

**OLIVIA LUM  
GROUP CEO & PRESIDENT  
HYFLUX LTD**

**Background**

Growing up as an orphan in Perak, Malaysia, Olivia Lum's entrepreneurship began early. As a child, she peddled homemade ice-lollies. At 16, the straight-A student came to study at Tiong Bahru Secondary School in Singapore, where she paid her own way by giving tuition and peddling wares. She proceeded to Hwa Chong Junior College and then to the National University of Singapore where she graduated in applied chemistry during the 1986 recession. She joined Glaxo as a laboratory chemist. During her 3 years stint at Glaxo, Olivia saw the immense potential of water treatment business. Driven by passion, she decided to start her own business and sold her condominium and car to raise S\$20,000.

Hyflux started as a 3-person trading company selling water treatment systems in Singapore, Malaysia and Indonesia. During that time, Ms Lum rode a motorbike from Jurong to Batu Pahat, knocking on factory doors to sell her water filters and softeners. She ploughed whatever profits she made back into her business and made her first million five years after she started.

The business grew rapidly and a little more than a decade later, Hyflux became the first water treatment company to be listed on SESDAQ in January 2001. In April 2003, it was upgraded to the Singapore Exchange's mainboard.

Since it's founding, Hyflux has extended its core competency beyond system integration into the realms of research and development, design and build works and consumer products development.

Today, Hyflux is one of Asia's leading water and fluid treatment companies, specializing in the manufacture and use of membrane and related technologies for liquid/solid separation. It is also an integrated solutions provider, offering a suite of turnkey services including process design and optimisation, engineering procurement and construction management, pilot testing, fabrication, installation, commissioning, operation and maintenance as well as Design-Build-Own-Operate (DBOO) solutions.

Through the years, Hyflux has established an impressive track record in the designing, building, supply, operation and maintenance of purpose-built water treatment and liquid separation plants, using advanced membranes for a diverse portfolio of industrial, municipal and governmental clients.

Olivia is the driving force behind Hyflux's growth and business expansion, responsible for policy and strategies formulation and corporate direction. She also heads the Research and Development function, which is her first love.

In addition to a thriving presence in China and Singapore, the Group who has also successfully penetrated the lucrative Middle Eastern market will be setting its sights on India , Southeast Asia and Africa.

## **Recent Achievements**

Hyflux, which now has a staff of 600, has had a truly outstanding four years since its listing. Some of the notable milestones:

### 2001

In December 2001, Hyflux won the contract to build Singapore's first NEWater plant at Bedok for S\$16.1 million. This marked Hyflux maiden entry to Singapore's municipal water market. The plant now processes 32,000 cubic metres of NEWater daily.

### 2002

In September 2002, Hyflux achieved another first by clinching PUB's first advanced membrane potable water treatment plant, constructed at the Chestnut Avenue Waterworks for some S\$27 million. The plant with a capacity of 273,000 cubic metres daily is the largest membrane-based raw water treatment installation in the world.

In December 2002, Hyflux won its third contract from PUB to design and build Singapore's third NEWater plant at Seletar, worth S\$27.8 million. The plant was commissioned and launched in 2004. It now produces 24,000 cubic metres of NEWater daily.

### 2003

In January 2003, for Singapore's first public private partnership, the PUB awarded Hyflux the project to build, own and operate (BOO) Singapore's first desalination plant. With a project value of some S\$200 million, the largest tropical seawater desalination plant in Asia will supply some 136,000 cubic metres of desalinated water a day when completed in June 2005, to meet some 10% of the island's water needs. The financing of the project by 4 international banks, led by DBS Bank gained international recognition, resulting in Euromoney Project Finance Magazine hailing it as the Asia Pacific Water Deal of the Year 2003.

The Group made its first foray into the consumer market in 2003, by acquiring the licence to patent the breakthrough air-to-water technology. Hyflux now holds exclusive manufacturing rights to its air-to-water dragon-fly machines and its patents are filed in more than 37 countries. It is also continually expanding its product range to include other home filtration products.

### 2004

Hyflux's venture in China took a major leap forward in 2004 when it clinched two major projects to build seawater desalination plants in both Tianjin City and Liaoning Province, worth a total of some S\$240 million. These projects herald Hyflux's first foray into China's huge municipal market.

In June 2004, Hyflux was also awarded S\$24 million contract to build a membrane based treatment plant for a pharmaceutical firm in Shanxi province

No doubt the highlight of the year was Hyflux's breakthrough beyond Asia Pacific, into the water-scarce but economically flourishing Middle East market. In October 2004, Hyflux inked a deal with Istithmar Private Joint Stock Co (PJSC) to set up a joint venture (49:51) in Dubai to develop, own and operate water utility projects in Dubai. An investment holding company, Istithmar PJSC is part of a group of companies comprising, among others, the Ports, Customs and Free Zone Corporation and Nakheel Corporation, of Dubai, United Arab Emirates.

The Istithmar deal will give Hyflux access major water infrastructure projects in UAE and its neighbouring countries over the next three years. Hyflux will support the joint venture in developing, owning and operating water utility projects (seawater desalination plants, commercial and industrial water treatment plants, wastewater treatment and recycling plants, distribution networks and collection networks) for Nakheel, one of the biggest real estate developers in the Middle East.

Already, the joint venture is participating in water treatment projects for prestigious developments such as The World and The Palm, which are the world's largest manmade island and located just off the coast of Dubai. These islands are developed for world-class luxury hotels, residences, shopping malls and sports facilities

Following the announcement of this joint venture, Hyflux shares soared as high as \$3.10 a piece.

In November 2004, with the support from the Economic Development Board, Hyflux launched its advanced membrane and materials technology R&D Centre – the largest in Asia outside Japan - to spearhead Hyflux's development in cutting-edge technologies for water and environmental engineering.

## 2005

In January 2005, Hyflux's position as a leading supplier of liquid treatment plants to the biotechnology sector was affirmed when it clinched its largest industrial project to date worth S\$107 million to build-own-operate an organics acid plant in Ningxia Province.

## **The Accolades – The Company**

In less than 15 years, Hyflux has gained recognition in both the financial and business worlds, securing awards such as

- Most Transparent Company Award 2004, Securities Investors Association Singapore (SIAS) Investors Choice Awards 2004
- Enterprise Award 2003, Singapore Business Awards
- Euromoney - Deals of the Year 2003, Asia Pacific Water
- Asiamoney- Best Small Company in Singapore 2002
- Forbes Global - Best under a billion 200 Companies 2002
- Most Admired SESDAQ Company 2002

## The Accolades – Olivia Lum

The driving force behind the phenomenal success of Hyflux, Group CEO and President, Ms Olivia Lum has also received many accolades, which include:

- Global Women Inventors & Innovators Network (GWIIN) Award 2004
- Voted by Business Times readers as Singapore's "Most Creative Entrepreneur" in 2003
- The International Management Action Awards (IMAA) in 2003, administered by SPRING Singapore and the Chartered Management Institute.
- Ernst & Young Entrepreneur of the Year, Singapore 2003

## Financial Performance

As a young but fast-growing company, Hyflux is gearing up to take on more projects in the region. In 2004, Hyflux embarked on a securitisation exercise for the Tuas desalination project. This ongoing exercise is part of the Group's asset light strategy, so as to allow the group with greater financial flexibility.

For FY2004, net profit jumped 37 per cent to \$26.8 million on the back of the Group's revenue of S\$88.7 million compared to S\$81.2 million the previous year. Net margin improved from 24 percent to 30 per cent and earnings per share increased 36% to 8.53 cents.

At the close of trading on December 30, 2004, Hyflux shares stood at \$2.79 apiece (End-2003: \$1.59) and market capitalisation was \$880.7 million making it the 67th largest company on the local bourse, up from 84th position last year.

## Financial Summary

Year	2000	2001	2002	2003	<b>2004</b>
Turnover (S\$ million)	20.8	27.2	45.3	80.1	<b>88.7</b>
Profit before Tax	8.6	9.4	11.8	19.9	<b>29.5</b>
Profit after Tax	6.4	7.3	12.3	19.5	<b>26.8</b>

30 March, 2005