

On Formulating a New Energy Strategy for Turkey¹

SOHBET KARBUZ* and BARIŞ ŞANLI**

ABSTRACT

With its young population, dynamic private sector, and pivotal geographic location, Turkey is simultaneously a large energy consumer, an energy gathering and dispatching center, and an energy investor in the pan-European energy landscape. These characteristics, which make Turkey an emerging regional and global energy player, when combined with the growing gap between Turkey's energy supply and demand, necessitate a new, comprehensive, long-term energy strategy (preferably out to 2030 or later) in which the end policy goals are clearly defined, and the ways and means to achieve those goals are described in a comprehensive and coherent manner. This article discusses the basics of formulating such a strategy. It argues that such a strategy must focus on ensuring long term energy supply at affordable costs to consumers, on Turkey's geopolitical role in terms of regional and global energy concerns, and on fair competition and environmental challenges.

Although there exist several strategy documents to guide national energy sector development in Turkey, almost all have either a relatively short-term focus or no time horizon at all. However fashionable, the term “strategy” has almost always been misused or even abused in Turkey, especially in the energy field. Turkish energy policy makers have been increasingly inclined to equate strategy with listing desired goals, as opposed to figuring out how to achieve them.

In Turkey, therefore, systematic thinking about energy in terms of the integrated application of available means to accomplish desired ends is still missing. For instance, the energy strategy papers prepared by the Turkish Ministry of Foreign Affairs² in 2006 and 2009 can hardly be called *strategy* papers at all, since they do not go beyond describing the existing and planned oil and gas pipelines in the

* Director of Hydrocarbons, OME, France, karbuz@ome.org

** Member of the WEC National Committee, Turkey, barissanli@gmail.com

context of Turkey's potential East-West energy corridor role. Moreover, the 2010 energy strategic plan of the Turkish Ministry of Energy and Natural Resources (MENR)³ concentrates on establishing the desired ends to be attained but not on the means and ways of getting there.

These and other official documents containing the term “strategy” in their title demonstrate the lack of an adequate understanding of what strategy is. The purpose of strategy, in simple terms, is to design a coherent guide showing how to get where we want to go from where we are without getting stuck along the way. We can define strategy⁴ as the art and science of constructing an equation that combines a balance of ends (desired future/objectives), ways (strategic concept/courses of action) and available means (supporting resources) in meaningful ways, and of proposing an integrated application and control of this equation by being flexible and adaptive to changing circumstances in a world where uncertainty dominates.

A well-developed energy strategy requires nonlinear and multidimensional thinking that includes efforts leading to an enhancement of Turkey's means. After all, the strategy should underpin sustained growth of the economy while at the same time contributing directly to improving the well-being and quality of life of Turkey's people. The aim of this article is to discuss how such an energy strategy should be formulated and what essential features and characteristics it should have.

Where Are We Now?

Stimulated by Turkey's economic growth and rising standards of living, the demand for all types of energy, and particularly for electricity, has been growing rapidly over the past five decades. Turkey's primary energy demand increased from just over 10 million tonnes of oil equivalent (Mtoe) in 1960 to almost 100 Mtoe in 2009. Primary energy production over the same period, however, has stayed far behind, (although it tripled and approached 30 Mtoe by 2009). Today, coal accounts for half of Turkey's primary energy production. Most of the rest is renewables. As a result of this production-consumption imbalance, the ratio of domestic production to consumption fell from nearly 90% in 1960 to below 30% today. In other words, today over 70% of Turkey's total primary energy demand depends on foreign sources. Escalating energy imports have naturally increased energy insecurity and significantly worsened the country's current account balance.

Today, some 90% of the energy consumed in Turkey is of fossil origin. Oil accounts for one-third of the total energy demand, followed by coal and natural gas

(each with less than a 30% share). The transport sector accounts for at least one-third of the oil demand. Natural gas use became widespread after the arrival of Russian gas in 1987, and has rapidly become one of the most sought-after energy sources. A fast-growing economy, industrialization, and concerns about growing air pollution in big cities have played a major role in this tremendous increase. Power generation accounts for more than half of gas demand. Coal, a major fuel source for Turkey, is used primarily for power generation, steel manufacturing, and cement production.

Electricity demand in Turkey has grown spectacularly, from less than 50 GWh in 1923 when the Turkish Republic was founded, to approximately 200,000 GWh today. Installed electricity generation capacity over the same period increased from less than 33 MW to about 45,000 MW. Currently, three-quarters of the electricity generated in Turkey comes from burning fossil fuels, almost half of which is from natural gas alone. Nearly half of the total electricity consumption in Turkey occurs in the industry sector. The residential and services sectors follow the industry sector with a quarter share each.

Hard coal production decreased more 60% between 1970 and 2009, whereas lignite production recently reached an all-time high. Inadequate domestic oil production, which has been in decline since 1991, is far from meeting the growing demand. As a result, Turkey's oil import bill continues to rise. This is a big burden for the country, especially in regard to the massive environmental impact we have been witnessing in recent years, and will be confronted with toward the end of this decade when the global oil peak hits. Domestic gas production is increasing but total production corresponds to no more than 3 percent of domestic demand.

Except perhaps for hydro, renewable energy sources, despite their enormous potential, have long been neglected Turkey. Happily, this ignorance has recently given way to greater interest, which has led to a massive focus and sharp growth in renewable energy sources. Nevertheless, their share in the total primary energy demand and supply remains very small.

Where Are We Going?

In the energy business, well designed models of energy supply and demand can be particularly useful in policy formulations and in designing long term investment strategies. Long term projections naturally involve considerable uncertainties related to international and domestic policy changes, technological developments, and people's future preferences. Most forecasting exercises are thus

Turkey's energy need is expected to register tremendous growth over the next two decades, making Turkey one of the highest energy consuming countries in the Euro-Mediterranean region

based on the assumption that past trends will continue into the future and that no radical changes will take place in the functioning of the system. This assumption is often referred to as a business as usual or reference scenario.

According to the business as usual scenario results of the available forecasts,⁵ Turkey's energy need is expected

to register tremendous growth over the next two decades, making Turkey one of the highest energy consuming countries in the Euro-Mediterranean region. If the current realities and functioning of the Turkish energy system are maintained, by 2030 fossil fuels will account for more than 80% of the total primary energy demand, which will more than double, despite a growing push for renewable energy sources and nuclear power. Natural gas, with its one-third share, will likely be the most important fuel. And power generation will remain the largest energy consuming sector.

By 2030, primary energy production is expected to more than double, exceeding 60 Mtoe, with coal accounting for nearly half of it. Despite a big increase in domestic coal production, the majority of the coal demand will be satisfied by imports. Oil and gas production will decline to nearly half of today's levels.

The tremendous growth in Turkey's electricity demand will continue in the future, albeit at a slower pace than today. By 2030, electricity demand will triple. Natural gas will likely hold the largest share in power generation. Turkey will be hard-pressed to meet its growing electricity demand with its existing and planned power plants. Although improvements in the efficiency of power generation as well as sharp reductions in losses will help to ease the burden on electricity generation, Turkey will have to triple its current installed electricity-generating capacity in order to meet the demand with domestic resources by 2030.

In parallel with increasing fossil fuel use, Turkey's CO₂ emissions will continue to rise. By 2030 it will exceed 600 million tons, compared to less than 300 million tons today. Turkey is already attempting to minimize its energy-related emissions by improving energy efficiency, increasing the shares of alternative and renewable energy sources in its energy supply, allowing for fuel switching from high carbon to low carbon fuels, and implementing measures for emission reductions. Nevertheless, the combined share of alternative and renewable energy sources will account for less than 15% of total primary energy demand by 2030.

In sum, the business as usual scenario depicts similar trends over the next two decades compared to current situation: a fossil fuel-based energy system which is nearly fully dependent on foreign sources, placing an ever higher burden on the economy.

Where Should We Be Going?

History has proven repeatedly that business is never “as usual” in energy. The business *not* as usual approach relies on alternative scenarios, which may vary in complexity and scope from “if” to “what if” analyses. For a comprehensive energy strategy formulation what we need to know first is where we want to go.

Unfortunately Turkey still does not have a well established energy policy and strategy. This can be observed in the energy ministers’ addresses to the Turkish Grand National Assembly over the past few years. Current policies and strategies, as indicated in the presentation of the Ministry’s Budget for 2010 at the Turkish Grand National Assembly on December 18, 2009, include diversification of energy resources, import sources and routes; minimization of import dependency by increasing the importance of local, new and renewable resources; minimization of the effects of energy generation and use on the environment by increasing energy efficiency; protection of public benefits and consumers’ rights; activation of public and private sector opportunities within the framework of free market applications; and finally implementation of policies to take necessary precautions on meeting the country’s requirements in the most secure, continuous, and economical way and in a manner designed to minimize the environmental impact.

Specific policy targets for some of these goals are provided in the Energy Ministry’s Electricity Energy Market and Supply Security Strategy Paper, ratified by the High Planning Council in May 2009. According to that paper, Turkey’s proven lignite deposits and hard coal resources will be put to use for electricity generation activities by 2023, the share of nuclear power in energy supply will be at least 5% by the year 2020, the share of natural gas in electricity production will be reduced to 30%, and the share of renewable energy sources will be increased to at least 30% by 2023. The target for renewables assumes that by 2023, Turkey’s technically and economically available hydroelectric potential will be put to use in its entirety, installed wind energy power will be increased to 20,000 MW, the presently known geothermal potential of 600 MW suitable for electricity energy production will be entirely commissioned, and the maximum utilization of Turkey’s solar potential will be ensured by amending the current law in order to encourage solar electricity generation. Although many of these objectives might be

There is an urgent need for formulating longer term energy policy in line with both the economy and Turkey's foreign policy and security goals

achievable by 2023, the paper does not clearly detail how.

The new strategic plan⁶ put forth by the Energy Ministry is not much different. The plan seeks to accomplish the following strategic goals for the period 2010-2014: to diversify resources by giving

priority to domestic resources; to diversify oil and gas resources and reduce risks arising from imports; to increase the share of renewable energy sources in the energy supply; to increase energy efficiency; to improve market functioning and the investment environment; to make the country an energy corridor and terminal; to minimize the negative impact of energy on the environment; to increase the contribution of domestic natural resources to the economy; to increase the effectiveness of energy management; and to lead and support energy research and development. The plan also sets several quantitative goals, sometimes with meaningless or inappropriate metrics, desired to be reached by 2014. However, the means and ways of reaching those desired goals are far from being compelling or satisfactory.

Clearly the official energy policy goals are blurry and do not point to a precise direction in the future. In energy business the year 2014 is tomorrow and in energy policy making it is this afternoon. Therefore, there is an urgent need for formulating longer term energy policy goals that are precise, comprehensive, measurable, concrete, coherent, and in line with both the economy and Turkey's foreign policy and security goals. These goals, which should be determined and set by the energy ministry, are the prerequisite of any sound plan and the sine-qua-non of any energy strategy.

How to Get There? Means and Ways

Once long term end policy is clearly defined, the strategy should detail how to achieve them. This will require first knowing and anticipating the available resources at hand both today and in the future, second, mobilizing and increasing these resources and other means, and third, determining courses of action. The current strategy in Turkey could be compared to a passenger driving a car by looking at a roadmap. A real strategy must be enforced by a collection of tools and mechanisms to make sure that the car stays on the road and reaches its destination by making steering interventions and embedding feedback mechanisms to oversee and correct the voyage.



Photo: A.A., Mehmet Göçer

Turkey has recently started to place high priority on increasing its use of domestic energy resources by utilizing public, private, and foreign sources to initiate new investments.

Although there are several important means and ways to consider in Turkey's voyage, due to space limitations in this article we restrict ourselves to energy supply, energy demand management, energy sector supervision and energy diplomacy.

Making Best Use of Available Resources

One of the key elements in any energy strategy is to identify and assess the conventional and unconventional energy resource potential of the country. Only then can a meaningful analysis of their potential exploitation in the future be made.

Turkey has recently started to place high priority on increasing its use of domestic energy resources by utilizing public, private, and foreign sources to initiate new investments. It has undertaken studies to assess, improve, and evaluate the potential of hydropower, lignite, and renewable energy sources. However, Turkey still lacks a comprehensive, coherent and unified assessment of its entire energy reserves and resource potential. This means that we already fail in the first step of a strategic analysis.

According to the information available from public resources, it can be said that except perhaps for coal, Turkey is poor in fossil fuel resources. Turkey's hard coal reserves have been stagnant over the last two decades but, thanks to major exploration efforts, lignite reserves have increased significantly. The good news is that we have plenty of them. The bad news is that our lignite resources are of low

Unconventional energy sources could be a real game changer in Turkey's energy future

quality and contain high concentrations of sulphur. The opportunity for lignite use is to increase its utilization in power plants. The challenge for our engineers is to design a power plant that could burn our domestic resource in an efficient and clean way. This must be done through enhanced research and development as well as university, government and industry collaboration, support and cooperation.

Currently, Turkey is not as well endowed with oil and gas as are its neighbors; some three-quarters of Turkey's known oil reserves and some 40 percent of its known natural gas reserves have already been produced. However, inefficient and insufficient exploration to date raises some hopes for future discoveries. Nevertheless, it is rather premature to proclaim that "Turkey will be an energy independent country by 2023."⁷

Exploration efforts in Turkey have never been sufficient. The total number of exploratory wells drilled between 1934 and 2009 stood at less than 1,500. This number is less than the total exploratory wells drilled in the US in the first five months of 2010. In the future, three main factors besides more aggressive exploration, especially offshore, will help increase Turkey's oil reserves and hence production: (1) increasing the average recovery rate; (2) going back to the old fields, especially to the ones where gas presence was considered a problem in the past; and (3) drilling deeper. Unfortunately, none of these actions have been pronounced in any of Turkey's official strategy or policy documents. Instead, the 2010 strategy document of the MENR concentrates on the meaningless concept of footage drilled as a metric of potential, rather than discussing the number of exploratory wells, discovery success rate or average drilling depth, among other factors.

Another issue which is not mentioned in the official policy and strategy papers is the role of unconventional energy sources. For instance, in Turkey's Black Sea coastal region, which is home to important hard coal and coal-related resources, the coal mines continuously emit substantial quantities of methane. The recovery and use of this methane could potentially contribute to Turkey's energy supply in the future. Moreover, Turkey may not be endowed with large natural gas reserves but is surely endowed with enormous gas hydrates in the Black Sea. Technology to extract gas hydrates is not yet available in commercial scale, although several countries are working very hard on it. When technology becomes available, presumably in the next few decades, the hydrates could be a real game changer in Turkey's energy future. Therefore technological development in that field should

be very closely followed. In the shorter term, shale gas and tight gas resources should be an area of focus.

Turkey has long neglected renewable energy sources, despite their enormous potential. Happily, this ignorance has recently given way to greater interest, which has led to a massive focus on renewables. For example, Turkey is currently using less than half of its hydro potential. The saying “water flows, Turk gazes” possibly best summarizes the slow progress in developing these resources. The entire Southeastern Anatolia Project along the basin of the Tigris and Euphrates Rivers, which is considered one of the most ambitious water development projects ever undertaken, is still to be completed.

Turkey’s Energy Resource Potential in 2009

Hard Coal Reserves: 1.3 billion tonnes (proven, possible and probable),
Lignite: 12.3 billion tonnes (proven, possible and probable),
Crude Oil: 40 million tonnes (proven)
Natural Gas: 6.8 billion cubic meters (proven)
Geothermal: 600 MWe (proven), 2600 MWt (proven)
Solar: 380 billion kWh/yr (potential)
Hydro: 140 billion kWh (economic potential) 433 billion kWh (theoretical potential)
Wind: 120 billion kWh (potential)

According to official sources, Turkey is one of the wealthiest countries in Europe in terms of geothermal, wind and solar energy, and, in theory, those resources are sufficient to meet the country’s entire energy requirements. Unfortunately, this large potential has not been systematically developed, and has only recently begun to be tapped. Some of the main obstacles preventing development of these resources are economic and financial barriers, weak inter-sectoral coordination, lack of a clear legal and regulatory framework, and long term natural gas purchase contracts. As for nuclear energy, which is a must for Turkey, there have been several attempts with no concrete outcome, but currently Turkey is getting closer to realize this objective through a recent deal with Russia.⁸

Available resources should not be restricted to physical ones. Human capital is a resource that Turkey has been flatly ignoring for decades. Yet Turkey’s response to most of the future energy challenges must rely heavily on technology and, in many cases, on technologies that do not yet exist today. Innovation could provide solutions for overcoming barriers that limit the use of today’s technologies. The Turkish

The government should set mandatory targets for reducing energy demand in all state bodies, authorities, institutions and companies, including the armed forces

government must play a leading role in energy technology research and development, as well as research on innovation; for instance, by providing incentives to conduct such research through education, and capacity building in the education system to maintain a supply chain of well trained scientists and technicians.

Strong, long term energy technology research, development and deployment should be pursued and encouraged by universities,⁹ government, and industry.

Energy Demand Management

Responding to future challenges involves pulling energy efficiency and energy conservation together into a comprehensive, well-analyzed plan. A rational energy strategy should contain ways to discourage waste and to encourage, promote and create awareness of the importance of energy efficiency and conservation.

Improving end use energy efficiency in buildings and transportation has an immense potential among existing policy and technology options. For better or worse, we spend most of our time in buildings and in transport vehicles. And yet a large fraction of the energy delivered to buildings is wasted because of inefficient building structures and the inefficient equipment and machines they contain. Few structures designed even in the last ten years were built with energy efficiency in mind. And many older buildings dating back many decades are even worse. Current energy waste in buildings can be significantly reduced by energy efficient technologies such as increasing insulation in existing buildings and new constructions, improving heating and cooling systems, and by using all appliances and equipment more efficiently.

A definition of energy efficiency in a meaningful strategy should start with the primary energy source. This means that we should consider each and every step from primary energy to end use. Any effort to increase efficiency must also focus on losses, especially transmission and distribution losses, as well as illicit utilization. Currently nearly 20% of the electricity supplied to the Turkish grid is lost, compared to 7% of the European average. This loss is also an important burden for the end users' electricity prices. Therefore, minimization of the technical losses during the generation, transmission and distribution of electricity should be given priority. Even more important, illicit use of electricity as well as illegal tapping of oil and gas pipelines must be prevented.

Although energy efficiency offers great potential, it is energy conservation that offers the lowest (sometimes cost free) option for reducing consumption without sacrificing quality of life, and for creating a brighter and smarter energy economy of tomorrow. Conservation is a hidden energy reserve, since saving energy costs less than buying it. Tapping into this reserve requires a culture change in the way we use energy. And this culture change should be led by the government.

An aggressive campaign for changing incandescent light bulbs in government buildings is not sufficient. Instead, the government must take the lead in increasing awareness and in information dissemination, and also should set mandatory targets for reducing energy demand in all state bodies, authorities, institutions and companies, including the armed forces.

Overseeing the Energy Sector

One of the key roles of the government is to establish a stable, long term energy policy supported by a reliable legal, fiscal and regulatory framework. Such a framework is needed to allow energy projects to proceed in a timely, predictable manner, to facilitate and encourage investment in all forms of energy, and to respond to and marshal market forces in a competitive atmosphere. An effective policy encourages technology transfer and stimulates open competition. Turkey's performance on these issues is mixed. To be effective and successful, the principles of governing energy price regulations must be independent from political pressures.

A comprehensive, adaptive, effective and proactive supervisory framework is needed (1) for monitoring the Turkish energy sector, its direction and actions; (2) for identifying and understanding potential systemic risks in order to cope with and respond to changing circumstances and challenges; and (3) for creating the ability to imagine crises and the will to act preemptively and correctly with the right means and ways. What follows is a strong regulatory capacity to make rules and issue guidance in a well established legal framework by involving all stakeholders and related institutions in a horizontal way that allows for rapid responses to both ongoing and emergent risks, including the ones related to energy security.¹⁰ All these necessitate effective coordination and cooperation mechanisms to form a network of domestic institutions and national authorities.

Currently the Energy Market Regulatory Authority (EMRA) fails to match the robustness and vision enjoyed by many of its developed country counterparts. Instead of supervising the energy sector, it chases bureaucratic operations. If not

transformed, the EMRA will have a tough time in the new market paradigm, a structure including carbon markets. For this reason, a new agency having both regulatory and supervisory responsibility with a clear mandate, operational independence (to resist inappropriate political interference or influence from the energy sector itself) and accountability, endowed with adequate funding and a skilled staff, would be beneficial.

In fact, the Turkish energy sector may also require a radical institutional transformation. Turkish energy bureaucracy used to follow primarily the French system until the late 1980s. With the establishment of the Energy Market Regulatory Board, the system has begun to implement Anglo-Saxon, market based plug-ins. Moreover, the State Water Works was separated from the Ministry of Energy and Natural Resources (MENR) and was put under the Ministry of Environment and Forestry. In the internal market the MENR is limited by the Ministry of Finance, which determines the Special Consumption Tax and Automatic Price Mechanism for State-owned Enterprises. Concerned with increasing indirect taxes from energy commodities regardless of the internal energy balance, the Ministry of Finance indeed distorts the domestic market. In the international arena, the Ministry of Foreign Affairs has more influence than the MENR regarding the energy policies. Combined with the complete privatization of the state's energy companies, the MENR may in the future look like the "constitutional monarchy" of Britain, institutionalized by the law but with no power. Thus in the future one may expect the MENR to evolve into a new structure and form the Ministry of Energy and Environment.

To leave state owned companies to their destinies or to privatize them completely is not a solution. A rush for complete privatization of state companies operating in upstream, midstream and downstream activities is counterproductive in the short- to mid-term, at least for national security reasons. On the contrary, Turkey should have some national champions that are state controlled – for instance, an integrated oil and gas company – and some that are private. State institutions involved in the energy sector should have clearly defined roles and responsibilities. They should be free from all kinds of political influence and turned into fully effective, highly productive, institutionalized structures with sufficient autonomy to execute their roles.

The private sector will surely have to play a much greater role in Turkey than has been in the case in the past. But the push for privatization should not lead to guaranteed business opportunities. Energy is too important to be left in the hands of private enterprise alone. A public-private sector partnership must ensure the

speedy structuring, financing and development of projects in the energy sector. In this sense, government guarantees should be minimized and the government should clear its image of risk taker as well as guaranteed job provider. A concerted effort to prevent favoritism and cronyism is vital to the success of long term energy development.

Management of the energy sector should be transparent and oriented toward pursuing Turkey's national interests. This requires a fair and honest debate with all relevant energy sector stakeholders, particularly in establishing codes of practice, norms, guidelines and standards for existing and new technologies. Engagement and contribution of stakeholders through extensive consultation, and an open and transparent process will be essential to the success of the energy policy itself. The Energy Minister's visit to Greenpeace in December 2009 was a good example.

The Role of Energy Diplomacy

Turkey is strategically located at the crossroads of several strategically and economically important regions. And energy is the most common denominator in bringing all the actors in those regions together. The energy map of the world will be redrawn within the next two decades, especially following the global oil peak. The main question is whether Turkey will be able to play a central role in the future of this restructuring.

Too much ink has so far been spent on describing Turkey's energy corridor concept. In a nutshell, with the opening of the Baku-Tbilisi-Ceyhan (BTC) pipeline in 2006, Caspian crude has begun to be transported to the Mediterranean. The port of Ceyhan has already become an important outlet for Iraqi oil shipments from Kirkuk. The Bosphorus and Dardanelles straits are still regarded as major shipping choke-points for transit between the Black Sea and the Mediterranean, but the planned Samsun-Ceyhan oil pipeline is expected to ease the pressure on these straits. There are also plans to transport crude oil to Israel and then to the Asian markets.

Alongside the BTC runs the South Caucasus pipeline, carrying Azeri gas to Erzurum in Turkey. With the inauguration of the Greece-Turkey natural gas pipeline (or Interconnector) in 2007, Azeri gas is transported further to Greece. There are several pipeline projects in the works, among them piping gas to Italy with the extension of the Interconnector; to Austria with the Nabucco gas pipeline; to Ceyhan and further to Ashkelon with the extension of the Blue Stream Gas Pipeline.

Recently, energy sources and particularly transport routes have become one of the top items on the global political agenda, and the heart of Eurasian ener-

Not only war but many of today's pipeline projects are the extension of politics by other means

gy geopolitics. Energy is becoming the currency of power in bilateral relations and, at times, policy decisions are being formulated by looking through the pipelines. As a result, pipelines are often influenced more by political rather than

commercial factors. If Carl von Clausewitz, one of the greatest military strategists of all time were alive, he would probably say that not only war but many of today's pipeline projects are the extension of politics by other means.

Against these realities, it is quite peculiar that Turkey has not yet set its vision concerning its central role in Eurasian energy geopolitics. Its most pronounced goals include becoming Europe's fourth main gateway for energy imports, an energy hub, and perhaps using this position as a bargaining chip and a way of increasing its leverage regarding EU membership. In contrast, Turkey's role is framed as nothing more than a mere transit country by the EU. Indeed, EU officials declare repeatedly that while the EU may underestimate Turkey's strategic importance, Turkey certainly overestimates it.

Turkey might become a gathering and dispatching center rather than a pure transit country. But achieving this status would require tangible actions, not empty rhetoric. It is extremely difficult for Turkey to become a gas hub, simply because neither the conditions nor the necessity are or will be in place. However, Turkey can potentially become an oil hub. The world oil market is in desperate search for a new light crude oil benchmark. The need is obvious and the conditions can be fulfilled if Turkey implements a comprehensive strategy. Such a strategy should aim at finding ways to increase the amount of light oil arriving at the Ceyhan terminal. This requires first bringing to Ceyhan increasing quantities of Kazakh, Azeri, Iraqi and Russian light crude oil; second, establishing a liquid market there; third, increasing storage capacity; and finally creating an oil exchange in Ceyhan. To outline how all these things could be done requires a coherent and comprehensive strategy.

Another important issue is Turkey's potential role as interlocutor in resolving the legal status problem of the Caspian Sea. Turkey is increasingly becoming a key link in the complex game of the geopolitical balance of power, and is trying to play a mediator role in a range of conflicts. Still, unresolved disputes arising from the inadequate legal status of the Caspian Sea pose serious obstacles to the exploitation of several offshore oil and gas deposits, and block many projects, including trans-Caspian oil and gas pipelines. Turkey's involvement as a neutral fa-

cilitator could help resolve the issue with the littoral states, and would make the construction of trans-Caspian pipelines a real possibility. This would not have been possible a few years ago.

If Turkey wants to be a regional or global energy power, it must pursue an aggressive foreign energy policy

As is well known, energy pipelines are exposed to terrorist attacks, illegal tapping and sabotage. This brings us to the protection and security of Turkey's pipelines. Currently, the security of Turkey's energy infrastructure is mostly provided by the State (especially the armed forces), at almost no cost. For instance, Turkey gave guarantee to the BTC consortium for the protection of the line. While the Turkish State charges nothing, Georgia charges about 5 million dollars per year for the protection and security of the line in its territory.¹¹ Will this free of charge security be provided to Nabucco or the Samsun-Ceyhan pipelines as well? This is hard to guess. Therefore, before these and other pipelines are constructed Turkey should revise its existing laws and legal regulations, modify its institutional structure or create a new institution, and also work closely with NATO for the protection and security of its critical energy infrastructure.

If Turkey wants to be a regional or global energy power, it must pursue an aggressive foreign energy policy. We will either be in the global geopolitical room as one of the negotiators when the rules of the game are set, or will learn about them when the others come out and tell us what has been decided. It will be those in the room who will have the opportunity to write the rules to their own advantage, and be the first to benefit. And there is no reason why Turkey should not be in that room.

Conclusions

Turkey faces serious challenges today, and many more are on the horizon. These challenges require a new, long term national strategy that addresses our economy, energy, security, and the environment in an integrated way both now and in the future. The daunting challenges and vast opportunities we face today and will be facing in the future are too great not to have such a strategy. In the years ahead we will confront complex, dynamic and unanticipated challenges to our energy system as well. Unfortunately, Turkey today lacks a coherent, comprehensive and flexible strategy armed with clearly set goals to deal with the complex challenges of today and tomorrow.

Such a strategy must focus on ensuring long term energy supply at affordable costs to consumers, on Turkey's geopolitical role in terms of regional and global

energy concerns, and on fair competition and environmental challenges. A well designed strategy should avoid myopic thinking that could undermine potential interlinkages and the impact of policy on the entire value chain, and must follow a constant adaptation with feedback loops to meet changing realities.

Making policy involves making choices about the future. Our future depends largely on the choices we make today. While making choices today, policy makers must consider the benefits of taking action now and avoid the risks of not taking action before it is too late. Since Turkey's entire economy is at stake, its energy policy must be rooted in national interests, and policy objectives must support and contribute effectively to national socio-economic development.

There are several game changers to be watched and dealt with carefully in a long term strategy. These include but not restricted to gas hydrates, probable Black Sea fossil fuel reserves, thorium reserves for nuclear fuel, the possibility of renewables becoming more economical without state support due to excessively highly priced fossil fuel dependency or major advances in technology, the probability of shifting focus from Europe, the creation of a Ceyhan Energy Exchange trading a new crude oil benchmark, and Turkey's alignment with some developed countries regarding environment-energy targets.

Turkey needs a radical shift in the way it produces and consumes energy. One sided policies are destined to fail. Turkey's future energy mix should be determined domestically and not be dictated by outsiders. No technologies or energy sources should be excluded. Turkey will surely go beyond its current efforts and policies to meet its energy needs in the future in the best terms possible, and must formulate a comprehensive, forward looking energy strategy. It may be hoped that the mistakes made in the past will not be repeated: continuing business-as-usual policies over the next decades will not result in a desirable energy future. However unpopular new, far-reaching policies may be, the consequences of postponing a sound energy strategy are equally painful. The reluctance of policymakers to tackle awkward structural problems must be overcome. Implementation is vital.

Endnotes

1. The views and opinions expressed in this article are the private views of the authors.
2. *Turkish Ministry of Foreign Affairs: Turkey's Energy Strategy*, June 2006 and January 2009.
3. *Turkish Ministry of Energy and Natural Resources: Strategic Plan 2010-2014*, March 2010.
4. For classic and modern works for understanding of definitions, theory and processes related to strategy see, Sun Tzu, *The Art of War*, Samuel B. Griffith, trans. (New York: Oxford University Press, 1963); Carl von Clausewitz, *On War*, Michael Howard and Peter Paret, eds. and trans., (Prin-

eton, NJ: Princeton University Press, 1976); Colin S. Gray, *Modern Strategy* (Oxford, UK: Oxford University Press, 1999).

5. OME, *Mediterranean Energy Perspectives 2008*, Paris, Observatoire Mediterranéen de l'Energie, 2008.

6. *Turkish Ministry of Energy and Natural Resources: Strategic Plan 2010-2014*, March 2010.

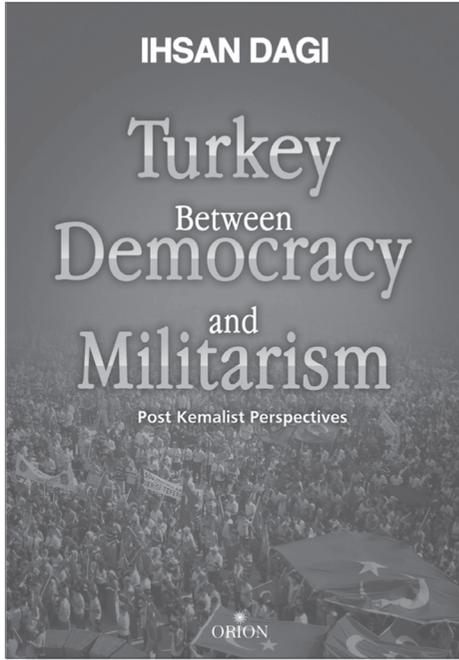
7. Mehmet Uysal, the CEO of TPAO, quoted in *Zaman*, June 14, 2008 and May 6, 2010.

8. Saban Kardas, "Russia Will Construct Turkey's First Nuclear Power Plant," *Eurasia Daily Monitor*, Vol.7, No.98, May 20, 2010.

9. By the way, it is unfortunate that there exists no university in Turkey providing a degree on energy economics.

10. I.e. oil and gas storage, energy emergency preparedness system, infrastructure capacity and capability, interruptible customers, access to energy and infrastructure among others.

11. M. Melih Basdemir and Mitat Celikpala, "Security of Petroleum and Natural Gas Pipelines in Turkey: Executing Policies and Suggestions," *SAREM Stratejik Arastirmalar Dergisi*, Turkish General Staff, Vol.8, No.14, January, 2010, pp. 97-126.



Turkey between Democracy and Militarism

Post Kemalists Perspectives

by IHSAN DAGI

This book presents a post Kemalists reading of contemporary Turkish politics by engaging with the following questions;

- Is Kemalists compatible with democracy?
- Kemalists: Why is it anti-Western?
- Is secularism or democracy under threat?
- The AK Party: Islamists or democrat?
- The CHP: Social democrat or nationalist?

2008 | ISBN: 9789944769198 | 301 pages | 20 TL.

Available in bookstores or from

 ORION KİTAPÇI

Selânik Cad. No. 72 06640 Kızılay/Ankara
Ph: +90 312 417 78 35 | Fax: +90 312 425 06 82
www.orionkitapci.com

II. INTERNATIONAL BLUE BLACK SEA CONGRESS:

Prospects of Conflict Resolution, Cooperation and Democratization

October 10 – 13, 2010, Sakarya / TURKEY



Oganizer:

Department of International Relations
Sakarya University



Deadline for Proposals: July 1, 2010

Call for Papers

We are currently accepting submissions for "2nd BLUE BLACK SEA CONGRESS on POLITICS, ECONOMICS AND SOCIETY: *Prospects of Conflict Resolution, Cooperation and Democratization*" to be held in Sakarya, Turkey, on October 10-13, 2010.

Submissions are welcome from politics, economics and other social sciences and related disciplines. We are expecting participation of academics, peace researchers, students, NGO leaders, activists, and other interested professionals.

CONFERENCE THEMES: Black Sea Region in Regional and Global Politics; Conflict and Peace in Wider Black Sea Region; The Role of International Organizations (UN, EU, OSCE and BSCE); The EU's Perspective on the Wider Black Sea Region; Turkish, Russian and US and NATO Perspectives on Eurasia; Frozen Conflicts in Wider Black Sea Region; Economic Challenges in Eurasia; Democratization in Eurasia; Other Areas of International Relations.

SUBMISSION OF ABSTRACTS: Interested applicants should submit a paper proposal in English (max. 250 words) and a brief CV (max. 200 words) explaining their academic affiliation, and research interests. We also welcome proposals for pre-organized panels.

Proposals are to be submitted by e-mail to numantelci@gmail.com before July 1, 2010.

For further information please visit the conference website: www.blueblacksea.sakarya.edu.tr