In a really interesting recent <u>post</u> by Sandbag, a UK-based organization that buys and retires credits from the EU Emissions Trading Scheme, the organization analyzed newly released 2009 data about drops in the emissions covered by the EU scheme. On the good news front, emissions that are covered by the EU scheme have dropped 17 percent over a two year period. Not surprisingly, however, the large drop in emissions reductions. Moreover, the emissions did not drop uniformly across sectors. Instead, the steel and cement industries, according to Sandbag, saw really dramatic drops that left them with a large excess of credits (30 percent above what they actually used). By contrast, the power sector saw emissions cap. What's also interesting about the emissions reductions is that the drops mean that emissions in 2009 were significantly lower than the caps established by the EU for this phase of trading (Phase II).

These data raise several issues. First, given that much of the drop is due to economic stagnation as opposed to serious and permanent emisisons cuts, carbon allowance prices have <u>dropped dramatically</u> from 30 Euro in 2008 to around 12 Euro currently. With prices so low, will the technological innovation and investment in energy reducing activities that a price in carbon is supposed to induce occur? Second, will the banking provisions of the EU Trading Scheme undermine future innovation? As Sandbag points out, because of the large drop in emissions well below the caps a significant number of unused allowances remain that have been "banked" and can be used in future years. That means that when the economy picks up, the cement and steel industries in particular can use "banked" credits rather than making actual cuts in emissions in order to meet emissions targets.

Banking provisions are included in Waxman-Markay and supported by a wide array of policy analysts. The theory is that allowing credits to be borrowed and banked promotes the most <u>efficient reductions</u> by allowing for emissions reductions across time rather than forcing reductions in an artificially limited period (a year, for example). And the cost of emissions reductions shouldn't fluctuate wildly due to exogenous factors, including economic downturns or upturns. To put it in <u>the words of</u> Resources for the Future fellows Harrison Fell and Richard Morgenstern,

Ideally, the discounted cost of reducing the last ton of emissions should be the same across different years as would occur under a carbon tax that rises over time at the rate of interest.

But if emissions occur due to an economic slowdown rather than because of aggressive changes in technology or energy efficiency, could the effect of the banking provisions in the EU simply mean that real emissions reductions are delayed even further as industry simply uses its banked allowances? Or that, as Sandbag argues, the EU can afford much tighter caps than the current goal of 20 percent reductions by 2020? Finally, does the fact that prices in the allowance market have falled dramatically support proposals for price floors for allowances in order to maintain a sufficient price to induce technological innovation? I'd be interested in reactions to these questions.