

# **Vermont 2022 Comprehensive Energy Plan**

**Public Hearings on Release of Draft 2022 CEP**

**December 2021**

# Agenda for Today's Meeting

- Welcome, Introductions and Opening Remarks
- Brief Presentation on the draft 2022 CEP (PSD)
- Public Comments
- Adjourn

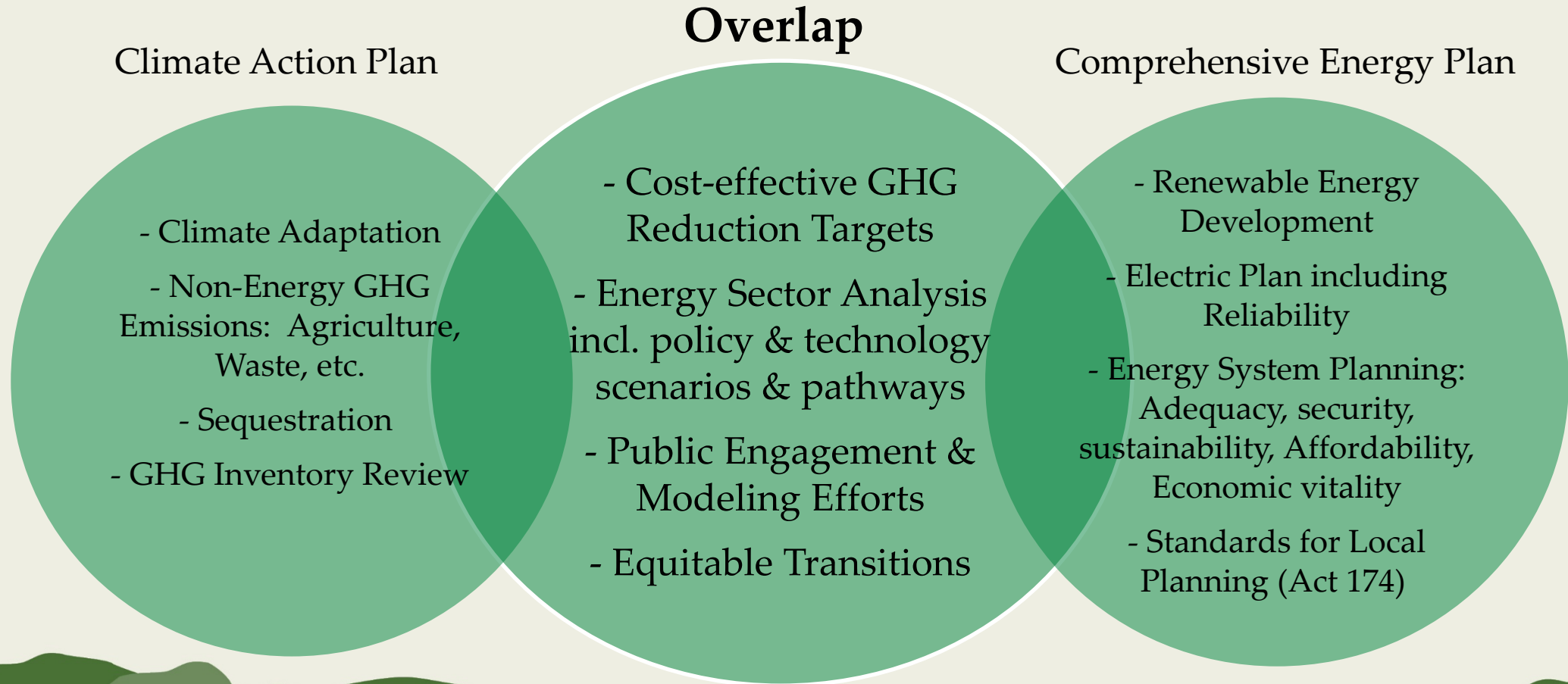
# Draft Comprehensive Energy Plan Overview

# Energy Plan 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**

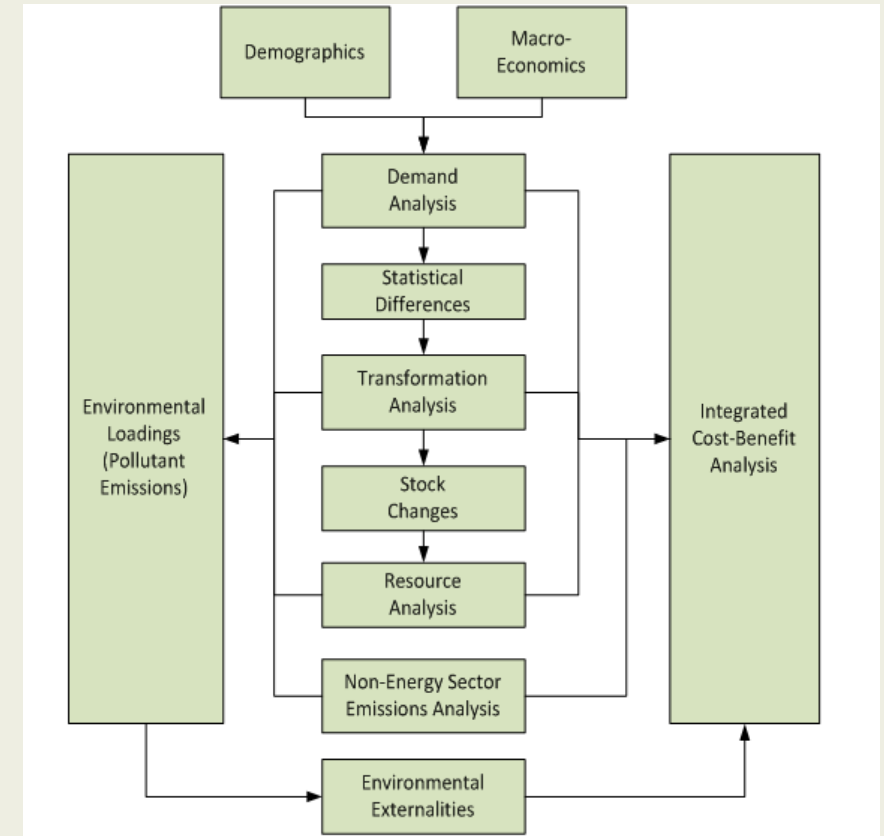
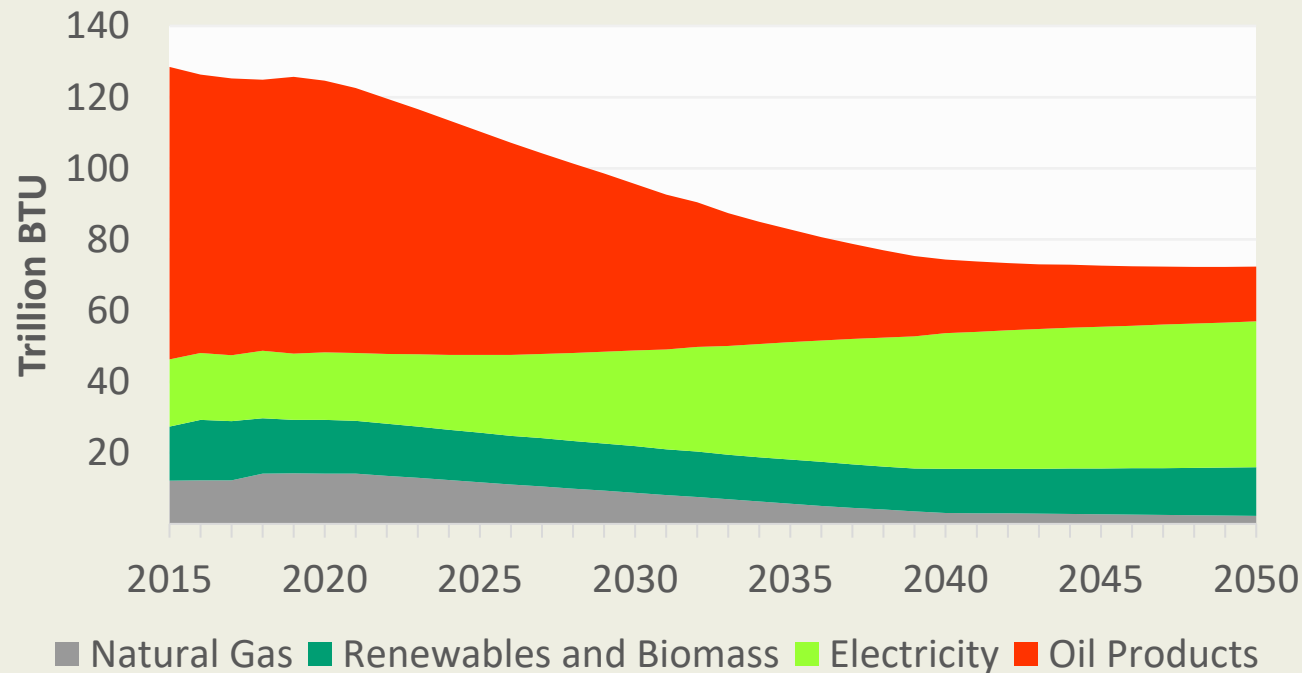
# Energy Plan & Climate Plan



# 2022 CEP Modeling



### Final Energy Demand by Fuel



# CEP Structure

Theme:  
Equity

RECOMMENDATIONS: E.g., Explore opportunities for collaboration with insurance industry stakeholders

Theme: Grid Optimization

STRATEGIES: For Example, Weatherization at Scale

PATHWAYS: For example, Reduce Energy Use in Buildings

PRINCIPLES: Affordability, Cost-effectiveness, Reliability, Security, Equity, Transparency (Based on §202a & Administration Priorities)

# CEP Theme: Equitable Transitions

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

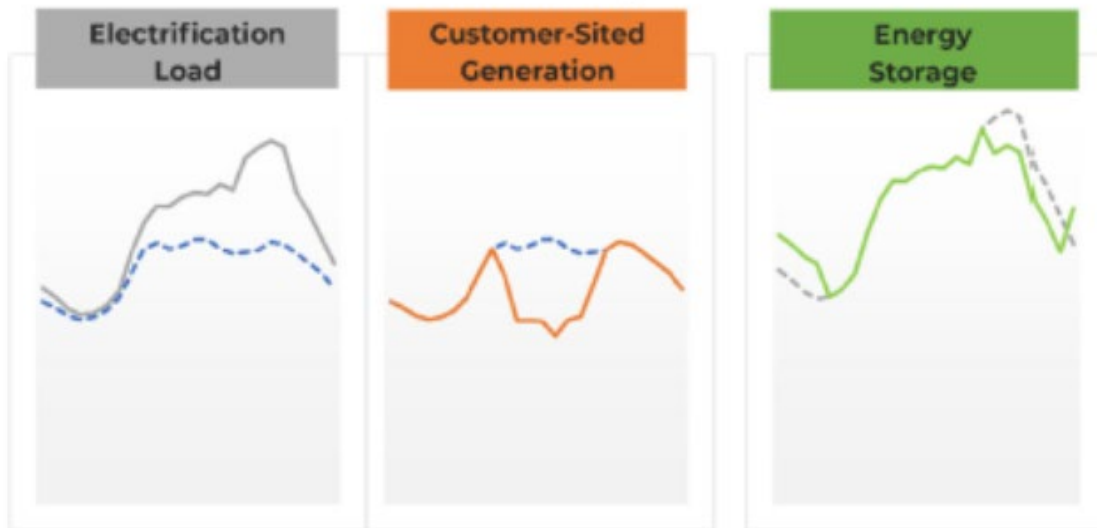
*Xusana Davis, Vermont’s Executive Director of Racial Equity, in her 2021 Report to the Legislature.*



# CEP Theme: Grid Evolution



## Load Shapes



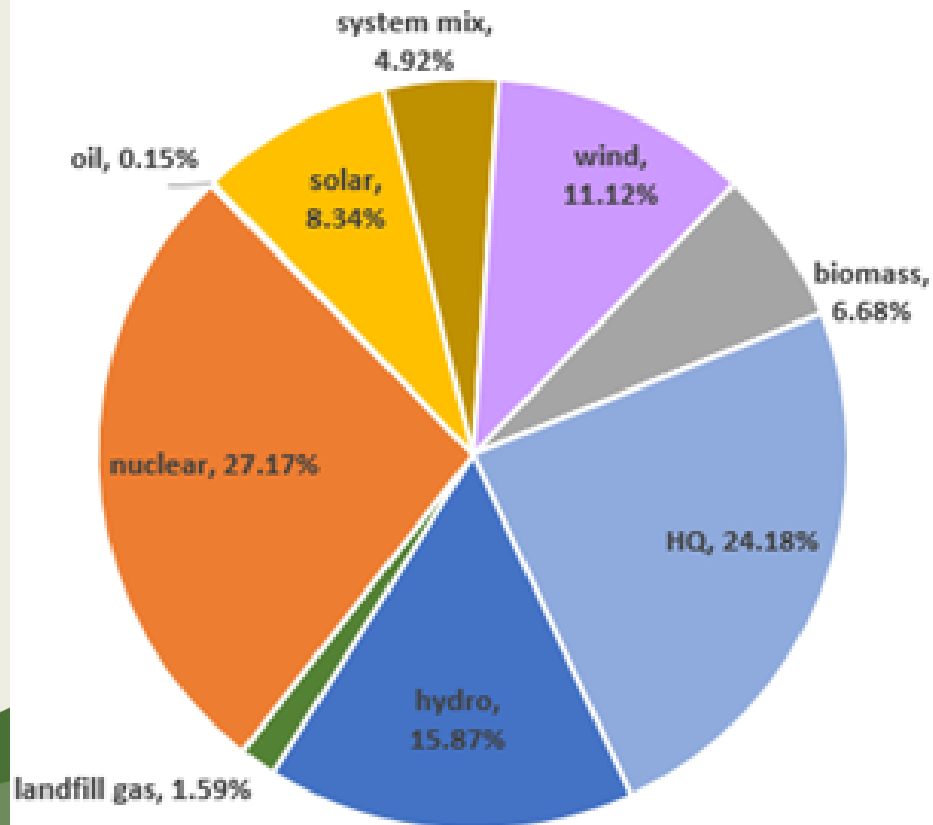
## *CEP Vision for Optimized Grid:*

- 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.

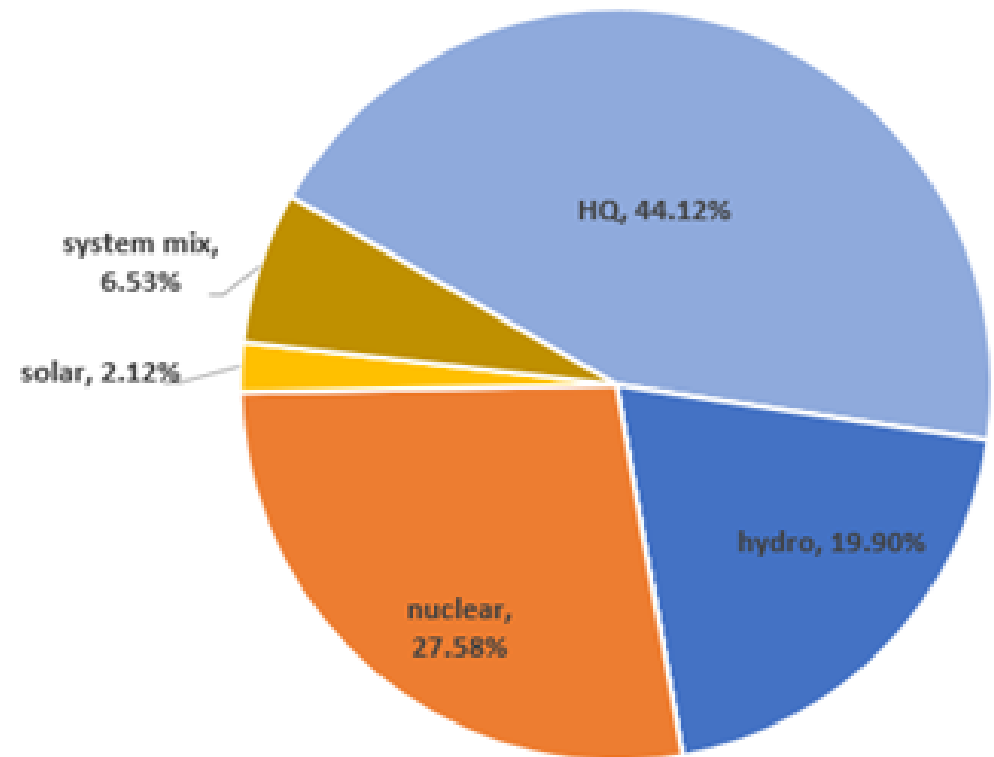
# Electricity Currently

## 2019 Electric Mix

Before the sale of RECs— Physical energy deliveries



Based on GIS certificate retirements



# CEP Electricity: 100% Carbon-Free by 2032

## ↑ Understanding of elec costs

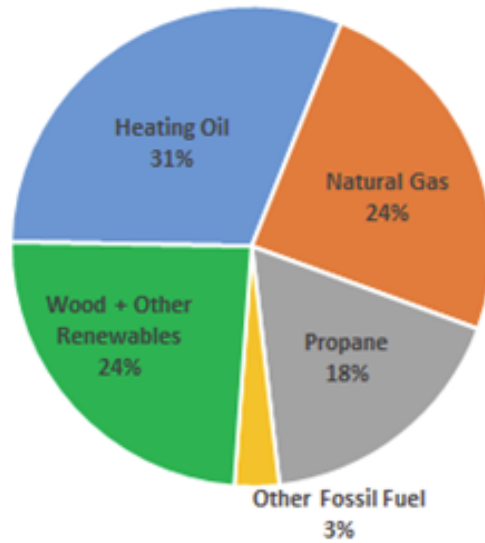
- Provide transparency on how VT spends \$900 million/year on electricity
- Explain costs of mandated programs

## Pathway: ↓ GHG in elec generation

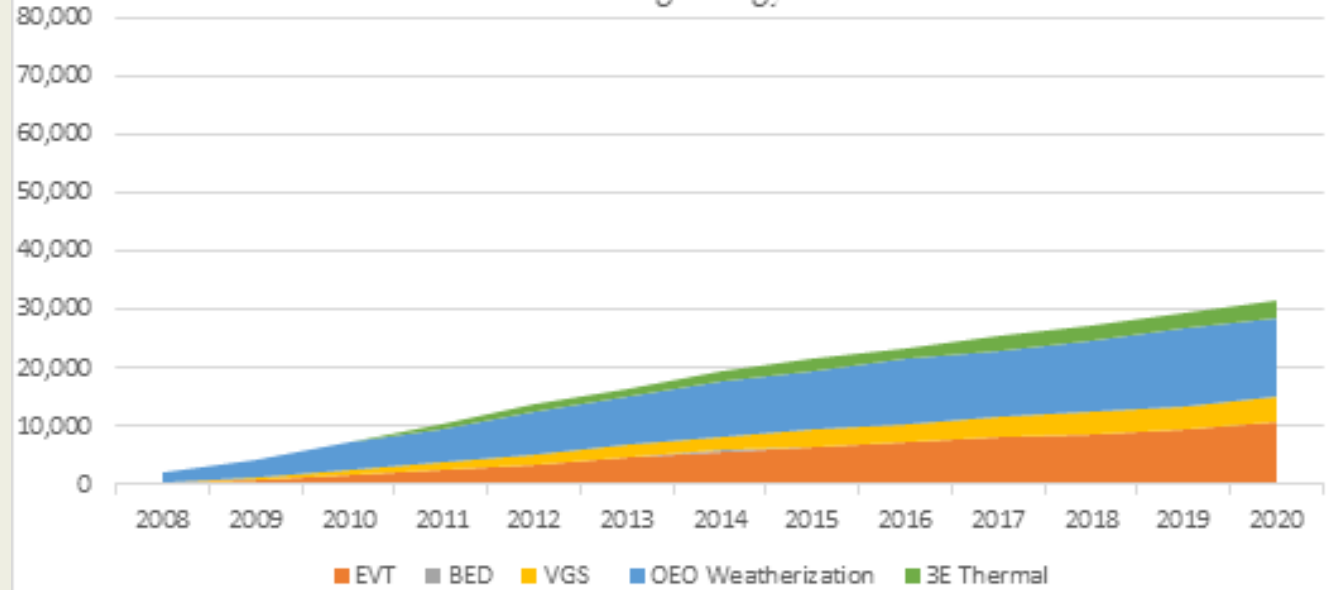
- Provide context re: electric sector GHG emissions
- Explain options for achieving 100% clean energy requirement

# Thermal & Process Currently

Renewable and Fossil Fuel Heating in 2019



Cumulative Building Energy Retrofits



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

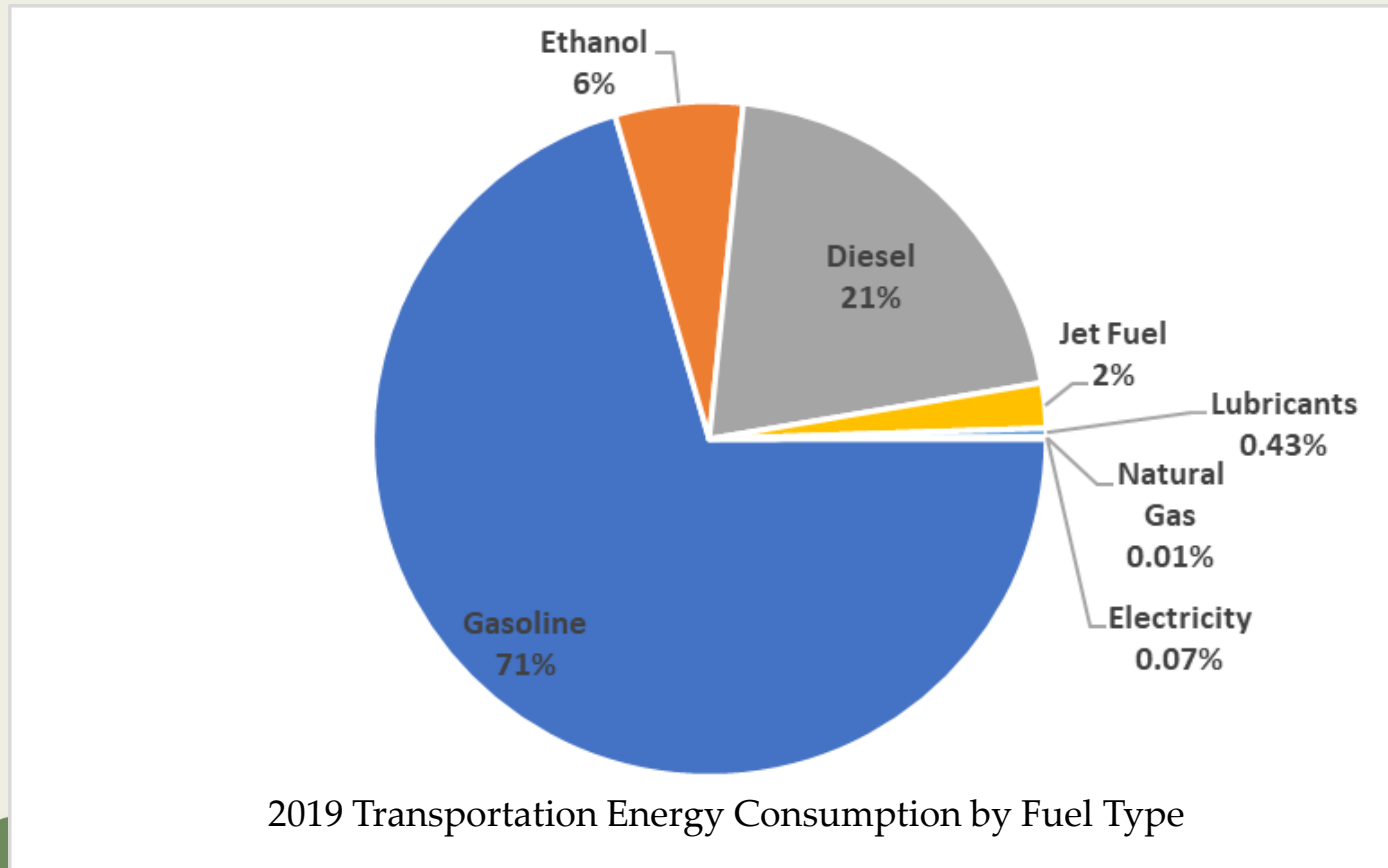
## Pathway: Reduce Energy Demand

- 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

# Transportation Currently



# 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, Bicycle etc.
- Infrastructure & Policy
  - **Rate Design & Load Control**
  - EV charging price transparency (via AAMF)
  - Dealer Awareness
  - Zero Emission Vehicle MOU
  - 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

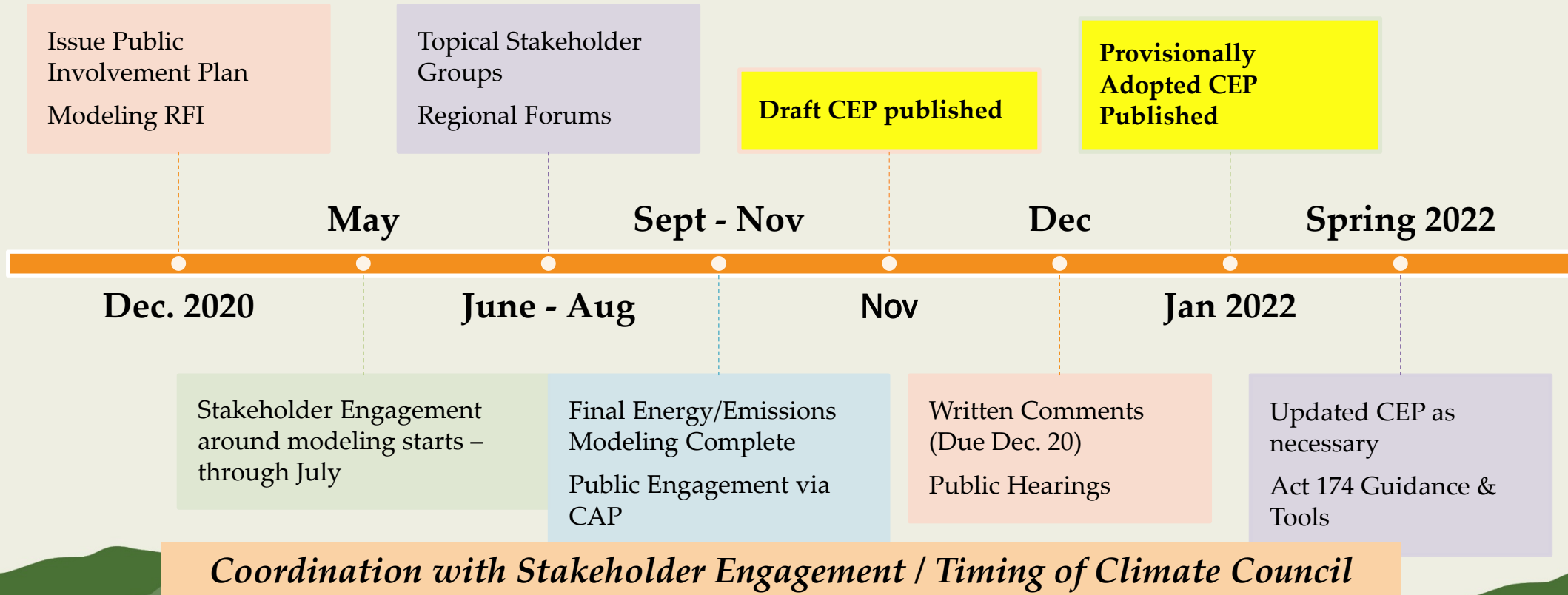
- Public & Active Transportation Options
  - Public Transit, Rail, Biking & Walking, etc.



# More CEP Components

- Energy Finance
- State Agency Energy Plan
- Act 174 Enhanced Energy Planning Standards
- Modeling Appendices

# 2022 CEP Engagement Timeline



# Opportunities for Comment

The Public Comment Period on the Draft 2022 CEP remains open until December 20, 2021

- 5 Public Hearings across the state
  - For locations, see: <https://publicservice.vermont.gov/content/release-draft-2022-comprehensive-energy-plan>
- Written Comments
  - Via email: [PSD.ComprehensiveEnergyPlan@vermont.gov](mailto:PSD.ComprehensiveEnergyPlan@vermont.gov)
  - Via US Mail:
    - CEP 2022 Public Comments*
    - Vt. Department of Public Service*
    - 112 State Street*
    - Montpelier, VT 05620-2601*
- Draft CEP may be downloaded from CEP website  
<https://publicservice.vermont.gov/content/release-draft-2022-comprehensive-energy-plan>

# Public Comment Period for Remainder of this Meeting

Please state your name, town (and organization, if relevant) when sharing comments.

**Thank You!**



 VERMONT

The Vermont State Logo, featuring a stylized white silhouette of a person with arms raised in a 'V' shape, set against a dark green background. To the right of the logo, the word "VERMONT" is written in a white, serif, all-caps font.