



SOUTH KOREA

South Korea has big plans for its renewables sector, which had only minimal investment - just \$20 million in 2009 placing it 19th among G-20 members. The country has roughly 3.5 GW installed in each of its wind and solar sectors but aims to hit 2.25 GW in wind development and 1.3 GW in solar capacity by 2011, which together would make up 5 percent of its total energy supply. Under its economic stimulus package, South Korea offered \$27.8 billion for clean energy. In the enhanced policy scenario, the cumulative investment potential in South Korea from 2010 to 2020 is projected to be \$40 billion, which would leverage installation of 22 GW of renewable energy generating capacity.

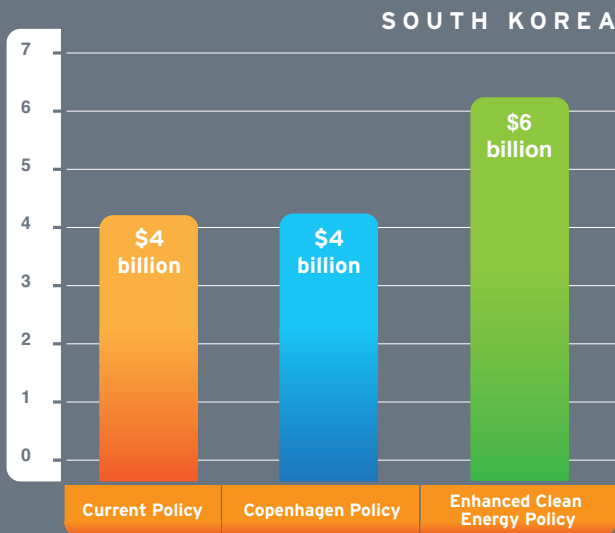
The government supports renewable energy as a way to reduce reliance on oil imports. In early 2010 South Korea passed a government bill to increase the country's consumption of renewable energy and to support solar and wind power. If South Korea follows through on its ambitions, it could attract \$6 billion in clean energy asset investment by 2020, double the \$3 billion projected for 2010.

The country has adopted a federal renewable electricity standard that will start in 2012 and will require companies to source 10 percent of their electricity from renewables by 2022. South Korea has also taken steps to ensure that government support will continue in the long-term with a law requiring at least 2 percent of its GDP be spent on clean energy research and development.

Finally, a pilot cap-and-trade program is being developed and the government has committed to a 4 percent reduction in emissions from 2005 levels. South Korea made the emission reduction pledge following the Copenhagen conference and has said it would be equivalent to a 30 percent reduction from business-as-usual emissions by 2020.

Its promises of spending, regulation and carbon pricing have already begun to draw the private sector into the market at unprecedented levels, with more than \$2 billion already pledged and major investments made in technologically advanced renewable energy equipment, such as large wind turbines and fourth generation PV. More than anything, what South Korea can do now, is keep its promises. The government has laid the groundwork for a boom in clean energy spending but must now make its long-term RPS and carbon emission reduction goals official through legislation. It must spend all the money it has said it will, including a \$24 billion smart grid investment and the 2 percent of GDP for research. Following through on its big plans should provide the incentives and the certainty that private investors and developers need to want a stake in South Korea's market.

FIGURE 36. INVESTMENT IN RENEWABLE ENERGY ASSETS, 2020 (BILLIONS OF \$)



NATIONAL CLEAN ENERGY POLICIES	
Carbon Cap	
Carbon Market	✓
Renewable Energy Standard	✓
Clean Energy Tax Incentives	✓
Auto Efficiency Standards	✓
Feed-in Tariffs	✓
Government Procurement	
Green Bonds	✓

FINANCE AND INVESTMENT (2009)*	
Total Investment	\$20 million
G-20 Investment Rank	19
Percentage of G-20 Total	0.02%
5-Year Growth Rate	N/A

INSTALLED CLEAN ENERGY (2009)	
Total Renewable Energy Capacity	0.7 GW
Total Power Capacity	0.8%
Percentage of G-20 Total	0.3%
5-Year Growth Rate	249.4%
Key Renewable Energy Sectors	
Solar	356 MW
Wind	304 MW

KEY CLEAN ENERGY TARGETS (2011)	
Wind	2,250 MW
Solar	1,300 MW

KEY INVESTMENT INCENTIVES	
Wind, Biomass, Small-Hydro	Generation-based subsidies
Renewable Energy Manufacturing	KEMCO long-term loan for manufacturing facilities

*Includes investments in venture capital and public markets, and asset finance for all clean energy technologies including biofuels and energy efficiency.