Vermont Comprehensive Energy Plan Review

TJ Poor

Director, Regulated Utility Planning

February 25, 2026

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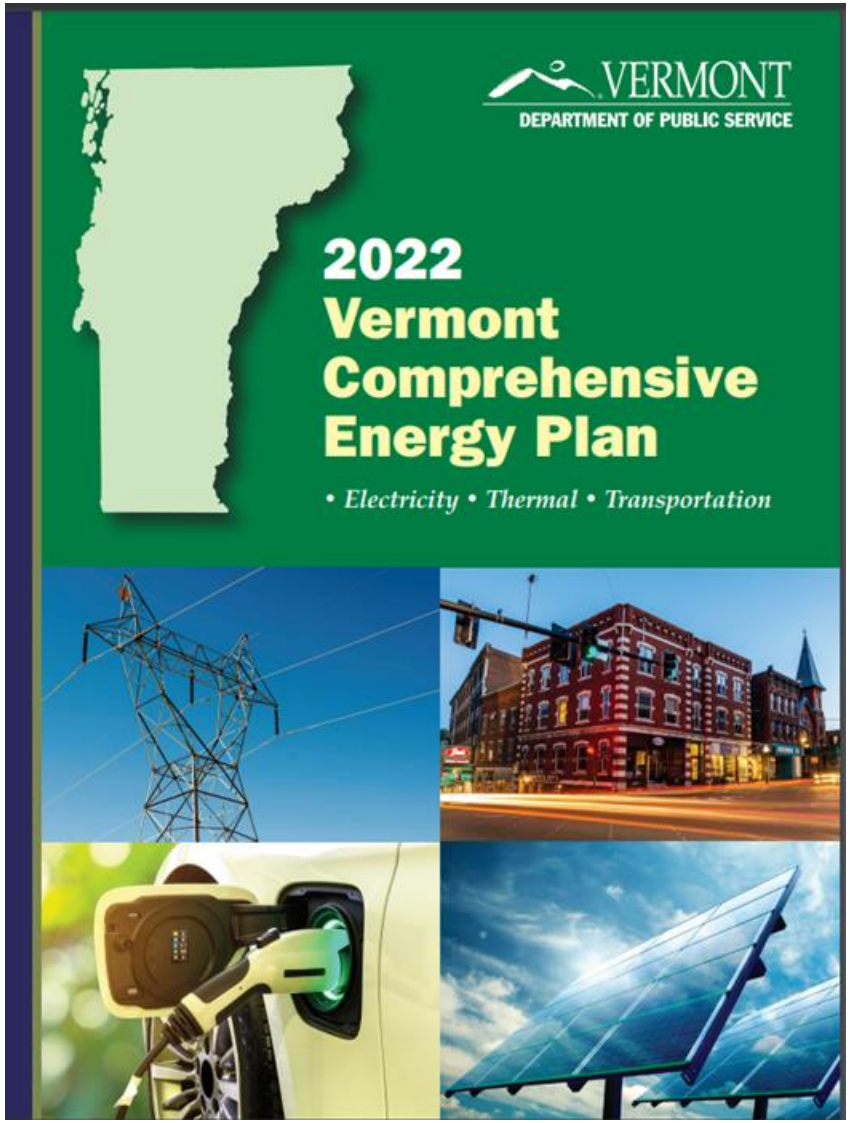

2022 Comprehensive Energy Plan (CEP)

Title 30, Section 202b – the Comprehensive Energy Plan (CEP) must include:

- Comprehensive 20-year analysis and projections of the use, supply, cost, environmental effects all energy sources used in VT

Title 30, Section 202 – Electric Plan must include:

- 20-yr assessment of *electric* demand, supply, strategies

Administration's Priorities: Affordability, Protecting the Most Vulnerable, Economic Development

Must be consistent with GHG requirements, Climate Action Plan, relevant goals of Title 24, Section 4302

Must "seek to implement the State energy policy set forth in section 202a"

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The Energy Plan is Rooted in Vermont Energy Policy

Title 30, Section 202a:

To ensure, to the greatest extent practicable, that Vermont can meet its energy service needs:

- In a manner that is **adequate**, **reliable**, **secure**, and **sustainable**
- Ensuring **affordability** and encouraging the state's **economic vitality**
- Using energy resources **efficiently** and managing demands **cost effectively**
- In a manner that will **achieve greenhouse gas reductions requirements**

Least Cost Planning

Title 30, Section 218c:

(a)(1) . . . meeting the public's need for energy services, after safety concerns are addressed, **at the lowest present value life cycle cost, including environmental and economic costs** . . . . Economic costs shall be assessed with due regard to:

- (A) the greenhouse gas inventory developed under the provisions of 10 V.S.A. § 582;
- (B) the State's progress in meeting its **greenhouse gas reduction goals;**
- (C) **the value of the financial risks associated with greenhouse gas emissions f**rom various power sources; and
- (D) consistency with section 8001 **(renewable energy goals)** of this title

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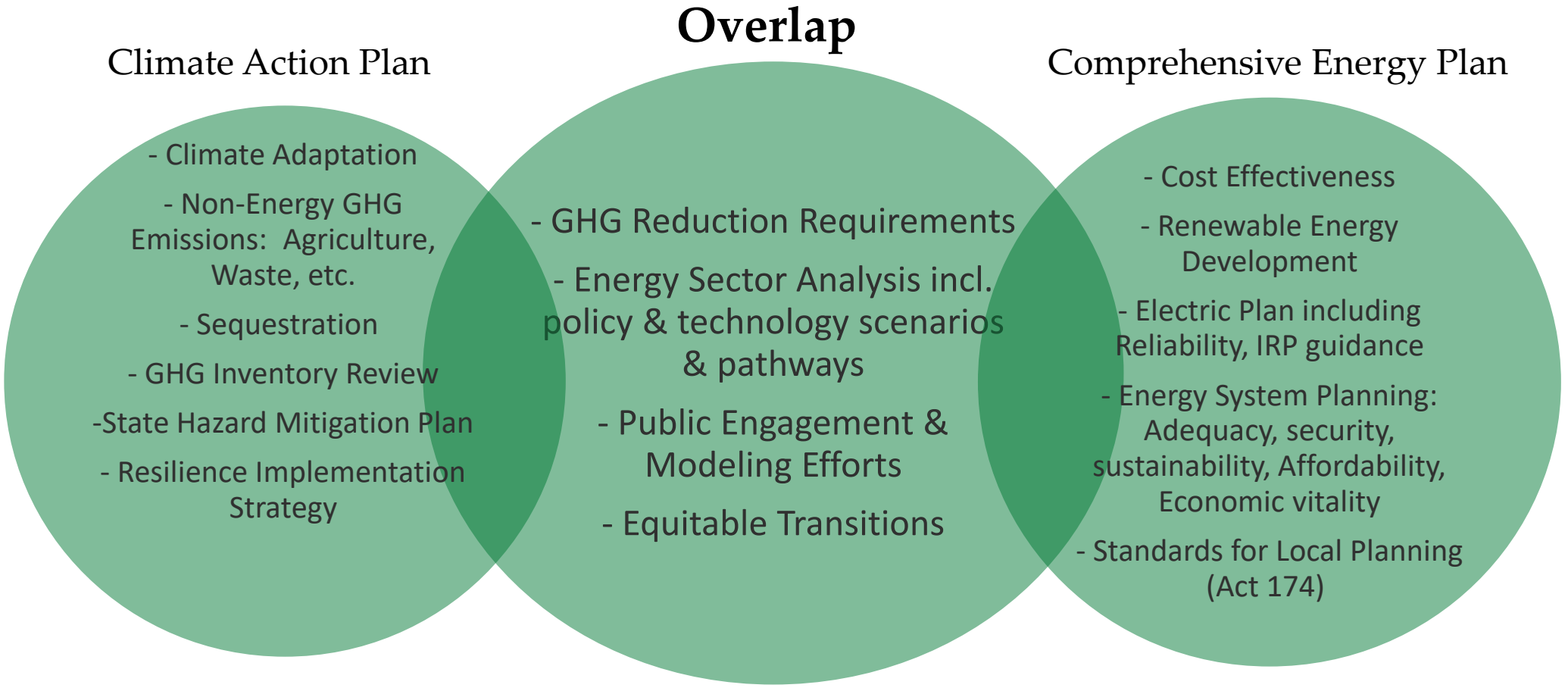
Energy Plan & Climate Plan



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CEP Decision Making Framework

Cost-Effectiveness from Various Perspectives

Technological Feasibility

Equity/Environmental Justice

Uncertainty

Milestones to trigger policy shifts

GHG Emissions

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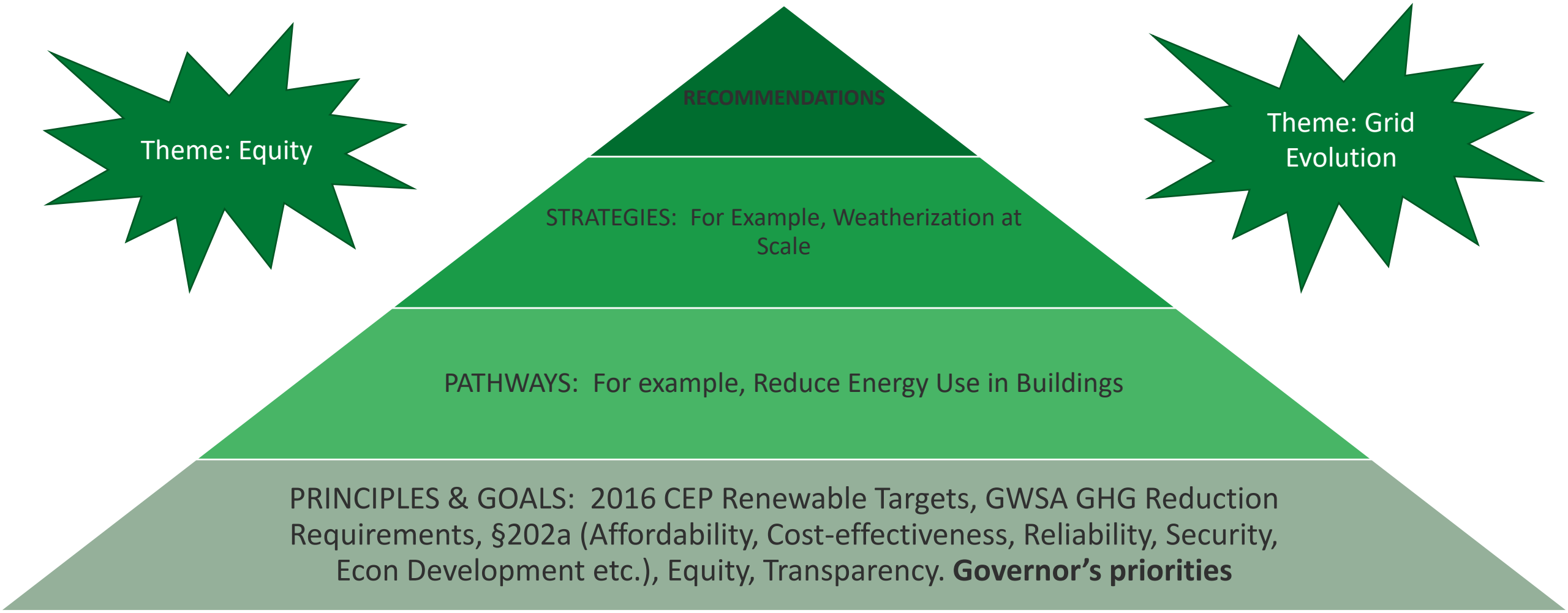
CEP Structure



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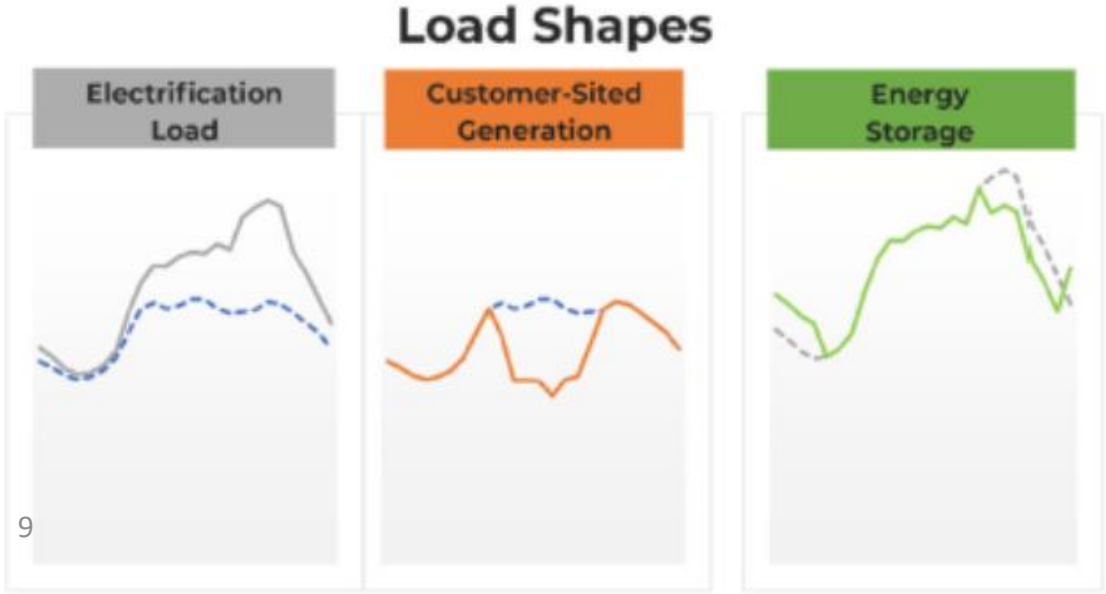
CEP Theme: Equitable Transitions

"Every one of us benefits when we make society fairer and more just"

Xusana Davis, Vermont's Executive Director of Racial Equity, in her 2021 Report to the Legislature.

CEP Theme: Grid Evolution



CEP Vision for Optimized Grid:

- A secure and affordable grid that can efficiently integrate, use, and optimize high penetrations of distributed energy resources to enhance resilience and reduce greenhouse gas emissions.

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CEP Electricity: 100% carbon-free by 2032

Pathway: Comprehensive PUC Review of RES Design and Complimentary programs – Options to meet

Actions Taken

- *PSD conducted 18-month engagement process, with polling, focus groups, Technical analysis supported by Stakeholder Advisory Group, Regional Planning Commission Engagement*
  - *Resulted in Comprehensive Proposal for Clean Energy Standard (100% by 2030 with increase to Tier II and creation of Tier IV), Community Solar, Review of Time Value of Generation*
- *Support AMI and distributed energy resource management software (DERMS) Solar for All*
- *Resilience Proceeding before PUC*
- *Regional Advocacy – Cost Reduction and optionality for utilities*
  - *Other States Considering also considering all options, including on/offshore wind, keeping gas and oil plants, nuclear energy*

CEP Thermal & Process: Goal Increase Renewable Supply to 30% by 2025, 45% by 2032, and 70% by 2042

Pathway: Reduce Energy Demand

- Weatherization at Scale
  - *Directed Significant Federal Funding toward Weatherization programs and Workforce*
  - *2026: Proposing additional funds for LI Weatherization via Thermal Efficiency Programs*
- Efficient Buildings
  - *Implement new Building Energy Standards (toward Net Zero Ready by 2030) – updated codes*

Pathway: Low Carbon Tech & Fuel Choices

- Consider Clean Heat Standard: Study, if reasonable then propose
  - *Legislature enacted – reviewed after the fact*
- Clean Fuels & Tech: ccHP, GSHP; Advanced Wood Heat; District Heat; Biofuels; RNG
  - *RNG evaluation and support through VGS Alt Reg Plan*
  - *Thermal Energy Networks Investigation/Evaluation*

CEP Transportation & Land Use (1): GHG Reductions Proportional to GWSA, 100% LD vehicle Sales ZEV by 2035

Pathway: Vehicle Electrification

- Vehicle Incentives (new & used): Light Duty, Medium Duty, Heavy Duty
  - *State Incentives for several years, Tier 3 program incentives. MileageSmart, replace your ride – helps low income*
- Infrastructure & Policy: Rate Design & Load Control
  - *Utilities implementing AMI, EV Rates*

Pathway: Cleaner Vehicles & Fuels

- Participate in regional discussions on federal emissions and fuel economy standards
  - ***Implemented CA Advanced Clean Cars II Regulations*** *(100% ZEV sales requirement by 2035), since rolled back*
- Monitor biofuels and low-carbon fuel development

CEP Transportation & Land Use (2): GHG Reductions Proportional to GWSA, 100% LD vehicle Sales ZEV by 2035

Pathway: System Efficiency via Land Use Settlement Patterns

- Integration of Land Use Planning into Trans Decision Making Frameworks:
  - Aligning planning across government agencies
  - Compact Development support
  - Smart Growth Designation programs
- *ACCD support for downtown development*,
  - *Continued implementation of Complete Streets*

Pathway: Increasing Transportation Choices

- Public & Active Transportation Options: Public Transit, Rail, Biking & Walking, etc.
  - *Continued public funding support*

Thank you

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Appendix

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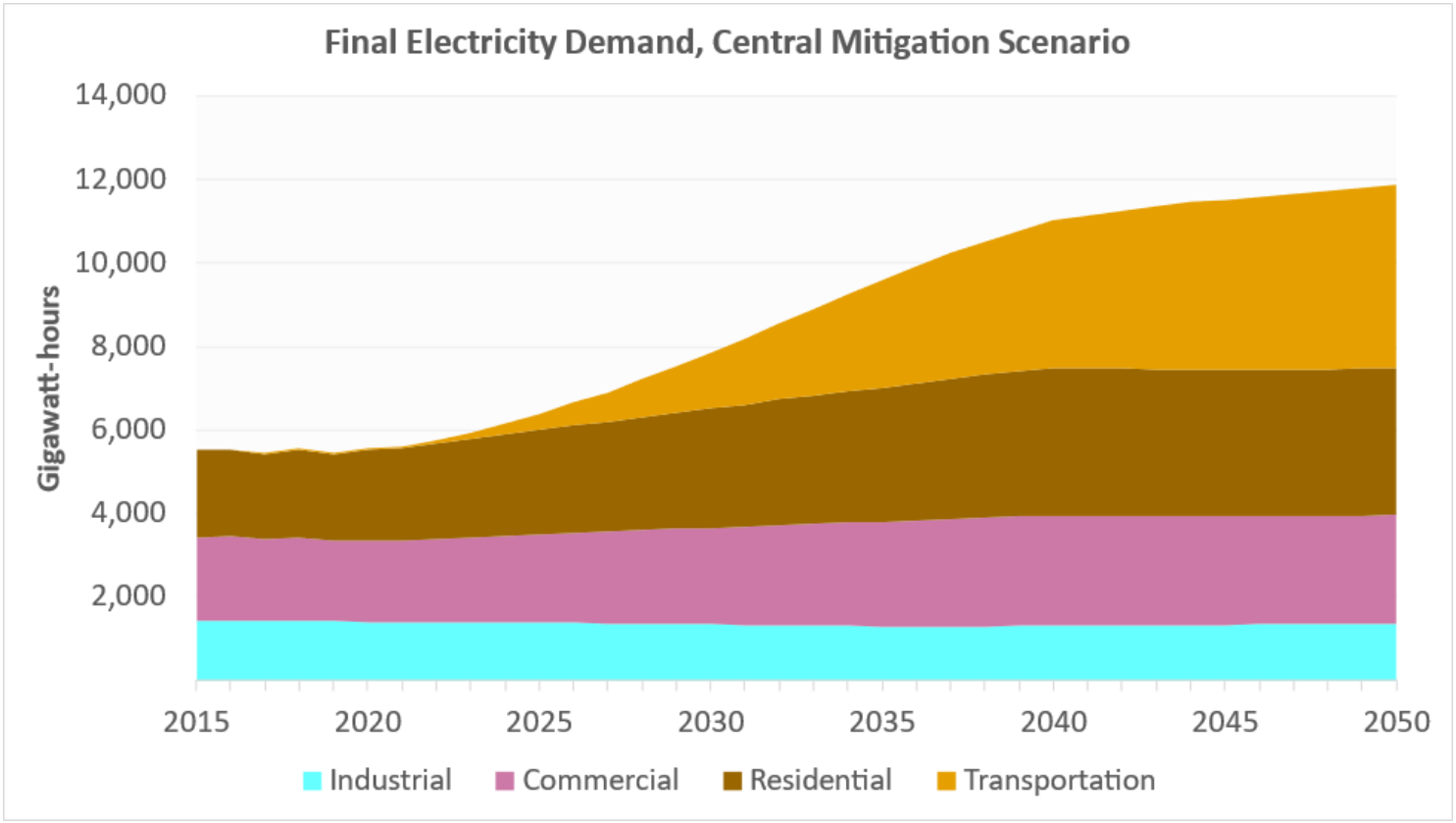
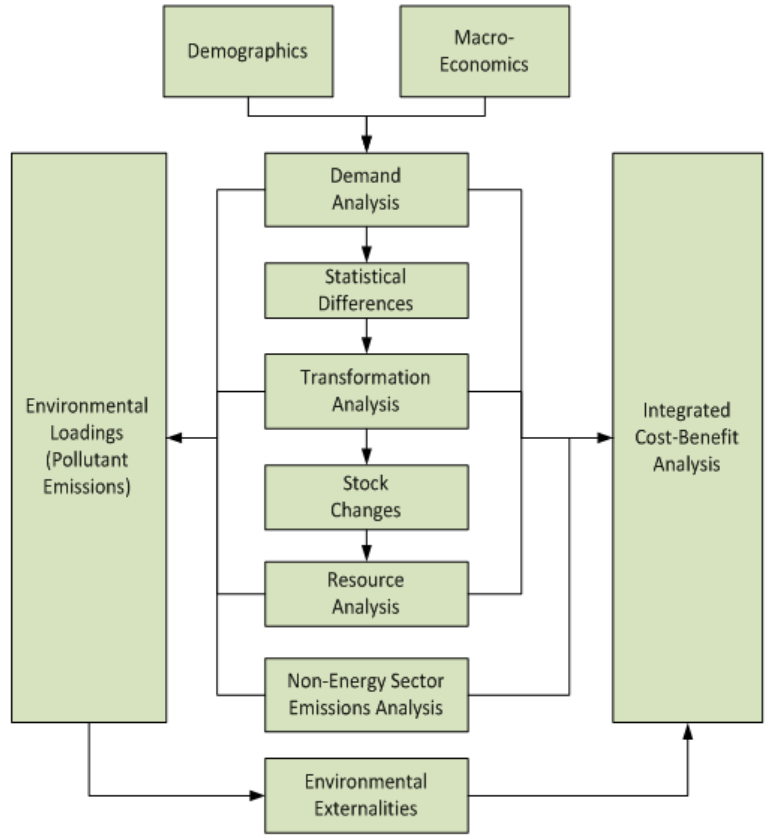
2022 CEP (& 2021/25 CAP) Modeling



LEAP



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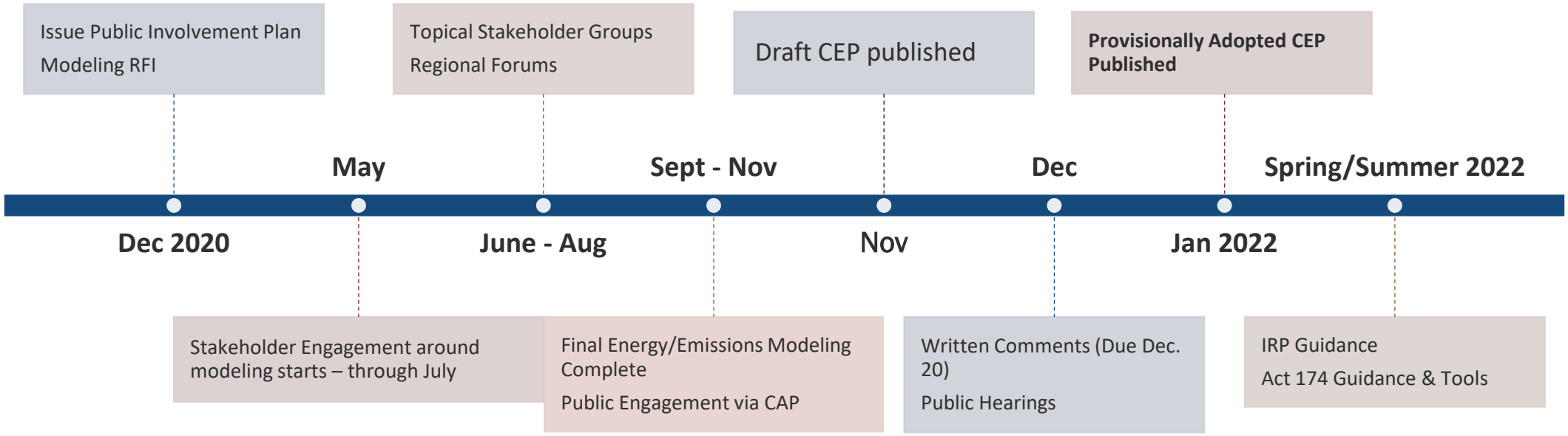
2022 CEP Engagement Timeline



Coordination with Stakeholder Engagement / Timing of Climate Council

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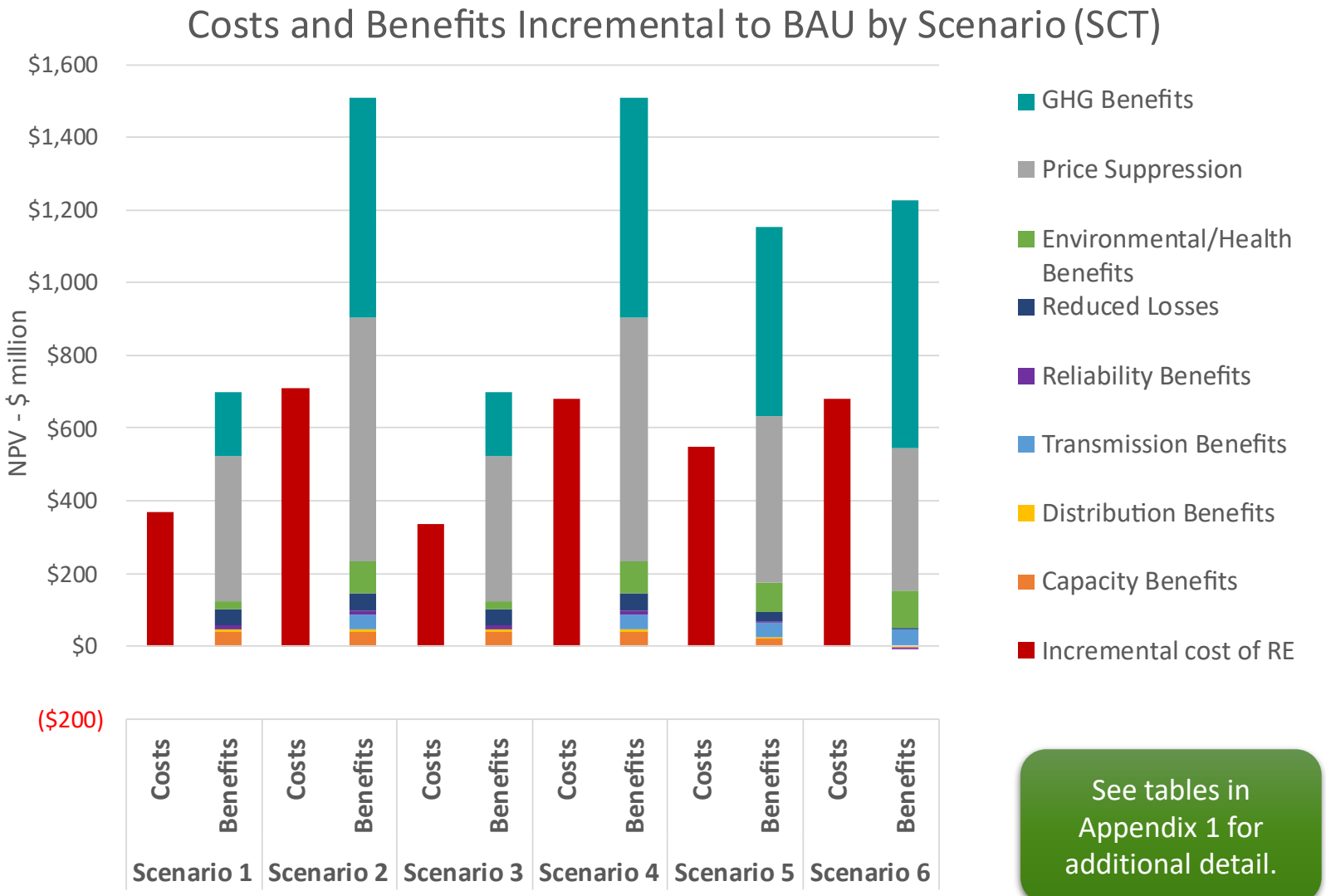
Costs & Benefits by Scenario: Incremental, SCT

Observations:

- Positive net benefits in all scenarios
- GHG and price suppression (all types) drive majority of benefit stack
- Tier I is not assigned any benefits, given absence of "additionality" for legacy resources

Scenario Definitions

	Reg. Tier Target	Tier II Target	Tier I Target	Target Date	Nuclear Tier I Eligible	Biomass Tier I Eligible
BAU	0%	10%	BAU	2032	No	Yes
Scenario 1	0%	30%	100% by 2030	2035	No	Yes
Scenario 2	30%	30%	100% by 2030	2035	No	Yes
Scenario 3	0%	30%	100% by 2030	2035	Yes	Yes
Scenario 4	30%	30%	100% by 2030	2035	Yes	Yes
Scenario 5	30%	20%	100% by 2030	2035	No	No
Scenario 6	50%	10%	100% by 2030	2035	Yes	No



See tables in Appendix 1 for additional detail.

Costs & Benefits by Scenario: Incremental, RIM

Observations:

- RIM focuses exclusively on items impacting VT bills
- Excludes GHG benefits
- Price suppression benefits limited to in-state (~4% of regional benefits)
- RIM approach yields net costs under every scenario

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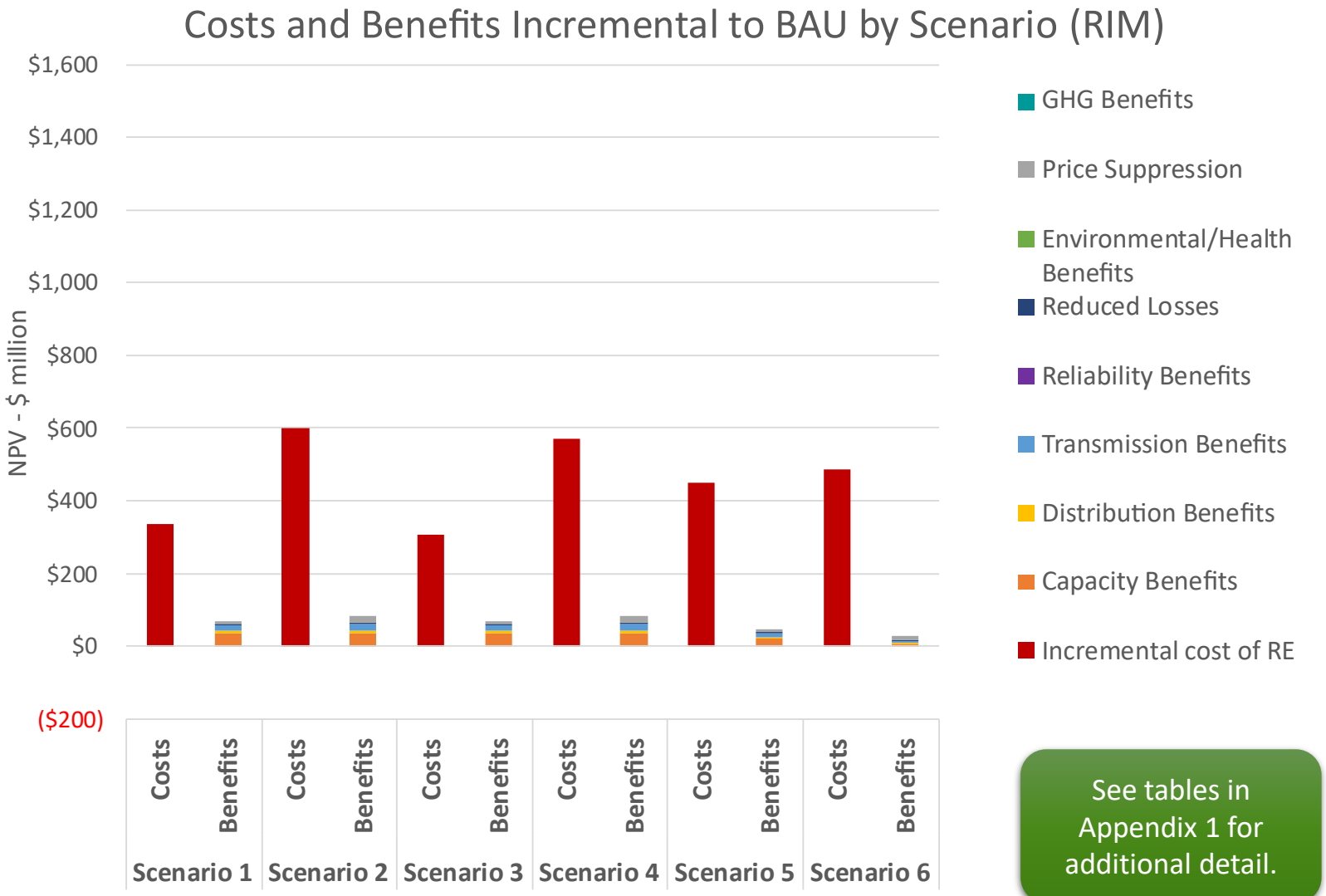
Scenario 4	30%	30%	100% by 2030	2035	Yes	Yes
Scenario 5	30%	20%	100% by 2030	2035	No	No
Scenario 6	50%	10%	100% by 2030	2035	Yes	No



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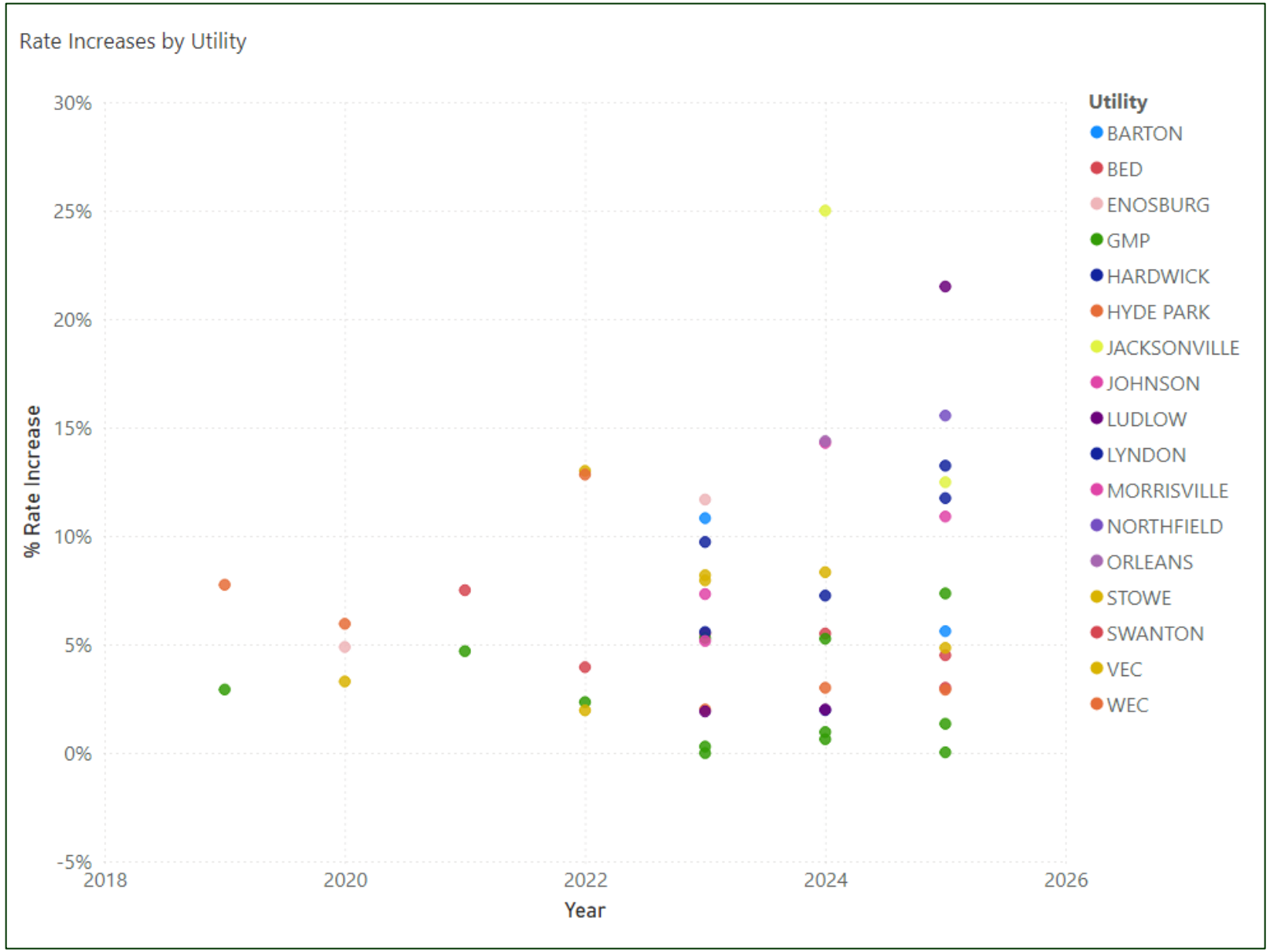

Vermont utilities have seen dozens of significant rate increases over the last several years

Data through August 2025

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Vermont Storage Deployment in New England Context

State	Goal*	Milestone	2025 summer peak (MW)**	Goal as % of 2025 summer peak	2025 deployed storage (MW)	Current % of peak
CT	1000 MW x 2030	300 MW x 2024	6596	15	41	0.6
ME	400 MW x 2030	300 MW x 2025	2026	20	63	3.2
MA	5000 MWh x 2030	N/A	12260	10***	481	3.9
NH	N/A	N/A	2524			
RI	600 MW x 2033	90 MW x 2026	1847	32	14	0.8
VT	N/A	N/A	833		85	10.2 (18.9 including under construction/in permitting; not including proposals for transmission-level storage)

The above table shows New England State's storage deployment targets. While four states have targets, those same states are currently at far lower levels of storage deployment relative to Vermont, as measured by percent of coincident peak load. Vermont is already on pace to exceed the targets set in other states.

*MA and CT storage goals apply just to Investor-Owned Utilities ("IOUs"). ME's is unclear. RI's targets apply to the RI Infrastructure Bank.

** 2025 summer peak contribution values from ISO-NE

***Assumes all batteries are 4 hours in duration

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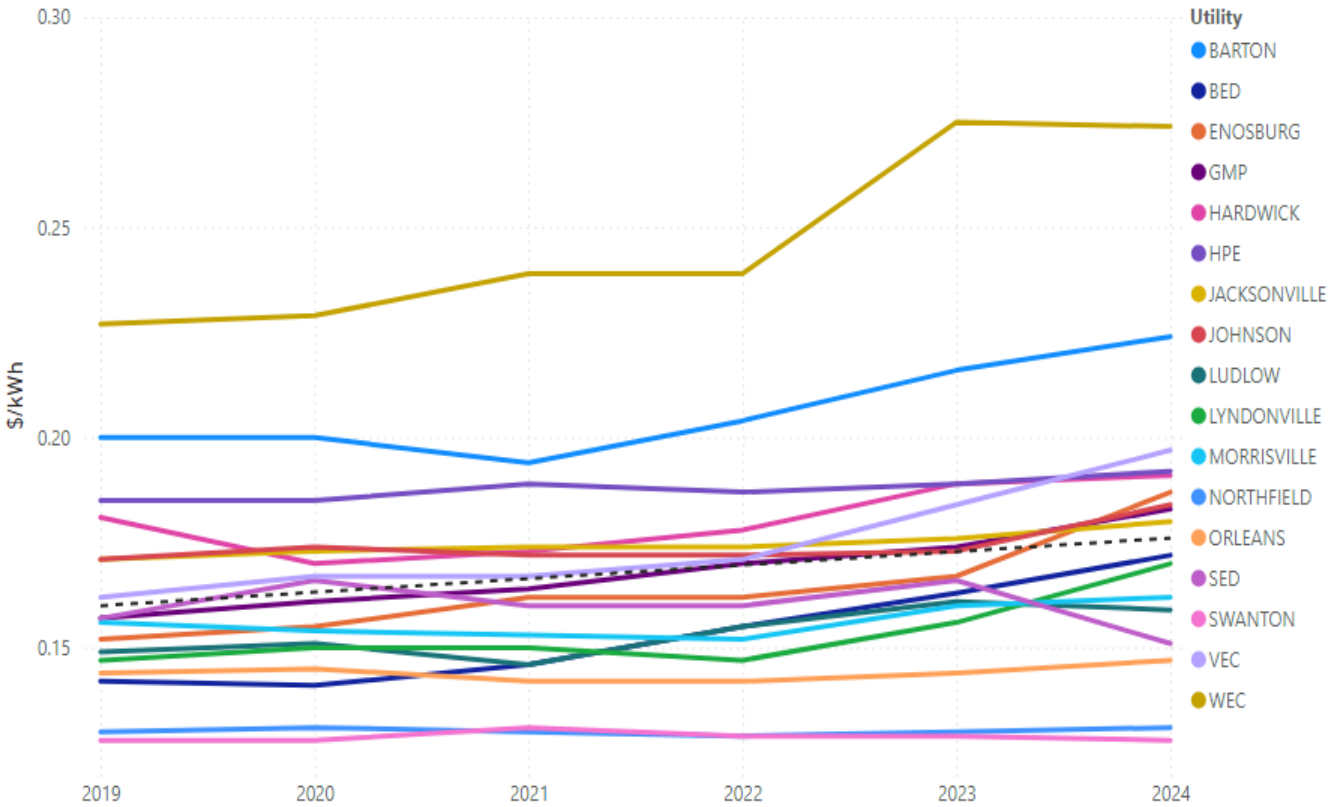
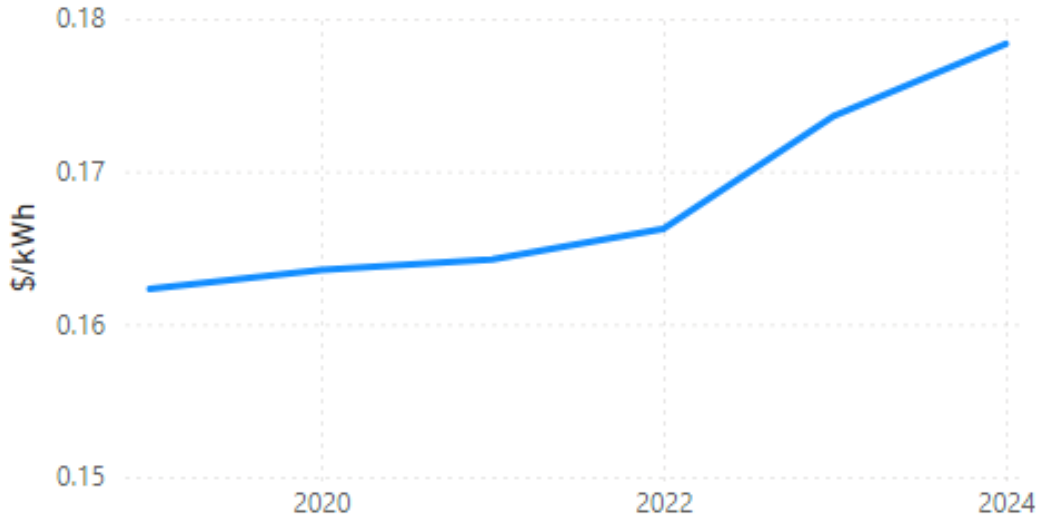
Average Cost of Electricity in $/kWh by Utility



Statewide Avg. Cost of Electricity ($/kWh)



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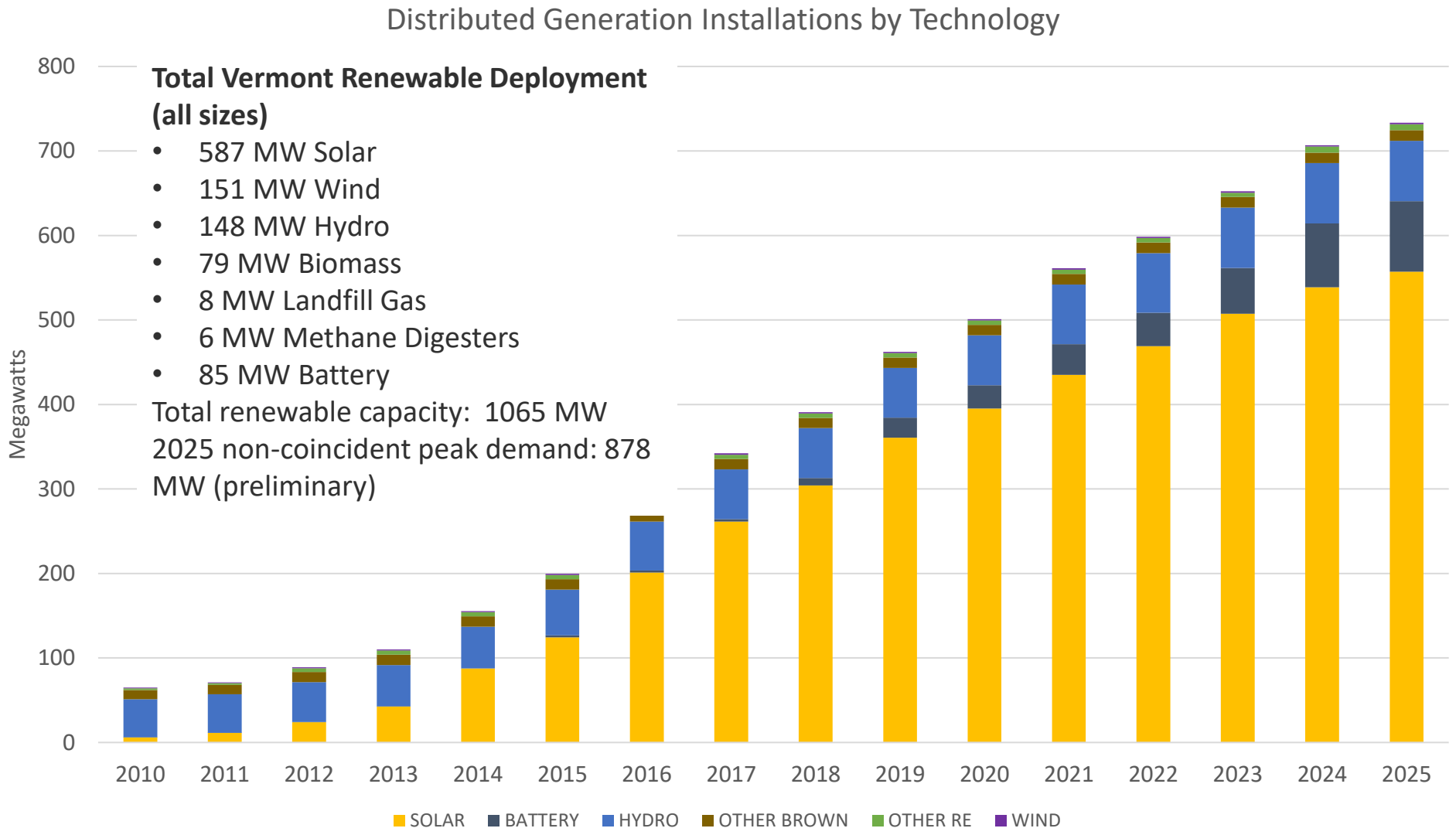
Vermont currently has significant percentage of renewables, especially Distributed Energy Resources (DERs)



**Derived from September 2025 utility PP-12 submissions to ISO-NE (excluding Stowe Electric Department) and additional data requests to Green Mountain Power*

VT now has over 733 MW of operational DERs including 85 MW of battery storage

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The Clean Energy Economy

#1 State in Clean Energy Jobs Per Capita

82%

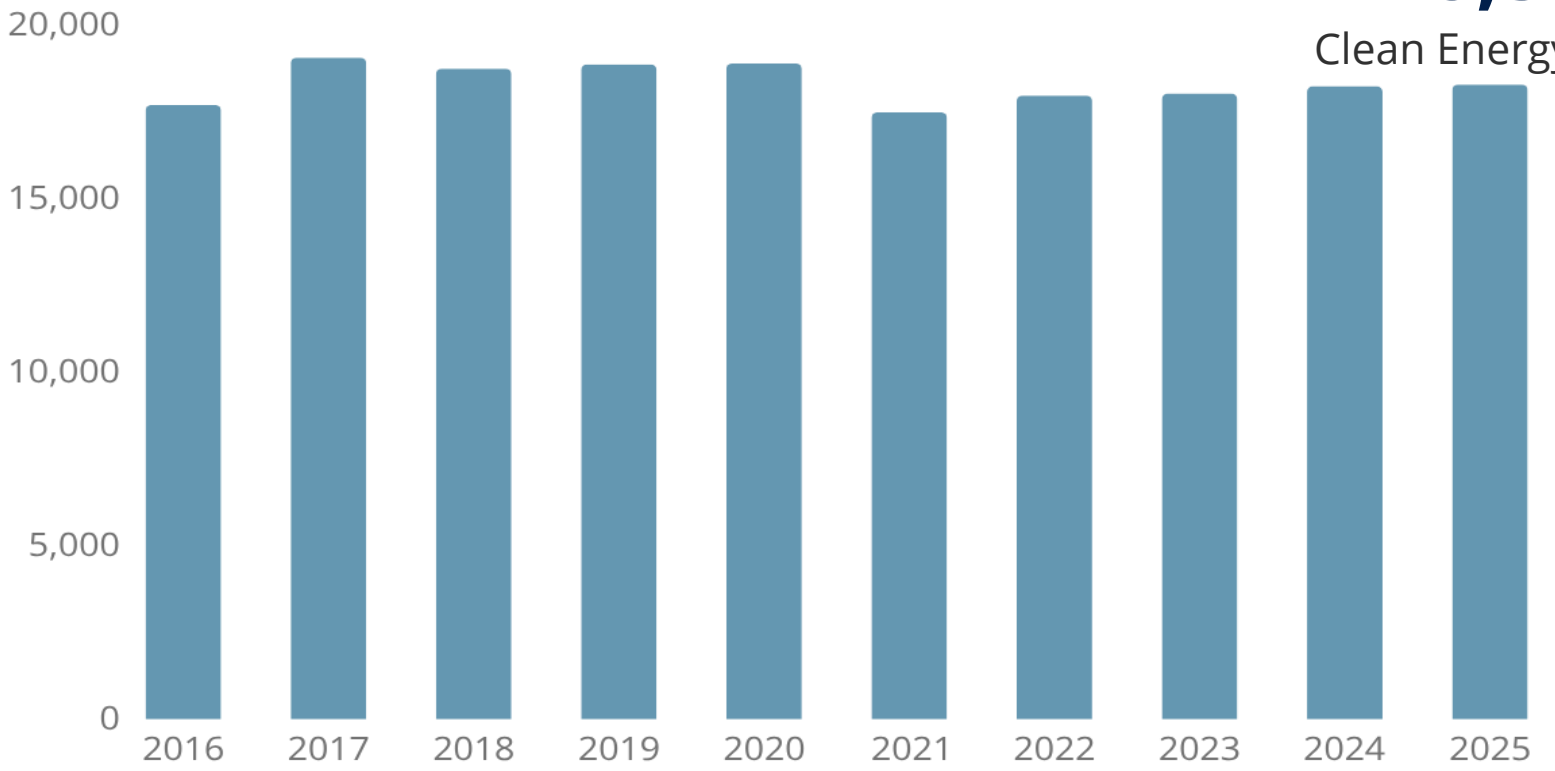
Clean Energy Share of State Energy Jobs, 2025

6%

Clean Energy Share of Total State Jobs, 2025

18,304

Clean Energy Jobs, 2025



Each year, the Department's Clean Energy Development Fund issues the Vermont Clean Energy Industry Report, drawing on data collected by the U.S. Department of Energy and its well-established methodology to characterize employment trends.

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