



Assessing Turkey's Future As an Energy Transit Country

By Daniel Fink

On June 2, 2006, the first load of Caspian oil from the Baku-Tbilisi-Ceyhan (BTC) pipeline was loaded onto the *British Hawthorn*, a tanker that set sail to the Italian port of Savona with 85,000 tons of oil in its hold. The first shipment of Caspian oil arrived six days earlier through the BTC, where it began to fill one of the seven 1-million-barrel tanks at the Ceyhan Marine Terminal on Turkey's Mediterranean shore.

The recently completed BTC pipeline along the east-west (Caspian Sea to the Mediterranean) corridor offers the landlocked Caspian basin another export route to global markets bypassing Russia. Interestingly, at this stage, Russia is also interested in Turkey's role as an energy transit country along the north-south (Black Sea to the Mediterranean) corridor, giving Moscow a chance to bypass Ukraine; currently, Russia exports much of its oil and gas to Europe through Ukraine. With two pipelines under construction and several projects under consideration, Turkey, if it can master the task of balancing Western and Russian interests, hopes to become an important energy transit route.

Background: EU's Dependency on Russia for Energy

On December 31, 2005, Russia cut gas deliveries to Ukraine, which in turn reduced supplies to the European Union (EU). This action caused trepidation among the EU members, which in 2004 received 35 percent of their gas from Russia.¹ Eighty percent of

Russian gas exports to the EU run through a pipeline through Ukraine.² Dependency on Russia is especially severe for Greece, Austria, and Germany, which receive 79 percent, 65 percent, and 38 percent of their gas from Russia, respectively.³

The pipelines through Turkey can be classified in two groups. First are those on the east-west corridor, carrying Caspian or Persian Gulf oil and gas. Second are those on the north-south corridor, carrying Russian oil and gas. Although the EU hopes that Turkey's energy infrastructure will decrease dependency on Russian gas, Russia will still play a significant role in providing Europe with gas along the north-south corridor.

In order to establish itself as an energy hub, Turkey will have to expand its natural gas grid for domestic consumption, storage, and export.⁴ Since 1987, Turkey has received its natural gas from the Russian Federation-Turkey gas pipeline. In 2004, Turkey consumed 688,000 barrels per day (bbl/d) of oil and 22.5 billion cubic meters (Bcm)⁵ of gas, the equivalent of 388,000 bbl/d.⁶

October 2005. Available online (http://ec.europa.eu/energy/russia/presentations/doc/2005_luxembourg_en.pdf).

2. "Ukraine FM Tells EU: Learn from Gas Dispute with Russia," Agence France-Presse, February 8, 2006.
3. "Table of European Imports of Russian Gas," Agence France-Presse, January 4, 2006.
4. Meanwhile, Turkey is also looking to expand its own energy sector, which includes plans to pursue nuclear energy. In February 2006, Energy Minister Hilmi Guler announced plans to build a nuclear plant in Sinop. "Turkish Minister Says Nuclear Energy Is a Must," BBC Monitoring Europe, April 14, 2006.
5. Figures in billion cubic meters of gas (Bcm) will be converted to the equivalent million barrels of oil per day (bbl/d). The conversion formula is 1 Bcm = 6.29 million barrels.
6. British Petroleum, "BP Statistical Review of World Energy 2006,"

1. "The Energy Dialogue EU-Russia 2005," European Commission,

Sixty-four percent of Turkey's gas consumption comes from Russia,⁷ with the rest coming by pipeline from Iran (276,000 bbl/d) and by tanker (as liquefied natural gas, or LNG) from Algeria and Nigeria (20 percent).

Another development in Turkey's energy infrastructure is a World Bank Gas Sector Development Project that will provide Turkey with a facility to store the energy equivalent of 6.29 million barrels.⁸ This facility will be the first of its kind in Turkey. On February 3, 2006, Turkey's energy minister, Hilmi Guler, and Gazprom CEO Aleksey Miller discussed cooperation on the project, which will be built south of the Tuz Golu (Salt Lake) in central Turkey.

East-West Corridor

Completed Lines

Baku-Tbilisi-Ceyhan Oil Pipeline. The 1,770-kilometer BTC has the potential of carrying between 1 million and 1.5 million bbl/d of crude to Ceyhan, though initial throughput will be 400,000 bbl/d.⁹ On May 25, 2005, the Azerbaijani government officially inaugurated its part of the BTC; the Georgians inaugurated their portion in October 2005.

The \$4 billion pipeline, which seeks to diversify Caspian oil export routes away from Russia, is the product of Azerbaijani, Turkish, and U.S. cooperation. The United States, which wants to encourage the independence of former Soviet republics, provided the diplomatic leverage and commitment for the project. Azerbaijan assembled the consortium to develop the oil fields, and Turkey agreed to finance its portion of the pipeline.¹⁰

Kirkuk-Ceyhan Oil Pipeline. The Kirkuk-Ceyhan twin pipeline, which has been functional since 1977 as Iraq's largest crude export line, has been a major tar-

get for Iraqi insurgents since 2003. The 966-kilometer-long parallel pipelines have a nominal capacity of 1.1 million bbl/d and 500,000 bbl/d, respectively. Since the current war in Iraq, however, the actual use of the pipelines has fluctuated. Because of attacks, the pipelines are shut down more days than they are open. The maximum flow through the pipelines since the war began has been 750,000 bbl/d.

Lines under Construction

South Caucasus Gas Pipeline (Baku-Erzurum-Ceyhan Pipeline). The South Caucasus Pipeline (SCP), also known as the Baku-Erzurum-Ceyhan pipeline, will carry Azerbaijani gas to Turkey. It is built by the South Caucasus Gas consortium parallel to the BTC up to the Georgian-Turkish border, which is 98 percent complete. From there, the Turkish government is building a 260-kilometer extension linking the SCP to its gas network in the eastern city of Erzurum. The pipeline will begin supplying gas to Turkey in fall 2006 and will provide a means of transporting gas from the Azerbaijani Shah Deniz gas fields in the Caspian Sea to Turkey. The SCP link is scheduled to transport the energy equivalent of 114,000 bbl/d of Azerbaijani gas.¹¹

Turkey-Greece-Italy Gas Pipeline. The Turkey-Greece Interconnector natural gas pipeline project will connect Turkey's and Greece's natural gas grids in western Anatolia and western Thrace, respectively, through a seabed pipeline across Canakkale Strait (Dardanelles). Originally envisioned as a confidence-building measure, the pipeline is now under construction, with the first deliveries expected in the fourth quarter of 2006. The pipeline will begin operating at nominal capacity in 2009.¹² Turkish prime minister Recep Tayyip Erdogan called the project a "bridge" that "can lead to a further rapprochement between our two peoples on environmental issues and other matters."¹³ Last year, Italy and Greece signed an agree-

June 14, 2005. Available online (www.bp.com/genericsection.do?categoryId=92&contentId=7005893).

7. Ibid.

8. World Bank, "Recent Gas Dispute Stresses Importance of Gas Storage for Turkey" (Ankara, Turkey: World Bank, 2006).

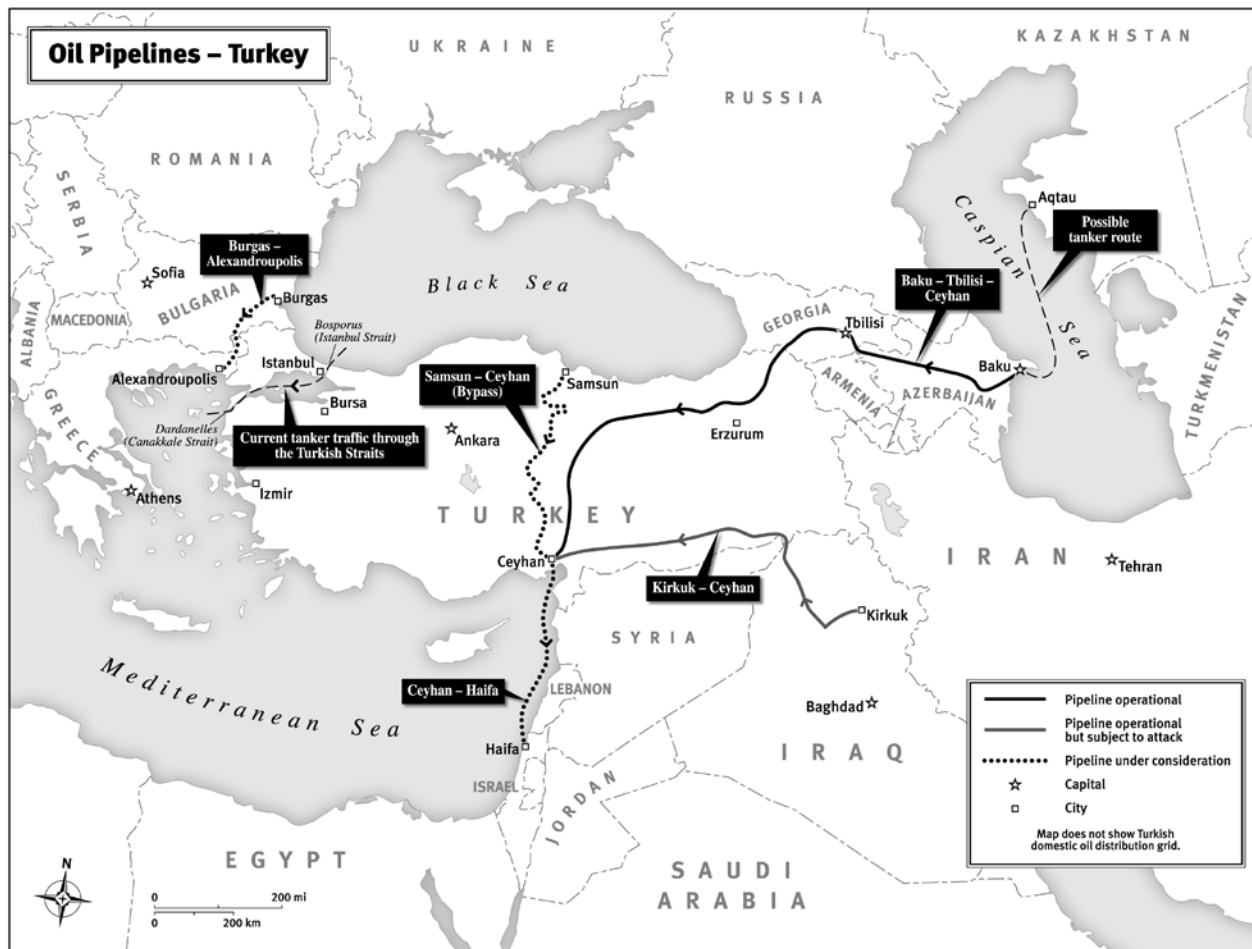
9. "Oil from U.S.-Backed Caspian Pipeline Reaches Turkey," Associated Press, November 18, 2005.

10. For more on the BTC, see Soner Cagaptay and Nazli Gencsoy, "Startup of the Baku-Tbilisi-Ceyhan Pipeline: Turkey's Energy Role," *PolicyWatch* no. 998 (Washington Institute for Near East Policy, May 27, 2005). Available online (www.washingtoninstitute.org/templateC05.php?CID=2319).

11. John Roberts, "Nabucco Gas Group Seeking EU Exemptions," *Platts Oilgram News*, April 1, 2005.

12. Kerin Hope, "Russia to Discuss Gazprom Role in New Greek-Turkish Gas Pipeline," *Financial Times*, February 6, 2006.

13. "Karamanlis, Erdogan Inaugurate Work for Vital Natural Gas Pipeline Project," Athens News Agency, July, 3, 2005, Foreign



ment to extend the interconnector to transport gas to Italy even though construction on the Italy-Greece pipeline has not yet begun.¹⁴

Russia, which views the interconnector pipeline as a way of providing Western Europe with gas supplies that bypass Ukraine, has lent its support to the project. Russia's support could raise the 300-kilometer-long pipeline's capacity to more than 172,000 bbl/d.¹⁵

Projected Lines

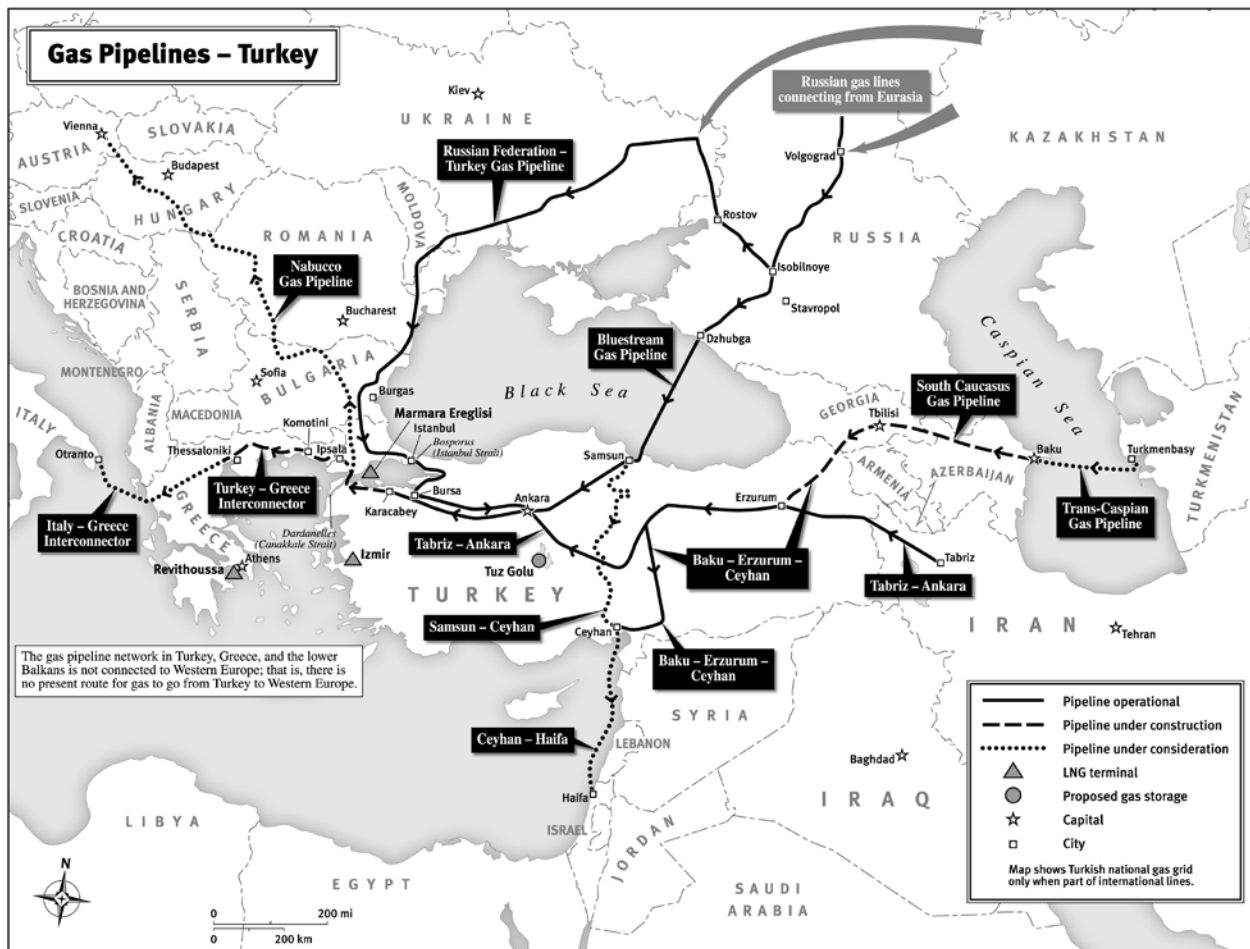
Nabucco Gas Pipeline. The Nabucco pipeline is an ambitious project that seeks to diminish Europe's dependence on Russian gas. The 3,300-kilometer pipeline would transport Azeri, Kazakh, Turkmen,

and Iranian gas to Romania, Hungary, and Austria. At its nominal capacity, the pipeline would transport the energy equivalent of about 500,000 bbl/d.¹⁶

European support for Nabucco increased in the months following the Russia-Ukraine gas dispute. Notwithstanding Nabucco's popularity, the project faces both political and economic obstacles. Nabucco presents just one option for Iran to use its gas. Iran has signed agreements to explore multibillion-dollar deals to export liquefied natural gas to both China and India. Reinjecting its gas into oil fields as a way of increasing their output is another option supported by many Iranian oil experts. Even if Iran opts for Nabucco, Iran's recent behavior—indicating it might use gas as a diplomacy tool, much like Russia does—is another impediment to the project. On January 23,

Broadcast Information Service (FBIS T06-17-22Z), July 4, 2006.
 14. John McLaughlin, "Power Cut Woes Turn Up Pressure on Italy's Policymakers," *Lloyd's List*, January 24, 2006.
 15. Kerin Hope, "Russia to Discuss Gazprom Role in New Greek-Turkish Gas Pipeline," *Financial Times*, February 6, 2006.

16. "Bulgaria Sees a Drop in Russian Gas Supply," *Agence France-Presse*, January 24, 2006.



2006, the daily flow of 165,000 bbl/d of Iranian gas to Turkey was decreased to 31,450 bbl/d.¹⁷ Although Iran cited technical failures for the problem, some analysts in Turkey contend that the decrease was Tehran's way of punishing Turkey because Ankara had just retracted an invitation to Iranian president Mahmoud Ahmadinezhad. Possible economic sanctions against Iran caused by its nuclear program could also endanger the project. Nevertheless, on June 26, the European Commission gave political backing to the project, bringing the \$5.8 billion scheme one step closer to fruition.

Trans-Caspian Gas Pipeline. A Trans-Caspian pipeline (TCP) would transport either Turkmen or Kazakh gas to Turkey, presumably for delivery en route

to Europe. Turkey's plans to construct a gas pipeline from Turkmenistan were stalled in 1999, although recent talks suggest that the two countries want to revive the project. Turkmenistan envisages a pipeline that will run 230 kilometers under the Caspian Sea, carrying the energy equivalent of 275,000 bbl/d of natural gas.¹⁸ Concern exists about the reliability of the legal and regulatory framework. Kazakhstan, with its proximity to the Caspian gas fields, presents a more viable supply option. Discord between Azerbaijan and Turkmenistan over demarcation rights in the Caspian Sea poses another challenge to the realization of the TCP; the TCP would have to cross through Azerbaijan.

Kazakh Oil. On June 16, 2006, Kazakh president Nursultan Nazarbayev signed an intergovernmental

17. "Flow of Gas from Iran to Turkey Increases but Still below Normal," BBC Monitoring, January 23, 2006.

18. Turkish Press Scanner, *Radikal*, January 31, 2006.

agreement with Ilham Aliyev, president of Azerbaijan, allowing Kazakhstan to join BTC by supplying the Azerbaijani portion with oil from the extensive Kashagan fields.¹⁹ The agreement envisages the transport of 500,000 bbl/d of Kazakh oil by tanker.²⁰ The United States supports introducing Kazakhstan to BTC. "The USA wants the Kazakh-Azeri talks on the transport of Kazakh energy resources through the BTC oil pipeline to be completed," U.S. energy secretary Samuel Bodman said in March 2006.²¹ Azerbaijan's industry and energy minister, Natick Aliyev, said Azerbaijan was considering building a new terminal capable of absorbing the Kazakh oil.²² In December 2005, the head of Kazakhstan's national oil company (KazMunaiGaz) said that if oil output reaches 400,000 bbl/d, a pipeline could be built on the Caspian seabed.²³ Demarcation rights of the Caspian Sea will have to be resolved for the project to be realized.

Iraqi Gas. Turkish energy minister Hilmi Guler expressed Ankara's desire to build a new natural gas pipeline parallel to the Kirkuk-Yumurtalik pipelines during Ankara's meetings with Iraqi prime minister Ibrahim Jaafari on February 28, 2006. Turkey's energy companies Botas and TPAO are in the process of searching for new sources of oil and gas in northern Iraq and are bidding to diversify Iraq's natural gas supplies.²⁴

North-South Corridor

Realized Line

Blue Stream Gas Pipeline. Blue Stream, the world's deepest twin gas pipeline, began to pump Russian gas to the Turkish port of Samsun in 2003. The \$3.2 billion pipeline runs from Isobilnoye in southern Russia, to Dzhugba on the Black Sea, then on to the Turkish

port of Samsun.²⁵ In November 2005, Blue Stream reached its projected capacity of the energy equivalent of 275,700 bbl/d.²⁶ On November 17, 2005, the pipeline was opened at an official ceremony attended by the prime ministers of Turkey and Italy—Recep Tayyip Erdogan and Silvio Berlusconi—and Russian president Vladimir Putin. Turkey's Calik Energy Company, Russia's Gazprom, and Italy's Eni are major stakeholders in the project.

Projected Lines

Samsun-Ceyhan (Bypass) Oil Pipeline. The Turkish straits (Bosporus and Dardanelles) are congested, and tanker traffic poses serious environmental risks to the area.²⁷ Istanbul is especially vulnerable because it lies along the two shores of the Bosporus. The Istanbul Strait (Bosporus) is a narrow waterway (less than half a mile across in most places) with many sharp turns and powerful currents; the passage of supertankers through the city's downtown poses a great risk to its inhabitants in the case of an accident. In the past decade, traffic along the straits has risen by 300 percent, with 2.9 million barrels carried daily in 150 vessels.²⁸ Turkey wants to see a 560-kilometer-long pipeline from Samsun in northeastern Turkey on the Black Sea to Ceyhan in southeastern Turkey on the Mediterranean as a route for Caspian oil to reach the Mediterranean without going through the Turkish straits. The 560-kilometer pipeline seeks to transport 1 million bbl/d.²⁹ In April 2006, Turkey's Calik Energy and the Italian state company Eni received a decree from Turkish president Ahmet Necdet Sezer to conduct a six-month feasibility study to construct the oil pipeline. Turkey estimates that a Samsun-Ceyhan pipeline could reduce tanker traffic by 50 percent.³⁰

19. Guy Dinmore and Isabel Gorst, "Kazakhstan Signs Pipeline Accord," *Financial Times*, June 17, 2006.

20. Ibid.

21. "US Secretary of Energy Urges Kazakhstan to Join Caspian Pipeline," BBC Monitoring Central Asia Unit, March 14, 2006.

22. "Aktau-Baku Pipeline Could Be Built on Caspian Seabed," *Interfax*, December 27, 2005.

23. Ibid.

24. Evren Mesci, "Kuzey Irak'la Paralel Boru Hattı İçin Kulis" (Backstage for a Parallel Pipeline with Northern Iraq), *Sabah* (Istanbul), March 1, 2006.

25. U.S. Department of Energy, Energy Information Administration, "Turkey," country analysis briefs, October 14, 2005. Available online (www.eia.doe.gov/emeu/cabs/turkey.html).

26. "Interfax Oil and Gas Report," *Interfax*, November 24, 2005.

27. On February 22, 2006, the strait had to be closed because of a drifting tanker, which nearly rammed into the Dolmabahce palace and left eleven other vessels waiting to enter the straits.

28. Patrick Byrne, "Pipeline Pedigree Helps Turkey Find a Place in the Sun," *Lloyd's List*, February 22, 2006.

29. Richard Swann, "Eni Joins Turkey's Calik in Plan to Build 1-Mil b/d Line Bypassing Bosporus," *Platts Oilgram News*, November 10, 2005.

30. Ibid.


Burgas-Alexandroupolis Oil Pipeline. In 2005, Russia signed an agreement with Bulgaria and Greece, laying the conditions for a 300-kilometer Burgas-Alexandroupolis pipeline that will run from the Black Sea coast of Bulgaria to the Aegean Sea coast of Greece with an annual capacity of 700,000 to 1 million bbl/d.³¹ This route would allow bypassing the Turkish straits through pipelines that would not cross Turkish territory. Transneft, Russia's oil pipeline monopoly, has met with executives from Chevron and Kazakhstan's state oil company, although construction has yet to begin.

Samsun-Ceyhan Gas Pipeline. The construction of a gas pipeline from Samsun to Ceyhan would allow Russian gas to be transported farther south along the north-south corridor to countries on the Mediterranean. In February 2006, Hilmi Guler said that Turkey and Russia participated in discussions related to the extension of a natural gas pipeline to Israel and Lebanon.³² Such a pipeline, however, would likely be built only after on an oil pipeline along the same route.

Turkey-Israel Oil/Gas Pipeline. Talks between Turkish and Israeli officials have taken place that envisage the transport of Russian oil and natural gas to Israel through four underwater pipelines. The European Investment Bank has financed a feasibility study, although no formal plans exist to date. A Turkey-Israel gas pipeline would depend on a surplus of either Azerbaijani or Russian gas, which Turkey could transport to Haifa, Israel's port

on the Mediterranean. Alternatively, an LNG terminal could be built in Israel capable of receiving gas from Turkey. Gazprom's Aleksey Miller supports the idea of connecting Turkey to Israel with underwater pipelines, and he has expressed a desire to connect them to feeder lines capable of reaching Jordan, the Palestinian Authority, and Lebanon. In March 2006, Israel's acting premier, Ehud Olmert, expressed his hope for the signing of an intergovernmental agreement saying, "I certainly believe that in a year's time we will be able to sign an agreement with Mr. Putin on Russian gas supplies to Israel, and then a gas pipeline will be built through Turkey, and we'll get ready to receive Russian gas."³³

Turkey As an Alternative

Turkey's ability to establish itself as an energy transport hub will depend on an array of intergovernmental, business, and territorial agreements. With Russia trying to broaden its influence, the pace at which Turkey can, with U.S. help, expand the BTC/east-west corridor in a balancing act with the advancement of the north-south corridor will ultimately determine Turkey's future as an energy transport hub. What is more, while Turkey profits from the east-west corridor by buying oil and gas from the East and selling it to the West, Russia envisions retaining the profits of the north-south corridor, offering Turkey only transit fees. Russia aspires to achieve a predominant role; it can be a major supplier of energy for shipment through Turkey. Many of those interested in seeing Turkey as a corridor for Caspian energy, however, wish to develop alternatives to strong reliance on Russian energy. 

31. Isabel Gorst, "Go-Ahead for Euros 900m Pipeline to Ease Pressure on the Bosphorus," *Financial Times*, April 12, 2005.

32. "Turkey and Russia to Extend Gas Pipeline to Israel, Lebanon," Associated Press Worldstream, February 3, 2006.

33. "Israeli Acting Premier Interviewed on Russian Gas, Arms Sales," BBC Worldwide Monitoring, March 20, 2006.

Visit Our Online Bookstore

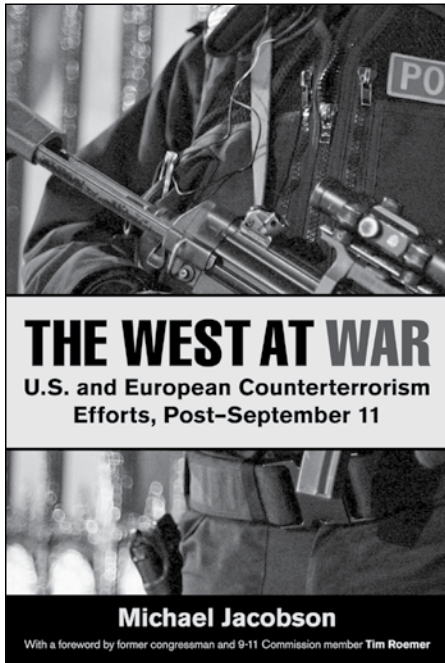
- ▶ Order new and backlist titles
- ▶ Download free publications
- ▶ Enjoy special offers and discounts
- ▶ Subscribe to the free PolicyWatch series



WWW.WASHINGTONINSTITUTE.ORG



New Titles from The Washington Institute



“Jacobson dissects controversial issues such as the Patriot Act, the shift from reactive to preventive action, the difficulties of Western legal coordination, and the politicization of the war on terror. His policy suggestions offer a steadying hand in an intemperate climate.”

—Robert Leiken, director of the Nixon Center’s Immigration and National Security Program

As Europe becomes one of the most important battlegrounds in the global fight against terrorism, U.S. cooperation with European counterterrorism efforts is more vital than ever. Despite often-heated rhetoric, authorities on both sides of the Atlantic have adopted similar methods—and faced similar difficulties—since September 11. In this timely study, Treasury Department advisor and former FBI analyst Michael Jacobson explores diplomatic, legislative, and tactical approaches that can help Western governments overcome their shared challenges.

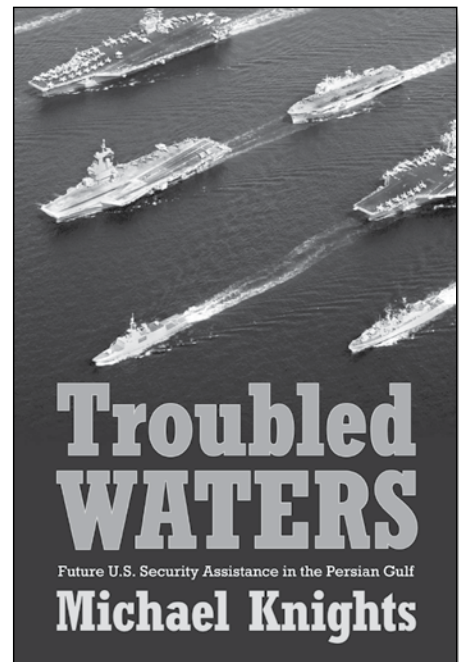
139 pp., ISBN 1-933162-00-7 \$19.95

“Gulf stability is not just a regional issue; it is a global one. This book is a critical reference for understanding the security challenges in an area containing the bulk of the world’s energy reserves.”

—Anthony Cordesman, former director of intelligence assessment, Office of the Secretary of Defense

This timely monograph offers a comprehensive survey of the factors that will shape the U.S. military’s Gulf presence over the next decade. American forces have long shouldered the burden of Gulf security because regional states have been unable to defend themselves against the threats posed by Iraq and Iran. By striking a better balance of effort with the Gulf monarchies and enabling them to handle new threats on their own, the United States can help ensure the region’s security for years to come.

241 pp., ISBN 1-933162-01-5
Includes figures, appendices, and index \$19.95

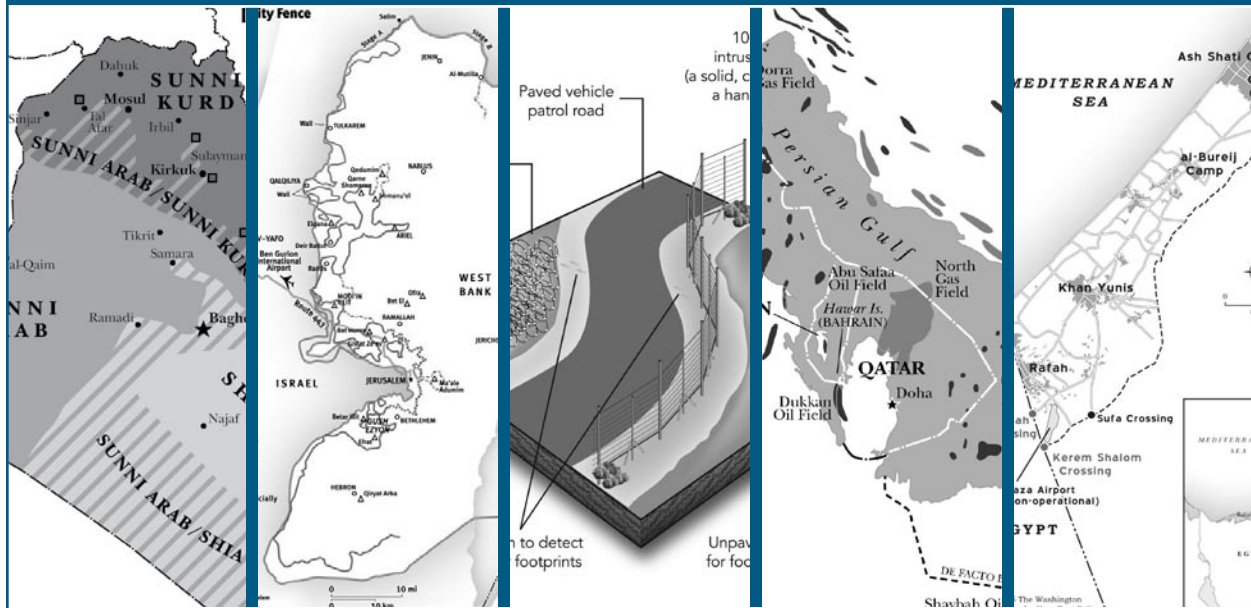


THE
WASHINGTON INSTITUTE 
for Near East Policy

To order these publications, please call 1-800-537-5487
To download a free catalog, visit WashingtonInstitute.org

Download Maps & Graphics

Our website offers state-of-the-art visual resources



WWW.WASHINGTONINSTITUTE.ORG



THE
WASHINGTON INSTITUTE
for Near East Policy



1828 L Street NW, Suite 1050, Washington, DC 20036

RESEARCH NOTES #11

Assessing Turkey's Future As an Energy Transit Country