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Translators: Mahyar Emami, Hamid Barimani

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Trans-Afghan Pipeline and Iran's Energy Diplomacy



A key development that took place on the 11th of December 2010 in Turkmenistan's Ashgabat City, was inking of a contractual framework by Turkmenistan, Afghanistan, Pakistan and India for the transfer of Turkmenistan's natural gas to the other three states. According to this contract, the pipeline known as Trans Afghan Pipeline (TAPI) shall be 1680 kilometers in length and is scheduled to transfer the natural gas extracted from Turkmenistan's Dolat Abad gas field close to the Iran-Turkmenistan border line to Afghanistan, Pakistan and India. The pipeline project is expected to cost some US\$7.5-10 billion.

History:

Construction of TAPI pipeline project dates back to 15 years go. For the first time in March 1995, an agreement was signed by Turkmenistan and Pakistan for the transfer of Turkmenistan's natural gas to Pakistan via Afghanistan. March 1995 was marked as a honeymoon in the relations between the United States and the then Taliban ruled Afghanistan. The US Unocal Company was operating in Afghanistan which set up a consortium known as CetGas (Central Asian Gas Pipeline Ltd) in August 1996 for the construction of the said gas pipeline. At that time, present Afghan president, Hamid Karzai was staying in the United

States and served as an intermediate between the Taliban government and the US oil companies.

In October 1997 and in the course of ceremonies that had been arranged in Turkmenistan's Ashgabat, a number of international companies that comprised the consortium, concluded agreements for cooperation with the government of Turkmenistan. In 1998, the Taliban government in Afghanistan signed an agreement that would authorize CetGas Company to carry on operations in that country. However, Gazprom which had a share of ten percent of the consortium as well as Unocal withdrew from the consortium in June and December of the same year respectively and disputed practicability of the project under the then conditions prevailing Afghanistan and in this manner, the consortium was practically dismissed and Trans-Afghan project was put into oblivion.

The idea of the construction of this pipeline was restored once again in 2002 and Turkmenistan, Afghanistan and Pakistan inked an agreement that stipulated construction of this pipeline. In 2005, the Asian Development Bank was in receipt of the latest revised version of the pipeline project's feasibility studies which had been conducted by the British Penspen Company. Navigating Penspen's internet site illustrates the very fact that the Company had apparently foreseen two routes for the construction of the project. These routes have been illustrated in the map below. The Company had estimated an investment of US\$2.5 billion for the construction of a 56 inch diameter pipeline for the transfer of 30 billion cubic meters of natural gas. These figures were of course subject to drastic changes in later stages.

Transfer of part of Turkmenistan's natural gas to Pakistan's Gwadar port via Trans-Afghan pipeline for conversion into LNG and supply to world markets had been raised in the past. Today, however, since India has joined the project and the global LNG market situation has changed, that idea is no longer a matter of attention.

The Americans Join the Game

Following collapse of Taliban from power in the wake of

the US invasion of Afghanistan, construction of the above mentioned pipeline became the center of attention and support of the Americans in 2005. Ever since the collapse of the former Soviet Union, the Americans have extended support for the implementation of projects which are intended to transfer Central Asian energy to world markets through routes other than Russia (and perhaps Iran) while TAPI pipeline is, from certain perspectives, similar to Baku-Tbilisi-Ceyhan (BTC) pipeline which served to be strategic to Americans and was put into operation under US pressure although it was not economically feasible compared with Iran route as an option. Susan Eliot, deputy undersecretary of state in the Southern and Central Asian affairs expressed the US administration's welcome for this pipeline project as follows:

"this pipeline can serve as a stabilizing corridor which will link neighboring states along the track towards economic growth and welfare. A long course lies ahead of this project, however, the benefits can be huge and worth the endeavors rendered by the four states involved in this project."

Meeting natural gas requirements of India and Pakistan through this pipe line and their independence from Iran's gas supplies is as well favored by the Americans. The US exerted much pressure on India and Pakistan to withdraw from the natural gas pipe line known as Peace Pipeline Project (Iran-Pakistan and India). India gave in to the US pressure, however, Pakistan insists on all options and alternatives available to that country and evades the US instructions.

The US's Additional Incentive

In addition to transfer of energy, TAPI pipeline is expected to bring about stability and peace in Afghanistan and in the region and that is yet another incentive for the Americans to support construction of this pipeline. This proved to be specially true when India, Pakistan and Afghanistan signed the agreement for the purchase of natural gas from Turkmenistan in April 2008.

This project facilitates transfer of huge resources of hydrocarbon products from the Caspian Sea region to

world markets and meantime serves to bring about stability to Afghanistan, promote friendship between India and Pakistan, bridge Central Asia to South Asia and consolidate the US's political, military and economic influence in the strategic Central Asian region which overlooks Russia, Iran and China. This pipeline project can assist Afghan government with creating employment and income generating opportunities in that country and hence lead to the establishment of peace and tranquility there while India and Pakistan will meantime have the incentive to work out a solution for the Afghan question and at the same time curb tension in their relations.

Impediments in the Way of Implementation of the Project

There certainly do reside a host of road spikes in the way of implementation of this project. The question of security and absence of infrastructures required for the construction of the pipeline in Afghanistan constitute perhaps the most serious impediments which increase risk and cost quite significantly.

As regards the issue of security, this is interesting to note that Afghanistan's Islamic Party led by former prime minister Golbodin Hekmatyar who was until very recently an formal ally of Taliban, extended support for the pipeline project shortly after the recent agreement which was reached by the four countries and stated that the pipeline would serve the interests of the people of Afghanistan. They went further and expressed preparedness to have a share in providing security for this project. The Taliban have not yet publicized their position in this matter, however, it is believed that the posture of the Islamic Party of Afghanistan may imply Taliban's consent.

The security of the above mentioned pipeline is synonymous with new employment opportunities. Part of this pipeline is scheduled to be constructed under the ground for security purposes. Kabul however, expects NATO and the US to guarantee security of the pipeline themselves. And that sounds reasonable enough to justify signing of any pact that would give ground to West's military

presence in Afghanistan.

TAPI pipeline project can go into operation by 2014, i.e. the year in which the US forces mission in Afghanistan will expire.

And all security uncertainties named by the Indian officials in the case of the Iran-Pakistan-India pipeline also apply to TAPI pipeline, however, Indian officials are now extending a warm welcome to this project and unlike Iran project, they evade pessimistic comments. The Indians' are believed to have pinned hope in intervention by the Americans aimed at removing tension between India and Pakistan.

And the question of infrastructures is not expected to be removed overnight.

Concerns about Turkmenistan's Potential Capabilities

A third concern that used to be associated with this project since years back was whether or not Turkmenistan is in a position to fulfill all her commitments. The situation has changed today. Global economic downturn, extraction of a huge volume of unconventional gases known as Gas Shale as well as some other factors have introduced drastic changes to the world's natural gas demand and supply prospects. Pursuant to the discovery of Ultan natural gas field in Turkmenistan which contains huge reserves of natural gas, the nation can now demonstrate more flexibility when signing contracts with international oil companies.

Although Turkmenistan produced some 66 billion cubic meters of natural gas in 2008, the latter's production of this product did not exceed 36 billion cubic meters in 2009 mainly due to global economic downturn. Despite contracts that Turkmenistan has signed for the supply of natural gas to Iran, Russia and China, that country is still in need of gaining access to new gas markets. Turkmenistan's chance of merging with the Nabucco pipeline project in order to supply natural gas to Europe is scant, for construction of Trans Caspian pipeline under the Caspian Seabed which has so far failed to win the consent of Iran and Russia seems to be unlikely before the legal sanction of the Caspian Sea has been specified.

Transfer of gas to Europe via Iran and Turkey will certainly face opposition from the side of the West, US and even Russia which is doing all in its ability to preserve its monopoly in Europe. Thus, Turkmenistan should seek other routes.

Russians have so far shown no reaction to this project and refused to echo any serious opposition to its construction. India and Pakistan do not constitute Russia's natural gas targets and instead indirectly assist with keeping Turkmenistan deprived of the European market.

Consent over Prices- The Challenge Ahead

Another challenge before construction of this pipeline



is reaching consent over natural gas price. There does not reside a transparent policy for pricing energy products in India and the price of locally produced gas is low due to the subsidies that the government pays to the local producers of this product. And in their negotiations with foreign suppliers of natural gas, the Indians keep on trying to purchase natural gas at low prices stressing their local pricing policy. This is exactly what they pursued in their negotiations with Iran and Pakistan and now they are trying their chance in the case of Turkmenistan. The Indian oil minister stated when signing the four-party agreement: "without a doubt, price of gas is the most important issue. Turkmenistan's natural gas price should compete with the natural gas price available in the

buyer country which includes locally produced natural gas. Whereas, India is host to the other end of this pipeline, it takes the highest risk pertaining to the security of gas supplies."

The Indians may act more obstinately concerning price of Turkmen gas compared with their stance in negotiations with Iran.

Iran's Stance

The pipeline is meantime viewed as an alternative for the Iran-Pakistan-India's gas pipeline project known as Peace Pipeline and for that matter, Iran has to clarify its stances concerning this subject.

Iran may opt to maintain indifferent or otherwise choose

to compete. However, cooperation and partnership is believed to guarantee long term interests of Iran. Iran maintains friendly ties with all the three nations. Iran purchases gas from Turkmenistan and has held lengthy negotiations with Pakistan and India for the supply of natural gas. Even Iran's gas pipeline grid could merge with this pipeline. Linked energy grids of the regional countries will provide these nations with stronger maneuverability insofar

as supply and transfer of energy is concerned particularly when consumption rates travel up and down periodically.

The Iranian companies specialize in constructing large diameter pipelines while they have easy access to Afghan territory and can have a share of construction of this pipeline at lower costs. That could serve the interests of all parties involved in the project. The Iranian oil and foreign policy sectors can work closely together in order to work out plans to have a share of the construction of this pipeline, let alone consolidation of relations with the beneficiaries of the project and identification of fresh opportunities that reside ahead of Iran. ♦

Director



OPEC's Reaction to US Monetary Policies

Behrooz Beik Alizadeh - Senior Oil Market analyst

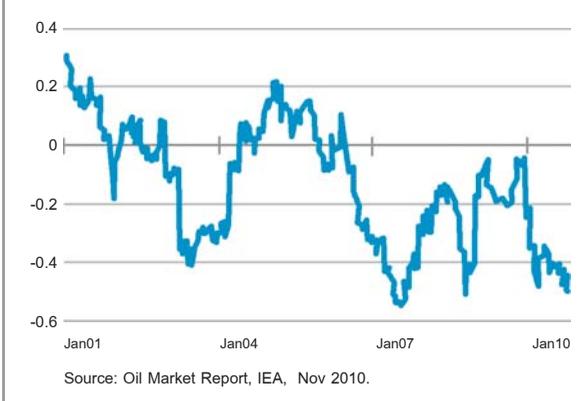
Crude oil prices jacked up significantly in December 2010. The price of Brent even exceeded US\$90 per barrel in the first half of December. Crude price hikes gave rise to the likelihood that, in their 158th meet, OPEC member states would vote in favor of increased rates of production. However, the OPEC member states refused to do so for a host of reasons and factors such as fluctuations in the value of US dollar.

In early November 2010, Central Bank of America put to practice, a new wave of expansionist policies aimed at providing the incentive necessary for the bloom of economy. These policies prepared the grounds for higher oil prices. Central Bank of America has announced that it would purchase an average US\$75 billion of the

Department of Treasury's bonds and securities each month by the middle of 2011. This figure is expected to total US\$600 billion, though prior to the announcement of this news, experts believed that the figure would be somewhere around US\$2 trillion. This new policy impacted the oil market, for it is in fact synonymous with more Dollar supplies and naturally a sharp drop in the value of this currency and ultimately higher oil prices. Graph No. 1 illustrates the relationship between oil prices and dollar value in recent months.

Devaluation of dollar is synonymous with higher oil prices, for such a drop of value would on the one hand mean cheaper oil for importers who spend hard currencies other than dollar and therefore, there will be more demand for crude oil. Players and dealers of the stock exchange market are as well aware of this equation and thus, initiate

Graph 1 – Correlation between the dollar and crude oil prices of West Texas Inter Mdyt



to purchase in the oil futures causing higher oil prices. The same players use oil futures market in order to cover and minimize market risk and transfer their capitals to the commodities markets, oil in particular, when the value of dollar drops. Graph No. 2 clearly illustrates this process.

US dollar value drop has another impact on OPEC oil exporters as well. Those producers whose sales are based on US dollars clearly sense the sharp decrease in their oil revenues and therefore, they are encouraged to maintain more control on their production and exports. Some OPEC officials had made reference to this reality before their 158th meeting. For instance, Shukri Ghanem, head of the Libyan Oil Company had reiterated that OPEC need not increase production and that at a time when oil prices are on the increasing, trade balance speaks of the loss sustained by OPEC member states and that higher prices have failed to make up for the devaluation of US dollar and higher commodity prices.

The oil market clearly sensed the impact of such an interpretation of dollar value fluctuations at OPEC's 158th meeting convened in Ecuador's capital. In their final statement, the OPEC oil ministers explicitly revealed that the negative impact of hard currency disputes is one reason why OPEC has opted not to increase production and remain committed to its obligation for cutting production rates. Interesting to note is that in its 151st meeting held in Algeria in December 2008, OPEC member states announced that they had undertaken to cut production

by 4.2 million barrels per day as of the beginning of 2009. Latest figures available prior to the holding of OPEC's 158th meeting revealed that by November 2010, OPEC had adhered to 53% of its commitments. At its 158th meeting, OPEC refused to increase production under circumstances when price of certain qualities of oil exceeded US\$90 per barrel while price of OPEC's basket on the 8th of December (a day before the meeting was convened) stood at US\$87.65 per barrel. This is under conditions when the price of OPEC's basket registered the low figure of US\$40.95 per barrel during the Organization's 17 December 2008 meeting in Algeria. A price fall which continued even until the end of 2008 and dropped to as low as US\$30-40 per barrel. In other words, OPEC decided to control production at a time when oil prices were low, a resolve which is still pursued by the OPEC member states even now that prices are almost significantly higher. The value of petrodollars currently gained by the OPEC

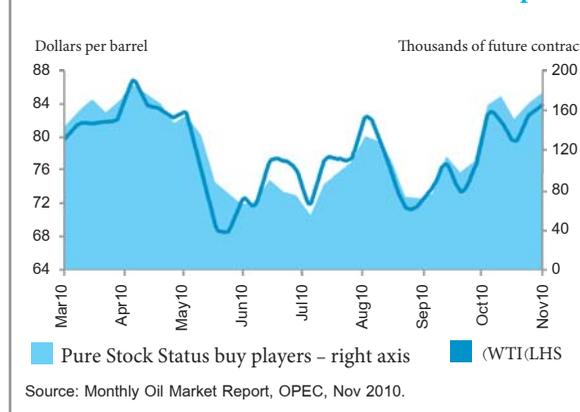


member states appears not to be able to convince these states to increase production rates. To make it more clear, it will suffice to take a look at crude oil's nominal and actual prices. The nominal price of OPEC's basket in November 2010 reached to US\$82.83 per barrel. If this price is compared with the 2001 prices (taking into consideration dollar value fluctuations and the global inflation rates) the said price would approximate the figure of US\$51.52 per barrel, meaning that each barrel of oil sold today can just buy what it could buy in 2001 i.e. US\$51.52. In the aftermath of the falling purchase power of petrodollars, the OPEC member states have no incentive to reduce prices. And the expansionist economic policies adopted by the US administration suggest that such a trend will continue in the monetary market.

OPEC member states have named yet some other factors underlying their refusal to increase production ceiling such as lower rate of demand in 2011 compared with that of 2010, fragile and vulnerable global economy and concerns over likelihood of occurrence of the second banking crisis in Europe which are all suggestive of instability in the current prices of oil.

Should OPEC adhere to its current production ceiling

Graph 2 – Comparison of net buying stock status skiers and West Texas intermediate crude oil prices



for the first quarter of 2011, the market is expected to experience a supply surplus of 700 thousand barrels per day and that will add up to the present crude stocks, hence further pressing prices. Under normal conditions, a daily 900 thousand barrels of oil should be withdrawn from stocks instead of additions.

Crude prices are exposed to the risk of experiencing downtrend particularly in the first half of 2011 should other factors remain stable and unchanged. The market is concerned about fragile global economy and the likelihood of emergence of debts crisis in Europe. These scary factors

are influential in OPEC's resolve to adhere to its current policies impacted by instable market and the US monetary policies in force that weaken purchase power of petrodollars. 💧

Sources:

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Iran, India in final talks on 'Farzad-B' gas field



ONGC Videsh Ltd and its partners, Indian Oil Corp and Oil India, are in last lap of negotiations for developing the Farzad B gas field off the coast of Iran at an estimated investment of over \$5 billion.

"There has been lot of discussions on the field development plan we submitted to Iranian authorities. Negotiations currently are centering around stitching together a services contract," an official in the consortium said.

The official said the Iranians still have some issues with respect to the development plan, but these are likely to be sorted out soon.

The consortium will get a fixed rate of return on the \$5 billion it will invest on developing the field, as Iranian law prohibits foreigners owning oil and gas resources. Foreign companies develop the fields through service contracts.

Indians can buy Iranian gas from the

remuneration they receive under the service contract.

The official said financing of the development plan would be looked into once Iran awards development rights to the Indian consortium. "We will cross the bridge when we reach there," he said.

National Iranian Offshore Oil Company had in October, 2010, stated that the contract to develop the Farzad B gas field in the Farsi offshore block would be signed soon.

Farzad-B gas field, contains in-place reserves of up to 21.68 trillion cubic feet (tcf), out of which the recoverable reserves may amount to 12.8 tcf.

OVL said that as per independent studies by Fugro Robertson Ltd of the UK and ONGC's Institute of Reservoir Studies, the in-place gas reserves of the block amounted to 9.48 tcf in a worst case scenario, whereas in the best case, they could add up to 21.68 tcf.

Shiraz 3rd Urea/Ammonia on stream by fall 2012



Nader Ghorbani- managing director of Petrochemical Industries Development Management Co. (PIDMCO) disclosed that Shiraz 3rd Urea/Ammonia plant (Marvdasht) will be operational by September 2012, reported the news agency of Iran oil ministry.

With a capacity of 667k tons of ammonia and 1.073 Mln tons urea, this engineering, procurement, construction and commissioning (EPCC) project had been awarded to Shiraz Petrochemical Industries design and Engineering Company (PIDEC) in November 2006 and was expected

to come on stream in 40 months (1st half of 2010).

"Bandar Imam 3rd Natural Gas Fractionation Plant (NF3) will get operational by September 2011," said Ghorbani.

Implementation of NF3 EPCC project has been assigned to a consortium of Namvaran Engineering & Management Co, Asphalt Tous Co. and Spanish Tecnicas Reunidas Co. (TR). Basic engineering, detailed engineering plus procurement, and construction and commissioning of the project will be carried out by TR, Namvaran and Asphalt Tous companies in order.

IGCC exports about 500k tons of sulfur



Over the first 9 months of current Iranian year (started Mar. 2010), Iranian Gas Commercial Company (IGCC) exported over 496 K tons of sulfur.

Naser Norouz Shad -managing director of IGCC- talked of 496,729 tons of sulfur exported in this period and said: "About 70% of this volume of sulfur came from Hashemi Nejad (Khangiran) Gas Refinery and the

remaining was from South Pars gas refineries."

The export was mainly destined to China, Bangladesh and India, he added.

According to him, the volume of sulfur exported last Iranian year (started Mar. 2009) was 814,000 tons and that of a year earlier -due to the recession in the world market- was 244,069 tons.

Iran can transfer 600 mcm of gas

Stating that about 43 gas pressure booster stations out of 63 stations of National Gas Grid are at service, managing director of Iranian Gas Transmission Co. (IGTC) Reza Almasi said: "At most 47 stations were at service on 8th of January '11. The total sour and sweet gas transfer capacity of the National Gas Grid is over 600 mcm/d."

He added: "A total of about 40-44 mcm/d of gas has been imported

through Kord Kuy and Dowlat Abad in Turkmenistan, while 30 mcm/d of gas is exported to Turkey."

According to the Fars news agency, quoting NIGC managers, gas production from Tangeh Bijar gas field is currently suspended and the company is trying to work out the problem. The gas produced at this gas field with a 6.8 mcm/d capacity is transferred to Ilam Gas Refinery.

Green light for investment on 2 Iran's gas projects



Mohsen Khojasteh Mehr -secretary for Iran's government special taskforce in oil affairs- talked of the issue of \$ 4.5 Bln and \$ 135 Mln investment permits to construct the remaining part of 'IGAT VI' and phase II of Ilam Gas Refinery respectively, reported the news agency of Iran oil ministry.

Stating that the operation of IGAT VI extension will take about 3 years, Khojasteh Mehr said: "The financial resources for its construction will be secured by domestic and foreign sectors."

Government special taskforce in oil affairs is composed of Mohammad

Reza Rahimi - president's first deputy, Masoud MirKazemi - oil minister, AliAkbar Mehrabian - minister of Industries and Mines, Shams Al-din Hosseini - minister of Economic Affairs and Finance, Heydar Moslehi - minister of Intelligence and National Security, Ebrahim Azizi - Vice President for Strategic Planning and Supervision, Mahmoud Bahmani - governor of Central Bank of Iran (CBI), Esfandiar Rahima Moshae - chief of staff and advisor to the president, and Ahmad Ghalebani - managing director of National Iranian Oil Co. (NIOC).

Work Has Eyes on Iran, and Beyond

China's LNG work has eyes on Iran, and beyond



China may have the technical capability to build a natural gas liquefaction plant within five years, potentially opening the door to vast reserves in Iran where sanctions have kept away western firms.

A breakthrough for Chinese firms would allow them to tap Iran's vast gas reserves, the largest in the world outside Russia, as long as they are prepared to brave sanctions that have scared off Western oil majors.

Developing the expertise to super-chill gas for shipment in tankers would also help Chinese firms secure more big ticket international engineering contracts, similar to the USD 6 billion Cuban refinery expansion and LNG terminal deal scooped by China National Petroleum Corp late last year.

Firms in China, the world's top energy consumer, already have stakes in major natural gas projects from Curtis Island in Australia to South Texas in the United States where they could deploy home-grown technology.

Two of the country's trio of oil majors -- CNPC and CNOOC -- are deploying resources to hone liquefaction technology for commercial scale plants, industry sources close to the firms said.

"We're aiming for 2 million tonne-per-year scale, all using domestic equipment. That may take 3 to 5 years," said an executive with Huanqiu Contracting & Engineering Corporation (HQCEC), an engineering unit of top energy group CNPC.

Two-million-tpy is mid-size for the global gas market, which now has the largest single train of nearly 8 million tpy,

but is currently beyond the reach of Chinese firms.

"That means opening up opportunities in Iran's Pars projects. And maybe, Australia's Arrow project and others," said the official, referring to the USD 3.1 billion deal PetroChina, CNPC's listed arm, entered into last year with Royal Dutch Shell to buy Australian coal seam gas firm Arrow Energy.

China may have the technical capability to build a natural gas liquefaction plant within five years, potentially opening the door to vast reserves in Iran where sanctions have kept away western firms.

Firms like France's Total and Germany's Linde Group have walked away from Iran's giant gas projects, fearful of a backlash against their US operations under UN and unilateral US sanctions, industry sources said.

China's energy firms have also since around the middle of last year slowed down work on oil projects in Iran as their ties grew with US energy firms.

But the lure of Iranian gas to feed China's insatiable energy demand while holding down its carbon footprint -- 70% the country's energy needs come from dirty coal -- may be

enough to make state-run firms risk Western opprobrium.

"It's in China's strategic interest to develop the technology," said London-based energy consultant Mehdi Varzi.

"But to think that immediately China can transfer the technology to Iran and run it successfully and bring it online very quickly, it's being over optimistic," he said.

"We could be 10 years away from China being able to apply its technology to Iran and complete a major project."

China is a newcomer in the global gas business. Its first LNG receiving terminal opened in 2006 in southern China's Guangdong province, shipping in Australian gas.

Its exposure to gas liquefaction is even more recent.

Big state oil firms CNPC and CNOOC ventured into the liquefaction business after 2006, as repeated gas shortages spurred a domestic building boom of mini-scale LNG plants, facilities that liquefy marginal onshore gas reserves into LNG that gets trucked around to users out of reach of pipelines.

CNPC's HQCEC, previously a chemical design firm, took on the role as the country's leading LNG engineering and construction company.

It's now building a 600,000-tpy facility in Ansai, in northern Shaanxi province, the country's largest, which the company is working to build up to a 2 million-tpy train.

Engineering giant

Third-largest oil and gas firm CNOOC is using its only liquefaction facility, a tiny 120,000-tpy plant started up two years ago in Guangdong, as a research base to give it the know how to tackle Iran's massive North Pars project, industry officials said.

CNOOC signed in 2006 a preliminary USD 16 billion deal with National Iranian Oil Company to develop North Pars and produce LNG. CNPC clinched a USD 4.7 billion deal in early 2010 to develop phase-11 of South Pars.

"The test would come this year when HQCEC completes the Ansai plant...Its success means the rise of Huanqiu as a competitor to us," said Michael Gai, oil and gas business manager with US engineering firm Black & Veatch, a firm active in China's mini-LNG business. 💧

