

South Korea White Paper

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History & Geographical Location

South Korea occupies the southern half of the Korean peninsula surrounded on three sides by the sea and by Russia, China, and Japan. The total area of the peninsula, including 3000 islands, is 222,000 square kilometers, of which 45% constitutes the territory of South Korea. Korea has suffered from the attempts of these neighboring countries to dominate it, particularly in the twentieth century. Each of them considers Korea to be of major importance to its own security, and since 1945 the United States has had a major security interest in the nation. The peninsula was divided at the 38th Parallel in an agreement between the United States and the Soviet Union at the end of the World War II. Subsequently, the Military Demarcation Line (4 Km long) was established by the Armistice Agreement of 1953 to bring a cease-fire to the Korean War (1950–1953). Koryo (918–1392) and Choson (1392–1910) were the last two Korean dynasties. Korean immigrants and their descendants in Russia, China, and Japan use the names of those dynasties as a reference for their ethnicity. Despite the continued use of Choson as a self-name in North Korea, the Japanese convention of referring to the Korean nation by that name can be offensive to South Koreans because of its evocation of Japanese colonization (1910–1945).

Government & Politics

Koreans lived under a dynastic system until 1910. After liberation from Japanese colonization in 1945, the southern half of the peninsula was occupied by the United States and the northern half by the Soviet military until 1948, when two Koreas emerged. Since then, South Korea has traveled a rocky road in its political development from autocratic governments to a more democratic state, amending its constitution nine times in the wake of tumultuous political events such as the Korean War, the April Revolution of 1960, the 1961 and 1979 military coups, the 1980 Kwangju uprising, and the 1987 democracy movement. The government has maintained a presidential system except in 1960–1961, when a parliamentary system was in place. Government power is shared by three branches: The Executive, Legislative, and Judicial. The Constitutional Court and the National Election Commission also perform governing functions.

The Executive branch under the president as the head of state consists of the Prime Minister, the State Council, 17 Executive Ministries, 17 independent agencies, the Board of Inspection and Audit, and the National Intelligence Service. The president is elected by popular vote for **a single five-year term**. The Prime Minister is appointed by the President with the approval of the National Assembly. The Legislature consists of a single-house National Assembly whose 273 members serve four-year terms. Some degree of local autonomy was restored for the first time since 1961 by the implementation of local assembly elections in 1991 and popular elections of the heads of provincial and municipal governments in 1995. The Judiciary has three tiers of courts: the Supreme Court, the High Courts or Appellate Courts, and the District Courts.

The People

Korea is a homogeneous country, racially and linguistically with its own culture, language, dress and cuisine, separate and distinct from its neighboring countries. Hard work, piety and modesty are characteristics

esteemed by Koreans who are proud of their traditional culture and their modern economic success. The two most important national holidays are the New Year and Ch'usok (8th full moon by the lunar calendar). During these holidays, many Koreans wear Hanbok (traditional dress), eat Ttok-kuk (rice-cake soup), play traditional games, and observe ancestor rites. On Ch'usok, the harvest festival celebrations include eating special foods such as Songp'yon (half-moon-shaped rice cakes) and making family visits to ancestral graves.

Meeting and Greeting

Bowing is the traditional Korean greeting, although it is often accompanied by a handshake among men. Korean women usually nod slightly and **may not** shake hands with Western men.

Names and Titles

It is considered impolite to address a Korean with his or her given name or use words like guy, man or fellow. Address Koreans by appropriate professional titles such Mr., Mrs., Miss + family name. Korean names start with family name, followed by two-part given name. The first given name is shared by everyone of the same generation in the family, and the second is the individual's given name.

Body Language

Koreans consider it a personal violation to be touched by someone who is not a relative or close friend. Direct eye contact between junior and senior businesspeople should be avoided. Do not cross or stretch your legs (never on a desk or chair). Always pass and receive objects with your **right hand**.

Corporate Culture

Koreans expect others to be punctual for social and business occasions. Professionals meeting for the first time usually exchange business cards. Be formal in meetings until the Korean delegation loosens up. Negotiations are generally long and require several trips. Koreans generally start negotiations at an unreasonable position and prepare to compromise. A low, deep bow from Koreans at the end of a meeting indicates a successful meeting. A quick, short parting bow could mean dissatisfaction with meetings. "Yes" is not necessarily "yes." Try to phrase questions in a manner that doesn't require a "yes" or "no" answer.

Dining & Entertainment

Do not pour your own drink, but do offer to pour others'. It is common to trade and fill each other's cup. Koreans may find tipping offensive. Always allow your host to seat you. Koreans do not like to talk a lot during dinner. The meal usually comes before socializing at a dinner party. It is polite to pass or accept food with your right hand. The person who invites pays the bill for everyone. **Prepare to sing a solo after dinner.**

Dress

Koreans dress well, and you should dress accordingly to show respect for them. A formal suit and tie is almost always appropriate. Women dress modestly. Prepare to sit on the floor; avoid straight, tight skirts.

South Korean Economy

South Korea is a member of the Organization for Economic Co-operation and Development (OECD) with a population of 50.2 Million. South Korean economy, known with lack of natural resources, is among the fastest growing OECD economies during the past decade. It has experienced an investment-led upturn that is likely to continue, scoring the **13th-15th strongest economy globally** mainly due to stronger industrial export as a result of the economic/financial reforms, Science, Information, Communication & Technology Strategies, and educational system's transformation (scored 1st among all OCED countries in Program for International Student Assessment). Output is projected to grow around 4% in 2014-15, helping to lift inflation into the target range of 2.5% to 3.5%. Its 2013 GDP is 39,535 US dollars/capita with projected increase rate of 4.2% per annum. The South Korean economy infrastructure consists of 34% Industry (Automobile & Ship Building), 20% Services, 20% Financial/Real-estate, 20% Communication/transport, 3% Agriculture/Fishing & 3% others. South Korea unemployment is at 3.1% compared to 7.9% OECD figure with government debt of 37.6% of the total GDP. Despite the Korean currency Won's strength, the International Monetary Fund believes that the currency is relatively undervalued by 2–8%, given South Korea's strong external surpluses. South Korea economy is vulnerable to key risks such as high household debt, low income mobility, aging population, and the concentration of economic power in large industrial houses.

South Korean Industry

South Korea has built a strong industrial foundation, especially in the areas of electronics, automobiles, shipbuilding, and petrochemicals. The shipbuilding industry is second only to Japan's and has a 32 percent share of the world market. In the semiconductor industry, Korea ranks third in the world market. Three Korean companies supply more than 40 percent of the global demand for computer memory chips. The Korean automobile and petrochemicals industries rank fifth in the world in terms of production.

South Korean Energy Consumption

The U.S. Energy Information Administration (EIA) estimates that South Korea was the world's ninth-largest energy consumer in 2011. Korea is one of the top energy importers in the world and relies on fuel imports for about 97% of its primary energy demand because the country lacks domestic energy reserves. In 2013, the country was the second-largest importer of liquefied natural gas (LNG), the fourth-largest importer of coal, and the fifth-largest net importer of total petroleum and other liquids. South Korea has no international oil or natural gas pipelines and relies exclusively on tanker shipments of LNG and crude oil. Despite its lack of domestic energy resources, South Korea is home to some of the largest and most advanced oil refineries in the world.

South Korean Energy Security

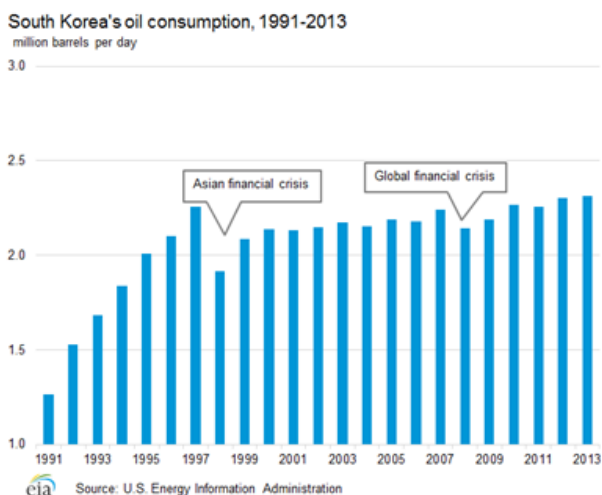
In an effort to improve the nation's energy security (Supply), oil and gas companies are aggressively seeking overseas exploration and production opportunities. The Korean government has encouraged private E&P overseas through tax benefits and the extension of credit lines to IOCs by the Korea Export-Import bank. As of 2013, KNOC & KOGAS (Gas Company) have invested in many strategic projects, of which are in the E&P/production stage, in 24 countries including North American oil sands and shale formations (23.7% interest in the Eagle Ford shale gas formation), two overseas oil companies in 2009—SAVIA from Peru and Sumbe from Kazakhstan, majority share in UK-based oil company Dana Petroleum, equity shares in four

production-stage projects, namely 50% in Canada's Encana project, 3% in Qatar's RasGas project, 8.9% in Yemen's YLNG project, and 1.2% in Oman's LNG project. **Korean strategic mid-term goal is to secure 25% of gas imports from equity production sources by 2017.**

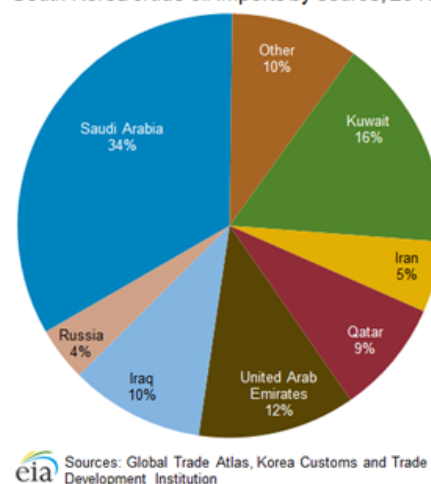
Although petroleum and other liquids accounted for the largest portion of South Korea's primary energy consumption, its share has been declining since the mid-1990s. This trend is attributed to the steady increase in natural gas, coal, and nuclear energy consumption. The government originally planned to increase the nuclear share of total energy consumption in the next 20 years as planned reactors come online, although the most recent energy policy, unveiled at the end of 2013, limits the country's reliance of nuclear energy in the power sector over the long term. South Korea is attempting to diversify its fuel portfolio to meet higher energy consumption and to moderate its nuclear power generation targets following Japan's Fukushima disaster and South Korea's problems with false safety certifications of nuclear parts in late 2012. To help balance a more moderate nuclear generation growth goal and offset some fossil fuel imports, the government is also promoting greater demand-side management, energy efficiency tactics, and renewable energy supplies.

South Korean Oil Consumption

South Korea consumed more than 2.3 million (bbl/d) of petroleum and other liquids in 2013, making it the ninth-largest consumer in the world. Oil consumption grew at a rapid pace with economic growth in the 1990s, fell following the Asian Financial Crisis of 1997, rose steadily until 2007, but dipped during the global economic downturn in 2008. Oil demand gradually rose from 2008 to 2013. South Korea is highly dependent on the Middle East for its oil supply, and the region accounted for more than 87% of South Korea's 2013 crude oil imports, according to Global Trade Atlas. Saudi Arabia was the leading supplier and the source of over a third of South Korea's imports, followed by Kuwait at 16% of total crude oil imports. **South Korea's oil demand growth outside of the petrochemical sector is limited in the long term because of its declining population growth, greater energy efficiency measures, and competition from other fuels such as natural gas, nuclear, renewable sources.**

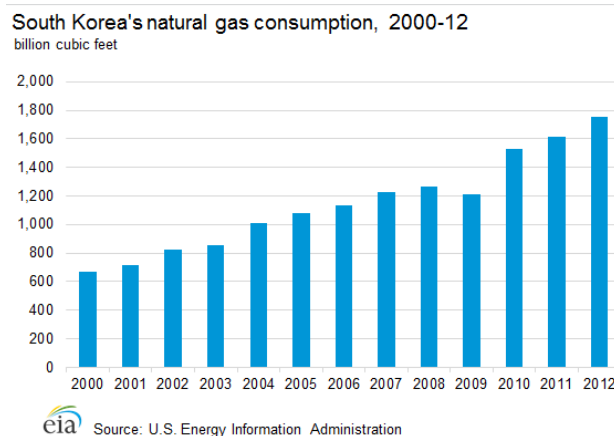


South Korea crude oil imports by source, 2013



South Korean Gas Consumption:

South Korea relies on imports to satisfy nearly all of its natural gas consumption, which has nearly doubled over the previous decade. While the country possessed discovered proven reserves of 203 billion cubic feet (Bcf) as of January 2014, according to OGI, domestic gas production is negligible and accounts for less than 2% of total consumption. South Korea does not have any international gas pipeline connections and must therefore import all gas via LNG tankers. As a result, although South Korea is not among the group of top gas-consuming nations, it is the second-largest importer of LNG in the world after Japan. South Korea consumed 1.8 Trillion cubic feet (Tcf) of natural gas in 2012, which was an increase of more than 163% from 2000. The city gas network, serving residential, commercial, and industrial consumers, accounted for slightly more than half of the natural gas sales, while power generation companies made up nearly all the remaining share. For the past decade, power generation has increasingly required a larger share of Korea's natural gas supply. The Korean government predicts overall natural gas demand to grow about 1.7% annually until 2035 according to its proposed long-term energy plan, as the fuel remains a significant source of cleaner energy for the country.



South Korean Refining

According to *Oil & Gas Journal*, South Korea had over 2.9 million bbl/d of crude oil refining capacity at six facilities as of late 2013. South Korea has the sixth-largest refining capacity in the world. The country's three largest refineries are owned by SK Innovation, GS Caltex, and S-Oil, the latter of which is partially owned by **Saudi Aramco** (669,000 bbl/d). South Korea maintains 3 of the 10 largest crude oil refineries in the world, allowing South Korea to be one of Asia's largest petroleum product exporters. According to Global Trade Atlas and Facts Global Energy (FGE), South Korea exported 1.2 million bbl/d of refined products in 2013, mostly in the form of middle distillates such as gasoil and jet fuel. Because of increasing demand from Asia during the past decade, South Korea's exports of refined products have grown at a rapid rate. Furthermore, Korean refineries are increasingly producing light, clean products as a result of refinery upgrades that have taken place in recent years. The increased sophistication of the Korean refining market is likely to **increase capacity utilization**, which is already high for some refineries. As a result, South Korea is expected to remain a leading refiner in Asia, with significant exports to China, Singapore, and Indonesia. Korean refiners are using their expertise in capacity expansion. Upcoming Korean refinery projects include additional units at the Incheon and Daesan refineries, which will increase capacity by another 245,000 bbl/d in 2014, according to FGE. These units are designed to handle refining of petroleum condensates, primarily from the Middle Eastern oil liquids supply.

South Korean Petrochemicals

South Korea is also a major producer of petrochemicals, with 7.3 million tons per year of ethylene capacity, according to the Korea Petrochemical Industry Association. Most of the country's petrochemical plants are integrated into larger refineries such as Incheon, Ulsan, and Daesan. South Korea is home to the single largest aromatics (includes petrochemicals such as benzene and its derivatives) production site in the world, owned by GS Caltex. Toyo Engineering, a Korean company, is constructing an ethylene plant in Ulsan with a capacity of nearly 300,000 tons per year that will come online at the end of 2014. Also, S-Oil (partially owned by **Saudi Aramco**) announced plans to spend over \$7 billion from 2014 through 2017 to construct heavy oil upgrading and petrochemical units at its current plants in Ulsan.

South Korean Renewable Energy & Energy Efficiency

In According to the Korea Energy Economics Institute (KEEI), **petroleum** and other **liquids** will account for about 34% of total primary energy consumption by 2017, because of an expected increase in the use of coal, natural gas, and nuclear power. Other factors affecting long-term demand include more stringent energy efficiency standards and an aging and shrinking population. In response to South Korea's new energy demands, oil companies have not only upgraded refining facilities and increased upstream investment, but they have also begun investing in alternative energy projects. In 2008, South Korea announced its Basic National Energy Plan 2008-2030, which aims to reduce energy intensity by 46% between 2007 and 2030. The overall energy savings goal for 2030 is nearly 38 Mtoe, 44% of which should be from industry, 32% from the households and services sector, 19% from the transport sector, and 5% from the public sector. According to its National Energy Plan 2008-2030, South Korea aims to produce 11 percent of the energy it consumes from renewables by 2030; intermediate targets are set at 4.3% in 2015 and 6.1% in 2020.

South Korean Exploration & Production

After beginning exploration in the 1970s, South Korea has discovered one commercially producing field among its Ulleung, Yellow, and Jeju Basins so far. Discovered in 1998, Donghae-1 in the Ulleung Basin has total proven reserves of 203 billion cubic feet (Bcf) of natural gas and 3.2 million barrels of ultra-light crude (condensates). South Korea produced about 37 Bcf of natural gas (about 2% of consumption) and 1,000 bbl/d of ultra-light crude (condensates), representing a negligible portion of its 2.3 million bbl/d total petroleum consumption. KNOC will continue production operations until 2018, when the project will be converted to an offshore storage facility. KNOC and Woodside Energy (Australia) are jointly exploring deep-water blocks of the Ulleung Basin and began drilling in 2012. State-owned Gas Hydrate Research & Development is conducting studies of deposits of methane hydrates (methane trapped in high-pressure ice deposits on the sea floor) in the Sea of Japan, and the government is currently spending about \$30 million per year on research and development. Although extracting this resource is technically challenging and requires high investment levels, Japan's successful extraction of gas from methane hydrates in early 2013 marks a breakthrough in the resource's viability. South Korea, which has been exploring at depths of less than 500 feet, plans to explore its domestic basins at depths greater than 1,000 feet.

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On behalf of the Korean Team, 2014 Asian Business & Cultural Program