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## **The DPRK as a Participant in Northeast Asia Regional Energy Cooperation : Benefits and Challenges**

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The robust industrial economy of the Republic of Korea (ROK) is almost entirely fueled with oil, natural gas (in the form of liquefied natural gas, or LNG), coal, and fuel for nuclear reactors imported by sea, much of it from distant regions. The Russian Far East (RFE) and adjoining Siberia have a wealth of oil, gas, coal, and hydraulic resources available for development, but very low regional energy demand because of a small and dispersed population. As such, Russian and Korean officials and researchers have for many years explored infrastructure projects—including powerlines and pipelines—that would allow RFE energy resources to be provided to the ROK, thus lessening the ROK's reliance on fuel from outside the region. Geographically between the ROK and RFE, however, lies the Democratic People's Republic of Korea (DPRK). Most RFE-to-ROK infrastructure proposed would transit the DPRK, requiring bilateral and multilateral arrangements for powerlines and pipelines to do so. Resolution of the DPRK nuclear weapons and related issues would open opportunities for regional cooperation on energy issues that heretofore have been stymied, at least in part, by the difficulties in including the DPRK in regional projects. There remain, however, many different opportunities for developing regional energy infrastructure and for energy cooperation activities—many of which could involve the DPRK—that would potential benefit a number of regional parties on many levels.

Power grid interconnections linking the RFE, DPRK, and ROK have been under discussion, on and off, for many years. Power from hydro, coal, gas, and/or nuclear plants in RFE—mostly from plants yet to be built—would be carried to the ROK and DPRK. Interconnection of the power systems of the three countries, however, is not a simple matter. The RFE alternating current (AC) system uses a different frequency (50 cycles per second, or Hertz—Hz) than the ROK system (60 Hz), so one or (likely) more stations converting AC power to DC (direct current) power and back to AC power of the proper frequency would be needed. Alternatively, a DC line—DC lines have lower transmission losses over large distances than AC lines—could be used to transfer power from the RFE to the ROK, with a DC-AC converter located near the ROK border with the DPRK. In exchange for hosting the powerline on its territory, the DPRK will require payments, power from the line, or a combination of the two. The DPRK power grid is in poor condition,

however, and will need substantial rebuilding in order to accept significant amounts of power, or power from the line could go to one or more totally new local or regional grids in the DPRK.

Discussions on potential gas pipelines from the Russian Far East and Siberia to the ROK through the DPRK have been continuing between the potential partners, on and off, for many years.<sup>1</sup> The Russian TASS news agency reported on talks by Russian Foreign Minister Sergey Lavrov with DPRK counterparts in November, 2014, saying that “North Korea is ready to consider projects to use its territory as a transit route for Russian gas and electricity deliveries to South Korea”, following a pilot coal shipment to the ROK via the DPRK port of Rajin, a part of the Rason Special Economic Zone.<sup>2</sup> As with electricity transmission lines, a gas pipeline from the RFE to the ROK via the DPRK would pay some “rent”, in the form of monetary payments and/or gas deliveries, to the DPRK in exchange for the transit of its territory. At present, however, the DPRK has little or no infrastructure for domestic gas use.

These “big infrastructure” projects have potential to contribute to the ROK’s energy security by diversifying its energy supplies, but will be very complex to negotiate, build, and operate. For example, an electricity interconnection with a capacity of 5 GW (5 billion Watts), at 80% annual capacity factor, could offset about 7% of the ROK’s 2012 net generation, though the net cost to the ROK would depend on a number of factors. Electricity imports from the RFE over such a line could reduce ROK greenhouse gas (GHG) emissions by maximum of about 5%, but this assumes that only ROK coal-fired power is displaced, and only hydro and/or nuclear power are used to supply the line in the RFE; other assumptions will result in much less overall GHG emissions reduction (counting emissions in both the RFE and ROK). On the other hand, a pipeline carrying 12 billion cubic meters of gas per year to the ROK from the RFE, as has been proposed in the past, could offset 23% of the ROK’s 2012 gas use<sup>3</sup> OR 51% of gas used for electricity generation OR 28% of coal-fired generation. By displacing coal use for generation, gas from the RFE could be used to reduce the ROK’s GHG emissions by up to 7%, but the reduction would be at a net cost to the ROK, since pipeline gas is likely to be more

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<sup>1</sup> See, for example, a series of news postings, stretching back more than a decade, on proposals for gas pipeline transiting the DPRK, compiled by *North Korea Economy Watch* as “Russia-Korea gas pipeline compendium” (most recent post, June 5, 2014), available as <http://www.nkeconwatch.com/2012/10/04/russia-korea-gas-pipeline-compendium/>.

<sup>2</sup> TASS Russian News Agency (2014), “North Korea ready to discuss transit of Russian gas to South Korea — Lavrov”, dated November 20, 2014, and available as <http://itar-tass.com/en/economy/760867>.

<sup>3</sup> ROK energy use from Korea Energy Economics Institute (KEEI, 2013), *2013 Yearbook of Energy Statistics*.

expensive than coal. If pipeline gas displaces LNG imports, the ROK might save money, but there would be little net effect on the nation's GHG emissions. Although these multi-billion dollar infrastructure projects can contribute toward enhancing the ROK's energy security, and may (or may not) save money or help to achieve national climate goals, they are far from total solutions by themselves.

Considering the potential for big infrastructure to contribute to DPRK energy sector redevelopment, about 10% of the output of a 5 GW could displace all of the DPRK's estimated coal-fired generation, based on Nautilus' 2010 estimate<sup>4</sup>, but, as noted above, transfer of this much power would require rebuilding the DPRK grid. Assuming the installation of new combined-cycle generation, a few percent of the output of an RFE-DPRK-ROK gas pipeline could displace all of the DPRK's current coal-fired generation, but again would require a DPRK grid rebuild. So large powerline or pipeline projects will not be, in and of themselves, panaceas for DPRK "energy insecurity".

Not to be overlooked are the host of difficult issues that must be surmounted by the partners in these projects, including agreeing on electricity or gas pricing and transit fees, deciding which labor and environmental regulations should govern the construction, operation, and management of the facilities—note that powerlines or pipelines from the RFE to the ROK would likely pass through areas that include sensitive wildlife habitat—and deciding upon a multi-nation organizational structure to control the operations of the powerline or pipeline. In short, there may well be economic and climate benefits associated with RFE-DPRK-ROK energy infrastructure projects, but the difficulty of these projects—underlined by long period over which they have already been considered—should not be underestimated.

As well as opportunities to more easily implement international infrastructure, additional markets for all types of technologies (and services) would open if the political issues involving the DPRK are addressed and the DPRK undertakes economic redevelopment—which is already happening to varying degrees, and with steps both forward and back, at the grassroots level. In fact, the redevelopment of the DPRK will provide a considerable opportunity to install efficient end-use equipment and renewable energy systems, as much of the DPRK economy (and infrastructure) will need essentially to be rebuilt from the ground up. Such projects could potentially be aided and financed

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<sup>4</sup> See, for example, David F. von Hippel and Peter Hayes, *An Updated Summary of Energy Supply and Demand in The Democratic People's Republic Of Korea (DPRK)*, published as Hanyang University Center for Energy Governance and Security Working Paper 2014-2, and available from [http://www.egskorea.org/sub/sub2\\_2.asp](http://www.egskorea.org/sub/sub2_2.asp).

by international programs such as Clean Development Mechanisms. The development of renewable energy and energy efficiency technologies have been of keen interest in many countries of Northeast Asia and beyond—with Germany and post-Fukushima Japan<sup>5</sup> as particularly interesting recent examples. Cooperation in these areas could take advantage, for example, of technology, research and development infrastructure, and financing from the ROK, Japan, and possibly the United States, mass manufacturing infrastructure, labor, and quite likely financing from China, labor from the DPRK, renewable resources in varying availability across the region, energy efficiency potential in all nations, and potentially huge combined regional markets.

Potential benefits to the DPRK of regional cooperation initiatives such as those above could include gaining access to energy resources that would be difficult to develop on its own, obtaining “rents” in exchange for allowing energy infrastructure to transit its territory, and obtaining better access to conventional energy, energy efficiency, and renewable energy, and related technologies, allowing the more rapid and cost-effective redevelopment of the DPRK economy. In addition, cooperation would oblige the DPRK to work with the countries of the region to negotiate access rights and fees, tariffs, and other parameters of cooperative projects. Lessons learned through those projects would help both the DPRK and the international community in subsequent interactions.

Overall, international projects involving the DPRK will be even more difficult to manage than cooperative project involving other Northeast Asian countries. Involving the DPRK in such projects, however, can offer significant benefits in terms of engagement of the DPRK with the international community, even apart from their energy and economic benefits.

Big regional infrastructure projects (powerlines/pipelines) are very difficult and expensive, and are much more so with the DPRK involved. A great deal of patience on the part of all partners will continue to be required to bring them to fruition. Although it is worthwhile working to move ahead with such big projects, but it is essential to ALSO:

- Pursue energy sector capacity-building with North Korean counterparts;
- Emphasize cooperation in energy-efficiency and renewable energy sources to help transform DPRK energy demand and supply during redevelopment

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<sup>5</sup> Andrew DeWit (2014), "Japan's Radical Energy Technocrats: Structural Reform Through Smart Communities, the Feed-in Tariff and Japanese-Style "Stadtwerke"", NAPSNet Special Reports, December 02, 2014, available as <http://nautilus.org/napsnet/napsnet-special-reports/japans-radical-energy-technocrats-structural-reform-through-smart-communities-the-feed-in-tariff-and-japanese-style-stadtwerke/>.

(essentially “leapfrogging” to the green growth future that the ROK government has advocated);

- Initiate quick, fast, cheap (and probably some not-so-cheap) cooperation projects in the DPRK with combined benefits for the energy sector, economic development, and humanitarian aid; and
- Build upon economic (such as private sector entrepreneurship) and energy (such as household renewables) trends already ongoing in the DPRK.

News articles and the testimony of observers<sup>6</sup> suggest that many aspects of life in the DPRK are changing, as outside influences continue to seep in. These trends can be built upon by carefully exploring cooperation options both big and small, and by moving forward with attractive, well-planned cooperation projects when opportunities arise.

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<sup>6</sup> See, for example, the recent Monitor article by the authors, “Private Purchases of Solar Photovoltaic Panels in the DPRK: Signs of Green Growth on the Way?”, as well as the summary of the recent book by Felix Abt, *A Capitalist in North Korea: My Seven Years in the Hermit Kingdom*, available at <http://www.a-capitalist-in-north-korea.com/>.

## The Unsteady Fate of TAPI Pipeline

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The realization of Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline represents an old project which could influence the regional energy scenario, considering interests and energy goals of the involved actors.

Even if relevant steps have been made during these years, the implementation of TAPI project has been complicated by a combination of geopolitic and security factors.

The project to fuel South Asia markets with Central Asian gas was elaborated in the 90's, following the collapse of the Soviet Union, in order to undermine Russian control on Central Asian energy exports and offering alternative routes of exports to the new post soviet republics. In 1998 the Taliban regime signed an agreement with a US-led and US sponsored consortium to build TAPI crossing the Afghanistan's territory, but the attacks to the US embassies in Kenya and Tanzania in the same year (lead by Osama bin Laden and supported by Taliban) froze this project.<sup>7</sup>

TAPI has revived after the death of the former Turkmen President Nyazov, following the multi vector energy strategy promoted by the new President Berdymukhamedov.

TAPI project has been defined as the “peace pipeline”, because it may promote stability and prosperity in the region as well as enhancing regional integration and cooperation through the realization of transport and energy infrastructures and the creation of new jobs: the development of this envisaged scenario of energy cooperation could smooth out the traditional rivalry between India and Pakistan also contributing to the stabilization of Afghanistan. Furthermore, TAPI will grant lucrative transit fees for involved countries and regular gas supplies to boost their energy security condition and to diversify their energy mix.

Turkmenistan has been identified as the only TAPI supplier: originally Daulatabad was indicated as the main source of supply for this project, but the stagnant/declining production of this mature field will make necessary to commit also Galkynysh production.<sup>8</sup> From Turkmen gas fields, TAPI pipeline should reach Fazilka in India's Punjab province, via the Afghan cities of Herat and Kandahar and Qetta and Multan in

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7 M. Krutikhin, *A Gas Pipeline Across Afghanistan?*, Natural Gas Europe, November 1, 2013, available online at: <http://www.naturalgaseurope.com/gas-pipeline-afghanistan-pakistan-china>

8 F. Indeo, *Turkmenistan's diversification strategy of energy exports and the role of China*, Global Energy Monitor, Vol.2, No. 3, March 2014, p.6, available online at: [www.egskorea.org](http://www.egskorea.org)

Pakistan. It is envisaged that total length of gas pipeline will be 1735 km: some 200 km of the pipeline will run through Turkmenistan, 735 km through Afghanistan, 800 km through Pakistan.<sup>9</sup>

Relevant progresses have been made in order to realize this energy infrastructure. In 2010 the participating four countries signed the Inter-Governmental Agreement (IGA) in Ashgabat, starting the practical implementation of this project. In 2012 Turkmenistan reached Gas Sales and Purchase agreement with India and Pakistan, while the agreement with Afghanistan was signed in 2013. TAPI should deliver 33 bcm per year of Turkmen gas to Pakistan and Indian markets by 2017-2018: Afghanistan will purchase 500 million cubic meters of Turkmen gas in the first ten years, 1 bcm and 1.5 bcm in the following second and third decades respectively, while India and Pakistan will approximately obtain 18 bcm each.<sup>10</sup> In the attempt to overcome the slow implementation of the project, in November 2013 the Asian Development Bank (ADB) was appointed in the role of transaction advisor for TAPI gas pipeline project, helping TAPI members to find financial support even if the estimated cost of the project has increased from US\$ 7.6 billion to around US\$ 9-12 billion, compared to the previous pre-feasibility study leaded by Penspen.<sup>11</sup> In November 2014, the four state gas companies of Turkmenistan, Afghanistan, Pakistan, and India established a company that will build, own and operate the planned TAPI Pipeline: Turkmengas, Afghan Gas Enterprise, Pakistan's Inter State Gas Systems (Private) Limited, and GAIL (India) Limited own equal shares of the company.<sup>12</sup>

The implementation of this project could grant benefits for all involved countries: Turkmenistan will open an alternative export route, developing the eastward corridor which will allow Ashgabat to diversify its gas exports lessening the dependence on China. Furthermore, US authorities look at Turkmenistan's engagement to realize TAPI as a

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9 State News Agency of Turkmenistan (TDH), *A meeting of steering committee for TAPI gas pipeline project*, State News Agency of Turkmenistan (TDH), August 7, 2014, available online at: [http://www.turkmenistan.gov.tm/\\_eng/?id=3763](http://www.turkmenistan.gov.tm/_eng/?id=3763)

10 T. Rejepova, *Turkmenistan and Afghanistan Sign Agreement Over TAPI Gas Pipeline*, Central Asian Caucasus Analyst Institute, August 7, 2013, available online at: <http://cacianalyst.org/publications/field-reports/item/12790-turkmenistan-and-afghanistan-sign-agreement-over-tapi-gas-pipeline.html>

11 G. Sachdeva, *TAPI: Time for the Big Push*, Central Asian Caucasus Analyst Institute, July 10, 2013, available online at: <http://www.cacianalyst.org/publications/analytical-articles/item/12772-tapi-time-for-the-big-push.html>

12 Asian Development Bank, *Turkmenistan, Afghanistan, Pakistan and India Establish Landmark TAPI Pipeline Company*, ADB New Release, November 13, 2014, available online at: <http://www.adb.org/news/turkmenistan-afghanistan-pakistan-and-india-establish-landmark-tapi-pipeline-company>

concrete and genuine effort aimed to the stabilization of neighboring Afghanistan and to forge regional integration through energy projects.<sup>13</sup>

Afghanistan may obtain lucrative transit fees and revenues (estimated at 500.000-\$1 billion per year) and the realization of infrastructures as well as the creation of job opportunities.<sup>14</sup>

For India and Pakistan additional volumes of natural gas could contribute to a diversification of the energy mix, respectively replacing coal (59%, while natural gas represents only 9% in the energy mix) and oil (35%) as dominant components in the electricity generation: natural gas is a cheaper source to produce electricity rather than oil, hydropower dams, nuclear or coal.

Moreover, gas deliveries coming from Turkmenistan may also diversify sources of imports, considering that Qatar covers 84% of India's total LNG imports.

In the Pakistani perspective, TAPI project appears a more realistic option rather than to import expensive Qatari LNG or plans to realize the Iran-Pakistan gas pipeline, hampered by international sanctions targeting Iran.<sup>15</sup>

In spite of these significant progresses, several concrete hindrances set back the realization of TAPI project.

Even if concerns about Turkmenistan's ability to supply different gas projects have been overcome – Asghabat holds the fourth largest gas reserves in the world - security of transport routes and domestic stability of involved countries represent the main issues to address. As a matter of fact, the Afghanistan's permanent condition of instability severely weakens the possibility to realize this energy route crossing the country, also considering that the planned TAPI transport route should cross Southern-Western Afghanistan (Herat, Helmand, Kandahar) as well as Pakistani Baluchistan, posing serious threats to the security of gas supply and regular energy transit.

If instability in the Af/Pak region has always been one of the main weakness of TAPI

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13 D.J. Graeber, *U.S. lauds TAPI natural gas pipeline progress*, UPI, November 20, 2014, available online at:[http://www.upi.com/Business\\_News/Energy-Resources/2014/11/20/US-lauds-TAPI-natural-gas-pipeline-progress/6271416478754/](http://www.upi.com/Business_News/Energy-Resources/2014/11/20/US-lauds-TAPI-natural-gas-pipeline-progress/6271416478754/)

14 *Afghanistan, Turkmenistan Ink Gas Deal*, Natural Gas Asia, July 13, 2013, available online at:<http://www.naturalgasasia.com/afghanistan-turkmenistan-ink-gas-deal>

15 US Energy Information Administration, *India, country analysis*, June 26, 2014 (last updated), available online at:<http://www.eia.gov/countries/cab.cfm?fips=in>; D. Bocharov, *Building a case for the Trans-Afghan Gas Corridor*, Neurope, July 26, 2012, available online at:<http://www.neurope.eu/article/building-case-trans-afghan-gas-corridor>; N. Snow, *ADB: TAPI gas pipeline making steady progress*, Oil and Gas Journal, June 5, 2014, available online at: <http://www.ogj.com/articles/2014/06/adb-tapi-gas-pipeline-making-steady-progress.html>

project, the rising tensions in the Turkmen-Afghan border – which encompasses the provinces of Jowzjan, Faryab, Badghis, and Herat on the Afghan side - contributes to spread uncertainty about TAPI implementation.

In 2014, frequent incursions and clashes provoked by supposed Taliban fighters have pushed Turkmen armed forces to intervene, and the security scenario will clearly worsen after the complete withdrawal of NATO military forces from Afghanistan.<sup>16</sup>

The proposal of the Afghanistan authorities to deploy 9,000-12,000 police to ensure the security of the project or to involve NATO troops to protect the pipeline appear unrealistic, maintaining unsolved the issue of stability and security.<sup>17</sup>

Another relevant factor which weakens and hampers TAPI's realization is Turkmenistan's refusal to involve major international companies in Production Sharing Agreements (PSA) to develop onshore gas fields. Their involvement may represent another step to realize TAPI project, following the ADB advice aimed to identify and select the commercial consortium leader in order to begin the construction and operation of the pipeline.<sup>18</sup>

Many international companies - such as Chevron, ExxonMobil, Total Malaysia's Petronas, Gazprom, British Petroleum, Germany's RWE - have showed their interest to support TAPI project, driven by geopolitical and economic aims. However, the combination among security concerns, financial costs and the impossibility to have direct access to onshore gas fields have prevented until now their involvement, substantially enhancing Chinese role in Turkmen energy sector.

The main US energy companies have tried to obtain a role in this project: Chevron offered to finance TAPI and lead the consortium, asking Turkmenistan for exploration rights. Since 2010 Ashgabat has offered exploration rights for offshore fields asking Chevron to swap gas found in these fields for onshore ones and export it to countries involved in TAPI project.<sup>19</sup> ConocoPhillips closed down its office in Ashgabat and left Turkmenistan in 2012, due to the refusal of Turkmen government to grant concessions or PSA. The interest of US companies reflects the strong Washington support to TAPI project,

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16 J. Kucera, *Turkmenistan Armed Forces Reportedly Cross Afghanistan Border*, *Eurasianet*, September 18, 2014, available online at: <http://www.eurasianet.org/node/70056>; Q. Ovozi, *Clashes, Appeasement, Isolation On The Turkmen-Afghan Frontier*. Radio Free Europe Radio Liberty, March 6, 2014, available online at: <http://www.rferl.org/content/turkmenistan-afghanistan-taliban-border-security/25288056.html>

17 Rejepova, 2013

18 Asian Development Bank, *Turkmenistan, Afghanistan, Pakistan and India Establish Landmark TAPI Pipeline Company*, 2014

19 C. A. Fitzpatrick, *US, Russia compete for TAPI role but China enjoys advantage in Turkmenistan*, *Natural Gas Europe*, October 31, 2013, available online at: <http://www.naturalgaseurope.com/us-russia-tapi-role-china-turkmenistan-advantage>

conceived as one of the pillars of the Modern Silk Road geopolitical strategy aimed to promote prosperity and security in the region after 2014, enhancing trade and energy ties between Central and South East Asia.<sup>20</sup> In the US perspective, TAPI has a strategic relevance as an energy corridor involving neither Russia and Iran (as suppliers or partners in the project) nor China, and able to offer regular gas deliveries to India.

In 2011 also Gazprom showed its interest to be involved in TAPI project trying to interfere with US strategy and to maintain its position in the regional energy scenario. Turkmenistan originally refused Russian involvement, while Pakistan and India expressed their support to Gazprom involvement in TAPI.<sup>21</sup> At present, Gazprom's participation in TAPI appears unrealistic, considering the frozen relations with Turkmenistan in the gas sector: Turkmen gas exports to Russia fell down from 50 bcm in 2009 to 9,9 bcm in 2013, while Ashgabat re-oriented its export routes to China.<sup>22</sup>

China has never opposed to TAPI, even if its potential implementation could compete with Beijing's energy projects in Turkmenistan. However, China could easily hinder TAPI's realization, considering its predominant role in Turkmen energy sector.

As a matter of fact, Chinese national company CNPC is the only foreign company with direct access to an onshore development - the Bagtyarlyk project - through a 35-year production sharing agreement: furthermore, a consortium led by CNPC developed Turkmenistan's Galkynysh gas field, the world's second largest and CNPC is currently the only designated company for the second development phase at Galkynysh.<sup>23</sup>

Given these Chinese predominant position, it appears hard to predict that Beijing will allow international energy companies to share stakes in Galkynysh in order to fuel a rival project.

Furthemore, following the implementation of the Central Asia-China Gas Pipeline (CAGP) - through the realization of Line C and the new D - China will commit Kyrgyzstan and Tajikistan as additional and alternative transit routes to deliver higher volumes of Turkmen gas to China (85 bcm by 2020) thanks to the rise of production ensured by

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20 S.F. Starr, A.C. Kuchins, *The Key to Success in Afghanistan. A Modern Silk Road Strategy*, Silk Road Paper-Central Asian Caucasus Institute, May 2010, pp. 39-40

21 C. A. Fitzpatrick, *Who will be tapped by TAPI*, Natural Gas Europe, July 23, 2012, available online at:<http://www.naturalgaseurope.com/tapi-turkmenistan-afghanistan-pakistan-india-pipeline>

22 British Petroleum, *BP Statistical Review 2014*, June 2014, p. 28, available online at: <http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2014/BP-statistical-review-of-world-energy-2014-full-report.pdf>

23 *Second phase of development of Turkmenistan's largest gas field begins*, Turkmenistan.ru, May 9, 2014, available online at:<http://www.turkmenistan.ru/en/articles/17705.html>

exploitation at Galkynysh, so depriving TAPI of potential source of supply.<sup>24</sup>

According to the Chinese energy strategy, the TAPI's failure and the success of the Iran-Pakistan (IP) gas pipeline could be an interesting strategic point, even because IP may be extended to China through Pakistani port of Gwadar, opening an additional and alternative route of gas imports.<sup>25</sup>

In spite of Berdymukhamedov stated that TAPI's realization will start in 2015, the lack of solution of the existent weaknesses prevent to share this positive approach of the Turkmen President.

Regional stability and security appear ambitious targets to reach in the medium term, also hindering efforts and attempts to attract foreign financial investments.

It will be also necessary to identify new unexplored gas fields to fuel TAPI project, because Galkynysh will not be the source of supply for TAPI, considering Chinese investments to develop this field. However, the development of PSA with international companies on onshore gas fields represents a precondition to achieve this aim, trying to obtain concessions in the Eastern part of the country, in order to make the project economically feasible.

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24 Indeo, 2014

25 S.Blank, *India's Challenges in Central Asia*, Central Asia Caucasus Analyst, January 8, 2014, available online at: <http://www.cacianalyst.org/publications/analytical-articles/item/12889-indias-challenges-in-central-asia.html>