



Pellet power: coal power substitute

By Rinaldo Brutoco, Founder and President, World Business Academy

The United States needs a new clean energy economy to generate the economic growth necessary to end the recession, slash the deficit, and re-ignite the U.S. economy's global competitiveness. There is a growing recognition that we need to take urgent action to cap carbon emissions before the earth reaches a dangerous tipping point. But we still fail to grasp that capping and pricing carbon emissions is not only good for the environment, it's good for the economy! In fact, it's just what we need to help turn the U.S. economy around from the depths of this severe recession.

Creating a cap and trade system will create new industries, careers, and jobs in renewable energy, energy efficiency, and climate change mitigation throughout the United States. It's not just the windy plains and the sunny southwest that stand to gain economically from the new industries that will sprout from a cap and trade system.

As the *Wall Street Journal* [reported](#) in early July, "Some of the fastest growing sources of renewable energy in the world are the wind, the sun—and the lowly wood pellet." Pellets are made out of sawdust, wood scraps, or fast-growing trees like pine.

The Southeastern U.S. is becoming a major exporter of the wood pellets that European countries are snapping up to meet EU renewable energy mandates. New pellet facilities in Florida and Alabama have dramatically increased U.S. pellet production. A new Arkansas plant that is breaking ground next month has already contracted to sell its first five years' production to Europe.

New pellet production plants have also sprung up in other states, including Maine, Pennsylvania, Wisconsin, and Washington. More plants are on the way. With the present downturn in the housing and paper and pulp industries, forest owners are "irrationally exuberant" about the growth of the pellet industry, according to the president of the Alabama Forest Owners Association.

Experts and pellet producers agree that the growth of the pellet industry is a direct result of government mandates that require greater percentages of electricity to be produced from renewable energy.

Wood pellets produced from commercial forests can help fight climate change. First, existing coal plants can install equipment to burn pellets to significantly reduce their use of coal, as plants are already starting to do. Burning coal to create electricity produces one-third of all greenhouse gas emissions.

Second, during the 20 years that it takes for the trees to reach maturity, the trees remove vast quantities of CO₂ from the atmosphere. Burning pellets releases slightly less carbon than their source trees absorbed during their lifetimes (which the trees would otherwise release upon their death and decay), making the process essentially carbon neutral or slightly positive as a CO₂ reduction tool.

Regional renewable energy resources vary, but every region of the United States stands to gain from the new energy industries that will flow from the post-Kyoto carbon-constrained world. Even cold



New England could profit from geothermal energy, according to a 2007 MIT study that describes the advances in heat exchanger and drilling technology. South Carolina is emerging as a leader in hydrogen, with the help of strong public-private partnerships.

The United States has already created a successful program to slash emissions of dangerous air pollutants through a national system of tradable emission allowances. The acid rain program established under the Clean Air Act amendments in 1990 created a cap and trade system to reduce power plants' emissions of sulfur dioxide and nitrogen oxides. The program has achieved a compliance rate of almost 100%. It dramatically cut emissions faster than anticipated, spurred innovation, and created new jobs. The marginal cost of emission reductions proved to be less than half the cost projected when the program began. Better yet, despite the negative projections when the acid rain legislation was proposed, electric utilities did *not* increase electricity rates in complying with the new caps. Electric-

ity rates actually went down by 19% from 1990 to 2006. Savings from health and other benefits of the legislation in that same period were in the \$200 billion range. We must build on this success.

American technological ingenuity and innovation can once again spark and sustain the U.S. economy if we have the vision and political will to enact a carbon dioxide cap and trade system that will end our dangerous dependence on imported oil and speed our transition to renewable energy. The pellet industry is just one renewable energy industry that will receive a boost from a cap and trade system, but it's a critically important one—as existing coal plants substitute pellets for coal, we will move away from the largest single source of greenhouse gases in the world.

It's important to know that we have the option of reducing the combustion of coal in making our electricity by burning cleaner fuels in existing electricity generating plants. We have far more options than we realize. It's great news. Pass it along.