

China's Oil Companies Overseas Business Overview and Sino-Japan Cooperation Potentialities

CNPC Economics & Technology Research Institute

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Introduction

In recent years, the oil and gas consumption in Asia-Pacific increases rapidly, contributing to the region's higher ranking in global market. Many oil companies of China, Japan, India, Korea and other Asian countries have extended their operations towards the whole world. They play a more and more important role in world's oil-gas market.

China's oil companies started to make overseas oil/gas investment in 1993, such as CNPC, SINOPEC, CNOOC, SINOCHEM, ZHENHUA and CITIC.

In the following days, China and Japan may reinforce the bilateral cooperation in more oil and gas domains, and jointly motivate the development of petroleum industry in respective country and the world.





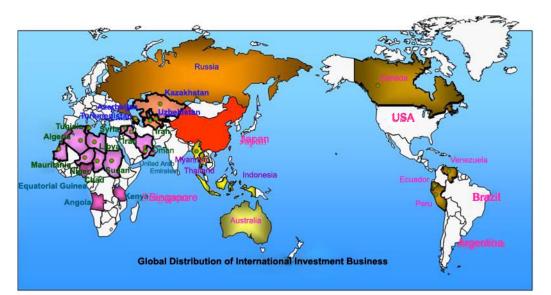
I. Overview of COCs' Overseas Business II. Proposals to Deepen Sino-Japan Oil/Gas

Cooperation



1. Five oil/gas cooperation zones were set up

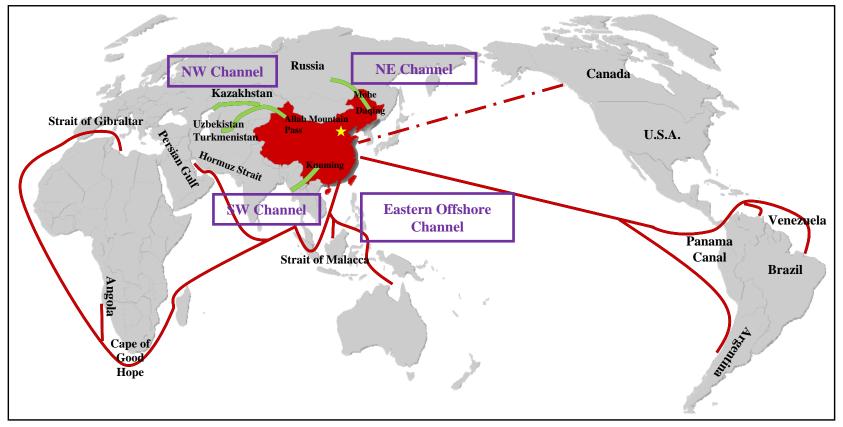
- By the end of 2011, China' oil companies (COCs) invested and managed 160 oil/gas projects in over 40 countries, mainly in Central Asia -Russia, Middle East, Africa, Asia-Pacific and America.
- Covering upstream, midstream and downstream, COCs become critical partners of host countries in the oil and gas industry.







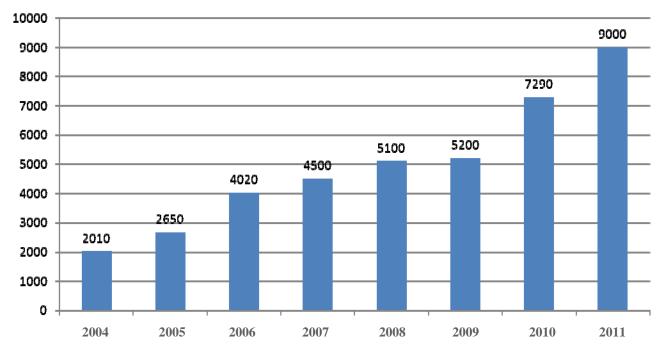
2. Four strategic oil/gas channels were formed



The cross-border pipeline corridors (e.g. China-Kazakhstan, Trans Asia, and China-Russia) are completed and put into operation, enabling the total length of export pipelines from overseas oil/gas fields and cross-border pipelines to exceed 10,000 km, with annual throughput up to 70.00 million tons (MMt).



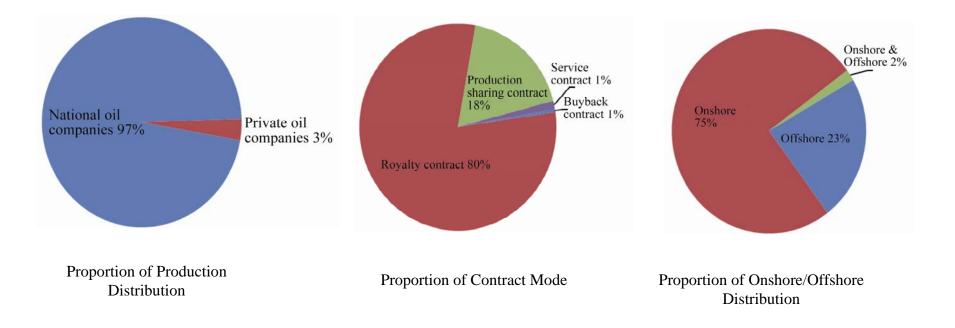
3. Overseas oil/gas production increased rapidly for consecutive years



Statistics of COCs' Overseas Equity Oil/Gas Production by Years (10⁴t oil equivalent)

- The overseas equity oil/gas production increased from 20 MMt in 2004 to 90 MMt in 2011, by 4.5 times in 7 years.
- In 2011, COCs's overseas oil/gas output was nearly 180 MMt, greatly contributing to the global oil and gas supply.





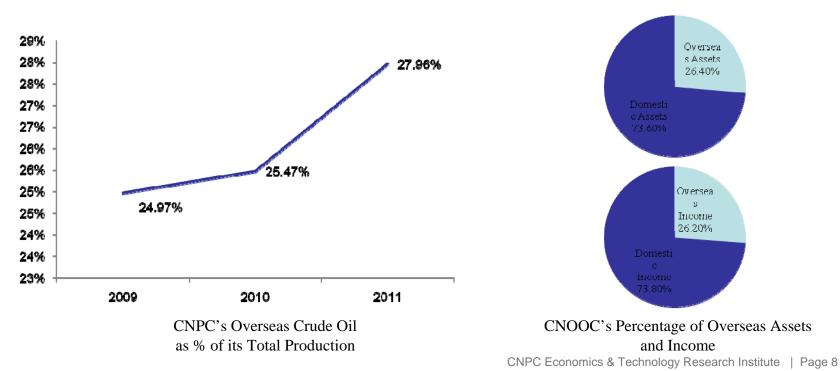
- Three major NOCs (CNPC, SINOPEC and CNOOC) assume more than 90% of COCs' total overseas output.
- Overseas projects are conducted mainly via royalty contract and production sharing contract, which account for 98% of total blocks overseas.
- Overseas blocks are mostly distributed onshore, as 75% of the total.



4. Overseas Business stepped into a new stage

COCs are increasingly internationalized

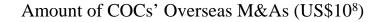
- In recent years, the transnationality index of COCs (i.e. respective proportion of overseas assets, overseas operating income and overseas employees in the entity) has been rising, especially CNPC, SINOPEC and CNOOC, which all reach or approach about 30%.
- However, it is still behind in contrast with BP (84%), Exxon (76%), and Total (76%).

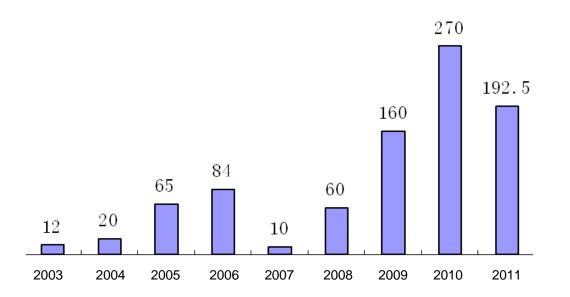




• Overseas M&As act as "Double-Engine" for international oil and gas businesses

- Since the beginning of the new age, as COCs become more experienced in overseas oil and gas projects, the cooperation mode shifts from traditional exploration and development to multi-level capital operation (e.g. merger and acquisition, and strategic cooperation).
- From 2009, COCs emerged actively in overseas oil and gas M&As.
- In 2009-2011, COCs' total overseas M&As amounted to US\$60 billion.





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1. Upheld the concepts and principles of Mutual Benefit, Win-Win and Harmonious Development

Mutual benefit and win-win with host countries Respect the laws and customs in host country, participate in community construction, and drive the industry and economy of host country by way of project construction, local employment and training, so as to provide more job opportunities and improve the living conditions locally

Collaborative development with partners

Share resources and responsibilities and cooperate sincerely with partners in overseas projects, as preferred partner for international peers

Harmony with the environment

Realize green development and clean development, with several top environmental awards granted by Sudan, Kazakhstan and other governments



Driving the industry in host country



Local employment and training



Utilities



Prometheus Award - top environmental prize in petroleum industry, Kazakhstan



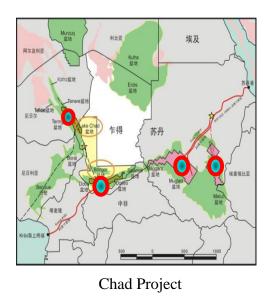
• In 2011, donated RMB39.31 million for • In 2011, supported local utilities and cultural education, and provided 31,000 jobs in Kazakhstan medical infrastructures. care and communities. education in local Venezuela • Assisted poverty relief with aborigines Central Asia – in oilfield community, Peru, with Russia RMB5.84 million in 2011 **Middle East** • In 2011, donated US\$202,000 America to community medical services, health, culture, education, and disabled persons locally in Oman Africa Asia-Pacific • Denoted to build 35 schools in Sudan, enabling over 70,000 children • In 2011, invested US\$6 million to receive education in building and reconstructing hospitals in Myanmar; donated • Supported social vulnerable groups RMB655.000 for floods in including orphans, deaf-mute children, Oueensland, Australia diseased women and blind persons in Khartoum, totally 30,000+ persons

2. Took a firm foothold in the world's exploration and development

- Since the 1990s, COCs accessed to the world oil/gas market by way of independent exploration and development with their experience in fine exploration and development & management of complex mature oilfields accumulated domestically in nearly half a century.
- COCs carried out independent exploration and development successfully in Sudan, Niger and Chad in Africa, and Kazakhstan and Turkmenistan in Central Asia, being major replacing areas of overseas reserves/production in recent years.



Aktobe Project



- Block 3/7 in Sudan was explored initially in 1975, where foreign oil companies only discovered a small oilfield with 168 million barrels of OIP after 10 years' efforts.
- COCs found a world-level oilfield with 5 billion barrels of proved reserves just within 3 years, through enhancing the independent exploration and deepening the geological studies, based on their own technical strength.



Project Site in Block 3/7, Sudan

3. Operated the projects by international rules and practices

• Currently, COCs are not so internationalized. Based on respective orientation, the companies are actively expanding overseas business and managing the overseas projects according to international rules and practices.

• COCs operate the overseas projects as guided by international common practices, and improve the professional operation management as instructed by project contract, oriented by market mechanism and relying on professional team.



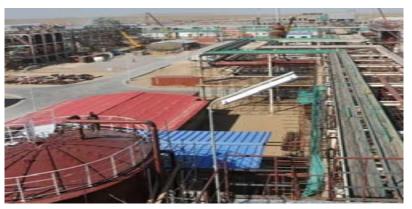
International supervisors introduced

4. Promoted the oil/gas field construction rapidly and efficiently with the strengths in engineering technical services

- COCs are mostly integrated with investment and engineering technical services. Apart from oil/gas investment, engineering technical service is also a key element in overseas development.
- COCs are experienced in management and coordination of large exploration and development projects. With integrated strengths that are unavailable in international oil companies, they have completed smoothly and efficiently a series of large/medium projects under complex conditions at low cost, by overall alignment.



AHDEB – the Landmark Project in Middle East put into operation ahead of the schedule



Amu Darya Project – Integrated Surface Facility

- In the past decade, COCs' overseas engineering technical service teams grew up to be key players in the international engineering technical service market, where they play a more and more important and influential role.
- Five strategic service regions (Africa, Central Asia, South America, Middle East and Asia-Pacific) were set up, and rate of local employment reached 81%.
- The structure and mode of engineering technical services are transforming essentially, from labor service export to labor service + technology, and further to technology + management.







5. Assisted host country in building an integrated petroleum industry

- During overseas operations, COCs assisted host country in building a complete petroleum industry in view of personnel training, industry development and technical support.
- Before the projects in Block 1/2/4, former Sudan (currently South Sudan and Sudan), were put into operation, oil consumption in the country fully depended on export. However, COCs helped former Sudan to set up a modern petroleum industry integrated with upstream and downstream, from exploration and development to refining and chemicals, enabling the country to shift from an importer to an exporter. This case is representative for China-Africa cooperation in oil industry.

Khartoum Refinery in Sudan

- Nature: JV
- Date of Signing: March 1997
- Share Holding: CNPC 50%
- It is CNPC's first downstream project overseas and also the first large completed refinery build overseas by COC.



On January 12, 2007, CNPC took over Block H in Chad as the sole operator. In just five years, CNPC made a series of breakthroughs in risk exploration, revealed 1 MMt oilfield, constructed 310 km oil pipeline, and built up the first refinery in Chad – Ndjamena Refinery with capacity of 1 MMt/y, contributing to improving the petroleum industry in Chad.





6. Drove the overseas business to develop intensively, effectively and sustainably in virtue of advanced culture





With the fine traditions of the Chinese nation, COCs always work hard and progressively



With five fundamental cultures that are unique in overseas operations, COCs make host countries and partners identify their development concepts and modes

- In 2009, COCs won the biddings for Rumaila and Halfaya projects in Iraq, marking the initiation of COCs' participation in rehabilitation of petroleum industry after Iraq war.
- In spite of frequent terrorist attacks on oilfield production facilities and oil pipelines, and obsolete equipment and technologies and inadequate utilities (water, electricity and communication), COCs struggled arduously to realize the production of both projects under the background of complicated social environment, extreme terrorist threats, and harsh operating conditions.
- Rumaila and Halfaya are typical in China-Iraq cooperation. They contribute greatly to the development and post-war rehabilitation of petroleum industry in Iraq and also to the employment and social stability locally.



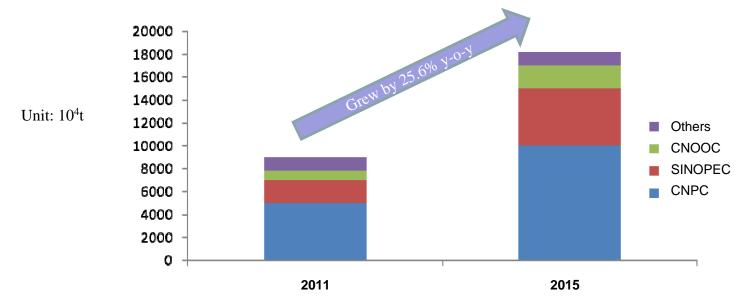
Car Bomb in Baghdad



(III) Future Prospect

1. Overseas crude oil production will continue to grow stably

- Three NOCs have proposed their respective objectives CNPC: To develop into a world-leading integrated international energy company; SINOPEC: To develop into a world-leading energy company; CNOOC: To develop into a world-leading energy & chemical company. In the future, COCs will further boost the course and pace of internationalization.
- COCs' overseas equity oil and gas production is expected to be 180 MMt by 2015, more than doubled than the figure now.



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(III) Future Prospect

2. The structure of asset portfolios (onshore & offshore, oil & gas, conventional & unconventional) in five oil/gas cooperation zones will be more balanced

COCs' overseas asset structure will be more balanced:

- Upstream, midstream and downstream industrial chains well-appointed
- Gas projects growing rapidly
- Unconventional resources ascertaining extensively
- Offshore projects expanding gradually
- Assets distribution increasingly balanced











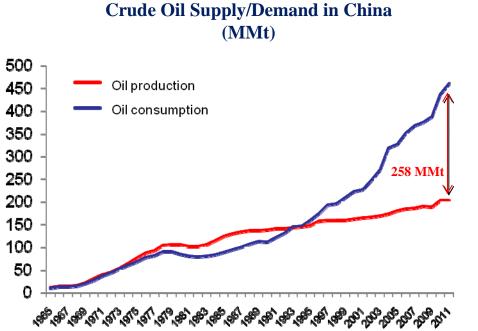
I. Overview of COCs' Overseas Business

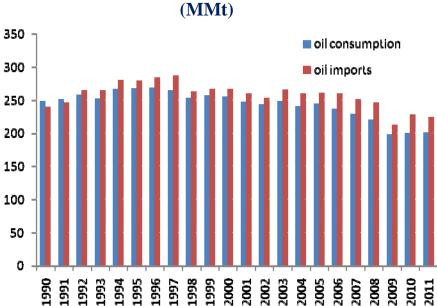
II. Proposals to Deepen Sino-Japan Oil/Gas Cooperation



1. Common responsibility to secure the stable oil and gas supply

Both China and Japan, as major consumers and importers, require stable oil and gas supply, which is a common challenge for two countries.



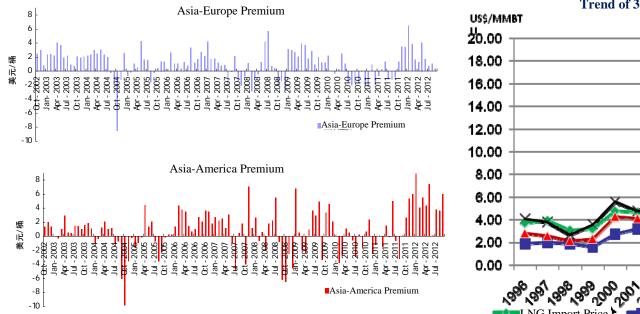


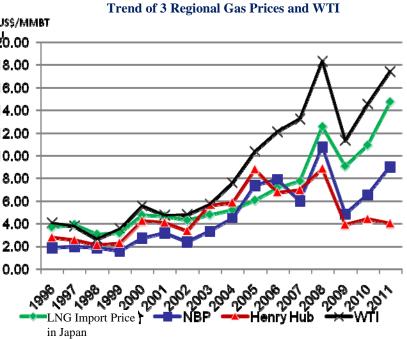
Crude Oil Supply/Demand in Japan



2. Fair and reasonable oil/gas import price in Asia

Currently, the oil/gas premium in Asia raises the foreign exchange expenditure of each consumer and lifts the price of energy products and relevant industrial costs in the region. It has brought impacts on economic growth of Asian countries, especially China and Japan.





(I) Common Energy Challenges for China and Japan

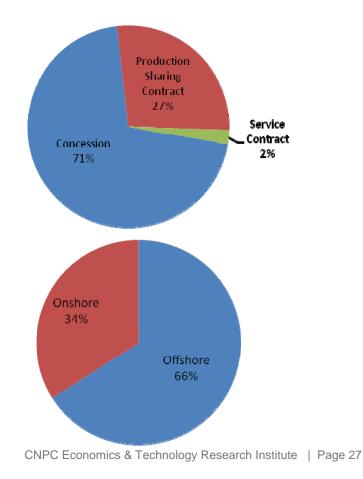
3. More expected practical Sino-Japan cooperation in energy

- China and Japan are neighbors in Asia, with cultural connection. Both are of great importance to local country and even the world.
- As major energy consumers and importers, both countries shall actively participate in international oil and gas exploration and development, and mitigate the supply-demand conflict in local country while maintaining stable and more oil and gas resources globally.
- By way of more negotiations and cooperation in energy domain, China and Japan shall work together to improve the right of speech and protect the common interests in the world energy industry, for the purpose of win-win.
- Actual benefit is the essence for Sino-Japan cooperation in energy industry. The energy enterprises shall especially enhance cooperation.

(II) Broad Foundation for Sino-Japan Cooperation

1. Overseas oil and gas investment of Japan's oil companies

- Currently, Japan's oil companies (JOCs) carry out development and operations in five regions: Asia-Pacific, Central Asia – Russia, America, Africa, and Middle East.
- JOCs operate in three modes: Concession, Production Sharing Contract and Service Contract. According to incomplete statistics, CC and PSC account for 71% and 22% respectively, while SC is mainly adopted in Mexico, Algeria and UAE, etc.
- Among JOCs' overseas projects, 66% distribute in offshore blocks, mainly in Asia-Pacific, Africa and America, and 34% in onshore blocks.





2. Expanding overseas business of JOCs through M&As in recent years

In recent years, JOCs are active in M&A market, covering upstream, midstream and downstream assets in America, Australia and Africa.

Announced Date	Buyers	Reported Segment	Primary Countries
2012-8-10	Japan Petroleum Exploration Co., Ltd.	Tight Oil/Shale Oil	United States
2012-5-1	Mitsubishi Corporation; Mitsui & Company, Ltd.	Deepwater	Australia
2011-11-14	Marubeni Corporation	Conventional	Papua New Guinea
2011-11-14	Marubeni Corporation	Processing	Papua New Guinea
2011-8-16	ITOCHU Corporation; LNG Japan; Sahara Group; Sempra Energy; Sojitz Corporation; Sumitomo Corporation	Terminals and Storage	Nigeria
2010-11-8	ITOCHU Corporation	Retail	Micronesia, Federated States of
2010-3-31	Tokyo Gas Company Ltd	Terminals and Storage	Australia
2010-3-30	Cosmo Oil Co. Ltd.; Japan Energy Development Co., Ltd	Conventional	United Arab Emirates

JOCs' Overseas Oil and Gas Assets Transactions

(II) Broad Foundation for Sino-Japan Cooperation

3. Deepening cooperation between COCs and JOCs

- In 2004, Nippon Oil signed a contract of refining entrustment with CNPC, to start to export refined oil to China.
- In 2008, CNPC acquired 49% equity of Nippon Oil in Osaka Refinery. It is a typical case in Sino-Japan cooperation.
- In 2009, SINOPEC set up a joint venture with Mitsubishi Chemical Holdings Corporation and Mitsubishi Engineering-Plastics Corporation, to conduct the practical cooperation in petrochemical industry.
- In 2012, SINOPEC and Mitsui Chemicals Corporation established SSME by 50:50, to produce and sell EPDM products.
- Besides, Japan's energy companies made intensive communication with China's oil companies (incl. CNPC and SINOPEC) and research institutes.



4. Intensive cooperation between JOCs and COCs in the world exploration and development

Some COCs (e.g. CNPC, SINOPEC and CNOOC) and JOCs (e.g. Tokyo Gas, JX Nippon Oil & Energy Corp) work together in oil and gas exploration and development in Australia and Canada (oil sands), in mode of Concession and partially Production Sharing Contract.

	Country	Block Name	Award Year	Expiry Year	License Type	Partners
1	Australia	ATP-768P	2004	2020	Concession	BG* (93.75%), CNOOC Ltd (5.00%), Tokyo Gas (1.25%)
2	Canada (Oil Sands)	OSL 79120T17	1979	2079	Concession	Syncrude* (0.00%), Canadian Oil Sands (36.74%), Imperial Oil (25.00%), Suncor Energy (12.00%), SINOPEC (9.03%), Nexen (7.23%), JX Nippon Oil & Energy Corp (5.00%), Murphy Oil (5.00%)
3	Canada (Oil Sands)	OSL 80040T22	1980	2079	Concession	Syncrude* (0.00%), Canadian Oil Sands (36.74%), Imperial Oil (25.00%), Suncor Energy (12.00%), SINOPEC (9.03%), Nexen (7.23%), JX Nippon Oil & Energy Corp (5.00%), Murphy Oil (5.00%)
4	Canada (Oil Sands)	OSL 97050T10	1997	2079	Concession	Syncrude* (0.00%), Canadian Oil Sands (36.74%), Imperial Oil (25.00%), Suncor Energy (12.00%), SINOPEC (9.03%), Nexen (7.23%), JX Nippon Oil & Energy Corp (5.00%), Murphy Oil (5.00%)

Overseas Oil and Gas Cooperation between JOCs and COCs

(III) Recommendations on Cooperation

JOCs and COCs enjoy a good foundation for cooperation and have many things in common in respect of mission, orientation, and layout and structure of overseas business. Based on our studies, China and Japan may enhance communication, learn from each other and build more deep and intensive cooperation in international operations.

1. To enhance the communication and cooperation in international oil and gas exploration and development

JOCs and COCs may build a strategic alliance by utilizing and integrating their respective strengths in management and technology, to work together in bidding and M&As of overseas oil and gas resources and stably expand the overseas oil and gas assets.

2. To enhance the communication and cooperation in oil and gas trade and price

- Strengthen the region-allied supply security and price negotiation, and improve the joint price negotiation competence.
- Communicate and coordinate timely in oil and gas trade, and discuss the possibility of joint procurement, so as to minimize the unnecessary competition in the region, reduce the difficulty in resource importation, and retrain the procurement cost.
- Jointly eliminate existing unreasonable and discriminatory trade conditions, in accordance with relevant trade protection specifications.
- Consider to jointly build a market of oil/gas futures transaction in Eastern Asia, and define a benchmark price reflecting the supply/demand in Asia.



3. To enhance the communication and cooperation in oil and gas infrastructures

Consider to joint build the oil/gas pipeline network in Northeastern Asia, strengthen the construction of oil/gas infrastructures in the region, and accelerate the establishment of uniform gas consumption market in the region.

Conclusion

- In recent years, COCs have set up five oil/gas cooperation zones and four strategic oil/gas channels overseas, with increasing internationalization and rapid growth in overseas business.
- COCs always uphold the concept and principles of mutual benefit, win-win and harmonious development in overseas operations. Moreover, with their strengths of technology, engineering technical services and corporate culture, COCs operate the projects according to international rules and practices, and realize mutual benefit and win-win with host countries and partners while promoting the overseas business.
- As energy importers and consumers, both China and Japan face the challenge to secure the world oil and gas supply and define a fair and reasonable price for oil and gas import in the region. Therefore, two countries shall work together to achieve win-win by enhancing the negotiation and cooperation in energy industry.
- China and Japan have built up practical partnership in multiple areas in energy industry. In the future, both sides shall intensify the communication and cooperation in international oil/gas exploration and development, oil/gas trade and price, and the oil/gas infrastructures in Asia-Pacific.



Thanks



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