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BUSINESSMAN OF THE YEAR

CHINESE DREAMER

PROPERTY KING WANG JIANLIN'S BRIDGE TO POPULAR CULTURE ... AND THE WORLD

AUSTRALIA.....A $10.00	INDIA.....RS 220	KOREA.....W 9,000	PAKISTAN.....RS 450	TAIWAN.....NT $250
CHINA.....RMB 75.00	INDONESIA.....RP 60,000	MALAYSIA.....RM 20.00	PHILIPPINES.....P 220	THAILAND.....B 230
HONG KONG.....HK $65	JAPAN....(TAX INCL.) ¥1300	NEW ZEALAND.....NZ $11.00	SINGAPORE.....S $12.00	UNITED STATES.....US $10.00

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Biomax Technologies:

Turning Waste Into Big Profits and Sustainable Business

With little formal education and only a halting command of English, Mr Sim Eng Tong seems an unlikely person to head a biotech company that researches complex enzyme-based solutions to support sustainable business operations. Yet, having worked in the business of food trading for over 30 years, Mr Sim found an opportunity to profit from his industry knowledge when he established Biomax Technologies. Today the Singapore-based company is a US$10 million enterprise with operations spanning the globe.

Biomax is best known for pioneering a solution that allows any organic waste—from animal manure to palm oil residue—to be treated and transformed into pure, rich organic fertilizer within 24 hours. This solution has been a boon for farmers and other businesses that need to dispose of biomass waste quickly and efficiently.

A Challenging Proposition

In 2004, Mr Sim approached a friend, scientist Dr. Puah Chum Mok, and challenged him to develop a way to recycle food waste into fertilizer. "I really wanted to see if all this food that was being thrown away or had expired could be recycled or made into something more useful," the 60-year-old entrepreneur recalls.

That dare was the start of a five-year-long research and development journey. The result: an enzyme that is the core ingredient of Biomax's waste-treating technology.

After spending millions of his own money to develop the enzyme and design the machines necessary for the process—which were manufactured by a Korean company—Mr Sim, along with Dr. Puah and another co-founder, Ms Fion Chua, opened Biomax for business in 2009.

But finding customers early on proved to be tougher than expected.

"No one believed that a small Singaporean company could develop a technology that could do what we do. It was a solution that could be used globally. We sent out emails and made cold calls, but got a lot of rejection," says Mr Sim, who operates as Biomax's chief executive officer.

"I used my years of business experience and tenacity to carry on. I told myself that I cannot fail because I believed in the product," he adds.

MR SIM ENG TONG
Chariman and CEO,
Biomax Techologies Pte Ltd

He and his colleagues invited potential customers to try the product and eventually snared their first customer, a Singapore-based firm that was planning to start a farm in Malaysia. In its first year of operations in 2010, that company chalked up $320,000 in revenue.

While business was slow initially, Biomax's innovative technology caught the attention of the trade press, and the company was featured in various industry publications. The media coverage helped, and soon customers from as far away as South America and Africa were inquiring about the company's technology.

Turnover grew steadily, and in 2013 Biomax registered its first profit on the back of over US$10 million in sales. Mr Sim expects sales to reach between US$15 million and US$20 million next year.

The digester, which works at 80°C to break down organic waste into fertilizer, is an integral part of Biomax's process.

Sustainable Growth

Today Biomax offers two versions of its machine, the larger of the two processing up to 50 tonnes of waste a day. Its customers range from a municipal treatment plant in Turkey to a color dye maker in Kenya. Biomax has a presence in 15 countries as well as a subsidiary in Australia, and it plans to open offices in the United States and other locations around the world in the coming years.

To accommodate its rapid expansion, Biomax moved to a larger 10,000-square-foot facility last year, increased its staff to 36 employees, and attracted funding from two venture capital firms.

The company's impressive achievements have not gone unrecognized by the industry. In 2013, Biomax was selected as one of the winners of OCBC Bank's Emerging Enterprise Awards; it also picked up the Frost & Sullivan 2013 Asia Pacific Technology Innovation Award and the ASEAN Business Award for Innovation.

But, at Biomax, it's not just about the bottom line and accolades. Today the company is dedicated to educating Singaporean youth about the importance of sustainability. As part of this effort, Biomax loaned one of its smaller machines, free of charge, to a primary school so that students could witness firsthand the process of recycling waste into something more valuable.

Mr Sim and Ms Fion Chua at a supplier meeting.

Looking ahead, Mr Sim, who remains the company's largest shareholder, is focused on growing its business in the huge markets of Brazil and the United States. Apart from just selling its machines, Biomax also plans to set up facilities in some of the markets in which it operates to gather waste, process it and sell the end product.

"I am confident that in markets like America, there is huge demand for recycling. After all, every country has rubbish," he says.

Confident in his business model, Mr Sim predicts that Biomax's sales will reach US$300 million by 2018. He also plans to publicly list the company's shares around that time.

In the meantime, it's business as usual for the company's growing team of scientists who strive to develop the enzyme-based solutions that will promote sustainable businesses around the world. ■


The design of the digester is also the brainchild of Mr Sim.

Inside the Process

Biomax Technologies' systems convert organic waste into 100% premium-grade organic fertilizer within 24 hours. The technology, called the Rapid Thermophilic Digestion System, is the fastest process of its kind in the organic waste-treatment industry.

Fertilizer can be converted from waste generated by the livestock industry and throwaways from coconut, sugar and other crops. The technology utilizes a system into which any kind of farm or animal waste is mixed with the BM1 enzyme. The waste is then heated at 80°C.

The end result of the process is fertilizer that is rich in organic matter and free of pathogens. In addition, as the waste is processed in a closed and controlled system, any offensive odors are eliminated during the process. The resulting fertilizer can then provide nutrients and food for both plants and soil.

BIOMAX™

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