

Renewable Energy Reform - Legislative Working Group

In-meeting Poll from October 4, 2023.

Results from this survey will update in real time and be available in aggregate, anonymous form.



29 responses

Requiring Vermont's electricity to be met with carbon free and renewable resources is the simplest way to achieve that in the electricity sector.

Utilize regional new renewables

We need carbon free/ renewable at night, in the winter and all the time - cannot come from a single resource.

By protecting existing renewable so the stay on line

The bulk of GHG emissions in VT are from Thermal and Transportation - Tier 3 is a good policy but that burden should not fall solely on electric customers.

Prioritize existing resources that are carbon free, such as nuclear and hydro. These are built systems and beneficial as base load resources.

Require far more new renewables (get renewables built).

Help match new loads from electrification with new renewable energy coming online in Vermont or the region

By helping to electrify the overall economy (heating and transportation in poarticular)





29 responses

Allow utilities to find the most cost effective alternatives to GHG sources

There is a threshold question imbedded in this question.
Reduce emissions produced by whom? By Vermonters or by
New England at large or some other group?

Procure generating resources that do not emit greenhouse gas., accessible to VT. Stay very flexible so each utility can meet their unique needs, stay affordable.

Enable flexibility in methods for achieving Tier III reductions.

Raising the purchasing requirements for new renewables would displace the marginal fuel source for ISO NE which is usually natural gas

1. Increase Tier 3 requirements 2. Ensure Tier 3 measures count as clean heat measures

Expanding energy transformation projects under Tier III

By incentizing new renewables in the region without regard to location

By not allowing HydroQuebec RECs.





29 responses

Forcing the creation of new renewable energy procurement programs to incentive new renewable deployment

Balance new renewables with existing portfolios, regional diverse resources with in-state opportunities (mostly solar).

Unless one asserts that the current does NOT decrease emissions, the current program could continue to operate as is, or with an accelerated timeline: 100% by 2030.

Allow utilities to do more new renewables, more Tier 3 projects than the minimum required.

by requiring that new load must be met by new renewables

Raising new renewable requirements could also force the necessary reforms to our permitting process to allow for efficient siting of renewables

In every way. The RES should set us on a path that eliminates use of fossil fuels in electricity generation and readies VT for more reliance on electricit as we move away from ff to run cars, heat etc

Given the lowest in the nation carbon emissions by Vermont's electric sector, the most significant way that the RES can reduce GHGE is by increasing use of electricity for heating and cooling.

Require 100% of all electricity usage in the state to come from renewables.





29 responses

Since no one is building new nuclear, allowing nuclear does reduce ghgs

Redefine the REC requirements--eg disallowing future purchases of a class of RECs, such as large hydro--to drive REC acquisition to assets such as solar and wind, thereby supporting their development.





Where / how could policy better support a drastic reduction in carbon load? 22 responses

Define broad foals and let the utilities find the best path for specific development

Encourage diversity of resources, particularly winter generating, to support growing winter load.

Increasing the requirements for new renewables in tier 2.

100% renewable/low-carbon energy requirement. More flexibility to go above and beyond minimum requirements for Tier 3.

Continued policy focus on Thermal and Transportation sectors for overall carbon reductions in Vermont. Move to 100% renewable by 2030.

We need to move to a 100% low carbon emissions standard for all of Vermont's electrical supply, and at a cost that will speed beneficial electrification.

Accelerate timeline for 100% clean.

Provide enough flexibility that new technologies are options but not required as currently unknown but hopeful (micronuclear, long-duration storage, etc) Making it easier for households to electrify (Tier III)





Where / how could policy better support a drastic reduction in carbon load? 22 responses

Focus less on specific sizes and locations.

Encourage diversity of resources and flexibility in procuring those resources most cost-effectively to allow for greater adoption of electrification for transportation and thermal sectors.

How is "drastic" understood? Current policy already has a very low carbon load.

Creating a new tier within tier 1 for new renewables from anywhere within ISO NE

Make it cheaper to put solar on already-impacted sites.

Consider allowing new renewables from outside ISO NE to count towards a new tier 1a

The upfront costs of new technology and renewable generation are significant and out of reach for many. In addition to relying on DUs, we must increase state investments to accelerate our transition.

Flexibility in methods to achieve Tier III requirements

All tiers should be considered a floor, not a ceiling, by the PUC. Limiting DUs' work to the requirements in the law artificially reduces what the DUs are capable of.





Where / how could policy better support a drastic reduction in carbon load? 22 responses

Focus on resources that have significant ability to replace energy and the affordability of those options

Requiring renewables w storage for new load

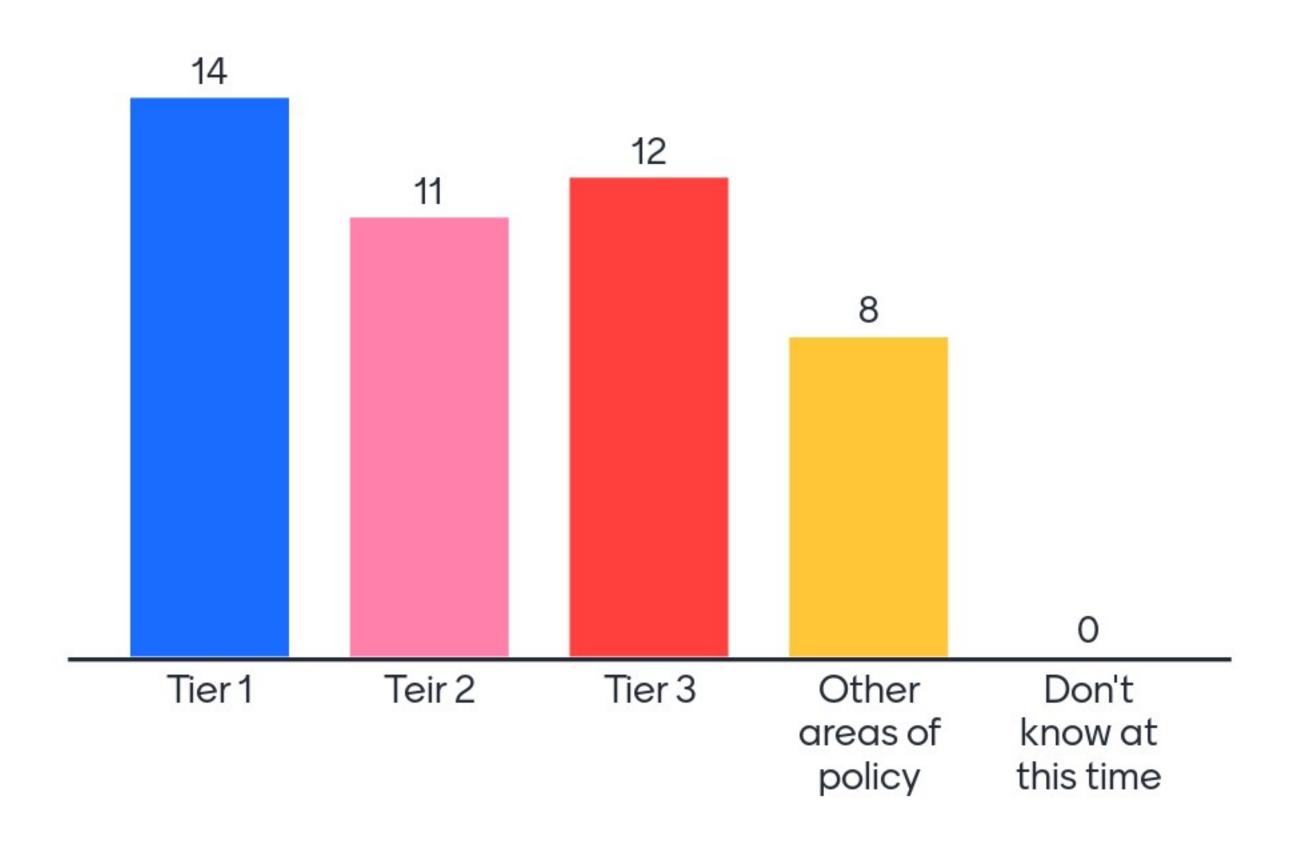
Ensure all new load is met by new renewables.

Encourage more beneficial electrification





Did your prior answers focus on... (check all that apply):





33 responses

New renewables need to come from multiple sources and varying geographic locations including regionally - i.e. New England - we need resources that can produce energy at night and all seasons.

The RES is essentially a mandate for procurement and incentives. So it can do so very directly by requiring that utilities meet those mandates.

For the ISO NE region, if we disallowed HQ RECs, that would force the region to increase renewable generation.

Increasing the requirements for new renewables in tiers 1 and 2.

The RES is essentially a mandate for procurement and incentives. So it can do so very directly by requiring that utilities meet those mandates.

Increase size of Vt renewables under Tier II

Balance the in state vs regional is important-the RES determines the appropriate percentages of each bucketand some portion from in state is acceptable however we need to inc resource diversity

Northeastern, by supporting new renewables that match electrification needs and match winter energy needs

New "tier" requiring retirement of RECs equivalent to MA/CT class 1 RECs (i.e. new RE from NE of any size).





33 responses

Create a new tier 1a for new renewables from anywhere within the ISO NE region

By requiring them and increasing their value (through RECs or other mechanisms).

Increase Tier 2. (Vermont RE, local)

This question lacks the "effectively" modifier. RES could be most effective by focusing on the broad GHG goals and leaving location those responsible for complying.

Location within VT becomes more and more important as we get higher saturation; this is why it is critical to use the RES to determine appropriate %, but do not dictate the procurement requirements.

I can't fully answer without first understanding the current marketplace for RECs allowed in VT; that is, are all RECs generated being sold/purchased? Are we short of RECs? in surplus? All of the above. We can stimulate in-state development and promote out of state purchase of renewables with a clear-cut ramp getting to a 100% renewable grid.

Consider allowing new renewables from outside ISO NE to count towards tier 1 or a new 1a

Focusing on generation that provides substantial energy related to the investment





33 responses

By allowing utilities to contract with the most cost effective sources, a diverse mix of appropriate local, state, and wider regional generation can be supported.

Create new procurement programs for in state renewables

Northeastern - enable robust resources where the energy injection aligns with peak demand timing.

Solar in VT is useful, but has limits. Regional onshore and offshore wind, regional nuclear will be critical to develop as VT and all of NE decarbonize. Biodigesters helpful, but small.

Focusing on the electrifications aspects of moving Vermont's economy. The power supply mix is highly carbon free already.

Ending the REC arbitrage of unbundled recs from old out of region large hydro would incentive new renewables

Incentivize solar with storage.

Very important to look regionally, particularly to support winter load.

Continue to incorporate procurement programs for on-site and community renewables to ensure multiple paths to development of local/VT renewables.





33 responses

Continue to incorporate procurement programs for on-site and community renewables to ensure multiple paths to development of local/VT renewables.

By setting responsible requirements for using new renewables to meet Vermont's growing electric load.

Require that new load must come from renewable sources.

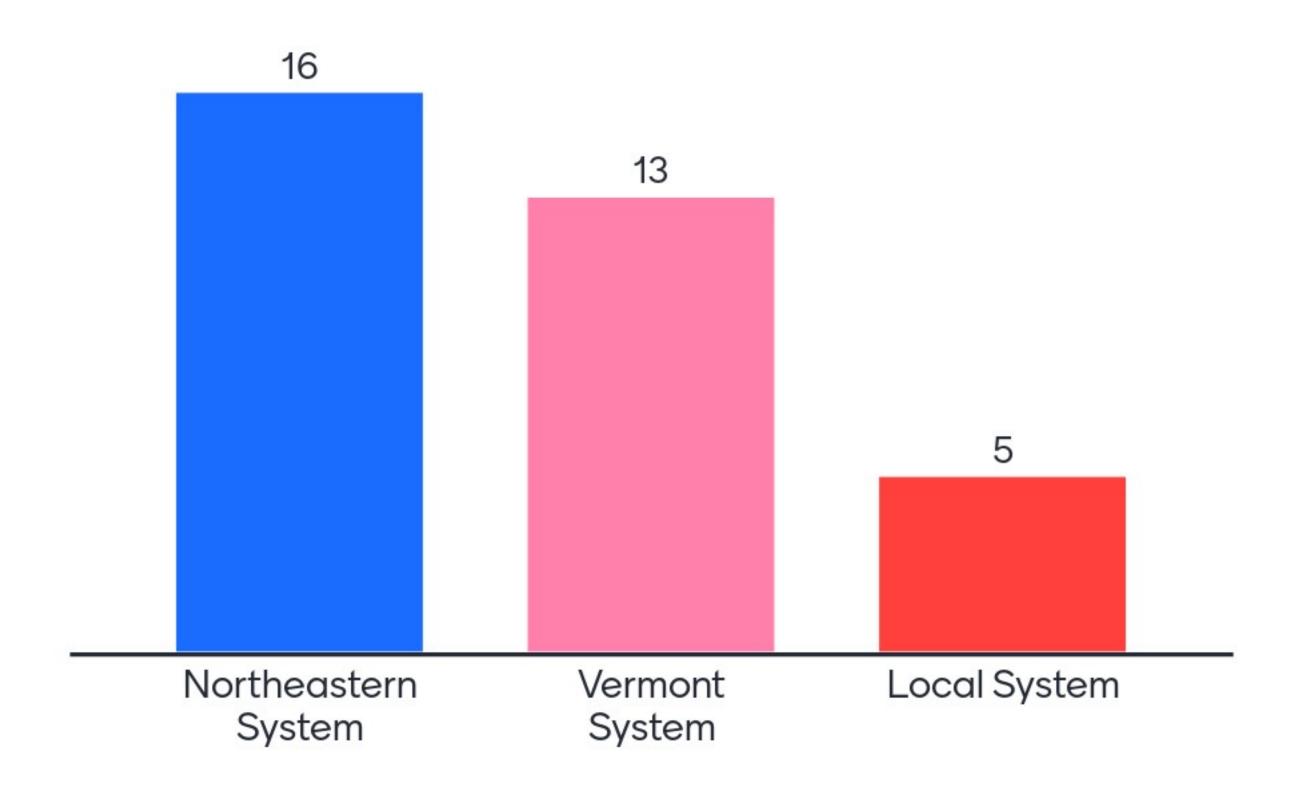
New England: Pursue agreements with other New England States to "clean up the NE grid"Local: Help VT communities develop micro grids and storage for resilience Disallow unbundling of RECs for future REC requirements.

Northeastern and Vermont





5. Did your prior answers focus on... (check all that apply):





28 responses

Burying power lines

Under-groundingMicro grids Permit reform

Micro grids

Allow the DUs to determine the best approach to procuring their mix of renewable resources - do not dictate procurement strategies.

More investments in household and building-level storage

#1 grid hardening (such as burying cables)

Allow the DUs to determine the best approach to procuring their mix of renewable resources - do not dictate procurement strategies.

Ensure reliable power generation for winter-time. Support peak demand reduction technologies and programs. Underground where economic. Battery storage where economic.

More micro grids and energy storage





28 responses

The RES actually does not need to be a Grid Resiliency
Policy - DU's do that well - let each utility determine the best
approach and make sure RES is appropriately balanced
with costs/resources.

All flexibility in meeting requirements across Tiers

Net Metering laws/rules remove many utility customers from paying their share of infrastructure costs. This is starving the grid of needed investment including local match to draw down federal money.

Redundancy

Since micro storms are the new norm, local distributed production can play a big role to reduce outages. Storage is also critical to local resilience in the face of more intense weather events.

Electricity generation facilities distributed around the state, close to the population centers that use the electricity, and paired with energy storage and grid flexibility measures.

Significant, strategically-placed storage paired with distributed generation.

Loosening the prescriptive nature of requirements. Utilities have maintained the electric grid for more than 100-years and know how to react. Mandates can create contrary incentives

Financing to upgrade transmission to support more distributed generation





28 responses

Most of the updates are unrelated to renewable procurement - burying wire, vegetation clearing, grid technology to sectionalize outages.

Greater reliance on micro-grids and storage

Storage will be helpful, particularly long-term storage

More storage and microgrid systems, burying power lines, encouraging more generation close to the load.

To the extent mandates are included recognize that each utility is different

Increased focus on demand response, etc. to shift load esp w/electrification.

microgrids for essential infrastructure first, then secondarily for larger areas, such as housing developments.

Encourage greater diversity in resources that are able to remain online during an event on the system.

Consideration of location of where a generator is sited on Vermont's grid.





28 responses

RES is currently requiring utilities to help Vermonters reduce their fossil fuel useage.





How is the RES reinforcing Climate Adaptation, currently? ...how isn't it? 21 responses

It does not directly address adaptation and it is not necessarily the best policy to do so

Mostly through Tier 3. We are actually seeing cases where the Tier 2 requirements are requiring additional upgrades

Net metering is a great tool for promoting distributed generation especially when paired with battery storage.

Increased DG is helpful, but modest in current RES (low T2 requirements).

The RES does very little to assist with adaptation. In fact, in some ways it is counterproductive to adaptation preparation. It is focused on climate mitigation.

It is not directly a climate adaptation policy, and doesn't need to be.

The low new renewable requirement in the res works against climate adaptation

RES currently relates to reducing carbon, not addressing impacts which is an entirely different arena of strategies

The current RES is helping us adapt but needs to go faster and have greater reliance on locally produced renewables.





How is the RES reinforcing Climate Adaptation, currently? ...how isn't it? 21 responses

Tier 2 requires distributed generation. We know from case studies done in places experiencing high climate impacts (like Puerto Rico) that distributed generation increases resilience when storms hit

It has resulted in new renewable generation coming online throughout the New England region

Limited incentives through Tier III allowing some to individuals to change

To the extent the RES constrains utility decisions, it can lead to a less resilient grid than might otherwise be developed and maintained.

Main impact is that the RES supports the marketplace for renewable generation--BUT this raises a point of controversy as well: what type(s) of generation are legitimately renewable?

It is time to prepare for the impact of climate changes. That requires significant investment in grid infrastructure which is not now occurring.

Supporting local generation which will help with long run resilience.

Tier 3 is addressing some climate adaptation. However, the lowest income customers are the least likely to be able to participate and are at risk of being left behind in adaptation

Only in that it has created some new renewables in the region





How is the RES reinforcing Climate Adaptation, currently? ...how isn't it? 21 responses

there is a myth that "local" generation helps resiliency, but not if it's not near load or paired with storeage The current RES leaves out storage, and has no specific components to drive innovative resilience projects (like GMP's microgrid projects). More in that direction, w/o weakening T3, would be positive.

Unbundling of RECs may not support RE.





Where / how could policy better support robust adaptation? 22 responses

Do not see it as the role of RES to drive this - however, as customers transition off of fossil fuel such as through Tier 3, they are less exposed to the volatility of the fossil markets.

Distributed generation paired with energy storage and grid flexibility measures is critical to adapting the grid to withstand climate disasters

With many utilities moving to 100% clean/renewable, limited opportunity as a % of VTs emissions

the RES isn't an adaptation policy and shouldn't be reworked to be one.

Allow greater flexibility for utilities.

Policy should set brought goals and let the individuals responsible for compliance react to their changing needs as they meet the goals

Through regional planning entities, Act 250, and local zoning. Ensure regulatory processes including at PUC are accounting for need for adaptation to climate change.

The more flexibility that is provided to utilities for procurement, the more easily siting and other considerations for resiliency (primary mission of every utility and Vermont) can be incorporated.

Our policies assume that the majority of the cost of providing electrical service is in buying or producing power. They largely ignore (and therefore shortchange) the need for infrastructure funding,





Where / how could policy better support robust adaptation? 22 responses

Outside of RES, need to think through permitting and other policies that delay the deployment of grid hardening and modern techniques to eliminate outages.

If we reduced the 9% rate return utilities get to make then more of these investments could come out of the current rate structure without increasing the cost to ratepayers.

All climate policy should have an equity focus ensuring that LMI Vermonters can participate in energy transformation

The res isn't a resilience policy

It should focus on the aspects of Vermont's economy that have the most GHG emmissions

How are we defining adaptation? If at a high level, then accelerating the RES timeline to 100% by 2030 is perhaps the most powerful tool. If adaptation is at the local level, then we need other tools.

Procurement policies need to be flexible and tailored to each utility

Incentivize microgrids, distributed generation that's close to load. Put more funding towards upgrading neighborhoodscale distribution lines

Larger renewable generation facilities will play an important role is displacing fossil fuels, and will thereby reduce emissions that will only create more climate disasters if not abated





Where / how could policy better support robust adaptation? 22 responses

Address siting and net-metering policies to create a predictable path for new renewables

It need to consider consumer affordability

Greater transparency in the economics of RE.

Variation on T3 (in addition to, not instead of) requiring increasing storage, for both resilience and load shifting. Leave lots of flexibility for DUs to innovate w/in those broad parameters.



Thank You.