

Executive Summary Backgrounder

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The Proposed Iran–Pakistan–India Gas Pipeline: An Unacceptable Risk to Regional Security

Ariel Cohen, Ph.D., Lisa Curtis, and Owen Graham

The foreign policies of India and Pakistan are driven increasingly by energy security. To sustain their booming economies and growing populations amid tight oil and gas markets, Indian and Pakistani policymakers are turning to energy deals with unsavory regimes, such as Iran's. At the same time, energy-producing states including Iran and Russia are attempting to tap new markets, drive up oil prices, and secure their own interests by locking in demand.

In 1993, Pakistan and Iran announced a plan to build a gas pipeline, which Iran later proposed extending into India. Dubbed the "peace pipeline," the Iran–Pakistan–India (IPI) gas pipeline would traverse over 2,775 kilometers (1,724 miles) from Iran's South Pars gas field in the Persian Gulf through the Pakistani city of Khuzdar, with one branch going on to Karachi and a second branch extending to Multan and then on to India.

This pipeline would give Iran an economic lifeline and increase its leverage and influence in South Asia. U.S. policymakers argue that allowing the IPI pipeline to proceed would encourage the Iranian regime to defy the will of the international community, develop nuclear weapons, and support terrorism. Furthermore, inadequate investment in Iran's oil and gas industry and increasing domestic demand could render Iran incapable of supplying natural gas through the IPI.

The Energy Chess Game. Although Iran possesses the second-largest gas reserves in the world,

inadequate investment and other deficiencies in its hydrocarbon sector call into question Iran's ability to supply gas to Pakistan and India through the IPI pipeline.

In addition, 475 miles of the IPI pipeline will run through the Pakistani province of Baluchistan. This remote region is home to separatist tribes that employ private militias that fight over territory and resources—conditions that are hardly conducive to secure energy transportation.

The Kremlin is also seeking to influence Iran to send its gas east through the IPI instead of west through the proposed Nabucco gas pipeline, which would undermine Russia's supplier dominance over European gas markets. Russia also hopes that the IPI will undercut plans for the proposed Turkmenistan–Afghanistan–Pakistan–India (TAPI) pipeline. Russia is interested in developing the Russia-proposed north–south energy and trade corridor. Both Iran and India have expressed interest in participating in this undertaking, which would connect them to Europe by way of Russia.

This paper, in its entirety, can be found at:
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China views Iran as an important node in its energy security and in its strategy to develop more overland energy transport routes to reduce its dependence on U.S.-dominated sea-lanes.

What the U.S. Should Do. Constructing pipelines is geopolitically and logistically challenging, especially in regions fraught with political tensions, financial sanctions, and unstable transit areas. Given regional security considerations and the constraints on Iran's capacity to supply natural gas through the IPI pipeline, India and Pakistan would be best served by expanding their liquefied natural gas (LNG) import capacity and investing in alternative energy technologies and projects, such as hydroelectric power and renewable energy, rather than by pursuing the IPI pipeline.

To support India and Pakistan in meeting their rapidly growing energy demand, the U.S. should:

- **Step up its energy diplomacy to discourage their pursuit of the Iran–Pakistan–India pipeline.** The U.S. should develop a multifaceted strategy that incorporates diplomacy and economic policy tools to discourage pursuit of the pipeline.
- **Encourage India to increase LNG capacity** and expand contracts with Australia, Qatar, and other Gulf exporters.
- **Support the TAPI gas pipeline through intensive diplomacy with the governments of Turkmenistan, Afghanistan, Pakistan, and India** with the understanding that, in view of the situations in southeastern Afghanistan and Baluchistan, Pakistan would need to stabilize further before the project becomes feasible from a security standpoint.
- **Boost bilateral energy dialogues with India and Pakistan.**
- **Expand energy cooperation with India within the framework of the Asia–Pacific Partnership** to develop and disseminate technologies that

support the development of clean, efficient, and cost-effective energy.

- **Continue to pursue U.S.–India civil nuclear cooperation.**
- **Assist Pakistan in building large-scale hydroelectric projects and LNG terminals to meet its growing energy and electricity demand.**

Conclusion. Iran's support of terrorism, hostile policies in the Middle East, pursuit of nuclear weapons, and mismanagement of its economy make it a dangerous and unreliable business partner and call into question its capacity to supply natural gas to Pakistan and India through the IPI. Potential transit problems in Baluchistan also make this project inherently risky.

As major energy consumers, the U.S. and India share strategic interests in the Persian Gulf and Central Asia. Building the IPI would be contrary to these interests, would destabilize the Persian Gulf, and would strengthen Russia's grip over Central Asia, decreasing both regional and global energy security. Accordingly, the U.S. should fully back TAPI to increase India's and Pakistan's energy security and reduce Russia's leverage in Central Asia.

India and Pakistan would benefit from an increase in LNG contracts and capacity. This would also strengthen India's ties to the Middle East. Finally, blocking Iran's overland export option might also increase Iran's interest in promoting stability in the Strait of Hormuz. The U.S., India, and Pakistan should expand their energy cooperation to ensure security and economic prosperity in the region.

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Background

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The Proposed Iran–Pakistan–India Gas Pipeline: An Unacceptable Risk to Regional Security

Ariel Cohen, Ph.D., Lisa Curtis, and Owen Graham

The foreign policies of India and Pakistan are driven increasingly by energy security. To sustain their booming economies and growing populations amid tight oil and gas markets, Indian and Pakistani policymakers are turning to energy deals with unsavory regimes, such as Iran's. At the same time, energy-producing states including Iran and Russia are attempting to tap new markets, drive up oil prices, and secure their own interests by locking in demand.

In 1993, Pakistan and Iran announced a plan to build a gas pipeline, which Iran later proposed extending into India. Dubbed the “peace pipeline,” the Iran–Pakistan–India (IPI) gas pipeline would traverse over 2,775 kilometers (1,724 miles) from Iran's South Pars gas field in the Persian Gulf through the Pakistani city of Khuzdar, with one branch going on to Karachi and a second branch extending to Multan and then on to India.¹

This pipeline would give Iran an economic lifeline and increase its leverage and influence in South Asia. U.S. policymakers argue that allowing the IPI pipeline to proceed would encourage the Iranian regime to defy the will of the international community, develop nuclear weapons, and support terrorism. Furthermore, inadequate investment in Iran's oil and gas industry and increasing domestic demand could render Iran incapable of supplying natural gas through the IPI.

Energy Geopolitics and South Asia

India and Pakistan consume 537 million tons of oil equivalent (Mtoe) and 54 Mtoe per year, respec-

Talking Points

- Indian and Pakistani foreign policies are increasingly driven by energy security.
- Iran, Russia, and other energy-producing states are trying to tap new markets, drive up oil prices, and lock in demand.
- India and Pakistan are negotiating a natural gas pipeline deal with Iran, but security concerns, price haggling, and political uncertainty have stalled the deal.
- This gas pipeline would give Iran an economic lifeline and undermine the international sanctions regime aimed at curbing its nuclear ambitions and continued support for international terrorism.
- The U.S. should encourage India and Pakistan to pursue alternatives, such as developing their liquefied natural gas capacities and building the Turkmenistan–Afghanistan–Pakistan–India natural gas pipeline.

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tively.² Islamabad and New Delhi are facing the growing challenge of supplying enough energy to meet rising domestic demand and develop their economies. By any standard, both countries are in a tight market because their local reserves are insufficient to meet these growing demands.

According to the U.S. Department of Energy's *International Energy Outlook 2007*, world demand for energy is projected to grow by 57 percent by 2030.³ Energy demand will grow most rapidly in India and Pakistan and other Asian countries that are not members of the Organisation for Economic Co-operation and Development (OECD). Meeting this demand will require producing an additional 35 million to 37 million barrels per day of petroleum and other liquid fuels by 2030.⁴ Yet according to the International Energy Agency, only an additional 25 million barrels per day is planned.⁵ In this context, it is little wonder that states are endeavoring to lock in energy supplies even if this requires dealing with rogue regimes.

Iran, Pakistan, and India have been negotiating for more than a decade to build a 2,775-kilometer gas pipeline from Iran's South Pars gas field in the Persian Gulf through Pakistan to India. The pipeline talks stalled in 1999–2003 because of Indo–Pakistani tensions, but they regained some momentum in 2004–2005 after New Delhi and Islamabad started a bilateral dialogue process. More recently, pricing disputes among the three countries have hampered progress. The memorandum of understanding on the project dates back to the mid-1990s, but no major international investors have committed to the project, largely because of continuing U.S. sanctions on companies that invest more than \$20 million annually in Iran's oil and gas sector.

In late April 2008, India and Pakistan held ministerial-level talks on both the IPI and Turkmenistan–Afghanistan–Pakistan–India (TAPI) pipeline projects. India's Minister for Petroleum and Natural Gas Murli Deora said that both pipelines are equally important to Indian energy interests. In May 2007, India joined the four-party intergovernmental agreement with the Asian Development Bank (ADB) on the proposed TAPI natural gas pipeline.⁶ This pipeline would run from the Dauletabad gas field in Turkmenistan to the Indo–Pakistani border at a cost of \$7.6 billion.

At the same time, energy-producing states including Iran and Russia are attempting to tap new markets, drive up oil prices, and enhance their own energy security by locking in demand. As Iran has become more isolated on the world stage, it has sought economic investment and political support from members of the U.N. Security Council. In this regard, China and Russia are key diplomatic backers and military suppliers of Iran.

Russia is determined to maintain its supplier dominance over European gas markets and is seeking to open up investment opportunities for Russian oil and gas companies, most of which are state-owned and flush with cash. It is also seeking to influence Iran to send its gas east through the proposed IPI pipeline instead of west through the proposed Nabucco gas pipeline, which would compete with Gazprom.

Russia is also interested in developing the Russia-proposed north–south energy and trade corridor.⁷ Both Iran and India have expressed interest in participating in this undertaking, which would connect them to Europe via Russia.⁸

1. Ali Mostashari, "The Political Economy of the Iran–Pakistan–India Gas Pipeline," *Iran Analysis Quarterly*, Vol. 4, No. 1 (January–March 2007), p. 28, at http://isg-mit.org/IAQ-storage/IAQ_Vol.4_No1_2007.pdf (May 12, 2008).
2. International Energy Agency, *World Energy Outlook 2007: China and India Insights* (Paris: OECD Publishing, 2007), p. 444, and Xinhua English Newswire, "Pakistan's Energy Crisis to Worsen in Next Two Years," *Transmission & Distribution World*, January 9, 2007, at <http://tdworld.com/news/pakistan-energy-crisis> (May 1, 2008).
3. U.S. Department of Energy, Energy Information Administration, *International Energy Outlook 2007*, p. 1, at <http://www.eia.doe.gov/oiaf/ieo/pdf/highlights.pdf> (October 12, 2007).
4. *Ibid.*
5. Dan Caterinicchia, "IEA Exec Says Oil Supply Crunch Looms," *BusinessWeek*, December 11, 2007.
6. Stephen Blank, "India's Energy Options in Central Asia," South Asian Strategic Stability Unit, forthcoming, p. 34.

While Russia ostensibly seeks to assist the West in stopping Iran from enriching uranium, it also supports Iran's nuclear program by providing civilian nuclear technology, missile expertise, and surface-to-air missile systems to protect Iranian nuclear installations. The Kremlin hopes that IPI will mitigate Sino-Russian competition over Central Asian gas and undercut plans for the proposed TAPI pipeline.

China has expressed an interest in extending the IPI pipeline into China to obtain additional gas to feed its growing economy. China views Iran as a critical source of oil and gas and as an important node in its strategy to develop more overland energy transport routes to reduce its dependence on U.S.-dominated sea-lanes.⁹ Like Russia, China and Iran are interested in blunting U.S. influence in the region. However, as an oil importer, China shares with the U.S. an interest in stable and lower energy prices.

To isolate Iran because of its nuclear program and support for terrorism, the Bush Administration has expressed strong opposition to the proposed pipeline with Iran, which would give Iran an economic lifeline and increase its leverage and influence in South Asia. U.S. policymakers argue that allowing the IPI to proceed will only encourage the Iranian regime to defy the will of the international community and to continue using terrorism as a foreign policy tool. U.S. opposition to the IPI is aimed at containing Iran and promoting stability and security throughout the Middle East and South Asia.

India and Pakistan have other options to fulfill their energy needs that will be more reliable than the IPI. Instead of the IPI, the U.S. should encourage India and Pakistan to expand liquefied natural gas (LNG) imports, focus more on the proposed TAPI pipeline, and deepen cooperation with the U.S. in developing other energy sources, including clean coal, hydroelectric, and civilian nuclear.

India's Energy Needs

India's primary interest in seeking a pipeline deal with Pakistan and Iran is to diversify and expand its energy supply to provide for a rapidly growing economy. The Indian economy has grown by more than 8 percent annually for the past two years. New Delhi hopes to maintain this high growth rate over the next 25 years. This will allow India to raise large segments of its population out of poverty and fulfill its objective of becoming a major global power.

Already the world's fifth-largest energy consumer, India is projected to rise to third-largest by 2030, surpassing Japan and Russia.¹⁰ According to the U.S. Energy Information Agency's reference case scenario, primary energy demand in India is expected to grow by 3.6 percent per year, doubling from 537 Mtoe in 2005 to 1,299 Mtoe in 2030.¹¹ India will need to quintuple its electricity-generation capacity from 1,600 gigawatts to nearly 8,000 gigawatts.¹²

India generates 70 percent of its electric power and 50 percent of its total energy from coal.¹³ Indian policymakers have been working to diver-

7. *Ibid.*; Vladimir Putin, "Extracts from the Meeting with Representatives of Russian and Indian Business Circles," Embassy of the Russian Federation in the Republic of Chile, January 25, 2007, at http://www.chile.mid.ru/misc/25-260107_e_06.html (March 31, 2008); Stephen Blank, "The Indian-Iranian Connection and Its Importance for Central Asia," EurasiaNet, March 12, 2003, at <http://www.eurasianet.org/departments/business/articles/eav031203.shtml> (March 26, 2008); and Regine A. Spector, "The North-South Transport Corridor," Brookings Institution, July 3, 2003, at http://www.brookings.edu/articles/2002/0703russia_spector.aspx (March 31, 2008).
8. Embassy of the Republic of Kazakhstan in the Republic of India, "North-South Corridor to Cut Transport Costs Between Central and South Asia," *Kazakhstan Weekly News*, November 8, 2007, at <http://www.kazind.com/newsarchives/newsvol123.htm#5> (March 31, 2008). For more information, see official International North-South Transport Corridor Web site at <http://www.instc.org> (March 31, 2008).
9. John Keefer Douglas, Matthew B. Nelson, and Kevin Schwartz, "Fueling the Dragon's Flame: How China's Energy Demands Affect Its Relationships in the Middle East," U.S.-China Economic and Security Review Commission, September 14, 2006, at http://www.uscc.gov/researchpapers/2006/China_ME_FINAL.pdf (March 10, 2008).
10. Carin Zissis, "India's Energy Crunch," Council on Foreign Relations *Background*, updated October 23, 2007, at http://www.cfr.org/publication/12200/indias_energy_crunch.html (March 9, 2008).
11. International Energy Agency, *World Energy Outlook 2007*, pp. 7 and 465.

sify away from coal because Indian coal is extremely dirty and has low caloric value. India's soft coal produces about twice as much ash and particulate matter as U.S. coal produces. Gas-powered plants are much cleaner and more efficient, especially given the rising costs of emission-control equipment. Increasing dependence on gas has made demand for natural gas in India rise faster than demand for any other energy source.

Most of India's domestic sources of gas are used in the expanding electricity sector. As of January 2007, India had 38 trillion cubic feet of proven natural gas reserves.¹⁴ In addition to current stocks, several recent discoveries in the Bay of Bengal have added to India's known domestic reserves. Despite these finds, India's gas reserves are insufficient to meet its growing demand, and India will rely increasingly on gas imports.

India's LNG Portfolio

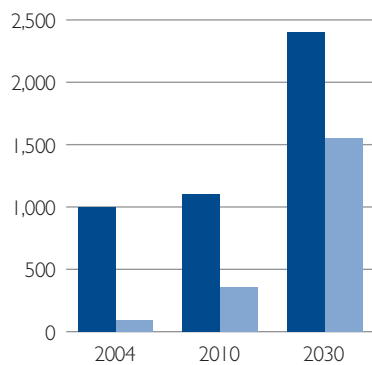
India produces approximately 80 million cubic meters (mcm) of natural gas per day, but domestic demand is 170 mcm per day.¹⁵ Thus, India must import approximately 90 mcm per day. According to energy consultants Wood Mackenzie, Indian demand for natural gas is rising 8 percent per year and will reach 270 mcm per day by 2020. "Around 200 [mcm per day] of this is likely to come from a mixture of state-controlled capped-price production, private-sector production and already-contracted LNG supplies, which leaves a gap of more than 55 [mcm per day], which could be filled by LNG imports."¹⁶

India has two LNG terminals and will complete a third terminal by 2009. Two additional terminals have also been proposed,¹⁷ and several companies are examining the viability of constructing additional LNG import sites throughout India.

Natural Gas and Oil in India

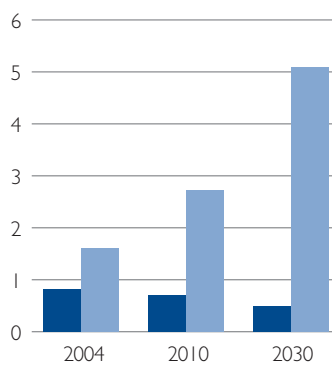
Natural Gas

In Billions of Cubic Feet



Oil

In Millions of Gallons per Day



■ Domestic Production ■ Net Imports

Sources: BP, "Quantifying Energy: BP Statistical Review of World Energy," June 2006, pp. 8 and 24; U.S. Department of Energy, Energy Information Administration, *International Energy Outlook 2006*, June 2006, at [www.eia.doe.gov/oiia/lieo/pdf/0484\(2006\).pdf](http://www.eia.doe.gov/oiia/lieo/pdf/0484(2006).pdf) (February 13, 2007); Central Intelligence Agency, *The World Factbook*, s.v., "India," at www.cia.gov/cia/publications/factbook/geos/in.html (February 13, 2007); International Energy Agency, *World Energy Outlook 2004*, 2004, at www.iea.org/itextbase/nppdf/free/2004/iewo2004.pdf (February 13, 2007); and U.S. Department of Energy, Energy Information Administration, "India," *Country Analysis Brief*, January 2007, at www.eia.doe.gov/emeu/cabs/India/pdf/pdf (February 13, 2007).

Chart I • B 2139 heritage.org

12. Government of India Planning Commission, *Integrated Energy Policy: Report of the Expert Committee*, August 2006, p. xiii, at http://planningcommission.nic.in/reports/genrep/rep_intengy.pdf (December 28, 2007).
13. Condoleezza Rice, "U.S.–India Atomic Energy Cooperation: The Indian Separation Plan and the Administration's Legislative Proposal," testimony before the Committee on Foreign Relations, U.S. Senate, April 5, 2006, p. 113, at <http://www.senate.gov/~foreign/testimony/2006/RiceTestimony060405.pdf> (May 1, 2008).
14. U.S. Department of Energy, Energy Information Administration, "India," *Country Analysis Brief*, January 2007, at <http://www.eia.doe.gov/emeu/cabs/India/Full.html> (May 1, 2008).
15. "India's Gas Reserves Deflate," *Energy Tribune*, August 17, 2007, at <http://www.energytribune.com/articles.cfm?aid=595> (March 10, 2008).
16. SEDIGAS, "Analysis—Liquefied Natural Gas: India's Dilemma," 15th International Conference and Exhibition on Liquefied Natural Gas, Barcelona, March 2007, at <http://www.lng15.com/index.asp?urlgo=newsletter506> (May 1, 2008).
17. U.S. Department of Energy, "India."

India has a long-term LNG contract with Qatar's RasGas 2 project for the delivery of 7.5 million tons of LNG per year through 2029 and an additional 1.25 million tons per year on one-year contracts.¹⁸ In addition, India has active LNG contracts with Australia, Malaysia, Oman, and Turkmenistan.¹⁹

In June 2005, India and Iran reached a \$22 billion deal to export 5 million tons of Iranian LNG to India per year beginning in 2009. However, the talks have been stalled over the past two years, partly due to Iranian efforts to renegotiate the contract. Tehran may also be signaling its anger over India's votes against the Iranian nuclear program at the International Atomic Energy Agency meetings in September 2005 and February 2006.²⁰ In January 2008, Tehran signaled its willingness to revive talks on the LNG deal.

Pakistan's Energy Needs

Pakistan is in a similar situation, but its overall energy demand is only a fraction of India's demand. Natural gas consumption accounts for 50 percent of Pakistan's energy use, and Pakistan consumes all of its domestic gas production. Without increased production, it will become a net importer.²¹ Domestic needs are pressing. Only 60 percent of Pakistani households currently have electricity, and only 18 percent have access to pipeline gas for heating.

Energy demand is expected to increase 250 percent over the next 20 years.²² To meet expected demand, electrical generating capacity must grow by 50 percent from 20.4 gigawatts in 2004 to 30.6 gigawatts in 2010.²³ Accordingly, Pakistan is interested in expanding its sources of gas supply.

Pakistanis have begun to feel the energy crunch more than ever as scheduled outages have occurred six to eight hours per day since January.

The Proposed IPI Pipeline

In 1993, Pakistan and Iran announced the plan to build a gas pipeline, and Iran later proposed extending it into India. The pipeline would run 2,775 kilometers from Iran's South Pars gas field in the Persian Gulf through Khuzdar, Pakistan, with one branch going on to Multan and another to Karachi, a port on the Arabian Sea. From Multan, the pipeline would extend into India. (See Map 1.) This pipeline could potentially export 150 million metric standard cubic meters per day (mmscmd) of gas to Pakistan (60 mmscmd) and India (90 mmscmd).²⁴

The overland route was eventually chosen because it would be four times cheaper than the deep-sea route, even after including transit fee payments to Pakistan.²⁵ Building the pipeline would cost an estimated \$7.5 billion. However, additional nonmonetary risks and costs will need to be factored into this equation.

The pipeline has been referred to as the "peace pipeline" because creating economic linkages between India and Pakistan would likely encourage more stable relations between the two historical foes, which have fought three wars since their independence in 1947 and experienced two military crises in the past nine years. In fact, the Clinton Administration was relatively supportive of the pipeline idea in the late 1990s, when the "moderates" were in ascendancy in Teheran, as a way to defuse Indo-Pakistani tensions, but the Bush

18. BBC Monitoring South Asia, "India to Seek Additional 5m Tonnes Gas from Qatar—Agency," October 29, 2007.

19. Vibhuti Hate, "India's Energy Dilemma," *South Asia Monitor*, September 7, 2006.

20. U.S. officials apparently pressured India to vote against Iran or risk jeopardizing the proposed U.S.–India civil nuclear deal. However, the U.S.–India civil nuclear deal has been bogged down in Indian domestic politics since the fall of 2007, and chances for its approval before the end of 2008 look increasingly doubtful.

21. U.S. Department of Energy, Energy Information Administration, "Pakistan," *Country Analysis Brief*, December 2006, at <http://www.eia.doe.gov/emeu/cabs/Pakistan/Full.html> (March 10, 2008).

22. Mukhtar Ahmed, "Meeting Pakistan's Energy Needs," presentation at Woodrow Wilson International Center for Scholars, June 2006, pp. 1–2, at <http://www.wilsoncenter.org/events/docs/TextofKeynoteAddress.pdf> (March 31, 2008).

23. U.S. Department of Energy, "Pakistan."

24. Mostashari, "The Political Economy of the Iran–Pakistan–India Gas Pipeline," pp. 26–34.

25. Gal Luft, "Iran–Pakistan–India Pipeline: The Baloch Wildcard," Institute for the Analysis of Global Security, January 12, 2005, at <http://www.iags.org/n0115042.htm> (October 30, 2007).

Two Proposed Pipelines in South Asia



Map 1 • B 2139 heritage.org

Administration has backed away from supporting the proposed Iran–Pakistan–India pipeline in recent years because of increased Iranian belligerence on the nuclear issue.

In addition to significant political risks, the pipeline faces several practical obstacles. Of particular concern is the 475 miles of pipeline through Baluchistan, one of the poorest and most unstable regions in Pakistan. This remote region is home to separatist tribes that employ private militias that fight over territory and resources—conditions that are hardly conducive to secure energy transportation.

Most notably, these tribes claim that they have not received their perceived fair share of the oil and

gas wealth and have expressed their deep dissatisfaction with the Pakistani federal government by targeting critical energy infrastructure, such as water pipelines, power lines, and gas installations. For example, on October 10, 2006, the Baloch Liberation Army (BLA) blew up a gas pipeline and a water pipeline in Pir Koh.²⁶ On January 1, 2007, the BLA claimed responsibility for blowing up a gas pipeline and two power pylons in Dera Bugti.²⁷ (See Map 1.)

India has also been cautious about pursuing the pipeline, given its concern that Pakistan could use it as economic leverage against India. For example, Islamabad could threaten to cut off the supply if it is dissatisfied with India's policy regarding Kashmir or some other bilateral issue,

26. Memorial Institute for the Prevention of Terrorism, "Baloch Liberation Army (BLA) Attacked Utilities Target (Oct. 10, 2006, Pakistan)," Terrorism Knowledge Base, October 11, 2006.

27. Memorial Institute for the Prevention of Terrorism, "Baloch Liberation Army (BLA) Attacked Utilities Target (Jan. 1, 2007 Pakistan)," Terrorism Knowledge Base, January 4, 2007.

much as Russia has repeatedly done in its bilateral relations with Ukraine and a number of other Eastern European states.²⁸

U.S. Policy Toward Iran

The United States has been firm in its opposition to the proposed Iran–Pakistan–India pipeline since negotiations started to gain traction in 2005. In 2006, U.S. Ambassador Steven Mann reiterated that “[t]he U.S. government supports multiple pipelines from the Caspian region but remains absolutely opposed to pipelines involving Iran.”²⁹ U.S. officials also continually remind India and Pakistan that U.S. legislation sanctions any company investing more than \$20 million annually in Iran’s oil and gas industry.

Indian support for the IPI undercuts U.S. efforts to isolate Iran economically by challenging U.S. sanctions against Iran’s oil and gas industry. Over the long term, pursuing the IPI will increase Iranian influence in South Asia, which could contribute to greater instability in the region, especially if Iran develops a nuclear weapons capability and continues to support international terrorism.

Iran continues to flout international pressure to cease its uranium-enrichment efforts and discontinue its nuclear program. In March 2008, the U.N. Security Council took notice and passed Resolution 1803, the third round of sanctions on Iran, adding to the sanctions adopted in 2006 and 2007.³⁰

Resolution 1803 follows the December 2007 release of the controversial National Intelligence Estimate, which stated that Iran had halted its nuclear weapons program in 2003. While this may be the case, the report also recognizes that Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons and that Iran’s uranium enrichment and ballistic missile programs are continuing.³¹ Both programs are vital for building a nuclear weapons arsenal. Moreover, Iran remains the world’s biggest supporter and financier of terrorism.

In addition to these new sanctions, the first two rounds of sanctions are having a noticeable impact. According to Stuart Levey, Under Secretary for Terrorism and Financial Intelligence at the U.S. Department of the Treasury, the U.S. has had success in persuading leading key banks and businesses worldwide to begin severing their Iranian business ties by sharing information on illicit terrorist funding by Iranian banks.³²

Financially, Iran is finding itself increasingly shut out of the international banking system, making it nearly impossible for Iran to secure loans to rebuild its sagging energy infrastructure. More banks are refusing to deal with Iran in any currency due to the high risk involved. Indeed, 40 international banks, including some of the largest in the European Union (EU) and Japan, have stopped doing business with Iran.³³

28. Ariel Cohen, “Europe’s Strategic Dependence on Russian Energy,” Heritage Foundation *Background* No. 2038, November 5, 2007, at <http://www.heritage.org/Research/Europe/bg2083.cfm>; “Russia’s Gas Attack on Ukraine: An Uneasy Truce,” Heritage Foundation *WebMemo* No. 954, January 4, 2006, at <http://www.heritage.org/Research/RussiaandEurasia/wm954.cfm>; and “Ukraine’s Economic Benefits from Integration into the Euro-Atlantic Community,” Heritage Foundation *Lecture* No. 1045, June 12, 2007, at <http://www.heritage.org/Research/Europe/hl1045.cfm>.

29. Steven Mann, former Senior Advisor on Caspian Basin Energy Diplomacy, U.S. Department of State, quoted in Abbas Maleki, “Iran–Pakistan–India Pipeline: Is It a Peace Pipeline?” Massachusetts Institute of Technology, Center for International Studies, September 2007, at http://web.mit.edu/cis/editorspick_maleki07_audit.html (May 7, 2008).

30. BBC News, “UN Approves New Sanctions on Iran,” March 4, 2008, at http://news.bbc.co.uk/2/hi/middle_east/7274902.stm (March 17, 2008).

31. James Phillips, “The Iran National Intelligence Estimate: A Comprehensive Guide to What Is Wrong with the NIE,” Heritage Foundation *Background* No. 2098, January 11, 2008, at <http://www.heritage.org/Research/MiddleEast/bg2098.cfm> (March 17, 2008).

32. Stuart Levey, “Iran’s Economic Suicide,” *The Wall Street Journal*, October 2, 2007, republished at <http://www.iranfocus.com/modules/news/article.php?storyid=12652> (March 17, 2008).

33. Jeffrey Donovan, “US Official: Iran Financial Clampdown Working,” Radio Free Europe/Radio Liberty, October 18, 2007, at <http://www.speroforum.com/site/print.asp?idarticle=11556> (November 1, 2007).

Increasing international sanctions, combined with Iran's reputation for unreliability and mismanaging contracts, have substantially reduced direct foreign investment in Iran. This lack of foreign investment, coupled with Iran's massive economic mismanagement and isolation from the international financial community, recently led the OECD to lower Iran's debt rating to the second-worst rating, putting it on par with Gabon and Swaziland.³⁴

Iran's Troubled Oil and Gas Sector

Iran is an important economic power in the natural gas and petroleum industry, but numerous deficiencies in its oil and gas sector have caused the overall economy to lag far behind its potential and call into question Iran's future as an oil and gas exporter, including its ability to supply gas to Pakistan and India through the IPI pipeline.

Iran has the second-largest gas reserves in the world after Russia and the second-largest petroleum reserves after Saudi Arabia. Iran has an estimated 974 trillion cubic feet in proven gas reserves and 136 billion barrels in proven oil reserves.³⁵ Oil provides more than 70 percent of Iranian government revenue.

Yet instead of reinvesting this money in the oil and gas sector, the Iranian government has generally spent it on ambitious weapons purchases, its nuclear program, support for terrorism, and economic subsidies. The Iranian regime is investing only about half of the funds necessary just to maintain hydrocarbon production, much less to expand production.

Iranian exports are declining by 10 percent to 12 percent annually according to a National Acad-

emy of Sciences (NAS) study. If current trends continue, Iran's oil exports will drop by half in less than five years and disappear entirely by 2015. This projected decline in production would be the result of a lack of investment in the oil sector and a shortage of natural gas for reinjection (to enhance oil recovery), caused by continuing massive growth in domestic demand for natural gas due to subsidized consumption.³⁶

Iran's domestic demand for natural gas is growing by nearly 9 percent annually, while its production is growing by 4.5 percent per year.³⁷ Thus, domestic gas demand has increased at the expense of reinjection, accelerating oil depletion rates. Despite its massive gas reserves, Iran has been forced to import 23 mcm per day from Turkmenistan. However, on December 31, 2007, Turkmenistan stopped daily deliveries of gas, forcing Iran to begin importing from Azerbaijan.³⁸

These trends indicate that Iran will be an unreliable oil and gas supplier and a high political risk. The NAS study concludes that without major changes, Iran will cease to be a net oil exporter by 2014 and will therefore be incapable of supplying gas to Pakistan and India through the IPI.³⁹

Russian Interests in the IPI and Iran

Iran and Russia see the U.S. as their principal antagonist, which trumps any major differences between them. They favor a strategy of multipolarity, both in the Middle East and worldwide. Russian interests include keeping oil prices high because Russia is a high-cost oil producer, diverting Iranian oil and gas exports away from Russia-dominated

34. Levey, "Iran's Economic Suicide."

35. U.S. Department of Energy, Energy Information Administration, "Iran," *Country Analysis Brief*, October 2007, at <http://www.eia.doe.gov/emeu/cabs/Iran/Full.html> (April 28, 2008).

36. Roger Stern, "The Iranian Petroleum Crisis and United States National Security," *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 104, No. 1 (January 2, 2007), pp. 377-382, at <http://www.pnas.org/cgi/reprint/0603903104v1> (March 10, 2008).

37. *Ibid.*

38. John C. K. Daly, "Analysis: Turkey, Iran Shiver Together," United Press International, January 10, 2008, at http://www.upi.com/International_Security/Energy/Analysis/2008/01/10/analysis_turkey_iran_shiver_together/9827 (March 9, 2008).

39. Stern, "The Iranian Petroleum Crisis and United States National Security." See also Alexander's Gas & Oil Connection, "Doubt About Iranian Gas Availability," *News & Trends: E & SE Asia*, January 16, 2007, at <http://www.gasandoil.com/goc/news/nts70396.htm> (March 22, 2008), and Roger Stern, "Iran Actually Is Short of Oil," *International Herald Tribune*, January 8, 2007, at <http://www.ihf.com/articles/2007/01/08/opinion/edstern.php> (March 22, 2008).

European markets and maintaining the Kremlin's dominance over Caspian energy transportation.

The Kremlin views Iran through an economic and strategic lens. It seeks to keep oil prices high by heightening regional instability, to which end it supports Iran's bid for regional influence, even supplying the air defenses to defend Iran's nuclear program. Such support increases Iran's confidence and belligerence, amply rewarding its Kremlin backers. Every \$1 increase in the price of a barrel of oil earns Russia an additional \$1.4 billion per year in revenue.⁴⁰

Iran's regime also benefits from high oil prices because the additional revenue helps to cover up its economic incompetence. According to Cambridge Energy Research Associates, each \$1 increase in the price of oil puts nearly \$900 million more per year into Iran's coffers.⁴¹ Reflecting their joint interests, Iran and Russia are moving away from the dollar as their preferred currency in energy transactions and are cooperating to create an OPEC-style global gas cartel.⁴² This cooperation in sustaining high energy prices and cartelization of energy resources bodes ill for those states that would be supplied by the IPI.

While the Kremlin ostensibly seeks to help the West in stopping Iran from enriching uranium, it also supports Iran's nuclear program, knowing that sanctions will help to keep Iran in Russia's commercial sphere of influence. This serves the dual purpose of keeping the U.S. and its allies preoccupied and preventing Western companies from helping Iran to send its gas west through the proposed Nabucco gas pipeline. (See Map 2.)

Recent Iranian statements indicate a willingness to supply gas through the Nabucco pipeline, which forced Russian Prime Minister Vladimir Putin and

President Dimitry Medvedev to work overtime, albeit subtly and stealthily, to prevent Iran's participation.⁴³ Moreover, with uncertainty over the availability of Turkmen and Kazakh gas to fill Nabucco, Europeans will increasingly look to Iran as a source of natural gas.

Nabucco would directly challenge Russia's strategic position as gas supplier to Europe by opening up a southern export route that would bypass Russia and provide Caspian gas to Europe. Europe depends on Russian gas imports for 41 percent of its annual consumption and is becoming more dependent.⁴⁴ Russia wants to increase this dependence so that Gazprom can use the resulting leverage to close bilateral energy deals that keep the EU divided over energy policy.⁴⁵

Thus, Moscow's strategy is to block all southern or western pipeline export routes that are not under Russian control and to keep Central Asian gas flowing north through the Russian network. Already geographically and commercially well-placed, the Kremlin wants to tighten its grip on its network and expand it, not dilute it with new competition. The core of this network is the old Soviet oil and gas infrastructure that was created specifically to integrate the periphery with the center—Central Asia and Eastern Europe with Russia.

Accordingly, Russia is seeking to expand this network through its proposed north-south energy corridor. This trade corridor is part of the Kremlin's plan to make Russia the primary hub in a vast pipeline network that would embrace Europe to the west and Iran, Central Asia, and India to the south.⁴⁶

Moscow's interest in the IPI pipeline dates back to 1995, when Gazprom and the Gas Authority of

40. Senator Richard G. Lugar (R-IN), opening statement for hearing on Russia, Committee on Foreign Relations, U.S. Senate, June 29, 2006, at <http://www.senate.gov/~foreign/testimony/2006/LugarStatement060629.pdf> (May 2, 2008).

41. Steven R. Weisman, "As the Price of Oil Soars, So Does Its Power to Shape Politics From Washington to Beijing," *The New York Times*, July 25, 2006, at <http://www.nytimes.com/2006/07/25/world/middleeast/25oil.html> (May 7, 2008).

42. Ariel Cohen, "Gas OPEC: A Stealthy Cartel Emerges," Heritage Foundation *WebMemo* No. 1423, April 12, 2007, at <http://www.heritage.org/Research/EnergyandEnvironment/wm1423.cfm>.

43. "Nabucco Pipeline Project Impossible Without Iran: Minister," *Tehran Times*, December 27, 2007, at http://www.tehrantimes.com/index_View.asp?code=160103 (March 22, 2008).

44. Cohen, "Europe's Strategic Dependence on Russian Energy."

45. Robert R. Amsterdam, "The Gazpromization of EU Energy Security," *The Daily Star* (Beirut, Lebanon), February 22, 2008, at http://www.dailystar.com.lb/article.asp?edition_id=10&categ_id=5&article_id=89192 (March 24, 2008).

The Proposed Nabucco Gas Pipeline



Map 2 • B 2139  heritage.org

India signed a memorandum of understanding on constructing the pipeline.⁴⁷ In addition to influencing Iranian decision making, Moscow has shown interest in the project both as a contractor and as an investor.⁴⁸

Moscow has also made commitments to develop Iranian oil and gas, particularly the giant South Pars field. According to a Gazprom statement, “the two sides agreed on the joint participation in the development of two or three blocs in South Pars field as well as on the participation by GazpromNeft in an oil production project in

Iran.”⁴⁹ Gazprom also expressed a desire to participate in LNG projects in Iran.⁵⁰

By helping to manage the IPI, Gazprom would extend its political leverage and gain a massive consumer market, swallowing up smaller energy companies along the way. The Kremlin views the IPI as the ideal instrument to expand its commercial and strategic reach into Pakistan, India, and China.⁵¹ The Kremlin also hopes that the IPI will prevent construction of the Turkmenistan–Afghanistan–Pakistan–India pipeline. (See Map 1.)

46. Blank, “India’s Energy Options in Central Asia”; Putin, “Extracts from the Meeting with Representatives of Russian and Indian Business Circles”; Blank, “The Indian-Iranian Connection and Its Importance for Central Asia”; Embassy of the Republic of Kazakhstan, “North–South Corridor to Cut Transport Costs Between Central and South Asia.”

47. Rediff.com, “Gazprom to Revive Indo–Iran Gas Pipeline,” August 6, 2002, at <http://www.rediff.com/money/2002/aug/06gas.htm> (March 10, 2008).

48. M. K. Bhadrakumar, “Russia, Iran and Eurasian Energy Politics,” *Japan Focus*, December 23, 2007, at <http://japanfocus.org/products/details/2613> (March 10, 2008). First appeared in *Asia Times*, December 22, 2007.

49. Associated Press, “Gazprom Signs Oil, Gas-Production Deal with Iran,” CNN, February 19, 2008, at <http://edition.cnn.com/2008/BUSINESS/02/19/russia.iran.oil.ap> (May 7, 2008).

50. Reuters, “Iran Says Deals with Gazprom ‘Almost Finalized,’” February 19, 2008, at <http://www.reuters.com/article/rbssEnergyNews/idUSBLA96134420080219> (March 9, 2008).

51. Atul Aneja, “Pipeline Should Extend to China,” *The Hindu*, May 7, 2007.

China's Giant Energy Appetite

Ever seeking greater energy supplies, China has already expressed interest in the IPI and has even declared that it will gladly buy India's share if India chooses not to participate.⁵² This enthusiasm is not surprising given China's considerable investment in its energy, military, and geopolitical relationship with Iran. Beijing's expressed interest in the IPI will also put New Delhi on the defensive because China has consistently outbid India in the competition for energy sources worldwide. Like Russia and Iran, China is interested in blunting U.S. influence in the region. However, as an oil importer, China also shares the U.S. interest in stable and lower energy prices.

China views Iran as a strategic source of energy supply for its ever-expanding economy. China also views Iran as an important link in its ambitious plans to develop overland transport routes for Middle Eastern oil, hoping to reduce its dependence on U.S.-dominated sea-lanes.⁵³

In February 2008, the Chinese National Offshore Oil Company reportedly signed a \$16 billion contract to develop Iran's North Pars gas field.⁵⁴ Under the agreement, Iran will export LNG from the field to China. In return, the Chinese company will invest \$11 billion in downstream LNG plants and \$5 billion in upstream gas field projects.⁵⁵ If this deal goes through, it will be the second big oil and gas contract that China has signed with Iran in several months.

In December 2007, China signed a \$2 billion contract with Sinopec to develop Iran's huge Yadavaran oil field.⁵⁶ This field will begin to produce 185,000 barrels per day within seven years. Iran

has also signed agreements with multiple firms to develop South Pars. The South Pars gas field is located near the border between Qatari and Iranian waters in the Persian Gulf and contains an estimated 500 trillion cubic feet (14 trillion cubic meters) of gas, which is equal to 7 percent of the world's proven reserves and 50 percent of Iran's gas reserves.

Through a strategy of buying international political support with major energy deals, the Iranian leaders are counting on Russian, Chinese, and European diplomatic cooperation in exchange for lucrative energy business.

Alternative Pipelines

Some pipeline options would be less disruptive than the proposed Iran-Pakistan-India pipeline, such as the proposed TAPI pipeline. (See Map 2.) The United States has supported this export option—together with the proposed trans-Caspian pipeline—as a way to reduce Russia's leverage over Europe, strengthen the political independence of the former Soviet republics, and increase India's and Pakistan's energy security. TAPI would also help to stabilize Afghanistan by providing needed jobs to Afghans and promoting economic linkages in South and Central Asia.

As with the proposed Nabucco and trans-Caspian pipelines, Moscow is determined to block TAPI. Gazprom is already worried that its current monopoly on the Caspian states' pipeline routes will be undermined by a recent contract to build a 2,000-kilometer gas pipeline from Turkmenistan through Kazakhstan to China's western Xinjiang province.

Although TAPI's projected capacity is roughly half of the IPI's capacity, the potential loss of Turk-

52. Ben Lando, "Iran Presses India for IPI Pipeline Answer," United Press International, February 18, 2008, at http://www.upi.com/International_Security/Energy/Analysis/2008/02/18/analysis_oil_and_gas_pipeline_watch/4414 (May 2, 2008), and LexisNexis News, "Iranian Gas for China?" February 14, 2008.

53. Douglas *et al.*, "Fueling the Dragon's Flame," p. 2.

54. Associated Press, "China Silent on Iran Gas Deal," *Gulf News*, February 29, 2008, at http://www.gulfnews.com/business/Oil_and_Gas/10193501.html (March 24, 2008). North Pars has some 80 trillion cubic feet (2.3 trillion cubic meters) of gas.

55. Associated Press, "China's CNOOC Mum on Iran Gas Deal; Beijing Rebuffs Speculation over Sanctions Violation," *International Herald Tribune*, February 28, 2008, at <http://www.ihf.com/articles/ap/2008/02/28/business/AS-FIN-China-Iran-CNOOC.php> (March 9, 2008).

56. Agence France-Presse, "Iran, China Finalise Two Billion Dollar Oil Contract," Google News, December 9, 2007, at <http://afp.google.com/article/ALeqM5iitKVhppHvh3Ny8YKJXxmFNbPtCw> (December 20, 2007).

men gas supplies is of great concern to Moscow. According to the BP annual statistical review of world energy, Turkmenistan has the world's fifth-largest gas reserves: 2.9 trillion cubic meters.⁵⁷ To maintain its supplier dominance over Europe, Russia needs to control Turkmen gas.

Furthermore, Russia relies heavily on Turkmen gas to meet its international contracts and is reaping windfall profits. Russia purchases Turkmen gas for about \$130 per 1,000 cubic meters (well below market price) and sells it to Europe at market rates for \$354 per 1,000 cubic meters.⁵⁸ By manipulating prices, Russia is able to keep its market share in Europe while maintaining a subsidized and inefficient domestic energy market.

However, these price manipulations may change. Gazprom recently announced that it will pay "European prices" for Central Asian gas beginning in 2009.⁵⁹ This move should be seen as part of the broader chess game of energy geopolitics. While the West had been offering to pay higher prices, this could be a powerful ploy to keep Turkmenistan in Russia's sphere.⁶⁰

Turkmenistan is increasingly looking to diversify its economy. It has announced a new law easing foreign investment and waiving numerous taxes and fees for foreign investment projects. President Gurbanguly Berdymukhamedov publicly announced that "[t]his law has been drafted as part of the policy of deep reforms of our economy and is aimed at attracting foreign investment."⁶¹ After the announcement, Makhtumguly Khydyrov, director of TurkmenGaz Oil and Gas Institute, said that Turkmenistan is seeking to boost annual gas

output from the current 80 billion cubic meters (bcm) per annum to 130 bcm in the near future.

Despite recent Turkmen commitments to Russia, if new Turkmen reserves are tapped and available, Washington would still like to see both a trans-Caspian gas pipeline and a TAPI pipeline. Turkmenistan has recently commissioned Gaffney, Cline and Associates, a British consulting firm, to conduct an independent audit of the country's gas fields.⁶²

Expanding LNG Capacity: A Prudent Alternative

Regional pipeline construction involves many challenges, including complicated logistics and massive financing. When pipeline transport proves unfeasible, liquified natural gas is an alternative means of long-distance transportation. Liquefied natural gas is stored and transported in liquid form by tanker ship. After delivery to market, it is regasified and distributed via pipeline.⁶³ Pipeline projects can run afoul of tricky political dynamics, such as long-standing regional tensions and unstable relations between neighboring countries. Taking these factors into account, India and Pakistan may decide that expanding LNG trade and port capacity is preferable to developing potentially volatile pipelines.

India's LNG prospects are promising. Beyond its current LNG imports, India continues to search for new sources of energy. One major source is Qatar, which has the world's third-largest gas reserves and is currently the largest producer of LNG. Qatar already provides LNG to India under a long-term contract and has announced that it will consider offering a major share of LNG on a priority basis to

57. Oleg Shchedrov, "Putin in Turkmenistan to Secure Gas Exports," SignOnSanDiego.com, May 11, 2007, at <http://www.signonsandiego.com/news/world/20070511-0328-turkmenistan-russia-.html> (March 23, 2008).

58. Associated Press, "Gazprom to Buy Central Asian Gas at 'European Prices,'" *International Herald Tribune*, March 11, 2008, at <http://www.ihf.com/articles/ap/2008/03/11/europe/EU-GEN-Russia-Gas-Prices.php> (March 23, 2008).

59. *Ibid.*

60. John C. K. Daly, "Analysis: Iran and Turkmen Gas," United Press International, March 20, 2008, at http://www.upi.com/International_Security/Energy/Analysis/2008/03/20/analysis_iran_and_turkmen_gas/3133 (March 23, 2008).

61. *Ibid.*

62. Associated Press, "Energy-Rich Turkmenistan Awards British Firm Contract to Audit Its Gas Reserves," *International Herald Tribune*, March 15, 2008, at <http://www.ihf.com/articles/ap/2008/03/15/europe/EU-GEN-Turkmenistan-Reserves-Audit.php> (March 26, 2008).

63. U.S. Department of Energy, Energy Information Administration, "What Is Liquefied National Gas?" December 2003, at <http://www.eia.doe.gov/oiaf/analysispaper/global/index.html> (April 28, 2008).

India after its expanded capacity of 77 million metric tons becomes operational by 2010.⁶⁴

Petronet LNG, India's largest LNG importer, anticipated increasing its LNG imports by 40 percent during 2007. Petronet has gone on a buying spree throughout Asia and Africa as part of its plans to increase capacity at its Dahej terminal from 6.5 million metric tons to 10 million metric tons by December 2008. It is attempting to secure LNG import deals totaling 2.25 million metric tons from additional suppliers, including Algeria, Egypt, Oman, and Trinidad and Tobago.⁶⁵

Australia has shown an interest in expanding LNG exports to India as it continues to develop its western gas fields. In 2008, the Australian Department of Industry plans to complete an analysis of the Indian gas market and identify opportunities for Australia-India LNG trade.⁶⁶

Increasing LNG capacity also fits well into India's planned naval expansion. After years of neglect and disrepair, India's navy has received much-needed attention, both from the Indian government and from the United States. With ambitions to expand the domestic shipbuilding industry and make "80 percent of the Indian Navy homemade,"⁶⁷ the defense and shipping fleets needed to increase India's LNG capacity would be readily available. The U.S. has pursued greater naval cooperation with India, proposing to accelerate the Indo-U.S. Maritime Cooperation Framework, which calls for expanded cooperation in joint patrolling of energy trade routes in the Strait of Malacca.⁶⁸

India is also seeking to strengthen its ties to the Middle East, both for energy security and because a large number of Indians work there. Likewise, India is working with its regional neighbors to counter the various maritime crimes (e.g., drug trafficking and piracy) that threaten some of the country's shipping routes.⁶⁹ Given India's path toward increased naval capacity and cooperation, its desire to increase LNG shipments is consistent with its overall maritime policies and pursuit of stronger regional ties and stability.

Finally, by forgoing the IPI pipeline and thus constraining Iran's overland export capability, India and Pakistan would make the Iranian regime more dependent on sea exports through the Strait of Hormuz. As the second-largest gasoline importer after the United States, Iran is already dependent on seaborne imports for 40 percent of its fuel needs.⁷⁰ This dependence stems from its reliance on its tanker fleet's access to international markets.⁷¹ Blocking the overland option may increase Iran's interest in promoting stability in this extremely important chokepoint.

What the U.S. Should Do

Constructing pipelines is geopolitically and logistically challenging, especially in regions fraught with political tensions, financial sanctions, and unstable transit areas. Given regional security considerations and the constraints on Iran's capacity to supply natural gas through the IPI pipeline, India and Pakistan would be best served by expanding their LNG import capacity and investing in alternative energy

64. Middle East North Africa Financial Network, "Marketing, Innovations Make Qatar LNG Giant," June 12, 2007, at http://www.menafn.com/qn_news_story_s.asp?StoryId=1093176808 (March 9, 2008).

65. Dinakar Sethuraman, "Petronet Chief Opens LNG Buying Journey," *International Herald Tribune*, February 15, 2007, at <http://www.ihf.com/articles/2007/02/15/bloomberg/sxpetronet.php> (May 2, 2008), and Reuters, "India's Petronet Eyes Revised Gorgon LNG Deal," February 12, 2008, at <http://www.reuters.com/article/companyNews/idUSDEL10705220080212> (May 6, 2008).

66. Australian Department of Resources, Energy and Tourism, "Liquefied Natural Gas (LNG) Fact Sheet," February 2008, at <http://www.ret.gov.au/Industry/Energy/Pages/LiquefiedNaturalGasLNGFactSheet.aspx> (May 2, 2008).

67. Neelam Mathews, "Cinderella on the Move: The Once Neglected Indian Navy Is Reaping Benefits from International Cooperation," *Aviation Week and Space Technology*, September 25, 2006.

68. *Ibid.*

69. Gurpreet Singh Khurana, "Interpreting India's Naval Strategy," *The Straits Times*, July 16, 2007.

70. *Ibid.*

71. U.S. Department of Energy, "Iran."

technologies and projects, such as hydroelectric power and renewable energy, rather than by pursuing the IPI pipeline.

To support India and Pakistan in meeting their rapidly growing energy demand, the U.S. should:

- **Step up its energy diplomacy to discourage their pursuit of the Iran–Pakistan–India pipeline.** The U.S. should develop a multifaceted strategy that incorporates diplomacy and economic policy tools to discourage pursuit of the pipeline. Washington should use public diplomacy, particularly in the international business community and regional media, to highlight the IPI's disadvantages compared with other energy alternatives for South Asia.
- **Encourage India to increase LNG capacity** and expand contracts with Australia, Qatar, and other Gulf exporters. LNG provides distinct economic and security advantages, particularly in the long run. Increasing LNG capacity also fits into India's planned naval expansion. India's planned expansion of its domestic shipbuilding industry would help to provide the naval and shipping fleets needed to increase its LNG capacity.
- **Support the TAPI gas pipeline** to boost the energy security of India and Pakistan, reduce Russia's leverage over Europe, and strengthen the political independence of Turkmenistan. Washington should engage in intensive diplomacy to encourage the Turkmen, Afghan, Pakistani, and Indian governments to build this pipeline instead of the IPI.

The U.S. should also offer Turkmenistan a development assistance package as an added incentive for energy cooperation, especially in health, education, and agriculture, to make it a primary natural gas industry partner in the region and facilitate the construction of both TAPI and the trans-Caspian gas pipeline. Building the TAPI pipeline will require further stabilization of the situations in southeastern Afghanistan and Baluchistan, Pakistan, before it becomes feasible from a security standpoint.

- **Boost U.S. bilateral energy dialogues with India and Pakistan.** These dialogues should focus on encouraging India and Pakistan to meet their energy needs in ways that facilitate economic growth and greater security and stability in South Asia. The U.S. should enhance its bilateral engagement with India on energy issues, including gas options, clean coal technologies, alternative fuels, strategic oil reserves, and energy efficiency projects.

The U.S. should also expand its energy dialogue with Pakistan, particularly on hydroelectric power and development of LNG terminals, and encourage energy conferences in South Asia that bring U.S. companies and investors to the region to explore various projects.

- **Expand energy cooperation with India within the framework of the Asia–Pacific Partnership⁷²** to develop and disseminate technologies that support development of clean, efficient, and cost-effective energy.
- **Continue to pursue U.S.–India civil nuclear cooperation.** Although the U.S.–India civil nuclear talks are stalled because of Indian domestic political opposition, Washington should continue to pursue a dialogue with New Delhi on civil nuclear cooperation to overcome the technical hurdles and find common ground.
- **Assist Pakistan in building large-scale hydroelectric projects and LNG terminals to meet its growing energy and electricity demand.** For example, U.S. companies could provide much-needed foreign investment and technology for several major Pakistani hydroelectric projects.

Conclusion

Iran's mismanagement of its economy and continued pursuit of a nuclear weapons capability in the face of U.N. sanctions and international pressure make it an unreliable business partner and call into question its capacity to supply natural gas through an Iran–Pakistan–India pipeline. Moreover, Tehran's continued support for international

72. The Asia–Pacific Partnership also includes Australia, Canada, China, Japan, and the Republic of Korea.

terrorism means that any business venture with the current regime carries unacceptable political risks.

As major energy consumers, the U.S. and India share strategic interests in the Persian Gulf and Central Asia. Building the IPI would be contrary to these interests, would destabilize the Persian Gulf, and would strengthen Russia's grip over Central Asia, decreasing regional and global energy security. Accordingly, the U.S. should fully back TAPI to increase India's and Pakistan's energy security and reduce Russia's leverage in Central Asia.

India and Pakistan would benefit from an increase in LNG contracts and capacity. This would also strengthen India's ties to the Middle East.

Finally, blocking Iran's overland export option might also increase Iran's interest in promoting stability in the Strait of Hormuz. The U.S., India, and Pakistan should expand their energy cooperation to ensure security and economic prosperity in the region.

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