

REDUCING EMISSIONS OR PLAYING WITH NUMBERS?

WHAT THE EU CLIMATE PACKAGE COMMITS THE EU-27 TO IN TERMS OF REDUCED EMISSIONS

Summary

The Climate Packageⁱ agreed upon by the EU in December last year, includes two policies that limit future EU greenhouse gas (GHG) emissions between 2013 and 2020. One is a modification of the EU Emissions Trading Scheme (ETS), which has been running since 2005 and controls emissions from the energy intensive industrial sectors.ⁱⁱ The other is the Effort Sharing Decision (ESD) covering all other sectors.ⁱⁱⁱ The combined objective of these policies is to reduce the EU's annual GHG emissions by 20 per cent by 2020, compared to 1990 levels. This is equivalent to reducing annual emissions by 14 per cent compared to 2005 levels (the year upon which the EU bases its calculations). Although the latest climate science research indicates that emissions must be reduced more ambitiously to ensure the average temperature rise remains below two degrees Celsius, the EU's commitment to cut GHG annual emissions is widely considered a step in the right direction.

Research conducted by FERN into the Climate Package shows, sadly, that when considered in detail, the EU's commitment amounts to very little change within the EU. Rather than reducing its own emissions, the EU plans to make the majority of its projected reduction by paying companies in developing countries to reduce theirs. This is a practice permitted under the Kyoto Protocol Clean Development Mechanism (CDM) and widely referred to as offsetting. Carbon offsets do not contribute to preventing dangerous climate change because they are not designed to reduce emissions. Even in a best case scenario, all they can do is stabilise levels, because a reduction in one place justifies an extra emission in another place. Unfortunately, even this best-case scenario appears to be rare as it is not possible to verify whether any claimed reduction would otherwise have occurred. By allowing the release of extra emissions without the certainty of equivalent extra reductions elsewhere, any trading scheme involving carbon offsets may increase rather than reduce GHG emissions. On top of this, many of these projects also affect the rights of some of the world's poorest communities, resulting in increased hardship and suffering.^{iv}

Using European Commission data and policy statements, we have calculated that the reduction required within the EU between 2013 and 2020 is just 3.9 per cent compared to 2005 levels, with nearly 60 per cent of the EU's emissions reductions coming from offsetting.

This figure could increase significantly following the economic downturn, which will, in all likelihood, lead to a decrease in GHG emissions over the short-term. If the EU is serious about climate change it will have to reduce its own emissions without resorting to offsetting.

Required reductions by the ETS

The ETS sets a target of, by 2020, reducing annual emissions from energy intensive industrial installations by 21 per cent compared to 2005 levels for the EU as a whole. It allows the companies who own these installations to trade the rights to permitted emissions among themselves. If the installations covered by the ETS continued to emit GHG at the same rate as 2005, the total ETS emissions for the period 2013 to 2020 would be 17,416Mt Carbon Dioxide Equivalent (CO₂e). The total ETS emissions reduction for the period 2013-2020 projected by the EU is 2,642Mt CO₂e.

The rules of the ETS state that 50 per cent of the total reduction during the period 2008 to 2020 can be offset using CDM type credits. In the period 2008-2012, the EU projects the total ETS reduction to be 376Mt CO₂e giving an offset from this period of half that: 188Mt CO₂e. In the period 2013-2020 the EU projects total ETS reductions to be 2,642Mt CO₂e giving an offset from this period of half that: 1,321Mt CO₂e.

The current economic downturn will, in all likelihood, lead to a decrease in GHG emissions from energy intensive industry over the short term. Alongside this, the rules of the ETS allow for offsetting credits and permits not used in one year to be used in later years. This means that offsets available for use during 2008-2012 will be saved to allow companies to achieve more than 50 per cent of the required reductions between 2013 and 2020.^v



Required reductions by the ESD

The ESD sets a target of, by 2020, reducing annual non-ETS emissions (i.e. everything outside the remit of the ETS) by 10 per cent compared to 2005 levels for the EU as a whole and translates this into separate targets for each member state. If member states continued to emit GHG at the same rate as 2005, the total non-ETS emissions for the period 2013-2020 would be 23,993Mt of CO₂e. Assuming non-ETS emissions in 2013 are the same as they were in 2005, and that reductions will follow a linear path to the required reduction levels in 2020, the total non-ETS reduction in the period 2013-2020 amounts to 1,109Mt.

Here again, offsetting is permitted, but unlike with the ETS, the allowable quantity remains static at either 3 or 4 per cent of 2005 emissions for each member state, regardless of emissions levels each year between 2013 and 2020. This amounts to a total of 799Mt CO₂e which can be offset, leaving a non-ETS reduction from within the EU of 310Mt. In other words, the ESD requires a mere 1.3 per cent reduction in non-ETS emissions from the baseline (the amount of emissions that would be released if the EU continued to emit at 2005 levels) to come from within the EU. That means that 72 per cent of the required reduction can be achieved through the purchase of offset credits.

Furthermore, this is based on an assumption which ignores the fact that larger countries will be expected to already have lower emissions in 2013 than in 2005.^{vi} Thus the total non-ETS

emissions for the period 2013-2020 will likely be lower than 23,993Mt, while the non-ETS offset remains unchanged, resulting in an even smaller proportion of reductions being required within the EU and a larger proportion being offset.

Conclusion

The total baseline emissions during 2013-2020 from ETS and non-ETS sources (i.e. all GHGs) within the EU are 41,409Mt. The required reduction in GHG emissions over the same period is 3,751Mt, or 9 per cent of the baseline emissions. Of this 3,751, 2,120Mt can be offset. This is 56.5 per cent of the 3,751Mt reduction required in the period 2013-2020. It also means that reductions from within the EU will be just 1,631Mt, a mere 3.9 per cent below projected baseline emissions.

However, this figure of 56.5 per cent is likely to be an underestimate. As a result of the financial crisis, European economies have taken a dip and at least a few years of negative growth are expected. Reduced economic activity will also lower non-ETS GHG emissions, resulting in the actual level of such emissions being lower than assumed in the ESD calculations above. Despite this, there has been no change to the level of offsetting available. As a result of all these factors, the overall percentage of reductions that can be achieved through the purchase of offset credits rather than reductions within the EU is likely to be even higher than calculated here. Despite its claims, the EU is not leading in reducing emissions, but in offsetting and pushing its responsibility to reduce emissions onto others.

Period 2013-2020	ETS (Mt CO ₂ e)	Non-ETS (Mt CO ₂ e)	Total (Mt CO ₂ e)
Total projected baseline emissions	17,416	23,993	41,409
Total reduction	2,642	1,109	3,751
Reduction within the EU	1,321	310	1,631
Total offset	1,321	799	2,120 (56.5% of projected reductions)

Endnotes

i. http://ec.europa.eu/environment/climat/climate_action.htm

ii. This includes energy generation, cement and metal production.

iii. This is a wide range of sectors covering mostly small scale emitters, such as transport (e.g. cars, trucks), residential and services buildings, small industrial installations, agriculture, etc., including all types of greenhouse gases.

iv. See www.sinkswatch.org for more information.

v. Several countries are expected to begin reducing as of 2009 although the target in 2020 remains unchanged.

vi. It should be noted however that the ESD doesn't allow banking of offsets in the same way as the ETS as member states can only transfer 5 per cent from one year to the next.