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Foreign Shores: National Oil Companies' International Investments

National Oil Companies (NOCs), including those from the Middle East, have become increasingly active in the international arena. Qatar Petroleum has expanded its exploration efforts to several countries such as Cyprus, South Africa and Mexico. But the foreign investments of NOCs and their strategies are very varied. Is this a response to their historic circumstances and resource bases? Or have some NOCs simply chosen differently? International investments can safeguard and drive a company's future, but they demand a step forward in managerial and operational skill. To make best use of their financial and political capital, internationalising NOCs need to think carefully about what they are trying to achieve, and the tools they need to do it.

Kuwait Foreign Petroleum Exploration Company (KUFPEC)'s facilities at Varanus Island, Australia (source: KUFPEC)

Executive Summary

- International investments by national oil companies (NOCs) are not new, but have expanded in scale and scope in recent years.
- Different NOCs invest in very different ways. Some have almost no international business. But very few NOCs (Equinor and Petronas being the best examples), and none from the Middle East, have become truly internationalised like an international oil company (IOC), with their international assets of similar size and value to the domestic ones.
- Upstream investments by NOCs have mostly been fairly limited, though growing.
- Downstream investments are much more notable, and are also growing, with the aim to access and protect attractive growth markets for hydrocarbon demand.

Implications for leading oil and gas exporters

- Investing internationally has become an imperative for most NOCs, particularly in the downstream and in building an integrated global gas business.
- Reduced upstream investment appetite by IOCs, particularly outside the US, may result in more opportunities for NOCs. However, it is still a very competitive business.
- To grow a material portfolio, NOCs will have to be more aggressive in taking technical risk, spending heavily and/or maximising their use of government-to-government deals.
- For commercial success, NOCs will need to improve their existing technical abilities, and acquire a range of new skills.

Different NOCs invest in very different ways

The main focus of this paper is on the NOCs from the leading MENA oil- and gas-exporting countries.

The case of these companies contrasts with those of NOCs from other regions. Equinor (formerly Statoil) of Norway, Petronas of Malaysia, and Petrobras of Brazil, have generally been considered the most successful "internationalised NOCs".

A possible classification of NOCs according to their international investments is shown in TABLE 1.

Resource-rich NOCs have abundant, low-cost reserves at home, and their production is often constrained by OPEC quotas; their primary concern is to secure international markets and maximise the value of their exports. Where they invest in upstream, it is to gain technical skills which they can then bring back to their domestic fields.

Resource-poor NOCs have smaller and/or higher-cost, more technically difficult resources at home. They seek to expand into upstream overseas to sustain and increase their production.

TABLE 01: **CLASSIFICATION OF NOCS AND THEIR INTERNATIONAL INVESTMENT APPROACHES**[1]

Resource-rich NOCs	Resource-poor NOCs	Importing NOCs	Strategic NOCs	Non-international NOCs
Qatar Petroleum	Petronas	Sinopec	Rosneft	Iraq Ministry of Oil
Kuwait Petroleum	Petrobras	CNOOC	Mubadala	Libya NOC
Abu Dhabi National Oil Company	Pertaamina	ONGC (India)	Gazprom	NNPC (Nigeria)
Sonatrach	Ecopetrol (Colombia)	Oil India		Sonangol (Angola)
PDVSA (Venezuela)	Oman Oil Company	Petroviet-nam		BAPCO (Bahrain)
Saudi Aramco	TPAO (Turkey)	PTTEP (Thailand)		Pemex (Mexico)
	EGPC (Egypt)	ENOC (Dubai)		National Iranian Oil Company
	Equinor (Statoil)	KNOC (South Korea)		
		CNPC		

Importing NOCs are from countries that are net importers of hydrocarbons; their aim is to 'secure' resources overseas that can directly or indirectly support national self-sufficiency and avoid or limit supply shocks. In some cases, they are seeking a hedge against high oil prices to offset a domestic subsidy burden.

Strategic NOCs, which can include some sovereign wealth funds, seek to make profitable investments, but may also be directed to build alliances with key strategic partners, as with Rosneft's investments in Venezuela.

Finally, non-international NOCs have no or very few foreign assets, and concentrate on their domestic resources. Their international efforts are confined to marketing and perhaps shipping and storing their crude and gas. This is often the result of a troubled situation within the country that has limited the NOC's financial capability or strategic foresight.

This division is not absolute: NIOC and Sonangol have a few international assets. Conversely Petrobras has sold most of its non-Brazilian investments to meet debt and investment commitments at home, and Oman Oil has sold assets in Kazakhstan to concentrate on domestic developments.

Of course some non-internationalised NOCs may in future change strategy. Some GCC-based NOCs in particular have very few non-GCC assets currently, but have now shifted focus to build up internationally.

Of course, this classification does not mean that commercial motives are secondary or absent. Companies in all categories rarely make non-profitable decisions deliberately. But in some cases, 'empire-building', corruption, or the desire to limit the scope for interference by domestic politicians, can motivate management to expand overseas, as with PDVSA in the late 1990s, and possibly at times some of the Chinese NOCs.

Several of the investor-owned 'majors' have their origins in national oil companies, notably France's Total, Italy's ENI, Spain's Repsol and Petrocanada (now part of Suncor). It is possible some NOCs could go this way in future, via partial or complete privatisation. Equinor, Petrobras, Rosneft, Gazprom and others already have substantial portions of their shares listed on stock exchanges or held by strategic investors.

International investment by NOCs is not new, but is gaining pace

What would now be considered 'importing country NOCs' - the Japanese companies, ENI and Repsol - had already begun investing in the Middle East as early as the 1950s to 'secure' oil for their domestic markets. This was essential in the vertically integrated oil market of the time, when most international oil trade was carried out by the Western majors within their own refining and retail systems.

International investments by NOCs beginning in the late 1970s and early 1980s reflected a confluence of factors:

- Completion of nationalisation of Western IOC operations in their home countries.
- Need to secure international outlets for their crude as the IOCs' vertical integration was disrupted.
- Ready availability of capital because of high oil prices.

The most notable investments of this time were probably Kuwait Petroleum International, which from 1983 onwards acquired European refining and retail assets under the Q8 brand; the purchase by the Kuwait Investment Office (now Kuwait Investment Authority) of 10% of BP when the British government privatised it in 1987; and PDVSA's buy of 50% of refiner and retailer Citgo in 1986 and the remainder in 1990, as a US outlet for its heavy crude.

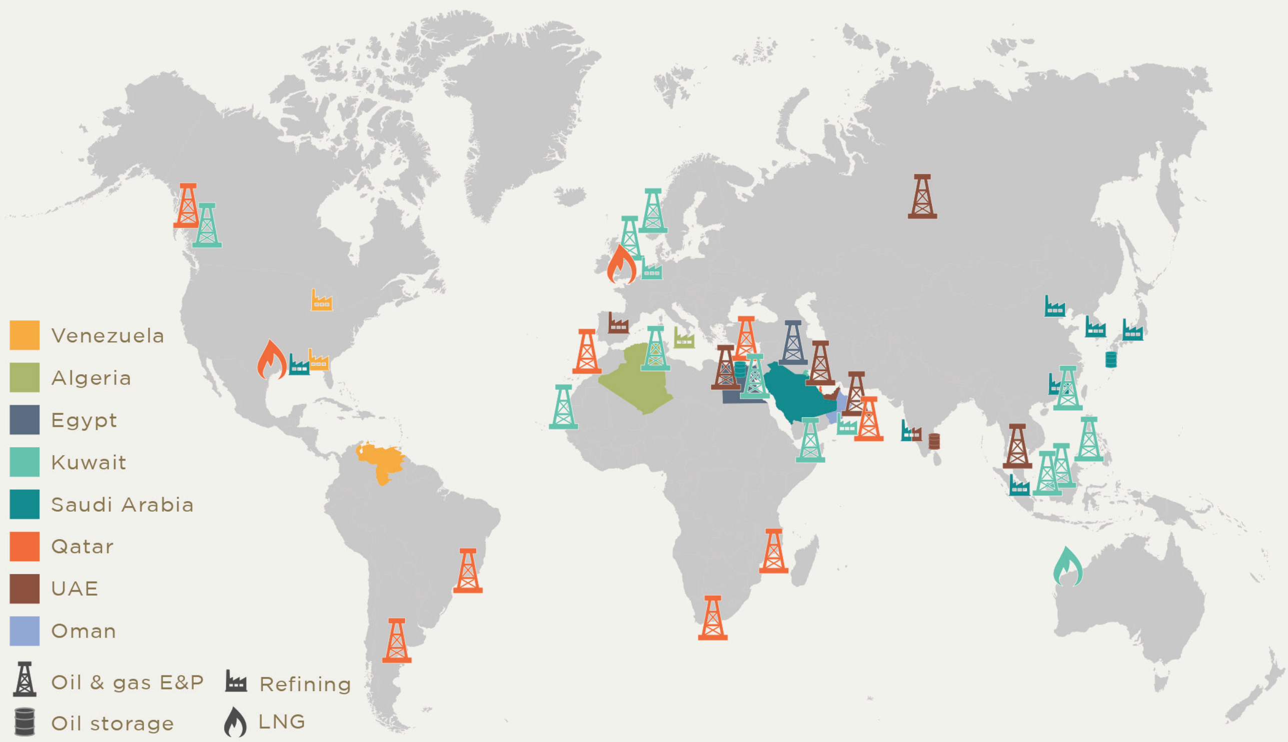
In the later 1980s and through the 1990s, low oil prices limited the Middle Eastern NOCs' ability to grow internationally. In the 2000s, high oil and gas prices encouraged Asian NOCs in particular to venture out and acquire overseas production, as the Chinese did in Kazakhstan, Sudan, Iraq and elsewhere.

From the 2000s, high oil and gas prices returned and NOCs were again able to spend on international projects.

Despite similar circumstances, NOCs have ended up with very different portfolios

FIGURE 1 shows the current pattern of investments by selected NOCs (UAE includes ADNOC and Mubadala and Mubadala's wholly-owned CEPSA, but not its minority share in OMV).

FIGURE 01: **SELECTED NOC INTERNATIONAL INVESTMENTS**[2]



The different patterns of investment stand out quite sharply. Aramco's investments to date have been solely in oil storage, refining and petrochemicals in its core markets: the USA, China, Japan, South Korea, India and now Malaysia.

Qatar Petroleum began its international expansion focussed on acquiring stakes in producing oil and gas fields in Brazil and Congo. More recently, it has moved into appraisal and frontier exploration, already enjoying successes in Mexico, South Africa and Cyprus, and entering Mozambique in March 2019. The gas finds in Cyprus and South Africa, and any that are made in Mozambique, could fit its LNG strategy and/or supply local markets.

ADNOC's recent change of strategy has brought it closer to Aramco's, with plans to invest in a joint venture refining and petrochemical complex in western India.

Mubadala's initial expansion focussed on the Middle East (Qatar, Oman and Bahrain), and aiming to serve the UAE domestic market. It also moved opportunistically into south-east Asia. More recently, investments in Egypt (a share in ENI's Zohr field) and Russia again reflect strategic imperatives.

Kuwait was an early entrant into international investments, and its refining and fuel retail operations are therefore focussed on Western Europe. KUFPEC, its E&P arm, is present in the North Sea, Canada, North Africa, Middle East and south-east Asia.

At the same time, to complement its world-leading LNG business, it took final investment decision (FID) on the Golden Pass LNG export project in Texas in February 2019.

It has partnered with strong IOCs, notably Total, ENI and ExxonMobil, to reduce technical risk. QP's willingness to take exploration risk is in sharp contrast to KUFPEC and Mubadala, which have generally preferred to buy into discovered resources.

QP's growth prospects also depend more on the international market than those of KPC, Aramco or ADNOC. Domestic oil-fields are relatively small by Gulf standards, and mature. Its LNG business will, of course, expand, but within the constraints of the world gas markets. This may partly explain its more aggressive stance on international E&P.

PDVSA has no international E&P, but continues to hold CITGO, the US refining and fuel retail company, although CITGO's future is in doubt given US sanctions and the dispute over the legitimate president.

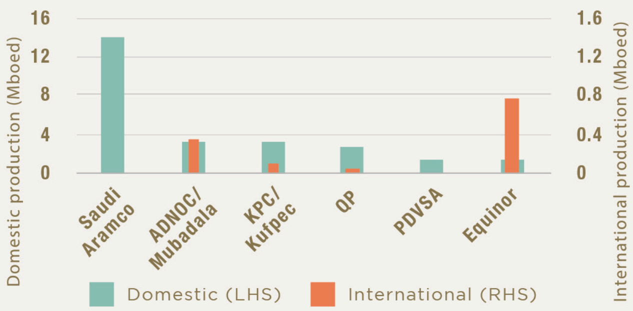
Finally, some North African NOCs have picked up a few Middle East/North Africa exploration and production assets, leveraging local relationships and geological knowledge. Sonatrach also bought the Augusta refinery in Sicily, but unlike Aramco, this was done to supply products to the domestic market.

Motivations for investing in upstream vs downstream are very different

The motivations for investing in upstream seem to vary between the companies involved. KUFPEC clearly states that it wants to obtain skills and technologies that can be used in Kuwait's own fields. At a time that investment in Kuwait's own upstream has been heavily constrained by parliamentary opposition, it also allows KPC an area of growth.

As FIGURE 2 shows, the leading NOCs' international production is a tiny fraction of their domestic production, even when combining Mubadala and ADNOC's contributions. Even in the case of Equinor, which has long had an international business, Norway is still 63% of its output. The disparity of reserves would be even greater.

FIGURE 02: **SELECTED NOCS' DOMESTIC AND INTERNATIONAL OIL + GAS PRODUCTION**[4]



In refining, however, the situation is more balanced (FIGURE 3). Apart from QP, with no refining outside Qatar, the other NOCs shown have international refining capacities of about half or even more of their domestic capacity.

FIGURE 03: **SELECTED NOCS' NET DOMESTIC AND INTERNATIONAL REFINING CAPACITY, CURRENT AND UNDER CONSTRUCTION**[5]

NOCs have stepped up their international refining and petrochemical businesses in recent years. Motivations include securing stable outlets for their crude oil; realising enhanced value; and gaining access to growth markets. Storage assets are intended to ensure a steady flow of crude to customers, in the event of interruption by weather, insecurity or technical problems.

PDVSA's purchase of CITGO is a special case, motivated by specific technical considerations. It needed a guaranteed outlet for its heavy oil, which requires special refining, and its main market has historically been in the nearby US.

Oman Oil, Aramco, and more recently ADNOC, have also announced plans to boost trading to emulate companies such as Vitol and Trafigura. They need to optimise value for an increased volume of refined product exports from new refineries. They may also soon begin trading their own crude.

As concerns over 'peak oil demand' have grown (see Al Attiyah Foundation Research Series March 2018), NOCs with large oil resources have sought to expand their petrochemical businesses in particular, and to focus on the big Asian growth markets – China, India, and to an extent South Korea, Vietnam, Indonesia, Pakistan and others. Integrating petrochemicals with refining has been seen as a way to improve profitability, so combining the strategic and commercial goals.

Gas is becoming more of a focus

The other major trend of recent years in NOC investments has been gas. As noted, Qatar has sought to support its LNG business by expanding internationally with new liquefaction projects, receiving terminals and exploration that might one day support LNG or pipeline gas projects. Golden Pass will give Qatar access to US LNG that could supply Europe, freeing up the country's own LNG to send more to Asia, or to optimise deliveries between between the Atlantic and Pacific basins.

Interestingly, of two other NOCs with long-running LNG businesses, Petronas has expanded internationally into Australia, Canada, Egypt and regasification in the UK, while Sonatrach has not ventured beyond Algeria.

Other Middle East NOCs' gas businesses have historically been focussed on meeting domestic needs, with little or none available for export. Now, they realise the importance of gas in a decarbonised future, and as a possible hedge against stagnating oil demand.

International success is not easy, and is vulnerable to developments at home

The international oil business is very competitive. Middle Eastern NOCs have to match the IOC supermajors, smaller independents, and internationalised NOCs (from Equinor to PetroChina and others).

This may partly explain why NOCs' non-domestic E&P businesses have remained relatively small, even in the case of a company such as Equinor which is as technically and commercially capable as IOCs.

QP stands out for its exploration success. It will now have the interesting challenge of working with its partners to commercialise its discoveries.

In the downstream (refining, petrochemicals, storage and retail), the availability of guaranteed crude supplies has proved a powerful draw-card. Governments such as Saudi Arabia's can also deal directly with counterparts in China and India to ensure projects go ahead.

The importance of international investments, though, fluctuates with conditions at home. When oil prices are low and resources short, foreign ventures may be looked at sceptically by politicians and government bureaucrats. And when companies get into trouble at home, as Petrobras did over its corruption scandal and massive debt load, the temptation is also to sell off international assets to refocus at home.

Conclusions

Middle East NOCs' international expansion will continue. Overall, they will concentrate more on gas, particularly LNG and cross-border pipeline projects, and on integrated refining and petrochemicals in growth markets, mainly in Asia.

Their presence in sub-Saharan Africa's downstream is surprisingly low, but this will change as markets there grow to more material scales.

As IOCs come under more pressure from shareholders, NOCs may find more opportunities in the upstream than they have historically.

Therefore, their international upstream businesses will also grow, but to be comparable in size to their domestic production, they will need to achieve major exploration success, spend heavily on acquisitions, and/or strike large strategic deals with governments, most likely in Russia.

Commercial success in the upstream will require NOCs to assess where their strengths lie – for instance, in exploration, LNG, deepwater, heavy oil, enhanced oil recovery or other specialities – and to boost or acquire these strengths. Middle East NOCs have not yet begun to invest in non-hydrocarbon energy internationally, unlike for instance Equinor, Shell and Total, but this may also become a future option.

Contrastingly, commercial success in the downstream will be driven by the ability to access attractive markets, to gain across the value chain, to deploy leading technologies, and to achieve operational excellence.

Managing these expanding foreign activities will require NOCs to improve their capabilities, not just in the technical and commercial spheres, but in stakeholder management, public and government relations, environmental impact and other areas. They will have to be prepared for a much greater degree of challenge and scrutiny.

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4. Qamar Energy research; company annual reports and websites; media reports; BP Statistical Review of World Energy 2018; gas converted to oil at 5800 cubic feet = 1 barrel oil equivalent

5. Qamar Energy research; company annual reports and websites; media reports; BP Statistical Review of World Energy 2018; includes Mubadala's ownership of CEPSA, the Ratnagiri refinery in India, RAPID refinery in Malaysia, Nghi Son refinery in Vietnam

Qadirpur gas field, Pakistan, a KUFPEC asset. This Photo by Unknown Author is licensed under CC BY-SA.

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