



Korean Resources Development and Building Strategic Partnership with Countries in Northeast & Central East Asia

July 3, 2008



**Energy & Mineral Resources
Development Association of Korea**



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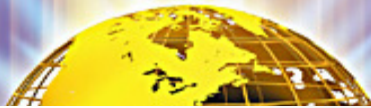
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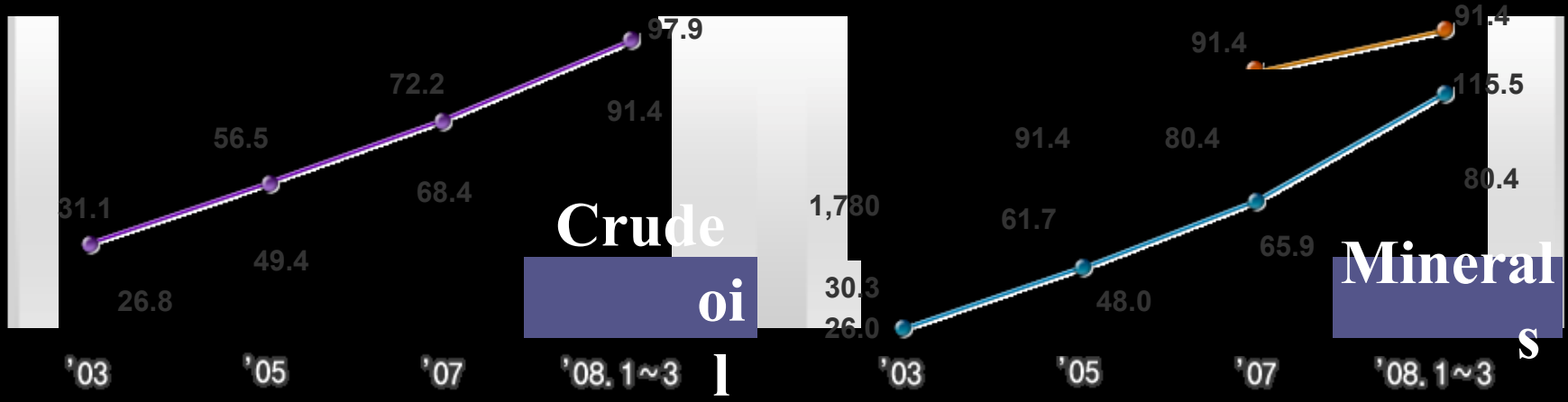
Recommendations



Current Global Energy & Resources Market



Crude oil and minerals sharp rise in price at the global market



Global competition intensified surrounding energy resources

Consumer: Mobilizing all-out Policies to Resource War

Politics - Diplomacy

- Africa Summit (China, India)
- Strengthen Energy Alliance (SCO)

Economy

- Writing-off debt, increasing ODA
- Pipeline Joint Construction (China-Turkmenistan)

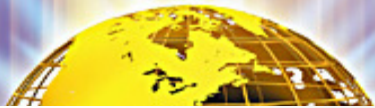
Producer: New Resource Nationalism

Nationalizing Resource

- Resource Nationalization Law (Bolivia)
- Legislation of the right of Restriction of Foreign Investment (Kazakhstan)

Growing Reinforcement

- Participation on Strategic Blocks
- Fostering National Oil



Importance of Overseas Energy Development

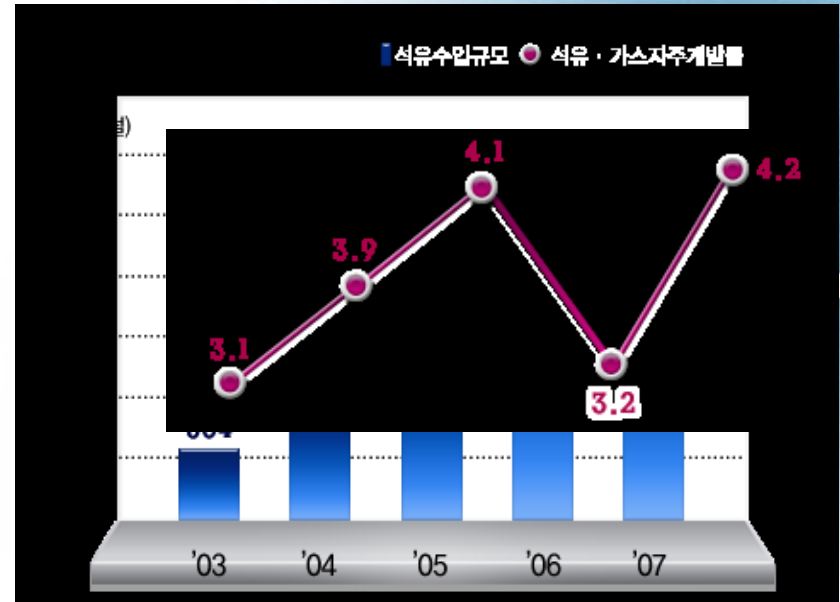


Stabilization of Energy Self-Supply

- World's 10th Largest Energy Consumer
- World's 5th Largest Oil Importer



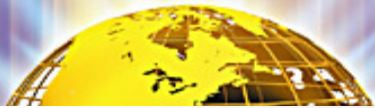
- Foreign Energy Dependence: 97%
- Oil & Gas Self Developing Rate: 4.2%



Newly Growing Higher Value-added Business

- Overseas resources development creates the demand of manufacturing and Service Industries
 - Spread effect to Machinery, Construction, Transportation, Finance, Insurance Industries
- Promote joint advance of a large scale infra-industries including power plant, SOC etc.
 - Open up a new foreign market and increase export





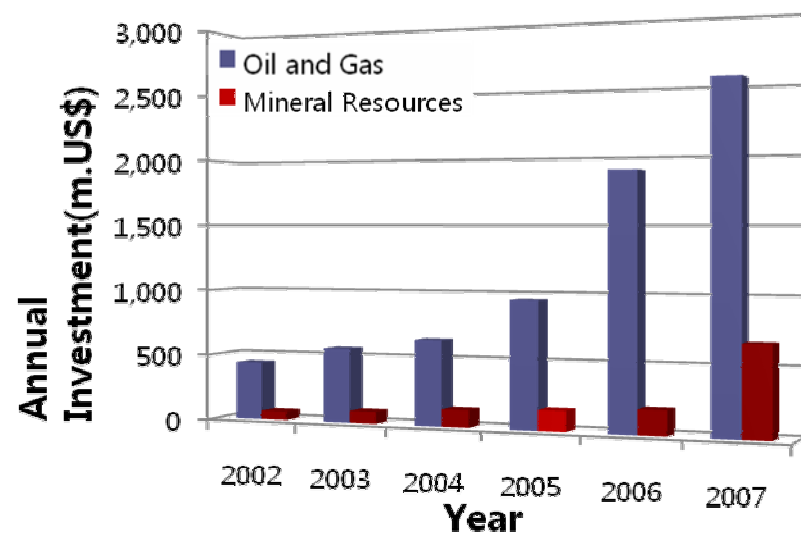
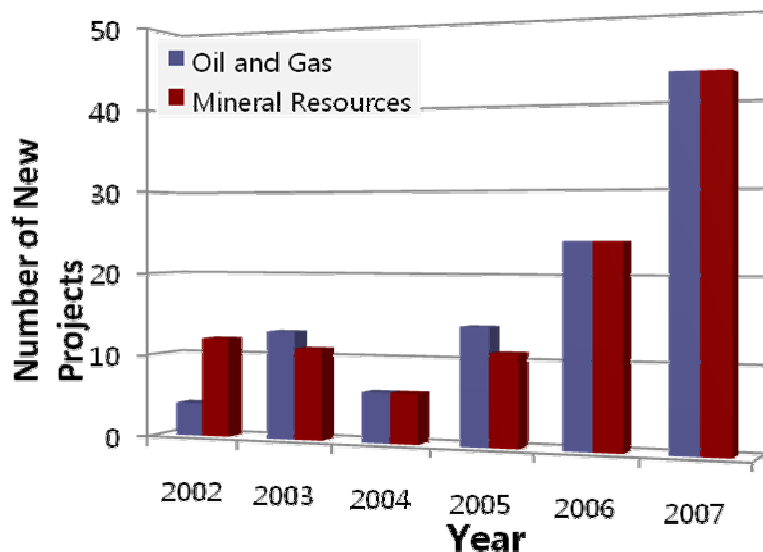
Overseas E&P Project of Korean Companies

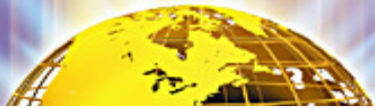


■ Status of Overseas E&P Project of Korean Companies (As of the end of 2007)

	Countries	Projects	Companies	Investment (Billion \$)
Oil & Gas	32	123	61	8.91
Mineral resources	37	163	126	2.46
Total	*53	286	187	11.37

(* Some countries are overlapped, E&P : Exploration and Production)

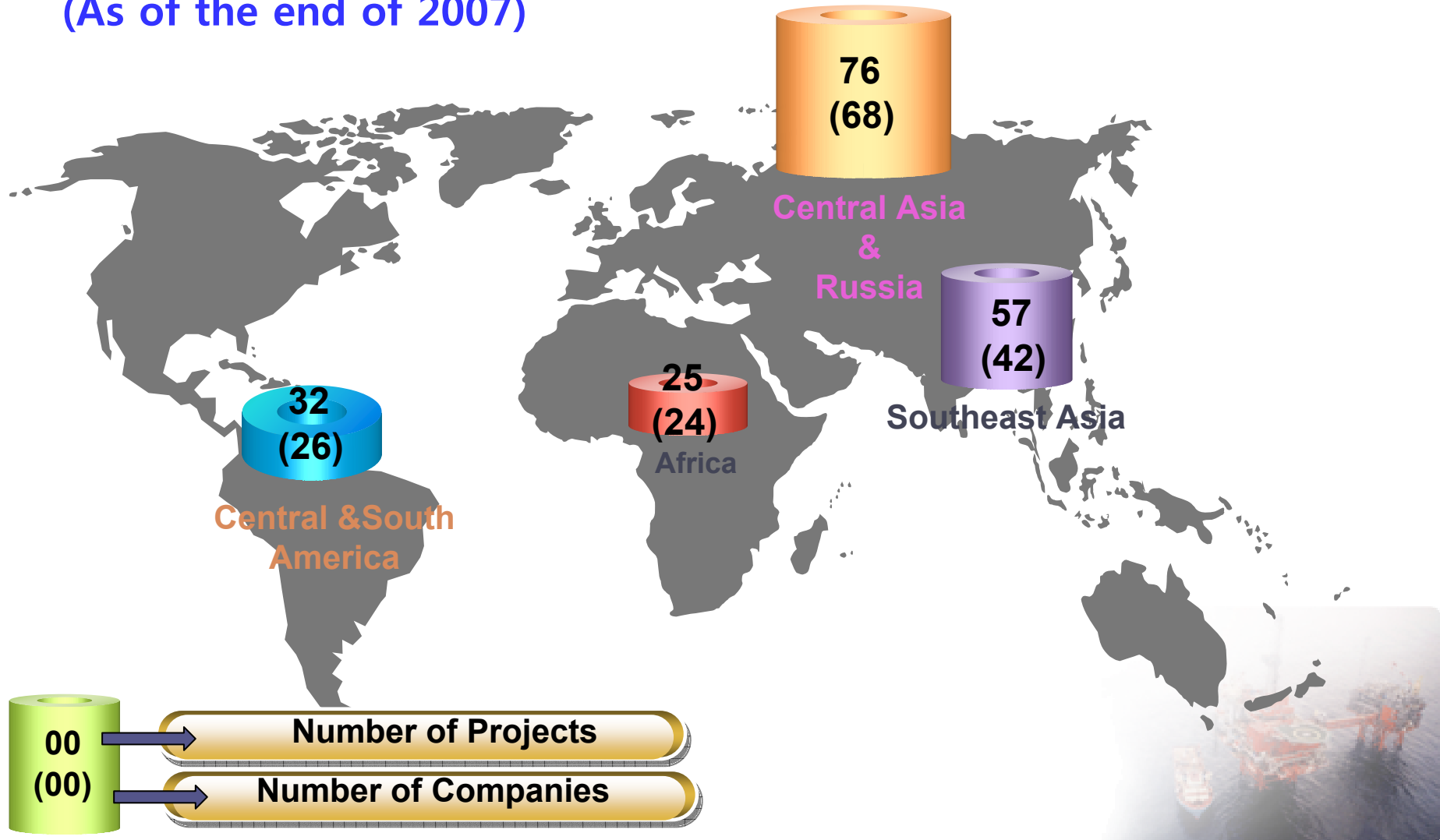


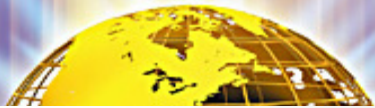


Overseas E&P Project of Korean Companies



Korean Companies Participating in Overseas E&P Projects by Region (As of the end of 2007)





Package Projects for Energy Resources



Why 'Package Projects' of Resources Development?

'Tailored strategy' linking resources security and industrial cooperation including SOC for the mutually sustainable development

Nigerian Projects

- Overseas oil field + Power plant + Gas pipeline construction



Resource-abundant countries

Uzbekistan

- Supporting...



Increasing Successful Cases of Package Projects

: Improving Supporting System → Developing and Securing Prospective Projects

Information

- Publishing country reports for resource abundant countries
- Researching and developing prospective resources sectors by country

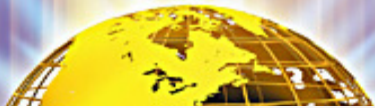
Strategy

- Tailored strategies based on traits in each country

Business

- Dispatching study-groups
- Supporting studies





Possibility of Korea as a strategic partner



Win-Win Cooperation Partner to Contribute Economic Development

- ▽ Petrochemical, Steel, IT
- ▽ Upstream(producing country) + Downstream(Korea)

World-best Competitiveness

- ▽ High electric technology(Kopec)
- ▽ Competitiveness of SOC, plant

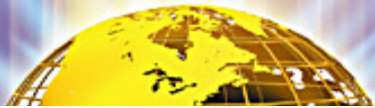
National Infrastructure Construction

- ▽ Instruction experiences
- ▽ New government policy is 'business-friendly'

Successful Economic Development

Global Consumers with Large-scale Purchasing Power

- KOGAS : World largest LNG purchasing power as a single enterprise(25 m.ton)
- POSCO (iron ore, 45 m.ton/World 4th), Korea Zinc (Zinc, 0.92 m.ton/World 5th)



Economical Status of Korea



World 11th Economy (GDP U\$787.6 billion as of 2005)



Major Industries of Korea



Automobile

- World 5th Automobile Producing Country
- World Market Share : 5.47%



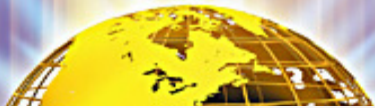
Shipbuilding

- World 1st Producing Country
- World Market Share : 34.8%



Steel

- World 5th Steel Producing Country (5%)
- World 6th Steel Export Country (6.4%)
- Annual Capacity : 47.8 million tons

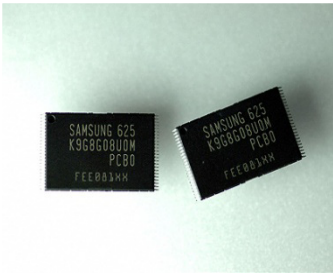


Major Industries of Korea



Petrochemical

- World 5th Largest Capacity
- Ethylene Production Capacity : 5.76 mt/y



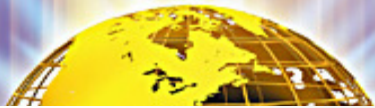
Semiconductor

- World 1st in Memory Chips
- World 3rd Market Share in Semiconductor(10%)



Digital

- World 4th Market Share in Digital (7.2%)
- Average Annual Growth 2001–2005 : 18.7%



Possibility of Korea as a strategic partner



Securing Competitive Technology and Know-how for Resource Development

World-class Exploration · Development · Production Technology

- Horizontal drilling technology, 3D subsurface structure visualization technology
- : Success in the whole process by independent technology (Vietnam 11-2 block)



Effective Operating Capacity based on Abundant Experiences

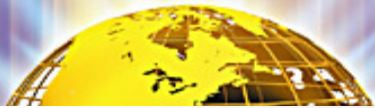
Operating :
52 oil-fields, 53 mines
throughout the world
(KNOG, KORES, SK Energy etc)



Development know-how to The Oil Field in Deep Sea and the Polar Region

Ocean Facility Building
- Signed Contract : Building
26 deep sea drilling rig (96%)
and 14 FPSO (43%) for 3 years
→ On-time oil field development



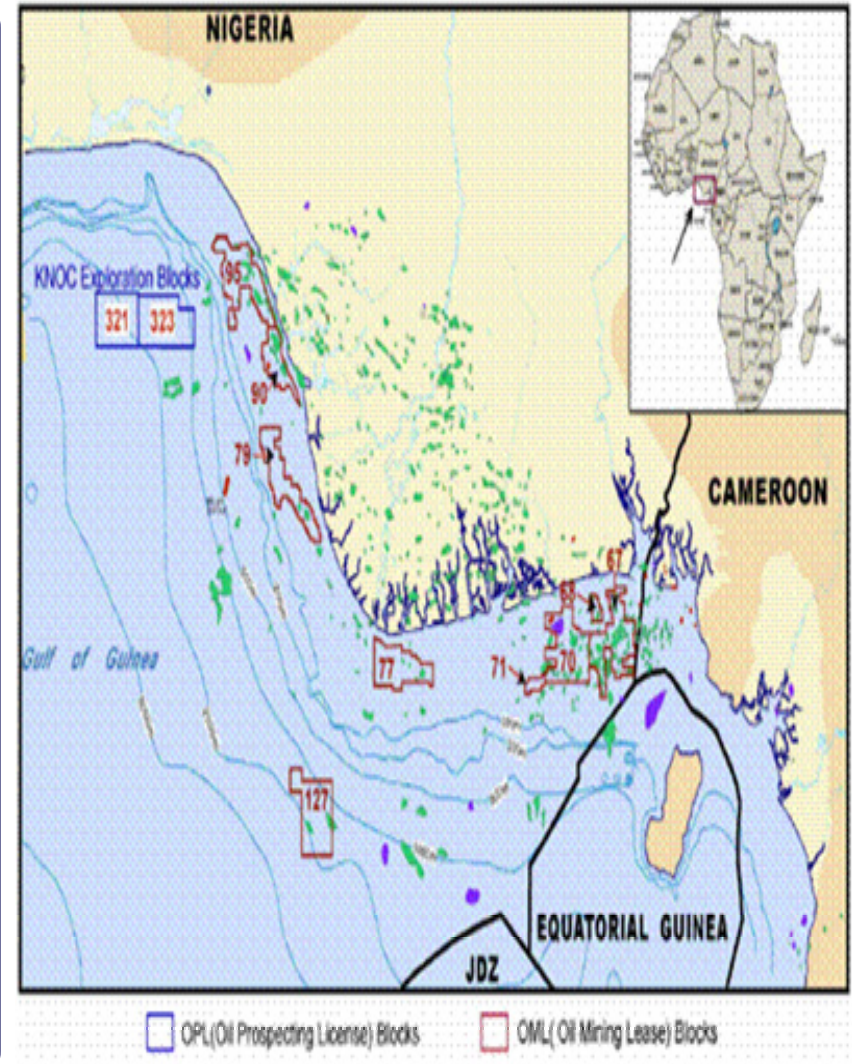


A Case of Package E&P Project

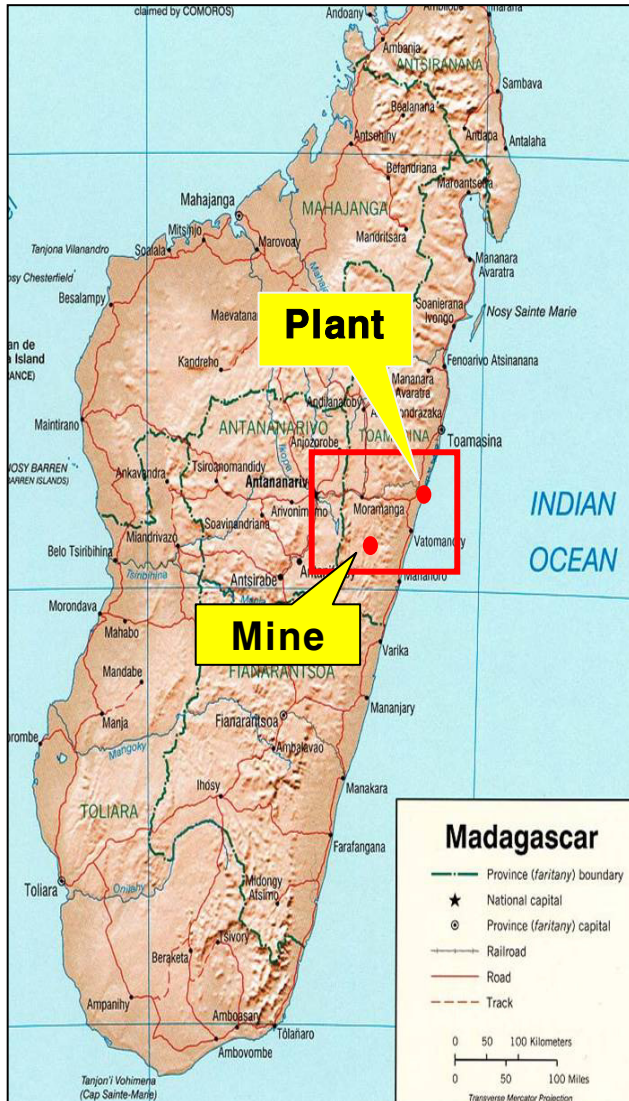


Nigeria

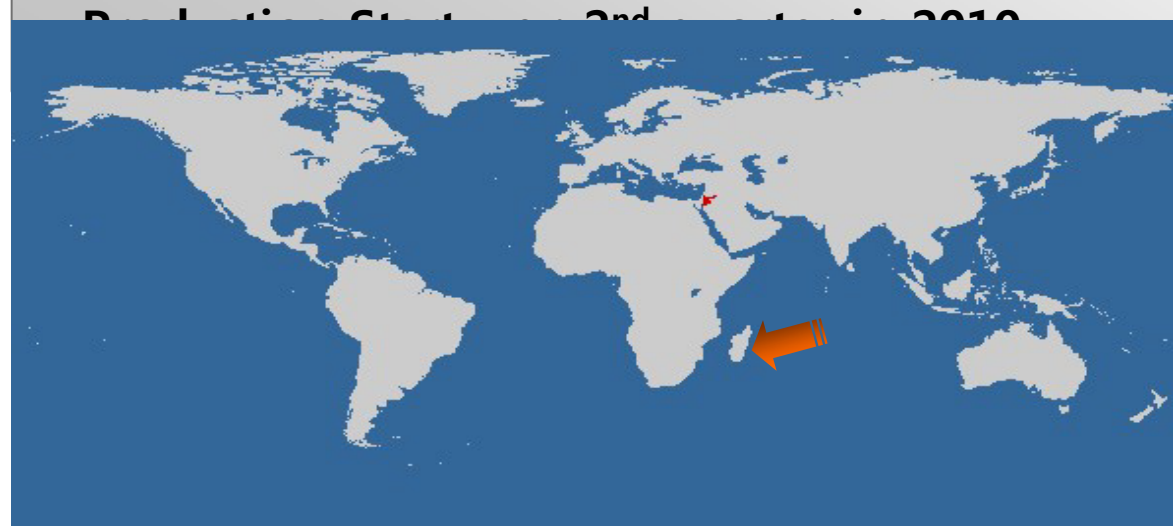
- OPL 321, 323 Exploration Blocks (PSC, 2006)
 - Expectation Reserves : about 2 billion barrel
 - Accompanying Investment : Power Plants (2,250MW), Gas Pipeline (600km)
- Discounts Signature Bonus : \$231 million
- Progress of Project
 - Petroleum E&P project : 3D Seismic Survey for Prospects
 - Power Plant Project : Feasibility Study for Gas Pipeline
- Plans of This Year
 - Selecting Drilling Target Structure
 - Submitting Power Plant Project Plan

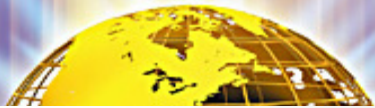


A Case of Package E&P Project [Madagascar]



- **Location : Madagascar Middle-east area**
 - Mine : nearby Moramanga Plateau (120km in the capital)
 - Plant : nearby Toamasina Port (285km in the capital)
- **Mining right : Exploitation Licence(143.72km²)**
- **Current phase : Development Phase (F/S completed)**
 - Development Period : 32 months





E&P Project and Action Plans in the regions



Russia : the Largest Resources Abundant Country



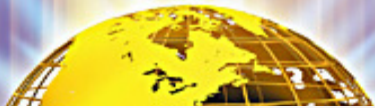
Central Asia : Another 'Middle East'



Action Plan

- Resource Summit Diplomacy, Resources Cooperation Committee
- Inviting high-level Officials
- Dispatching Public-Private Investment Mission





Korea Government Policies toward Overseas Resources Development



Financing

Government

- Increasing government budget
- Expanding loan of Korea Export – Import Bank

Private Sector

- National Pension and Foundation
- Resources Development fund

Infra Structure

Human Resources

- Promoting and Supporting the Mining College

Technology

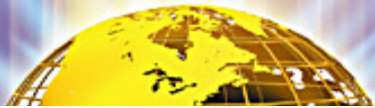
- Increase of R&D Fund
- Technology Development through the National Technical Research Projects

Information

- Integration of Information System on Overseas Resources Development

Enterprise

- Enlargement of Supporting to Resources Development Companies



Korea Government Policies toward Overseas Resources Development



Building up Government Supporting System

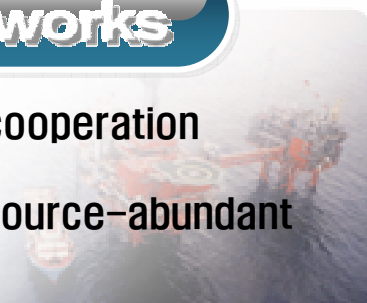
- Organizing and operating national resources development project –supporting council
- Strengthening cooperating system among ministries to promote resources diplomacy
- Operating sustainable resource–cooperation committees with 27 countries

Improving On-site Supporting System

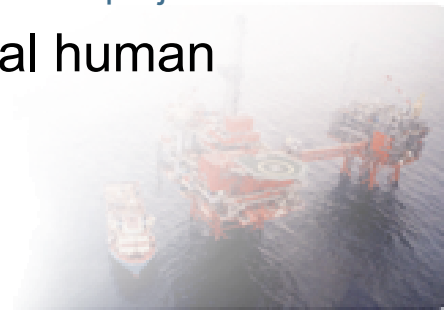
- Increasing dispatch of resource specialists to embassies of resource– abundant countries
- Enlarging resources development organization of KOTRA and on–site Korea Trade Centers

Increasing ODA and Human Resource Networks

- Increasing ODA for economic development and resource development cooperation
- Extending invitation & training programs for high–level officials from resource–abundant countries

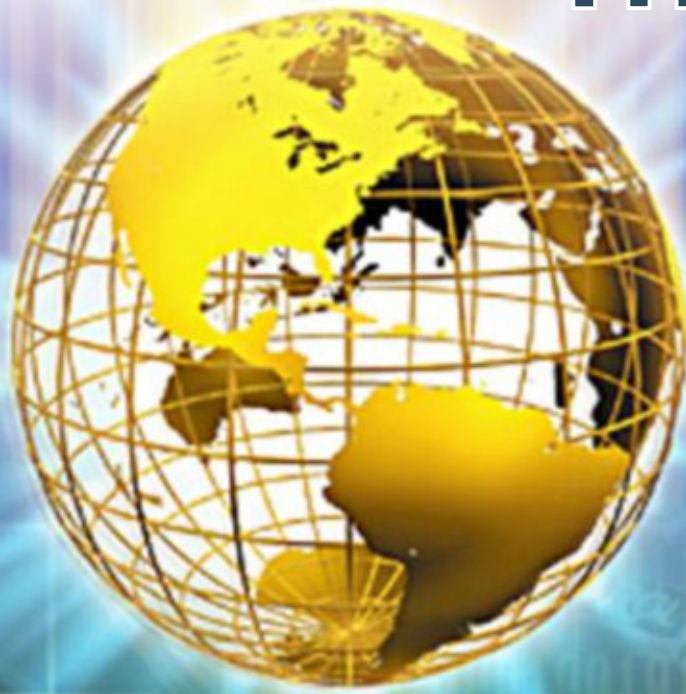


- Strengthening joint cooperation in various fields including IT, SOC and power plant construction between the hosting countries and Korea
 - ✓ 'Package projects' will ultimately contribute to the economic development of hosting countries and Korea
- Participating in mineral resources development projects, especially uranium, zinc and copper in Central Asian countries
 - ✓ Since 2004, oil & gas projects of Korean companies have been rapidly increasing in this region, yet participation into mineral resources is relatively inactive
- Concluding 'Double Tax Avoidance Agreement' (DTAA) including indirect foreign tax deduction article
 - ✓ Prevention of double taxation for the revenue from the resources development projects
- For the tailored package projects to be promoted, mutual human networking and cultural exchange have to be expanded.





Thank You !



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