

# Vermont Comprehensive Energy Plan

**CVRPC**

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<http://energyplan.vt.gov>



# Comprehensive Energy Plan

## *Team Effort*

### **State Government**

- Public Service Dept.
- Agency of Natural Resources
- Agency of Transportation
- Agency of Agriculture, Food, & Markets
- Agency of Commerce & Community Development
- Agency of Human Services
- Dept. of Bldgs & General Services

### **Community & Business Partners**

- Public Comments
- Utilities
- Energy Services Companies and Consultants
- Public Interest Organizations and Community Groups
- Business Community
- Town Energy Committees

# Guiding goals

- ❖ **A vibrant and equitable economy**
- ❖ **Healthy ecosystems and a sustainable environment**
- ❖ **Healthy Vermonters**

Economic, environmental, and human health ideals can be in conflict and implementation of a particular policy or program requires striking balances.

When there is consistency and an action positively impacts all of these areas, it deserves greater priority.

# Goals for 2025 and beyond

## Reduce total energy consumption per capita

- by 15% by 2025
- by more than 1/3 by 2050

## Meet remaining with renewable sources

- 25% by 2025
- 40% by 2035
- 90% by 2050

# Sectoral Goals

## Buildings

Goals:

- 30% renewable by 2025
- All new buildings net zero by 2030

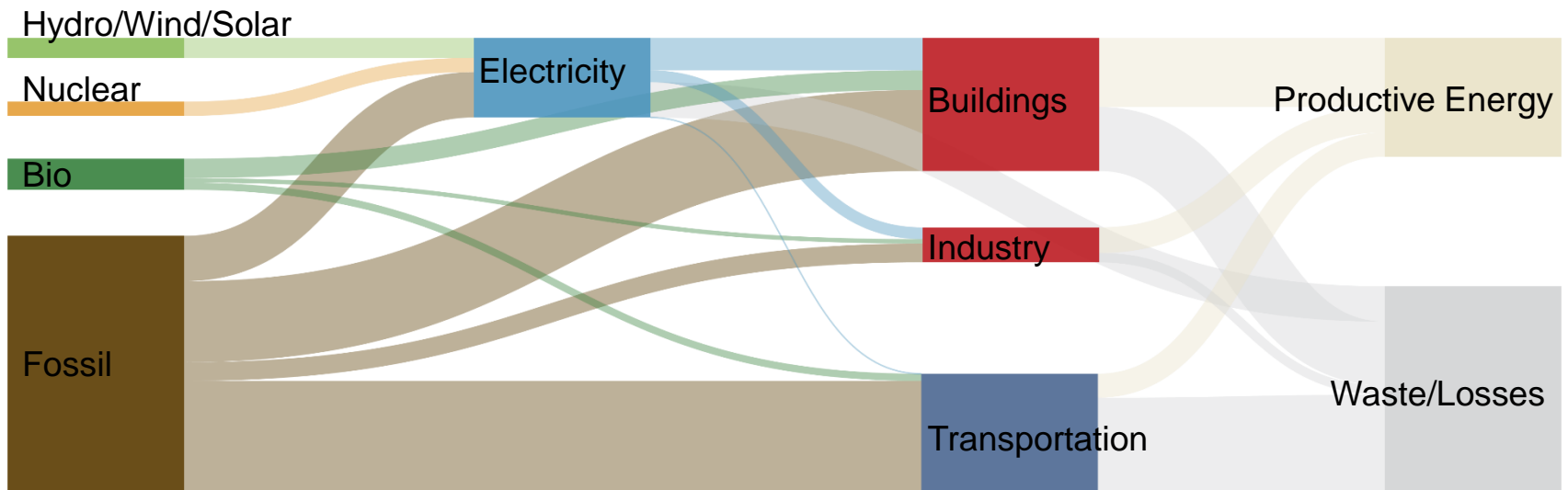
## Transportation

Goal: 10% renewable by 2025

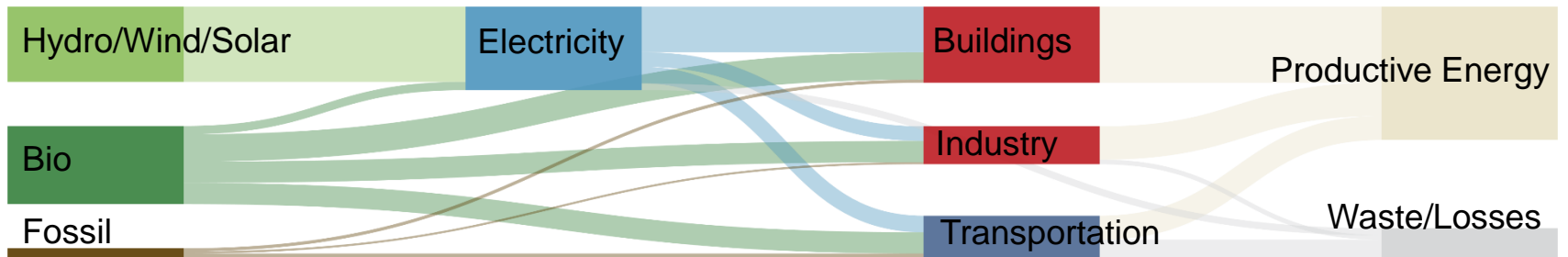
One way to get there:

- Keep VMT per capita at or below 2011 levels
- 10% of all light-duty vehicles plug in
- 10% average bio-content in diesel

# Energy Flows: 2015



# Energy Flows: 2050



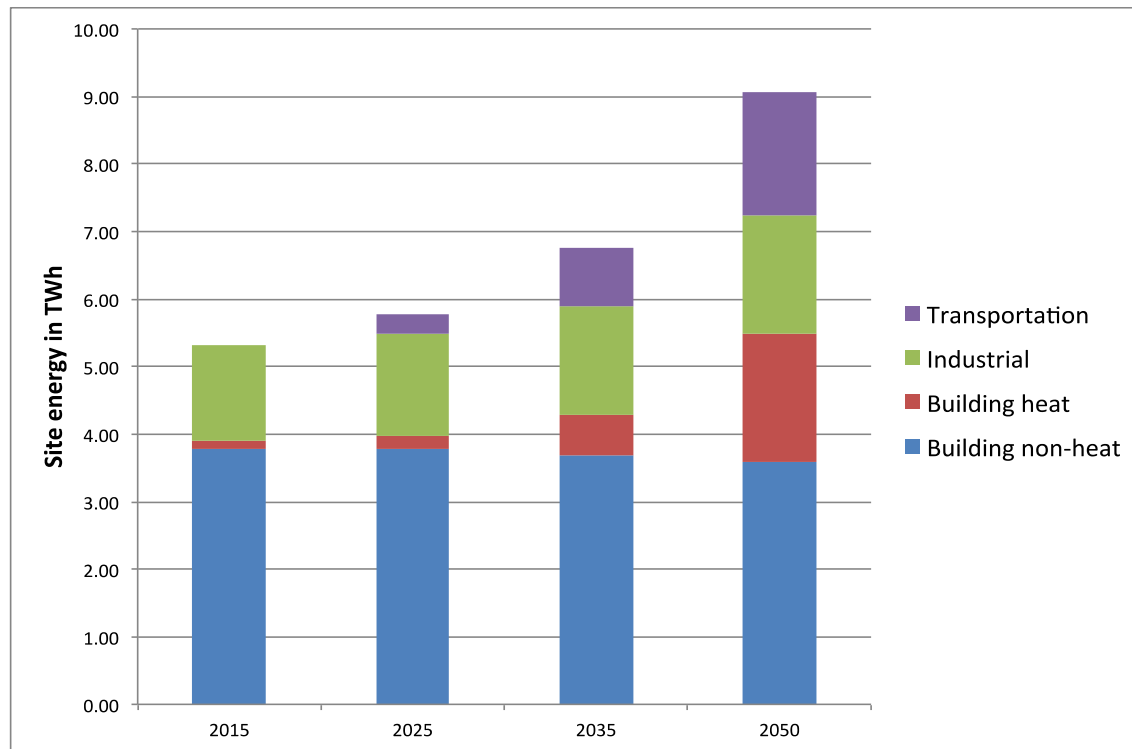
# Efficiency – 3 ways

- Thermal and electric efficiency
- Electrification
- Renewable electric generation

(More of the primary energy ends up as useful power)

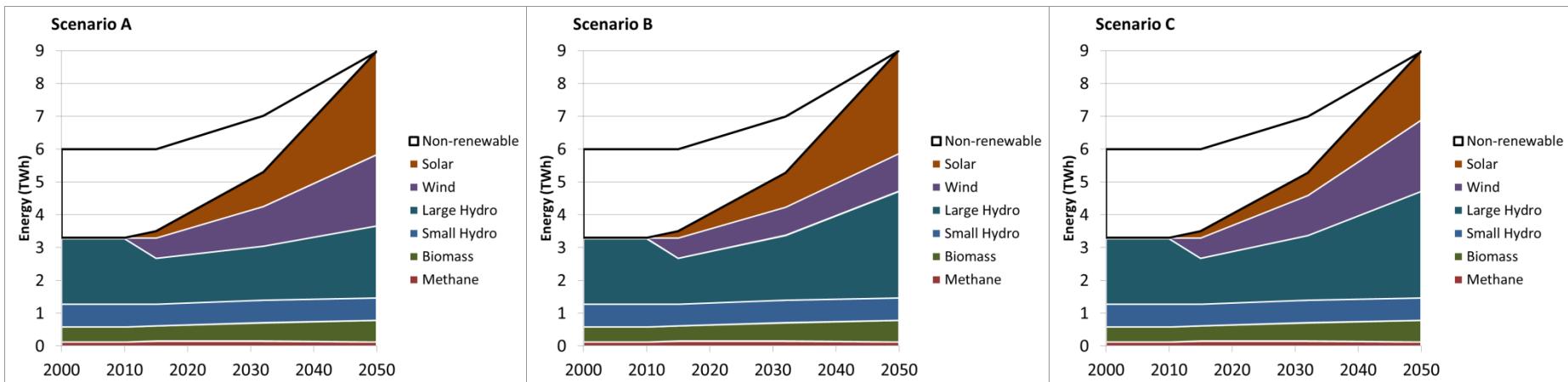


# Electric Power



# 3 Scenarios

- Electric usage goes up
- Different mixes are possible



# Strategies

- Efficiency remains the lowest cost resource: Continue to pursue all reasonably available cost-effective efficiency
- Current state-wide programs driving 90 by 50:
  - Net Metering
  - Renewable Energy Standard (includes an electrification component)

# Central Vermont

- Regional energy planning process
  - Modeling
    - End uses: heating, transportation, and electricity
    - Sectors: residential, commercial, industrial
  - Mapping
  - Public Process
  - Plan

Regions will chart their own path to 90% renewable by 2050.

# Bennington Results

**THIS IS THE  
AMOUNT OF  
LAND AREA  
IN THE  
BCRC REGION**

*(about 370,00 acres, or 575 sq. miles)*

**THIS IS THE  
AMOUNT OF  
THAT AREA  
WHICH IS  
CONSIDERED  
"PRIME SOLAR."**

*(about 14,500 acres)*



**AND THIS IS ABOUT  
THE AMOUNT OF  
AREA THAT WOULD  
BE NEEDED TO REACH  
OUR 2050 GOAL OF  
77MW ADDITIONAL  
IN-REGION CAPACITY.**

*(about 700 acres)*



# Central Vermont

## Transportation and heating

- Local land use planning and zoning are critical
- Options to consider:
  - EV charging stations in commercial permitting.
  - Support for public transportation.
  - Support for biodiesel refueling stations.
  - Dense zoning in towns and villages.
  - Support for weatherization and heat pumps.

For more information on the energy plan go to:

[www.energyplan.vt.gov](http://www.energyplan.vt.gov)

