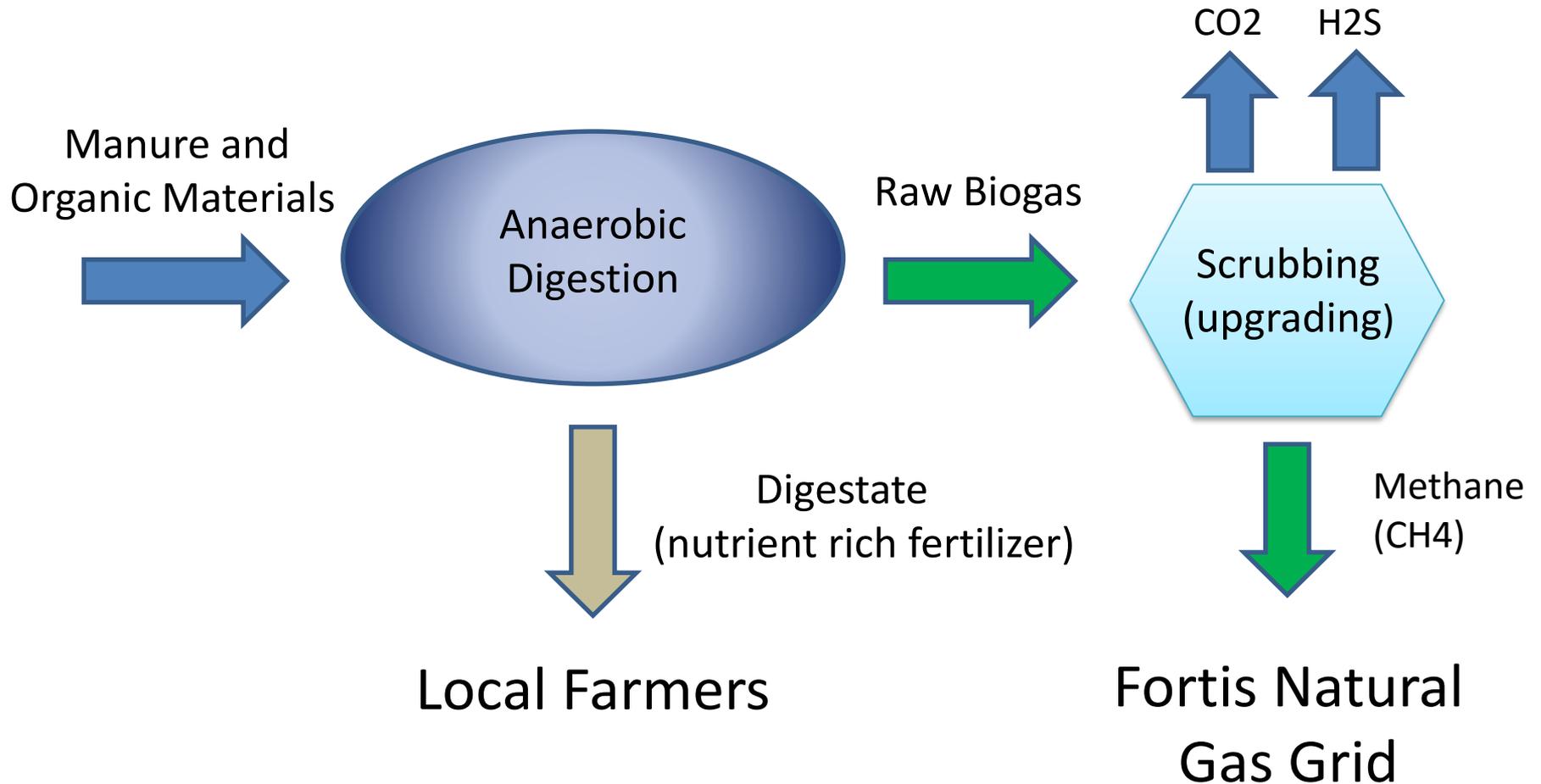






Process Overview



Why Anaerobic Digestion?

- ✓ Environmentally responsible.
- ✓ Sustainable way to farm by closing the loop on waste while creating renewable energy.
- ✓ Reduces greenhouse gas emissions.
- ✓ Providing the opportunity for families and businesses to choose carbon neutral renewable natural gas as an alternative to conventional natural gas.
- ✓ Create a nutrient rich organic fertilizer to use on crops.
- ✓ Reduce nutrient loading in the Fraser Valley.

Benefits

- ✓ Allows consumers to make an individual choice to purchase a renewable natural gas.
- ✓ Supports farmers with nutrient management planning, reducing chemical fertilizer use.
- ✓ Captures methane that would otherwise be released into the atmosphere.
- ✓ Kills pathogens seeds that may be present in waste products, resulting in a weed free, pathogen free fertilizer as an end product.
- ✓ The anaerobic digestion process changes the composition of nutrients to allow a more readily available take-up of nutrients by crops. The higher take-up of nutrients improves crop quality, improves efficiency and reduces leeching into groundwater and aquifers.
- ✓ Creates local jobs.

Renewable Natural Gas

Fraser Valley Biogas was the first facility to take the produced biogas and instead of using it to generate electricity and heat, the biogas was upgraded to renewable natural gas and sold to a utility company.

Upgrading of the biogas through simple water scrubbing allows us to sell pipeline grade (virtually indistinguishable from conventional Natural gas) renewable natural gas directly to the Fortis BC gas grid.

Upgrading biogas to RNG is much more energy efficient than traditionally burning it in a gas engine to generate electricity.

Fraser Valley Biogas produces enough Renewable Natural Gas to heat approximately 900 homes.

Digestate

Current

- Currently we produce approximately 30,000 tons of liquid digestate per year.
- We have agreements with local farmers giving us access to over 2000 acres of crop land surrounding our facility.
- We work with these farmers on Nutrient management planning for all land that receives digestate.
- Partner with some Dairy farmers where by we take one load of manure and they receive one load of digestate in return.
- Dairy farmers who have more manure than they can responsibly apply to their land, is brought to our facility and after being digested is land applied for vegetable growers replacing traditional chemical fertilizer.
- Testing of feedstock and digestate to ensure no heavy metals.

Digestate

Future

- Create a marketable fertilizer product that can be transported easily out of the Fraser Valley
- Reduce nutrient loading in the Fraser Valley to allow for sustainable, responsible expansion of the Agricultural industry
- Separation of specific nutrients to increase crop production by targeting the soil deficiencies and meeting those needs the same as a chemical based fertilizer
- Dewatering of the digestate to eliminate the need for make-up water in our gas scrubber and the onsite Dairy farm

Revenue

- Primary revenue from Renewable Natural Gas sales
- Secondary revenue from tipping fees
- Growth and revenue potential through the continual increase in demand for Renewable energy; with options of adding power generation or expanding gas sales
- Growth potential in organic fertilizer production and sales
- Diversion of more organic material away from landfills generating increased tipping fees

