KNOC's Global Expansion Strategy

Kim Byul-hwa*

Summary

In June 2008, Korea's state-owned Korea National Oil Corporation (KNOC) announced a global expansion strategy calling for a six-fold increase in oil and gas output and a five-fold increase in proven reserves by 2012.

Korea, which depends almost entirely on foreign countries for oil supply, has been developing policies to encourage the development of overseas resources by Korean companies to enhance its energy security. KNOC's expansion is part of these efforts. Korean companies' expansion into the upstream sector has featured a package-oriented approach in which they secure resources in foreign countries while supporting the development of energy infrastructure and social overhead capital required in these countries. As the national oil company, KNOC has played a leading role in this global expansion.

Key features of KNOC's strategy include the acquisition of production assets rather than exploration assets, M&As of oil companies, the retention of engineers from the merged companies and the improvement of technological levels. If KNOC successfully implements its expansion strategy as planned, Korea's equity oil and gas production is expected to increase. However, a drop in crude oil prices has prompted other Asian national oil companies such as Chinese NOCs to aggressively go out for oil and gas assets. As the competition for securing energy resources intensifies, KNOC's future course remains to be seen, including how it would overcome the future challenges of post-merger integration.

Introduction

Korea National Oil Corporation (KNOC), the state-owned oil company in Korea, began to consider its expansion strategy[1] on a full-fledged basis as part of the nation's energy security policy following a surge in crude oil prices in the first half of 2008. This was because Korea had a growing recognition that it should expand its oil development companies in order to survive a fierce global race for resources. In the oil and gas exploration and production business, particularly, corporate sizes are closely related to competitiveness. Sufficient corporate sizes are a key condition for participation in new oil development projects. For example, the Iraqi oil minister has cited a minimum oil production capacity of 200,000 bbl/d as one of the qualification conditions for participation in E&P (Exploration and Production) projects. In France, Spain and Italy that have

* Researcher, Oil & Gas Strategy Group, Strategy and Industry Research Unit, IEEJ

1 It means the expansion of financial capacity, production and workforce (mainly engineers), as explained later.

insufficient natural resources, governments have led efforts to expand national flagship companies to increase equity oil production[2]. Emerging countries such as China and India aim to develop their national oil companies into globally competitive oil firms. This report briefly reviews KNOC's business operations and introduces the expansion plans that KNOC is now implementing.

1. KNOC's Past Overseas Expansion

1-1 Overview of KNOC

KNOC is under the control of the Ministry of Knowledge Economy (MKE) and is classified as a public corporation in Korea. Under the Korean law, some public organizations with 50 or more employees and independently earned revenues accounting for 50% or more of the total are designated by the Ministry of Strategy & Finance as public corporations.

KNOC, which was founded in 1979 to secure stable oil supply in response to two global oil crises, has mainly undertaken operations relating to oil and gas development at home and abroad and management of oil stockpiling. KNOC is 100% owned by the government. Its capital totaled about 5.9 trillion won in 2008. At the end of 2007, KNOC was participating in 37 projects in 16 countries. Its oil production then stood at 50,000 bbl/d, recoverable reserves at 520 million barrels, and outstanding investment at about $700 million (Table 1). In 2008, the number of projects subject to KNOC's participation increased to 44 including 10 projects in the production stage.

KNOC participates in oil exploration, development and production projects independently or in cooperation with other Korean energy companies. KNOC operates oil and gas fields in such foreign countries as Vietnam, Indonesia, Yemen, Nigeria, the United States and Canada, as well as the Dong-hae gas field at home. The oil find at Vietnam's 15-1 concession is cited as one of KNOC's most successful landmark overseas E&P projects. At the concession, KNOC played a leading role in the exploration phase before commercial production started in October 2003. Recoverable reserves there total 720 million barrels. A KNOC-led consortium has a 23.25% stake in the concession (Table 2).

Table 1 Comparison of Oil Companies' Investment and Production(2007)

Company	KNOC	Total	CNPC	ONGC	Repsol
Investment ($100 million)	7	113	144	40	51
Production (1,000 bbl/d)	50	2,285	3,479	1,109	1,090

Source : A press release from the Ministry of Knowledge Economy, Korea

[2] For example, France has Total ranked 10th in the world by Petroleum Intelligence Weekly magazine. Italy has ENI ranked 21st and Spain owns Repsol-YPF ranked 28th.

Table 2　Vietnam's 15-1 Concession

Concession	Vietnam15-1
Acquirement date	September 1998
Recoverable reserves	720 million barrels
Stakeholders	-PV(Vietnam): 50% -Conoco(U.S.): 23.5% -ROK consortium: 23.25% (KNOC 14.25%, SK 9%) -Geopetrol (France): 3.5%
Production commencement	October 2003

Source : KNOC homepage

1-2　History of KNOC's Upstream Operations

In 2004 when crude oil prices continued to rise, the Korean government developed a policy to enhance support for overseas resources development for securing stable supply of oil. The government created the National Energy Council in January 2004 and the National Energy Committee in July 2005 with their chairmanship assumed by the president, putting overseas resources development on the national agenda.

In order to increase the self-sufficiency rate for key energy sources including uranium and coal as well as oil and gas, the government also sought to develop public corporations for overseas resources development into firms with international expertise to improve technology and fundraising systems. Furthermore, the government developed overseas expansion strategies including the package-deal model and switched from direct financial aid for resources-rich countries to infrastructure development aid instead. (see Table 3 for Korea's equity oil and gas ratios).

Table 3　Korea's Equity Oil and Gas Ratios

Unit: 1,000 barrels for crude oil, 1,000 tons for gas

Item	2005		2006		2007	
	Crude oil	Gas	Crude oil	Gas	Crude oil	Gas
Proven reserves	737,799	129,790	905,545	133,900	947,437	152,619
Imports (a)	843,202	22,304	888,429	24,605	873,481	24,765
Equity production(b)	31,089	1,296	25,101	1,116	26,453	2,259
Equity ratios (b/a)	3.7%	5.8%	2.8%	4.5%	3.0%	9.1%
Equity oil and gas ratios	4.1%		3.2%		4.2%	

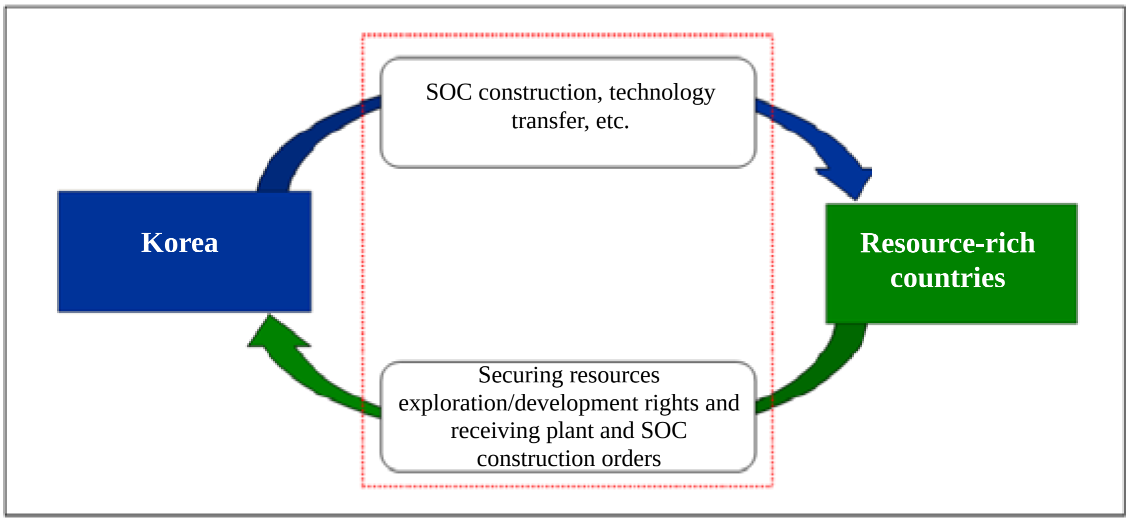
Source : "A study on Accompanied Overseas Resource Development & Its Investment Strategies" by Korea Energy Economics Institute (December 2008)

Just after its inauguration in 2008, the Lee Myung-bak administration gave priority to overseas resources development, established relevant policies and created more specific plans than the previous administration to stabilize energy supply and diversify its sources. It has selected Russia, Central Asia, Africa and South America as priority regions for resources development in a bid to promote summit talks for resources diplomacy. As part of relevant policies, the MKE announced a detailed strategy for overseas resources development in March 2008. The strategy calls for exploring opportunities for resources development projects and expanding investment for M&As of oil companies.

1-3 Packaged Expansion into Upstream Operations

Korean expansion into the overseas upstream sector has characteristically been packaged with investment in other sectors. This package deal represents a model to secure resources while supporting the development of energy infrastructure and social overhead capital (SOC) required by resource-rich countries. Areas subject to such support include information technology as well as roads, power stations, airports and other SOC construction projects. Particularly, this support can contribute to industrial diversification that oil-producing countries including developing nations are pursuing (Fig. 1).

Fig. 1 Concept of Korea's Packaged Expansion into Foreign Countries



Full-fledged discussions on the packaged resources development strategy began when the then Ministry of Commerce, Industry and Energy (now MKE) prepared the second basic plan for overseas resources development in 2004. The strategy was specified in the third basic plan for overseas resources development (2007-2016) given in 2007. The basic plan calls for developing strategies on a country-by-country or region-by-region basis to explore projects available for packaged resources development. It seeks to organize special task forces for regions such as Central Asia, Africa and Russia to develop strategies meeting the needs of resources-rich countries. This means that companies interested in overseas expansion under the plan can join country-by-country task forces to survey market conditions and explore project opportunities. Areas for non-energy projects for packaged resources development have widened to cover culture and telecommunications as well as infrastructure. Recently, however, there has been growing concern that the word “packaged” might have prompted resources-rich countries to interpret Korea’s resources development as associated with unconditional SOC development. Therefore, Korean firms have been recommended to switch to other terms such as “accompanied overseas resource development”

As a specific example of packaged resources development, a Nigerian offshore project is outlined in the table below (Table 4):

Table 4 Nigerian OPL 321/323 Project

Project name	Description
Nigeria OPL 321/323 concessions	● PSC signed in March 2006 (recoverable reserves: 2 billion barrels) ● Accompanying investment: Construction of a power station (2,500 megawatts) and gas pipelines ● Investment (oil project): ROK consortium (60%), Britain’s Equator (30%) and Nigeria’s LCV (10%) ● Korean participants: Kepco (Korea Electric Power Corporation), KNOC, POSCO, DSME etc

Source : KNOC homepage

The Nigerian project is the first Korean overseas resources development project packaged with other deals. In these packaged projects, KNOC has played a leading role. The concessions for which the Korean consortium has acquired the development right are 100 kilometers from the coast and 1,000 ~2,000 meters deep. The Korean consortium has a combined stake of 60% in the project – 45% for KNOC, 9% for Kepco (Korea Electric Power Corporation) and 6% for DSME (Daewoo Shipbuilding & Marine Engineering Co.). The consortium won the deal in August 2005. In March 2006, a production sharing contract for the concessions was signed in the presence of the Nigerian and ROK presidents. The project is now in an exploration phase[3].

As noted earlier, resources-rich countries are mostly developing nations, seeking to construct and expand railways, roads, ports, harbors and the like to diversify their industrial structure. This type of packaged resources development project is expected to bring about win-win relationships between Korea and resources-rich countries.

[3] After a change of government in Nigeria in May 2007, however, the new administration doubted the validity of oil concession contracts signed under the previous administration and claimed to cancel the E&P contract for the concessions owned partly by the Korean consortium. A legal dispute between the two countries has made oil exploration at the concessions difficult.

2. KNOC's Global Expansion Strategy

2-1 Details of Strategy

KNOC implemented its global expansion strategy in 2008 and a key numerical target under the growth strategy was to expand production six-fold from the present 50,000 bbl/d to 300,000 bbl/d by 2012. The six specific strategic measures designed to achieve the expansion target are as follows[4]:

(1) Promote the acquisition of production assets rather than exploration assets and expand its size through M&As of E&P companies
(2) Raise 19 trillion won including investment of 4.1 trillion won from the government
(3) Retain petroleum engineers upon the acquisition of oil companies
(4) Improve technology levels through the development of deep-water technologies and strategic cooperation with overseas service companies
(5) Reduce staff in non-E&P sector and transfer them through reeducation to the E&P sector as part of restructuring efforts
(6) Promote strategic cooperation with Kogas that has the world's largest gas-purchasing power

The first represented a change in a resources acquisition approach in Korea. Earlier, KNOC had expanded its overseas assets centering on exploration assets. But the strategy switched to the acquisition of production assets and oil companies with such assets. KNOC is expected to boost its assets from 9.4 trillion won in 2007 to 30 trillion won through the acquisition of production assets and oil companies.

On the second measure, the Korean government will invest 4.1 trillion won in KNOC to support its expansion. In addition, KNOC will raise 15 trillion won through issuing bonds in financial markets. In 2008, the MKE decided to provide KNOC with 964.7 billion won out of 4.1 trillion won in planned investment within the year to help KNOC to purchase oilfields or oil companies suitable for its acquisition as soon as targets were found. The MKE also decided to launch a resources development fund to encourage private sector investments in overseas resource development, with KNOC investing 100 billion won. As of August 2009, KNOC and KORES (Korean Resources Corporation) were leading the process to select a company for managing the fund.

Thirdly, KNOC plans to retain petroleum engineers when acquiring oil companies, in a bid to solve the problem of shortages in domestic skilled engineers. In February 2008 when KNOC acquired US Taylor Energy, for example, it employed 146 Taylor engineers.

Regarding the fourth, KNOC gives priority to core technologies such as deepwater exploration, enhanced oil recovery and extra heavy oil and plans to form strategic alliances with service companies specialized in technologies that are difficult for KNOC to develop.

[4] The following details are based on a press release announced by the MKE in June 2008. The strategy is briefly introduced by the first basic national energy plan (2008-2030) given in August 2008.

On the fifth measure, KNOC has been reeducating employees in the non-E&P sector and transferring them to the E&P sector as part of restructuring efforts. As for oil stockpiling, KNOC plans to undertake only core operations including the management of the strategic oil reserves and outsource non-core businesses as construction projects. Recently, it has revisited its upstream asset portfolios as well.

Lastly, KNOC has signed a memorandum of understanding with Kogas, which has the largest gas-purchasing power in the world, for cooperation in resources development. They are expected to take advantage of their strengths to enhance their competitiveness in resources development. Particularly, KNOC is expected to combine its upstream technologies with Kogas' gas-purchasing power and gas plant technologies to secure equity interests in E&P projects. The two companies have also agreed to create a joint technology center to cooperate in developing gas hydrate and other new technologies.

2-2 Prospect and Challenges

These strategic measures are expected to increase equity oil and gas production in Korea and allow KNOC to acquire necessary technologies for large scale E&P projects. The Korean government expects the smooth implementation of the KNOC's expansion plans will boost the current equity oil and gas ratio sharply to around 25%. As a medium to long-term measure, the government is considering the privatization of KNOC once it grows to become a regionally competitive E&P player through its expansion in operational and financial capabilities.

However, there are challenges that KNOC must overcome in order to achieve the targets under the strategy. One is that a sharp drop in oil prices last year has toughened KNOC's competition with other Asian national oil companies that are aggressively pursuing overseas assets. Another challenge has to do with the post-merger integration –how smoothly KNOC will manage to integrate acquired companies into its organization. Despite these challenges, KNOC, which recently agreed to buy Canada's Harvest Energy, seems to have made a big stride in its global drive to achieve ambitious growth plans.

Contact: report@tky.ieej.or.jp