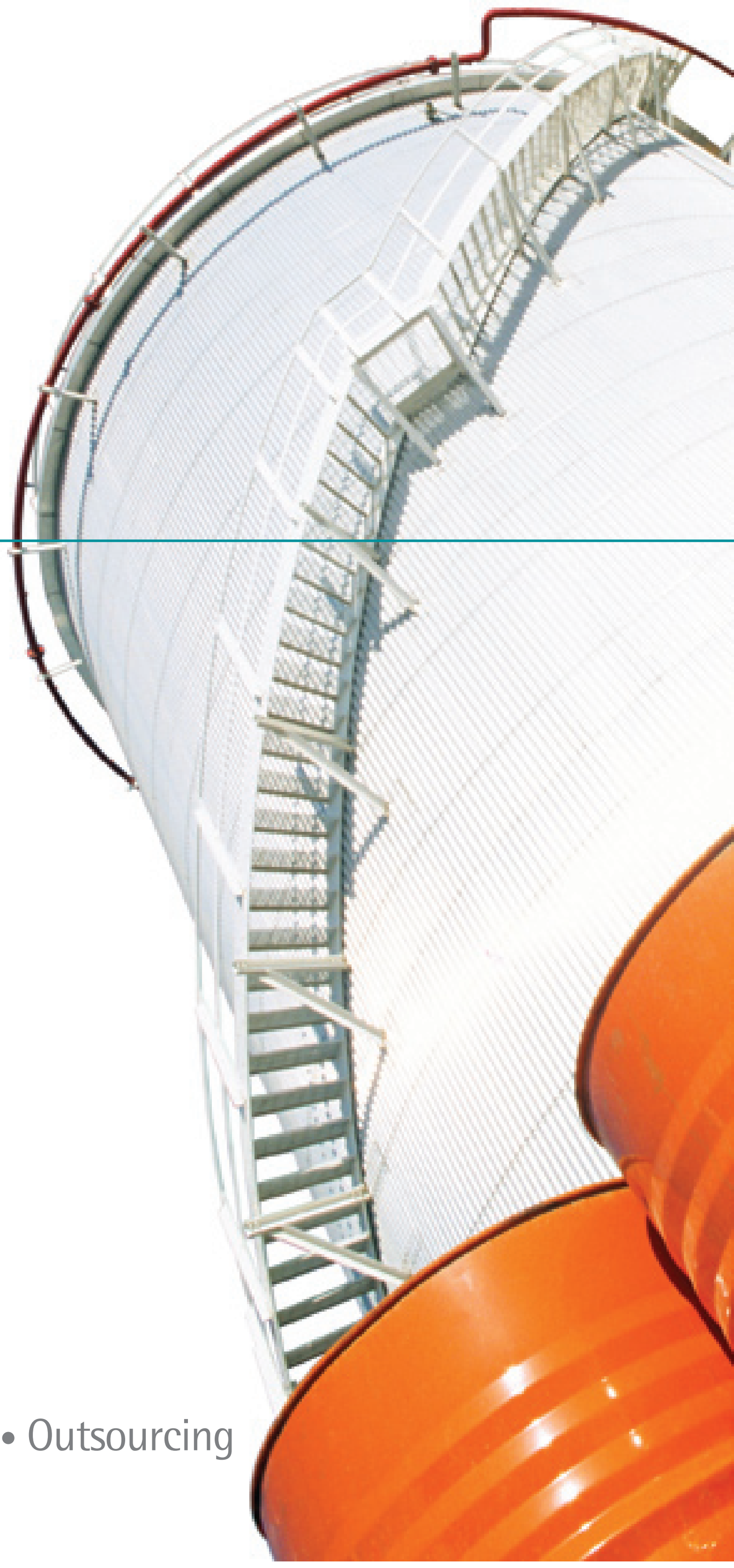
Accessing oil and gas reserves: Rethinking upstream offers by international oil companies



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In the drive to secure energy supplies, international oil companies (IOCs) and national oil companies (NOCs) are facing intense competition for upstream access in emerging markets. Accessing reserves in more stable economies has become increasingly more difficult. As a result, the focus has shifted to developing countries that are less geopolitically stable but have considerable hydrocarbon potential.

Resource-holding nations in exploration hot spots, such as West Africa, are enjoying unprecedented control over the offers that investing IOCs and NOCs are making—and they are requiring that oil and gas companies become more involved in local economic and social development. The ability of oil companies to meet these expectations with offers that appeal to resource holders has become a necessity. In today's energy industry environment it is a fundamental element in the pursuit of high performance.

NOCs have strengthened their ability to come up with appealing, multifaceted offers since they may uniquely understand, even share, the perspectives of the resource holder. In contrast, IOCs are often at risk of providing relatively limited offers that may not satisfy the resource holder's needs. This puts pressure on IOCs in the growing competition for oil and gas reserves.

Accenture believes that IOCs should be looking to combine their traditional strengths with innovative approaches that will enable them to provide broader, more creative and ultimately, more effective offers. By rethinking the way they formulate offers and teaming across industry sectors, they can position themselves to develop compelling value propositions that stand out—and win—in a competitive arena like West Africa.

Definitions

NOC (national oil company): A company that is wholly or partially owned by the government.

IOC (international oil company): A company that is fully private and whose shares are held by private entities.

Resource holder: Government or national oil company that owns a country's oil and gas reserves.

Oil and gas value chain: All sectors of the oil and gas industry—upstream, downstream and gas.

MOU (memorandum of understanding): A legal document that is signed as a precursor to negotiations for a full contract.

The shift of power

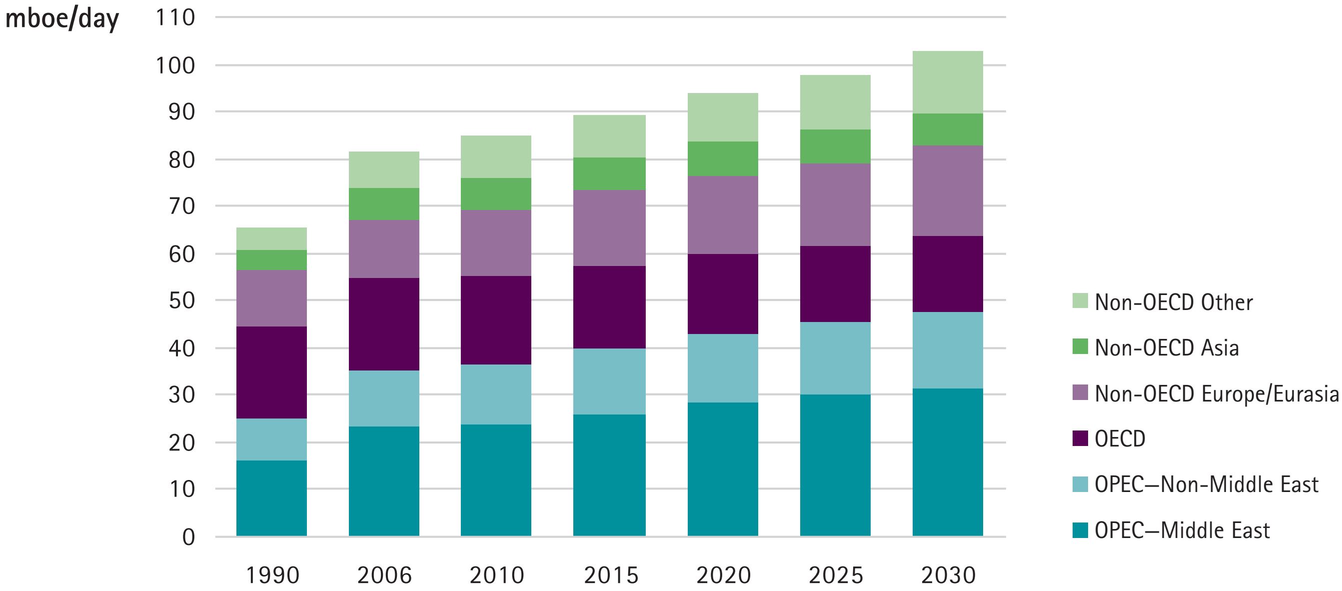
The majority of the world's proven oil reserves are under the control of NOCs, and are largely located in transitioning and developing economies, sometimes in unstable geopolitical environments. The Energy Information Administration (EIA) predicts that the Organisation for Economic Co-operation and Development (OECD) country share of world conventional liquids production will fall to 16 percent by 2030, from 30 percent in 1990.[1] In comparison, the share of oil production from the Organization of the Petroleum Exporting Countries (OPEC), including the Middle East, Angola, Nigeria, Algeria and Venezuela, will reach nearly 50 percent by 2030 (see Figure 1).

The competition between IOCs and NOCs for access to oil and gas reserves is increasingly intense. It is driven by several factors, including strong economic growth in China and India, which is prompting OECD governments to pursue energy security and the IOCs to focus on maintaining their reserve replacement ratios.[2] The objectives of resource holders are many and usually very specific to that nation and NOC.[3] It is fair to say, however, that in general, most see themselves as catalysts for national development and seek out investing in oil companies that will maximize the positive impact of the oil and gas industry on their economies.

The challenges faced by these emerging resource-holder countries to do this are often significant and wide ranging. Many have fast-growing, young populations with a multitude of health and social problems. In Angola, for example, approximately 40 percent of the population is below the age of 15, and the life expectancy is less than 40 years.[4] In the Middle East, India, China and Nigeria, there is an urgent need for power generation to meet the needs of growing populations, increasingly energy-intensive lifestyles, and manufacturing and other industrial sectors. Even in the more developed resource-rich countries, such as Saudi Arabia, Abu Dhabi and Egypt, there is a need to create jobs for a rapidly growing young population.

Not surprisingly, governments and NOCs in emerging markets are becoming more focused on local development, job creation and skill transfer across the oil and gas value chain. Many resource holders are gradually raising their local content requirements in terms of job creation and supplier development to well above 50 percent and are giving preference to upstream awards that are accompanied by downstream investments. In addition, some resource holders want investment beyond the oil and gas value chain. In the Middle East, Saudi Arabia and the United Arab Emirates are extremely

Figure 1. Global Oil Production



mboe/day = millions of barrels of oil equivalent per day

Source: International Energy Outlook 2008, Energy Information Administration, http://www.eia.doe.gov/oiaf/ieo/pdf/ieopol.pdf

interested in accessing expertise in green technology and alternative energy to help diversify their economies. In the central Asian region, countries such as Kazakhstan and Uzbekistan seek to develop not only their gas industries but also other industrial sectors, such as the steel industry. In Africa, Nigeria and Angola are interested in developing the national infrastructure, including roads and railways.

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The evolution of the offer

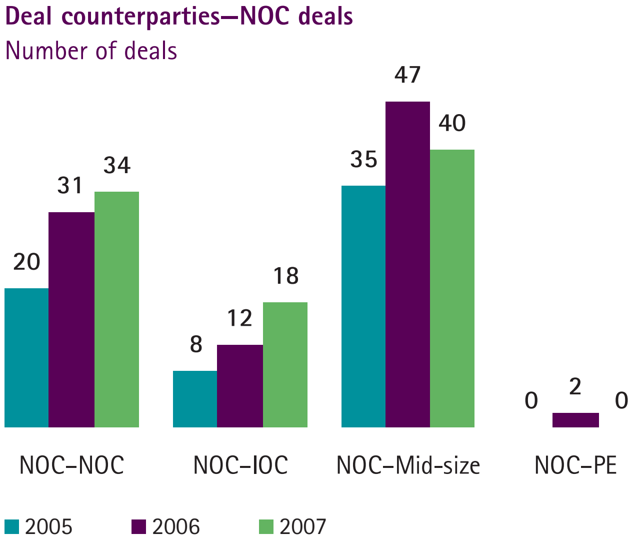
A key change in the competition for assets in the upstream arena is the arrival of the NOCs. Many NOCs are now growing their international presence and reputation. NOCs as diverse as Petronas; Japan Oil, Gas and Metals National Corporation (JOGMEC); Korea National Oil Corporation (KNOC); Gazprom; Qatar Petroleum; Petrobras; China National Offshore Oil Corporation (CNOOC); and Sonatrach have been expanding their global footprints.[5]

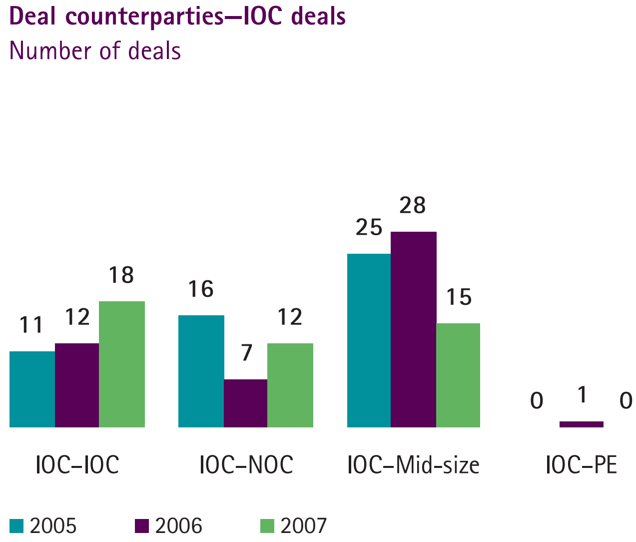
As the resource-hungry NOCs are driven by a need to secure energy supply for their home countries by accessing oil and gas reserves in emerging areas, also active are those NOCs seeking to find new markets or export their considerable technical know-how. We have seen examples over the past few years where NOCs have sometimes offered very large signature bonuses in order to gain access to reserves. For example, Sinopec offered $1 billion in signature bonuses for two blocks in the 2006 Angolan licensing round—significantly more than the amount typically paid for the same size blocks.[6]

And while Accenture research suggests that access to upstream opportunities is not dependent on bid value alone, the NOCs are also proving adept at crafting innovative value propositions which are much broader than the traditional upstream offer. Such propositions encompass factors such as infrastructure investment, national capacity building, innovative commercial arrangements and new partnership models. For example, India's oil and gas companies are pursuing mutual cooperation agreements with resource holders, offering stakes in India's upstream in return for assets abroad. In addition, India's NOCs are beginning to take advantage of India's strengths in IT training, sustainable agriculture and pharmaceuticals in order to meet the needs of resource-rich countries—an example being India's Oil and Natural Gas Corporation Limited's (ONGC) signing of an MOU to form a joint exploration and production (E&P) partnership.[7] The Chinese industry's ability to integrate oil and gas investments with general development loans and infrastructure investment has proved to be a successful model for resource access, particularly in Africa.

Other more creative offers that NOCs have been making extend to include power, transportation and other industrial sectors. For example, KNOC has formed consortiums with South Korean industrial companies such as POSCO Engineering & Construction, Korea Electric Power Corporation, and Daewoo Shipping and Marine Engineering in order to propose innovative deals to resource holders.[8]

Figure 2. IOC and NOC deals, 2005–2007





Notes: M&A activity covers mergers, acquisitions, joint ventures (JV), swaps, farm in, extension, awards, recapitalization, relinquishments, renegotiations, and "other" as classified by J.S. Herold. 2007 data includes forecasted activity for second half of 2007 based on first half year deals completed. Mid-size companies are defined here as those oil companies that have a market capitalization between $20 billion and $60 billion. PE stands for private equity.

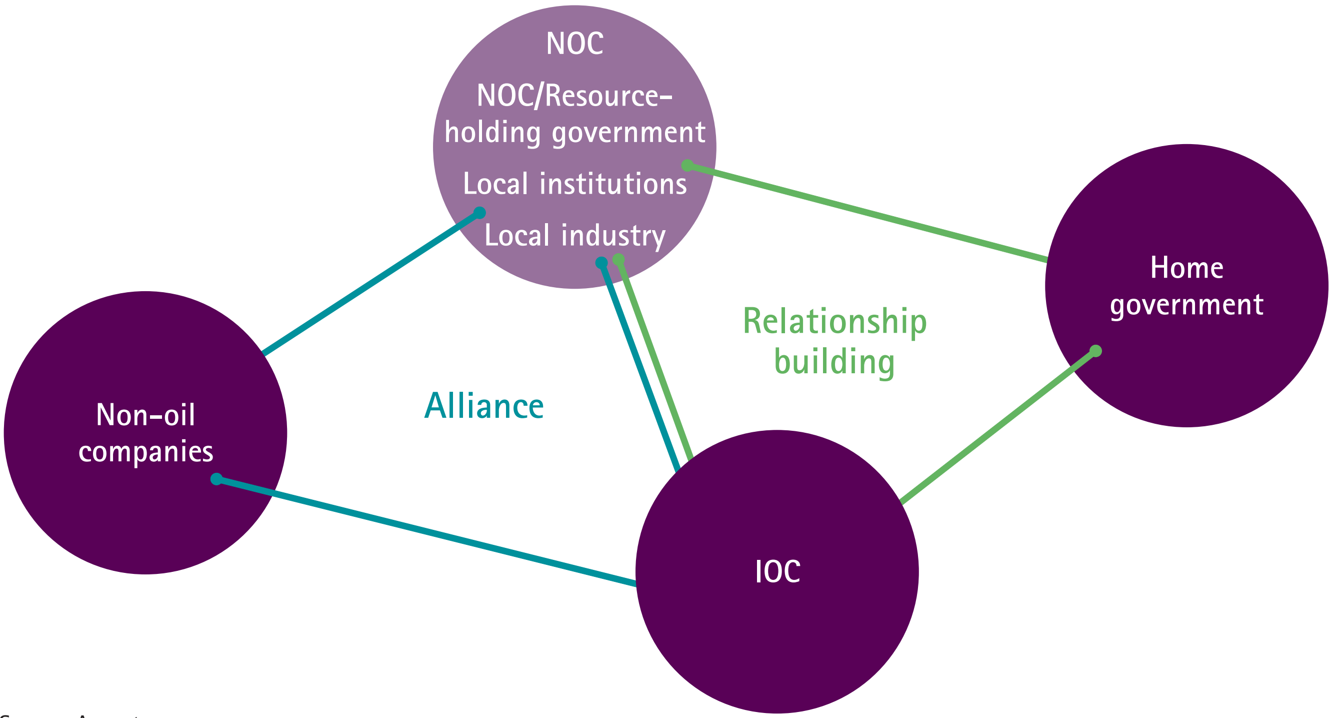
Source: Accenture analysis; Copyright © John S. Herold Inc.; M&A database

As the quest for reserves has become increasingly politicized, many NOCs are employing a "government-to-government" approach to their work in emerging markets. In April 2006, for example, the Chinese president visited Nigeria to sign an MOU that provided right of first refusal on four blocks for China National Petroleum Corporation (CNPC) in return for the company's commitment to expand Nigeria's Kaduna refinery, complete a number of power and telecommunication deals, and provide anti-malaria medication and education for medical staff.[9] And in January 2008, Brazil's president visited Cuba with four cabinet ministers and Petrobras' José Sergio Gabrielli de Azevedo to formalize plans for exploratory deepwater drilling off Cuba's coast, and to discuss the building of a lubricant factory and help with pharmaceutical and agricultural initiatives in Cuba.[10]

In short, IOCs are facing a new type of competition from the NOCs, with a greater level of political involvement and innovative value propositions that go beyond the traditional oil and gas value chain. To a large extent, however, IOCs are not keeping pace with this trend. They generally tend to focus their offers on the core oil and gas chain, along with social, workforce and supplier development and, perhaps, some limited activities in power generation or green technology. In addition, IOCs are normally organized into separate upstream and downstream business units, which tends to hinder them from offering more creative cross-value chain deals.

IOCs: New keys to the compelling offer

Figure 3. IOC Alliance-building model



Source: Accenture

To succeed in this new competitive environment, IOCs must reassess their approach to offers and making deals. Accenture believes that to do so, they should follow some of the paths pioneered by the NOCs.

Leverage external capabilities

A core strength of the NOCs is that they have been able to leverage external capabilities and relationships that allow them to formulate innovative packages for upstream assets. IOCs, too, can build external links and use them to invest in projects that have a large and visible impact on the country in question (see Figure 3). However, they must do more than just duplicate the NOC approach—they must develop their own models for delivery and leverage their traditional strengths, such as project management skills, capital discipline and the ability to manage networks of partners.

In particular, IOCs can form strong links with industrial companies in other sectors of the economy. By working with companies in industries such as chemicals, green technology, water services, power generation, infrastructure, mining, steel and fertilizer, they can provide more comprehensive and compelling value propositions that meet the wide-ranging needs of resource holders. Effective ways of doing this include forming strategic alliances, joint ventures and consortia with both international and local industrial companies in resource-holding nations. However, IOCs must carefully consider their fit with the partnering firms and other industries, and the long-term economic outlook for the host nation.

Effective alliances with industrial companies can give IOCs the potential to create offers that are precisely tailored to the specific resource holder's needs, such as utilities and national infrastructure, without having to develop these non-core capabilities in-house. (It is, of course, critical for the IOC to have a good understanding of the local business environment and the key decision makers involved when developing an offer so that the offer is truly aligned with the needs and priorities of the resource holder.) Thus, these alliances are a cost-effective way to increase the perceived value of the IOC's bid. They are also likely to increase the strength and depth of the relationship with the resource holder and foster goodwill for future interactions, such as bidding rounds, license extensions and the renegotiation of production-sharing agreements (PSA). Widening the offer beyond the development of hydrocarbon resources may also put the IOC in a position to start bilateral discussions outside of the conventional competitive bidding process. This could give the IOC a

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competitive edge, and the opportunity to secure early access or first right of refusal for areas where it sees high potential.

IOCs should also seize the opportunity to ease the learning curve when entering a new region by leveraging the well-established presence of their industrial-company partners in those areas. To date, only a few IOCs have successfully allied with industrial companies in their offers. Notable exceptions are the French and Italian IOCs. For example, in April 2007, Eni teamed up with fellow Italian utility Enel to jointly acquire Russian upstream gas assets through the auction of former Yukos assets. Through this acquisition, the companies plan to expand operations in the Russian power generation sector.[11]

The "offer" as a distinctive capability

Although cross-industry offers are important to both NOCs and IOCs, Accenture believes that IOCs are ideally positioned to realize greater value from such deals. In building cross-industry consortia, IOCs stand to benefit from their competitive strengths in project management and as integrators of various capabilities, and their experience in managing multibillion dollar, multiple-contractor projects. Rather than simply reacting to the changing needs of resource holders, IOCs should focus on developing the process of making the offer to a host nation into a "distinctive capability," which is one of the fundamental building blocks of high performance identified in Accenture's High Performance Business Research. That is, by developing the ability to consistently provide creative, targeted and effective offers, they can differentiate themselves in the competition for access to resources—and adapt readily to a world where resource holders have greater control.

Compared to NOCs, IOCs should also be relatively free from national and political pressures and thus be more flexible to develop offers and build relationships that make the most sense economically. NOCs, on the other hand, are more likely to be limited in their choice of partnering firms because of national imperatives to build strong industries in their home countries. And an IOC is typically in a good position to present itself as a partner of choice for an international company thanks to its international footprint, organization agility, strong business credentials and financing capability.

Figure 4. Stakeholder roles in a typical deal-making process

	Pre-bidding negotiation/ Relationship building	Bidding round/Bilateral agreement	PSA/Signing contract	Project execution	Maintain relationship/ Speculate opportunity
Home government (e.g., Energy ministry)	Government-to-government negotiation				Strengthen cooperation
IOC	Support government-to-government direct negotiation	Lead bidding round and negotiations	Sign contracts as operator	Execute oil/ gas projects	Work with government to strengthen relationship
Non-oil company partner		Support bidding round	Sign contracts as equity participants	Execute industrial projects and EPC contracts	

EPC = engineering, procurement and construction

Source: Accenture

Tap into home governments

While many of today's large IOCs were at one time an NOC and have used their government relationships to facilitate deal making, Accenture sees that today's competitive challenges require them to make heavier demands on their governments. Governments are usually better equipped than IOCs to assess the economic agendas of resource-holding countries because they can draw on their intelligence and diplomatic channels. In addition, a government-to-government approach can be more effective in negotiating large-scale, cross-industry projects with resource holders because of the better access to top decision makers on economic policy among the resource holders. IOCs may also find that home governments can help them strengthen long-term relationships with resource holders, help with financing projects, and even link foreign aid programs with oil and gas projects.

With this extended partnering approach, a number of different stakeholders will be involved in the deal-making process (see Figure 4). Thus, IOCs need to be able to manage these stakeholders, integrate the different elements of the project, shape and negotiate the deal and the bid, and maintain capital discipline—roles that play to their core strengths. The exact process will depend on whether the offer forms part of a license round bid or is a stand-alone deal.

More multifaceted deals

NOCs have been employing a variety of approaches to shaping their offers to resource-holding countries. For example, as Indian NOCs have strived to compete with the Chinese for reserves in recent years, they have experienced a sharp learning curve in terms of identifying a successful investment approach. Indian companies are typically pursuing mutual cooperation agreements with resource holders—that is, they are offering stakes in the Indian upstream in return for assets abroad.[12]

Meanwhile, in Korea, KNOC has been forming consortia with Korean industrial companies such as POSCO Engineering & Construction to propose innovative deals to resource holders in Nigeria. POSCO Engineering & Construction will lead the construction of a 1,500-kilometer-long railway that links the African state's southern oil field of Port Harcourt, the capital city of Abuja and the northern city of Maiduguri.[13]

Choosing the right partners

As IOCs look for industrial-company partners in other sectors, they should focus on industries that are complementary to the oil and gas value chain. Doing so will enable them to make broader offers and, at the same time, strengthen their own businesses. It can also help drive a multiplier effect in which joint investments in one area benefit other areas, enabling consortium partners to profit from the economic growth generated by their activities in the country. Partner industries to consider include:

- Utilities (e.g., water processing and gas, coal or nuclear power generation)
- Infrastructure (e.g., roads, railways)
- Industrial sectors (e.g., mining, steel, fertilizer, manufacturing and telecommunications)
- Green technology (e.g., alternative energy, biofuels, carbon capture and storage)

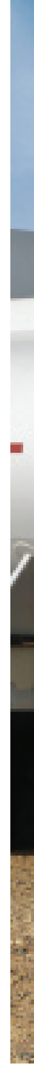
IOCs may want to consider partnerships with local industrial companies as well as international firms. Such partnerships not only help meet local content requirements, they also help build relationships that can allow the IOC to reduce its overall cost of procurement through access to suppliers with a cost advantage.

Partner selection should also be based on a clear assessment of potential supply chain bottlenecks in the target country that could affect their ability to deliver. For example, partnering with a shipyard with the aim of achieving synergies in the construction of offshore platforms would be of limited value if there is a bottleneck in sourcing the necessary steel at the correct specification.

Indeed, a consortium's ability to fulfill the offer should be a key consideration. Failure to successfully deliver can cause long-term damage to the IOC's reputation and its relationship with the host country and lead to a costly and difficult exit. Therefore, it is important for a consortium to thoroughly assess the project scope and its ability to deliver, and to understand the host country's ability to provide a suitable environment, including stable institutions and leadership, for the projects.

By focusing on industries that are complementary to the oil and gas value chain in their search for industrial company partners in other sectors, IOCs will be able to make broader offers and, at the same time, strengthen their own businesses.

Making the shift



IOCs might face growing challenges in the effort to gain access to oil and gas reserves; thus, they should consider combining their core strengths with many of the emerging deal-making strategies being used by NOCs. That means that IOCs need to look beyond bid value to create comprehensive offers that encompass activities across the oil and gas value chain. Increasingly, they must look to partnerships with other industries that will enable them to create offers that will address the full spectrum of resource holders' needs, from green technology to infrastructure development and power generation. Such actions can help them excel at "market focus and position"—that is, the ability to develop unique insights into the drivers of current and future value and quickly translate those insights into actions in the marketplace, which Accenture research has identified as a fundamental building block of the high-performance business. IOCs need to look not only at the value drivers for their own companies, but also those of the NOCs and nations where they wish to do business.

In essence, the winning IOCs will be those that can craft innovative value propositions that encompass infrastructure investment, national capacity building, innovative commercial arrangements and new partnership models—and bring these elements together to benefit the host country, their industrial-sector partners and themselves. Doing so will require new approaches and new capabilities—and perhaps a new mind-set. But the IOCs that can make that shift will be in a position to forge the strong relationships needed to allow continued access to oil and gas reserves—and to drive long-term, sustained business results that are key to the high-performance business.

Endnotes

[1] International Energy Outlook 2008, Energy Information Administration, http://www.eia.doe.gov/oiaf/ieo/pdf/ieopol.pdf.

[2] "The Changing Role of Mergers and Acquisitions (M&A) in the Energy Industry: An analysis of M&A activity and what motivates players today and for tomorrow," Accenture, 2007.

[3] "The National Oil Company—transforming the competitive landscape for global energy," Accenture, 2006.

[4] "The 2008 World Factbook," US Central Intelligence Agency.

[5] "The National Oil Company—transforming the competitive landscape for global energy," Accenture, 2006.

[6] "Sinopec Offers US$1-bil. Signature Bonus in New Licensing Round in Angola," Global Insight, May 12, 2006, Copyright © Global Insight (USA), Inc. Neither GLOBAL INSIGHT nor its affiliates nor any other party involved in providing components of the Services warrants the accuracy or adequacy thereof, nor shall they have any liability for any errors or omissions.

[7] "ONGC and Shell sign Wide-ranging Co-operation Agreement," Oil and Natural Gas Corporation Ltd., January 19, 2005, press release: http://www.ongcindia.com/press_release1.asp?fold=press&file=press155.txt.

[8] "Korean Consortium to build power plants in Abuja and Kaduna," Copyright © Nigerian National Petroleum Corporation, http://www.nnpcgroup.com/news/korea.htm.

[9] "Nigeria: Chinese President Brokers Major Oil and Infrastructure Deal During Nigeria Visit," Global Insight, April 27, 2006, Copyright © Global Insight (USA), Inc. Neither GLOBAL INSIGHT nor its affiliates nor any other party involved in providing components of the Services warrants the accuracy or adequacy thereof, nor shall they have any liability for any errors or omissions.

[10] "Petrobras signs a cooperation agreement with the Cuban state-owned oil company," Agencia Petrobras de Noticias, January 15, 2008, http://www.agenciapetrobrasdenoticias.com.br/en_materia.asp?id_editoria=11&id_noticia=4392.

[11] "Enel announces 852 million US dollar acquisition of Yukos Assets," Enel, April 4, 2007, http://www.enel.com/en/press_room/press_releases/releases/index.aspx?iddoc=1502129.

[12] "ONGC ties up with Norsk Hydro to develop Indian Deepwater Oil & Gas blocks," Oil and Natural Gas Corporation Ltd., July 2, 2007, http://www.ongcindia.com/press_release1.asp?fold=press&file=press257.txt.

[13] "POSCO E&C Pursues Railroad Construction Project in Africa worth 10 Billion Dollars," POSCO Engineering & Construction, November 7, 2006, http://www.poscoenc.com/english/pr/press_view.asp?hBOARD_ID=PR&hDOC_ID=225.

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