

NH Climate Action Plan
Emission Reductions and Target Emissions¹
Economy Wide

**Table 2.1 – Projected Emissions Reductions
 Resulting from the Task Force Recommended Actions**

CAP pp. 25

Year	Emissions [MMTCO ₂ e/yr]	
	2025	2050
Total Projected Emissions (BAU)	31.36	42.95
Projected Emission Reductions from Recommended Actions		
Building Actions	8.43	13.02
Electricity Generation Actions	3.44	6.57
Transportation Actions	5.01	7.91
Natural Resource Actions	1.81	2.25
Total Potential Emission Reductions	18.69	29.75
Total Projected Emissions for Action Plan	12.67	13.2
Percent Reduction from BAU	59.60%	69.30%
Percent Reduction from 1990 Emissions (15.79 MMTCO₂e)	19.70%	16.40%

Table 2.2 – Interim Emission Reduction Targets

CAP pp. 25

Interim Targets					
Year	2012	2015	2018	2021	2024
Annual Emission Targets [MMTCO₂e]	21	19.08	17.16	15.24	13.32
Percent Change Relative to 1990	33.10% <i>above</i>	20.90% <i>above</i>	8.70% <i>above</i>	3.50% <i>below</i>	15.60% <i>below</i>
Percent Reduction from BAU	10.90%	19.00%	27.20%	35.30%	43.50%

¹ Based on Analysis provided by Carbons Solutions New England

NH Climate Action Plan
Emission Reductions and Target Emissions²
EESE Board Domain

Building and Electric Generation GHG Emissions											
Historical and Projection Emissions – BAU & CAP Potential											
[MMTCO₂e]											
	1990	2008	2010	2012	2015	2020	2025	2035	2040	2045	2050
Business-as-Usual Emissions											
Commercial	1.32	1.41	1.44	1.47	1.51	1.58	1.64	1.78	1.85	1.91	1.98
Industrial	0.83	1.45	1.49	1.53	1.60	1.70	1.81	2.02	2.13	2.24	2.34
Residential	2.47	3.22	3.30	3.38	3.51	3.72	3.92	4.34	4.55	4.75	4.96
Electric Generation	4.85	7.21	7.38	7.63	8.01	8.64	9.26	10.51	11.14	11.77	12.39
Total	9.47	13.29	13.61	14.02	14.62	15.63	16.64	18.65	19.66	20.67	21.67
Potential Emissions CAP											
Buildings Scenario	-	13.29	12.86	12.24	11.31	9.76	8.21	8.39	8.48	8.56	8.65
Electric Power Scenario	-	13.29	12.01	11.05	9.60	7.18	4.77	3.69	3.16	2.62	2.08
Proposed EESE CAP Targets											
20% below 1990 by 2025 (80% below 1990 by 2050)	-	13.29	12.62	11.95	10.94	9.26	7.58	5.30	4.17	3.03	1.89

The “Potential Emissions CAP” rows represent the projected emissions for NH that would result if the Buildings Scenario were implemented by itself (Buildings Scenario row) and if the Buildings Scenario and Electric Power Scenario were implemented together (Electric Power Scenario).

The “Proposed EESE CAP Targets” represents the combined emissions levels for the Building and Electric Power Sectors if they were to follow a linear path to the 20% below 1990 levels by 2025 and 80% below 1990 by 2050. NOTE: The projected emissions for the Climate Action Plan are typically lower than the “Proposed EESE CAP Targets” path. This is important to offset the lower emissions reductions that could be achieved in the Transportation Sector.

Climate Change Action Plan

² Based on Analysis provided by Carbons Solutions New England

**Draft Scenario Analysis Tables
 Presented to the Climate Change Policy Task Force - October 10, 2008**

The following tables were developed in order to model the potential impact of a variety of greenhouse gas reduction strategies that could be employed in the state of New Hampshire. Four scenarios were developed (e.g., Buildings, Energy Generation, Transportation, Natural Resources) and for each a high medium and low case was developed based on the calculations performed by UNH-based Carbon Solutions New England.

1. Building Combination Strategies Scenario		Low Scenario	Medium Scenario	High Scenario
RCI 1.1	Maximize Efficiency in New Construction	30% more efficient	70% more efficient	100% more efficient
RCI 1.2	Maximize Energy Efficiency in Existing Residential Buildings	15,000 15% more efficient	15,000 30% more efficient	30,000 60% more efficient
RCI 1.3	Maximize Energy Efficiency in Existing Comm, Industrial, and Municipal Buildings	15% more efficient	30% more efficient	50% more efficient
Remaining actions were treated as supporting to avoid double counting potential CO₂e emission reductions.				
EGU 1.1	Establish Revenue Decoupling	Action not individually quantified		
EGU 1.2	Mandate Energy Efficiency Procurement	5% reduction in NH consumption by 2025; maintain % to 2050	15% reduction in NH consumption by 2025; maintain % to 2050	24% reduction in NH consumption by 2025; maintain % to 2050
EGU 1.3	Increase the Use of Combined Heat & Power	5% penetration by 2025; maintain percentage to 2050	15% penetration by 2025; maintain percentage to 2050	25% penetration by 2025; maintain percentage to 2050
RCI 1.4A	Upgrade Building Energy Codes	25%	25%	50%
RCI 1.4B	Increase Building Energy Code Compliance	50%	80%	80%
RCI 1.5	Establish an Energy Properties Section in MLS	Action not individually quantified		
RCI 2.1	Install Higher-Efficiency Equipment, Processes	Action not individually quantified		
RCI 3.1	Increase Renewable Energy and Low-CO ₂ e Thermal Energy Systems	Quantified as written in Action Plan		

2. Electric Power Combination Strategies Scenario		Low Scenario	Medium Scenario	High Scenario
EGU 2.2	Regional Greenhouse Gas Initiative (RGGI)	NH Allowance + 10% Purchase Scenario	NH Allowance Only Purchase Scenario	NH Allowance -10% Purchase Scenario
Remaining actions were treated as supporting to avoid double counting potential CO₂e emission reductions.				
EGU 2.1	Promoting Renewable Energy through the Electric Portfolio Standard (RPS)	Quantified as written in Action Plan		
EGU 2.4	Low- and Non-CO ₂ -Emitting Supply-Side Resources	Action not individually quantified		
AFW 2.4	Encourage the Use of Biogenic Waste Sources for Energy Generation	Analysis underway		
Electric Generation Scenario - Task Force Potential Modifications (NOT MODELED)				
		Low Scenario	Medium Scenario	High Scenario
EGU 2.6	Importation of Non-CO ₂ -Emitting Power	Quantified as written in Action Plan		
EGU 2.7	Regulated Low- and Non-CO ₂ -Emitting Supply-Side Resources	Quantified as written in Action Plan		
EGU 2.8	Deployment of Smart Technologies and the Establishment of a Smart Grid	Analysis underway		
EGU 2.9	Promoting Low CO ₂ e-Emitting and Renewable Distributed Generation	Analysis underway		