



City of Laredo – El Metro

What is Renewable CNG

Why Transition to Renewable CNG

RIN Credits & Implementation

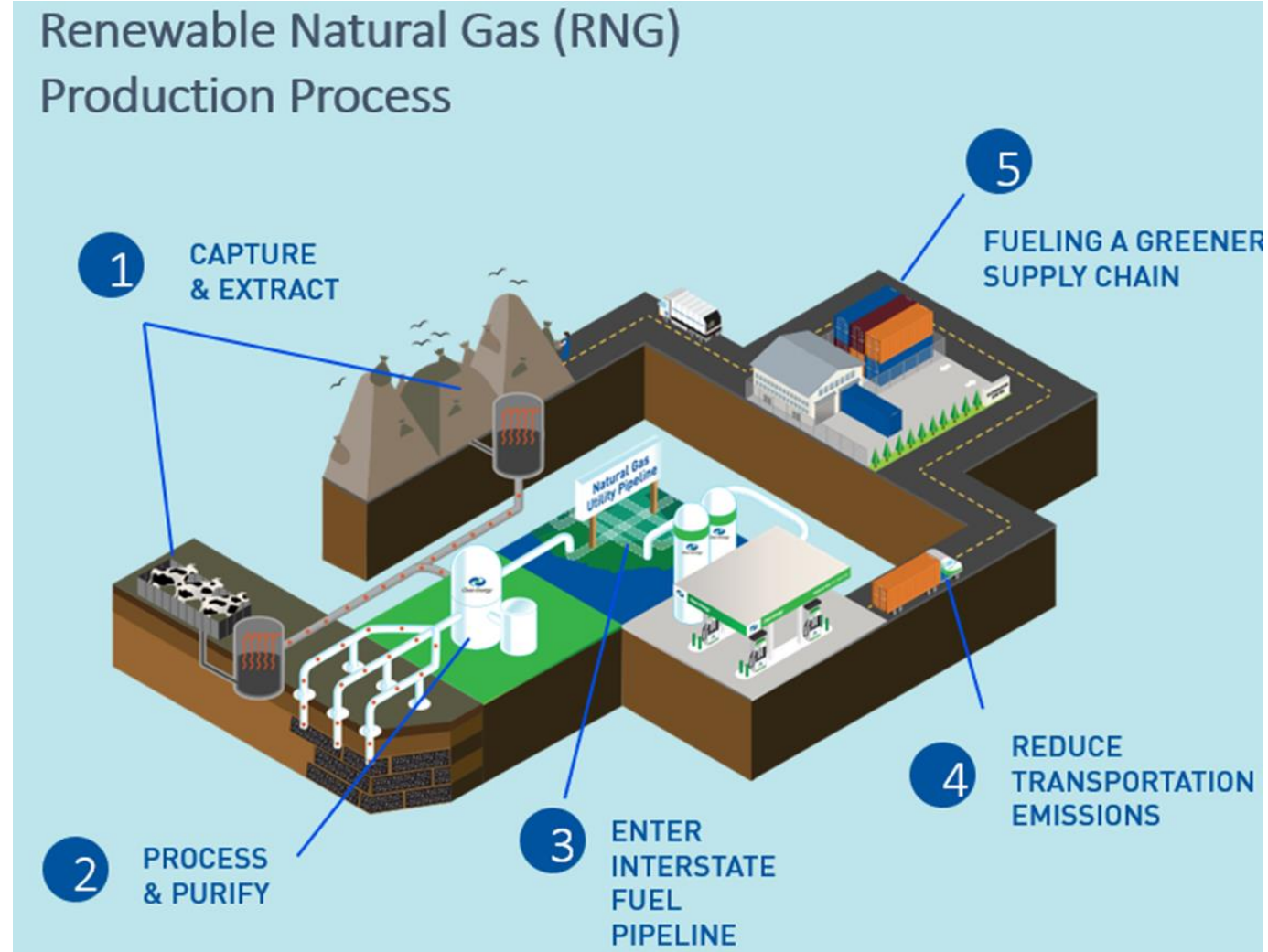
Financial Impact

August 16, 2024

What is Renewable CNG?



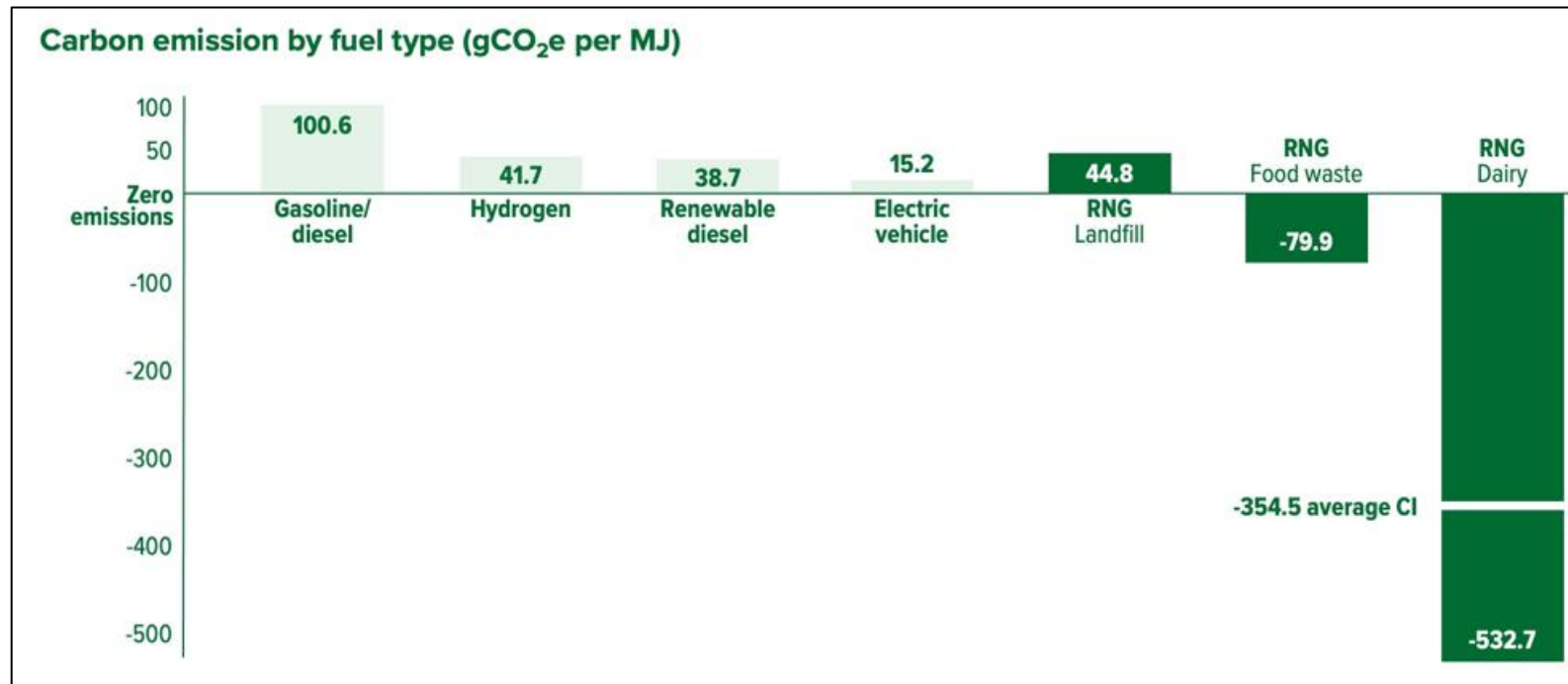
- Renewable Natural Gas (RNG) also known as biomethane is a 100% renewable energy source which is produced from organic matter like agricultural crops, forestry waste, and manure. Major sources of biomethane are landfills, dairies, and wastewater treatment plants.
- RNG is being developed throughout the United States and injected into the natural gas grid displacing conventional natural gas.



Why Transition to Renewable CNG?



1. It's cleaner than fossil CNG which has a carbon intensity of 88. R-CNG has a carbon intensity, depending on the source, between 45 and -532. Minimum 50% carbon or GHG reduction.
2. It's sold for the same price as fossil CNG and generates revenue from the Renewable Fuel Standards (RFS). Renewable Fuels generate D3 RIN Credits.



How do these RIN credits work?



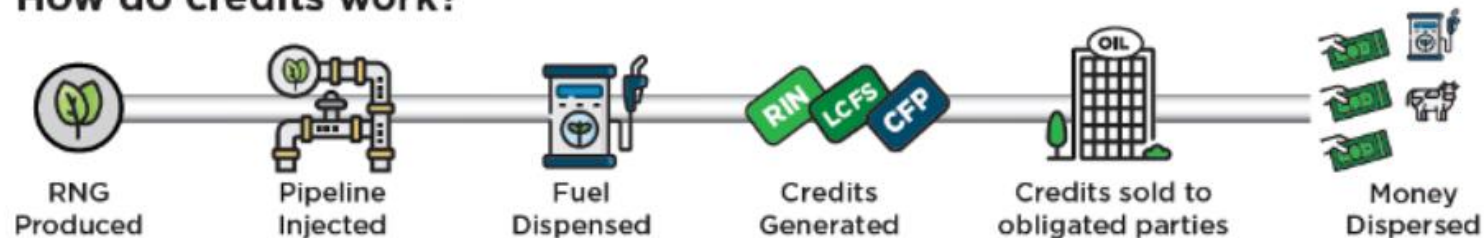
- The Renewable Fuel Standard (RFS) is a national program that focuses on reducing dependence on foreign oil, achieving greenhouse gas reductions, and growing the nation's renewable energy industry. It was created in 2005 under the Energy Policy Act.
- Each year Congress establishes a Required Volume Obligation (RVO) that establishes the amount of renewable fuels producers must bring to market.
- Obligated parties (*refiners or importers of gasoline or diesel fuel in the U.S.*) must produce or purchase enough renewable fuels to satisfy their individual RVO. If they cannot do so, the obligated parties must purchase Renewable Identification Number (RIN) credits from other renewable fuel producers.

Proposed Volume Targets (billion RINs)^a

	2023	2024	2025
Cellulosic biofuel	0.72	1.42	2.13
Biomass-based diesel	2.82	2.89	2.95
Advanced biofuel	5.82	6.62	7.43
Renewable fuel	20.82	21.87	22.68
Supplemental standard	0.25	n/a	n/a

^a One RIN is equivalent to one ethanol-equivalent gallon of renewable fuel.

How do credits work?



How do you allocate RNG to Station?



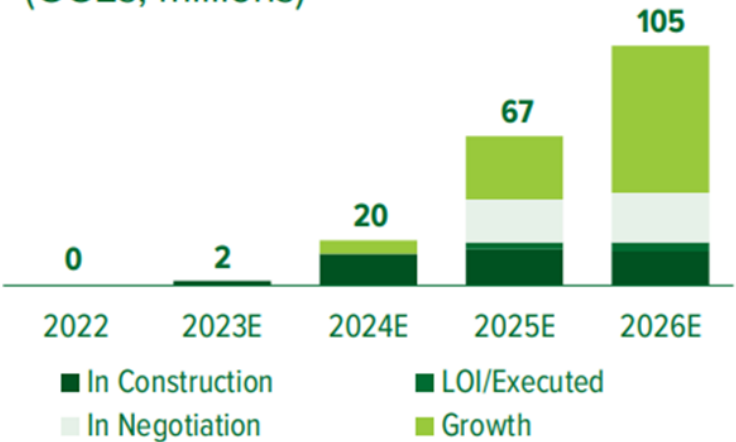
1. Provide a copy of utility statements.
2. Clean Energy works with EPA and illustrates RNG production/allocation matches station consumption on its utility statements.
3. RIN credits are then generated.
4. CE sells those credits to obligated parties and reimburses station owner for allowing us to allocate RNG.
5. Station owner receives statements on a monthly basis and continue paying the same cost for the gas.





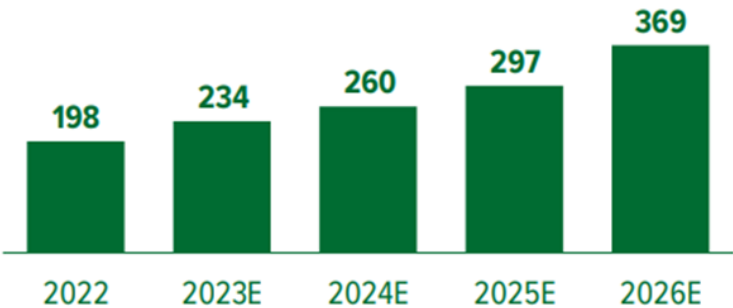
CLNE produced dairy RNG

Volume sales
(GGEs, millions)



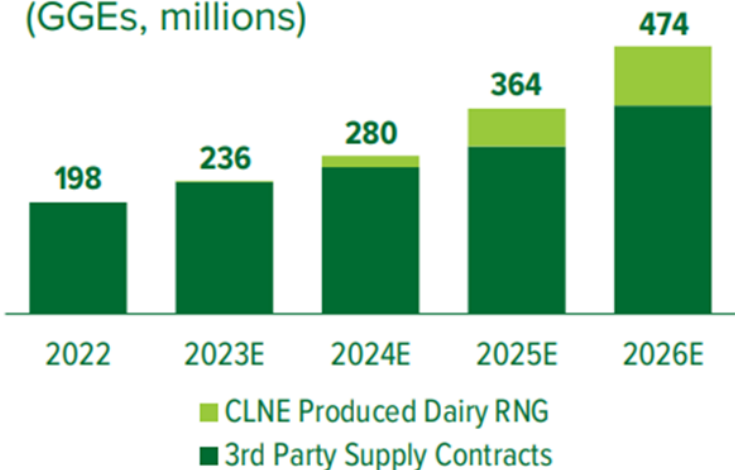
3rd party supply contracts

Volume sales
(GGEs, millions)

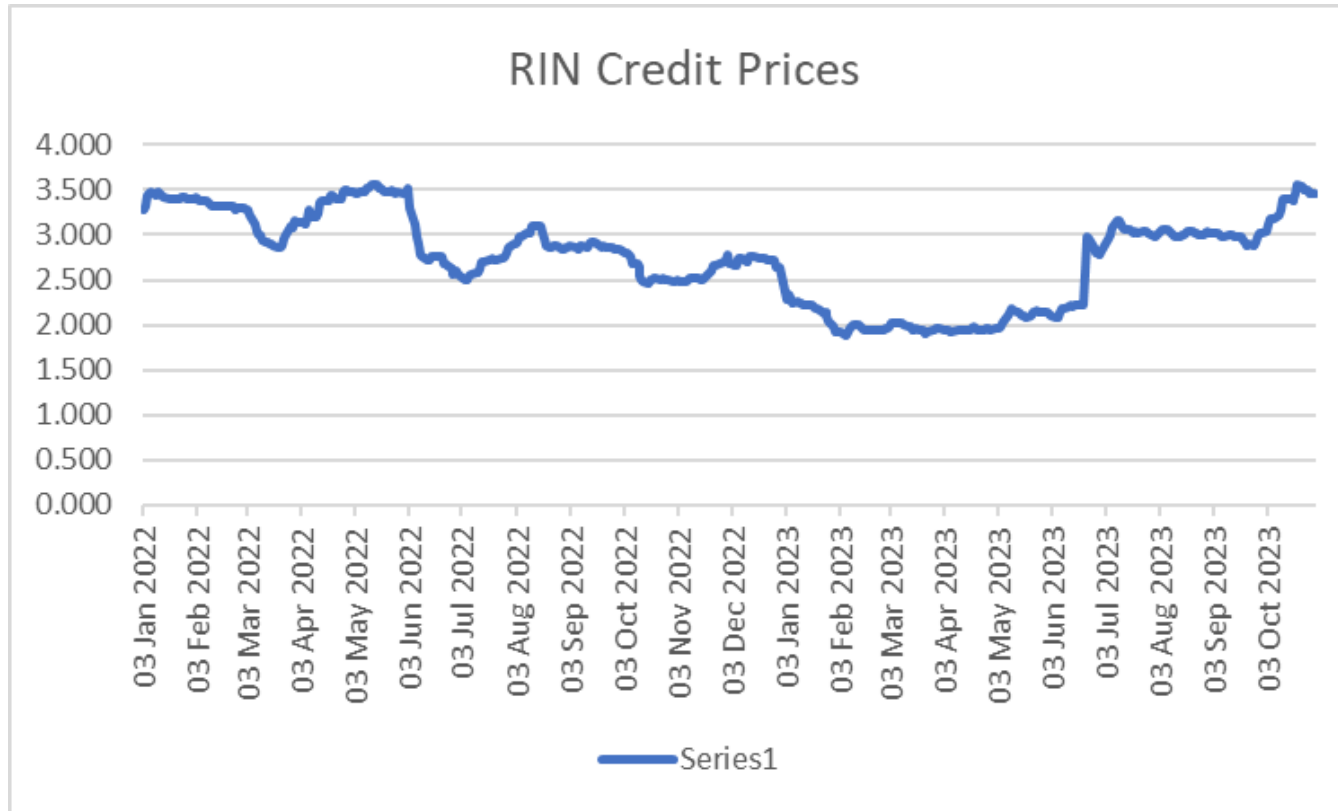


Total RNG supply to CLNE network

Volume sales
(GGEs, millions)



How much value is RNG?



Credit values fluctuate on the open market and currently trading at \$3.50.
5% of RIN value would be \$0.20 - \$0.22 per GGE.

City of Laredo (El Metro) Revenue is \$54,000 per Year.