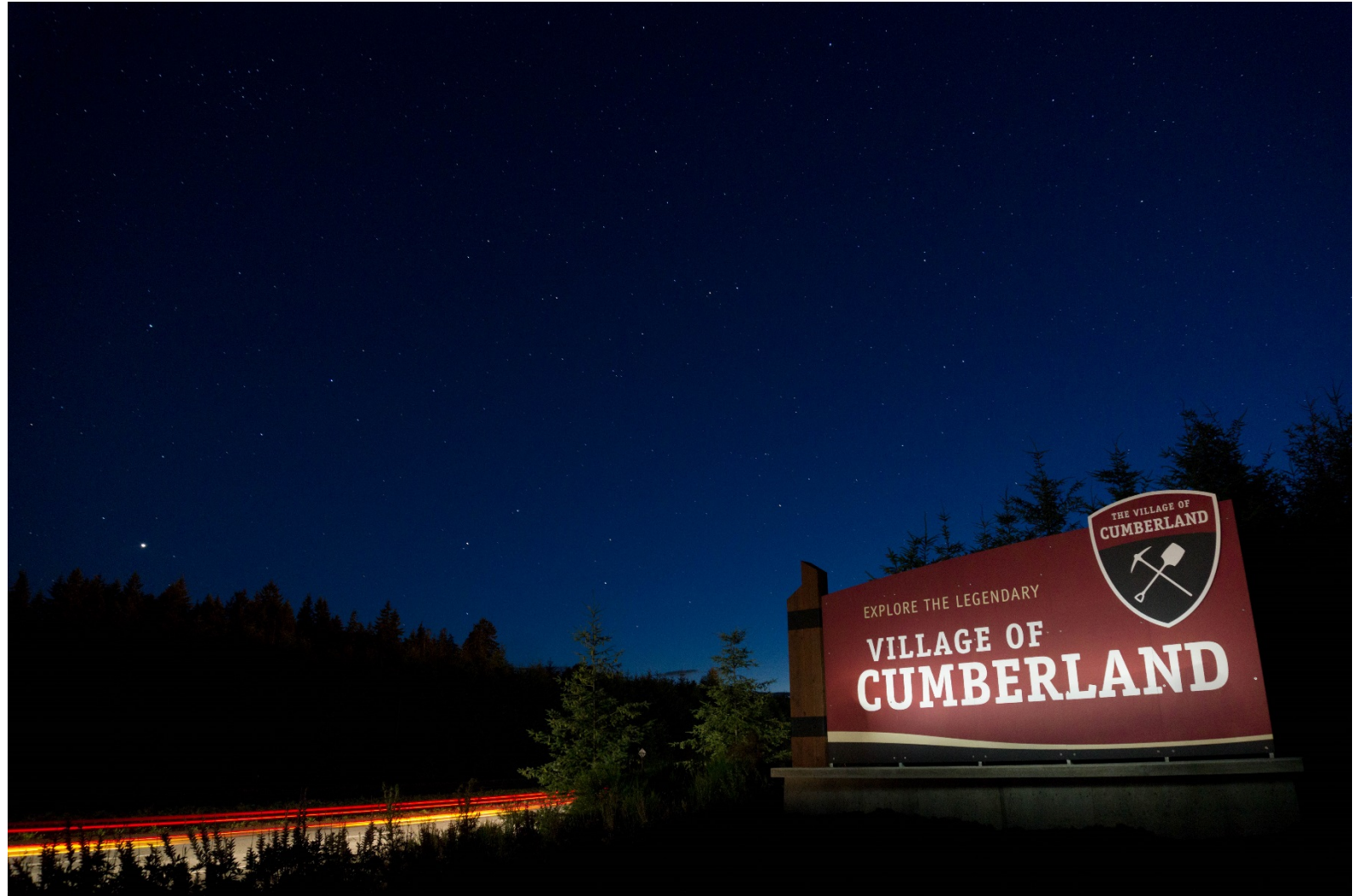


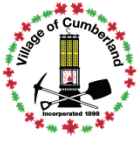
# Junk to Joules RNG to help spur Economic Development

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- Village of Cumberland
- FortisBC
- Comox Strathcona  
Waste Management

PREPARED BY: Sundance Topham  
DATE: April 13, 2019

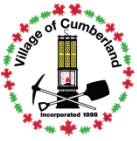




## Background

- The regional landfill for the Comox Strathcona Waste Management (CSWM) service is located within the Village of Cumberland. The Service is managed by the Comox Valley Regional District (CVRD).
- In July 2013, the CVRD and Cumberland entered into a Memorandum of Understanding (MOU) to serve as the basis for the parties to work together and engage in discussions regarding the management and operations of the Comox Valley Waste Management Centre (CVWMC) as they relate to the Village.
- As part of this MOU Cumberland was provided with the first option for utilizing integrated resource recovery, including the landfill gas (LFG).

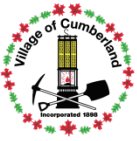




## The Partnership

- Cumberland worked closely with the CSWM during their review of LFG possibilities.
- Once approximate volumes and quality of LFG were known the Village researched opportunities within its means to utilize the LFG.
- As part of this work Cumberland approached FortisBC to explore partnership opportunities for the utilization of the landfill gas.
- It quickly became apparent that increasing LFG as part of their Renewable Natural Gas program was a priority for FortisBC.
- Cumberland worked with FortisBC to come up with a partnership proposal to submit to the CSWM.





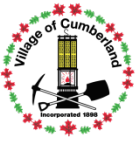
## The Opportunity

- Cumberland's Bevan Industrial Lands, located directly adjacent to the regional landfill, represents approximately 84% of the vacant industrial lands within the Comox Valley and the largest supply of future industrial land for the region.
- Cumberland would like to market development opportunities in this area towards industrial uses that strive for a more sustainable pathway of growth.
- Cumberland recognizes the importance and opportunities presented by the LFG project and acknowledges the importance of this resource to the greater CSWM region.



**CUMBERLAND**  
**Economic Development**

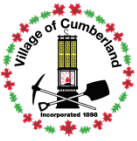




## The Opportunity

- The development of the Bevan industrial Lands is still at its incipient stage with tentative launch time expected in 2021-2023, subject to demand and economic situation.
- As a primary goal of its First-Option, Cumberland has sought to ensure that an allocation of RNG from the landfill (notional displacement) is available for use within these lands as future development occurs.
- Such an arrangement allows Cumberland to implement strategic economic development initiatives and confidently promote these lands using local RNG access as a key component towards generating business and employment opportunities for the entire region.

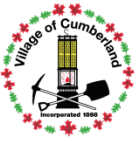




## The Concept – A Phased Approach

- Landfill Gas Utilization
  - Partner with FortisBC to reach an agreement to help support the development of Cumberland's employment and industrial lands, by working to have FortisBC commit to an allocation of RNG (notional displacement) to meet future servicing needs within Cumberland.
  - FortisBC will negotiate a purchase agreement with the CVRD, as a regional representative entity, that is appropriate for all member communities within the CSWM.
  - FortisBC will Develop a LFG utilization project at the CVWMC to convert waste methane (LFG) into RNG for sale within their distribution network.

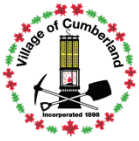




## The Concept – A Phased Approach

- Natural Gas for Transportation
  - FortisBC works to support the transition to cost-effective, lower emission fuels in the public and private transportation sectors through the deployment of a Compressed Natural Gas (CNG) station.
  - Provide additional incentives to support market adoption of CNG throughout the regional transportation sector; and,
  - Enhance local quality of life through reduced GHG emissions and improved air quality linking CNG and RNG.



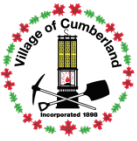


## Benefits

- As proposed, the Village of Cumberland and FortisBC believe the development of the LFG project will situate the CSWM as a hub for sustainability to support the economic and environmental objectives of the broader region.
- CSWM will receive an additional revenue stream from the sale of LFG at the CVWMC landfill.
- CSWM can rely upon FortisBC to invest capital in infrastructure, reducing the risk for the region.
- Economic growth through job creation and the development of Cumberland's strategic lands to enable and showcase the Comox Valley as a renewable energy center.
- Cumberland and the entire CSWM will show leadership in sustainability, GHG reductions and environmental stewardship.



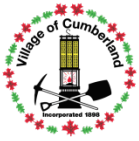




## Next Steps – Coastal Communities Initiative

- The CSWM Board agreed with the overall concept at their October 11, 2018 meeting and agreed to enter into a MOU with FortisBC to undertake a feasibility analysis of the landfill gas.
- This analysis will determine the quality and quantity of available gas for the purpose of negotiating a revenue purchasing agreement between CSWM and FortisBC.
- This information will also be used between Cumberland and FortisBC to finalize a Letter of Intent which will identify the available allocation of RNG for the Bevan Lands, as well as a potential process for Cumberland to opt-in to RNG service at the Bevan Lands if/when needed.





## For More Information

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