

**PUBLIC – PRIVATE PARTNERSHIP IN THE WATER AND
SANITATION SECTOR:**

**An exchange of experiences between Europe, Central Asia,
the Middle East and North Africa**

(21 – 22 October 2014, Geneva)

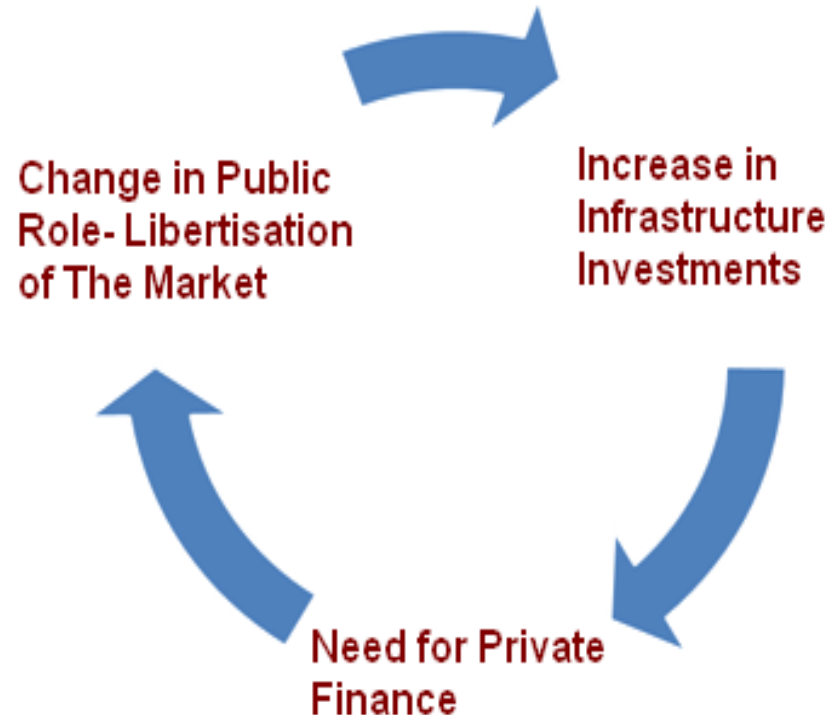
Prof. Mehmet Emin BİRPINAR

Deputy Undersecretary

Ministry of Environment and Urbanization, TURKEY

CONFERENCE ON PPPs IN THE WATER AND SANITATION SECTOR

- Public financial resources are **not enough** to meet all demand.
- The aim is to benefit from **dynamic charter of private sector**.
- Change in the role of the public sector in the economy:
 - In order to provide services itself
 - Organize, regulate and control**



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- 💧 **TURKEY** is familiar with PPP type contracts since **1980s**.
- 💧 TURKEY is the **FIRST COUNTRY** that put **Build-Operate-Transfer (BOT)** methodology into implementation for the electricity sector in **1984** (Law no 3096).
- 💧 However, the term PPP has not been fully defined in regulations.
- 💧 **Turgut ÖZAL**, the 8th President and one of the previous Prime Ministers of Turkey, is the innovator of the term BOT. *(Reference below)*

Reference: Grimsey. D., & Lewis M.K., «Evaluating Risks of Public Private Partnerships for Public Infrastructure Projects», International Journal of Project Management, 20, 2002, s. 107-118

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BIRECIK HYDROELECTRIC POWER PLANT

- Establishment : 1995
- BOT period : 15 Years
- Installed capacity : 672 MW
- Project cost : 1,2 billion US \$
- Service : Started in 2000

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YUVACIK DAM AND POTABLE WATER PROJECT

- Establishment : 1995
- BOT period : 15 Years
- Project cost : 865 Million US \$
- Service : Started in 1999

KOCAELİ
BÜYÜKŞEHİR BELEDİYESİ

WASTEWATER TREATMENT SERVICES:

- 💧 In Turkey, the population supplied wastewater treatment services is **rapidly increasing**.
- 💧 As a result of our investments, the rate of the municipal population served by wastewater treatment **increased**:
 - 💧 From **35 %** in **2002**
 - 💧 To **77 %** in **2014**

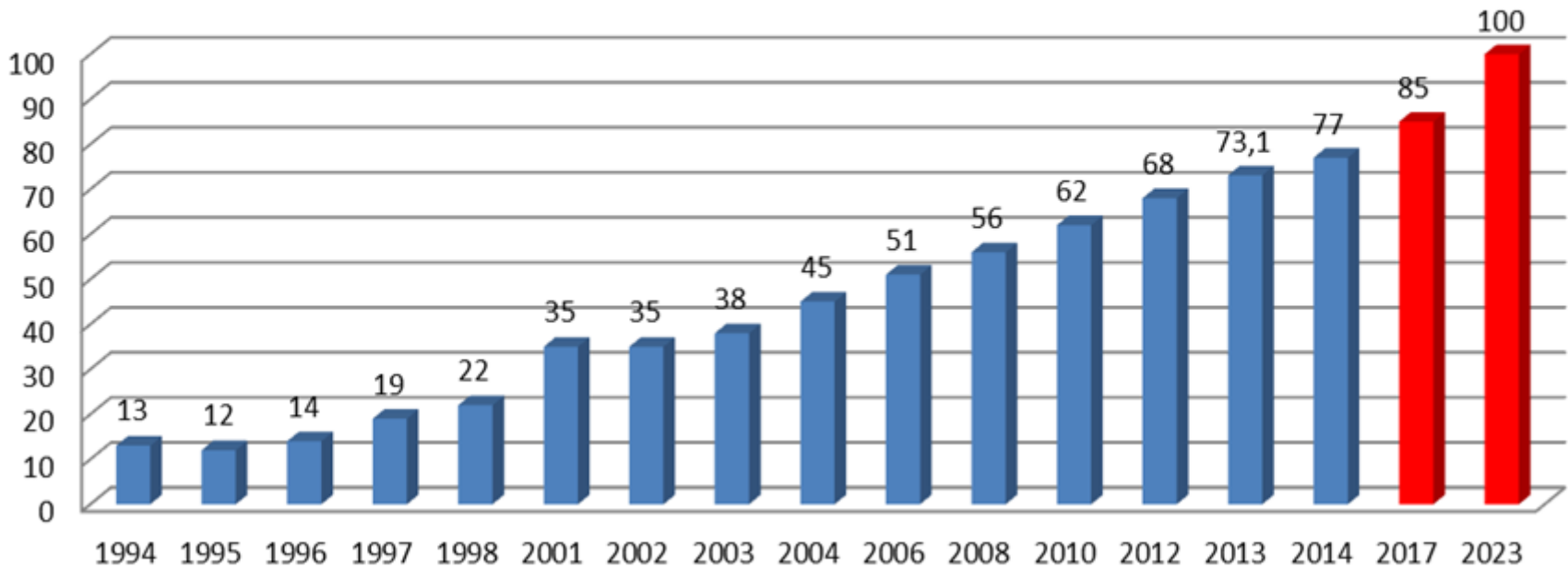


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OUR GOAL IS TO INCREASE THIS RATIO UP TO **%100 IN **2023**.**

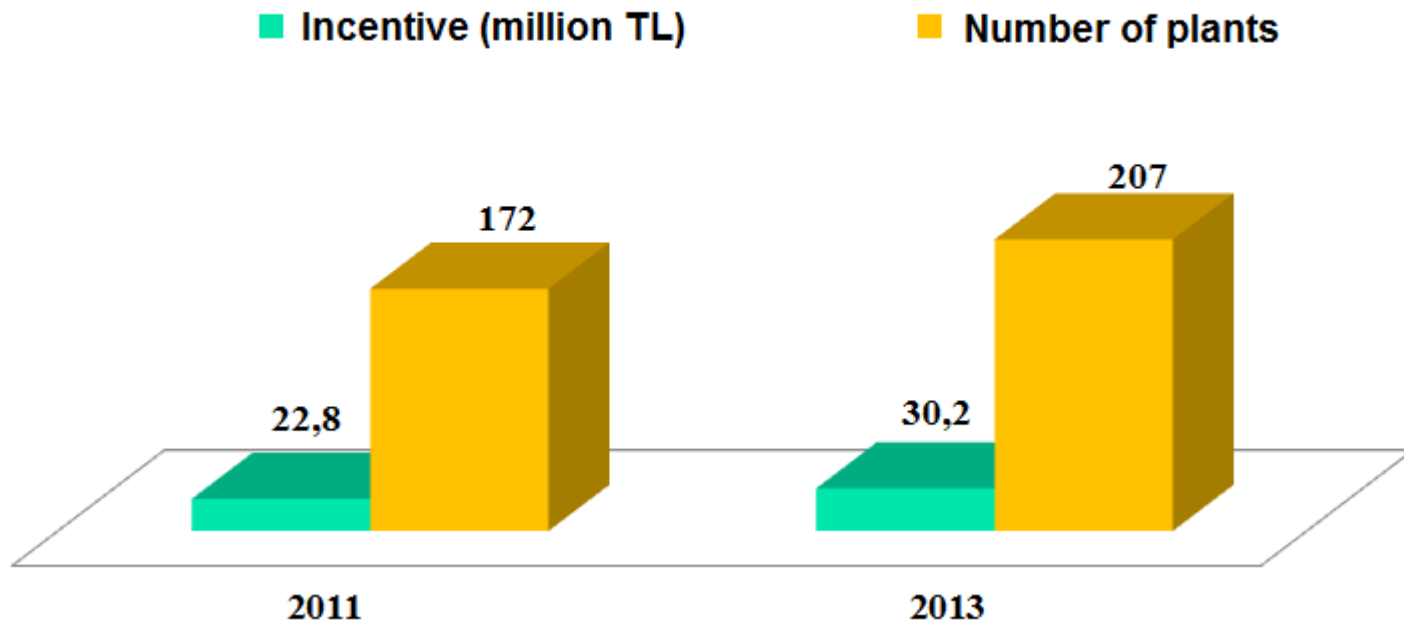
The municipal population served by wastewater treatment (%)



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Energy expenses of wastewater treatment plants are covered by the **Ministry of Environment and Urbanization** up to **50%**.

Energy incentives for wastewater treatment plants



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PPP PROJECTS IN TURKEY

SECTOR	No of Projects
Highways	29
Airports	17
Ports	20
Marina and Tourism Facilities	13
Customs Facilities and Customs Gates	13
Industrial Facilities	2
Health Facilities	5
Power Plants	68
TOTAL	167

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PPP Order of Developing Countries (1990-2010)

According to Number of Projects	
Country	Project Number
Chine	1,018
India	605
Brazil	550
Russia	334
Argentina	208
Mexico	200
Kolombia	140
Chile	126
Turkey	118
Thailand	112

According to Cost of Projects (million US Dolars)	
Country	Total Costs (US \$)
Brazil	325.537
India	273.433
Russia	120.783
Chine	116.399
Mexico	109.265
Argentina	87.423
Turkey	77.198
The Philippines	54.320
Malaysia	54.104
Indonesia	50.768

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Actions to be taken for Water and Sanitation PPP's Application in Turkey (1/2):

- Water and sanitation projects are under **the responsibility of municipalities**.
- Municipalities** should be willing to apply for PPP like private sector.
- Technical and administrative capacities of municipalities should be strengthened.
- PPP can be applied especially in operation phases of facilities: Municipalities have difficulties in complex facilities due to financial problems and lack of technical capacity.

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Actions to be taken for Water and Sanitation PPP's Application in Turkey (2/2):

- 💧 In order to involve in municipal PPP projects, private sector requires guarantee.
- 💧 Iller Bank Inc. (Bank of Provinces) can act as an umbrella organization in order to provide the required guarantee and to enhance coordination and efficiency in PPP projects.

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CASE STUDY (1/2)

Regarding water and sanitation sector, for six municipalities, **Iller Bank Inc.** was carried out a study for a **20-year BOT model**. Table below shows minimum costs of 1 m³ water to be applied in water tariffs including financial cost.

Item	Municipalities					
	Tavsanlı	Tire	Erzin	Elbistan	Duzici	Kadirli
Water cost	1.64	1.64	2.24	1.70	1.96	1.28
Wastewater Cost	0.82	0.82	1.12	0.85	0.98	0.64
Other	0.75	0.75	1.01	0.77	0.90	0.58
Total (TRY/m3)*	3.21	3.21	4.37	3.32	3.84	2.50

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CASE STUDY (2/2)

- According to cost/benefit analysis of water/wastewater projects, **water expenditures of households should not exceed 2% of their average income.**
- Therefore, for Turkey, **cost of 1 m³ water should not exceed 2 TRY.**
- On the other hand, the costs given in the previous slide are already exceeding this amount.
- As a result, in order to **apply PPP models in water and sanitation sector, investment and/or operation costs should be decreased.**



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Evaluation of PPP in TURKEY for Near Future (1/2):

- 💧 **Turkey has huge potential**, however the investment level is **lower than** that of European Union countries and there is need for foreign financing and investment.
- 💧 Foreign investors should mobilize the local and national dynamics in Turkey and should work in close coordination and cooperation with all local, national and international stakeholders especially the financial institutions.
- 💧 There is an increase in reputation in the international banking environment



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Evaluation of PPP in TURKEY for Near Future (2/2):

- There is a need for new comprehensive policy.
- The coordination and prioritization capacity for developing PPP investments of the public institutions should be enhanced.
- An umbrella organization would increase coordination and efficiency.
- Problems due to tendering without sufficient feasibility studies (financial and technical) should be solved.
- Access to high experience of the East Europe, Middle East and Gulf Countries with the help of cultural closeness.
- However, there are some risks due to Global Financial Crisis.



Bosphorus Bridge

THANK YOU VERY MUCH...