

## Assigned Amount Unit: Seller/buyer analysis and impact on post-2012 climate regime

### Executive Summary

CAN Europe has commissioned this report from Point Carbon to enhance the transparency of bilateral or multilateral Assigned Amount Unit (AAU) deals between governments and/or between governments and private sector entities.

The report gives an overview of governments and private-sector entities that are buying or selling AAUs and the quantities that are involved. An additional objective is to look at the potential magnitude of AAU sell-offs before 2012 and the impact on banking existing AAUs towards 2020 targets. We go on to consider how the issue of the surplus AAUs and banking is playing out in the Copenhagen negotiations.

The targets set by the Kyoto Protocol for Annex B Parties are expressed as levels of allowed emissions, or “assigned amounts,” over the 2008-2012 commitment period. The assigned amounts are denominated in “assigned amount units” (AAUs), equal to one metric tonne of CO<sub>2</sub> equivalent greenhouse gas emissions. Article 17 of the Protocol defines a “cap and trade” mechanism which allows countries to trade these units to meet their targets, a practice known as international emissions trading (IET).

Countries in Central and Eastern Europe and the former Soviet Union, so-called ‘economies in transition’, hold a surplus of AAUs in the Kyoto commitment period (2008-2012). Because their AAU surplus has resulted from economic decline in the 1990s rather than from an effort to reduce emissions, it is sometimes referred to as “hot air” – a term that is vehemently opposed by the seller countries, who instead emphasise the huge social and economic costs of the transition from planned to market economy which has enabled these reductions.

Many Annex B countries have procured, or are in the process of procuring AAUs, mostly through a green investment scheme where the revenues are invested by the seller in projects that reduce emissions (“hard greening”) or at least capacity building such as emissions inventory development in the seller country (“soft greening”). There are private sector entities and intermediaries that also engage in the trading of AAUs. It is these deals in particular that have attracted controversy for their lack of transparency and little attention to the greening of the AAUs.

We understand that 147 million AAUs have been contracted in the AAU market so far, with a further 50-60 million AAUs reported to be under negotiation. The largest sellers have been the Czech Republic and Ukraine, having sold 68,5 and 44 million AAUs respectively. The Japanese government and private companies appear to be the largest buyers, having bought most of the volume transacted by Ukraine and the Czech Republic. Latvia and the Czech Republic have concluded the most transactions, at four each. Individual transactions are listed in annex to this report.

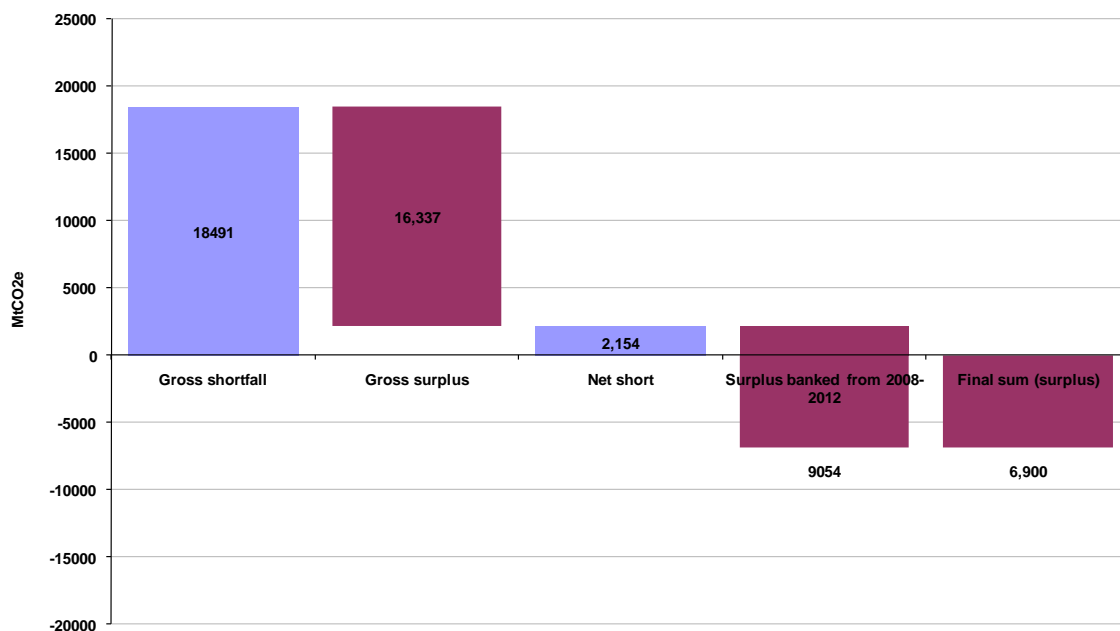
We expect that the transactions in AAUs may begin to tail off up to 2012. However, the scale of the surplus in the Kyoto period and the ability for them to be banked has implications for the effectiveness of the targets to reduce emissions by 2020 currently under negotiation.

We find that, taking the IMF's most recent global GDP growth outlook that takes into account the current economic downturn, the Kyoto period 2008-2012 could be oversupplied by 9 billion AAUs. There are no restrictions on the banking or carry-over of AAUs between compliance periods. We model business-as-usual emissions to 2020 and assume two sets of caps in scenarios A and B to determine the effect of the surplus.

In Scenario A, we apply the targets already offered by Annex B countries in the course of the negotiations, and assuming that the targets are linear, from the 2012 level through to 2020. Taking the period 2013-2020 in isolation, we find that there is a net shortfall of 2.2 GtCO<sub>2</sub> over the eight years. This corresponds to a reduction target of a 12% cut on 1990 levels by 2020, well below the IPCC's recommended 25-40% target range.

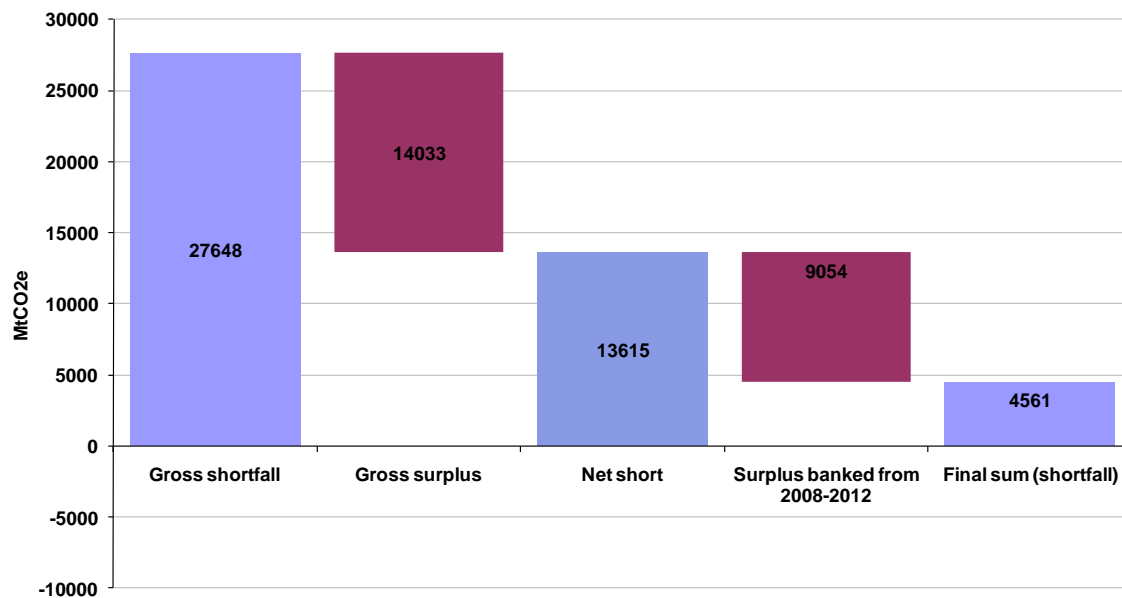
However, still in Scenario A, when one assumes that the net surplus from the period up to 2012 (9 GtCO<sub>2</sub>) is carried forward into the 2013-2020 period, we see that again the market is oversupplied, this time by 6.9 GtCO<sub>2</sub>. In other words, the oversupply in the system is enough to meet demand through to 2020, still with 7 billion AAUs to spare. If the surplus is spread evenly over the period and used for compliance, the targets' effectiveness is reduced to a 6% cut on 1990 levels by 2020.

## Scenario A, supply and demand for AAUs 2013-2020



In Scenario B, we assume that every country in Annex B takes on a target at 25% below 1990 by 2020, in line with the least ambitious end of the IPCC recommended targets. This is far higher than in Scenario A, illustrating the gap between what targets are on the table in the negotiations to date, and the IPCC recommendation. Scenario B results in a net system short of 13,615 MtCO<sub>2</sub>, taking 2013-2020 in isolation. In this case, if the full surplus from up to 2012 were carried forward into the 2013-2020 period, the net short would be reduced to 4,561 MtCO<sub>2</sub>. The effectiveness of the cap is reduced from 25% to 19%.

## Scenario B, supply and demand for AAUs 2020



There are many proposals on the table for dealing with the surplus. We find that all of them have their faults and may be rejected by one party or another. A politically-negotiated outcome may well be beyond the Parties unless there is considerable movement on the issue by the key Parties.

We also consider that the trade in AAUs is likely to diminish, as most Parties look set to turn their back on them after 2013, with the notable exception of Japan and possibly Australia or New Zealand so far.

None of the options considered for surplus AAUs satisfy all economic, environmental and political concerns. While no solution is perfect, any option or combination of options chosen must safeguard the environmental integrity of the post-2012 agreement. To quote the report from the Finnish Institute of International Affairs<sup>1</sup>, *“the surplus issue is politically extremely sensitive, and could potentially collapse the Copenhagen negotiations”*, thus the issue of the surplus AAUs

<sup>1</sup> Anna Korppoo, Thomas Spencer. The Dead Souls: How to deal with the Russian surplus? The Finnish Institute of International Affairs, 4 September 2009. Available at <http://www.upi-fiia.fi/en/publication/84/>

could become a stumbling block in the final rounds of negotiations. As this is considered a crucial issue for Russian participation, we doubt that restrictions on AAU banking will materialize within a future international agreement.

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