



*Hyflux*TM



Hyflux's Journey Into the European Market

**Europe Business Forum Presentation
Singapore International Water Week
Mr Foo Hee Kiang
25 June 2009**

AGENDA

- **About Hyflux**
- **Hyflux's Foray Into Europe**
- **Looking to the Future**

About Hyflux



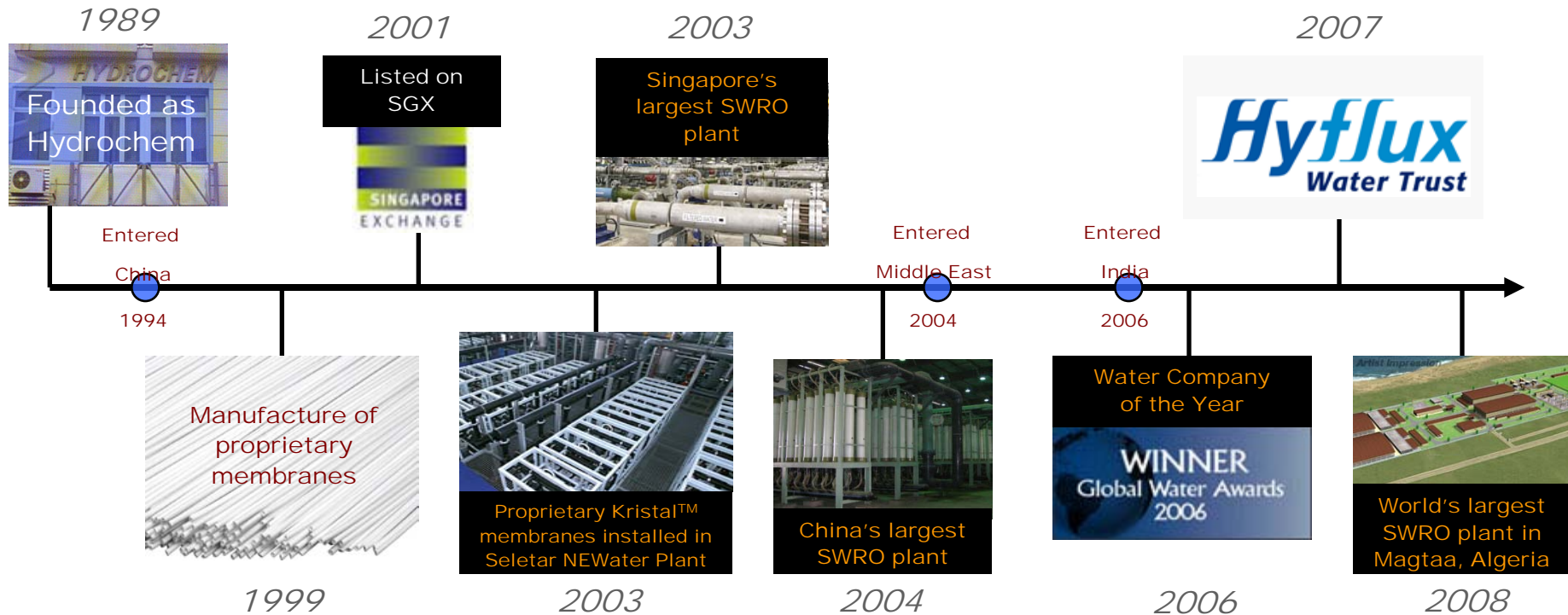
Hyflux: Who We Are

Our Vision

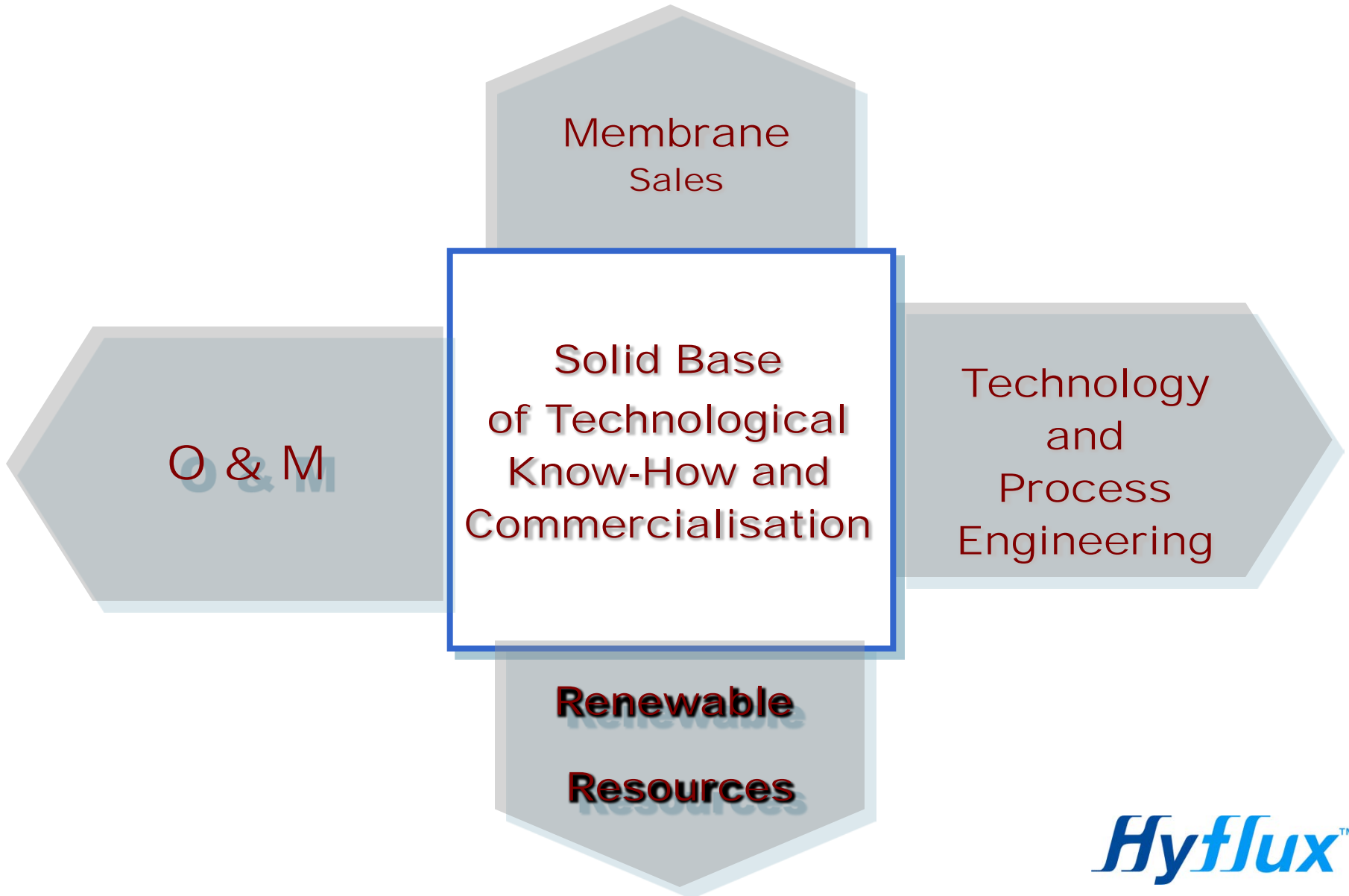
To be the leading company the world seeks for innovative and effective environmental solutions.

Our Mission

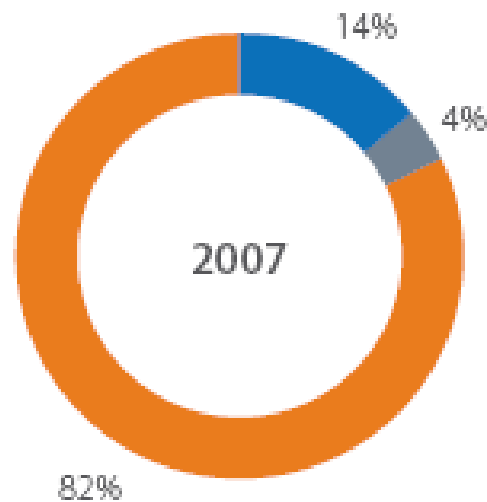
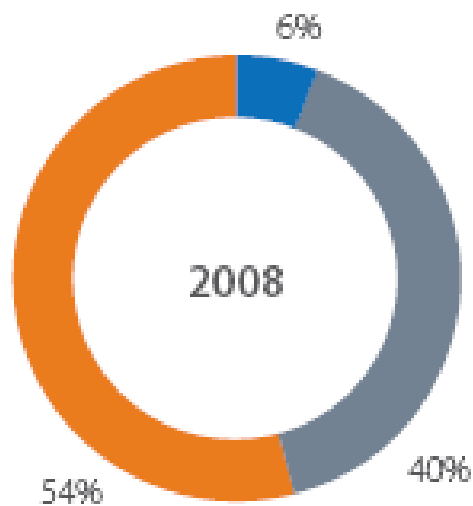
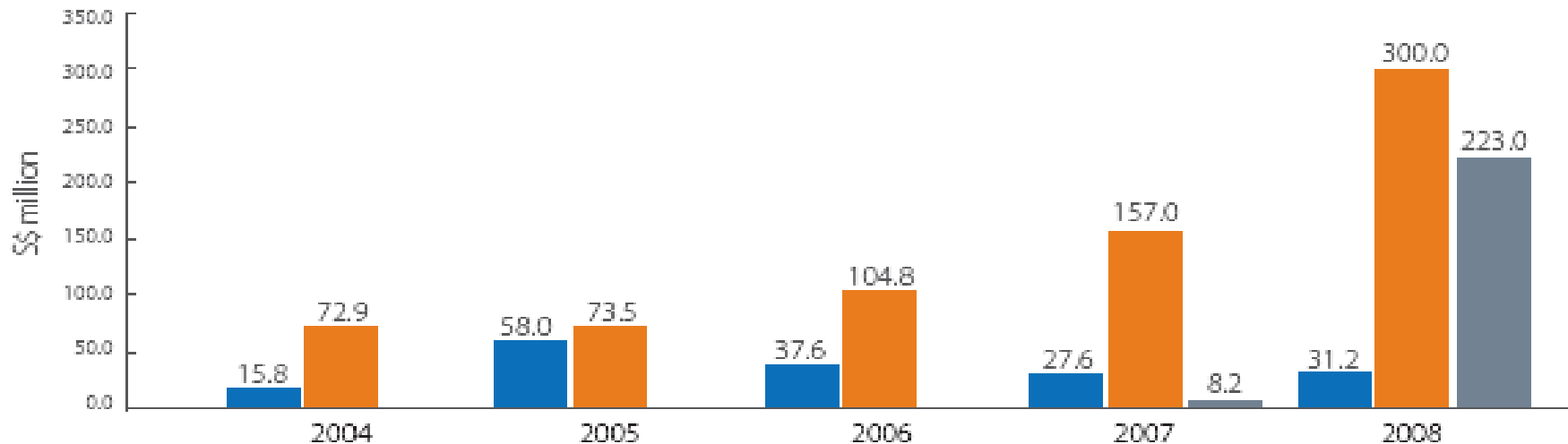
To provide efficient and cost-effective solutions to meet our client's needs through innovation and technological advancement.



Key Businesses



Key Markets By Revenue



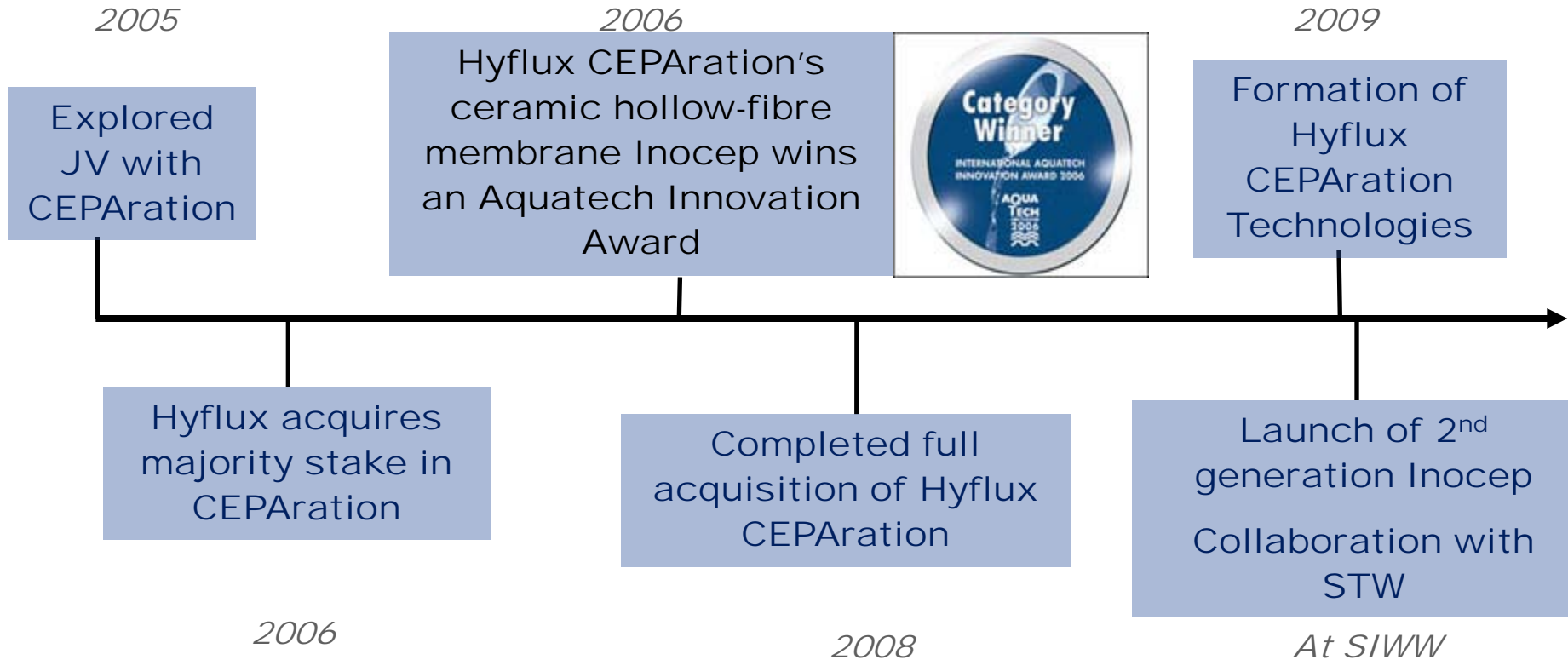
Hyflux's Foray Into Europe



Hyflux's Journey in Europe

OBJECTIVES

- Obtain advanced technologies by collaboration or acquisition
- Establish a foothold into European market



Inocep: Result of Successful Research

- Source of award-winning ceramic hollow-fibre membranes at the biennial Aquatech Innovation Award in 2006
 - Such a configuration of ceramic membranes was the world's first when presented in 2006
 - Hyflux remains one of the very few – if not only company – that can mass-manufacture membranes of such a configuration to date
 - Successful commercialisation has led to industry applications from dairy to pharmaceutical sectors



HyfluxTM

Industrial Sales and Marketing In Europe

- Numerous proven applications of Hyflux membrane products – including InoCep – coming from Europe:
 - Dairy & Milk
 - Beer
 - Wastewater treatment
 - Industrial chemicals
 - General food and beverage



Challenges

- **Stringent regulatory requirements especially environmental**
- **High labour cost**
- **Matured market**
- **High taxes**
- **Perception of companies originating from the East**

Looking to the Future



Twin Pronged Strategy

Research and commercialization in tandem with leading universities across Europe

Continue with Membrane Sales
Wastewater Recycling
Seawater Desalination

*Hyflux*TM

Co-operation With STW

Formation of separate Hyflux CEPAration Technologies to conduct R&D
will streamline research efforts



Membrane Sales

KRISTAL

- Polymeric hollow-fibre membrane
- Frost and Sullivan Desalination Technology of the Year 2007



FERROCEP

- Stainless steel tubular membrane
- *Handles difficult industrial streams with high viscosity and solid content*

INOCEP

- Ceramic hollow-fibre membrane
- *Withstands high temperature, pressure and PH values*

Applications

- Zero Liquid Discharge Wastewater Treatment
- Water Recycling
- Seawater Desalination Pretreatment

- Solving separation bottlenecks in industries like chemical processing, F&B and biopharmaceuticals

- Fermentation broths of amino acids, anti-biotics and vitamins



**Hyflux membranes installed in more than 1,000 plants
in over 300 locations across the globe**

One Stop Solutions Provider for Desal & WRP

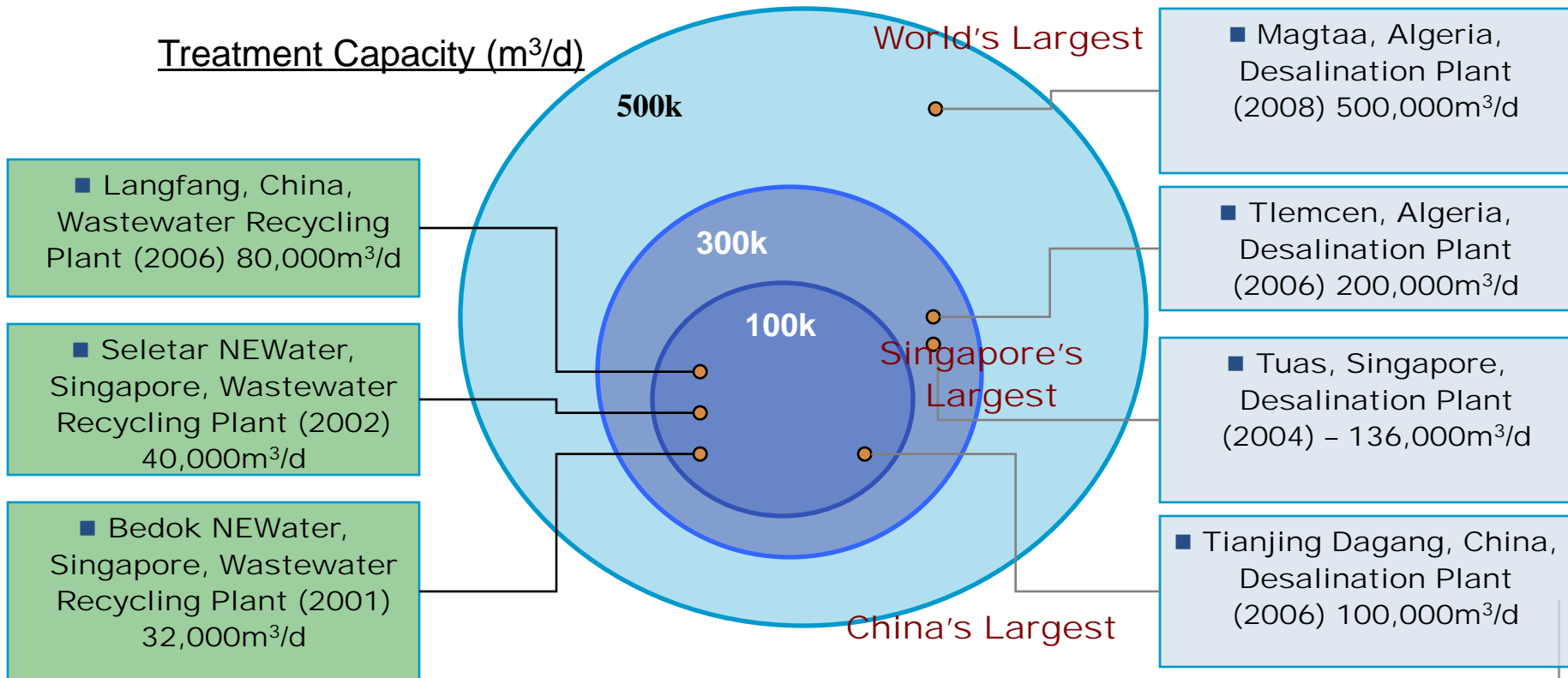
Capturing the full value chain from plant design and construction to O&M

Best-Value Solution

Scalability

Geographic Reach in SE Asia, China and MENA

Treatment Capacity (m³/d)



Track Record: Seletar Water Reclamation Plant

**Client: Public Utilities Board,
Singapore**

**Design & Construction of High Grade
Water Reclamation Plant**

**24,000 m³/day, expandable to 40,000
m³/day**



Recycles Wastewater Into High Grade Water Using
Proprietary Kristal Membrane as Pretreatment

Won Highly Commended Award, Wastewater Recycling
Plant of the year, Global Water Awards 2005

Hyflux also provides O&M services for 3 other similar
plants in Singapore and China

Track Record: SingSpring Desalination Plant

SingSpring Desalination Plant

Client: Public Utilities Board Singapore
Project Type: 20 yr Design-Build-Own-Operate Concession
Capacity: 136,380 m³/day



Singapore's largest membrane-based Seawater Desalination Facility

- **Boasts high levels of energy and operational efficiencies**
- **Won Distinction Award for Desalination Plant of the Year at Global Water Awards 2006**

Thank You

At Hyflux, we make things happen.