



CGA by the Numbers:

The battery no one talks about: natural gas storage in Canada

The Canadian natural gas system has the capacity to store about 850 billion cubic feet (bcf) of natural gas. Natural gas storage capability in Canada is concentrated in our largest producing region (Alberta) and in our primary consuming region (Ontario), but storage facilities also exist in Saskatchewan, British Columbia, and Quebec (graphic 1).

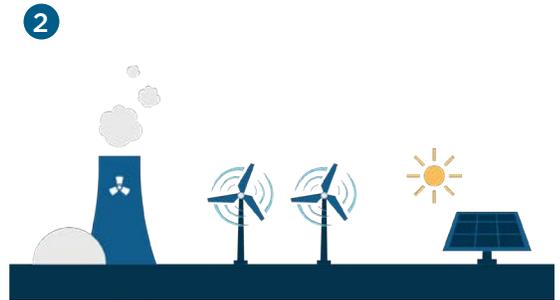
Natural gas storage facilities can be geological: often old depleted wells, salt caverns or old aquifers are used. Natural gas can also be stored above ground as liquefied natural gas (LNG) in large cryogenic facilities. Canada has all of these forms of storage in use and has derived significant economic and environmental benefits from their provision of year-round access to clean and affordable natural gas.

These facilities are “filled” over the lower-demand summer months so that when winter arrives, stored natural gas supplies are available to meet any increases in needs, helping ensure reliable, affordable energy services for customers. In a typical year storage facilities reach their maximum in October and drop to their lowest level by March.

Energy storage is a topic of much conversation as societies look for bigger and better batteries. Canadians don’t realize the massive battery we have available today: natural gas storage. This ability to easily store natural gas for use whenever it is needed is one of the key benefits it has compared to other energy forms such as wind power, solar power, nuclear power, coal, and most forms of grid electricity (graphic 2).

Canada’s current natural gas storage capacity is equivalent 249 billion Kilowatt hour of energy. This would meet the annual energy needs of 11 million residential homes in Canada. It is roughly twice the amount of electricity from all forms of generation in Ontario in 2017. It would take 18 billion of the latest home electricity battery storage systems to store the equivalent amount of energy (graphic 3).

Natural gas utilities are constantly investigating new opportunities to develop, export and utilize storage - with an eye to constantly improving the environmental performance and efficient operation of this amazing battery available to us.



3

18 BILLION

