

# PRACTICAL CARBON AN INTRODUCTION TO EMISSIONS TRADING

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This is the first of a series of four articles which is intended to highlight the relevance of carbon issues to insurers and to business interruption insurers in particular. It follows a related article published in Post Magazine on 10 November 2005.

Carbon is in the mainstream press almost every day. Carbon legislation has changed the way business is done and is therefore part of every business interruption insurance claim.

The implementation of legislation which limits carbon emissions at every one of the 12,000 carbon emitting installations ('installations') in the EU is already having an impact. This impact is current and significant rather than theoretical. These articles will not focus on global warming, modelling and predictions of increasingly severe storms. This series will practically address how carbon legislation is now impacting risks covered by insurance. Before the practical claims handling and underwriting consequences can be discussed some background is necessary.

This article is a practical introduction to carbon emissions legislation which impacts insurers. The second article is a review of how carbon emissions legislation creates new carbon liabilities and opportunities for insurers to mitigate losses. The third article will review new liabilities that arise for insurers from green projects that are connected with carbon emissions legislation. The last article considers the future impact of carbon on insurers, the consequences of the anticipated US inclusion in a similar carbon reduction scheme and suggests carbon strategy for insurers.

## Introduction to the ETS

The Kyoto Protocol ('Kyoto'), signed by virtually every member of the UN, aims to reduce green house gas emissions, primarily carbon dioxide, to pre-1990 levels. The EU Emissions Trading Scheme ('ETS') is the EU's statutory enactment of its Kyoto obligations to reduce carbon emissions and is intended to provide a financial stick and carrot for greener, cleaner industry. Installations in the EU are financially obliged to reduce their carbon emissions and incentives promote investment in green technologies both in the EU and in developing economies.

## Carbon Credit Allocation

Under the ETS each EU state applied for and was then allocated a limited number of carbon credits. One carbon credit is the equivalent of one tonne of carbon dioxide. After detailed monitoring of emissions and applications, installations in each Member State were allocated, at no cost, a limited number of carbon credits which they are permitted to burn.

## ETS Phase 1 & 2

The ETS is broken down into Phases 1 and 2. Phase 1 covers 2005-2007, Phase 2 coincides with Kyoto and covers 2008-2012. Phase 1 is a mandatory pre-Kyoto trial period for the EU. Carbon credits were allocated for Phase 1 and then split annually. Installations must declare their carbon use on an annual basis and are generally permitted to carry over carbon credits between years during Phase 1. Carbon allocations for Phase 2 remains a topic of debate.

## Financial Treatment of Credits

Installations are not required to pay for their allocated carbon credits. However, carbon credits have a monetary value and can be traded by an installation upon receipt. There is no agreed accounting treatment for the allocated carbon credits. Carbon credits are usually classed as a production cost and this 'cost' is passed on to domestic and commercial consumers.

## Cap and Trade

The ETS is a cap and trade market for carbon in the EU. 'Cap and trade' means that the total amount of carbon credits are limited in each Member State and at each installation. The ETS is premised on each installation being allocated less carbon credits than they are likely to require. This intentional deficit is meant to provide installations an incentive to reduce emissions.

## Incentives

As with all markets, the greater the need to acquire carbon credits, the greater their price. Installations which exceed their caps must acquire carbon credits from installations which have a surplus. The cost of acquiring additional carbon credits is meant to be an incentive for installations to avoid exceeding their caps by introducing green technology. Cleaner installations are rewarded by benefiting from the sale of their excess carbon credits.

## Market Volatility

Carbon credits, like a traditional derivative or commodity, have a fluctuating value which has ranged from €4 to €31 since trading began in January 2005. Carbon credits and their corresponding market value mean that the way installations do business has been fundamentally altered. Environmental issues are now financial issues and thus contribute to the profit margins of carbon emitting businesses.

Emissions for 2005 were reported under the ETS on 15 May 2006. Early reports resulted in market volatility – on 27 April – the value of carbon credits dropped by approximately a third. The market dropped again immediately prior to the May announcement and has since recovered to trade at approximately half the value carbon credits traded at in early April 2006.

## Reason for Fluctuation and Effect of Surplus Carbon Credits

One of the stated reasons for this market volatility is that most Member States allocated too many carbon credits to installations for Phase 1 of the ETS and there was a surplus of carbon credits. Overly optimistic growth forecasts may explain the surplus. Consequently, for most, with a surplus of carbon credits and without the financial incentive to run greener, cleaner installations, the 2005 ETS was an elaborate, profitable accounting exercise. However, the present surplus of credits could be rapidly and significantly altered by a major outage, severe climactic conditions or a significant fluctuation in the price of traditional resources such as oil, gas and coal.

## Value of Credits in Phase 2 Likely to Increase

Phase 1 (2005-2007) should best be thought of as a practice round for the ETS. It is generally believed that Phase 2 (2008-2012) allocations and accounting provisions will be more restricted, or more accurate, than Phase 1. This should provide a real cap to the ETS. The reduced likelihood of surplus carbon credits is likely to result in the increased value of carbon credits and further highlight the issues surrounding how the ETS impacts insurers.

## Future of the ETS

At the moment, the ETS is the only cross border carbon trading system in operation following Kyoto. It may eventually interface with other carbon trading systems originating in Kyoto signatory states outside the EU. It may also interface with voluntary emission reduction schemes in the US and non Kyoto signatory states. Recently, the political landscape in the US has shifted and there are several draft bills to limit carbon emissions which are similar to the ETS.

## ETS Continues After Kyoto

It is worth noting that the EU legislation enacting the ETS renews the ETS in 2012 and every five years thereafter in a series of 'post-Kyoto phases'. Accordingly, carbon is an issue which is unlikely to disappear in the EU regardless of what may happen to the Kyoto Protocol. There appears to be broad public support in the EU for emission reduction controls. There is also an emerging financial sector involved in carbon trading which is likely to seek to protect its existence.

## Claims, Adjustment and Underwriting – Impact on Insurance

If an installation suffers an outage a question arises as to whether the insurer or the assured should benefit from the value of any unused credits which could be transferred, sold or saved during an indemnity period. In such a case, the value of credits is only realised by an indemnified loss.

Of immediate concern to insurers will be controlling loss through mitigation and conversely, the anticipation of new carbon liabilities. A secondary, but equally important concern will be the impact of the ETS on other insurance policies including D&O, PI, political and credit risk, financial lines and financial institutions. Finally, insurers may also wish to consider new carbon focused business opportunities.

Insurers should review how the ETS impacts their underwriting and claims handling. Any calculation of risk exposure, modelling or claim adjustment for business interruption which does not actively incorporate carbon credits is likely to be inaccurate – in some cases wildly inaccurate.