

# INVESTING IN INFRASTRUCTURE AND PUBLIC PRIVATE PARTNERSHIP IN TURKEY

### Agenda



- Executive Summary
- Need for Infrastructure Investment
- Track Record
- Opportunities
- Benign Investment Climate

### Turkey has a strong case for investment in infrastructure...



### Investment Need for Development

- Turkish economy is robustly growing with an average annual GDP growth rate of 5.7%.
- Turkey's 81-million strong population is growing with additional 1 million every year coupled with a rapid urbanization process which has resulted in more than 20 urban centers with populations over 1 million.
- Turkey's growing trade volume and strategic location compels Turkey to develop its infrastructure.

# Track Record with Significant Opportunities in the Pipeline

- Turkey has implemented \$135 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 by 2023, the centennial of the Republic of Turkey.
- From transportation to healthcare and energy, ample opportunities are available in the pipeline.

### Favorable Investment Climate

- 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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2016-2040

\$569 Billion

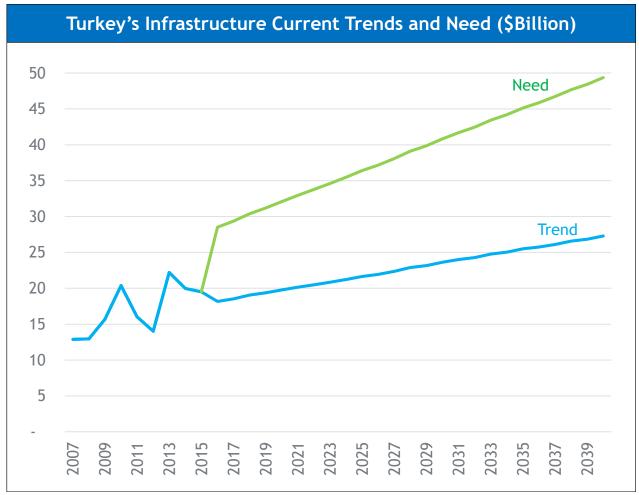
Investment current trends

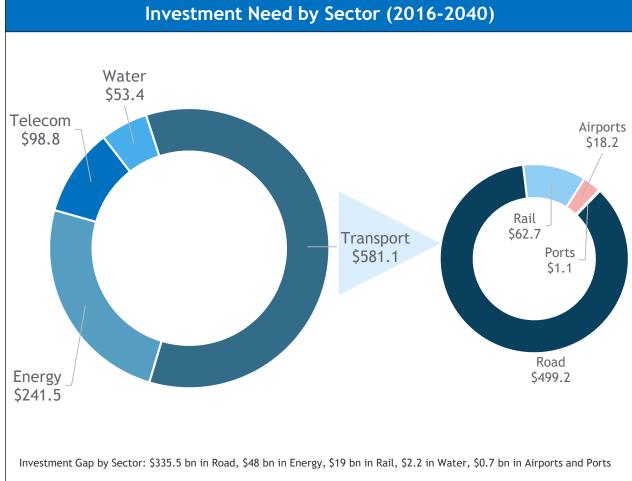
\$975 Billion

Investment needed

\$405 Billion

Investment gap





Source: Global Infrastructure Hub



5.7% GROWING ECONOMY PER YEAR

Turkish economy has been robustly growing with an average annual GDP growth rate of 5.7 from 2002 to 2017

81
GROWING
POPULATION
2017

Turkey's population has been rapidly growing by 1 million every year

\$391 BILLION TRADE VOLUME GROWING TRADE

Tukey's foreign trade volume has increased from \$88 billion in 2002 to \$391 billion in 2017

URBAN CENTERS WITH POPULATIONS OVER 1 MILLION

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



Turkey is strategically located in the proximity of energy resources and trade routes



In order to maintain competitiveness, Turkey needs to enhance efficiency and productivity by investing in infrastructure

# Robust Economy

Turkey has sustained stellar economic growth over the past 15 years and continues to grow..



### Average Annual GDP Growth (%), 2003-2017

Turkey Poland Romania Czechia Hungary

Real GDP Growth (Index: 2002=100)









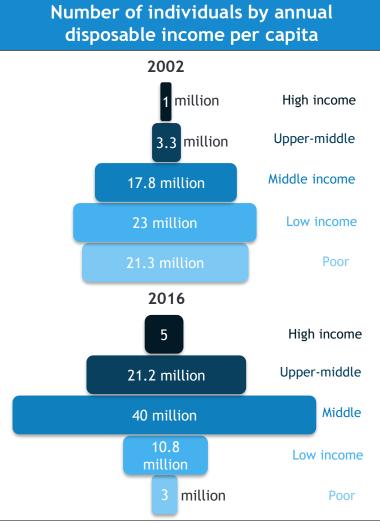




### 13th largest economy in the world

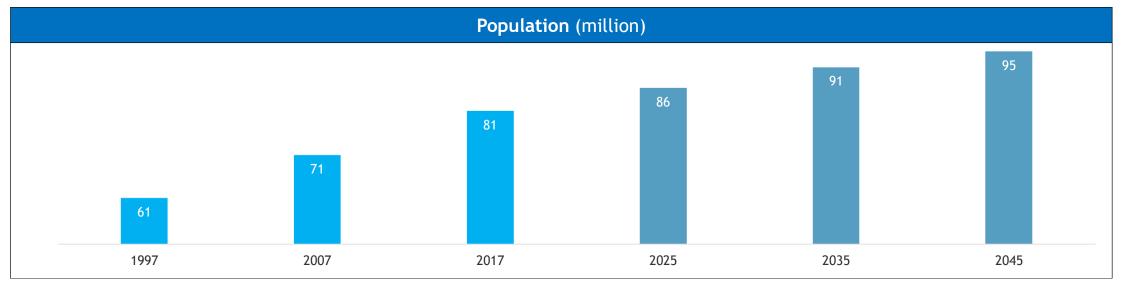
# 275 250 225 200 Poland Romania Czechia Hungary 100

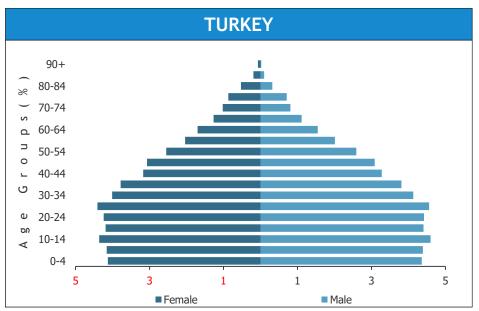


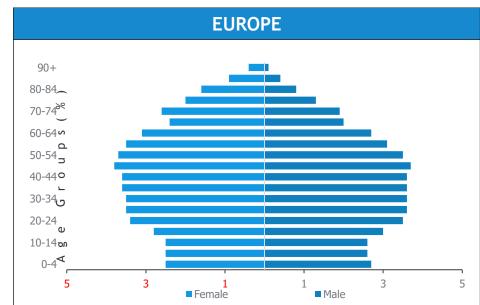


### A young and growing population has been spurring economic activities...



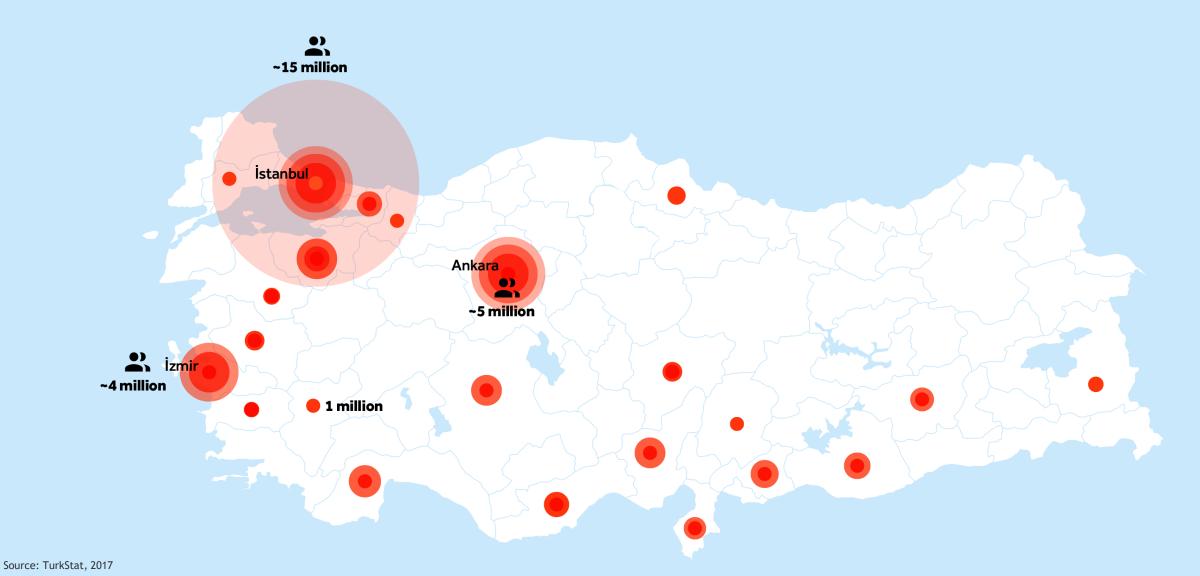








### More than 20 urban centers with populations over 1 million



# Strategic Location

Turkey is strategically located at the epicenter of trade routes, which require a developed transportation infrastructure..

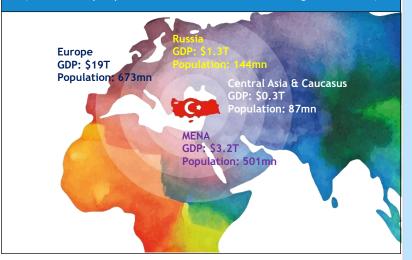


# Connectivity with key markets through road, rail, sea and air..



### Proximity to major markets

(1.5 billion people and \$24T GDP\* at 4 hour flight-distance)



# Follow and cover markets in 16 time zones from New York to Tokyo



# Already a manufacturing & export hub for global companies..

TOYOTA Exporting 85% of its production



Exporting 77% of its production



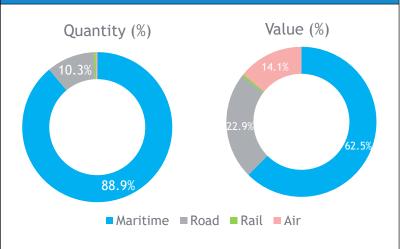
Production base for MENA

BOSS

Largest production facility worldwide



# Turkey's Foreign Trade by Mode of Transportation (2017)



Source: Turkstat, \*IMF and World Bank

### Agenda

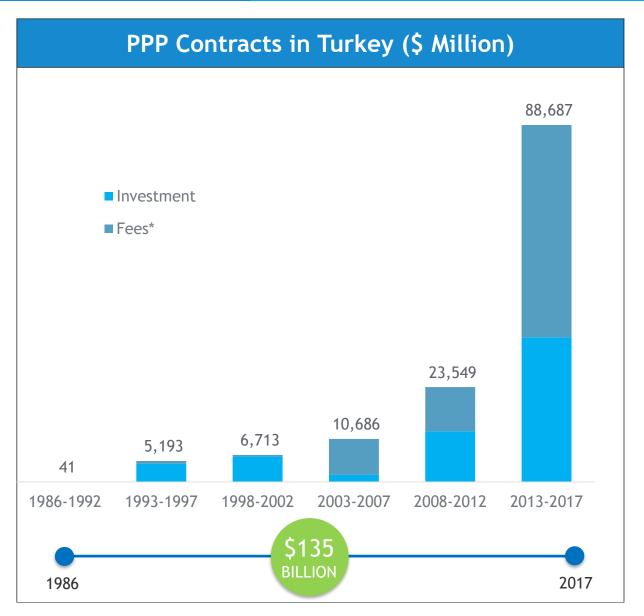


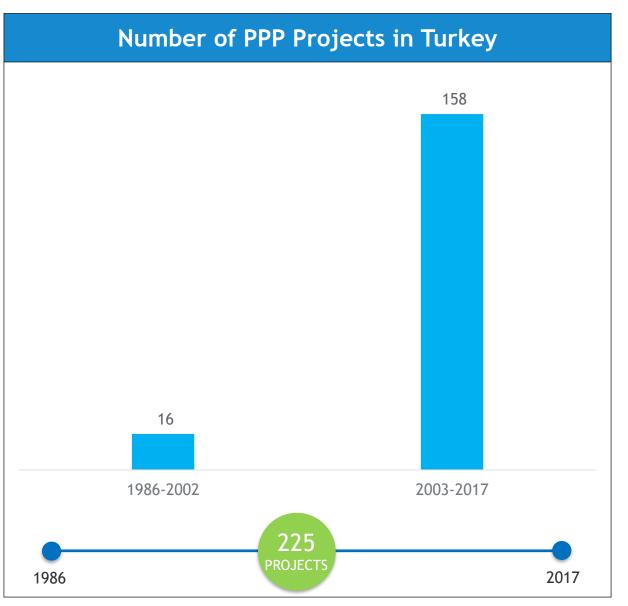
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### Turkish PPP Market

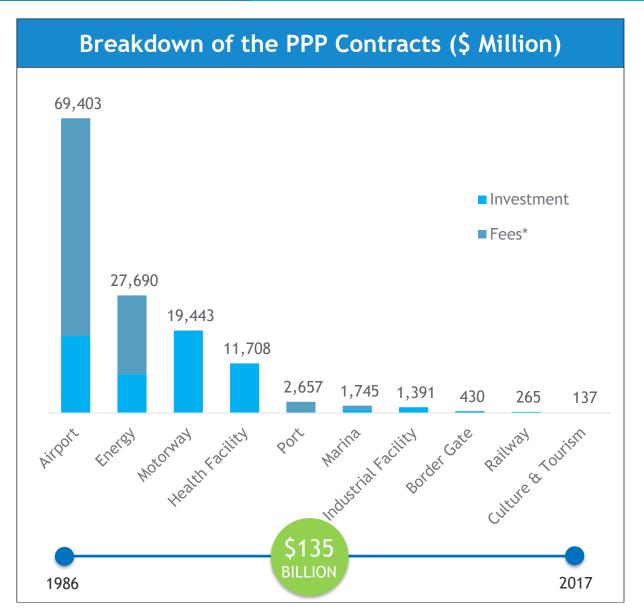
Turkey's socio-economic necessities have spurred investments in infrastructure, significantly increasing in recent years..









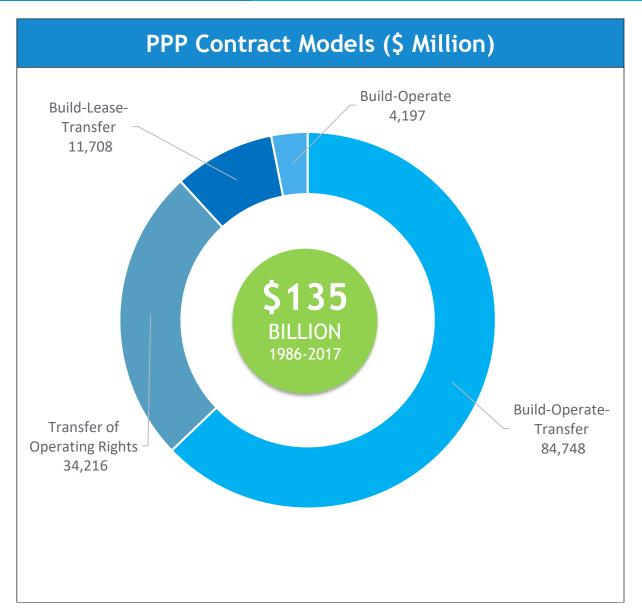


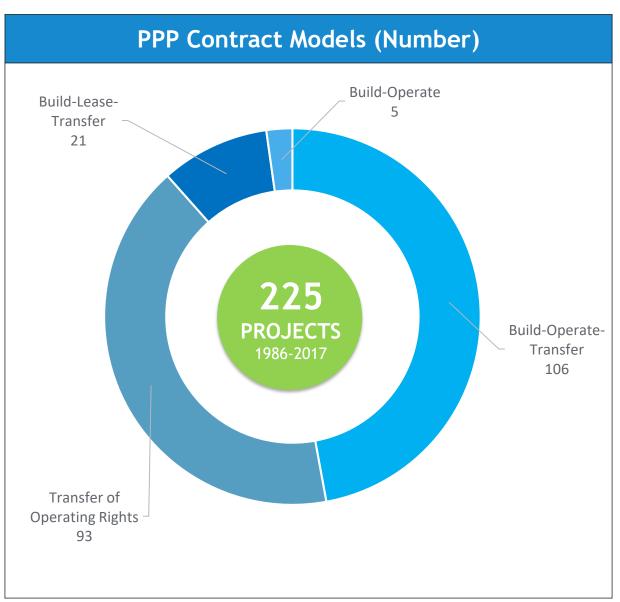


### Turkish PPP Market

Build-Operate-Transfer and Transfer of Operating Rights are the main contract models in the Turkish PPP market..







### Agenda

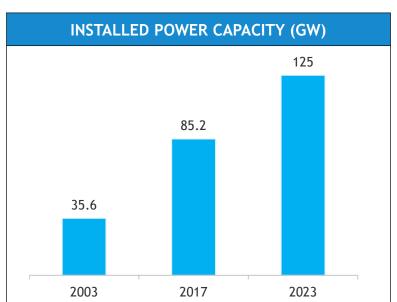


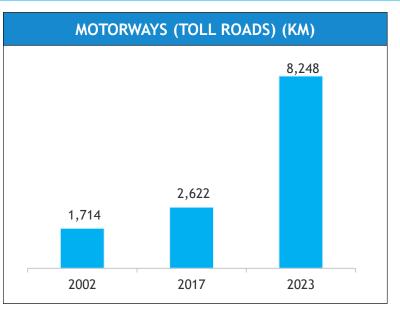
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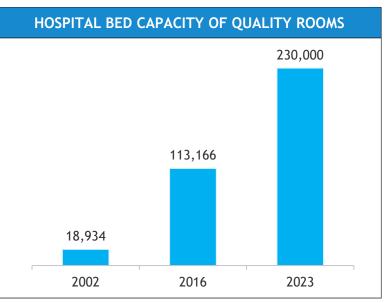
### **Ambitious Targets** Turkey has set ambitious targets for the centennial of the Republic...











# Opportunities in Healthcare

# Turkey has recently introduced new PPP projects to build *integrated healthcare* campuses across Turkey and more opportunities are in the pipeline..



PPP PROJECTS IN INTEGRATED HEALTHCARE CAMPUSES				
Status	Number	Bed Capacity		
Completed (in service)	4	4,074		
Under Construction	17	26,735		
In Tender Process	2	1,900		
Samsun		900		
Denizli		1,000		
Approved by High Planning Council (HPC)	3	2,700		
Antalya		1,000		
Diyarbakır-Kayapınar		750		
Aydın		950		
Submitted to HPC for Approval	3	5,900		
İzmir Tınaztepe		1,200		
Ordu		900		
İstanbul Sancaktepe		3,800		
To be Submitted to HPC for Approval	1	800		
Trabzon		800		
Total in the Pipeline	9	11,300		

OTHER PROJECTS FOR VARIOUS HEALTHCARE FACILITIES						
Status	Number	Bed Capacity	Closed Area (M <sup>2</sup> )			
In Bidding Process	30	1,761	418,538			
Under Construction	153	21,034	4,885,643			
Planned (Feasibility Studies)	208	23,733	4,734,162			
Total in the Pipeline	391	46,528	10,008,343			





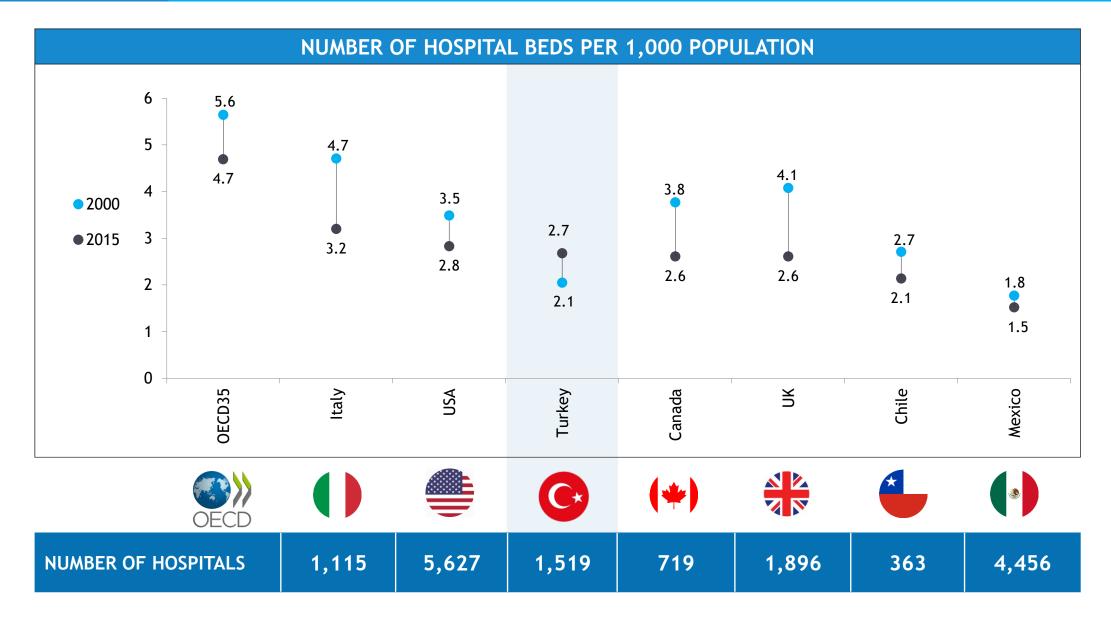




# Opportunities in Healthcare

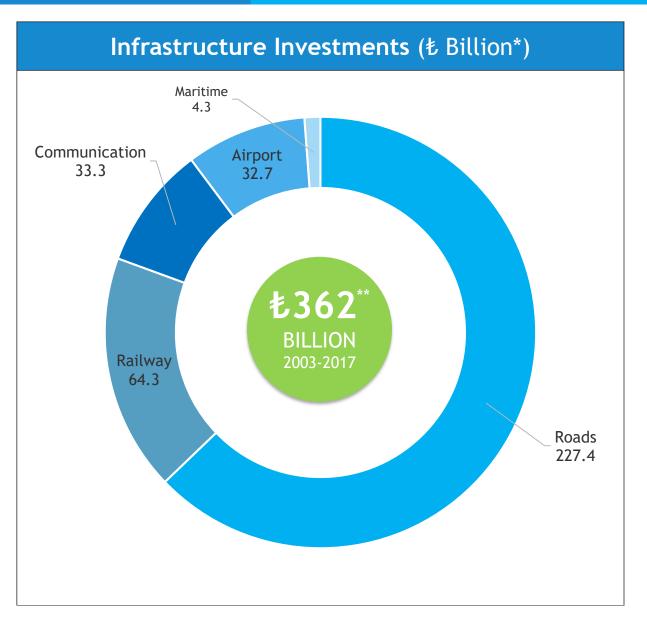
Turkey has significantly improved its healthcare services and continues to invest in healthcare infrastructure to catch up with OECD average..

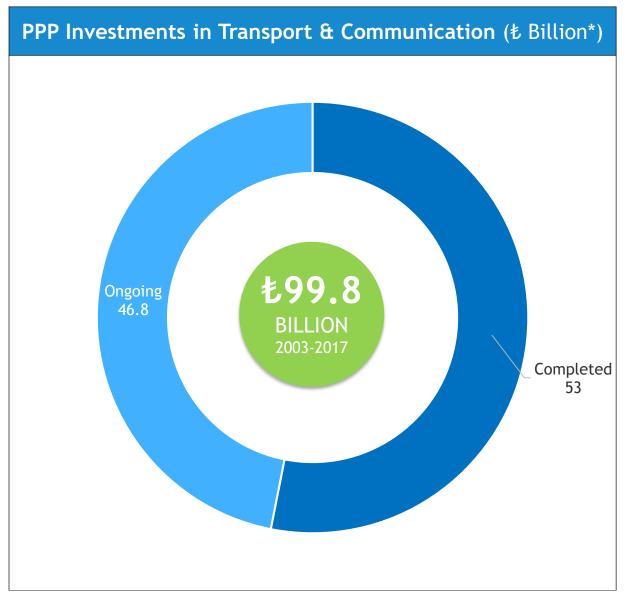




Turkey has heavily invested in transport infrastructure across the country and continues to do so with ambitious targets..

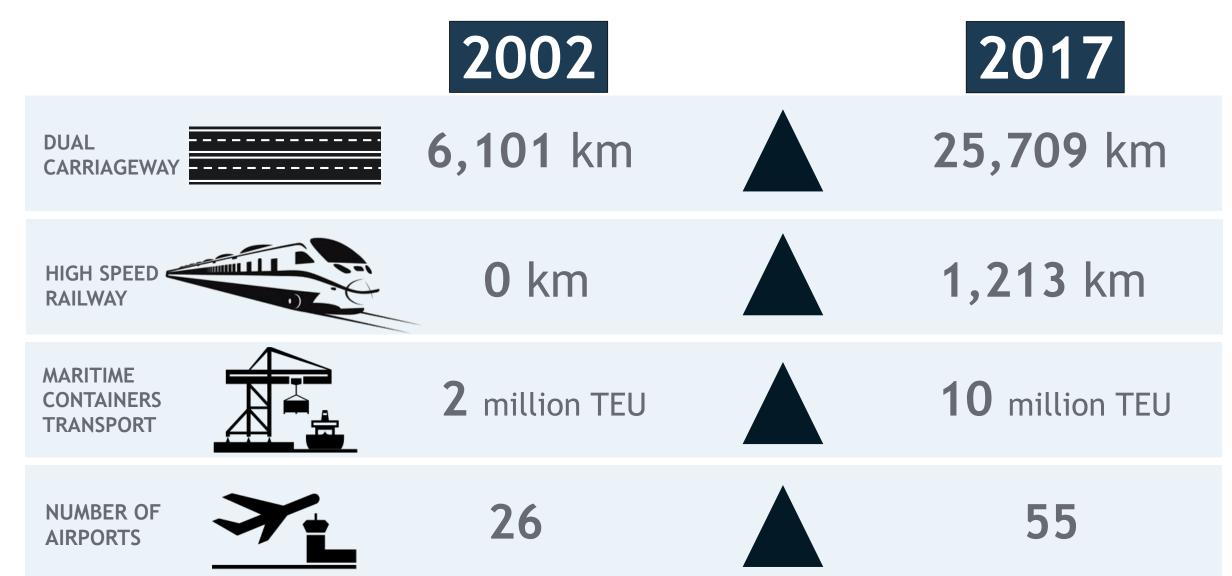






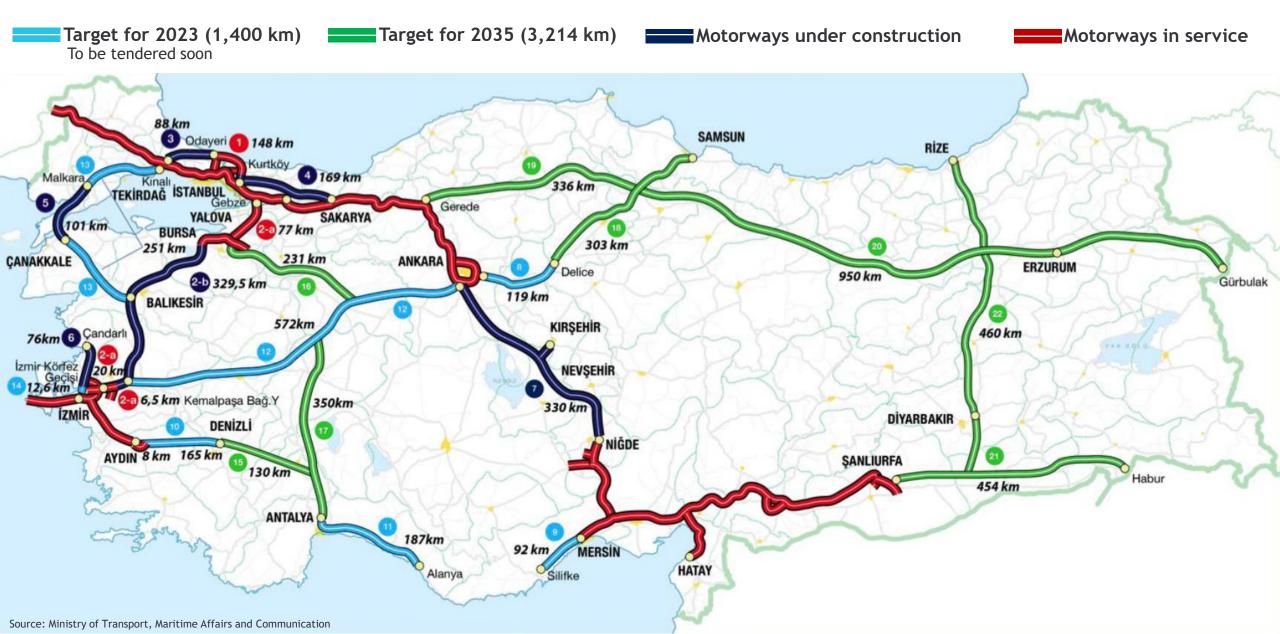
Investing in transportation has remarkably transformed Turkey's infrastructure landscape, yet Turkey is determined to improve it further..





Motorways (toll roads) are key to Turkey's road transportation.. Around 5,000 km is in the pipeline offering significant PPP opportunities..





Turkey is committed to transforming its rail transport infrastructure from conventional to high speed...



### HIGH SPEED RAILWAY MAP OF TURKEY



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 logistic networks..



### **LOGISTICS CENTERS**



Source: Ministry of Transport, Maritime Affairs and Communication

Turkey has significantly improved and upgraded its airport infrastructure and continues to invest in airports..

construction/study



**Planned Airports** 



construction/study

### Turkey has implemented a variety of mega projects and continues to do so...



### Istanbul New Airport



A new airport in Istanbul to replace the existing one, with an eventual annual capacity of 200 million passengers and 6 runways. Contracted in Nov 2013 and operations to start in -end-2018. Operation period 25 years. Cost: \$6.5 Billion and \$29 Billion in fees with BOT

### Gebze - Orhangazi - İzmir Motorway



A 427-km-long motorway connecting Istanbul, Bursa and İzmir with world's 4th longest suspension bridge. The suspension bridge is operational as of July 2016; Operation period 15 years

Cost: \$6.5 Billion with BOT

### MAKYOL ASTALDI VÜKSEL GÖÇAY

### Yavuz Sultan Selim Bridge (Istanbul Third Bosphorus Bridge)



A 95-km-long motorway with a bridge for rail and motor vehicle transit over the Bosphorus strait. Construction started in May 2013. Operation period: 10 years 2 months 20 days (including construction period).

Operation started in August 2016. Cost: \$3.5 Billion with BOT model

### **Eurasia Tunnel** (Istanbul Strait Road Tube Crossing Project)



11

A twin-deck highway tunnel crossing underneath the seafloor connecting the Asian and European continents. Construction started in 2011; Operation started in 2016 Operation period 26 years

Cost: \$1.2 Billion with BOT





### 1915 Çanakkale Bridge





- ✓ Longest main span (2,023 km) of any suspension bridge in the world
- ✓ Bridge Length: 4,608 m
- √ 88 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









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 a triple-deck tunnel under Bosphorus Strait..





### KANAL ISTANBUL

- √ 43 km, 25 m depth and 150 m width
- √ 6 bridges
- ✓ New satellite cities

### **GRAND ISTANBUL TUNNEL**

- ✓ Triple-deck with 17.5 m in diameter and 4.5 km in length
- ✓ 2×2 lane highway and dual line metro
- ✓ 30 km metro line with 13 stations and 16 km highway

Another exemplary transportation project is soon to be launched in İzmir..



# IZMIR BAY CROSSING

connecting south and north coasts of Izmir Bay;

- ✓ Total length: 12.6 km
  - √4,175 m bridge
  - √1,903 m submerged tube tunnel
  - √880 m artificial island

SUBMERGED TUBE TUNNEL SECTION











### Turkey is also investing in maritime transportation infrastructure...



### Port of Filyos

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

### Port of Çandarlı

- 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

### Mersin Container Port

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



# Opportunities in Energy

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..





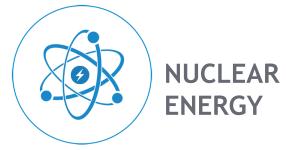
20GW installed wind power capacity by 2023, up from 6.5GW in 2017.



10GW installed solar power capacity by 2030, up from 2.6GW in 2017.



1GW additional geothermal power in the pipeline in addition to existing 1GW capacity



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



To utilize all known indigenous coal & lignite resources to build coal-fired power plants with 18.5GW by 2023



34GW installed hydro power capacity by 2023, up from 27GW in 2017

# 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.



1,000-MW solar power project tender in March 2017 won by the consortium of;



\$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.



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





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**

Turkey considers nuclear power generation as a key element of its economic development to secure energy supply and reduce dependency on energy imports.

Turkey has already started to build its first nuclear power plant while preparatory work for the second and third plants is underway.





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.



In 2013 Japan and Turkey signed an agreement for the construction of Turkey's second nuclear power station with four Atmea1 reactor units (4,480MW capacity), developed by Areva-Mitsubishi Heavy Industries (MHI) joint venture Atmea. Work will be performed by a consortium that will include MHI, ITOCHU, Engie, and the Turkish Electricity Generation Company (EUAS).

Feasibility studies are ongoing for verification of site suitability and development of the financial scheme.

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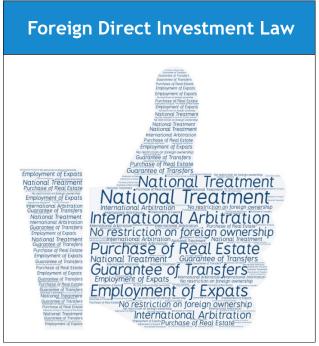


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# Investment <u>Climate</u>

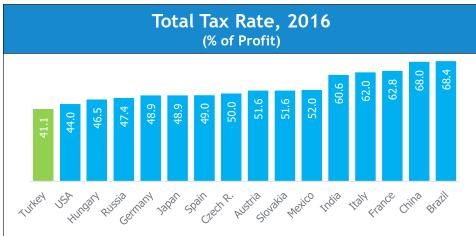
Turkey's investment legislation supports and protects investors through various legal mechanisms..













### Investment Climate

Relevant legislation is quite flexible, enabling to adapt various PPP models according to the nature and requirements of projects...



Build Operate	Build Operate Transfers	Transfer of Operating Rights	Operate Transfers	Built Lease Transfer
✓ Thermal Power Plants	<ul> <li>✓ Airports</li> <li>✓ Power Plants</li> <li>✓ Marinas</li> <li>✓ Border Gates</li> </ul>	<ul> <li>✓ Privatizations</li> <li>✓ Airports</li> <li>✓ Ports</li> <li>✓ Power Plants</li> <li>✓ Electricity Discos</li> <li>✓ Gas Discos</li> <li>✓ Marinas</li> </ul>	<ul><li>✓ Tunnels</li><li>✓ Bridges</li><li>✓ Motorways</li><li>✓ Ports</li><li>✓ Airports</li></ul>	<ul><li>✓ Hospitals</li><li>✓ Colleges</li><li>✓ Dormitories</li><li>✓ Schools</li></ul>
<b>Law</b> 4283	Law 3096	Laws 4046 5335 3465 3096 4458	Laws 3096 3996 3465 3096	Laws 5396 652, 6428 351





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.



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



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.

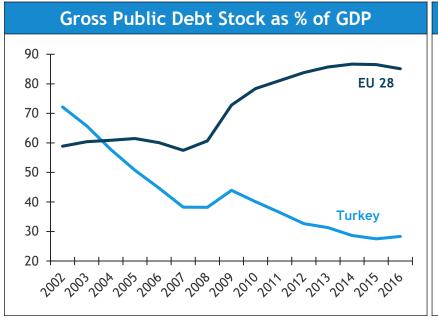


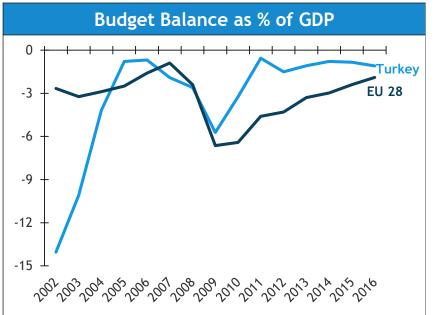
Certain PPP projects provide minimum revenue guarantees.

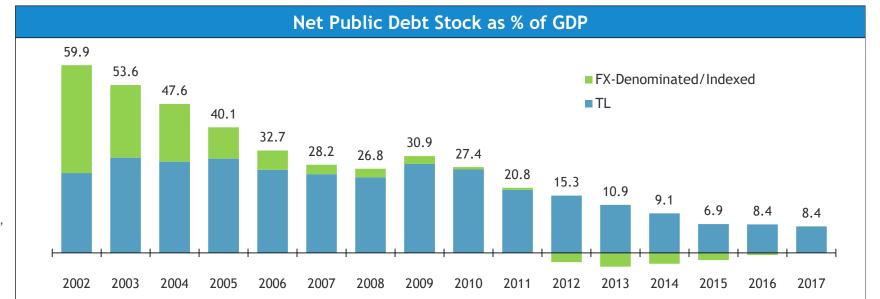
# Investment Climate

### Strong macroeconomic fundamentals allow the government to support PPP projects..









Source: Eurostat, Treasury, Ministry of Finance, Gross Public Debt Stock and Budget Balance as defined by the EU, Net Public Debt Stock as defined Gross Public Debt Stock minus Central Bank net assets, public sector assets (all deposits accounts and other financial assets) and unemployment insurance fund net assets.































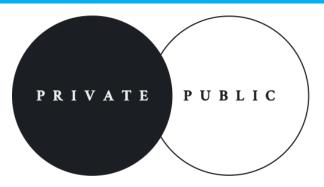
# What can ISPAT do for you?

### ISPAT would assist you before, during and after your entry into Turkey





A governmental body attached to the Prime Ministry



Private sector approach with public sector capabilities



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



### **Useful Links**



- Ministry of Transport, Maritime Affairs and Communication: <a href="http://www.udhb.gov.tr/">http://www.udhb.gov.tr/</a>
- Healthcare Investments (Ministry of Health): <a href="http://www.saglikyatirimlari.gov.tr/">http://www.saglikyatirimlari.gov.tr/</a>
- Ministry of Energy and Natural Resources: <a href="http://www.enerji.gov.tr/">http://www.enerji.gov.tr/</a>
- Ministry of Development: <a href="http://www.kalkinma.gov.tr/">http://www.kalkinma.gov.tr/</a>
- Treasury: <a href="https://www.treasury.gov.tr/">https://www.treasury.gov.tr/</a>
- Turkish Wealth Fund: http://turkiyevarlikfonu.com.tr/
- Privatization Administration: <a href="http://www.oib.gov.tr/">http://www.oib.gov.tr/</a>
- European Bank for Reconstruction and Development: <a href="http://www.ebrd.com/turkey.html">http://www.ebrd.com/turkey.html</a>
- European Investment Bank: <a href="http://www.eib.org/infocentre/contact/offices/turkey-istanbul.htm">http://www.eib.org/infocentre/contact/offices/turkey-istanbul.htm</a>
- International Finance Corporation: http://www.ifc.org/
- Banks in Turkey: https://www.bddk.org.tr/WebSitesi/english/Institutions/Banks/Banks.aspx



# **THANK YOU**







