



What is it?

- AKA Solution Gas, Associated Gas, Casing Gas and Excess Gas
- It is natural gas that exists in oil formations
- The primary component is methane but trace amounts of other gases and liquids may be present



Why do we need to deal with it?

- For oil to flow into a well the pressure must be less than that of the oil formation
- As oil is pulled into the well Associated gas comes out of solution into the casing
- Historically, excess gas was typically vented to atmosphere. This practice is harmful to the environment. It is estimated that vented methane has a Greenhouse Effect over 25X that of CO₂.
- While venting still exists, use of flares/combustors to burn off excess gas is becoming more prevalent in our region. Although combustion is better than venting, it is still a waste of a usable resource.
- A typical oil well not conserving the gas may vent or flare enough gas to heat 100 homes (or more!)

What are the rules



- The Alberta Energy Regulator (AER) - Directive 60 governs venting and flaring
- Limits are specific to the type of facility and are subject to certain exemptions
- As a general rule the following limits apply to oil wells:
 - Vented Gas - 15,000 m³/month/site
 - Flared Gas - 900 m³/day/site*

*For flared gas this limit requires producers to evaluate conservation of the gas based on defined criteria. The results of this evaluation often allow flaring/combusting in excess of the limit

What can the County do about vent gas?



- The County works with producers to use our gas distribution system to gather and utilize excess gas
- Currently 2 of the 3 million GJ's of gas moved through our system annually are local excess gas
- A majority of that gas is moved between wells producing/requiring gas and a small portion is combusted
- Up to 300,000 GJ/year is currently purchased and utilized to supply our residential, agricultural and commercial customers
- The County Gas Utility's gathering efforts help to improve the environment and provide economic benefits to our County through increased local oil and gas production

What are the challenges?



- Gas quality, pressure, infrastructure, and seasonal consumption are all challenges that the County and Producers face in utilizing excess gas
- To utilize excess gas on our residential systems gas needs to be of sufficient quality and pressure
- To be an effective method of conservation for the Producers it needs to be economical and consistent throughout the year

What can the I do about vent gas?



- As a landowner or resident, you can ask Producers about current or planned conservation of excess gas at wells on your property/in your area, and whether they have contacted the County for options
- If you believe that a producer is not compliant with Directive 60, we encourage you to first contact the Producer.
- Additionally you can contact the Alberta Energy Regulator (403) 297-8311 | inquiries@aer.ca ; Or
- The County Gas Utility (780) 846-2222 | gasut@county24.com