

CENTER FOR  
**GLOBAL  
AFFAIRS**  
& STRATEGIC STUDIES



Universidad  
de Navarra

WORKING PAPER

[WP #2/2023]

# **Türkiye's complex path. Erdogan's economic policy review and new energy prospects**



**Arturo García de la Cruz and Fernando Palau**

December 2023

© 2023

***Türkiye's complex path. Erdogan's economic policy review  
and new energy prospects***

By Arturo García de la Cruz and Fernando Palau  
December 2023

Center for Global Affairs & Strategic Studies  
University of Navarra  
Law School - International Relations

Campus Pamplona: 31009 Pamplona  
Campus Madrid: Marquesado Sta. Marta 3, 28027 Madrid  
<https://www.unav.edu/en/web/global-affairs/>

*Cover: A view of Istanbul [Ahmed]*

## ABSTRACT

In the dynamic realm of global investments, Türkiye has long been a focal point of economic interest, blending its rich historical heritage with a burgeoning modern economy. However, no more than ever, Türkiye stands as a captivating mosaic of challenges and difficulties. Despite the storm clouds on the horizon, the course of time will show how the Turkish new economic team faces these significant challenges through lengthy, complicated, and different roads ahead of it. The changing approach of using a more conventional economic policy will have a heavy influence in trying to keep the economy afloat. Secondly, the energy sector will star a promising investment landscape. Türkiye is strategically positioning itself as a new regional energy hub, marking an unprecedented shift. Henceforth, it will actively foster domestic capabilities to harness its renewable energy potential and reduce its risky reliance on energy imports. Sustainable energy development will also be promoted by an energy strategy advancing towards major privatization and liberalization of the energy market.

## CONTENT

<b>INTRODUCTION</b> .....	4
<b>1. ECONOMIC POLICY</b> .....	6
Possible scenarios .....	8
<b>2. THE ENERGY SECTOR</b> .....	14
Security of energy supply .....	15
Expanding domestic energy pproduction.....	17
Energy market liberalization.....	19
<b>CONCLUSION</b> .....	21
<b>BIBLIOGRAPHY</b> .....	22

## INTRODUCTION

Türkiye is a dynamic and strategically located nation that constitutes a bridge between Europe and Asia, offering significant investment opportunities, especially considering the possibility of the country becoming a regional energy hub. However, understanding the prevailing political landscape, marked by the figure of the actual president, Recep Tayyip Erdogan, and the potential risks and challenges in his new presidential term is essential for informed decision-making.

A meticulous analysis of Türkiye's macroeconomic indicators for the forthcoming years shows that GDP growth will remain hampered by fiscal public stagnation, eroding purchasing power and domestic demand. Any aspiration regarding economic expansion, fiscal resilience, or trade dynamics will be determined by the monetary policy nuance that Erdogan is ready to choose. This possible financial transition is what keeps investors' eyes on Türkiye, besides the more significant opportunities that the energy sector will provide. This promising sector, where public institutions and private companies are reaching mutual understanding, is expected to be bolstered with a significant domestic strategy destined to reach international energy partnerships.

### **Türkiye's macroeconomic context**

The major economic forecasts for the short term are:

- The GDP growth is expected to keep its slowdown path in the next years, from an expected 3.9% in 2023 to 2.9% (2024) and 3.1% (2025), according to the latest IMF outlook<sup>1</sup>.
- High inflation is exceeding what indicators estimated for 2023, reaching 62% at the end of 2024; then it is projected to cool to 52% by 2025. The IMF maintain this forecast in spite of more optimistic view from the Turkish authorities.
- Economic policies will increasingly shift towards achieving a more conventional perspective, all with increasing social pressure and impatience, challenging CPI and unemployment rates.
- The energy sector will be hopefully attractive to the investment landscape. An ambitious energy strategy towards diversification of technologies and promotion of renewable sources, where privatizations will increase to play a major role, is expected to be clearly the most profitable sector for investors and the country.

Despite the devastating effects of the earthquakes, Türkiye's economy expanded by 4% in 2023 due to robust domestic demand. However, further trade imbalance driven by the negative impact of net exports (-0.7%) will exacerbate a slow-down growth from 2024 to 2028 (always remaining below 3.2%). Türkiye's long-term potential will be hampered by

---

<sup>1</sup> IMF, "Republic of Türkiye". International Monetary Found. <https://www.imf.org/en/Countries/TUR>

high inflation rates, expected to drop off progressively from 70% in 2023 to nearly 40% in 2028. Cautious economic expansion and high inflation will support a persistent deficit of about a gap between -3.2% and -3.6% in the budget. The government debt-to-GDP ratio is projected to go down from 34.4% of GDP at the end of 2023 to a constant 32% with fewer variations. Some strategic sectors (such as energy) and coming-through growths on exports indicate a promising gradual shift of the current account deficit from -4.2% in 2023 to -2.8% in 2025. The labor market will remain relatively downbeat, featured by little but growing unemployment rate to 10.2% in the late 2020s.

Leaving the macroeconomic prospects to what the international institutions and the Turkish authorities say (the latter are more optimistic in their outlook), our analysis will focus on two aspects: 1) the economic policy that President Erdogan will apply in his new presidential term in order to reduce high inflation and at the same time try to boost economic growth, changing from the so call *Erdoganomics* to a more orthodox praxis, and 2) the energy sector, where Türkiye wants to become an energy hub given its privileged geographical location.

## 1. ECONOMIC POLICY

Türkiye's recent policy changes have been largely favorable, with the central bank's substantial rate hike boosting investor confidence these months. However, uncertainties remain regarding the extent of tightening measures and their effectiveness in addressing Türkiye's primary imbalances: the current account deficit and high inflation.<sup>2</sup> New waves of inflation and an alarming budget deficit urgently require cash abroad, especially from foreign direct investment. However, the economic course of the country is going to depend on how its financial and monetary policies tackle those primary economic imbalances.

Türkiye's economic downturn started in 2018 when its economic growth model collapsed. To gain a better comprehension of how Türkiye's economic structure works and to comprehend the future possible economic scenarios fully, it is crucial to look back in time.<sup>3</sup> Since AKP came to power in 2002, the country has faced the consequences of a severe financial crisis (2001) for years due to political instability and economic problems. Turkish economic development had relied on enormous flows of foreign investment, but it needed to be supported with the required financial means to grow sustainably. Enormous budget deficit and inflation led to the worst stock market collapse of the country since WWII. Up to this point, the government employed an aggressive economic strategy based on expensive infrastructure projects, increasing foreign investors and businesses and consumers encouraged to incur debt.

Under those circumstances, government reforms enabled Türkiye to grow rapidly in the 2000s. At that time, Türkiye appeared in the international context as an "economic miracle:" poverty rates decreased, and an overall rise in prosperity was led within Turkish society. Moreover, Türkiye managed to navigate the challenges posed by the global financial crisis of 2007-2009 relatively successfully. Despite a slowdown in GDP growth to 0.6% in 2008 and a recession of -4.8% in 2009, the country experienced robust economic expansion, with growth rates surging to 8.4% in 2010 and an impressive 11.2% in 2011. The financial system started again to depend highly on high imports of capital and resources without being able to generate enough foreign trade surplus to balance. Although some political tensions in the country strengthened Erdoğan's position inside the AKP, the economy began to subordinate itself to an increasingly centralized governmental power. This lack of economic flexibility over the political power and a negative current account balance overheated the economy, facing another currency crisis

---

<sup>2</sup> Liam Peach, "Turkey's Policy Shift: Promising Start, but a Lot More to Do," August 31, 2023, <https://www.capitaleconomics.com/publications/emerging-europe-economics-update/turkeys-policy-shift-promising-start-lot-more-do#no-back>.

<sup>3</sup> Adam Rogalewicz, "Economic Crisis in Turkey," The Warsaw Institute Review, November 30, 2022, [https://warsawinstitute.review/news-en/impact-of-the-sars-cov-2-pandemic-on-the-tourism-sector-in-the-european-union-2/#\\_ftn3](https://warsawinstitute.review/news-en/impact-of-the-sars-cov-2-pandemic-on-the-tourism-sector-in-the-european-union-2/#_ftn3).

in 2018.<sup>4</sup> It was followed by a situation in which Turkish companies, many heavily reliant on foreign loans, found enormous difficulties repaying their Dollar-denominated debt.

The situation worsened in September 2021 with the implementation of the unconventional New Economy Program (NEP).<sup>5</sup> Rooted in Erdogan's belief that high interest rates spur inflation, the NEP aimed for aggressive rate cuts to devalue the Turkish Lira, boost exports, and subsequently strengthen the Lira, curbing inflation and bolstering the central bank's foreign reserves. However, none of these objectives materialized. Despite significant interventions by the central bank, the dollar exchange rate (in comparison with the Turkish currency) plummeted from 8.5 Liras in September 2021 to 26 Liras in July 2023<sup>6</sup>. Inflation skyrocketed (peaking at 85.5% in November 2022), and the central bank's net foreign reserves turned negative for the first time since 2002. Despite the NEP's failure, the government persisted with its unorthodox approach. Under Erdogan's influence, the Central Bank (CBRT) and the Banking Regulation and Supervision Agency (BRSA) kept supporting the low-interest-rate policy long after its efficacy had waned. In the 2023 election campaign, Erdogan showed almost no inclination to change that course, interpreting the AKP's success in the parliamentary elections as an endorsement of his approach.

Notwithstanding his persistence on low rates, the financial teetering on the edge of crisis is making Erdogan think whether the best option involves changing its economic policies or not. Consequently, the president may be giving a message to international investors when Mehmet Şimşek was reappointed as minister of Treasury and Finance and Hafize Gaye Erkan as governor of CBRT. Both appointments, welcomed by economic analysts for their support to central bank independence and fiscal discipline, signal a potential shift in Erdogan's stance, indicating willingness to overcome its unorthodox monetary policy.

Whether Şimşek (TRMTF) and Erkan (CBRT) can successfully make a significant policy shift hinges on their ability to convince investors that the NEP is definitively a thing of the past, never to be revived. This task poses considerable challenges, especially considering that a brief return to conventional policies in late 2020 lasted less than five months. Just because Erdogan currently supports a more traditional approach does not guarantee he will completely abandon his stance on interest rates. Equally problematic has been the assignment of Şahap Kavcıoğlu, the former central bank governor responsible for implementing sharp rate cuts at Erdogan's insistence, to the Banking Regulation and Supervision Agency (BRSA), where he is expected to counterbalance the restrictive effect of rising borrowing costs.

---

<sup>4</sup> Bulent Aliriza and Zeynep Yekeler, "The Turkish Economic Slowdown in 2018," CSIS, March 20, 2019, <https://www.csis.org/analysis/turkish-economic-slowdown-2018>.

<sup>5</sup> Republic of Turkey, "New Economy Program."

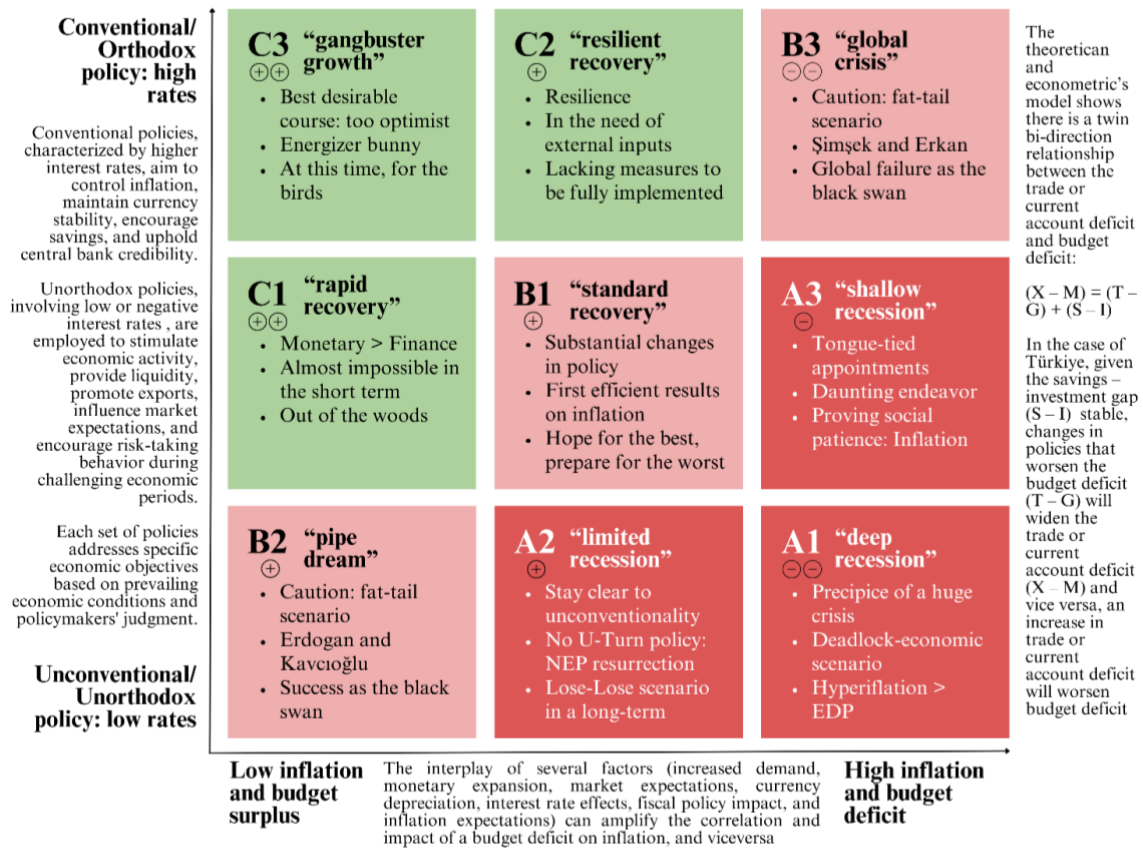
<sup>6</sup> Selva Demiralp, "Turkey's Economic U-Turn?," IEA, July 17, 2023, <https://iea-world.org/turkeys-economic-u-turn/>.



## Possible scenarios

A discussion presented graphically in a matrix about all possible scenarios (and their consequences) of Turkish economic policies from this moment to come is presented below. The two main variables or drivers that conform the 3x3 scenario mapping are the following: (1) the macro-economic nature of Turkish policies and measures taken to address (2) Turkish primary imbalances on current account balance<sup>7</sup> and inflation. All these are in a complex situation of uncertainty where security and the economy are likely to be the main drivers of Turkish foreign and domestic policies in the coming years.

### Can Erdogan pass the test and embark on the path to long-term prosperity? Türkiye on 3x3 matrix: scenarios prospectively considered



<b>Growth trend comparison</b>	⊖ below	⊖⊖ more below	⊕ above	⊕⊕ more above
<b>Risk colour Strategy</b>	■ Invest/Grow strategy - low risk	■ Selectivity/Earning strategy - medium risk	■ Harvest/Divest strategy - high risk	

© personal adaptation of GE-McKinsey Matrix typically used in corporate strategy, with the benefit of analyzing all possible Turkish economic policies, scenarios and outcomes in a most prospective way

<sup>7</sup> Ebrahim Abbassi, Bijan Baseri, and Shima Salehi Alavi, “The Effect of Budget Deficit on Current Account Deficit: Evidence from Iran,” Journal of Economics and Sustainable Development, 2015, <https://core.ac.uk/download/pdf/234647166.pdf>.



In the upcoming months, policymakers must implement significant measures to effectively combat Türkiye's inflation issue and control the substantial trade deficit brought by the imbalances in the current account.

*Scenario A1: "Deep recession"*

This scenario would represent the starting point in which Türkiye is now located. Under the analysis of macroeconomic indicators, Türkiye is on the precipice of a vast crisis. This can be the starting point in which Erdogan must choose economically between keep following unconventionality on its economic programs or maybe shifting to a more orthodox financial perspective. As it has been proven the failures of the NEP for 2021-2023, at the end of this year, it will be published the following economic measures to follow. As the former program was based on the idea of pursuing a "new balancing, new normal and new economy," years 2024 in advance must take more seriously its "advertising slogan". The latest appointments of the governors for the main Turkish financial institutions (especially TRMTF and CBRT)<sup>8</sup> can be considered as the first step of "shifting". However, the most pessimistic analysts often doubt it. Anyhow, staying over this deadlock-economic scenario will mean hyperinflation and increasingly failing results on the main macroeconomic indicators of the country, with a high possibility of driving into more social and political tensions, especially regarding the local elections of March 2024. An urgent Excessive Deficit Procedure, similar to one of the EU,<sup>9</sup> will be the first issue of Erdogan's agenda.

*Scenario A2: "Limited recession"*

Limited but progressive recession requires Erdogan to stay clear on its unconventional way of looking at the economy and interest rates. Not letting Şimşek and Erkan elevate the interest rates effectively will lead to inflation, weakening domestic currency against major foreign ones. Although cutting interest rates at the moment of rising inflation seems to cool down the currency for some time, it actually elevates long-term interest rates for government bonds, consumer loans, and other market rates. When political or fiscal pressures influence central banks, they lose their independence and capacity to shape expectations and, consequently, struggle to manage long-term interest rates. In essence, this creates a "lose-lose scenario": maintaining a low policy rate when economic conditions are not at the same level results in both high inflation and elevated long-term interest rates (counteracting the initial purpose of lowering rates). Kavcıoğlu's influence through the BRSA is expected to counteract the tightening effect of any effort to raise

---

<sup>8</sup> Baker McKenzie, "Who Regulates Banking and Financial Services in Your Jurisdiction? Turkey," Global Financial Services Regulatory Guide, 2023, <https://resourcehub.bakermckenzie.com/en/resources/global-financial-services-regulatory-guide/europe-middle-east-and-africa/turkey/topics/who-regulates-banking-and-financial-services-in-your-jurisdiction>.

<sup>9</sup> Jorge Liboreiro, "EU Countries Are Hagglng over How to Tackle High Debt and Deficit. Here's Why It Matters," euronews, October 23, 2023, <https://www.euronews.com/my-europe/2023/10/23/eu-countries-are-hagglng-over-how-to-tackle-high-debt-and-deficit-heres-why-it-matters>.

borrowing expenses. There will not be any U-turn policy under this scenario. Inflation won't behave as a skyrocket in the short term, but it will continue to be problematic, and investors will have nightmares about a possible NEP resurrection.

***Scenario A3: “Shallow recession”***

Erdogan's appointments on Şimşek and Erkan can be interpreted as a starting shift in the domestic economic policy into a more conventional and orthodox mind. This situation is currently leading the CBRT to increase its key interest rate from 30% to 35% as part of its ongoing efforts to curb inflation. The decision was prompted by stronger-than-expected price rises in the third quarter of 2023, demanding monetary tightening to stabilize inflation expectations and to address the deteriorating pricing behavior. Here, the commitment of the CBRT to reinforcing monetary tightening as much as necessary requires the employment of a timely and gradual approach until a substantial improvement in the inflation outlook is achieved. This move comes after a previous 5% hike in September 2023, signaling a departure from a prolonged period of unconventional monetary policy, during which rates were lowered despite soaring inflation. Since the initial increase from 8.5%, economists contend that further adjustments are required. The main problem in this scenario is the lack of people's patience and investor's hope. This risky situation of mixed expectations could not allow further recalibration of inflation, a diminishing trade gap and increasing foreign reserves. With the appearance of changing the model, this scenario would represent a failed attempt.

***Scenario B1: “Standard recovery”***

Although it is uncertain whether the new appointments can successfully implement a policy reversal, this scenario would mean a shift in leadership accompanied by substantial changes in policy. It must be effective regardless of the political risks of entailing costs for various segments of Turkish society. By taking into account that the measures described above (in the “failing attempt” of Scenario A3) are being fully implemented, there would be a standard shift of monetary policies and the outcome of the first efficient results on inflation, current account balance and foreign exchange reserves. There would be a similar scenario as A3, together with a little success and hope for the future of the Turkish main imbalance.

***Scenarios B2 and B3: “Pipe dream” and “global crisis”***

Scenarios B2 and B3 would be examples of fat-tails' outcomes.<sup>10</sup> They would be peculiar situations in which, regardless of their appearance, the probability of happening is greater than expected. As the economy has proved historically to be tricky, it is important to look

---

<sup>10</sup> Andrew G. Haldane, “Tails of the Unexpected,” Bank of England, June 8, 2012, <https://www.bankofengland.co.uk/-/media/boe/files/speech/2012/tails-of-the-unexpected.pdf>.

carefully at economic fat-tail scenarios<sup>11</sup>. The first one (B2) suggests that the main problematic unbalances would be solved without making any shift on whether monetary or fiscal policy, just by standing firm with Erdoğan's unconventional measures. The second scenario (B3) suggests that no advantage on inflation and account deficit would be achieved by restructuring the nature of economic policies and applying new favorable orthodox measures. Both possibilities are weird enough to happen. However, no one knows if any black swan could appear in the equation when getting into these extreme situations (black swans' drivers into B2 and B3 could be the exacerbated foreign interest in Türkiye's currency and an extreme global or regional crisis, respectively).

*Scenario C1: "Rapid recovery"*

A shifting change of economic perspective followed by a more supporting offer and demand on the biggest trading sectors could suddenly bring a currency revalorization that brought positive monetary outcomes before the overall financial system ended to restructure its macroeconomic policies. This situation seems to be a little bit out of the woods. If an economy experiences positive monetary outcomes related to inflation and the current account balance before transitioning to more conventional economic policies, several potential scenarios can unfold. While positive outcomes can ensure a smoother shift without immediate concerns about economic turbulence at the time of increasing its attractiveness to investors' confidence, sudden changes can lead to volatility in stock markets, currency values and bond prices. This can strain household finances and impact the profitability of businesses, leading to potential defaults and financial stress. Furthermore, it can hurt export competitiveness in some strategic sectors, making the country's goods and services more expensive for foreign buyers and potentially leading to trade imbalances. Economic experts believe that assuming there is no resurgence in political uncertainty, Türkiye's economy will not be realigned until 2026. This could involve achieving a better balance in external and fiscal accounts, as well as bringing inflation levels to more acceptable standards. But not in a very short period.

*Scenario C2: "Resilient recovery"*

Financial resilience means the ability of a country to withstand life events that affect its capital structure, liquidity, revenue and assets.<sup>12</sup> To have Türkiye fully recover from its primary imbalance, it is crucial to enhance institutional quality to boost growth and

---

<sup>11</sup> Martin L. Weitzman, "Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change," Department of Economics, Harvard University, 2011, <https://scholar.harvard.edu/files/weitzman/files/fattaileduncertaintyeconomics.pdf>.

<sup>12</sup> Adam Knight and Aisling Kavanagh, "Financial Resilience: Building and Fostering Trust," Deloitte United Kingdom, December 15, 2020, <https://www2.deloitte.com/uk/en/blog/risk-powers-performance/2020/financial-resilience-building-and-fostering-trust.html>.

resilience.<sup>13</sup> Promoting financial trust to empower households and investors in evaluating the advantages and drawbacks of financial engagement would lead Türkiye to present itself as a trustable country to spend and invest in. An example of this would be the blueprint for Türkiye’s resilient reconstruction and recovery post-earthquake.<sup>14</sup> Although there are some cases in which this resilience depends on external financial help, as WB did in response to the earthquakes,<sup>15</sup> a coherent restructure of internal policies is always a must. This scenario represents Türkiye’s shift into more flexible and orthodox policies, with an economy that continues to suffer notorious inflation and some deficit in its budget. While there would still be a gap for more remarkable recovery and growth, Türkiye will have implemented some measures (explained in C3) to tackle the situation with patience.

### *Scenario C3: “Gangbuster growth”*

Due to the patient process taken in C2, a gangbuster growth of Türkiye’s economy would be incurred far in the future, if applicable. This situation would be excessively optimistic and would require many surpluses in the years to come. The expression “gangbuster growth” refers to an economy showing a large amount of energy, activity, speed, or success.<sup>16</sup> Graphically, it is usually assimilated to an energizer bunny, a financial system represented as never running out of energy. To make this situation more likely, Türkiye would have to accumulate successful outcomes from the pretended measures mentioned in the latest paragraph.

To mitigate economic risks, Türkiye should lead essential measures such as implementing contractionary monetary policies, adjusting interest rates to curb spending, implementing austerity measures, enhancing labor market flexibility, and improving the business environment. Additionally, managing exchange rates, promoting foreign investment through streamlined regulations and tax incentives, pursuing a comprehensive debt management strategy, and fostering public-private partnerships (PPPs) in infrastructure projects are crucial steps. These measures collectively promote economic stability, attract investments, and enhance resilience when facing challenges. Finally, designing policies

---

<sup>13</sup> OECD, “Resilience in a time of high debt,” November 23, 2017, <https://www.oecd.org/economy/outlook/Resilience-in-a-time-of-high-debt-november-2017-OECD-economic-outlook-chapter.pdf>.

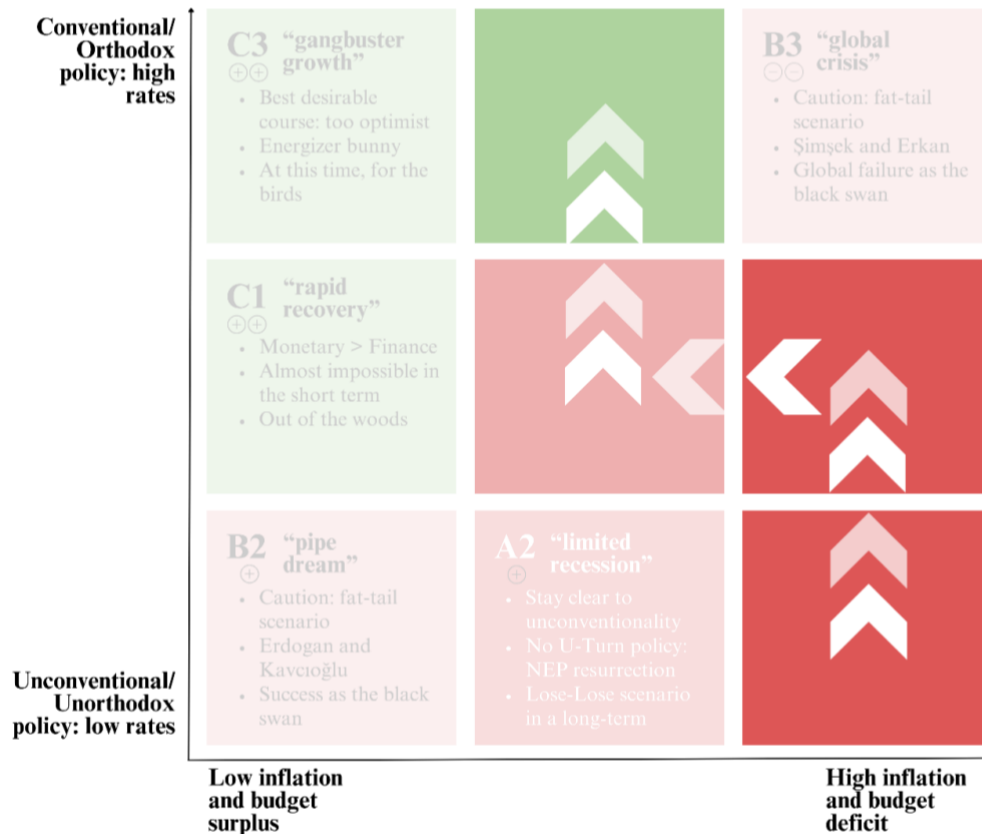
<sup>14</sup> Karim Elgendy, “A Blueprint for Turkey’s Resilient Reconstruction and Recovery Post-Earthquake,” Atlantic Council, June 20, 2023, <https://www.atlanticcouncil.org/blogs/turkeysources/a-blueprint-for-turkeys-resilient-reconstruction-and-recovery-post-earthquake/>.

<sup>15</sup> World Bank Group, “World Bank Approves \$1 Billion for Türkiye to Help Restore Rural Homes and Essential Public Services to People in Earthquake-Hit Areas,” World Bank, June 27, 2023, <https://www.worldbank.org/en/news/press-release/2023/06/27/world-bank-approves-1-billion-for-turkiye-to-help-restore-rural-homes-and-essential-public-services-to-people-in-earthqu>.

<sup>16</sup> Cambridge Dictionary, Gangbusters, 2023, <https://dictionary.cambridge.org/dictionary/english/gangbusters#:~:text=go%2Fgrow%2C%20etc.&text=to%20show%20a%20large%20amount,like%20gangbusters%20for%20several%20years>.

that focus on reducing poverty and income inequality,<sup>17</sup> such as progressive taxation and targeted social welfare programs, would have positive outcomes in the upcoming years of Erdogan’s mandate.

### Can Erdogan pass the test and embark on the path to long-term prosperity? Türkiye on 3x3 matrix: its most likely road to follow



Having all scenarios expounded, the last figure shows a tendency of Türkiye to move from Scenario A1 to A3 shortly. Depending on how Erdogan and its financial mates from the CBRT, TRMTF and BRSA overcome critical moments (referring to local elections, consequences of the course of wars, economic crisis to address, its regional relations and key trading relationships with the most significant world powers), the upcoming financial program will drive Türkiye to move around either from B1 to C2 or to become stagnant to a shallow recession. In other words, there will be “hope for the best and preparation for the worst”. Türkiye will definitely be in a tricky position in the years to come. Still, the interaction between domestic and external forces will also influence its position as a highly attractive country.

<sup>17</sup> World Bank Group, “Turkey Economic Monitor: Sailing Against The Tide,” World Bank, February 26, 2022, <https://www.worldbank.org/en/country/turkey/publication/economic-monitor>.

## 2. THE ENERGY SECTOR

Situated at the crossroads of Asia and Europe, Türkiye spans southwestern Asia and southeastern Europe (Eastern Thrace). With its territorial size, diverse cultural heritage and pivotal geographical location, Türkiye holds significant influence within the region.<sup>18</sup> As there have been decades since Türkiye kept rapidly growing in terms of both its industrial production and population, the energy demand has become increasingly crucial (energy import-demand dependency). This is why energy has become one of Türkiye's most crucial development preferences. Additionally, Türkiye's energy power is pretended to be exercised at a regional level.

While Türkiye heavily relies on imported oil and gas, it is actively diversifying its energy landscape. Although there is a high dependency on imports, the nation is fostering relationships with various international partners and adopting measures to increase the utilization of domestic energy sources (including renewables, nuclear, and coal). Strategically important, Türkiye has long aspired to become a significant trading hub for energy exchanges between Central Asia, Russia, the Middle East, Europe, and other global markets.

However, the Turkish electricity sector is confronting its trial against multifaceted challenges driven by both internal and external factors.<sup>19</sup> Particularly, Türkiye faces some recent claimings concerning its reliance on low-quality domestic lignite in power generation, potentially hindering decarbonization efforts. In alignment with the global trend toward achieving net-zero greenhouse gas emissions, Türkiye must carefully evaluate its energy policies ("National Energy Plan" and "Hydrogen Technologies Strategy and Roadmap," both prepared to meet the country's 2053 net zero emission targets<sup>20</sup> and 12th Development Plan<sup>21</sup>). Regarding energy sources, fossil fuels (mainly oil and gas, constituting 93% and 99% of imports, respectively) continue to underpin Türkiye's economy, necessitating an emphasis on expanding domestic exploration and production. Considering limitations in upstream resources and the imperative of emissions reduction, Türkiye should focus on cost-effective demand-side measures.

---

<sup>18</sup> Simone Tagliapietra, "Turquía y La Geopolítica Regional Del Gas Natural. La 'Visión Centro' a La Luz de Las Futuras Perspectivas Del Corredor Sur de Gas," IEMed, 2019, <https://www.iemed.org/publication/turquia-y-la-geopolitica-regional-del-gas-natural-la-vision-centro-a-la-luz-de-las-futuras-perspectivas-del-corredor-sur-de-gas/?lang=es>.

<sup>19</sup> Abdullah Bugrahan Karaveli, "World Energy Issues Monitor Group | 2022 Turkey," world energy council, March 2022, [https://www.worldenergy.org/assets/downloads/World\\_Energy\\_Issues\\_Monitor\\_2022\\_Turkey\\_commentary.pdf](https://www.worldenergy.org/assets/downloads/World_Energy_Issues_Monitor_2022_Turkey_commentary.pdf).

<sup>20</sup> Ministry of Energy and Natural Resources, "Türkiye Announces National Energy Plan and Hydrogen Strategy," Republic of Türkiye Ministry of Energy and Natural Resources, January 19, 2023, <https://enerji.gov.tr/news-detail?id=21111>.

<sup>21</sup> Gazi Nogay and Seval Ocak, "Türkiye's 12th Development Plan Presented to Turkish Parliament," Anadolu Ajansı, October 17, 2023, <https://www.aa.com.tr/en/turkiye/turkiye-s-12th-development-plan-presented-to-turkish-parliament/3022408#>.

These include enhancing efficiency and transitioning to alternative fuels, especially in the transport sector, which presently relies on oil for 98% of its energy needs.

Despite this, electricity consumption continues to rise steadily.<sup>22</sup> Türkiye strategically positions itself by integrating new technologies and expanding the electricity sector value chain to encompass various activities and participants, marking an unprecedented shift. The country actively fosters domestic capabilities to harness its renewable energy potential and reduce reliance on energy imports, indicating a robust commitment to sustainable energy development.

<b>Internal factors</b>	<b>Strengths (S)</b>	<b>Weaknesses (W)</b>
<b>External factors</b>	S: Diverse Energy Sources S: Renewable Energy Potential S: Strategic Location S: Investment Opportunities S: Advanced Infrastructure	W: Dependency on Imports W: Insufficient R&D W: Regulatory Challenges W: Environmental Concerns W: Energy Efficiency
<b>Opportunities (O)</b>	<b>SO strategy</b>	<b>WO strategy</b>
O: Renewable Energy Growth O: Energy Efficiency Programs O: Regional Collaboration O: Technological Advancements O: Green Energy Investments	<ul style="list-style-type: none"> <li>• Renewable Energy Expansion</li> <li>• Investment Facilitation</li> <li>• Regional Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Allocate funds for R&amp;D</li> <li>• Streamlined Regulations</li> <li>• Capacity Building</li> </ul>
<b>Threats (T)</b>	<b>ST strategy</b>	<b>WT strategy</b>
T <sub>1</sub> : Geopolitical Tensions T <sub>2</sub> : Price Volatility T <sub>3</sub> : Climate Change T <sub>4</sub> : Technological Disruptions T <sub>5</sub> : Market Competition	<ul style="list-style-type: none"> <li>• Diverse Energy Sources</li> <li>• Investment in Infrastructure</li> <li>• Technological Upgradation</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing Dependency</li> <li>• Environmental Regulations</li> <li>• Climate Adaptation</li> </ul>

Since the in-depth review of Türkiye’s energy policies by the IEA in 2016,<sup>23</sup> the nation has remained committed to market reform and energy security. To address this, Türkiye has developed a significant energy strategy based on three pillars: (1) a prioritization of securing its energy supply by (2) boosting its domestic production of energy and (3) advancing the liberalization of energy markets (that are disclosed below). This central strategy drives Türkiye to undertake significant energy system restructuring, aiming to rationalize demand growth, reduce energy prices for consumers, and slow down import expansion. These reforms also encompass modernization, liberalization, and increased domestic production capacity, driven by private and foreign investments.

### Security of energy supply

Energy security refers to a nation’s ability to reliably and consistently meet its energy needs without disruptions, ensuring a stable, affordable, and sustainable energy supply

<sup>22</sup> Frost & Sullivan, Turkish electricity market, forecast to 2030, August 29, 2019, <https://store.frost.com/turkish-electricity-market-forecast-to-2030.html>.

<sup>23</sup> IEA, “Energy Policies of IEA Countries 2016 Review Turkey,” International Energy Agency, 2016, <https://iea.blob.core.windows.net/assets/07870364-750a-4231-a649-7c84c5d4b2f7/EnergyPoliciesofIEACountriesTurkey.pdf>.



for its economy and citizens. In the case of Türkiye, given its significant reliance on imported oil and gas, the approach for its energy security strategy involves three aspects: enhancing domestic oil-gas exploration and production, broadening the sources of oil and gas supplies and related infrastructure, and lowering energy consumption through improved energy efficiency measures.

Türkiye's energy strategy aims to fulfil the increasing energy needs of the country sustainably, encompassing both economic and environmental aspects.<sup>24</sup> One of the main concerns for Türkiye is that its energy supply is highly dependent on imports. Despite the rapid growth in domestic energy production (witnessing a remarkable 59% growth in 2014-2019, especially propelled by a significant 54% of the total energy production coming from renewable sources),<sup>25</sup> Türkiye relies primarily on energy imports for its supply. In those years, nearly all natural gas was imported, and domestic oil production accounted for only 7% of total demand.<sup>26</sup> Domestic coal production was larger, but despite recent growth, Türkiye still relied on imports for 58% of its coal demand.<sup>27</sup> The need of importing resources to meet Türkiye's primary energy consumption leads to a new strategy of enhancing and upstreaming domestic energy production. While Türkiye imports around 25 to 30 million oil tons a year, especially from Russia and Iraq; its domestic annual production of oil stands at 3 million oil tons (serving to only 7% of the country oil consumption). Regarding natural gas, Türkiye produces 0.379 billion cubic meters of natural gas (out of more than the 50 billion cubic meters of the country gas consumption).<sup>28</sup>

Beyond upstream efforts, Türkiye has successfully enhanced natural gas security by diversifying its import sources (Russia, Iran, Iraq, Azerbaijan and Saudi Arabia are its most energy providers) and transportation routes. The country has significantly bolstered its gas import infrastructure by expanding its gas network through new diversified supply sources, increasing the capacity of existing pipelines and introducing new ones, such as the TurkStream route from Russia and the TANAP route from Azerbaijan. Regarding oil supply, Türkiye has also diversified its sources and transportation methods similarly, considering Iran, Iraq, Russia, and Saudi Arabia as its key partner suppliers.

Another way to tackle the energy import-export gap is trying to slow its consumption growth rate by improving efficiency. In pursuit of this end, the 2nd National Energy

---

<sup>24</sup> Deloitte, "Turkish Energy Market Outlook Achievements, Overview and Opportunities," World Energy Council, October 2016, <https://tyrkiet.um.dk/en/-/media/country-sites/tyrkiet-en/the-trade-council/tc-turkey-windteaser-2021.ashx>.

<sup>25</sup> IEA, "Key energy statistics," 2020, <https://www.iea.org/countries/turkiye>.

<sup>26</sup> IEA, "Turkey 2021 Energy Policy Review," 2021, [https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey\\_2021\\_Energy\\_Policy\\_Review.pdf](https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey_2021_Energy_Policy_Review.pdf).

<sup>27</sup> IEA, "Turkey 2021 Energy Policy Review."

<sup>28</sup> EIA. "Country Analysis Brief: Türkiye," 2023. US Energy Information Agency. [https://www.eia.gov/international/content/analysis/countries\\_long/Turkiye/turkiye.pdf](https://www.eia.gov/international/content/analysis/countries_long/Turkiye/turkiye.pdf)

Efficiency Action Plan (NEEAP), spanning from 2024 to 2030, strives to keep decreasing Türkiye's primary energy consumption as the 1st NEEAP (2017-2023)<sup>29</sup> pretended to do so by 14% compared to business-as-usual levels. This reduction is targeted across various sectors, including buildings and services, power and heat, transport, industry and technology, agriculture, and cross-cutting areas. However, progress to date on this objective needs to be completed. To improve efficiency, additional efforts by the NEEP SCB (institution in charge of controlling<sup>30</sup> and ensuring the best possible implantation of the plan) shall be taken to meet all expectations drawn. Given the interconnected global landscape, successful implementation of this strategy must increasingly rely on collaboration at both intergovernmental and investor levels. For example, additional financial joint support by organizations such as the WB<sup>31</sup> and the EU<sup>32</sup> remains a premise.

### **Expanding domestic energy production**

Apart from the expansion of upstream oil and gas activities, Türkiye's approach to increasing domestic energy production involves two main characteristics: on the one hand, diversifying energy sources through several initiatives (renewable resources, nuclear energy, lignite mining); on the other, expanding energy-associated infrastructure to allow Türkiye to adapt resiliently to changing energy landscapes, to meet diverse energy demands, and to navigate global energy challenges effectively. The intended energy mix as a base load clean source of Turkish power needs to be provided by the creation and improvement of energy infrastructure (through both conventional large-scale nuclear power plants and small modular reactors, also known as "SMR"). Given that the negotiation of plans for nuclear power is a key aspect for the country's aim for economic growth, it is worthy to say the financial role of Russia regarding Türkiye's nuclear capacity, and the negotiations with Korean, Franco-Japanese and Chinese companies for the construction of nuclear power reactors (Akkuyu, Sinop and Igneada, respectively)<sup>33</sup>.

---

<sup>29</sup> Republic of Turkey Ministry of Energy and Natural Resources, "National Energy Efficiency Action Plan Türkiye," National Energy Efficiency Action Plan, 2018, <https://policy.asiapacificenergy.org/sites/default/files/National%20Energy%20Efficiency%20Action%20Plan%20%28NEEAP%29%202017-2023%20%28EN%29.pdf>.

<sup>30</sup> Republic of Türkiye, Climate Change Presidency, "Eighth National Communication and Fifth Biennial Report of Türkiye under the UNFCCC," 2023, <https://www.iklim.gov.tr/db/english/dokumanlar/eight-national--8230-1105-20230601110557.pdf>.

<sup>31</sup> IBRD, "Project Appraisal Document To The Republic Of Turkey For An Energy Efficiency In Public Buildings Project," International Bank for Reconstruction and Development. Energy & Extractives Global Practice Europe And Central Asia Region, October 1, 2019, <https://documents1.worldbank.org/curated/en/195431573268453378/text/Turkey-Energy-Efficiency-in-Public-Buildings-Project.txt>.

<sup>32</sup> DG Near, "IPA III Annual Action Plan in Favour of Turkey for 2021," European Neighbourhood Policy and Enlargement Negotiations (DG NEAR), 2021, [https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/strategy-and-reports\\_en](https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/strategy-and-reports_en).

<sup>33</sup> World Nuclear Association, "Nuclear Power In Turkey," September 2023, <https://world-nuclear.org/information-library/country-profiles/countries-t-z/turkey.aspx>

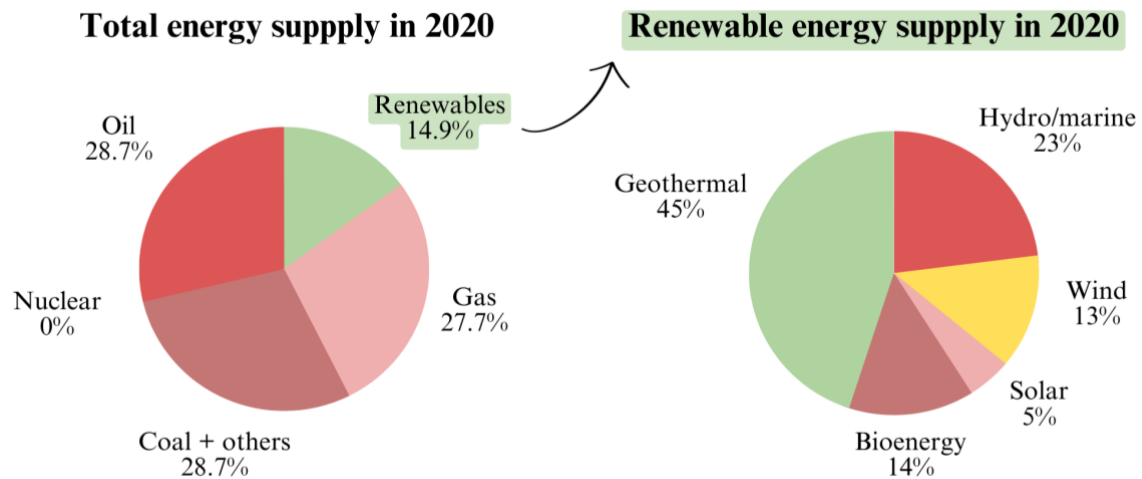
### Türkiye’s renewable energy installed capacity<sup>34</sup>

#### Total Installed Renewable Energy Capacity (MW) by Source (%) and Year

	2018	2019	2020	2021	2022
Total renewable energy	42,230.393	44,388.542	49,195.384	53,175.324	55,943.424
Hydropower	66.99%	64.21%	62.98%	59.22%	56.43%
Wind	16.58%	17.1%	17.95%	19.94%	20.37%
Solar	11.99%	13,5%	13.55%	14.69%	16.84%
Other sources	4.44%	5.19%	5.52%	6.15%	6.36%

Geothermal energy is not being considered to the aim of this table

### Türkiye’s 2020 total energy supply distribution<sup>35</sup>



© IRENA, 2023, Source: IRENA (2023), Türkiye statistical profile (August 2023)

The first principal diversification involves the expansion of energy supply options. To secure energy supply through competitive and transparent means, utilizing local and renewable sources is a top priority for Türkiye.<sup>36</sup> Notably, it has successfully diversified its energy mix, witnessing remarkable growth in renewable energy, including a threefold

<sup>34</sup> IRENA, “Installed Renewable Electricity Capacity (MW) by Region/Country/Area, Technology and Year,” IRENASTAT Online Data Query Tool, 2023, [https://pxweb.irena.org/pxweb/en/IRENASTAT/IRENASTAT\\_\\_Power%20Capacity%20and%20Generation/RECAP\\_2023\\_cycle2.px/table/tableViewLayout1/](https://pxweb.irena.org/pxweb/en/IRENASTAT/IRENASTAT__Power%20Capacity%20and%20Generation/RECAP_2023_cycle2.px/table/tableViewLayout1/).

<sup>35</sup> IRENA, “Energy profile Türkiye,” August 8, 2023, [https://www.irena.org/-/media/Files/IRENA/Agency/Statistics/Statistical\\_Profiles/Eurasia/Turkiye\\_Eurasia\\_RE\\_SP.pdf](https://www.irena.org/-/media/Files/IRENA/Agency/Statistics/Statistical_Profiles/Eurasia/Turkiye_Eurasia_RE_SP.pdf).

<sup>36</sup> Dilek Temiz and Aytac Gokmen, “The Importance of Renewable Energy Sources in Turkey ,” International Journal of Economics and Finance Studies, 2010, [https://www.sobiad.org/eJOURNALS/journal\\_IJEF/archieves/2010\\_2/03dilek\\_temiz.pdf](https://www.sobiad.org/eJOURNALS/journal_IJEF/archieves/2010_2/03dilek_temiz.pdf), 24.

increase in renewable electricity generation over the past decade. In fact, Türkiye currently has the 12th largest renewable energy capacity in the world. While the global installed capacity for renewable energy experienced an 8.8% growth since 2011 and reaching 3,372 GW in 2022, Türkiye’s renewable energy installed capacity demonstrated a Compound Annual Growth Rate (CAGR) of 10.3%, reaching 56.4 GW.<sup>37</sup> Furthermore, the commissioning of Türkiye’s inaugural nuclear power facility in 2023 broadens the country’s fuel sources even more.

The second aspect of Türkiye to consider when it comes to expanding domestic energy production is making progress in new source discoveries, pipelines, and LNG terminals and enhancing storage facilities. Hereafter is presented a table with the most relevant oil and gas pipelines and projects.

### **Türkiye’s most relevant energy pipelines and on-going projects**

Pipeline or Project	Energy Source	Comissioned	Countries
Kirkuk-Yumurtalık Pipeline	Crude Oil	1970	Iraq-Türkiye
Baku-Tbilisi-Ceyhan Pipeline (BTC)	Crude Oil	2006	Azerbaijan-Georgia-Türkiye
Tabriz-Ankara Pipeline	Natural Gas	2001	Iran-Türkiye
Blue Stream Pipeline	Natural Gas	2005	Russia-Türkiye
South Caucasus Pipeline (BTE)	Natural Gas	2006	Azerbaijan-Georgia-Türkiye
Türkiye-Greece Pipeline (ITG)	Natural Gas	2007	Türkiye-Greece
Trans-Anatolian Pipeline (TANAP)	Natural Gas	2018	Türkiye
TurkStream Pipeline	Natural Gas	2020	Russia-Türkiye
Southern Gas Corridor	Natural Gas	2014	Europe-Middle East-Türkiye
Saros FSRU terminal	Natural Gas	2023	Oman-Türkiye
BOTAS and Bulgargaz	Natural Gas	2023	Bulgaria-Türkiye
Sakarya Gas Field	Natural Gas	2023	Türkiye (Black Sea)
Caycuma-1 Gas Field	Natural Gas	2023	Türkiye (Black Sea)
Akkuyu Nuclear Power Plant	Nuclear	2023	Türkiye
Renew Israel-Turkey Collaboration	To determine	2023	Israel-Türkiye
Possible Three Gulf States Partnership	To determine	2023	UAE-Qatar-Saudi Arabia-Türkiye

© Republic of Türkiye Ministry of Energy and Natural Resources, 2023, Source: Republic of Türkiye MENR (November 2023)

### **Energy market liberalization**

Türkiye’s energy strategy’s third pillar advances towards liberalizing energy markets and enhancing pricing predictability and transparency. Following the liberalization and

<sup>37</sup> PWC, “Overview of the Turkish Electricity Market,” Turkish Electricity Market, September 2023, <https://www.pwc.com.tr/tr/sectorler/enerji/turkiye-elektrik-piyasasina-genel-bakis-2021.pdf>, 43.

privatization of the electricity market in 2001,<sup>38</sup> private entities gained access to electricity generation, distribution, and supply alongside state-owned companies.

A significant milestone was the establishment of the Energy Exchange Istanbul (EXIST) in March 2015, a crucial step toward liberalizing the electricity and gas markets. Organized wholesale electricity markets and gas trading platforms have been operational on EXIST since then. Efforts to develop physically settled power and natural gas futures markets are currently underway. The market's depth and liquidity are expected to benefit from the new derivatives market establishments. These platforms offer vital price signals to investors and stakeholders, enhancing further market transparency.

On a broader scale, implementing further measures to establish competitive energy markets and encourage increased private sector involvement will facilitate the mobilization of essential investments into the energy sector. The Turkish government has made big strides toward investing in its position as a regional energy trading center and as an international gas trading hub. The pretended expansion of its trading platforms and energy resources is expected to be launched by future contracts with other country public institutions and private international investors.

Through collaborative efforts, public institutions<sup>39</sup> and private agents<sup>40</sup> in Türkiye created a dynamic and competitive energy sector, fostering investments, innovation, and sustainable energy development. Therefore, the regulation and operation of the electricity market carried by public institutions are increasingly enabling private partners to foster competition and production.

---

<sup>38</sup> OECD, "Energy Policies of IEA Countries Emission Factors 2023 Turkey 2001 Review," International Energy Agency, 2001, [https://iea.blob.core.windows.net/assets/bf862218-7fd8-4637-aca6-5a347b6ca4f1/IEA\\_Methodology\\_Emission\\_Factors\\_2023.pdf](https://iea.blob.core.windows.net/assets/bf862218-7fd8-4637-aca6-5a347b6ca4f1/IEA_Methodology_Emission_Factors_2023.pdf).

<sup>39</sup> IEA, "Turkey 2021 Energy Policy Review."

<sup>40</sup> PWC, "Overview of the Turkish Electricity Market."

## CONCLUSION

### Rhetoric vs. reality

The level of uncertainty surrounding the macro-financial situation of Türkiye remains high. In 2023, Türkiye's GDP experienced a milder slowdown than predicted. Although it seemed to be a quick rebound after the devastating earthquakes, consumer confidence peaked after the elections, motivated by the crash of the Türkiye's currency. Accelerating inflation is expected to be one of the most notable features of its economy, as well as its financial imbalances concerning the cumulative deficit on its budget and its current account.

Notably, in comparison with its latest macroeconomic indicators recorded, it presents a tricky roadmap that will be shaped by the application of a strict economic policy framework aimed at turning around Türkiye's primary imbalances. Reviewing all plausible scenarios and the consequences that monetary policy shifts could deliver, Türkiye's economic performance is expected to be moderate, in search of stabilization. However, the energy sector is projected to foster resilient and sustainable growth. Türkiye is gaining power on its intended role as a regional energy hub, driven by increasing investments in renewable energy sources, infrastructure development, and diversification efforts.

In conclusion, despite the challenges posed by this year's devastating earthquakes, financial setbacks and Erdogan's new presidential term, Türkiye has demonstrated resilience and the ability to adapt to changing circumstances. With the prospect of becoming a regional energy hub, Türkiye is expected to continue to grow and play a significant role in the region's geopolitical landscape.

## BIBLIOGRAPHY

ABBASSI Ebrahim, Bijan Baseri, and Shima Salehi Alavi. "The Effect of Budget Deficit on Current Account Deficit: Evidence from Iran ." Journal of Economics and Sustainable Development, 2015. <https://core.ac.uk/download/pdf/234647166.pdf>.

ALIRIZA, Bulent, and Zeynep Yekeler. "The Turkish Economic Slowdown in 2018." CSIS, March 20, 2019. <https://www.csis.org/analysis/turkish-economic-slowdown-2018>.

BAKER MCKENZIE. "Who Regulates Banking and Financial Services in Your Jurisdiction? Turkey." Global Financial Services Regulatory Guide, 2023. <https://resourcehub.bakermckenzie.com/en/resources/global-financial-services-regulatory-guide/eur-op-e-middle-east-and-africa/turkey/topics/who-regulates-banking-and-financial-services-in-your-jurisdiction>.

BUGRAHAN Karaveli, Abdullah. "World Energy Issues Monitor | 2022 Turkey." world energy council, March 2022. [https://www.worldenergy.org/assets/downloads/World\\_Energy\\_Issues\\_Monitor\\_2022\\_Turkey\\_complementary.pdf](https://www.worldenergy.org/assets/downloads/World_Energy_Issues_Monitor_2022_Turkey_complementary.pdf).

CAMBRIDGE DICTIONARY. Gangbusters, 2023. <https://dictionary.cambridge.org/dictionary/english/gangbusters#:~:text=go%2Fgrow%2C%20etc.&text=to%20show%20a%20large%20amount,like%20gangbusters%20for%20several%20years>.

DELOITTE. "Turkish Energy Market Outlook Achievements, Overview and Opportunities." World Energy Council, October 2016. <https://tyrkiet.um.dk/en/-/media/country-sites/tyrkiet-en/the-trade-council/tc-turkey-windteaser-2021.ashx>.

DEMIRALP, Selva. "Turkey's Economic U-Turn?" IEA, July 17, 2023. <https://iea-world.org/turkeys-economic-u-turn/>.

DG NEAR. "IPA III Annual Action Plan in Favour of Turkey for 2021." European Neighbourhood Policy and Enlargement Negotiations (DG NEAR), 2021. [https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/strategy-and-reports\\_en](https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/strategy-and-reports_en).

EIA. "Country Analysis Brief: Türkiye," 2023. US Energy Information Agency. [https://www.eia.gov/international/content/analysis/countries\\_long/Turkiye/turkiye.pdf](https://www.eia.gov/international/content/analysis/countries_long/Turkiye/turkiye.pdf)

ELGENDY, Karim. "A Blueprint for Turkey's Resilient Reconstruction and Recovery Post-Earthquake." Atlantic Council, June 20, 2023. <https://www.atlanticcouncil.org/blogs/turkeysources/a-blueprint-for-turkeys-resilient-reconstruction-and-recovery-post-earthquake/>.

FROST & SULLIVAN. Turkish electricity market, forecast to 2030, August 29, 2019. <https://store.frost.com/turkish-electricity-market-forecast-to-2030.html>.

HALDANE, Andrew G. "Tails of the Unexpected." Bank of England, June 8, 2012. <https://www.bankofengland.co.uk/-/media/boe/files/speech/2012/tails-of-the-unexpected.pdf>.



IEA. Key energy statistics, 2020. <https://www.iea.org/countries/turkiye>.

IEA. “Energy Policies of IEA Countries 2016 Review Turkey.” International Energy Agency, 2016. <https://iea.blob.core.windows.net/assets/07870364-750a-4231-a649-7c84c5d4b2f7/EnergyPoliciesofIEACountriesTurkey.pdf>.

IEA. “Turkey 2021 Energy Policy Review,” 2021. [https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey\\_2021\\_Energy\\_Policy\\_Review.pdf](https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey_2021_Energy_Policy_Review.pdf).

IMF, “Republic of Türkiye”. International Monetary Found. <https://www.imf.org/en/Countries/TUR>

IBRD. “Project appraisal document to the republic of turkey for an energy efficiency in public buildings project.” International Bank for Reconstruction and Development, Energy & Extractives Global Practice Europe And Central Asia Region, October 1, 2019. <https://documents1.worldbank.org/curated/en/195431573268453378/text/Turkey-Energy-Efficiency-in-Public-Buildings-Project.txt>.

IRENA. “Energy Profile Türkiye,” August 8, 2023. [https://www.irena.org/-/media/Files/IRENA/Agency/Statistics/Statistical\\_Profiles/Eurasia/Turkiye\\_Eurasia\\_RE\\_SP.pdf](https://www.irena.org/-/media/Files/IRENA/Agency/Statistics/Statistical_Profiles/Eurasia/Turkiye_Eurasia_RE_SP.pdf).

IRENA. “Installed Renewable Electricity Capacity (MW) by Region/Country/Area, Technology and Year.” IRENASTAT Online Data Query Tool, 2023. [https://pxweb.irena.org/pxweb/en/IRENASTAT/IRENASTAT\\_\\_Power%20Capacity%20and%20Generation/RECAP\\_2023\\_cycle2.px/table/tableViewLayout1/](https://pxweb.irena.org/pxweb/en/IRENASTAT/IRENASTAT__Power%20Capacity%20and%20Generation/RECAP_2023_cycle2.px/table/tableViewLayout1/).

KNIGHT, Adam, and Aisling Kavanagh. “Financial Resilience: Building and Fostering Trust.” Deloitte United Kingdom, December 15, 2020. <https://www2.deloitte.com/uk/en/blog/risk-powers-performance/2020/financial-resilience-building-and-fostering-trust.html>.

LIBOREIRO, Jorge. “EU Countries Are Haggling over How to Tackle High Debt and Deficit. Here’s Why It Matters.” euronews, October 23, 2023. <https://www.euronews.com/my-europe/2023/10/23/eu-countries-are-haggling-over-how-to-tackle-high-debt-and-deficit-heres-why-it-matters>.

MINISTRY of Energy and Natural Resources. “National Energy Efficiency Action Plan Türkiye.” National Energy Efficiency Action Plan, 2018. <https://policy.asiapacificenergy.org/sites/default/files/National%20Energy%20Efficiency%20Action%20Plan%20%28NEEAP%29%202017-2023%20%28EN%29.pdf>.

MINISTRY of Treasury and Finance, Republic of Turkey. “New Economy Program .” Medium Term Program, 2020. <https://ms.hmb.gov.tr/uploads/2020/10/New-Economy-Program-2021-2023.pdf>.

MINISTRY of Energy and Natural Resources. “Türkiye Announces National Energy Plan and Hydrogen Strategy.” Republic of Türkiye Ministry of Energy and Natural Resources, January 19, 2023. <https://enerji.gov.tr/news-detail?id=21111>.

NOGAY, Gazi, and Seval Ocak. “Türkiye’s 12th Development Plan Presented to Turkish Parliament.” Anadolu Ajansı, October 17, 2023. <https://www.aa.com.tr/en/turkiye/turkiye-s-12th-development-plan-presented-to-turkish-parliament/3022408#>.

OECD. “Energy Policies of IEA Countries Emission Factors 2023 Turkey 2001 Review.” INTERNATIONAL ENERGY AGENCY, 2001.

[https://iea.blob.core.windows.net/assets/bf862218-7fd8-4637-aca6-5a347b6ca4f1/IEA\\_Methodology\\_Emission\\_Factors\\_2023.pdf](https://iea.blob.core.windows.net/assets/bf862218-7fd8-4637-aca6-5a347b6ca4f1/IEA_Methodology_Emission_Factors_2023.pdf).

OECD. “Resilience in a time of high debt,” November 23, 2017.

<https://www.oecd.org/economy/outlook/Resilience-in-a-time-of-high-debt-november-2017-OECD-economic-outlook-chapter.pdf>.

PEACH, Liam. “Turkey’s Policy Shift: Promising Start, but a Lot More to Do.” Turkey’s policy shift: promising start, but a lot more to do , August 31, 2023.

<https://www.capitaleconomics.com/publications/emerging-europe-economics-update/turkeys-policy-shift-promising-start-lot-more-do#no-back>.

PWC. “Overview of the Turkish Electricity Market.” Turkish Electricity Market, September 2023. <https://www.pwc.com.tr/tr/sectorler/enerji/turkiye-elektrik-piyasasina-genel-bakis-2021.pdf>.

Republic of Türkiye, Climate Change Presidency, “Eighth National Communication and Fifth Biennial Report of Türkiye under the UNFCCC,” 2023,

<https://www.iklim.gov.tr/db/english/dokumanlar/eight-national--8230-1105-20230601110557.pdf>.

ROGALEWICZ, Adam. “Economic Crisis in Turkey.” The Warsaw Institute Review, November 30, 2022. [https://warsawinstitute.review/news-en/impact-of-the-sars-cov-2-pandemic-on-the-tourism-sector-in-the-european-union-2/#\\_ftn3](https://warsawinstitute.review/news-en/impact-of-the-sars-cov-2-pandemic-on-the-tourism-sector-in-the-european-union-2/#_ftn3).

TAGLIAPIETRA, Simone. “Turquía y La Geopolítica Regional Del Gas Natural. La ‘Visión Centro’ a La Luz de Las Futuras Perspectivas Del Corredor Sur de Gas.” IEMed, 2019. <https://www.iemed.org/publication/turquia-y-la-geopolitica-regional-del-gas-natural-la-vision-centro-a-la-luz-de-las-futuras-perspectivas-del-corredor-sur-de-gas/?lang=es>.

TEMİZ, Dilek, and Aytac Gokmen. “The Importance of Renewable Energy Sources in Turkey.” International Journal of Economics and Finance Studies, 2010.

[https://www.sobiad.org/eJOURNALS/journal\\_IJEF/archieves/2010\\_2/03dilek\\_temiz.pdf](https://www.sobiad.org/eJOURNALS/journal_IJEF/archieves/2010_2/03dilek_temiz.pdf).

WEITZMAN, Martin L. “Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change.” Department of Economics, Harvard University, 2011.

<https://scholar.harvard.edu/files/weitzman/files/fattaileduncertaintyeconomics.pdf>.

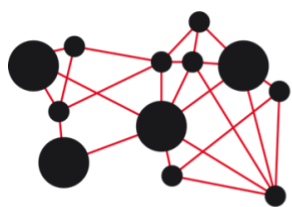
WORLD BANK. “Turkey Economic Monitor: Sailing Against The Tide.” World Bank, February 26, 2022. <https://www.worldbank.org/en/country/turkey/publication/economic-monitor>.

WORLD BANK. “World Bank Approves \$1 Billion for Türkiye to Help Restore Rural Homes and Essential Public Services to People in Earthquake-Hit Areas.” World Bank, June 27, 2023.

<https://www.worldbank.org/en/news/press-release/2023/06/27/world-bank-approves-1-billion-for-turkiye-to-help-restore-rural-homes-and-essential-public-services-to-people-in-earthqu>.

WORLD NUCLEAR ASSOCIATION, “Nuclear Power In Turkey,” September 2023,

<https://world-nuclear.org/information-library/country-profiles/countries-t-z/turkey.aspx>



CENTER FOR  
**GLOBAL  
AFFAIRS**  
& STRATEGIC STUDIES



Universidad  
de Navarra