

## Water

Investments with above  
average growth potential

Dr Marc-Olivier Buffle  
Zurich September 2008

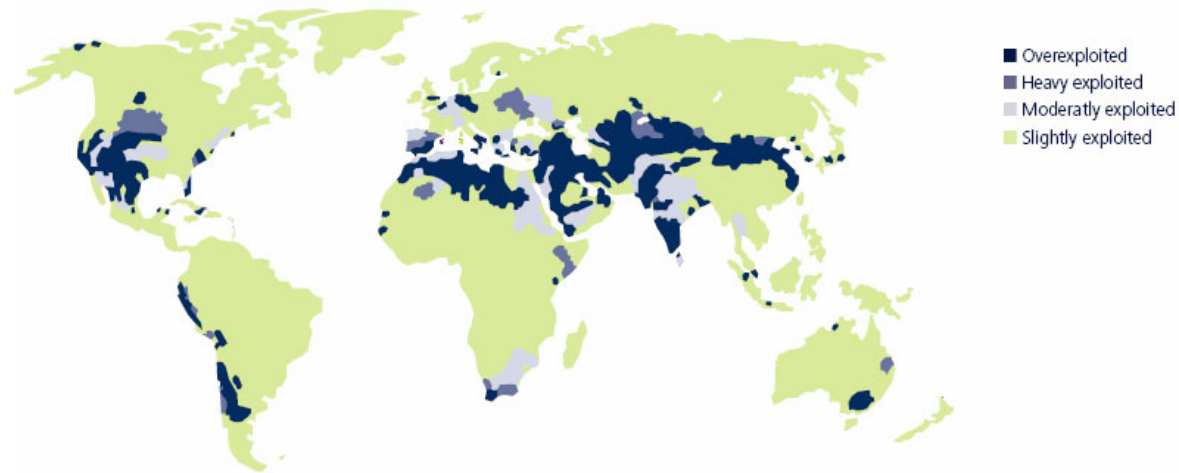


# Macro Trends Shaping the Water Sector

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## Demographics

- Growing world population
- Regional migrations
- Spread of “western” consumerism
- Urbanization
- Population age structure



**Water reserves exploitation**  
Source: UNDP, Human Development Report 2006

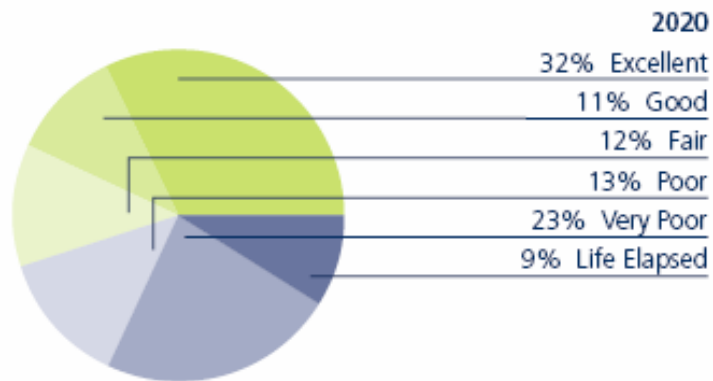
# Macro Trends Shaping the Water Sector



Cleveland, March 2008, AP

## Aging Infrastructure

- Increasing leaks → water losses (DW) & contamination (WW)
- Increasing breakages → structural damages
- Unreliable Metering → loss in revenue



State of the US water distribution networks

Source: US EPA, Clean Water and Drinking Water Infrastructure Gap Analysis Report, 2002

# Macro Trends Shaping the Water Sector

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## Water Quality & Health

- New chemicals produced
- Increased sensitivity of analytics
- Rising awareness of water cycle interactions
- Rising awareness of long term health effects
- Spread of zero-risk tolerance
- Growing global commitment towards “water-for-all”



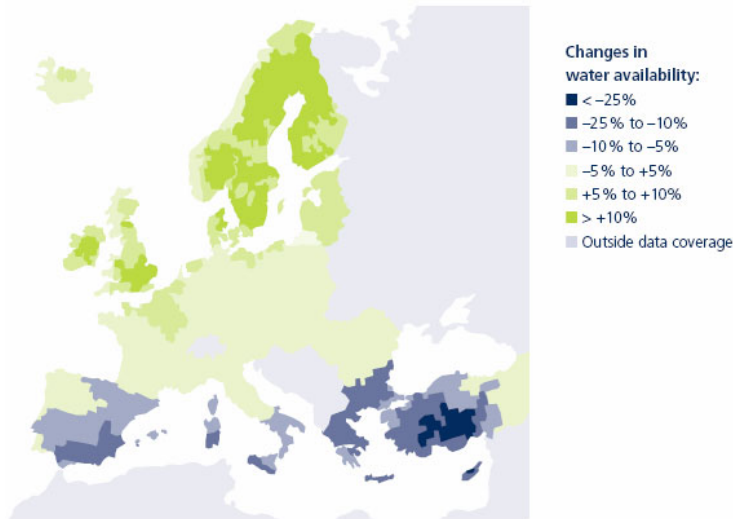
Padding in Manila Bay

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## Climate Change

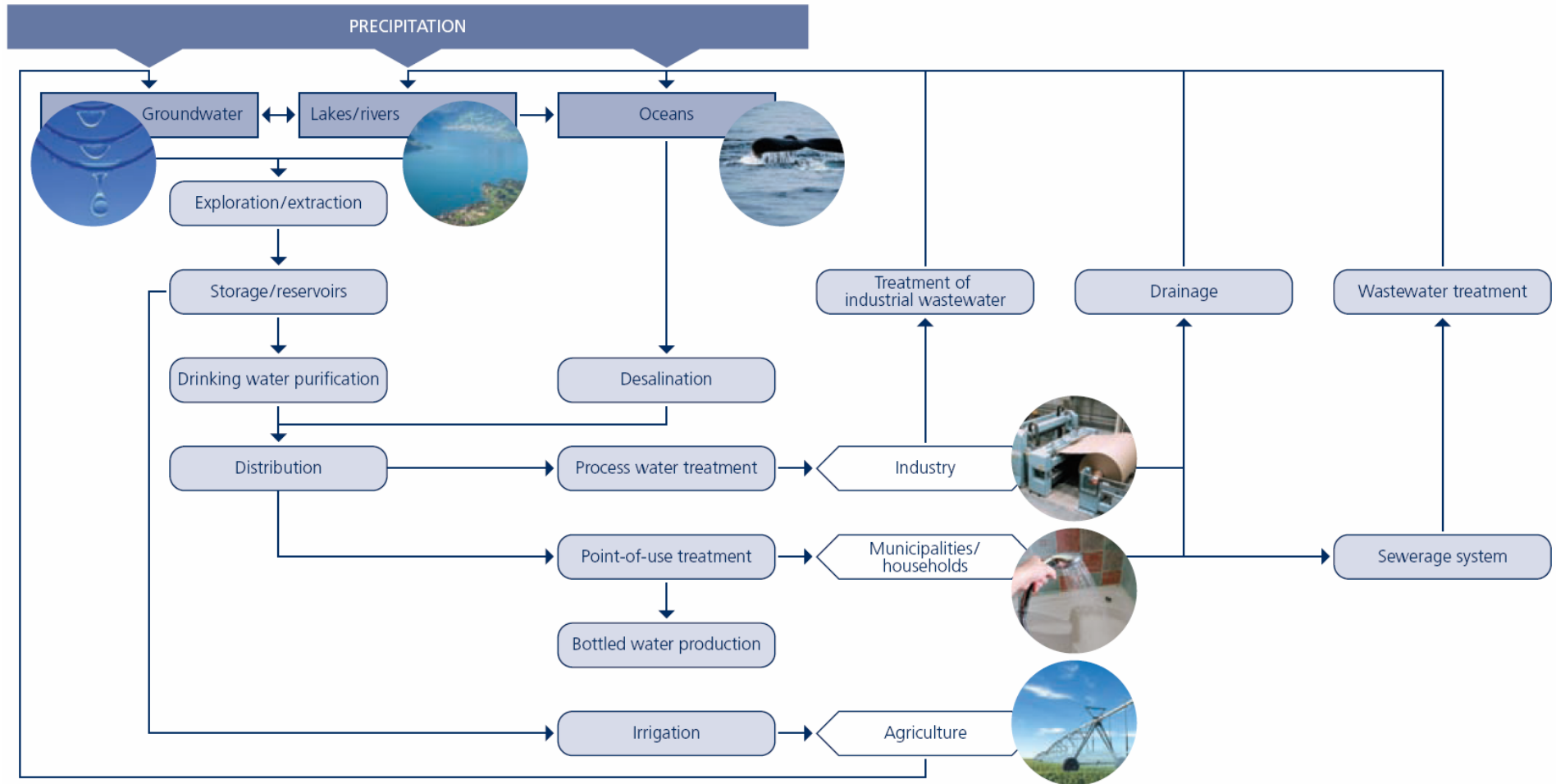
- Increased evaporation
- Increased variability of rainfall
- Long term decrease in river runoff
- Increased water droughts
- Increased intensity and frequency of severe weather events



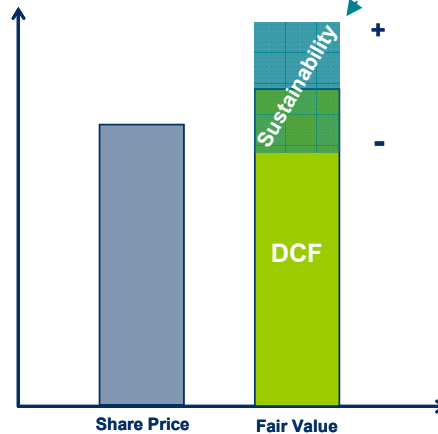
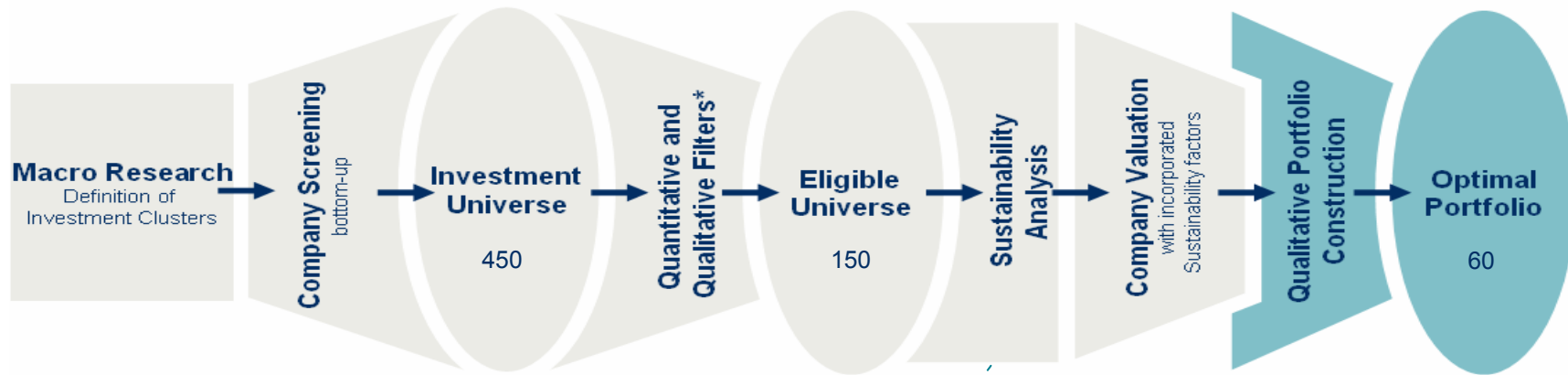
**Water availability in Europe in 2025**

Source: The European environment – State and outlook 2005.

# Opportunities Found along the Water Value Chain



# Investment Process



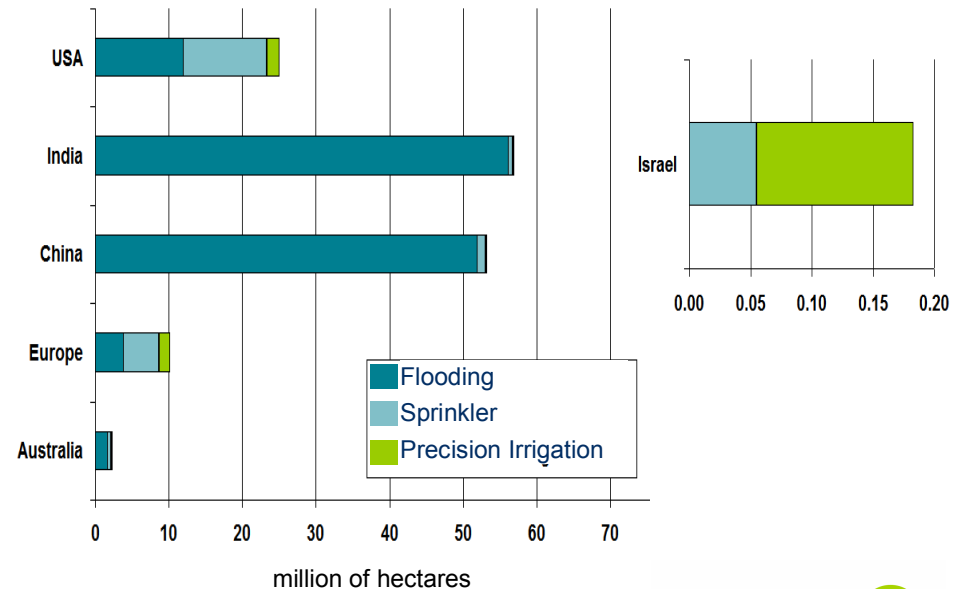
# Example: Irrigation

## Xinjiang Tianye: efficient irrigation

- Micro-irrigation: less water, less fungicide, increased harvest
- High potential due to intensive agriculture and scarce water resources in Xinjiang region
- Leading  $\mu$ -irrigation company in China



Xinjiang Tinaye



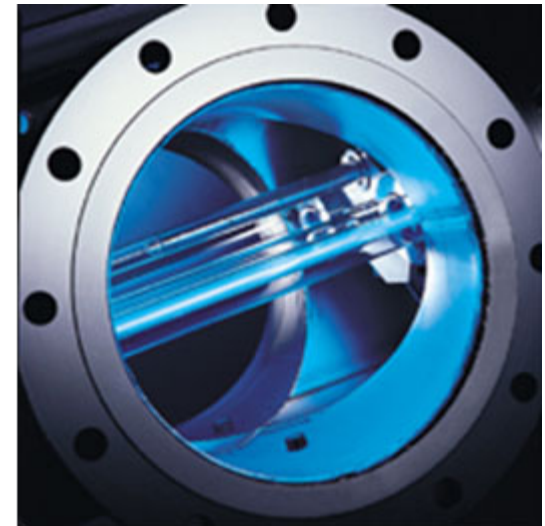
Agricultural land irrigated  
Source: FAO, ICID, SAM

# Example: Advanced Treatment

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## Danaher Corp: advanced disinfection

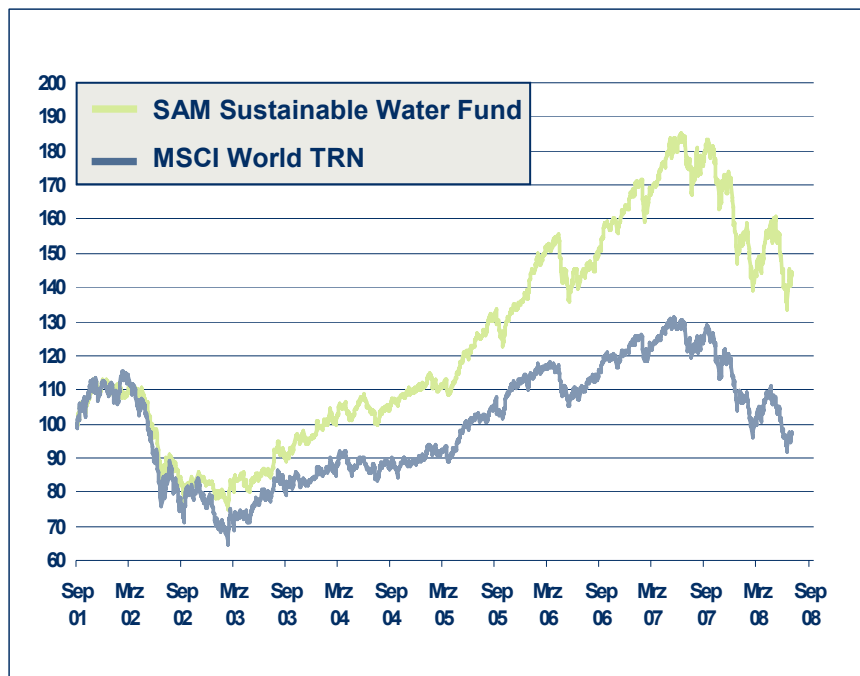
- In 1993, 400'000 people sick in Milwaukee due to *Cryptosporidium Parvum*
- Disinfection standards raised to include *Crypto*, but existing disinfectant ineffective
- New technology, UV disinfection, inactivates *Crypto*
- UV market is US\$ 500 mio growing at 14%
- Danaher won bid to supply New York City with UV technology. System will contain upwards of 10'000 lamps



Danaher Corporation, Trojan Technologies

# Performance Comparison with Benchmark

SAM Sustainable Water Fund (B-Shares, in EUR, as of July 31, 2008, since inception)



Source: Bloomberg

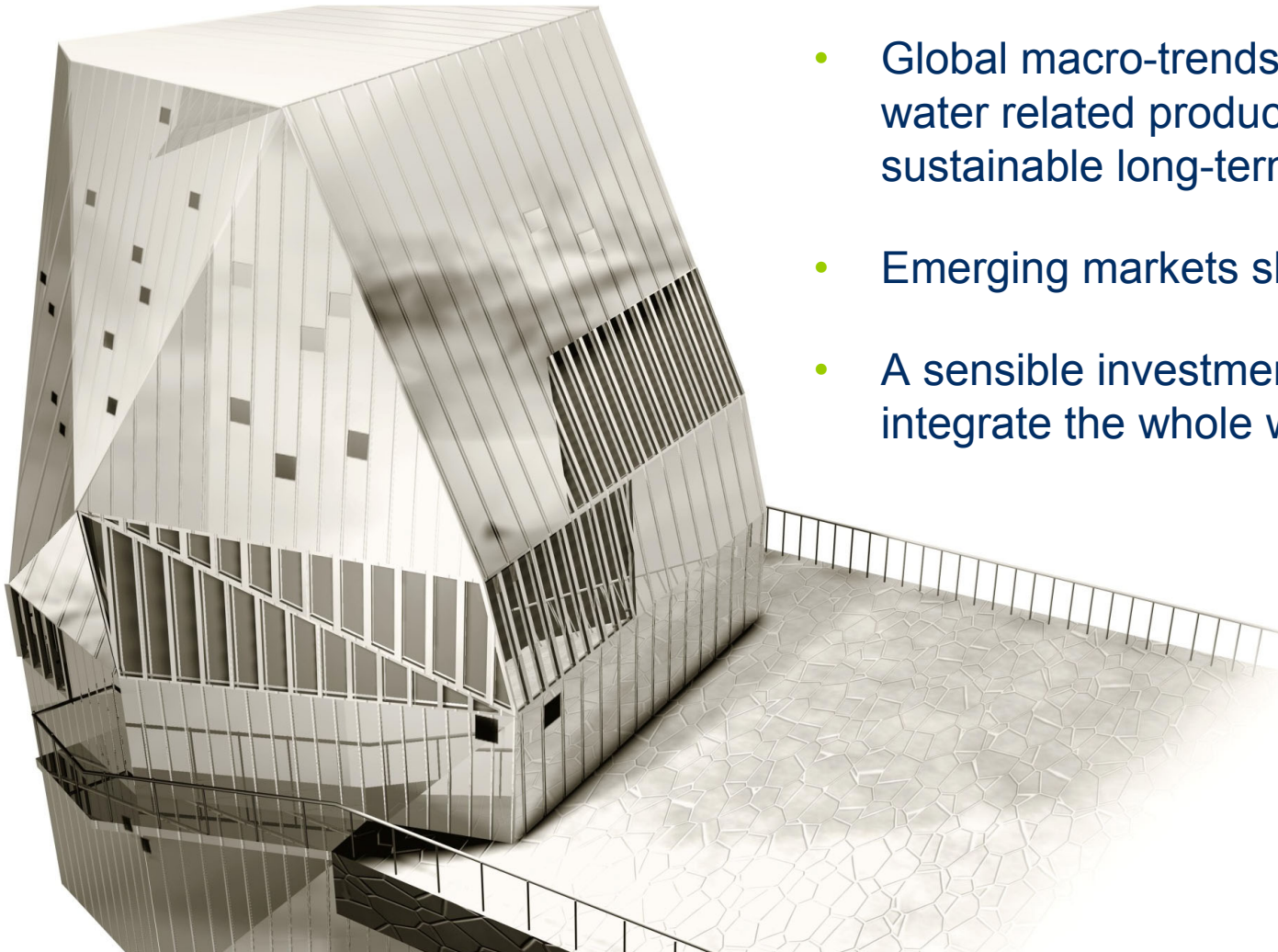
versus MSCI World since inception	Water Fund
Excess Return / annum	5.7 %
Active Risk (tracking error, ex post)	7.6 %
Beta (ex post)	0.83
Information Ratio	0.75
Companies in portfolio	68

Past performance is no indication of future results. The values and returns indicated here do not consider the fees and costs which may be charged when subscribing, redeeming and/or switching units.

# Conclusion

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- Global macro-trends drive demand for water related products and services : sustainable long-term growth
- Emerging markets show strongest growth
- A sensible investment approach must integrate the whole water value chain



Monte Rosa cabin: sustainable water and energy usage