Vermont Climate Action Commission

Thursday July 12, 2018 1:00 – 5:00 PM Agency of Natural Resources Annex 190 Junction Rd., Berlin, VT

Commissioners Present: Marie Audet, Michele Boomhower, Harrison Bushnell, Kristin Carlson, Paul Costello, Matt Cota, Jared Duval, Bethany Fleishman, Joe Fusco, Liz Gamache, Bill Laberge, Johanna Miller, Bob Stevens, June Tierney, Robert Turner, Peter Walke, Jennifer Wallace-Brodeur

Agenda Items

Welcome / June Meeting Notes

Co-chair Walke welcomed the group to the last scheduled meeting. The commission's report to the governor will be presented at 10am on July 31. All commissioners are welcome to attend this event. Co-Chair Walke thanked the commission members and staff for their efforts. He noted that the latest greenhouse gas inventory report prepared by the Agency of Natural Resources showed the state's emissions have increased. 2015 emissions (the latest year the analysis is available for) are just below the 2004 emissions peak. He confirmed that public comment will be accepted on the final report for 60 days after its presentation to the governor. He confirmed that the co-chairs had sent a letter to the governor recommending that the VW Settlement funds be dedicated for EV incentives and reported that the governor's office is still evaluating that recommendation. The commission's final report recommendation regarding EV incentives will be updated to reference this letter and recommendation.

Co-chair Costello also thanked the commissioners, staff, and especially co-chair Walke. He noted that this effort is historic. It was the second governor's commission on climate change but will not be the last. Vermont needs to do its part.

June meeting notes – approved unanimously, with 3 abstentions (Boomhower, Bushnell, Brady) with note to correct spelling of co-chair Walke's name.

Co-chair Walke has proxy for Commissioner Schirling, and for Commissioner Boomhower until her arrival.

Report Recommendations Review

Co-chair Walke requested that any non-substantive changes and edits (e.g. typographical and grammatical errors) that commissioners have identified be e-mailed to him. Meeting discussion will be focused on substantive changes.

Proposed changes:

- Reference to the "threat to world civilization" should be edited to make more local.
- Add a section to describe the Vermont business-as-usual case.
- Include citations to sources of data and metrics and provide rationale for estimates if not from another source.
- Include acknowledgement of the report recommendation limitations and that additional work and actions are required (Commissioner Miller will draft text).
- Infographic key reference to "feasibility" should be changed to "ease".
- Replace "infographic" with a more descriptive term.

Co-chair Walke assigned a sub group (Commissioners Duval [lead], Turner and Wallace-Brodeur; staff DePillis, Dutcher, Jones) to review the recommendation tables and impact estimates for consistency.

Commissioners Miller and Fleishman volunteered to review the draft report for typographical and other non-substantive errors.

Co-chair Walke noted that the recommendations are not presented in order of priority.

After review of the first recommendation, the commission agreed to review the recommendations by topic instead of one-by-one. Comments on the recommendations follow, organized by topic. Comments on the recommendations are in *italics*. The commission agreed to have the co-chairs make the proposed changes to the recommendations.

Homes and Workplaces

1. Double Low-Income Weatherization through the State Weatherization Assistance Program

This is the first recommendation in the list but has a low GHG impact estimate. As stated above a sub-group will be reviewing the impact estimates for all recommendations and revising as appropriate.

2. Accelerate the Adoption of Advanced Wood Heat

Remove wood-to-energy reference in the background section, as this recommendation is specific to wood for thermal energy.

3. Encourage Cost-Effective Investment and Customer Use of Buildings

Add Building Electrification to title

4. Adopt and Implement a Roadmap for All New Buildings to be Net Zero by 2030

- 5. Increase Building Energy Labeling
- 6. Increase Low-to-Moderate Income Homes Weatherized through EEU Programs
- 7. Expand Vermont's State Energy Management Program to serve MUSH

With the proposed changes, these recommendations were approved unanimously.

Getting Around

8. Provide a State-funded or State-facilitated EV purchase incentive that applies to new and used EVs

Add explicit reference to new and used EVs in action step.

As discussed earlier, add use of VW settlement funds for EV incentives to recommendation.

- 9. Strengthen the used EV market
- 10. Make special EV pricing purchase and lease deals more visible and available to the public
- 11. Use VW Settlement funds for jumpstart a transition from diesel to electric transit and school buses
- 12. Investigate and utilize grant funding and finance strategies to help overcome the high upfront cost of electric transit buses
- 13. Implement recommendations in VTrans corridor study to provide DCFC within 30 miles of all Vermonters
- 14. Develop and execute strategy for deployment of VW Settlement funds for EV charging
- 15. Conduct research/analysis needed to support the PUC workshop on issues relating to the charging of plug-in EVs required by Vermont Act 158 of 2018
- 16. Leverage and enhance Drive Electric Vermont to maximize the impact of education and outreach campaigns and stakeholder engagement to build awareness and encourage purchase consideration for EVs
- 17. Implement "ride and drive" events to give Vermonters a chance to test drive or experience EVs

- 18. Work collaboratively with auto dealers on developing and deploying strategies to effectively engage customers who are interested in purchasing and EV
- 19. Make EVs available through traditional car rental, car share or ride-hailing service to provide drivers ready access to an EV with no ownership or lease commitment
- 20. Increase use of public transit with more public transit infrastructure, trip planning tools, and enhanced service with more efficient vehicles and routes
- 21. Increase efficiency of school transportation and promote active transportation to school
- 22. Increase programs and public infrastructure to support walking and biking in Vermont
- 23. Explore the viability of commuter rail service in Vermont

Staff noted that previous studies and commuter rail pilot projects indicate that commuter rail is not yet viable; increasing capacity of bus transit is more flexible and cost-effective. Commissioners noted that the action step associated with this recommendation was on the topic of development around the state's train stations. After discussion, the commission agreed to move this recommendation to the action step section of Recommendation 24.

- 24. Implement programs and policies to increase multi-modal transportation
- 25. Improve infrastructure to support safe and efficient multi-modal travel

With the proposed changes, these recommendations were approved unanimously.

In regard to these and other recommendations that call for increased use of electricity, the cochairs will draft text in the introduction or elsewhere to acknowledge that additional electricity generation is assumed to come from renewable sources.

Communities and Landscapes

26. Measure and Report Statewide Development Indicators

To reflect the need to continually update this data set, amend title to "Measure, Report and Maintain Statewide Development Indicators."

Commissioners noted that there is no action step in this recommendation for reporting or data analysis.

27. Develop Smart Growth Impact Metrics

28. Expand Interagency and Intergovernmental Support to Communities to implement Smart Growth Principles

In title, change "Expand Interagency..." to "Provide Interagency..."

In action step 5 (Conduct Smart Growth audits) provide more information about the proposed step (e.g. "provide for 3^{rd} party review of municipality development and land use practices and policies").

- 29. Leverage Health Care Partnerships
- 30. Align Smart Growth Policies for an Evolving Transportation System
- 31. Targeted Land Conservation
- 32. Maintain Large Forested Blocks by Implementing Act 171 Intergenerational Transfer Report Recommendations
- 33. Expand Natural Resource Planning and Bylaws that Address Forest Blocks, Habitat Connectivity and River Corridors
- 34. Align Regulation with Location-based Impacts

With proposed changes, these recommendations were approved unanimously.

<u>Sequestering Carbon on Vermont's Farms and Forests</u>

35. Document goals and mitigation contributions from agricultural sequestration and create a best practice guide for farmers

Incorporate a recognition of net emissions from agricultural sector.

- 36. Investigate opportunities for the sale of carbon offsets and other mechanisms that leverage private finance
- 37. Develop an accurate baseline of carbon sequestration on agricultural soils
- 38. Design and implement a way to track the sequestration benefits of water quality practices that are being tracked through ANR's reporting to EPA. Determine levels of adoption and the additional, voluntary practices.
- 39. Develop and use consistent messaging to farmers about the carbon-capturing cobenefits of the water quality improvements, including the cost benefit to the farmer

- 40. Use the new "BMP Challenge" program as an opportunity to evaluate incorporating sequestration into water quality projects prioritization and tracking.
- 41. SoV should expand urban forestry initiatives
- 42. Continue funding the Vermont Housing and Conservation Board for conservation easement purchases on forestland; prioritize projects that emphasize aggregation to maximize conservation and set the state for carbon offset projects.
- 43. Re-assess funding needed to continue agricultural practices, especially after 2019, for continued water quality improvements that also sequester carbon and lessen or avoid flood damage.

Change title from "Re-assess funding..." to "Assure funding...".

44. Incorporate land transfer and changes in parcel sizes and boundaries into ANR's environmental mapping tool.

Commissioners noted this recommendation overlaps with Smart Growth recommendations. Motion approved to delete this recommendation

With the proposed changes, these recommendations were approved unanimously.

Jobs and the Economy

45. Restructure Regulated Electricity Rate Design

Revise recommendation title to "Create an Environment for Grid Innovation"

Revise action step 3 to "Initiate rate design reforms"

46. Provide Access to Smart Meter Data for Clean Grid Modernization Companies.

Revise title to "Provide Cost-Effective Access to Smart Meter Data for Clean Grid Modernization Companies".

47. Determining the Value of Grid Modernization

Change action step 1 to "Conduct an analysis to assign a value to grid modernization in Vermont". Delete action step 2.

In last sentence in background, change "public dollar" to "state".

Commissioners noted that the preferred funding source for the recommended analysis is the general fund.

48. Establish a \$1 Million Innovation Fund

Delete existing action step 2 – typographical error.

Co-chairs to re-draft this recommendation to focus on establishment of this fund, including support for an appropriation and definition of the fund specifics. If established, the executive branch would be tasked with implementation.

- 49. Create a Small Business Innovation Research Grant Matching Program
- 50. Enhance the Vermont Employment Growth Incentive for Clean Grid Modernization Businesses

Edit action step 1 to make explicit what two changes are proposed

- 51. Create a Fully Refundable research and Development Tax Credit
- 52. Create a new Student Loan Repayment Program
- 53. Support for Free Legal Services to New Climate Economy Entrepreneurs

Existing action steps are incorrect and will be corrected

Expanding AWH Production Facilities Introduction

Add text to note that currently most cordwood/chipwood is produced locally; the greatest opportunity for economic growth is with wood pellet manufacturing.

54. Reduce Electric Costs for Wood Pellet Manufacturers

Delete action step 2; typographical error.

55. Streamline the Permitting Process for Wood Pellet Production Plants

Co-chair Costello reported on the subgroup discussion regarding grid modernization, and offered three proposals to clarify that actions apply to innovation in grid modernization, distributed generation, and energy storage:

- 48 add to eligible expenses "in innovative businesses in clean energy, grid modernization, distributed generation and storage."
- 49 add in background section, SBIR awards "or research and development in distributed generation and storage businesses."
- 50 In title, add "Distributed Generation and Energy Storage" to list of businesses

51 - In background, add "...distributed generation and energy storage..." to list of businesses.

Motion to amend as above approved.

With proposed changes, these recommendations were approved unanimously with one abstention.

Additional Recommendation

The co-chairs noted that the state's GHG emissions have been rising since 2011, most recently documented in the latest ANR Greenhouse Gas Inventory Report (1990-2015). The existing introduction and financial conclusions sections of the commission's report describe what the scope of the problem is. The commission's report recommends that VT needs to lead in areas that it can. In response to the greenhouse gas inventory report, Commissioner Miller drafted proposed text to the commissioners to add to the introduction. Co-chair Costello edited this proposed text, which was circulated to the commissioners:

"In early July 2018, the Vermont Agency of Natural Resources released its latest greenhouse gas inventory report. This analysis provided an update from the most recent 2013 report and showed that, in years 2014 and 2015, despite strong state goals and a focus on transforming our energy system – our electricity system in particular – Vermont's greenhouse gas emissions have increased dramatically. Since the last analysis, GHG's have risen by 10 percent; cumulatively now up 16 percent from the statutory target of 1990 levels. The inventory highlights, in particular, that the unregulated fuel sectors – transportation and residential, commercial and industrial fuel use – are the two most GHG intensive sectors.

Based on this new information, the Commission urges that, unless there is significant progress in GHG reductions over the next three years, by 2021, Vermont should institute a cap on greenhouse gas emissions with a gradual, staged reduction of emissions in future years. Such a cap can be used to generate revenue to advance economic activity to answer the climate challenge. In preparation toward that potential end, the Governor's administration should begin an evaluation this year of existing structures and potential partnerships with other states and provinces."

Co-chair Walke noted there was more than one way to implement a cap on emissions. Staff noted that the reported increase in emissions was driven by increases in the transportation and building thermal sectors. The decrease in oil price has likely contributed to changes in heating fuel use and vehicle purchase decisions.

Commissioners generally supported the first paragraph of the proposed text. While this information became available very late in the commission's process, commissioners thought that acknowledging the trends in the ANR inventory report was important and appropriate.

Commissioners debated the recommendation contained in the second paragraph. Issues discussed included the time frame for additional action, the potential options for additional action(s), the potential effect of this proposed recommendation on the remainder of the commission's recommendations, and the availability of resources to implement the commission's recommendations. The commissioners recognized that the Joint Fiscal Office is commissioning a study of potential decarbonization options due in January.

Upon completion of the discussion, the commissioners voted on the proposed text as originally presented. Co-chair Walke reminded the commission members that substantial changes to the report such as this require a super-majority of the commission, which would be 12 votes in favor. The motion failed with 7 votes in favor, 11 opposed.

Commissioner Bushnell then proposed adopting the first paragraph of the proposed text as originally presented, and an amended version of the second paragraph:

"Based on this new information, the Commission urges that, unless there is significant progress in GHG reductions Vermont should institute additional wide scale measures to reduce greenhouse gas emissions informed by the JFO study and other emergent information. Such measures can be used to advance economic activity to answer the climate challenge."

The commission adopted this revision with 15 votes in favor, 3 opposed.

Meeting Wrap Up

Commission members were asked to send all proposed edits to the recommendations section to both co-chairs. All proposed changes should be sent in redline/strikeout format to the co-chairs. The deadline for comments and edits is Friday July 20.

Co-chair Walke reported that he will be away on leave next week.

The commissioners acknowledged the contribution of Commissioner Bushnell in the previous discussion. Commissioner Boomhower acknowledged the effort of all the commissioners and staff.

Public Comments

There were no comments by members of the public.

Adjourn

The meeting adjourned at 4:54pm