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Developing Local Content Programs

Insights from Accenture for global players to achieve high performance in today's competitive energy landscape

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The changing landscape

The golden era of easy oil is over. In today's increasingly competitive energy industry, both established and new players are constantly looking for new ways to grow and achieve high performance. Oil companies are under pressure to replace reserves—reserves that are harder to find and more difficult and expensive to extract, both technically and politically. The prospects for an oil company's growth often involve working in developing markets that offer access to major energy reserves—in exchange for contributions to the country's broader economy.

The relationship between many major resource holders and international oil companies (IOCs) has been changing. National oil companies (NOCs), which hold more than one-third of the world's oil reserves, are emerging as relatively new change agents on the global energy scene. As emerging markets develop and mature, their national host governments want their countries to be involved in a broader range of business activities. Host nations rich in energy assets are seeking to maximize the overall economic benefits for their citizens.

It is against this backdrop that NOCs are reevaluating and setting new objectives and partnership roles to define participation in joint ventures and production-sharing agreements in their countries. Historically, IOCs have sought to maximize their economic outcomes, which have included some local spending in areas such as health, education and the environment. IOCs must now move beyond a philanthropic model. In the past, greater emphasis was placed on the cash value of products and services locally owned businesses provided (even if the actual products or services were imported) and also

on community jobs. These activities did not create a multiplier effect from the energy industry to grow related industries in the country. The IOCs preferred to import required materials and services from known suppliers, rather than develop the local supply base directly. As such, minimal linkage existed between the oil and gas sector and the rest of the economy of such countries.

Today the rules of the game have changed: Developing local economies, stimulating industrial development, increasing local capability, building a skilled workforce and creating a competitive supplier base—also referred to as local content—are minimum requirements for doing business with host countries and NOCs. For IOCs, the need and justification for a clear local content policy and the innovative delivery of a local content program have become critical issues. IOCs now have to develop new models and redefine their business approaches with NOCs to include equity-building programs that provide an opportunity to improve the IOC's "license to operate" in developing regions. The ability of IOCs to set up local content programs that meet the long-term strategic goals of the host NOC and the nation the NOC serves is emerging as a key determinant of success or failure in developing markets—and leading companies are realizing that new approaches are necessary to achieve success.

The case for local content development

Growing instances of new-entrant foreign companies—such as China National Offshore Oil Corporation (CNOOC), Korea National Oil Corporation (KNOC), India's Oil and Natural Gas Corporation (ONGC), and Brazil's Petrobras—winning attractive bids in countries such as Angola and Nigeria demonstrate that Western IOCs have a new set of competitors that are attuned to the host country needs and aspirations, and have raised the bar for the social and economic impact portion of a company's proposal for leases. In many instances, emerging and increasingly influential NOCs are aggressively pursuing international acquisitions and "super bidding" focused on acquiring foreign assets rapidly. The willingness to deliver even non-energy-related infrastructure and local workforce training is an example of some deals being brought to the table across various countries and situations. Additionally, the emergence of previously conservative NOCs in consortia involved in such creative deal packaging has created a stir in the industry. For example, in 2005, China National Petroleum Corporation (CNPC), Russia's LUKOIL, Uzbekneftegaz, KNOC and Malaysia's PETRONAS set up a consortium to develop gas fields in northwestern Uzbekistan.¹ And KNOC and ONGC formed a consortium that jointly bid and won two deepwater

blocs—OPLs 321 and 323—in the Nigerian bidding rounds that took place in April 2007.

The medium-term gains that international operators would eventually realize for pursuing a local content program strategy cannot be over-emphasized. Not only are NOCs' ambitions changing, but IOCs are facing resource challenges on their home fronts as well. All over the world, oil and gas services players are grappling with an aging workforce and a gradual shrinking of technically capable, skilled resources that can be readily deployed within company operations. To get the required competent workforce that can be quickly deployed in dispersed geographies, companies are weighing various approaches. One option that may be in the best interest of the IOCs and allied foreign suppliers is to set up operations using local workforces, resources and materials and move a significant part of an organization's value chain to the operating geographies. In reality, NOC countries will develop these capabilities, whether helped by Western IOCs or multinational NOCs. Therefore, it will be advantageous for IOCs to embrace this development and benefit from it.



1. "PETRONAS Inks Two Joint Effort Deals with Uzbekistan," PETRONAS press release, October 3, 2005, <http://www.petronas.com>.

Defining local content today

As mentioned, developing countries and NOC states with maturing mineral sectors, particularly oil and gas, have placed a renewed emphasis on increased local content participation by IOCs in recent years. Host nations and NOCs are emphasizing that the desire for an increased contribution to the local economy and society and a strategic intent to pursue local content go beyond philanthropy, and are beginning to expand their perspectives and mind-sets regarding how local content should be implemented.

This mind-set is increasingly woven into the strategic development and goals of NOCs and their nations, and is being used to support and carry out the domestic and international business goals of such NOC companies. Up until the late 1990s, and with the gradual dismantling of protectionist policies as a result of World Trade Organization (WTO) guidelines and requirements, even certain developed economies such as Norway and Britain had used local supplier/industry protection policies to develop specific industry sectors and fund some welfare initiatives introduced by the state.²

Although definitions vary from country to country, *local content* is generally taken to be the total value added to a national economy through the localized production of select services and key materials, equipment and goods related to target sectors of the economy (upon which such nation is dependent). For NOC states

such as Nigeria, Brazil, Malaysia and Indonesia, where oil and now gas are prime national assets, *local content* is defined as the total combination of related services and production of goods and materials used within the local oil and gas industry. It also covers the spillover effect of such activities on other sectors of the economy with the underlying assumption that such linkages are capable of stimulating increased economic growth across other areas.

Today, host countries and NOC states have widened local content focus to cover policies and initiatives to stimulate industrial development; promote and diversify the national economy; bring in advanced technology and competence; and develop local capability resulting in a competitive local supply base and technically competent workforce. In addition to developing a transparent and clear policy to drive these objectives as well as promoting the domiciliation of a significant level of related services and manufacturing in-country, developing countries have also increased their engagement of asset operators and offshore personnel to aid in recommending and implementing initiatives that would increase local content significantly.

In general, NOCs are determined to maximize non-rent returns through the transfer of technology and competence to national workers. NOCs also seek a willingness from IOCs to identify national infrastructure development projects and the agreement to use local suppliers. A tacit understanding exists that a premium is conferred on companies that pursue the development of

a supplier-base program. This requirement can also be inserted in contracting guidelines that are issued publicly as well as operating agreements between the IOCs and the NOCs.

A study of several countries that have developed models that define how technology and competence will be either transferred or developed reflects that local content is a positive development³ (see "Local Content Developments Around the World," opposite page). For example, through this route, Norway, a major oil producer and gas exporter to Europe, has built an advanced technological oil and gas service industry.⁴ Brazil has developed a globally renowned competence in deepwater exploration.⁵ The country's oil and gas linkages to the local economy are being optimized while utilization of existing national infrastructure has improved.

2. H.L. Bjørnstad, "*O Petroleo e Nosso: The Strategic Relaxation of the Brazilian Petroleum Monopoly*," Dissertation, Department of Political Science, University of Oslo, 2000.

3. Paul Domjan, "The Supplier Development in the Oil and Gas Sector of Kazakhstan," Background Paper No. 5., Joint Economic Research Program of the Ministry of Economy and Budget Planning of the Republic of Kazakhstan and the World Bank, April 2004.

4. Hildegunn Kyvik Nordås, Eirik Vatne and Per Heum, "The Upstream Petroleum Industry and Local Industrial Development: A Comparative Study," SNF Report No. 08/03, Institute for Research in Economics and Business Administration (SNF), Bergen, Norway, May 2003.

5. Per Heum et al., "Enhancement of Local Content in the Upstream Oil and Gas Industry in Nigeria," SNF Report No. 25/03, Institute for Research in Economics and Business Administration (SNF), Bergen, Norway, August 2003.

Local content developments around the world

The ways in which various countries have developed and pursued a local content improvement strategy reveal several critical actions taken and provide valuable insights for other enterprises.

Brazil

Despite deregulation, the Brazilian oil and gas industry is still protected by trade barriers; finished goods that can be supplied by Brazilian firms (for example, platforms and supply vessels) are protected by import duties ranging from 10 to 20 percent. Equipment that cannot be supplied by the domestic industry, however, can be imported without restrictions. This restriction on imports of finished goods has encouraged international companies to establish industrial activities in Brazil.⁶

Norway

Norway is the world's third-largest gas exporter and fifth-largest oil exporter, and local content development has been driven mainly by a national focus on research and development (R&D) and the transfer of technology. Foreign operators entering the Norwegian industry in the late 1970s were strongly encouraged to form R&D partnerships and joint development programs with Norwegian companies and research institutions. The operators' commitment and strategies for technology transfers were made a crucial and determining factor in the licensing processes. In more recent years, other events, such as the WTO guidelines restricting protection of local industries, have since diminished Norway's national focus. Moreover, Norway has grown its local industry significantly, giving the impression that

the country has relaxed its strict entry guidelines for smaller companies to encourage increased participation in the Norwegian oil and gas industry.

Due to these initiatives, Norwegian oil and gas and supply companies have now developed leading-class, state-of-the-art technologies, and many international companies have located part of their R&D chain in Norway.⁷ Also, Norway's success can partly be explained by the existence of related industrial capacities when oil was discovered in 1957. Industrial capabilities in shipping, ship equipment and mining as well as general experience in operating capital-intensive industries were available and were leveraged.

Indonesia

Indonesia is one of the world's largest exporters of liquefied natural gas (LNG), but its supply industry is fragmented. Most local companies are small and lack the industrial capacities and financial strength to become dominant suppliers to the Indonesian oil and gas industry. Most operate at a very basic technological level. Local content in Indonesia has focused largely on the involvement and development of manpower rather than technology. This has possibly resulted in lower local content levels relative to other benchmark peers. Currently, minimum local content requirements have been set at 35 percent, but this figure is difficult to achieve. In practice, local content commonly ranges between 10 and 20 percent.⁸

Angola

Angola is the second-largest sub-Saharan Africa oil producer. Increasingly, more of the resource

requirements by way of equipment, materials, and skilled and unskilled labor are being met from within the country. The country's focus has been on developing Angola into a manufacturing and fabrication base for after-sales service and support for oil operations, helping to maximize the provision of goods and services through local businesses. Accordingly, a \$30 million local content development scheme—Projecto de Desenvolvimento da Participação Nacional (PDPN)—was created by major stakeholders in the national oil industry in 2002.⁹

Kazakhstan

Kazakhstan is a net oil and gas exporter and is working to become a global supplier of knowledge-intensive, value-added goods and services to the global extractive industry with a medium-term focus on the Caspian region. Rules are being redesigned to encourage oil companies to look for local suppliers as part of their operational work rather than as an add-on administrative requirement. Local content in Kazakhstan is backed by legislation and stipulates that field operators must use equipment, materials and finished products manufactured in Kazakhstan, provided that they meet state and/or international standards; involve Kazakhstan organizations in the performance of services related to oil operations, so long as they meet "the standard, price and quality characteristics of similar work and services provided by non-residents" of the country; give preference to Kazakhstan personnel during the performance of oil operations; and finance training and retraining programs for Kazakhstan citizens in accordance with the subsoil use contract.¹⁰

6. Regina Cunha, "The Brazilian Onshore Subsector," US Commercial Service, report, January 2007.

7. Hildegunn Kyvik Nordås, Eirik Vatne and Per Heum, "The Upstream Petroleum Industry and Local Industrial Development: A Comparative Study," SNF Report No. 08/03, Institute for Research in Economics and Business Administration (SNF), Bergen, Norway, May 2003.

8. "Report on Oil and Gas Field Equipment and Services Market in Indonesia," prepared by the Engineering Export Promotion Council's (EEPC) Singapore office, January 2002.

9. Arne Wiig, "Supply Chain Management in the Oil Industry: The Angolan Case Study," working paper, Chr. Michelsen Institute, Bergen, Norway, 2001.

10. Paul Domjan, "The Supplier Development in the Oil and Gas Sector of Kazakhstan," Background Paper No. 5., Joint Economic Research Program of the Ministry of Economy and Budget Planning of the Republic of Kazakhstan and the World Bank, April 2004.

Guidelines for developing a local content agenda

Over the years, Accenture has worked with energy companies in markets ranging from Azerbaijan and Equatorial Guinea to Nigeria and Trinidad. Our extensive experience together with our research-based knowledge helps oil and gas companies become high-performance businesses. Our involvement in implementing ambitious local content programs in several countries around the world, including Nigeria and Brazil, highlights some imperatives that can be broadly applied across economies and geographies. Based on our hands-on experience in these regions, we have identified some key areas in which IOCs should consider providing assistance when setting up a local content program or agenda.

Develop a national infrastructure

This area entails the development of a medium- to long-term program for implementing a national infrastructure agenda to complement capacity-building initiatives that developing countries have identified. For a credible and effective local content program to be possible, developing countries first need to have a viable national infrastructure in place before embarking on an ambitious capacity-development effort.

Alternatively, NOC nations and IOCs need to establish complementary national infrastructure rehabilitation or upgrade programs alongside the local content agenda that would facilitate or stimulate the growth of the national economy and increase the standing of the IOCs operating in the country. The selection of national infrastructure would be guided by its relevance to the target oil and gas sectors and would also involve encouraging the setting up of smaller, adjunct businesses in related fields to

enable the development of regional manufacturing precincts or zones.

Build collaborative stakeholder networks

IOCs in collaboration with NOCs also need to build or leverage existing in-country collaborative stakeholder networks around suppliers, service providers, operators and other key industry participants. This network will help provide a strong stakeholder collaboration model and participatory framework to guide the local content agenda implementation. This framework in turn makes quick, efficient implementation possible. For example, in Brazil, an association of oil- and gas-related suppliers already existed and was able to provide necessary data that helped in implementing some of Prominp's programs for the industry.¹¹

Develop the local workforce

Accenture believes that to be effective, local workforce initiatives must go beyond the traditional piecemeal approaches that target limited, short-term results. Companies must work with host countries to identify and select target disciplines and technical competencies as well as build a world-class knowledge diffusion and capital management program to embed these elements in the national workforce. The workforce approach must be comprehensive, multifaceted (including training, development, internship and placement programs), coordinated, and focused on the long-term success of the local workforce, the company and the host country.

Define metrics

NOCs need to develop universally acceptable industry metrics that define local content and actively monitor progress. Such metrics would track both the outcomes and results of the local content program as well as the quality of the local content

implementation and monitoring process. These metrics would assess progress being made by all IOCs to meet stated local content guidelines across their operations and capital projects. The defined metrics would also monitor progress being made in implementing capacity-building programs for the industry. Finally, such metrics should be simple to measure to ensure industry acceptance and consistency in results.

Establish strong program management capability

For IOCs to implement a strategic local content improvement program, they will need to commit to a strong program management capability because the required initiatives will cut across projects, industries, public institutions and government stakeholders. Possessing an expertise in managing all the discrete yet interconnected activities will determine the success and speed of the outcome of a local content program.

Leverage foreign company alliances and relationships

To accelerate the execution of local capacity-building and supplier-development programs, companies will also need to have in-depth knowledge of the appropriate global networks, access to relevant alliances and relationships with foreign companies. These ties will be necessary for dialogue and collaboration that could result in foreign ownership of stakes in the local businesses, technology transfer, and assistance with capacity building and asset upgrade. All collaboration efforts would need to lead to a willingness and readiness of IOCs to work with global service providers, equipment manufacturers and local companies to ensure that technologies are transferred adequately without compromising quality standards.

11. José Fantine and Carlos Feu Alvim, "A Model for National Development," *Economy and Energy*, no. 57 (August–September 2006).

Looking ahead

Local content development programs are here to stay and will continue to gain ground, especially in emerging markets and NOC states. International players, particularly in energy, will be required to proactively design attractive offers in tandem with their country-entry strategies. Players will need to include these offers to ensure that they penetrate, improve their access to and acquire license to operate in emerging markets, and raise their country stakeholder perception and corporate equity.

In Nigeria, local content has been successfully raised from single-digit levels to about 30 percent through the creation of an ambitious local content agenda by the Nigerian National Petroleum Corporation (NNPC) working with the major oil companies, local suppliers and other institutional stakeholders. NNPC, in collaboration with the various stakeholders, has developed

and published local content legislation and guidelines specifying the equipment, materials and services that need to be compulsorily sourced from within the country. Adherence is now being monitored actively.

Along with this legislative development, NNPC is implementing an ambitious infrastructure-building program with major stakeholders and the government to enable realization of challenging local content targets that must be met by 2010. Such targets include raising local content requirements to 70 percent for the Nigerian oil and gas industry, fabricating and integrating a significant quantity of the topsides required for floating production and storage offshore vessels, significant pipe milling in-country, and manufacture of various materials and equipment.

By collaborating with a number of IOCs as well as NOCs to develop local content programs, Accenture has

found that energy companies working in emerging markets can achieve solid benefits on several fronts. For example, IOCs can:

- Secure and strengthen the “license to operate” with national governments while building long-term win-win relationships with key stakeholders and senior officials representing the various institutions.
- Meet growth targets by building the capabilities of local workers and suppliers to support expansion.
- Decrease operating costs by enabling local businesses to achieve adequate scale to effectively compete.

IOCs that view local content program development as an integral part of both their own global business and the local country's economic environment will be in position to grow and thrive in emerging markets. Adopting a long-term mind-set about the changing landscape will drive ongoing, long-term success—ultimately leading to sustained high performance.



Contact us

To learn more about how Accenture can help your organization on its journey to high performance, visit us at www.accenture.com or call us toll-free within the United States and Canada at 1 888 688 7909. From other countries, please dial +1 312 737 7909.

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