

Renewable Energy Standard Reform - Legislative Working Group

This document categorizes the In-Meeting Notes from September 20, 2023.

- All original contributions, as paraphrased from the in-meeting notes on 9/20/23, are included below this table in blue font.
- Categories A-F were drafted as distinct groupings by the facilitator, to make the list easier to work with. This draft was reviewed by Legislative Members of the Working Group 9/21/23 – 9/25/23.
- Purpose: To inform topics of discussion at RESRWG Meetings, by identifying what participants are paying attention to.
- **INVITATION TO ALL RESRWG WORKING GROUP MEMBERS: Review this document. Are the topics important to you represented here? If important categories are missing from the table, or your thoughts are misrepresented, please email jenknauer@gmail.com by 9am on Tuesday, October 3rd with your suggested edit. Your input will be collated & shared in aggregate form, to supplement this list. Edits were recv'd from two working group members. Added 10/3/23 in red font.**

Task (1): Changes to Vermont’s Existing Renewable Energy Requirements

Per Act 33 of 2023: “whether any changes to Vermont’s existing renewable energy requirements, or other energy policies, are needed to increase grid stability, resiliency, modernization, and reliability”

Areas of Tension Raised In-Meeting on September 20, 2023. CATEGORIZED, paraphrased.	What do you need Legislators to know, regarding...
<p>A. In what ways could the RES reduce <i>actual</i> carbon load?</p> <ol style="list-style-type: none"> 1. Discuss: To what extent could the RES seek to decrease generation of greenhouse gas emissions? ...how so? 2. Discuss: In what ways could the RES bring new renewables into the system? Differentiate: the Northeastern regional system, Vermont’s system, VT Local system(s). 	<p><i>What is factoring into the decision to define the RES as a Clean Energy Standard, or as a Renewable Energy Standard?</i></p> <p>-- Relates to Task (2), as ambiguity about CES / RES was raised as a barrier to moving to 100% by 2030)</p> <p><i>How geography (Regional to the Northeast, or in-state/out-of-state) and system of Renewable Energy Credits (RECS) reinforces amount of carbon load / new renewables in system.</i></p>
<p>B. Considerations regarding the Resilience & Reliability of Grid Infrastructure</p>	<p>Task (1)</p> <p><i>How geography (Regional to the Northeast, or in-state/out-of-state) impacts</i></p>

<ol style="list-style-type: none"> 1. Evaluate & Discuss: What updates would help prepare & support <u>Vermont's</u> grid / infrastructure to withstand increased environmental stressors / climate change? 2. Discuss: How is the RES reinforcing Climate Adaptation, currently? ...how isn't it? Where could policy better support robust adaptation? 	<p><i>physical infrastructure, technology and storage needs.</i></p>
<p>C. How could RES policies shift to mitigate current inequitable burdens / benefits on Vermonters? <i>See details in notes below table, blue font. This content has not yet been assigned a specific RESRWG meeting date – more to come.</i></p>	<p>Task (4) Task (7) Task (8)</p>
<p>D. In what ways could an updated RES help navigate tensions around siting? <i>See details in notes below table, blue font. This content has not yet been assigned a specific RESRWG meeting date – more to come.</i></p>	
<p>E. Economic Viability of Vermont's Energy Policies Note – various ways to look at this. Weigh costs of inaction (climate affects) and costs of changes (implementing incoming technologies & updates) <i>See details in notes below table, blue font. This content has not yet been assigned a specific RESRWG meeting date – more to come.</i></p>	<p>Task (3)? Task (4) Task (6)</p>
<p>F. Implementation Timeline for Proposed Changes</p> <ol style="list-style-type: none"> 1. Think through: What flexibility / phasing will various Utilities need, in order to honor current contracts / obligations? 2. Reality Test: Will the technologies be available within the timeframe of the goals, as proposed? 3. Understand: What updates will be required for physical equipment / distributions / cyber security in order to work with upcoming technologies? Impacts on manufacturing? 4. Reality Test: To what extent are these updates operationally feasible within the timeframe of goals, as proposed? 	<p>Task (1) and Task (2) Task (5)?</p>

Raw Material / Notes. Key:

A – F. Facilitator’s Reworking of Categories, 9/21/23. Discussed & refined with Legislative Team 9/25/23.

Blue font – original paraphrasing of Working Group Members, as scribed in 9/20 meeting

Red font – edits from Working Group Members, submitted before 10/3/23.

A. How will RES Reduce *Actual* VT Carbon Load?

1. To what extent is the RES seeking to decrease generation of greenhouse gas emissions?
2. To what extent is the RES bringing new renewables into the regional system?

RES addresses Vermonters carbon load

- Reduce green house gas emissions in the real world -

% of New Renewables required in policy

- Increase new renewables → actually reducing carbon & green house gas emissions

Transition from Renewable Energy Standard – promoting clean energy standard

Is the Goal of the RES: Renewable or Greenhouse Gases free / climate impacts?

- Affordability (is the cost worth it - weighing factors)

I haven’t seen indications that Tier III is going to be a substantive part of the scenario modeling or the policy conversation. However, while reducing the carbon load of our electrical grid is vital, most of our state’s emissions come from the thermal and the transportation sectors, which can be partially addressed in Tier III. This also has a strong equity role in ensuring that households can fully take advantage of a clearer electrical grid. Not making new any changes to Tier III might restrict our progress in reducing energy consumption.

– Vermont Housing Finance Agency

Tier III may need to be revisited in light of the Affordable Heat Act, as some RECs generated under Tier III might also be counted under AHA, which could cause confusion and reduce actual impact. However, with that said I think it’s important that Tier III commitments to customers are not reduced or eliminated in response to AHA. – Vermont Housing Finance Agency

B. Considerations regarding Resilience & Reliability of Grid Infrastructure

1. Evaluate & Discuss: What updates would help prepare & support Vermont’s grid / infrastructure to withstand increased environmental stressors / climate change?
2. Discuss: How is the RES reinforcing Climate Adaptation, currently? ...how isn’t it? Where are the areas where policy could better support robust adaptation?

Hardening of Grid / infrastructure- ability to withstand climate change

- Renewables available to VTers in-State

- Climate change adaptation

Resilience / Reliability — Location & Type / Diversity of Renewable Resources

- Consider limitations from reliability perspective re. Load (ex. how to power VT in the Winter)
- Overlapping intermittency (or not) of these resources. ...recognizing the dispatchable reliability benefits of biomass, and ensuring any scenario that does not include it accurately accounts (using recognized IPCC and ANR guidelines) for carbon impacts of any replacement resources – Burlington Electric Dept.
- Not currently land / place for larger renewables in current framework

C. To what extent are the RES policies mitigating inequitable burdens / benefits on Vermonters?

How policies will impact households' ability to participate

- Electrifying affordable housing (how participate in community options)
- How do changes made under RES affect other policies
- Equity of access on clean, renewable power / energy

Net Metering

- Make more accessible
- Carve-outs for municipalities

Paraphrasing from chat, as audio was not clear: “regional ties serve a critical role in delivering safe, reliable and affordable bulk electric power to Vermonters.”

Effect of *Climate Changes* on Overall Economy (cost impacts externalized on others)

Balance population needs / utility needs

D. In what ways can the RES help navigate tensions around siting?

Tension(s) around siting

- Location of distributed generation
- Land use (food, biodiversity, energy needs)
- Relationship between equity interests, grid reliability / resilience

How policies will impact households' ability to participate

- Electrifying affordable housing (how participate in community options)
- How do changes made under RES affect other policies
- Equity of access on clean, renewable power / energy

Balance population needs / utility needs

E. Economic Viability of Vermont's Energy Policies

RES addresses Vermonters carbon load

- Impact on low-income VT's, keeps rates low for electricity and heat (**beneficial electrification of heating and transportation sectors – Burlington Electric Dept**)

Economic Viability

- Impact on manufacturing / employees
- Flexibility in how meet emission reductions

Effect of *Climate Changes* on Overall Economy (cost impacts externalized on others)

- RES role in regional impact on emissions & economic activity

Balance population needs / utility needs

F. Implementation Timeline for Proposed Changes

1. Think through: What flexibility / phasing will various Utilities need, in order to honor current contracts / obligations?
2. Reality Test: Will the technologies be available within the timeframe of the goals, as proposed?
3. Understand: What updates will be required for physical equipment / distributions / cyber security in order to work with upcoming technologies? Impacts on manufacturing?
4. Reality Test: To what extent are these updates operationally feasible within the timeframe of goals, as proposed?

Practicality / Operability (reliability, affordability, resilience)

- Timeline: Are technologies ready within the time period that we are setting goals?
- Physical / cyber security. Take into account - Limitations on physical equipment / distributions that will require updates in order to work with upcoming technology

Concentrate newer requirements on increased loads

- Mindful of impact on existing contracts – focus on new **Keep existing requirements in place, especially for 100% renewable utilities – focus new requirements on serving future increases in load – Burlington Electric Dept.**

Economic Viability

- Impact on manufacturing / employees
- Flexibility in how meet emission reductions

Flexibility in how we achieve policy goals going forward

Balance population needs / utility needs