

Briefing: Scottish Climate Change Bill (1) – Jan 2009

Target of ‘at least 80% reduction in greenhouse gas emissions by 2050’: critical.

Introduction

Since the industrial revolution the global average temperature has increased by some 0.75°C, a change that is already having significant impacts on some of the world’s poorest people and wildlife. Due to the time lag between emissions and temperature change there is at least another 0.6°C rise to occur. To avoid the worst impacts of catastrophic climate change it will be necessary to stabilise global greenhouse gas emissions at below 450ppm¹ (CO₂ equivalent) and probably nearer 400ppm² aiming to keep the final temperature rise below 2°C.

Globally this means an emission cut of 50% from 1990 baselines and for industrialised countries like Scotland at least an 80% cut in greenhouse gas emissions by 2050.³

An 80% reduction in emissions is critical to stand even a 50% chance of staying below a 2°C warming above pre-industrial levels.

The significance of 2°C

The International Panel on Climate Change (IPCC) has concluded that at a warming of just over 2°C over pre-industrial levels, some 20-30% of species face a high risk of extinction. If the rise in temperature ranges between 2-3°C, an additional 1-2 billion people will face increased water scarcity and many millions face increased hunger, displacement by sea level rise and extreme weather events. If the temperature rises above 2°C we face risks of crossing severe tipping points and triggering feedbacks that will accelerate climate change further, such as the collapse of the Greenland ice sheet and die back of the Amazon rainforest.

The urgency

Current global greenhouse gas emissions are already at 430ppm and are increasing at approximately 2% per year. There is an ever narrowing window in which to take action. Any delay will make the challenge harder, more expensive and the likelihood of passing 2°C even greater.

There is clear evidence of the need for immediate action to reduce emissions. In the Arctic last summer there was such a significant acceleration in the melting of sea ice that scientists are now predicting that the Arctic may be free of all summer ice by as early as 2030, almost 100 years ahead of previous IPCC projections.

¹ ppm = parts per million in the atmosphere

² Meinhausen 2006, see also the Stern Review and IPCC Summary for Policy Makers 2007

³ International Panel on Climate Change Reports 2007

The Scottish Climate Change Bill

In 2007, the SNP manifesto set out a commitment to deliver a Scottish Climate Change Bill to establish a statutory framework for an 80% cut in emissions by 2050 and mandatory annual reduction targets of 3%. The draft Scottish Climate Change Bill proposes a long term target of at least 80% reductions in greenhouse gas emissions by 2050. This commitment would meet the absolute minimum necessary reductions as set out in the science and internationally agreed through the IPCC processes. WWF work⁴ has demonstrated this is possible in the UK without nuclear, environmental damage and including aviation and shipping, Scottish Government work has confirmed this in Scotland alone.

It is critical that the statutory framework created by the Scottish Climate Change Bill establishes at least an 80% reduction target by 2050⁵ for all greenhouse gas emissions.

Statutory annual reductions targets of at least 3% year on year are needed to ensure that the 80% reduction goal is achieved. There is more on annual targets in **WWF Climate Change Bill Briefing (2)**.

The targets must include emissions from all sectors. Excluding any, like aviation or shipping (which will not be in from the start according to current proposals), means some emissions will not be counted, some sectors will not contribute a fair share to reduction targets and others will have to do more. Calculations (based on current growth trends) of emissions from the aviation industry indicate that if aviation emissions are excluded from the targets and legislation, the total reduction reached by 2050 would be less than 70% rather than 80% of total emissions and therefore well below the reductions needed. For more on international aviation and shipping emissions – see **WWF Climate Change Bill Briefing (3)**.

The UK Act

Until recently⁶, the UK Government was committed to a Climate Change Bill that set a target of a 60% reduction of carbon dioxide emissions by 2050. This is much weaker than the 80% commitment from the Scottish Government. Critically, it would not deliver the required reductions as the target is too low and it does not address all greenhouse gas emissions. However, in his keynote speech at the Labour Party Conference in September 2008, Prime Minister Gordon Brown asked Government's advisors on the Committee on Climate Change to report to him early on their advice regarding targets.

Their advice was due in December 2008, but in a letter to the Prime Minister in early October the Chair of the Committee, Lord Turner advised on behalf of the Committee that: the UK's target should be 80% by 2050, it should account for all greenhouse gas emissions and that emissions from international aviation and shipping should be addressed.⁷ In light of this advice, UK Government amended the Bill and the UK Act now addresses these points. Although it does not include aviation and shipping emissions in targets from the outset, but has a provision to take account of them in due course.

Draft Climate Change (Scotland) Bill: The Scottish Climate Change Bill (as introduced) would legislate for **at least an 80% reduction in all greenhouse gas emissions**. This is welcome and WWF hopes all MSPs will ensure this target remains strong in the final Act passed by the Scottish Parliament.

Tackling Climate Change. As a nation Scotland could lead the way.

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⁴ UK 80% Challenge: Delivering a low-carbon UK IPPR/RSPB/WWF, 2008 http://assets.wwf.org.uk/downloads/80percent_report.pdf and Mitigating Against Climate Change in Scotland: Identification and Initial Assessment of Policy Options, Scottish Government 2008.

⁵ Based on 1990 baseline

⁶ October 2008