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The Proposed Clean Heat Standard Ignores Preconditions of the UNFCCC and the Paris Agreement
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Electrification of the Heating Sector in VT Will Increase GHG Emissions Because Fossil-Fueled Generation is a Dominant Source of VT Electric Generation

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GWSA Expressly Requires that GHG Reduction Mitigation Measures Implement Policies Consistent With The Paris Agreement

GWSA, 10 V.S.A. § 578(a):

"Vermont shall reduce emissions of greenhouse gases … pursuant to the State's membership in the United States Climate Alliance *and* commitment to *implement policies to achieve the objectives of the 2016 Paris Agreement"*

The Paris Agreement is Part of the UNFCCC Framework

- The UNFCCC stands for United Nations Framework Convention on Climate Change (1994)
- The UNFCCC is the parent treaty of the 2015 Paris Agreement
- The UNFCCC is also the parent treaty of the 1997 Kyoto Protocol
- The ultimate objective of all three agreements under the UNFCCC is to stabilize greenhouse gas concentrations in the atmosphere

https://newsroom.unfccc.int/about-us/about-the-secretariat
https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change

Mitigation Measures are Allowed Under Article 6.4 of the Paris Agreement, But With Important Preconditions

- Paris Agreement Article 6.2:

  "Parties shall … promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties [UNFCCC] serving as the meeting of the Parties to this Agreement"

- Paris Agreement Article 4.13:

  "In accounting for anthropogenic emissions and removals corresponding to their nationally determined contributions, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting, in accordance with guidance adopted by the Framework Convention [UNFCCC]"

- Paris Agreement Article 6.4:

  "[C]limate mitigation mechanisms must deliver an 'overall mitigation in global emissions'"

Double Counting

Under the UNFCCC, double counting of emission reductions occurs when a single greenhouse gas emission reduction or removal "is accounted more than once towards attaining mitigation pledges"

https://www.sei.org/publications/addressing-the-risk-of-double-counting-emission-reductions-under-the-unfccc/

"30 V.S.A. § 8124. TRADEABLE CLEAN HEAT CREDITS" Expressly allows Double Counting

(g) All eligible clean heat measures that are delivered in Vermont shall be eligible for clean heat credits and may be retired and count towards an obligated party's emission reduction obligations, regardless of who creates or delivers them and regardless of whether their creation or delivery was required by other State policies and programs. This includes individual initiatives, emission reductions resulting from the State's energy efficiency programs, the low-income weatherization program, and the Renewable Energy Standard Tier 3 program.

The Clean Heat Standard Allows Triple Counting of GHG Reduction Claims

30 V.S.A. § 8124(g) allows GHG reductions from clean heat mitigation measures to be accounted for towards attaining (1) RES Tier III, (2) VT weatherization pledges & programs, and (3) the Clean Heat Standard –

It allows triple counting!

There is no Additionality!

THE PROHIBITION ON DOUBLE COUNTING ASSURES ADDITIONALITY

The Requirement of Additionality in Mitigation Measures Was Codified by the COP as part of the Kyoto Protocol

Kyoto Protocol Article 12, paragraph 5(c):

"Additionality means that energy resources must result in "reductions in emissions that are additional to any that would occur in the absence of the certified project activity"

Additionality is Required by Paris Agreement Article 6.4's Requirement that "climate mitigation mechanisms must deliver an 'overall mitigation in global emissions'"

UNFCCC Conference of the Parties ("COP") 21 (2015) Resolution Issued on Adoption of the Paris Agreement:

"37. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement adopt rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Agreement on the basis of:

(a) Voluntary participation authorized by each Party involved;

(b) Real, measurable, and long-term benefits related to the mitigation of climate change;

(c) Specific scopes of activities;

(d) Reductions in emissions that are additional to any that would otherwise occur;

(e) Verification and certification of emission reductions resulting from mitigation activities by designated operational entities … ."

https://www.wri.org/insights/what-you-need-know-about-article-6-paris-agreement
https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=2

Additionality of Mitigation is a Fundamental Precondition of the UNFCCC

Microsoft Word - Additionality under Art. 6_VP_2017-10-27_PRINT (icroa.org)

Paris Agreement Article 4.14:

> "[W]hen recognizing and implementing mitigation actions with respect to anthropogenic emissions and removals, Parties should take into account, as appropriate, existing methods and guidance under the Convention [UNFCCC]"

The UNFCCC Had Adopted Guidelines That Ensure Mitigation Projects and Offsets Demonstrate Additionality:

See Tool for the demonstration and assessment of additionality. (Version 05.2). (unfccc.int)

UNFCC COP21's Recommendation 37 Is also Clear that Mitigation Measures Must Result in "Reductions in emissions that are additional to any that would otherwise occur"

The Credit Trading Scheme Allowed by the CHS Will Allow Fuel Dealers to Continue to Pollute

Because the CHS does not require additionality, and allows double and triple counting, it will increase, not decrease, GHG emissions.

Obligated parties will be able to buy clean heat credits from the same utility clean heat measures that qualify toward the utilities' obligations under Tier III, use the credits to offset fuel deliveries and net out the GHG reductions they claim from the credits, thus allowing the fuel providers to continue selling more GHG emitting fossil fuels. This will not result in overall reductions in GHGs.

In fact, the netting out from the offsets will allow the fuel dealers to continue to pollute more by taking credit for Tier III measures that have no additionality and that would have been installed anyway under Tier III.

The Clean Heat Standard FAILS the Paris Agreement on:

ENVIRONMENTAL INTEGRITY

ADDITIONALITY

DOUBLE COUNTING

TRANSPARENCY

Electrification of the Heating Sector in VT Will Increase GHG Emissions Because Fossil Fuels are a Dominant Source of VT Electric Generation

The Carbon Loophole in Vermont's Renewable Energy Standard

REC Arbitrage

Arbitrage is the near-simultaneous buying and selling of commodities in different markets in order to take advantage of differing prices for the same or similar assets. REC arbitrage occurs when RECs from one project are sold and replaced by less expensive RECs from another project.

A VERMONT EXAMPLE

Project	Kingdom Community Wind
Owners	Vermont Utility Owned– GMP & VEC
Location	Lowell, VT
Commissioning Date	November 2012
Type	Wind
Size	63 MW
REC Qualifications	VT Tier I, CT-I, MA-I, MA CES, RI-new

In 2018, GMP could use a $27 REC from KCW or a $1 REC from HQ for Tier I compliance. Least cost principle suggests using $1 REC and selling KCW RECs into the MA, CT, or RI REC markets.

VERMONT

https://legislature.vermont.gov/assets/Legislative-Reports/2020-Annual-202be-report-Final.pdf

GMP's 2019 & 2020 RES Compliance Worksheets Reveal the Carbon Loophole

Empirical proof of the RES Greenwashing Loophole is apparent from GMP's 2021 and 2020 RES Compliance Filing Spreadsheets, which report on their electricity and REC deliveries in 2020 and 2019, respectively.

GMP reported 4 million MWH of total electricity delivered to Vermont in both 2019 and 2020. Electricity from fossil fueled generation (ISO NE residual system mix) was 416,000 MWh in 2019, but ballooned to 916,000 MWh in 2020, more than a 110% increase in its fossil fueled electricity delivered to Vermonters in 2020.

See following GMP RES Spreadsheets.

Source: August 31, 2021 Filing by GMP in PUC RES Compliance Case No. 21-1045-INV; August 31, 202o Filing by GMP in PUC RES Compliance Case No. 17-4632-INV

GMP 2020 RES Compliance Spreadsheet for 2019 Electricity:

	A	B	C	D
1		VY 2019 Only	VY 2019 Only	Includes banked VY 2018 RECs
2	**Compliance Year Resource Mix**	**Physical MWh Delivered**	**RECs/Attributes Delivered**	**RECs/ Attributes Retired**
3	Biomass	178,613	125,223	960
4	Distillate	0	0	0
5	Farm Methane	16,861	0	0
6	HQ System Mix	1,041,728	2,741,618	2,186,787
7	Hydropower	550,974	465,965	273,266
8	Landfill Methane	10,862	10,862	0
9	Natural Gas	0	0	0
10	Nuclear	1,272,998	1,272,998	0
11	Solar	358,609	176,660	90,464
12	NE System Mix	416,200	0	0
13	Wind	445,838	445,798	0
14	REC only purchase- hydro	0	339,043	100,578
15	other (NM ex. solar)	15,563	0	0
16	other (diesel, oil)	6,728	808	0
17	other (NY system mix)	5,657	5,657	0
18	TOTAL	4,320,631	5,584,632	2,652,055
19				
20	**Compliance Costs**	**REC Cost**	**Overhead**	**Incentives**
21	Tier I	$521,638.00	$0.00	$0.00
22	Tier II	$4,029,365.00	$0.00	$0.00
23	Tier III	$5,288,311.80	$527,332.80	$4,760,979.00
24	TOTAL	$9,839,314.80	$527,332.80	$4,760,979.00

Source: August 31, 2020 Filing by GMP in PUC RES Compliance Case No. 17-4632-INV

GMP 2021 RES Compliance Spreadsheet for 2020 Electricity:

	A	B	C	D
1		VY 2020 Only	VY 2020 Only	Includes banked VY 2019 RECs
2	**Compliance Year Resource Mix**	**Physical MWh Delivered**	**RECs/Attributes Delivered**	**RECs/ Attributes Retired**
3	Biomass	206,892	206,892	0.000
4	Distillate	13,382	0	0.000
5	Farm Methane	15,080	0	0.000
6	HQ System Mix	1,046,534	2,846,474	2,064,097.000
7	Hydropower	452,300	384,586	570,044.000
8	Landfill Methane	7,915	7,915	0.000
9	Natural Gas	0	0	0.000
10	Nuclear	628,041	1,289,659	1,289,659.000
11	Solar	442,897	253,140	111,684.000
12	NE System Mix	916,450	0	0.000
13	Wind	458,796	458,796	0.000
14	REC only purchase- hydro	0	0	0.000
15	REC only purchase- wind	0	0	0.000
16	NYPA	5,563	5,279	5,279.000
17	other (specify)	0	0	0.000
18	TOTAL	4,193,850	5,452,741	4,040,763
19				
20	**Compliance Costs**	**REC Cost**	**Overhead**	**Incentives**
21	Tier I	$1,368,616.02	$0.00	$0.00
22	Tier II	$5,150,979.21	$0.00	$0.00
23	Tier III	$11,247,430.16	$1,167,090.30	$10,080,339.86
24	TOTAL	$17,767,025.39	$1,167,090.30	$10,080,339.86

Source: August 31, 2021 Filing by GMP in PUC RES Compliance Case No. 21-1045-INV

GMP Claimed 100% Carbon Free Resources (Notwithstanding More than 900,000 MWh Energy Delivered to VT Customers Came From the ISO Residual System Mix (Fossil Fuel Mix))

GMP Claimed in its 2021 RES filing:

"GMP exceeded the state 59% Tier 1 obligation, instead achieving 68.1% renewable. The voluntary additional 9.1% retirements are exclusive of banked Tier I RECs. GMP also elected a voluntary retirement of additional carbon free attributes representing 31.9% of total annual retail sales. The carbon free retirements in combination with our Tier I retirements (also carbon free resources), represent a 100% carbon free power mix for GMP in 2020."

GMP 8/31/21 Ltr to PUC, Investigation re: Renewable Energy Standard compliance for program year 2020, No.21-1045-INV, 2020 Renewable Energy Standard ("RES") Compliance Filing

GMP also Bought Over 600,000 MWh of Unbundled (Not Attached to Electricity) Nuclear Offsets to Achieve its 2020 "Carbon Free" Claims

Refer to Line 10 of Slide 18, GMP 2021 RES Compliance Spreadsheet

Nuclear offset are not recognized under the Paris Agreement, UNFCCC or GWSA.

These Carbon Offsets are Misleading and Have No Environmental Integrity.

GMP also reported 1.7 Million MWh of carbon offsets acquired from HQ

GMP 8/31/21 compliance filing in Investigation re: Renewable Energy Standard compliance for program year 2020, PUC Case No.21-1045-INV

These old hydro attributes/offsets have no additionality and therefore have no environmental integrity, and fail to conform with the UNFCCC, Paris Agreement and the GWSA.