

# What is Green Trading?

**Green Trading is a term coined several years ago to capture the value of the convergence of the capital markets and the environment. Peter C. Fusaro, Global Change Associates Inc., who originated the term "Green Trading", provides an overview of its benefits and how it can lead to a cleaner environment.**

**G**reen Trading encompasses all forms of environmental financial trading including carbon dioxide and other GHG reductions, sulphur dioxide (acid rain) and nitrous oxide (ozone), renewable energy credits and negawatts (value of energy efficiency). All of these emerging and established environmental financial markets have one thing in common which is making the environment cleaner by either reducing emissions, using clean technology or not using energy through the use of financial markets. Sometimes, you can do both as in reducing emissions and reducing energy usage by moving to cleaner technology. Green Trading is one mechanism to accelerate this change.

## Trading pollution?

The financial value of all of these environmental benefits is determined by the trading markets. The quaint notion that we are trading pollution is actually an oversimplification of the need of markets to create financial incentives to reduce pollution and accelerate more efficient and environmentally benign technology transfer. This is not an academic exercise but an exercise of rational economic behaviour.

For example, in the well-established US sulphur dioxide (SO<sub>2</sub>) and nitrous oxides (NO<sub>x</sub>) markets, we have seen a sea change in the past year. As coal

burning increased due to rising electricity demand and decreasing supply of natural gas, the emissions trading markets responded in kind. The price of emissions allowances rose to over \$700 per ton for sulfur dioxide and \$40 000 for nitrous oxide during the past year in the US. Sulphur dioxide credits in the 11 year old markets had never before risen above \$225 per ton. This financial penalty for emitting more emissions accelerated the emergence of new technology into the coal burning power generation space that was previously uneconomic.

## Efficiency increases

In the past year, at least 20 newly planned coal gasification facilities have either been announced or are on the permitting cycle for siting. A year ago there were none. The benefits of gasification technology are that they not only reduce the previously mentioned SO<sub>2</sub> and NO<sub>x</sub> emissions but also reduce carbon dioxide emissions. They also increase efficiency of coal burning from 30% to over 70% percent. Which means that less coal will need to be burned to produce the same amount of electric power in the future. This additional efficiency benefit is often overlooked by environmentalists, economists and policy makers who tend to view the energy supply picture as static with ever increasing energy demand. Basically, we will be using less

energy and it will be cleaner forms of energy in the future due to market based incentives coupled with financial penalties for noncompliance. These are not voluntary markets but government mandated markets. They have proven to work and be economically cost effective. They are essentially the template for the Kyoto Protocol.

## Renewables

Another venue for Green Trading has been in the renewable energy area where wind, solar and biomass markets are accelerating commercially due to the monetization of renewable energy credits as they are called in the US. Today, 19 states have or are developing a Renewable Portfolio Standard (RPS) that is jump starting markets in states such as Texas, California and the

## About the author

Best selling author Peter C. Fusaro is chairman of Global Change Associates ([www.global-change.com](http://www.global-change.com)) in New York and is a leading authority on environmental financial markets. Throughout his 30 year career in the energy and environmental arena, Peter has been instrumental in introducing market-based solutions to reducing pollution on 5 continents through his speaking, writing and advisory work. He has authored 8 books on energy and environmental financial trading. Contact: Peter C. Fusaro, Chairman, Global Change Associates Inc., 2565 Broadway PMB #385 New York, NY 10025, USA. Tel: +1 212-316-0223; [peterfusaro@global-change.com](mailto:peterfusaro@global-change.com); [www.global-change.com](http://www.global-change.com)

Northeastern states to take advantage of "green power" programs that are now popular with consumers. Today, in America there are over 350 green power programs where consumers willingly pay more for green power. The renewable energy projects in these states are able to bank-finance their development and create a revenue stream of green credits that reduce the cost of capital in effect creating "Green Finance."

Green Trading is the mechanism to create these market-based incentives and their application is global as not only the US, EU and Japan move forward but also developing economies such as China, India and Russia are moving forward on both emissions trading initiatives and clean technology applications.

### Clean technology

As fossil fuel prices remain higher throughout this decade and as demand

### Green Trading Markets

Elsevier, publisher of Refocus magazine, will soon be publishing a new book **Green Trading Markets: The Second Wave**. This contributed text authored and edited by Peter C. Fusaro and Marion Yuen brings forth new applications by practitioners in the emerging environmental financial markets. For those that are interested in ordering, please contact: [energy@elsevier.com](mailto:energy@elsevier.com)

### Green Trading Summit

The annual Green Trading Summit 4 includes two days of intensive information exchange and networking at a conference in New York City on May 2 and 3, 2005. If interested in attending this event or desiring more free information about Green Trading, please visit the Green Trading website at [www.greentradingsummit.com](http://www.greentradingsummit.com) and become part of a green trading community on the Internet.



continues to increase, clean technology will now become a more attractive economic choice for deployment in global markets. Energy and environment issues continue to be more interlinked such that rising demand is accelerating the need to move faster to clean technology solutions. Green Trading is the financial mechanism that allows markets to meet

that goal of global deployment of new, cleaner technology to meet rising demand for electricity, transportation, heating and cooling applications. What used to be expensive and uncommercial is now rapidly changing to economic solutions to global environmental problems. Green Trading is one tool to achieve that goal.