

Hensall District Co-op April 15, 2021

CONTRIBUTION + CARING + CO-OPERATION





MICHELLE VIEIRA CEO AND DIRECTOR OF SALES

My energy expertise has ranged from large volume producer, marketing companies to AEC, agricultural owned energy cooperative. I have been in the energy sector for more than 25 years with natural gas and electricity consumers and products.





THOMAS BELLISSIMO

INSIDE SALES

Significant experience in communication and sales support has allowed me to easily transition into my role as Inside Sales at AEC and offer exceptional customer care. Working with a team of energy experts, I have been able to further develop my expertise and provide resources to over 500 members and customers.



AGENDA





INTRODUCTION



NATURAL GAS

- Markets
- LDC vs Fixed Price
- Small, Mid and Large Consumers



ELECTRICITY

- Markets
- LDC vs Fixed Price AEC Market Rate
- Small, Mid and Large Consumers



SUMMARY



WHO ARE WE?

- Ag Energy Co-operative (AEC) was founded in 1988 by a group of Ontario greenhouse growers who couldn't find the energy solutions they needed on the market.
- These growers decided to join forces to build a co-operative to minimize their costs and de-risk their energy spending.





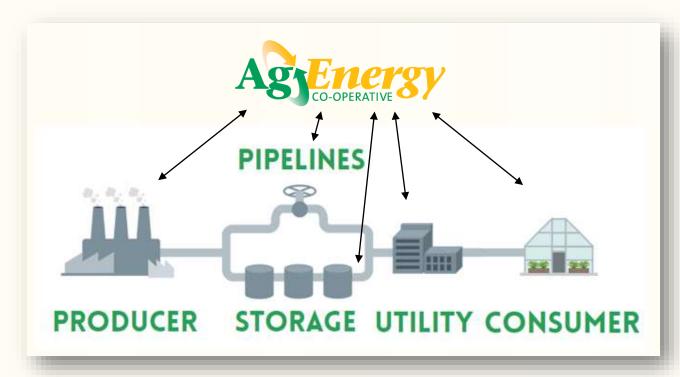
Today, serving Ag Energy Members continues to be at the center of everything the co-operative does; we educate, cooperate with our members, so they don't need to worry about managing their energy.



NATURAL GAS

MARKET – DAWN Charts

- Natural Gas is a commodity market like many agriculture-based commodities.
- It is traded on platforms with markets moving every minute of almost every day.
- In Ontario, the OEB (Ontario Energy Board), regulates the energy sector for low volume consumers to provide a fair marketplace for retail contracts.
- The LDC always provides a reliable supply of natural gas regardless of the pricing decisions made by the consumer.
- Let's explore the options.





NATURAL GAS

MARKETS

Natural Gas is traded on the NYMEX (New York Mercantile Exchange) and NGX (Natural Gas Exchange).

These trading platforms require large wholesale volumes for transactions.

Most Ontario consumers purchase natural gas on the OTC (Over-the-counter) marketplace.

NYMEX – Natural Gas sample

| Quotes | Settlements | | Volume | Time & Sales | | Contract Specs M | | flargins Calendar | |
|--------|-------------|-------|--------|--------------|-------|------------------|--------|---------------------|----------------------------|
| Strike | Туре | Open | High | Low | Last | Change | Settle | Estimated Volume | Prior Day Open Interest |
| 2550 | Put | .0001 | .0001 | .0001 | .0001 | 0 | .0000 | 1 | (|
| 2575 | Put | .0001 | .0001 | .0001 | .0001 | 0 | .0000 | 1 | (|
| 2625 | Put | .0005 | .0005 | .0004 | .0004 | 0 | .0000 | 183 | (|
| 2700 | Put | 20 | 3 | - | 13 | 0 | .0670 | 0 | (|
| Total | | | | | | | | 185 | |



NATURAL GAS

MARKETS



We discussed trading platforms so what other information do you need?



Units of Measure – natural gas is sold in both volumetric and heat content values – you need to know what you are buying.



NATURAL GAS

MARKETS

Gigajoules vs Cubic Metres

The two units used in Canada for measuring residential customer gas consumption are gigajoules (GJ) or cubic metres (m³). Gigajoules measure natural gas consumption by its energy content, and cubic metres measure consumption by volume.

- US/MMBtu usually very large consumers suppliers, financial institutions, large volume brokers or retailers
 - CAD/GJ usually mid to large consumers same as above
 - cents/m³ standard for residential, commercial and mid sized businesses this price is offered by the LDC and many retailers



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| | | | | | | | |

| Convert from | Convert to | Multiply by |
|---------------------------------|--------------------------------------|-------------|
| 1 Cubic metre (m ³) | Gigajoules (GJ) | 0.038 |
| 1 GJ | m^3 | 26.137 |
| 1 m ³ | Cubic feet (cf) | 35.314 |
| 1 cf | m^3 | 0.028 |
| 1 GJ | Million British thermal units (MBtu) | 0.948 |
| 1 MBtu | GJ | 1.055 |

Some of the values are estimates for conversion purposes. Conversion rates from m³ to GJ can change monthly.



NATURAL GAS

MARKETS

The other piece of the natural gas puzzle is delivery point.

- For many years natural gas was produced and priced in Alberta, AECO.
- As much as AECO is still a delivery point (trading hub) Ontario has become a liquid delivery point and trading hub as well.
- As we live in Ontario it makes sense to purchase your natural gas in Ontario but how do you know?
- Watch our Explainer Video to shed some light on the subject



Transportation – Included versus Excluded



NATURAL GAS

LDC historical prices

- 1 year 13.5 cents per m³
- 3 year 14.5 cents per m³
- 5 year 15.1 cents per m³

AEC Term prices

- 1 year 14.2 cents per m³
- 3 year 14.1 cents per m³
- 5 year 14.5 cents per m³

QRAM – Quarterly Rate Adjustment Mechanism – Ontario landed pricing

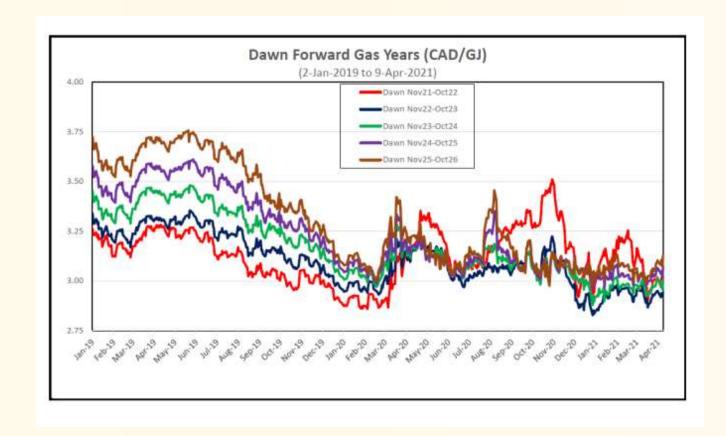
- Approved by the OEB January, April, July and October schedule
- No option = price taker



NATURAL GAS

MARKET – DAWN Charts

- DAWN = Ontario
- Markets are volatile and reactive to weather, storage, economic conditions, political climate, as well as trading speculation positions.
- Markets are at very attractive now
- 5 years is the typical term offered by the OTC (over-the-counter) market
- Prices can be secured up to 8 -10 years however wholesale volumes are required – usually over 1,000 GJ/day





NATURAL GAS

MARKET – DAWN Charts

- Contango and backwardation are terms used to define the structure of the forward curve.
- When a market is in contango, the forward price of a futures contract is higher than the spot price.
- Conversely, when a market is in backwardation, the forward price of the futures contract is lower than the spot price.

