



TURKEY

Turkey had \$1.6 billion in clean energy investments in 2009 and its five-year growth rate is the highest among G-20 members at more than 178 percent. Thanks to regulatory policies and a potential feed-in tariff program, that growth could well continue. Turkey sources less than 1 percent of its power from renewables, including more than 8 GW from wind. The country has adopted an aggressive renewable electricity standard (RES) requiring it to increase renewable energy capacity to 25 percent by 2020. As a result, Turkey could add 8-10 GW wind by that time, though other policies clearly will be required to achieve those results.

Turkey did not submit a post-Copenhagen commitment regarding carbon emission reductions and rumors briefly circulated that the government had abandoned its renewable energy feed-in tariff program. Still, a wide-ranging energy bill is pending in parliament. If passed, it would offer generous rates for on and offshore wind, solar thermal electricity generation and photovoltaic solar, geothermal, biomass and marine energy. Taken with the RES, this program could provide much needed certainty to draw more investors to the market.

Excessive red tape and bureaucracy has also hindered rapid growth of renewables and the new legislation is poised to address that as well. Streamlining permitting and connection procedures will allow Turkey to avoid the backlogs that have developed in some other countries. Meanwhile, smart grid and power storage investments and demonstration projects will help Turkey incorporate large amounts of renewables into its grid. The country should also consider carve outs and financing programs for distributed generation under its tariff program.

| FINANCE AND INVESTMENT (2009)* | |
|--------------------------------|---------------|
| Total Investment | \$1.6 billion |
| G-20 Investment Rank | 13 |
| Percentage of G-20 Total | 1.4% |
| 5-Year Growth Rate | 178.3% |

| INSTALLED CLEAN ENERGY (2009) | |
|---------------------------------|--------|
| Total Renewable Energy Capacity | 0.6 GW |
| Total Power Capacity | 0.4% |
| Percentage of G-20 Total | 0.1% |
| 5-Year Growth Rate | 29.6% |
| Key Renewable Energy Sectors | |
| Small-hydro | 127 MW |
| Wind | 433 MW |

| KEY CLEAN ENERGY TARGETS (2011) | |
|---------------------------------|-----------------------------------|
| Wind | 15,000 MW |
| Renewable Energy | 25% of energy consumption by 2020 |

| KEY INVESTMENT INCENTIVES | |
|---------------------------|--|
| Wind, Solar, Geothermal | 25% of generation by 2020 |
| Wind | Equipment exempt from VAT and customs duty |

| 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 | |

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