



**CCRPC Long Range Planning Energy Sub -Committee**

**AGENDA**

\*=attached to agenda in the meeting packet

**DATE:** Tuesday, February 20, 2018  
**TIME:** 5:00 p.m. to 7:00 pm  
**PLACE:** CCRPC Office, 110 West Canal Street, Suite 202, Winooski, VT.

**Wi-Fi INFO:** Network = CCRPC-Guest; Password = ccrpc\$guest

1. **Welcome + Introductions (5 minutes)**
2. **Review December 19, 2017 Minutes\* (5 Minutes)**
3. **Comments on the First Public Hearing Draft of the ECOS Plan**
  - a. Vermont Gas provided comments on the ECOS Plan which are suggestions for addressing Vermont Gas's role in Chittenden County and the State's energy portfolio within the Plan. Please see the attachment for their comments.
  - b. To date, 5 comments were submitted on the energy sections. See attached.

Staff will discuss the options for addressing the comments with the Committee at the meeting.

The draft ECOS Plan is available here: <http://www.ecosproject.com/2018-ecos-plan/#plan>

4. **Updated Energy Data Guides**

For your information, Staff refreshed all the municipal energy data guides and are available here: <https://www.ccrpcvt.org/our-work/our-plans/regional-energy-plan/>. These guides contain the data and targets for municipalities to meet a portion of the Act 174 energy planning standards.

5. **Next Steps (5 minutes)**

Next Meeting Tentative 3/6/2018

In accordance with provisions of the Americans with Disabilities Act (ADA) of 1990, the CCRPC will ensure public meeting sites are accessible to all people. Requests for free interpretive or translation services, assistive devices, or other requested accommodations, should be made to Emma Vaughn, CCRPC Title VI Coordinator, at (802) 861-0114 or [evaughn@ccrpcvt.org](mailto:evaughn@ccrpcvt.org), no later than 3 business days prior to the meeting for which services are requested.



**CCRPC Long Range Planning Energy Sub -Committee**

**Draft Minutes**

**DATE:** Tuesday, December 19, 2017

**TIME:** 5:00 p.m. to 7:00 pm

**PLACE:** CCRPC Office, 110 West Canal Street, Suite 202, Winooski, VT.

**Attendees:**

Catherine McMains,  
Jericho (Chair)

Keith Epstein, South  
Burlington

Regina Mahony, CCRPC  
Planning Program  
Manager

Matt Burke, Charlotte  
alternate

Jeff Forward, Richmond

Melanie Needle, CCRPC  
Senior Planner

Will Dodge, Essex

Robin Pierce, Essex

Jim Donovan, Charlotte

Emily Nosse-Leirer, CCRPC  
Planner

**1. Review November 28, 2017 Minutes**

Keith asked why there is so much money in the MTP for highway expansion, and whether the energy committee can change this because it's contrary to our energy goals. Melanie explained that the MTP is somewhat constrained by federal funding requirements, and that our actions to shift to almost 100% electric light duty vehicles means that driving doesn't necessarily go against our energy goals. The committee discussed. Melanie reiterated that the plan will be updated in 5 years and we will be able to revisit this in the future. Jeff stated that he hopes that towns will be able to set transportation goals at the local level to get people out of their cars, and said that he supported Keith's comments.

**2. Public Comment Discussion**

Please see the attached spreadsheet for the comments CCRPC has received on draft sections of the ECOS Plan. The comments highlighted in yellow are the comments which need committee input. The committee discussed several of the comments, and decided:

- Lines 10 and 32: Not to advocate for a statewide carbon tax, because it is undergoing more study by the Governor's Commission on Climate Change, and not to call for a county-specific carbon tax.

- Line 11: That the discussion of natural gas that is currently adequate and clearly states the limits of CCRPC's ability to change this fuel use
- Lines 16 and 17: To keep the plan's discussion about the importance of energy storage to stabilize the grid in the future
- Line 25: To add a reference to the Metropolitan Transportation Plan's discussion of freight and passenger rail
- Line 26: To more clearly draw the link between CCRPC's land use goal (80% of new growth in areas planned for growth, which equal 15% of land area) with energy efficiency
- Line 38: To change "encourage" to "recommend" and to say that "inability to meet the guidelines does not necessarily preclude," rather than "does not preclude"
- Line 78: To recommend that any discussion of changing non-energy ECOS Plan goals is the purview of the full Long Range Planning Committee, not the Energy Subcommittee
- Line 79: A long discussion ensued about the benefit of stretch energy codes, and how effective they are because compliance is self-verified. While members feel that they are a good thing for energy efficiency, staff brought up that because they only apply to Act 250 permitted development, they may end up discouraging developers from larger compact development. The committee discussed this, and decided that, regardless of whether they agree that stretch codes would cause developers to avoid Act 250 permits, it is preferable for all new development to meet higher energy codes. The statement was changed to "Encourage the State of Vermont to implement a single energy standard which includes a process for verifying compliance"
- Line 88: Not to include a solar-ready requirement for new affordable housing stock

### **3. Renewable Generation Targets\* (60 minutes)**

Melanie ran two scenarios to see if municipalities can meet their local targets in various ways. (At the last meeting, we discussed that Essex Junction could not meet their individual energy generation goal. The goal is very high due to Global Foundries' high percentage of the county's energy use.) Combining Essex and Essex Junction's generation goal did not work, because it just meant that they both couldn't meet their goal. Distributing Global Foundries' energy consumption throughout the county fixed the problem for Essex and Essex Junction because the energy usage was distributed across the County. However, it increased the target for other municipalities. The Committee agreed that the best approach is to combine Essex Town/Essex Junction with Global Foundries' usage remaining with these municipalities because redistributing it only creates another issue. The plan will include Essex and Essex Junction's combined generation target, and a discussion of why their target is so high. Finally, Melanie explained that the county can meet its county-wide generation goals comfortably, regardless of where Global Foundries' energy use is counted.

Jeff suggested adding the number of acres in each town to the table showing their wind and solar potential acres. This will be reported in the plan.

Keith wants to know if we can get state tax data on delivered fuels. This may be possible in future drafts or future energy work. Jeff said that public entities don't pay the tax so it's not accurate.

A motion was made to recommend to the LRPC that the energy sections as drafted be included in the 1st public hearing draft of the ECOS Plan. Jeff made a motion and Keith seconded.

**4. Next Steps (5 minutes)**

It was unclear when the next meeting would need to occur, as the Board will hopefully be warning a public hearing for the full ECOS Plan at their meeting on 1/17/2018. Melanie will discuss the appropriate time for the next meeting with Catherine.



February 15, 2018

Charles Baker, Executive Director  
Chittenden County Regional Planning Commission

VIA E-Mail

Dear Charlie:

We appreciate the opportunity to comment on the draft 2018 Chittenden County ECOS Plan (the "Plan"). It is evident that a tremendous amount of work and thought went into its development and we recognize the challenges associated with balancing numerous – potentially conflicting – viewpoints and objectives. Our comments are intended to ensure that the Plan as written is sufficiently flexible to balance objectives such as affordability, economic development, resiliency, and advancement of the State's aspirational energy goal of 90% renewable energy by 2050. Further, since policy makers and regulators consider regional plans when evaluating proposed developments and infrastructure projects, it is critical that the Plan not result in unintended consequences that could result if such flexibility is missing.

## **BACKGROUND**

Before we provide the detailed comments on the Plan, some additional framing and background about Vermont Gas and our contributions and role in Chittenden County's –and the State's- energy portfolio and economic development might be helpful.

Vermont Gas provides over 51,000 homes and businesses in Chittenden, Franklin and Addison counties with cleaner and more affordable energy – more than 40,000 are customers in Chittenden County. Every Vermont family who chooses Vermont Gas over oil reduces their home carbon emissions by almost 23%. Choosing a high-efficiency gas furnace or boiler can reduce energy use by an additional 20% -- cutting both costs and carbon emissions. Our energy experts can identify even more savings through our comprehensive home energy audits. A customer who converts from fuel oil to natural gas and takes full advantage of our Vermont Gas efficiency program offerings can reduce carbon emissions by up to 70%.

At the same time, natural gas customers save anywhere from 20-50% on their heating costs as compared to other fuels (like oil, propane and electricity). For a typical family, this means annual heating cost savings of \$630 compared to fuel oil and \$1,650 compared to propane. Our commercial and industrial customers also rely on natural gas service as a critical energy infrastructure helping to make, and keep, them competitive. Natural gas service is far cheaper, cleaner and more efficient than oil or propane for industrial thermal processes and heating requirements. We hear regularly that availability of natural gas service is a key infrastructure component for businesses making the decision to invest and/or locate in Chittenden County.

Put simply, families and businesses, large and small, benefit from natural gas service as a cleaner and more affordable energy option and that allows them to retain and grow good-paying jobs in our communities.

New this spring, Vermont Gas will offer customers another important renewable energy choice. EcoGas, our renewable natural gas service, will bring our customers the opportunity to further reduce and, if desired, eliminate their home heating carbon footprint.

Our economic contribution to Chittenden County is significant as well. Vermont Gas is the largest private owner of underground infrastructure with almost \$140 million in assessed value in Chittenden County, paying \$3 million per year in property taxes to our communities. We employ about 130 Vermonters at our South Burlington facilities, with a payroll of over \$10 million. Ours are skilled jobs that provide important opportunities to Vermonters to live and work here.

All in all the choice and opportunity afforded by Vermont Gas's natural gas service and associated energy infrastructure is a tremendously important economic and environmental advantage that Chittenden County enjoys.

We believe together with state, community and business leaders, we can contribute to the goals of the Plan.

## **PLAN COMMENTS**

Our specific recommendations by Plan section are shown below.

### **2018 ECOS Plan:**

Page 1: Consider adding to the end of the last paragraph "It is not intended to be a prescriptive planning tool supporting or opposing any specific projects and it is important for the Commission and its municipalities to maintain flexibility in their future planning initiatives."

Page 4, Goal 16: Add "energy systems" to the list of infrastructure facilities. Whether natural gas infrastructure or adequacy of the electric grid, specifically mentioning energy infrastructure will provide flexibility in addressing areas slated for growth.

Page 4, Goal 17: Consider rephrasing from "Transform Chittenden County's energy system to a cleaner..." to "*Move* Chittenden County's energy system *toward* a cleaner..." This will allow room for cleaner fuels to replace dirtier fuels even if they are not yet renewable.

Page 18, Action 2.4.a.ii: Add "renewable natural gas" to the list of examples for decreasing fossil fuel usage.

Page 18/19, Action 2.4.a: Add an additional bullet "Using existing energy infrastructure, including natural gas transmission and distribution infrastructure to advance the use of

renewable fuels such as renewable natural gas that could be transported and delivered through existing infrastructure, so long as investments are made to keep this infrastructure modern, well-maintained, safe and reliable.”

### **Supplement 2:**

Page 52, second full paragraph: Add “investments in energy infrastructure” to the list of vital infrastructure.

Page 66, Energy Goal, as noted above, consider rephrasing from “Transform Chittenden County’s energy system to a cleaner...” to “*Move Chittenden County’s energy system toward a cleaner.*” This will allow room for cleaner fuels to replace dirtier fuels even if they are not yet renewable.

Page 66, Consider rephrasing the sentence under energy goals as follows: “To meet state energy goals, the region is planning for a major shift away from fossil fuels in the transportation and heating sector to renewable ~~electric~~ sources of energy, energy efficiency in all sectors, and an increase in ~~in-state~~ renewable energy ~~generators.~~” This will allow flexibility for the inclusion of out-of-state renewable natural gas for uses other than electric generation.

Page 67, first bullet: Add renewable natural gas to the list of options to be promoted in achieving goal.

Pages 68/69: Consider adding a new bullet stating: “Renewable natural gas will provide Chittenden County residents with an additional opportunity to increase the amount of renewable resources available.”

### **Supplement 3:**

Page 2: Add the following to the end of the first full paragraph under **ECOS Plans Policies and Maps**. “For clarity, this Plan is not intended to require the Regional Planning Commission, or any individual municipality, to support or oppose any specific development proposal based on any particular goal or objective of this Plan.”

### **Supplement 6:**

Page 6: First paragraph. It may be helpful to strike “in-state” and “generators” before and after “renewable energy” in the last sentence. This will allow flexibility for the inclusion of out-of-state renewable natural gas for uses other than electric generation.

Page 6: Second paragraph. Consider adding the “while balancing other critical factors such as economic vitality and affordability” to the end of the last sentence. This will help convey/remind that there are numerous factors to be considered.

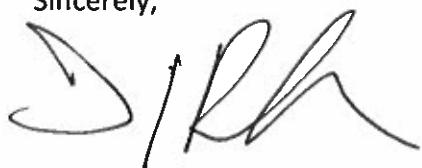
Page 6: Third paragraph. Consider adding to the following sentence to the end of the paragraph. "As noted above, in practice this will require balancing of several objectives and it is critical that flexibility in planning be maintained."

Page 6: Last paragraph. Please add "or renewable natural gas" to the list of various renewable energy technologies.

Page 35: First paragraph. Please add "including renewable natural gas." to the last sentence.

We look forward to this ongoing conversation and appreciate the opportunity to share this feedback with you. As always, if you have any question, please let us know.

Sincerely,

A handwritten signature in black ink, appearing to read "DRR", with a vertical line through the middle of the letters.

Don Rendall, CEO



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	ECOS Plan Section	Topic	Page #	Comment	Comment Type	Comment Rec'v By	Commenter	Municipality	Contact	Date	Response	Date Response & by Whom	Proposed ECOS Plan content change (Y, N, N/A)	Need LRPC Discussion?	
2	Supplement 2	Energy		2030 District Folks in Burlington requested that the 2018 ECOS plan acknowledge the formation of Burlington's District 2030 as a way to draw attention and give credibility to their efforts. <b>See Email saved</b>	Email	Melanie Needle	Jenna Antonio Dimare	Burlington		1/5/2018					
3	Main Document	Preferred Sites Map		Can you tell me about the "Closed Landfill" features? The map shows two in Shelburne, and I question whether any should be shown. I have no idea what the one close to Route 7 is about. The one between Thompson Road and Spear Street is indeed an old town dump. But since these aren't capped landfills of the type that might be attractive as 'cheap space' in more modern times, does it actually make sense to portray them?	Email	Melanie Needle	Dean Pierce	Shelburne		1/25/2018	Thanks for your comment. Staff checked in with the State Waste Management Program and only those landfills which have post-closure certification are eligible for preferred site status. The map has been updated to reflect this new information.				
4	Supplement 6	Energy		On Figure X on page 23 (CCRPC 2050 MTP Scenario Energy Use Over Time, by Fuel), how did LEAP reach its assumptions about the reduction of Natural Gas usage over time, particularly between 2025 and 2050 – are they assuming that heat pumps become sufficient to heat as a primary fuel source for buildings, and that electricity costs come way down? The other fuel reductions / increases seem plausible but I'm concerned as to whether such a dramatic NG decrease is realistic. Forgive me if we already went over this issue during the meetings.	Email	Melanie Needle	Will Dodge	Essex		2/9/2018	I thank you for your comment. Yes you are correct the LEAP model is assuming the cold climate heat pumps will be the source of heating. Please keep in mind that this is just one scenario for achieving the 90X250 scenario that is based on the state's assumptions in the Total Energy Study.				
11	Supplement 3	Constraint description		Clarify this in the Plan: I received clarification from the State's Waste Management program about landfills. They indicated that landfills with post-closure regulatory documentation are the only ones that are qualified to be preferred sites.			Regina Mahony			2/15/2018					
14	Energy			I have participated in the Planners Advisory Committee and provided comments in the development of the energy section as it was developed. This energy section draft includes many of the requirements to meet the State's energy plan of 90% renewables by 2050. To accomplish this, the draft energy section provides a wide variety of considerations for the county including increasing renewable energy production and energy conservation measures. While Colchester did not provide many constraints to the siting of solar and wind, many other communities have created significant constraints that may push energy development to less restrictive areas such as Colchester. The concepts of how to reduce energy needs are very conceptual and nonbinding at this time. This will allow communities to explore energy reduction strategies in a variety of ways. Overall, the energy sector will better inform member communities and provide the data necessary for the development of local energy plans without binding communities to specific measures.			Sarah Hadd via Colchester Dept. Head memo	Colchester			Thank you for your comment. No edit needed.				

## Melanie Needle

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**From:** Jenna Antonino DiMare <jenna.antonino.dimare@2030districts.org>  
**Sent:** Friday, January 5, 2018 10:34 AM  
**To:** Jennifer Green  
**Cc:** Melanie Needle; Jeff Nick; Eric Morrow; Rob Conboy  
**Subject:** Re: Chittenden County RPC December Newsletter

Hi Melanie,

Here is a Burlington 2030 District description (posted below). Please let me know if you have any questions, or whether you need anything else.

Thank you,

Jenna

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Established in April 2017, the Burlington 2030 District is a private-public partnership working to reduce building energy consumption, water use and transportation emissions 50% for the entire City by 2030 (with a carbon neutral by 2030 goal for new construction). By establishing the economic case for the necessary reductions, the District helps property owners increase asset value, reduce operating costs, and create a healthier community. With over 3.6 million square feet already committed to the District, achieving these reductions will significantly limit the greenhouse gas emissions from the City's businesses and residences while increasing economic vitality and civic engagement. Burlington is the 17th city to join a national network of 2030 Districts, and Vermont Green Building Network (VGBN) is serving as the local non-profit sponsor organization of the Burlington 2030 District.

The Burlington 2030 District initiative directly supports the priorities of the City of Burlington's Climate Action Plan, the City's transition to net zero energy in the thermal, electric and transportation sectors, and the State of Vermont's Comprehensive Energy Plan. By reducing Burlington's energy and water usage, and transportation emissions, we lessen the State's ecological footprint. The initiative also ensures that there is a replicable, straightforward path for other cities to follow as they aim to reduce their greenhouse gas emissions.

The Burlington 2030 District utilizes the Architecture 2030 Challenge for Planning performance goals shared by all 2030 Districts. The District seeks to develop realistic, measurable, and innovative strategies to assist District property owners, managers and tenants in meeting these goals to reduce environmental impacts of facility construction and operations. The Burlington 2030 District is unique in the it seeks to achieve these goals for the entire city.

The Burlington 2030 Districts works to achieve the 2030 Challenge targets at a district scale. While individual buildings will have specific opportunities for energy reduction, a district approach provides the opportunity for district-wide heat recovery, distributed generation, and other district energy, water and transportation efficiencies. This will reduce the demand for resources and minimize greenhouse gas emissions while strengthening the community. Ultimately, by encouraging local property owners to voluntarily participate and commit to the Burlington 2030 District goals and targets, this initiative supports a holistic approach to sustainable community development bolstering Burlington's climate resilience and leadership.

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On Wed, Jan 3, 2018 at 10:51 AM, Jennifer Green <[jgreen@burlingtonelectric.com](mailto:jgreen@burlingtonelectric.com)> wrote:

Thank you Melanie. Jenna, would you be able to send language on the 2030 District? Thank you.

Jen

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