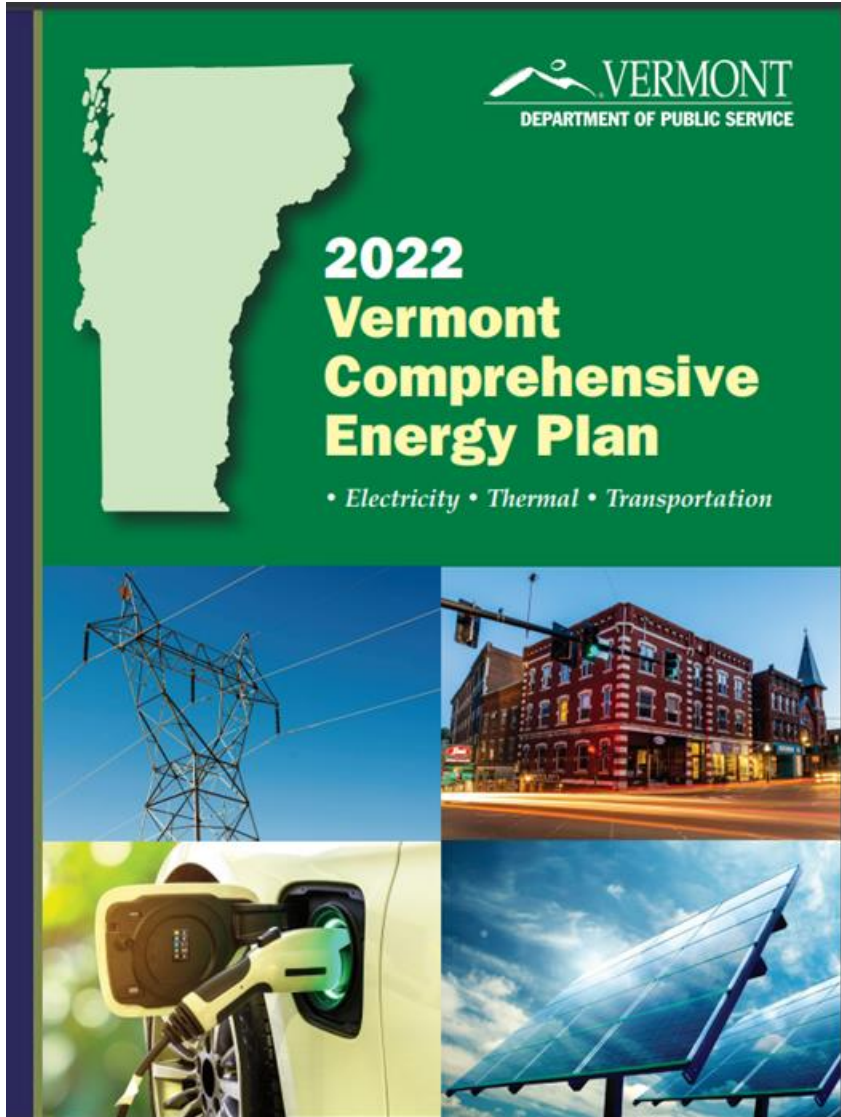


Vermont Comprehensive Energy Plan

Introduction and Overview

TJ Poor, Director of Regulated Utility Planning, PSD
March 19, 2025
House Committee on Energy & Digital Infrastructure





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”

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**

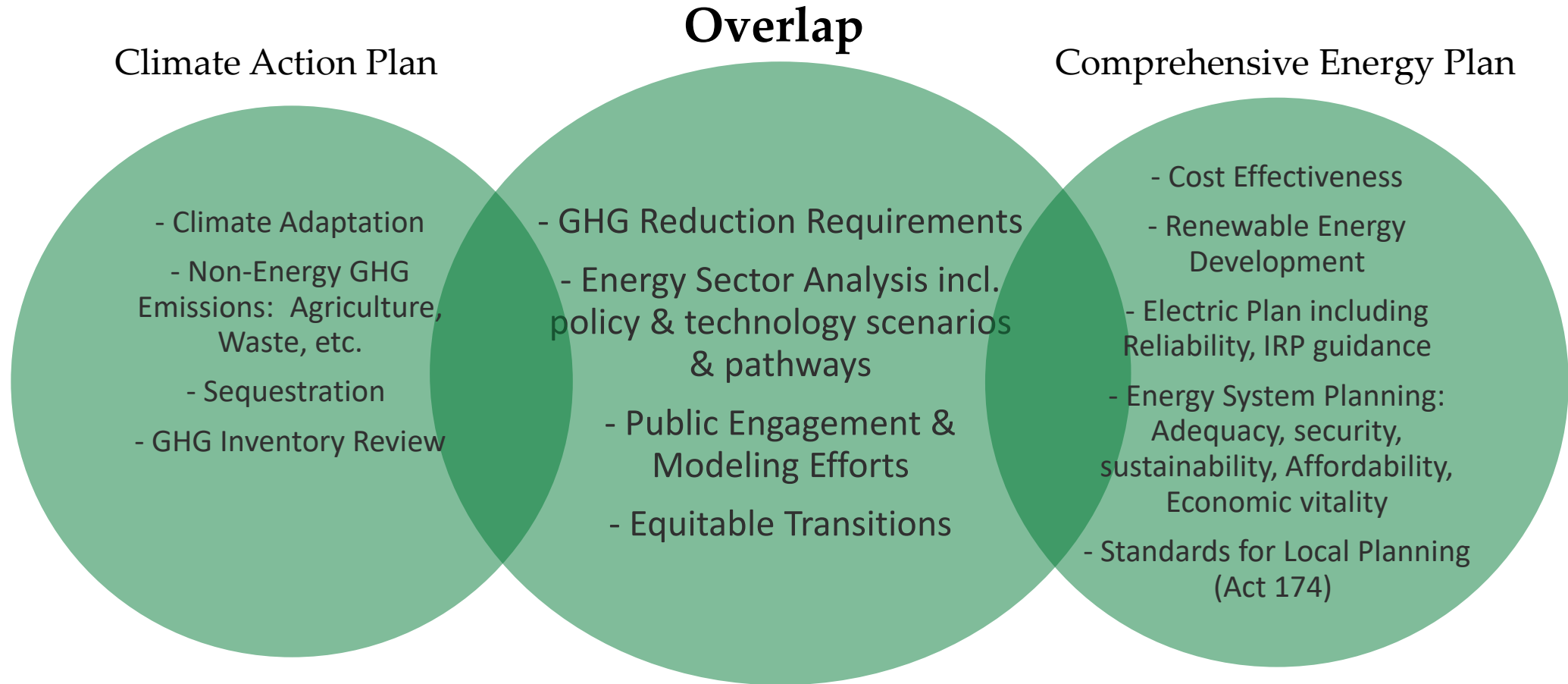
Least Cost Planning

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:

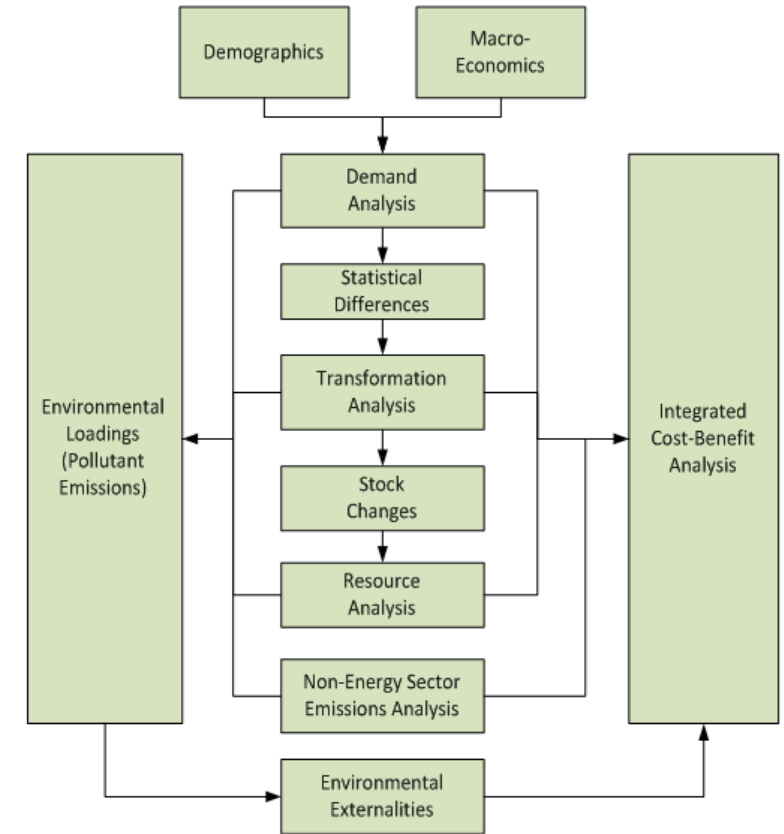
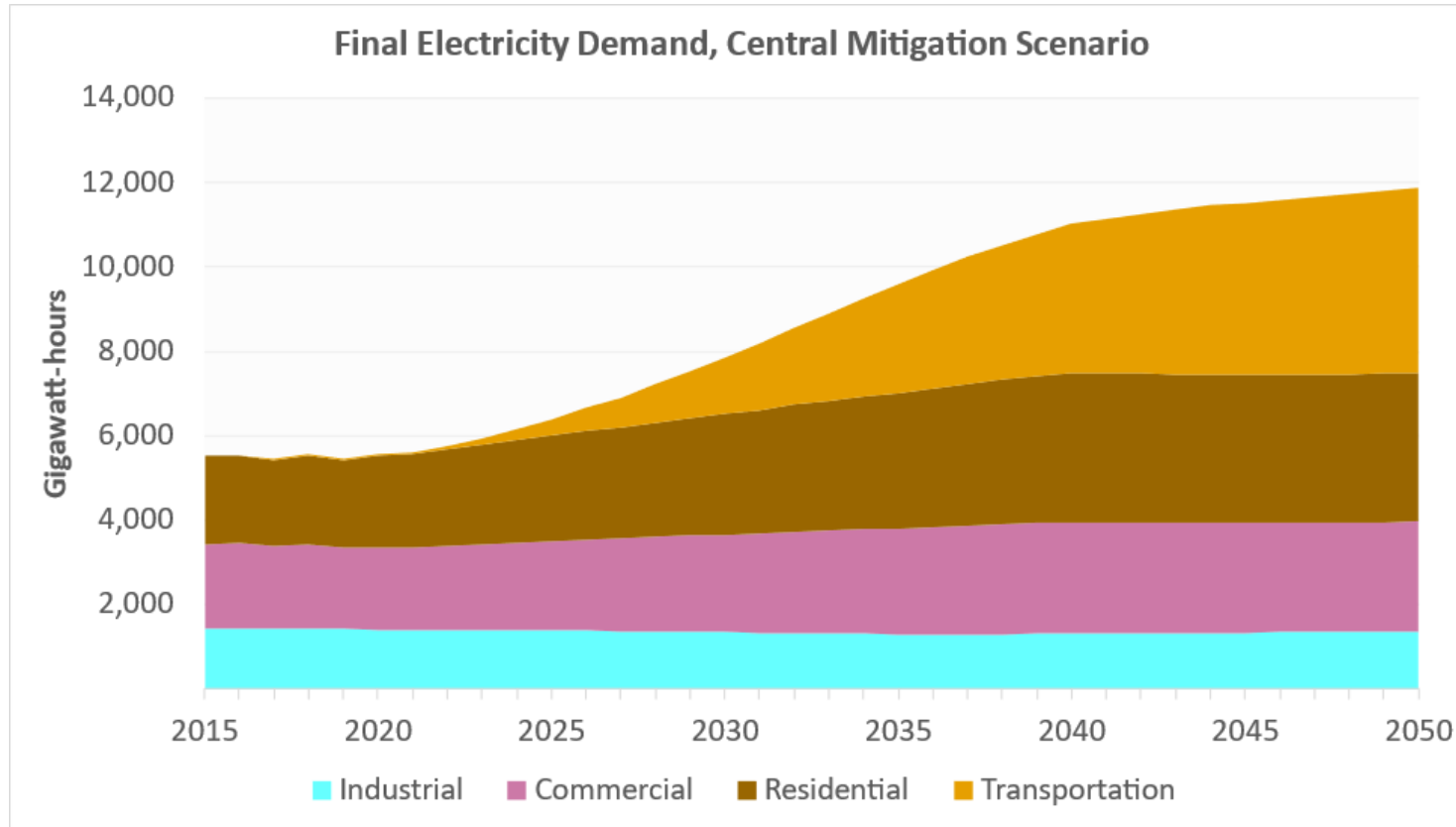
- (A) the greenhouse gas inventory developed under the provisions of 10 V.S.A. § 582;
- (B) the State's progress in meeting its **greenhouse gas reduction goals**;
- (C) **the value of the financial risks** associated with greenhouse gas emissions from various power sources; and
- (D) consistency with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

Energy Plan & Climate Plan



*2025 CAP update will speak to State Hazard Mitigation Plan and Resilience Implementation Strategy as well

2022 CEP (& CAP) Modeling



CEP Decision Making Framework



Cost-Effectiveness



Technological
Feasibility



Equity/Environmental
Justice



Uncertainty

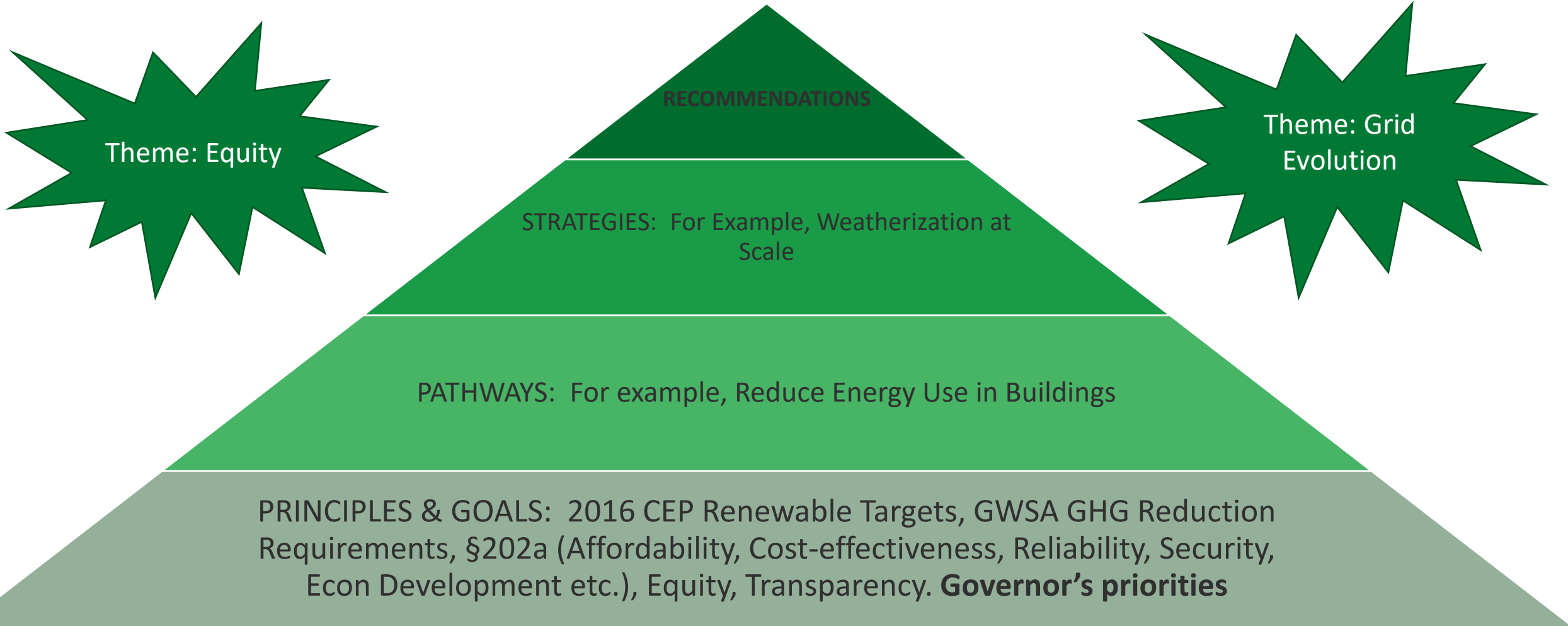


Milestones to trigger
policy shifts

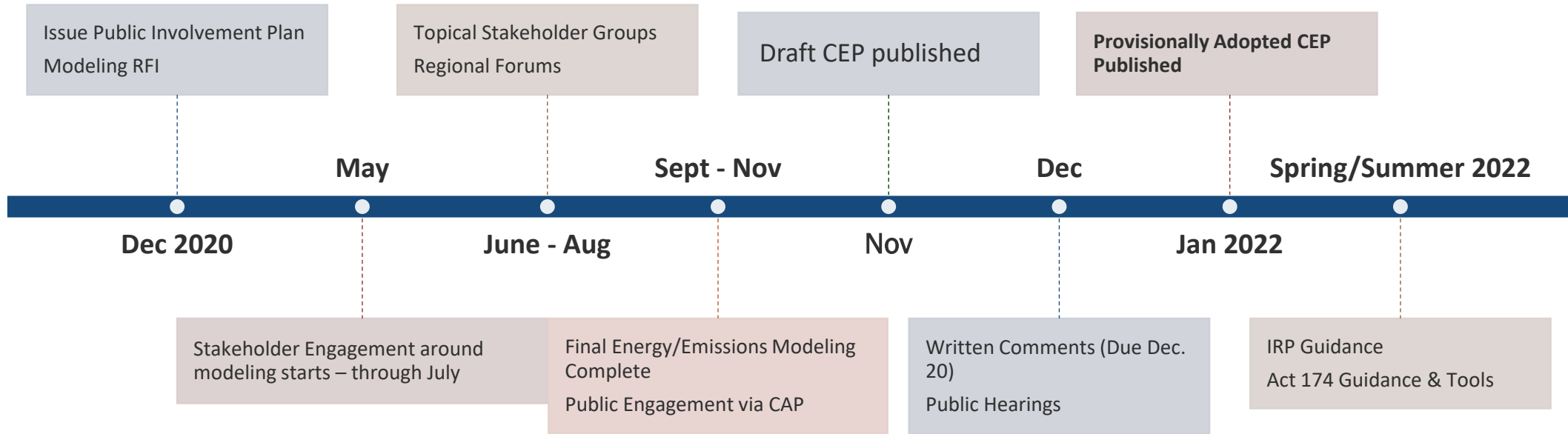


GHG Emissions

CEP Structure



2022 CEP Engagement Timeline



Coordination with Stakeholder Engagement / Timing of Climate Council

CEP Theme: Equitable Transitions

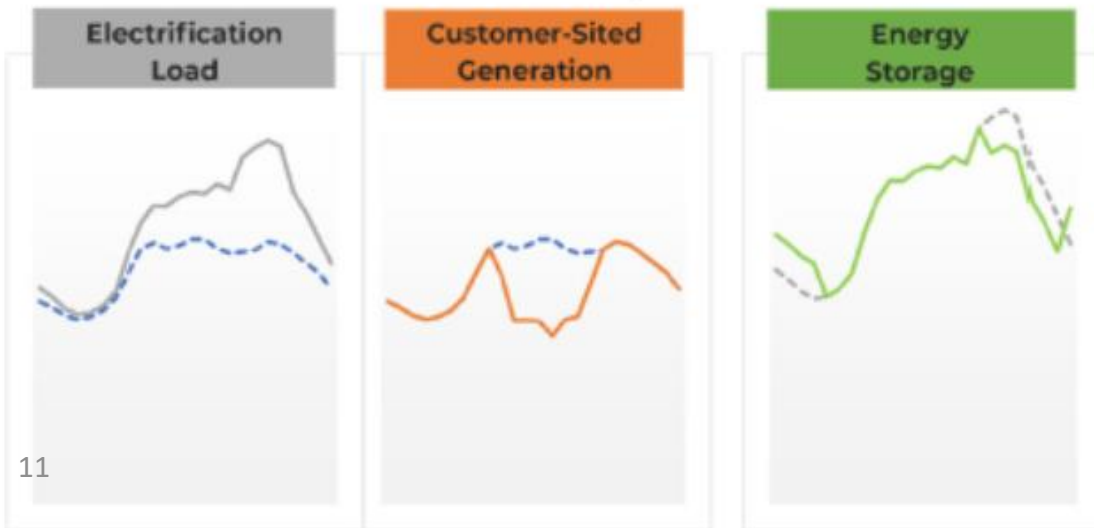
“Every one of us benefits when we make society fairer and more just”

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

CEP Theme: Grid Evolution



Load Shapes



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.

CEP Electricity: 100% carbon-free by 2032

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

- Current Programs
 - Net Metering
 - “Community Solar”
 - Standard Offer Program
- Time & Locational Values
- New versus existing generation
- In-state vs. Out-of-State generation

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
 - WAP, EEU's, Sustainable Funding, Counseling, Workforce
- Efficient Buildings
 - Building Energy Standards (Net Zero Ready by 2030)
- State Energy Management Program Enhancements

Pathway: Low Carbon Tech & Fuel Choices

- Consider Clean Heat Standard
 - Study, if reasonable then authorization for PUC
- Clean Fuels & Tech
 - ccHP, GSHP
 - Advanced Wood Heat, District Heat
 - Biofuels
 - RNG

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
 - MileageSmart, Replace Your Ride, etc.
- Infrastructure & Policy
 - **Rate Design & Load Control**
 - EV charging price transparency (via AAMF)
 - Dealer Awareness
 - Road user charge/T-fund impacts discussed but awaiting VTrans study result

Pathway: Cleaner Vehicles & Fuels

- Participate in regional discussions on federal emissions and fuel economy standards
 - **CA Advanced Clean Cars II Regulations** (100% ZEV sales requirement by 2035)
- 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

Pathway: Increasing Transportation Choices

- Public & Active Transportation Options
 - Public Transit, Rail, Biking & Walking, etc.

Thank you, and we look to discussion of how H.289 furthers the Comprehensive Energy Plan.

