

Future Prospects of Infrastructure Investments in Turkey

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The 9th Development Plan (2007-2013)

Strategic Axis

- Increasing Competitiveness
- Increasing Employment
- Empowering Human Resources and Social Solidarity
- Achieving Regional Development
- Increasing Quality and Efficiency in Public Services

Main Economic Indicators

	2000	2005	2007	2013	2007-2013 Increase (%)
GDP, Billion \$	200	363.4	658.8	797.4	--
GDP Growth	7.4	7.4	4.5	--	7.0
GDP per Capita, \$	2,879	5,042	9,333	10,099	9.9
Population (million)	67.8	72.5	74.3	79.3	1.1
Fixed Capital Investment/GDP, %	22.4	19.6	21.4	24.2	9.1
<i>Public</i>	6.0	4.3	3.6	6.0	8.1
<i>Private</i>	16.4	15.3	17.8	18.2	9.4
Export (F.O.B), Billion \$	27.8	73.4	107.2	210	14.2
Import (C.I.F.), Billion \$	54.5	116.5	170.1	275	10.9
Unemployment Rate, %	6.5	10.3	9.9	7.7	--

Investment Policies

Investment Policies

- Public investments will be directed towards economic and social infrastructure
- New financing models that will increase private sector participation in infrastructure investments will be utilized.

Public Investment Policies

- The shares of public investment in education and health sectors, which are among priority sectors, will be increased.
- Public investments will be increased in the agriculture (irrigation) sector
- In line with the liberalization policy, the share of the public sector in energy investments will be gradually decreased.

Public Investment Policies

- The transportation sector will receive the largest share from public investments.
- Financing will be supported by the new models that involve private sector participation.
- The share of public investments in mining and manufacturing industries will decrease

Public Investments During 9th Plan Period

Sectors	2006 (Current Prices)		2013 (Current Prices)		2007-2013 (2006 Prices)	
	Million \$	% Share	Million \$	% Share	Million \$	% Share
Agriculture	948	7,7	3.507	11,8	11.916	10,2
Mining	441	3,6	794	2,7	3.803	3,3
Manufacturing	307	2,5	118	0,4	1.046	0,9
Energy	1.744	14,2	1.804	6	12.241	10,5
Transport-Communication	3.913	31,8	7.644	25,6	30.361	26,0
Tourism	33	0,3	138	0,5	530	0,5
Housing	75	0,6	271	0,9	903	0,8
Education	1.720	14,0	6.541	21,9	22.348	19,1
Health	874	7,1	2.576	8,6	9.857	8,4
Other Services	2.237	18,2	6.429	21,6	23.887	20,4
-Economic	1.192	9,7	2.919	9,8	10.775	9,2
-Social	1.045	8,5	3.510	11,8	13.112	11,2

Sectoral Investment Policies

Energy

Main strategies:

- Liberalization of the energy sector and privatization of the public electricity generation and distribution assets.
- Diversification of the energy resources and origin countries,
- Initiation of new production investments including nuclear energy,
- Improvement of transit country position in energy traffic,
- Ensuring sufficient storage for oil and natural gas.

Energy

Major projects to be realized in energy sector in the next five years;

- Large hydro electric power plants,
- Nuclear power plants,
- Afşin Elbistan C&D lignite thermal power plants,
- Electricity transmission projects,
- Electricity distribution projects,
- Natural gas storage projects.

Energy - important prospective projects

Million USD\$					
PROJECT NAME	IMPLEMENTATION PERIOD	PROJECT COST	CUMULATIVE EXPENDITURE	2008 ALLOCATION	
ENERGY SECTOR TOTAL			34.813	19.510	1.748
PRIORITY PROJECTS TOTAL			12.467	2.483	709
Afsin Elbistan C and D Lignite Ther.Pow.Plant			Projects are open to bids till 26 June 2008!		
Nuclear Power Plants			Project is open to bids till 24 September 2008!		
Electricity Transmission Projects	1994-2011	1.639	220	218	
Electricity Distribution Projects	1986-2011	4.715	2.201	399	
Tuz Gölü Nat.Gas Underground Storage Project	2005-2015	263	62	92	
NABUCCO Gas Pipeline Project	2001-2011	5.850	Turkey's share of investment cost (\$ 1.45 B) will be supplied outside Annual Investment Program.		

Nuclear Power Plant

- Law about "Building and Operation of Nuclear Power Plants and sale of Energy" went into effect recently.
- Bids to be submitted by 24 September 2008 for a nuclear power plant with a capacity of 4,000 MW and should be commissioned by the end of 2020.
- A Power Purchase Agreement of a maximum duration of 15 years will be signed with the off-taker
- The location is Mersin at the south of Turkey and land will be allocated free of charge

Irrigation

Irrigation Sector

- Irrigation investments will be expanded with the aim of increasing the production of agricultural products with a high production value in a cost effective manner.

Irrigation Sector - Investments

Million USD

PROJECT NAME	IMPLEMENTATION PERIOD	PROJECT COST	CUMULATIVE EXPENDITURE	2008 ALLOCATION
IRRIGATION SECTOR TOTAL		31.272	12.162	695
PRIORITY PROJECTS TOTAL		3.335	2.351	101
Bagbaşı Dam and Blue Tunnel	2005-2013	236	-	33
Kucukmenderes Beydag	1991-2010	235	62	14
Develi Second Stage	1990-2012	166	59	12
Lower Fırat First Stage	1977-2010	1.665	1.315	17
Antalya Caybogazı	1985-2009	201	153	13
Lower Buyuk Menderes	2005-2015	832	762	12

(* In addition to the above 23,745 ha of new projects will be tendered in 2008.

Southeastern Anatolian Irrigation Project (GAP)

- ✓ Southeastern Anatolian Project (GAP) will irrigate about 1.8 million hectares of land.
- ✓ So far 14% has been completed.
- ✓ 7 % is under construction.
- ✓ 25 % rests in Public Investment Program without contract.
- ✓ New ideas are sought for construction of the remaining 54%.

Transportation

Existing Road Transport System

- 64,000 kms of road network (excluding village roads)
- The length of multi-lane highways is 14,000 kms.
- 7,200 bridges of total length 390 kms
- 172 tunnels of total length of 75 kms

Motorways-BOT Projects Under Preparation

- Gebze-Orhangazi-Izmir Motorway (Izmit Bay Crossing Included) (377 km)
- Istanbul-Canakkale Motorway (Çanakkale Strait Bridge Included) (566 km)
- Ankara-Izmir Motorway (503 km)
- Ankara-Antalya Motorway (345 km)
- Ankara-Bursa Motorway (202 km)

Railway Transport

- Transporting freights mainly by railways is a strategic objective of the transportation sector.
- Freight transportation will be liberalized in order to benefit from the operational advantages of the private sector.
- State Railways Authority will be restructured and its financial burden will be reduced to a sustainable level.
- New connection lines will be constructed primarily in industrial regions with private sector partnership.

Railway Transportation Projects

In Million USD\$

PROJECT NAME	IMPLEMENTATION PERIOD	PROJECT COST	CUMULATIVE EXPENDITURE	2008 ALLOCATION
RAILWAY SECTOR TOTAL			16.760	2.945
PRIORITY PROJECTS TOTAL		12.635	1.761	453
Marmaray	1998-2012	3.400	625	270
Ankara-Istanbul High Speed Train	1994-2010	2.700	975	137
Ankara-Konya High Speed Train	2005-2009	754	160	13
Turkey-Georgia-Azerbaijan Railway	1999-2010	293	1	29
Halkali-Bulgaria Border High Speed Train	2007-2010	905	-	1
Ankara-Afyon-Izmir High Speed Train	2007-2011	2.370	-	1
Ankara-Sivas High Speed Train	2007-2011	1.573	-	1
Bursa-Ankara, Bursa-Istanbul High Speed Train	2008-2012	640	-	1

(*) Last four projects on the table have not been tendered yet.

Air Transport Sector

(Major Air Transport Projects)

BOT Projects

6 passenger terminals have been constructed at 5 different international airports with a total capacity of 50 million passengers per year with a total cost of 937 million \$.

Air Traffic Navigation Project

Total cost of 160 million \$. The Project will increase air traffic capacity of Turkey and it will let the navigational systems be controlled from a single central unit.

Planned Large-Scale Projects

3rd Airport in Istanbul: Site selection study is started.

Maritime Transport

- Port capacities will be increased in Aegean, Mediterranean, Marmara and Black Sea Regions to cope with the increasing trade.
- New large scale port constructions are thought to be realized by PPP models.
- Port operations are being privatized.
- New large scale shipyards will be constructed according to the results of the ongoing "Shipyards Master Plan".

Prospective Maritime Projects

Location	Type of Project	Implementation Period	Estimated Cost (in million \$)
İzmir Port	Port channel+ 2nd Stage Dredging	2008-2011	248
Derince Container Terminal	New Construction	2009-2012	355
Çandarlı (Kuzey Ege) Port	New Construction 1st Stage	2008-2012	265
Mersin Container Port	New Construction 1st Stage	2009-2012	525
Filyos Port	New Construction	2009-2012	700
İzmit/İzmir/İskenderun VTS Project	New Construction	2008-2010	80

Environment

Environment Projects

Sector	Number of Projects	Total Project Cost (million \$)	2008 Investment (million \$)
Water Supply	96	5,301	340
Wastewater	166	3,333	655
Municipal Services Including Waste	47	644	349
TOTAL	309	9,278	1,344

Prospective Environmental Infrastructure Investments in the EU Approximation Strategy

Total investment need in the period 2007-2023 (million \$)	
Water Supply	15,374
Wastewater	21,817
Waste	11,534
TOTAL	48,725

Public Private Partnerships (PPPs)

Share of Investments in GDP (%)



Public-Private Partnerships

Rationale for Public-Private Partnerships in Turkey

- The need for additional finance for public investments
- The potential of faster implementation of projects
- Reduced operation and construction costs
- Diffusion of managerial skills and efficiency of the private sector into infrastructure management and public service provision

Public-Private Partnerships

PPP Projects in Different Sectors

Air Transport	Airport Passenger Terminal Buildings (6 BOT Projects, 4 Long Term Lease Projects)
Road Transport	1 Tunnel Project (BOT) Motorway Roadside Facilities (BOT)
Maritime Transport	Ports, Ship Wharfs, Passenger Wharfs (BOT) (3 BOT Projects, 1 TOR Project)
Rail Transport	1 Railway Project (BOT) (No bid submitted to tender) 1 Station Rehabilitation Project (BOT) (Not tendered yet)
Urban Transport	Istanbul Strait Road Tunnel Project (BOT) (Not tendered yet)
Energy	Hydroelectric Power Plants, Natural Gas Power Plants, Wind Power Plants, Natural Gas Combined-Cycle Power Plants, Thermic Plants (22 BOT Projects, 5 BO Projects, 2 TOR Projects)
Tourism	Yacht Marinas (12 BOT Projects ⁽¹⁾)
Customs	Border Gates (18 BOT Projects ⁽²⁾)
Water Supply	1 BOT Dam Project

(1) 3 of the projects are at the stage of preparation..

(2) 13 of the projects are at the stage of preparation.

Public-Private Partnerships

Due to:

- Limited Number of PPP model variations in the existing legislation (Only BOT, BO, TOR and BLT models currently included)
- Lack of harmonisation among the existing legislation
- Lack of awareness and capacity in the public sector about PPPs
- Lack of a central administrative structure for managing PPP projects,

a new Framework PPP Law has been drafted under the coordination of the State Planning Organization

Public-Private Partnerships

Draft PPP Framework Law;

- Defines the concept of public-private partnerships
- Unifies the PPP legislation
- Forms the legal basis for additional PPP models and sectors
- Brings a rational and objective project selection procedure
- Sets the principles of risk management in PPP projects

Thanks for Your Attention