

**Case Study**

**Assessment of the Global Desalination Market**



# Case Study

## Assessment of the Global Desalination Market



### About the Client



- The client is an international investment group

### Client Objectives / Goals



- Understand the global desalination market, with a focus on small-scale desalination plants
- Decide whether to invest in small-scale solar-powered mobile desalination plants

### Approach and Methodology



- An initial hypothesis was constructed based on our preliminary research and discussions with the client. The initial hypothesis was “small-scale desalination plants are not economically feasible”
- The hypothesis was rigorously tested based on our analysis of the global desalination market, covering historic and forecasted market value and capacity
- Assessed the geographic and technological landscape of this sector and identified few of the challenges affecting the various plants
- Benchmarked leading desalination companies based on their cost structures, technology, operational and financial parameters

### Sample Output



**RE-desalination: A growing market where costs typically increase with decrease in production capacity**

Capacity	Target Customers	Capacity	Target Customers	Capacity	Target Customers	Capacity	Target Customers
< 100 m <sup>3</sup> /d	Single users like households	100 - 10,000 m <sup>3</sup> /d	Holiday Homes	10,000 - 1,000,000 m <sup>3</sup> /d	Villages and Hotels	> 1,000,000 m <sup>3</sup> /d	Municipalities

  

Category	Typical Capacity (m <sup>3</sup> /d)	Water Generation Cost (MPC)
Reverse Osmosis	100-10,000	2.0
Electrodialysis	100-10,000	2.5
Thermal Desalination	100-10,000	4.0
Distillation	100-10,000	4.5
Other	100-10,000	5.0

  

Category	Typical Capacity (m <sup>3</sup> /d)	Water Generation Cost (MPC)	Assessment
Reverse Osmosis	100-10,000	2.0	Highly Efficient
Electrodialysis	100-10,000	2.5	Highly Efficient
Thermal Desalination	100-10,000	4.0	Lowly Efficient
Distillation	100-10,000	4.5	Lowly Efficient
Other	100-10,000	5.0	Lowly Efficient

### Results / Value-add



The client was planning to make a multi-million dollar investment in a technology that it wasn't bullish about. Based on our detailed and neutral analysis of the market and the prevailing cost structures, the client did not go ahead with the investment