

A Joint Submission
From A Group of Concerned Citizens
to the
Oireachtas Joint Committee on
Environment, Culture and the Gaeltacht

on the

*Outline Heads of the Climate Action
and Low-Carbon Development Bill*

30 April 2013

Submission Intent and Signees

We, the undersigned, are making this submission to the Oireachtas Joint Committee on Environment, Culture and the Gaeltacht as a group of individual citizens, with a wide range of backgrounds and experience, who are concerned that the proposed Outline Heads of Bill are an inadequate basis for a robust legal framework that might effectively underpin accountability and progress in climate action and toward low-carbon development.

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Abbreviations Used in This Submission

EPA	Environmental Protection Agency
GHG	Greenhouse Gas
Heads	Outline Heads of the Climate Action and Low-Carbon Development Bill
NESC-Sec	NESC-Secretariat
NESC-Sec Report	NESC-Secretariat Final Report Dec 2012: “Ireland and the Climate Change Challenge, Connecting ‘How Much’ to ‘How To’”

Executive Summary

A meaningful Climate Action and Low-Carbon Development Bill should reflect its stated aims by specifying a quantitative, cumulative, national, greenhouse gas *carbon budget*. This is a series of annual emissions targets on an emissions trajectory consistent with climate science and equity of development. The overwhelming scientific evidence is clear: the time for vague, aspirational words is long past; only an unprecedented, society-wide mobilisation can now meet the scale of the climate change challenge that must now be faced. Ireland has the people, the need, the ability, and a clear moral responsibility to take a leading role in addressing this challenge.

Under the Copenhagen Accord Ireland has already committed to play its part in achieving the goal of limiting average global warming to a *maximum* increase of 2°C over pre-industrial levels in accordance with the science and respecting equity of global development (UNFCCC, 2009:Clause 1). The 2°C limit is primarily a politically-agreed, very approximate 'guardrail' indicating the beginning of dangerous climate change, although damage is already occurring. In reality the current rate of emissions is on a trajectory very likely to lead to catastrophic global warming of 4° to 7°C (Betts et al, 2011;). Ireland needs to acknowledge this danger and act in accordance by committing to an emissions path based on current and past emissions that will assist in achieving an agreed carbon budget to limit warming as much as possible.

As Ireland has the second highest carbon emissions per capita in the EU, far above the average, policy-makers have an increased responsibility to act now for the common good of all, including those not yet born. Much greater percentage decreases in emissions are needed than are currently planned, indeed they emissions are planned to exceed the binding limits by 2016.

There are great benefits in resilience to be gained by Ireland if the climate challenge is taken seriously: energy independence, employment opportunity and community solidarity could increase markedly given the right mix of policies, all of which could be heavily funded by carbon revenues.

At present the Outline Heads fail to acknowledge the Copenhagen Accord's objectives and do not declare a carbon budget in line with the 2°C commitment. Both 'top-down' targets, and investment in 'bottom-up' action, are required but neither are given substance legally in the Heads of Bill or quantitatively in the NESC-Report.

A carbon budget with strong annual targets exclusive of offsets used to purchase carbon credits is the essential basis against which to judge any progress toward a "low carbon" society. Lacking any mention of a defined carbon budget (or the need to define one) the Heads of Bill provide climate legislation that is not merely ineffective but reckless and destructive, as it further delays meaningful action and escalates the difficulty of our collective future challenge. It is also profoundly unjust as gains this generation has benefited from are transferring costs and increased risks to future generations.

As written, every one of the Outline Heads is ambiguously phrased, and so easily vulnerable to potential cynical interpretation as to be effectively meaningless. Even assuming an honest political intention, as Ireland's share in a global effort to constrain global warming to 2°C, the bill is largely irrelevant and inadequate in the form currently proposed.

Climate science has established that the equilibrium temperature resulting from increased greenhouse gas concentrations in the atmosphere is directly related to total global *cumulative* emissions. Every additional molecule of carbon dioxide and other green house gases emitted now add to global warming causing future climate change. It is our emissions choices now that will determine the risks for future generations including our own children, meaning action to limit this problem must not be delayed. Therefore only a carbon budget approach can frame climate action and low-carbon development. Further, major reports and climate science state that, to have any realistic prospect of meeting the permissible global carbon budget, emissions must peak by 2015 and decline rapidly thereafter. Ireland is already mandated to reduce emissions over time but in fact the plan is to exceed the legally binding target by 2016.

A maximum national carbon budget, which is fixed and irrevocable (subject only to the developing scientific evidence, and action within the powers of the Oireachtas) is needed. This would be both commensurate with the threat and consistent with global and inter-generational justice. By specifying, in detail, how that national budget will be husbanded over time, the Bill would show that Ireland appreciates the full scale and nature of the challenge and is committed to playing its proper role in meeting it. Such a commitment to **‘climate honesty’** would enable Ireland to be a leader in international progress toward avoiding dangerous climate change and will provide a legally-defined basis for evidence-based policy – with significant long-term benefits for Ireland’s future security and economic sustainability.

Ireland’s climate law should have an overall carbon budget or else state the need to have one within a short timeframe. Ideally it should acknowledge that realistic national carbon accounting needs to include net embodied emissions of imports, minus exports, as well as domestic emissions. The Heads of Bill need to unambiguously state that a national plan describing a ‘safe’ emissions path of annual targets within a defined carbon budget is required. The Heads should also provide the legal framework that will underpin the baselines, monitoring, organisation and accountability required to achieve progress in line with this path and budget. A Science Advisory Body, independent of the policy focused Expert Advisory Body recommended by the Heads, and independent of government is critical to ensure that governments stay within a long-term carbon budget.

Climate action will be effective provided the savings from efficiency measures are ring-fenced to funding further carbon efficiency within a regulatory framework that prevents carbon leakage (allowing savings to be spent on goods and services that cause GHG emissions).

By taking climate change mitigation seriously our society will reap many local benefits – such as reduced fuel imports, cost savings from energy efficiency and energy conservation, eliminating ‘fuel poverty’, keeping scarce money in local circulation, generating new enterprises, innovation in green energy, and in deep building retrofits and resilience.

List of Recommendations

1. Make the Taoiseach Directly Responsible For Climate Action

As written, the Heads of Bill make the Minister of Environment, Communities and Local Government the key Minister. Climate change is a problem that needs to be addressed in a co-ordinated way by all-government policy and only the Taoiseach has the authority to ensure this level of co-ordination and compliance.

It is time that Government and government departments realised that climate change action needs to be at the centre of all policy and must deeply affect planning and policy in all departments, especially Finance, Transport and Agriculture that currently do not have a climate focus.

2. Make the Heads of Bill Unambiguous Throughout

Almost every clause of the Outline Heads is either vague, unenforceable or made meaningless by ambiguity. This is unhelpful and lax as the purpose of the legislation is to render imperatives mandatory, and where the norm for justiciability is precision. A well-regarded definition of law is HLA Hart's in *The Concept of Law*: a "system of rules" (Hart, 1994). In this context, meaningful law should be mandatory, specific and have sanctions. As proposed, this legislation clearly falls short of these objectives. If the intention is to underpin accountability and transparency – in following a 'safe' emissions path as Ireland's share in the global effort to constrain global warming to as far below 2°C as possible – then the Heads as they stand are clearly a failure.

We recommend that every clause of the law be improved so as to be legally unambiguous to ensure climate action actually takes place urgently and quantifiably. Otherwise the law is being brought into disrepute.

3. A Defined Carbon Budget is Fundamental to Climate Action

The maximum, global, carbon budget to limit global warming to achieve a high probability of constraining warming to less than 2°C is about 500 GtCO₂ (a long-term budget that is likely to be exhausted within fifteen years). Ireland's climate bill needs to have an evidence- and equity-based carbon budget set as Ireland's

due share of this global budget, otherwise the proposed bill's aim of achieving a "low carbon future" is meaningless because it does not set out the overall limit on cumulative emissions that Ireland is committing to use. A 'safe' emissions path within the carbon budget needs to be defined. This means that decreasing, annual all-economy emissions targets –that sum to the long-term carbon budget – along a planned 'safe' "emissions pathway" are required to achieve effective climate action.

To satisfy Ireland's stated commitment to the Copenhagen Accord 2°C limit and to make an honest statement of intent, the climate Bill needs to state what portion of the available global carbon budget Ireland intends to lay claim to for its use by 2050, and explain clearly — for ourselves and for the global human community — our basis and rationale for this claim.

4. Carbon Accounting on a Consumption Basis Is Needed

Currently, carbon accounting reflects only domestic emissions failing to capture Ireland's emissions due to aviation, shipping and emissions 'embodied' in imports of goods and services. Realistic national carbon accounting needs to include net embodied emissions of imports minus exports as well as domestic emissions.

This absolute emissions value, reflecting actual consumption, including imported goods and services, is essential to describing Ireland's emissions responsibility correctly, to underpin climate action and a low carbon future.

5. The Heads Must Reflect The Need for Urgent Climate Mitigation

Emission path science shows that climate action that would guarantee the 2°C limit requires urgent demand and consumption reduction, beginning immediately and followed by rapid energy-supply decarbonisation. Unless these actions are taken there will be no emissions left in the carbon budget for the incremental technical innovation and organisational learning proposed by the NESC-Sec report. The carbon budget is not what is feasible politically it is what *must* be achieved – the atmosphere cannot be negotiated with, it will simply respond according to the emissions it receives. This basic point seems to be continually overlooked but policy now has to catch up with reality before it cannot.

Climate science and environmental economics provide strong evidence that urgent mitigation is needed now and will be far less costly if begun as soon as possible. Ireland needs to play its part in undertaking the necessary societally challenging action needed now to address climate change.

6. An Overall Emissions Target Should Omit Any Use of Offsets

The use of offsets allows carbon pollution from those failing to meet targets to be paid for by taxpayers. This is economically, and environmentally irresponsible.

All targets can be exceeded if offsets can be paid, weakening any national resolve and reducing effective action toward a low carbon economy. A commitment to ‘climate honesty’ would ensure that policy-makers accept that offsets and

7. Annual Sectoral Targets Are Required Within Planned Overall Targets

Top-down overall targets are critical to indicate the progress that must be made by bottom-up policies to avoid dangerous warming. If a sector’s emissions is planned to increase then that can only occur within the planned emission path and carbon budget, so that overall ‘burden sharing’ decreases emissions. Any increase in agricultural emissions, as is currently planned to 2020 and beyond, can only be allowed if other sectors (transport and buildings for example) can reduce emissions equal to the amount of increase in the other sector. The EPA have stated that: “Sectoral mitigation goals need to be established to ensure that sectors mainstream climate actions into strategic development plans and goals” (EPA, 2012:1), yet this need for sectoral targets, advised by the State’s scientific advisors, is not addressed by the NESC-Sec Report.

Investment in increased emissions must be balanced by investment that achieves a similar or greater decrease in emissions. In the very near term, total emissions must peak and then decrease radically.

8. The Urgent Need for Behavioural Change Has To Be Addressed

The NESC-Sec Report states as part of its vision the aim of developing a participatory society and a commitment to social justice. However, neither the NESC-Sec report nor the Heads detail how this vision is to be achieved.

We believe that by stating in the Heads the urgent, deep and society-wide climate action that is immediately required, the public will be alerted to what is actually needed to address the climate challenge

9. Scientific Advisory Should Be Independent From Policy and Government

The Heads propose a policy advisory group, an “Expert Advisory Group”. It is at least equally important that an entirely independent, internationally peer-reviewed, Science Expert Advisory Body is given responsibility for determining a safe emissions path for Ireland within Ireland’s carbon budget for 2°C – the fraction of the global carbon budget for 2°C that Ireland’s policy-makers determine Ireland is entitled to use up by 2050.

To guarantee effective climate action a highly independent Science Advisory Body is a requirement without which policy preferences are likely to cloud reality.

10. Political Delay is the Greatest Impediment to Effective Climate Action

Neither the NESC-Sec Report nor the Heads address the political inaction that has been the major cause of delayed climate progress, including misleading carbon accounting by nations, over the past fifteen years.

Again, by stating in the Heads the need for action, the public might begin to appreciate what is necessary and would better support politicians in making the difficult decisions that are now urgently required.

Main Body – The Challenge of Climate Change

A Challenge Avoided by the Heads and NESC-Sec Report

We begin the main body of this submission with basic facts regarding the climate change challenge because we believe that both the NESC-Secretariat Report and the Heads of Bill fail to address the nature of the challenge, and the part that Ireland has agreed to play in meeting the challenge. NESC-Sec and the Heads ignore the implacable physical, and thus non-negotiable, facts underlying the urgent need for climate action: that the cumulative, global emissions or carbon budget remaining, to constrain warming below 2°C, is rapidly being consumed. This is happening so quickly that urgent and large-scale reductions in consumption and changes to renewable energy supplies are now needed to avoid catastrophic outcomes.

It is critical to understand that global warming is largely irreversible on human timescales given the amount of emissions committed to date *but* also that it is 'stoppable' in that if emissions can be severely limited from now on by strong, co-ordinated, global human action then the temperature at which warming stops will also be limited (Matthews and Solomon, 2013). However, at present, humanity continues on a highly dangerous emissions path passing through one-way 'trapdoors' to higher and higher eventual temperatures (Stocker, 2013). Recent science strongly indicates that the recent apparent pause in temperature increase is entirely offset by increased solar heat absorption by the oceans, that will in time release it (Magdalena et al., 2013; Guemas et al., 2013). In addition, short term effects, increased volcanism and increased aerosol emissions from industry in developing countries, have delayed the eventual increase that will inevitably ensue as a result of the increasing atmospheric concentrations of greenhouse gas emissions (Hansen, 2013).

In just a hundred years, the average global temperature has increased from near the lowest in the last 12,000 years to near the highest (Marcott et al., 2013) and now they are accelerating at a rate previously unknown in human history or in known geologic history. Human burning of fossil fuels has launched the Earth's

average surface temperature toward an increase of 6°C by 2100, a rate of change only associated with mass extinction events (Benton and Twitchett, 2003). We have left the launch-pad and only single-minded, concerted action can avoid the high probability of a global climate disaster that will also destroy our own economy within the coming decades (see Figure 1). Effective action can be achieved only if we acknowledge the high risks that are strongly evidenced by climate science (Hansen, 2013).

By taking a highly insular and short-term view throughout, the NESC-Sec Report fails to identify the very large external and long-term climate damage risks to Ireland, especially for food supplies and security. Furthermore, by avoiding statement of a carbon budget, and by stating ambiguous and vague objectives, both the NESC-Sec Report and the Heads effectively abdicate Ireland's responsibility for quantifying its commitment to playing its part in avoiding dangerous climate change.

Global warming is being caused by emissions of greenhouse gases into the atmosphere, caused by human activities, predominantly by the burning of fossil fuels. Climate science has established that the equilibrium temperature resulting from increased greenhouse gas concentrations in the atmosphere is directly related to the total cumulative global emissions. This cumulative total, minus all emissions to date, gives the remaining global carbon budget for 2°C. This budget is not only being depleted far more rapidly than is consistent with a managed, equitable, sharing of this finite global resource, but even the *rate* of depletion is still increasing on a global basis.

Therefore, only a carbon budget approach can honestly frame climate action and low-carbon development. Unfortunately, this essential requirement is not acknowledged by the NESC-Sec Report nor by the Heads. We recommend that the Committee urge that these inadequacies are corrected.

Earth Surface Temperature Over 22,000 Years

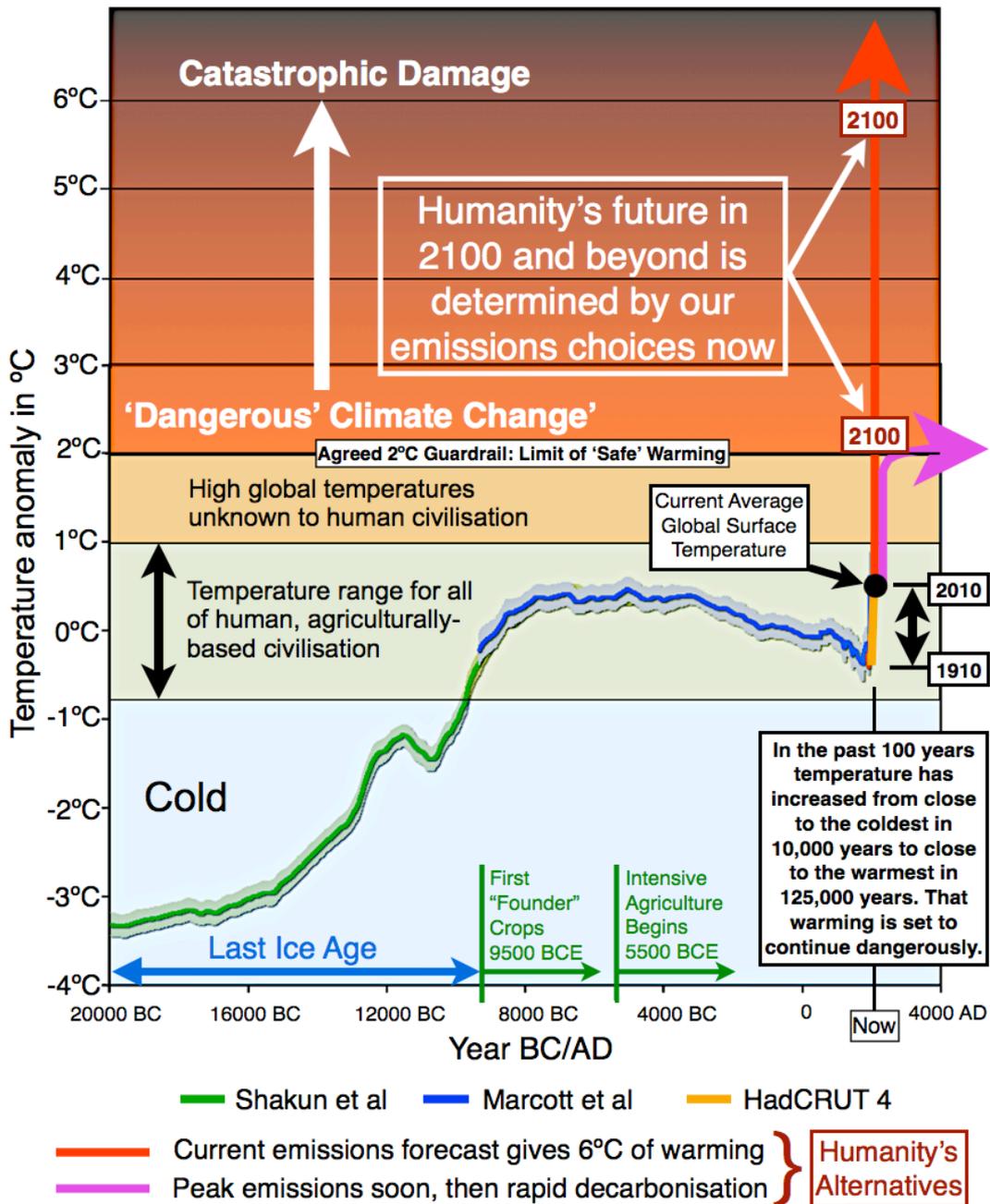


Figure 1. Average global surface temperatures from 20,000 years ago to present and forecast: past reconstructions, compared to pre industrial, and forecast warming from now on. Two emissions paths are illustrated – the current highly dangerous one and a safer one. Redrawn by Paul Price, after Jos Hagelaars' combined presentation of temperature anomaly reconstructions by Marcott et al. (2013), Shakun et al. (2012), observed HadCRUT4 instrumental recent temperature record, and the IPCC A1B projection (currently being tracked by current observed emissions). Hagelaars' graphic has been additionally annotated with: temperature bands and markers for human history; choosing the low emissions alternative leads to a lower temperature; the current emissions track toward potentially catastrophic temperatures by 2100 warming constraint dates above are from Stocker (2012). See further discussion at: <http://www.climie.blogspot.ie/2013/04/our-choice-rocket-to-warming.html> See also discussion at <http://ourchangingclimate.wordpress.com/2013/03/19/the-two-epochs-of-marcott/?replytocom=18266>

Figure 1. Temperature versus time over the past 22,000 years including the recent instrumental record (HadCRUT 4) and two possible emissions scenarios defined by humanity's emissions choices being made now. Continuing on our present path commits us to catastrophic warming, whereas urgent mitigation might constrain warming to safer though still probably dangerous levels. Any and all emissions add to probable warming.

NESC-Sec Report and Heads of Bill: Ignoring the Science

The climate change challenge is a well understood problem with a solution that is simple to describe – to avoid a high risk of dangerous global warming it is required that global greenhouse gas emissions to decline to near-zero before the remaining carbon budget is exhausted – but this objective will be very difficult for humanity to achieve. Over the past fifteen years, nations have consistently failed to constrain global emissions which continue to increase exponentially, currently averaging a 3% increase per year, equivalent to doubling emissions every 25 years.

As Latin (2012) details, in *Climate Change Policy Failures*, it is not the UNFCCC and Kyoto processes that are primarily to blame for inaction (as the NESC-Sec Report claims) it is nation states and vested interests, the actors in the processes, that have caused and continue to cause delay. In a recent speech, Nicholas Stern, author of the Stern Report (2006) states that the biggest obstacle to investment in climate change is “government-induced policy risk” (Stern, 2013:@33min00sec). A much greater effort is needed to motivate and inform the public of the rapidly increasing risk of dangerous climate change so that politicians are supported in making the difficult decisions now required. As they stand the proposed law is ignoring the science and perpetuating ineffective climate policy.

If climate legislation focused on providing a framework that honestly stated the scientific monitoring and framework that is actually needed to address the challenge it would be an important step toward ‘climate honesty’ in our society.

The NESC-Sec Report and the Heads do not acknowledge the key information that mitigation is urgently required and so do not provide the key evidence-based guidance required for climate action or low carbon development. Humanity’s collective task is to achieve whatever is necessary to prevent extremely dangerous climate change. This may well mean challenging what is currently thought to be politically feasible because the fact is that 4°C or above is not feasible for a functioning global society (Anderson and Bows. 2011). Delay will only make the challenge much harder; indeed, delay has already made the required changes

more difficult than they might have been. It is therefore vital that the required changes, however unfeasible they might currently appear, are actually achieved, otherwise in the very near future, the task will become impossible.

This critical need for urgent mitigation is first evidenced, and then ignored, by the NESC-Sec Report. On page 1 the Report states:

In 2012, the World Bank commissioned a study from the Potsdam Institute to examine the potential impact of 4°C warming in the current century. While uncertainties remain, the scenarios associated with 4°C warming are referred to as ‘devastating’ by the President of the World Bank. The report suggests that a 4°C world would be one of unprecedented heat waves, severe drought, and major floods in many regions, with serious impacts on ecosystems and associated services. The report concludes that there is no certainty that adaptation to a 4°C world is possible. It is important to be aware that although the worst effects of climate change are likely to arise elsewhere, Ireland will definitely not be immune from damaging changes in weather conditions and sea levels.

NESC-Sec Report p.2

If the clear scientific advice, accepted in the above paragraph by NESC-Sec, is that there is “no certainty that adaptation to a 4°C world is possible” then the precautionary principle (EC, 2000) must apply and urgent and immediate mitigation is the only logical requirement to avoid the potential global catastrophe. Instead of stating this urgency, NESC-Sec go on to conclude (p.2) that both adaptation and mitigation are required, seemingly without realising that unless mitigation is successful in constraining global warming – requiring a level of global coordination and commitment never before achieved – then no adaptation will be possible. (Ethically, it is adaptation to climate change in the developing world that needs to be fully funded by the developing countries that are most responsible for climate change.) Here and throughout the NESC-Sec Report and the Heads there is a tacit implication that Ireland does not have to peak its own emissions and does

not have to decarbonise urgently thereafter. This is both scientifically dubious and ethically unjustifiable.

As further evidence of this, we would like to bring to the Committee's attention the Royal Society's special themed edition on '*Four Degrees and Beyond: the potential for a global temperature increase of four degrees and its implications*' (New et al., 2011) in its prestigious journal *Philosophical Transactions*. In this series of peer-reviewed papers research strongly shows that climate change due to global warming is likely to occur so quickly that no adaptation will be possible unless very strong mitigation measures are undertaken now.

The paper in this edition by Anderson and Bows (2011) provides strong scientific evidence that the approach favoured by NESC-Sec and the Heads of Bill is entirely lacking in any evidence basis and will not address the climate challenge. They state that "the impacts associated with 2°C have been revised upwards, sufficiently so that 2°C now more appropriately represents the threshold between 'dangerous' and 'extremely dangerous' climate change." Further they state that:

Put bluntly, while the rhetoric of policy is to reduce emissions in line with avoiding dangerous climate change, most policy advice is to accept a high probability of extremely dangerous climate change rather than propose radical and immediate emission reductions. [emphasis added]

Anderson and Bows, 2011:41-42

They conclude their paper by saying

*The science of climate change allied with emission pathways for Annex 1 and non-Annex 1 nations suggests a profound departure in the scale and scope of the mitigation and adaptation challenge from that detailed in many other analyses, particularly those directly informing policy. However, **this paper is not intended as a message of futility, but rather a bare and perhaps brutal assessment of where our 'rose-tinted' and well intentioned (though ultimately ineffective) approach to climate change***

has brought us. Real hope and opportunity, if it is to arise at all, will do so from a raw and dispassionate assessment of the scale of the challenge faced by the global community.

[emphasis added]

Anderson and Bows, 2011:41-42

Coming from a peer-reviewed paper this is a sobering conclusion for policy makers and we urge the Committee to observe that the NESC-Sec and the Heads of Bill are still following this “‘rose-tinted’ and well intentioned (though ultimately ineffective) approach to climate change”. For example, Head 4, Sub-Head 2, states that: “Ministers shall [three clauses] aim to ensure the achievement of the transition objective set out in subhead (1) in the earliest, cost-effective manner, and no later than the end of the year 2050”. The scientific assessment given by Anderson and Bows indicates that 2050 is likely to be twenty years too late and that cost-effectiveness is not relevant to the emissions challenge that climate change presents. It is emissions choices made now that most affect the future.

Given that the likely potential cost of exhausting the carbon budget for 4°C (the likely outcome on the current emissions trajectory) is the loss of entire global human economy and civilization as we know it, then strong and urgent mitigation is the only course that countries, including Ireland, can logically follow (Van den Bergh, 2004). Betts et al (2011) conclude that catastrophic warming of 4°C could be exceeded by 2060 given the current emissions trajectory. Meanwhile, many economists and policy analysts continue to engage in complex cost-benefit calculations while overlooking the basic fact that human civilisation is at risk and Ireland is responsible for its part in acting urgently to decrease this probability. The NESC-Sec Report recommendations and the Heads also ignore the increasing likelihood of this outcome.

Arguments that Irish emissions are trivial on a global scale are also without merit – Ireland’s population emits the equivalent carbon emissions as about ten times as many people in the developing world. Morally, Ireland has to act not only in the interests of its own security but also in the interests of those whom climate change will affect most deeply: those in poorer countries and future generations.

By concentrating only on local effects and imminent compliance requirements, the Report manages to ignore the very real external and long-term risks to Ireland's future security from the likely, future, climate damage effects on imported food supplies, imported energy and on the global economy. **As an open economy, importing 90% of its energy, Ireland is utterly exposed to volatility in global economy arising from climate disruption.**

On the one hand the NESC Report, states:

The science is unambiguously pointing towards a challenge of enormous proportions. It is also pointing to the need for immediate and sustained action. Stabilising the level of GHG concentrations in the atmosphere requires that annual emissions peak and then decline. The later the peak in emissions occurs, the higher the rate of decline in emissions after the peak or the lower (or even negative) are the emissions required in the long run in order to achieve any given temperature target with the same probability. Recent analysis, commissioned by the EU's Climate-Change Science Experts [Fee et al., 2010], suggests that to reach 2 degree target emissions need to peak by 2015.

NESC-Sec Report p.2

But instead, the Report later accepts that due to an apparently non-negotiable political demand for economic growth: Ireland's emissions will rise at least until 2020 despite breaching a the EU emissions target by 2016; no intended peak date for national emissions is seemingly needed; no responsibility for absolute emissions from consumption needs be acknowledged; and no quantification needs be given to justify its claim that "Irish people have every reason to be confident that Ireland can be, and will be, a carbon-neutral economy by 2050".

Here, again, the NESC-Sec Report states the scientific analysis that Ireland like all other countries must peak emissions soon and decarbonize rapidly, and then it ignores the advice in its own report's recommendations. Given these contradictions, how can the NESC-Sec Report then say that this advice is evidence-based?

NESC-Sec Report and Heads: Ignoring the Economics

The NESC-Secretariat's first guiding principle for climate action in the Report is "Economic prosperity, recovery and social development" (p.6), to be based on economic growth that is ideally 'green growth' depending on sustainable energy and resources. The building blocks to this transition to a 'green' economy are renewable energy, energy efficiency, sustainable transport, carbon-neutral agriculture and efficient resource management. Therefore, the basis of the Report's argument for a transition to a carbon neutral economy is carbon-efficient and resource-efficient management through gradual experimentation.

Although this may sound reasonable to economists, this is not evidence-based climate policy. It ignores critical global effects of efficiency that undermine climate action, especially in that efficiency savings equate to cost saving, which in the absence of pricing mechanisms such as carbon taxes, can easily be spent on more emissions.

These rebound effects may be limited locally but globally there is strong evidence indicating that there is no net gain in carbon efficiency as a result of increased "efficiency". Globally, the amount of emissions per unit GDP has only varied within a 5% band (World Bank and CDIAC figures) since 1973. On a global basis GDP is just as 'dirty' as it was forty years ago (see Figure 2). Unless *all* efficiency cost savings are to be ring-fenced to further carbon-emissions reduction measures then it is very likely that emissions will continue to rise globally (the only scale that matters to climate change).

Let us be clear: energy efficiency is a very good objective but it needs to be accompanied by energy conservation measures and, most importantly, energy decarbonisation to have any global effect in reducing the rate at which carbon emissions are added to the atmosphere. An urgent and rapid policy of reducing fossil fuel usage is the most necessary policy.

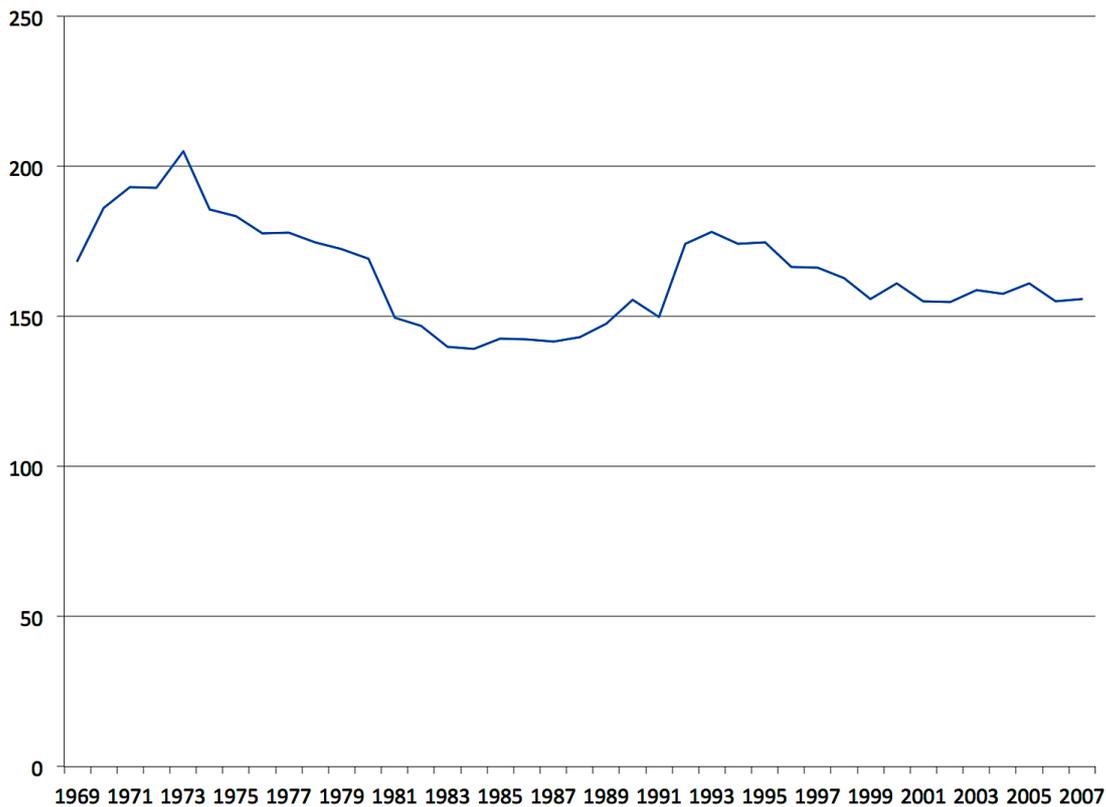


Figure 2. Historic carbon intensity ratio of tCO₂ to GDP (in millions of 2005 dollars) from 1969 to 2008. Carbon intensity has been largely unchanged since 1978 (a variation of just plus or minus 5% over 30 years). Data from World Bank and CDIAC. There has been no global carbon intensity improvement due to efficiency over this time.

This data in Figure 2 shows that, on a global scale, technological innovation and energy efficient design have not lead to lower carbon emissions over the past decades. Other policies such as taxation or regulation are required to have any significant effect (Herring and Roy, 2006:194) so that real climate action can be achieved.

Most critically of all, the NESC-Sec Report, as with the analyses of many policy-analysts and economists, ignores the overriding imperative for climate action: the likely climate damage cost is far more than the carbon mitigation cost (Van den Bergh, 2004). Recent research published in Nature has shown that the political choices that delay mitigation have the largest effect on the cost–risk distribution (Rogelj, 2013).

The Taoiseach and Cabinet need to agree a ‘burden sharing’ structure for all Sectors. Each Sector has to be allocated a specific ‘carbon budget’, with annual and longer-term targets. If agriculture and transport increase emissions

or don't achieve their required amount of reduction, this will make reducing emissions extremely difficult for other sectors to compensate for this increase.

The Residential and Commercial sectors would then have to make a much greater reduction effort to compensate for the non compliant sectors, or else the ETS and electricity generation sector needs to supply power for transport (EVs) and heat buildings (heat pumps). These are economic and socio-economic issues that cannot be left to a single Minister for Environment to manage responsibly.

The Bill should restrict further governments from permission to breach EU mandatory targets, where the taxpayer is left to purchase Carbon Credits or pay hefty fines (unless all our citizens are fully informed of the consequences well in advance).

The Bill should make it very clear that purchasing carbon credits is unacceptable and is not acting in citizens' or our children's best longer-term interests. It is just kicking our obligations down the road for our children to be left to carry the ever increasing burden, and allowing emissions into the atmosphere that our remaining carbon budget cannot afford.

Finally, regarding policy options, a false choice is made by the NESC-Sec Report in prioritising 'bottom-up', 'how to' incremental innovation and learning, while downgrading 'top-down, how much' targets for carbon emission reduction. This thinking is carried through in the Heads, which provide only a vague, outline plans. Speaking at the Met Office earlier this month, John Ashton, a former, senior UK government advisor on Climate Change said:

The choice between bottom up and top down is a false choice. Bottom up activity is taking place all the time and will continue. The real choice is between bundling together what we would do anyway and pretending it will solve the problem, or imposing in addition an action forcing mechanism, in the form of legally binding targets in our Climate Change Act, to ensure that the

pace on the ground matches the ambition we need. We need top down as well as bottom up, not instead of it.

Ashton, 2013:6

It is very clear that without strong targets the wholesale changes now needed to reduce consumption and transform the energy system will not be achieved. Grabbing at the low hanging fruit of 'energy efficiency' and waiting for technical innovation to occur will not achieve the necessary carbon emissions reductions without 'top-down', legally binding targets to drive innovation and encourage real organisational and personal behavioural change.

Behavioural change can be encouraged at scale immediately and in Ireland existing technology can replace fossil fuel energy. However, radical climate change in the coming decades will only be limited if radical measures are urgently adopted to decrease carbon emissions thereby limiting the amount of global warming that is causing climate change.

Co-ordinated top-down targets for all sectors of the economy are fundamental to driving these changes providing the waymarkers, directions, and speed limits for the path that Ireland and the world has to take.

Heads of Bill – Ambiguities Undermine Climate Action

The legislative quality of the Heads is poor, it reads as if it is a vague policy document rather than law. The following are a just a few examples of the many poorly phrased clauses in the Outline Heads.

- The word “may” is used repeatedly (about 25 times) through the document immediately indicating that “or may not” is an allowed alternative interpretation. For example:

Head 5 (3.) The Minister may, after the submission to the Government of a report under Head 9 consequent upon a periodic review, make, and submit to the Government, a national roadmap revising or replacing an existing national roadmap.

The word “may” here indicates that The Minister can in fact choose not to submit, revise or replace a national roadmap.

- The words “having regard to” are used in several clauses yet, as has been found in planning law, these words are entirely without legal force. For example:

Head 5 (11a) 11. The Minister and the Government shall take account of the following matters when performing functions under this Head:

(a) the need to take a long-term view, but not too long a term, having regard to:

[followed by three sub-clauses.]

If the words “having regard to” are indeed legally without force then there is little if any substantive commitment to the sub-clauses that follow.

- The definite sounding clauses are undermined by weak language or definitions. For example:

Head 5 (2) The national roadmap referred to in subhead (1) shall, inter alia, (a) articulate a national vision for the transition to a low carbon, climate resilient and environmentally sustainable economy over the period to 2050.

Without quantitative definition what does this “vision” legally mean? The Heads offer no objective or tangible definition of what would qualify as a “low carbon, climate resilient and environmentally sustainable economy”.

Therefore the aspiration here is meaningless; possibly high-minded and perhaps well intentioned — but still entirely meaningless.

The Heads also contain language indicating that: economics must at all times take precedence over emissions reductions whenever there is a conflict between economic growth and emissions reductions. This is particularly clear in Head 5 (11).

To the contrary though, the entire logic of climate action is that there is an absolute global carbon budget for 2°C (and therefore an absolute State carbon budget) that limits the future emissions of the State, otherwise the State is asserting that, in the interests of some, at best ephemeral, economic growth it is permissible to contribute to dangerous climate change causing long term economic damage to the Earth that is likely to affect the future security of Ireland and the world. Allowing Ministers and future governments to avoid that responsibility for short- or even medium-term economic and political reasons is not acceptable because avoiding climate damage should, by definition, be the aim of a Climate Bill.

Even the proposed “Expert Advisory Body” is undermined by weak language in all of the clauses and is further undermined by the high potential for government interference both within the appointment and control of the Body’s activities set out in the Heads, and in the fact that most of the appointees to the Body are in some way paid by or indebted to the government. Without statutory guarantees of its independence, it is unlikely to discharge its proper and intended function of providing (to the Oireachtas and to the people) ongoing, expert judgement as to whether successive ministers and governments are discharging their legal and moral obligations to safeguard the long-term security and well-being of the nation.

Ireland’s people and government need high quality, independent advice to support difficult decision-making. We hope that the Committee can recommend policy that ensures that such advice will be available to future governments.

Conclusions

We believe that the Committee has an important role in recommending the direction of this legislation and hope that you will consider the following:

- The Heads do not outline a carbon budget (or the need to define one) for Ireland to 2050 for 2°C. Therefore the Heads are so vague and equivocal as to be effectively meaningless. It is hard to escape the impression that this high-sounding but ultimately vacuous construction is a matter of quite deliberate and intentional design. If so, the judgement of posterity will surely be harsh. Politicians and policy-makers have an opportunity now to set a new course for hope.
- Overall targets in line with the carbon budget limited emissions path are critical to setting policy-objectives. Policy may be ‘bottom up’ or ‘top down’, of one ideology or another, but regardless they must limit climate change.
- Sectoral targets must add up to no more than the overall target.
- The Heads are vague, ambiguous, and allow or even tacitly encourage, delays in action and are open to lax or cynical interpretation.
- Both the NESC-Sec report and the Heads entirely fail to engage in a commensurate way with the scientifically evidenced need to peak emissions now, first by rapid decreases in consumption (while ensuring that absolute poverty does not increase), and second, rapid transition to completely decarbonised energy sources to underpin long term, sustainable growth — which, by definition, is not growth of gross consumption but rather growth of societal welfare.
- A complete re-drafting of the proposed Climate Bill is required so that, in line with Ireland’s agreed intent in the Copenhagen Accord it complies with the scientific evidence regarding climate change and with development equity.

We strongly urge the Committee to make these recommendations for the common good of current and future citizens, and the biosphere that supports them, in Ireland and around the world.

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