

Irish Emissions Reductions Targets: EU & climate Bill

Understanding the confusion and controversy surrounding the emissions targets in the Government's Climate Change Response Bill 2010

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The Government's recently published Climate Change Response Bill 2010 contains the following emissions reductions targets:

2020: 2.5% annual reduction from 2008 to 2020.

2030: 40% below our 1990 / Kyoto baseline

2050: 80% below our 1990 / Kyoto baseline

In each case the reduction target is for Ireland's net emissions. That is our actual (gross) emissions of greenhouse gases minus the removals of greenhouse gases achieved by increasing carbon sinks in Ireland. So we can meet these targets by any mixture of reducing our gross emissions and enhancing our sinks. The more we enhance our sinks the less we have to reduce our actual emissions.

These targets have caused controversy and confusion, particularly in relation to how they compare to Ireland's obligations under EU agreements. And most particularly in relation to the 2020 target.

This briefing seeks to clarify the position. A comparative analysis of the targets follows, but first it is worth explaining why it's not surprising some confusion has arisen.

Why Ireland's EU and climate Bill targets for 2020 are hard to compare

A. Different baselines

- The Bill's reduction target for 2020 is from a baseline of 2008.
- Ireland's EU reduction target for 2020 is from a baseline of 2005.

B. Different scopes

- The Bill's reduction targets cover 100% of emissions in the Irish state
- Ireland's EU reduction target for 2020 only covers the non-ETS sector (70% of Irish emissions in 2008).

C. There was confusion what 2.5% a year means

We won't argue about whether it's clear from the text of the Bill and everything that went before. Everyone is now agreed that what is referred to is an annual 2.5% reduction on the year before, which means emissions in 2020 have to be 26.2% (not 28%, not 30%) less than they were in 2008. If you're asked, that means it's a compounded reduction not a linear one.

D. Different treatment of carbon sinks

The target in the Bill is for net emissions, i.e. Actual (gross) emissions, less emissions removed by the growth of carbon sinks. Ireland's EU 2020 target is currently for gross emissions. But that may change. The EU may legislate to allow sinks count towards meeting the 2020 target.

Why the IFA, IBEC and the DoE see the targets differently

A combination of factors A, B and C above account for the fact that the IFA's briefing compares Ireland's 2020 EU target of a 20% reduction and the Bill's 2020 target of 26.2% and says the Bill target is more demanding. In fact, the EU is talking about a 20% reduction of 70% of Ireland's emissions in 2005 while the Bill is talking about a 26.2% reduction of 100% of Ireland's emissions in 2008. It's apples and oranges.

More substantively, in the case of IBEC, it is factors B and D that account for the disagreement between IBEC and the Department of Environment (DoE) about whether the Bill target is more demanding than our EU obligations.

Taking B first. The fact is that the EU target for Ireland for 2020 only covers the non-ETS sector, while the Bill's 2020 target covers both the ETS sector and the non-ETS sector, i.e. all emissions in the territory of the Irish state, in line with how we report our emissions to the UN each year. IBEC explains this element of the challenge of comparing the two targets well:

“By the year 2020, Ireland's non-ETS sector emissions should be reduced by 20% compared to a 2005 baseline. There is no national cap on emissions from the EU ETS sector, although a 21% reduction must be achieved collectively across all EU member states by 2020. In order to compare directly our EU 2020 target against the one specified in the Climate Change Response Bill, we must add in an expected emissions figure for the EU ETS sector in Ireland.”¹

IBEC and the DoE both take the EPA's “with additional measures” (WAM) projection for the ETS sector to begin with, which gives you an EU target as outlined in line (d) of Table 1, which turns out to be the same as the target in the Bill. (See below, however, on how IBEC challenges that based on differing treatments of carbon sinks).

Before bringing in sinks IBEC raise concerns about the likelihood of any Government delivering the EPA's WAM scenario. The baseline “with measures” scenario only takes into account policies that have been legislated for and are already being implemented. The WAM scenario, however, includes all the policies that have been adopted by Government whether or not all the required measures have been legislated for and implemented yet. So, yes, it's true one can't yet take the WAM projection for granted. One would presume that is precisely the purpose of reflecting the WAM projection in the Bill's target: to drive the adoption and implementation of all the measures required to fully realize the adopted policies.

On the basis of this concern IBEC hint at an alternative national target² which takes our EU-agreed 20% reduction target for the non-ETS sector and presumes, rather than the WAM projection, that Irish ETS sector emissions fall at the rate mandated for the EU as a whole, 21%. That would give you the national target in line (g) in Table 1.

¹ IBEC (2011) “Briefing Note: Government's Climate Bill target goes beyond the EU 2020 obligation for Ireland.”: [http://www.ibec.ie/IBEC/DFB.nsf/vPages/Energy~Key_Issues~climate-change-response-bill-13-01-2011/\\$file/120111_IBEC%20Note%20Climate%20Change%20Response%20Bill.pdf](http://www.ibec.ie/IBEC/DFB.nsf/vPages/Energy~Key_Issues~climate-change-response-bill-13-01-2011/$file/120111_IBEC%20Note%20Climate%20Change%20Response%20Bill.pdf)

² Ibid, read the asterisk note under Table 3.

The DoE maintain however that when you consider the interaction of the following:

- the direct impact of the ETS on Irish emissions
- our renewable energy target under EU law
- the impact of our National Energy Efficiency Action Plan target, which is a national commitment created to be in compliance with an EU requirement

we are legally committed to significantly more than a 21% reduction in the ETS sector and politically committed to something pretty close to the WAM projection.

Turning to factor D, the treatment of carbon sinks and the role they play in removing greenhouse gases from the atmosphere. The Bill treats our EU target as a target for gross emissions, because, currently, it is. So that means to compare the two you take the EU target for 2020, you take away Ireland's projected level of sinks in 2020, and you compare that to the target in the Bill, which is for net emissions. Looking at the figures on line (d) in Table 1 below you can see that 52.4 Mt minus 4.8 Mt gives you the EU target in net terms, at 47.6 Mt, while on line (c) the Bill target for net emissions is 47.7 Mt. So the EU target is 0.1 Mt more demanding than the Bill target.

IBEC, however, point out that EPA has said that the EU 2020 agreement provides for the inclusion of sinks at a later date. What the EPA says is "It not yet clear how the inclusion of carbon sinks would impact on Ireland's 2020 target and whether including their impact would mean a stricter limit for Ireland. For the purposes of this discussion, it is assumed that the 2020 target would remain unchanged if carbon sinks are to be included."³ What that would mean in effect is that the EU target would switch from being a target for gross emissions to being one for net emissions, so, as with the Bill target, Ireland could meet it using a mix of reducing emissions and growing sinks.

On this basis IBEC presents the EU target as being the one on line (e) of Table 1 below, i.e. 4.7 Mt less demanding than the target in the Bill⁴. This is at least presumptive, if not also a little disingenuous. Presumptive because the EU target has not yet changed in the manner they describe. On the EU's website the latest information is that the European Commission held a consultation from September to November last year asking "how land use activities may contribute to climate change mitigation; if land use, land use change and forestry (LULUCF) should count towards the EU's greenhouse gas reduction commitment; and, if so, the ways in which this could be done."⁵ Neither the submissions nor the outcome of the consultation were accessible online when I checked.

It's a little disingenuous to present this possible policy development as the basis for claiming the targets in the Government's Bill are far stricter than Ireland's EU obligations for the following reason. In the EU 2020 package this policy development is a conditional and qualified one. And IBEC are arguing, on the one hand, that we should pre-empt that development in setting our national targets when, on the other hand, one of the main thrusts of their general objection to the climate Bill seems to be we shouldn't pre-empt EU policy. But let's agree we should prepare for how EU

³ EPA (2010) Ireland's Greenhouse Gas Emissions Projections 2010 – 2020, page 18:

http://www.epa.ie/downloads/pubs/air/airemissions/EPA_GHG_Emission_Projections_2010.pdf

⁴ IBEC (2011) as note 1 above.

⁵ "Public consultation on the role of EU agriculture and forestry in achieving the EU's climate change commitments": <http://ec.europa.eu/environment/consultations/climate.htm>.

policy may well evolve, as forward planning is indeed the purpose of the Bill. In that case would it not be foolish to prepare for the inclusion of sinks and not prepare for the probable, not to say inevitable, move in the EU 2020 reduction target itself, from 20% to 30%? The UK, Germany and France have all called for an immediate move to the more demanding target⁶ and Minister Ciaran Cuffe has said he actively supports such a move when he engages at the European level.

As with the inclusion of sinks, we don't know precisely how Ireland's 2020 target will change with a move a 30% EU target, but the Fianna Fail / Progressive Democrat Government published one estimate of Ireland's share of an EU 30% target in the National Climate Change Strategy published in April 2007. That estimate is 48 Mt net. Equally if Ireland's 20% target for the non-ETS sector simply becomes a 30% target then our equivalent national target works out at 47.8 Mt net. The 2020 target in the Climate Change Response Bill is 47.7 Mt net.

So, to summarize, if we take Ireland's 2020 target under EU agreements as they are now, our EU obligation is 0.1 Mt more demanding than the target in the Bill (Bill: 47.7 Mt, EU: 47.6 Mt). If we take Ireland's 2020 target under EU agreements as they are likely to evolve over the next couple of years our EU obligation is 0.1 Mt less demanding than the target in the Bill (Bill: 47.7 Mt, EU 47.8 Mt). For all intents and purposes the target in the Bill and our EU obligations are the same.

Other considerations to bear in mind

- The targets in the Bill can be changed by a simple resolution of the Oireachtas. If EU or global policy evolves unexpectedly the targets can be adjusted.
- The targets in the Bill are not legally binding, unlike the UK Climate Change Act. What is legally binding is for the Government to plan to meet them. Taking legal steps now to plan to meet what is very likely to be our EU 2020 target is hard to characterize as an outrageous imposition.
- The Irish and EU targets lag well behind what the science says is necessary. The EU has long promoted 2C as the threshold where global warming will cause dangerous climate change. According to the IPCC report, to have a 50/50 chance of staying below 2C, rich countries will have to reduce their emissions in 2020 to 25 – 40% below the 1990/Kyoto baseline. The EU is instead debating a range of 20 -30%, just overlapping with the science.

Table 1 follows on the next page.

⁶ "Europe needs to reduce emissions by 30%", Financial Times, 15th July 2010: <http://www.ft.com/cms/s/0/08538a04-8f78-11df-8df0-00144feab49a.html#axzz1BHbCwJm6>

Table 1 Comparison of emissions reduction targets

	Gross CO2e MT	Sinks CO2e MT	Net CO2e MT
1990 actual historical	54.8		
Kyoto baseline (1990 or 1995 depending on which gas) ⁷	55.6		
Kyoto target (13% above baseline averaged over 2008-2012)	62.8		
2005 actual historical	68.8		
	<i>2005 ETS</i>		
	<i>2005 non-ETS</i>		
2008 ⁸	67.4	2.8	64.7
2020			
(a) Programme for Gov: 3% a year reduction (in gross emissions ⁹)	46.8	4.8 ¹⁰	42.0
(b) Oireachtas Committee cross-party Bill: 30% reduction in net emissions from 1990 ¹¹ (i.e. the Kyoto baseline)	43.7	4.8	38.9
(c) Government Bill: 26.2% reduction from 2008 net emissions (64.7)	52.5	4.8	47.7
(d) EU 2020 package (as agreed in 2008, and currently in force)			
20% reduction in non-ETS from 2005	37.1		
EPA WAM projection for Irish ETS sector (32% < 2005)	15.3		
Total	52.4	4.8	47.6
(e) EU 2020 package (as IBEC presume it'll be amended, allowing)			
20% reduction in non-ETS from 2005			37.1
EPA WAM projection for Irish ETS sector (32% < 2005)			15.3
Total	57.2	4.8	52.4
(f) EU 2020 package (when EU target moves to 30%; & allows sinks)			
30% reduction in non-ETS from 2005			32.5
EPA WAM projection for Irish ETS sector (32% < 2005)			15.3
Total	52.6	4.8	47.8 ¹²
(g) "EU average reduction" version of 20% EU target (IBEC's briefing Table 3*)			
20% reduction in non-ETS from 2005	37.1		
21% reduction in Irish ETS sector (21% is pan-EU target)	17.7		
Total	54.8	4.8	50.0

shading indicates whether each target is expressed as gross or net

⁷ Everybody says 1990 when referring to the baseline for international commitments to reducing emissions, such as under the Kyoto Protocol. Technically, however, the UN baseline is 1990 for 3 greenhouse gases (CO₂, Nox and methane) and 1995 for the 3, rarer, f-gases. The Bill uses the official baseline, obviously, which is 55.6 Mt, 0.8 Mt higher than our actual emissions in 1990.

⁸ Everyone is using slightly out-of-date figure for 2008 emissions. These figures come from the EPA projections document from April 2010, see note 3 above, which themselves didn't sum exactly due to rounding. The EPA's provisional figures for 2009, published on 22 October 2010 contain a revision of the 2008 gross figure, upwards from 67.4 to 67.7. It's a minor difference and I've stuck with the older figure for ease of comparison.

⁹ PfG doesn't specify gross or net, but the Carbon Budget of 11/12/09 specified PfG referred to gross.

¹⁰ This figure for sinks in 2020 comes from the EPA projections. See note 3 above.

¹¹ See section 6.(2)(c)(1) of the Climate Change Bill 2010 (Number 61 of 2010):

<http://www.oireachtas.ie/viewdoc.asp?fn=/documents/bills28/bills/2010/6110/B6110D.pdf>

¹² This is very close to the 48Mt the 2007 NCCS estimated as Ireland's share of a 30% EU 2020 target.