

February 24, 2022

EA Modernization Project Team
Environmental Assessment Modernization Branch
135 St Clair Ave West
4th Floor
Toronto, ON
M4V 1P5
Canada

Re: Plain Language Description of Advanced Recycling Proposal

Dear Sir or Madam,

I am writing in response to the Plain Language Description of Advanced Recycling Proposal released for public comment. Omni Conversion Technologies Inc. (Omni) is an interested party and wishes to comment.

There are two substantive recommendations:

Recommendation #1:

For an Advanced Recycling site that does not use coal, oil or petroleum coke as fuel and whereby 80% mass is recovered, we recommend:

In the calculating the recovery rate in the formula presented, the insertion of the word “dry” before the word mass, provided that any water extracted is managed in accordance with local and provincial water regulation.

$$\frac{\text{The DRY mass of recovered material Resulting from thermal treatment}}{\text{The DRY mass of waste processed}} \times 100 = \% \text{ of recovered material produced}$$

Municipal solid waste is inherently water laden with a moisture content significantly above 20% and frequently is above 40% moisture content. Without allowing the ability for projects to extract the water, no thermal process will be able to meet the recovery rate threshold.

We note in the proposed guidance, the Ministry also reflected the following language:

This mass will not include any material that will be removed during pre-processing of the waste prior to the thermal treatment (for example, steel removed from tires).

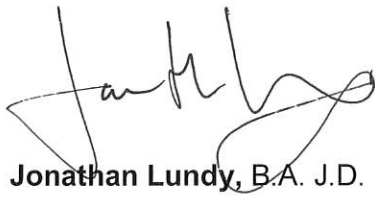
The concept of extracting water from the calculation is consistent with the concept of extracting steel from tires. The use of the word “dry mass” simplifies the arithmetic concept with precision.

Recommendation #2:

Synthesis gas (syngas) should not be required to be injected into a utility owned NG pipeline to qualify as Advanced Recycling. Creating syngas from waste through our thermal process delivers significant environmental and sustainability benefits to communities. It is significantly more energy efficient and environmentally beneficial to deliver this clean recyclable energy gas directly to the industrial consumer (inside the fence or over the fence) as a replacement for natural gas or other fossil fuels. Our recommend is based on the following facts:

Converting syngas into an RNG/synthetic NG for pipeline injection would result in a significant loss of energy. Approximately 40-50% of the energy content would be lost in producing and injecting RNG/synthetic NG simply to inject it into a pipeline when better alternatives exist. This loss could be avoided by simply delivering syngas directly to the industrial consumer. Syngas and NG for heat applications will serve the exact same purpose and function. While syngas is energy rich and burns as clean or cleaner than NG or RNG, it cannot be injected into a natural gas pipeline because syngas contains carbon monoxide. The proposed requirement will force sub-optimization of both its energy value and its environmental benefits unnecessarily if the syngas cannot be delivered directly to an industrial consumer. There will be situations when converting waste to RNG makes eminent sense to address transportation logistics, however, such regulation should not be at the detriment to other approaches that could yield better economic and environmental sustainability.

Omni welcomes any dialogue with any government parties wishing to review and lean more about our technology and the benefits it brings to Ontario.



Jonathan Lundy, B.A. J.D.

Chief Executive Officer