



PRESIDENCY OF  
THE REPUBLIC OF TÜRKİYE  
**INVESTMENT  
OFFICE**

# INVEST IN INFRASTRUCTURE PROJECTS IN TÜRKİYE

June 2022

INVEST.GOV.TR

# SUMMARY OF ENERGY PORTFOLIO (PRIVATIZATION)



Asset No	Power Plants	Installed Capacity (MWe)	2020 Generation (MWh)	2021 Generation (MWh)	Location	Dam/Fuel Type
1	Akköprü HEPP	115.0	126.275	92.157	Batı Akdeniz	Reservoir
2	Demirköprü HEPP	69.0	59.092	41.911	Gediz	Reservoir
3	Seyhan 1 HEPP	60.0	352.743	202.742	Seyhan	Reservoir
4	Derbent HEPP	56.4	140.787	97.355	Kızılırmak	Reservoir
5	Çamlığöze HEPP	32.0	77.569	41.188	Yeşilirmak	Reservoir
6	Seyhan 2 HEPP	7.5	9.129	2.733	Seyhan	Run-of-river
7	Yüreğir HEPP	6.0	15.840	5.523	Seyhan	Run-of-river
8	Çayırhan A TPP	620	937.662	1.589.704	Ankara	Lignite
9	Tekirdağ A CCGT	478	1.010.576	2.437.875	Tekirdağ	Nat. Gas&Diesel
10	Tekirdağ B CCGT	478	2.437.875	1.804.138	Tekirdağ	Nat. Gas&Diesel
Asset No	Corporation	Generation Capacity (MW)	Total Generated Electricity Amount (TWh)	Transmission Line	Staff	
11	Turkish Electricity Transmission Corporation	100,341	331.5 TWh	72.108 KM 71.778 KM OHL 589 KM Cable 184 KM Submarine Cable	17.063 8.149 TEIAS 8.914 Service Procurement	

# SUMMARY OF MOTORWAY PORTFOLIO



Project No	Highway	Length (km)	Guarantee Car Equivalent AADT	Contract Type	Tender Criteria	Investment Cost (Million Euro)	Contract Duration (Years)	Location
1	Ankara-Kırıkkale-Delice	120	Section 1: 46.000 Section 2: 25.000	BOT	Minimum Toll Rate	605	20	Ankara-Yozgat
2	Antalya-Alanya	122	45.000	BOT	Minimum Toll Rate	970	20	Antalya-Alanya

Asset No	Highway	Length (km)	Guarantee Car Equivalent AADT	Contract Type	Tender Criteria	Investment Cost (Million Euro)	Contract Duration (Years)	Location
1-9	Motorway (x7) and Bridge (x2)	2119	-	Privatization	Maximum Rent To Be Paid To The Government	-	-	Various

# SUMMARY OF MARITIME PORTFOLIO



Project/ Asset No	Marina	Yacht Capacity	Dock Length (m)	Location	Contract Type	Investment Cost (Million Euro)	Contract Duration (Years)	Tender Criteria
1	Kalamış	1.511	1.383	Istanbul	TOR	TBD	40	One time fixed payment with 4 years installement
2	Demre	600	287	Antalya	BOT	4.21	31.5	Maximum Yearly Rent to be Paid to Government
3	Lapseki	250	709	Çanakkale	BOT	4.21	31.5	Maximum Yearly Rent to be Paid to Government
4	Çeşme-Şifne	460	650	Izmir	BOT	10.52	32.5	Maximum Yearly Rent to be Paid to Government

Project/ Asset No	Port	Capacity	Dock Length (m)	Location	Contract Type	Investment Cost (Million Euro)	Contract Duration (Years)	Tender Criteria	Total Area (m <sup>2</sup> )
5	Marmaraereğlisi	8.5 million tons/year	750	Tekirdağ	TOR	-	45	One time fixed payment with 4 years installement	1.468.998
6	Filyos	25 million Tonnes/year	1380	Zonguldak	BOT	80	15	Maximum Yearly Rent to be Paid to Government	459.000
7	Çandarlı Port	4 million TEU/year	2000	İzmir	BOT	752	-	-	3.000.000

Project No	Project	Excavation Volume (1000 m <sup>3</sup> )	Length (km)	Location	Contract Type	Investment Cost (Billion Euro)	Contract Duration (Years)	Tender Criteria
8	Canal Istanbul	1.155.668	45	Istanbul	BOT	9.78	18	-

# SUMMARY OF RAILWAY PORTFOLIO



Project No	Project	Length (km)	Passenger Capacity (Million/year)	Freight Capacity (Million tons/year)	Contract Type	Investment Cost (Billion Euro)	Tender Criteria	Location
1	Ankara-Istanbul High Speed Railroad	347	11	-	BOT	5.6	Minimum Operation Period	Ankara, Istanbul
2	Gebze-Halkalı Railroad	213	16	18	BOT	4.0	Minimum Operation Period	Kocaeli, Istanbul
3	Divriği-Kars Railroad	666	0.5	2.7	BOT	0.75	Minimum Operation Period	Sivas, Erzurum, Kars
4	Kemalpaşa Logistics Center	-	-	5.0	BOT	0.06	Minimum Operation Period	İzmir



# ENERGY SECTOR



# SUMMARY OF ENERGY PORTFOLIO (PRIVATIZATION)



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# GENERAL OVERVIEW PRIVATIZATION



## Privatization Opportunities for Hydro and Natural Gas Power Plants

Transaction

Portfolio/Scope of Presentation

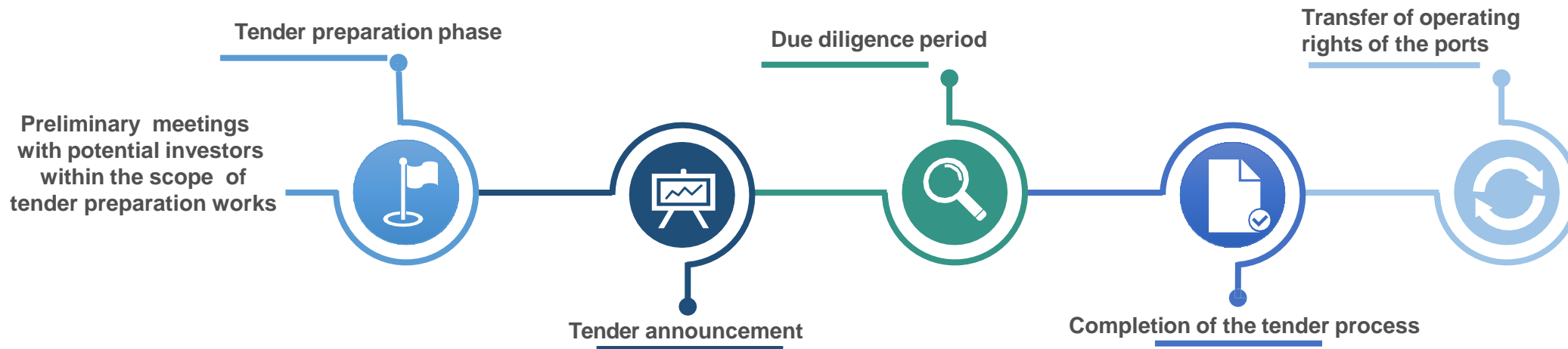
Advisor

Tender Process

- **7 hydroelectric power plants** ("HEPP") and **two combined cycle gas turbine and one thermal power plant** have been placed on the privatization agenda as to the Privatization High Council decisions dated 15/06/2015, 24/05/2017, 11/11/2021 and numbered 2015/55, 2017/27 and 4770.
- The scope of this presentation includes **7 HEPPs** with an overall capacity of **c.346 MWe** in various regions of Turkey, **two combined cycle gas turbine** with an total capacity of **956 MWe** and **one thermal power plant** with a total capacity of **620 MWe**.
- HEPPs with capacities varying from 6 to 115 MWe at different locations offer green energy investment opportunities to the investors willing to enter into Turkish energy market.
- **Development Investment Bank of Turkey** ("TKYB") was appointed as the exclusive financial advisor of **Privatization Administration of Turkey** ("PA") in June 2020 to provide advisory services in respect of preparation and execution of the privatization tenders of certain power plants.
- This document provides preliminary technical and operational data pertaining to the associated power plants listed on the following page on the privatization agenda.
- Privatization tenders of select power plants are planned to be announced within **2022**.



## Contemplated Privatization Process





# LOCATION OF POWER PLANTS



## HEPPs

Total Installed Capacity 346 MWe

2021 Total Generation 484 MWh

## CCGTs

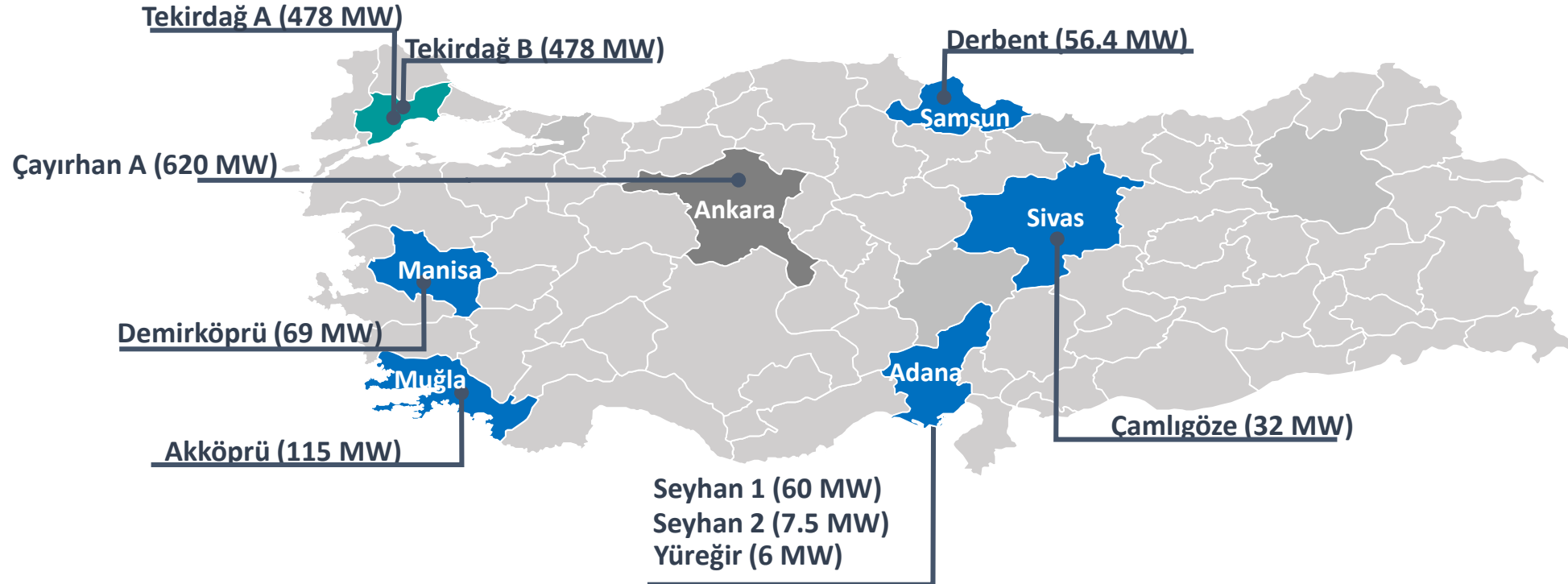
Total Installed Capacity 956 MWe

2021 Total Generation 4,242,013 MWh

## TPP

Total Installed Capacity 620 MWe

2021 Total Generation 1,589,704 MWh



# ASSET 1: AKKÖPRÜ HEPP



## Asset Overview

Source

Capacity

Location

115 MWe

Muğla

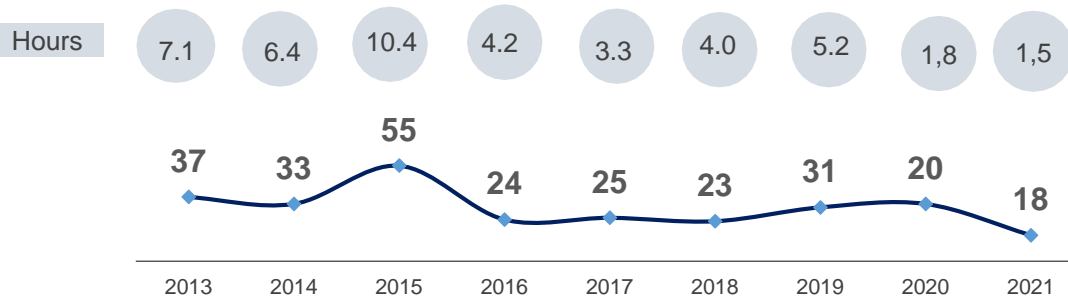


## Key Technical Data

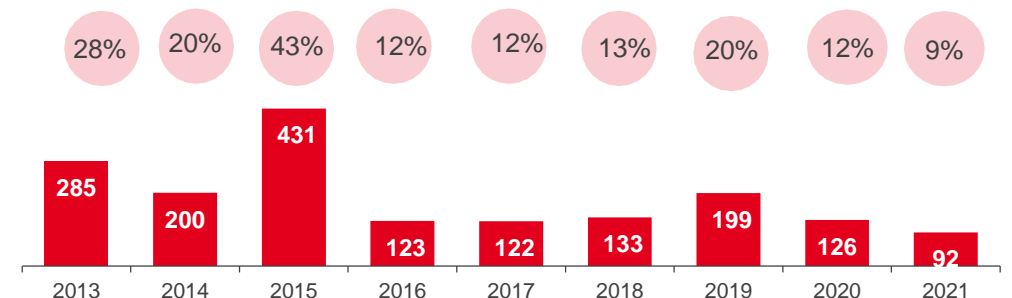
River Basin:	Dalaman stream
Commercial operation date:	2012
License Validity:	2063
FIT Price (USD cent/MWh):	7.3 until 2022
Purpose:	Potable water, Irrigation, Flood, Energy
Source:	Reservoir
Firm energy generation:	343 GWh/year
Generator supplier:	Siemens
Turbine supplier:	Voith Siemens
# of turbines:	2
Turbine type:	Horizontal axis Francis
Turbine head height:	86.8 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)



# ASSET 2: DEMİRKÖPRÜ HEPP



## Asset Overview

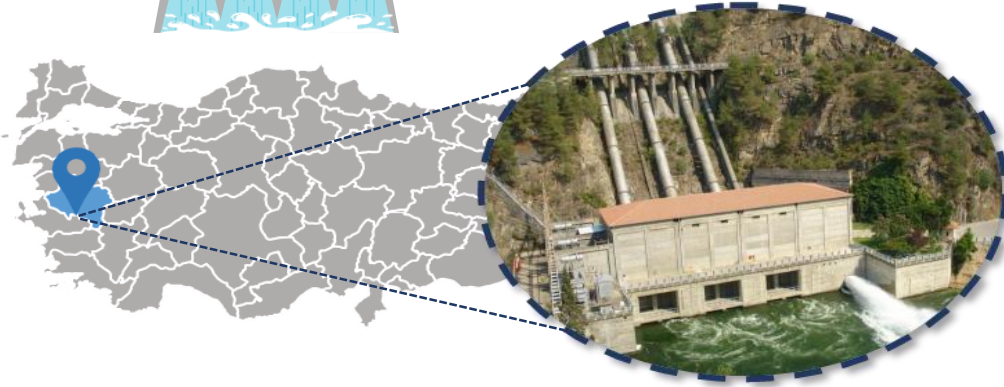
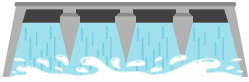
Source

Capacity

Location

69 MWe

Manisa

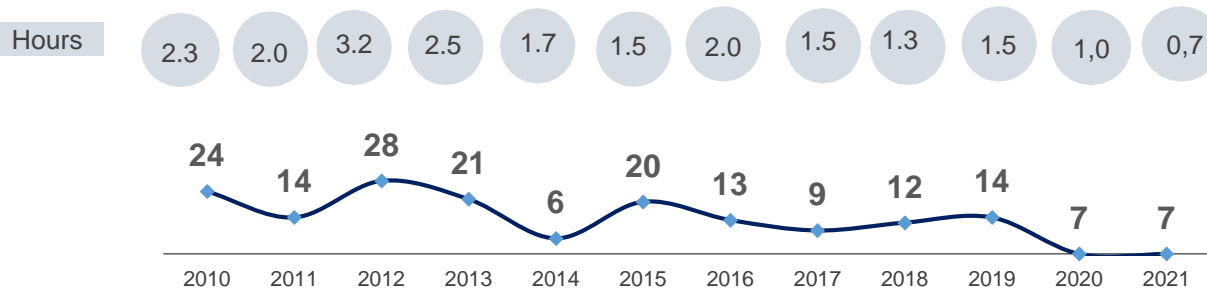


## Key Technical Data

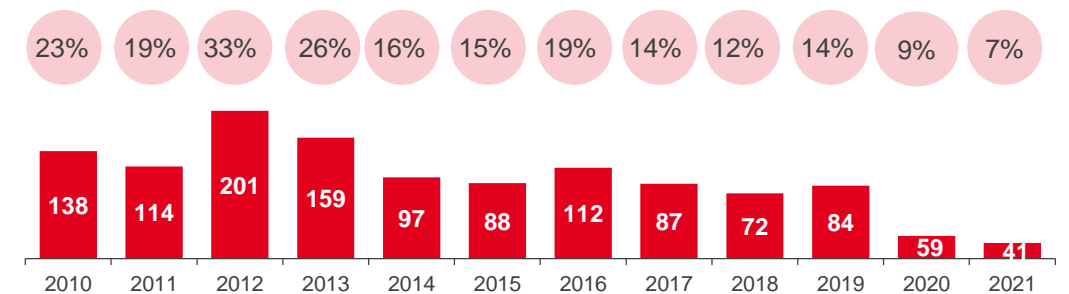
<b>River Basin:</b>	Gediz river
<b>Commercial operation date:</b>	1960
<b>License Validity:</b>	2052
<b>FIT Price (USD cent/MWh):</b>	7.3 until 2022
<b>Purpose:</b>	Irrigation, Flood, Energy
<b>Source:</b>	Reservoir
<b>Firm energy generation:</b>	32 GWh/year
<b>Generator supplier:</b>	Alstom
<b>Turbine supplier:</b>	Neypic-Gronoble
<b># of turbines:</b>	3
<b>Turbine type:</b>	Vertical axis Francis
<b>Turbine head height:</b>	107.5 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)



# ASSET 3: SEYHAN 1 HEPP



## Asset Overview

Source

Capacity

Location

60 MWe

Adana

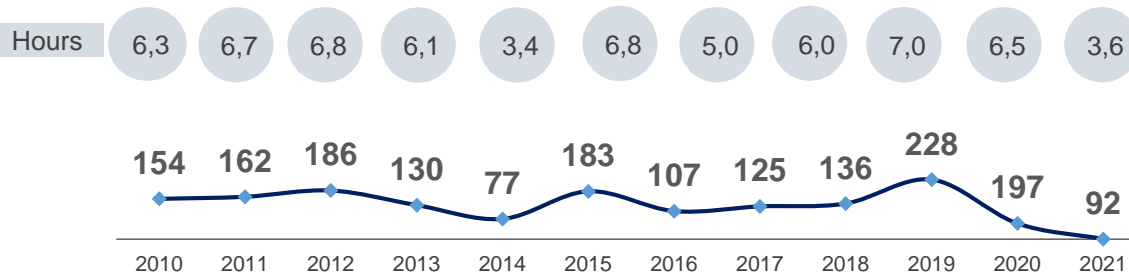


## Key Technical Data

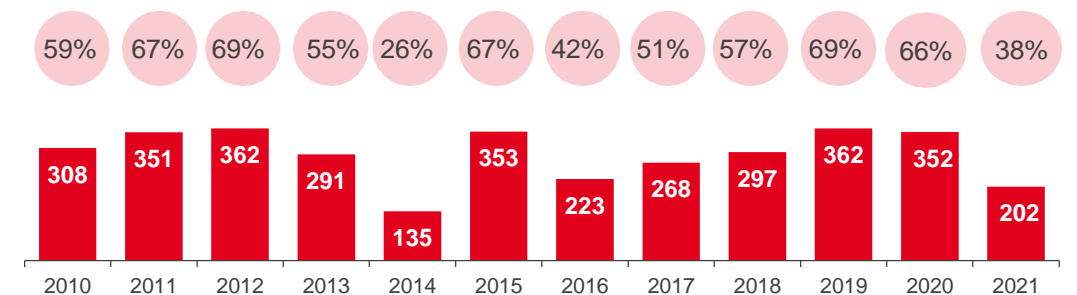
<b>River Basin:</b>	Seyhan river
<b>Commercial operation date:</b>	1956
<b>License Validity:</b>	2053
<b>FIT Price (USD cent/MWh):</b>	No FIT, Merchant risk
<b>Purpose:</b>	Potable water, Irrigation, Flood, Energy
<b>Source:</b>	Reservoir
<b>Firm energy generation:</b>	213 GWh/year
<b>Generator supplier:</b>	Siemens
<b>Turbine supplier:</b>	J.M. Voith
<b># of turbines:</b>	3
<b>Turbine type:</b>	Vertical axis Francis
<b>Turbine head height:</b>	32 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)



# ASSET 4: DERBENT HEPP



## Asset Overview

Source

Capacity

Location

56 MWe

Samsun

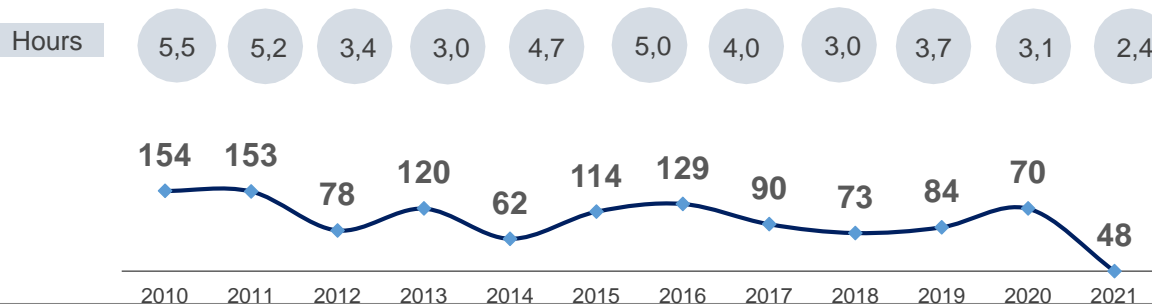


## Key Technical Data

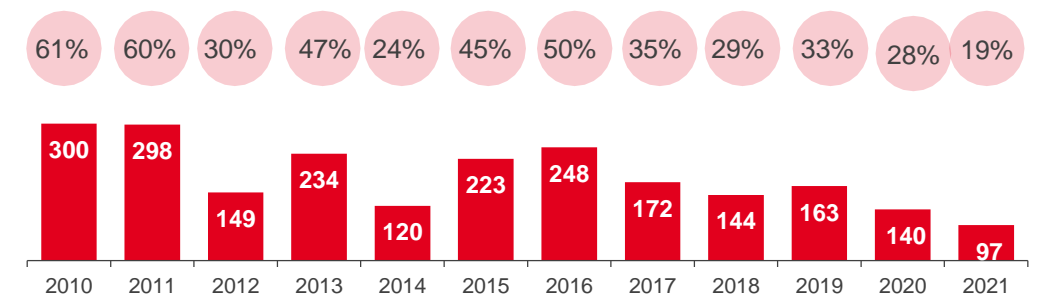
<b>River Basin:</b>	Kızılırmak river
<b>Commercial operation date:</b>	1991
<b>License Validity:</b>	2052
<b>FIT Price (USD cent/MWh):</b>	No FIT, Merchant risk
<b>Purpose:</b>	Irrigation, Flood, Energy
<b>Source:</b>	Reservoir
<b>Firm energy generation:</b>	150 GWh/year
<b>Generator supplier:</b>	Toshiba
<b>Turbine supplier:</b>	Toshiba
<b># of turbines:</b>	2
<b>Turbine type:</b>	Horizontal Kaplan
<b>Turbine head height:</b>	24 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)



# ASSET 5: ÇAMLIGÖZE HEPP



## Asset Overview

Source

Capacity

Location

32 MWe

Sivas

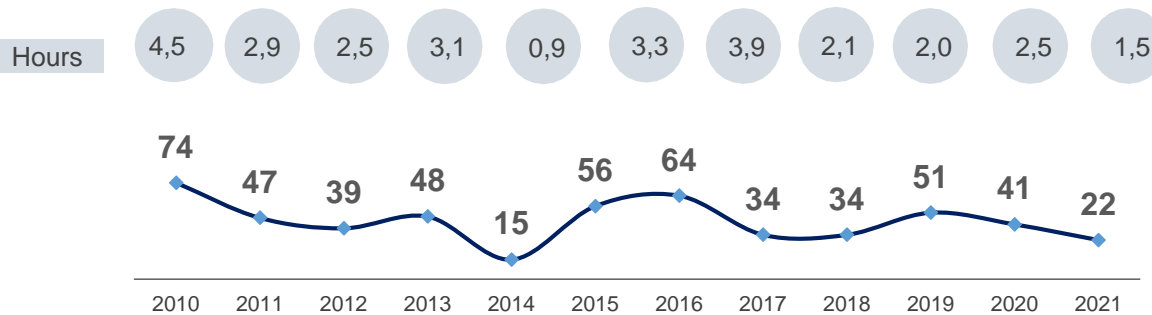


## Key Technical Data

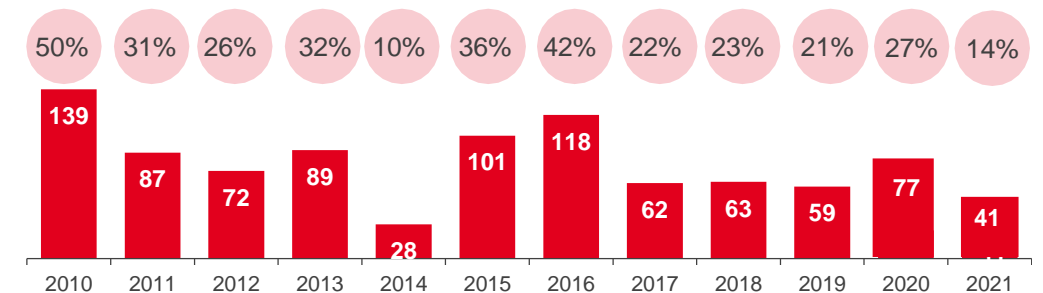
<b>River Basin:</b>	Yeşilırmak river
<b>Commercial operation date:</b>	2000
<b>License Validity:</b>	2052
<b>FIT Price (USD cent/MWh):</b>	No FIT, Merchant risk
<b>Purpose:</b>	Irrigation, Flood, Energy
<b>Source:</b>	Reservoir
<b>Firm energy generation:</b>	68 GWh/year
<b>Generator supplier:</b>	UCMR SA
<b>Turbine supplier:</b>	Andino
<b># of turbines:</b>	2
<b>Turbine type:</b>	Vertical axis Kaplan
<b>Turbine head height:</b>	23 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)



# ASSET 6: SEYHAN 2 HEPP



## Asset Overview

Source

Capacity

Location

7.5 MWe

Adana

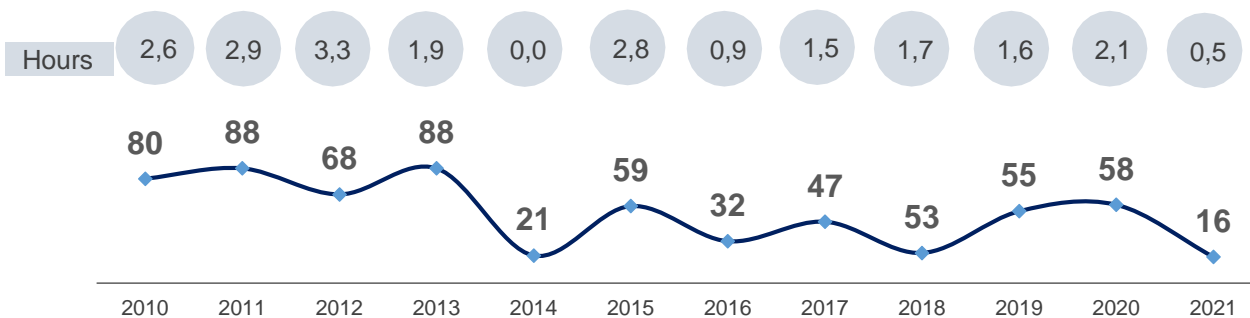


## Key Technical Data

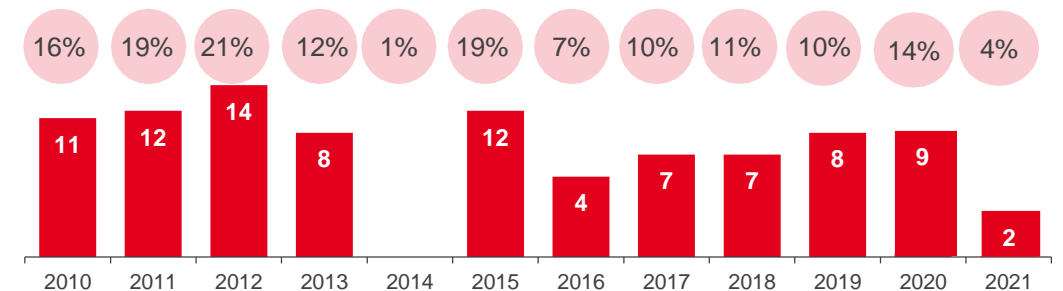
<b>River Basin:</b>	Seyhan
<b>Commercial operation date:</b>	1992
<b>License Validity:</b>	2053
<b>FIT Price (USD cent/MWh):</b>	No FIT, Merchant risk
<b>Purpose:</b>	Flood, Irrigation, Energy
<b>Source:</b>	Run-of-river
<b>Firm energy generation:</b>	7 GWh/year
<b>Generator supplier:</b>	Gegelec-Alstom
<b>Turbine supplier:</b>	Dumont
<b># of turbines:</b>	3
<b>Turbine type:</b>	Horizontal axis Francis
<b>Turbine head height:</b>	3.4 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)



# ASSET 7: YÜREĞİR HEPP



## Asset Overview

Source

Capacity

Location

6 MWe

Adana

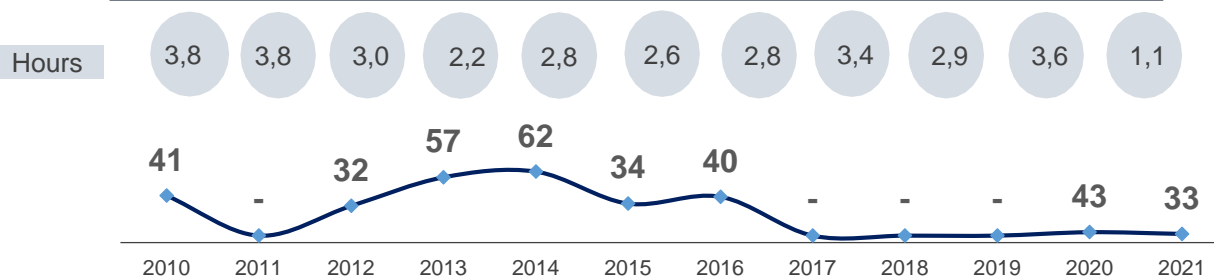


## Key Technical Data

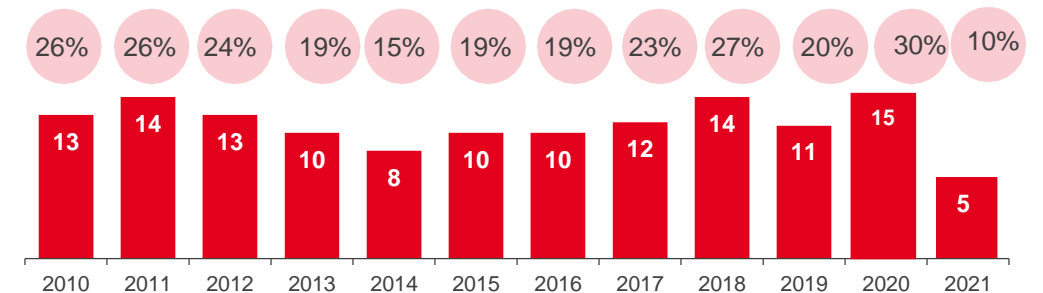
River Basin:	Seyhan river
Commercial operation date:	1972
License Validity:	2053
FIT Price (USD cent/MWh):	No FIT, Merchant risk
Purpose:	Irrigation, Energy
Source:	Run-of-river
Firm energy generation:	4 GWh/year
Generator supplier:	AEG
Turbine supplier:	Mailier
# of turbines:	1
Turbine type:	Kaplan
Turbine head height:	8.7 meters

## Operational KPIs

Yearly avg. water flow (m<sup>3</sup>/sec) and avg. working hours ('000)



Gross generation (GWh) and net capacity factor (%)





# ASSET 8: ÇAYIRHAN-A TPP



## Asset Overview

Source



Capacity

476 MWe

Location

Ankara



## Key Technical Data

<b>SCOPE OF PRIVATIZATION</b>	<b>ÇAYIRHAN THERMAL POWER PLANT</b> , real properties within the use of Power Plant, movables and immovables within the use of Çayırhan Lignite Pit through “Asset Sale”; and mining licenses numbered 23405 and 30963 and mining sites within the scope of these licenses through “Transfer of Operating Rights”
<b>LOCATION (CITY/DISTRICT)</b>	ANKARA / NALLIHAN
<b>DATE OF COMMISSION</b>	2 units in 1987, 1 unit in 1998, 1 unit in 1999 (TRANSFERRED TO EUAS IN JULY 2020)
<b>POWER PLANT TYPE</b>	LİGİNİTE-FİRED
<b>INSTALLED CAPACITY (MW)</b>	620 MW
<b>GENERATION (MWH)</b>	2020 937.662 2021 1.589.704
<b>NUMBER OF UNITS X (UNIT CAPACITY)</b>	2 x (160 MW) + 2 x (150 MW)
<b>ANNUAL ELECTRICITY GENERATION CAPACITY (MWh)</b>	5.431.200 MWh

# ASSET 9: TEKİRDAĞ-A CCGT



## Asset Overview

Source



Capacity

476 MWe

Location

Tekirdağ



## Key Technical Data

<b>PLANT NAME</b>	<b>TEKİRDAĞ-A COMBINED CYCLE POWER PLANT</b>
<b>LOCATION (CITY/DISTRICT)</b>	TEKİRDAĞ / MARMARA EREĞLİSİ
<b>DATE OF COMMISSION</b>	JUNE 1999 (TRANSFERRED TO EÜAŞ İN JUNE 2019)
<b>POWER PLANT TYPE</b>	NATURAL GAS
<b>INSTALLED CAPACITY (MW)</b>	476
<b>GENERATION (MWH)</b>	2020 1.010.576 2021 2.437.875
<b>NUMBER OF UNITS X (UNIT CAPACITY)</b>	2 X (160 MW) + 1 X (158 MW)
<b>ANNUAL ELECTRICITY GENERATION CAPACITY</b>	3.600.000 MWH
<b>EFFICIENCY</b>	51 %
<b>GAS TURBINE SUPPLIER / MODEL</b>	ABB / 13E2
<b>STEAM TURBINE SUPPLIER</b>	ABB

# ASSET 10: TEKİRDAĞ-B CCGT



## Asset Overview

Source



Capacity

478 MWe

Location

Tekirdağ



## Key Technical Data

PLANT NAME	TEKİRDAĞ-B COMBINED CYCLE POWER PLANT
LOCATION (CITY/DISTRICT)	TEKİRDAĞ / MARMARA EREĞLİSİ
DATE OF COMMISSION	JUNE 1999 (TRANSFERRED TO EÜAŞ İN JUNE 2019)
POWER PLANT TYPE	NATURAL GAS
INSTALLED CAPACITY (MW)	478
GENERATION (MWH)	2020 668.727 2021 1.804.138
NUMBER OF UNITS X (UNIT CAPACITY)	2 X (154 MW) + 1 X (170 MW)
ANNUAL ELECTRICITY GENERATION CAPACITY (MWh)	3.600.000
EFFICIENCY	50,48 %
GAS TURBINE SUPPLIER / MODEL	SIEMENS / V.94.2
STEAM TURBINE SUPPLIER	SIEMENS KN

# ASSET 11: TURKISH ELECTRICITY TRANSMISSION CORPORATION



## **Privatization Method**

Initial Public Offering for certain amount

## **Privatization High Council decisions dated**

2 July 2021



<b>100.341 MW</b> Generation Capacity	<b>331,5 TWh</b> Total Generated Electricity Amount	<b>329,6 TWh</b> Total Consumed Electricity Amount
<b>17.063 Staff</b> 8.149 TEIAS 8.914 Service Procurement	<b>1.366 Substations</b> 770 Substations owned by TEIAS	<b>72.108 KM Transmission Line</b> 71.778 KM OHL 589 KM Cable 184 KM Submarine Cable



# MOTORWAY SECTOR



# SUMMARY OF MOTORWAY PORTFOLIO



Project No	Highway	Length (km)	Guarantee Car Equivalent AADT	Contract Type	Tender Criteria	Investment Cost (Million Euro)	Contract Duration (Years)	Location
1	Ankara-Kırıkkale-Delice	120	Section 1: 46.000 Section 2: 25.000	BOT	Minimum Toll Rate	605	20	Ankara-Yozgat
2	Antalya-Alanya	122	45.000	BOT	Minimum Toll Rate	970	20	Antalya-Alanya

Asset No	Highway	Length (km)	Guarantee Car Equivalent AADT	Contract Type	Tender Criteria	Investment Cost (Million Euro)	Contract Duration (Years)	Location
1-9	Motorway (x7) and Bridge (x2)	2119	-	Privatization	Maximum Rent To Be Paid To The Government	-	-	Various

# PROJECT 1

## ANKARA-KIRIKKALE-DELICE HIGHWAY (BOT)



### Project Overview

	<b>Location</b>	Ankara-Kırıkkale-Yozgat
	<b>Total Length</b>	120 KM
	<b>Guarantee (Car AADT)</b>	46.000

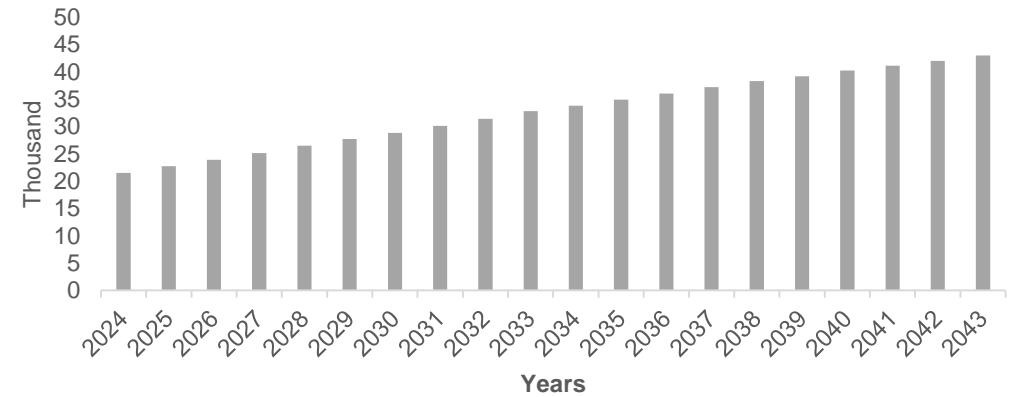
**605**  
Million (€)



### Project Snapshot

<b>Contract Type</b>	Built-Operate-Transfer
<b>Tender Criteria</b>	Minimum Toll Rate
<b>Payment Mechanism</b>	Toll Revenues
<b>Governing Law</b>	3996 BOT Law
<b>Contracting Authority</b>	Directorate General of Highways
<b>Construction Period</b>	3 years
<b>Contract Duration</b>	20 years
<b>Indicative Investment Amount</b>	605 Million Euro
<b>Expropriation Responsibility</b>	Shared between Public (50%) and SPV (50%)
<b>Expropriation Cost</b>	137 Million Euro
<b>Total Length (km)</b>	101 KM + 19 KM = 120 KM
<b>Minimum Revenue Guarantee</b>	Section-1: 46.000 / Section-2: 25.000 (AADT)
<b>Revenue Sharing with Government</b>	50% revenue share (in case of traffic exceeding the guarantee)

### Car Equivalent AADT








# PROJECT 1

## ANKARA-KIRIKKALE-DELICE HIGHWAY (BOT)

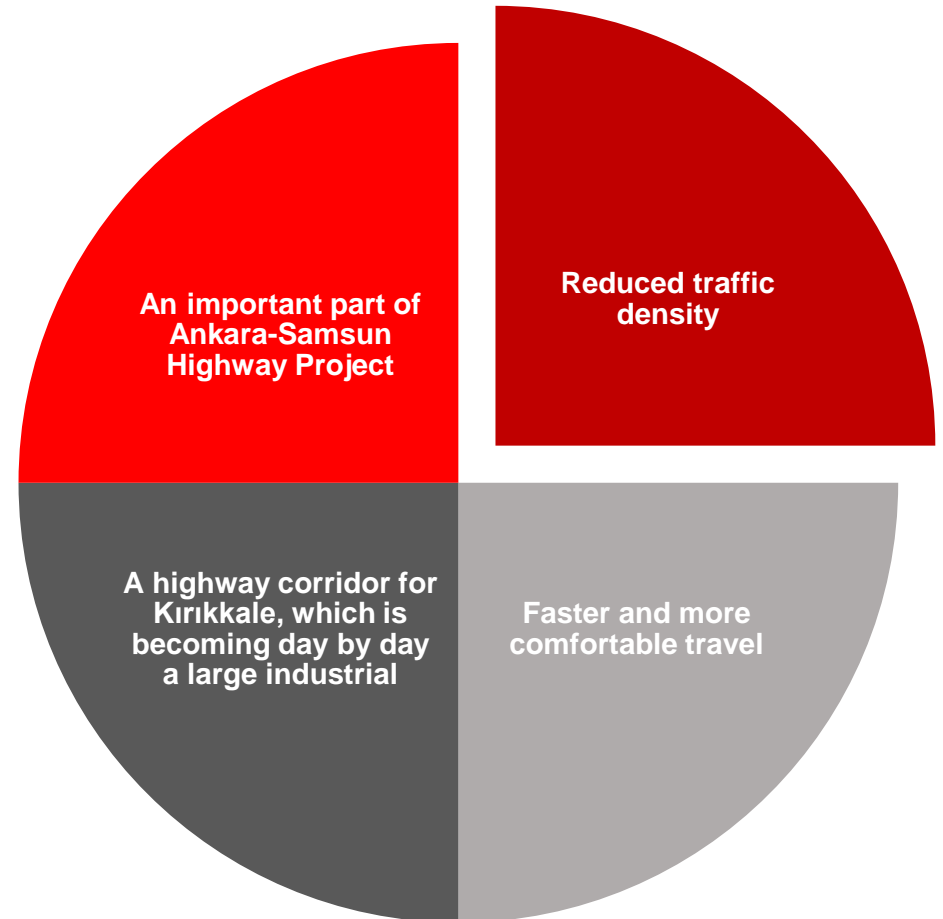


### Revenue Stream: Tolls

	Car	Medium	Bus	Truck	Trailer
					
Toll Coefficients	1.0	1.60	1.9	2.52	3.18
Toll Rates per KM (€)	0.06	0.096	0.114	0.151	0.191
Toll Rates per Section (€)	3.69 4.08	5.91 6.53	7.01 7.75	9.30 10.28	11.74 12.98



### Project Rationale





# PROJECT 1

## ANKARA-KIRIKKALE-DELICE HIGHWAY (BOT)



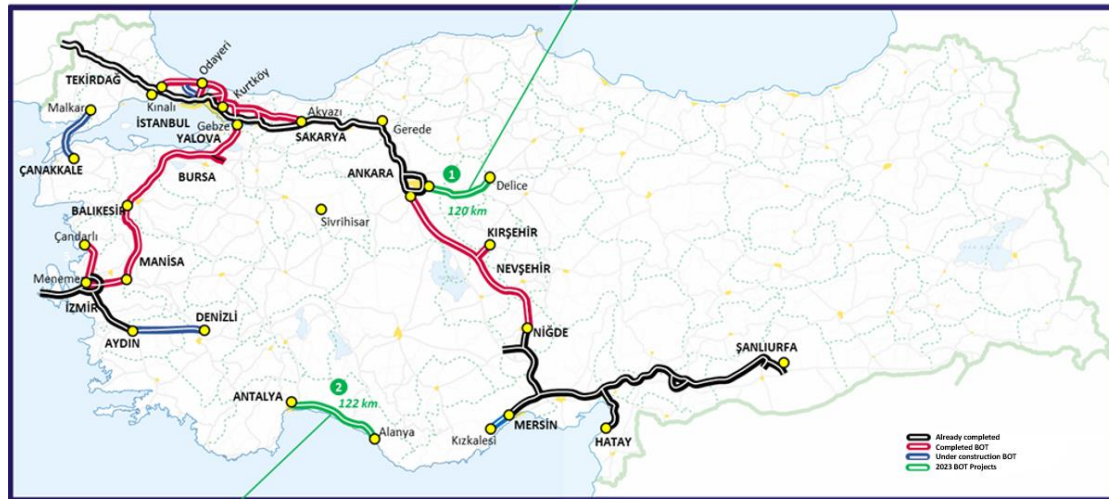
### Project Details

PROJECT CHARACTERISTICS	LENGTH (M) / NUMBER
Platform viaducts	3.679 m x 2
Tube tunnels	3.656 m x 2
Service Facilities	3
Intersections	7

### Revenue Stream: Highway Service Facilities

FACILITIES	REVENUE (EURO)
Facility-1	12.63 Million
Facility-2	4.73 Million
Facility-3	12.63 Million

Ankara-Kırıkkale-Delice Highway



Antalya-Alanya Highway

### Maintenance and Operation Costs

OPERATION COST DETAILS	COST/YEAR/KM (EURO)
Routine maintenance	18.387 €
Winter maintenance	9.035 €
Periodical heavy maintenance	300.000 €
Operating Cost	154.525 €
<b>Total</b>	<b>481.948 €</b>

# PROJECT 2

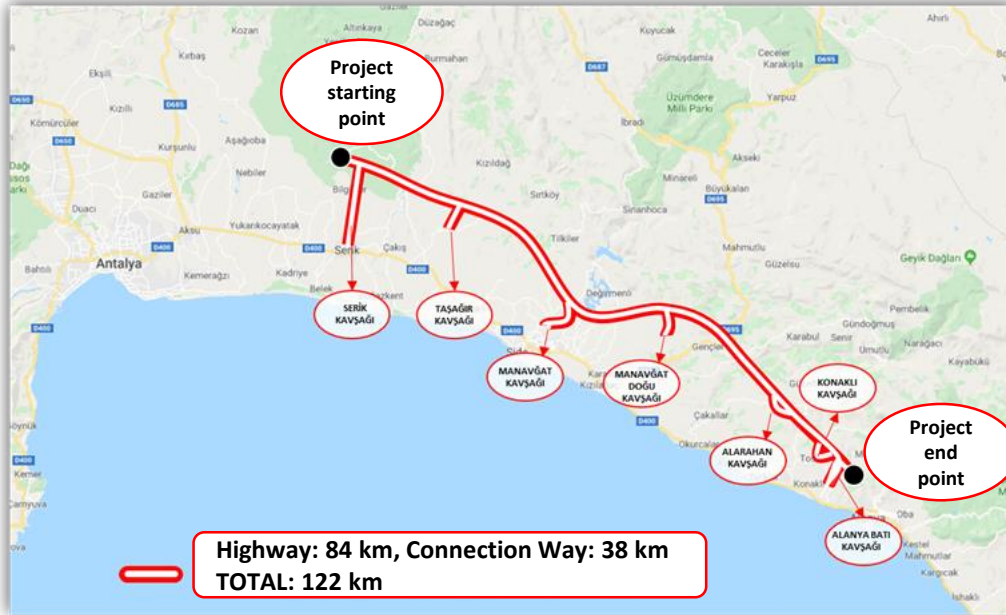
## ANTALYA-ALANYA HIGHWAY (BOT)



### Project Overview

	<b>Location</b>	Antalya
	<b>Total Length</b>	122 KM
	<b>Guarantee (Car AADT)</b>	45.000

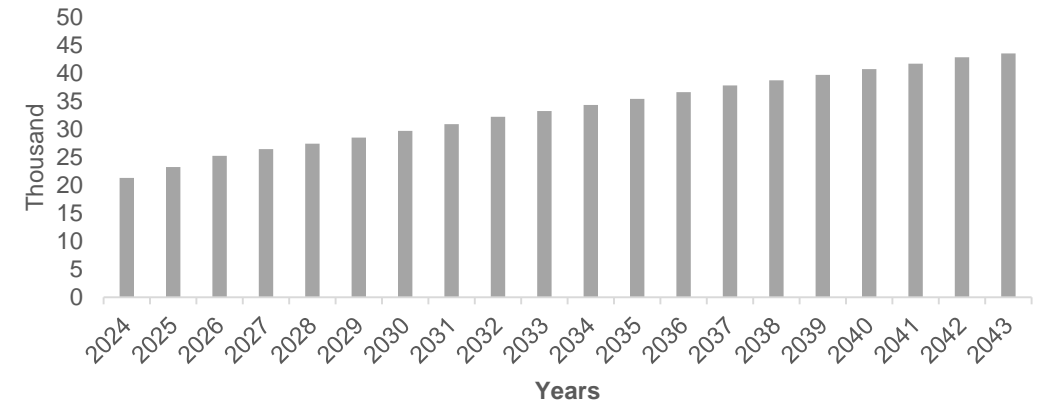
**970**  
Million (€)



### Project Snapshot

<b>Contract Type</b>	Built-Operate-Transfer
<b>Tender Criteria</b>	Minimum Toll Rate
<b>Payment Mechanism</b>	Toll Revenues
<b>Governing Law</b>	3996 BOT Law
<b>Contracting Authority</b>	Directorate General of Highways
<b>Construction Period</b>	3 years
<b>Contract Duration</b>	20 years
<b>Indicative Investment Amount</b>	970 Million Euro
<b>Expropriation Responsibility</b>	Shared between Public (50%) and SPV (50%)
<b>Expropriation Cost</b>	136 Million Euro
<b>Total Length (km)</b>	84 KM + 38 KM = 122 KM
<b>Minimum Revenue Guarantee</b>	45.000 (AADT)
<b>Revenue Sharing with Government</b>	50% revenue share (in case of traffic exceeding the guarantee)

### Car Equivalent AADT



# PROJECT 2

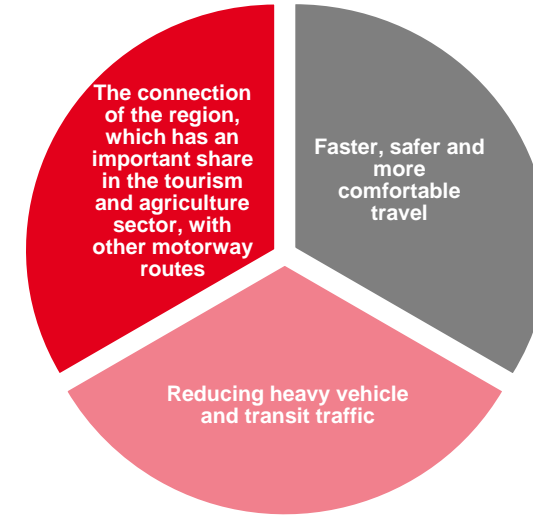
## ANTALYA-ALANYA HIGHWAY (BOT)



### Revenue Stream: Tolls

	Car	Medium	Bus	Truck	Trailer
Toll Coefficients	1.0	1.60	1.9	2.52	3.18
Toll Rates per KM (€)	0.07	0.112	0.133	0.176	0.223
Toll Rates per Section (€)	9.22	14.76	17.52	23.24	29.33

### Project Rationale



# PROJECT 2

## ANTALYA-ALANYA HIGHWAY (BOT)



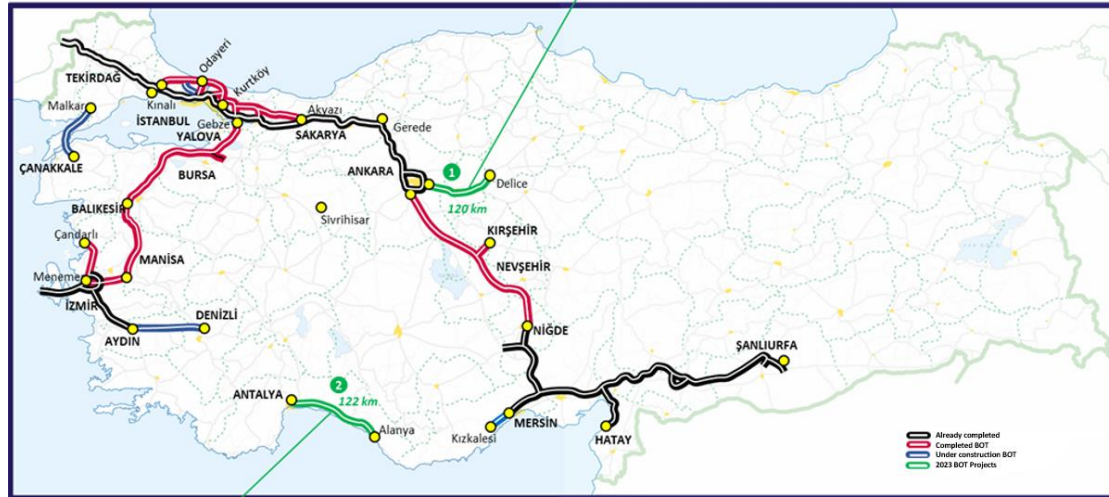
### Project Details

PROJECT CHARACTERISTICS	LENGTH (M) / NUMBER
Platform viaducts	7.480 m x 2
Tube tunnels	11.167 m x 2
Service Facilities	4
Intersections	7

### Revenue Stream: Highway Service Facilities

FACILITIES	REVENUE (EURO)
Facility-1	3.15 Million €
Facility-2	7.90 Million €
Facility-3	3.15 Million €
Facility-4	3.15 Million €

Ankara-Kırıkkale-Delice Highway

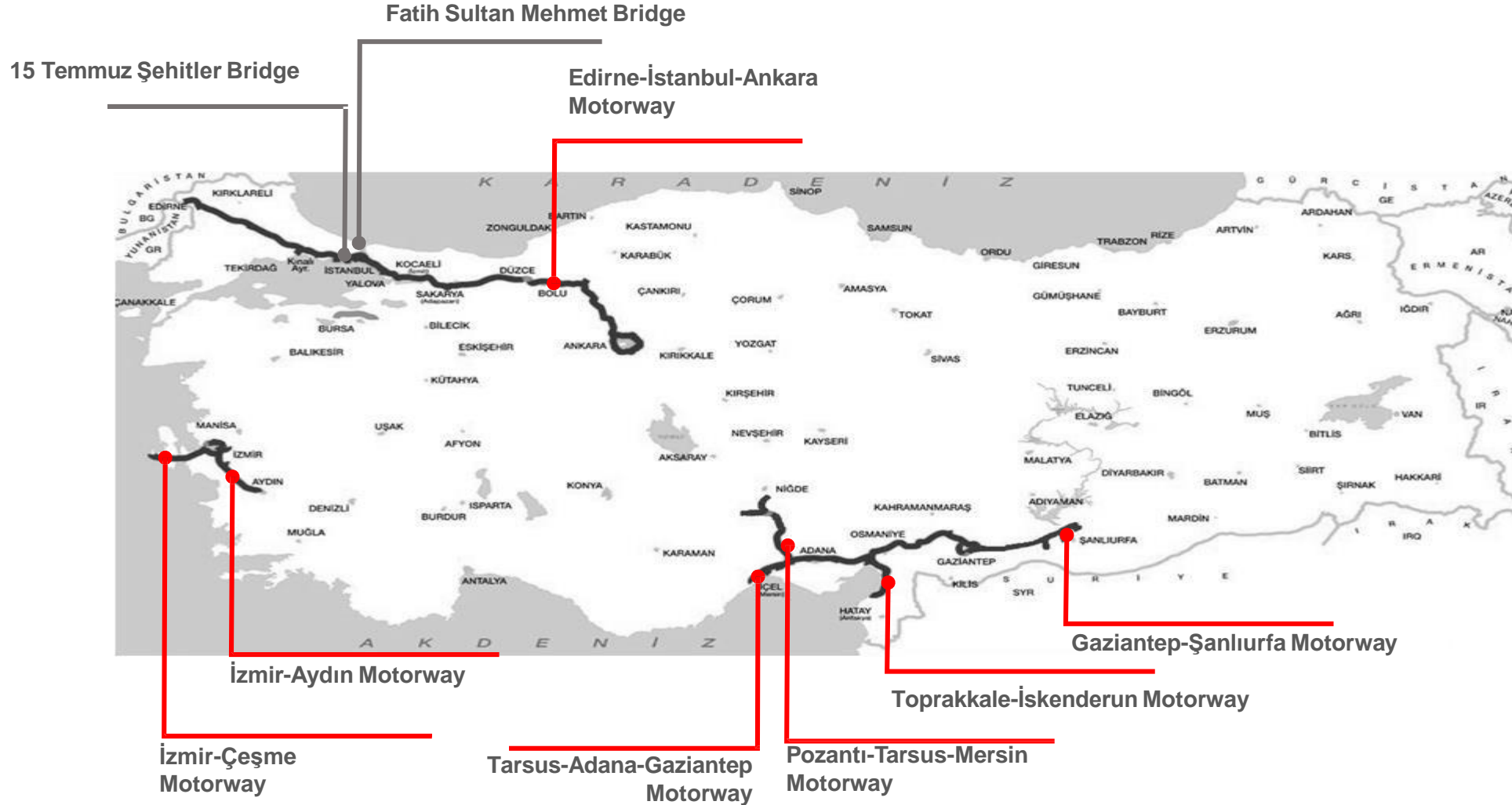


Antalya-Alanya Highway

### Maintenance and Operation Costs

OPERATION COST DETAILS	COST/YEAR/KM (EURO)
Routine maintenance	11.934 €
Winter maintenance	1.527 €
Periodical heavy maintenance	296.210 €
Operating Cost	144.315 €
<b>Total</b>	<b>453.986 €</b>

# ASSET 1-9: PRIVATIZATION PORTFOLIO



# GENERAL OVERVIEW PRIVATIZATION



## Motorways and Bridges within the Scope of Privatization

### Transaction

- **Motorways and Bridges** have been placed on the privatization program as to the Privatization High Council decisions dated 19/04/2007 and numbered 2007/25.

### Portfolio/Scope of Presentation

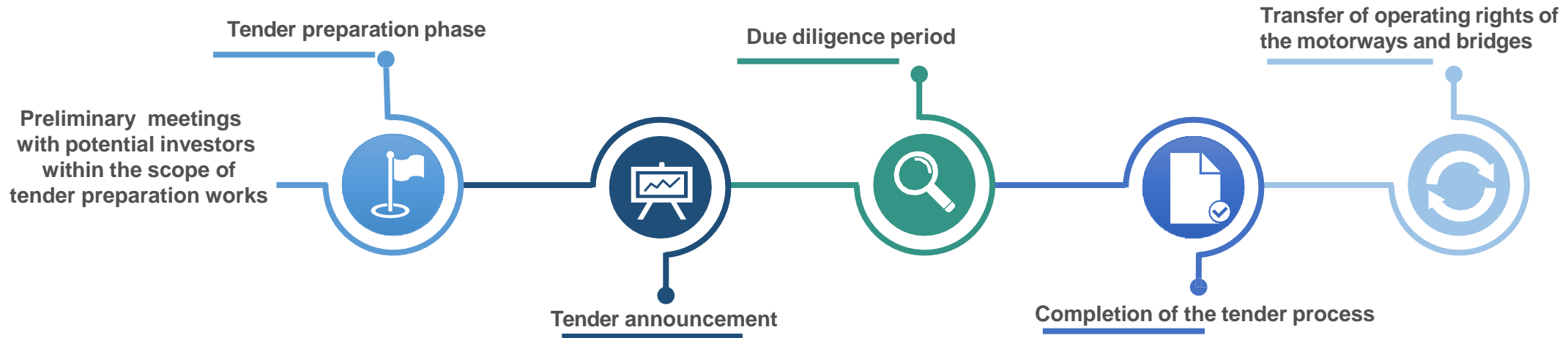
- The privatization portfolio includes; maintenance and operation facilities, service facilities and other goods and service production units and assets on the motorway. Seven highways and two bridges included has a total length of 2.119 km.
- The construction, maintenance, repair works of the Motorways and Bridges are currently carried out by KGM.

### Tender Process

- Operating rights of highways and bridges will be transferred for 25 years.



## Contemplated Privatization Process



# REVENUE PERFORMANCE OF THE PORTFOLIO



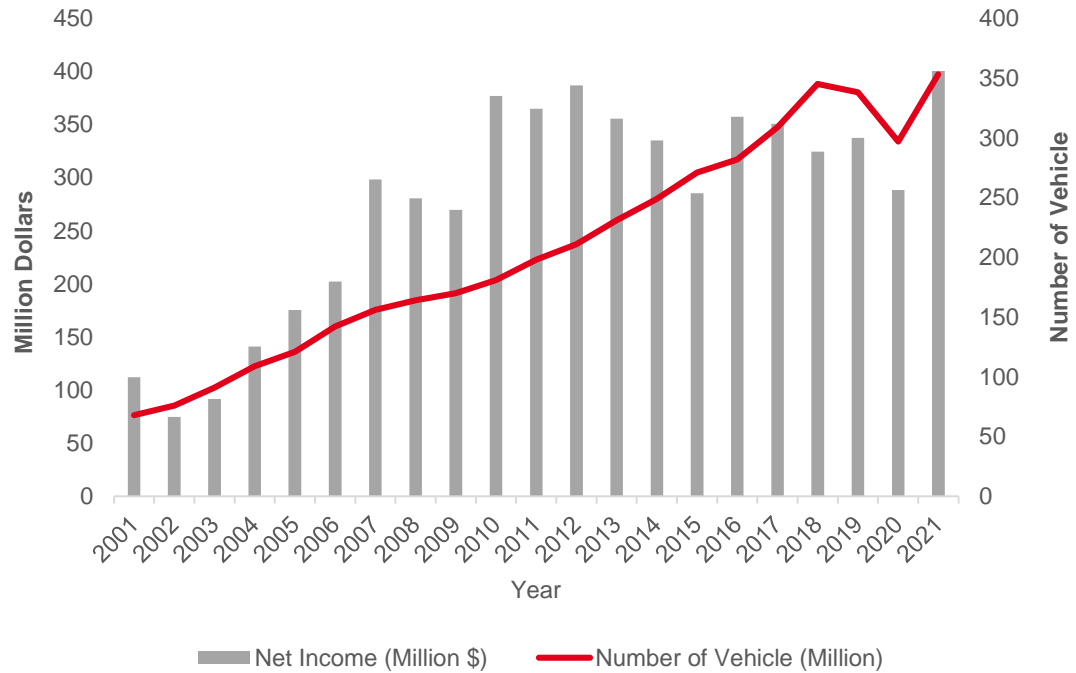
## VEHICLE NUMBERS AND INCOME STATEMENT ON THE BASIS OF SECTIONS (2021)

SECTIONS	NUMBER OF VEHICLES	GROSS INCOME (Dollar)
Edirne-İstanbul (Mahmutbey)	92.179.549	72.565.120
İstanbul (Çamlıca) - Ankara	167.943.036	229.376.660
Niğde-Pozantı-Mersin-Adana (Batı Kavşağı)	28.321.845	35.219.563
Adana (Doğu Kavşağı)- İskenderun- Şanlıurfa	32.377.379	40.071.088
İzmir-Çeşme	11.429.069	7.217.983
İzmir-Aydın	20.940.145	15.845.397
Boğaziçi Bridge (15 Temmuz Şehitler Bridge)	43.216.332	34.505.883
Faith Sultan Mehmet Bridge	42.927.710	33.364.818
<b>Motorway Total</b>	<b>353.191.023</b>	<b>400.295.811</b>
<b>Bridges Total</b>	<b>86.144.042</b>	<b>67.870.701</b>
<b>TOTAL</b>	<b>439.335.065</b>	<b>468.166.512</b>

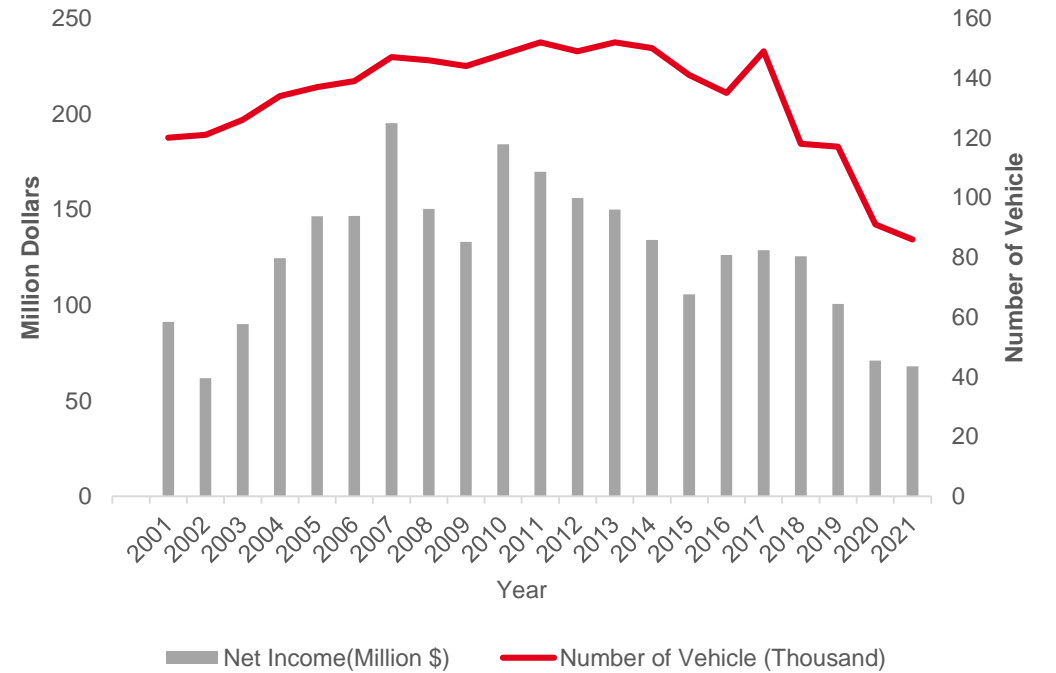
# REVENUE PERFORMANCE OF THE PORTFOLIO



## Motorways



## Bridges



Net income: 18% VAT was deducted when calculating the motorway net income, 18% VAT and 10% Municipality Share were deducted when calculating the net income of bridges. Number of vehicles passing over the bridges include vehicles passing on both directions





# MARITIME SECTOR



# SUMMARY OF MARITIME PORTFOLIO



Project/ Asset No	Marina	Yacht Capacity	Dock Length (m)	Location	Contract Type	Investment Cost (Million Euro)	Contract Duration (Years)	Tender Criteria
1	Kalamış	1.511	1.383	Istanbul	TOR	TBD	40	One time fixed payment with 4 years installement
2	Demre	600	287	Antalya	BOT	4.21	31.5	Maximum Yearly Rent to be Paid to Government
3	Lapseki	250	709	Çanakkale	BOT	4.21	31.5	Maximum Yearly Rent to be Paid to Government
4	Çeşme-Şifne	460	650	Izmir	BOT	10.52	32.5	Maximum Yearly Rent to be Paid to Government

Project/ Asset No	Port	Capacity	Dock Length (m)	Location	Contract Type	Investment Cost (Million Euro)	Contract Duration (Years)	Tender Criteria	Total Area (m <sup>2</sup> )
5	Marmaraereğlisi	8.5 million tons/year	750	Tekirdağ	TOR	-	45	One time fixed payment with 4 years installement	1.468.998
6	Filyos	25 million Tonnes/year	1380	Zonguldak	BOT	80	15	Maximum Yearly Rent to be Paid to Government	459.000
7	Çandarlı Port	4 million TEU/year	2000	İzmir	BOT	752	-	-	3.000.000

Project No	Project	Excavation Volume (1000 m <sup>3</sup> )	Length (km)	Location	Contract Type	Investment Cost (Billion Euro)	Contract Duration (Years)	Tender Criteria
8	Canal Istanbul	1.155.668	45	Istanbul	BOT	9.78	18	-

# GENERAL OVERVIEW PRIVATIZATION



## Privatization Opportunities for Ports

Transaction

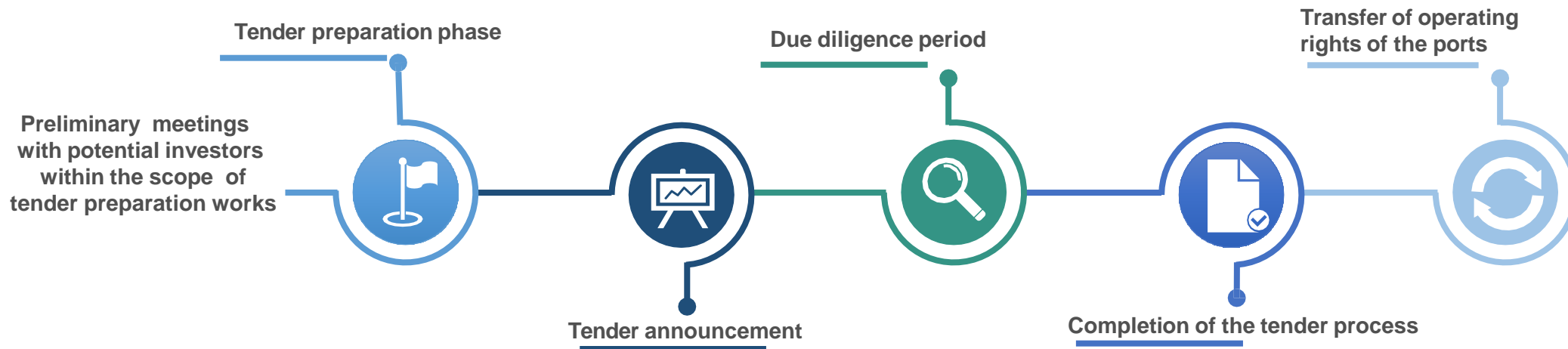
Portfolio

Tender Process

- Ports, business units and assets of Turkish Maritime Administration and certain port projects owned by Republic of Turkey Ministry of Treasury and Finance have been placed on the privatization agenda of **Privatization Administration of Turkey ("PA")**.
- The privatization portfolio includes Fenerbahçe-Kalamış Marina and Marmaraereğlisi Port Project.
- Each asset with its strategic location offers significant value creation opportunities to the investors willing to enter into Turkish market with a significant foothold.
- This document provides preliminary technical and operational data on **marina** and **port** on the privatization agenda. The privatization tenders of the said marinas and ports are planned to be announced in **2022**.



## Contemplated Privatization Process



# 1) ASSET

## KALAMIŞ MARINA (PRIVATIZATION)



### Asset Overview

Port Type



Capacity

1,511 yachts

Location

İstanbul

Total port area

342,884 m<sup>2</sup>

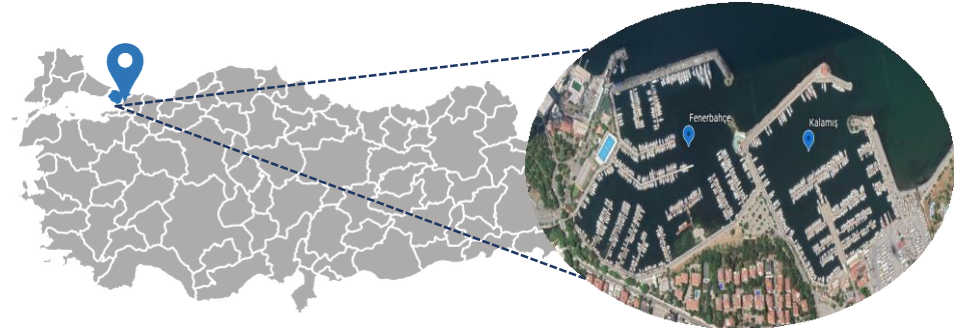
Operation date

1987

Operator

Private

### Kalamış Marina - İstanbul



### Key Technical Data



	Current	Potential	Total	Current	Potential*
Mooring capacity/sea:	1,291	1,680	Sea	342,884 m <sup>2</sup>	437,789 m <sup>2</sup>
Mooring capacity/land:	220	220	Port	233,244 m <sup>2</sup>	314,541 m <sup>2</sup>
Dock length:	1,383 m		<b>Total closed area construction</b>	103,529 m <sup>2</sup>	123,248 m <sup>2</sup>
Piled jetty length:	1,280 m		<b>Rentable area (Commercial &amp;/or tourism)</b>	7,893 m <sup>2</sup>	14,539 m <sup>2</sup>
Floating jetty length:	795 m			7,005 m <sup>2</sup>	14,539 m <sup>2</sup>
Car parking area:	350	c.550			
Maximum water depth:	6.5 m	6.5 m			
			<b>Construction Constraints</b>		
				<b>Commercial &amp; touristic area</b>	<b>68%</b>
				<b>Touristic area</b>	<b>20%</b>
				<b>Base area for a single building</b>	<b>750 m<sup>2</sup></b>



(\*): Current zoning plan would allow to investor to expand current levels to potential after privatization.

## 2) PROJECT

### DEMRE MARINA (BOT)



#### Project Overview



Location **Antalya**



Yacht Capacity **600**

**4.21**  
Million (€)



#### Project Snapshot

Contract Type	Built-Operate-Transfer
Tender Criteria	Maximum Yearly Rent to be Paid to Government
Governing Law	3996 BOT Law
Contracting Authority	Directorate General of Infrastructure Investments
Indicative Investment Amount	4.21 Million Euro
Construction Period	18 months (estimated)
Operation Duration	28 years 6 months
Contract Duration	30 years
Expropriation Responsibility	In case of a need for expropriation, its cost will be covered by the company in charge.
Yacht Capacity	400 (moored) + 200 (on land) = 600 (total)
Revenue Sharing with Government	Doesn't exist



## 2) PROJECT

### DEMRE MARINA (BOT)

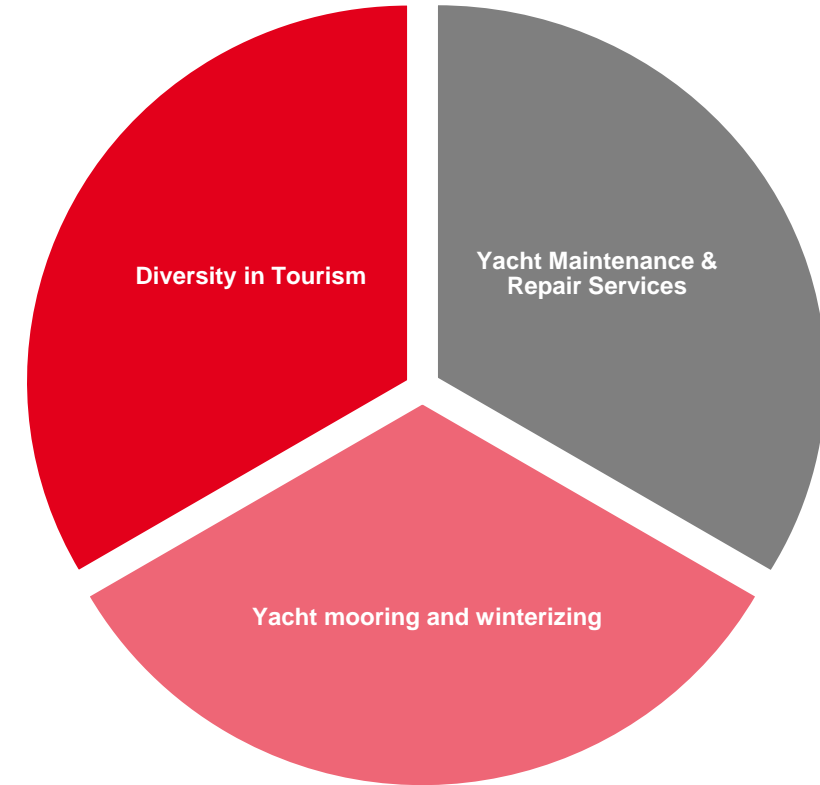


#### Project Details

PROJECT CHARACTERISTICS	LENGTH (M)
Main Breakwater	958 (already completed)
Secondary Breakwater	281 (already completed)
Dock	287 (already completed)



#### Project Rationale



### 3) PROJECT

## LAPSEKI MARINA (BOT)



### Project Overview



Location

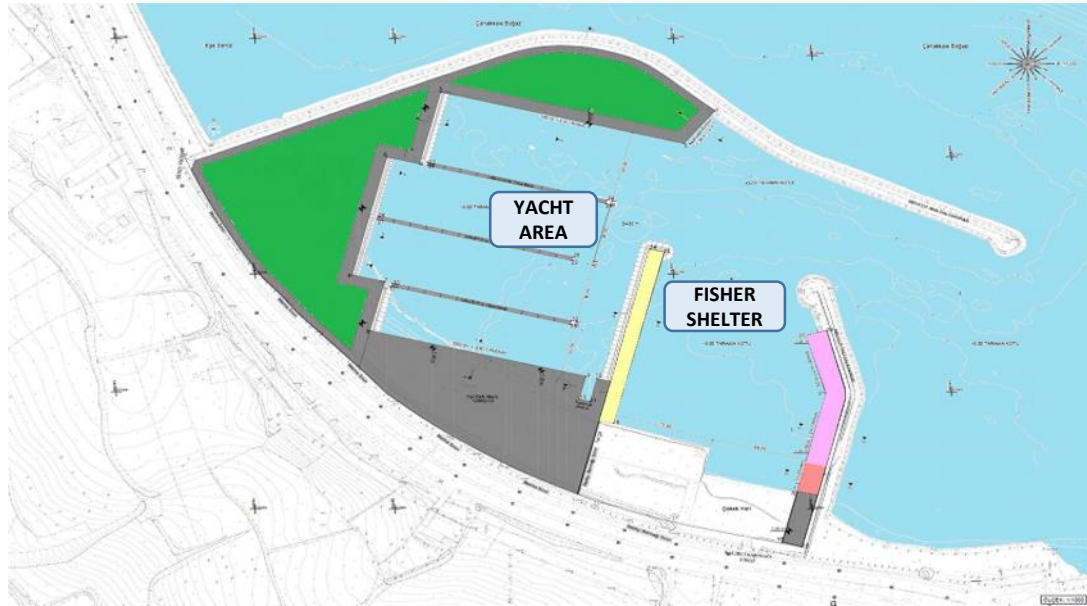
Çanakkale



Yacht Capacity

250

**4.21**  
Million (€)



### Project Snapshot

Contract Type	Built-Operate-Transfer
Tender Criteria	Maximum Yearly Rent to be Paid to Government
Governing Law	3996 BOT Law
Contracting Authority	Directorate General of Infrastructure Investments
Indicative Investment Amount	4.21 Million Euro
Construction Period	18 months (estimated)
Operation Duration	28 years 6 months
Contract Duration	30 years
Expropriation Responsibility	In case of a need for expropriation, its cost will be covered by the company in charge.
Yacht Capacity	200 (moored) + 50 (on land) = 250 (total)
Revenue Sharing with Government	Doesn't exist



# 3) PROJECT

## LAPSEKI MARINA (BOT)

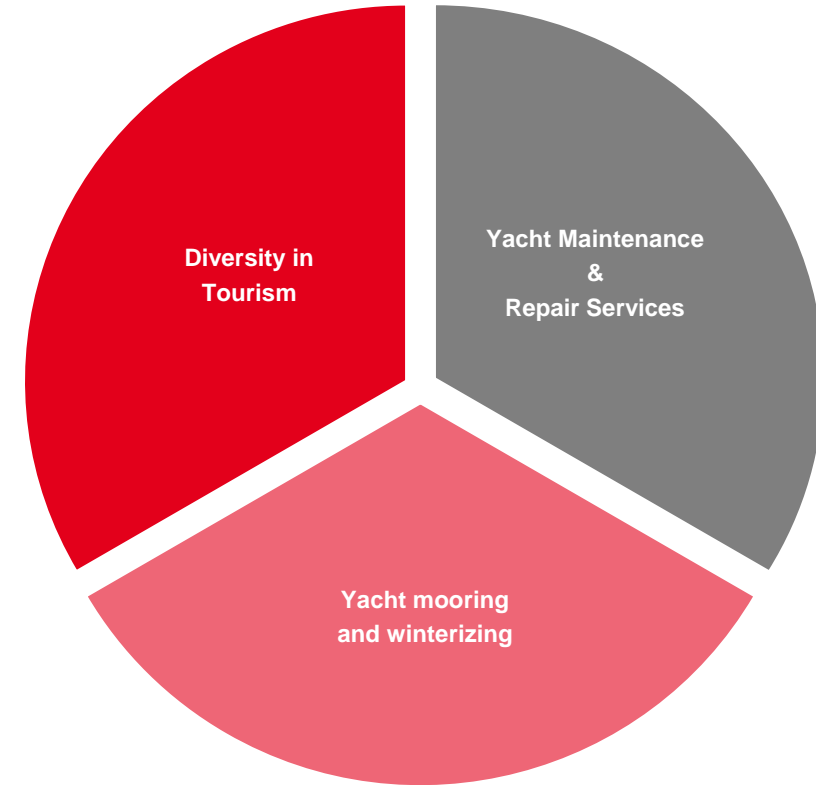


### Project Details

PROJECT CHARACTERISTICS	LENGTH (M)
Main Breakwater	690
Secondary Breakwater	250
Dock	285 m + 424 m + 408 m (floating dock)



### Project Rationale





## 4) PROJECT

### ÇEŞME ŞIFNE MARINA (BOT)



#### Project Overview



Location

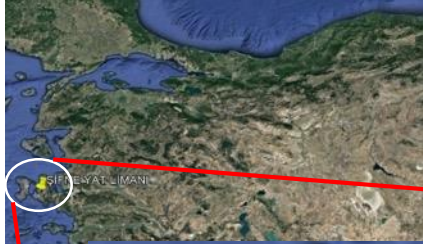
İzmir



Yacht  
Capacity

460

**10.52**  
Million (€)



#### Project Snapshot

<b>Contract Type</b>	Built-Operate-Transfer
<b>Tender Criteria</b>	Maximum Yearly Rent to be Paid to Government
<b>Governing Law</b>	3996 BOT Law
<b>Contracting Authority</b>	Directorate General of Infrastructure Investments
<b>Indicative Investment Amount</b>	10.52 Million Euro
<b>Construction Period</b>	30 months (estimated)
<b>Operation Duration</b>	27 years 6 months
<b>Contract Duration</b>	30 years
<b>Expropriation Responsibility</b>	In case of a need for expropriation, its cost will be covered by the company in charge.
<b>Yacht Capacity</b>	360 (moored) + 100 (on land) = 460 (total)
<b>Revenue Sharing with Government</b>	Doesn't exist



## 4) PROJECT

### ÇEŞME ŞIFNE MARINA (BOT)

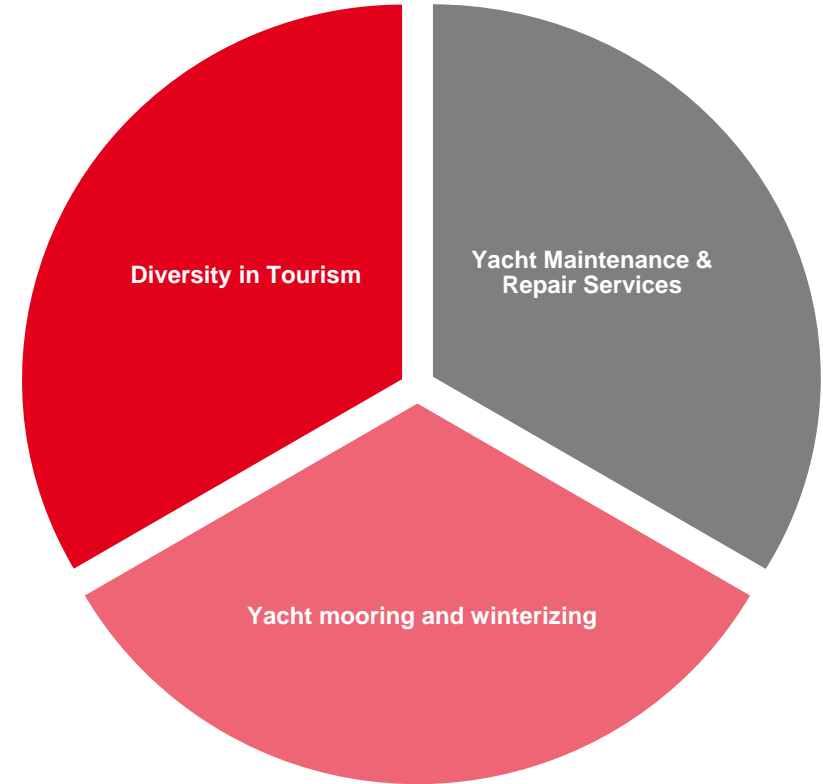


#### Project Details

PROJECT CHARACTERISTICS	LENGTH (M)
Main Breakwater	700
Secondary Breakwater	100
Dock	650 Total (540 + 110)
Floating Pier	585



#### Project Rationale



## 5) ASSET

## MARMARAEREĞLİSİ PORT PROJECT (PRIVATIZATION)



### Asset Overview

Port Type



Capacity

8.5 mn  
tons

Location

Tekirdağ

Total  
project area

1,468,998 m<sup>2</sup>

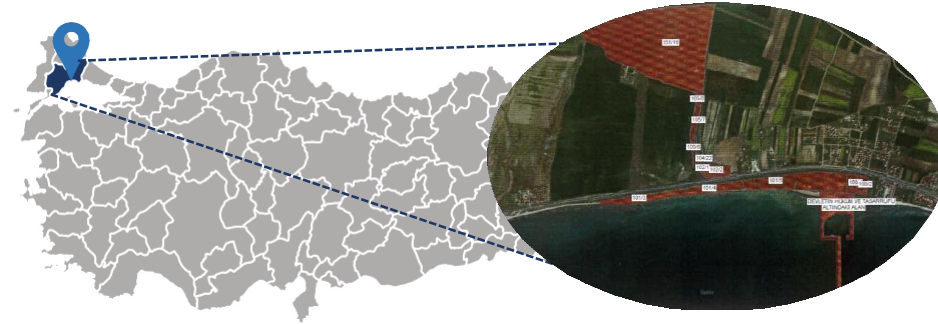
Operation  
date

Under  
construction

Operator

--

### Marmaraereğlisi Port Project - Tekirdağ



### Key Technical Data

<b>Construction date:</b>	2002
<b>Completion status:</b>	%38
<b>Dock length:</b>	750 m
<b>Liquid capacity:</b>	4.5 mn ton/year
<b>Discharge capacity:</b>	4.0 mn ton/year
<b>Ro-Ro vehicle capacity:</b>	100,000
<b>Backfield area<sup>1</sup>:</b>	576,114 m <sup>2</sup>

	Port Area	Sea Area	Other Area
<b>Total</b>	589,695 m <sup>2</sup>	873,056 m <sup>2</sup>	6,247 m <sup>2</sup>
<b>Emax</b>	0.15x	0.15x	0.15x
<b>Hmax</b>	No limit	No limit	No limit

Total Container Handling (mn TEU)	2018	2019	2020	CAGR (%)
Mediterranean	2.4	2.7	2.8	8.2%
Marmara	6.8	7.2	7.0	1.4%
<b>Tekirdağ</b>	<b>1.1</b>	<b>1.4</b>	<b>1.4</b>	<b>15.4%</b>
Aegean	1.6	1.6	1.7	4.9%
Black Sea	0.1	0.1	0.1	18.9%
<b>TOTAL</b>	<b>10.8</b>	<b>11.5</b>	<b>11.6</b>	<b>3.5%</b>

(1) Including logistic area.

(2) Zoning plan preparation phase completed. Investor winning the privatization tender will develop the port.

## 5) ASSET

### MARMARAEREĞLISI PORT PROJECT INVESTMENT HIGHLIGHTS



#### Strategic Location

Advantageous location; proximity to Istanbul, Edirne, Tekirdağ cities of Turkey and also EU countries Greece and Bulgaria.

#### Capacity Enhancement and Utilization of Idle Assets

Port project with a significant backfield area to be developed as a logistics center which would serve to the organized industrial zones around the port location



#### Proximity to Industrial Zones

Expectation of sustainable port traffic due to the proximity to Tekirdağ industrial zones.

#### Port Backfield Area

Contemplated zoning plan regarding backfield area providing logistics center investment opportunities.

#### Increasing Demand

Scale up in port operations as growth of regional industry zones spurring demand for port services.

## 6) PROJECT

### FILYOS PORT (BOT)



#### Project Overview



Location

Zonguldak



Freight  
Handling  
Capacity

25 Million Tonnes/year

80  
Million (€)



#### Project Snapshot

<b>Contract Type</b>	Built-Operate-Transfer
<b>Tender Criteria</b>	Maximum Yearly Rent to be paid to Government
<b>Payment Mechanism</b>	Harbor Operation Revenues and Rent Revenues
<b>Governing Law</b>	3996 BOT Law
<b>Contracting Authority</b>	Directorate General of Infrastructure Investments
<b>Construction Period</b>	2 years
<b>Contract Duration</b>	15 years
<b>Indicative Investment Amount</b>	80 Million Euro
<b>Expropriation Cost</b>	5 Million Euro
<b>Expropriation Responsibility</b>	Shared between government and SPV (Rate tbd)
<b>Total Handling Capacity</b>	25.000.000 TEU/Year
<b>Revenue Sharing with Government</b>	50 % after guaranteed revenue



## 6) PROJECT

### FILYOS PORT (BOT)



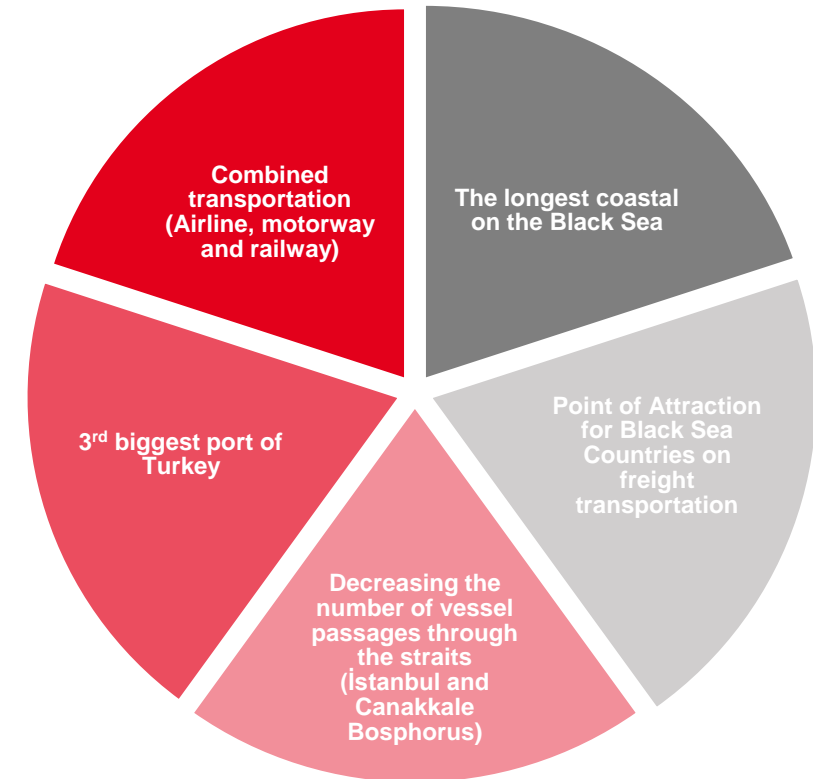
#### Project Details

TYPE OF CARGO	PORT ELEMENT	PHASE-1 2025	PHASE-2 2030	P-3 2035
Dry Bulk	Quay Length	485 m	700 m	700 m
	Terminal Area	24 ha	27 ha	31 ha
Container	Quay Length	175 m	525 m	700 m
	Terminal Area	7 ha	26.3 ha	35 ha
Break Bulk	Quay Length Iron and Steel	200 m	200 m	200 m
	Quay Length Other Cargo	520 m	520 m	690 m
	Terminal Area	14.9 ha	15.1 ha	18.3 ha

#### Project Capacity

TYPE OF CARGO	PHASE-1 2025	PHASE-2 2030	P-3 2035
Dry Bulk	4,752,796 tons	5,718,370 tons	10,012,249 tons
Container	127,718 TEU	436,090 TEU	932,576 TEU
Break Bulk	2,099,694 tons	2,898,827 tons	3,660,368 tons

#### Project Rationale



## 7) PROJECT

### ÇANDARLI PORT PROJECT DEVELOPMENT



#### Previous Studies Regarding the Çandarlı Port Project

- Within the scope of the tender held in 2011, the construction of the breakwater of Çandarlı Port has been started in 2014 with a contract value of 237 million TL, with its provisional acceptance.
- A tender was made in 2013 for the **2,000 m long and 1,000 m wide quay**, superstructure construction, dredging activities and field filling planned to be built with the build-operate-transfer model in the port, where the breakwater construction was completed, but no bids could be received.
- Within the framework of the approved implementation and zoning plan of Çandarlı Port, which has a natural depth of 18 m; It is aimed to reach a total capacity of 4 million TEU/year in 3 stages:
  - 1.Stage: 1 million TEU/year
  - 2.Stage: 2 million TEU/year
  - 3.Stage: 1 million TEU/year
- A total investment of **752 million Euros** is projected, with infrastructure and superstructure investments of 380 million Euros, equipment and marine vehicles investments of 372 million Euros.
- The construction of the highway connection was started by the General Directorate of Highways, and the railway connection was started by TCDD.
- The area, which has a fairly flat structure, is located in a suitable area for industrial plant construction.

#### Joint Evaluation of Çandarlı and İzmir Ports

- Located in the north of İzmir, within the borders of Zeytinadağ and Çandarlı, the port is planned to serve as **the main port (Hub-Port) on the main container transportation lines** passing through the Mediterranean and meeting the container loads in the region due to the capacity constraints of the İzmir Port.
- **It is aimed to increase potential investor interest and create a permanent solution for the region by evaluating Çandarlı Port, which is designed as a container port and can easily meet the increasing freight traffic due to its location, planned capacity and depth, together with İzmir Port.**



## 8) PROJECT

### CANAL ISTANBUL (BOT)



#### Project Overview

	Location	Istanbul
	Length	45 KM
	Minimum Width	275 M

**12.78**  
Billion (€)

#### Project Snapshot

Contract Type	Built-Operate-Transfer
Tender Criteria	To be determined (duration, income, project etc.)
Payment Mechanism	Fees
Governing Law	3996 BOT Law
Contracting Authority	Directorate General of Infrastructure Investments
Construction Period	5 years
Expected Contract Duration	18 years
Indicative Investment Amount	12.78 Billion Euro
Expropriation Cost	882 Million Euro
Expropriation Responsibility	Government or SPV (not defined yet)
Total Canal Length	45 KM
Minimum Canal Width	275 M
Minimum Canal Depth	21 M
Revenue Sharing with Government	To be determined (during the tender process)





## 8) PROJECT

### CANAL ISTANBUL (BOT)

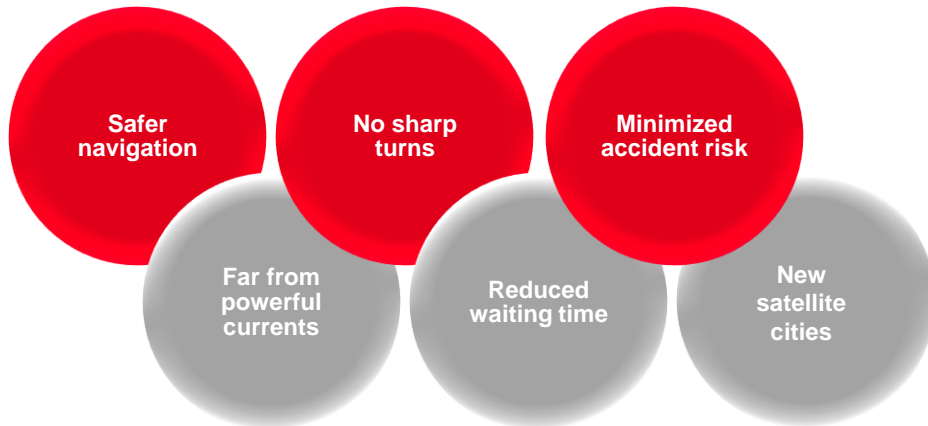


#### Project Details

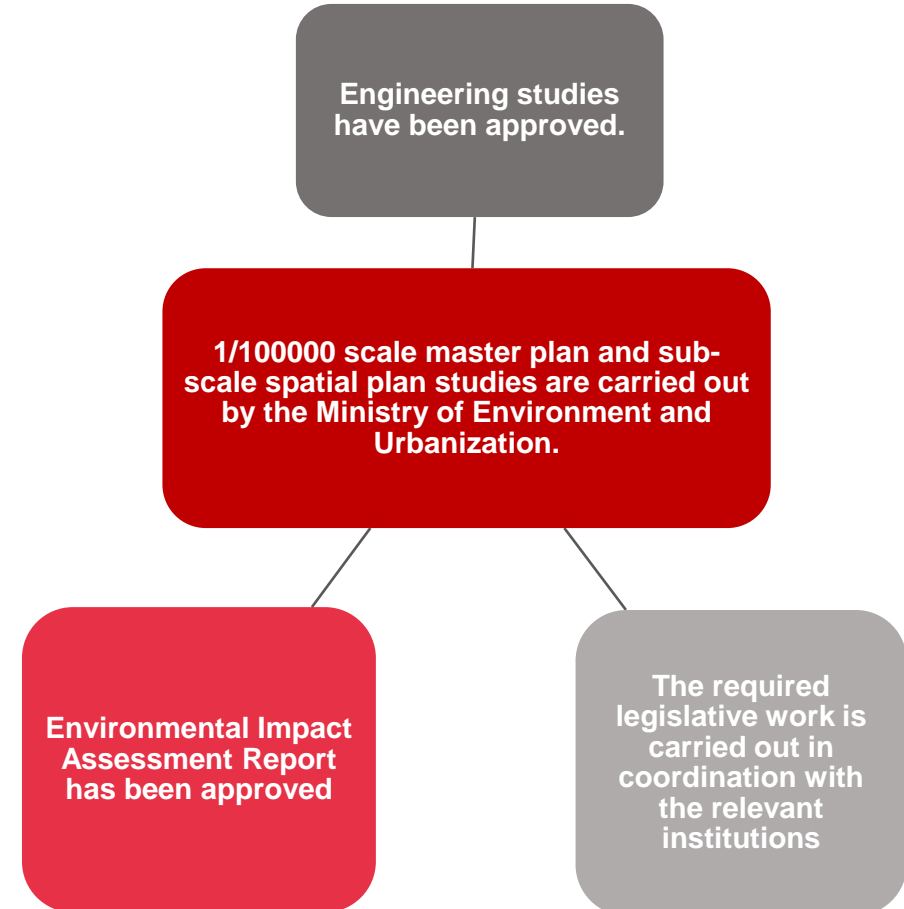
VESSEL TYPE	LENGTH-WIDTH-DRAFT	DWT	FULLY LOADED TONNAGE
Oil Tanker	275-48-17 m	145000	176000
Container	350-49-16 m	120000	185700

EXCAVATION	AREA (1000 m2)	VOLUME (1000 m3)
Land Excavation	28.141	1.065.452
Lake Dredge	8.781	85.547
<b>TOTAL</b>	<b>36.922</b>	<b>1.151.000</b>

#### Project Rationale



#### Project Explanation





# RAILWAY SECTOR



# SUMMARY OF RAILWAY PORTFOLIO



Project No	Project	Length (km)	Passenger Capacity (Million/year)	Freight Capacity (Million tons/year)	Contract Type	Investment Cost (Billion Euro)	Tender Criteria	Location
1	Ankara-Istanbul High Speed Railroad	347	11	-	BOT	5.6	Minimum Operation Period	Ankara, Istanbul
2	Gebze-Halkalı Railroad	213	16	18	BOT	4.0	Minimum Operation Period	Kocaeli, Istanbul
3	Divriği-Kars Railroad	666	0.5	2.7	BOT	0.75	Minimum Operation Period	Sivas, Erzurum, Kars
4	Kemalpaşa Logistics Center	-	-	5.0	BOT	0.06	Minimum Operation Period	İzmir

# PROJECT 1

## ANKARA-ISTANBUL HIGH SPEED RAILROAD (BOT)



### Project Overview



Location

Ankara-Istanbul



Total Length

347 KM



Passenger

11 Million / year (2027)

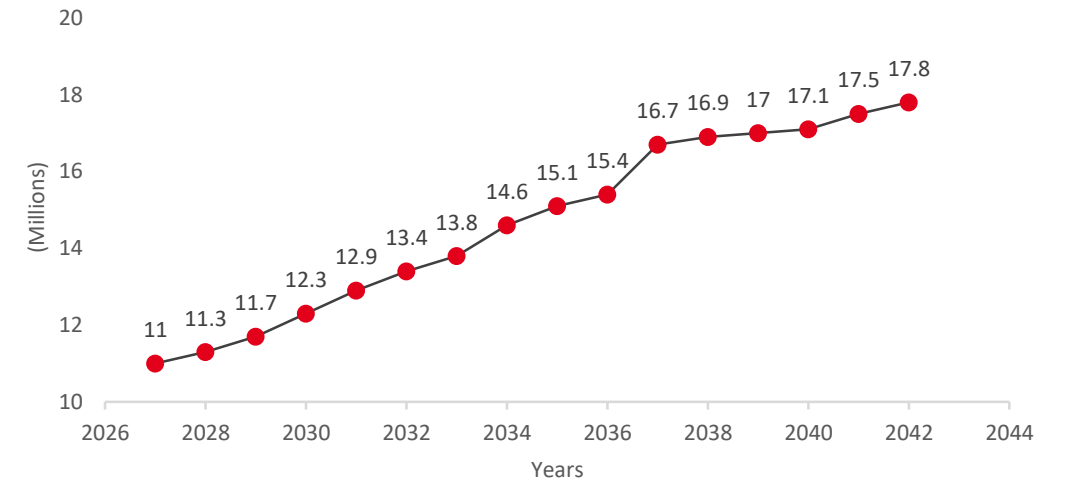
**5.6**  
Billion (€)



### Project Snapshot

Contract Type	Built-Operate-Transfer
Tender Criteria	Minimum Operation Period
Payment Mechanism	Fees
Governing Law	3996 BOT Law
Contracting Authority	Directorate General of Infrastructure Investments
Construction Period	5 years
Expected Contract Duration	30 years
Indicative Investment Amount	5.6 Billion Euro
Expropriation Responsibility	Government
Total Passenger Capacity	11.000.000 passenger/year (2027)
Total Length (km)	347
Design Speed (km/h)	350 km/h
Expected Tender Date	The end of 2021

### Passenger Projection



# PROJECT 1

## ANKARA-ISTANBUL HIGH SPEED RAILROAD (BOT)



### Project Rationale

Istanbul and Ankara cities which have the biggest passenger and freight transport demand will be connected each other

Transferring transport density from road to rail

Shortened travel time

Faster and more comfortable travel



# PROJECT 2

## GEBZE-HALKALI RAILROAD (BOT)



### Project Overview



Location

Kocaeli - İstanbul



Total Length

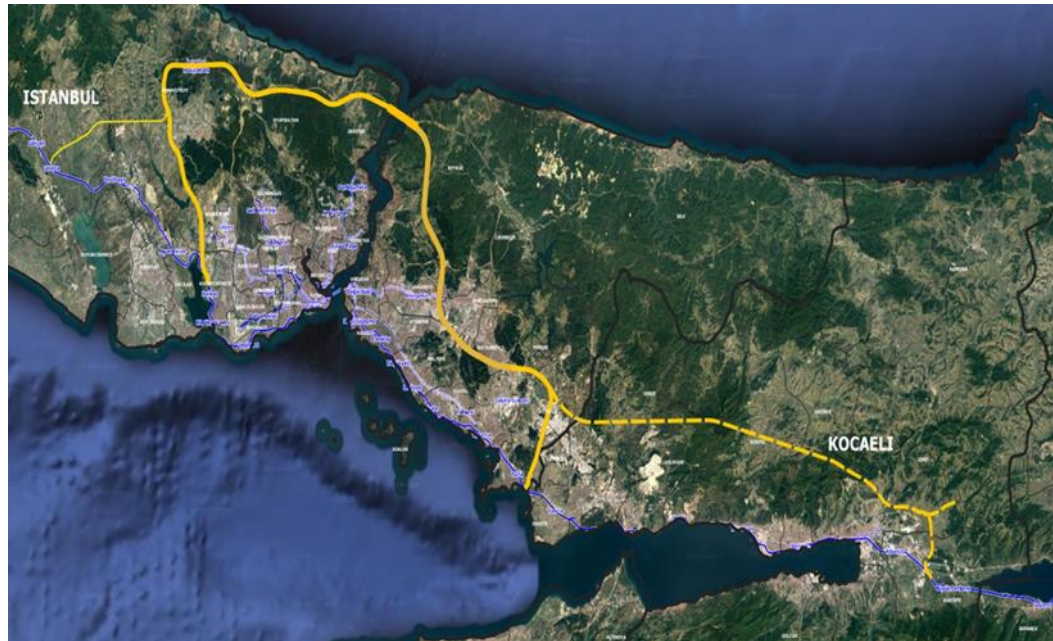
213 KM



Passenger

16.8 Million / year (2027)

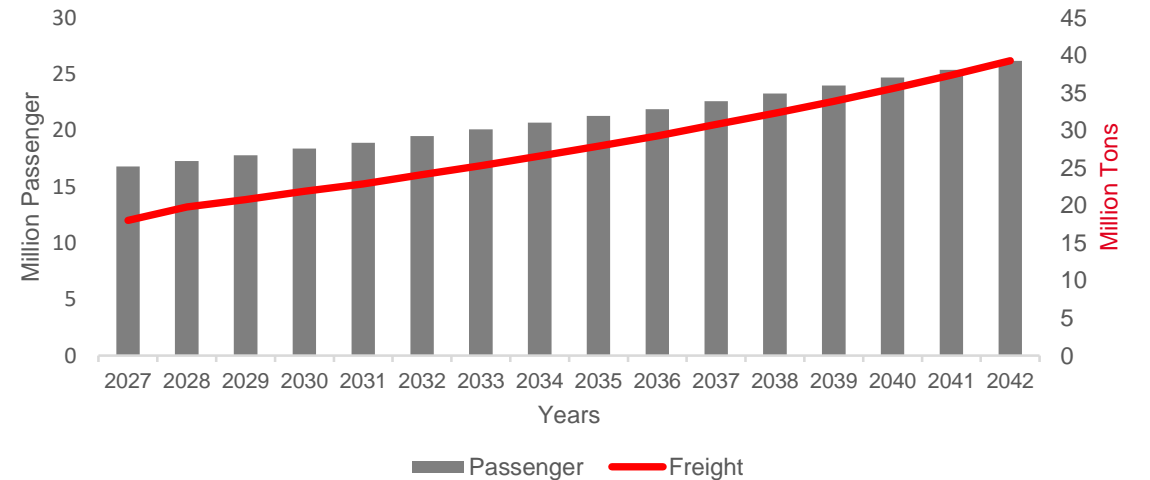
**4.0**  
Billion (€)



### Project Snapshot

Contract Type	Built-Operate-Transfer
Tender Criteria	Minimum Operation Period
Payment Mechanism	Fees
Governing Law	3996 BOT Law
Contracting Authority	Directorate General of Infrastructure Investments
Construction Period	5 years
Expected Contract Duration	25 years
Indicative Investment Amount	4 Billion Euro
Expropriation Cost	170 Million Euro
Expropriation Responsibility	Government
Total Passenger Capacity	16.842.227 passenger/year (2027)
Total Freight Capacity	18.030.584 tons/year (2027)
Total Length (km)	213

### Passenger and Freight Projection



# PROJECT 2

## GEBZE-HALKALI RAILROAD (BOT)

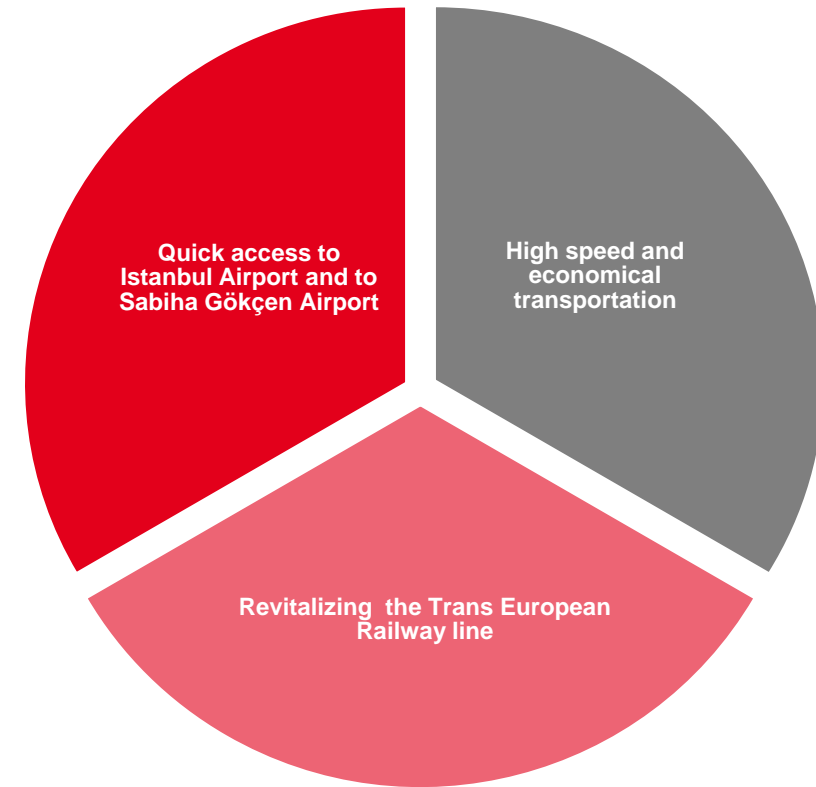


### Project Details

PROJECT CHARACTERISTICS	NUMBER/LENGTH
Total length (km)	213
Design Speed (km/hr)	Min. 200 / Max. 350
Tunnel (Number/Length)	53/120,4 km
Viaduct (Number/Length)	31/7,7 km
Number of Stations	10
Number of Lines	2



### Project Rationale



# PROJECT 3

## DIVRIĞI-KARS RAILROAD (BOT)



### Project Overview

	<b>Location</b>	Sivas-Erzurum-Kars
	<b>Total Length</b>	666 KM
	<b>Passenger</b>	500 Thousand/year

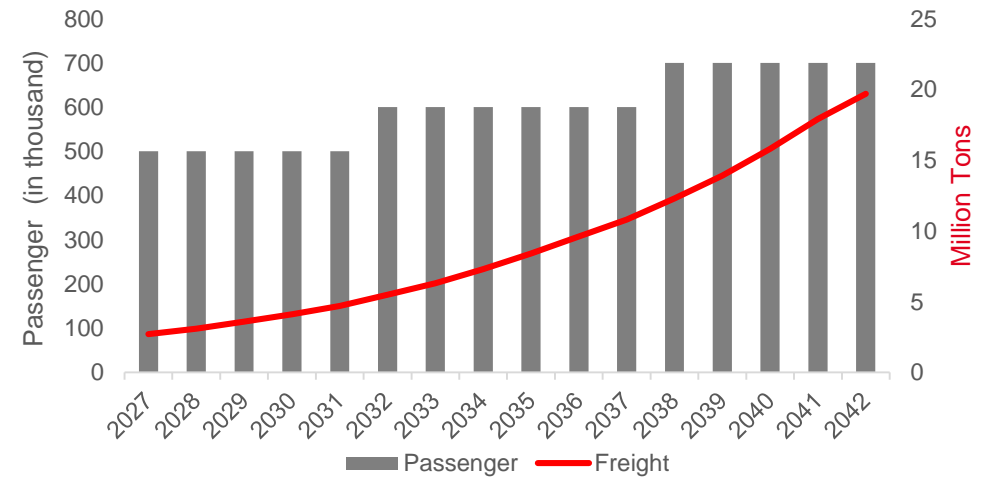
**750**  
Million (€)



### Project Snapshot

<b>Contract Type</b>	Built-Operate-Transfer
<b>Tender Criteria</b>	Minimum Operation Period
<b>Payment Mechanism</b>	Fees
<b>Governing Law</b>	3996 BOT Law
<b>Contracting Authority</b>	Directorate General of Infrastructure Investments
<b>Construction Period</b>	4 years
<b>Expected Contract Duration</b>	24 years
<b>Indicative Investment Amount</b>	750 Million Euro
<b>Expropriation Responsibility</b>	Government
<b>Total Passenger Capacity</b>	500.000 passenger/year (2027)
<b>Total Freight Capacity</b>	2.700.000 tons/year (2027)
<b>Total Length (km)</b>	666

### Passenger and Freight Projection





# PROJECT 3

## DIVRIĞI-KARS RAILROAD (BOT)



### Project Rationale

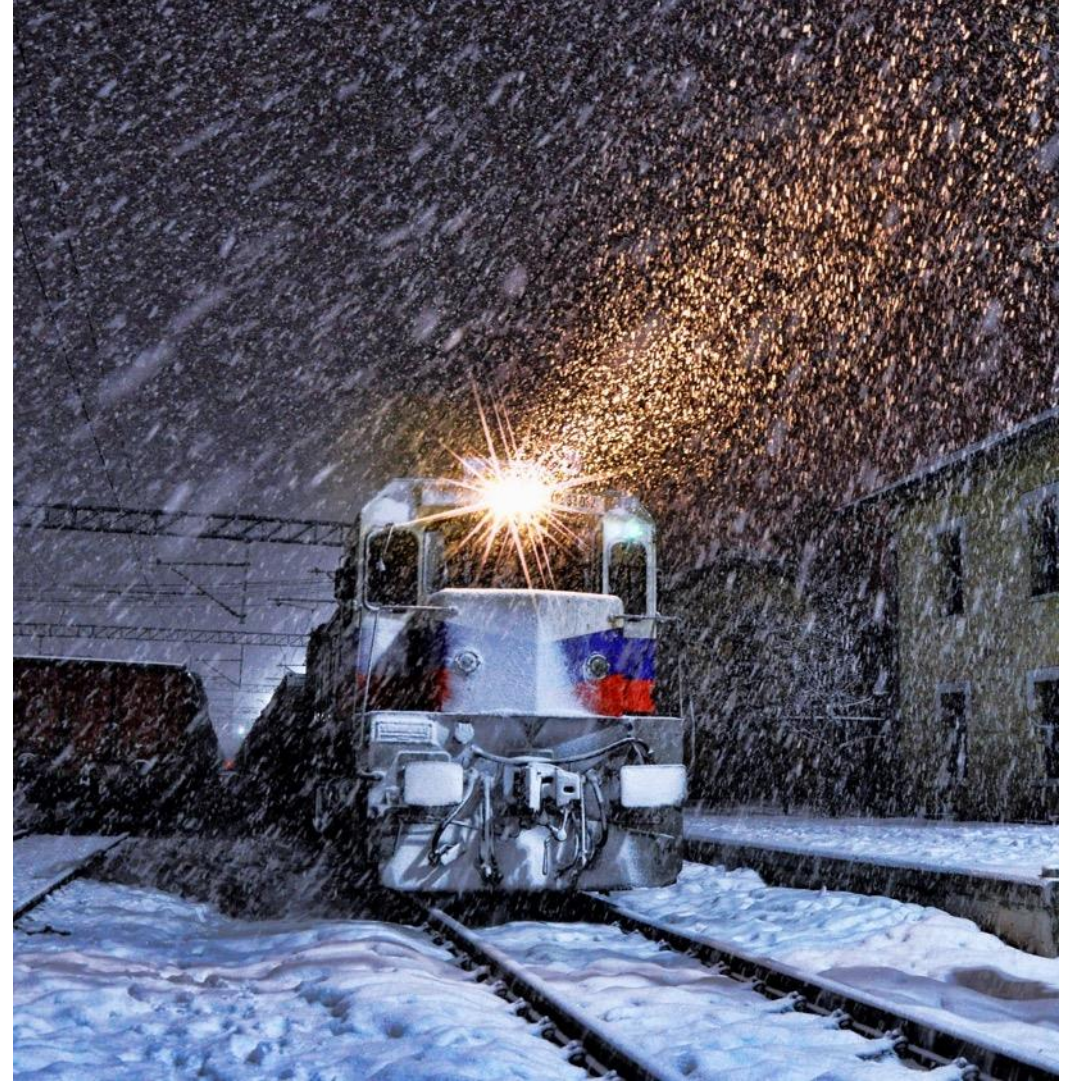
Railway connection between China and Europe



Safer and faster transportation



Transferring freight transport to the railway in the East-West Corridor



# PROJECT 4

## KEMALPASA LOGISTICS CENTER (BOT)



### Project Overview



Location

İzmir



Freight Capacity

5 Million Tonnes / year  
(2027)

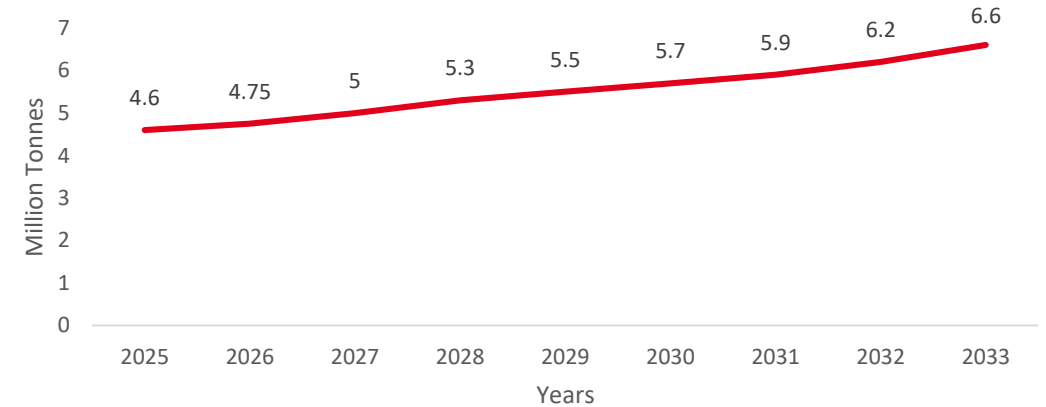
60  
Million (€)



### Project Snapshot

Contract Type	Built-Operate-Transfer
Tender Criteria	Minimum Operation Period
Payment Mechanism	Fees
Governing Law	3996 BOT Law
Contracting Authority	Directorate General of Infrastructure Investments
Construction Period	30 months
Expected Contract Duration	144 months
Indicative Investment Amount	60 Million Euro
Expropriation Responsibility	Government
Total Freight Capacity	5.000.000 tonnes/year (2027)

### Freight Projection



# PROJECT 4

## KEMALPAŞA LOGISTICS CENTER (BOT)

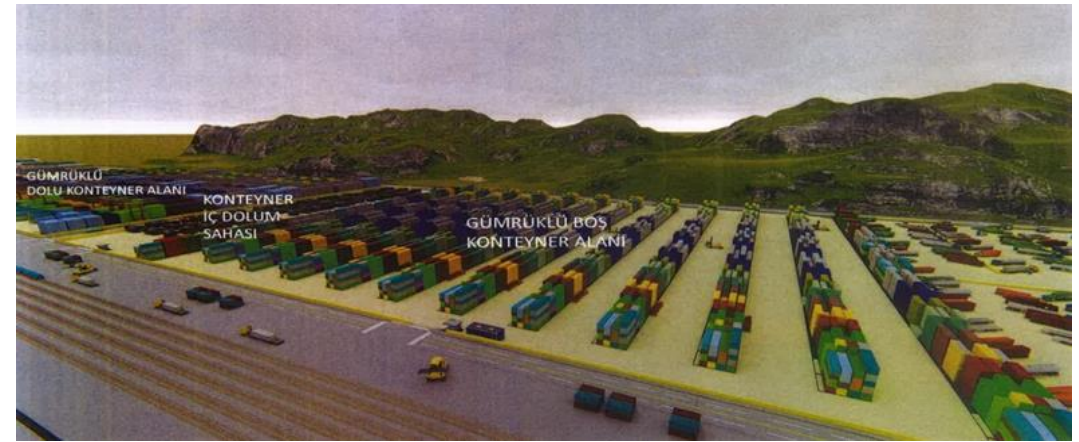


### Project Rationale



### Project Details

PROJECT CHARACTERISTICS	NUMBER/LENGTH
Bonded temporary storage areas(m <sup>2</sup> )	17000
Container loading/unloading areas(m <sup>2</sup> )	30000
Capacity of international trailer truck park (per)	450
Area of international trailer truck park(m <sup>2</sup> )	50000
Capacity of internal transport truck park (per)	280
Area of internal transport truck park(m <sup>2</sup> )	27000





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