

Renewable natural gas

Organic waste: helping to decarbonize Québec!

One way to ease the transition to a low-carbon economy is to increase the production of renewable energy, including renewable natural gas (RNG). A recent study by Deloitte and WSP Canada demonstrates how much promise this renewable energy source holds for Québec's energy transition.

Study objective

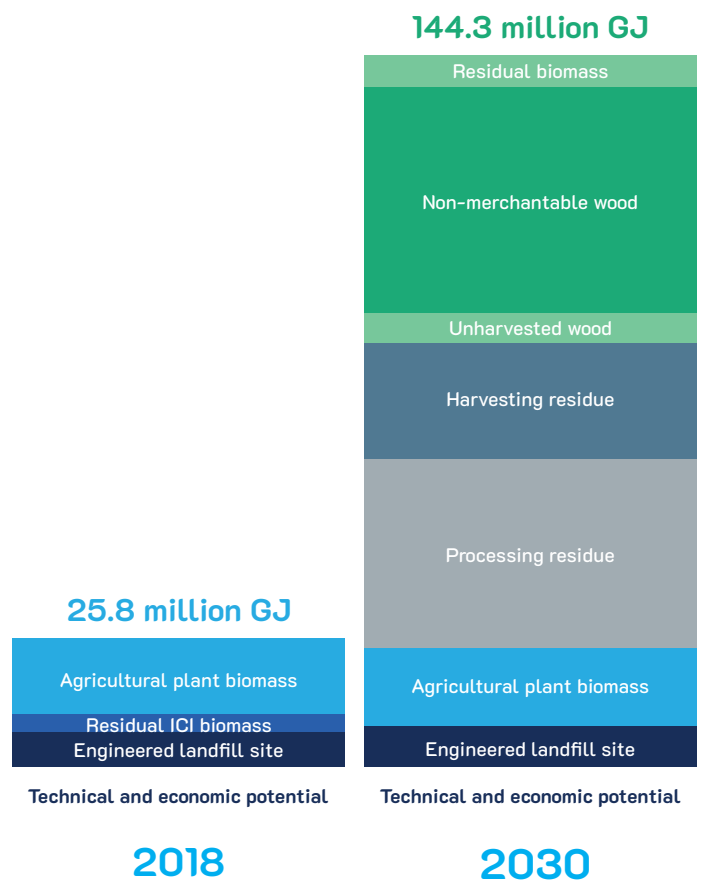
To find out the quantity of RNG that could potentially be produced now and in the coming years, to determine how big a role it could play in Québec's energy portfolio.

Promising results

The 2018 technical and economic potential for RNG production equals **12% of the total volume of natural gas that Énergir currently distributes** in Québec. This potential could reach **2/3 of the volume distributed by 2030**.

Potential to accelerate the energy transition







- Using this volume of RNG in the gas network by 2030 would eliminate 7.2 million tons of greenhouse gas (GHG) emissions each year. That's roughly like taking 1.5 million cars off the road.¹
- GHG reductions could be even greater if RNG were to replace diesel fuel in heavy transport, since the latter accounts for 12.1% of total GHGs in Québec.²
- All regions of Québec will have technical and economic potential for RNG production by 2030.
- By 2030, RNG's technical and economic potential increases because of second-generation technologies that use forest residues in production.



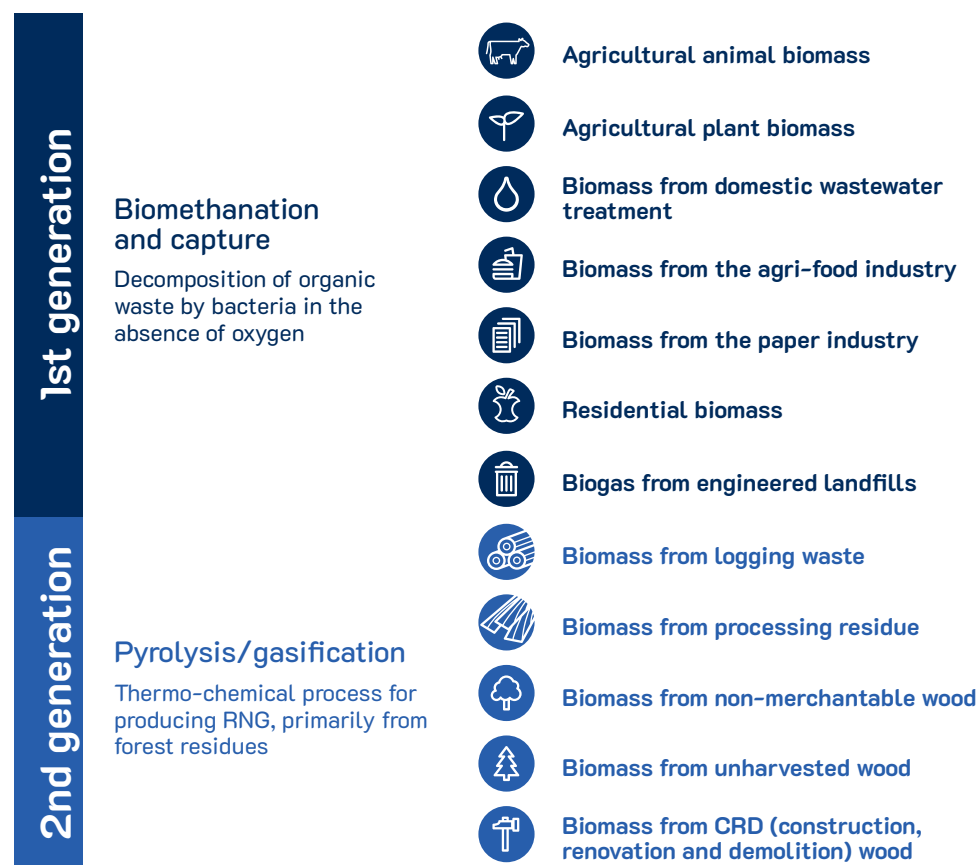
¹ US EPA, Greenhouse Gas Equivalencies Calculator

² Inventaire québécois des émissions de gaz à effet de serre en 2015 et leur évolution depuis 1990, MDDELCC [Inventory of greenhouse gas emissions in Québec in 2015, and emission trends since 1990.]

A winning energy source across the board

-  100% renewable energy that reduces GHGs
-  Provides new sources of revenue for different sectors (agricultural, forestry, municipalities, etc.)
-  Gives organic waste new life, supporting a circular economy
-  Creates local jobs that cannot be outsourced and economic spinoffs for rural communities
-  Improves the trade balance by decreasing energy imports
-  Can be used in the existing gas distribution system

RNG production technologies and organic waste included in the study



Renewable natural gas

Produced from residual organic matter that would otherwise go unused.

Completely interchangeable with the natural gas distributed in Québec.

Technical and economic potential

Proportion of organic matter that could viably be converted into RNG, at a given price.

From potential to action: Québec must create winning conditions

Québec has the opportunity to innovate and **become a leader** by creating an environment conducive to RNG projects.