

National Climate Change Adaptation Strategy facing Extreme Water Stress

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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 80% of
Potable water in Israel



1,200 Water
well drillings



Investments
\$450 million per annum



Supplies 70% of total
water consumption



3,000 Facilities



Employees
2,200

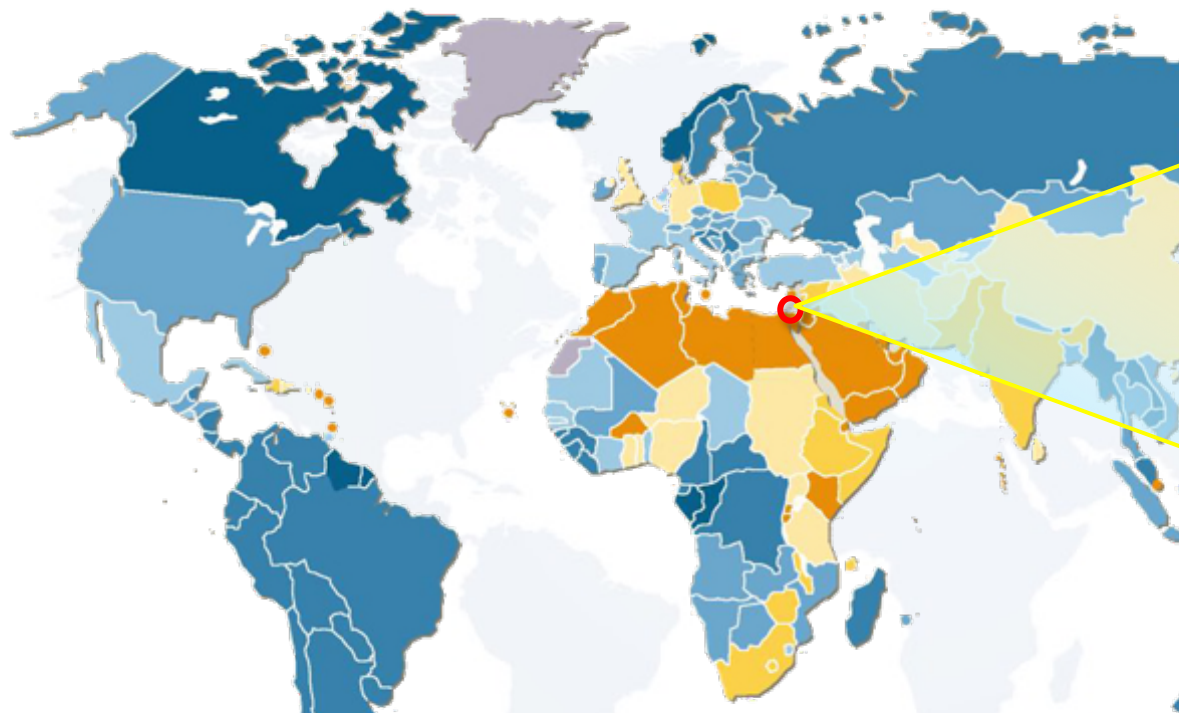


Reuses 60% of treated
wastewater for
agriculture

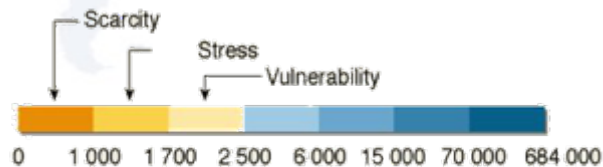


12,000 km of
water lines

United Nations Freshwater Availability Map



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



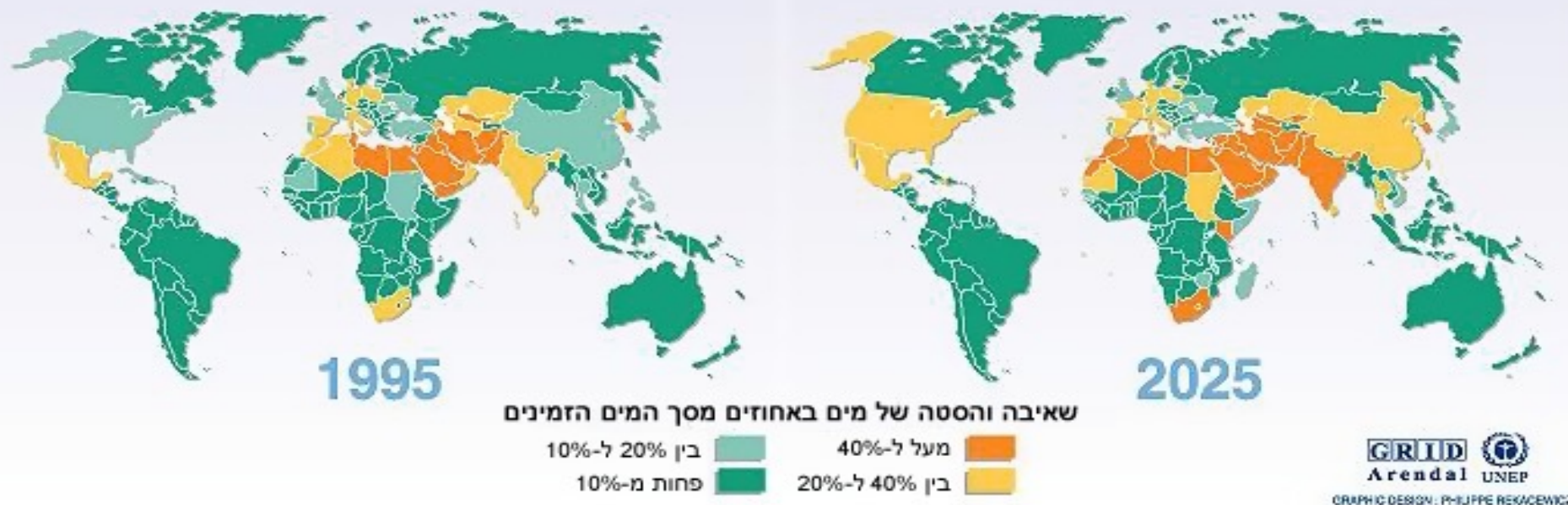
Source: FAO, Nations unies,
World Resources Institute (WRI).

PHILIPPE RENACEWICZ
FEBRUARY 2006



Data non available

United Nations Freshwater Availability Map



Source: Global environment outlook 2000 (GEO), UNEP, Earthscan, London, 1999.

- Most of the freshwater found on the surface is far from settlements and is not available for human use.
- The water is not distributing among the world's population.

Water Law

All forms of water resources belong to the Public and should be managed by the State

The Measurement of Water Law

All water supplied/consumed, has to be measured

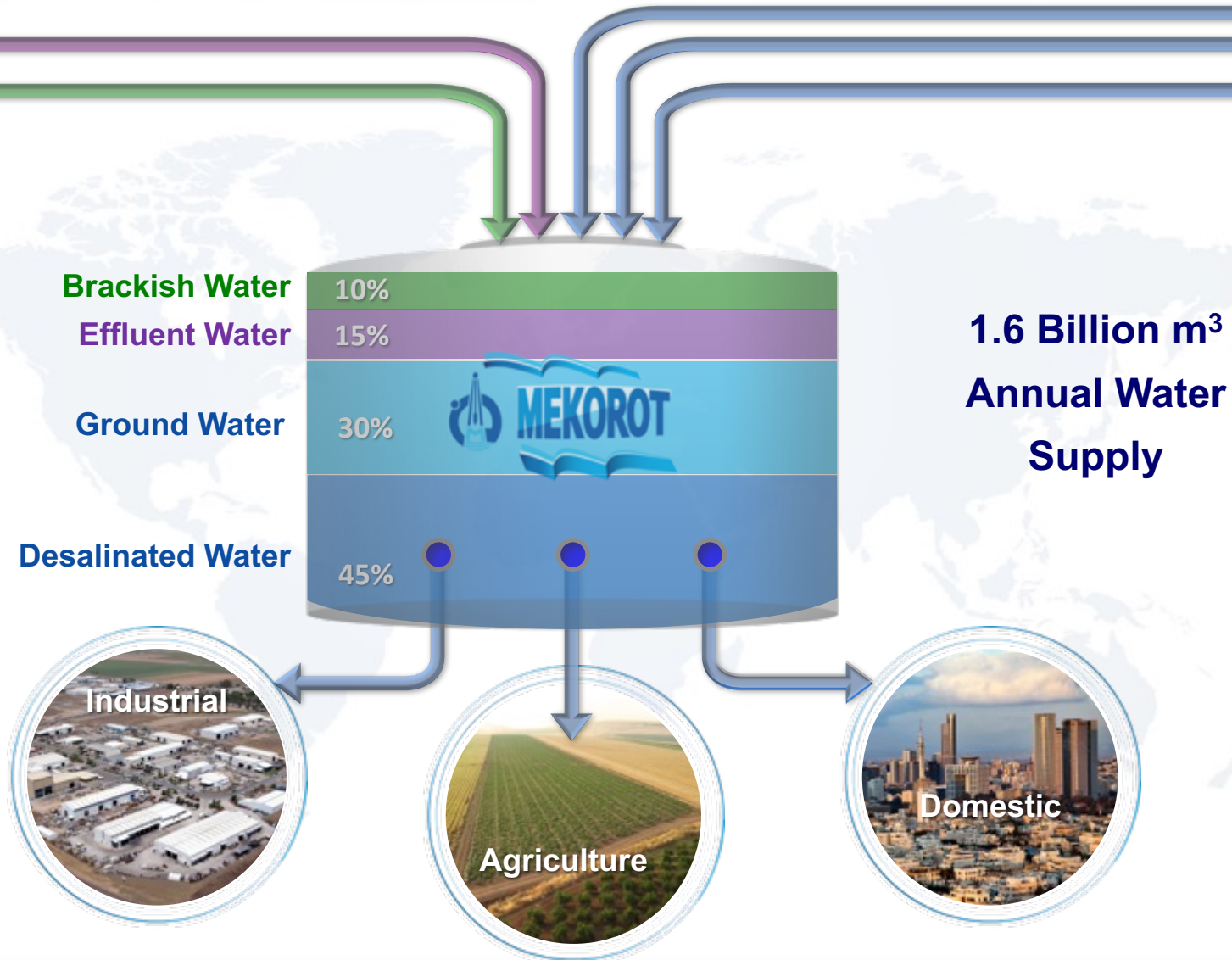
comprehensive Solutions:

- **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

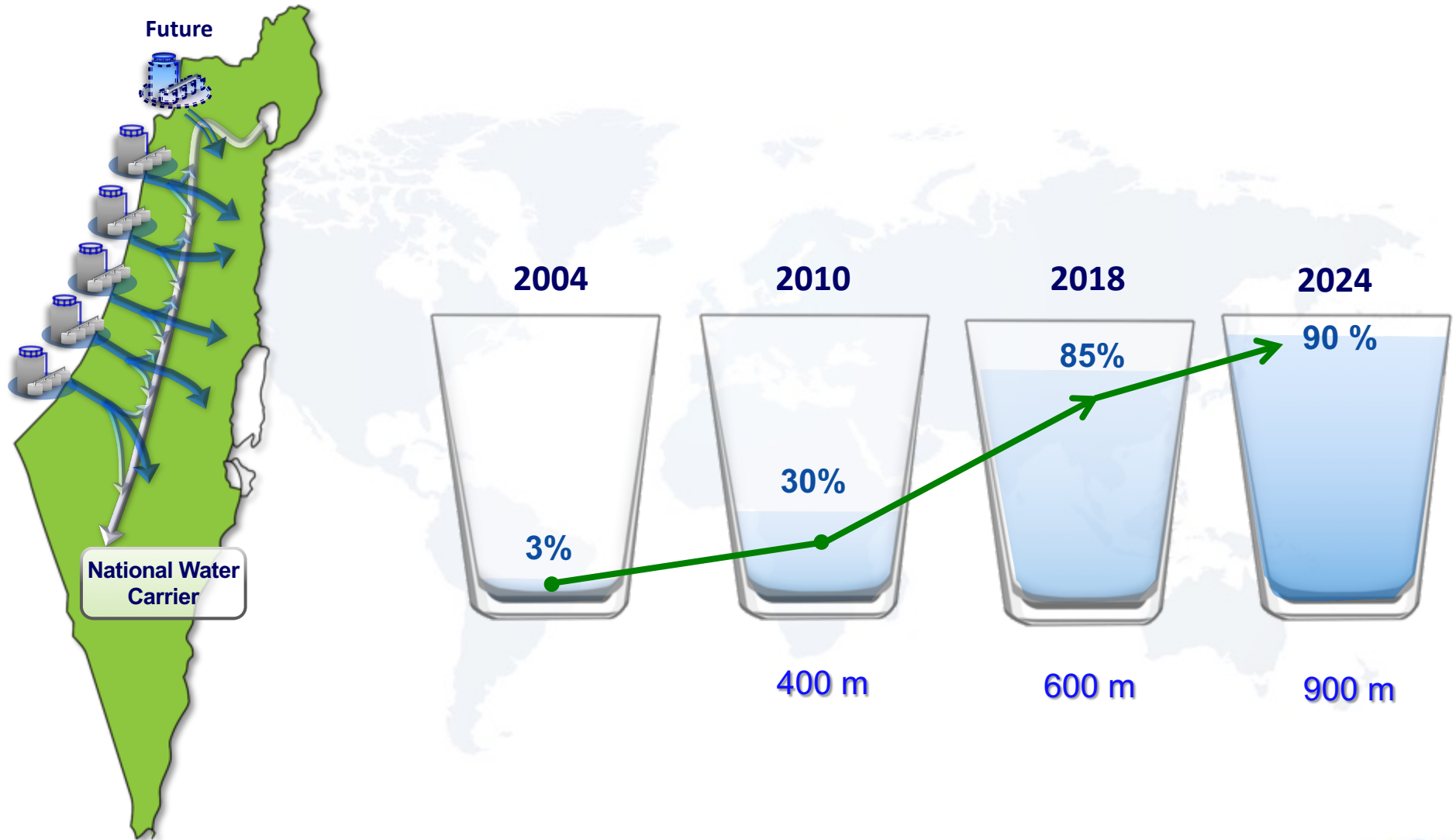


The New National Water Carrier

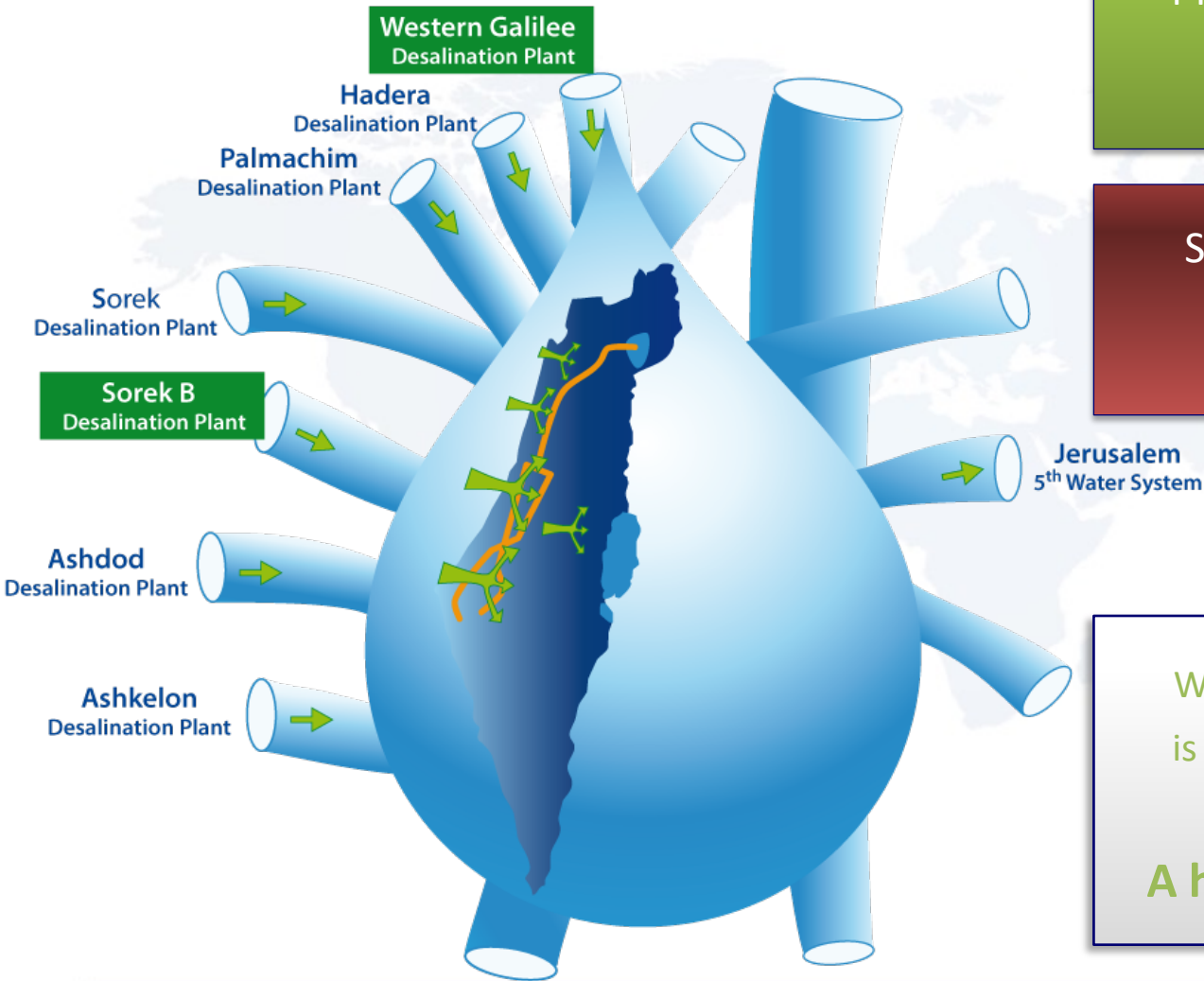
The Revolutionary National Water System



The Desalination Revolution



Operational Complexity in the New Era



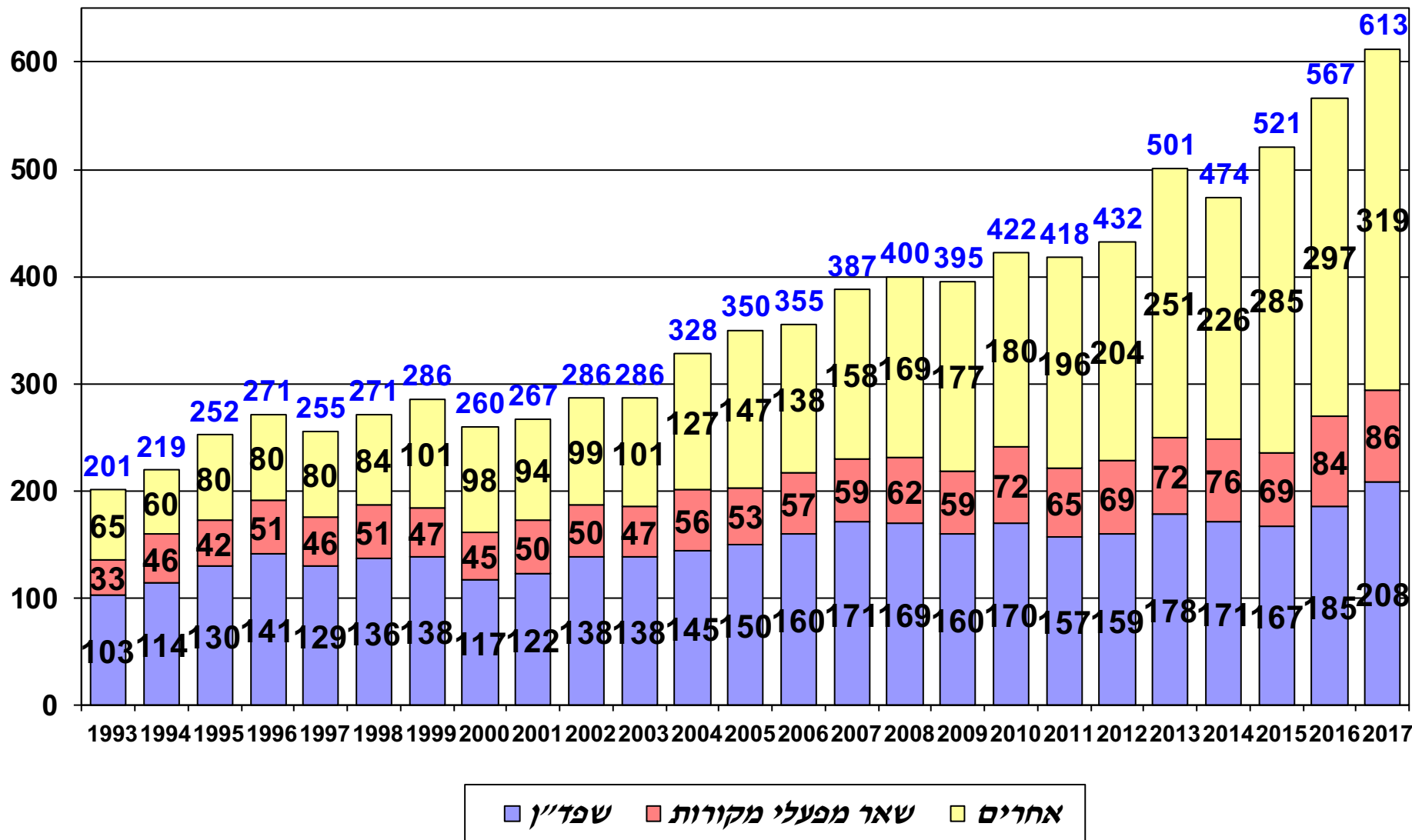
Supplying water from the Kinneret
within 7 days

Supplying desalinated water
within 3 hours

Water from various water sources
is supplied in a short time without
storage capabilities
A huge operational challenge

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





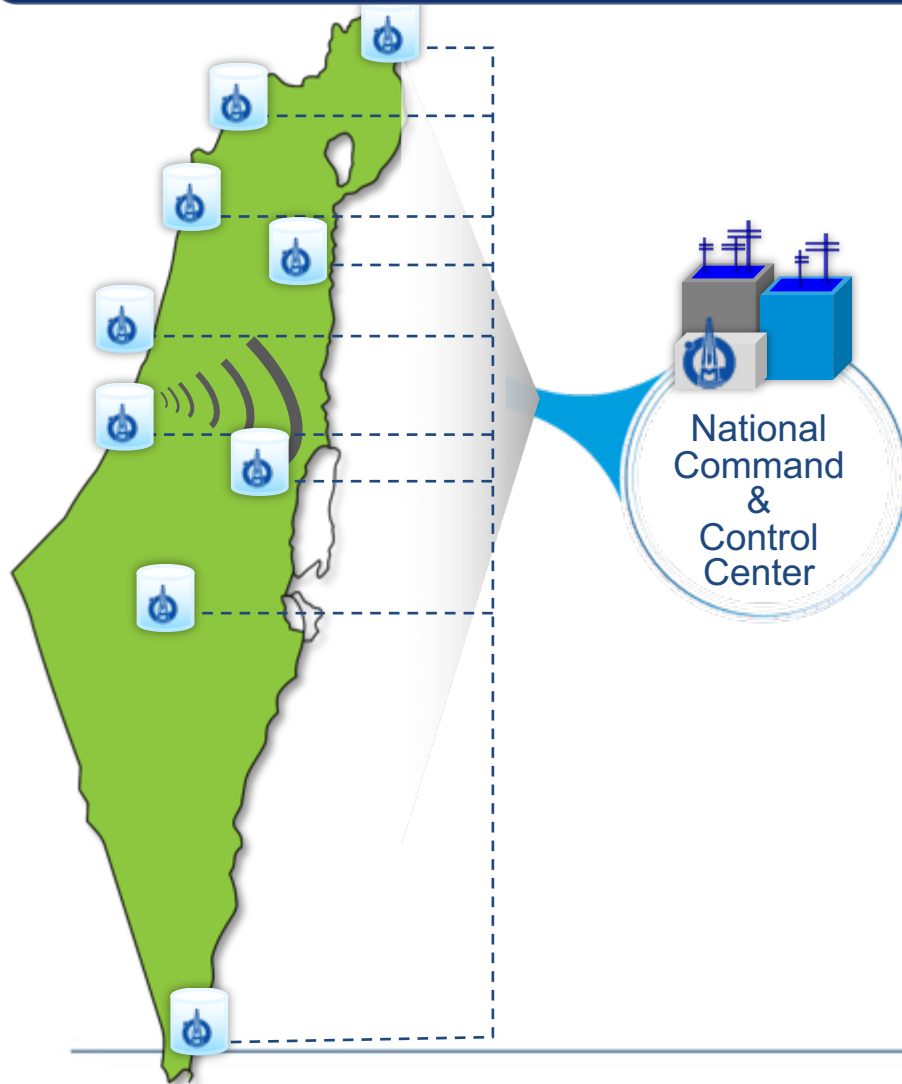


Sustainable Management of the Natural Resources

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



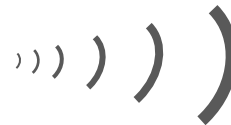
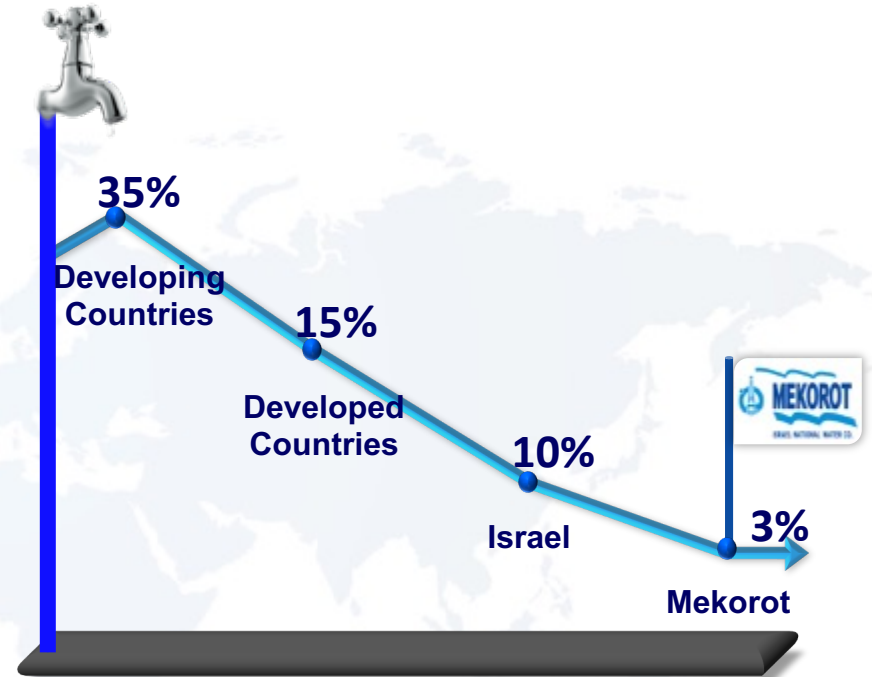
Managing the entire national water system

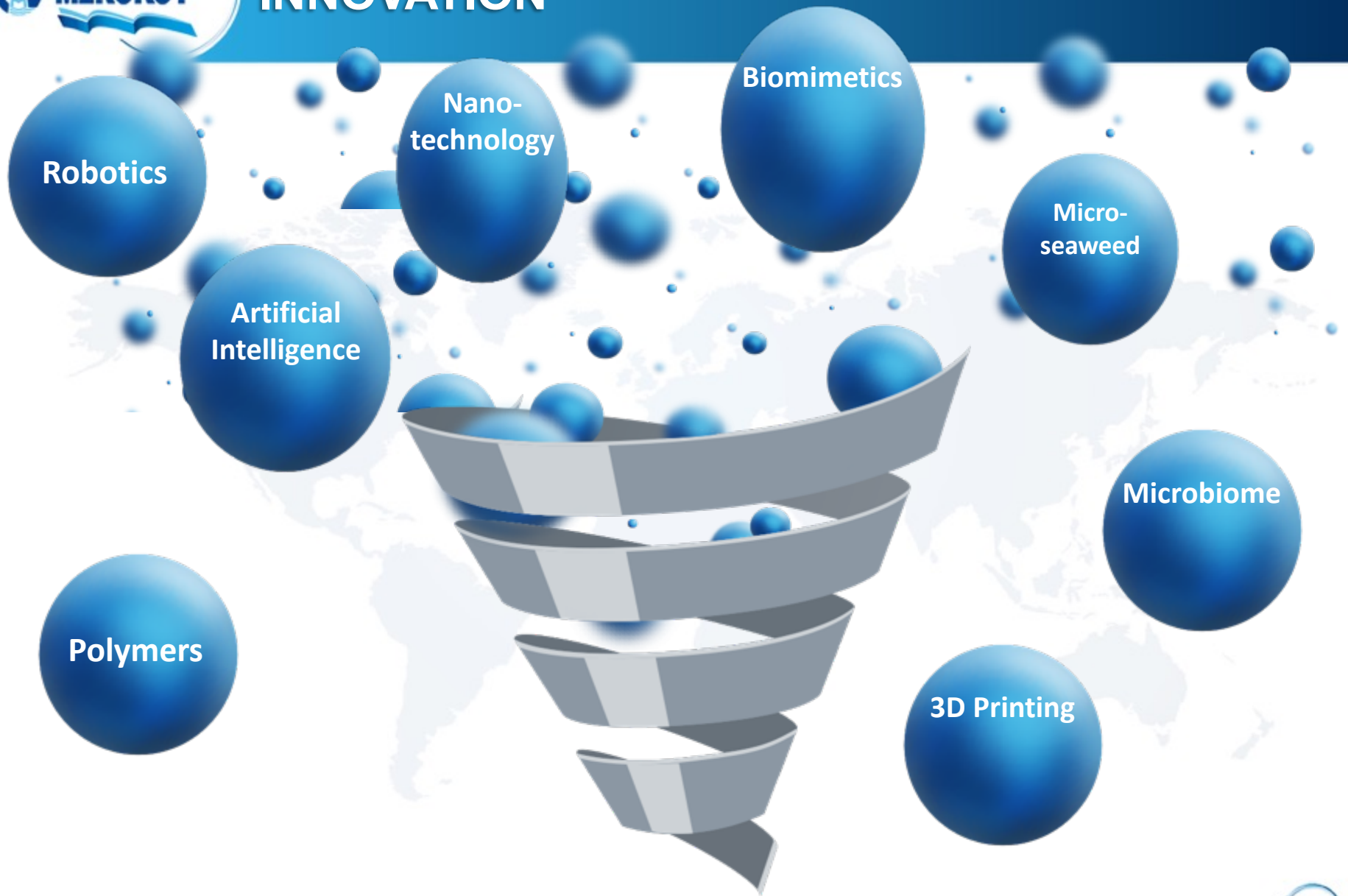


- monitoring **3,000** facilities in real-time by remote control.
- Optimizing by means of advanced models and decision support systems.

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

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







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

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