

EcoWorth Tech Pte. Ltd. is a Budding Innovations managed, award-winning start-up company, in the water remediation and waste management space. It provides a **breakthrough solution for the removal and recuperation of organic contaminants** from Industrial and oil & gas waste water. The technology integrates seamlessly into the latest water remediation processes in a highly cost efficient manner. Additionally, it uses biomass waste for the production of the **carbon fiber aerogel technology** providing environmental benefits and **waste-to-worth** opportunities.

WHAT IS CARBON FIBRE AEROGEL?

CARBON FIBRE AEROGEL IS A GAME-CHANGING, ENVIRONMENTALLY FRIENDLY TECHNOLOGY FOR REMOVING LIQUID ORGANIC CONTAMINANTS FROM WASTEWATER.



Carbon Fibre Aerogel (CFA) is a highly absorbent material that is safe, natural, and recyclable. CFA is able to absorb a wide variety of organic material from wastewater. It can be made from a variety of cellulose-based material, such as cotton or waste paper.

Our patented process heats the feedstock to very high temperatures in controlled conditions. CFA is then applied by incorporating the material into industrial-grade cartridges and used as filters. CFA can be regenerated, which allows customers to reuse CFA cartridges several times before recycling them.

With these innovative filters, wastewater is transformed from waste into water that can be reused or released into the environment safely, while sometimes offering opportunities to monetise the materials recuperated in the process, like biofuels.

WHAT ARE THE BENEFITS?

ULTRA-EFFICIENT  Absorbs contaminants up to 190X times its own weight across a broad range of organic materials  Highly effective at removing organic elements such as oil, fats, solvents & grease  Removes up to 99% of waste organics from water streams, meeting environmental release limits		ENVIRONMENTALLY FRIENDLY  Made from safe, natural, recyclable materials, using a non-toxic production process	
COST EFFECTIVE  Up to 20 times cheaper than other low-cost alternatives in use today  CFA can be made using locally available feedstock, eliminating the need for transport  More cost effective than treating wastewater via a third-party		REUSABLE  Waste materials absorbed can be squeezed out of CFA filters, allowing CFA to be reused multiple times  CFA filters are fire & flame resistant so absorbed materials can be burned for fuel, allowing CFA to be reused or repurposed	
 Recuperates organics from wastewater for monetisation in secondary markets  Easily implemented into existing water treatment systems			



THE BUSINESS ISSUES

- Wide range of organic material in wastewater
- Incurred significant costs to treat wastewater due to having to ship waste offsite for treatment
- Extra costs sustained due to the lack of a water recycling system

OUR SOLUTION

- Design of an end-to-end water treatment and recycling system using CFA filters
- Engineering services to integrate the system into the current plant process
- Commissioning and ongoing servicing and maintenance of the system

THE PAYOFFS

- Savings of 50% on cost compared to previous solution
- Payback of costs in less than two years
- Transformation of wastewater into water clean enough to be reused for industrial processing or with contaminant levels low enough to be discharged into the environment
- Achievement of corporate social responsibility goals due to the increase in water reuse and usage of environmentally friendly materials

For more information please reach out to CEO Andre Stolz (andre.stolz@ecoworth-tech.com). More news on our website www.ecoworth-tech.com