

What next for Iran's oil industry?

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Can Iran attract international investment in the current political and economic climate, or are the new President's plans likely to drive the country backward in terms of production and export?



President Ahmadinejad

Iran has scaled back its ambitious plans to increase oil production to five million bpd (barrels per day) to 4.5m bpd by 2010. Iranian oil fields are in desperate need of technical expertise to reverse decline rates of eight to ten per cent per annum and to raise recovery rates from 24-27 per cent to the world average of 35 per cent. Long-term foreign assistance is necessary to introduce modern methods of enhanced oil recovery, through gas injection techniques that the National Iranian Oil Company (NIOC) has yet to master.

However, oil majors are becoming increasingly wary of investment in Iran under the administration of President Mahmoud Ahmadinejad (above), who came to power in August 2005. Iran has been struggling to secure investment to help offset the decline in its older oilfields and achieve its production targets. High levels of perceived political and economic risk and a lack of market liberalisation, plus the country's lack of progress in terms of oil and gas industry deregulation are prompting many to rethink their projects in Iran. In addition, Iran's attractiveness to investment is undermined by the threat of United Nations (UN) sanctions and Iran's increasingly hostile relations with the US.

Instead of investing in oil production capacity, Ahmadinejad has chosen to pour up to US\$30bn per annum – around 15 per cent of gross domestic product (GDP) – into maintaining domestic gasoline prices at just ten cents per litre. Iran's domestic demand for oil is accelerating on the back of fuel

subsidies, with demand rising by three to five per cent per annum. Rising domestic demand and stagnant output could spell disaster for the Iranian economy, which relies on oil exports for foreign exchange. Yet, little is being done to improve the efficiency of fuel use and reduce domestic demand growth, which would free up more oil for export.

Oil depletion: policy not geology to blame

Iran's failure to ramp up oil production has prompted some alarming warnings from several quarters. In September 2006, Oil Minister Seyed Kazem Vaziri-Hamaneh, announced that production could fall by 13 per cent annually unless there is a surge of investment. Roger Stern of Johns Hopkins University has projected that Iran's oil exports could fall to zero by 2015 due to the country's failure to increase investment to boost output. In a paper entitled 'The Iranian Petroleum Crisis and U.S. National Security', Stern pointed out that "since 1980, energy demand growth (6.4 per cent) has exceeded supply growth (5.6 per cent), with exports stagnant since a 1996 peak." Deputy oil minister with responsibility for international relations, Seyed Mohammad Hadi Nejadhosseini, appeared to concede this point in an interview with the *Los Angeles Times*, saying: "If the Government does not control the consumption of oil products in Iran... and at the same time, if the projects for increasing the capacity of the oil and protection of the oil wells will not happen, within ten years, there will not be any oil for export."

Most observers do not share Stern's gloomy assessment, but also doubt Iran will achieve its objective of seven million bpd by 2014. According to a Dow Jones Newswires report, an Indian oil executive attending the Vienna conference where the bidding round was announced said: "You tell me a country where there aren't any problems when it comes to investing." Iran, he added, is simply "a different nature of ... problem."

Writing in the *Middle East Economic Survey*, former International Monetary Fund economist Jahangir Amuzegar argued that "official data show that since the end of the Iran/Iraq war in 1989, Iran has actually added more oil to its reserves than it has taken out of the ground ... In short, based on official, and generally accepted, reserves figures, at the current rate of extraction, Iran will be able to produce and export oil for the next 70 years." He also cast doubt on the Iranian oil ministry's claims that oil reserves will fall by 13 per cent annually without technical assistance, claiming the projection is a "bureaucratic trick" by ministry officials in order to scare parliament and the budget office to raise the ministry's annual budget share. Amuzegar does not believe that geology is against Iran, but that the Government's own policies as well as the US sanctions regime are to blame for the decline in output.

Nevertheless, there are also good reasons for the Iranians to repeat Stern's warnings in international fora. The Iranian government knows that a decline in exports would put further pressure on the world oil markets, tightening supply and raising prices. The subtext is that unless the US releases its pressure on banks and oil majors and allows the development of Iranian oil fields, it will suffer the consequences of \$100 per barrel oil prices. Whether an end to Iranian exports will have an impact on world markets is conditioned by the rate of growth in energy demand in India and China and the capacity of OPEC (Organization of the Petroleum Exporting Countries) members to increase production and offset a decline in Iranian exports. However, Iranians want to talk up the possibility of a cut off in Iranian supply to avert further sanctions.

Buyback a disincentive

A major hurdle for investment in the Iranian oil sector is the Islamic constitution which prevents foreign economic domination and commits Iran to state-ownership of the country's main industries. The constitution explicitly forbids "the granting of concessions to foreigners or the formation of

companies or institutions dealing with commerce, industry, agriculture service or mineral extraction." The Islamic state is therefore the only legal proprietor of minerals and has sole responsibility for extraction, effectively barring private and foreign companies from ownership and exploitation of national resources. However, the 1987 Iranian Petroleum Law allows for contracts between foreign companies and the state-owned National Iranian Oil Company (NIOC), enabling buy-back arrangements in which international oil companies (IOCs) can explore and develop oil fields operated by NIOC and can tender for the right to become a contractor to NIOC. Under buyback contracts, the contractor funds all investments, receives remuneration from NIOC in the form of an allocated production share, then transfers operation of the field to NIOC after a set number of years when the contract is completed. Oil companies' returns are typically 18-20 per cent, which Iranians complain are too high and at times of low oil prices NIOC has to bear the risk. Buyback contracts are also less advantageous to IOCs and have proven unpopular with foreign investors complaining that returns fail to cover rising project costs. But under the terms of the Iranian constitution, production sharing contracts are out of the question.

The unattractive terms of buy-back contracts have led to long delays in activating headline expansion projects, such as the Azadegan and Yadavaran fields in Khuzestan. Inpex relinquished control in the \$2bn development of the Azadegan field – one of the world's largest oil fields – in October 2006, just two and a half years



after signing a buyback deal. Production at Azadegan was due to begin in 2007 with initial output of 50,000bpd, but relations between Inpex and the Iranian government soured for commercial, technical and political reasons. Inpex was reduced to a ten per cent stake in November 2006, with the rest owned by NIOC's marketing subsidiary NICO, with the hope that an Asian or European oil company will take control over Azadegan's development.

Buyback contracts are not only unattractive prospects for investors, they also hinder the sustainability of production as fields mature. Geology is against the short-term nature of NIOC's IOC contracts. Oil fields are located under fractured limestone, which initially generates high levels of output. As fields mature, they lose pressure and require gas reinjection to maintain productivity, involving more advanced extraction technology. However, by this time, the buy-back agreements have expired and NIOC is often left struggling and unable to invest in the technology

necessary to maintain output.

While officials have acknowledged the problems with buyback contracts, it is unlikely that they will change the constitution to make it more amenable to foreign investors.

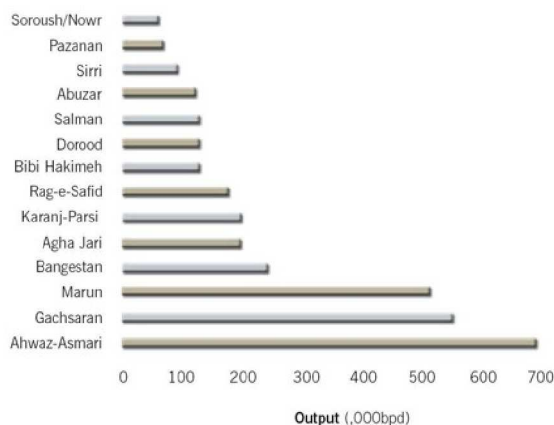
However, according to ideas mooted by NIOC officials, foreign investors could be offered up to ten per cent of future asset sales, which would enable foreign involvement in the oil sector. NIOC officials have also suggested the possibility of privatising downstream industries, indicating that the government is becoming more amenable to foreign investment. There are also proposals for more attractive deals on offer in the 2007 licensing round and a move away from the current buy-back system.

The threat from the US

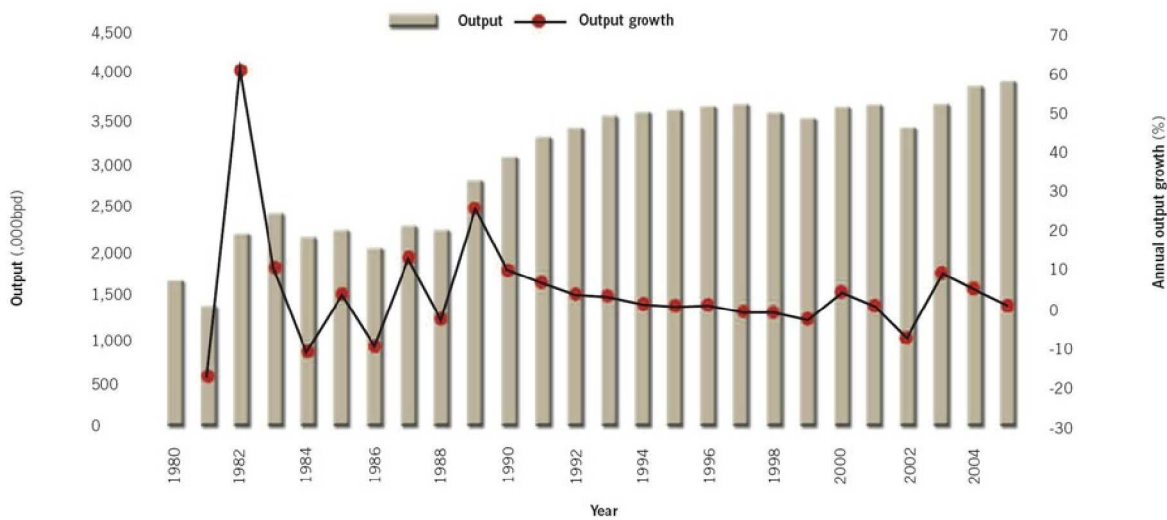
The collapse of the Inpex deal also had a political dimension. Its exposure to the US markets made the Azadegan venture far too risky. The Japanese had come under considerable pressure from the US government to quit Azadegan.

The oil industry is a battleground for disputes between the US and Iran. Since 1996, the US has adopted a raft of sanctions in an attempt to starve the Iranian economy in retaliation for Iran's alleged

Major oil fields in Iran



Iranian oil production trends



role in international terrorism and acquisition of weapons of mass destruction (WMD). US laws prohibit US-registered companies and citizens from trading or investing in Iran. The sanction regime extends to foreign businesses. The US, Iran and Libya Sanctions Act of 1996 (ILSA) forbids more than \$20m of investment in Iranian oil and gas projects. The violator can be deprived of US economic assistance and may also face sanctions.

The sanctions have been impossible to enforce in a globalised energy market and the European Union (EU) has imposed "blocking legislation" designed to counter the US sanctions regime. ILSA has been a stick to threaten foreign countries, but until recently was rarely applied with any rigour. However, US tensions with Iran over WMDs and financing of terrorist organisations have led to a greater willingness to enforce trade and investment sanctions. The US Justice Department has focussed its efforts on the banking sector, which has starved loans to several development projects in Iran. Difficulties in securing finance and threats of multi-million dollar fines are leading many oil firms to reconsider investments in Iran, at least in the short- to medium-term.

Nevertheless, Holly Pattenden, Middle East oil and gas analyst at the London-based Business Monitor International, is optimistic about Iran's chances of boosting long-term production capacity. She said: "It will be difficult to ignore Iran's potential, even under the present buy-back contracts. There has been a flurry of recent deals with majors such as Repsol YPF and Shell in the South Pars gas field. These firms are prioritising replacement

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ratios over relations with the US. This is not the case with majors such as BP and Inpex, which are more reliant on trade and sources of finance that can be targeted by US sanctions." She points to the fact that the opening of 17 onshore and offshore oil blocks for development in February 2007 attracted the interest of 90 firms, including China's Sinopec, Norway's Statoil, Royal Dutch Shell, Italy's Eni, France's Total and Russia's Lukoil.

Internal pressure for change

The chief problem for the Iranian oil industry is President Ahmadinejad, whose rise to power has dampened hopes of securing technical co-operation from oil majors. Elected on a populist platform, Ahmadinejad has made no secret of his disdain for private enterprise. At the same time, he has pumped oil revenue into dead-end state-owned industrial projects in order to ameliorate high youth unemployment, which threatens to destabilise the political order.

Moderate elements within the Iranian establishment may force Ahmadinejad to climb down from his confrontational stance with the US, conform with United Nations (UN) resolutions over the Iranian nuclear

programme and create more investor-friendly buyback arrangements. Signs of growing unease over the direction Iran is taking under Ahmadinejad were revealed in a secret parliamentary report compiled by Iranian oil experts in September 2006 and leaked to *Le Monde* in January 2007. The report's authors feared the effects of a combined trade embargo on Iran's oil trade, warning that "any worsening of the economic situation could cause social troubles that could lead to a deterioration and a weakening of internal stability."

Following a disastrous showing for pro-Ahmadinejad candidates in the December 2006 elections to municipal councils and the powerful Assembly of Experts, the President's critics now have the upper hand and are likely to side-line him in order to save the oil industry from decline. No-one expects Iran and the US to bury the hatchet, but a reduction in tensions could see the threat of further sanctions lifted and renewed interest in investment in development. Iran would then see a reversal in declines in oil production and a more secure long-term footing for the country's oil industry. ●

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