

'Trash is gold' as Benin community turns waste into biogas

August 22 2018, by Josué Mehouenou



The facility processes around six tonnes of organic waste every week, turning it into 200 cubic metres of biogas

Garbage has never smelled so sweet for a small village in southern Benin since it opened a pilot waste treatment centre to turn household rubbish



into gas—and cash.

"Our trash has become gold. We no longer throw it into the bush. We use it to make money," beams Alphonse Ago, who lives next to the centre in Houegbo village.

ReBin, a Swiss foundation for sustainable development, built the 1.3-hectare (3.2-acre) facility, which every week turns around six tonnes of <u>organic waste</u> into 200 cubic metres of biogas—saving some 164 tonnes of wood from being used to make charcoal.

The centre, which opened late last year, also plans to produce around 400 tonnes of organic fertiliser per year.

So far, around 100 households in the area have signed up to the scheme to deposit their <u>waste</u> at the centre on a daily basis.

Every 10 kilogrammes (22 pounds) of waste fetches 250 CFA francs (around 50 euro cents, 57 US cents), paid either in cash or credit—to buy biogas.

The fuel is a precious commodity in a rural region where electricity remains scarce.

Agnes Avoce, a shopkeeper and mother of five, proudly straps a large plastic bag of the gas onto her back.

Biogas, she says, is much cleaner and more efficient for cooking than charcoal—which "darkens the pots and makes me sick"—and she is more than happy to make the switch.





So far, around 100 households in the area have signed up to the scheme. Every 10 kilogrammes of waste fetches 250 CFA francs (around 50 euro cents), paid either in cash or credit—to buy biogas

Avoce is not alone; five other women are waiting to pick up gas.

"There are queues here since we opted for biogas," another customer says.

'Goldmine'

Symphorien Adonon, 35, drops off a week's worth of carefully sorted waste, smiling as he pockets his cash payment.



"Now I have enough to do the shopping for dinner," says Adonon, who drives a motorcycle taxi.

The centre has treated more than 20 tonnes of waste since it began operations late last year.

In addition to the customers' household waste, there is also rubbish collected by a local non-government organisation, Astome.

The NGO's chief, Florent Gbegnon, says he used to collect it on a push cart, but he now uses a tricycle provided by the centre.



ReBin Benin Foundation chief Mark Giannelli was inspired to launch the project after noticing mountains of discarded pineapple skins in Benin, Africa's fourth-biggest exporter of the fruit



"It's a huge relief," he says as he dumps a load of pineapple skins.
"Pushing the cart was a real burden."

It was the massive amounts of waste such as pineapple skins that originally caught the attention of ReBin's founder, Mark Giannelli, and inspired him to set up the treatment centre in Houegbo.

"I saw this not as a problem, but as an opportunity, and I thought it was a goldmine," Giannelli told AFP.

Benin is Africa's fourth-biggest exporter of pineapples. And in Houegbo, which has one of the busiest markets in the region, local sources estimate that more than a tonne of waste is generated every day from that fruit alone.

Giannelli told AFP that he had been searching for a potential site for his project in Benin's West African neighbours Ghana and Togo.

But it was the enthusiasm with which the locals embraced his idea that finally convinced him to set up the waste treatment centre here, he said.

'Source of happiness'

The goal is to establish "a real economy that serves the population and protects the environment," he says. "We have to take the problems locally and adapt them to local solutions."





Sewai Mardochee, director of the Toffo facility, says it should be duplicated across Benin. 'We can then create jobs and clean up our living environment by reducing the use of firewood and coal'

Once the necessary expertise has become more firmly established in Houegbo, Giannelli hopes to extend the project to larger municipalities and let local entrepreneurs run it.

The centre's director, Sewai Mardochee, suggests duplicating it in all of Benin's 77 municipalities.

"We can then create jobs and clean up our living environment by reducing the use of firewood and coal," he said.



Nicolas Hounje, a retired official, has put himself forward to take over the company.

"We did not know here that garbage can become a source of happiness," he says.

© 2018 AFP

Citation: 'Trash is gold' as Benin community turns waste into biogas (2018, August 22) retrieved 6 May 2024 from https://phys.org/news/2018-08-trash-gold-benin-biogas.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.