CENTRAL VERMONT
REGIONAL ENERGY COMMITTEE

DECEMBER 12, 2016
4:00PM

WHY ARE WE DOING THESE PLANS?

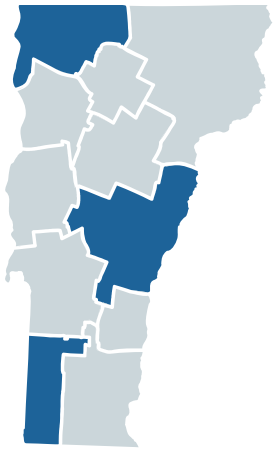
Vermont's Energy Goals…

25% of all energy consumed in the state through in-state renewables by 2025.

Reduce greenhouse gas emissions from energy use by 50% (of 1990 levels) by 2028 (and 75% by 2050).

Weatherize 60,000 Vermont housing units by 2017 (and 80,000 by 2025).

90% of Vermont's total energy needs from renewable sources by 2050.

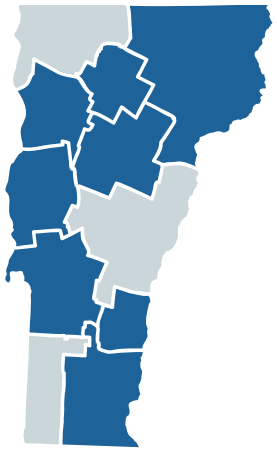


ROUND I

BCRC

NVRPC

TRORC



ROUND II

ACRPC

CCRPC

CVRPC

LCPC

NVDA

RRPC

SWCRPC

WRC

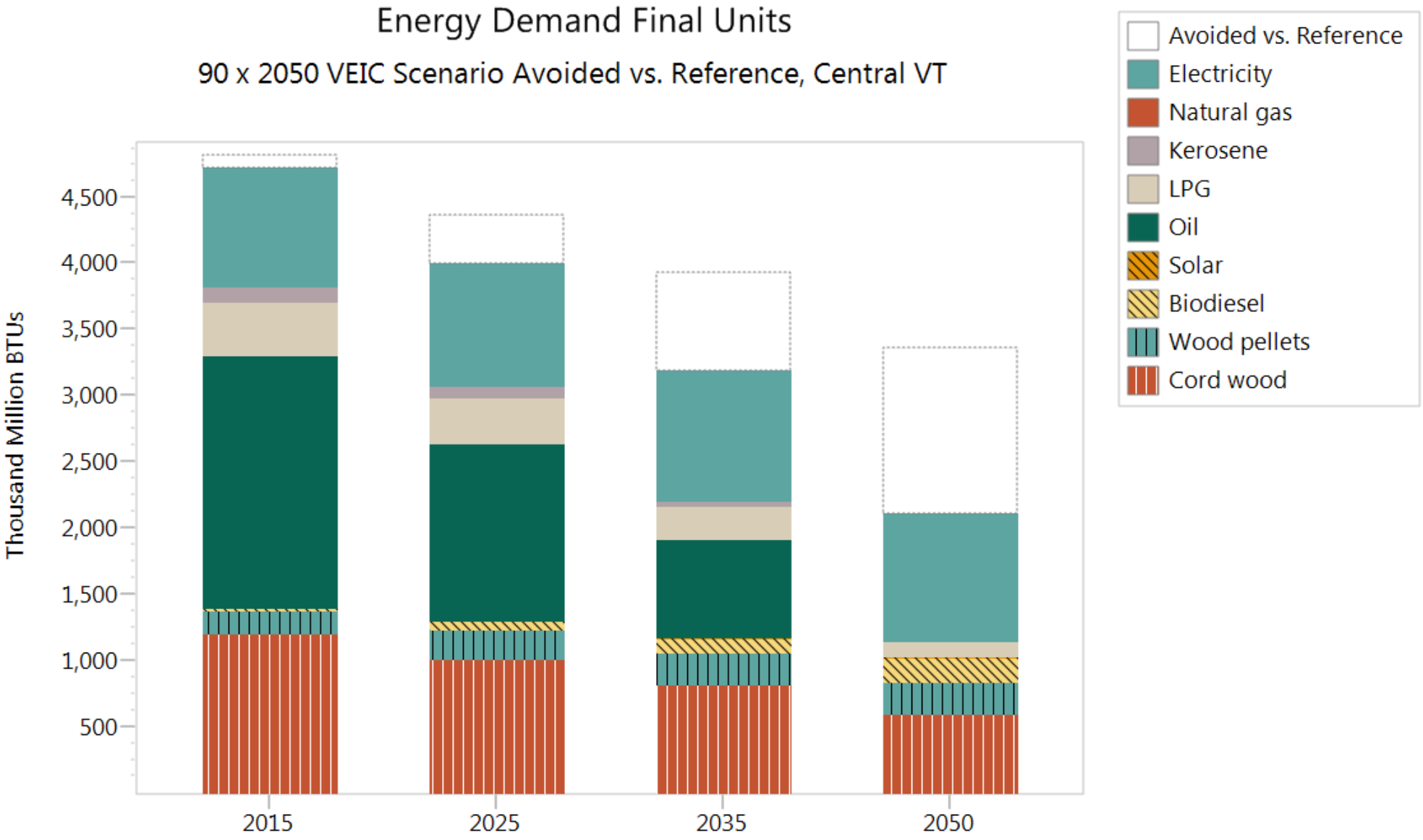
REQUIREMENTS OF THE PLAN

- **Total Energy**
  - Baseline usage across all sectors
  - Existing sources of thermal & electric generation
- **Thermal Efficiency & Alternative Heating Systems**
  - Conservation & efficiency
  - Conversion to alternative heating fuels/systems
- **Transportation System Changes & Land Use Strategies**
- **Conservation & Improvements in Efficiency**
- **Mapping**

BASELINE INFORMATION

- **3 Main sectors of energy use**
  - Electricity
  - Space Heating/Thermal
  - Transportation
- **LEAP Model identifies targets for:**
  - 2025
  - 2035
  - 2050
- **Targets assume:**
  - Fuel switching
  - Electrification of the grid

LEAP Model – Future Energy Use Projections



Regional residential energy consumption by fuel

REGIONAL TARGETS

The LEAP System's total estimated amount of capacity needed by 2050 (approximately 1,650 MW of new solar and 195 MW of new wind, as well as all existing capacity) was allocated regionally. From there, regional goals were reduced by the amount of capacity that existed in that region for each resource (as of 2015). Renewable electricity generation goals were set per region, allocated based on resource availability, demand and existing capacity.

Central Vermont Existing **Solar** and **Wind** Capacity (2015)

9.6 MW of Solar

0.15 MW of Wind

Central Vermont NEW **Solar** and **Wind** Generation Goals (2050)

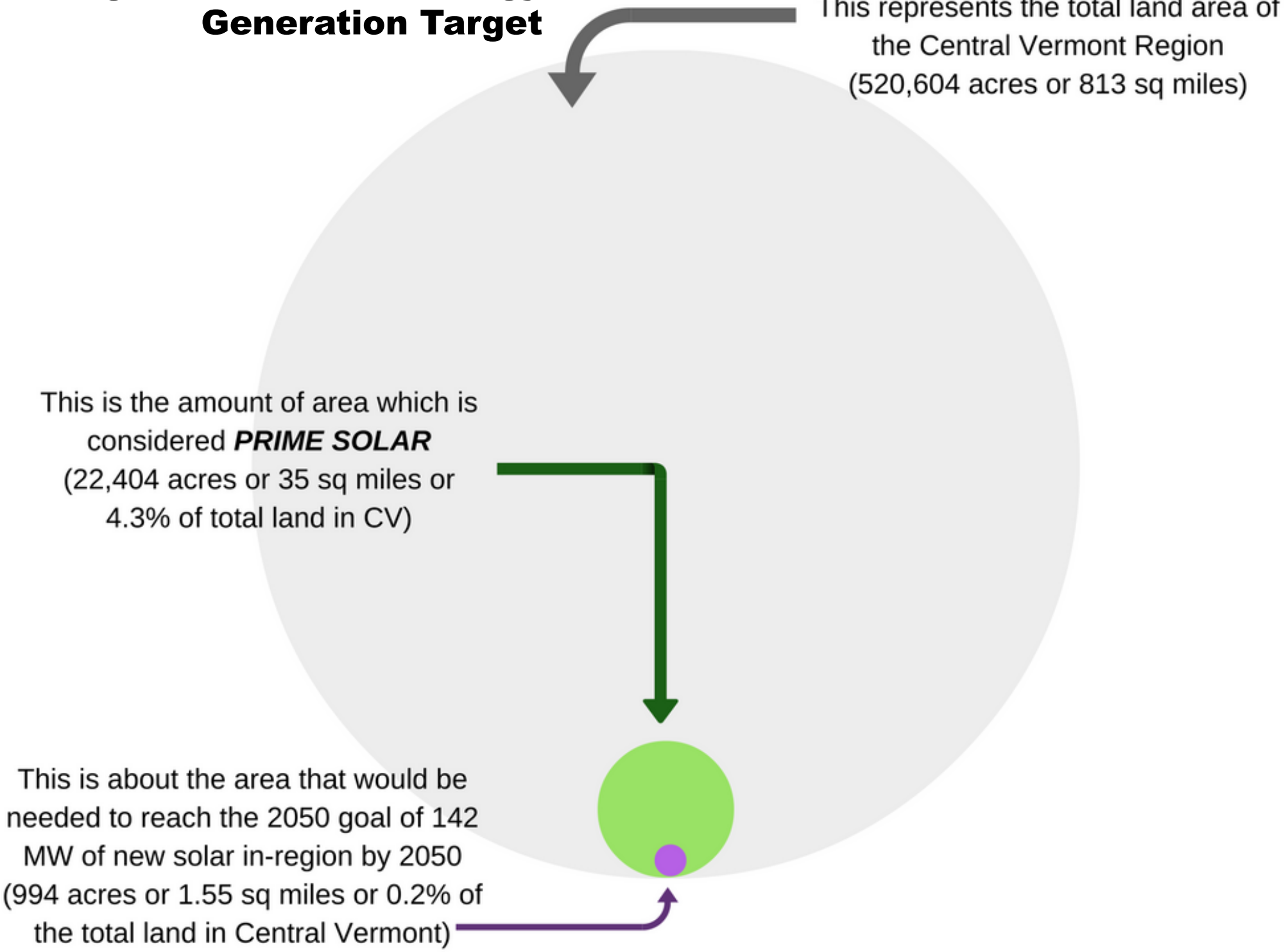
142.8 MW of Solar

33 MW of Wind

MAPPING INFORMATION

- **Identification of resources**
  - Prime & base wind
  - Prime & base solar
  - Hydroelectric
  - Woody biomass
- **Identification of constraints**
  - Known constraints – *development is highly unlikely to occur*
  - Possible Constraints – *development may be possible*
- **Identification of preferred locations**

In-Region Renewable Energy Generation Target



TIMELINE

- **July 2016 -**
  - **Project kick-off**
- **October 2016 -**
  - **LEAP data distributed**
- **November 2016 -**
  - **Department releases energy planning standards**
- **December 2016 -**
  - **Draft resource maps prepared**
  - ***Training on Standards***
- **May 2017 -**
  - **Draft plan prepared and available for public comment**
- **December 2017-**
  - **Draft plan finalized and adoption process begins**

QUESTIONS?