

Renewable Energy Standard Structure

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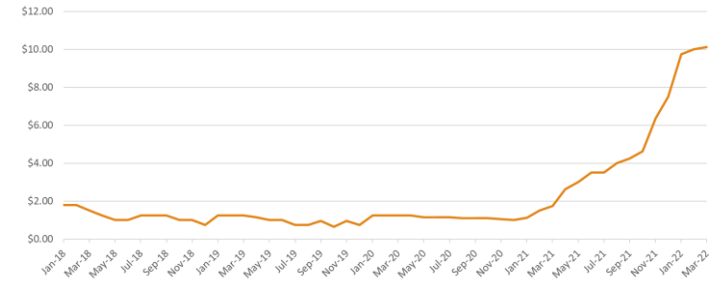
Renewable Energy Standard – [30 V.S.A. §8005](#)

The Renewable Energy Standard requires **Vermont electric distribution utilities** to purchase or own a specific amount of electricity generated from renewable resources and to facilitate fossil reductions from their customers. This requirement is outlined in three different Tiers:



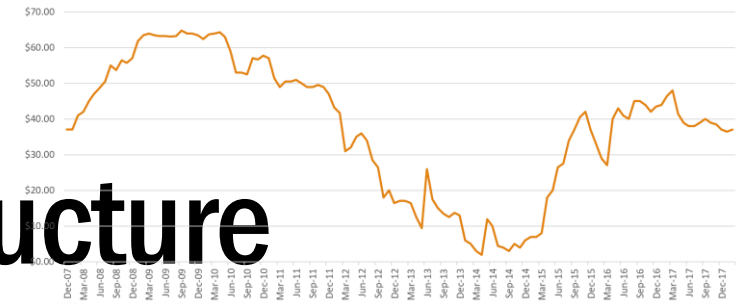
Tiers 1 and 2 require that utilities retire renewable energy certificates (RECs) to show they are in compliance, and utilities had to start complying in 2017.

Tier 1 – Total Energy Structure



- **Purpose** – to encourage economic and environmental benefits of renewable energy
- **Eligibility** – any renewable resource that can deliver into New England, regardless of when resource was constructed.
 - Includes resources from NY and Quebec
- **Required Amounts:**
 - 55% of retail sales in 2017, increasing 4% every three years, until 75% in 2032 and maintained thereafter
 - Tier II is included in Tier I
- **Exemptions:** For example, opportunity to reduce obligation if findings are made
- **Alternative Compliance Payment** = \$11.97/REC in 2023, increasing by CPI annually
 - Price forecast was available at time of implementation.
 - REC prices have historically been relatively low (ex. \$0.35/REC average in 2019 & \$0.63/REC in 2020) although have increased substantially in the past year (\$5-9/REC)

Tier 2 – Distributed Generation Structure



- **Purpose** – encourage DG to support reliability, reduce line losses, help avoid t7d constraints, diversify resource connected in Vermont.
- **Eligibility** – renewable resources commissioned after June 30, 2015; connected to a distribution or sub transmission line in Vermont; nameplate capacity of less than 5 MW
 - Resources used to demonstrate compliance typically include net-metering, standard offer, utility PPAs
- **Required Amounts** - 1% of retail sales in 2017, increasing 0.6% every year, until 10% in 2032, maintained at 10% thereafter
 - Carve out of Tier 1 requirements (not additional)
- **Exemptions** – Path for DG greater than 5MW, changing requirements if renewable at time
- **Alternative Compliance Payment** = \$71.83/REC in 2023, increasing by CPI annually
 - Price forecast was available at time of implementation.
 - Tier 2 REC price forecast for new RECs: ~\$35/REC in the near-term, decreasing to ~\$30/REC by 2030

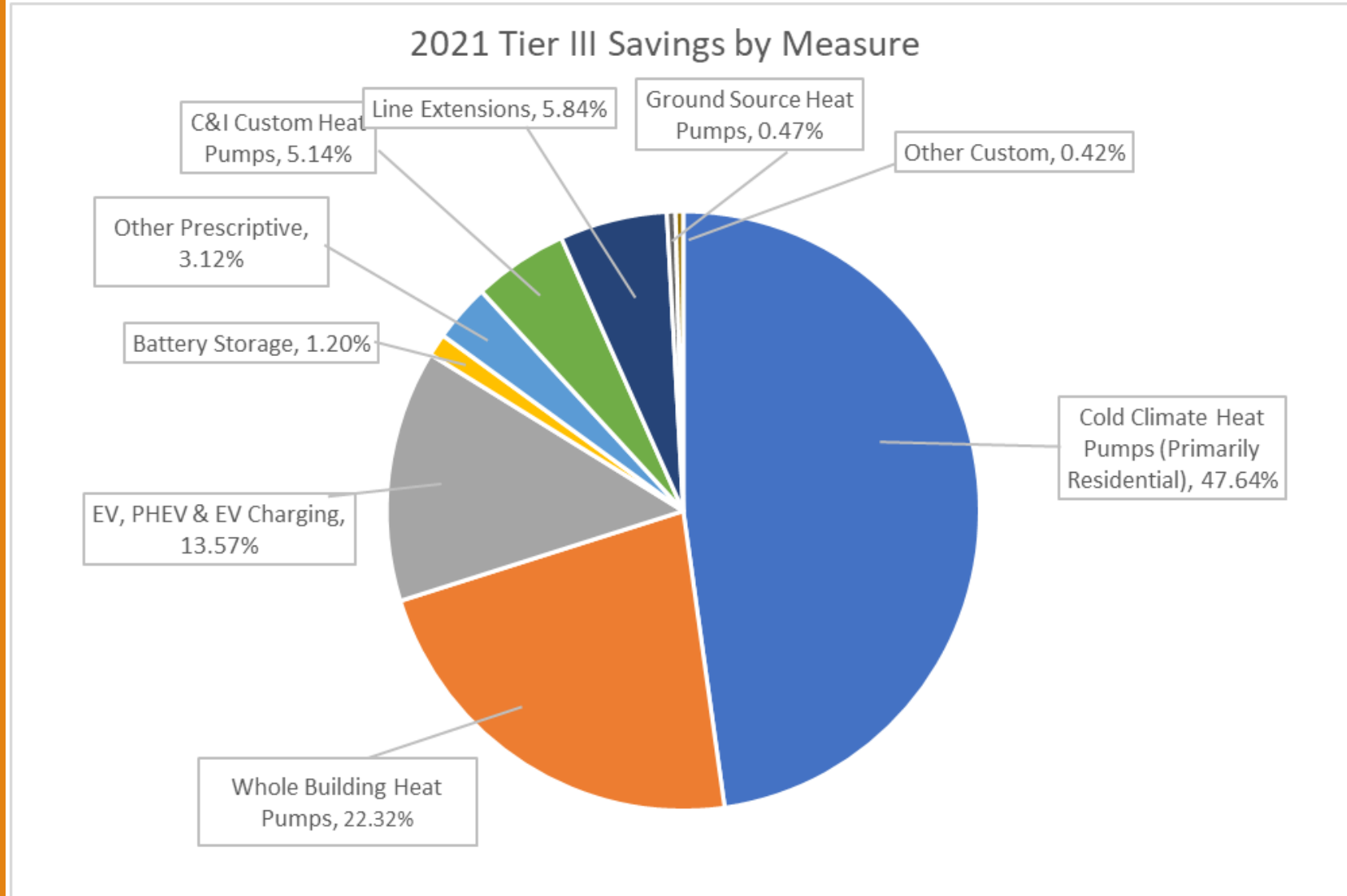
Tier 3 – Energy Transformation

- ❖ “encourages **Vermont retail electricity providers** to support projects to **reduce fossil fuel** consumed by their customers and the emission of greenhouse gases attributable to that consumption.” 30 VSA 8005 A)3(a)
 - Obligation can be satisfied by additional Tier 2 credits
- ❖ Obligated entities are 17 Electric Distribution Utilities
- ❖ Requirements set in MWh_e (converted from MMBTU) as % of retail sales.
- ❖ Requires cost-effectiveness screening – “lowest lifecycle cost”
- ❖ Requires incremental investment
 - Utilities can’t take credit for activities that would happen anyway
- ❖ Cost capped at Alternative Compliance Payment (ACP)
 - Initially set at \$60/ MWh_e, adjusted annually by CPI (currently \$71.83)

Tier 3 Implementation

- ❖ Statute set broad parameters
- ❖ PUC established framework through Orders and ultimately Rulemaking (Rule 4.400)
 - Stakeholder process carried out between 2015 and 2017
 - PUC established income thresholds and participation targets
- ❖ Each utility offering Tier 3 Programs files an Annual Plan with the PUC
 - Opportunity for stakeholders to review and comment
- ❖ Department of Public Service conducts annual verification of savings.
 - Tier 3 credits are not tradeable among utilities.
- ❖ Many Tier 3 programs delivered jointly with Efficiency Vermont

Tier 3 Compliance



***Tier 3 predominantly supports electrification**

Heat Pump Forecast

