## Mr. Ji-Chul Ryu Director, Korea Energy Economics Institute, South Korea "Energy Problems and Regional Cooperation in Northeast Asia: Viewpoint of South Korea"

Energy demand in the Republic of Korea (South Korea) ranks fourth among advanced countries, after the United States, Japan and Germany. This is a relatively high position considering South Korea's economic magnitude. South Korea depends on imports for most of its energy, and particularly on imports of coal and liquefied natural gas (LNG), of which it is the second largest importer in the world after Japan. However, North Korea blocks the way to linking the energy supply system of mainland China and Russia to South Korea

For the past twenty years, energy demand in South Korea has increased rapidly in line with development in the raw material industry. Oil accounts for about half of energy, coal for 24%, and LNG and nuclear energy for more than 10% each. Energy demand, and in particular electricity demand, is forecast to further increase in the future.

Increasing foreign dependence, environmental measures, problems concerning nuclear power sites, and improvement of market systems are pointed out as the structural problems of energy demand in South Korea. According to "Energy Strategy," published in 2003 by the South Korean government, these problems will be dispelled by promoting diffusion of renewable energy (its share of primary energy supply will be increased from 3% at present to 5% in 2010), and the international competitiveness of South Korea's energy industry will be enhanced through improving the conditions for utilizing the market mechanism. It also states the goal of South Korea becoming the energy hub in Northeast Asia in the future. External energy cooperation (among the countries of Northeast Asia and between South Korea and North Korea) is also an important policy issue. The stable supply of energy, enhancement of efficiency, environmental conservation, and investment in infrastructure are pointed out as the items for which cooperation is required. Cooperation among countries can ease the political tensions remaining in the region, achieving efficient allocation of resources and transfer of technology and know-how and causing a ripple effect on other industrial sectors. Meanwhile, establishing an international cooperation framework like the Latin American Energy Organization (OLADE) or the European Coal and Steel Community (ECSC) is a task for the future. In the short term, inter-governmental talks, particularly at senior official level, will be useful. However, establishing a framework for long-term cooperation is indispensable. Furthermore, active development of projects is required such as strong partnership in international pipelines and electricity systems, joint

stockpiling, and developing information provision systems. A fund-raising mechanism should be established in the region to achieve this.

The following are the principles to promote the cooperation mentioned above: (1) building consensus about the necessity for cooperation and separating energy problems and political problems; (2) eliminating trade barriers and realizing nondiscriminatory trade; (3) spreading energy cooperation to other sectors such as environmental conservation; (4) dividing responsibility for common goals; and (5) "open regionalism" involving foreign countries such as the United States and the countries of the European Union.

As for approaches for promoting cooperation, there are three types: a top-down approach like that of the Energy Charter Treaty; a bottom-up approach as observed in the process of the foundation of the EU, and an ad-hoc approach that deals with specific issues like that of the Korean Peninsula Energy Development Organization (KEDO). More discussion and consideration is required to decide which approach is most appropriate for Northeast Asia.