

Energy issue in EU-Turkey relations

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2. EU targets

The European Union has targets for 2020, 2030, and 2050 in order to pursue its energy goals systematically.

-Regarding greenhouse gas emissions, renewables, and energy efficiency.

2. EU targets

2.1 The 2020 Energy Strategy

- Reducing greenhouse gases by at least 20%
- Increasing the share of renewable energy in the EU's energy mix to at least 20% of consumption
- Improving energy efficiency by at least 20%

2. EU targets

2.2 The 2030 Energy Strategy

- Reducing greenhouse gas emissions by 40% (compared to 1990 levels)
- Ensuring 27% of energy consumed within the EU comes from renewable sources
- Improving energy efficiency by at least 27%
- Completing the internal energy market by reaching an electricity interconnection target of 15% between EU countries and pushing forward infrastructure projects

2. EU targets

2.3 The Energy Roadmap 2050

The EU also aims to achieve an 80-90% reduction in greenhouse gases (compared to 1990) by 2050. The Energy Roadmap 2050 lays out a number of scenarios for meeting this target.

2. EU targets

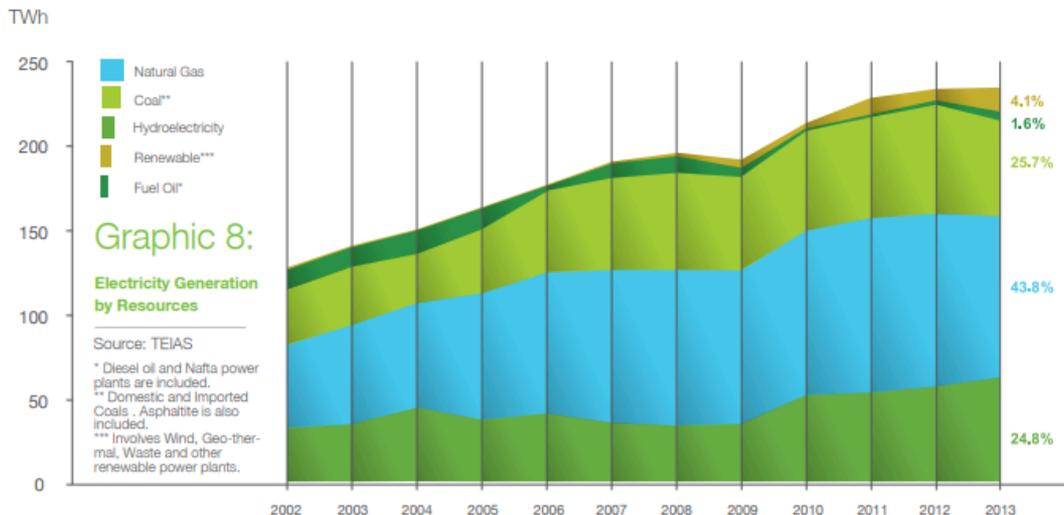
2.3 The Energy Roadmap 2050

The EU also aims to achieve an 80-90% reduction in greenhouse gases (compared to 1990) by 2050. The Energy Roadmap 2050 lays out a number of scenarios for meeting this target.

3. Turkey targets

3.1 Vision 2023

-Increase share of renewables to 30% (Not very ambitious. Already achieved in 2015)



3. Turkey targets

3.1 Vision 2023

-Reduce the country's energy intensity by at least 20% percent between 2011 and 2023

-125 MW installed power (36,000 MW hydropower; 20, 000 MW wind; 3,000 MW solar; 600 MW geothermal)

3. Turkey targets

3.2 Turkey's significance

- EU candidate country

- Major energy importer

- Potential significant transit country for natural gas supplies flowing from the Caucasus, the Eastern Mediterranean, the Middle East, and Central Asia to Europe.

- Vital role in the development of the Southern Gas Corridor through the construction of the Trans-Anatolian pipeline.

4. EU Energy Security Strategy

Important because:

-The EU imports more than half of all the energy it consumes.

High dependency. Crude oil (90%); natural gas (69%). The total import bill is more than 1 billion euros per day.

-Vulnerable to supply disruptions

Many countries are heavily reliant one partner

4. EU Energy Security Strategy

Goal:

-Ensure a stable and abundant supply of energy for European citizens and the economy.

Objectives:

-Increase energy efficiency and reach the proposed 2030 energy and climate goals;

4. EU Energy Security Strategy

Objectives:

- Increase energy production in the EU and diversify its supplier countries;
- Complete the internal energy market and the missing internal infrastructure links;
- Speak with one voice in external energy policy;
- Strengthen the emergency and solidarity mechanisms and protect the critical infrastructure.

4. EU Energy Security Strategy

	Solid fuels										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Russia	20.2	21.4	21.5	22.7	26.2	22.8	22.9	23.0	25.9	25.9	25.8
Colombia	10.0	9.7	11.0	10.7	15.2	16.9	20.7	21.7	19.6	18.8	21.3
United States	6.5	6.7	7.9	12.2	11.8	14.2	15.7	20.6	19.5	18.3	14.0
Australia	11.2	10.3	11.3	10.2	6.5	8.9	7.7	6.6	6.7	5.6	8.1
South Africa	21.4	19.8	17.4	14.4	13.7	8.2	6.9	5.7	6.0	8.7	6.9
Indonesia	6.2	7.9	6.8	6.3	6.1	4.7	4.4	4.0	2.8	3.0	3.1
Canada	2.7	2.4	2.6	2.3	1.2	1.7	1.9	1.5	1.6	2.2	1.4
Mozambique	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4
Ukraine	1.9	1.4	1.5	2.0	1.5	1.6	2.1	1.5	1.4	1.3	0.4
Others	19.9	20.4	20.0	19.2	17.8	20.9	17.6	15.5	16.2	15.8	18.6
	Crude oil										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Russia	30.5	31.2	31.2	29.8	31.5	32.4	32.8	31.8	31.9	28.9	27.7
Norway	15.6	14.2	13.8	14.0	14.2	12.8	11.7	10.6	11.1	12.4	11.4
Nigeria	3.0	3.3	2.5	3.7	4.2	3.9	5.7	7.7	7.7	8.7	8.0
Saudi Arabia	9.8	8.3	6.6	6.4	5.3	5.5	7.6	8.3	8.2	8.5	7.5
Iraq	2.0	2.7	3.2	3.1	3.5	3.0	3.4	3.9	3.5	4.3	7.2
Kazakhstan	4.1	4.2	4.3	4.5	5.0	5.1	5.4	4.8	5.4	6.1	6.2
Azerbaijan	1.2	2.1	2.7	3.0	3.8	4.1	4.6	3.6	4.5	4.2	4.9
Algeria	3.2	2.3	1.7	2.4	1.5	1.2	2.4	2.7	3.7	4.0	4.0
Angola	1.1	0.7	1.9	2.4	2.5	1.5	2.0	1.9	2.8	3.2	4.0
Others	29.5	30.9	32.0	30.8	28.4	30.5	24.4	24.5	21.1	19.8	18.9
	Natural gas										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Russia	34.6	33.0	32.1	31.2	27.6	26.8	28.3	27.8	32.4	29.7	29.4
Norway	20.2	21.7	23.3	23.7	24.5	22.9	22.1	24.9	23.6	25.0	25.9
Algeria	15.0	13.6	12.7	12.3	11.9	11.7	10.7	10.8	10.1	9.7	8.8
Qatar	1.3	1.5	1.8	1.9	4.6	8.1	9.6	6.8	5.2	5.5	6.1
Libya	1.4	2.1	2.5	2.4	2.4	2.2	0.6	1.5	1.4	1.7	1.7
Nigeria	2.9	3.6	3.8	3.3	2.0	3.4	3.6	2.8	1.4	1.2	1.6
Trinidad and Tobago	0.2	1.0	0.7	1.4	1.9	1.2	0.9	0.7	0.6	0.7	0.5
Peru	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4	0.3	0.2
Turkey	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2
Others	24.5	23.5	23.1	23.5	24.8	23.5	24.2	23.9	24.8	26.0	25.5

Source: Eurostat (online data codes: nrg_122a, nrg_123a and nrg_124a)

5. EU-Turkey Energy Cooperation

5.1 Existing cooperation:

5.1.1 Gas:

-Creation of the Southern Gas Corridor gains importance with the aim of diversifying.

-The aim is to bring gas to the EU from the Caspian Basin, Central Asia, the Middle East and the Eastern Mediterranean Basin.

5. EU-Turkey Energy Cooperation

5.1 Existing cooperation:

5.1.1 Gas:

- TANAP/TAP (Trans-Anatolian Pipeline and Trans-Adriatic Pipeline): 10 billion cubic meters (bcm) per year to Europe. Opens in 2019-2020. This is as part of the European Energy Strategy of diversification.

-EU actions for expanding the Southern Corridor include:

-Keeping the infrastructure projects needed for the Corridor on the EU's list of Projects of Common Interest

5. EU-Turkey Energy Cooperation

5.1 Existing cooperation:

5.1.1 Gas:

- Cooperating closely with gas suppliers in the region including Azerbaijan, Iraq and Turkmenistan.
- Cooperating closely with transit countries Azerbaijan, Georgia and Turkey
- Negotiating with Azerbaijan and Turkmenistan on a Trans-Caspian pipeline to transport gas across the Caspian Sea.

5. EU-Turkey Energy Cooperation

5.1 Existing cooperation:

5.1.2 Electricity:

-Through its 2013 Electricity Market Law, Turkey liberalised its market in line with the EU Third Energy Package.

- In 2015, TEİAŞ – the Turkish electricity grid operator – and the European Network of Transmission System Operators for Electricity– (ENTSO-E) signed a long-term agreement on permanent synchronous operation between the Turkish and continental European electricity systems. TEİAŞ further strengthened its engagement with ENTSO-E in 2016 by becoming its first observer member.

5. EU-Turkey Energy Cooperation

5.1 Existing cooperation:

5.1.2 Electricity:

-In 2016, TEİAŞ further strengthened its engagement with ENTSO-E in 2016 by becoming its first observer member.

5.1.3 Renewables and energy efficiency:

-Little cooperation. Mainly the allocation of some funds.

5. EU-Turkey Energy Cooperation

5.2 Possible cooperation:

5.2.1 Renewables and energy efficiency:

-The EU could support Turkey by scaling-up the financial support it currently provides.

-This would reinforce the case for renewables and efficiency projects in Turkey, particularly as the cost of capital continues to represent a major barrier for these investments. (Bruegel think tank)

5. EU-Turkey Energy Cooperation

5.2 Possible cooperation:

5.2.2 Nuclear energy:

-By integrating Turkey into Euratom, the EU can make a sensible contribution to the establishment of a nuclear energy sector in Turkey

-Win-win situation: The EU could put its leadership aspirations into practice, while opening up new commercial opportunities. Whereas Turkey, will enhance both climate and environmental performance, while reducing the energy import bill and energy dependency on Russia

5. EU-Turkey Energy Cooperation

5.2 Possible cooperation:

5.2.2 Nuclear energy:

-These steps would be important because it appears that the Turkish government seems to be addressing Turkey's energy import dependency by making greater use of coal.

-Turkey's current coal programme could double the country's greenhouse gas emissions from around 460 million tons in 2013 to around 860 million tons per year. (Bruegel think tank)

6. High level meetings

14 June 2012. Commissioners Oettinger and Füle & Ministers Yilidiz and Bagis.

Agreed to focus on 5 topics of mutual interest:

- Long term perspectives on energy scenarios and energy mix
- Market integration and development of infrastructure of common interest (gas, electricity, oil)
- Global and regional energy cooperation
- Promotion of renewable energy, energy efficiency and clean energy technologies
- Nuclear safety and radiation protection

6. High level meetings

EU-Turkey High Level Energy Dialogue and Energy Cooperation (I)

-16 March, 2015

-To strengthen their security of supply, Turkey and the EU are promoting as partners the development of the Southern Gas Corridor.

6. High level meetings

EU-Turkey High Level Energy Dialogue and Energy Cooperation (II)

-28 January 2016

-Re-affirmed their joint commitment to the successful implementation of the Southern Gas Corridor

-Improve Turkish storage and LNG capacity

-Welcomed the agreement signed that year between TEIAS and ENTSO-E, by which TEIAS became the first observer member.

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