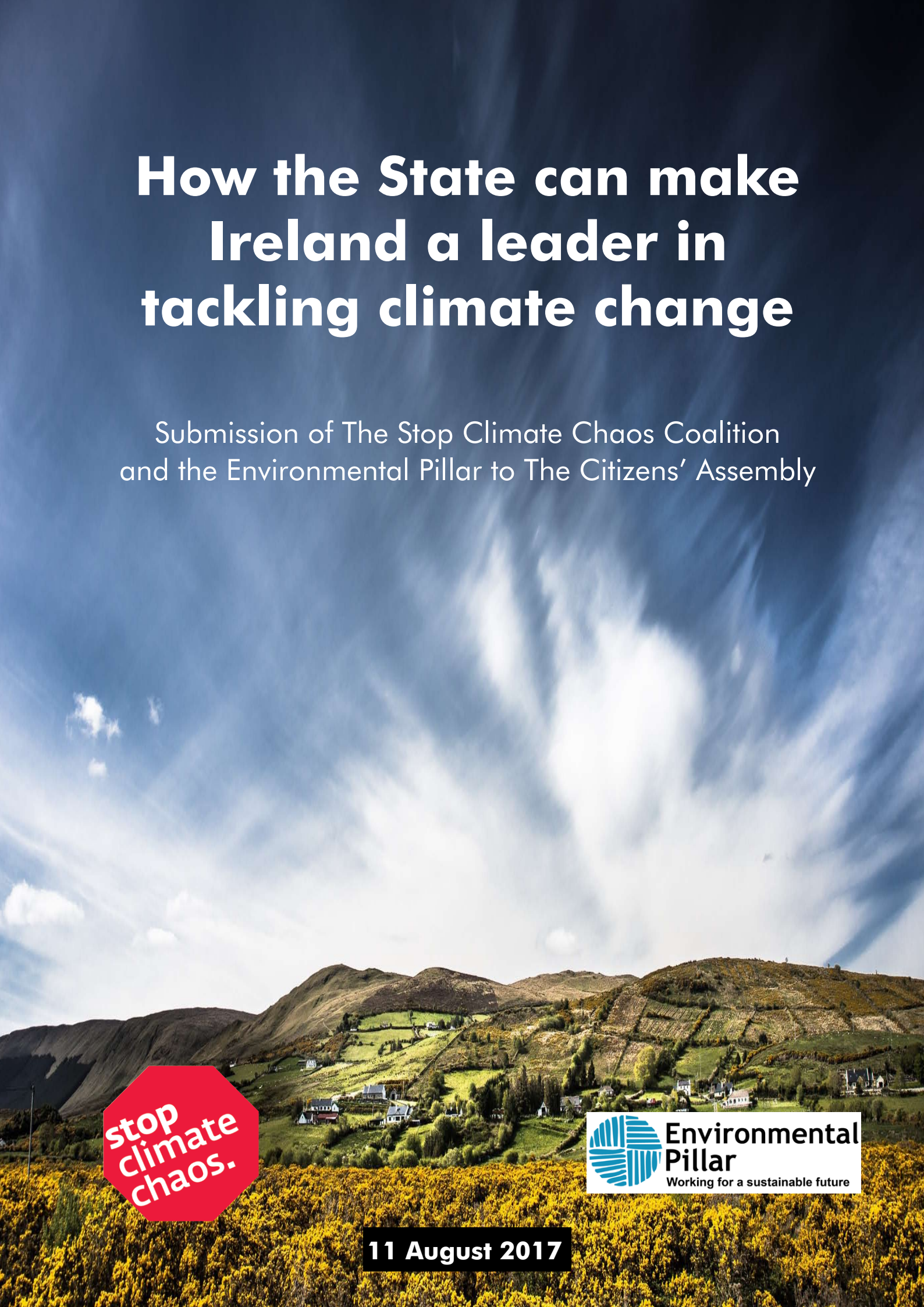
How the State can make Ireland a leader in tackling climate change

Submission of The Stop Climate Chaos Coalition and the Environmental Pillar to The Citizens' Assembly



11 August 2017

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INTRODUCTION

Stop Climate Chaos and the Environmental Pillar welcome the focus of the Citizens' Assembly on climate change given the urgent imperative for the State to take action in order to protect current and future generations, communities, livelihoods and the natural environment.

Stop Climate Chaos is the civil society coalition campaigning for Ireland to do its fair share to tackle climate change. Our 33 members include overseas aid and development, environmental, youth and faith-based organisations.[i] The Environmental Pillar is made up of 26 national independent environmental non-governmental organisations (NGOs) that work together to represent the views of the Irish environmental sector.[ii]

The Stop Climate Chaos Coalition was launched in 2007 based on a recognition by members that **the objectives which our organisations serve are under significant threat from the global advance of climate change**. With evidence that Ireland has an extremely high level of emissions per person and thus has been contributing disproportionately to the problem, we felt compelled to establish a joint platform for campaigning for Ireland to do its fair share to tackle climate change.

In this submission we first lay out our recommendations on the topic that the Assembly has been asked to consider: 'How the State can make Ireland a leader in tackling climate change'. We hope that these proposals will be considered and included by the Assembly in their final recommendations to the Houses of the Oireachtas. The submission then sets out the reasons why action on climate change is essential and urgent and also addresses the lack of substantive action by Ireland to date.

For those who would like a more complete picture of the suggested measures, further information on the basis and detail of our specific proposals is set out in the separate appendix.

KEY RECOMMENDATIONS TO THE CITIZENS' ASSEMBLY

Tackling climate change is the defining global challenge, and indeed opportunity, of our age. Our position is that Ireland must do its fair share to meet the objectives of the landmark Paris Agreement on climate change, adopted by 195 countries in 2015.

But the topic for consideration by the Assembly – 'How the State can make Ireland a leader in tackling climate change?' – gave our coalitions pause for thought. The problem is that Ireland's track record on climate pollution and climate action to date is so poor that it is currently extremely hard to imagine Ireland being in a leadership role.

Far from being a leader, unfortunately Ireland is a 'climate laggard' and is not playing its part in the global effort to reduce damaging greenhouse gas emissions. In fact, our climate pollution has been rising since 2014 due to Government decisions and policies. While it has been suggested that the economic crash has prevented the State from meeting its climate obligations, in fact the opposite is true: by 2010 Ireland would have missed its original legally-binding target (under the 'Kyoto Protocol') if it was not for the downturn impacting key sectors and lowering harmful emissions.[iii] Now Ireland is one of only five EU countries that is set to miss its 2020 targets and it has the third highest emissions per person in the EU.[iv]

Ireland's leading experts in the Environmental Protection Agency (EPA) have repeatedly highlighted **the inadequacy of current policies and plans, and that our performance is getting worse not better.**[v] Ireland has been without a climate action plan for five years resulting in policies that contradict our climate commitments and making achievement of those commitments increasingly more difficult. Unfortunately, Ireland's new 5-year climate action plan (the National Mitigation Plan, recently published in July 2017) does not provide the impetus to change this poor state of affairs due to **the absence of new, clear and substantive measures to reduce emissions across the polluting sectors.**[vi]

Moreover, in recent years **Ireland's reputation has suffered at EU level** as the Government has repeatedly sought concessions and tried to negotiate much less demanding 2030 targets with our EU partners, rather than planning on how to meet them.[vii] This has undermined, rather than supported, EU collective action on climate change and is not in the public interest, globally nationally or locally. The Taoiseach, the Environmental Protection Agency and the Climate Change Advisory Council all agree that we need a "transformation" to put us on a path to a genuinely low carbon society, but as yet Government policy and action does not reflect this.

And so, our first response to the topic posed to the Assembly is that **we must start by bringing the years of inaction to an end**. We must also **move Ireland to the level of most of our EU partners** and **get on track to meet our existing and forthcoming targets**. And although Ireland is far from leadership and the State's record is poor, there are also **some areas where Ireland can show leadership right away**.

Many of the solutions are already well-known and involve a range of policies across all sectors of the economy to reduce polluting emissions. Our recommendations for actions which the State can take are organised along these lines:

A) Longstanding recommendations, as yet not acted on, that would help Ireland meet its existing targets.

B) Best practice from other countries that would kick-start a real transformation.

C) Areas where Ireland could actually take a global leadership role.

D) Steps that would improve climate policy development in future.

We are of the view that the transition must also be just, with careful attention paid to those households and communities in Ireland and globally who are affected most and will be most affected by the changes necessary. By making the climate change agenda one of social progress, equity, and environmental sustainability, the State can ensure that Ireland will be in a position to reap the social, health and economic benefits of the transition to a low-carbon economy and provide secure and sustainable livelihoods for all, particularly for the poorest and most vulnerable.

The suggested recommendations for the Assembly to put to the Oireachtas are set out in full overleaf.

In order to make Ireland a leader on climate change, the State should:

A) Longstanding recommendations that would help Ireland meet its existing targets.

1. Confirm now that Ireland will stop burning peat for electricity in 2020 and immediately set up an inter-agency task force to ensure training and employment opportunities for those employed in supplying and operating Ireland's 3 peat-fired stations and for impacted communities. (The Government was first advised to stop burning peat for electricity in 1998)

2. Confirm now that Ireland will stop burning coal for electricity in 2022 and immediately set up an inter-agency task force to ensure training and employment opportunities for those employed in Moneypoint coal-burning power station. (The Government was first advised to stop burning coal for electricity in 1998)

3. Realign investment to achieve the goals of the 2009 Smarter Travel Policy, increasing the share of transport investment that goes to walking, cycling and clean public transport.

4. Mobilize significant funds to offer financing options and project management support to households to upgrade the energy performance of their homes (e.g. the Tipperary Energy Agency Super Home scheme).

B) Best practice from other countries that would kick-start a real transformation

5. Where a developer is proposing a renewable energy project, make it compulsory that they offer 20% of the ownership to the local community through reasonably priced shares (as is the case in Denmark).

6. Kick-start community ownership of renewable energy by introducing a fair payment for solar electricity (as happens in the UK and Germany for example). Right now there is no payment for solar power at all, you have to give any surplus you generate away for free to the ESB.

7. Decide now that from 2020 all new buildings built in Ireland will produce minimal carbon pollution through energy efficiency measures.

8. Seek to restore Ireland's peatlands as a means of emissions reduction and carbon storage and to assist in important biodiversity protection and flood protection.

9. The Government should make regular contributions to the UN Green Climate Fund that are in line with Ireland's responsibility for climate change in order to support developing countries to adapt to climate change and contribute to the global effort. (The Government's current contribution of €2million is over 30 times lower than the EU average).

C) Areas where Ireland could take a global leadership role

10. 50% of the subsidy for peat-firing of power stations should be ring-fenced in a new 'Just Transition Fund' to help workers who face the risk of unemployment as we move away from polluting energy sources.

11. The Oireachtas should pass the Fossil Fuel Divestment Bill to divest the Ireland Strategic Investment Fund from fossil fuels as soon as possible, given the moral and practical imperative to ensure the majority of remaining fossil fuels remain unburned.

12. Encourage and support a transition to a more–plant based diet for the sake both of our health and of the climate.

13. Support farmers to gradually transition away from intensive meat and dairy production, which is harming the climate and local environment, to an economically and environmentally sustainable model of farming by incentivising low-carbon farming and high value nature farming.

14. End all new oil and gas exploration in Irish waters.(Searching for new fossil fuel reserves to burn is incompatible with any serious attempt to meet the Paris Agreement temperature targets.)

D) Steps that would improve climate policy and action in future

15. Commit Ireland to doing our fair share to meet the temperature goals of the Paris Agreement and update Ireland's national policy to reflect this.

16. Push the EU to revise and strengthen its targets in light of the Paris Agreement, in line with science and equity.

17. Adopt 5-year climate action plans that contain specific 5-year emissions reduction targets in line with the Government's 2050 transition objective. Each plan should be debated and voted on by the Dáil. (The Government's National Mitigation Plan released in July 2017 does not include any specific reduction commitment for the five-year period it covers.)

18. Ensure decisions taken on major national planning processes, such as the Capital Review and the National Planning Framework, align with Ireland's emission reduction commitments.

WHY ACT ON CLIMATE CHANGE?

'Today, my first thoughts and words must be with those who have suffered so much because of the storms of the last month: the men and women whose farms and homes have been flooded, isolated or evacuated, whose livelihoods have been threatened, and who have spent long, anxious days and nights afraid of and mesmerised by the weather forecast of rain, rain, rain, and the heartbreak it brought'.

An Taoiseach, Enda Kenny T.D., Dáil statement on flooding, 2016

'When the credit bubble burst in 2008, the damage was devastating. We're making the same mistake today with climate change. We're staring down a climate bubble that poses enormous risks to both our environment and economy.'

Hank Paulson, Former US Treasury Secretary, 2014

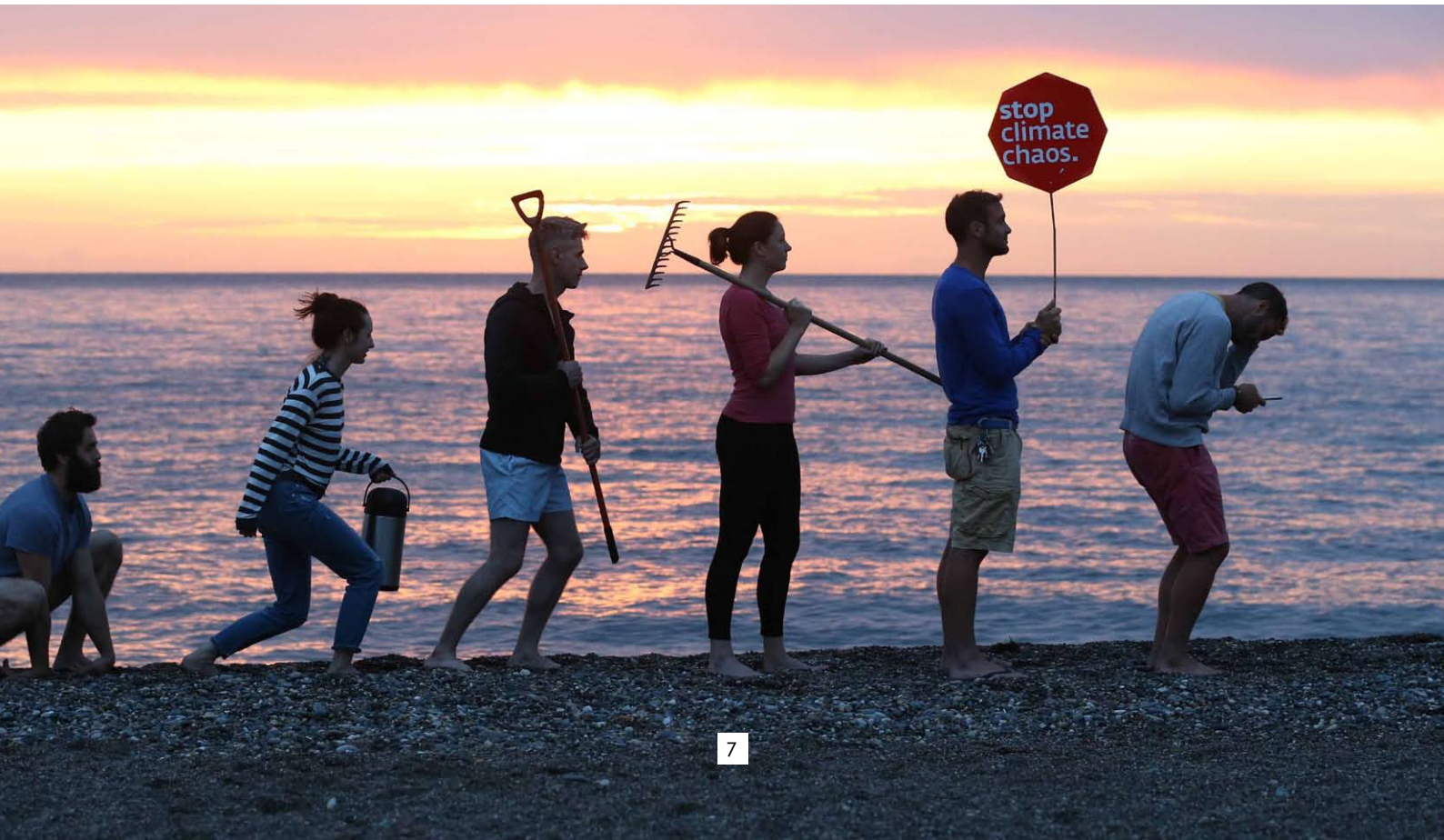
'Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems.'

Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Summary for Policymakers. Fifth Assessment Report of the Intergovernmental panel on Climate Change. P. 8.

Climate change affects us all. It is the biggest threat to our prosperity, safety and wellbeing and we are seeing the effects of our polluting emissions now: 2016 was the hottest year ever recorded and 16 of the 17 warmest years have occurred since 2001.[viii] In Europe climate-related extreme events accounted for approximately 85,000 additional deaths over the period 1980-2013. In Ireland, the Environmental Protection Agency has stated that our coastal regions, as well as our transport and energy infrastructure, are vulnerable to more frequent and extreme weather events and sea-level rise as a result of climate change.[x] This will also pose particular risks for small farmers.[xi] Climate change is also contributing to the decline of natural habitats, putting pressure on already vulnerable species and their ecosystems, and increasing the risk of the spread of harmful invasive species.

However, climate change does not affect us all equally. Climate change is impacting first and most profoundly on poor countries and communities who have done least to cause the problem and who have the least resources to cope. For many of these countries and communities, climate change impacts are already at crisis levels. In 2015 alone, more than 19.2 million people across 113 countries fled climate-related disasters.[xii] At time of writing, in East Africa, almost 25 million women, men and children are in urgent need of food aid as a result of recurrent drought. Sadly, this is the latest of an ever-increasing number of devastating impacts on the poorest countries due to climate change. Global rises in sea level due to climate change poses major risks for coastal cities and is already affecting small-island states and low-lying coastal areas in the Pacific and Indian Oceans.[xiii]

An increasing number of reports and statements from numerous experts, international organisations and regulators are also highlighting the spill-over effects from climate change on the global financial system, trade, infrastructure, geopolitics, security, human displacement and migration.[xiv] This imperative to protect society, in particular vulnerable communities both in Ireland and abroad, clearly requires the State to implement adequate and fair policies to reduce harmful pollution even where this involves challenging and complex policy choices.



WHY ACT NOW?

'We are actually on track for global warming of up to 3.4 degrees Celsius. Current commitments will reduce emissions by no more than a third of the levels required by 2030 to avert disaster. We must take urgent action. If we don't, we will mourn the loss of biodiversity and natural resources. We will regret the economic fallout. Most of all, we will grieve over the avoidable human tragedy; the growing numbers of climate refugees hit by hunger, poverty, illness and conflict will be a constant reminder of our failure to deliver.'

Erik Solheim, head of United Nations Environment Programme, and Jacqueline McGlade, UNEP's chief scientist, 2016 UN Emissions Gap report.

'Doomsday predictions can no longer be met with irony or disdain. We may well be leaving to coming generations debris, desolation and filth. The pace of consumption, waste and environmental change has so stretched the planet's capacity that our contemporary lifestyle, unsustainable as it is, can only precipitate catastrophes, such as those which even now periodically occur in different areas of the world. The effects of the present imbalance can only be reduced by our decisive action, here and now. We need to reflect on our accountability before those who will have to endure the dire consequences.'

Pope Francis, Encyclical Letter Laudato Si',
On Care For Our Common Home, 2015, Paragraph 161

As a first step, Ireland needs to do more to meet the targets that it has already agreed as an EU Member State. Ireland also needs to work with other Member States to strengthen the EU's targets in the light of the objectives of the Paris Agreement on Climate Action.

The Paris Agreement is the landmark climate deal adopted by 195 countries in December 2015, which came into force in November 2016.[xvi] The Agreement commits Ireland and all other countries who have ratified to: 'Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.'

The Agreement also commits Ireland to reducing emissions 'in accordance with the best available science' and on 'the basis of equity'.[xvii] An important feature of the Agreement is that all countries must regularly review and increase their efforts. Reducing polluting emissions in line with Paris Agreement is also fundamental to achieving the globally agreed Sustainable Development Goals (SDGs) [xviii] namely Goal 13, Take urgent action to combat climate change and its impacts.[xix] Ireland played a key role in the negotiation of the Goals which also require coordinated implementation by the Government.

Long before the Paris Agreement, the State had already agreed national emission reduction targets for 2020 with other EU members, and begun the process of agreeing 2030 targets. **It is important to note that these existing EU and Irish targets will have to be radically revised and strengthened in the light of the objectives of the Paris Agreement.** But right now Ireland is failing to act to meet even these existing targets and, because of the cumulative nature of pollutants in the atmosphere, Ireland's continuing delay in taking necessary action drastically increases the effort that will be required in every future year.

However, State action is not merely a question of legal obligations. It is about managing risk and grasping opportunity. Taking action cannot be simply dismissed or delayed as a mere inconvenience or an unnecessary burden. As the sections above outline, acting on climate change is an imperative for the safety of the nation and the planet. The choice that we have is whether we act quickly enough to avoid the worst impacts, and whether we act fairly and deliver a more just as well as sustainable society. Climate action can support and sustain communities, jobs and the local environment. Indeed, **the transition to a low carbon, climate resilient economy is as much a major opportunity as it is a challenge**.

The recommendations put forward have the potential to stimulate new growth and job creation, while building a more viable economy and improving public health. Research conducted in 2014 for the Irish Corporate Leaders on Climate Change indicated that climate action in Ireland has the capacity to create 90,000 jobs.[xx] In many cases, what would be required is not new exchequer resources, but elimination of incoherent policies, the recalibration of incentives and re-allocation of existing resources.

The risks and costs of failing to capitalise on opportunities to reduce emissions must also be considered. The costs of inaction will fall much more heavily on today's children and young people, and future generations. The landmark Stern Review on the Economics of Climate Change estimated in 2006 that it would be up to 20 times cheaper to prevent further climate change as opposed to dealing with the economic costs of inaction.

WHAT IS IRELAND'S TRACK RECORD?

Enda Kenny: We must act now on climate change or it will be too late

Greatest contribution Ireland can make to COP21 is to lead by example - by pursuing transition to low-carbon economy

Mon, Nov 30, 2015, 13:54 | Updated: Mon, Nov 30, 2015, 13:56

Enda Kenny

Taoiseach Enda Kenny shakes hands with French president Francois Hollande upon his arrival for the opening of the UN conference on climate change, on November 30th, 2015 at Le Bourget, on the outskirts of the French capital Paris. Photograph: Loic Venance/AFP/Getty Images

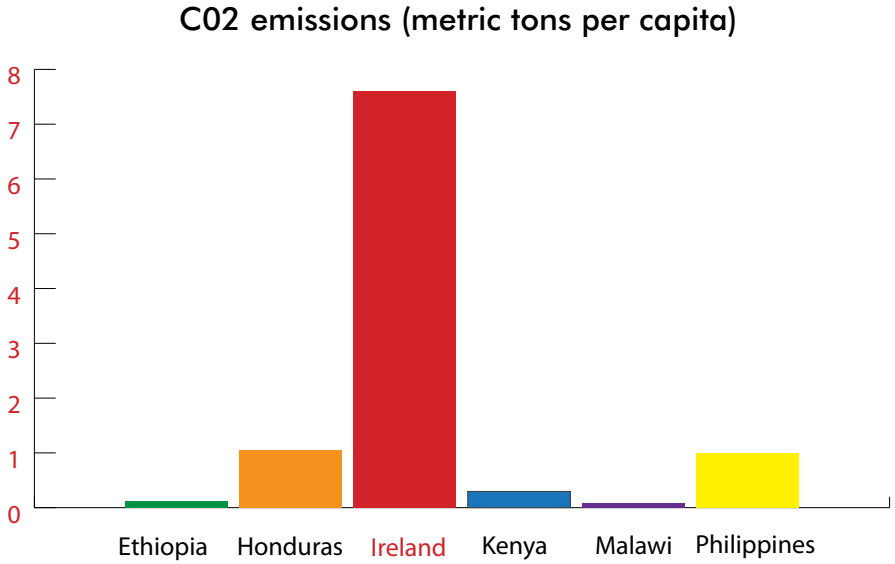
Climate change is not our priority - Taoiseach

Taoiseach Enda Kenny delivers a speech during the opening day of the World Climate Change Conference 2015

From the Irish Times and Irish Independent: At the Paris climate conference in 2015, the Taoiseach told world leaders that Ireland is 'determined to play its part' in reducing harmful greenhouse gas emissions. However, he told Irish journalists a different story, claiming that Ireland's EU 2020 targets were 'unrealistic', despite the State having already agreed to take action to meet them. [xxi]

A commitment to sharing the responsibility of reducing global emissions equitably and fairly is at the heart of global action on climate change. Unfortunately, Ireland is a particularly poor performer and the State's actions have not matched its commitments at EU and UN level. Currently, Ireland is the third highest producer of emissions per person in the EU, and eighth in the OECD.[xxii] By comparison, Ireland's total annual emissions are equivalent to those produced by around 400 million Africans. This failure to meet our climate responsibilities stands in direct contradiction of our proud, longstanding tradition of support for the eradication of global poverty and hunger.

Ireland's per capita emissions in comparison to five developing countries already experiencing severe impacts from climate change



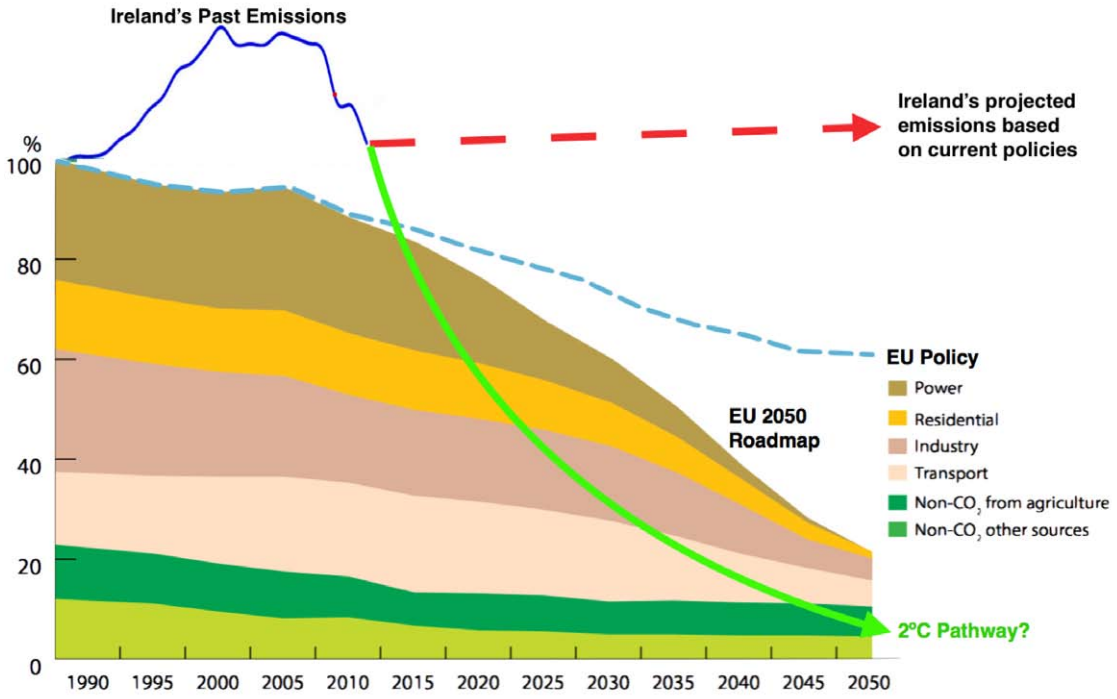
Source: CO2 emissions (metric tons per capita) in 2013, The World Bank, World Development Indicators. http://data.worldbank.org/indicator/EN.ATM.CO2E.PC?end=2013&locations=IE-SD&start=2013&view=bar

Under the Kyoto Protocol, an international climate treaty signed in1997, Ireland agreed to limit the rise in our climate polluting emissions to13% above1990 levels by 2012. Instead, the rise was already twice that by 2005 and only the economic crash brought our emissions back under the Kyoto limit. One would have hoped that the State would have learned the lesson of that experience and planned and implemented policy to meet our 2020 targets in a timely fashion. Instead, Ireland has been without a climate action plan for five years since the last one expired in 2012.

We are now one of only five countries in the EU which is going to miss its existing 2020 emission reduction commitments. Ireland is also the only one of these five States where emissions are predicted to continue to rise and where the State will likely be highly reliant on special flexibility procedures, such as the buying of credits from other countries, to close the gap.[xxiii] While it has been suggested that Ireland's targets were unrealistic, EU bodies, State agencies and expert commentators have consistently noted that Ireland's emissions reduction commitments could have been met if, like other EU countries, the State had taken action in a timely manner. [xxiv]

Ireland's polluting emissions are also forecast to continue to increase out to 2030 and beyond and put the State's ability to meet its national 2050 objective in jeopardy. The EPA has stated that '[t]he latest figures demonstrate the need for new and innovative measures to meet the challenges that Ireland faces in making the transition to a low carbon economy.'[xxv] While the recession is often cited as the reason Ireland has performed so badly, the decrease in industrial activity as a result recession brought Ireland's polluting emissions down, without which Ireland would be even further from meeting its commitments.[xxvi]

Ireland and EU Relative Percent Emissions Change Past and Projected 1990 to 2050.



The blue line is Ireland's historical emissions, the dotted red line is Ireland's current emissions pathway, and the green line is the sensible emissions reduction pathway to achieve the Government's national transition objective.

A major campaign focus for the Stop Climate Chaos coalition for the last decade was the enactment of climate legislation, as a means to strengthen policy development, implementation, and political accountability for climate action in Ireland. Yet, the State has been far from proactive in introducing the types of policies that would actually see emissions reduced, communities protected and workers empowered. A significant step occurred in December 2015 when the Climate Action and Low Carbon Development Act, became law.[xxviii] Under the Act, the Minister for Climate Action, Denis Naughten TD was required to deliver a new 5-year action plan to Government on how Ireland will cut climate pollution (called the 'National Mitigation Plan').

In April 2017 Stop Climate Chaos examined the Government's draft plan and concluded that it failed to fulfil Ireland's national and international legal obligations and that it did not respond to the EPA's warning that current policies and plans remain inadequate to fulfil Ireland's international obligations. The finalised National Mitigation Plan was published in July 2017. Unfortunately, it does not commit the State to substantive policy change. Many of the listed actions are old or existing or involve promises to make future decisions. Furthermore, the Plan does not provide a clear analysis of how Ireland's polluting emissions will be progressively reduced in line with national and EU targets. It also does not include an emission reduction commitment for the 5-year period that it covers or any information on the significant costs that climate change will inflict on the Irish economy if left unchecked.

Therefore, while having a new climate plan is an important step, we are significantly concerned that, even now with a domestic statutory obligation to reduce emissions, **there remains a lack of political commitment to take the actions necessary**.

The National Dialogue on Climate Action launched earlier this year is a welcome development by the State.[xxix] The Dialogue is critically important to facilitate people from across Irish society to have their voices heard in this critical agenda. The Dialogue also can and should promote new momentum and innovation, however it cannot be expected to replace the need for political leadership and robust policy development, implementation and political accountability.

We are of the view that the Citizens' Assembly can play a transformative role and radically improve the poor state of affairs in the State's policy-making on climate change. We hope that our 18 proposals detailed above can be considered and utilised by the Assembly in their recommendations to the Houses of the Oireachtas.


stop climate chaos.
stop climate chaos

APPENDIX:

The Key Recommendations Explained - What is the basis for these proposals?

A) Longstanding recommendations to help Ireland meet existing targets

RECOMMENDATIONS

1. Confirm now that Ireland will stop burning peat for electricity in 2020 and immediately set up an inter-agency task force to ensure training and employment opportunities for those employed in supplying and operating Ireland's 3 peat-fired stations and for impacted communities. (The Government was first advised to plan to stop burning peat for electricity in 1998)

2. Confirm now that Ireland will stop burning coal for electricity in 2022 and immediately set up an inter-agency task force to ensure training and employment opportunities for those employed in Moneypoint coal-burning power station. (The Government was first advised to plan to stop burning coal for electricity in 1998)

3. Realign investment to achieve the goals of the 2009 Smarter Travel Policy, increasing the share of transport investment that goes to walking, cycling and clean public transport.

4. Mobilize significant funds to offer financing options and project management support to households to upgrade the energy performance of their homes (e.g. the Tipperary Energy Agency Super Home scheme).

End the burning peat for electricity

The head of the Environmental Protection Agency has said the 'fossil fuel age is over'. The evidence is clear internationally. We need to keep 80% of all known fossil fuel reserves in the ground if we want to remain within the temperature limits set out in the Paris Agreement. The State's national expert group on climate change, the Climate Council Advisory Council, has identified the termination of Government supports for peat-firing of power stations as an obvious step.[xxx] These stations provide just 9% of our electricity but are huge emitters of harmful emissions, producing 22% of our emissions from electricity generation.[xxxi] While the Government has confirmed that the harvesting of peat for electricity generation is expected to cease by 2030, the National Mitigation Plan does not include any further commitments or timelines.

End the burning coal for electricity

The use of coal for electricity generation has major negative impacts both on the climate and on public health. The Government was first advised to plan to stop burning coal for electricity in 1998. Moneypoint is Ireland's only coal burning electricity generation plant and in the 2015 Energy White Paper the Government committed to make a decision on the future of the Moneypoint station before 2020. In the meantime, coal consumption in electricity generation has increased, rising by 20% in 2016 primarily due to cheap import costs. While the National Mitigation Plan acknowledges the need to diversify Ireland's renewable sector, no decisions are included regarding the future of Moneypoint. It merely reiterates the White Paper commitment and notes that further studies will be carried out on its replacement.

Decarbonise Ireland's transport sector

There is an urgent need for the Government to focus on decarbonising Ireland's transport sector. As noted by Ireland's Climate Change Advisory Council, progress in tackling transport emissions has been very limited.[xxxii] Transport is the only sector to have increased its share of emissions since 1990. In fact, emissions have doubled since 1990 to one fifth of Ireland's total. Actual total transport emissions rose 4% in 2015 and are continuing to rise quickly.

In 2009, the Government adopted 'Smarter Travel' as national policy.[xxxiii] The policy included the following targets to be met by 2020:

- The transport sector making a meaningful contribution to Ireland's EU climate change commitments by reducing greenhouse gas emissions;
- 500,000 more people taking alternative means to commute to work so that the total share of commuting by car drops from 65% to 45%;
- Walking, cycling and public transport rising to 55% of total commuter journeys to work;
- The total kilometres travelled by car not increasing significantly from 2009 levels.

None of these targets is being met and the new National Mitigation Plan merely calls for more deliberation and review. Yet, an increased transport budget is not required to achieve these goals. The Government must act now to rebalance existing funding from roads and prioritise investment in walking, cycling and clean public transport, which has many benefits for public health, better air quality and improved public spaces, as well as cutting emissions.

The National Mitigation Plan includes the target that from 2030 all new cars and vans sold in Ireland will be either electric or hybrid. However, the Government needs to go further by introducing new incentives to accelerate the immediate adoption of electric vehicles and by bringing to an end the use of petrol and diesel for transport. This process has already begun in the UK and France whose governments both announced in July that they will end sales of petrol and diesel vehicles by 2040.

For public transport, conversion to electric power equally makes sense, with inbuilt air quality improvements. Other sustainable options may include the use of biomethane, a lower carbon form of natural gas produced by the decomposition of organic waste material via anaerobic digestion (such as municipal waste, or farm slurry) - an already prevalent source of fuel in a number of European cities. The UK's Low Carbon Vehicle Partnership Green Bus Initiative provides some useful examples of what can be implemented in Ireland.

The State should also commit in the new national planning framework to facilitating low-carbon mobility, particularly by requiring (as a licensing condition) fully integrated transport networks across public and private sectors, offering seamless connectivity to passengers. This would specifically require zone, distance, or time-based fares for transfers between modes and transport operators. This integrated approach would ensure both progress in lowering emissions, as well as reduced transport demand and journey times.

Mobilize greater financing to the energy performance of homes

Deep retrofitting of Ireland's existing housing stock is recognised as one of the main energy efficiency challenges and also as a significant opportunity with major health, economic and employment benefits. In 2016, the Sustainable Energy Authority of Ireland estimated that, in order to achieve 2020 Energy Efficiency targets, around 75,000 homes per year will need energy efficiency upgrades between now and 2020.[xxxiv] Detailed analysis by the UCC and the ESRI has shown that if the State retrofits 1million homes, emission reductions in the building sector of more than 50% can be achieved.[xxxv]

In terms of recent Government actions, the allocation of an additional €20m in Exchequer funding in 2017 is to be supported, as well as the SEAI's current grants and schemes, such as the Deep Retrofit Pilot and the Better Energy Programme. However, the Climate Change Advisory Council has noted that the rate of retrofit of the existing building stock to near zero emissions levels needs to be scaled up. Significantly greater financing and project management support is required in order for households to upgrade their energy performance. Initiatives such as the Tipperary Energy Agency Super Home scheme should be supported which enables the retrofitting of homes to an 'A' BER standard through up to 50% financial support.

B) Best practice from other countries that would kick-start a real transformation

RECOMMENDATIONS

5. Where a developer is proposing a renewable energy project, make it compulsory that they offer 20% of the ownership to the local community through reasonably priced shares (as is the case in Denmark).

6. Kick-start community ownership of renewable energy by introducing a fair payment for solar electricity (as happens in the UK and Germany for example). Right now there is no payment for solar power at all, you have to give any surplus you generate away for free to the ESB.

7. Decide now that from 2020 all new buildings built in Ireland will produce minimal carbon pollution through energy efficiency measures.

8. Seek to restore Ireland's peatlands as a means of emissions reduction and carbon storage and to assist in important biodiversity protection and flood protection.

9. The Government should make regular contributions to the UN Green Climate Fund that are in line with Ireland's responsibility for climate change in order to support developing countries to adapt to climate change and contribute to the global effort. (The Government's current contribution of €2million is over 30 times lower than the EU average).

Deliver renewable energy at local level and support community ownership

The overarching vision of Ireland's energy policy is to become zero carbon, with a concrete target of 80-95% reduction in greenhouse gas emissions from the energy sector by 2050.[xxxvii] However, in Ireland today we rely on imported fossil fuels for about 85% of our energy needs. Within the electricity sector, about 75% of our electricity is generated using coal, gas and peat. While in recent years there has been a significant increase in renewable generation, less than 0.3% of this is owned by local citizens or communities. Moreover, currently there is no national strategy for community energy. Energy policy provides little regard to the potential role of community energy, and provides no clear incentive to support the development of community energy in Ireland.

Solar power offers a unique opportunity to provide diversity in electricity generation and for citizens and communities to participate in and take ownership of the renewable transition. Although Ireland is not known for its year-round sunshine, a solar panel in Ireland is as good at generating electricity as anywhere else in the world at the same latitude. Other countries in Europe (and not all of them very hot or sunny!) have recognised that solar power offers a unique opportunity for citizens and communities to take part in the renewable transition and to provide diversity for our electricity generation. 1.5 million Germans generate solar electricity on their roofs, and over 50% of all renewable energy in Germany is owned by communities and households. In the UK, 10 GW of solar power has been deployed since 2010. In Ireland, where a solar panel will perform as well as in the UK or Germany, there is only 2 MW of solar electricity installed. Hence, the UK has 5000 times more solar power installed than Ireland. [xxxviii]

In essence, the roofs of our homes, our farm buildings, our schools, our community centres, our sports halls can all become locally-owned power plants. Households and communities could be reducing their demand for fossil fuel electricity, lowering their energy bills, and generating an income from the excess clean energy they produce. But not if they have to give the electricity they don't use themselves away for free, as they do now. Without a guaranteed payment for micro-generation, including solar, this "rooftop revolution" will not happen in Ireland.

Facilitating community ownership of renewable projects, as is done in other European countries, can also help achieve public acceptance of renewable energy projects and climate policy more generally. Key steps must include a fair price for rooftop solar electricity supplied to the grid, measures to enable community-led projects such as simplifying grid access, and a Danish-style shared ownership scheme mandating that developer-led projects offer 20% of the equity to local people.

Energy Efficiency Measures for New-Builds

Ireland has significant potential to improve the energy efficiency of new buildings while also making use of domestic renewable energy resources. In line with the EU Energy Performance of Buildings Directive, new Building Regulations (based on 'Nearly Zero Energy Buildings' requirements) are to be implemented which will allow for improved energy performance and significant reductions in emissions.

While such initiatives are to be welcomed, the National Mitigation Plan does not address new measures to ensure that all new buildings adopt the highest energy efficiency standards. For example, in the domestic sector, each new development could follow the Home Performance Index (the national certification system for quality and sustainable residential developments). Regarding the non-domestic sector, current regulations dating from 2008 do not represent good industry practice. Many of the most progressive companies in the construction sector in Ireland have been working to a standard which considerably exceeds the current 2008 building regulations.

Moving beyond 2020, a strategy is required to guarantee that new housing stock meets the highest levels of energy efficiency with near zero emissions as part of the State's 2050 low-carbon transition. In order for the objectives of the Paris Agreement to be achieved, the World Green Building Council has stated that all new buildings must operate at net zero carbon from 2030 and that 100% of buildings must operate at net zero carbon by 2050.[xl]

Only measuring the operational energy of buildings is not sufficient and there is a need to move to a 'Life Cycle Approach' where the energy used at all stages of the construction, operation, maintenance and end of life are taken into account. The impacts of the construction of a building can account for between 30 and 50% of the overall impacts. It is increasingly important to achieve the best energy and carbon savings over the life of the building rather than just at the operational stage.

Support and Protect Ireland's Peatlands

Because of peat extraction, disturbance, and related activities, Ireland's peatlands (most of which are moderately or severely damaged) have become a source of carbon emissions. In their healthy state, peatlands will not only store carbon, but also continue to absorb CO2 as they expand. For this potential to be realised however, there also needs to be stronger measures put in place to protect and restore Ireland's peatlands. Industrial strip-mining of peatlands continues to extract large amounts of carbon-rich peat for burning and horticulture, causing emissions far greater than any sequestration in forestry. These peatlands are of high conservation importance and their unsustainable utilisation results in a deterioration of water and air quality.

We have previously argued that if adequately managed, sequestered carbon in peatlands could provide a cheap mitigation measure, and produce important income in terms of agri-climate environmental measures under the Rural Development Plan Regulations.[xli] Based on the recognition of the value of peatlands as long-term carbon sinks, Scotland's Draft Climate Change Plan (2017-2032) includes target-driven plans for peatland restoration. A similar approach can easily be adopted in Ireland.

Deliver greater financing for climate action in developing countries

Even with existing and future measures to mitigate climate change, the needs of vulnerable developing countries to adapt to its impacts will continue to grow. Therefore, predictable public finance is essential for developing countries to deal with the unavoidable impacts of climate change. Public money is also needed to support emissions reductions in developing countries with smaller economies, and less developed financial infrastructure – all factors that discourage private investment.

In 2009 developed countries promised to mobilise $100 billion per annum by 2020 to support the efforts of developing countries to deal with climate change. A new Green Climate Fund was established as the main delivery mechanism for a significant portion of this funding. However, no action was taken by the State and Ireland's failure to make any pledge was a matter of considerable embarrassment at UN climate negotiations in Lima in 2014.

In 2015 the State finally made a commitment, however its pledge of just €2million means Ireland's record remains deeply concerning. The State's pledge is completely out of line with Ireland's capacity representing about $0.50 per capita, while pledges from comparable European Member States currently stand at least 10 times Ireland's amount with the EU average at around $12 per capita.[xlii] Despite commitments by the Government in 2016 and 2017 to build up its support to the Green Climate Fund in the coming years, no further pledges have been made. [xliii]

Developed countries committed that climate finance would be new and additional. This means it must be additional to existing overseas development aid. However, the practice of many donor countries has been to count financing from their aid budgets towards climate commitments without any corresponding increase in overall funding. Therefore, a new Climate Justice Fund should be used to deliver the funding required to fulfil Ireland's international climate finance obligations, including making contributions to the Green Climate Fund.[xliv]

C) Areas where Ireland could take a global leadership role

RECOMMENDATIONS

10. 50% of the subsidy for peat-firing of power stations should be ring-fenced in a new 'Just Transition Fund' to help workers who face the risk of unemployment as we move away from polluting energy sources.

11. The Oireachtas should pass the Fossil Fuel Divestment Bill to divest the Ireland Strategic Investment Fund from fossil fuels as soon as possible, given the moral and practical imperative to ensure the majority of remaining fossil fuels remain unburned.

12. Encourage and support a transition to a more–plant based diet for the sake both of our health and of the climate.

13. Support farmers to gradually transition away from intensive meat and dairy production, which is harming the climate and local environment, to an economically and environmentally sustainable model of farming by incentivising low-carbon farming and high value nature farming.

14. End all new oil and gas exploration in Irish waters. (Searching for new fossil fuel reserves to burn is incompatible with any serious attempt to meet the Paris Agreement temperature targets.)

Develop a 'Just Transition Fund'

The Irish public supports generation from peat, renewables and incineration through the Public Service Obligation (PSO) levy which is charged on every electricity bill. For 2016/17 it will amount to €6.02 per month on an electricity bill, or cumulatively to €400.9 million. However, approximately one third of this is used to subsidise the peat-generating power stations and these subsidies are due to expire in 2019.

We support the recommendation from the Institute of International & European Affairs (2017) that individual climate policies be socially and rurally proofed and that Government commit to proactively manage the transition for affected communities.[xlv] We recommend that peat subsidies be redirected to a new 'Just Transition Fund' which will support development, training and employment, as well as sustainable, progressive energy poverty alleviation. Shifting these subsidies is essential to progress a sustainable approach to energy poverty, provide retraining and alternative jobs to replace those that must be phased out.

Divest the Ireland Strategic Investment Fund from Fossil Fuels

Despite evidence that 80% of remaining known fossil fuels need to remain unburned to deliver on the commitments in the Paris Agreement, the global fossil fuel industry plans to extract and burn its reserves and continues to explore for more. If fossil fuel companies are allowed to pursue their current business plans the hard won Paris Agreement will become meaningless and the social, environmental and economic implications will be devastating. This situation sparked the emergence of a 'global fossil fuel divestment movement' that has become the fastest growing movement of its kind in history over the last few short years. Major universities in the US and Europe – including a number of Irish universities, major cities and towns – including Berlin, Copenhagen, Oslo, Paris and Sydney, pension funds and thousands of people have committed to offloading their investments in fossil fuel companies.

The Ireland Strategic Investment Fund, a State investment vehicle funded by taxpayer money (formerly the National Pension Reserve Fund), currently has around €300mn invested in global fossil fuel companies, and has a higher than average investor carbon footprint.[xlvi] While this is a very small portion of the Fund's overall investments, it is public money being invested against the public interest and in contradiction with the States' obligations under the Paris Agreement. In addition, expert analysis is revealing the financial risks involved in continuing to invest in fossil fuels given the scientific fact that fossil fuels must be phased out, and the economic fact that renewables are where the investor opportunities are as technology prices continue to fall. [xlvii]

The Government should divest the Ireland Strategic Investment Fund from fossil fuels given the moral and existential imperative to avoid overshooting the temperature limits adopted in the Paris Agreement. The majority of elected representatives in the Dáil support this action and a Bill that would enable it to happen is currently on the agenda of the Committee on Finance, Public Expenditure and Reform. While Norway has already divested its equivalent national pension fund from a number of fossil fuel businesses, enactment of this Bill would mark the first State to divest from all fossil fuel companies. There is, furthermore, a precedent for this action. The State adopted an Act in 2008 to divest the Ireland Strategic Investment Fund (then the NPRF) from Cluster Munitions for ethical reasons. Passing the Fossil Fuel Divestment Bill is largely symbolic, as well as a smart investor move, but it can send an incredibly important message to the world and is an opportunity for Ireland to show genuine global leadership on climate action.

Encourage a transition to a more–plant based diet

Foods from animals such as meat and dairy provide protein and essential nutrients. Raising livestock also supports the livelihoods of many smallholder farmers. However, our appetite for meat and dairy is a major driver of climate change. Harmful emissions from livestock account for 15% per cent of the global total which is equivalent to exhaust emissions from all the vehicles in the world.[xlviii] Global meat consumption is also expected to increase by over 75 per cent by 2050.

A key point is that, even with efforts to lower the emissions intensity of livestock production, rising demand for meat and dairy globally means that emissions will continue to rise.[xlix] Therefore, it is highly unlikely that the temperature goals of the Paris Agreement can be achieved without reducing global meat and dairy consumption. Consumption has already reached unhealthy levels: in industrialized countries, the average person is already consuming twice as much meat as is considered healthy by experts. Overconsumption of meat is resulting in major increases in obesity and non-communicable diseases like cancer and type-2 diabetes.[li] Beef consumption also has by far the greatest impact on resource use and the environment of all commonly consumed foods.[lii]

Therefore, Governments must lead efforts to address this unsustainable consumption[liii] and dietary change to a more plant-based diet needs to be a major part of government policy.[liv] As detailed in the Global Nutrition Report 2015, an important step in changing consumer habits is 'for national dietary guidelines to recommend lower red meat consumption among high-consuming groups'. Initiatives by the Health Council of the Netherlands and Sweden's National Food Agency are given as positive examples in this regard.[lv] The World Resources Institute has also carried out in-depth analysis on overconsumption of animal-based foods, in particular beef, and put forward a framework for marketing and behavioural change in order to shift people's diets. [lvi]

Support a transition from intensive meat and dairy production

Although the agri-food sector contributes to the economic viability of Irish rural life, the sector, particularly in beef and dairy, contributes significantly to Ireland's greenhouse gas emissions, as well as affecting the conservation status of aquatic and terrestrial ecosystems on the island. In Ireland, the agriculture sector is the single largest contributor to overall emissions, at about one third of the total.

The State's 2050 objective, as set out in the State's National Policy Position on Climate Action, is that total annual emissions by 2050 will be based on 'an approach to carbon neutrality in the agriculture and land-use sector, including forestry, which does not compromise capacity for sustainable food production'. In other words, that emissions from agriculture will not be more than what is absorbed annually by our natural sinks which take in C02, such as our forests, peatlands and grasslands.

As detailed in our recent research[lvii], Ireland is not taking adequate or appropriate steps to reach this objective. The State's current agriculture and land-use policy is neither 'climate-smart' nor sustainable for a number of reasons. Firstly, ruminant (cattle and sheep) derived food is an extremely climate, calorie and fertiliser intensive way of producing protein at scale. The agriculture sector in Ireland is propped up by large economic subsidies, and indeed, if climate change, biodiversity loss, and other pollution costs were included in the true cost of beef, dairy, and sheep-meat, much of Ireland's agri-food sector would lose its economic viability.

As a result of the Government's Food Wise 2025 policy, emissions from agriculture are set to rise significantly by 2020 (an increase 47 per cent of our non-Emissions Trading Sector emissions). This presents significant challenges for Ireland's responsibilities towards achieving its climate and energy targets, as well as its obligations under EU environmental directives and national and international strategies for biodiversity.[lviii] Ireland should be charting a different course for agriculture. This should involve supporting farmers to transition away from intense ruminant production to more sustainable agriculture, recognising and working with Ireland's unique cultural and ecological heritage to support High Nature Value farming,

It is also important to note that State action on climate change must not be constrained by questions of potential short-term competitiveness of certain businesses within individual sectors. A narrow focus on 'cost-effectiveness' for proceeding with climate action is both short-sighted and dangerous and does not serve Irish society or an orderly transition of the economy. Indeed, in many cases, effective climate action does not necessarily require new State resources, but rather the elimination of incoherent policies, re-allocating existing resources, and recalibrating incentives towards low carbon development.

It is commonly suggested that the development of the rural economy (meat and dairy production in particular) must be balanced against the environmental objective of reducing emissions. This appeal to 'balance' puts forward the false thinking that the development of Irish agriculture and climate action is a 'zero-sum game', and assumes emissions reductions and a resilient rural economy are inherently in conflict. It fails to recognise the importance of diversification within a rural economy. It is also based on the premise that the current, dominant model of farming in Ireland is economically viable and environmentally sustainable. Yet, this model is heavily dependent upon policy and incentive structures and a considerable proportion of Irish farms are economically vulnerable and nonviable without current subsidies. Irish agricultural produce also does not contribute to global food security; Irish exports are almost entirely destined for European and emerging middle-class markets. Moreover, food insecurity in developing countries is primarily determined by inadequate access to land and key resources and not simply insufficient production.

End all new oil and gas exploration.

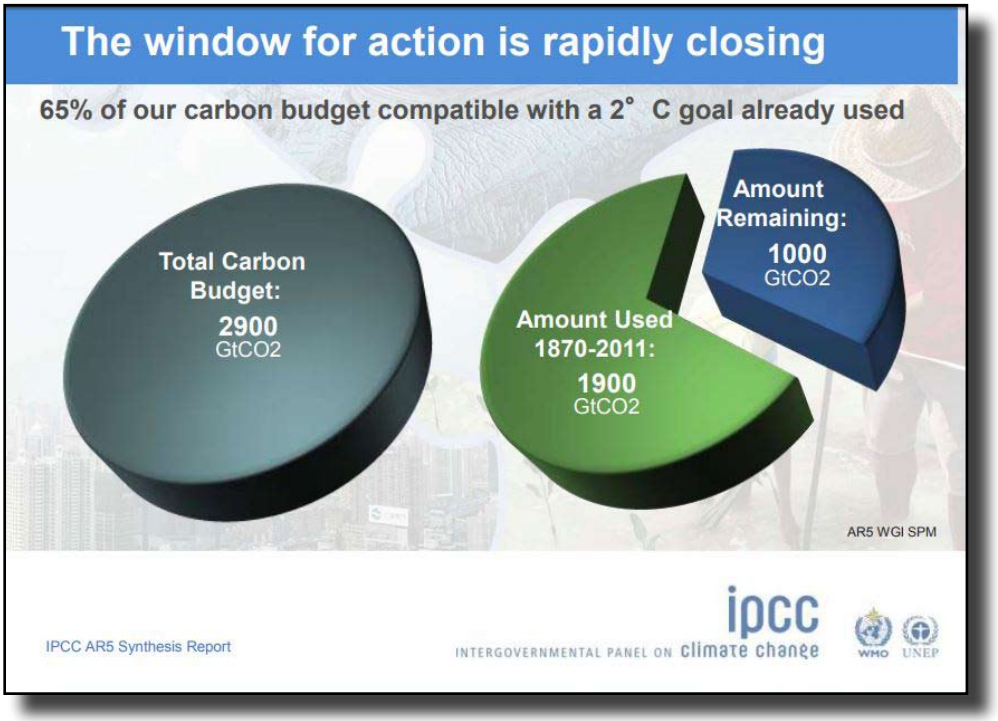
In their 2014 report the Intergovernmental Panel on Climate Change (IPCC) concluded that the total amount of climate pollution we could emit while giving ourselves a decent chance of staying under 2C of global warming was 1,000 Gigatonnes (One trillion tonnes)[lix]. This report was signed off on by almost 200 governments before its publication.

Proven reserves of fossil fuels would produce 2,860 Gigatonnes of CO2 if they were burned[lx]. If our total "carbon budget" is only 1,000 Gigatonnes then we can burn little more than one third of all the fossil fuels that have already been discovered and are on the books of companies and states around the world. This analysis has been done repeatedly and in detail by an expert group called Carbon Tracker in a series of reports since 2011[lxi].

This central conclusion has been endorsed by the International Energy Agency in its World Energy Outlook, which stated 'No more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2°C goal'[lxii] and repeated frequently by our own Mary Robinson .

In circumstances where only one third of existing fossil fuel reserves can be extracted and burned, it makes no sense to be prospecting and exploring for more. Most governments have yet to grasp this contradiction and are living in a state of denial or hypocrisy and continue to issue exploration licenses. It is an issue where Ireland really could take a leadership position. Just this year the Dáil and Seanad passed a law to ban onshore fracking for oil and gas. Now it is time to end the issuing of licenses for exploration for fossil fuels in Ireland's national territory (land and sea).

Research published by Oil Change International in 2016 has also found that the oil and gas fields and coal mines that are already in production contain enough C02 to carry us past the 2 degree global warming limit.[lxiv] Therefore, every single new extraction site that is opened threatens the achievement of the Paris Agreement.



See https://www.ipcc.ch/news_and_events/docs/COP20/LCAHLD.pdf

D) Steps that would improve climate policy and action in future

RECOMMENDATIONS

15. Commit Ireland to doing our fair share to meet the temperature goals of the Paris Agreement and update Ireland's national policy to reflect this.

16. Push the EU to revise and strengthen its targets in light of the Paris Agreement, in line with science and equity.

17. Adopt 5-year climate action plans that contain specific 5-year emissions reduction targets in line with the Government's 2050 transition objective. Each plan should be debated and voted on by the Dáil. (The Government's National Mitigation Plan released in July 2017 does not include any specific reduction commitment for the five-year period it covers.)

18. Ensure decisions taken on major national planning processes, such as the Capital Review and the National Planning Framework, align with Ireland's emission reduction commitments.

Bring Climate Action at National and EU level in line with the Paris Agreement

The Climate Action and Low Carbon Development Act 2015 requires the Government to take into account 'the principle of Climate Justice' and 'the policy of the Government on climate change'. The national policy position, adopted by the Government in 2014 (before the Paris Agreement), defines the 2050 mitigation target as at least an 80% reduction in combined annual emissions from energy, transport, and buildings, and an approach to carbon neutrality in agriculture and land-use that doesn't compromise sustainable food production. The policy ring-fences all available national greenhouse gas sinks from land use to be counted as offsets against agriculture-related emissions; requiring all other sectors to undertake collective emissions cuts of at least 80% compared to1990 levels, with no offsetting "flexibility".

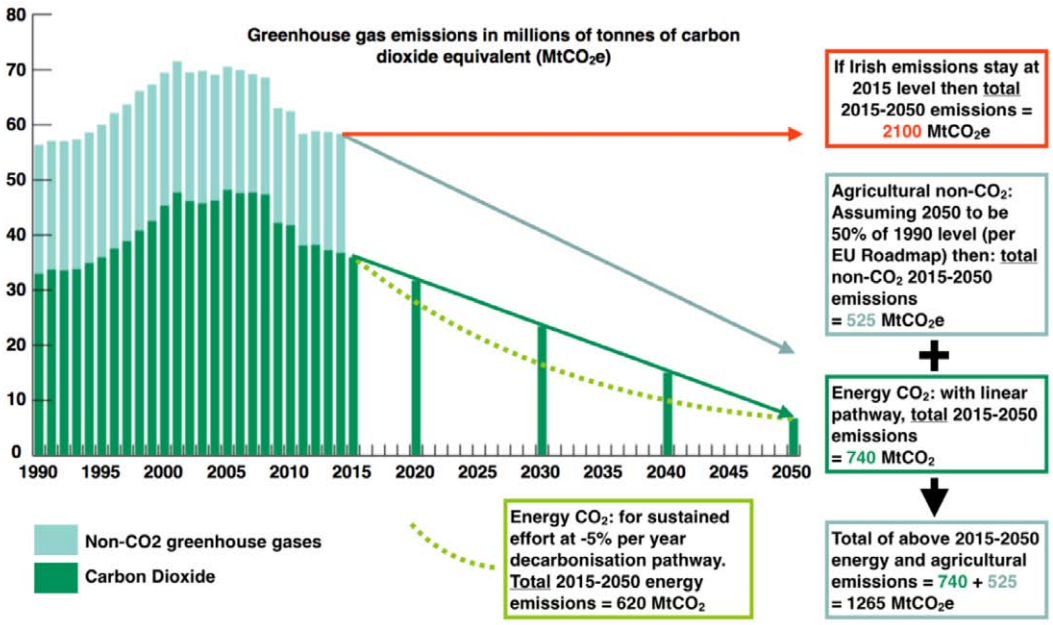
Overall, the objective is at the lower end of ambition of the agreed EU objective of 80-95% reduction in total annual emissions by 2050, and has not been updated to reflect the goals of the Paris Agreement. Yet, based on current EPA analysis, emissions are projected to increase to nearly two and a half times that limit, a total of 1585 million tonnes of CO2 – an overshoot of 932 million tonnes.

Combined international action plans are, as yet, inadequate to achieving the goals of the Paris Agreement (i.e. holding the increase in the global average temperature rise to well below 2°C above pre-industrial levels and pursuing efforts to limit temperature increase to 1.5°C above pre-industrial levels). Independent analysis conducted by Climate Action Tracker [lxv] indicates that existing Nationally Determined Contributions, or national pledges are not in line with the temperature goals agreed in Paris. Notably, the European Union 2030 target is also currently not consistent with limiting temperature rise to below 2°C, let alone to limiting the increase to 1.5°C. In early 2017, Ireland was also criticised by the European climate action network, Carbon Market Watch, for advocating for the use of offsets from forestry in order to meet EU effort-sharing commitments.[lxvi]

The need for specific 5-year emissions reduction targets

The adoption of a carbon budget framework in the National Mitigation Plan is to be welcomed, however, as per the draft Plan released for consultation in March, this framework is not rigorously applied.[lxvii] To provide a useful guide for policy development and implementation, at consultation stage we recommended[lxviii] that the final Plan should contain an overall carbon budget for the achievement of the National Transition Objective by 2050. We noted that within that overall budget, the Plan needed to determine a carbon budget for the five-year timeframe and proceed to allocate available emissions and reduction efforts between sectors to achieve the continuous, substantial and sustained decarbonisation that is required economy wide.

Ireland's provisional target for 2030 is a 30% cut in the annual aggregate emissions of the transport, buildings and agriculture sectors. The carbon budget for these sectors is approximately 383 MtCO2e for 2021 to 2030. Based on current trends, the EPA project that Ireland will produce almost 456 MtCO2e over the same period; this leaves an emissions gap of 73 million tonnes, representing a 19% overshoot on the carbon budget.[lxix] Despite the considerable financial penalties that Ireland may face over the coming decade to 2030 and the significant local and global human costs, the Plan fails to specify how the Government intends to close this emissions gap over the next five years.



The above graphic is an annotated version of a graph presented in the Climate Change Advisory Council's first report.[lxx] The solid green line highlights the linear pathway to achieve the 2050 national mitigation objective of a reduction in CO2 emissions to 80% below 1990 levels. The blue line is a linear pathway for non-CO2 emissions from agriculture to 50% of 1990 levels (50% is EU Roadmap value for total EU agri-emissions).

The solid green linear pathway back-loads the heavy lifting to later years, with the first decade seeing only a 20% reduction from a very high base whereas the last decade would require a 60% cut from a much lower base. In order to be consistent with the national 2050 objective of an 80% cut in net emissions, Ireland must carry out year-on-year cuts of 5% per annum starting now (dotted green line), which evens out the relative effort while also reducing total emissions (the area under any given curve). Every year of delay in reaching this reduction rate increases the required decrease, reflects an absence of intent to international partners, and drives up the cost of transition.

Integrate Climate Action into State Planning Decisions

The Government is currently preparing a new National Planning Framework to provide for future development and investment in Ireland over the next twenty years. We very much welcome the commitment in the National Mitigation Plan that the climate implications of spatial choices will be fully considered in order to ensure that Ireland's planning system is aligned with the national objective to achieve a low carbon economy by 2050.

However, climate change issues should not merely be addressed as an additional factor for high-level consideration in the Government's new National Planning Framework. Rather Ireland's climate change commitments, taking into account the need for enhanced action under the Paris Agreement, must be a key priority in relation to decisions-making on spatial planning and infrastructure investments. This integration and prioritisation of climate action must also feature in regular Capital Reviews and as part of the development of the State's new ten-year Capital Plan which is to be produced before the end of 2017

END NOTES

i. Afri, BirdWatch Ireland, Christian Aid Ireland, Comhlámh, Community Work Ireland, Concern Worldwide, Cultivate, Cyclist.ie, Dublin Friends of the Earth, Eco Congregation Ireland, ECO UNESCO, Feasta, Fossil Free TCD, Friends of the Earth, Good Energies Alliance Ireland, Gorta-Self Help Africa, Jesuit Centre for Faith and Justice, Just Forests, Kimmage Development Studies Centre, Latin America Solidarity Centre (LASC), Liberia Solidarity Group, Methodist Church of Ireland – Council of Social Responsibility, Mountmellick Environmental Group (MEG), National Youth Council of Ireland, Oxfam Ireland, Peoples Climate Ireland, Presentation Ireland, Tearfund Ireland, Trócaire, An Taisce, VITA V.O.I.C.E., and Young Friends of the Earth.

ii. An Taisce, Bat Conservation Ireland, Birdwatch Ireland, Celt – Centre For Environmental Living And Training, Coastwatch, Coomhola Salmon Trust, Eco-Unesco, Feasta, Forest Friends, Friends Of The Earth, Global Action Plan, Gluaiseacht, Good Energies Alliance Ireland, Green Foundation Ireland, Green Economy Foundation, Hedge Laying Association Of Ireland, Irish Peatland Conservation Council, Irish Seed Savers Association, Irish Wildlife Trust, Irish Whale And Dolphin Group, Native Woodland Trust, The Organic Centre, Sonairte, Sustainable Ireland Cooperative Voice, Zero Waste Alliance Ireland.

iii. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Ireland's target in relation to the Kyoto Protocol was to limit greenhouse gas emissions to 13% above 1990 levels in the period 2008-2012. In 2013, Ireland's Environmental Protection Agency noted 'Whilst the reduction in the distance to target for the Kyoto Protocol period is a positive outcome in terms of compliance, its occurrence is, primarily, a direct result of the current economic recession and economic outlook for the future. In order to meet future targets, Ireland cannot rely on a recession and needs to develop as a low carbon economy going forward. ' Environmental Protection Agency, Ireland's Greenhouse Gas Emission Projections 2012-2030 April 25th 2013 https://www.epa.ie/pubs/reports/air/airemissions/EPA_GHG_Emission_Proj_pub_2013_FINAL.pdf

iv. See http://www.cso.ie/en/releasesandpublications/ep/p-eii/eii2016/ggcc/

v. Environmental Protection Agency, Ireland's Greenhouse Gas Emission Projections 2016-2035, April 2017. http://www.epa.ie/pubs/reports/air/airemissions/ghgprojections/EPA_2017_GHG_Emission_Projections_Summary_Report.pdf

vi. See https://www.stopclimatechaos.ie/news/2017/07/19/longawaited-mitigation-plan-does-little-to-transform-irelands-climate-response/

vii. 'For many years now, though you would not know it from reading the climate strategy, one of the most active strands of government climate policy has had nothing to do with wind farms, insulation or electric cars. The focus for successive governments has not been on cutting emissions but on getting Ireland off the hook. Though having no mandate to do so, Irish politicians and diplomats have expended enormous political capital lobbying at EU level for an easier ride under the next set of EU targets to 2030.' Editorial, Sunday Times, 23 July 2017. Present in concluding section at https://www.thetimes.co.uk/article/government-enables-a-police-chief-who-is-a-law-unto-herself-tcq0m69t3 See also http://www.climatechangenews.com/2017/01/25/how-ireland-bent-eu-climate-rules-to-protect-farting-cows/ ; http://www.politico.eu/article/ireland-not-green-emerald-isle-greenhouse-gas-emissions-economy-growing-pollution/ ; http://www.irishexaminer.com/ireland/climate-change-ireland-accused-of-fiddling-as-the-world-burns-as-paris-agreement-signed-394588.html ; http://www.politico.eu/article/eu-risks-being-left-out-in-the-cold-in-global-warming-pact-environment-climate-change-cop-21-paris-europe/

viii. See https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally/

ix. European Environment Agency (2016). Climate change, impacts and vulnerability in Europe 2016. pp. 19 and 27. Available at: http://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016/keyfindings . Landmark research by the Lancet Commission in 2015 detailed climate change also represents an unacceptably high and potentially catastrophic risk to human health, recommending the early phase out of coal and calling for a decisive policy package which targets air pollution from the transport, agriculture, and energy sectors. Lancet Commission on Health and Climate: Change Health and climate change: policy responses to protect public health, 2015

x. See Chapter 3, Environmental Protection Agency, Ireland's Environment 2016 - An Assessment, Mr Brendan Wall, Dr Jonathan Derham and Mr Tadhg O'Mahony (Eds) http://www.epa.ie/pubs/reports/indicators/SoE_Report_2016.pdf

xi. Regarding the effects on farming in Ireland see Dr. Stephen Flood, Research Associate, ICARUS, NUIM, 'Projected Economic Impacts of Climate Change on Irish Agriculture'. October 2013. https://www.trocaire.org/sites/default/files/resources/policy/economic-impacts-of-climate-change-on-irish-agriculture-oct-2013.pdf

xii. Norwegian Refugee Council (2016) Disaster and Climate Change. Available at: https://www.nrc.no/

what-we-do/speaking-up-for-rights/climate-change/ . It is noted in the UN 2015 Human Development Report that climate change could expose 250 million people to greater water stress in Africa and, in some countries drought could halve the yields from rain-fed agriculture by 2020, noting that 'since 2008 an estimated one person every second has been displaced by a disaster, with 19.3 million people forced to flee their homes in 2014 alone.'

xiii. See "Hallegatte, Stephane; Bangalore, Mook; Bonzanigo, Laura; Fay, Marianne; Kane, Tamaro; Narloch, Ulf; Rozenberg, Julie; Treguer, David; Vogt-Schilb, Adrien. 2016. Shock Waves : Managing the Impacts of Climate Change on Poverty. Climate Change and Development;. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/22787 ; Nurse, L.A., R.F. McLean, J. Agard, L.P. Briguglio, V. Duvat-Magnan, N. Pelesikoti, E. Tompkins, and A.Webb, 2014: Small islands. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1613-1654

xiv. Since 2015, an investigation by the Bank of England into systemic risk led to the establishment of the G20 Financial Stability Board Task Force on Climate-related Disclosure. In recent months the Dutch Central Bank and Swedish Financial Supervisory Authority, the Australian Prudential Regulation Authority, Deputy Governor of the Bank of Canada, and a joint report by the French Treasury, Central Bank and Prudential Regulators have all initiated national level consideration of these issues. Climate change and directly connected issues of extreme weather and resource crises have consistently featured among the top-ranked risks in the World Economic Forum's Global Risks Report since 2011. See also European Environment Agency (2016) Climate change, impacts and vulnerability in Europe 2016: An indicator-based report. Brussels: European Environment Agency. Available at: http://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016

xv. European Environment Agency (2016) Climate change, impacts and vulnerability in Europe 2016: An indicator-based report. Brussels: European Environment Agency. Available at: http://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016

xvi. See https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf

xvii. See http://www.foe.ie/imglibrary/2016/10/201610270742501.png

xviii. See http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-13-climate-action.html

xix. See http://www.globalgoals.org/global-goals/protect-the-planet/

xx. https://www.foe.ie/download/pdf/unlocking_opportunity_the_business_case_for_climate_action_in_ireland.pdf

xxi. See www.irishtimes.com/opinion/enda-kenny-we-must-act-now-on-climate-change-or-it-will-be-too-late-1.2448804 ; www.independent.ie/world-news/climate-change-is-not-our-priority-taoiseach-34248017.html ; www.irishtimes.com/news/politics/cop21-kenny-criticises-unrealistic-climate-targets-1.2449442 ; www.merrionstreet.ie/en/News-Room/Speeches/Statement_by_An_Taoiseach_Enda_Kenny_T_D_21st_Conference_of_the_Parties_to_the_UN_Framework_Convention_on_Climate_Change.html

xxii. See http://www.cso.ie/en/releasesandpublications/ep/p-eii/eii2016/ggcc/

xxiii. This relates to 2020 targets set under the Effort Sharing Decision. See European Environment Agency, Trends and projections in Europe 2016 - Tracking progress towards Europe's climate and energy targets - www.eea.europa.eu/themes/climate/trends-and-projections-in-europe/1-overall-progress-towards-the And www.eea.europa.eu/themes/climate/trends-and-projections-in-europe/current-progress-towards-targets-under

xxiv. Environmental Protection Agency, Ireland's Greenhouse Gas Emission Projections 2013-2030 28th May 2014 - https://www.epa.ie/pubs/reports/air/airemissions/GHG_report2014.pdf and Environmenal Protection Agency, Ireland's Greenhouse Gas Emission Projections 2012-2030 April 25th 2013 https://www.epa.ie/pubs/reports/air/airemissions/EPA_GHG_Emission_Proj_pub_2013_FINAL.pdf

xxv. Environmental Protection Agency, Press Release 13 April 2017, Greenhouse gas emissions projected to increase strongly as economic growth takes hold

xxvi. 'Whilst the reduction in the distance to target for the Kyoto Protocol period is a positive outcome in terms of compliance, its occurrence is, primarily, a direct result of the current economic recession and

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lxvii. An emissions target can be expressed in two ways: 1. An "end-point" reduction level: a percentage

reduction in annual emissions by a certain year, relative to some reference year. In itself such a target says nothing about the planned pathway of emissions over this period (they might decline steadily, or might go up first and then subsequently decline more quickly etc.): but this detailed pathway may make a big difference to the actual climate impacts (even if the endpoint target is met). Hence, an end-point target in itself is a poor tool for policy planning. 2. The total amount of accumulated emissions allowed over a certain time (or, indeed, for all time into the future). This is known as a carbon budget. The science tells us that, for any given temperature increase limit, there is a corresponding, finite, remaining amount of global atmospheric capacity to absorb emissions, largely regardless of how long or how short a period those total emissions are spread over. Carbon budgets are better planning tools, as they reflect the "zero sum" nature of the trade-offs of remaining emissions across sectors and across time. If we continue to emit more now, we must emit even less in the future (i.e., the detailed shape of the reduction pathway doesn't really matter as long as the cumulative total is the same). If one sector is allowed a greater share of the available budget, some other sector(s) must be allocated less. On a global level, when one country annexes to itself a greater share of the remaining global budget, it is essentially expecting others to settle for less. Ireland has used both ways of expressing targets in the past. For example, the Kyoto target for the 2008-2012 period was expressed both as a limit on emissions of 13% above 1990 levels, and as total emissions of 314 Mt CO2.

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Working for a sustainable future

Environmental Pillar of Social Partnership

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