INVESTING IN INFRASTRUCTURE & PUBLIC PRIVATE PARTNERSHIP (PPP) PROJECTS IN TURKEY?

May 2021
AGENDA

EXECUTIVE SUMMARY

NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES
- Healthcare
- Transportation
- Energy

FAVORABLE INVESTMENT CLIMATE
EXECUTIVE SUMMARY

TURKEY HAS A STRONG CASE FOR INVESTMENT IN INFRASTRUCTURE

• Turkish economy is robustly growing with an average annual GDP growth rate of 5.1%.
• Turkey’s 84-million strong population is growing with additional 1 million people every year coupled with a rapid urbanization process which has resulted in more than 24 urban centers with populations over 1 million.
• Turkey’s growing trade volume and strategic location compels Turkey to develop its infrastructure.

Investment Need for Development

• Turkey has implemented $156 Billion worth of Public Private Partnership (PPP) projects in a variety of sectors. This trend has picked up in recent years with a bright prospect.
• Turkey has set ambitious targets to upgrade its infrastructure.
• From transportation to healthcare and energy, ample opportunities are available in the pipeline.

Track Record with Significant Opportunities in the Pipeline

• Turkey has a favorable investment legislation for PPP investments that can be realized through various models, such as build-operate, build-operate-transfer, transfer of operational rights, etc.
• Turkey’s investment climate is further strengthened by domestic and international laws that protect investments and provide international arbitration.
• Turkey’s macroeconomic policies, investments and more importantly, strong public finance management support PPP investments that require guaranteed purchase.
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FAVORABLE INVESTMENT CLIMATE
Turkey has a significant investment need in infrastructure development. Investment current trends amount to $475 Billion, while the need for investment is estimated at $823 Billion, leaving a gap of $348 Billion.

Turkey’s Infrastructure Current Trends and Need ($Billion)

Investment Need by Sector (2021-2040)

- Transport: $494.6 Billion
- Energy: $202.9 Billion
- Telecom: $80.9 Billion
- Water: $44.8 Billion
- Rail: $52.8 Billion
- Ports: $0.9 Billion
- Airports: $15.3 Billion
- Roads: $425.6 Billion

Investment Gap by Sector: $288.3 bn in Road, $42 bn in Energy, $16 bn in Rail, $1.9 in Water, $0.57 bn in Airports.

Source: Global Infrastructure Hub (GIH)
**TURKEY’S INVESTMENT NEED IN INFRASTRUCTURE IS DRIVEN BY SEVERAL FACTORS**

**GROWING ECONOMY**
Turkish economy has been robustly growing with an average annual GDP growth rate of 5.1% from 2002 to 2020.

**GDP GROWTH PER YEAR**
5.1%

**GROWING POPULATION**
Turkey's population has been rapidly growing by 1 million every year.

**URBANIZATION**
As Turkish economy has developed, people from rural areas have migrated to urban centers.

**URBAN CENTERS WITH POPULATIONS OVER 1 MILLION**
24

**GROWING TRADE**
Turkey’s foreign trade volume has increased from $88 billion in 2002 to $389 billion in 2020.

**TRADE VOLUME**
$389 BILLION

**GROWING TRADE VOLUME**

**GROWING NEED FOR EFFICIENCY**
In order to maintain competitiveness, Turkey needs to enhance efficiency and productivity by investing in infrastructure.

Source: TurkStat
### 11th largest economy in the World

#### RANKING OF ECONOMIES BY GDP AT PPP

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>USA</td>
<td>CHINA</td>
<td>USA</td>
</tr>
<tr>
<td>2.</td>
<td>CHINA</td>
<td>USA</td>
<td>JAPAN</td>
</tr>
<tr>
<td>3.</td>
<td>JAPAN</td>
<td>INDIA</td>
<td>INDIA</td>
</tr>
<tr>
<td>4.</td>
<td>GERMANY</td>
<td>JAPAN</td>
<td>GERMANY</td>
</tr>
<tr>
<td>5.</td>
<td>INDIA</td>
<td>GERMANY</td>
<td>JAPAN</td>
</tr>
<tr>
<td>6.</td>
<td>RUSSIA</td>
<td>RUSSIA</td>
<td>INDIA</td>
</tr>
<tr>
<td>7.</td>
<td>FRANCE</td>
<td>INDONESIA</td>
<td>JAPAN</td>
</tr>
<tr>
<td>8.</td>
<td>UK</td>
<td>BRAZIL</td>
<td>GERMANY</td>
</tr>
<tr>
<td>9.</td>
<td>BRAZIL</td>
<td>UK</td>
<td>RUSSIA</td>
</tr>
<tr>
<td>10.</td>
<td>ITALY</td>
<td>FRANCE</td>
<td>FRANCE</td>
</tr>
<tr>
<td>11.</td>
<td>MEXICO</td>
<td>MEXICO</td>
<td>TURKEY</td>
</tr>
<tr>
<td>12.</td>
<td>INDONESIA</td>
<td>ITALY</td>
<td>TURKEY</td>
</tr>
<tr>
<td>13.</td>
<td>SPAIN</td>
<td>TURKEY</td>
<td>TURKEY</td>
</tr>
<tr>
<td>14.</td>
<td>CANADA</td>
<td>S.KOREA</td>
<td>CANADA</td>
</tr>
<tr>
<td>15.</td>
<td>S.KOREA</td>
<td>SPAIN</td>
<td>SPAIN</td>
</tr>
<tr>
<td>16.</td>
<td>S.ARABIA</td>
<td>CANADA</td>
<td>S.ARABIA</td>
</tr>
<tr>
<td>17.</td>
<td>IRAN</td>
<td>S.ARABIA</td>
<td>S.ARABIA</td>
</tr>
<tr>
<td>18.</td>
<td>TURKEY</td>
<td>IRAN</td>
<td>AUSTRALIA</td>
</tr>
</tbody>
</table>

#### AVERAGE ANNUAL GDP GROWTH (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>2002-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>TURKEY: 5.1</td>
</tr>
<tr>
<td>2003</td>
<td>POLAND: 3.6</td>
</tr>
<tr>
<td>2004</td>
<td>ROMANIA: 3.4</td>
</tr>
<tr>
<td>2005</td>
<td>BULGARIA: 3.0</td>
</tr>
<tr>
<td>2006</td>
<td>CZECHIA: 2.4</td>
</tr>
<tr>
<td>2007</td>
<td>HUNGARY: 2.0</td>
</tr>
<tr>
<td>2008</td>
<td>KOREA: 1.8</td>
</tr>
<tr>
<td>2009</td>
<td>CANADA: 1.6</td>
</tr>
<tr>
<td>2010</td>
<td>CANADA: 1.4</td>
</tr>
<tr>
<td>2011</td>
<td>SPAIN: 1.2</td>
</tr>
<tr>
<td>2012</td>
<td>SPAIN: 1.0</td>
</tr>
<tr>
<td>2013</td>
<td>SPAIN: 0.8</td>
</tr>
<tr>
<td>2014</td>
<td>SPAIN: 0.6</td>
</tr>
<tr>
<td>2015</td>
<td>SPAIN: 0.4</td>
</tr>
<tr>
<td>2016</td>
<td>SPAIN: 0.2</td>
</tr>
<tr>
<td>2017</td>
<td>SPAIN: 0.0</td>
</tr>
<tr>
<td>2018</td>
<td>SPAIN: -0.2</td>
</tr>
<tr>
<td>2019</td>
<td>SPAIN: -0.4</td>
</tr>
<tr>
<td>2020</td>
<td>SPAIN: -0.6</td>
</tr>
</tbody>
</table>

#### REAL GDP GROWTH

Registered the second largest economic growth in OECD

A YOUNG AND GROWING POPULATION HAS BEEN SPURRING ECONOMIC ACTIVITIES

TURKEY’S POPULATION IS GROWING WITH ADDITIONAL 1 MILLION PEOPLE EVERY YEAR AND IS EXPECTED TO REACH 100 MILLION BY 2040

Source: Turkstat, Eurostat * As of 2019

2000: 63 MILLION
2010: 72 MILLION
2020: 84 MILLION
2030: 92 MILLION
2040: 100 MILLION
24 urban centers with populations over 1 million

Total Population in 2020: 83.6 Million

Source: TurkStat
STRATEGIC LOCATION

TURKEY IS STRATEGICALLY LOCATED AT THE EPICENTER OF TRADE ROUTES, WHICH REQUIRE A DEVELOPED TRANSPORTATION INFRASTRUCTURE

PROXIMITY TO MAJOR MARKETS
1.3 billion people and $26T GDP in Europe, MENA and Central Asia at 4 hour flight-distance

CONNECTIVITY
Turkish Airlines connects you to 323 destinations in 127 countries

Turkey’s Foreign Trade
($ Billion)

Export Import
389

2002 2020
88

1.6 BILLION

MANUFACTURING & EXPORT HUB FOR MULTINATIONALS

Exporting 85% of its production

Exporting 77% of its production

Production base for MENA

AS WELL AS MANAGEMENT HUB FOR MULTINATIONALS

B/S/H/

89 countries

80 countries

72 countries

63 countries

60 countries

30 countries

23 countries

Source: World Bank as of 2019
AGENDA

EXECUTIVE SUMMARIES

NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES

• Healthcare
• Transportation
• Energy

FAVORABLE INVESTMENT CLIMATE
FOR THE LAST 18 YEARS, USE OF PPP MODELS INCREASED AS AN ALTERNATIVE TO PUBLIC PROCUREMENT

PPP Contracts in Turkey
($ Billion**)  
- Investment
- Fees*

Number of PPP Projects in Turkey

Source: Presidency of Strategy and Budget  
*Fees to the government for the transfer of operating rights  
**2020 prices
**TURKISH PPP MARKET**

**TRANSPORTATION AND ENERGY INFRASTRUCTURE PROJECTS DOMINATE THE PPP MARKET IN TURKEY**

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**Breakdown of the PPP Contracts**

($) Million**

<table>
<thead>
<tr>
<th>Category</th>
<th>1986</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport</td>
<td>73,354</td>
<td>24,431</td>
</tr>
<tr>
<td>Energy</td>
<td>37,325</td>
<td>11,639</td>
</tr>
<tr>
<td>Motorway</td>
<td>24,431</td>
<td>4,828</td>
</tr>
<tr>
<td>Health Facility</td>
<td>11,639</td>
<td>2,180</td>
</tr>
<tr>
<td>Port</td>
<td>4,828</td>
<td>1,470</td>
</tr>
<tr>
<td>Marina</td>
<td>2,180</td>
<td>539</td>
</tr>
<tr>
<td>Industrial Facility</td>
<td>1,470</td>
<td>280</td>
</tr>
<tr>
<td>Border Gate</td>
<td>539</td>
<td>258</td>
</tr>
<tr>
<td>Mining</td>
<td>280</td>
<td>144</td>
</tr>
<tr>
<td>Railway</td>
<td>258</td>
<td>31</td>
</tr>
<tr>
<td>Culture &amp; Tourism</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

**Investment**

**Fees**

---

**Breakdown of the PPP Contracts**

(Number)

<table>
<thead>
<tr>
<th>Category</th>
<th>1986</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport</td>
<td>97</td>
<td>41</td>
</tr>
<tr>
<td>Energy</td>
<td>41</td>
<td>23</td>
</tr>
<tr>
<td>Motorway</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>Port</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Health Facility</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Border Gate</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Airport</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Marina</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Mining</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Railway</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Culture &amp; Tourism</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

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Source: Presidency of Strategy and Budget *Fees to the government for the transfer of operating rights **2020 prices

---
BUILD-OPERATE-TRANSFER AND TRANSFER OF OPERATING RIGHTS ARE THE MAIN CONTRACT MODELS IN THE TURKISH PPP MARKET

PPP Contract Models
($ Million**)

- Build-Lease-Transfer: 11,594
- Build-Operate: 6,996
- Transfer of Operating Rights: 44,881
- Build-Operate-Transfer: 92,416

Source: Presidency of Strategy and Budget *2020 prices

PPP Contract Models
(Number)

- Build-Lease-Transfer: 5
- Build-Operate: 20
- Transfer of Operating Rights: 109
- Build-Operate-Transfer: 115

PROJECTS
1986-2020

$156 BILLION
1986-2020

249 PROJECTS
AGENDA

EXECUTIVE SUMMARY

NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES
- Healthcare
- Transportation
- Energy

FAVORABLE INVESTMENT CLIMATE
Turkey has set ambitious targets to upgrade its infrastructure.

**Hospital Bed Capacity of Quality Rooms**

- 6% in 2002
- 75% in 2020
- 100% in 2023

**Highways (Toll Roads)**

- 1.714 km in 2002
- 3.523 km in 2020
- 8.187 km in 2035

**Railway (km)**

- High Speed: 10.959 km in 2003
- Conventional: 11.590 km in 2003
- High Speed: 12.803 km in 2020
- Conventional: 12.915 km in 2020
- High Speed: 25.030 km in 2023
- Conventional: 12.115 km in 2023

**Installed Power Capacity (GW)**

- 35.6 GW in 2003
- 91.9 GW in 2020
- 120 GW in 2023

Source: Turkstat, Ministry of Health, Ministry of Transport and Infrastructure, Ministry of Energy. *Quality rooms: one or two-bedded rooms with a private shower and toilet.
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NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES
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FAVORABLE INVESTMENT CLIMATE
OPPORTUNITIES IN HEALTHCARE

TURKEY HAS RECENTLY INTRODUCED NEW PROJECTS TO BUILD INTEGRATED HEALTHCARE CAMPUSES ACROSS THE COUNTRY AND MORE OPPORTUNITIES ARE IN THE PIPELINE

Source: Ministry of Health, as of August 2020 *Total bed capacity of PTR & HSFP Hospitals to be built in Afyon-Diyarbakır-Samsun-Malatya-Erzurum-Istanbul-Trabzon-Van: 2,400
OPPORTUNITIES IN HEALTHCARE

PPP PROJECTS IN INTEGRATED HEALTHCARE CAMPUSES

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
<th>Bed Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed (in service)</td>
<td>13</td>
<td>17,836</td>
</tr>
<tr>
<td>Under Construction</td>
<td>7</td>
<td>13,479</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
<td><strong>31,315</strong></td>
</tr>
</tbody>
</table>

THE PPP PROJECTS ARE STRUCTURED AS DESIGN, BUILD, FINANCE AND MAINTAIN FOR FACILITIES MANAGEMENT, WHILE CORE MEDICAL SERVICES REMAIN UNDER THE RESPONSIBILITY OF THE MINISTRY OF HEALTH

Source: Ministry of Health, as of August 2020
THE ELAZIĞ FETHI SEKIN CITY HOSPITAL PROVIDES HEALTHCARE SERVICES TO THE COMMUNITIES IN ELAZIĞ AND NEIGHBORING PROVINCES, WITH A COMBINED POPULATION OF 1.6 MILLION PEOPLE

Elazığ Fethi Sekin City Hospital

July 2014 Project Awarded  August 2018 Operational  Operation Period 25 Years

Sponsors

Credit Enhancers

Enhanced Bondholders

Unenhanced Bondholders

✓ The campus consists of three towers and annexes located around a central core and includes the following hospitals;
  • General Hospital
  • Maternity and Pediatric Hospital
  • Detainee Forensic Psychiatry Hospital
  • High Security Forensic Psychiatry (HSFP) Hospital
  • Oral and Dental Health Central (ODHC)

✓ Bed capacity: 1,038
✓ LEED Gold Certificate (a designation for green buildings)
✓ Employment: 3,850

Main Hospital

<table>
<thead>
<tr>
<th>Beds</th>
<th>Polyclinic Rooms</th>
<th>Patient Rooms</th>
<th>Operating Rooms</th>
<th>Beds at the Intensive Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>888</td>
<td>227</td>
<td>519</td>
<td>37</td>
<td>160</td>
</tr>
</tbody>
</table>

HSFP and Detainee

<table>
<thead>
<tr>
<th>Beds</th>
<th>Polyclinic Rooms</th>
<th>Patient Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 HSFP + 50 Detainees</td>
<td>8 HSFP</td>
<td>100 HSFP + 50 Detainees</td>
</tr>
</tbody>
</table>

ODHC

<table>
<thead>
<tr>
<th>Polyclinic Rooms</th>
<th>Operating Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>2</td>
</tr>
</tbody>
</table>

✓ Project Cost: €360 million = €288 million senior debt + €72 million equity
✓ First project benefiting from risk mitigation provided jointly by MIGA’s political risk insurance coverage and EBRD’s unfunded liquidity facilities
✓ First project bond financing for a greenfield infrastructure project in Turkey
✓ A1 Bonds were rated Baa2
✓ Vigeo Eiris certified the Elazığ project bond as a ‘green and social’ bond – the first such certification for an infrastructure project in Turkey
✓ With a 20 year maturity, the bond had the longest maturity for the Turkish Integrated Health Campuses PPP Programme

Source: Rönesans, GİH
TURKEY HAS SIGNIFICANTLY IMPROVED ITS HEALTHCARE SERVICES AND WILL CONTINUE TO INVEST IN HEALTHCARE INFRASTRUCTURE TO CATCH UP WITH OECD

NUMBER OF HOSPITAL BEDS PER 1,000 POPULATION

Source: OECD, Ministry of Health, values 2017 for Turkey and Canada, 2015 for the US
HEALTHCARE HAS BEEN A TOP PRIORITY FOR THE TURKISH GOVERNMENT WHICH IS COMMITTED TO INCREASING ACCESS TO HEALTHCARE SERVICES FOR ALL CITIZENS

The government introduced the Health Transformation Program in 2003 to provide universal healthcare services.

**UNIVERSAL COVERAGE**
In 2006 Universal Health Insurance introduced to cover all citizens

**IMPROVING INFRASTRUCTURE**
Number of Hospital increased from 1156 in 2002 to 1538 in 2020 (bed capacity 165K to 240K)

**INCREASING # OF HEALTHCARE PROFESSIONALS**
Number of Doctors increased from 92K in 2002 to 165K in 2020 (from 1.4 to 2 per 1000)

Source: OECD, Ministry of Health, values 2017 for Turkey and Canada, 2015 for the US
AGENDA

EXECUTIVE SUMMARY

NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES

• Healthcare
• Transportation
• Energy

FAVORABLE INVESTMENT CLIMATE
TURKEY HAS HEAVILY INVESTED IN TRANSPORT INFRASTRUCTURE ACROSS THE COUNTRY AND CONTINUES WITH EVEN MORE AMBITIOUS TARGETS

Infrastructure Investments

(₺ Billion*)

- Roads: 564.9
- Railway: 170.2
- Communication: 76.7
- Airport: 86.5
- Maritime: 10

₺ 910.3 BILLION
2003 - 2020

PPP Investments in Transport & Communication

(₺ Billion)

- Completed: 184.4
- Ongoing: 30.3

₺ 214.7 BILLION
2003 - 2020

Source: Ministry of Transport and Infrastructure, “at 2020 prices, including completed PPP investments”
INVESTING IN TRANSPORTATION HAS REMARKABLY TRANSFORMED TURKEY’S INFRASTRUCTURE LANDSCAPE, YET TURKEY IS DETERMINED TO IMPROVE IT FURTHER.

### OPPORTUNITIES IN TRANSPORTATION

<table>
<thead>
<tr>
<th>Category</th>
<th>2002</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUAL CARRIAGEWAY</td>
<td>6.101 km</td>
<td>27.230 km</td>
</tr>
<tr>
<td>HIGH SPEED RAILWAY</td>
<td>0 km</td>
<td>1.213 km</td>
</tr>
<tr>
<td>MARITIME CONTAINERS TRANSPORT</td>
<td>190 million Tons</td>
<td>497 million Tons</td>
</tr>
<tr>
<td>NUMBER OF AIRPORTS</td>
<td>26</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: Ministry of Transport and Infrastructure
The total length of highways currently in service is 3,523 km. Following the completion of the highway projects under construction and planning stages, it is aimed to increase the total length of the highway to 4,461 km in 2023 and 8,187 km in 2035.
OPPORTUNITIES IN TRANSPORTATION

TURKEY IS COMMITTED TO TRANSFORMING ITS RAIL TRANSPORT INFRASTRUCTURE FROM CONVENTIONAL TO HIGH SPEED

RAILWAY MAP OF TURKEY

Source: Ministry of Transport and Infrastructure
OPPORTUNITIES IN TRANSPORTATION

LOGISTICS IS AN INTEGRAL PART OF TURKEY’S TRANSPORT INFRASTRUCTURE. TURKEY HAS ESTABLISHED INTERMODAL LOGISTICS CENTERS ALONGSIDE THE TRANS-ASIAN RAILWAY NETWORK TO LOWER COSTS AND INCREASE EFFICIENCY OF LOGISTICS NETWORKS

LOGISTICS CENTERS

- 25 logistics centers
- 35 million tons additional transport capacity
- 12.8 million m² container storage and handling area

In Service and Completed (11)
Planned (8)
Under Construction (3)
In Tender Stage (3)

Source: Ministry of Transport and Infrastructure
Turkey has significantly improved and upgraded its airport infrastructure and continues to invest in airports.
SHOWCASE PROJECTS

TURKEY HAS IMPLEMENTED A VARIETY OF MEGA PROJECTS WITH BOT MODEL AND CONTINUES TO DO SO

ISTANBUL NEW AIRPORT
- Set to become world’s largest airport
- Annual capacity of 150 million passengers when all phases are completed
- Commissioned in April 2019
- Investment of $6.5 billion

YAVUZ SULTAN SELIM BRIDGE
- 95 km-long motorway featuring a bridge for rail & motor vehicle transit over Bosphorus
- Commissioned in August 2016
- Investment of $3.5 billion

GEBZE - ORHANGAZI - IZMIR MOTORWAY
- 427 km-long motorway connecting İstanbul, Bursa & İzmir via world’s 4th longest suspension bridge
- All phases are under operation
- Investment of $6.5 billion

EURASIA TUNNEL
- Double-deck underwater tunnel connecting Asia & Europe in Istanbul
- Commissioned in December 2016
- Investment of $1.2 billion
SHOWCASE PROJECTS

ANOTHER MEGA PROJECT EXPECTED TO BE COMPLETED SOON

1915 ÇANAKKALE BRIDGE

- Longest main span (2,023 km) of any suspension bridge in the world
- Bridge Length: 4,608 m
- 101 km motorway (including the Bridge)
- Construction started in March 2017
- Operation to start by 2023
- Operation period: 16 years 2 months (including construction)
- Investment: $2.8 Billion with BOT

Source: Turkish Statistical Institute Industry & Services Statistics NACE Rev2 Division 28, Central Bank of Republic of Turkey
TURKEY IS SET TO IMPLEMENT A MAGNIFICENT FEAT OF ENGINEERING PROJECTS; AN ARTIFICIAL SEA-LEVEL WATERWAY CONNECTING THE BLACK SEA TO THE SEA OF MARMARA, AND GEBZE-HALKALI RAILWAY PASSING OVER 3RD BOSPHORUS BRIDGE

**CANAL ISTANBUL**
- 45 km, 21 m depth and 275 m width
- 6 bridges
- New satellite cities

**GEBZE - HALKALI RAILROAD**
- 213 km with 10 stations
- 31 viaduct (8 km) and 53 tunnel (120 km)
- Passenger capacity: 13 million (Passenger/Year)
- Freight capacity: 12 million (Ton/Year)

Tender process to start soon
ANOTHER EXEMPLARY TRANSPORTATION PROJECT IS ANKARA-ISTANBUL HIGH SPEED RAILROAD

- Shortened travel time
- Faster and more comfortable travel
- 347 km total length
- 11 million passenger/year
- 350 km/h design speed
OPPORTUNITIES IN TRANSPORTATION

SIX BUILT-OPERATE-TRANSFER HIGHWAY PROJECTS ARE EXPECTED TO BE TENDERED IN 2021

1. KINALI-SAVASTEPE-MALKARA
   - The distance between Istanbul-Çanakkale and Istanbul-Tekirdağ will be shortened
   - Total length: 127 km
     - 3.363 m x 2 Viaduct
     - 1048 m x 2 and 1000 m x 2 Tunnels
     - 6 Facilities and 9 Crossroads

2. ANKARA-SIVRIHISAR
   - An important part of the East-West and North-South traffic corridor
   - Total length: 127 km
     - 5.490 m x 2 Viaduct
     - 6 Facilities
     - 5 Crossroads

3. ANKARA-KIRIKKALE-DELICE
   - Reduced traffic density and an important highway corridor for Kirikkale, which is becoming day by day a large industrial zone
   - Total length: 120 km
     - 3.679 m x 2 Viaduct
     - 3.656 m x 2 Tunnel
     - 3 Facilities and 7 Crossroads

Source: Ministry of Transport and Infrastructure
4. ANTALYA-ALANYA
Reducing heavy vehicle and transit traffic and increasing travel comfort

Total length: 163 km
- 8,822 m x 2 Viaduct
- 11,167 m x 2 Tunnel
- 7 Facilities and 9 Crossroads

5. CESMELI-SILIFKE-KIZKALESI
Uninterrupted highway transportation on Mersin-Adana-Gaziantep line

Total length: 52 km
- 2x4.266 m
- 1 Facility
- 5 Crossroads

6. DÖRTYOL-HASSA
Integration of industrial zones with Iskenderun Port

Total length: 31 km
- 359 m x 2 Viaduct
- 19,240 m x 2 Tunnel
- 5 Crossroads
PORT OF FİLYOS
Ongoing infrastructure construction

- 25 million ton/year capacity
- With special economic zones in the hinterland
- Port management to be BOT model

PORT OF ÇANARLI

- 1,500 m jetty work completed
- To reach 4 million TEU/year capacity in 3 phases;
  - Phase I: 1 million TEU
  - Phase II: 2 million TEU
  - Phase III: 1 million TEU
- Tender for Phase I expected
- Port management to be BOT model

MERŞİN CONTAINER PORT

- Studies ongoing
- 12.8 million TEU/year capacity
- Port management to be BOT model

Source: Ministry of Transport and Infrastructure
AGENDA

EXECUTIVE SUMMARY

NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES
- Healthcare
- Transportation
- Energy

FAVORABLE INVESTMENT CLIMATE
AS TURKEY HEAVILY DEPENDS ON ENERGY IMPORT, SPECIFIC TARGETS HAVE BEEN SET TO DIVERSIFY THE ENERGY MIX AND UTILIZE INDIGENOUS RESOURCES TO REDUCE DEPENDENCE ON IMPORTS

**WIND POWER**
More than 10 GW in the pipeline to reach 16 GW installed wind power capacity by 2027, up from 7.5 GW as of 2019.

**SOLAR POWER**
More than 10 GW in the pipeline to reach 16 GW installed solar power capacity by 2027, up from 6 GW as of 2019.

**GEOTHERMAL POWER**
3 GW potential in the pipeline in addition to existing 1.5 GW capacity as of 2019.

**NUCLEAR ENERGY**
To have 8 nuclear reactors with ~10 GW capacity operational and start building 4 additional reactors with 5 GW capacity by 2023.

**LIGNITE & COAL**
To utilize all known indigenous coal & lignite resources of 20 GW potential in addition to existing total 19 GW capacity as of 2018.

**HYDRO POWER**
34 GW installed hydro power capacity by 2023, up from 28.5 GW as of 2019.
OPPORTUNITIES IN ENERGY

TURKEY IS REALIZING THE TARGETS ONE BY ONE THROUGH SUCCESSFUL PPP MODELS WITH STRONG PARTICIPATION OF INTERNATIONAL PLAYERS

RENEWABLE ENERGY RESOURCES AREAS (YEKA)
YEKA aims to use renewable energy resource sites more effectively and efficiently in Turkey through large-scale mega projects with a high share of locally manufactured technologies.

The YEKA scheme is highly attractive with guaranteed feed-in-tariffs for 15 years.

SOLAR
1,000-MW solar power project tender in March 2017 won by:

1,000-MW solar power project

$1.3 billion investment is expected. The project will be fully operational in 36 months with a power take-off price of $0.0699 kWh.

WIND
1,000-MW wind power project tender in July 2017 won by the consortium of:

1,000-MW wind power project

More than $1 billion investment is expected. Turbines to be installed by 2019, with a power take-off price of $0.0348 kWh.

Nuclear Power Generation
YEKA aims to use renewable energy resource sites more effectively and efficiently in Turkey through large-scale mega projects with a high share of locally manufactured technologies.

The YEKA scheme is highly attractive with guaranteed feed-in-tariffs for 15 years.

NUCLEAR POWER GENERATION
YEKA aims to use renewable energy resource sites more effectively and efficiently in Turkey through large-scale mega projects with a high share of locally manufactured technologies.

The YEKA scheme is highly attractive with guaranteed feed-in-tariffs for 15 years.

The governments of Russia and Turkey signed a cooperation Agreement in 2010 to build a nuclear power plant consisting of four power units of NPP-2006 project with VVER-1200 reactors of total capacity 4.8GW in Turkey.

The project is the world’s first NPP project implemented on BOO (build-own-operate) principle.

The groundbreaking ceremony was held in April 2017, construction underway.

Source: Ministry of Energy and Natural Resources
AGENDA

EXECUTIVE SUMMARY

NEED FOR INFRASTRUCTURE INVESTMENT

TRACK RECORD

OPPORTUNITIES
- Healthcare
- Transportation
- Energy

FAVORABLE INVESTMENT CLIMATE
INVESTMENT CLIMATE

TURKEY’S INVESTMENT LEGISLATION SUPPORTS AND PROTECTS INVESTORS THROUGH VARIOUS LEGAL MECHANISMS

FOREIGN DIRECT INVESTMENT LAW

BILATERAL INVESTMENT PROTECTION TREATIES WITH 82 COUNTRIES

TREATIES TO AVOID DOUBLE TAXATION WITH 86 COUNTRIES

TOTAL TAX AND CONTRIBUTION RATE, 2019 (% of Profit)

INTERNATIONAL TAX COMPETITIVENESS, 2020 (Index=100 as most competitive)

Source: Ministry of Economy, Ministry of Finance, WB Doing Business Report, Total Tax Rate: Profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, turnover taxes and other taxes (such as municipal fees and vehicle taxes).

Tax Foundation (Tax competitiveness measures countries’ tax policies five categories: corporate income tax, consumption taxes, property taxes, individual taxes, and international tax rules.)
INVESTMENT CLIMATE

RELEVANT LEGISLATION IS QUITE FLEXIBLE, ENABLING TO ADAPT VARIOUS PPP MODELS ACCORDING TO THE NATURE AND REQUIREMENTS OF PROJECTS

MODELS AND LEGAL FRAMEWORK FOR PPP IN TURKEY

<table>
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<tr>
<th>Relevant Legislation (Law No.)</th>
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<th>Build-Lease-Transfer</th>
<th>Transfer of Operating Rights</th>
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<td>Thermal Power Plant</td>
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</table>

Source: Presidency of Strategy and Budget
INCENTIVES IN TURKEY MAKE PPP PROJECTS MORE BANKABLE

DEBT ASSUMPTION
The government may assume project companies’ foreign debt in BOT and BLT projects either partially or in full. In order qualify for debt assumption, the minimum investment must be ₺1 billion in BOT projects and ₺500 million in BLT projects.

INCENTIVES
Exemptions from certain fees and taxes (VAT and Stamp Duty). In addition, where applicable, PPP investors may benefit from corporate tax deductions and other financial incentives.

LAND
PPP projects in Turkey allow free use of government-owned land and expropriation.

REVENUE GUARANTEE
Certain PPP projects provide minimum revenue guarantees.
STRONG MACROECONOMIC FUNDAMENTALS ALLOW THE GOVERNMENT TO SUPPORT PPP PROJECTS
INVESTMENT CLIMATE

BANKABILITY OF THE PPP PROJECTS ENABLES INVESTORS TO ACCESS FINANCE THROUGH BOTH NATIONAL AND INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS) AND INVESTORS.
WHAT CAN INVEST IN TURKEY DO FOR YOU?

ASSIST YOU BEFORE, DURING AND AFTER YOUR ENTRY INTO TURKEY

PRIVATE SECTOR APPROACH WITH PUBLIC SECTOR CAPABILITIES

PRIVATE PUBLIC

A GOVERNMENTAL AGENCY REPORTING TO THE PRESIDENT

ACTING AS YOUR SOLUTION PARTNER

General & customized business information & Sectoral analysis & reports

Site selection support to find appropriate location/land for your investment

Arrangements of meetings with governmental bodies and other stakeholders

Facilitating your investment at all stages

Matchmaking with local partners & establishing business linkages

Project launch & Press release Services

Facilitating your visit to Turkey
USEFUL LINKS

- Ministry of Treasury and Finance: [https://www.treasury.gov.tr/](https://www.treasury.gov.tr/)

- European Investment Bank: [http://www.eib.org/infocentre/contact/offices/turkey-istanbul.htm](http://www.eib.org/infocentre/contact/offices/turkey-istanbul.htm)
- Banks in Turkey: [https://www.bddk.org.tr/Institutions-Category/Banks/22](https://www.bddk.org.tr/Institutions-Category/Banks/22)