



12th December 2017

Climate Change Advisory Council

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Tackling Climate Change and its
Consequences

Met Éireann:

Future Weather, Future Challenges

Background

- Met Éireann anniversary
- Climate Change Advisory Council
 - To review national climate policy and advise government on how Ireland can move to a low carbon, **climate resilient** economy and society by 2050
 - Adaptation committee of the Council
 - Have provided advice on adaptation

Met Éireann anniversary

- Annual report of the Registrar General, 1864
 - Included a report on meteorological observations:
 - “Geraniums which remained out of doors were killed by the frost on the 4th of January ... up to which date they were fresh and green, and in many cases in bloom.”
 - “On the afternoon of the 19th of March a large yellow butterfly was seen flying about the garden attached to the Ordnance Survey in Phoenix Park”
 - A more eclectic approach to documenting climate change in the past!
- Met Éireann has come a huge distance
 - Professionalism and technical competence of Met Éireann today
 - Vital to understanding, not just tomorrow’s weather, but also the process of climate change and what it means for Ireland
 - Essential to have such expertise available for policy-makers in Ireland
 - Met Éireann vital role in making Ireland climate resilient.

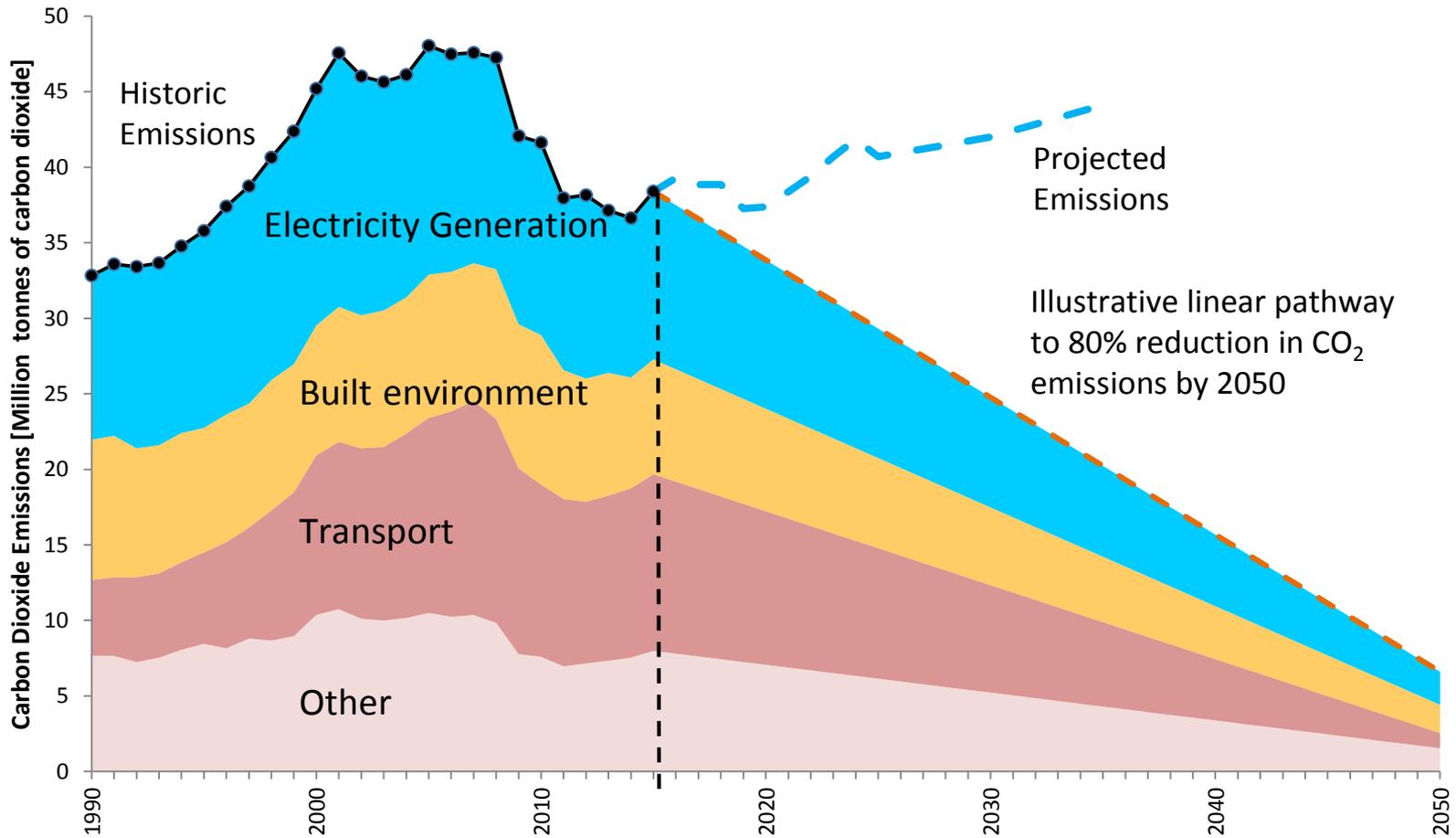
Climate Change – the Challenge

- The world faces dramatic changes as a result of human behaviour
 - However, these changes will take decades to play out, but not centuries
- This is more about future generations than our own
 - Cannot say – policy will be a big benefit to you, or even your children.
 - The burden of a climate disaster will fall more on future generations
 - Reason for taking action – altruism
- Today suffering the effects on climate change of inaction in the past
 - Urgent need to adapt to what is inevitable because of past inaction
- Climate change is a moral question
 - We are suffering today from past inaction
 - Action is required which will bring us little benefit, but significant costs
 - In nearly all other policy areas there are winners and lose

Communicating Climate Change Challenge

- No simple answer
- Many distractions
 - Brexit, Tracker mortgages etc. etc.
 - Politicians are human and can only work 24 hours a day. Getting necessary attention is difficult. A high profile event like the Paris conference was an opportunity to concentrate minds
- How to communicate
 - Human behaviour – complex response to information
 - Ability of people to absorb information
 - A moment of inspiration does not necessarily produce a lifetime of action
 - The role of the market as a simple signal
 - However, the market is always imperfect. Many other approaches needed as well.

The Challenge: to 2020 and 2050



Progress Towards 2020 Targets?

- Ireland will not achieve 2020 targets
 - With higher growth: risk of even higher emissions
- Serious: achieving our 2030 target more difficult
 - Can buy permits for 2020 – but will require even greater (and more expensive) action in 2020s
 - Need urgent action to minimise gap to 2020, to be on track to meet 2030 targets and decarbonisation to 2050
- Need to consider scenarios on how to decarbonise by 2050
 - Scenarios because of uncertainty to inform cost effective pathway

National Mitigation Plan

- Council welcomed the NMP
 - Reflected commitment of the Government to the task of tackling climate change
 - A number of key Ministers signed off on the NMP and a special Cabinet meeting
- Additions included:
 - Comprehensive approach to land use with inclusion of wetlands
 - Review of the Public Expenditure Code
 - This should influence autumn Investment Plan
- Council recognised that NMP is work in progress
 - Look forward to significant further progress

Council Recommendations

- Need to identify and implement additional policies if we are to meet targets and achieve National Transition Objective
 - NMP lists many possible initiatives but commitment to new measures and implementation is being delayed
- Need a review of performance of existing policies and of analysis of proposed new initiatives
- Policies should be developed within a framework
 - Quantify expected reduction in emissions at what cost
 - This analysis would allow prioritisation
 - A framework would ensure policies fit together

National Adaptation Framework

- Need for more urgency in tackling adaptation
- The policy challenge
- Governance and structures
- Task of adaptation.
- Critical infrastructure
- Private sector responsibilities

The Policy Challenge

- Climate change will have increasing impact
- Policy must take account of:
 - Current and historic vulnerability to weather and climate variability and extremes as a basis for determining risks and exposure.
 - Projected changes in vulnerability, risk and exposure.
 - Slow-onset changes such as sea level and certain ecosystem responses.
 - Potential for climate change to trigger events that are highly disruptive.
 - Occurrence of low-probability, high-impact events including the changes in the Atlantic Meridional Overturning Circulation or loss of Greenland Ice Shelf.
- Need to define objectives on adaptation
 - Criteria needed to prioritise investment
 - Assess vulnerability of critical infrastructure

Governance and Structures

- Different government agencies - need co-ordination
- Need for common understanding of challenge of climate change for Ireland
 - What kind of climate extremes should be planned for?
 - Some agencies deciding for themselves
 - ‘Climate Ireland’ platform provides critical information supporting sectors and local authorities
 - Key role for Met Éireann
- Framework needed
 - Unclear what decision framework will be used to determine adaptation priorities
 - How is ownership for adaptation to be assigned where there are multiple actors
- Need for appropriate governance
 - Who is responsible?
- Steering Group chaired by Minister for Climate Change
 - Should include Departments of Finance and Public Expenditure

National Adaptation Framework

- Decisions on planning and development affecting future resilience
- Assessing Costs and Benefits
 - Need to prioritise state investment
 - Need framework for prioritisation e.g. OPW
- Health, wellbeing and social impact
- Warnings and emergency response
- Climate change will affect the wider world
 - Effects on society, economy, migration.
 - Feedback to Ireland

Vital Infrastructure

- Ophelia a wake up call
 - Assess what worked well and where there were failures
- Sectoral plans – good example:
- Electricity and Gas Network Sectoral Adaptation Plan
 - Realistic
 - A good view for system, including definition of what adaptation means
 - Need to consult with stakeholders – e.g. water, health etc.
 - More attention to costs (and benefits) of proposed action
- National Planning Framework
 - Needs to include relevant vulnerability and risk analysis
 - Vital contributor to future resilience

Private Sector Role

- At least as important as public sector role
- State cannot fund adaptation by private sector but should concentrate on “public goods”
- Households & companies have duty to adapt themselves
 - Insurance. The state cannot be the insurer of last resort
 - Unwise development has consequences: for the developer
 - Farming – adaptation in light of research
- National Adaptation Framework needs to spell out role of private sector

Conclusions

- Climate change poses a unique challenge for society
- The Council considers that Ireland should have no further negative impact on the climate system by mid-century
- Need major change on policy to deliver on national objective
- Because consequences of climate change are already affecting us adaptation needs to be prioritised
 - Need co-ordinated response
 - Public **and** private investment
 - Prioritisation and value for money crucial
 - Long lead in time on many actions
 - Consider cascading effects of failures in vital infrastructure
 - Preparing for inevitable and unavoidable crisis events