

# Emissions Trading Update



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*National governments, with help from the private sector, are getting involved in their own cap-and-trade schemes.*

## Sustainability

>> June 2012 marks the 20th anniversary of the Rio Earth Summit at which the UN Framework

Convention on Climate Change (UNFCCC) was conceived. Looking back, we perhaps should allow ourselves one muted cheer for what has been achieved. Looking forward, the new concept of nationally appropriate mitigating action (NAMA) for developing countries, provides some hope that the fastest growing emitters, China and India, will cut their carbon intensity and “grow green.” But the goal of capping and cutting the emissions of developed countries seems as elusive as ever. Maybe it is time to make a pragmatic change of tack and seek out nationally achievable mitigating action for developed countries.

### The story so far

The 1992 UNFCCC committed the Organization for Economic Cooperation and Development (OECD) and Commonwealth of Independent State (CIS) countries to limit their own greenhouse gas (GHG) emissions and return to levels of emissions apparent in an earlier unspecified historic period. These are the Annex I countries in the UNFCCC. An OECD sub-set of Annex I, the so-called Annex II countries, further committed to:

- Pay the costs of developing countries in measuring and communicating their GHG emissions;
- Underwrite the cost of transferring green technology; and,
- Provide aid to vulnerable developing countries in adapting to climate change.

Developing countries, or non-Annex I countries, made no specific commitments to do other than cooperate with the process, particularly by assisting in the monitoring and measuring of their

own GHG emissions. This is a very disparate group ranging from China, India, Saudi Arabia, South Korea and Brazil to Fiji, Niger and Tuvalu.

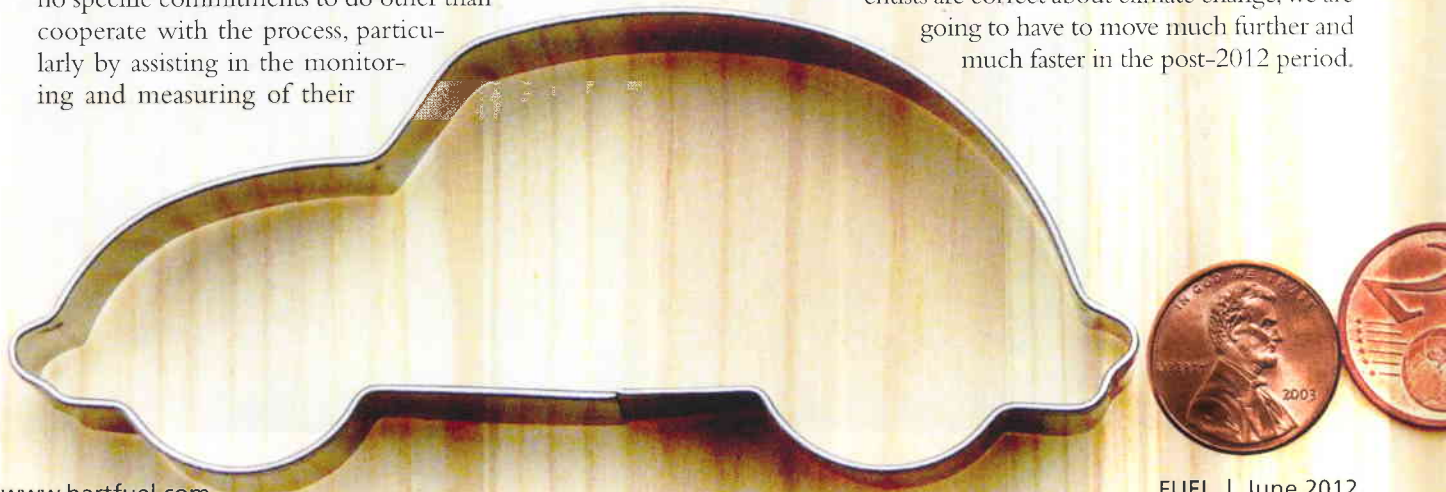
It is worth bookmarking these UNFCCC commitments because if the Kyoto Protocol is not extended or succeeded by a new agreement, these UNFCCC pledges still have to be honored.

The 1997 Kyoto Protocol, which entered into effect on February 16, 2005, contains legally binding targets for developed countries, called Annex B under this treaty, to reduce their emissions of GHGs by 5.2% on average, compared with 1990 levels, during the 2008-2012 first commitment periods.

The U.S., then the largest emitter in the world, opted out and refused to ratify the protocol, but it is still on the hook to the UNFCCC, it now had to find a different way of honoring its pledges.

As we approach the end of this first Kyoto Commitment period, it is all too easy to be critical of how little has been achieved so far. U.S. emissions have continued to grow as have those of Japan and Canada. This has been offset by cuts in Europe, the Antipodes (Australia and New Zealand) and most markedly by Russia. Of course, the Russian cut is a consequence of the collapse of the economy after the breakup of the former Soviet Union, rather than a conscious effort to invest in clean technology. Cynics would say that the greatest contribution to the goal of cutting GHGs in the first Kyoto commitment period was the recession that hit in mid-2008 and from which the international economy has not yet recovered.

This is cold comfort in the global warming story: if the scientists are correct about climate change, we are going to have to move much further and much faster in the post-2012 period.



### The good news and the bad news

The good news is that implementation of the Kyoto Protocol has allowed us to install and debug some of the systems that are needed to actually deliver whatever cuts in GHG emissions the negotiators can agree in principle.

We now have a burgeoning database of actual country and sector-specific GHG data against which emissions reduction policy can be framed. We have a registry software system in place in which GHG permits can be created, traded and cancelled to cover actual emissions. We have baseline- and credit-project mechanisms in both developed and developing countries. Most importantly of all, we have an international carbon market in which emissions permits can be traded.

The bad news is that so many permits have been created that their price is too low to incentivize investment in clean technology. The cap-and-trade foundation on which the Kyoto Protocol was built depends on the creation of fewer emissions permits than countries and industries need to continue growing in their old polluting ways. If the price of allowances, each allowance representing the right to emit one tonne of carbon equivalent, is high, an environmentally unfriendly plant will be driven to the wall. High-allowance prices incentivize investment in clean technology to avoid having to buy high-cost permits. But if the allowance price is low, it is business as usual and the cost of allowances just becomes like another tax on business: Unwelcome but affordable.

The situation in which we find ourselves in the last year of the Kyoto Protocol is that permits are so over-supplied that prices are languishing in sub €10/tCO<sub>2</sub>e (\$13/tCO<sub>2</sub>e) territory. (See chart on next page.)

As the price of Clean Development Mechanism Certified Emissions Reduction (CDM CER) allowances have fallen even further to around €3/tCO<sub>2</sub>e (\$4/tCO<sub>2</sub>e) new investment in CDM projects in developing countries has dried up almost completely.

### The night is darkest just before the dawn

The cap-and-trade experiment of the 2008-2012 has confirmed what we already knew – the private sector can be relied on to make the “trade” part of the equation work, but the politicians cannot be trusted to get the “cap” bit right. This is no surprise. No matter how convincing the scientists make the climate change story, national negotiators can only agree to what their voters will allow the politicians to do.

Barack Obama made an election promise to “implement an economy-wide cap-and-trade program to reduce GHG emissions to the level recommended by top scientists to avoid calamitous impacts: 80% below 1990 levels by 2050.” But he has repeatedly failed to get legislation through the U.S. Senate and appears to have abandoned the attempt as the next election looms.

After the Durban conference in December 2011, Japan has opted out of the extension of the Kyoto Protocol to 2017, which was agreed in Durban to allow time for negotiators to hatch a more lasting agreement by 2015 to apply from 2020. Canada has gone further, and said it will not even comply with its first commitment period cuts, let alone join in the 2017 extension. Russia has similarly opted out unless its allowance surplus windfall in the 2008-2012 period can be carried for use in the new agreement, effectively absolving it of taking any meaningful climate action for the foreseeable future. Even Europe, which has prided itself in leading the environmental charge, has been blocked in offering a 30% reduction in GHGs by 2020 favored by Germany, the U.K. and France by eurozone countries reeling from the currency crisis.

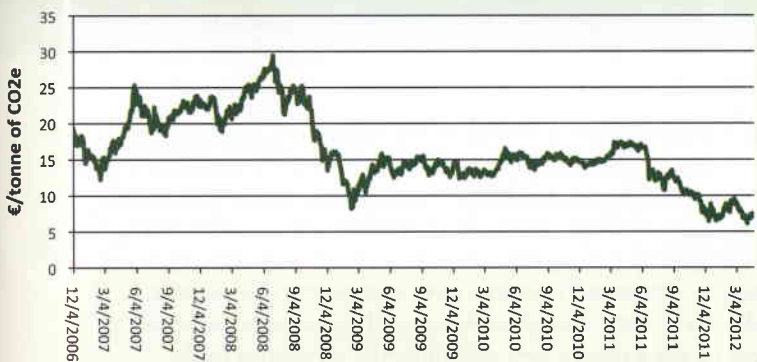
The fundamental problem with political negotiations is that the politicians have to come back to their own country and convince their own electorate that they have done a better deal for them than nations competing with domestic industry in international commerce. To gain consensus of some sort, the UNFCCC will always be forced to give in to special pleading and hence the market will tend towards surplus allowances, even though this guarantees that the market will fail.

### A ray of hope in NAMA

This does not mean to say that the tortuous UNFCCC negotiating process, striving to achieve agreement between 190+ countries, has nothing further to contribute. This process has delivered the concept of NAMA, Nationally Appropriate Mitigating Action. As mentioned above, non-



Forward Price of European Allowances



Graph courtesy of Consillience Energy Advisory Group

Annex I developing countries do not have to do anything more to comply with the UNFCCC. But the much maligned Copenhagen meeting in 2009 held out a carrot to the developing countries of a share in a Green Climate Fund of \$100 billion per year from 2020. A share in this fund depends upon developing countries taking action that can be independently measured, monitored and verified. This is the motivation needed to encourage developing countries to commit to more than they were required to do under the original UNFCCC treaty.

This, in turn, has spawned the World Bank Partnership for Market Readiness, a \$100-million initiative to kick-start carbon markets in poor countries. It has awarded grants to countries such as Chile, China, Colombia, Costa Rica, Indonesia, Mexico, Thailand, Turkey and Ukraine to help them launch pilot Emissions Trading Schemes.

NAMA is a potentially game-changing concept in as much as it has looked at the disparate group of the non-Annex I developing countries and recognized that policies appropriate for China, now the largest and fastest-growing emitter in the world, do not necessarily make sense in Haiti; the issues facing Saudi Arabia are different from those facing Niger or Brazil.

Unless China and India, in particular, are encouraged to reduce their carbon intensity then the climate mitigation efforts of the rest of the world will be redundant. In particular, there is no hope of the U.S. committing to a carbon cap unless it can assure its voters that the U.S. economy is not simply stepping aside to allow these formidable competitors the room to grow and that the large developing countries are also making a significant contribution.

Under the NAMA umbrella, China is introducing seven pilot regional cap-and-trade schemes from 2013 as a prelude to introducing country-wide fixed caps and energy use limits by 2015. There are two important points to recognize here: China is properly concerned about global warming and is prepared to use its command-and-control approach to take action; China appears happy to impose mitigating

action domestically if that does not limit its economic growth and if it does not involve an outflow of funds from China to third parties, particularly to developed countries. A China-wide cap-and-trade could dwarf the EU Emissions Trading Scheme and is probably the most exciting development to come out of international discussions. Similar schemes from Chile to India, from Indonesia to the Ukraine, each with a domestic focus and under domestic government control may very well be the only practical way forward for the climate change mitigation effort.

It may be that the NAMA model is pointing the way forward for developed countries, too. Would it be more politically achievable for countries such as the U.S., Australia and Japan to set their own caps rather than attempt to coordinate the imposition of “fair” caps simultaneously at an international conference, particularly when 190 countries will have 190 different ideas of what is fair for each other? It could be, if the winners and losers under each scheme were all confined within national boundaries.

**Devil is in the detail**

The prospect of a whole range of national or regional emissions trading schemes spreading like a rash across the face of the planet is not an attractive one. There would probably be different allowances representing different standards of environmental integrity applying in each scheme. This would make it difficult for the schemes to link up and make their respective compliance allowances fungible. Fungibility is necessary to provide a common carbon price signal ultimately across the globe.

It would be difficult for an international body like the UNFCCC to calibrate the allowances used in different countries’ emissions trading schemes onto a common basis because any decision that the allowances of one country were worth less than those of another would be too politically charged. This is where the private sector comes in. An international standards body, analogous to ISO, could perform this role. From there, it is a short step for market supply and demand forces to establish the market value of the appropriately standardized allowances.

It could be that the Doha Conference of Parties in 2012 will take us one step further toward an ideal solution – meaningful GHG caps for developing countries. Realistically, we should be considering fallback options now in case the politicians fail to deliver. ■

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