December 2018, Las Vegas

Desalination in Israel
and RSDS Project

Abraham Tenne
Former Head of Desalination Division and Water Technologies
Former Chairman of the WDA (Water Desalination Administration)
Water, Wastewater and Desalination consultant

atenne66@gmail.com  972-50-6221342
Because we don't share Moses' abilities
to draw water from the rock...
National Water Supply and Consumption: Past to Future
Increasing Use of Alternatives

Source: Water Authority - Master Plan
Water Technologies

- Advanced Filtration Systems.
- Advanced water leakage detection systems.
- Water saving and efficient use of water.
- Developing water saving plantation.
- Storm water treatment and collection.
- Water security.
- Smart city
- National water management
<table>
<thead>
<tr>
<th>Water supply</th>
<th>Agreement method</th>
<th>Capacity MCM/Year</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2005</td>
<td>BOT</td>
<td>100</td>
<td>Ashkelon</td>
</tr>
<tr>
<td>May 2007</td>
<td>BOO</td>
<td>30</td>
<td>Palmachim</td>
</tr>
<tr>
<td>2013</td>
<td>BOT</td>
<td>150</td>
<td>Sorek</td>
</tr>
<tr>
<td>2015</td>
<td>BOT</td>
<td>100</td>
<td>Ashdod</td>
</tr>
<tr>
<td>December 2009</td>
<td>BOT</td>
<td>100</td>
<td>Hadera</td>
</tr>
<tr>
<td>2010-2013</td>
<td></td>
<td>105</td>
<td>Hadera</td>
</tr>
</tbody>
</table>

Total: 585 MCM/Year

Operation stage 8.2005: Ashkelon (120)
Operation stage 8.2007: Palmachim (45)
Operation stage 8.2013: Sorek (150)
Operation stage 12.2009: Hadera (130)
Operation stage 5.2007: Ashkelon (120)

Ashkelon Desalination Plant

- **Construction** beginning January 2003
- **Operation** beginning August 2005
- **Production capacity** 120 MCM/Year
Palmachim desalination plant

- Construction beginning January 2005
- Operation beginning January 2005
- Operation capacity 90 MCM/Year
Hadera desalination plant

- Construction beginning June 2007
- Operation beginning December 2009
- Production capacity 127 MCM/Year
Soreq desalination plant

Construction beginning January 2011

Production capacity 150 MCM/Year

Operation beginning August 2013
Ashdod desalination plant

Construction beginning June 2011

Operation will start by the end of 2015

Planned production 100 MCM/Year
RSDS-Phase I

- Red Sea Intake capacity 300MCM
- Desalination plant with capacity of 65MCM – 35 for Israel and 30 for Jordan
- Discharge to the Dead Sea 235MCM
- 31 MW of HEPP
- BOT project managed jointly by Israel and Jordan