

**CLEANTECH  
CAPITAL DAY**

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# Investment Opportunities in Water Tech

*Lydia Whyatt, Foursome Investments Ltd*

**FOURSOME**  
INVESTMENTS





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## Foursome Investments – Brief Summary

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- Foursome Investments Ltd is a London based investment management business with \$115m funds under management.
- Strong focus on clean technology and environmental issues since inception (1998), dedicated new Cleantech fund since October 2006 (Foursome Cleantech LP I), with strong focus on water technologies.
- In Water Tech we focus on the following areas:
  - Water recover and re-use
  - Energy efficiency
  - Energy from waste streams
  - Materials from waste streams



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## M Parkman/Foursome - Water TAG

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- **Mouchel Parkman Group is one of the largest engineering consultancies in the UK**
  
- **‘Water TAG’ – Industry Technology Assessment Group with major water utilities in the UK founded by Mouchel Group**
  
- **Foursome is a founding VC/PE member**
  
- **Track record 2005-2007**
  - **350 technologies reviewed to date**
  - **29 presented to TAG**
  - **23 presented to investors**
  - **£14.5m invested**
  - **First exit in June 2007**





# Foursome CleanTech Portfolio



Water Sciences Ltd

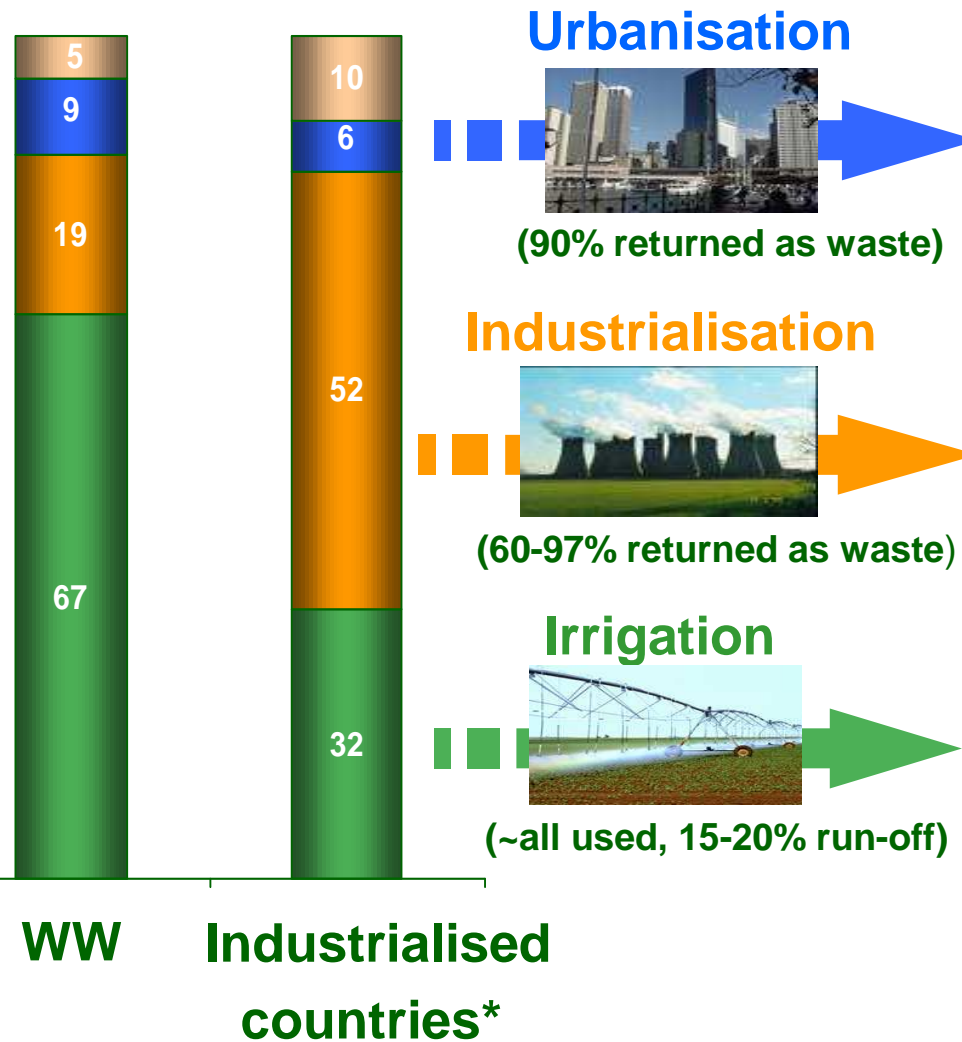


Oxsensis

multi parameter optical sensing



# Why Water is an issue/opportunity for VC?



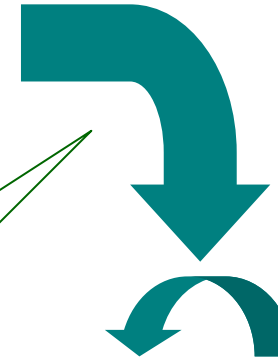
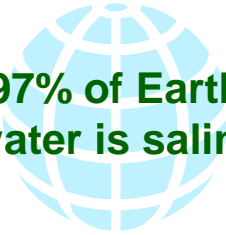
By 2025 WW water demand is to increase from **3750 km<sup>3</sup>** to **5100 km<sup>3</sup>**, for some industrialising countries - **3-5 times**

\* US example  
 Sources: USGS, UNESCO

# Water Tech Could Be Key Solution



97% of Earth  
water is saline



## Desalination

- \$3.8b market, only 1% of all fresh water used
- Desalination equipment market: **20-25% growth p. a 2005 - 2015.**



## Water Re-use

- Only small% of waste water is re-used
- Re-use tech market growth (ex.):
  - UV technology market: **15-30% p.a.**
  - Membrane filters: **15-20% p.a.**





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## Areas of VC activity to date

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- Desalination technology,
  - e.g. Altela (US), Water Sciences (UK)
  - energy tech for desalination e.g. Oceanlinx (formerly Energetech, AU)
- Water Re-use technology:
  - Advanced filtration technology (micro-, ultra-, nano-, and ion exchange membranes), e.g. Stonybrook (US), Inge AG (GE), Pionetics (US)
  - Chemical free disinfection technology (UV, ozone, AOP, etc), e.g. Quay Technologies (UK), Ozonetech (Sweden), Atlantium (Israel).
- Sensor Technologies: e.g. Sensicore (US), Intellitect (UK)

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# Foursome Portfolio Examples

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## Quay Technologies Ltd



Date of Investment: 2003

*Nature of Business:* Water Purification Technology

*Website:* [www.quaytechnologies.com](http://www.quaytechnologies.com)



**Quay Technologies** has developed a revolutionary UV disinfection system using electrode-less lamps which provide substantial performance improvements and cost savings (2x) for the waste water and drinking water industries. Development partnership with Philips. Preferred supplier to a number of major UK utilities, growing business in Eastern Europe, recent installation in China. Acquired By Severn Trent Services, a division of Severn Trent Services (part of the major UK PLC with £3bn market cap).





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## Foursome Portfolio Examples

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### Water Sciences Ltd

Date of Investment: 2006

Nature of Business: Desalination Technology

**Water Sciences** is a seed stage company which has developed a breakthrough, low cost approach to desalinating seawater. Foursome has funded proof of concept trials alongside our venture partner. Early results are showing energy savings over current reverse osmosis approaches of up 5 times.

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## But Low Level Compared to Energy

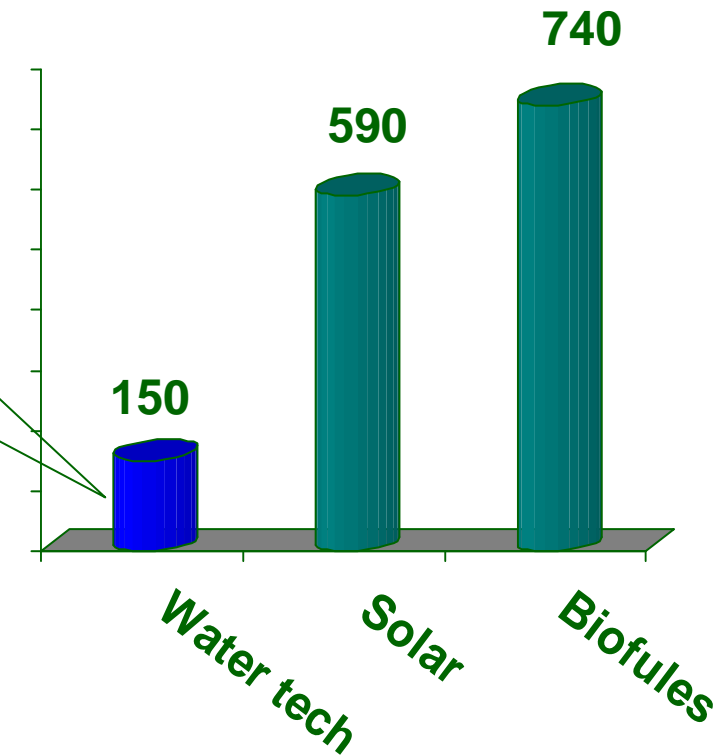
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*“ a Drop In the Bucket” (www.vcjnews.com)*

Water Tech  
is still only  
**6-10%**  
of all  
Cleantech VC  
investments

**US VC capital deployment 2006,  
\$m**



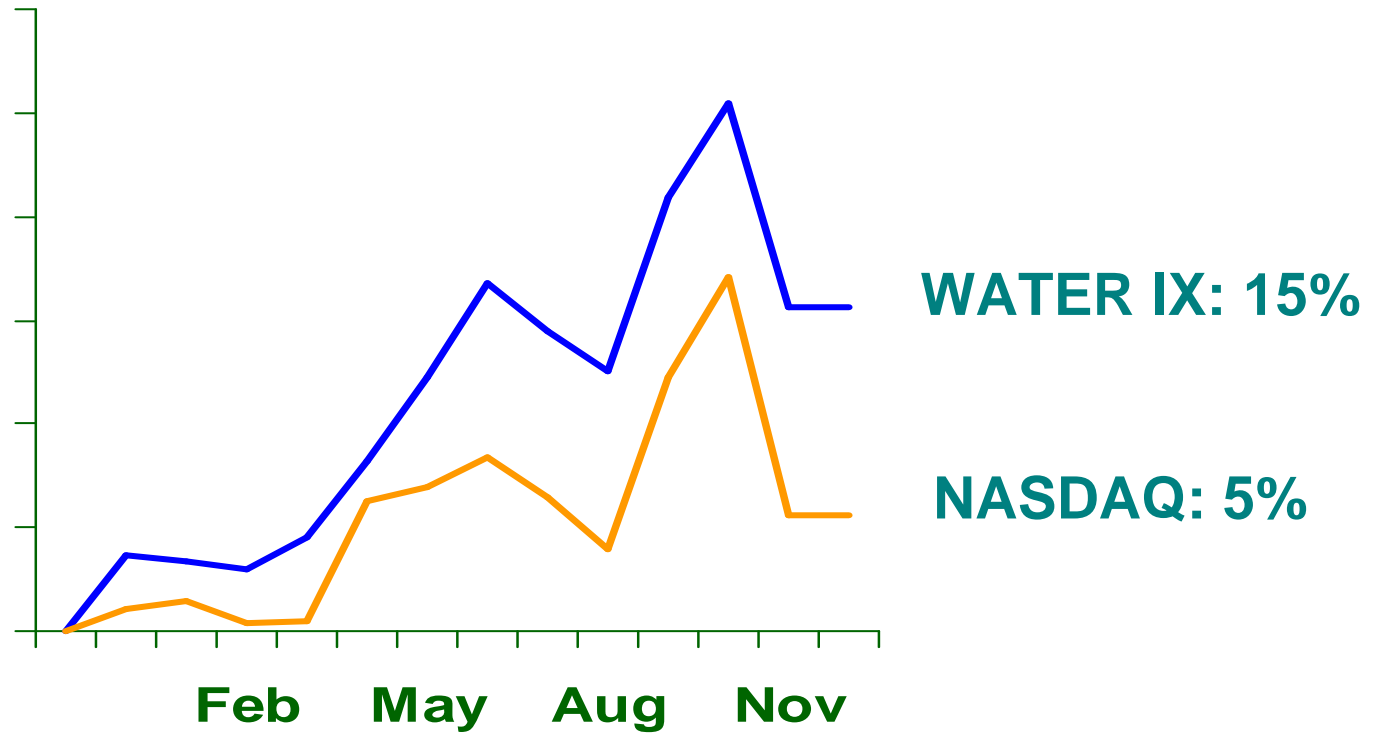
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# Despite Strong Public Markets And M&A

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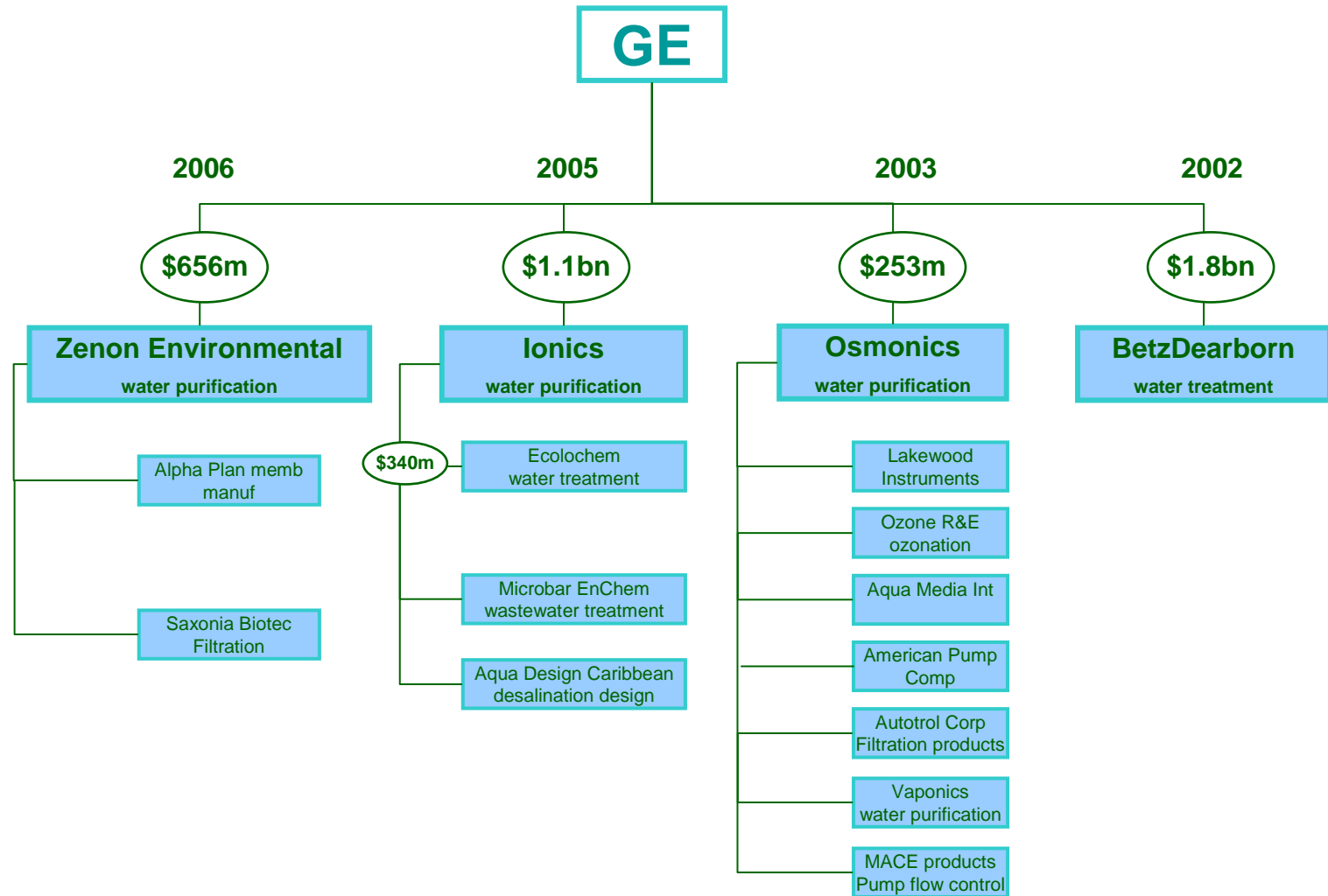


*Water Index\* Versus over 2007*



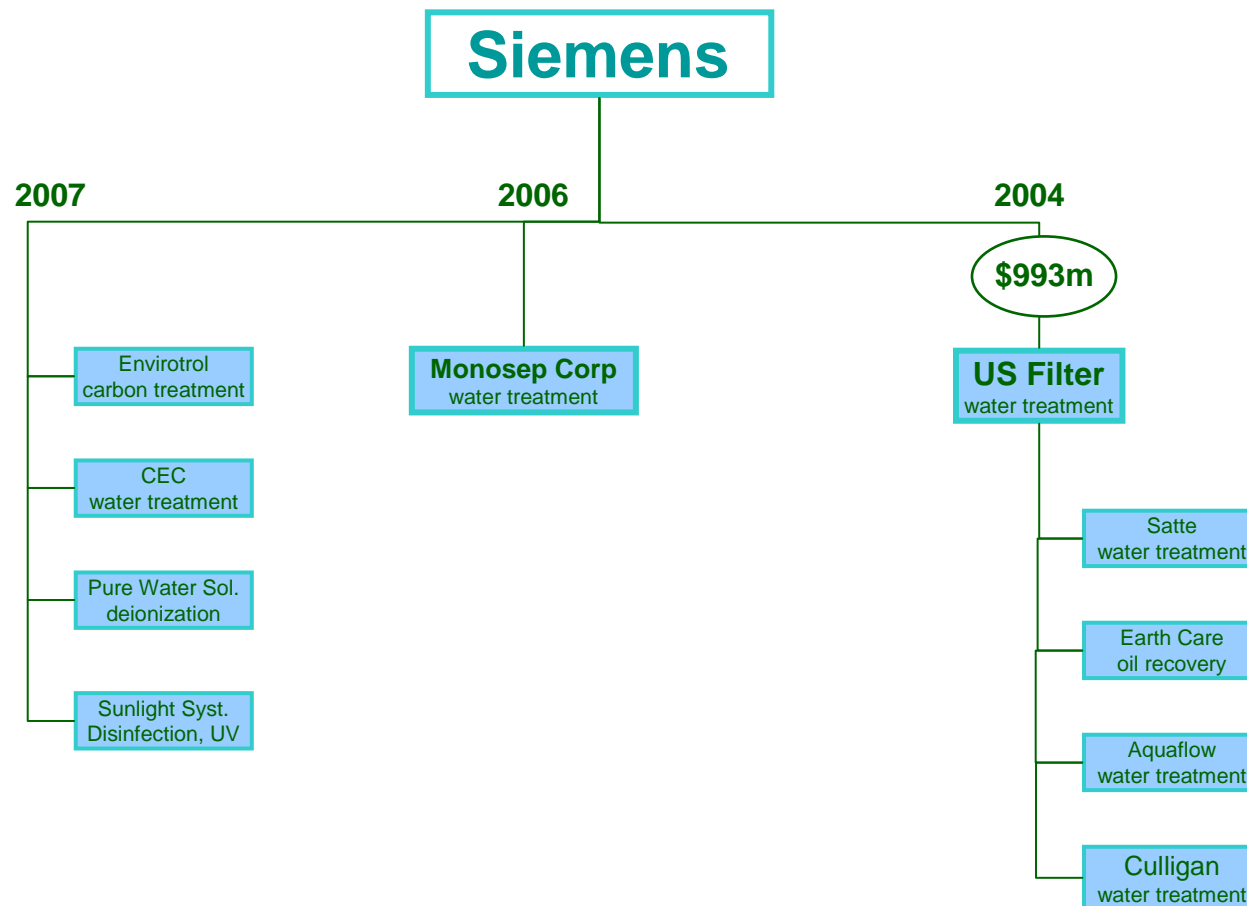
\* Palisades Water Index (AMEX: ZWI)

# M&A activity - GE Builds Water Business

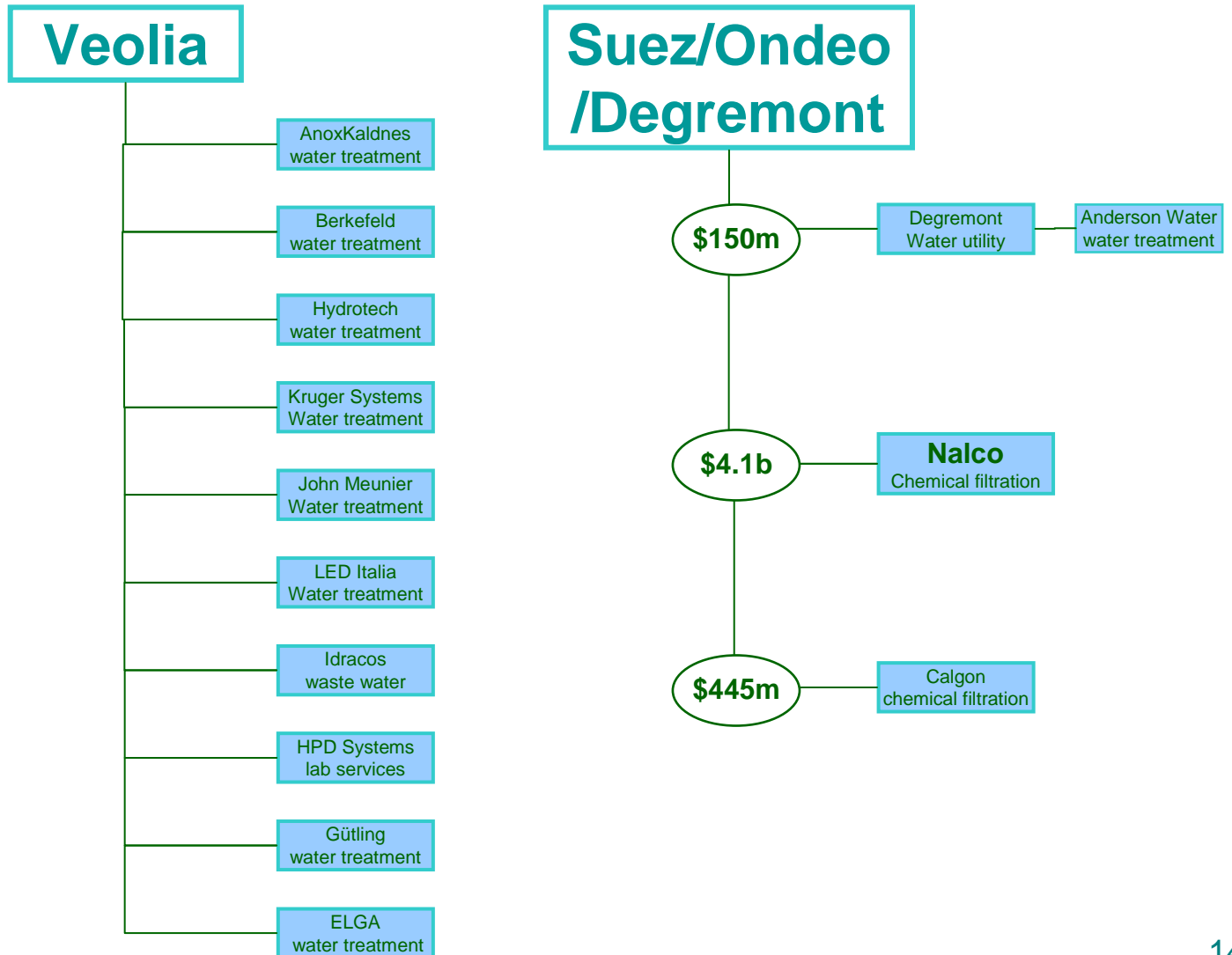




# M&A activity - Siemens: head to head



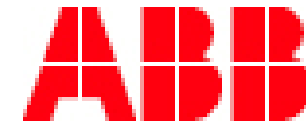
# M&A activity - Veolia and Suez



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# Other Large Active\* Water Tech Acquirers

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\* Acquired or actively looked to acquire a water tech company during the past 12 months

## And Recent Water Tech IPOs



Company Name	Description	Market	Date Listed	MC at IPO
Modern Water, UK	Subsidiary of IP Group, IP commercialisation company	LSE	June 2007	£99m
Basin Water, US	Producer and supplier of water filtration systems	NASDAQ	May 2006	\$200m
Amiad, Israel	Producer and supplier of water filtration systems	AIM	December 2005	£35m (now £45m)
Hyrdo Int, Israel	Treatment of stormwater and wastewater	AIM	April 2005	£20m (now £44m)
Metal- Tech, Israel	Extracts metals from industrial sludge	AIM	May 2005	£70m
Bio-Treat Technology, China	Uses biotechnology for waste and water treatment	SGX	February 2004	SGD355m (today > SGD1bn)
Christ Water Technology, Austria	Water and wastewater treatment	VSX	November 2004	£164m





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## Why Not More Investment Activity?

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- Exits are not as attractive as in other CleanTech sectors:
  - **Collection of niche opportunities rather than a “holy grail”**
  - **A lot of M&A, but mainly small acquisitions**
  - **IPOs are not as “flashy” as Q-Cells or REC.**
- Risks are high for early stage:
  - **Barrier to entry are very high for early stage**
  - **Long sales cycles, conservative customers**
  - **Slow corporate customers on the waste water side**
- Lack of good opportunities/teams to back:
  - **Historically low interest from entrepreneurs for the reasons mentioned above**
  - **Under-investment in testing technologies on commercial scale due to the early stage capital gap**



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## But There Are Reasons to Be Optimistic:

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- The market is becoming more dynamic:
  - **Water utilities outsource asset maintenance, creating both PE buy-out and VC tech opportunities**
  - **The customer base is spreading: Industrial waste water will increasingly become the responsibility of the polluters**
- The issues are becoming more acute:
  - **Environmental awareness**
  - **Rising energy cost**
  - **Regulation is starting to bite in some markets (WFD)**
- Supply of deal is getting better (but things take time)
  - **Corporate interest (e.g GE, Siemens, IBM) “woken up” entrepreneurs and universities**
  - **Government funds committing to long term water tech (Singapore, Israel, etc.)**
- No bubbles to burst!
  - **Less competition for deals (at least at the moment)**
  - **Space for knowledgeable investor as picture is more complex**
  - **No inflated expectations and government credits**

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# Foursome Future Focus in Water Tech

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- **Energy efficiency:**
  - **It costs 3-5 times more to desalinate water than to pump out of the ground**
  - **Removing persistent pollutants from waste water (WFD) will be very energy intensive (UV, AOP, filtration, etc)**
  - **Transporting water is becoming a more common feature (e.g. Canada to US)**
  
- **Industrial biotech application to waste water:**
  - **Most cost effective treatment (and least energy)**
  - **Any wet organic waste is a feedstock**



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## Contact Details

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