



CANADA

Under the enhanced policies scenario, \$8 billion is invested in renewable assets in Canada by 2020, a 175 percent increase over 2010 levels. The country is becoming a growing force in the North American wind market, and the industry is largely supported through feed-in tariffs and generous power-purchasing agreements offered by regulated provincial utilities. As such, wind accounts for two-thirds of the forecast 2020 investments in all scenarios. In the enhanced policy scenario, the cumulative investment potential in Canada from 2010 to 2020 is projected as \$63 billion, which would leverage installation of 32 GW of renewable energy generating capacity.

In Canada, the provinces determine their respective energy mixes, making it difficult to form a cohesive national market. However, the federal government has in recent years offered production-based incentives and beneficial tax and accounting rules for renewables. Those incentives are set to expire soon and the government has not indicated that it plans to extend them.

The federal government regulates emissions for Canada but has been similarly unaggressive in those policies, recently scrapping its climate change plan in favor of whatever the United States eventually adopts. For its Copenhagen pledge, Canada lowered its emissions reduction goal to match that of the Obama administration: 17 percent below 2005 levels by 2020.

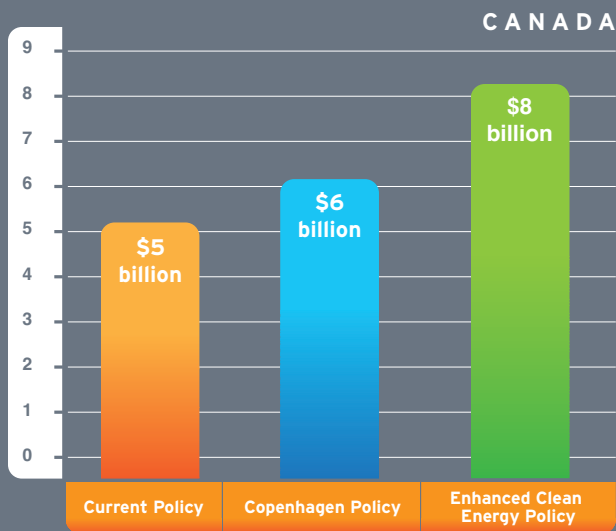
Meanwhile, some Canadian provinces have moved aggressively to promote renewables and reduce emissions. Ontario recently launched its

generous feed-in tariff program for renewable energy and has already signed more than 2.6 GW in contracts. Quebec plans to have 14 GW of renewable energy by 2035 with the rest of its mix coming mostly from large hydro. British Columbia has signed a series of contracts that would put it well on its way toward reaching a goal to install 5 GW of new renewables in the next few years.

In terms of sheer natural resources, Canada has the potential to add extraordinary amounts of small-hydro, wind and marine capacity. The country also stands to export cleanly generated power to electricity-hungry United States markets. Canada could also benefit if the United States adopts stronger national policies mandating specific high levels of clean energy generation.

Still, the Canadian federal government can do its part. Canada could extend its current renewable energy incentives and adopt a national cap-and-trade program in line with those already proposed at the provincial level in Ontario, Quebec, Manitoba and British Columbia. A national policy would also make renewables more attractive in Alberta, where emissions are slated to continue rising until at least 2020. To force growth of Alberta's renewable energy market, Canada could also impose a moratorium on new coal and natural gas development that does not include at least 90 percent carbon capture. Commercial-scale power storage incentives and significant investments in east-west transmission to carry clean power between provinces would also ease renewables adoption.

FIGURE 29. 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) ¹	
Total Investment	\$3.3 billion
G-20 Investment Rank	8
Percentage of G-20 Total	2.9%
5-Year Growth Rate	70.2%

INSTALLED CLEAN ENERGY (2009)	
Total Renewable Energy Capacity	7.6 GW
Total Power Capacity	4.3%
Percentage of G-20 Total	2.7%
5-Year Growth Rate	18.1%
Key Renewable Energy Sectors	
Wind	3,056 MW
Small-Hydro	2,000 MW

KEY CLEAN ENERGY TARGETS (2020)	
Wind (Quebec only)	4,700 MW
Solar	500 MW

KEY INVESTMENT INCENTIVES ²	
Wind, Solar, Biomass	Generation-based subsidies /Preferential loans

¹ Includes investments in venture capital and public markets, and asset finance for all clean energy technologies including biofuels and energy efficiency.

² Incentives primarily through provincial governments