



Israel National Water Co.  
EMS Mekorot Projects  
Development & Enterprise Ltd

# Implementing Resilience Under Extreme Conditions in a Water Stressed Region

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**Water should not be taken for granted. We make it happen, in Israel and in the world!**



# Facts and Figures About Mekorot



**Revenue**  
\$1 billion per annum



**Supplies 85% of Potable water in Israel**



**1,200 Water well drillings**



**Investments**  
\$350 million per annum



**Supplies 70% of total water consumption**



**3,500 Facilities**



**Employees**  
2,400



**Reuses 60% of Israel's treated wastewater**

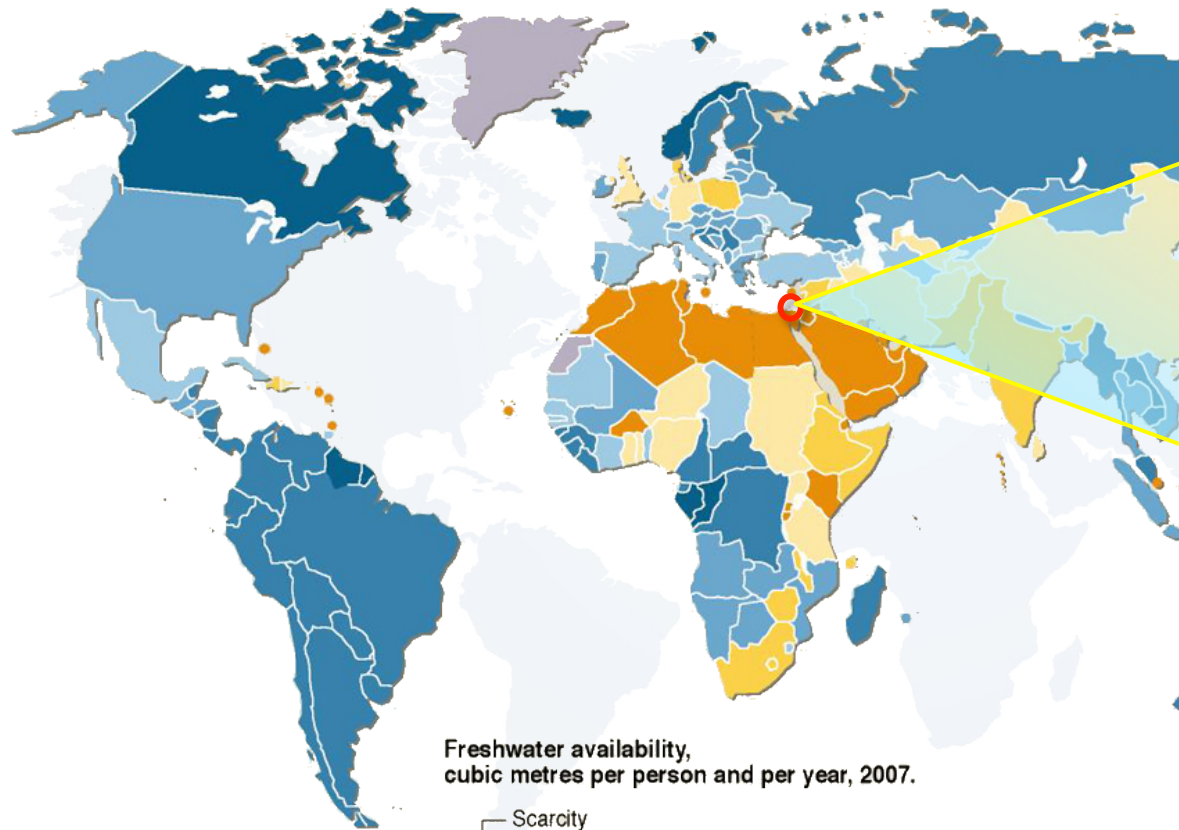


**12,000 km of water lines**

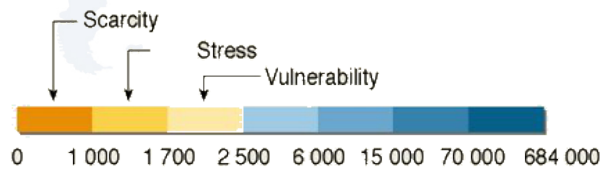




# United Nations Freshwater Availability Map



Freshwater availability,  
cubic metres per person and per year, 2007.



Data non available

Source: FAO, Nations unies,  
World Resources Institute (WRI).

PHILIPPE REKACEWICZ  
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# Achieving Water Security Despite the Scarcity

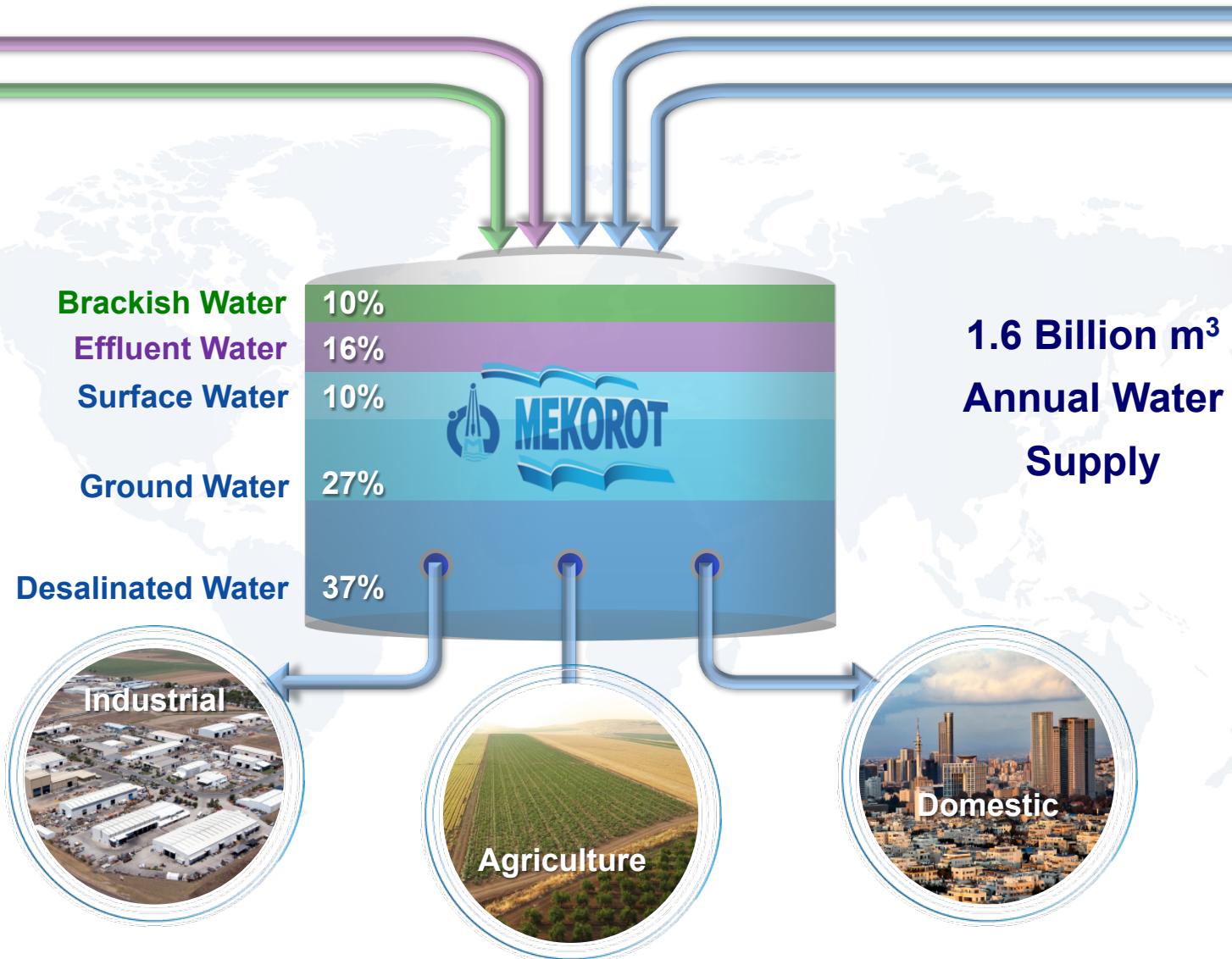
## **comprehensive Solutions:**

- **Integrated water resources management**
- **Reuse of treated effluents**
- **Sustainable management of the natural resources**
- **Smart integrative command & control**
- **Seawater and brackish desalination**
- **Applied Innovation**





# Integrative Real-Time Water Management





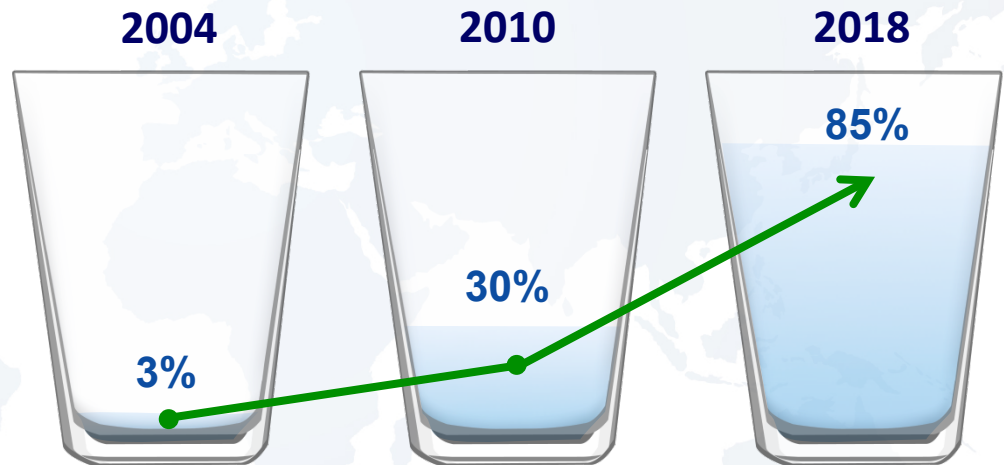
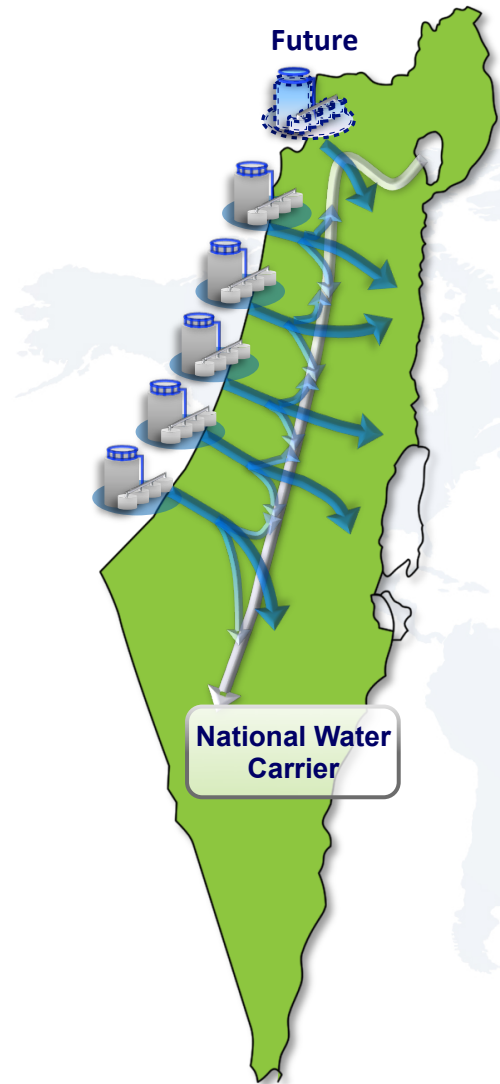
# The New National Water Carrier

## The Revolutionary National Water System





# The Desalination Revolution





# Renovation of Wells

- Israel





# Effluent Reclamation

- Israel reuses more than **85%** of the treated effluents
- Israel's strategic goal for the next decade is to increase the reuse to **90%**

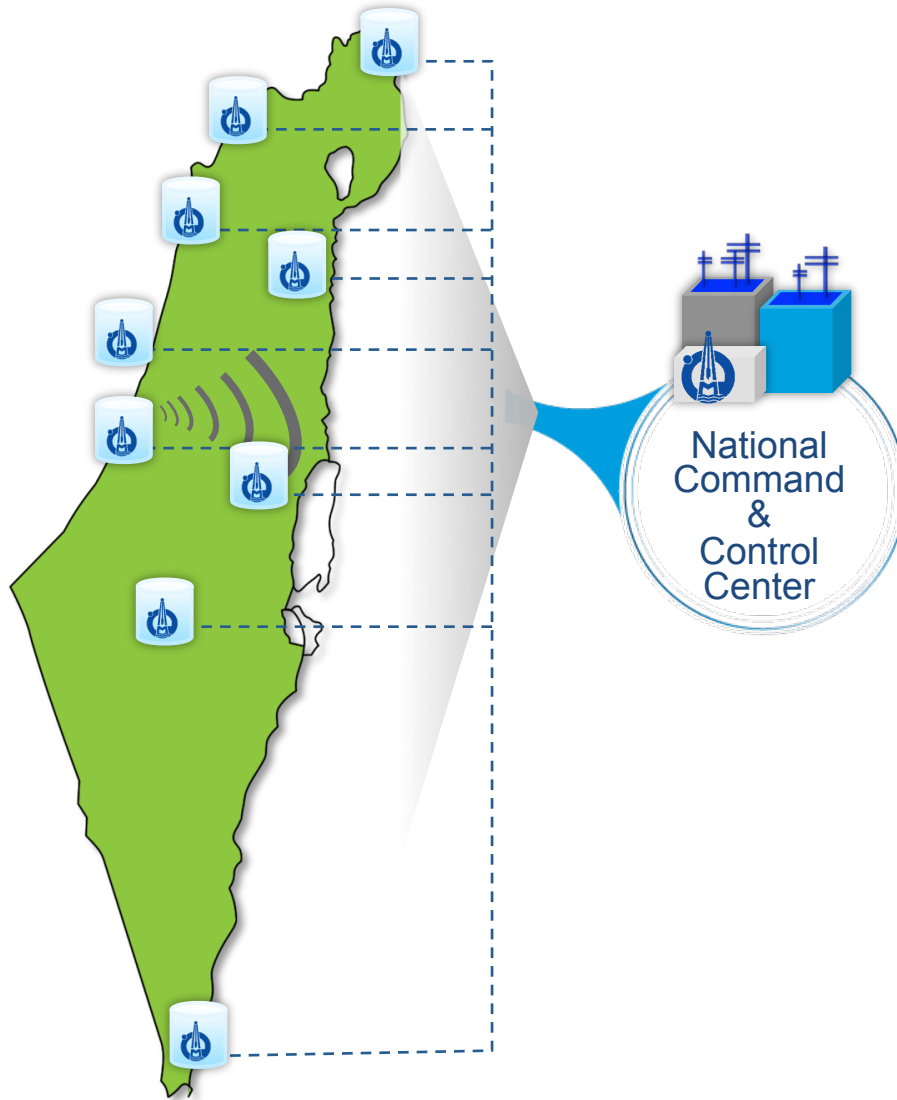




## Sustainable Management of the Natural Resources

- **Controlled pumping while maintaining the groundwater level & quality**
- **Monitoring water quality**
- **Conducting environmental surveys to prevent natural water contamination**





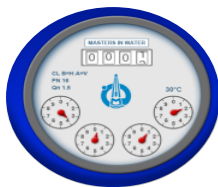
- Managing the entire national water system requires smart integrative management
- Mekorot Group operates **10** command and control centers which monitor **3,000** facilities in real-time by remote control
- Optimizing and increasing efficiency, by means of local and remote control, automatic meter reading (AMR), advanced models and decision support systems (DSS)



# 3% Water Loss

Mekorot's 3% Water Loss are the result of its Integrated activities:

- Maintenance of the pipeline & installations
- covering and sealing reservoirs
- preventing water theft
- precise measurements, including AMR (Automatic Meter Reading)

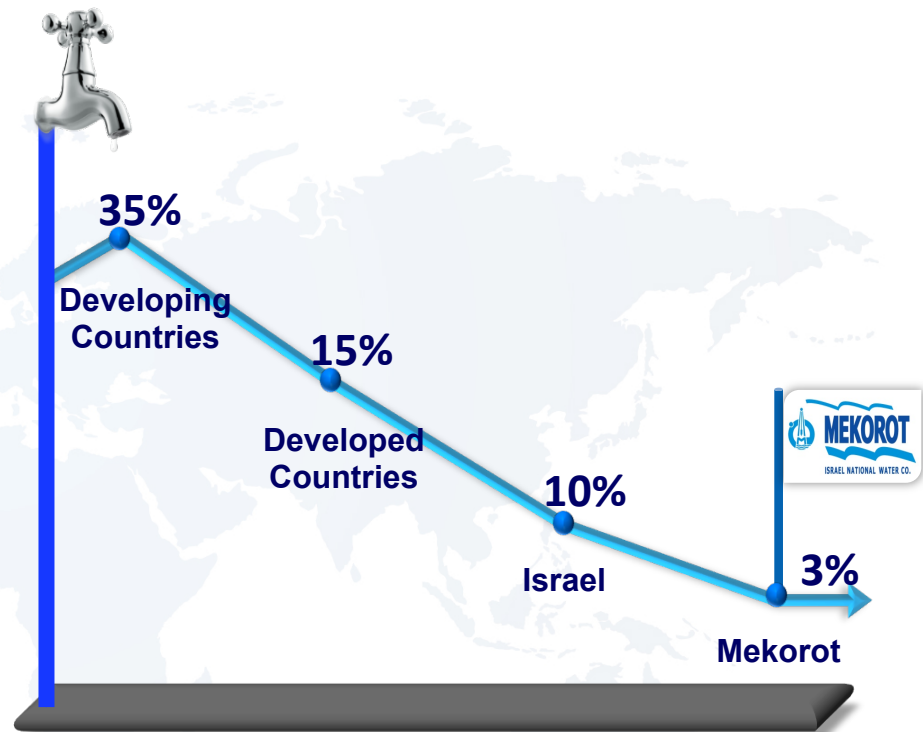




## Efficient O&M to reduce Water Loss

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- Maintenance of the pipeline & installations
- covering and sealing reservoirs
- preventing water theft
- precise measurements, including AMR (Automatic Meter Reading)





# INNOVATION

- **Israel**



**Only those who take  
risks and go far find out  
how far they can go**





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## 4. The Revolutionary National Water Carrier

