





Energy

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The South Korean government plans invest £22.2 billion over the next five years in developing renewable energy sources, as the country aims to reduce its heavy dependence on oil and gas imports while tackling greenhouse gas emissions. This Governmental stimulus is seen as a key sector of growth in Korea and consequently offers UK companies great business opportunities.

Offshore Wind

The wind power sector in Korea is a large growth area and one of

promise for UK firms, with large and consistent investment by the Korean public sector. The government and public organizations invested £440 million while private organisations invested £2.2 billion for production and R&D in renewable energy in 2010.

Offshore Development Sites

The Korean government's Ministry of Trade, Industry & Energy (MOTIE) plans to develop a 2.5GW turbine site by 2019, located off the country's west coast. It will invest approx. £5 billion into the project, and is

aiming to be one of the global top 3 wind power generation countries by 2020.

The three-phase project will begin construction of a test site for 100MW turbines by the end of 2014. Additional 400MW turbines will be installed by 2016 in the second phase, followed by 2000MW turbines by 2019, all with a capacity of 2.5MW. Korea Offshore Wind Power Corp, Special Purpose Company (SPC), was established in December 2012 in order to develop the project.





Opportunity Korea

Energy – Opportunities for UK companies

South Korea

The developers include the Korea Electric Power Corporation and its subsidiaries, in partnership with consortium construction firms such as Hanjin and GS E&C. More than ten offshore wind projects, ranging from 30-600MW and in total exceeding 4.7GW, are planned in South Korean coastal waters.

Tidal and Wave Energy

After an early focus on Offshore Wind, Korea is now also increasingly looking to Offshore tidal and wave energy. Research is still in the initial, pre-commercial stage. There is recognition from Korean experts that UK is strong in this sector. The waves in Korea average only 1.5 to 2 meters. Wave power is also weak with the most powerful waves (near Jeiu) reaching 12-13KW compared to 30-40KW in the North Sea. Some wave power generation technologies have created concern due to their impact on shipping channels but these are limited. The Ministry of Land, **Transport and Maritime Affairs** (MLTM) has allocated a budget of £18.8 million for wave power R&D through 2020.

The Si-hwa tidal power generation project was completed in 2011, becoming Korea's first, and the world's largest tidal plant. It has a generating capacity of 254,000KW a day or 552 million KW per year, surpassing the

output of La Rance Tidal power station in France. MLTM has allocated £15.8 million for R&D into tidal power and £28 million for tidal current power from 2001 to 2020.

This offers UK companies a multitude of opportunities, particularly those with technology to address operation and maintenance issues.

Clean Coal Technology

Clean Coal Technology will make a significant contribution to South Korea's energy needs in its low carbon future. The UK is recognised as strong in the development of clean coal and advanced technologies in the clean coal sector, which are of need in Korea.

Carbon Capture Storage (CCS)

The CCS market is relatively developed in the UK but still young in South Korea. Combining UK technology, consulting and management with South Korean technology and construction could accelerate the adoption of CCS.

CCS is another area in which UK knowledge capital is in demand for support of Korea's manufacturing capabilities.

Market Entry – Factors for Success

To compete in South Korea UK companies are recommended to

have a capable local distributor, licensee or franchise partner who has an established network in the market and extensive market knowledge. A long-term perspective and a reliable partnership between supplier and their local partner is one of the key factors in achieving success.

How can UKTI help?

UKTI team in South Korea has actively provided support to UK companies for many years. Some of the assistance we can offer includes:

- providing tailored overviews of the sector
- providing market research and local contacts
- identifying reliable and eligible agents/ distributors/partners
- identifying competitors
- supporting events and your visits
- arranging one-to-one meetings

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