PRACTICAL CARBON
DIRTY BUSINESS

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By John Startin and Jason Reeves

This is the second article on the impact of carbon on insurance. The first article outlined the four articles of this series, introduced carbon legislation and reported on the volatility of the carbon trading market. Each carbon emitting installation in the EU is freely allocated a specific amount of carbon which it is permitted to burn. Any excess carbon which the installation burns must be bought from the open market.

We will consider three scenarios relating to carbon emitting installations illustrating mitigation opportunities and new liabilities. The first will look at a typical outage at a carbon emitting installation. The second will review carbon's impact on a claim for increased cost of working. The third considers new liabilities arising out of carbon.

Typical Outage

12,000 carbon emitting installations in the EU are annually allocated carbon credits at no cost. Carbon credits have had an average approximate market value of €15–€18 each. They can be traded or used to annually account for an installation's emission allowance. During an outage there is usually a disruption, if not a complete cessation, of carbon emissions. This results in a pool of unused carbon credits, or 'outage credits'. When such an outage occurs it is not clear how the outage credits should be treated. Should insurers or an assured benefit from the outage credits? Relevant factors include the form of policy wording, the scope of adjustment and the transparency of the assured's accounting treatment of the carbon credits.

Increased Cost of Working

Where insurers are presented with a claim for Increased Cost of Working the position is arguably clearer. In an ICOW claim a manufacturing plant suffers an outage and presents a claim for 14 days of ICOW. The assured plant normally burns 3000 carbon credits per day during the production of 'x' production units. The assured plant submits a claim for obtaining alternative production units from a competitor. The competitor's costs include carbon credits. At the same time the assured plant retains its outage credits. This results in the assured plant receiving all of its production units while retaining 42,000 outage credits (€630,000 worth of credits if valued at €15 per credit). If the value of carbon credits is not taken account of in the wording of the BI insurance they must be considered at the adjustment stage.

Green Technology

Where a carbon emitting installation's carbon credit allocation or its annual use of carbon is predicated on the incorporation of green technology, insurers face new potential liabilities. For example, an installation incorporates green technology which reduces its daily burn from 1200 to 1000 carbon credits. A 90 day outage involving that technology will increase the number of credits required to run the installation by 18000 credits, or €270,000 at €15 per credit. We believe insurers have an exposure to this new type of risk and may need to review risks which may incorporate green technology.

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Risk Survey, Proposals and Transparency

Detailed information concerning all 12,000 installations in the EU with a carbon allocation is freely available online. We recommend that every risk survey and proposal for relevant insurance should involve questions which clarify an installation's carbon allocation and liabilities. It is our experience that in some cases, at present, an installation's carbon position may not be made transparent via the risk survey, the proposal form or through an installation's voluntary disclosure. Further, it is possible that carbon is often not being adequately considered when handling adjustments and claims.

Accounting for Carbon

The accounting treatment of carbon credits is still years away from being clarified. While not an easily accessible subject, the accounting treatment of carbon credits is fundamental to determining how to properly treat a BI claim involving carbon. The lack of formal guidance has resulted in carbon emitting installations treating carbon credits as part of the production cost of a production unit.

While this may be an understandable approach it tends not to reflect the fact that carbon credits are freely allocated, uniquely wasting assets whose value can only be realised by production or transfer. Nevertheless, this notional carbon 'cost' is passed on to domestic and commercial consumers. In an FT article dated 15 May 2006 it was estimated that in Britain alone, £1b of profit was made that is solely attributable to the 'cost' of free carbon credits.

It is arguable that the ETS did not intend for freely allocated carbon credits to be a source of profit. Insurers may need to consider defining the true nature of carbon credits for policies involving carbon through carbon accounting guidelines.

What's at Stake ?

To understand how important outage credits are for mitigation purposes it is useful to apply some concrete numbers. For large installations carbon credit mitigation may extinguish all but the very largest of losses and will greatly reduce smaller losses. Even where a carbon credit is valued at €5 in a fluctuating market, there is a significant impact for all but the smallest installations.

Possible value of carbon credits during an outage:

Facility	Annual Allocation	Daily Carbon Use	60 day indemnity €5 per credit	180 day indemnity €20 per credit
Power Station	5,962,684	16,336	€4,900,800	€58,809,600
Cement Works	1,163,632	3188	€956,400	€11,476,800
Power Station	664,229	1819	€545,700	€6,548,400
Power Station	287,535	787	€236,100	€2,833,200
Paper Mill	96,711	264	€79,200	€950.400
Chemical Plant	38,374	105	€31,500	€378,000
University	2714	7	€2100	€25,200

While only illustrative, the numbers set out in the table above are not theoretical. Every outage at an installation results in excess or 'outage credits'. Carbon credits have a value from the date they are issued until they are used. Whether or not outage credits are used to mitigate losses raises difficult questions for insurers and demands knowledge of a new and complicated issue.

Policy Wording For Carbon

Some would say that carbon should be excluded from policies. However, excluding carbon may produce unfair results for both assureds and insurers. Further, as the ICOW example above demonstrated, a formal exclusion will not always reduce the scale of loss.

It has already been suggested that policy wording could include an agreed accounting treatment of carbon credits. Valuing and allocating credits to a particular outage is another element of carbon underwriting. Valuing credits will necessarily contemplate market fluctuations. Allocating credits to an outage will involve distinguishing allocated carbon credits from carbon credits purchased by an installation. It will also involve defining the actual carbon credits not burned due to an outage. This must take into account the possibilities of carbon credits being used during a start up period and a decision to burn dirty to make up lost production. As with any BI claim there is a fair method for determining these sometimes complicated matters. Accordingly, the first component of understanding carbon is certainty in the wording.

Impact on Insurance

The examples above demonstrate that BI insurers have been directly impacted by the ETS. As the ETS develops, and as installations become even more carbon sophisticated, insurers should carefully consider their policy wordings. Without suitable wordings an assured's accounting treatment may serve to inadvertently hide the true cost, or hidden profit, of an outage. Clawing back the value of carbon credits not used during an outage through premium rating or in a claim adjustment will require understanding of the basic mechanisms of the ETS and necessitate looking behind the submitted claim.

The next 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.