

PENFIELD COMMUNITY CHOICE AGGREGATION

PenfieldCCA
2023-2025

GENERAL INFORMATION SESSION
ABOUT PENFIELD'S RENEWED CCA PROGRAM
FOR 2023 TO 2025

PRESENTED BY:

COLOR PENFIELD GREEN
AL HIBNER - CO-FOUNDER

Objective for this Session



*To provide additional background information to assist you with your family's decision to: **stay in Penfield Green, opt-out altogether from PenfieldCCA or opt-in to the Penfield 100 choice** in Penfield's new 2023-2025 CCA program.*

Carbon Free Electricity Mix

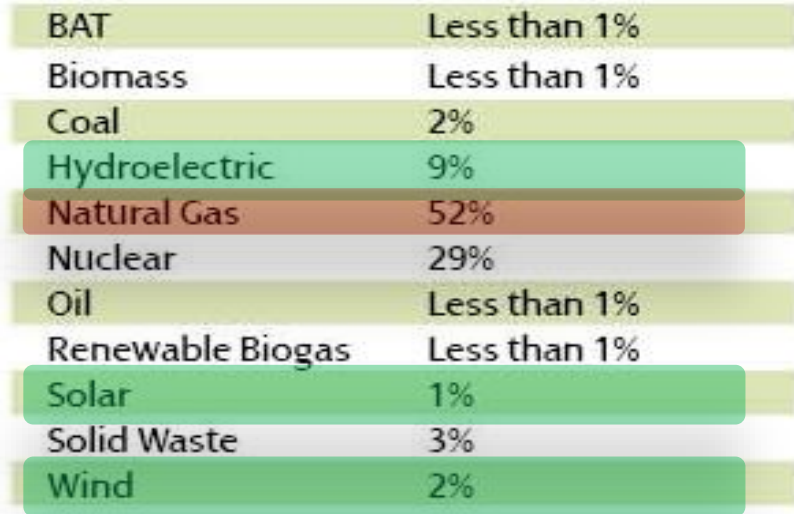


PenfieldCCA
2023-2025

PART I
PERFORMANCE
OF OUR CURRENT
CCA PROGRAM
12/2021 TO 9/2023

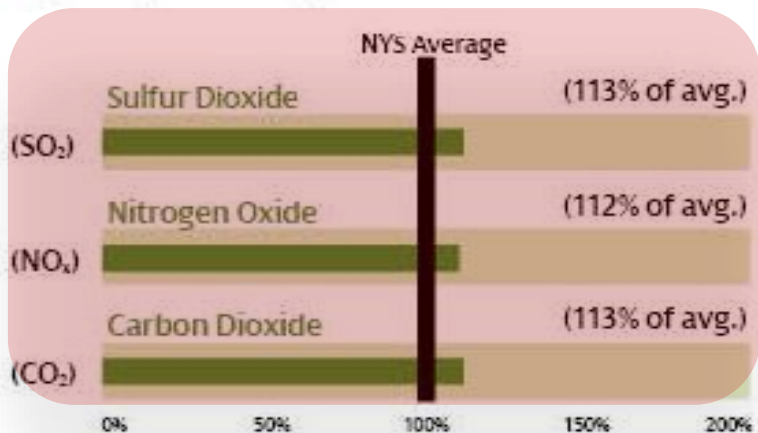
Fuel Sources Used to Generate Your Electricity

- January 2021 through December 2021
- Actual total may vary slightly from 100% due to rounding



Air Emissions Relative to the New York State Average

- January 2021 through December 2021



RG&E Fuel Sources for All of 2021 - Used to Generate Our Electricity Supply



- Graph on the left comes from RG&E & a link to a webpage provided to me by Sarah Waterman, Town Sustainability Engineer.
- I do not have the updated data from RG&E for the years 2022 & 2023. It is important that that information be found ultimately.
- RG&E's fuel mix for 2021 shows 9% Hydro and very low renewable content (1% Solar & 2% Wind) – 12-13% Green in total?
- Air emissions are 113% of NYS average. Troubling. A dirty mix.
- 52% of our electricity in 2021 came from burning natural gas. This number surprised me quite a bit. Also quite troubling.
- In my opinion, this helps to explain **why RG&E's default daily variable electricity supply rate is so low**. More on that later.

<https://www.rge.com/w/environmental-disclosure>

Overview				
	2021	2022	2023	2024
Brent crude oil (dollars per barrel)	70.89	100.94	84.46	88.22
Gasoline retail price (dollars per gallon)	3.02	3.97	3.60	3.52
U.S. crude oil production (million barrels per day)	11.27	11.91	12.78	13.16
Natural gas spot price (dollars per million BTU)	3.91	6.42	2.58	3.24
U.S. LNG exports (billion cubic feet per day)	9.76	10.59	11.60	13.15
Shares of U.S. electricity generation (percentage)	%Age of Electricity Generated by Natural Gas Over Time			
Natural gas	37	39	42	40
Coal	23	20	16	15
Renewables	20	22	22	25
Nuclear	20	19	19	19
U.S. GDP (percentage change)	5.9	2.1	2.2	1.4
U.S. CO2 emissions (billion metric tons)	4,903	4,964	4,792	4,746

The screenshot shows the EIA website header with the logo and navigation links. The main content area features the title 'SHORT-TERM ENERGY OUTLOOK' and the date 'As Of September 12, 2023'. Below the title, there are links for 'Full Report', 'Text Only', 'All Tables', and 'All Figures'. The release and forecast dates are also visible.

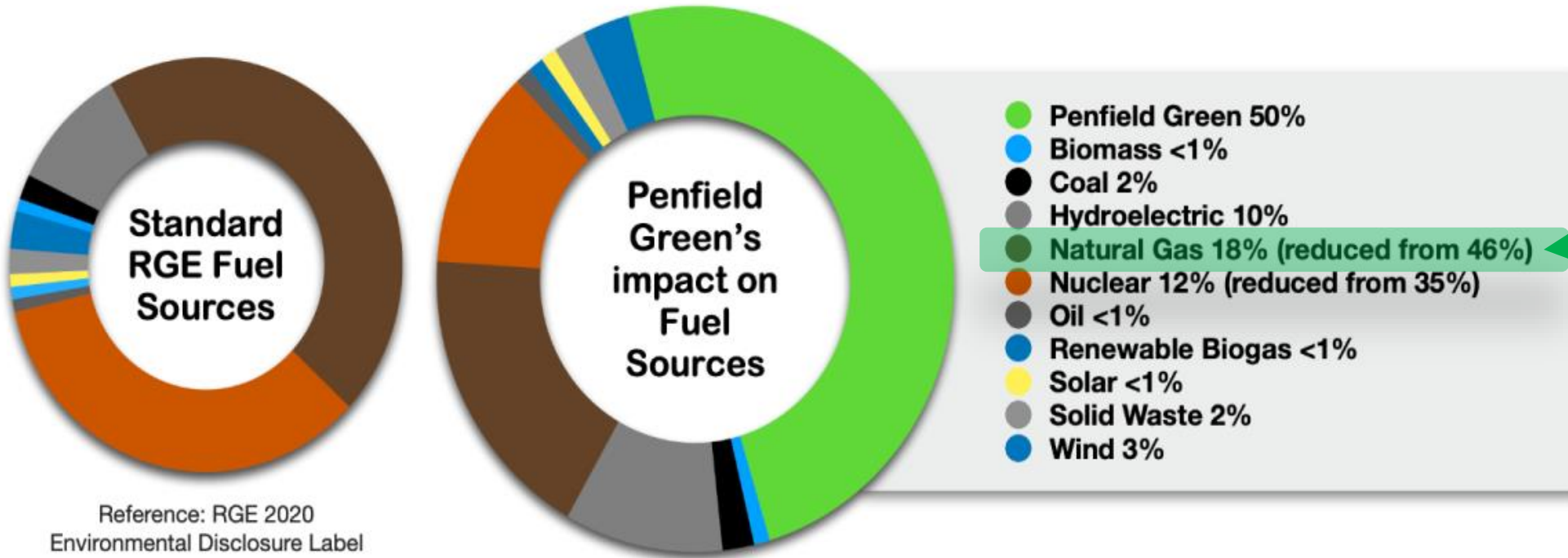
- The chart on the left from the US EIA shows energy outlook data for 2021 to 2023 and **projections for 2024**.
- The US EIA forecasts that nationally, 40% of all electricity will continue to be generated by natural gas in 2024.
- The US EIA also forecasts that natural gas spot prices in 2024 will continue (as in 2023) to remain well below the large spike in prices we experienced in 2022.
- Hypothesis: Therefore, prices for electricity generated by natural gas in 2024 should (likely) be lower than in 2022.

<https://www.eia.gov/outlooks/steo/>



Penfield Green's Impact

The addition of Penfield Green reduces the use of fossil fuels



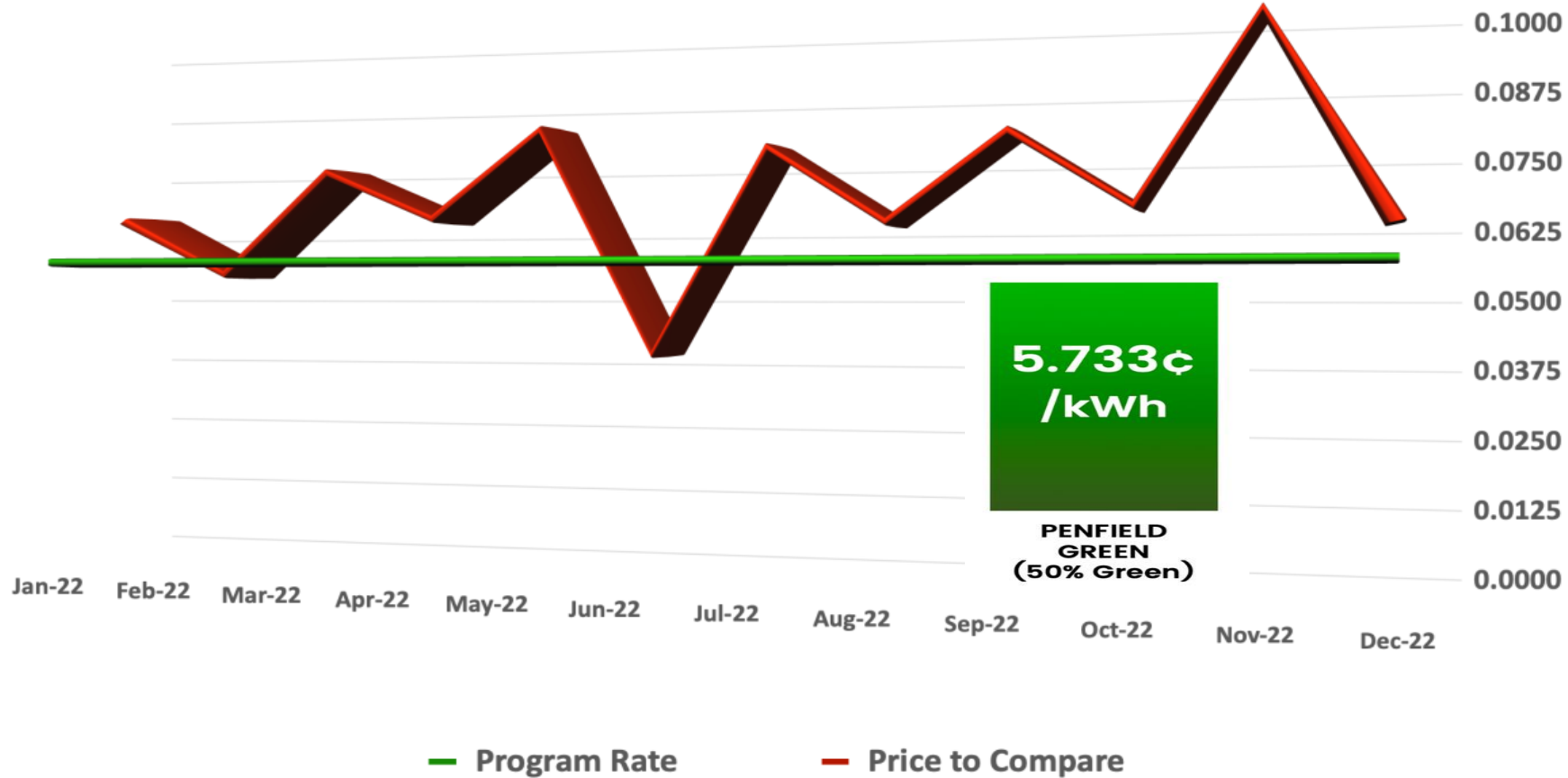
Notice the Substantial Reduction in Natural Gas in the Penfield Green Fuel Sources Mix from 46% DOWN to 18%

Combine Penfield Green =(50% RECS) w/ Hydro, Solar, Wind, Biomass & Biogas = around 65% Green.

Link (below) to this Town of Penfield webpage provided to me by Sarah Waterman, Town Sustainability Engineer.

<https://penfieldcca.com/program-highlights/>

Program Rate vs RGE Price to Compare



Penfield's
Penfield Green
CCA Rate
VS
RG&E Variable Daily
Price in 2022

Combine Penfield Green – 50% RECS w/ Hydro, Solar, Wind, Biomass & Biogas = *around 65% Green.*

Link (below) to this Town of Penfield webpage provided to me by Sarah Waterman, Town Sustainability Engineer.

<https://penfieldcca.com/program-highlights/>



Spot prices

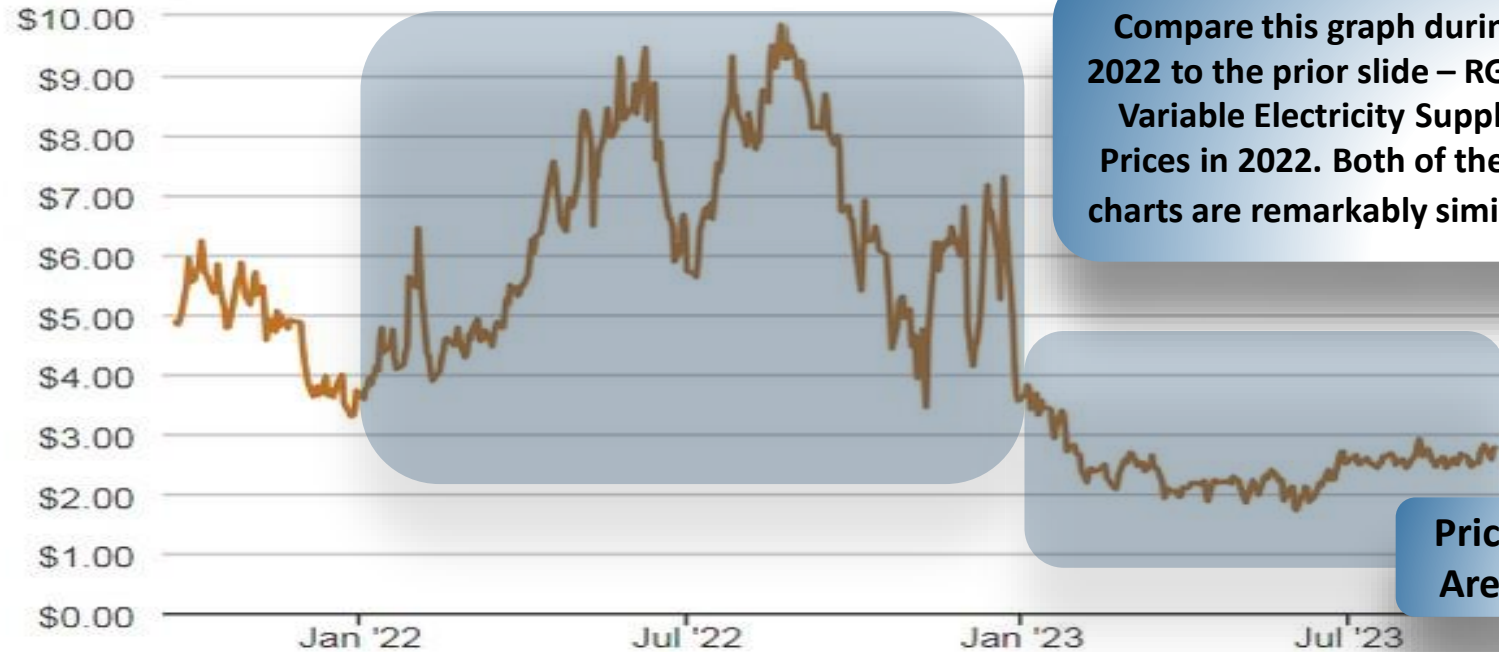
Spot prices table

NYMEX prices

NGPL prices

Natural gas spot prices (Henry Hub)

dollars per million British thermal units



Compare this graph during 2022 to the prior slide – RG&E Variable Electricity Supply Prices in 2022. Both of these charts are remarkably similar!

Prices in 2023 Are Very Low

Data source: Natural Gas Intelligence



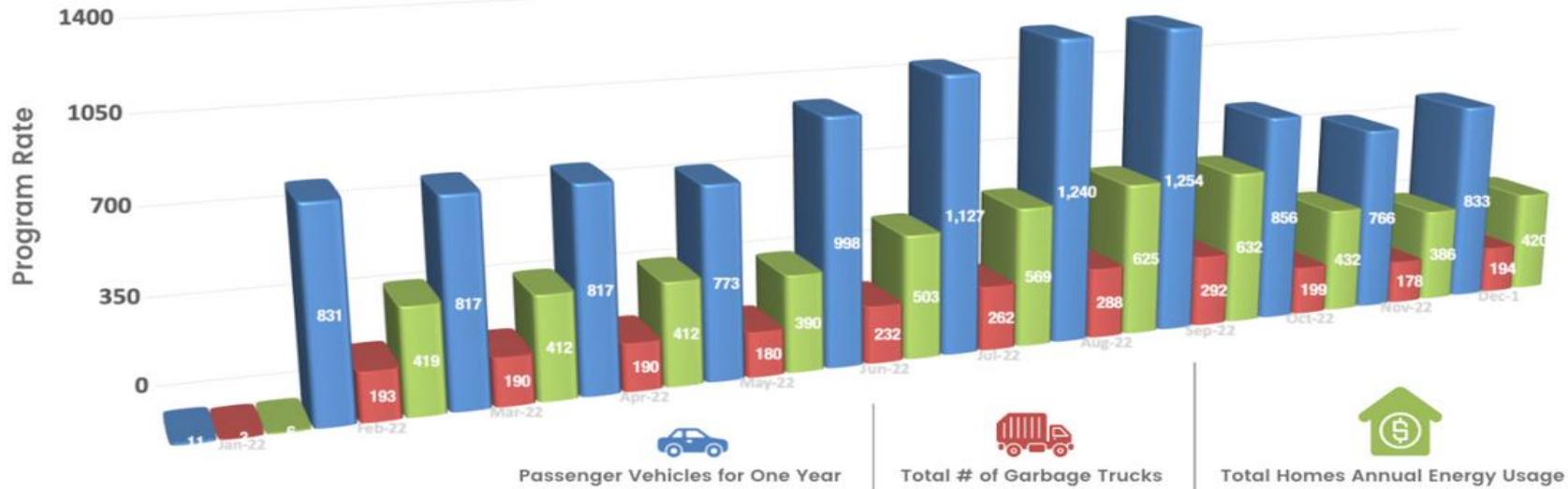
Why Did Penfield Green Beat RG&E's Supply Price by So Much in 2022?

Want to Put a Steadily Rising Price On CO2 Emissions Anyone? I do!

A "Black Swan" Event – the War in Ukraine Caused Large Price Increases for Natural Gas Worldwide...

<https://www.eia.gov/naturalgas/weekly/>

Carbon Offsets Each Month of Penfield Program
Penfield Green (50% Green)



The chart above shows the equivalent Greenhouse Gas emission reductions or offsets that have been created on a monthly basis since the inception of the Program; demonstrated in terms of how many passenger vehicle could be eliminated for one year of use or the equivalent # of home's annual energy usage, or how many garbage trucks could be eliminated. Since the inception of the Program 5,388 passenger vehicles could have been removed from use for an entire year based on the amount of renewable energy the Program has purchased.



Penfield's Penfield Green Monthly Carbon Offsets - 2022

Combine Penfield Green = 50% RECS w/ Hydro, Solar, Wind, Biomass & Biogas = around 65% Green.

Link (below) to this Town of Penfield CCA webpage provided to me by Sarah Wateman, Town Sustainability Engineer.

<https://penfieldcca.com/program-highlights/>



The logo for Penfield CCA is a circular emblem with a light blue background. It features three stylized wind turbines on the left and two solar panels on the right, with a sun icon positioned between them. The text "PenfieldCCA" is written in a bold, white, sans-serif font across the middle, and "2023-2025" is written below it in the same style.

PenfieldCCA
2023-2025

PART II
NEW CCA
PROGRAM
INFORMATION
12/2023 TO 11/2025



**Penfield's
Penfield Green
CCA Rates
for
2023-2025**

**9.665¢
/kWh**

**PENFIELD
GREEN
(50% Green)**

**10.849¢
/kWh**

**PENFIELD
100
(100% Green)**

**6.830¢
/kWh**

**Prior 12 month
average
RG&E price to
compare**

Renewal Program Rates – 24 months starting December 2023

So WHY Are These Rates SO High For Our Next 24 Month Contract?

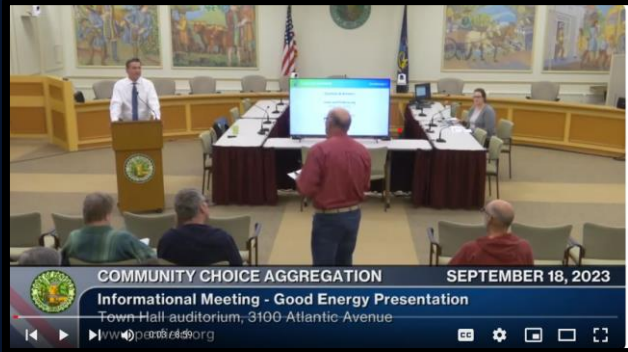
<https://penfieldcca.com/>

PENFIELD TV
GOVERNMENT ACCESS
WWW.PENFIELDTV.ORG

Monday, September 18, 2023

COMMUNITY CHOICE AGGREGATION

Information Meeting



Penfield's
Penfield Green
CCA Rates
for
2023-2025

So WHY Are These Rates SO High For Our Next Contract?
Let's Listen to Some Questions @ the Public Meeting...

Full Meeting Video on YouTube: <https://youtu.be/7N4n1ludGb8?feature=shared>



- The Town of Penfield held an informational meeting with John Berg from Good Energy (Penfield’s CCA Program Administrator) and Sarah Waterman (Town Sustainability Engineer) on September 18th, 2023, about the contract renewal of its Community Choice Aggregation program for the next two years from Dec 2023 to Nov 2025.
- During that meeting there was an opportunity for residents to ask questions.
- This video records the questions asked by Jeff Burns at this meeting and the answers provided by John Berg and Sarah Waterman.



Penfield’s CCA Public Meeting 9/18/2023

Questions Jeff Asked:

1. Why did the rate increase 68%? 00:00:05
2. How do you come up with this fixed rate? 00:03:47
3. How does our rate compare to other CCA’s? 00:06:12
4. What is the participation %age in Penfield? 00:07:01
- Community solar as an option? 00:07:41



These Rates SO High For Our Next Contract?

be: <https://youtu.be/7N4n1ludGb8?feature=shared>



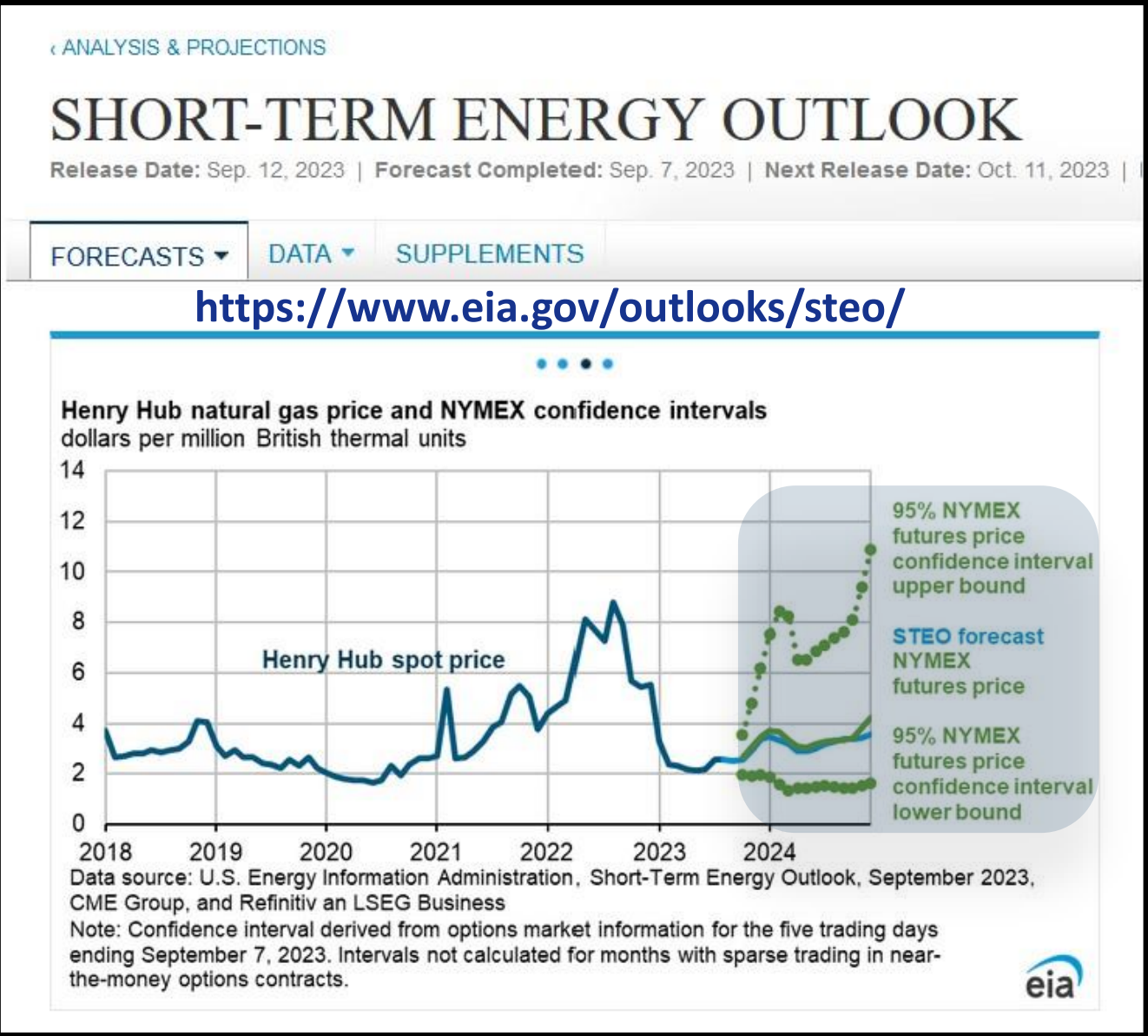
How does our rate compare to other CCA's?



NOTE: The 50% Renewable Fixed Rate Option includes 50% electricity supply matched by Renewable Energy Certificates (RECs) provided by New York State renewable power plants (hydropower, wind, solar). The remaining 50% is matched by RECs sourced from other U.S. renewable electricity sources. The 50% Renewable Option is not counted as 100% renewable by New York State.

Customer Type	9.665¢ /kWh	10.849¢ /kWh	50% Renewable Fixed Rate (default)	100% NYS Renewable Fixed Rate
Residential			\$0.09136	\$0.10053
Commercial	PENFIELD GREEN (50% Green)	PENFIELD 100 (100% Green)	\$0.09136	\$0.10053

What is the Short Term Price Outlook for Natural Gas?



- Since natural gas prices seem to be so tightly correlated to RG&E's daily variable electricity supply rate, what is the forward outlook for those prices into 2024?
- The graph on the left shows the probability of them staying lower than 2022 in 2024
- This means that RG&E electricity supply prices ***may not rise*** closer to the level of our CCA fixed prices in the coming year.

How Do Our NEW CCA Prices Compare to Other ESCO Prices?



The screenshot shows the 'Summary of Offer Results' page on the NY State Power To Choose website. The page features a navigation bar with the 'NEW YORK STATE' logo and 'Services' and 'About' links. The main content area displays '63 Energy Offers Found', broken down into '55 Electric' and '8 Gas' offers, with a sub-total of '49 Renewable Energy Offers'. A note states: 'Estimations are made based on consumption of 300 therm or 700 kWh per month.' Below this, there are two summary cards: 'Electric Summary' showing a price range of '\$38.50-\$149.80 PER MONTH (\$0.055-\$0.21 per kWh)' with '49 Renewable Energy Offers' and '0 Guaranteed Savings'; and 'Gas Summary' showing a price range of '\$73.14-\$336 PER MONTH (\$0.2438-\$1.12 per therm)' with '0 Guaranteed Savings'. Both cards have 'View Electric' and 'View Gas' buttons respectively.

Let's Visit the NY State Power To Choose Website – **55 Electricity Offers Found**

<https://documents.dps.ny.gov/PTC/zipcode/14526>

How Do Our CCA Prices Compare to Other ESCO Prices in NYS?



Refine Search

Guaranteed Savings

Service Type
Electric

Min Rate 0 **Max Rate** 100

Offer Type
Fixed

Contract Length
24 Months

Cancellation Fee
None/No Info

Value Added
Select Option

Renewable Energy
Yes

100% Renewable

Filter Clear

Company	Offer Details	Pricing Details	Offer Type	Renewable Energy Info	Additional Info
Rochester Gas and Electric Corporation Incumbent Utility		[View Details] \$0.0649 per kWh \$45.40 per month	Variable		Historic Pricing
Rochester Gas and Electric Corporation Incumbent Utility		[View Details] \$0.0649 per kWh \$45.40 per month	Variable		Historic Pricing
<input type="checkbox"/> Verde Energy USA New York LLC	Min Term: 24 Month(s)	[View Details] \$0.1009 per kWh \$70.63 per month	Fixed	100% Hydroelectric, Wind	10.849¢ /kWh PENFIELD 100 (100% Green)
<input type="checkbox"/> Clean Choice Energy, Inc.	Min Term: 24 Month(s)	[View Details] \$0.135 per kWh \$94.50 per month	Fixed	100% Solar, Wind	

Conclusion:
Penfield's CCA's 24 Month Fixed Rate-100% Renewable Rate is Well Within the Existing Market Price Ranges for Other ESCO's

Only (2) Offers for Fixed / 100% Renewable / 24 Month Terms – Averaging 12 cents/kWh

<https://documents.dps.ny.gov/PTC/zipcode/14526>

How Do Our CCA Prices Compare to Other ESCO Prices?



Refine Search

Guaranteed Savings

Service Type
Electric

Min Rate 0 **Max Rate** 100

Offer Type
Fixed

Contract Length
24 Months

Cancellation Fee
Select Option

Value Added
Select Option

Renewable Energy Offer
Yes

50 % Renewable

Filter Clear

Guaranteed Savings

Incumbent Utility	Service Type	Min Rate	Max Rate	Offer Type	Contract Length	Cancellation Fee	Value Added	Renewable Energy
Rochester Gas and Electric Corporation	Electric	0	100	Fixed	24 Months	Select Option	Select Option	Yes
Verde Energy USA New York LLC	Electric	0	100	Fixed	24 Months	Select Option	Select Option	50 % Renewable
Public Power, LLC	Electric	0	100	Fixed	24 Months	Select Option	Select Option	50 % Renewable
XOOM Energy New York, LLC	Electric	0	100	Fixed	24 Months	Select Option	Select Option	50 % Renewable
Energ Power & Gas LLC	Electric	0	100	Fixed	24 Months	Select Option	Select Option	50 % Renewable
Green Mountain Energy Company	Electric	0	100	Fixed	24 Months	Select Option	Select Option	50 % Renewable
Clean Choice Energy, Inc.	Electric	0	100	Fixed	24 Months	Select Option	Select Option	50 % Renewable

9.665¢ /kWh

PENFIELD GREEN (50% Green)

Conclusion:
 Penfield's CCA's 24 Month Fixed Rate-50% Renewable Rate is Well Within the Existing Market Price Ranges for Other ESCO's

Found (6) Offers for Fixed / 50-100% Renewable / 24 Month Terms – Averaging 11.5 cents/kWh

<https://documents.dps.ny.gov/PTC/zipcode/14526>



Objective for this Session

We Hope This Video Helps You to Make Your CCA Decision

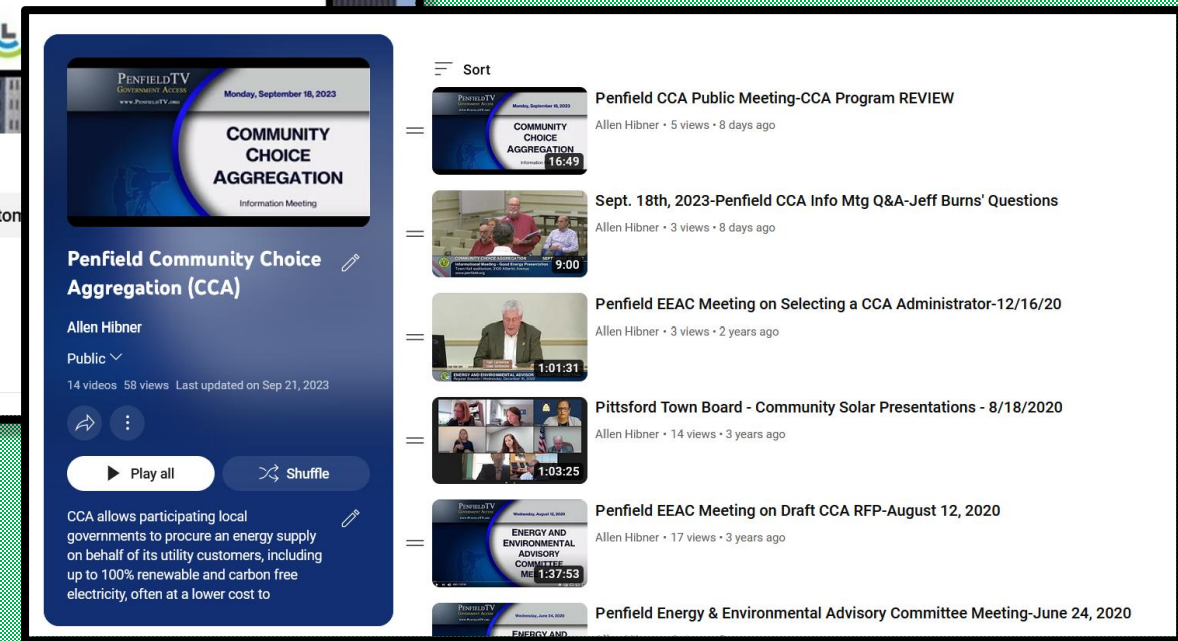
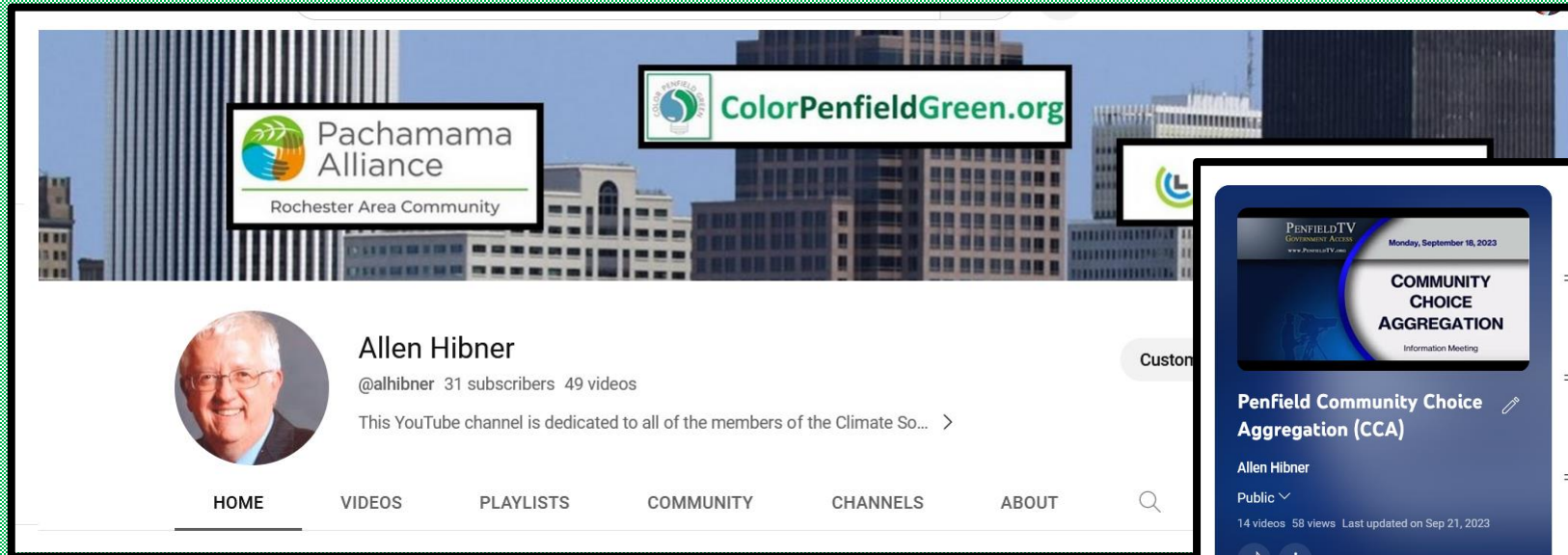


OUR GOAL

To provide additional background information to assist you with your family's decision to: stay in Penfield Green, opt-out altogether from PenfieldCCA or opt-in to the Penfield 100 choice in Penfield's new 2023-2025 CCA program.

Carbon Free Electricity Mix

Thanks for Watching!



Please subscribe to my YouTube Channel and watch more videos on my CCA Program and Color Penfield Green *playlists!*

Al Hibner's YouTube Channel: <https://www.youtube.com/channel/UCYmL10BWsbgolzOqSOwjkmA>

CCA Videos Playlist: <https://www.youtube.com/playlist?list=PLYN3s1HG0FJ9Rb8Gt4OPa9WS78TO9Po3v>

