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## Will the carbon emissions market in Phase Two of ETS be long or short of CO<sub>2</sub> certificates?

### Introduction

The EU emissions trading scheme has seen major developments since forward trading started on a modest basis in 2003. Phase 1 of the system, scheduled to run for a three-year period from 2005, was always intended to be a pilot phase. And it certainly turned out as one. Prices soared to above €30/t as market participants and analysts (including Point Carbon) expected the market to be short, only to eventually collapse to zero as the market turned out to be fundamentally long. As we have now entered Phase 2, coinciding with the five-year Kyoto period from 2008 to 2012, it is time to take a closer look at the period ahead.

In this paper we investigate the future of emissions trading in Europe by looking at three questions. First, we ask whether all the problems from the pilot-phase have been amended and whether the system is now structurally short. Second, we ask to what extent the market will actually result in emission reductions within Europe. Finally, we look at the potential pitfalls that could arise from linking the future of the EU ETS closely to the implementation of renewables targets in Europe.

### Finally a short market?

The allocation in both Phase 1 and Phase 2 was set via a process where the European Commission assessed National Allocation Plans (NAPs) submitted by all Member States. As we all know, this resulted in considerably inflated emission estimates in several countries. And as the EC, and Member States, did not have consistent historical emission data to base their assessment on, the market ended up with more than 210 Mt (3.4%) length in Phase 1.

There was, however, a remarkable change in the allocation process for Phase 2. First of all, the experience from Phase 1 showed that Member States' projections were not necessarily to be trusted. Second, with the verification data from 2005, the EC had for the first time a comprehensive set of emissions data for all countries. As a result, the allocation for Phase 2 was set about 10% below the previous phase, and will according

to our estimates lead to an initial shortage of more than 300 Mt/year (before supply of new entrants and auctions to the market).

While the EC managed to cut the allocation for Phase 2 and ensure a short market, there was one aspect of the allocation that in hindsight seems less successful. As part of the allocation, each installation covered by the system will have the opportunity to use reduction credits from Clean Development Mechanism (CDM) and Joint Implementation (JI) projects to meet its target.

This import opportunity is, however, not unlimited, but expressed as a percentage of the allocation. In total, the import limits account for about 13% of the allocation or some 1400 Mt over the 5-year period. This means that, in principle, the market can meet its entire reduction effort by importing credits from developing countries and Eastern Europe.

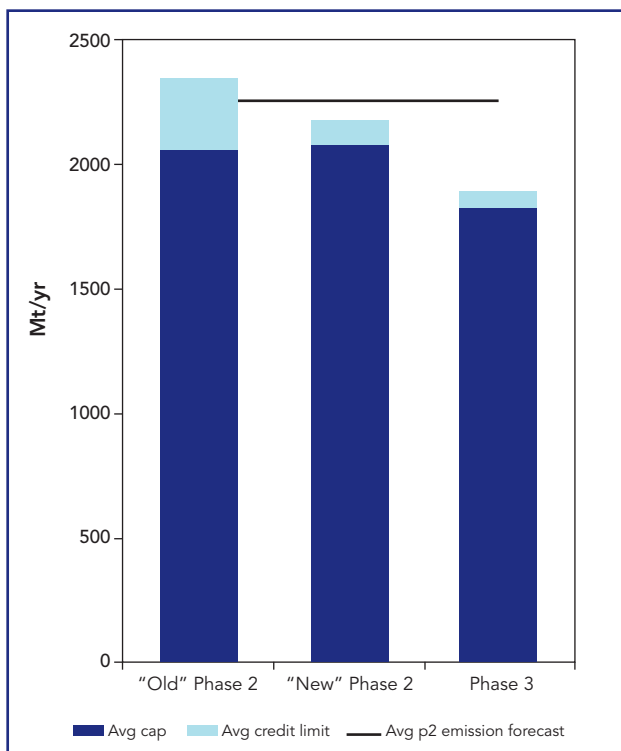
Surely, this was never the intention of European policy makers. Although the EU ETS was also meant to spur the growth of a global carbon market, its prime goal has always been to lead to emission reductions within Europe. So what could be done to rectify this situation?

The answer came on 23 January 2008, when the EC presented its Energy & Climate package, a set of proposals for meeting the EU's targets of 20% emission reduction and 20% renewable generation by 2020. Here, the EC suggested how the allocation for Phase 3, stretching from 2013 to 2020, should be set, including the level of CDM/JI imports allowed for the next trading period. In a move that caught the market by some surprise, the EC proposed that in a case where the EU stayed with its unilateral target of 20% reduction by 2020, the only use of CDM/JI credits it would allow was what remained of the 1400 Mt initially set aside for Phase 2.

Hence, what was originally seen as a 280 Mt/year limit, can now be viewed as a 108 Mt/year limit. The EC did propose that in the case of an international agreement, half of any additional reductions for the EU ETS can be met by CDM/JI. But the situation is clear; the EC proposal will, if approved, finally ensure that the EU ETS is both short and that a substantial share of the CO<sub>2</sub> ▲

abatement will take place within Europe. At least this will be the case if we consider Phase 2 not in isolation, but take into account that there will be banking of allowances and credits to Phase 3. **Figure 1** shows how the situation has changed following the EC proposal, where the "new Phase 2" shows a shortage that will have to be met by domestic reductions.

**Figure 1 – How the EC ensured a short market**  
Allocation of allowances and import limits. "old" and "new" Phase 2 refers to the situation before and after the 23 January 2008 proposal from the EC.



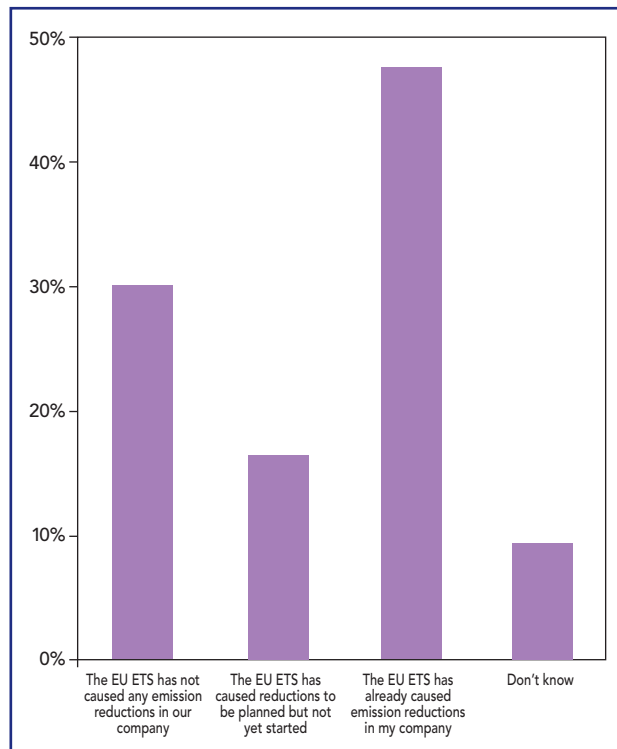
**Do market participants agree?**

Each year since 2006, Point Carbon has conducted a survey of market participants. In Carbon Market Survey 2008, more than 3,700 respondents gave their view on a number of critical aspects for the EU ETS. About 40 per cent of the respondents stated that they were involved in trading of EU allowances and/or certified emission reductions (CERs) from CDM projects. Given the status of allocation and import limits as described above, do market participants expect the EU ETS to result in actual reductions within Europe, or do they expect to meet their targets solely by imports?

**Figure 2** shows some of the results from our survey. We asked "Has the EU ETS caused your company to reduce its own emissions?," and limited the sample to those respondents who were covered by the scheme. The results indicate that at least two thirds of the respondents have initiated, or are planning to implement, emission reductions of some kind. One important unanswered question is how much these initiatives will eventually

deliver in terms of emission reductions. Nevertheless, market participants seem to agree that the EU ETS will in the future be treated as a short market, and that it will result in reductions within Europe.

**Figure 2 – Has the EU ETS caused emission reductions in your company?**



Source: Point Carbon

Another way of judging the success of the EU ETS is whether the price of EU allowances is now taken into account when companies make their investment decisions. **Figure 3** shows the results from our survey when we asked "Has the price of carbon influenced the degree of new investments by your company?" Again, only companies with obligations under the EU ETS were included in the sample. The results indicate that 73% of our respondents found the EUA price relevant to their investments. Still, quite a large share of the respondents did not see the carbon price as a driver for investments. Does the picture change if we look further out on the investment horizon? We asked the same question in relation to the long-term carbon price (to 2020), and found that only six percent of the respondents said that the carbon price had no impact on new investments.

**What could go wrong this time?**

We see that the EU ETS has gone through several changes in its few years of operations. In some ways, its history can be viewed as one of first setting the framework for the future and then mending the unintended problems ▲



arising from the initial framework. This certainly was the case for Phase 1, where the overallocation was successfully corrected for Phase 2. However, by allowing for the generous limits for import of CDM/JI, the system looked like it might not after all lead to reductions within Europe, but that the majority of reductions (and investments) were directed towards developing countries. This was again corrected by the proposal for Phase 3, which will, if approved, set both the level of allocation and imports in a manner that achieves both shortage and reductions within Europe. Also, as we have seen above, market participants now expect the EU ETS to lead to reductions within their company, and the European carbon price is seen as a crucial factor for investment decisions. So what could possibly go wrong this time? While it is still too early to conclude whether the EC has actually made any mistakes this time around, there is one aspect of the future EU ETS that at least has the potential to be a pitfall. Looking to 2020, the EC has proposed not only targets and limits for the EU ETS, but also specific targets for the level of renewable generation within each Member State. In fact, the targets for the trading scheme and renewables have been made dependent on each other. Thus, in order to meet the reduction target for the ETS sector (21% below 2005 emissions by 2020), the power sector will need to invest considerably in renewable generation. And vice versa, the renewable targets are expected to be dependent on a high carbon price.

There is one aspect that is important to highlight when it comes to how the two targets will interact. The EU ETS will from 2013 be an almost completely centralised process, where the rules, regulations and allocation will be set in Brussels. For renewables, however, the situation is almost the complete opposite, relying heavily on national plans and various subsidy schemes. Also, for the trading scheme there is a strong compliance regime, with targets and financial penalties on an installation level. This is very far from the case on renewables,

where the only option is for the EU to open infringement procedures against countries if they fail to meet their targets. Although a strong instrument in itself, the potential threat of a court case some time closer to 2020 does not guarantee that the rate of renewable new-build will be met.

As the proposal for EU ETS Phase 3 goes through the co-decision process in Brussels, we expect the carbon market to increasingly reflect the tighter allocation from 2013. This will in itself drive up prices already now in Phase 2, where our current forecast suggests an average price of €30/t for the five-year period. If the market also finds reasons to doubt that the targets for renewable generation will be met in time, it will increasingly price itself on the costs for changing from coal- to gas-fired generation, and our forecast would be even higher. Perhaps the biggest flaw of the future EU ETS is that the EC is powerless to implement a completely centralised policy process for renewables? ■