



REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE



REPUBLIC OF TÜRKİYE MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE
**DIRECTORATE of
CLIMATE CHANGE**



COP31
TÜRKİYE
A N T A L Y A

REPUBLIC OF TÜRKİYE

FACILITATIVE, MULTILATERAL
CONSIDERATION OF PROGRESS

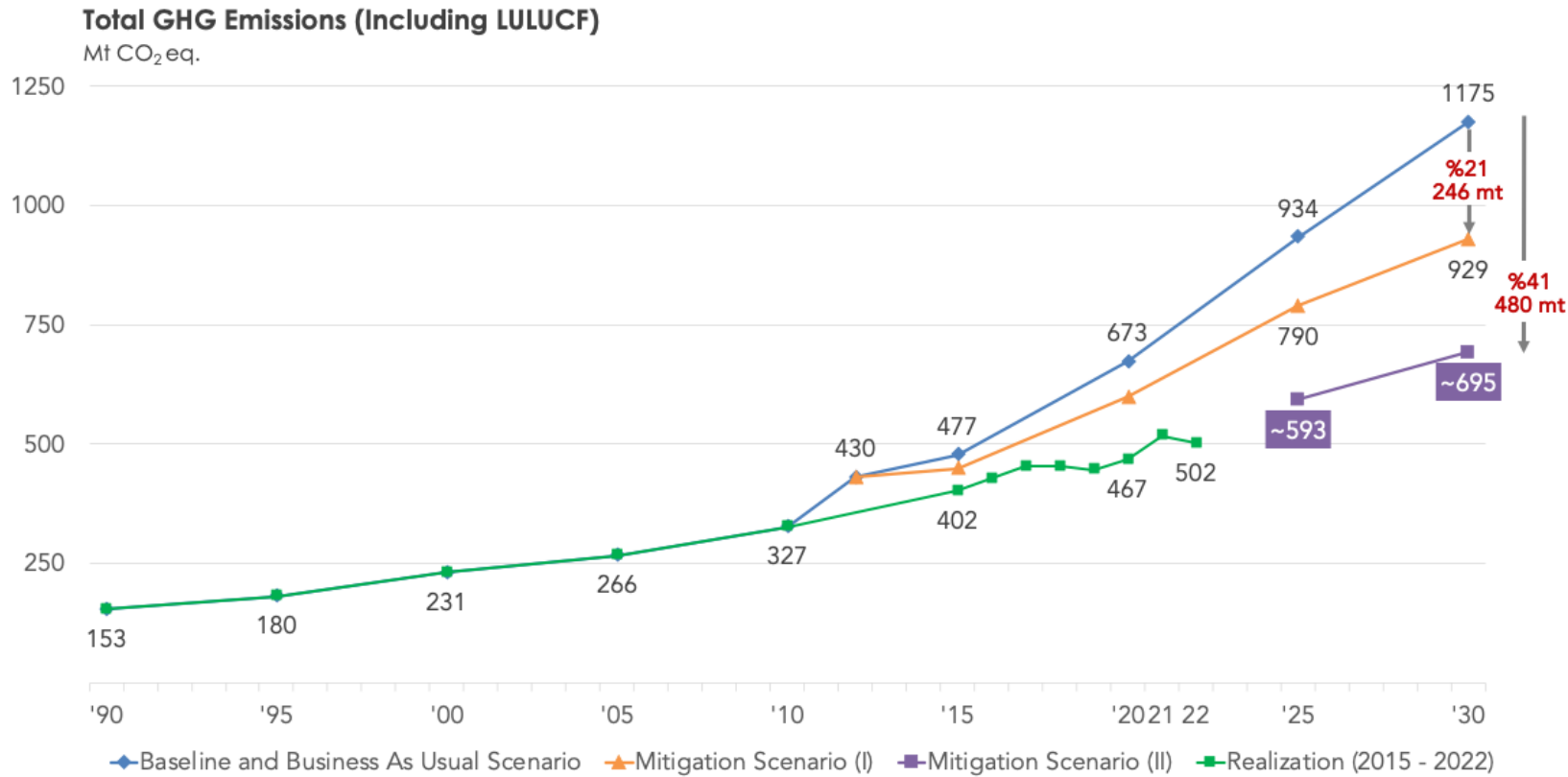
JUNE 2026

National Circumstances

Population (millions)	85.28
Area (km ²)	785,264 km ²
Population density (person/km ²)	111
GDP (Billion \$)	905.81 USD (2022)
GDP (per capita)	10,622 USD (2022)
Average temperatures:	13,9 C



Türkiye updated its First NDC, committing to a 41% reduction in GHG emissions from the BAU scenario by 2030



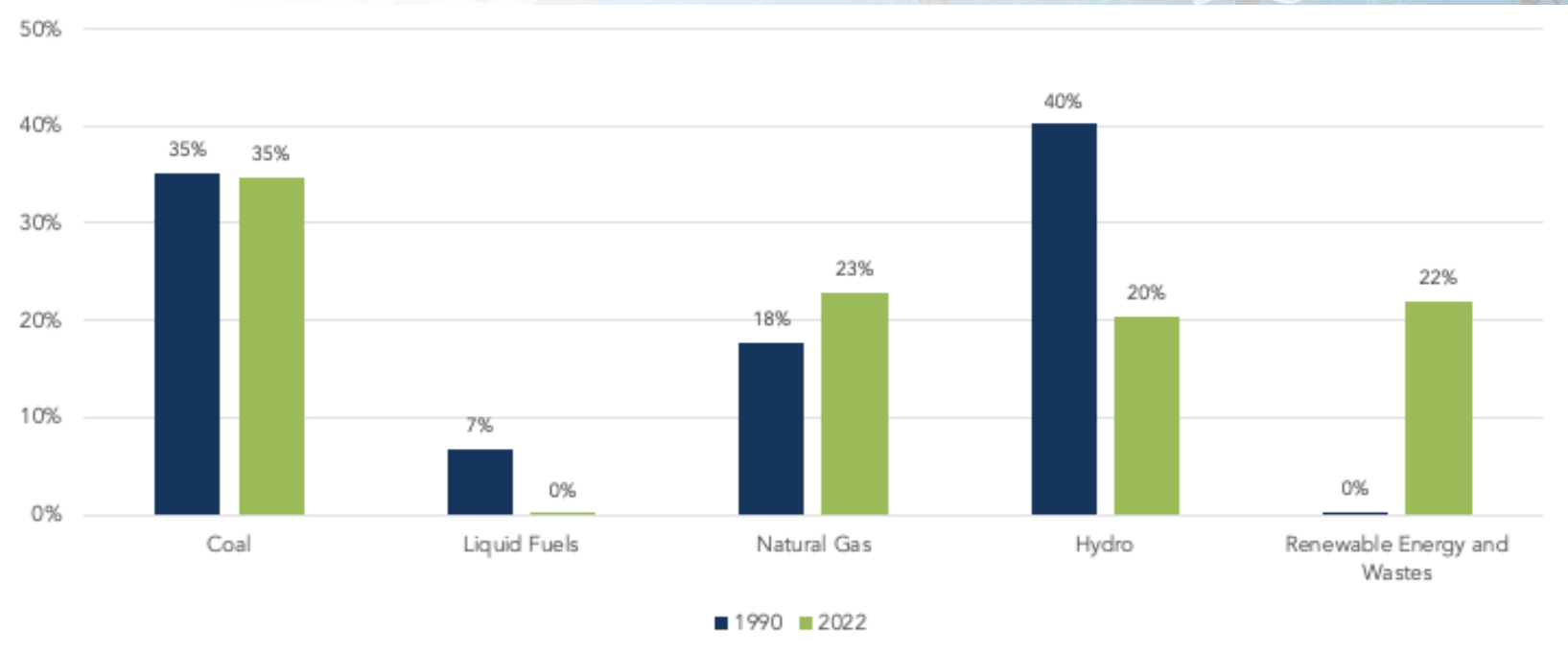
Türkiye's Historical and Estimated GHG Emissions (Including LULUCF) Under Business as Usual (BAU) and Mitigation Scenarios in the Updated First NDC

Energy Sector

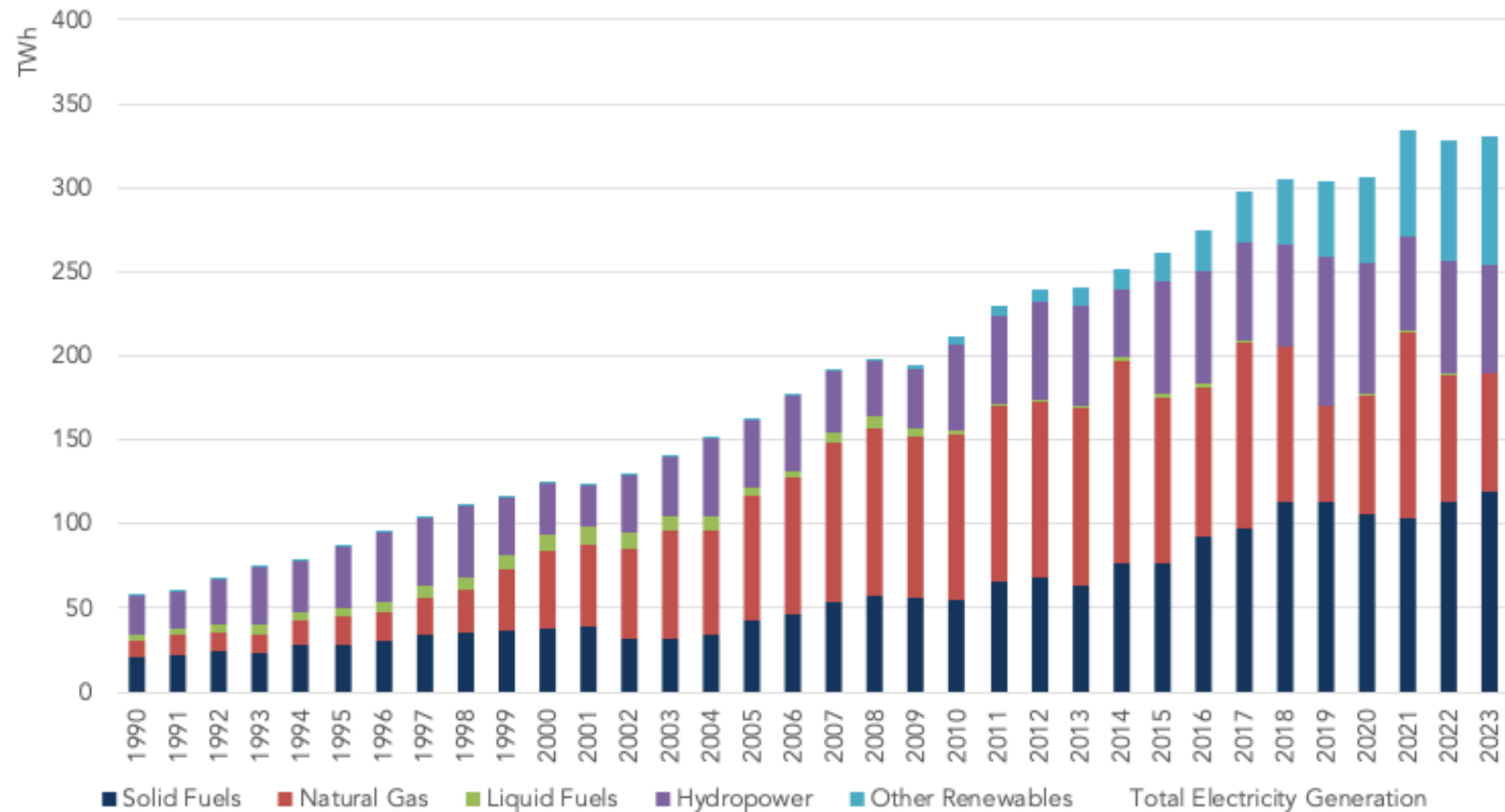
By the end of 2022, **total installed capacity reached 103,809 MW** nearly 6.4 times higher than the 1990 values. The **total gross electricity consumption was 328,379 GWh in 2022**.

In 2022, hydro had a share of 20.3% in all electricity production, natural gas (22.9%), coal (34.6%), other renewable and wastes (22.0%) and oil (0.1%).

Electricity generation and shares by energy resources (1990-2022)



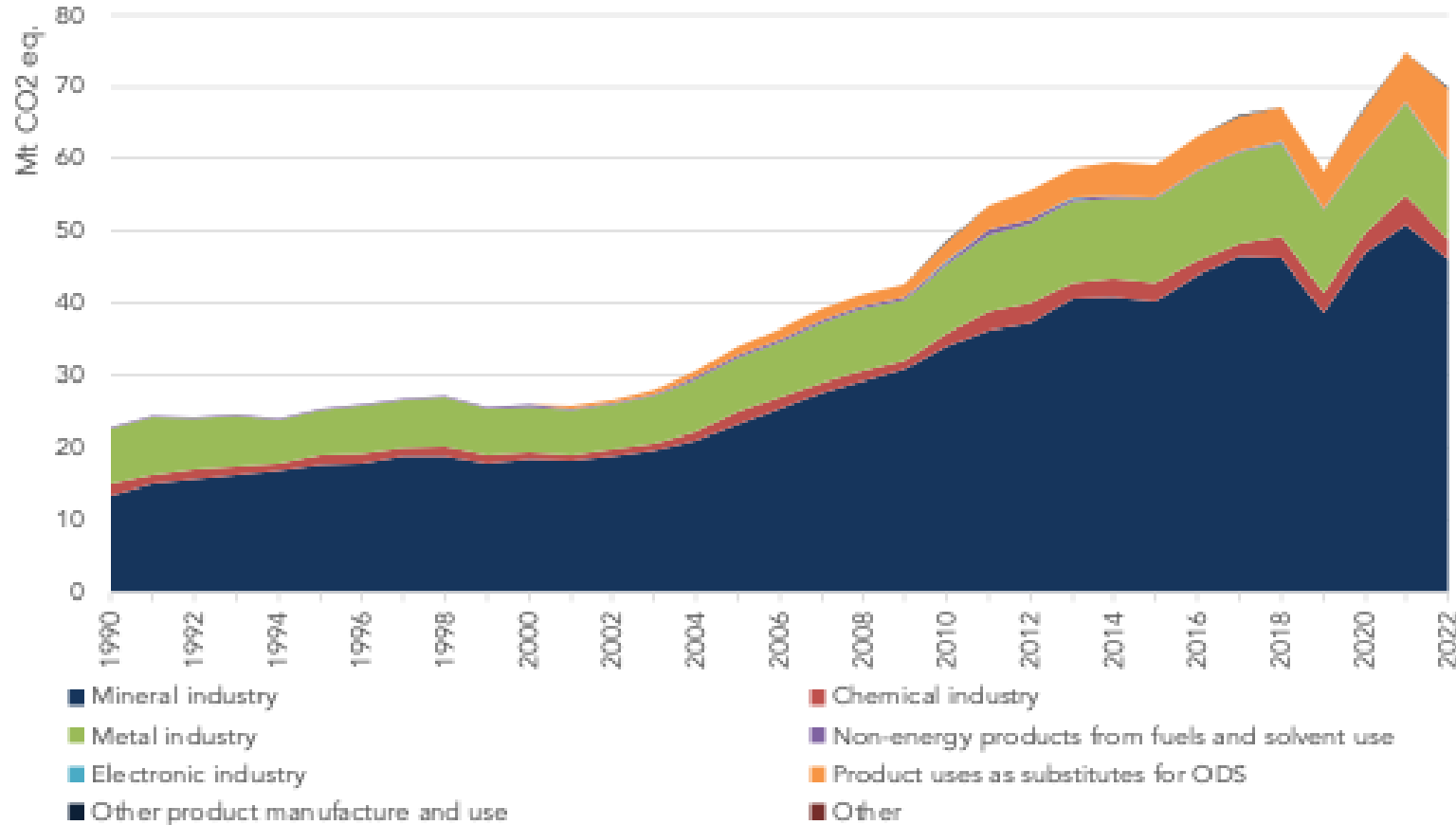
Electricity generation by primary energy resources, 1990-2023



Electricity Production from Solar and Wind Energy Has Rapidly Increased from 2010. The share of renewable energy in the total electricity installed capacity has reached 55% in Türkiye as of the end of 2022.

IPPU Sector

Emissions from industrial processes and product use by subsector, 1990–2022

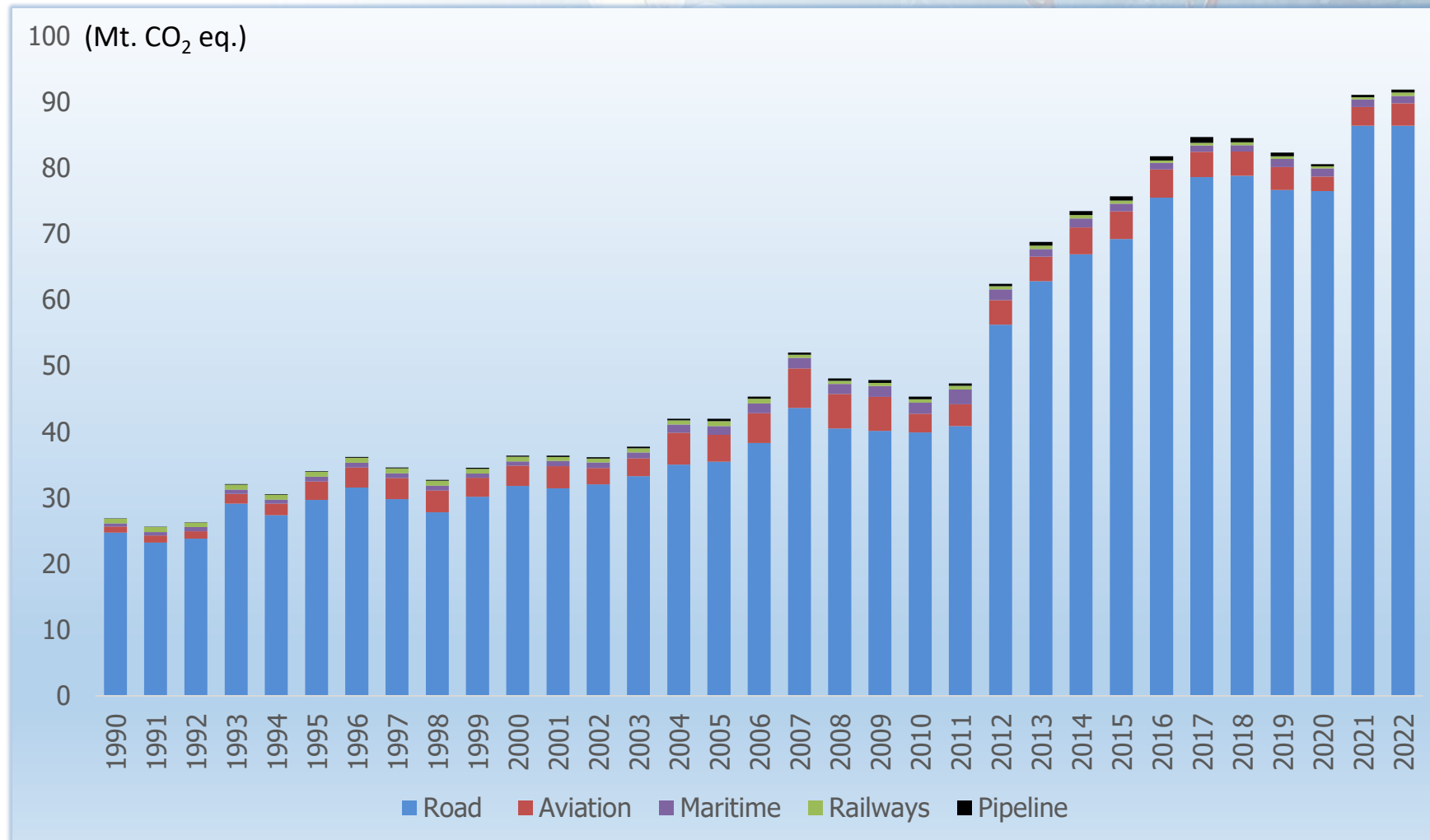


Majority of the GHG Emissions Under IPPU Originated From Mineral Industry Between 1990-2022

Transport Sector

By the end of 2022, transport emissions reached **91.9 Mt CO₂ eq.** in 2022.

Road transportation is the leading mode with %94 of emissions following with domestic aviation %3.7, maritime %1.2, railways %0.6 and pipeline %0.5 respectively.

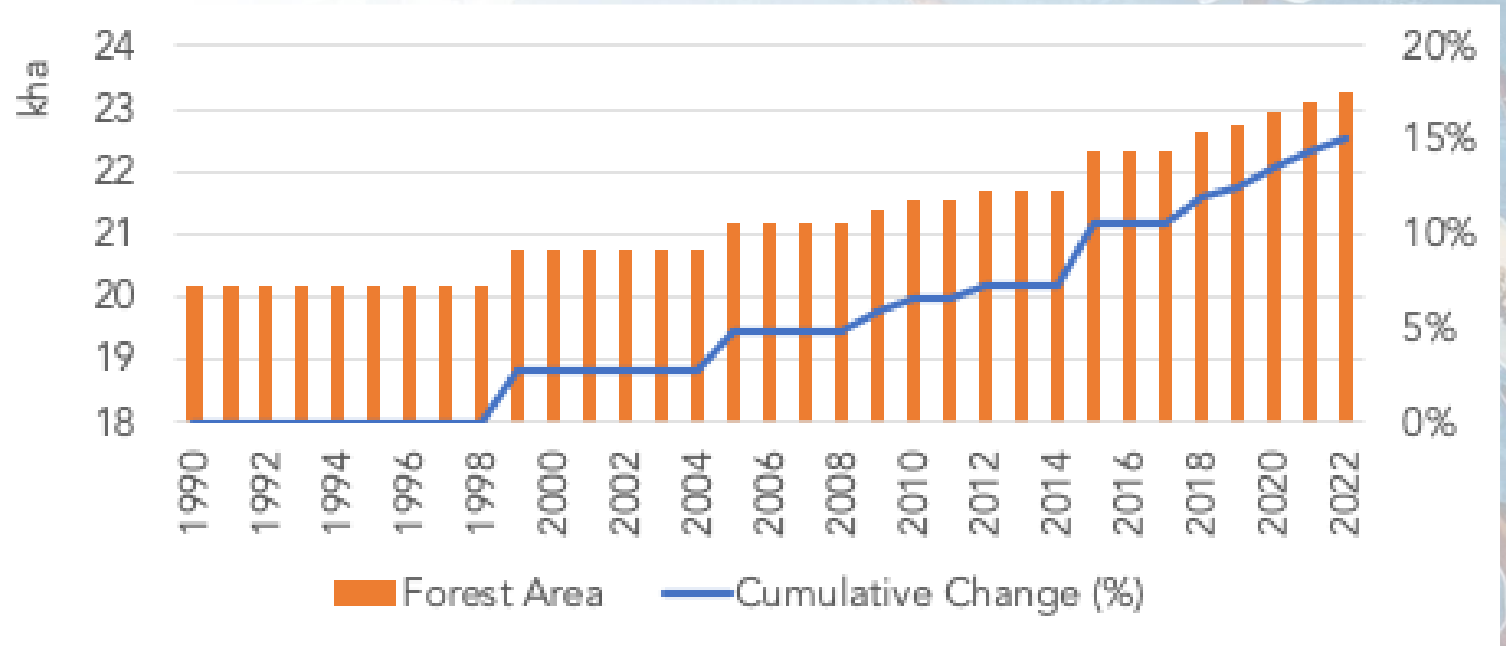


Transport emissions by modes (1990-2022)

Türkiye's Forest Areas Are Increasing

Change in forest areas of Türkiye
(1990 – 2022)

Türkiye's **total forest area** was 20,199 kha in 1990 and reached to 23,245 kha in 2022 which represents an **increase of 15%**. At the same time **Türkiye's total arable land and land under permanent crops** decreased from 27.856 kha to 23.883 kha which represents a **decrease of 14%**.



Progress Made Towards the NDC

Indicator	Unit, as applicable	Indicative Years			Implementation Years			Target level	Target year	Progress made towards the NDC
		2012	2020	2021	2022	...	2030			
Net Greenhouse Gases Reduced with Respect to the BAU	Mt CO2 eq.	413.37	472.42	524.04	502.00			695.00	2030	The calculation for 2022 is still ongoing. However, progress toward the BAU scenario for 2020, though outside the scope of the NDC implementation period, has been assessed. According to these calculations, Türkiye achieved significant success in 2020 by reducing its emissions to 553.01 Mt CO ₂ eq., which is 40% lower than the BAU scenario and even 27% lower than the mitigation scenario.
Total GHG emissions and removals consistent with the coverage of the NDC	Mt CO2 eq.	413.37	472.42	524.04	502.00			695.00	2030	Same as the main indicator
Contribution from the LULUCF sector	Mt CO2 eq.	-50.85	-57.76	-47.95	-56.27			N/A		N/A

Main Policy Formulation Entity

- The **Climate Change and Adaptation Coordination Board (CCACB)**, consisting of 26 member organizations is the main policy formulation entity streamlining climate policies. The Board consists of senior level representatives from the following institutions:
- MoEUCC (coordinator)
 - Chief Climate Negotiator
 - Ministry of Foreign Affairs
 - Ministry of Energy and Natural Resources
 - Ministry of Treasury and Finance
 - Ministry of Interior
 - Ministry of National Education
 - Ministry of Health
 - Ministry of Industry and Technology
 - Ministry of Agriculture and Forestry
 - Ministry of Trade
 - Ministry of Transport and Infrastructure
 - Ministry of Culture and Tourism
 - Ministry of Family and Social Services
 - Ministry of Justice
 - Ministry of Labor and Social Security
 - Presidency of Strategy and Budget
 - Council of Higher Education
 - Directorate of Climate Change
 - Scientific and Technological Research Council of Türkiye
 - TurkStat
 - Turkish Directorate of Environment Agency
 - Union of Chambers and Commodity Exchange
 - Turkish Industry and Business Association
 - Independent Industrialists' and Businessmen's Association
 - Union of Municipalities of Türkiye.

Türkiye's Climate Policy Framework

Technical Infrastructure

- Energy-Emission Model (In house capacity)
- 2100 Climate Projection with 3 km resolution



Policies

- Long Term Strategy (LTS)
- NDC
- Adaptation and Mitigation Strategy and Action Plans for 2030
- Other Sectoral Net Zero Roadmaps
 - Building
 - Industry
 - Transportation
 - Forestry
- Climate Finance Strategy
- Alignment of all National Policies including 12th Development Plan



Legal Framework

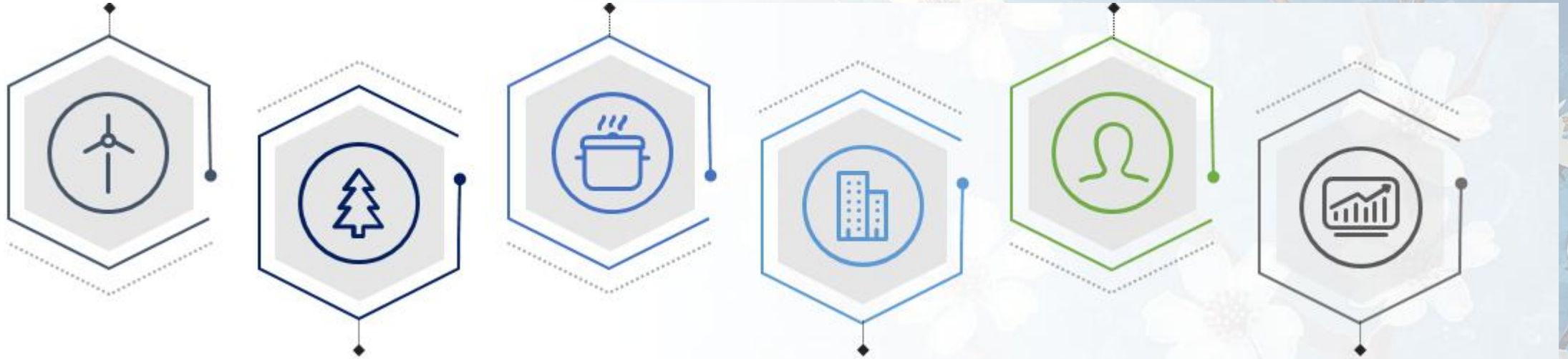
- Climate Law
- Secondary Legislation



Implementation Tools

- Renewable Energy Resource Areas
- Renewable Energy Support Mechanism
- Türkiye Industrial Decarbonization Investment Platform
- ETS
- Offset Mechanism
- Local Climate Action Plans

Sectoral Policies in the Updated First NDC



- To utilize **energy efficiency** and **renewable potential** at the highest level possible by considering feasibility, market conditions, and energy security
- To reduce the carbon footprint of **industrial products** and increase using renewable energy and resource and energy efficiency in the industry sector.
- To develop low or zero emission, energy-efficient, and alternative **clean fuel transportation** options and expand urban passenger and freight transportation by rail for international and intercity.
- To increase the recovery rate of methane gas from biodegradable wastes.
- To improve fertilizer efficiency.
- To prevent, control and reduce desertification and land degradation.

Financial Support Needs

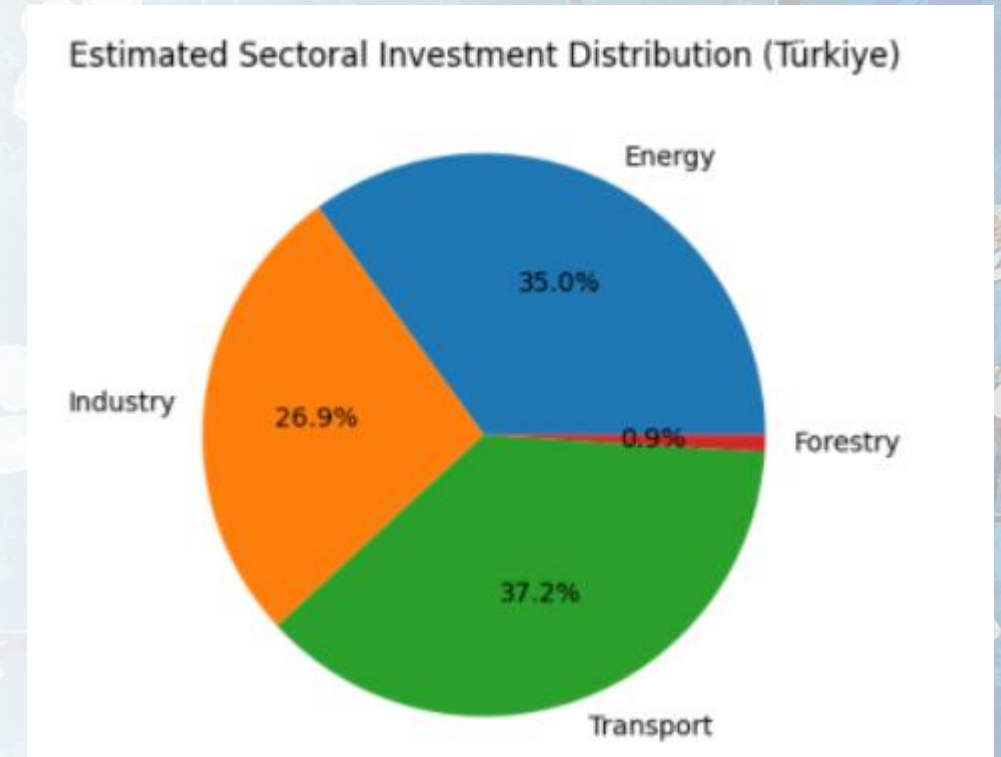
Türkiye needs **\$68 billion (2022–2030)** and **\$165 billion (2022–2040)** in additional investments, with **about half expected from the private sector**

Energy transition investments alone include:

- **\$73 billion** for renewable energy by 2035
- **\$20.2 billion** for energy efficiency (2024–2030)

Industrial decarbonization requires major investments, including:

- Cement: **~\$30 billion**
- Steel: **~\$31.4 billion**
- Aluminum: **\$4.82 billion**
- Fertilizers: **\$5.3 billion**



Transport sector investments include:

- **\$29 billion** (railways by 2030)
- **\$70 billion** (railways by 2053)
- Up to **\$2 billion** for EV infrastructure

Financial Support and Technology Transfer Needs



Energy

Power generation, distribution
Energy Efficiency
Renewable Energy
Energy Technologies
Diversifying Electricity Generation
Hydrogen Technologies

Industry

Waste Heat
Cement, Fertilizer, Steel Sectors
Green Hydrogen
Carbon Capture, Utilization, and Storage (CCUS) technologies
Hydrogen technology integration
Industrial electrification
Energy Sufficiency

Transport

Electric Vehicles
Public Transport
Railways
Electrification
Promotion of Low/zero-emission Vehicles
Fire Management
Domestic Battery Technology Development

Waste

Waste Management Systems
(recovery, pre-treatment, intermediate storage)
Thermal conversion technologies
Biogas conversion technologies

Agriculture

Combating Agricultural Drought
Climate-friendly and sustainable agriculture technologies
Digital agriculture systems
Sensor technologies for agriculture

Forestry

Restoration
Reforestation
Fire Management
Climate impact analysis on carbon stocks
Digitalization in forestry and land use
Remote sensing technologies (satellite and drone-based)



REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE



REPUBLIC OF TÜRKİYE MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE
**DIRECTORATE of
CLIMATE CHANGE**



COP31
TÜRKİYE
A N T A L Y A

THANK YOU

JUNE 2026