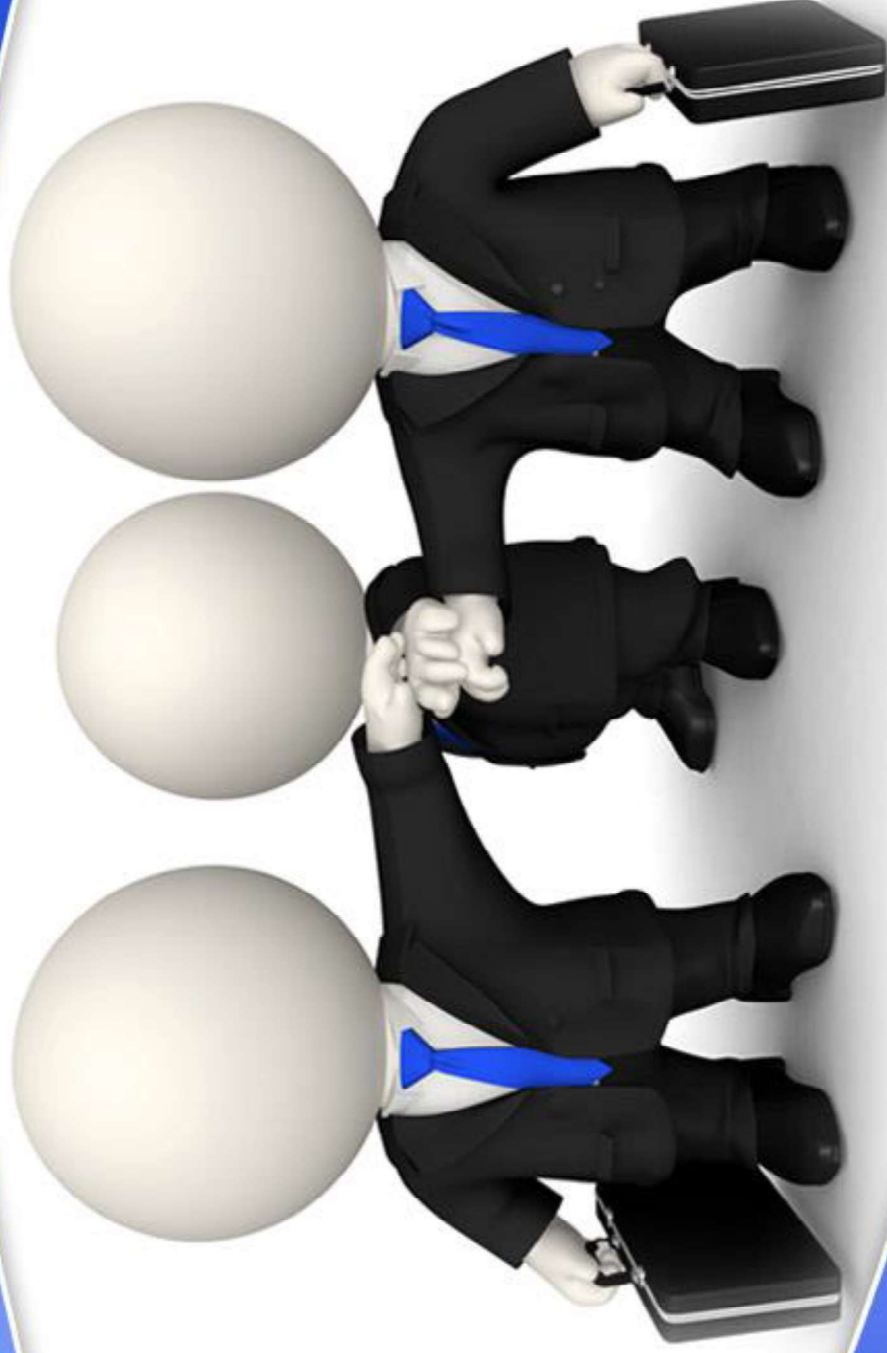




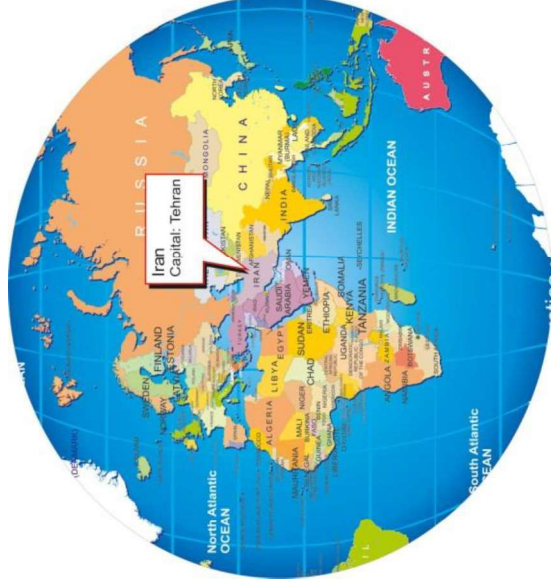
Islamic Republic of Iran
Ministry of Energy

Investment Projects in Water and Wastewater Sector In Iran

Mashallah Tabejamaat
Amsterdam -2017



Iran at a glance



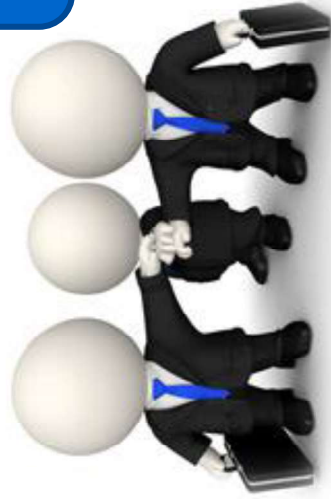
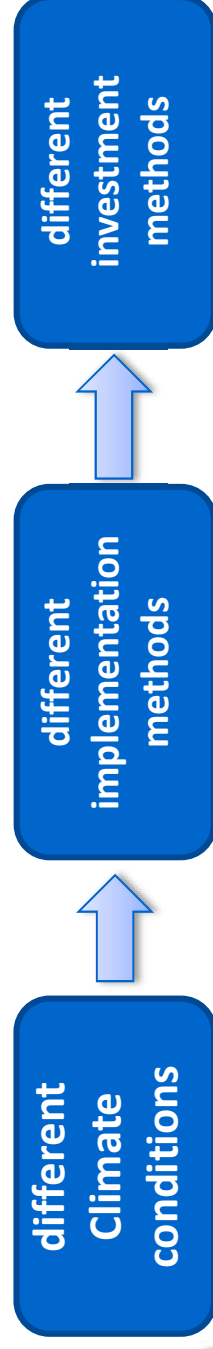
Iran

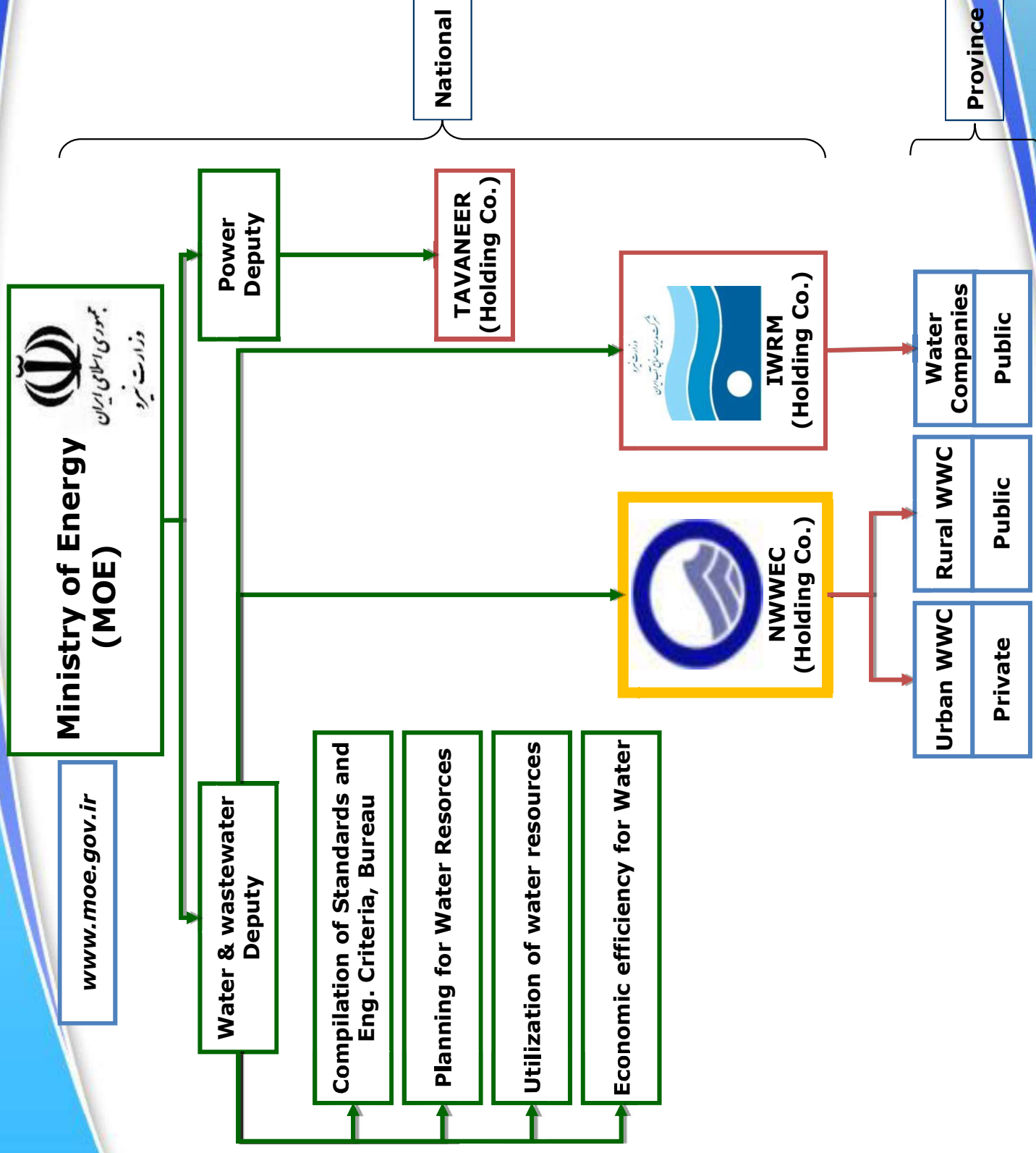
Total water consumption: 96 BCM/year

Underground	52 BCM/year
Surface water	43.3 BCM/year
Other	0.7 BCM/year

The different climatic conditions of Iran

- In general, Iran has an arid climate
- Most of the annual precipitation falls from October through April.
- In most of the country, yearly precipitation averages 250 mm
- In Zagros and the Caspian coast the precipitation averages about 500 mm
- In the western part of the Caspian rainfall exceeds 1,000 mm annually
- This contrasts with some basins of the Central Plateau that receive ten centimeters or less





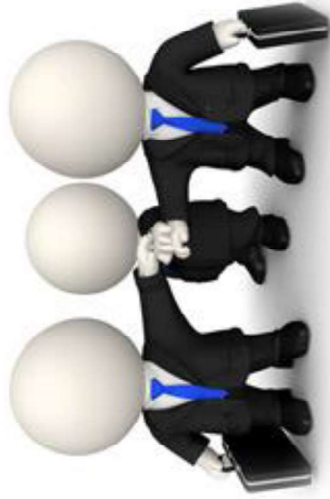
Water & Wastewater Policy

- Circular on amendment of consumption pattern.
- Exploit the new water resources such as unconventional waters (sea water, effluent of WWTP, etc.) especially for industries and irrigation.
- Planning for use of Desalination systems especially in Coastal Areas with high water stress.
- Execution the wastewater plans with the objective of protecting the environment and improving the health and welfare of the society.
- After execution of important and priority projects in wastewater, the revision of wastewater collection and treatment plans has been considered.
- Recycling the treated water (effluent) and using it as a new water resource to recharge groundwater resources, to prevent land subsidence, etc.

**Lack of agricultural water efficiency
Still a challenge**

PPP Policy

The change and the new impetus in our economy have made the use of private sector's capacities not only a solution but currently a necessity to benefit from the economic, managerial and executive capabilities of the private sector in our country.



PPP evolution in Water and Wastewater sector

Complete reliance on public resources

Complete reliance on private resources

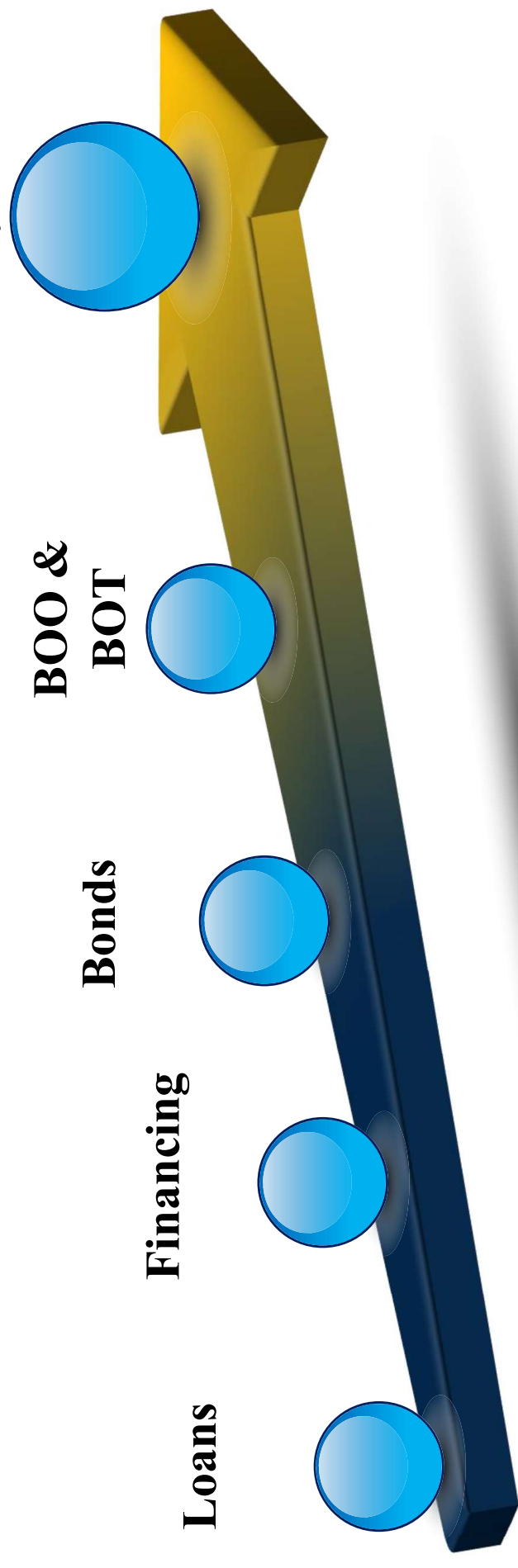
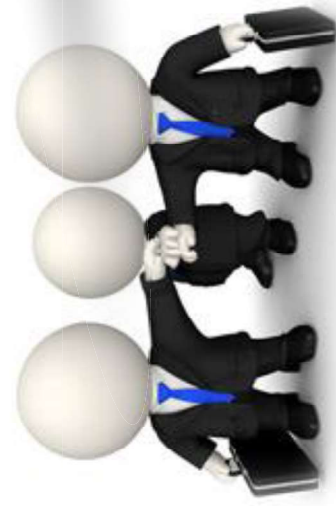
Buyback

BOO & BOT

Bonds

Financing

Loans



The trend of private participation in water and wastewater sector

Complete
reliance on
public resources

Complete
reliance
on private
resources



Loans from
MDB



Financing



Bonds



BOO &
BOT

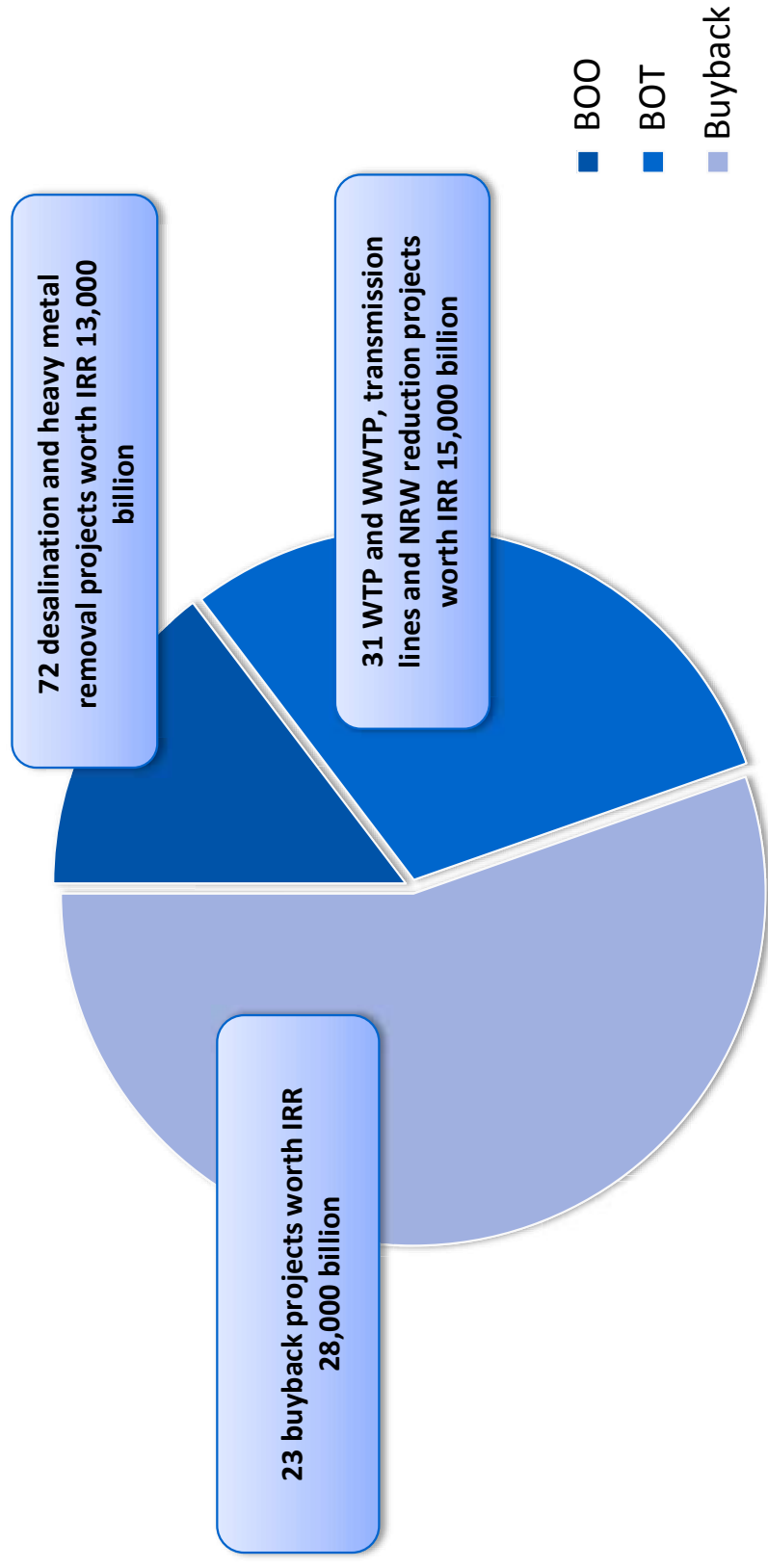


Buyback

In total IRR 54,000 billion have been
invested in the sector

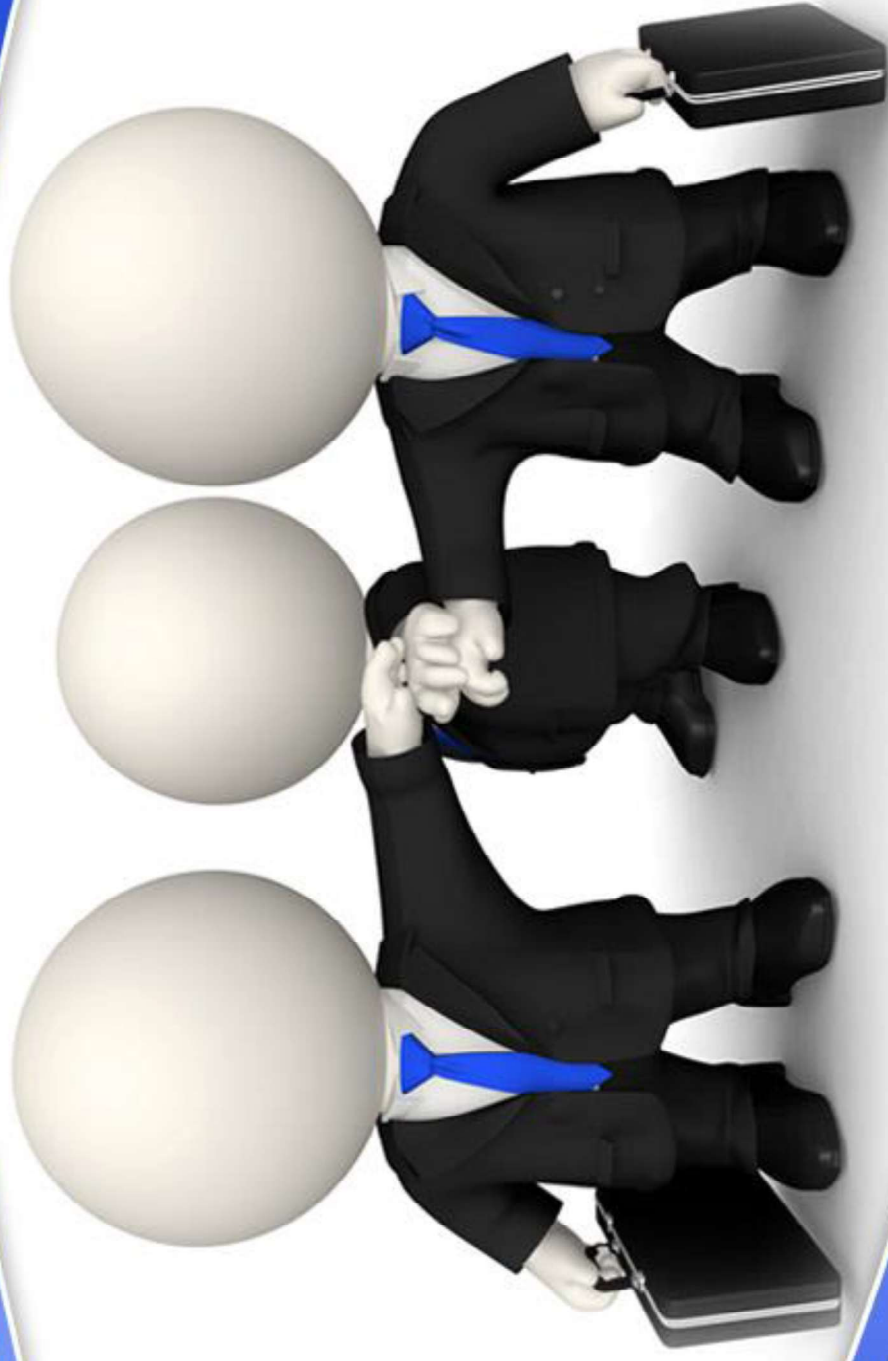
To date 126 contracts worth IRR 55,000 billion have been invested in these projects, many of which have become operational

Ongoing contracts



Ensuring funds for the plans from non-governmental resources

Implementation of plans through BOO & BOT contracts



Funding plans through BOO contracts

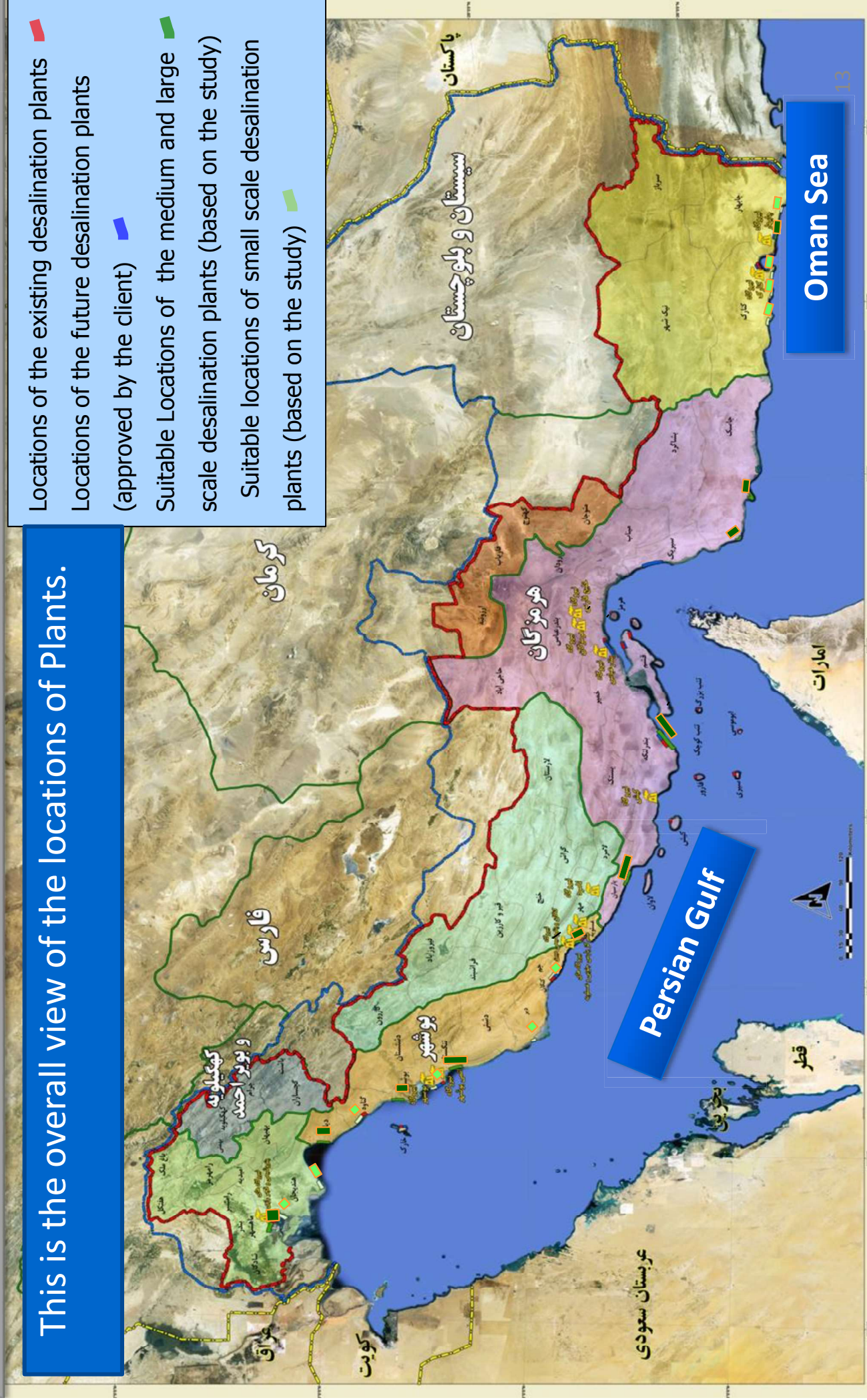
- BOO
All our desalination plant projects are awarded in this contractual frame.



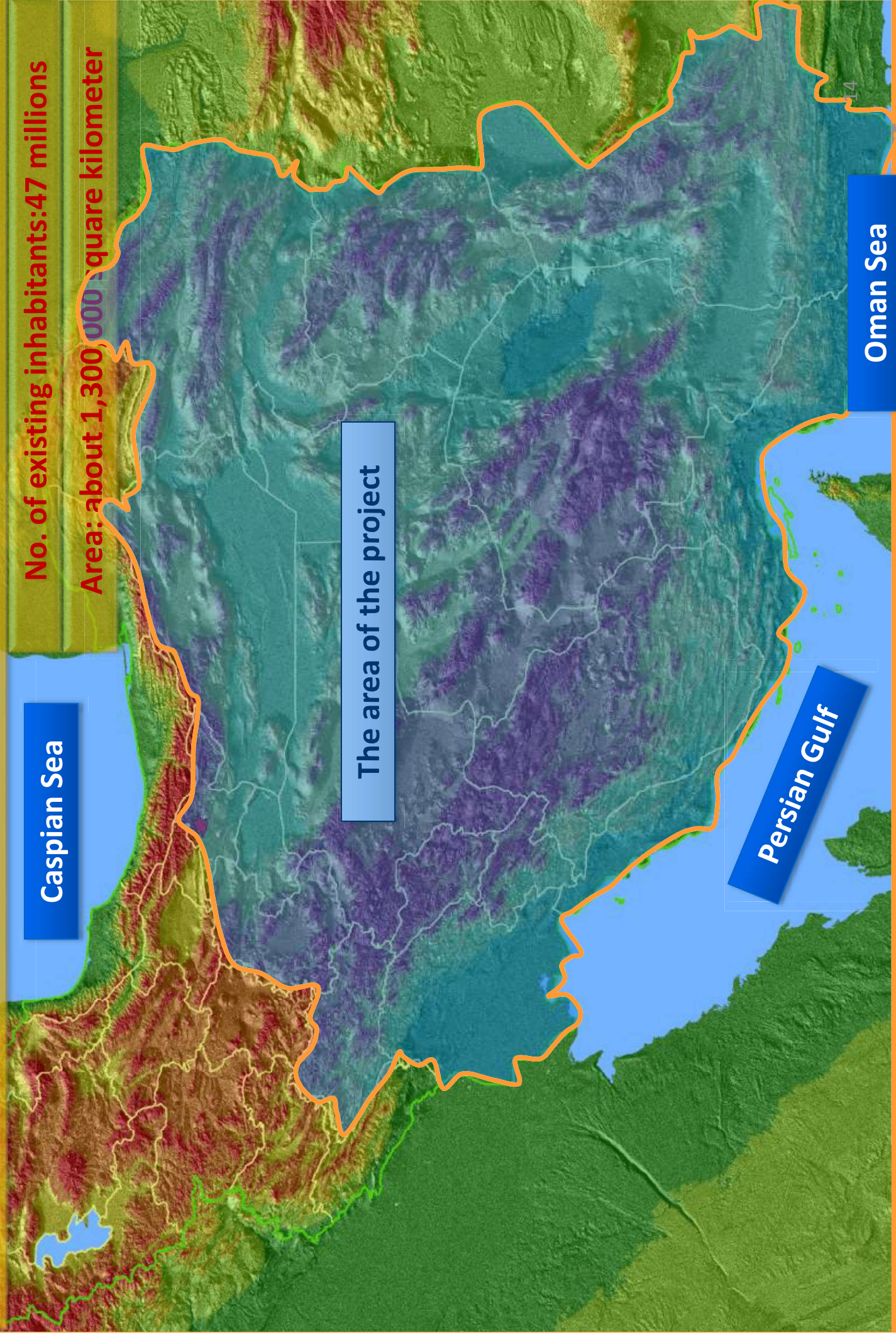
Master plan for evaluation of utilization of desalination process in the coastal strip of Persian Gulf and Oman Sea

This is the overall view of the locations of Plants.

- Locations of the existing desalination plants
- Locations of the future desalination plants (approved by the client)
- Suitable Locations of the medium and large scale desalination plants (based on the study)
- Suitable locations of small scale desalination plants (based on the study)



Design of water transfer from Persian Gulf and Sea of Oman to the central plateau of Iran



The ongoing BOO project in water and wastewater sector



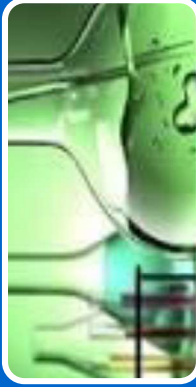
Desalination plants

- 64 projects with a production capacity of over 373,000 m³/day
- Over IRR 13,000 billion in private investment



Construction of small hydropower plants

- Execution of 3 projects at an investment of over IRR 14,000 billion



Construction of heavy metal removal systems

- 1 contract at a capital cost of IRR 13 billion



Self relying heavy metal removal and desalination plants

- 5 contracts at a capital cost of IRR 264 billion

Ongoing BOT contracts in water and wastewater sector



Construction of WWTP

- 17 WWTP of 568,000 m³/d in capacity
- Over IRR 7,000 in capital costs



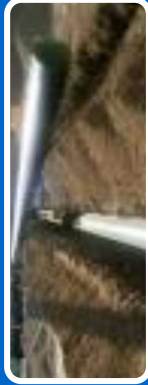
Construction of WTP

6 treatment plants of over 700,000 m³/day in capacity
Over IRR 3,000 billion in investment



Reduction of NRW

- 1 contract with a capital cost of IRR 110 billion



Water supply project

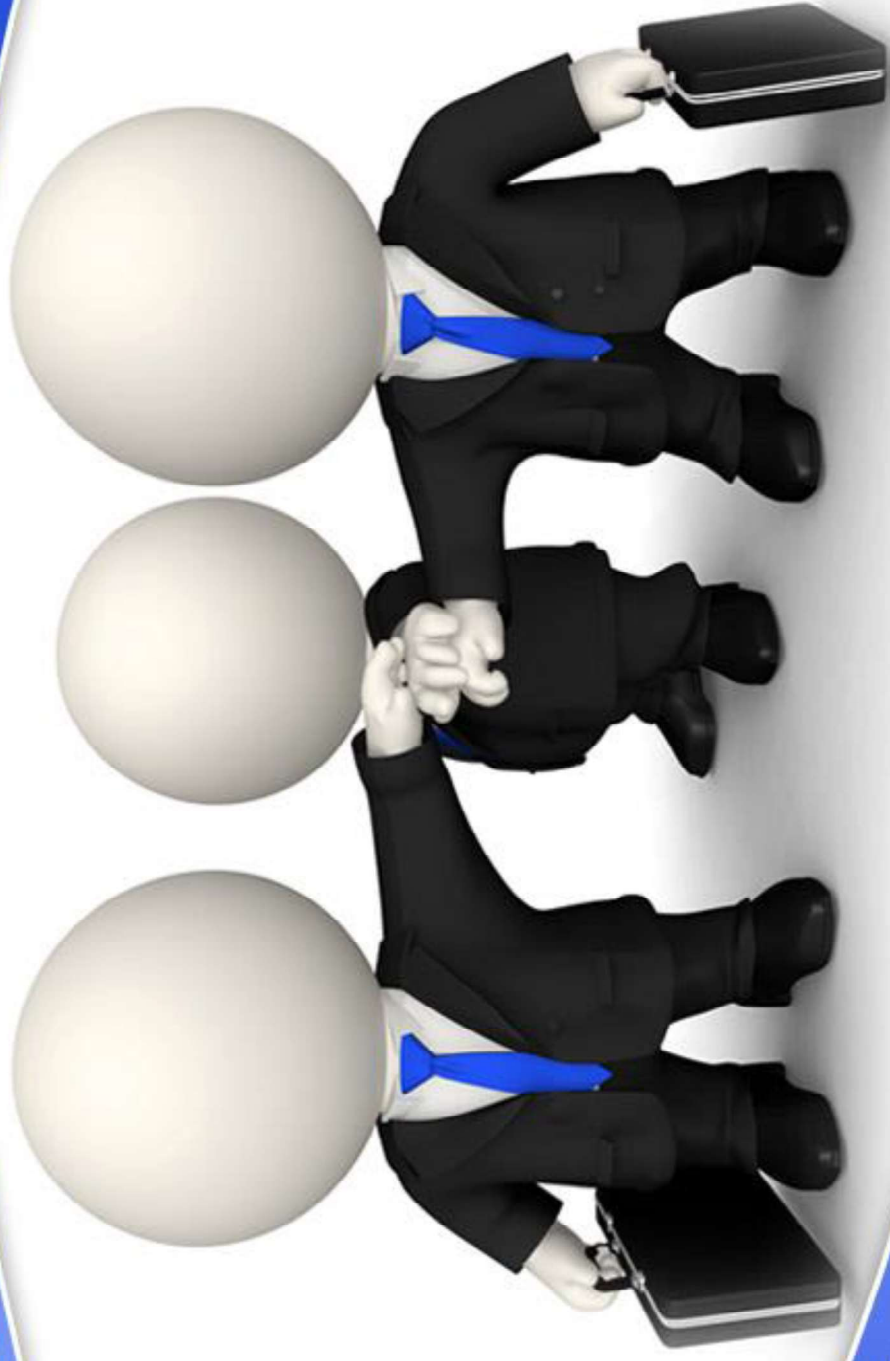
- 5 contracts with a capital cost of IRR 3,000 billion



Water supply from wells

- 1 contract with a capital cost of over IRR 97 billion

Ensuring funds for the plans from non-governmental resources Implementation of plans through Buyback contracts

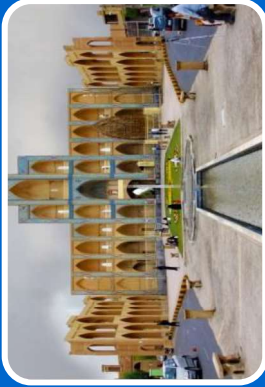


Ensuring funds through Buyback contracts - definition

- ❖ The private investor needing water for development of his industrial or agro-industry plans by investing in the wastewater collection and treatment system in a populated region obtains the treated effluent as a water resource
- ❖ All the phases of construction, operation and maintenance of the system including the main and secondary collectors, transmission lines and the treatment works are undertaken by the private entity, which will hold an exclusive right over the treated effluents for a specific and limited period.
- ❖ The project's product is not purchased directly and is used by the investor. For this reason it carries the title of "Buyback".

Ongoing buyback contracts in water and wastewater sector

Province of Yazd



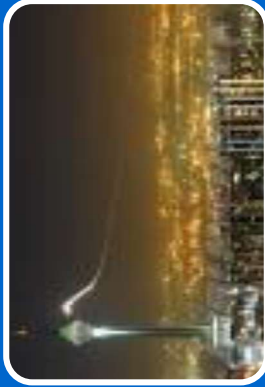
- 4 contracts worth over IRR 4,000 billion
- Completion of wastewater plans in the cities of Ardekan, Mehriz, Bafgh and Meybod

Province of Esfahan



9 contracts worth over IRR 3,500 billion
Completion of wastewater plans in the cities of Lanjan, Mobarakeh, Zavareh, Tiran, Dastgerd, Khorzoogh, Najafabad, Gorgab and Dolatabad

Province of Tehran



4 contracts worth over IRR 12,000 billion
Completion of wastewater plans in different parts of Tehran

Ongoing buyback contracts in water and wastewater sector



Province of Hormozgan

- 1 contract worth over IRR 2,500 billion
- Completion of wastewater plans in Bandar Abbas



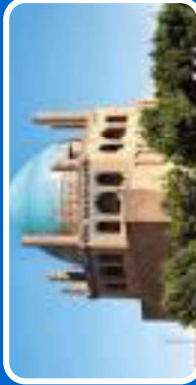
Province of Kerman

1 contract worth over IRR 1,700 billion
Completion of wastewater plans in Sirjan



Province of Semnan

1 contract worth over IRR 550 billion
Completion of wastewater plans in Semnan



Province of Zanjan

1 contract worth over IRR 400 billion
Completion of wastewater plans in Abhar

Ongoing buyback contracts in water and wastewater sector



Province of South Khorasan

- 1 contract worth over IRR 500 billion
- Completion of wastewater plans in Ferdos



Province of Razavi Khorasan

1 contract worth over IRR 1,100 billion
Completion of wastewater plans Kashmar

Thank you for your attention

