PPP Projects in Israel



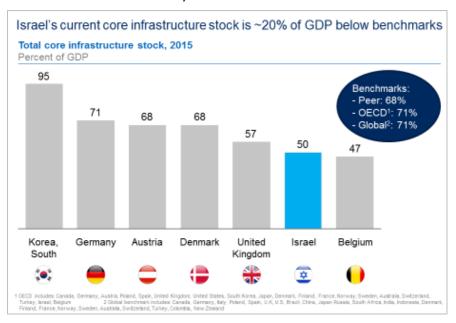
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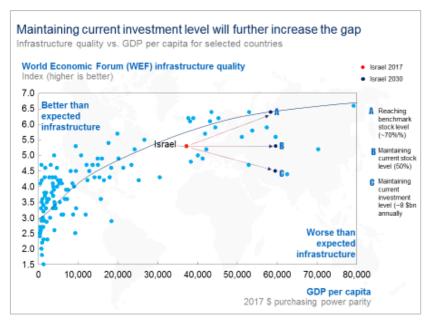
PPP Projects in Israel

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.





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.

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.



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.



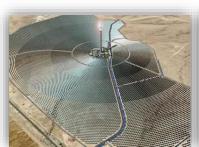














3) Existing PPP Projects in the State of Israel

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 **33.4 billion**.

Project	Project Description	Governmental Authority	Status	Financial Closing /Construction Commencement	Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
Transportation	1								
Route 431	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
Fast Lane to Tel Aviv	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
The Carmel Tunnels	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

Project	Project Description	Governmental Authority	Status	Financial Closing /Construction Commencement	Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
Highway 6, Central Segment	Cross-Israel Highway; electronic toll road; approximate length of 106 km, from Ein Tut Interchange in the north to Sorek Interchange	The Projects Division	Operation	Q4/1999	Q3/2002	Derech Eretz	Noy Fund; IIF Fund	Hapoalim; Psagot; Migdal; Clal; Harel Insurance; Menora Mivtachim;	5.0
Highway 6, Segments 3 + 7	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
Jerusalem Light Rail – Red Line	The line connects Pisgat Ze'ev in the north with Mount Herzl through the city center; approximate length of 14 km, including 23 stations	The Projects Division	Operation	Q1/2006	Q4/2011	Citypass	IIF Fund; Ashtrom; Harel	Hapoalim; Leumi	1.9
Ashkelon Desalination	Reverse osmosis desalination facility, production capacity of 118 million m³ a year; includes an independent power plant that provides electricity to the facilit	The Projects Division	Operation	Q1/2003	Q3/2005	VID	IDE; Veridis	Leumi; institutions	1.0

Project	Project Description	Governmental Authority	Status	Financial Closing /Construction Commencement	Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
Palmahim Desalination	Reverse osmosis desalination facility, production capacity of 90 million m³ a year	The Projects Division	Operation	Q1/2005	Q2/2007	Via Maris	IIF	Hapoalim	0.9
Hadera Desalination	Reverse osmosis desalination facility, production capacity of 127 million m ³ a year	The Projects Division	Operation	Q4/2007	Q4/2009	H ₂ ID	Shikun & Binui; IDE	Hapoalim; EIB; Clal Group	1.6
Sorek Desalination	Reverse osmosis desalination facility, production capacity of 150 million m³ 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
Ashdod Desalination	Reverse osmosis desalination facility, production capacity of 100 million m ³ a year	The Projects Division	Operation	Q4/2011	Q4/2015	ADL	Mekorot	EIB; Hapoalim	1.4
Energy	<u> </u>								
Ashalim – thermo-solar – PLOT A	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

Project	Project Description	Governmental Authority	Status	Financial Closing /Construction Commencement	Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
Ashalim – thermo-solar – PLOT 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
Ashalim – PV1	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
Construction									
National Police Academy	National Police Academy in the area of Beit Shemesh; approximate size of 230 dunam, including operation, catering and training arrays	The Projects Division	Operation	Q1/2012	Q1/2015	Policity	Shikun & Binui; G4S	Discount; Harel	0.6
Ashdod Medical Center	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

Project	Project Description	Governmental Authority	Status	Financial Closing /Construction Commencement	Operation Commencement		Shareholders in the Concessioner	Main Finance Providers	Construction cost (billions of NIS)
The Training Complex – the Training Bases City	Buildings (offices, classrooms, warehouses and welfare facilities) for the training bases reloacated from Tzrifin Base; designated for training for combat supporting units	The Ministry of Defense	Operation	Q2/2012	Q1/2015	Mabat LaNegev	Electra; Minrav; Binat; Noy Fund	Hapoalim; Amitim; Menora; Psagot;	1.4
Teleprocessing Complex in Be'er Sheva	The project includes the construction of buildings (offices and welfare facilities) for units of the Teleprocessing Department, the South Command Headquarters and technological units of the Air Force	The Ministry of Defense	Construction	Q4/2018	Q1/2023	The Technological Teleprocessing Complex in the Negev		Leumi; Clal; Amitim; First International Bank	1.6
Court houses Hadera; Dis Jerusalem and	complex in Natanya; in Tiberias, Safed and trict complexes in Nazareth Illit; Parking Ministry of Justice in	Governmental Building	Construction	-	-	-	-	-	1.7
houses in Lod, and Herzliya;	x in Tel Aviv; Court Ashekelon, Petah Tikva HaLeom parking lot, r and Genery 2 in	The Governmental Building Administration	Operation	-	-	-	-	-	1.8

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 **48 billion**

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
Transportation							
Road 16 (1)	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	Financial Closing	Q2/2015 (in practice)	Q4/2016 (in practice)	Q4/2019	Q2/2023
Jerusalem Light Rail – Jnet (Green Line + extensions of the Red Line) (2)	The line will connect Mount Scopus to Gilo with a branch to the commercial and residential areas of Malha + extensions of the existing Red Line. approximate length of the line – 27 km, including 50 stations	The Projects Division	Tender	Q2/2017 (in practice)	Q2/2018 (in practice)	Q4/2020	2025
Fast lanes in Gush Dan	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)	Q1/2021	Q1/2025
International Airport	International airport, complementary to Ben Gurion Airport; the airport will be designed to serve mostly Low-Cost airlines	The Projects Division	Pre-tender	Q3/2020	Q1/2021	Q4/2022	Q4/2026

¹ Contract awarded

² Bids submitted

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
Jerusalem Light Rail – Blue Line	The line will connect the neighborhood of Ramot in the north and Gilo in the south; approximate length of the line – 20 km, including 42 stations	The Projects Division	Pre-tender	Q4/2019	Q4/2020	Q1/2022	2027
Tel Aviv Light Rail – Green Line	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)	Q3/2021	2025
Tel Aviv Light Rail – Purple Line	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)	Q3/2021	2025
Haifa-Nazareth Light Rail	The line connects Haifa to Nazareth and settlements along its route; approximate length of the line – 41 km, including 19 stations and 16 Park and Ride parking lots	Cross Israel Higway	Pre-tender	Q3/2020	Q4/2021	Q1/2023	2027
Water							
Sorek B Desalination Facility ⁽³⁾	Reverse osmosis desalination facility; approximate production capacity of 200 million m³ a year. Includes an option for the construction of an independent power plant which will supply electricity to the facility.	The Projects Division	Tender	Q2/2018 (in practice)	Q4/2018 (in practice)	Q2/2020	Q2/2023
Western Galilee Desalination Facility	Reverse osmosis desalination facility	The Projects Division	Pre-tender	Q4/2019	Q2/2020	Q4/2021	Q4/2024

³ Bids submitted

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
Water Treatment Facility –the Sharon area	Treatment facility for contaminated groundwater at the Military Industrial Complex in the Sharon area	The Projects Division	Pre-tender	Q1/2020	Q1/2021	Q4/2022	Q1/2025
Energy							
Ashalim – PV2 (photo-voltaic) (4)	Power plant for electric power production using photo-voltaic technology; approximate capacity of 40 MW	The Projects Division	Tender	Q1/2016 (in practice)	Q1/2017 (in practice)	Q3/2020	Q4/2021
Dimona – PV (photo-voltaic)	Power plant for electric power production using photo-voltaic technology; anticipated approximate capacity of 250-300 MW	The Projects Division	Pre-tender	Q3/2019	Q2/2020	Q4/2021	Q2/2023
Environment							
Waste treatment Facility at the Shafdan area	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)	Q3/2019	Q4/2022
Waste Treatment Facility - Ma'ale Adumim	Waste treatment facility, using an incineration method (waste-to-energy), in the area of Ma'ale Adumim	The Projects Division	Pre-tender	Q3/2019	Q1/2020	Q1/2022	Q1/2025
Construction							
Unitary Supply Centers – District Logistical Centers	District Logistical Centers in Mishmar HaNegev, Beit Naballa and Netafim; the concessioner will be responsible for the maintenance of the structures and compounds to be constructed by it and for the operation of logistical warehouses in Beit Naballa and Mishmar HaNegev.	The Ministry of Defense	Tender	Q2/2017 (in practice)	Q2/2018 (in practice)	Q4/20210	Q4/2025

⁴ Contract awarded

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commencement
The Intelligence Complex	The Intelligence Complex in the Negev, next to Omer; the project includes construction of buildings (offices, workshops, warehouses and welfare facilities) for units of the Intelligence Corps, as well as provision of maintenance and operation services throughout the concession term	The Ministry of Defense	Tender	Q3/2016 (in practice)	Q2/2018 (in practice)	Q1/2021	Q4/2026
"Wide Horizon" ("Ofek Rachav") – a multi-branch base in Ramla	Multi-branch base in Ramla next to the Home Front Command; should include corps headquarters, a military recruiting office, a reception and sorting base, a regional clinic and more	The Ministry of Defense	Tender	Q1/2018 (in practice)	Q3/2019	Q4/2021	Q4/2025
Governmental Offices	Approx. 70,000 m ² for governmental offices above the LRT Depot at Jerusalem.	Governmental Building Administration	Pre-tender		Q1/2020	Q1/2022	Q2/2026
Governmental and court complex	Government complex and court at Afula	Governmental Building Administration	Pre-tender		Q3/2019	Q3/2020	Q3/2023
Governmental complex	Government complex at Kfar Saba	Governmental Building Administration	Pre-tender		Q4/2019	Q2/2020	Q2/2023
State Archive	Storage center of the Governmental Archive	Governmental Building Administration	Pre-tender		Q1/2020	Q3/2020	Q3/2023
Governmental Teleprocess complex	Complex for several governmental teleprocess units including the Israel Police and the Government ICT Authority at Jerusalam	Governmental Building Administration	Pre-tender		Q1/2020	Q3/2020	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. The total investment in these energy projects is estimated to be more than NIS 10 billion. Furthermore, as part of the reform in the electricity market, the sale of following five power plants (which are currently owned by the Israel Electric Corporation Ltd) is anticipated: Alon Tavor, Ramat Hovav, Reading, Hagit and Eshkol.