Full Methods from Colorado Emissions Gap Analyses

Table 1: Net Emissions Gaps in Colorado, 2025

2025 target: 26% below 2005 net emissions						
Analysis Source	2005 Baseline Emissions ⁴ (Net MMT CO ₂ e)	Emissions Target (Net MMT CO2e)	Projected Emissions (Net MMT CO2e)	Remaining Emissions Gap in 2025 (Net MMT CO2e)		
Environmental Defense Fund A (GHG Inventory baseline) ¹	123.8	91.6	117.4	25.8		
Environmental Defense Fund B (Roadmap baseline) ^{1,3}	137.2	101.6	119.1	17.5		
CO Roadmap (Reference Scenario) ^{2,3}	137.2	101.6	127.9	26.3		
CO Roadmap (2019 Action Scenario) ^{2,3}	137.2	101.6	115.2	13.6		
M.J. Bradley & Associates	123.8	91.6	121.3	29.7		
NRDC/Sierra Club (Reference Scenario) ^{2,3}	137.2	101.6	139.1	37.5		

Table 2: Net Emissions Gaps in Colorado, 2030

2030 target: 50% below 2005 net emissions							
Analysis Source	2005 Baseline Emissions ⁴ (Net MMT CO2e)	Emissions Target (Net MMT CO2e)	Projected Emissions (Net MMT CO2e)	Remaining Emissions Gap in 2030 _(Net MMT CO₂e)			
Environmental Defense Fund A (GHG Inventory baseline) ¹	123.8	61.9	103.2	41.3			
Environmental Defense Fund B (Roadmap baseline) ^{1,3}	137.2	68.6	104.6	36			
CO Roadmap (Reference Scenario) ^{2,3}	137.2	68.6	130.1	61.5			
CO Roadmap	137.2	68.6	101.3	32.7			

(2019 Action Scenario) ^{2,3}				
CO GHG Emissions Inventory ²	123.8	61.9	118.4	56.5
M.J. Bradley & Associates	123.8	61.9	107.8	45.9
Resources for the Future	123.8	61.9	103.7	41.8
NRDC/Sierra Club (Reference Scenario) ^{2,3}	137.2	68.6	134.2	65.6

¹Assumes Rhodium Group's V-shaped economic recovery scenario.

² Gross emissions adjusted to net emissions. Greenhouse gas emissions in Colorado are primarily reported, projected, and regulated in net emissions. To ensure that the emissions gaps shown are comparable, we converted some data from gross to net emissions. We made the following adjustments: (1) converted the CO Roadmap baseline from gross to net emissions by subtracting the historical level of carbon sequestration related to land use and forestry (LULUCF)—1.9 MMT carbon—as reported for 2005 in the <u>State inventory</u>; (2) adjusted emissions projections from the CO Roadmap "Reference" and "2019 Action" scenarios, as well as emissions projections from the CO GHG Inventory and the NRDC/Sierra Club report, to include 4.2 MMT of carbon sequestered annually—the average of historical LULUCF values.

³ In these analyses, emissions are estimated using the IPCC Fifth Assessment's 100-year Global Warming Potential (GWP) values instead of AR4 values. Analyses without this note estimate emissions using IPCC AR4 100-year GWP values.