



The system uses a hydrocyclone process to neutralise the smoke from the combustion into water steam |
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WASTE-PROCESSING SOLUTION DECOMPOSES ANY KIND OF SOLID WASTE INTO CARBON

 SUSTAINABILITY

The company uses carbonisation technology and a hydrocyclone process, providing a sustainable alternative to current waste-management processes

Spotted: Indonesian company Sampangan has developed a waste processing solution to efficiently decompose solid waste into carbon, for use in organic agriculture and other industries.

Sampangan utilises carbonisation technology (heat radiation), invented by Dr Ishenny, to turn organic and inorganic waste into carbon. They also use a hydrocyclone process to neutralise the smoke from the combustion into water steam.

As carbon can work as a natural fertiliser, soil conditioner, fuel and more, carbonisation technologies provide solutions to waste management and agriculture, the environment and energy conservation simultaneously.

The company, which has been nominated by the United Nations Development Programme as one of ten entrepreneurial ventures to join the global Accelerate2030, currently provides waste processing to local governments and industries across four Indonesian cities (including South Sumatera Government, Jakarta City, Bali, Tarakan City). Its scaling ambitions aim to solve waste problems across Southeast Asia, starting in Singapore, Malaysia, China and Suriname.

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Takeaway:

Currently, about [2.01 billion metric tons](#) of municipal solid waste are produced worldwide annually, with 50 per cent managed inefficiently and dumped on land, or in rivers and seas. In turn, this causes significant risk to marine life and releases toxins into our soil, affecting groundwater reservoirs. By providing a high-value output, Sampangan is offering an economically sustainable solution to our current waste processing model.