# EXPLORE TOMORROW KNOC



Jul.-Sep. 2014 **Vol.019** 

### 10<sup>th</sup> Anniversary of Donghae-1 Gas Field Discovery



Donghae-1 is Korea's first oil and natural gas field. Recently, it celebrated its 10<sup>th</sup> anniversary. KNOC held a ceremony to celebrate its first economically viable oil and gas reserve that has made use of its own technology from the very beginning at the gas field administrative office in Ulsan on July 11, 2014. Present at the ceremony were KNOC's CEO & President, Suh Moon-kyu, and Ministry of Trade, Industry and Energy's Energy Resources Director, Kim Jun-dong, as well as other important guests who reported on the production progress at the gas field, singled out employees of merit, and gave celebration speeches.

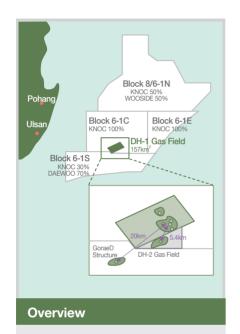
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## 10<sup>th</sup> Anniversary of **Donghae-1 Gas Field Discovery**



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Ulleung Basin, 58km southeast of Ulsan (size: 157km²)

#### 

KNOC (100%)

#### 

186.2 Bcf of natural gas and 3.2 million barrels of condensate





During his ceremonial speech, CEO Suh complimented KNOC employees' hard work at maintaining reliable production and operation of the gas field over the past decade and asked them to take pride in their continued commitment to the stable operation of the gas field as a member of oil producing countries.

The Donghae-1 gas field is located in the Ulleung Basin, 58km southeast of Ulsan. In July 1998, KNOC discovered an economically viable oil and gas reserve in the Gorae V structure. It subsequently drilled a production well and constructed facilities in the area. Later, the production of natural gas began as of July 11, 2004. This was an immensely significant event for both Korea and KNOC, as it was the first time KNOC had successfully carried out the entire procedure, from continental shelf exploration to development and production of oil, using only its own technologies and making the country the 95<sup>th</sup> oil producer in the world.



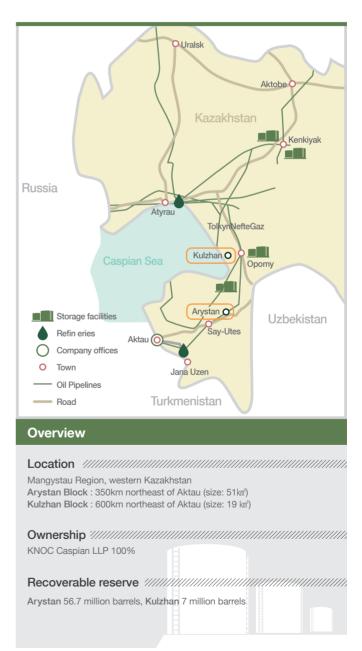
# KNOC holds the completion ceremony for production facilities at blocks in Arystan, Kazakhstan

On July 2, 2014, KNOC held a completion ceremony for production facilities at blocks in Arystan and Kulzhan at the Nur Plaza Hotel in Aktau, Kazakhstan.

A total of 117 guests were present at the event, which included employees from KNOC and construction companies in Arystan and Kulzhan, to celebrate the completion of the gasification facilities on the Arystan block, the main production facility for KNOC's Caspian Sea project.

Visiting Kazakhstan was KNOC's Director & Senior Executive Vice President, Kim Joong-hyun, who received a progress report on the project and wandered around the sites in the Arystan block, the Zhambyl drilling site, and Aktau and Almaty to show his support for workers at the sites.







### Statoil-KNOC Renews MOU on Joint International Oil Stockpiling

KNOC renewed its MOU on the joint oil stockpiling with Statoil at KNOC's head office on July 3, 2014.

Statoil, Norway's state-owned oil company, has been stockpiling its oil at KNOC's Yeosu Terminal since 1999 and represents KNOC's first client as part of its International Joint Stockpiling Project. KNOC's Executive Vice President for Petroleum Stockpile Group, Shin Kang-hyun, and Statoil's Executive Vice President for Marketing, Processing and Renewable Energy, Eldar Saetre, signed the sixth renewal of the contract at the ceremony.

The two signatories also concluded another MOU for a mutual partnership in the trading business. Statoil is a major global oil trader whose transaction volume stands at two million barrels per day, and is active in the Asian, North American, and European markets.

### **KNOC Enters into the Dung Quat** Oil Storage Project

On July 22, 2014, KNOC signed an MOU for participatory cooperation in feasibility testing and a legal review of Vietnam's Dung Quat Oil Storage Project at its head office. Present were KNOC's Vice President of Petroleum Stockpile Dept., Park Sung-ho, the Operational Division Director at the Korean energy company E1, Song Yeon-bok, and GeoGreen 21 CEO Lee Myung-jae.

Vietnam's Dung Quat Oil Storage Project marks KNOC's first participation in the construction and operation of an underground facility outside Korea. As part of the project mandate, KNOC is drawing on help from GeoGreen 21, which will assume responsibility for planning and designing the underground storage facility, and E1, which will contribute its expertise in the operation and management of the underground storage facility.



# KNOC's Yeosu Office Loads 1 Billionth Barrel of Oil

On July 10, 2014, KNOC's Yeosu Office (General Mangager: Kim Jong-kyung) held a ceremony to celebrate the marine loading of its 1 billionth barrel of oil at its conference room and in the presence of the EVP for Petroleum Stockpile Group, Shin Kang-hyun, the CEO of Tongyang, and other distinguished guests.

After its first marine loading of an oil tanker, the Sabang, on May 27, 1999, KNOC Yeosu Office crossed the 1 billionth barrel threshold 15 years later. The office also celebrated the fact that not only achieved its zero accident days campaign goal set in October 1999, but that it actually went 14 times longer than the original aim as of April 2014.

On August 21, 2014, the Yeosu Office celebrated the 900<sup>th</sup> entry of a marine oil tanker loading with the C. Freedom. The General Mayager, Kim Jong-kyung, presented the captain of the C. Freedom with a floral bouquet as they celebrated this momentous occasion.



# Ulsan Office Removes Aboveground Storage Tank

KNOC's EVP for Petroleum Stockpile Group, Shin Kang-hyun, attended a ritual service to pray for everyone's safety during the demolition of the aboveground storage tank on September 3, 2014 at the Ulsan branch. In his speech to onsite workers, Mr. Shin talked about his hope for no accidents and no injuries throughout the demolition procedure. Approximately 200 operators and supervisors present at the ceremony were reminded to remain focused through to the last leg of the dangerous oil storage tank demolition project.

Earlier, Vice Minister for Trade, Industry and Energy Han Jin-hyun visited the Ulsan Office on July 15, 2014 as he toured the underground storage tank construction site and received a construction progress report as he reiterated the importance of onsite safety. Mr. Shin returned to the site on July 31 to check on how clean-up efforts and the demolition were going, encouraging workers and supervisors alike.

KNOC expects to save KRW 2.0 billion in maintenance expenses and enhanced operational stability by replacing the old storage tanks, which were above the ground, with underground facilities. As part of this project, SK Engineering & Construction is cleaning up the oil tanks before demolishing the 18 aboveground storage tanks by the end of May 2015.



# **KNOC Wins Grand Prize at Innovative Management Awards**

CEO Suh attended TV Chosun's 2014 Management Awards at Seoul's Lotte Hotel on July 23 to receive the Grand Prize in the private sector.

Organized by the TV Chosun broadcasting station, the 2014 Management Awards selected entrepreneurs and governors of local governments who displayed exceptional performance results in embracing change and innovation. The awards have been recognized for their prominence in singling out individual contributions to the development of Korean industry, society, economy, and culture.





#### Korea-Japan Brainstorming Sessions for Northeast Asian Oil Hub Vision

For two days, from September 16-17, 2014, CEO Suh visited the company's Japanese partners to discuss ways of further cooperating in relation to the Northeast Asian Oil Hub Project.

On the first day of the trip, he met the CEO of the Institute of Energy Economics Japan (IEEJ), Masakazu Toyoda, to exchange thoughts on the project's expected benefits, such as its contribution to energy security in Asia and its added economic value, before discussing future collaboration initiatives with Japanese oil companies and the IEEJ. CEO Suh also visited the head office of the Japan Oil, Gas and Metals National Corporation (JOGMEC) and met with its CEO, Kawano Hirobumi, to reiterate KNOC's commitment to continued bilateral cooperation as well as to discuss plans connected to upstream and R&D projects. On September 17, 2014, he visited JOGMEC's Technology Research Center (TRC) to get a better idea of the latest trends going on in Japan's energy industry.

#### **World NOC Congress America**

On September 25 and 26, 2014, KNOC CEO Suh attended PEMEX's World National Oil Companies (NOC) Congress Americas in Cancun, Mexico. Following the brief introduction concerning market situations related to oil development in Mexico, Mr.Suh consulted with industrial heavyweights



from the Mexican state-run oil company PEMEX and other local companies as well as the Mexican energy minister about new business opportunities and business alliances.

The first day of the Congress began with presentations on energy reform, investment opportunities, related laws and regulations in Mexico. Afterwards, Mr. Suh talked with Mexican Energy Minister Pedro Joaquin Coldwell in the Ritz Carlton Hotel about how to create a business environment that is friendlier to international companies in the Mexican resource development market. He also met the CEO of Occidental, Steve Chazen, to talk about new opportunities for KNOC and future bilateral partnerships.

On the following day, Mr. Suh sat down with the CEO of PEMEX, Emilio Lozoya, in the same hotel. PEMEX is a Mexican state-run oil company that is actively involved in a number of E&P projects and is drawing on the nation's vast oil reserves, the 18<sup>th</sup> largest in the world, with the world's 10th largest oil production volume. The two CEOs reiterated their commitment to maintaining close ties in order to conclude a memorandum of understanding (MOU) by the end of the year.

Later, CEO Suh met other industrial insiders, including the CEO of Ecopetrol, Javier Gutierrez Pemberthy. Ecopetrol is the current partner of KNOC for the SAVIA Peru project. The two counterparts discussed ways for further partnerships in future E&P projects in Mexico as well as current issues concerning their present partnership.

#### Meeting with the Mayor of Houston

The Mayor of Houston, Annise Danette Parker, flanked by the Chief Development Officer of Houston, Andy Icken, and three other officials visited Korea from September 28 to October 1, 2014. On September 29, 2014, the second day of the planned visit, Mayor Parker met with CEO Suh at the Grand Intercontinental Hotel in Seoul.

In 1981, KNOC opened its first overseas office in Houston, which, along with the Woodlands, is now home to 20 staff working for KNOC. Houston is of particular significance to KNOC because it will be the base camp of the company's business expansion attempts in the U.S. as it expands its shale gas assets. Boasting profound understanding in the oil/gas E&P business—and with more than 20 years of experience in the field, including a career spent at Mosbacher Energy Company—Mayor Parker reiterated her continued support of KNOC's business expansion plans.



#### CEO Suh Attends Economic Delegation Joint Discussion

On July 7, 2014, CEO Suh participated in a joint discussion with economic delegations to Central Asian countries at the Korea Chamber of Commerce & Industry's International Conference Hall in Seoul. Sharing the results of Eurasian diplomacy and discussing the



future direction for further strengthening assistance to business activities, approximately 100 governmental officials and representatives from the private sector, as well as the Minister of Industry, Trade and Energy, discussed plans

to improve the economic performance of future summit diplomacy.

South Korean President Park Geun-hye also attended the session and delivered the keynote speech, reiterating the significance of Central Asia to the nation's overseas market expansion policy and asking for the private sector's cooperation in this regard. Following a presentation on the results from their Eurasian Tour and related success cases, attendees were briefed on the future direction of the economic delegation and discussed creative ideas to make use of the President's Global Window portal site (president. globalwindow.org).

# **Shale Gas International Cooperation Conference**

The Chief of Institute for E&P Technology, Choi Byeong-goo, attended the 3rd Shale Gas International Cooperation Conference at the Westin Chosun Hotel in Seoul on September 16, 2014. Mr. Choi delivered the keynote address on the current status and outlook of Korean E&P companies' engagement in shale gas projects. Presentations were then given by Edward Poole, Vice President for Tight and Unconventional Resources at Chevron, and Dong Xiucheng, a director at one of China University of Petroleum's research centers, on the current status and industrial outlook of shale gas development by the U.S. and China, respectively.

The two sessions were then followed with intensive debates about the shale gas revolution and its impact on changes in the global energy market as well as an analysis of the value and economic viability of developing shale gas beds in North America. Cohosted by the Ministry of Foreign Affairs and the MOTIE, the conference was attended by 300 guests from related organizations related to Korean shale gas development and academic circles, all of whom discussed the impact of the shale gas revolution on Korea's diplomatic efforts and industrial circles, while strengthening cross-border networks through industry, academia and the research sectors.



#### **Inward Cooperation**



## CEO Suh Visits E&P Project and Production Sites in the U.S.

CEO Suh visited KNOC's U.S. operations from July 27-30, 2014 and spent time touring around the company's E&P projects and offshore production platforms in the U.S. On July 27, he presided over a meeting with the General Manager & Managing Director of the U.S. Office, Park II-rae, the President of Ankor Energy LLC, Denton Copeland, and the Vice President of the Development Dept., Kwak Won-joon, as he checked on progress with the U.S. office's projects and went over several new projects. The following day, he paid a visit to the SS 229, one of Angkor's offshore production platforms, to look around the production facilities and its safety control mechanisms before encouraging staff on board to keep up the great work.

#### 2014 1st Half Strategic Meeting

From July 24 to 25, 2014, the 2014  $1^{\rm st}$  half strategic meeting was held at KNOC's head office.

The program began with presentations from all Business Reform Committee subdivisions on debt management, asset streamlining, business innovation, and technology independence. This was followed by a Q&A session at the main hall of the head office building on July 24, 2014. On the following day, each division, department and office reported their business results and future plans.

Prior to the meeting, CEO Suh spent time with those who were present, expressing his appreciation to the labor union and employees for their agreement to the company's enforcement of public organization reform plans and called for their continued commitment in strengthening the company's long-term growth engines to ensure sustainable growth.



#### 2014 Meeting for Overseas Chief Financial Officers

On July 2 and 3, 2014, KNOC held the 2014 Meeting for Overseas Financial Managers at its head office. KNOC executives, including the EVP for Strategy & Planning Group, and nine other CFOs from five KNOC subsidiaries met to discuss long-term financial management plans and performance results, global operational budgeting, future direction plans, and KNOC's global policies. Each subsidiary also provided a summary of their respective financial management plans and current issues.

Agenda items were distributed to each of these participating subsidiaries to collect feedback on enhancing effectiveness in the future. The content of what was discussed at the meeting will be reflected in the following global operational budget as KNOC continues to fine-tune solutions to pending issues.



#### **Town Hall Meeting**

On August 25, 2014, KNOC held a town hall-style meeting between top management and rank-and-file employees from the company in the main hall of its head office building. During the 90-minute open forum, participants shared their opinions and ideas about the company's mid-term strategic management plans up until 2017, progress of the asset streamlining project, and management issues stemming from E&P-oriented organic growth. The CEO asked everybody present to offer their honest thoughts about the company's future direction plans and to continue working hard to establish a more open and communicative corporate culture.





# New Employee Orientation and Leadership Course

KNOC provided orientation sessions for interns guaranteed with employment after the end of their internships at a training center in Yangpyeong from September 15 to 18, 2014. The purpose was to introduce the 104 new interns to the company, its core values and the required basic competencies as new employees of KNOC. On September 17, 2014, Director & Senior EVP Kim Joong-hyun and the EVP for Administration Group, Lee Jae-woong, listened to presentations before chatting with the participants and offering words of encouragement. After passing the final stage of the three-step recruitment procedure in July 2014, the interns received orientation, OJT and E&P basic competency-building courses from September 1 to October 2, 2014. Afterwards, they will be appointed to working-level departments. When they finish the four-month internship program, they are entitled to a final interview as part of the regular job employment screening process.

The company also offers 37 vice presidents, 152 senior managers and 32 managers with leadership courses customized to their different needs. From September 16 to 18, 2014, a total of 50 vice presidents and senior managers attended the first round of course training at a training center near Seoul, where vice presidents received training on how to lead an innovative organization and embrace changes, while senior managers learned about strategic thinking and compassionate leadership. There was also a separate yet common course to help trainees cultivate their business mindset and insight. The second round of the leadership program is scheduled to offer the same curriculum and at the same venue from September 23 to 25, 2014, followed by a third round from October 6 to 8, and a fourth round from October 14 to 16 at the Yongin Leadership Center and Eugenes HRD Center, respectively.

# Final Presentation of Joint Study on Zagros Fold belt

On September 25 and 26, 2014, the results of a joint study on the Zagros Fold Belt in the Middle East were released at KNOC's head office building. KNOC Institute for E&P Technology's Strategic Resources Dept. has been working closely with its U.K. subsidiary, Dana Petroleum, on this project since February 2014. A team of three people, led by Dana's Dr. Alistair Gray, came to Korea to give a presentation prior to a discussion with the Chief of Institute for E&P Technology, Choi Byeong-gu, and other KNOC staff. The main topics stemmed from a feasibility study on prospect blocks in Kurdistan and northeastern Iraq and western Iran. Attendees also discussed future plans, including selecting subjects for new joint research in 2015.







#### **Social Responsibility**



KNOC held its 18th scholarship delivery ceremony at its head office on August 20, 2014. In the second half of 2014, the company granted a total of KRW 42 million to 14 graduate and undergraduate students (KRW 3 million each) who major in petroleum engineering and geology. After the delivery of the grants, CEO Suh encouraged the beneficiaries to continue increasing their

expertise and skills, and to play a pivotal role in the E&P

industry in the future.

Moving forward, KNOC has more programs it plans on introducing to expand the E&P infrastructure, such as sponsoring university E&P projects, E&P internship programs, a special military service program for skilled researchers, training programs, and more scholarships for postsecondary students.

#### **Head Office-Branch Joint Social** Contribution

In the run-up to Korean Thanksgiving Day in 2014, KNOC's headquarters and domestic offices held various social contribution programs from August 25 to September 5, two of which included donating rice and promoting traditional markets.

On August 27, CEO Suh visited Anyang City Hall to personally donate rice for 160 underprivileged households in the city. Nine other KNOC domestic

offices also participated in this rice donation campaign, with the Yeosu Office taking it one

step further by donating not just rice to Yeosu City but also KRW 16 million in cash to cover the medical bills of underprivileged seniors and free

meals for undernourished children. Furthermore, the 26 volunteer corps from KNOC's headquarters

offices around the country visited their sister charities for children, the elderly and the disabled to offer a helping

and 10 other volunteer corps from



#### **Lecture Tours on Integrity and Ethical** Management

On September 1, 2014, KNOC invited the Code of Conduct manager at the Anti-Corruption & Civil Rights Commission (ACRC) to deliver a lecture entitled "An Introduction to the Code of Conduct for Government Officials" to employees working at the company's headquarters. The lecture provided detailed information on actual case studies related to desirable behavioral guidelines for public officials.

The Strategy & Planning Dept. also held a lecture tour on ethical management for all domestic offices across the nation from July 8 to 18 and from September 4 to 19, 2014. The tour was planned to ensure that everyone at KNOC clearly understood the ethical management operational framework and to enhance employees' ethical awareness of the whistleblowing program, while also collecting feedback from branch staff members for higher efficiency in ethical management practices.

#### Participation in Anti-Corruption Workshop

CEO Suh attended the Joint Workshop for Anti-Corruption organized by the Ministry of Trade, Industry and Energy (MOTIE) on September 2, 2014. Also present were the CEOs and standing auditors from 40 public corporations under the control of MOTIE, all of whom pledged to a no-tolerance principle to corruption. The Minister for Trade, Industry and Energy Yoon Sang-jik reiterated the significance of trust-based relationships with stakeholders and asserted that it can be achieved by fair and transparent practices.

Furthermore, all the participants signed on to an integrity pact that prohibits illegality and corruption, arbitrage/commission, and bribery, while also promoting the fair fulfillment of jobs and leading a life of integrity as public servants. The discussion then turned to how way to eliminate illegality and corruption from their organizations.







#### HSE

#### Internal Review of HSEO **Practices by Overseas Offices**

KNOC's E&P Safety Team, which falls under the HSE Dept., visited the Kazakhstan Office from August 26 to September 3, and the Canada Office from September 14 to 20, to carry out inspections on their HSEQ system compliance and operational status.

In Kazakhstan, the investigation team looked into HSEQ compliance and control status at the Almaty Office and the Aktau Office, as well as the worksite safety process and the effectiveness of practices at the Arystan worksite. They also interviewed local staff to help them better understand the company's HSEQ system. In addition, the delegation carried out the same mission at the company's Canadian office and Canada's Black Gold Block, helping them with HSE control practices. The company plans to carry out more internal reviews of HSEQ practices at its offices in the U.S., Vietnam and U.K. in October.

#### Ulchi Freedom Guardian Drill

Starting with an emergency call to all employees in the bright, early morning of August 18, 2014, KNOC conducted a four-day Ulchi Freedom Guardian (UFG) Drill that ended on August 21, 2014. This year's drill was focused on reinforcing crisis management and countering provocations, attaining proficiency in a practical shift procedure to wartime readiness, initial drill measures in the event of a complex disaster. and responding to cyber terrorist attacks. As part of this

procedure, the government checked on integrated first aid procedures in the event of a security threat and/or catastrophic disaster. A total of 480,000 people from 3,700 governmental and public organizations participated in this year's drill.

#### Joint Fire Drill with Anyang Fire Station

In collaboration with Anyang Municipal Fire Station, KNOC ran a fire drill on August 20, 2014. In response to growing concerns over safety issues and security checks in the aftermath of several disasters that took place in Korea in the recent past, this joint fire drill was aimed at increasing employees' proficiency in the case of an emergency in how to use gas masks and fire extinguishers.

#### Private-Public-Military-Police Joint Drill at **KNOC's Yongin Office**

KNOC's Yongin Office held a private-public-military-police joint anti-terrorism and fire drill on August 21, 2014. The main purpose was to strengthen capabilities when responding to a breakdown in oil storage tank pipelines due to a terrorist attack or oil leakage that results from the outbreak of a fire. This fire drill helped the company strenathen its protective measures at storage facilities for the continued stable supply of its stockpiled oil in the event of an emergency.



#### **Tighter Safety Control at Storage Facilities**

On July 27, 2014, the ruling party's 4<sup>th</sup> Policy Coordination Committee visited KNOC' Guri Office (General Manager: Choi Jae-su), Lawmakers who are members of the Agriculture, Food and Rural Affairs Committee, Commerce, Industry, and Energy Committee, and Land Transport and Marine Affairs Committee, as well as Energy Resources Director Kim Jun-dong, were briefed on the current status of the Guri Stockpile Terminal before looking around the site.

KNOC's EVP for Petroleum Stockpile Group, Shin Kang-hyun, visited the Pveongtaek Office (General Manager: Roh Shi-dae) on August 13, 2014 to check on the loading of economical oil and the office's safety control system. He lauded employees there for all their hard work before urging them to take special care with all safety control systems. Afterwards, he had a meeting with local staff members to listen to their grievances and suggestions for future improvements.

Mr. Shin also visited the Seosan Office and an oil pipeline construction site on September 2, 2014. During his visit, he received a progress report from the office and met with local employees before touring

around the construction site to see how work was progressing. On September 17, 2014, Mr. Shin dropped by the Guri Office to check on safety control practices at the Tank reform worksite. After the safety check, he sat down with local staff members and reiterated his desire for the air-tight safety control of facilities against all risk factors and for a more





# Turning Possibility into Reality

KNOC products natural gas & oil in the 'Donghae-1' the first commercial gas field in Korea.

We have nine oil stockpile facilities across Korea with combined capacity of 146 million barrels of oil.

Keenly aware of our responsibility for national future energy needs, we take full advantage of even the slightest energy possibility to bring out its full potential.





'Creating value beyond energy' is KNOC's new vision that embodies its commitment to reaching closer to the people by achieving growth for the bright future of Korea and the happiness of its people.

