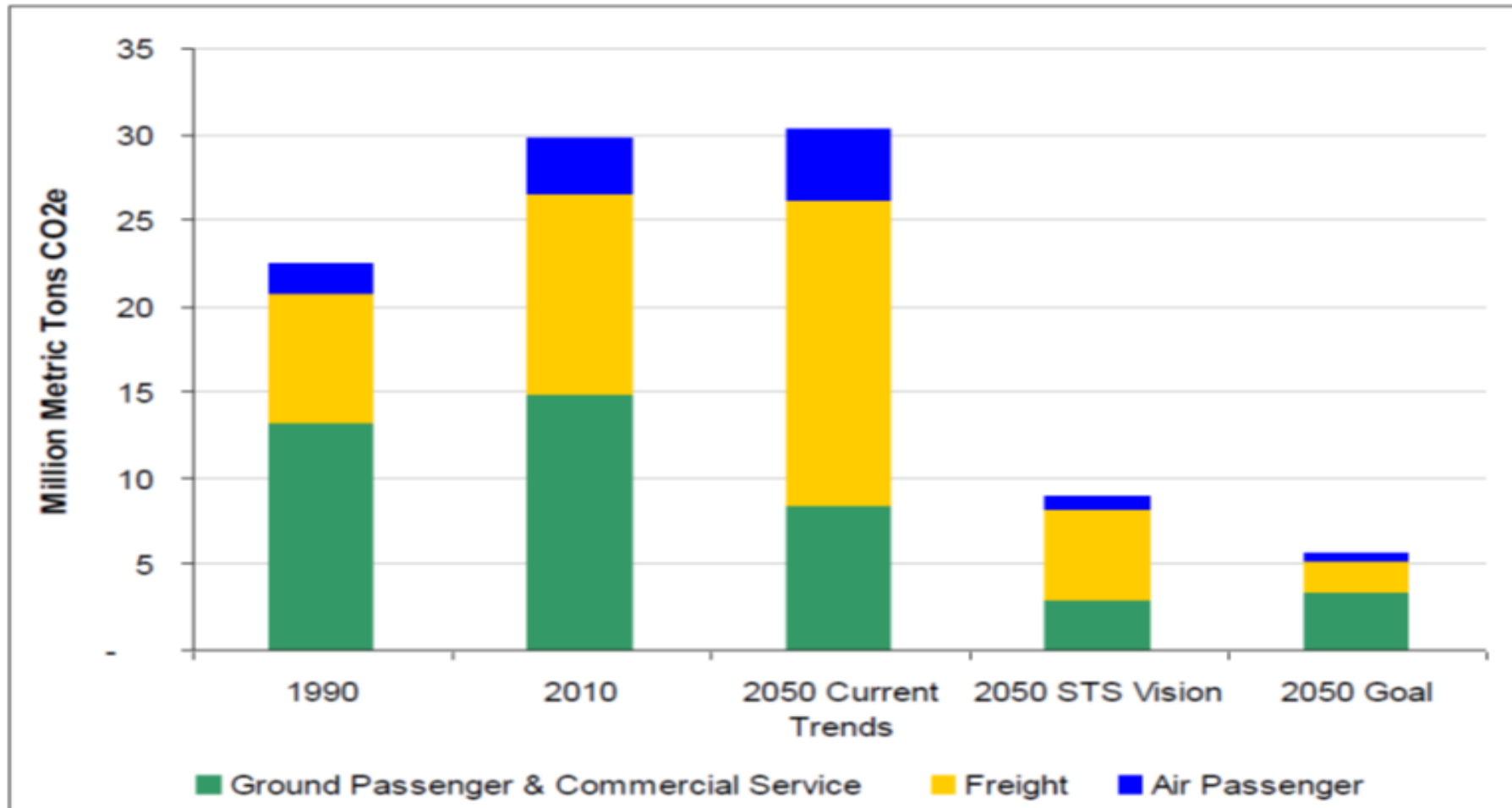
Climate Protection Program – Key Program Elements

- Setting initial limits on GHG emissions
- Trajectories for declines
- Program scope (GHG emissions/sources subject to limits)
- Points of regulation
- Trading of compliance allowances between regulated entities
- Use of alternative compliance instruments to meet limits
- Cost containment mechanisms

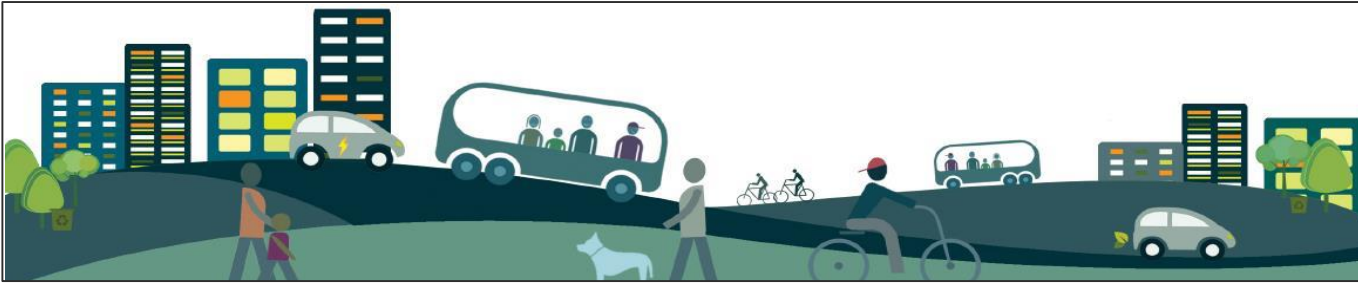
Development Timeline for Cap and Reduce Program(s)



Oregon – Past & Projected Future Sources of Transportation GHG Emissions



Every Mile Counts/Statewide Transportation Strategy – Reducing Transportation GHG Emissions

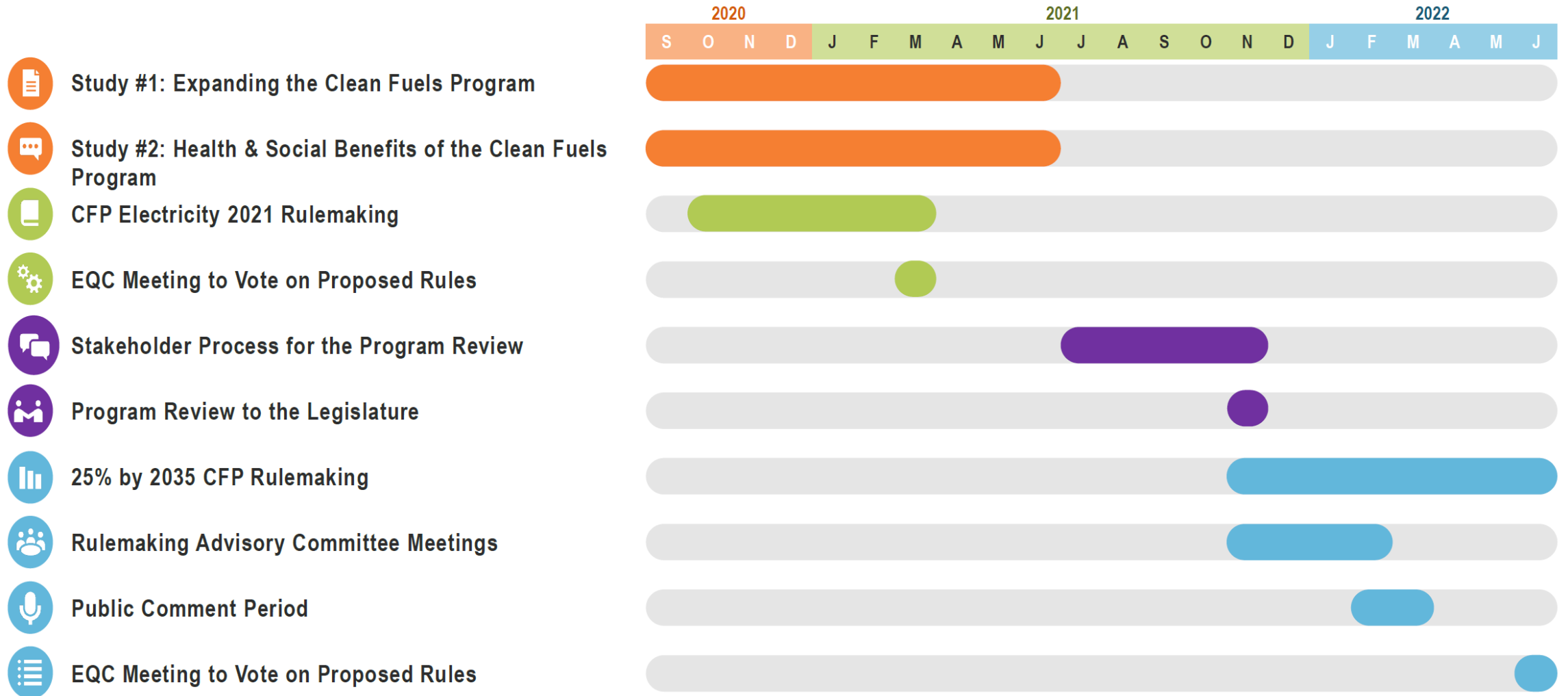


Six categories of actions in agency work plans:

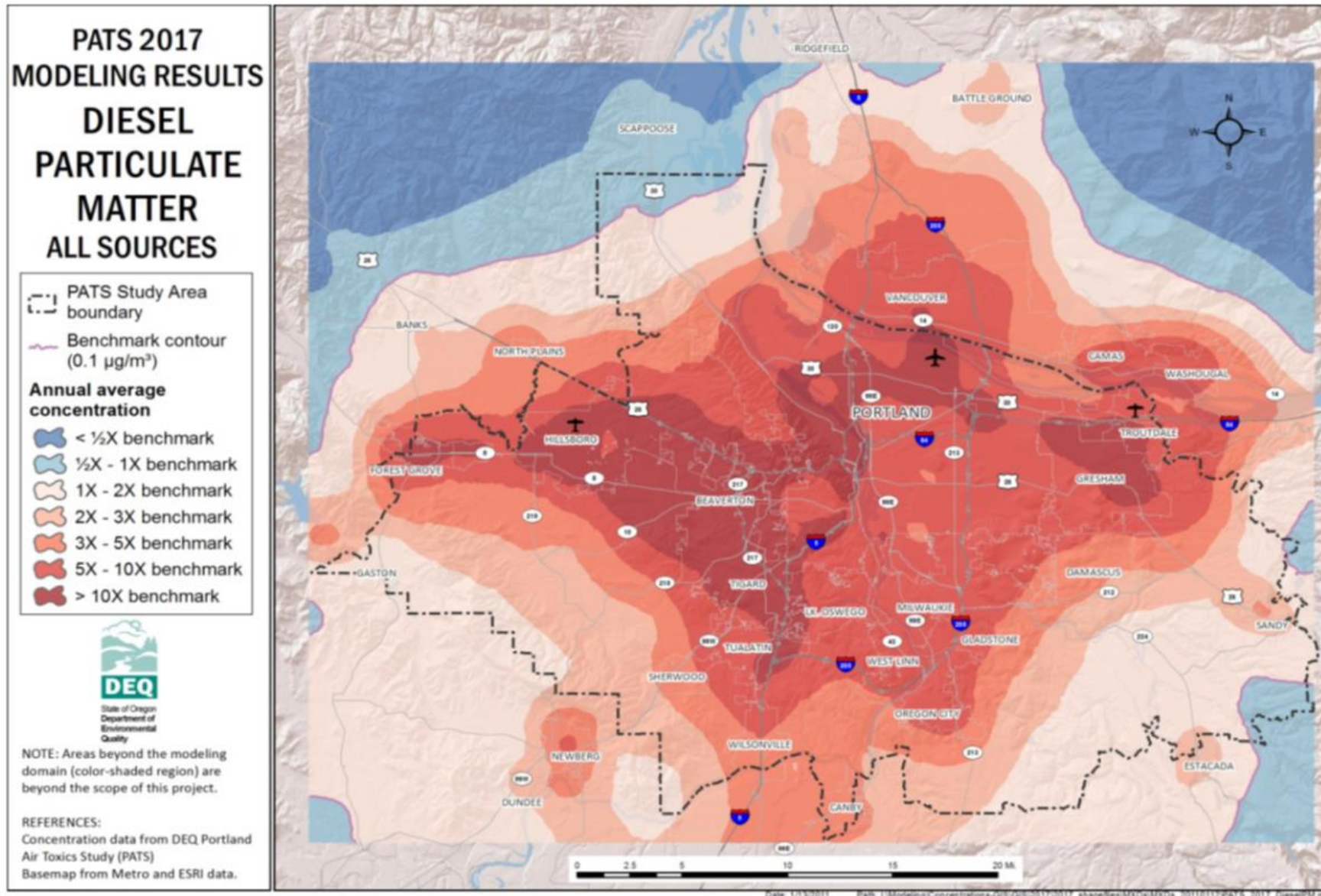
- **Fuel Efficient Vehicles** (CA standards for passenger and freight + Clean Vehicle Rebate Program)
- **Clean Fuels** (25% reduction in carbon intensity by 2035)
- Transportation options
- Climate-Friendly & Equitable Communities
- Transportation systems management
- Pricing strategies



Timeline to Extend Clean Fuels Program



Reducing Transportation Emissions – Health & Equity



Reducing Food Waste and Landfill Emissions

Strengthen landfill gas monitoring and control

- Reduce potent methane emissions from municipal and industrial landfills
- Ensure Oregon's regulations are in line with neighboring states
- Rulemaking to initiate early 2021

Reduce Food Waste

- Prevent methane and other landfills emissions by reducing food waste
- Non-regulatory strategy to evaluate and achieve food waste reductions across the food system

Staying engaged

DEQ Climate Programs

www.Oregon.gov/deq/ghgp

DEQ GovDelivery

<https://public.govdelivery.com/accounts/ORDEQ/subscriber/new>

Questions?
