

# PPP Projects in Israel



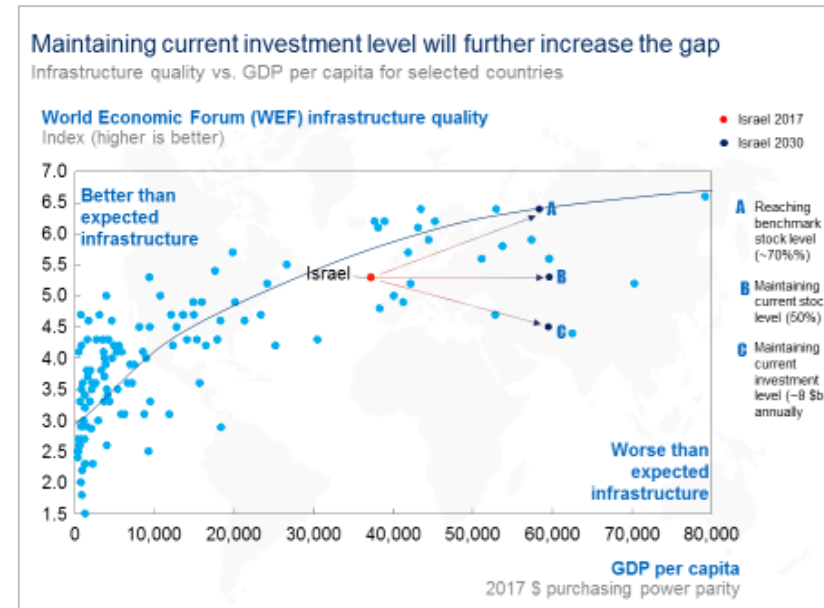
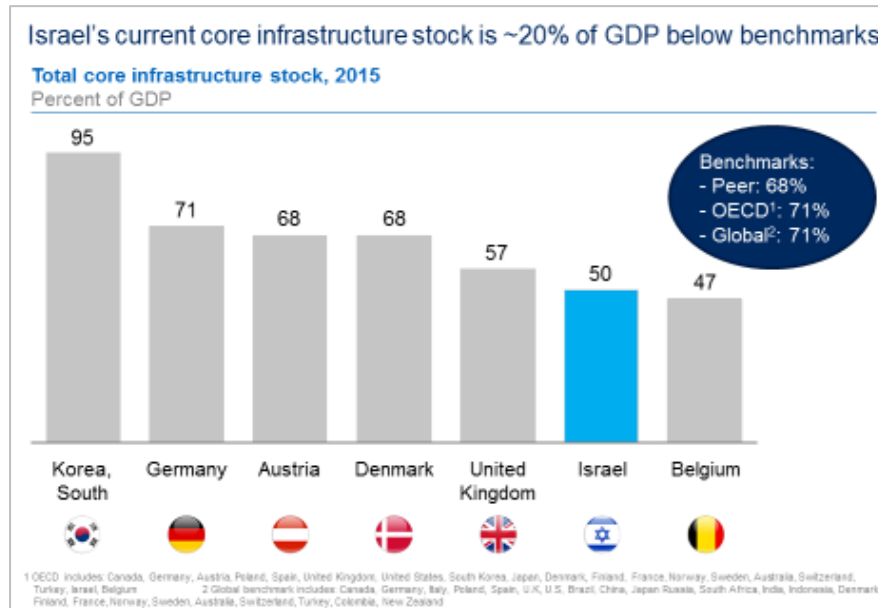
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# PPP Projects in Israel

## 1) General Overview

The current scope of infrastructure investment in the State of Israel is significantly lower than comparable countries around the world. This gap can be seen in traffic congestion, power outages and the low percentage of electricity production from renewable energy.

Therefore, in 2017, Israel's Minister of Finance appointed an inter-ministerial team to establish a national strategic plan in order to advance and expand investments in infrastructure projects. According to the team's conclusions, while in OECD countries the stock of economic infrastructure (transportation, water and energy) forms 71% of the GDP; in Israel it constitutes only 50% of the GDP.



## PPP PROJECTS

### (Public Private Partnership)

Such projects feature long-term agreements between the State and a concessioner: the public sector transfers to the private sector the responsibility for providing a public infrastructure, product or service, including the design, construction, financing, operation and maintenance, in return for payments based on predefined criteria. At the end of the concession agreement term (typically 25-30 years), the projects are transferred back to the State for no additional compensation.

The PPP Model enables an optimal risk allocation between the private sector and the public sector, as each party assumes the risks it is most fit to manage.

PPP projects have been promoted in Israel for over two decades in the fields of transportation, energy, environment, water and construction.



One of the main recommendations of the team was to substantially increase the investment in infrastructure by 2030. According to the team's evaluation, where the present scope of infrastructure investments is maintained, the existing gap from the rest of the world will further grow; in order to reach the global average, a considerable increase of the infrastructure investments in Israel is required through 2030.

The team further recommended to, inter alia: develop a national infrastructure strategy for Israel; improve statutory procedures; establish new financing tools for infrastructure investments and adjust regulation in order to enhance such investments; and establish a performance management system. Accordingly, there is now a major expansion of the infrastructure investment, mostly in the field of public transport. The investment is expected to grow even further once the team's full recommendations are implemented.

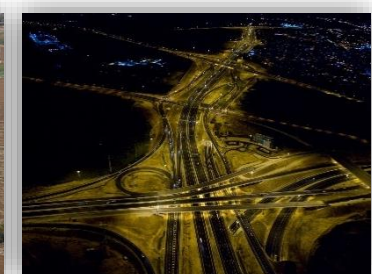
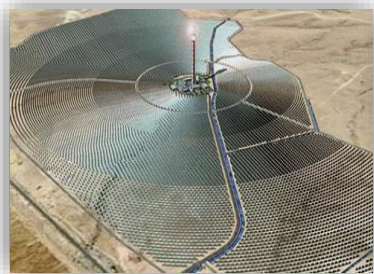
A significant part of the increase of infrastructure investments is anticipated to be executed based on Project Finance procurement strategy mostly through PPP Model (Public-Private Partnerships).

This document provides a review of Public-Private Partnership projects in the State of Israel – both existing PPP Projects (during construction and operation stages) and anticipated projects.

## 2) Promotion of PPP Projects in Israel

PPP projects in Israel are promoted by several governmental authorities:

- 1) **The Infrastructure and Projects Division at the Accountant General Department in the Ministry of Finance** – the division is composed of the Accountant General’s staff and the PPP Projects Unit located at the governmental company, Inbal. The division promotes PPP projects in various sectors (transportation, energy, environment, water and construction) through Inter-ministerial Tender Committees headed by a representative of the Accountant General.
- 2) **The Transfer to the South Administration in the Ministry of Defense** – the Ministry of Defense promotes projects of development of several army bases through the Transfer to the South Administration, which manages the transfer of IDF units from the center of Israel to the Negev area in the south, as part of the strategic plan to support and develop the Negev area.
- 3) **The Governmental Building Administration at the Accountant General’s Department in the Ministry of Finance** – the Governmental Building Administration is a branch of the Assets, Procurement and Logistics Division at the Accountant General in the Ministry of Finance. It is in charge of governmental building, including head offices (ministries), district and regional complexes, courts and other construction projects.
- 4) **NTA, Metropolitan Mass Transit System Ltd** – a governmental company in charge of planning and establishing mass transit systems in the metropolis of Tel Aviv. The company promotes projects through standard public procurement and by using the PPP Model.
- 5) **Cross Israel Highway** – a governmental company in charge of planning and establishing Cross Israel Highway segments ('Highway 6') and a light rail line in the northern metropolis of Haifa. In addition, the company acts as an Implementing Authority for Highway 6, Carmel Tunnels and the Fast Lane to Tel-Aviv. The company promotes projects through standard public procurement and by using the PPP Model.



### 3) Existing PPP Projects in the State of Israel

The table below presents the main PPP projects that have been promoted in Israel over the last two decades and that are in their operation stage or construction stage. The estimated total cost of construction of these projects is approximately NIS **36 billion**.

Project	Project Description	Governmental Authority	Status	Financial /Construction Commencement	Closing Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
<b>Transportation</b>									
<b>Route 431</b>	Crosswise highway from Anava Interchange to Ayalon Highway, approximate length of 22 km	The Projects Division	Operation	2006	Q1/2009	Netivey Hayovel	Danya Cebus; IIF Fund	Hapoalim; Clal; Menora; Amitim; Harel; others	1.8
<b>Fast Lane to Tel Aviv</b>	Park & Ride parking lot at Shapirim providing free shuttle service to central Tel Aviv, and a designated lane that prioritizes public transport, shuttle services and HOVs. The remaining capacity is sold to private vehicles for a fee	The Projects Division	Operation	Q3/2007	Q1/2011	Fast Lane	Shapir	Leumi; Migdal	0.4
<b>The Carmel Tunnels</b>	Two tunnels crossing Haifa from east to west, approximate total length of 6.5 km, 5 km of which are tunnels	The Projects Division	Operation	Q1/2006	Q4/2010	Carmelton	Shikun & Binui; Allied	Discount; Harel Insurance	1.0
<b>Highway 6, Central Segment</b>	Cross-Israel Highway; electronic toll road;	The Projects Division	Operation	Q4/1999	Q3/2002	Derech Eretz	Noy Fund; IIF Fund	Hapoalim; Psagot;	5.0

Project	Project Description	Governmental Authority	Status	Financial /Construction Commencement	Closing Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
	approximate length of 106 km, from Ein Tut Interchange in the north to Sorek Interchange							Migdal; Clal; Harel Insurance; Menora Mivtachim;	
<b>Highway Segments 3 + 7</b>	<b>6,</b> The northern Cross-Israel Highway: between Yoqne'am and Somekh; approximate total length of 19 km	The Projects Division	Operation	Q1/2015	Q1/2019	Cross North	Shapir; Noy Fund; Leumi; Pizzaroti	Hapoalim; Deutsche Bank	2.3
<b>Road 16</b>	An additional entrance road to Jerusalem from the west, connecting Road no. 1 (Moza) and Menachem Begin Boulevard; approximate length of 5 km, including tunnels	The Projects Division	Construction	Q4/2019	Q2/2023 (predicted)	Shapir Pizzarotti Highway 16 LTD.	Shapir; Pizzarotti	Hapoalim; Clal Insurance	1.1
<b>Water</b>									
<b>Ashkelon Desalination Facility</b>	Reverse osmosis desalination facility production capacity of 118 million m <sup>3</sup> a year; includes an independent	The Projects Division	Operation	Q1/2003	Q3/2005	VID	IDE; Veridis	Leumi; institutions	1.0



Project	Project Description	Governmental Authority	Status	Financial /Construction Commencement	Closing Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
	power plant that provides electricity to the facility								
<b>Palmahim Desalination Facility</b>	Reverse osmosis desalination facility, production capacity of 90 million m <sup>3</sup> a year	The Projects Division	Operation	Q1/2005	Q2/2007	Via Maris	IIF	Hapoalim	0.9
<b>Hadera Desalination Facility</b>	Reverse osmosis desalination facility, production capacity of 127 million m <sup>3</sup> a year	The Projects Division	Operation	Q4/2007	Q4/2009	H <sub>2</sub> ID	Shikun & Binui; IDE	Hapoalim; EIB; Clal Group	1.6
<b>Sorek A Desalination Facility</b>	Reverse osmosis desalination facility, production capacity of 150 million m <sup>3</sup> a year; includes an independent power plant that provides electricity to the facility	The Projects Division	Operation	Q2/2011	Q3/2013	SDL	Dan Capital	Hapoalim; EIB	1.6
<b>Ashdod Desalination Facility</b>	Reverse osmosis desalination facility, production capacity of 100 million m <sup>3</sup> a year	The Projects Division	Operation	Q4/2011	Q4/2015	ADL	Mekorot	EIB; Hapoalim	1.4
<b>Sorek B Desalination Facility</b>	Reverse osmosis desalination facility; approximate production capacity of 200 million m <sup>3</sup> a year. Includes a planned construction for an independent power plant which will supply electricity to the facility.	The Projects Division	Construction	Q2/2020	Q2/2023 (predicted)	S.M.S IDE	IDE	KFW; ;Leumi EIB	2.2

Project	Project Description	Governmental Authority	Status	Financial /Construction Commencement	Closing Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
<b>Energy</b>									
<b>Ashalim – thermo-solar – PLOT A</b>	Thermo-solar power plant using parabolic trough technology, generation capacity of 121 MW	The Projects Division	Operation	Q2/2015	Q2/2019	Negev Energy	Shikun & Binui; Noy Fund; TSK	Hapoalim; EIB; OPIC	3.4
<b>Ashalim – thermo-solar – PLOT B</b>	Thermo-solar power plant with a solar reflection tower, generation capacity of 121 MW	The Projects Division	Operation	Q2/2014	Q2/2019	Megalim	Noy Fund; BrightSource; GE	Hapoalim; EIB; Menora; Harel; others	2.5
<b>Ashalim – PV1</b>	Power plant using photo-voltaic technology, generation capacity of 30 MW	The Projects Division	Operation	Q4/2013	Q4/2017	Ashalim Sun	ClalSun; EDF Energy	Hapoalim; Clal	0.2
<b>Construction</b>									
<b>Ashdod Center</b>	<b>Medical</b> A hospital, including all the departments required for a public hospital, with approximately 300 beds (and an option for additional 400 beds).	The Projects Division	Operation	Q2/2012	Q2/2017	Assuta	Assuta Ashdod	Leumi	1.2





#### 4) Anticipated PPP Projects

The table below presents the main projects that are promoted through PPP Model in Israel. The projects included in the table are in the stage prior to Financial Closing, in various tender stages or in the pre-tender stage. The estimated total cost of construction of these projects is approximately NIS **55 billion**

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
<b>Transportation</b>							
<b>Fast lanes in Gush Dan</b>	Fast lanes alongside Road 2 and Road 20, from Rishon LeZion to Road 57, for public transport, Shuttles, HOVs and toll-paying vehicles, including two Park & Ride parking lots with thousands of free spaces at Shefayim Interchange and Mevo Ayalon Interchange, with free shuttle services	The Projects Division	Tender	Q3/2016 (in practice)	Q1/2019 (in practice)	Q3/2021	Q3/2025
<b>International Airport</b>	International airport, complementary to Ben-Gurion Airport; the airport will be designed to serve mostly Low-Cost airlines	The Projects Division	Pre-tender	Q1/2021	Q3/2021	Q2/2023	Q2/2027

<sup>1</sup> Contract awarded

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
<b>Tel Aviv Light Rail – Green Line</b>	The line connects the southern parts of the metropolis OF Tel-Aviv (Holon and the margins of Rishon LeTzion) and its northern parts (Herzliya) to Tel Aviv; approximate length of the line – 39 km, including 61 stations	NTA	Tender	Q3/2018 (in practice)	Q2/2019 (in practice)	Q1/2022	2027
<b>Tel Aviv Light Rail – Purple Line</b>	The line connects the eastern areas of the metropolis of Tel Aviv and the center of Tel Aviv; approximate length of the line 29 km, including 43 stations.	NTA	Tender	Q3/2018 (in practice)	Q2/2019 (in practice)	Q1/2022	2026
<b>Haifa–Nazareth Light Rail</b>	The line connects Haifa to Nazareth and villages along its route; approximate length of the line – 41 km, including 20 stations and 16 Park and Ride parking lots	Cross Israel Highway	Tender	Q2/2020 (in practice)	Q4/2021	Q1/2024	2027
<b>Water</b>							
<b>Western Galilee Desalination Facility</b>	Reverse osmosis desalination facility with a production capacity of 100-200 million cubic meters per year	The Projects Division	Tender	Q1/2020 (in practice)	Q3/2020	Q1/2022	Q4/2024
<b>Water Treatment Facility –the Sharon area</b>	Treatment facility for contaminated groundwater at the Military Industrial Complex in the Sharon area	The Projects Division	Tender	Q1/2020 (in practice)	Q1/2021	Q4/2022	Q1/2025
<b>Energy</b>							

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
<b>Ashalim – PV2</b> <sup>(2)</sup>	Power plant for electric power production using photo-voltaic technology; anticipated capacity of 40 MW	The Projects Division	Financial Closing	Q1/2016 (in practice)	Q1/2017 (in practice)	Q1/2021	Q4/2021
<b>Dimona – PV</b>	Power plant for electric power production using photo-voltaic technology, and electricity storage; anticipated approximate capacity of 250-300 MW	The Projects Division	Tender	Q1/2020 (in practice)	Q3/2020	Q3/2022	Q3/2024
<b>Ashalim- PV3</b>	Power plant for electric power production using photo-voltaic technology; anticipated approximate capacity of 100 MW	The Projects Division	Pre-tender	Q4/2020	Q2/2021	Q1/2023	Q1/2024
<b>Natural gas -fired power plants</b>	Natural gas power plants	The Projects Division	Pre-tender	Q4/2020	Q4/2021	Q2/2023	Q2/2026
<b>Environment</b>							
Waste treatment Facility at the Shafdan area <sup>(3)</sup>	Municipal Solid Waste treatment facility in the Shafdan area; approximate treatment scope – 1,000 tons of waste per day; the facility includes an anaerobic digestion processes for the production of green energy recyclables and agricultural compost	The Projects Division	Financial Closing	Q3/2012 (in practice)	Q4/2014 (in practice)	Q1/2021	Q4/2024

<sup>2</sup> Contract awarded

<sup>3</sup> Contract awarded

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
<b>Governmental and court complex</b>	Government complex and court at Afula	Governmental Building Administration	Pre-tender		Q4/2020	Q3/2021	Q3/2024
<b>State Archive</b>	Storage center of the Governmental Archive	Governmental Building Administration	Pre-tender		Q4/2020	Q3/2021	Q3/2024

In addition, several infrastructure projects are promoted by the private sector in the field of energy (which require licenses from the Israeli Electricity Authority) using Project Finance methods. These projects include power plants that use various technologies, such as cogeneration, photo-voltaic production, wind power and pumped-storage hydroelectricity. For more details about these projects see the "**2019 Infrastructure for Growth**" report of the Israeli government, which is published on the governmental website. Furthermore, as part of the reform in the electricity market, 'Alon Tavor' plant have been sold, and the sale of following four more power plants (which are currently owned by the Israel Electric Corporation Ltd) is anticipated: Ramat Hovav<sup>4</sup>, Reading, Hagit and Eshkol.

<sup>4</sup> Contract awarded