

# **Newsletter August 2024**

# Accelerating Global Waste Management: A Clean Technology Revolution



As the global population continues to grow, so does the output of waste, which now totals a staggering 2.2 billion tons per year. Much of this waste ends up in landfills or is incinerated, contributing significantly to greenhouse gas emissions. Oceanic waste, originating from rivers or direct dumping, has even begun entering human food chains, posing severe environmental and health risks.

INNOVO's pyrolyzers convert a wide range of waste into profitable clean electricity and high-purity products, addressing the global waste crisis.



## **Innovative Waste Conversion Technology**

# All Types of Waste Profitably Converted into Clean Energy and Pure Products | Profit | Pyrolyzer | Nill CO2 | Prevent Waste |

**Landfills and Incineration:** Traditional waste management methods are reaching their limits. Landfills are overflowing, leading to the export of waste to other countries. Meanwhile, incineration releases harmful greenhouse gases into the atmosphere. Pyrolyzers offer a transformative alternative.

**Pyrolyzer Technology:** Pyrolyzers efficiently convert waste into biofuels, pure hydrogen, and other valuable byproducts. The process yields biochar, which sequesters carbon in soil, enhancing plant growth as a bio-fertilizer. Additionally, activated carbon is produced for water purification and air filters, and graphene, a remarkable nano-carbon material with a host of applications:

- **Energy Storage:** Graphene-based car batteries can be charged in minutes, revolutionizing electric vehicle technology.
- **Energy Efficiency:** Coating air conditioning heat exchangers with graphene has reduced energy consumption by over 20%.
- **Solar Power:** Graphene-enhanced solar panels are 60% more efficient than traditional silicon panels.

## A Profitable and Sustainable Model

**Economic Benefits:** The global cost of waste disposal is a staggering USD 361 billion annually. INNOVO's pyrolyzers not only address this issue but also offer substantial economic advantages, generating profits of USD 200 to USD 400 per ton of waste processed.

**Environmental Impact:** Unlike traditional methods that generate CO2 and methane, INNOVO's pyrolyzers operate without emitting greenhouse gases, aligning with global net-zero goals.



Our business model is centred on transforming waste into clean electricity and pure, high-value products, demonstrating that sustainability and profitability can go hand in hand.

To learn more about INNOVO's groundbreaking technologies and how we are shaping the future of waste management, visit us at <a href="innovo-net-zero.com">innovo-net-zero.com</a>

### What are Net Zero Emissions?

Net Zero is a popular term, but many people are unclear about its true meaning. It does not mean that no CO2 is emitted during a process.

Net Zero emissions refer to the balance between the amount of carbon dioxide (CO2) emitted into the atmosphere and the amount removed from it. Achieving Net Zero carbon means that any CO2 emissions produced by human activities are offset by an equivalent amount of CO2 being absorbed or removed, resulting in no net increase in atmospheric CO2 levels.

This balance can be achieved through various methods, such as reducing emissions by switching to renewable energy sources, improving energy efficiency, and implementing carbon capture and storage technologies. Additionally, natural processes like reforestation and soil carbon sequestration play a crucial role in absorbing CO2 from the atmosphere.

At INNOVO, we refer to ourselves as Profitable Net Zero because we believe achieving Net Zero should be an opportunity for profitability, not a cost. This is why we promote bio farms that capture CO2 from the atmosphere or scrubbed flue gas and use it as a nutrient to grow algae. This process, which naturally occurs in the sea, is accelerated in tanks. The byproduct is biomass that can be processed to extract Crude Algae Oil, which can then be refined into Sustainable Aviation Fuel. The process is profitable and permits the creation of Net Zero Fuel for airplanes.