



The Master Plan for Desalination in Israel , 2020

Water demand forecast (MCM/Year)

Year	2008	2013	2015	2020
Agriculture	430	520	550	530
Industry	85	95	95	110
Urban	730	710	730	800
Aquifer rehabilitation	0	380	237	150
Neighbors	120	120	120	120
Nature	7	25	35	50
Total demand	1,372	1,850	1,767	1,760

These figures do not include effluents, storm water and brackish water for irrigation in the amount of 500 MCM/Year.

Water resources including desalination (MCM/Year)

Year	2008	2013	2015	2020
Natural resources	675	1,470	1,200	1,170
Brackish water desalination	30	30	35	70
Sea water desalination	140	350	530	750
Total resources	845	1,850	1,765	1,990
Total demand	1,372	1,850	1,767	1,760
Gap	-527	~0	~0	230

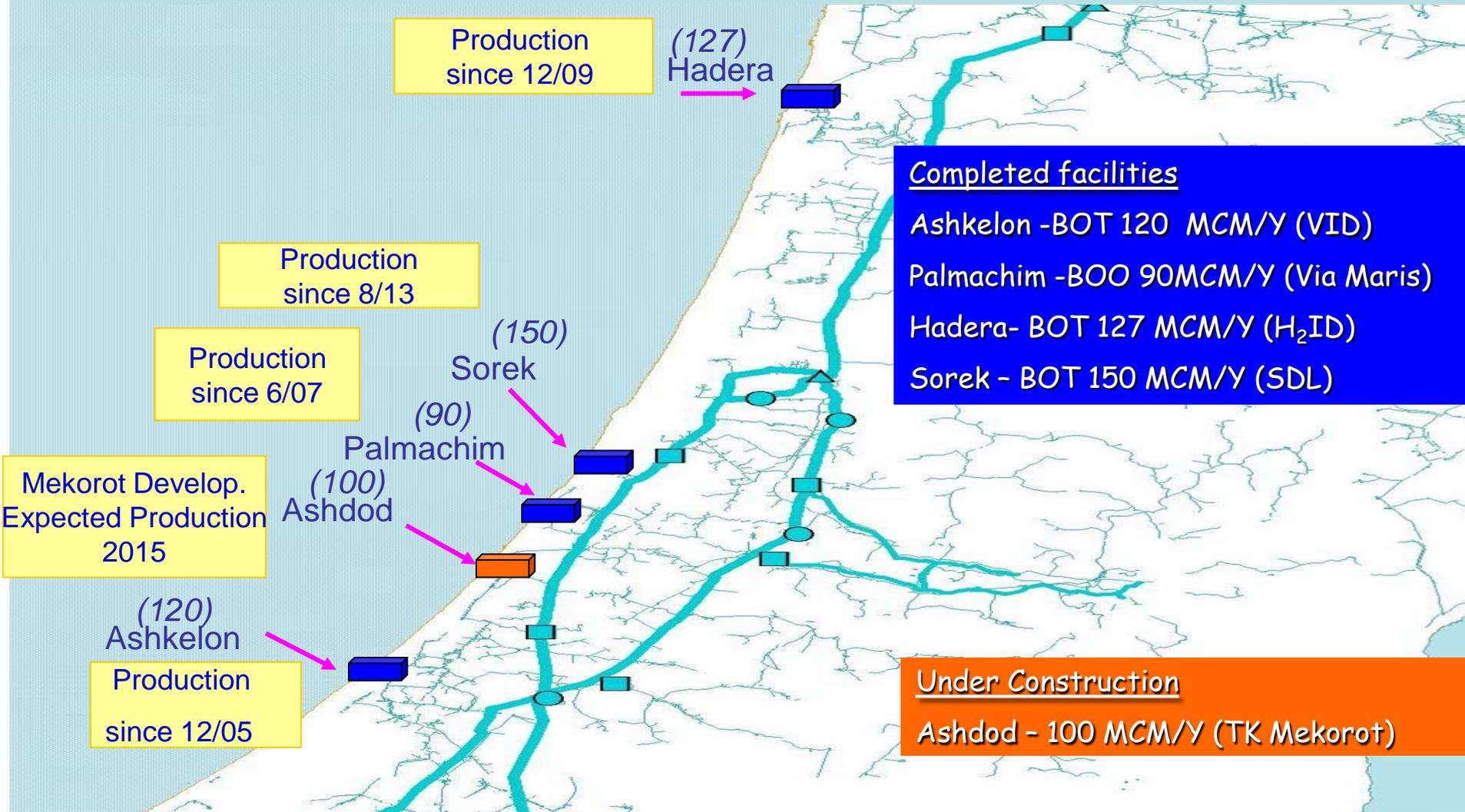
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Sea Water Desalination

רשות המים



In accordance with the Government decisions since 2001 large scale seawater desalination facilities are being built:





Desalination Water Quality

Quality parameter	units	Contractual Demands			Ashkelon Actual	Palmachim Actual	Hadera Actual
		Ashkelon	Palmachim	Hadera			
Chloride	ppm	20	80	20	10-15	30-40	10-15
Boron	ppm	0.4	0.4	0.3	0.2-0.3	0.3-0.38	0.2-0.3
pH	ppm	7.5-8.5	7-8	7.5-8.5	8-8.5	8-8.5	8-8.5
LSI		-0.2 to 0.5	-0.5 to 0.5	0 to 0.5	0 to 0.5	0-0.5	0 to 0.5
Alkalinity	ppm*			>80	45-50	40-45	> 80
Hardness	ppm*	>60	>75	80-120	90-110	85-95	80-120
Turbidity	NTU	<0.5	<0.8	<0.5	0.15-0.2	0.15-0.3	0.2-0.5

* As CaCO₃

Pre Tender & Tender Process

Financial Feasibility

Cost and size analysis

Optimal plant size

PQ financial requirements

Adequate financial resources

Bid Requirements

Letters of intent

Detailed financial model

Business plan outlaying all financial sources

Bid Evaluation

Robutness of the financial model

Analysis of the financial model and the Concession Agreement

The Payments Structure

- **Bi – Monthly payment mechanism**
- **Payment structure is based on two types of payments**

Fixed Payment

- **Take or Pay mechanism based on availability of the plant**
- **Provides return on capital invested regardless of actual water consumed**

Variable Payment

- **Payment for each cubic meter of Desalinated Water actually delivered to the State**
- **Provides return on variable costs of water production (energy, etc.)**

Bi monthly payment, which includes the fixed price and the variable price, based on the plant's performance



Thank you



Drought 2010-2011