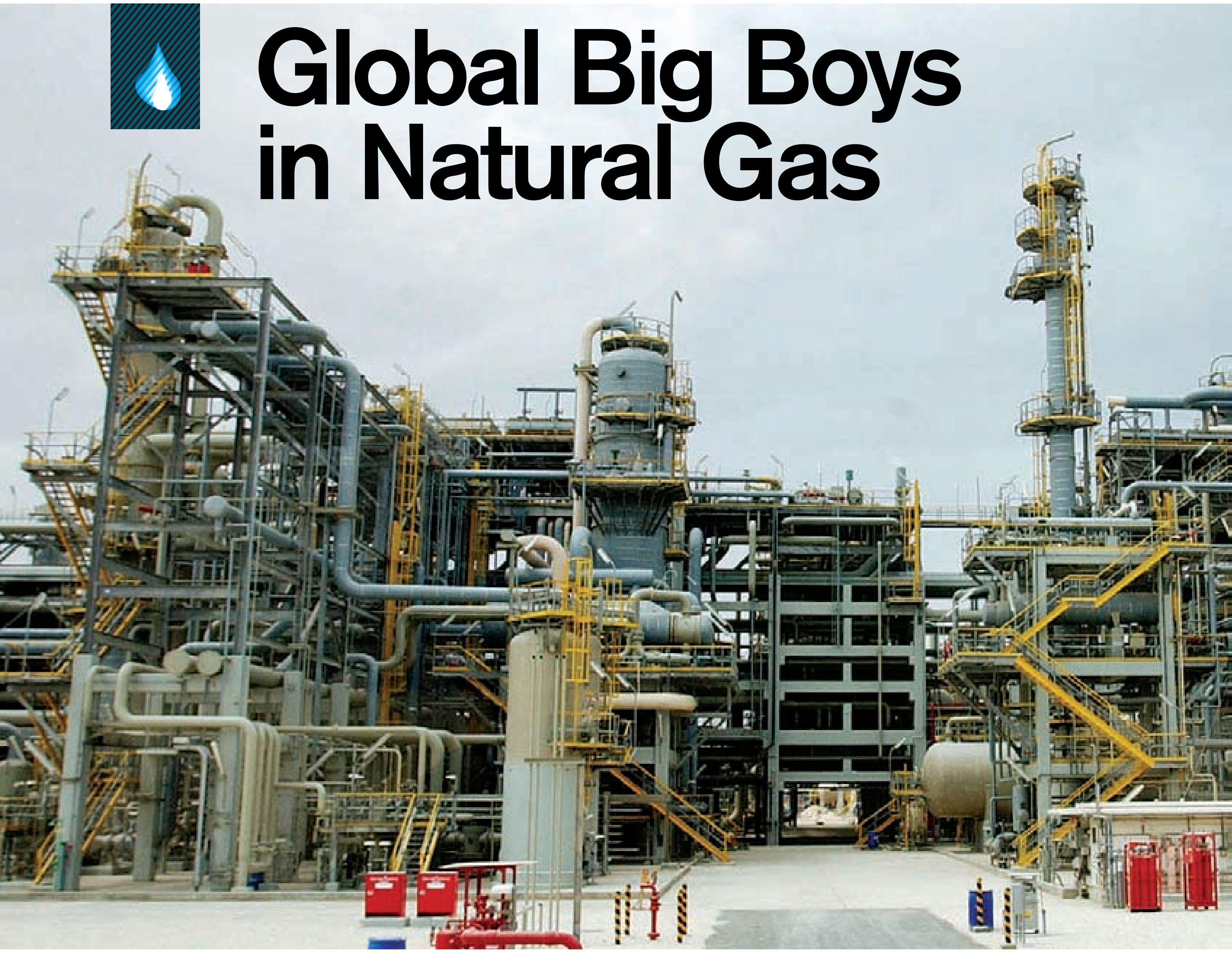
Global Big Boys in Natural Gas



DEVELOPING LNG RESOURCES

BY KEN SILVERSTEIN

Once natural gas was flared around the world as a waste by product of oil production. Now it is becoming a rich asset.

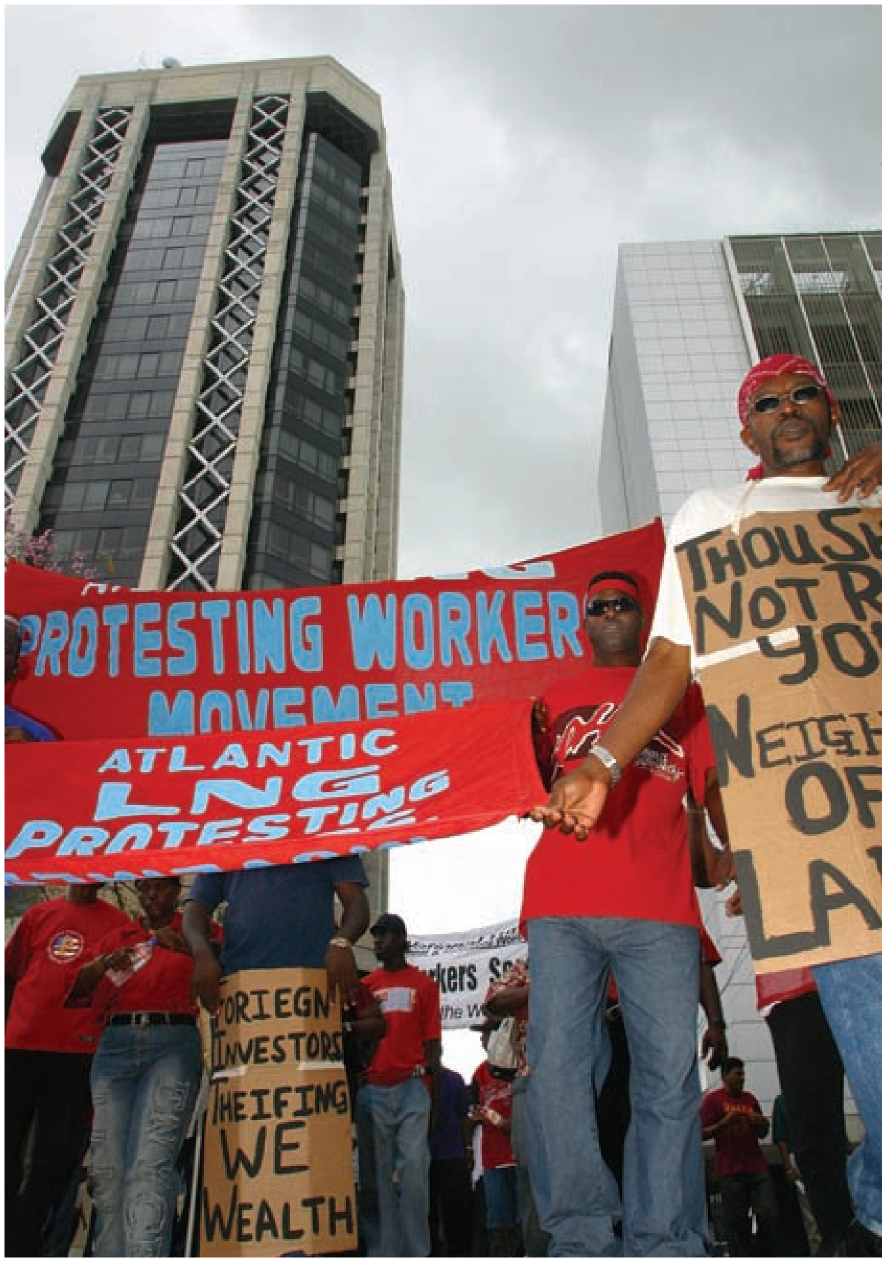
A plant produces liquified natural gas in northern Qatar.
SOURCE: AP PHOTO

AS global demand for the commodity races ahead, the big oil companies are investing to bring the product to market as liquefied natural gas, or LNG. It is dedicating billions of dollars to liquefy, transport and then re-gasify natural gas. With predictions that world demand for LNG will triple by 2020 and with prices near $8 per million per British thermal unit, the risks are paying off.

In its third quarter financials, Shell Oil says that LNG made a significant contribution to net profit. One division, Shell Petroleum Development, is expected to invest $3 billion over the next six years in Nigeria and all to collect stranded natural gas. The purpose is not just to sell a valuable commodity but to also avoid criticism that it is acting environmentally reckless by burning off gas.

The biggest havens for LNG deposits include Qatar, Indonesia, Malaysia, Algeria, Australia and Russia, which are reported to hold 70 percent of global gas reserves. Nigeria, Egypt and Trinidad are well behind those nations. When tallied up, the Middle East holds 41 percent of the world's natural gas while Russia contains 26 percent of it, says the International Energy Agency in Paris. Developed nations have 9 percent of proven natural gas reserves.

Asia is the biggest LNG consumer followed by Europe and the Americas. With the Atlantic LNG market set to equal the Pacific market by 2010, the energy agency says that a global gas market will develop. Prices will keep rising in the near term because of high demand.



Hundreds of striking Atlantic LNG workers march through the streets of the capital Port of Spain, Trinidad in 2004, demanding higher wages for their work at Trinidad's liquid natural gas plant.
SOURCE: AP PHOTO/SHIRLEY BAHADUR

In the next five years, global gas demand is projected to increase to 3.2 trillion cubic meters, or 2.4 percent per year, says the energy agency. Even if high gas prices persist, a decrease in that demand is only likely to be felt after 2010. The LNG industry currently constitutes only 6.5 percent of the gas market but is set to attract half of the sector's investments, it adds. As far as the United States goes, LNG currently provides approximately 2.8 percent, a figure that is predicted to increase to 16 percent by 2030, according to the U.S. Department of Energy.

At issue is whether the United States and the West in general should rely upon such an essential commodity from nations whose economic and social values may not be in synch with each other. Many say "no." Many others, however, say we have no choice. Russia, which has backtracked on some of its previous open market reforms, is the world's largest gas producer and exporter.

"Russia has been a reliable supplier of gas to Western Europe for several decades. Russia has both the willingness and the reserves to continue this role for the decades to come," says Claude Mandil, executive director of the International Energy Agency. "Nevertheless, it is not clear where and when investments will be made to reduce the impact of declining production in its major existing fields. Both suppliers and consumers will greatly benefit from increased transparency in the Russian gas sector."

Winning Investment

Companies are weighing the risks and potential benefits. On the demand side, investment is strong in the power sector with the overwhelming majority of new power plants in the developed nations being gas fired. On the supply side, project developers are struggling to keep pace and projects are currently being postponed because of a lack of qualified personnel and high raw materials prices.

In Nigeria, for instance, the cost of building an LNG facility has risen by 150 percent. The added expense has inhibited both the start and completion of some oil company-initiated projects. An

LNG project may require an initial investment of $5 billion to $10 billion, although the facility would have a lifespan of about 30 years. Shell, BP, France's Total, ExxonMobil Corporation, British Gas and Chevron are among the biggest players.

While Western nations are asking if they can depend on others that are less in tune with their values, the developing countries are debating whether they should give the big oil companies carte blanche over their oil and gas basins. The reality is that most of those nations have well-

Men fish in the sea near a liquefaction gas plant on Russia's Sakhaim island.
SOURCE: REUTERS/SERGEI KARPUKHIN (RUSSIA)

positioned national enterprises that control the processes. They seek Western partners primarily for their technological knowledge.

Certainly, much of the world has moved beyond the stereotypical images of the multinational corporation as preying upon their people and their profits. They largely see them as sources of prosperity and economic development. Chevron says that 90 percent of everyone it employs in Angola and Nigeria are locals. It says that it is also addressing energy poverty in the remotest sections of the Niger Delta, where many communities lack commercial electricity. It is building transmission cables and installing power-generating facilities – all to provide 100,000 Delta residents in 20 communities with electric power.

"We've selected a position that respects both our responsibility to turn a profit in a business that, at its core, is about improving standards of living and our intention to enhance the societies in which we do business," says Peter Robertson, vice chair of Chevron. "To succeed today, a company like Chevron must demonstrate world-class performance across every aspect of our business, from our technical and financial performance to our impact on society and the environment – the so-called triple bottom line. Nearly every single Chevron employee integrates these values into everyday activities and decision making."

The Deterrents

To be sure, the host countries and the oil companies often have uneasy relationships. Consider the 663-mile pipeline from Chad to Cameroon in West Africa. The $3.7 billion deal that culminated in 2003 was a combative process, drawing fire from environmentalists and human rights activists alike. Those critics said revenues from construction activity would not be invested back into the country, pointing out that French, German and U.S. companies had won all the contracts.

The big challenge... is actually getting access to sufficient gas...

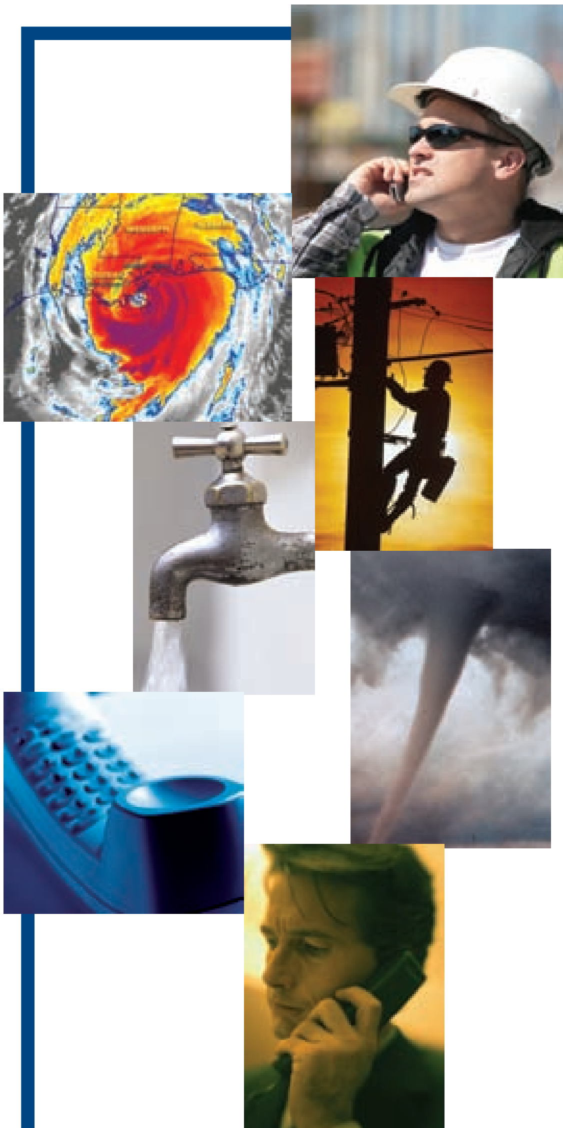
In the end, the pipeline was built based upon the expectation that government revenues in those African countries would increase by hundreds of millions of dollars. But the same issues are still pervasive today. In fact, discussions are now taking place in West Africa that would involve expansions or development of several LNG plants. Financing issues along with internal strife are deterring not just LNG projects but also pipelines and power plants that are needed once the resource is re-gasified. Shell, for example, has delayed some multi-billion dollar deals in the region because of sabotage.

Ever-increasing costs are also a deterrent. Chevron has seen escalating cost at its Greater Gorge project in Australia. The facility was expected to come on line in 2010 and to cost about $11 billion. Now, though, the company says it won't be completed until 2015 and that it will now cost about $14 billion. Shell, meantime, says that the Sakhalin 2 LNG project in Russia is going to rise from $10 billion to $20 billion.

While obstacles to LNG development abound, the fact remains that the commodity's popularity is growing. Scottish Consultancy Wood Mackenzie says that worldwide, LNG demand will triple by 2020. It is predicting consumption will blossom from 7 trillion cubic feet a year now to 25 trillion cubic feet a year.

"The big challenge facing the LNG industry in the foreseeable future is actually getting access to sufficient gas reserves, or enough gas supplies to feed growth," says Frank Harris, head of global LNG for Wood Mackenzie. "We think this is an issue in the short, medium and long term. The national oil and gas companies' strategies are evolving. To keep growing, the international companies have to do more exploration."

Big oil companies and the nations in which they do business are linked at the hip. It's a symbiotic relationship and one that will require the hosts to lessen restrictions and the industry to maintain a firm social compact. It's about creating prosperity and helping to feed the global energy demand.



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