



THE GLOBAL GOALS



Business&Environment Related Statistics of TurkStat

Ebru ÜNAL
TurkStat Expert

31 May 2023

Content

- SDG portal
- Coordination of SDGs in Turkey
- TurkStat's Role
- Businesses & Environment
- Overview of Business & Environment Related Indicators of Turkey
- Key Takeaways



SDG PORTAL



**SÜRDÜRÜLEBİLİR
KALKINMA
AMAÇLARI**

[Ana Sayfa](#)
[SKA Hakkında](#)
[Raporlama Durumu](#)
[Interaktif Harita](#)
[Türkçe](#)
[A](#)


Dünyamızı dönüştürmek için 17 Amaç

25 Eylül 2015 tarihinde gerçekleştirilen Birleşmiş Milletler Sürdürülebilir Kalkınma Zirvesi'nde kabul edilen "[Sürdürülebilir Kalkınma için 2030 Gündemi](#)", 2016-2030 dönemini kapsayan 15 yıl boyunca tüm dünyada insanların refah içinde yaşaması için takip edilecek amaçları ve bu amaçlara ulaşmak için gerekli araçları içeren bir eylem planıdır. Bu eylem planı, 17 Sürdürülebilir Kalkınma Amacı, 169 hedef ve 248 tekrarlı (232 tekil) göstergeye dayanmaktadır.

Amaçlar

Göstergeler için Sürdürülebilir Kalkınma Amaçları logolarına tıklayınız



Coordination of SDGs in Turkey

Two-pillar structure

Policy making

(Presidency of the Republic of Turkey, Strategy and Budget Office)

Data production & monitoring

(TurkStat)

- Coordination within TurkStat
- Coordination with stakeholders
- Coordination with international organizations



TÜRKİYE CUMHURİYETİ CUMHURBAŞKANLIĞI
STRATEJİ VE BÜTÇE BAŞKANLIĞI



TurkStat's Role

Monitoring and Coordination

Indicators in the global set;

- Identifying responsible (and related) institutions for each indicator
- Monitoring the national availability of each indicator,
- Coordination of production of unavailable data,
- Data dissemination and monitoring,
- Communication with international organizations (Custodian Agencies) responsible for the indicator,
 - Coordination of data transmission and validation process – strong communication with data producers is needed

An indicator set to be produced with the active participation and support of all official statistics producers institutions...

Business & Environment

The actions of businesses are important for the environment because they have the capacity to either exacerbate environmental challenges or lead the way towards sustainable practices and a more environmentally friendly future.

By embracing environmentally responsible actions, businesses can make a substantial positive impact on the environment and contribute to the well-being of our planet.

Therefore it is crucial to measure the effect of businesses on the environment to take adequate action.





Overview of Business&Environment Related Indicators of Turkey

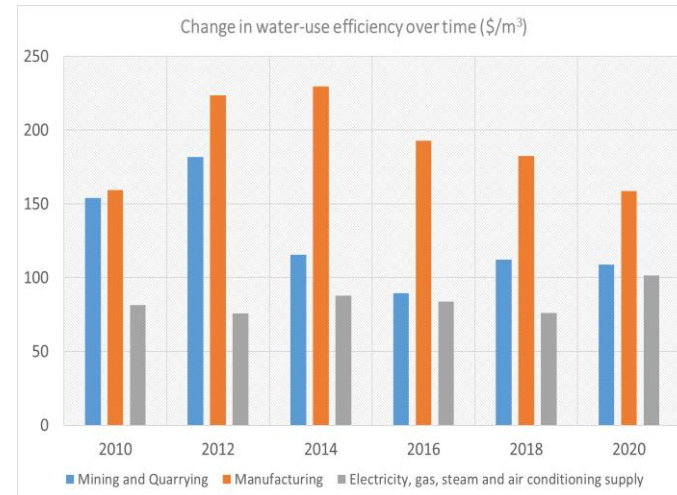


6.4.1. Water-use efficiency in businesses (per unit of value added)

Definition of Indicator: This indicator is calculated by dividing the value added of a particular main sector (following ISIC 4 sector categories) by the water use of that sector which is expressed in USD / m³ over time. In this indicator, data on the volume of water used by each sector and the gross value added data of each sector from the National Accounts of TurkStat are used.

Data Source: TurkStat; Gross Domestic Product (GDP) Statistics, Manufacturing Industry Water, Wastewater and Waste Statistics, Mining Establishments Water, Wastewater and Waste Statistics, Thermal Power Plants Water, Wastewater and Waste Statistics

<https://sdg.tuik.gov.tr/en/6-4-1/>





7.2.1. Share of renewable energy consumption in businesses

Definition of Indicator:

- Renewable energy share in the total final energy consumption
- Electricity generation ratio from renewable energy and wastes

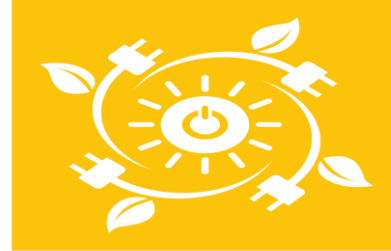
Definition of Indicator:

- This indicator is the percentage of final consumption of energy in total energy consumption that is derived from renewable resources. Net final energy consumption in the denominator is calculated from national balances and statistics as total final consumption minus non-energy use.
- This indicator is the ratio between the electricity produced from renewable energy sources and the gross national electricity production for a given calendar year. It measures the contribution of electricity produced from renewable energy sources to the national electricity production.

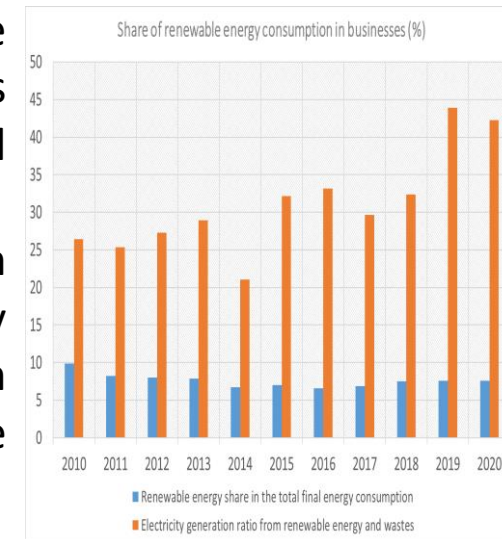
Data Source: Ministry of Energy and Natural Resources, Energy Balance Sheets

<https://sdq.tuik.gov.tr/en/7-2-1/>

TARGET 7-2



INCREASE GLOBAL PERCENTAGE OF RENEWABLE ENERGY





7.3.1. Energy efficiency in businesses (per unit of value added)

Definition of Indicator: This indicator is obtained by dividing total energy supply to gross domestic product (GDP). Primary energy intensity is an indication of how much energy is used to produce one unit of economic output (GDP) and it is an indicator of energy productivity.

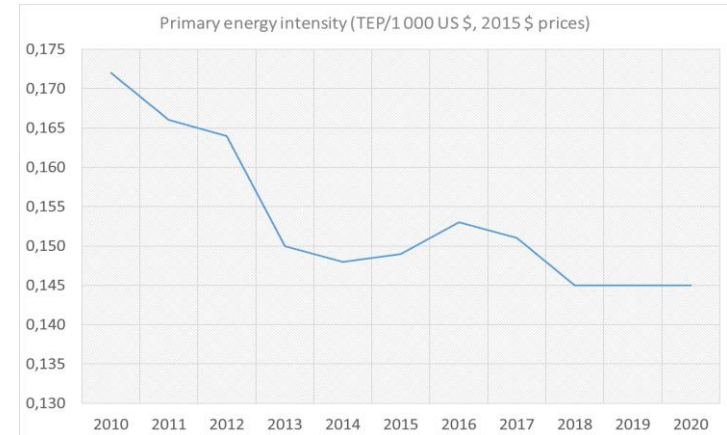
Data Source: Ministry of Energy and Natural Resources; TurkStat, Gross Domestic Product (GDP) Statistics

<https://sdg.tuik.gov.tr/en/7-3-1/>

TARGET 7-3



DOUBLE THE IMPROVEMENT IN ENERGY EFFICIENCY





9.4.1. CO₂ emission per unit of value added

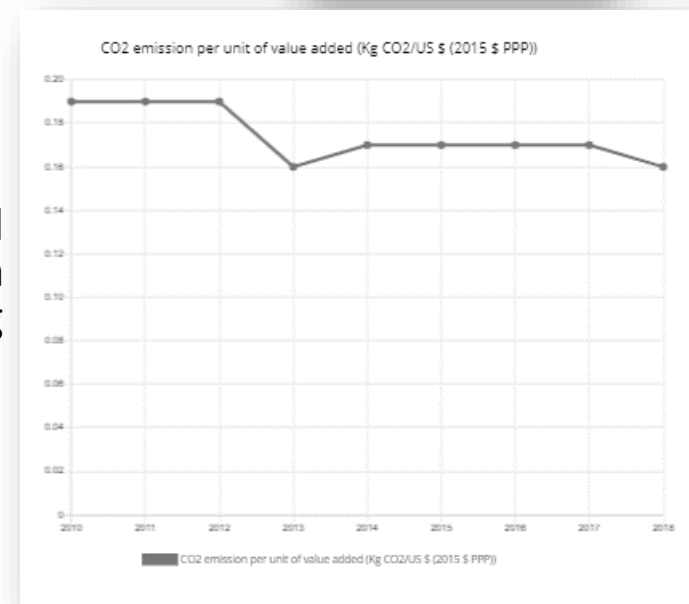
Definition of Indicator: This indicator is the ratio of CO₂ emissions from fuel combustion (CRF category 1.A) to the GDP, purchasing power parity (PPP) (2015 constant USD).

$$\frac{\text{CO}_2 \text{ emission from } \textit{manufacturing} \text{ (in kg)}}{\text{MVA (constant USD)}}$$

Data Source: TurkStat, Greenhouse Gas Statistics

We also covered CO₂ emissions from fuel combustion and CO₂ emissions from manufacturing industries per unit of manufacturing value added (MVA)

<https://sdg.tuik.gov.tr/en/9-4-1/>





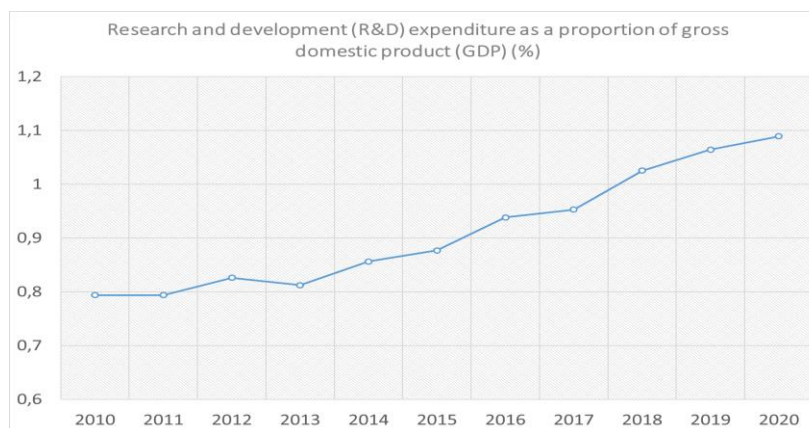
9.5.1. Research and development (R&D) expenditure as a proportion of gross domestic product (GDP)

Definition of Indicator: This indicator is calculated by the amount of research and development expenditure divided by the total output of the economy, gross domestic product (GDP).

$$SDG\ 9.5.1 = \frac{\text{Research and development (R\&D) expenditure}}{\text{Gross Domestic Product (GDP)}} * 100$$

Data Source: TurkStat, Research and Development Activities Survey

<https://sdg.tuik.gov.tr/en/9-5-1/>





9.5.2. Researchers per million inhabitants

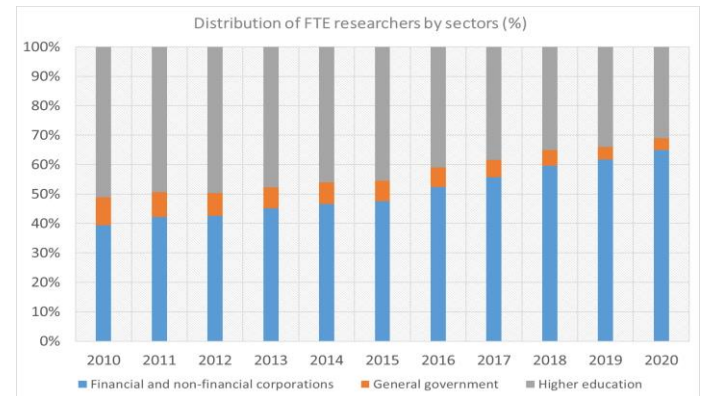
Definition of Indicator: This indicator is obtained by dividing the number of researcher personnel calculated in terms of full time equivalent (FTE), by mid-year population (million people). Full time equivalent is calculated by dividing the time spent by a person or group for R&D activities in a given a calendar year by the total time worked in the same period. Researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in the management of the projects concerned.

Data Source: TurkStat, Research and Development Activities Survey

TARGET **9.5**



**ENHANCE RESEARCH
AND UPGRADE
INDUSTRIAL
TECHNOLOGIES**



<https://sdg.tuik.gov.tr/en/9-5-2/>



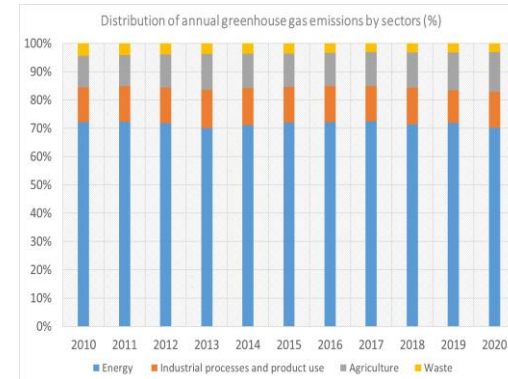
13.2.2. Annual greenhouse gas emissions

Definition of Indicator: Total greenhouse gas emissions are calculated as the sum of emissions of direct greenhouse gas emissions: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃), measured in units of CO₂-equivalent, by using a common weighting factor, the so-called Global Warming Potentials (GWP).

Data Source: TurkStat, National Greenhouse Gas Emissions Inventory, Air Emission Accounts

The National Greenhouse Gas Emissions are calculated by using Revised 1996 IPCC Guidelines and 2006 IPCC Guidelines.

<https://sdg.tuik.gov.tr/en/13-2-2/>



Key Takeaways

- Establish the legal setting for **SDG responsibilities** with a binding legal document
- National **coordination** is critical
- Organize **workshops** to increase SDG awareness and ownership
- Carry out **inventory analysis** to investigate data availability
- Prepare a **national road map** for unavailable SDG indicators
- Improve **administrative records**, TUIK uses survey method to compile environmental data of enterprises. However, in order to compile healthier, timely and accurate data, we started to use administrative records intensively.
- Produce **disaggregated data**
- Produce SDG indicators by adding questions to some **surveys/censuses**
- Eliminate the **data inconsistencies** in international databases by communicating with custodian agencies
- Present the indicators at a more effective, visible, updateable platform - **web portal**



Thank you

sdg@tuik.gov.tr