

IPC-MERCATOR POLICY BRIEF

TURKEY'S ENERGY FUTURE IN AN UNCERTAIN WORLD – FIVE PRIORITIES FOR A VIABLE ENERGY STRATEGY

Jörn Richert

Executive Summary

Turkey's economy and security are strongly affected by the country's steadily increasing energy needs. The government is well aware of this fact and has put major emphasis on energy policy making, both domestically and internationally. The challenge, however, is that such efforts take place within a constantly changing global environment. In recent years, energy governance has been influenced by developments such as the increasing importance of unconventional oil and gas production in the United States, the economic crises in Europe and their effects on European energy demand, the increasing certainty about the negative impact of climate change, and crises such as in Iraq and Syria, as well as Ukraine.

What can Turkey do to develop a viable energy strategy in this uncertain environment? This policy brief presents five priorities for formulating such a strategy. The groundwork for these priorities was laid at the expert roundtable "Turkish Energy Leadership, Europe and the Future of the Global Energy Order" at Istanbul Policy Center (IPC). The workshop convened representatives from business, science, and civil society. Participants discussed Turkey's fossil and renewable energy situation, its potential for leadership and becoming an energy hub, as well as its relation to the European Union. This policy brief presents the author's interpretation and elaboration of this discussion.

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The interpretations and conclusions made in this article belong solely to the author and do not reflect IPC's official position.

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I. Strategic Energy Planning — Extending Scope, Increasing Excellence

The first step in responding to global energy challenges is to be well-prepared. Strategic planning enhances policy performance by means of forecasting, foresight, and future-proof strategy development. The Energy Ministry's five-year strategic plans already constitute a useful foundation for Turkey's energy policy making. There are two challenges, however, that have not been fully anticipated by the current approach to strategic planning. First, energy investment decisions are usually made based on a time horizon spanning over several decades. Compared to these horizons, policy planning periods up to 2023 or even 2030 are relatively short. This mismatch creates uncertainty about what happens in the years thereafter. Potential future policy changes are one of the most prevalent aspects upon which investment decisions are based. Second, energy developments are inherently uncertain. Political, technological, and market developments have the potential to significantly change the energy outlook in comparatively brief amounts of time. This uncertainty has not been sufficiently taken into account.

To ensure that the investment needs of the energy sector are met and that Turkey is prepared for future challenges and changes in the energy sector, the country should extend the temporal scope and increase the quality of its strategic energy planning efforts.

Existing strategic plans should be coupled with the development of a long-term vision of Turkish energy policy making. A major step to accomplish this is to extend the time horizon of energy planning from 2030 to at least 2050. A 2050 roadmap should elaborate on a clear vision of where Turkey sees itself in the future in terms of energy

demand, supply, and politics. This vision should be tested against multiple possible futures regarding global and regional economic, geopolitical, technological, and energy political developments. What would this vision mean, for example, in the case that sustainable energy transition globalizes over the next two decades? Is Turkey's energy policy based on realistic assumptions regarding future technological development? Would the vision work if not only unconventional oil but also unconventional gas increasingly changed the global energy landscape until then? A third important dimension is the interaction between different parts of the overall energy system. How, for example, could energy efficiency and renewable energy policies enhance Turkey's role as an energy hub by freeing up gas volumes for export?

A crucial factor in developing a viable strategic planning process is to increase the quality of strategic planning by consciously taking into account a variety of foresight and forecasting methods such as formal modeling and qualitative, normative, and exploratory scenario analysis. It is crucial, furthermore, to clearly define and operationalize key terms such as "energy hub" or "energy leader." For achieving these aims, Turkish authorities should put increasing emphasis on collaborations with domestic and international research institutions and build on their expertise.

II. Private Investment – Increasing Transparency and Stability in the Market and Legal System

Turkey is relying on private investment for developing the energy sector. Such investment, however, is conditional on legal and economic frameworks that shield investors against ad hoc political interference and allow them to calculate their potential costs and benefits. Investors prefer transparent and consistent regulations, as well as transparent and market-based pricing and distribution mechanisms. Any violation of these conditions increases investment risk and, thus, makes a market less attractive, reducing overall investment volumes.

In order to realize sufficient private energy investment, the Turkish government should work towards providing a transparent and consistent legal environment. From an investor's perspective, laws and regulations, first of all, need to be accessible and understandable. Turkey should thus provide a central access point for energy investors – a one-stop shop – that informs investors about relevant laws and regulations and establishes contacts with other significant state actors. Particularly for foreign investors, laws and regulations should be translated into foreign languages, English most importantly, so as to facilitate foreigners' entry into the Turkish market.

To ensure transparency, consistency, and simplicity, Turkey should conduct a regulatory audit of existing energy-related regulations that identifies regulatory inconsistencies and uncertainties. Such inconsistencies and uncertainties constitute a significant hurdle for investment and should thus be removed.

Another investment hurdle is the anticipation of potential future policy changes and reversals of

regulations. In the context of the abovementioned strategic planning exercises, therefore, Turkey should formulate and convincingly commit itself to a concrete, long-term domestic energy law and market vision.

A further crucial factor with regard to transparency lies in price formation. Following the Energy Market Law of 2013 (Law No. 6446), Turkey launched an Energy Market Operation Joint Stock Company (EPIAŞ) in April 2015. This new company established an energy spot exchange. For making the exchange work, it is of the utmost importance to guarantee transparency of operations and minimize political involvement. To lay the groundwork for becoming an energy hub, furthermore, Turkey needs to quickly expand the operations of the new Stock Exchange to include well-functioning markets both for the electricity derivatives (futures) and for the spot and derivative oil and gas markets.

III. Efficiency and Renewable Energy — Exploiting Domestic Strengths

The best way to prepare for uncertainties in the global energy sector is to exploit Turkey's domestic strengths on two fronts. The first of these strengths lies in the potential to increase energy efficiency. Every unit of energy that is saved at home makes the country economically stronger and more secure. It reduces Turkey's import dependency as well as the import bill for fossil fuels, which is estimated to amount to 61 billion USD in 2014 alone. Energy efficiency measures can substantially reduce this bill, with savings potential estimated at more than 16 billion USD annually. The promotion of transparent market-based energy pricing as elaborated above can contribute to raising energy efficiency when implicit price supports are reduced. An energy price that reflects the actual cost of energy can contribute to a heightened awareness of energy usage and provide incentives for energy saving.

With its Energy Efficiency Law of 2007 (No. 5627) and 2012 Strategic Paper, Turkey has already made important steps with regard to more specific energy efficiency policies: It should continue to pursue its goal of reducing energy intensity by 20% between 2008 and 2023. Despite this solid legislative framework, however, Turkey has, as a recent World Bank analysis shows, not yet sufficiently implemented its strategy. It lacks energy efficiency incentives that are specifically directed at groups such as house owners and commercial buildings, and monitoring and evaluation practices are still insufficient. The creation of an independent energy efficiency agency would help to realize the implementation of Turkey's energy efficiency strategy. Special consideration should be given to low-cost, high-impact cases of potential energy efficiency gains.

Turkey should also reinforce its commitment to raising public awareness of the benefits of

energy efficiency. Economic and societal actors are the ultimate consumers of energy. Changes in their preferences and behavior might result in substantial energy savings and thus contribute to supply security. The lack of such changes might render policy instruments, for example investment incentives, ineffective when stakeholders do not embrace them. It is thus worthwhile to step up efforts towards a greater public awareness regarding the financial and societal value added of energy savings, sustainable behavior, and business strategies. One way to do so is to push for free energy savings consulting. For firms, such consulting might result in reduced energy costs and thus increasing competitiveness. Also, for individuals and families, a greater focus on energy savings might reduce household energy expenses.

Turkey ranks first in Europe regarding wind and geothermal potential and second regarding solar energy potential. Therefore, a second priority in exploiting Turkey's domestic energy strengths is to make use of this formidable renewable energy potential. In doing so, governance reforms are needed. While the country has introduced feed-in tariffs that are valid for projects realized until the end of 2020, several shortcomings have been identified. To guarantee sufficient investment into renewable energy, Turkey should enact a level of feed-in tariffs that takes into account two guiding prices: the actual production cost of renewable energy and the real cost of alternative fossil and nuclear fuels. The latter consists of concrete generation costs plus the externalities and risks deriving from fossil and nuclear energy. Externalities and risks include local environmental degradation, carbon emissions, and negative climate consequences, as well as future uncertainty regarding volatile and potentially rising fossil fuel prices and the risks of nuclear accidents. A realistic feed-in tariff should increase the price that investors can realize when

selling renewable electricity at least to the level of the real price of fossil fuel plus an adequate margin of return. To be effective for generating investment, furthermore, such tariff should be set at the level of actual electricity generation costs of renewable energy technologies plus an adequate margin of return. An adequate margin of return is one that equals the margins that investors might realize in alternative investments with similar investment duration and a similar risk profile. As mentioned above, the risk profile itself can be improved by ensuring transparency and predictability in regulation and planning.

To avoid difficulties that have previously been experienced in states like Germany, Turkey should supplement its renewable energy support scheme with a monitoring mechanism that keeps track of actual investment and allows for a timely adaptation of feed-in tariffs when the abovementioned prices change. Transparency and predictability are important to avoid increasing investment risks. Turkey should furthermore secure sufficient grid stability and encourage investment accordingly. In line with the abovementioned points on enhancing the legal investment environment, Turkey should strive to increase the efficiency and speed of approval procedures of renewable energy facilities regarding their grid connection and system usage.

IV. Stakeholder Participation — Ensuring Efficient Policy Implementation

Energy policies do not unfold in a vacuum. They affect the economy, the environment, and Turkey's international reputation, as well as the everyday life of Turkish citizens. The success of energy policies depends on these interactions. Discarding them may lead to policy failure. Therefore, to make Turkey's energy policy effective and successful, these interactions need to be considered, and stakeholder participation needs to be ensured. It is

in Turkey's long-term interest to give ample room in policy formulation processes to stakeholders from different sectors of the economy as well as from civil society. These actors should be given the realistic opportunity to comment on proposed laws and regulations, and their comments should be taken seriously. These stakeholders often have deep practical knowledge and can thus give valuable input on regulatory design. Moreover, it is only when stakeholders accept laws and regulations that there is some assurance that these policies will not suffer from stakeholder ignorance or resistance. Engaging stakeholders early on is key to reducing such resistance.

Stakeholder participation is just as important in the abovementioned strategic planning process. Long-term planning in a democratic state must account for the possibility of changing governments and party coalitions. In order to create a lasting strategic plan that withstands beyond a single election period, therefore, it is essential to build consensus beyond party lines and the narrow confines of the political system. Non-governmental stakeholders themselves should form coalitions and demand such participation from state authorities. Another important point for increasing stakeholder participation is to allow for sufficient debate in parliament on matters of energy policy and for effective parliamentary oversight by all parties over executive actions in the energy sector.

V. Energy Foreign Policy and Its Relation to Europe – Pragmatism and Decision-Making

A fifth and final priority for Turkish energy policy making is to reconsider its foreign energy policy stance. Particularly in the later phase of Nabucco, Turkey's foreign energy policy has often been less cooperative and productive. Further, Turkey's oft-confrontational policy approach has not resulted in regional energy leadership, which has been the strategic vision of the Energy Ministry for years. To change this, Turkey needs to convince other states of its leadership position and to pursue supportive policies.

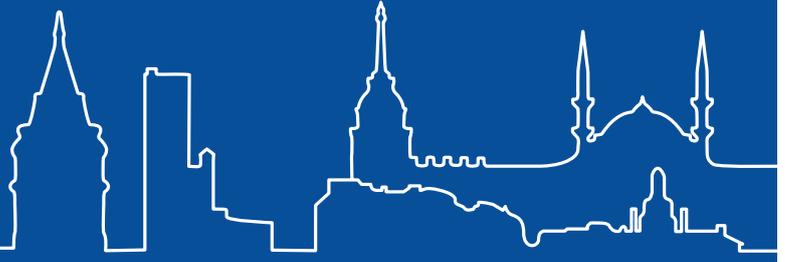
To play an important international role, Turkey should clearly define its national interests and operationalize the terms that are used to describe such interests (which is also indicative of strategic planning as mentioned above). In pursuing such, it should abstain from unrealistic demands that might unsettle its political partners or threaten the economics of concrete energy projects, thus negatively impacting Turkey's international reputation. Turkey should instead resort to regional cooperation, as well as the separation of energy governance and other more contentious policy fields, and adopt a pragmatic problem-solving attitude.

Turkey is increasingly stuck between the EU, on the one hand, and its energy dependency on Russia, on the other. It needs to navigate this tension with great care. Turkey thereby needs to consider that a rapprochement with Russia will reduce the EU's interest in further developing a Southern Corridor, since this corridor was originally envisaged as an alternative to gas transport through Russia. The more Turkey leans towards Russia, the less realistic an alternative to Russia will be. Additionally, the recent developments in Syria – including the clash of a Russian fighter jet and the Turkish army –

suggest that a rapprochement with Russia is not Turkey's best option.

Turkey's relation to the EU is thus of the utmost importance. In many of the abovementioned areas, the cooperation with the EU would prove a substantive value added – be it long-term strategic planning, establishing stable legal frameworks and functioning markets, or pushing energy efficiency and renewable energies. In short, many of the regulations that are needed to make Turkish energy policy future-proof are already in existence within the European energy framework. Turkey's approach to Europe needs to be developed before the background of the EU accession process. Here, a fundamental choice should be made: If Turkey is still taking the accession process and its political and societal integration into a post-sovereign European order seriously, and if EU membership is thus identified as a central component of Turkey's future, the opening of the energy chapter (Chapter 15) is the only way forward. In this case, Turkey should focus its efforts in lobbying for accession on the opening of this chapter. However, in the case that the Turkish government decides that EU membership and integration into its post-sovereign order does not fit into Turkey's future, the insistence on channeling EU-Turkey energy cooperation through the accession process might seriously damage Turkey's future energy performance. Since the adoption of EU regulations presents the fastest and potentially most effective way to realize many of Turkey's energy priorities even without the accession process, Turkey should instead opt for full membership in the Energy Community.

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