



## LOCALISATION PLAN of TURKEY

REPUBLIC OF TURKEY MINISTRY of ENERGY and NATURAL RESOURCES DEPARTMENT of NUCLEAR ENERGY PROJECT IMPLEMENTATION

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### **Country Profile**





	2012	2023
GDP per capita (US \$)	10,524	25,000
Electricity Consumption (billion kWh)	241	500
Electricity Consumption per capita (kWh)	3,186	5,952
Population (million)***	75	84

\* World Bank

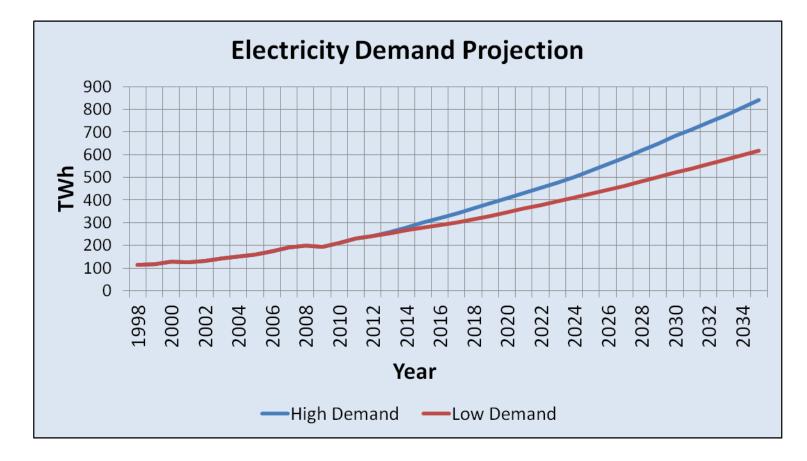
\*\* TEIAS

\*\*\* TUIK

### Electricity Demand Demand Growth



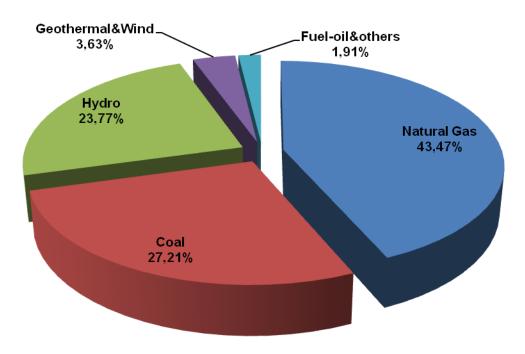
✓ The annual electricity demand growth rate is 6-8%.
✓ Ranking second in the World after China, and first in Europe.





#### **Electricity Supply**

**Distribution of Generated Electricity to Source Type** 





#### **Electricity Supply**

#### **Proportion of Electricity Generation Instrument**

Sources	World*	Turkey**
Natural Gas	%21,3	%43,47
Coal	%41,0	%27,21
Hydrolic	%15,9	%23,77
Nuclear	%13,5	%0
Geothermal – Wind	%2,8	%3,63
Fuel Oil - Others	%5,5	%1,91

\* World Energy Outlook 2012

\*\* TEIAS



### **Electricity Supply**

#### 2023 Targets

Sources	Current Energy Mix*	2023 Targets**
Natural Gas	%43	~ %30
Renewable	%27	~ %30
Coal	%28	~ %30
Nuclear	-	~ %10

\* End of Oct. 2012, Energy Strategy Paper, MENR

\*\* Projection of Electricity Generation Capacity (2012-2021), TEIAS



### **Economic Targets for 2023**

✓ To become one of the top 10 economies of the world
 ✓ To reach 25.000 US \$ GDP
 ✓ To reach export volume of 500 billion US \$

In parallel with economic development, it is expected that domestic and industrial electricity consumption demand will increase at the same rate.



### Nuclear Energy 2023 Target

- 2 NPPs to be operated and 1 NPP to be under construction by 2023.
  - ✓Akkuyu NPP (4800 MW)
  - ✓Sinop NPP (4480 MW)
  - ✓ 3rd NPP (approximately 5000 MW)
- The share of nuclear energy in the generation of electricity energy will be almost 10 %.

 These 3 NPP project will create many opportunities for different industries. The nuclear market volume in Turkey will be about 60 billion dollars.



### LOCALISATION ACTIVITIES CONDUCTING BY MENR

✓A realistic assessment of the national supplier capabilities for either nuclear or non-nuclear safety related activities should be done by relevant stakeholders.

✓In this context; MENR is working on the evaluation of national industrial capacity.



### **COMPANY INVENTORY**

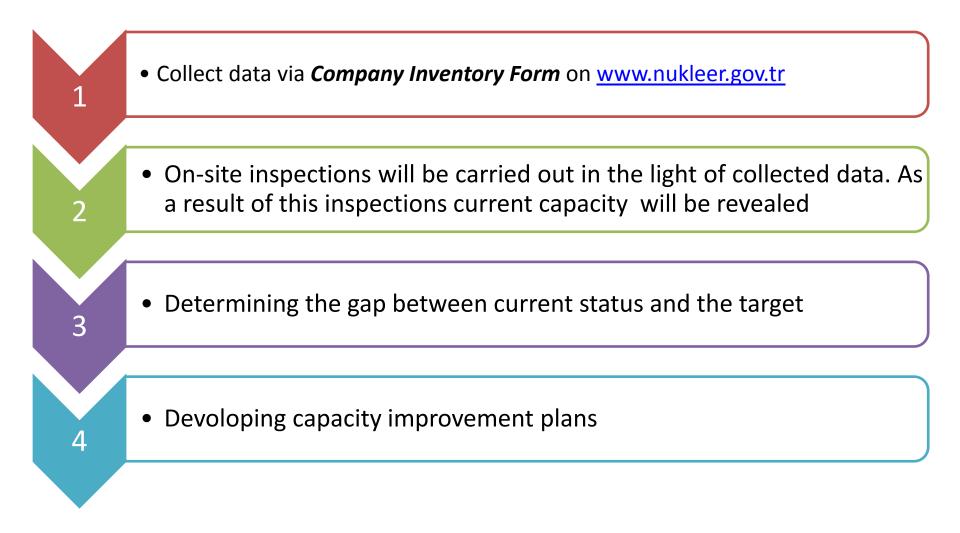
To collect data for the evaluation of the national industrial capacity "Company Inventory Form" created.

http://www.nukleer.gov.tr/

More than 400 company registered
 *"Company Inventory Form"*



### **ROAD MAP**





#### **Capability and Capacity Analysis**

To determine the capability of Turkish national industry to manufacture nuclear power plant equipments, we will make on-site inspections with universities in the light of data collected via "Company Inventory Form"





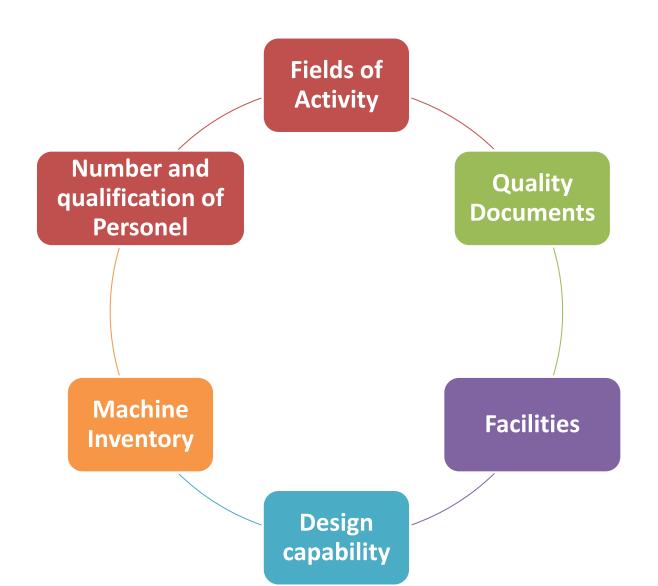
### **University – Industry**



Design Manufacturing Installation Test

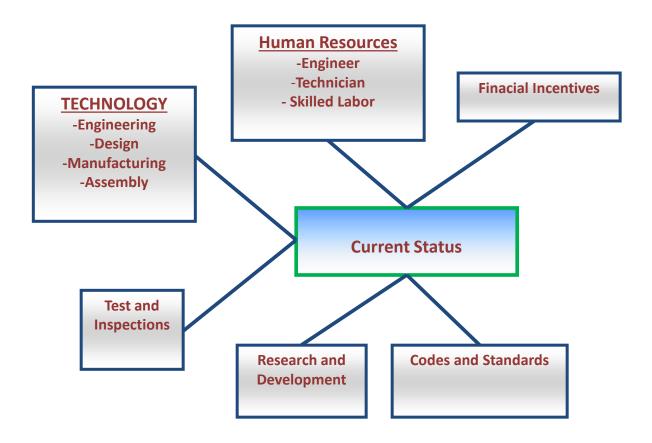
Universities Technoparks





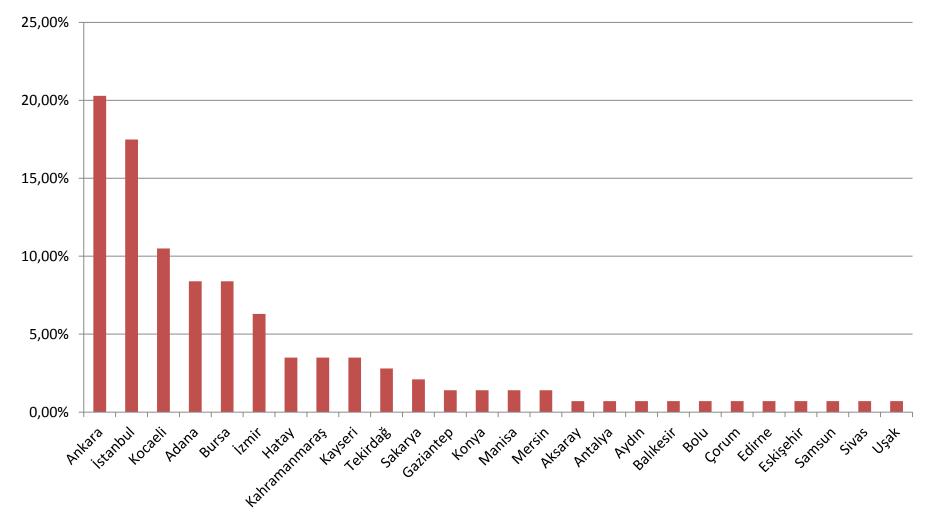


### **GAP ANALYSİS**

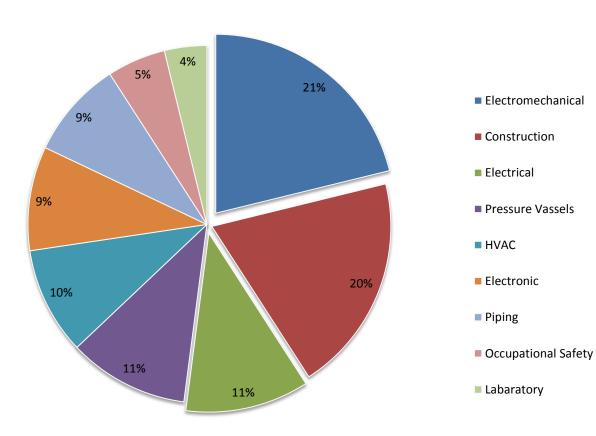




#### **Location of Plants**



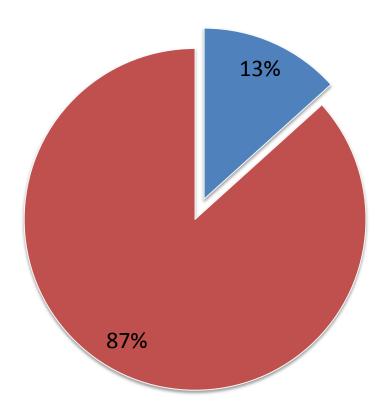




**Fields of Activities** 

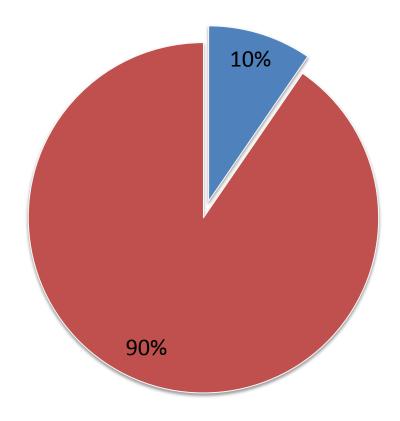


#### Familiarity with GOST standarts





**Familiarity with ASME Standarts** 





# Actions to be taken

- 1) Codes and standards
- 2) Certification
- 3) University- Industry Cooperation
- 4) Cooperation with foreign Companies
- 5) Market volume:
- The worth of online, under construction and planned 600 NPP worth more than 3 trillion dollars. The opportunity for the industry becomes higher if we take into account operation and maintenance cost.
- Until the year 2023 Turkey will realize 60 Billion Dollars worth NPP projects.



## **OPPORTUNITIES in TURKEY**

- Turkey has a bridge position between Middle East-Asia and Europe.
- Within 10 years Saudi Arabia, Jordan and Emirates will carry out NPP Projects.
- Turkey is close to these newcomer countries.
- Turkey can be a manufacturing base for these NPP projects.
- Many Turkish companies are ready to establish partnerships with experienced foreign companies which are working with GOST standards.



# **OPPORTUNITIES in TURKEY**

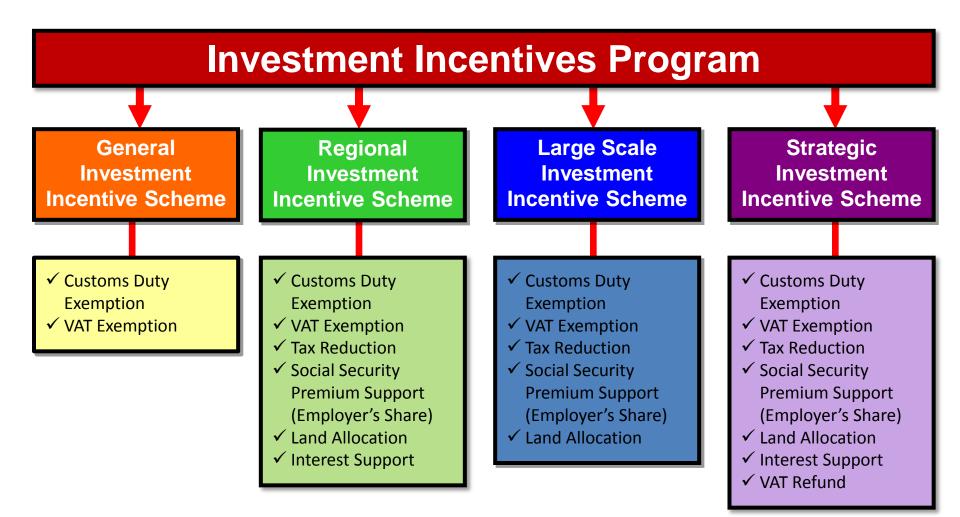
- Until the year 2023 Turkey will realize 60 billion dollars worth 3 NPP projects.
- Labor costs is lower than Europe.
- Especially, Turkish companies are strong in software and construction areas.
- There are companies working for producing thermal power plant equipments.



# The Republic of Turkey Prime Ministry Investment Support and Promotion Agency

- As a booming country with a GDP growing at an average annual rate of 5 percent for a decade, Turkey represents tremendous potential with numerous investment opportunities for foreign investors.
- Experts agree that this trend will continue into the future as the country vigorously pursues its goal of becoming one of the top 10 economies in the world over the next 10 years.

http://www.invest.gov.tr/en-US/Pages/Home.aspx





## **THANK YOU !**

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