ONYM

Sustainable Energy, Circular Solutions

Investor Fact Sheet

Entering Full-Scale Commercialization

November, 2024



About Us

Launching Commercial-Scale, Carbon-Neutral Bioenergy & Bioproducts

ONYM is a climate technology company now launching our first commercial-scale plant in partnership with a global steel manufacturer. With two successful demonstration plants, we're set to revolutionize how heavy industries and biomass waste generators tackle environmental challenges. Using our advanced proprietary pyrolysis technology, we convert residual woody biomass into carbon-neutral biofuel and valuable bioproducts at an industrial scale. Our recent offtake MOU with a global steel manufacturer not only marks our transition into commercialization but also validates the market demand for our solutions.

We invite visionary investors to join us in transforming the energy landscape and making a lasting impact.

The Challenge

Obstacles to Decarbonization and Waste Management



Heavy Industries & Biomass Waste Generators Face Significant Obstacles:

- **High CO_2 Emissions**: Struggling with affordable decarbonization, particularly for high-heat load applications.
- **Regulatory Pressures**: Increasing mandates to reduce emissions, impacting profitability.
- **Waste Management Costs**: A large portion of residual woody biomass is landfilled, leading to high landfilling costs and methane emissions from anaerobic decomposition.
- **Market Pressure**: Increasing demand for carbon-neutral products and responsible forestry practices.
- **Disconnected Sectors**: Heavy industry and biomass generators face their challenges, unable to bridge their differences to create synergies.

Our Solution

Turning Residues into Carbon-Neutral Energy and Bioproducts

ONYM bridges the gap between the two disconnected sectors by transforming residual biomass into carbon-neutral bioenergy and high-value bioproducts through an advanced proprietary pyrolysis process.

- **Multi-Product Output**: Residual biomass is transformed into liquid biofuel (49%), biochar (22%), wood vinegar (15%), and renewable gases (14%)—all from the same process, maximizing resource efficiency.
- **Circular Economy Integration**: Utilizing residual biomass (urban and industrial forestry, construction & demolition, agriculture, ...) to deliver renewable, clean energy.
- **Eco-Friendly Process**: Zero waste, no water consumption, and significant GHG reduction capabilities.

Key Differentiators

Innovative, Cost-Effective, and Scalable Bioenergy

Innovative Technology

- **Greater Liquid Biofuel**: Our proprietary innovations result in a biofuel with higher energy density and lower water content, compared to standard pyrolysis oil, improving profitability and efficiency .
- **Up to 80% Carbon Biochar Content**: ONYM's technology ensures a high-quality biochar for effective coal replacement in the industry, soil amendment and carbon sequestration.

Cost-Competitive Advantage

- **CAPEX & OPEX**: Our low CAPEX and OPEX make commercial-scale bioenergy production economically viable, facilitating rapid scale-up and market adoption. Additionally, our ability to process cheaper residual biomass, further lowers costs compared to traditional technologies.
- **Biofuel Priced Similar to Fossil Fuels**: Our products are ready for integration into the market, simplifying the transition to carbon-neutral energy sources at a commercial scale.

Key Achievements

- **Parent Demonstration Project:** A demonstration project production plant constructed and operated inside a sawmill plant in Parent (Québec, Canada), and successfully achieved in 2019.
- **Montreal Showcase Plant**: A 30 tons per day showcase plant in Montreal that has started operations in 2024.
- **Prefeasibility Study**: A technoeconomic prefeasibility study for the upcoming commercial plant. The study was a key element in signing our first offtake MOU for the commercial size plant.
- **Offtake MOU**: We have signed an MOU with a global steel manufacturer, initiating our move into full-scale commercial operations, with our first

commercial plant set to begin production in 2026. The prefeasibility study confirmed that the estimated CAPEX is significantly lower than comparable existing plants and promises a high return on investment. The plant is projected to annually process 160,000 tons of raw residual biomass, producing 37 million liters of biofuel, 13,000 tons of biochar, and 9 million liters of wood vinegar. Additionally, it will generate up to 80,000 tons of GHG reductions from the operations of the steel mill

- **Proprietary technology** : Two patents pending and solid intellectual property and industrial secrets, built through a decade of projects and technology developments.

Market Adaptability

- **Plug & Play Solution**: Biofuel use requires minimal changes to existing industrial combustion systems.
- **Broad Range of Applications**: Biochar for soil enhancement or as a coal replacement; wood vinegar as a biostimulant and natural biocide; and biofuel as a renewable energy source —including for power generation—and as a bio-based feedstock for the petrochemical industry.

Benefits for Stakeholders

Delivering Value to Industries and Biomass Generators

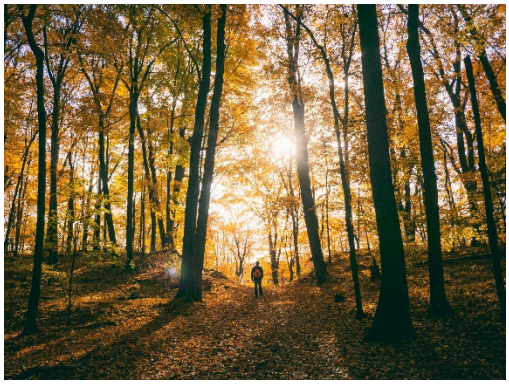
Heavy Industries

- **Cost-Competitive Energy**: By partnering with ONYM's commercial operations, industries can transition to carbon-neutral energy without significant financial burdens, enhancing their competitiveness and sustainability.
- **Emissions Reduction**: Cut GHG emissions by 70,000 tons annually per plant.
- **Improved Air Quality**: Decrease contaminants like sulfur, leading to improved operational efficiency.



Biomass Waste Generators

- **Lower Disposal Costs**: ONYM offers an economical and sustainable alternative to landfilling.
- **Revenue Opportunities**: Potential revenue from residual biomass used in production.
- **Reduced Emissions**: Avoiding landfilling residual biomass reduces GHG emissions by up to 20,000 tons the first year.



Next Steps

Advancing with Purpose: Scaling Up and Accelerating Our Impact

Transition to Binding Offtake Agreement

- We are finalizing a binding offtake agreement that will solidify our entry into commercial operations, ensuring a committed market for our bioenergy products.

Secure Financing for the Commercial-Scale Plant

- We are actively seeking investment to fund the construction and operation of our first commercial-scale plant, marking a significant step in scaling up our impact.

Expand and Scale

- We will invest steadily to build nine additional plants as quickly as possible, supporting the global economy in its pursuit of net-zero carbon emissions.

Projected Impact

- Over **20 years**, our 10 large-scale plants will reduce at least **15 million tons** of GHG emissions globally, divert **30 million tons** of residual biomass from landfills, and contribute to improving soil and air quality, supporting a circular economy approach.

Call to Action

We invite investors to **join us** as we launch our commercial operations and scale up our innovative bioenergy solutions. Together, we can **redefine industrial sustainability** and achieve significant returns. Become a part of this impactful journey to **build 10 commercial-scale plants** and transform energy use in heavy industry.



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