PPP Projects in Israel



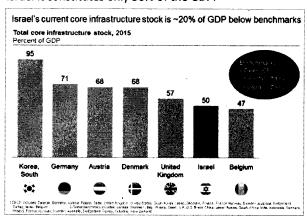
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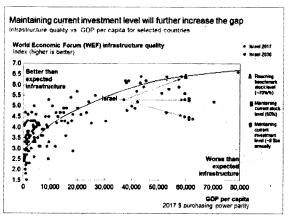
PPP Projects in Israel

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 public concessioner: the transfers to the private sector the responsibility for providing a public infrastructure, product or service, including the design, construction, financing, operation 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.

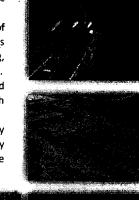
PPP projects have been promoted in Israel for over two decades in the fields of transportation, energy, environment, water and construction.



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 Closing /Construction Commencement	Operation Commencement	Concessioner	Shareholders in the Concessioner	Main Finance Providers	n cost (billions of NIS)
Transportation Route 431	Crosswise highway from Anava Interchange to Ayalon Highway, approximate length of 22 km	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 a Shapirim providing fre- shuttle service to centra Tel Aviv, and a designate lane that prioritizes publi transport, shuttle service and HOVs. The remainin capacity is sold to privat vehicles for a fee	ee Division al ed lic es	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	, Division	Operation	Q1/2006	Q4/2010	Carmelton	Shikun & Binui; Allied	Discount; Harel Insurance	1.0
Highway 6, Central Segment	Cross-Israel Highway;	; The Projects ; Division	Operation	Q4/1999	Q3/2002	Derech Eretz	Noy Fund; IIF Fund	Hapoalim; Psagot;	5.0

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	Projects in
	ın İsrael

Project Description

approximate length of

106 km, from Ein Tut

Interchange in the north

Yoqne'am and Somekh;

approximate total length

Mount Herzl through the

city center; approximate length of 14 km, including 23 stations

the west, connecting

Road no. 1 (Moza) and

Boulevard; approximate length of 5 km, including

production capacity of 118 million m³ a year; includes an independent

Menachem

tunnels

Reverse

desalination

of 19 km

The northern Cross- The Projects

The line connects Pisgat The Projects

An additional entrance The Projects

Begin

osmosis The Projects

facility, Division

road to Jerusalem from Division

Ze'ev in the north with Division

Israel Highway: between Division

to Sorek Interchange

Highway

3+7

Segments

– Red Line

Road 16

Ashkelon

Desalination Facility

Jerusalem Light Rail

Governmental Status

Authority

Operation

Q1/2019

Q4/2011

Q2/2023

Q3/2005

(predicted)

/Construction

Q1/2015

Q1/2006

Operation

Operation

Construction Q4/2019

Commencement

Concessioner

Cross North

Citypass

Shapir

LTD.

Pizzarotti

Highway 16

Shareholders Main Finance Constructio

Migdal; Clal;

n cost

(billions of NIS)

2.3

1.9

1.1

1.0

the Providers

Harel

Insurance;

Hapoalim;

Deutsche

Hapoalim;

Hapoalim;

Insurance

Clal

Leumi;

institutions

Leumi

Bank

Menora Mivtachim;

Concessioner

Shapir;

Leumi;

Pizzaroti

Noy Fund;

IIF Fund;

Ashtrom;

Harel

Shapir;

Pizzarotti

IDE; Veridis

Project	Project Description	Governmental Authority	Status	Financial Closin /Construction Commencement	g Operation Commencement	Concessioner		Main Finance Providers	n cost (billions of NIS)
	power plant that provid								
	electricity to the facilit				00/0007	Maria Adams	IIF	Hapoalim	0.9
Palmahim		is The Projects	Operation	Q1/2005	Q2/2007	Via Maris	IIF	пароант	0.9
Desalination Facility	desalination facilit								
	production capacity	of							
	90 million m³ a year	,						I I a a a Basa	1.6
ladera Desalination		is The Projects	Operation	Q4/2007	Q4/2009	H₂ID	Shikun &	Hapoalim; EIB: Clal	1.6
acility		y, Division					Binui; IDE		
	production capacity	of						Group	
	127 million m³ a year								1.0
orek A Desalination	Reverse osmos	is The Projects	Operation	Q2/2011	Q3/2013	SDL	Dan Capital		1.6
acility	desalination facilit	y, Division						EIB	
	production capacity	of							
	150 million m³ a yea	r; .							
	includes an independer	nt			•				
	power plant the	at							
	provides electricity	to				•			
	the facility								
Ashdod Desalination	Reverse osmos	is The Projects	Operation	Q4/2011	Q4/2015	ADL	Mekorot	EIB;	1.4
acility	desalination facilit	y, Division						Hapoalim	
	production capacity	of							
	100 million m³ a year								
orek B Desalination	Reverse osmos	is The Projects	Construction	Q2/2020	02/2023	S.M.S IDE	IDE	KFW; ;Leumi	2.2
Facility	desalination facilit	y; Division		2012000	(predicted)	3		EIB	
	approximate production	on			()				
	capacity of 200 million	on							
	m³ a year. Includes								
	planned construction f								
	an independent pow								
	plant which will supp								
	electricity to the facilit								

Ashalim – thermo solar – PLOT A	Thermo-solar power plant using parabolic trough technology, generation capacity of	The Projects Operat Division	Commencement 312 (1) 332 cition Q2/2015	Q2/2019	Negev Energy	Shikun & Binui; Noy Fund; TSK	Hapoalim; EIB; OPIC	(billions of NIS) 3,4
Ashalim – thermo- solar – PLOT B	Thermo-solar power plant with a solar reflection tower, generation capacity of 121 MW	The Projects Operat Division	tion Q2/2014	Q2/2019	Megalim		Hapoalim; EIB; Menora; Harel; others	2.5
Shalim – PV1	Power plant using photo-voltaic technology, generation capacity of 30 MW	The Projects Operat Division	tion Q4/2013	Q4/2017	Ashalim Sun	ClalSun; EDF Energy	Hapoalim; Clal	0.2
National Police Academy	National Police Academy in the area of Beit Shemesh; approximate size of 230 dunam, including operation, catering and training		Construction in Q1/2012	Q1/2015	Policity	Shikun & Binui; G4S	Discount; Harel	0.6
Ashdod Medical Center	arrays A hospital, including all the departments required for a public hospital, with approximately 300 beds (and an option for additional 400 beds).		ion Q2/2012	Q2/2017	Assuta	Assuta Ashdod	Leumi	1.2

Project		Project Description	Governmental Authority	Status	Financial Closing /Construction Commencement	g Operation Commencement				n cost (billions of NIS)
The Complex Training Ba	Training — the ses City	Buildings (offices, classrooms, warehouses and welfare facilities) for the training bases reloacated from Ezrifin Base; designated for training for combat supporting units	,	Operation	Q2/2012	Q1/2015	Mabat LaNegev	Electra; Minrav; Binat; Noy Fund	Hapoalim; Amitim; Menora; Psagot;	1.4
Teleprocessi Complex i Sheva	ng in Be'er	The project includes the construction of building: (offices and welfare facilities) for units of the Teleprocessing Department, the South Command Headquarter and technological units of the Air Force	s of Defense	Construction	Q4/2018	Q1/2023 (predicted)	The Technological Teleprocessing Complex in the		Leumi; Clal; Amitim; First International Bank	
In Tiberia complexes	is, Safed in Jerusa	in Natanya; Court houses and Hadera; District lem and Nazareth Illit; Ministry of Justice In	Governmental Building	Construction		-	-		-	1.7
Court comp Ashekelon,	Petah Tik	Nviv; Court houses in Lod, va and Herzliya; HaLeom enter and Genery 2 in	- Governmental	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 **55 billion**

Project	Project Description	Governr Authorit		Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commenceme nt
Jerusalem Light Rail – Jnet (Green Line + extensions of the Red Line)	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 Division	Projects I	Financial Clo	sing Q2/2017 (in practice	Q2/2018 e) (in practice)	Q4/2020	2022
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 Division	Projects	Tender	Q3/2016 (in practice	Q1/2019 a) (in practice)	Q3/2021	Q3/2025
International Airport	International airport, complementary to Ben-Gurion Airport; the airport will be designed to serve mostly Low-Cost airlines	The I Division	Projects	Pre-tender	Q1/2021	Q3/2021	Q2/2023	Q2/2027

¹ Contract awarded

Project	Project Description	Governmental Authority	Status	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commenceme nt
Jerusalem Light Rail — Blue Line	The line will connect the neighborhood of Ramot in the north and Gilo in the south; The line is 28 km long and includes 46 stations.	The Projects Division	Tender	Q2/2020 (in practice	Q1/2021 e)	Q1/2023	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 e) (in practice)	Q1/2022	2027
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 e) (in practice)	Q1/2022	2026
Haifa—Nazareth Light Rail	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	Highway	Tender	Q2/2020 (in practio	Q4/2021 e)	Q1/2024	2027
water for the last						表示教育	19 14 14
Western Galilee Desalination Facility	Reverse osmosis desalination facility with a production capacity of 100-200 million cubic meters per year	The Projects Division	Tender	Q1/2020 (in practic	Q3/2020 e)	Q1/2022	Q4/2024
Water Treatment Facility –the Sharon area Energy	Treatment facility for contaminated groundwater at the Military Industrial Complex in the Sharon area	The Projects Division	Tender	Q1/2020 (in practic	Q1/2021 e)	Q4/2022	Q1/2025

Project	Project Description	Governmental Authority		pated ualification ation	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Anticipated Operation Commenceme nt
Ashalim – PV2 (2)	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
Dimona – PV	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
Ashalim- PV3	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
Natural gas -fired power plants	Natural gas power plants	The Projects Division	Pre-tender	Q4/2020	Q4/2021	Q2/2023	Q2/2026
Environment:	· 是更多数 GadaService	2.10 (2.5)	20 A D A P E			4. F. S. A. S. (i)	
Waste treatment Facility at the Shafdan area ⁽³⁾	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
Waste Treatment Facility Ma'ale Adumim	Waste treatment facility, using an incineration method (waste-to-	The Projects Division	Tender	Q4/2019	Q3/2020 .	Q3/2022	Q3/2025

Contract awarded
 Contract awarded

Project	energy), in the area of Ma'ale Adumim	Governmental Authority	ı	Anticipated Pre-Qualification Publication	Anticipated Tender Publication	Anticipated Financial Closing/ Construction Commencement	Commenceme
Construction	and the second	En le Connection				4 4	
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		Financial Clos	sing Q2/2017 (in practice	Q2/2018 e) (in practice)	Q2/2021	Q4/2025
The Intelligence Complex	Mishmar HaNegev. 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	The Ministry of Defense	Tender	Q3/2016 (in practice	Q2/2018 e) (in practice)	Q3/2021	Q4/2026
	Intelligence Corps, as well as provision of maintenance and operation services throughout the concession term					,	
("Ofek Rachav") – a	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 practic	Q3/2019 e) (in practice)	Q3/2022	Q1/2027
Governmental Offices	Approx. 70,000 m² for governmental offices above the LRT Depot at legusalem		Pre-tender		Q2/2021	Q2/2022	Q2/2026

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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 Hovav4, Reading, Hagit and Eshkol.

Status

Pre-tender

Pre-tender

Authority

Building Administration

Building Administration

Government complex and court at Governmental

Storage center of the Governmental Governmental

Complex for several governmental Governmental

teleprocess units including the Israel Building Police and the Government ICT Administration Anticipated

Publication

Pre-Qualification

Anticipated

Publication

Q4/2020

Q4/2020

Tender

Anticipated

ConstructionCommencement

Q3/2021

Q3/2021

Financial Closing/ Operation

Q3/2024

Q3/2024

Q3/2025

Governmental and

Afula

Archive

Authority at Jerusalam

court complex

State Archive

Governmental

Teleprocess complex