

INNOVATIVE  
**BIOGAS ENERGY**



# WHAT IS **BIOGAS?**

Rolland's main energy source is biogas, also called garbage gas. Methane is captured from the decomposition of waste in a nearby landfill to prevent its release into the air, then it's purified and compressed, and transported in a dedicated 8-mile pipeline to fulfill 93% of our paper mill's thermal energy needs instead of using traditional combustible fuels. Not only is biogas a renewable energy, it reduces our CO<sub>2</sub> emissions by 70,000 tons, or the equivalent of 23,400 compact cars annually. Because of biogas, Rolland Enviro products have less than half the environmental impact of the North American industry average for virgin and 100% recycled papers.



[rollandinc.com/sustainability/biogas-energy/](http://rollandinc.com/sustainability/biogas-energy/)

## **THE LIGHT BULB MOMENT THAT TRIGGERED OUR INVESTMENT IN BIOGAS**

The inspiration did not come from an engineer, scientist or technician. An office employee had the idea while watching a TV program on greenhouse gases. After some digging confirmed the general merits of using land-fill biogas, he approached our management team. This led to the major investment, and the work of internal and external specialists, which turned inspiration into reality.



# BETTER FOR **THE ENVIRONMENT,** **FOR BUSINESS** **AND FOR SOCIETY**

Biogas – created by decomposing landfill waste – supplies 93% of our paper mill’s energy needs. This plentiful local fuel provides ongoing benefits across the board.

## **LOWER ENVIRONMENTAL EMISSIONS ON TWO FRONTS**

- By using biogas rather than fossil fuels, Rolland reduces annual carbon dioxide emissions by 70,000 tons – the equivalent of 23,400 compact cars.
- Biogas is mainly carbon dioxide and methane: When methane burns to produce steam for papermaking it becomes carbon dioxide, 21 times less harmful to the atmosphere.

## **GOOD BUSINESS FOR OUR PARTNERS AND FOR ROLLAND**

- The landfill operator collects biogas (previously burned off, creating no value), a utility operates the pipeline to Rolland, and both receive revenues as part of our supply chain.
- This cost-effective fuel strengthens Rolland’s long-term competitiveness.

## **BETTER FOR SOCIETY AT LARGE, INCLUDING OUR WORKFORCE**

- Our investment in biogas has boosted the local economy, helping sustain the community, and continues to demonstrate our corporate social responsibility.
- The initial biogas idea came from our workforce, proving that Rolland acts on employee contributions. An engaged workforce makes for stronger community.

# HOW IS BIOGAS PRODUCED?

## PURIFICATION

Methane is captured and pumped into a purification system.



## 8 MILES OF PIPELINE

Then, it is transported by pipeline for more than 8 miles to Rolland's mill.



## NON-CONVENTIONAL

Biogas replaces the need for traditional fossil fuels.



1



## DECOMPOSITION

Biogas is produced from methane resulting from the decomposition of organic waste buried in a local landfill.

2

3



## COMPRESSED

It is then dried and compressed.

4

5



## USE

Once on site, it is used as thermal energy for the manufacturing of the paper.

6

7



## RENEWABLE ENERGY

Reduce your environmental footprint by adopting ecological paper manufactured using renewable biogas energy.

# ENVIRONMENTAL PRINTING PAPERS

We strive to manufacture the best recycled paper, and maintain the smallest possible environmental footprint, so we can be an enduring partner in your sustainability supply chain. We are working hard to make that footprint even smaller over time.

And as papermakers, we are committed to preserving Rolland's longstanding reputation for industry-leading product quality.

Because our customers merit the best.



100%



The mark of  
responsible forestry



Ancient  
Forest  
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