

Submission by ESD Training to the Environment Committee on the heads of Bill (Climate Action and Low Carbon Development Bill).

Gavin Harte runs ESD Training his consultancy for Education in Sustainable Development. Through ESD Training he provides specialist skills in climate change awareness, energy efficiency training and sustainable development. Over the last 6 years ESD Training has developed a broad range of education and awareness workshop tools to build capacity within organisations through training, professional development and peer-to-peer learning.

Gavin has a wealth of experience in sustainability and environmental issues. He holds a master's degree in sustainable development and has nearly 20 years' experience developing green and sustainable business in Ireland. He was the founder of Ireland's first eco-village in Cloughjordan in County Tipperary.

In the past Gavin has worked as the national director of An Taisce, as a Corporate Responsibility Consultant with Business in the Community Ireland and as a TV presenter with RTE.

In 2010 ESD Training secured a funding partnership between the Environmental Protection Agency, Sustainable Energy Authority of Ireland and the Department of Environment, Community and Local Government to develop and deliver an awareness programme called [Climate for Change](#).

Climate for Change offers local authorities an education and awareness presentation and workshop on climate change and energy use. Climate for Change events targeted elected representatives, council staff, the general public, schools, local business and community networks through local authority outreach.

To date Climate for Change has delivered over 35 events in 17 local authorities to approximately 2000 attendees, generating 16 media articles and interviews from 2010 to 2012.

ESD Training specialises in communicating climate change in a friendly and accessible manner. The ESD Training toolkit provides a comprehensive range of learning methods built to enhance a stronger understanding of both issues across all sectors of Irish society.

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Executive summary:

1. Climate change happening now and it is accelerating.
2. Positive public engagement with climate change legislation is critical if citizens are ultimately going to embrace the changes required to build a low carbon future.
3. Unfortunately public understanding of climate change is superficial at best and is not adequate to foster the change in behaviour required to address climate change mitigation and adaptation.
4. Public understanding of climate change needs to be significantly strengthened if legislation and policy are to effectively engage the public on this challenging, complex and long-term problem.
5. There are significant barriers to societal support. Fostering change within the general public will require more than just raising awareness.
6. The National Low Carbon Roadmap must acknowledge and address the strong social influences that drive people's behavior and consumption choices.
7. Successfully shifting Irish society towards a low carbon future requires addressing consumption behavior while at the same time strengthening civic and political engagement on climate change across all sectors of society.
8. Changing habits and behaviors require a combination of bottom-up grassroots initiatives with top-down mandates.
9. A scientifically based target and budget approach to CO2 management and reduction is required.

Recommendations:

1. Genuine political leadership on climate change is required to influence the level of public action on the issue.
2. The Expert Advisory Body has a critically important role within the proposed legislation. The body must be;
 - a. Independent of government influence.
 - b. Sufficiently resourced to carry out its activities as well as its secretariat the EPA.
 - c. Free to publish its reports.
 - d. Equipped to address the civic and political engagement of all sectors with regard to effective mitigation and adaptation measures.
3. Legislation needs to ensure that Ministers and the Government will take the long-term view having regard to likely future commitments of the State.
4. Inline with the European Commissions "Roadmap for moving to a competitive low-carbon economy in 2050", legislation should include long-term targets for the reduction in greenhouse gas emissions by 2050.
5. In line with Expert Advisory Body serving period (not exceeding 5 years) the National Low Carbon Roadmap should also be submitted to government not less than once in every period of 5 years.
6. The National Low Carbon Roadmap should contain carbon budgets in line with longterm targets.
7. The National Climate Change Adaptation Framework requires secure budgetary allocations and funds for climate change adaptation activities both nationally and locally.

Climate change is happening now.

[The scientific conclusions](#) supporting climate change have been thoroughly examined, tested, and supported by so many independent observations and results, that their likelihood of being found to be wrong is now inconceivable. [Climate extremes](#) are already occurring much more frequently in the world we have warmed through our reliance on fossil fuels. When scientists measure the [type of carbon accumulating in the atmosphere](#), they observe more of the type of carbon that comes from burning fossil fuels.

[Since 1751 approximately 337 billion tons of carbon](#) have been released to the atmosphere from the consumption of fossil fuels and cement production. Humanity is now emitting around 31 billion tons of CO₂ into the atmosphere every year. According to the EPA [Ireland's total emissions](#) amounted to 57 million tonnes in 2011, ranking us [69th in the world](#). According to the CSO, Ireland's [greenhouse gas emissions on a per capita](#) basis were the second highest in the EU in 2009.

We are feeling climate change on the ground and it is accelerating!

Six years ago, the 4th report of the [Intergovernmental Panel on Climate Change](#) painted a gloomy picture of our planet's future. As climate scientists gather evidence for the next report, due in 2014, the journal [New Scientist](#) published seven research updates as to why things are now looking even grimmer

In September scientists from the [National Snow and Ice Data Center](#) said that Arctic sea ice has reached the lowest recorded extent since records began in 1979, a drop of at least 45%.

According to the monthly [report from Met Éireann](#) for March 2013, it was the coldest March on record for most weather stations. [Some recent studies](#) are now linking these extreme cold weather events in the U.S. and Europe to the rapid Arctic climate change mentioned above.

In July 2012 NASA satellites observed unprecedented [Greenland ice sheet](#) surface melt and by the 12th of July an estimated 97 percent of the ice sheet surface had thawed. In fact, combined Antarctica and [Greenland are now losing ice mass](#) three times faster than they were 20 years ago.

[Superstorm Sandy](#) wreaked havoc on parts of the U.S. East Coast killing 125 people in the United States and was blamed for about \$62 billion in damage and other losses.

[2012 saw persistent wet weather for the UK](#) resulting in total rainfall just 6.6 mm short of the 2000 record. In fact four of the top five wettest years in the UK have happened since 2000.

The human dimension and climate change.

As the government embarks on action to address climate change through legislation, it is important to understand the attitudes and behaviour of Irish citizens towards climate change and the [barriers to civic action](#) on the issue.

In a year of strange weather worldwide, [climate change reporting](#) by the world's media fell a further 2 percent in 2012. Global media coverage of climate change is now back to 2004 levels of coverage. [In Ireland](#) the total number of articles on climate change in Irish newspapers fell from 2,780 in 2009 to only 972 in 2012.

In October 2011 Eurobarometer published its [Climate Change](#) survey which found that the European public at large is more concerned about climate change than it was in 2009 – and that climate change remains a greater worry than the economic situation.

However in Ireland only 13% of citizens felt that climate change was the most serious global problem at the moment, second from the bottom of the EU 27. While 66% of Irish citizens felt they have taken personal action to tackle climate change recently. 13% answered, “don’t know” to this question. This implies that that a sizeable minority of Irish people may not make a link between climate change and their individual actions. Irish citizens were also asked whether or not they agreed with the idea of basing taxation more on people's energy use. While 25% “totally agreed” with such a proposal, 20% “did not know”.

[Recent research](#) suggests that public opinion regarding climate change is likely to remain divided as long as political elites continue to send out conflicting messages on this issue. The researchers conclude that any communication strategy to raise awareness about climate change must be coupled with a broader political strategy.

The scientific evidence for a budget approach to CO2 management.

[Scientists](#) have calculated that from 2000 and 2050 humanity should emit no more than 886 gigatons of carbon dioxide (GtCO₂) in to the atmosphere to stay below 2°C of global warming — anything more than that runs the risk of catastrophe for life on earth. In the last 10 years we have used 1/3 of that total budget leaving 565 GtCO₂ over the next 35 years. We only have to do the math.

The political problem with this calculation is that [humanity actually has access to 2,795 GtCO₂](#) of known fossil fuel reserves, five times the safe amount to burn.

If we burn that 565 Gt of carbon between now and 2050 science knows what the outcome will be. If we decide not to burn our fossil fuel reserves society need to think and act very differently. For this reason the legislation proposed must have science-based targets for CO₂ reduction because a law without targets, is like a football match without goal posts.