



GUILT-FREE DISPOSABLES

BURY a disposable sugarcane plate made by eco u, and it will completely decompose by itself within 90 days. This is a testament to the 100 per cent biodegradable property of the products made by the disposables manufacturer, according to co-founders Nancy Ling and Thomas Klemm.

The products are kept safe and dry in various storerooms, including one located at Mapletree industrial property Redhill 1. Ms Ling says: “Some of our products have been tested in food digesters in Singapore. And we are the only manufacturer that can make 100 per cent food digestible plates.”

Food digesters are machines that turn discarded food into compost, which can be used as fertiliser. In other words, this shows that the company’s products are made of pure organic matter. Mr Klemm adds: “There is no plastic lining, no other chemicals, wax nor oils – they are very clean products.”

Founded in 2013, the company specialises in producing a variety of disposable cutlery and tableware from sustainable plant-based sources, through a process known as upcycling. Upcycling – a more specific form of recycling – helps to transform by-products or waste that could be thrown away into a product of a greater output value.

For instance, the company obtains leftover sugarcane pulp from across Asia and converts them into functional plates using innovative techniques. Ms Ling points out that while many products in Singapore are considered to be recyclable, they are not necessary upcyclable.

She notes that corn-based disposables require the destruction of corn as a food source, and that is not increasing the output value of the product. She adds: “For us, we are more interested in upcycling products, because it is more sustainable than destroying a virgin material like corn. From the sugarcane, we don’t make the pulp from raw sugar cane. We get the pulp from the waste product of sugar.”

This push for sustainability was apparent in the company’s founding. It was started by the two environmentally-conscious co-founders, who are both permanent residents (PRs). On the need for eco-friendliness, Ms Ling says: “We only have one planet. If you continue to practice unsustainable behaviour, that decision lasts your whole lifetime. Maybe you would use something – let’s say a plastic disposable – for just

15 minutes, but that decision lasts like 150 years.”

She adds: “When we came here, we were pretty surprised about the nature of packing that is used, and the volume of packaging. There was so much styrofoam and plastic – not really any alternative.”

“It was a mixture of frustration and not having an option that we had the idea after a while of coming up with eco u, to look for environmentally friendly disposable items to support the food and beverage (F&B) sector,” adds Mr Klemm.

He explains the three key principles present in their products: eco-friendliness, premium presentation and functionality. Besides being 100 per cent biodegradable, he says, the products look premium because presentation is everything in the F&B sector.

“Even if you don’t care about the environment, we design the products in such a way maybe you would choose the products because they look beautiful,” Ms Ling chimes in. Additionally, Mr Klemm points out, the company aims for “plates that are sturdy and knives that cut through meat instead of breaking”.

The co-founders admit that it was not easy at the start. Their products were at a higher price point, and they had to educate potential clients about the differences in their

products compared to their competitors.

“In the beginning, our positioning was towards higher-end businesses like retail, higher-end caterers and premier events,” Ms Ling recalls. But over time, their products saw greater acceptance in the wider market, and can be found in the pantries of various corporate customers.

Today, the company sells hundreds of thousands of disposables a month. The clients come from diverse backgrounds, include Grand Hyatt Singapore, Visa and Tanjong Beach Club. In recent years, eco u also secured clients from hawkers centres, such as several stalls from Maxwell Food Centre.

At the same time, it expanded its product offerings to include an assortment of forks, spoons, cups, takeaway boxes, straws, paper bags and other forms of cutlery and tableware. These products also come from a variety of plant-based sources – not just sugar cane pulp – but also materials such as wheat husks and Forest Stewardship Council (FSC) certified birch wood.

The company is now currently working on finding new materials to use, as well as coming out with more designs, product types and sizes. It is also looking to grow internationally. “We want to focus on South-east Asia – the market is still in infancy, there is a lot of growth potential there.



Also, waste in South-east Asia is a big problem – managing plastic waste especially,” says Ms Ling.

The company adopts a slogan of “responsible convenience”. Mr Klemm says: “We really want to change the way people perceive disposables. People always think you have to have a trade-off between eco-friendly and disposable. We think the experience we bring can have all of that.” ■

▲ DO THE RIGHT THING
Ms Ling and Mr Klemm started eco u out of a mixture of frustration and not having an option of using environmentally friendly disposable items

THE BUSINESS OF CONSCIENCE

One is a manufacturer that makes 100 per cent food-digestible disposable tableware. The other is a technology company that designs and implements regenerative urban solutions. Both are conducting their business in an ecologically sound and environmentally friendly fashion.



IN FULL FLOW

HARVESTING rainwater is one of technology company Netatech’s sustainable solutions – sustainable because “you are getting the water for free”, says Elinda Gan, director of operations. The water is then channelled for different uses, and treated accordingly. For example, if the water will be used to flush toilets, no treatment is necessary.

This upcycling of water resounds with the company’s ethos of swimming in sustainability. “Harvest more with less resources,” reads a catchphrase on its website.

The company’s projects range from working on water-based solutions such as landscape irrigation, solutions for farms such as high-tech greenhousing, to cloud-based controls. It is housed at Mapletree’s flatted factory building at Chai Chee Lane Cluster.

◀ MORE WITH LESS
The upcycling of water resounds with the company’s ethos of swimming in sustainability

Netatech began in 2008 with founder David Tan getting inspired by several greenhouses at HortPark. They were housing plants in an effort to acclimatise them for Gardens by The Bay, which was then not fully functional. The greenhouses, along with the trend and inherent value of building sustainable infrastructure roused Mr Tan to gather a team to represent Netafim, an Israeli manufacturer of irrigation equipment. This allowed the company to start off by designing solutions that involve drip irrigation – the process in which plants are watered at the roots with a slow drip. This saves more water than using sprays or sprinklers.

However, as a small startup, it was difficult to get manpower. Interest to work with the company grew gradually as Netatech assumed the role of a niche player. It took on other methods under the same umbrella of resourceful solutions, such as those for stormwater management.

Netatech considers stormwater as rainwater that falls on the ground, canals, and onto the road. It is unlike what it classifies as rainwater, which is water that falls on roofs and is cleaner. In managing stormwater, its methods – although trickier – follow the guidelines of PUB’s Active Beautiful Clean Waters (ABC Waters), a government initiative to integrate drains, canals and reservoirs into the environment.

The company designed the landscape of Brunei’s Prime Minister Office museum in 2012, and designed and installed the irrigation for the green wall at Jakarta’s Ferrari Building in 2015.



◀ **FREE FLOW**
Harvesting rainwater is a sustainable solution because “you are getting the water for free”, says Ms Gan

Also in 2015, Netatech completed a bioretention basin at Jurong Port, which combines both the detention function that retains run-off with treatment and filtration – making Jurong Port the first port in the world to build a bioretention system for stormwater treatment and control at its berths.

One of Netatech’s recent projects is an urban farm on the rooftop of Funan Mall. It will be open to the public, and the vegetables grown are intended to be supplied to the food and beverage outlets within the mall.

Another of Netatech’s strategies for success is using automation and control to set itself apart from the market. The use of the Internet of Things, cloud-based controls to minimise the need for workers, and the immediate response and connectivity related to automation and control make its solutions more productive. Remote control is offered to the clients to monitor the infrastructure from a mobile device, instead of having to be physically present.

“We never use things that have been used for the last three years, or five years,” Ms Gan adds. “We always look at how to make things faster, cheaper, better.”

On average, Netatech works on 20 projects at once. It has captured 80 per cent of the market keen on green walls, and has 52 members of staff. To attract the right people, “we have to hire the right people”, says Ms Gan. “If they don’t like to learn, it’s not a match with our culture. We keep challenging them with research and interesting projects. Everyone likes doing new things, no one likes to do the same job over and over again. They do know that if

they learn new things they get to do new things.”

Although Netatech staff are given opportunities to attend workshops and travel overseas, taking them up is not compulsory. “We want people to be very self-motivated,” Ms Gan says.

The company also plans to continue forging partnerships with various other technology companies such as UK company Hydro International, Israel’s Bermad, and Germany’s Klostermann. “They want to see something new, they want to see how it applies to the region as they are mostly European companies,” says Ms Gan.

Netatech also conducts workshops for the industry, such as for the architects and the engineers within them, at least twice a year. It has held them for National Parks Board (NParks) between 2009 and 2013, while in the last two years, it has worked with the Agri-Food and Veterinary Authority of Singapore (AVA).

It also participates in community initiatives overseas where it aids in masterplanning sustainable infrastructure. Currently, Netatech is working to help a farm in Thailand to adopt high-tech farming so as to improve the quality of its produce. “They are full of resources but lack the technology to do it. Singapore has no resources but a lot of technology. So we go over and help them,” says Ms Gan. “I think it gives our company a soul.” ■

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