



**“Winning the Future” With the U.S.-Colombia Trade Agreement:
An Opportunity to Expand the U.S. Green Sector & Create Green U.S. Jobs**

“The first step in winning the future is encouraging American innovation ... We'll invest in biomedical research, information technology, and especially clean energy technology ... Now, clean energy breakthroughs will only translate into clean energy jobs if businesses know there will be a market for what they're selling ...” – President Obama, State of the Union Address, Jan. 25, 2011

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Colombia is a promising market for U.S. green technology exports. Implementing the Colombia trade agreement will increase U.S. jobs in the green sector by eliminating tariffs on U.S. equipment exports, as well as expanding opportunities for U.S. service firms in this growing and vibrant sector.

Colombia is committed to building greater energy efficiency & lowering climate impact

- ***Yale University’s 2010 Environmental Performance Index:*** Colombia ranks highest in South America and 10th globally, placing it ahead of all U.S. trade agreement partners except Costa Rica.
- ***Tariffs on clean technology:*** Colombia generally imposes tariffs of 5 to 15 percent on clean technology but reserves the right to increase them to as high as 35 percent. The World Bank identified Colombia’s high tariffs as a barrier to adequate clean technology deployment – but our agreement with Colombia would eliminate most tariffs relevant to the sector and provide us a competitive edge.

Latin American clean technology sector is a promising opportunity for the United States

- ***U.S. share of direct investment in the sector:*** The United States ranked second with a 22 percent share of the market in 2009, behind Spain, which had a 26 percent share.
 - Spain has a bilateral investment treaty in force with Colombia, which benefits Spanish firms bidding for projects. Several Spanish firms are among world market leaders in clean technology.
 - Spanish firm *Gamesa* – a world leader in wind turbines – has several U.S. assembly plants, so our agreement with Colombia would allow us to take advantage of Spain’s strength in the sector.
- ***Colombia’s rank as destination for “green” investment:*** Ranked fourth in Latin America in total greenfield investment in clean technologies from 2003 through 2008, exceeding \$1.2 billion.

Electric power cogeneration potential is growing

- ***Doubling installed capacity:*** Colombia’s Mining & Energy Planning Unit has identified potential for private sector infrastructure investment to nearly double current installed capacity, reaching a total of 1100 megawatts. To do so would require installation of new engines, generators, boilers, and heat recovery systems in plants across many industrial sectors.
- ***Leading sectors:*** Colombia’s Federation of Palm Growers established in recent years a program for methane capture and energy cogeneration at member companies’ facilities, and the majority of palm

oil processing plants now participate. All steel companies in Colombia engage in cogeneration, and Colombia's three cement companies recently began cogeneration programs.

Biofuels sector is set to expand

- ***Insufficient domestic supply:*** Colombia produces only 2/3 of its needed ethanol/biodiesel supply, which provides both export and investment opportunities for U.S. firms in the sector. Colombia's blending requirements ensure significant domestic Colombian demand for biofuel.
- ***Expansion of domestic capacity:*** American service firms have significant opportunities, as do U.S. exporters of agricultural and processing equipment, as a result of prime conditions for expansion:
 - Abundant land – 7.3 million hectares – on which biofuels can be developed
 - Productivity per acre for both ethanol and biodiesel exceeds Brazil's by 50 percent

Colombia is developing other alternative energy sources

- ***Hydro:*** Colombia ranks 2nd in Latin America and 33rd in the world in water access. Hydropower generates two-thirds of Colombia's energy, so related U.S. exports are a major opportunity.
- ***Solar:*** Six Colombian states have solar energy potential ranging from 1,200 to over 2,000 Kwh per square meter per year. Our agreement would help U.S. firms compete with China's solar firms.
- ***Thermal:*** Colombia has more than 300 hot springs deposits, with significant development potential.
- ***Wind:*** Colombia's wind sector is small – 28 megawatts – but growing. It is currently dominated by Spanish firms, which benefit from the Spain-Colombia BIT, but the superior terms of our agreement with Colombia would improve U.S. firms' competitive position.

Colombia is seeking to reduce and offset emissions from traditional sources

- ***Transportation:*** Colombia is seeking to reduce emissions in the transportation sector, including in the context of its current nationwide upgrade of major cities' public transportation systems. This creates an immediate opportunity for U.S. export of fuel-efficient buses.
- ***Traditional industry:*** In addition to emissions reductions Colombia's traditional industries accomplish through energy cogeneration, these industries are interested in U.S. clean technologies to reduce emissions further.
- ***Forestry management:*** Colombia's commitment to sustainable forestry management – and forests' positive CO₂ effect – creates opportunities for U.S. service firms because the timber industry is active in only 1.5 percent of the 42 million acres suitable for timberland

Green R&D collaboration opportunities are promising because of Colombia's biodiversity

- ***Biodiversity:*** Colombia has more biodiversity per acre than any other country, including 51,000 flora, making it a promising site for research & development in the chemicals, cosmetics, and medicines sectors. In his 2011 State of the Union address, President Obama identified biomedical R&D as one of the keys to "winning our future."
- ***Intellectual property:*** The World Competitiveness Year Book ranks Colombia IP protection as among Latin America's best – and the U.S.-Colombia trade agreement would further strengthen it, protecting our R&D in this key sector.