International case studies and lessons for New Zealand

A Zero Carbon Act research paper (April 2017)
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Overview

The proposed Zero Carbon Act for Aotearoa New Zealand is in line with a global trend over the last 10 years to enact long-term legal frameworks in response to climate change. The trend is clear – the world is making legislative commitments towards a net zero carbon future. A Zero Carbon Act will ensure New Zealand stays in step with this global transition away from fossil fuels.

Legislated targets, pathways and frameworks send a strong signal of a country or state's commitment to addressing climate change externally to the international community as well as internally to government institutions, business and the population at large.

This research paper reviews climate change legislation from three jurisdictions: The United Kingdom ("UK"), the Republic of Ireland and the Australian state of Victoria. These three international case studies are particularly relevant to New Zealand, due to their broadly similar political, economic and social context.

These are not the only jurisdictions that have enacted climate change legislation similar to the proposed Zero Carbon Act. Two other states of Australia, as well as the Australian Capital Territory, have enacted such legislation.¹ Several states and provinces throughout the United States and Canada also have adopted sub-national frameworks.² And in Europe there are legislated carbon targets or goals in Denmark,³ Finland,⁴ and Switzerland.⁵ Sweden has recently announced plans to legislate a target of carbon neutral by 2045.⁶ Some of these legislative regimes are included in the comparative table at the end of this paper.

In light of the UK, Irish and Victorian experiences and legislation, there are a number of key lessons for New Zealand when it embarks on the process of drafting its own climate change legislation:

- The value of achieving broad cross-party political support for climate change legislation.
- The necessity for a climate advisory commission to be independent.
- The importance of concrete, legally binding emissions reductions targets.
- The power of transparency and reporting requirements to hold governments accountable for their progress towards targets.

This paper is the product of efforts to explore the best blueprint for climate legislation in New Zealand. The basic conclusion is that the relative success of the UK’s climate governance regime provides a model that can be readily tailored to New Zealand’s social and economic profile. The UK regime can be contrasted with Victorian legislation, which fails to create an independent body of expert oversight, and the absence of serious carbon reduction targets under Ireland’s framework. Hence, much of this paper focuses on the detailed design of the UK’s Climate Change Act 2008 to provide context to the proposed structure and content of the Zero Carbon Act.

1. Climate Change and Greenhouse Emissions Reduction Act 2007 (South Australia); Climate Change (State Action) Act 2008 (Tasmania); Climate Change and Greenhouse Gas Reduction Act 2010 (ACT).
2. For the United States, see Global Warming Solutions Act 2006 (California); Climate Change Act 2008 (Pennsylvania); New York State Climate and Community Protection Act 2016; Global Warming Solutions Act 2008 (Massachusetts); and Resilient Rhode Island Act 2014. For Canada, see Greenhouse Gas Reduction Targets Act 2007 (British Columbia); Climate Change and Emissions Reductions Act 2008 (Manitoba); Climate Change Mitigation and Low-carbon Economy Act 2016 (Ontario).
Case study 1: United Kingdom — Climate Change Act 2008

A History of the Act

The UK’s Climate Change Act 2008 came into being following widespread public demand for action on climate change and strong cross-party support from the UK Parliament.

The Act’s origin was a Climate Change Bill drafted by Friends of the Earth in 2005. The Bill was shared with UK MPs and promoted in a public campaign dubbed The Big Ask. Friends of the Earth formed a coalition with other organisations, including the World Wildlife Fund, Greenpeace, Oxfam, and celebrities such as Radiohead’s front man Thom Yorke, to raise the profile of the Bill. At the height of The Big Ask campaign in 2007, over 60,000 UK citizens had called or written to their local MP asking them to support the Bill — this equated to one person contacting an MP every 8 minutes.

The influential Stern Review on the Economics of Climate Change, by the Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (“Grantham Institute”), added further impetus for legislative reform. The Stern Review highlighted the potentially catastrophic impacts of climate change, and concluded that the long-term economic benefits of strong and early action to reduce greenhouse gas (“GHG”) emissions considerably outweighed the costliness of delay.

David Cameron, the leader of the Conservative Party in opposition at the time, expressed support for a Climate Change Bill in September 2006, joining hundreds of other MPs from a range of parties who had already done the same. Soon after this Conservative Party announcement, the Labour Government indicated in the 2006 Queen’s Speech that it would be introducing a new climate law, and issued its own draft Bill in early 2007. The Bill was widely scrutinised by Committees, experts and the general public. Throughout this process, the UK Government explicitly acknowledged the importance of addressing climate change, and that the Bill represented a world-leading blueprint likely to be replicated by other countries.

The independent advisory body created by the Act, the Committee on Climate Change (“CCC”), was pre-emptively created in “shadow form” in March 2008, before the Act came into force. This enabled the immediate provision of expert advice regarding the Act’s 2050 emissions reduction target, and for a report on the UK’s transition to a low carbon economy to be prepared as soon as possible.

Sustained demands for increased ambition from the public and MPs, in combination with advice from the shadow CCC, resulted in two significant last-minute changes to the Bill: (1) the initial long-term target of a 60% GHG emissions reduction by 2050 (below 1990 baseline levels) was increased to 80%; and (2) the Bill was amended to take into account international aviation and shipping (“IAS”) emissions.

The Climate Change Act was passed with near unanimity by the UK Parliament in late 2008, with only five votes against.

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8. Friends of the Earth “Happy Birthday to The Big Ask” (7 January 2008) <www.foe.co.uk/news/happy_birthday>
12. This advice was due by 1 December 2008: Climate Change Act 2008 (UK), s 33.
13. Committee on Climate Change Building a low-carbon economy — the UK’s contribution to tackling climate change (December 2008) available online <archive.theccc.org.uk/archive/pdf/TSO-ClimateChange.pdf>
B Design of the Act

1 Legally binding emissions reduction targets

The Climate Change Act was the first in the world to set legally binding domestic targets, known as “carbon budgets”, as a means of achieving a long-term GHG emission reduction goal. Under the Act, the Secretary of State responsible for climate change (“the Secretary”) — equivalent to New Zealand’s Minister for Climate Change Issues — has a duty to ensure that the 2050 target and each five-yearly carbon budget is achieved.14 During the passage of the Bill, the UK Government responded to submissions about the legal enforceability of these duties as follows:15

Our view is that the duties in the Bill — including the requirement to meet the targets and budgets — are stringent and legally enforceable. The statutory basis means that any failure to meet a target or budget carries the risk of judicial review, with remedies available at the discretion of the courts. No Government will take this risk lightly.

The Act also contains a statutory 2020 interim target, which states that the carbon budget for the year 2020 must include an emissions reduction target of at least 26%.16 This requirement was satisfied in 2009 when the UK Government accepted the CCC’s recommended target of 34% for the 2018–2022 carbon budget.17 The 2050 target and this 2020 interim target are the only targets stated in the Act. Carbon budgets, in contrast, are set by Ministerial order.

The Act’s 2020 interim target served two main functions. Firstly, it ensured that the UK’s carbon budget for 2020 would satisfy a minimum level of ambition, preventing the UK Government from delaying action until the 2030s and 2040s. Secondly, it acted as a signpost for businesses and other stakeholders as to the likely direction and impact of the Act, prior to any carbon budgets being set. This strong focus on transparency is apparent throughout the Act.

2 Carbon budgets

Carbon budgets are set by Ministerial order, and subject to affirmative resolution procedure, which means Parliament must formally assent to the order. Under the Act, the Secretary of State is legally required to consider several factors when setting a carbon budget target. First, the carbon budget must be set with a view to meeting the Act’s 2050 target, and the UK’s European and international obligations.18 Secondly, they must take into account the advice of the CCC, and any views expressed by the national authorities of Scotland, Wales, or Northern Ireland.19 Finally, the Secretary must take into account the following matters:20

- Scientific knowledge about climate change.
- Technology relevant to climate change.
- Economic circumstances, and in particular the likely impact of the decision on the economy and the competitiveness of particular sectors of the economy.
- Fiscal circumstances, and in particular the likely impact of the decision on taxation, public spending and public borrowing.
- Social circumstances, and in particular the likely impact of the decision on fuel poverty.
- Energy policy, and in particular the likely impact of the decision on energy supplies and the carbon and energy intensity of the economy.

15. Department for Environment, Food and Rural Affairs, above n 11, at 53.
18. Section 8.
19. Section 9(1).
20. Section 10.
• Differences in circumstances between England, Wales, Scotland and Northern Ireland.
• Circumstances at European and international level.
• The estimated amount of reportable IAS emissions for the budgetary period or periods in question.

This list does not prevent the Secretary from taking other relevant matters into account. The CCC must also take into account the above matters when preparing its carbon budget advice for the Secretary.21 If the Secretary departs from the CCC’s recommended carbon budget, the Secretary must publish a statement outlining their reasons for doing so.22

The five-year length of the carbon budgets matches the UK’s parliamentary term. This temporal alignment ensures that carbon budgets fall across different governments, and never start or end during a general election year. Unlike annual budgets, a five-year period better enables year by-year fluctuations to be taken into account, and also aligns with the five-year framework of the EU emissions trading scheme (“ETS”) as well as the five-year framework of the Paris Agreement.

The Act required that the UK’s first three carbon budgets — 2008–2012, 2013–2017 and 2018–2022 — to be set by June 2009.23 Subsequent budgets must be set at least 12 years in advance.24 For example, in 2016 the UK government set the carbon budget for 2028-2032, at an emissions reduction level of 57% below the UK’s 1990 baseline.25 The purpose of the 12 year forecast is to provide long-term certainty for businesses, investors, communities and public authorities alike.

The Act empowers the Secretary to carry emissions across carbon budgets.26 Up to 1% of emissions can be carried backwards to an earlier budget that met its target percentage with room to spare. Conversely, if the UK exceeds a carbon budget, the Secretary of State can order these excess emissions to be carried forward to a future budget.

3 Amending targets and carbon budgets

By order, the Secretary can amend the target percentage of the Act’s 2050 and 2020 statutory targets. However, this power may only be exercised following “significant developments” in (1) scientific knowledge about climate change; or (2) European or international law or policy.27

Alternatively, the 2050 target can be amended in connection with (1) an order to include additional GHGs in the Act, or (2) new regulations to include IAS emissions.28

There are further safeguards. Targets can only be amended if the Secretary has (1) obtained and taken into account advice from the CCC; and (2) taken into account any views expressed by the UK’s other national authorities.29 If the Secretary’s proposed amendment departs from the CCC, the Secretary must provide a statement justifying the reasons for doing so.30

By order, the Secretary may also amend a carbon budget following “significant changes” affecting the basis on which the budget was originally set.31 In effect, the Secretary must take into account all of

21. Section 10(1)(b).
22. Section 9(4).
25. Carbon Budget Order 2016 (No. 785)
26. Section 17.
27. Section 6(2)(a).
28. Section 6(2)(b).
29. Section 7.
30. Section 7(6).
31. Section 21(2).
the same matters as when initially setting the carbon budget, outlined earlier. This includes advice from the CCC, the 2050 target, and the UK’s international obligations.

Finally, all of these amendments are subject to affirmative resolution procedure, which means Parliamentary assent. These requirements and safeguards apply to both progressive and regressive amendments. To date, no targets or budgets have been amended under the Act.

4 Carbon accounting and carbon trading

The UK Act must be implemented consistently with international carbon reporting practices. It takes account of all the standard GHGs, including short-lived gases such as methane. Additional GHGs can be added by Ministerial order.

The final emissions total which must fall below the Act’s targets and carbon budgets is the “net UK carbon account”, which is the UK’s net emissions less any carbon units from emissions trading schemes, including international schemes.

Although the Act permits carbon trading units to be included in the net UK carbon account, it requires the Secretary of State to set a limit on how many units can be credited in this manner, after taking into account the advice of the CCC. This limit is subject to Parliamentary assent. The most recent limit, passed in June 2016, restricts the carbon units that can be credited to the 2018–2022 budgets to 55 MtCO₂e, out of a total carbon budget of 2,544 MtCO₂e; that is, about 2% of the total. However, in a letter to the Secretary, the CCC recommended a zero limit. Furthermore, carbon units from the EU ETS do not count towards this limit. Notably, the Act explicitly requires the Secretary of State to have regard to the need for UK domestic action on climate change. Domestic action means reducing UK emissions or increasing UK removals, and does not include using carbon units from international sources.

Although the Act addresses IAS emissions, at present they are not formally included in the UK’s carbon budgets. Instead, the UK’s estimated share of IAS emissions must be taken into account by the CCC when recommending carbon budgets, and by the Secretary when setting a carbon budget. These estimates ensure that carbon budgets are set with sufficient headroom to enable the UK to meet its 2050 target inclusive of IAS emissions. The Act envisages a change of approach in the near future. It required the Secretary to introduce regulations by 2012 specifying how IAS emissions would be formally included in the Act, or, alternatively, to explain why regulations would not be introduced. In December 2012, the UK Government chose the latter option, and explained that this was to promote progress in international IAS negotiations, including agreement on IAS accounting methodologies, without the UK being seen to take unilateral action. In the absence of such regulations, the CCC must continue to advise on the inclusion of IAS emissions, and carbon budgets must continue to be set with estimated IAS emissions taken into account.

32. Sections 6(5) and 21(5).
33. Section 29(2).
34. Section 24.
35. Section 24(2).
36. Section 27.
37. Section 11.
38. Climate Change Act 2008 (Credit Limit) Order 2016 (No. 786).
40. Climate Change Act 2008 (Credit Limit) Order 2016 (No. 786), ar 3(2).
41. Section 15.
42. Section 10(2)(i).
43. Section 30(3).
45. Climate Change Act, s 34.
5 Committee on Climate Change

The Act empowers the relevant Ministers from the national authorities of England, Scotland, Wales and Northern Ireland to appoint one Chair and between five to eight other members to the CCC.\(^{46}\) The Chair of the CCC is appointed first, and the Ministers must consult the Chair before making subsequent appointments.\(^{47}\) The Ministers must also have regard to the desirability of the CCC, as a whole, having experience and knowledge of the following areas:\(^{48}\)

- Business competitiveness.
- Climate change policy at national and international level, and in particular the social impacts of such policy.
- Climate science, and other branches of environmental science.
- Differences in circumstances between England, Wales, Scotland and Northern Ireland and the capacity of national authorities to take action in relation to climate change.
- Economic analysis and forecasting.
- Emissions trading.
- Energy production and supply.
- Financial investment.
- Technology development and diffusion.

The CCC has two main functions. The first is advisory. It must provide non-binding advice to the Secretary on the recommended targets for each carbon budget, and the extent to which that budget should be met through domestic action rather than purchasing international carbon credits.\(^{49}\) It must also advise on the contributions required of different sectors of the economy.\(^{50}\) The CCC’s advice must include reasons, and be provided 12 years and six months prior to the carbon budget period to which it relates.\(^{51}\) Advice must be published as soon as is practicable after providing it to the Secretary.\(^{52}\) Additionally, the CCC must provide advice on request to any of the UK’s national authorities in relation to their functions under the Act, adaptation policy, or any other climate matter.\(^{53}\)

The CCC’s second main function is to report to Parliament every year on the progress made towards meeting the UK’s carbon budgets and 2050 target, whether these future targets are likely to be met, and what further progress is needed.\(^{54}\) Following a carbon budget, the CCC must report on how the budget was or was not met, and the actions taken to reduce the UK’s emissions.\(^{55}\) The Secretary of State is required to respond to the CCC’s recommendations in these progress reports, and to lay this response before Parliament.\(^{56}\) This illustrates how the CCC has not only an advisory role but is also a watchdog and agenda-setter by providing an independent perspective on what needs to be done to achieve the emissions reductions targets set under the Act.

The CCC is required to appoint a Chief Executive and may appoint other employees.\(^{57}\) The CCC currently has about 30 staff for analytical and corporate support.\(^{58}\) The CCC can also establish Sub-Committees, which may include non-members of the Committee itself.\(^{59}\) The Act requires the

\(^{46}\) Schedule 1, cl 1.
\(^{47}\) Schedule 1, cl 1(2).
\(^{48}\) Schedule 1, cl 1(3).
\(^{49}\) Section 34.
\(^{50}\) Section 34(1)(d).
\(^{51}\) Section 34(4)(b).
\(^{52}\) Section 34(6).
\(^{53}\) Section 38.
\(^{54}\) Section 36(1).
\(^{55}\) Section 36(2).
\(^{56}\) Section 37.
\(^{57}\) Schedule 1, cls 11 and 12.
\(^{58}\) Committee on Climate Change "Structure and Governance" <www.theccc.org.uk/about/structure-and-governance>
\(^{59}\) Climate Change Act, sch 1, cl 15.
establishment of a mandatory Adaptation Sub-Committee, which must provide enough information to allow the CCC to fulfil its advisory duties on adaptation.60 The CCC is an independent statutory body. It does not act as a Crown agent, nor does it enjoy any Crown immunities.61 It is publicly funded, and required to account for its expenditure.62

Members of the CCC hold office in accordance with the term of their appointment, as determined by the national authorities.63 The national authorities also determine what remuneration and allowances are payable to the members of the CCC, its staff and the members of any Sub-Committees.64 Members of both the CCC are entitled to resign at any time during their appointment, but can only be removed by the national authorities where the member has been continually absent, becomes bankrupt, or is otherwise unfit to carry out their duties.65 In practice, the terms of appointment are currently for five years and CCC members are limited to two terms. Remuneration is offered at £800 per day with a workload of two days per month.66

6 Emissions reduction policy plan

As soon as is reasonably practicable after setting a carbon budget, the Act requires the Secretary to prepare policies to ensure the carbon budget will be met.67 The policies must be laid before Parliament, accompanied by a policy report.68 This report sets out all existing policies prepared to meet carbon budgets, the time frames in which any new policies are expected to take effect, and how different sectors of the economy will be affected.

The policy plan must, as a whole, contribute to sustainable development.69 In all other respects the Act does not prescribe or constrain what emission reduction policies may be implemented by the UK Government to meet its carbon budgets.

Other relevant transparency duties for the Secretary of State include a requirement to provide annual statements of the UK’s emissions,70 and to forecast future emission changes,71 thereby highlighting policy gaps which need addressing in order to meet future targets. As noted, the CCC must also deliver annual reports to Parliament setting out their views on what further progress is needed, to which the Secretary is legally required to respond.

7 Adaptation policy plan

The Act requires the Secretary to prepare risk assessment reports for Parliament about the impacts of climate change at least every five years.72 The CCC’s Sub-Committee on Adaptation must advise the Secretary about these risks prior to each report.73 As soon as reasonably practicable after submitting a risk assessment report to Parliament, the Secretary has a legal duty to prepare a national adaptation programme outlining objectives, policies and time-scales to meet the risks identified in the report.74
The Act also empowers the Secretary to issue adaptation guidance to public authorities. This may include a direction to assess risks, prepare policies, or report on progress to date. Public authorities must comply with directions issued under the Act.

C Operation of Act

To date, the UK Government has accepted all of the CCC’s recommended targets, and has met all of its carbon budgets (see graph below).

The cost of meeting future targets, affirmed in the CCC’s most recent advice, is likely to be less than 1% of the UK’s gross domestic product. A 2016 report by the Grantham Institute has also concluded that the climate policies implemented under the Act have not damaged the competitiveness of the UK’s businesses; to the contrary, evidence suggests that well-designed climate change policies could increase the long-term competitiveness of UK businesses by promoting greater innovation and efficiency.

The CCC’s recommended UK carbon budgets and the UK’s 2050 target

In March 2016, the UK Government announced its intention to extend the Act to a net zero long term target, in alignment with the Paris Agreement.\(^{80}\) The CCC agrees with this step, but recommends continuing to focus on short-term action while developing a strong evidence-based net zero emissions strategy.\(^{81}\)

Initial reviews of the Act acknowledged the merit of its framework and science-based targets, while stressing that the real test will be how the Act responds when the UK begins to veer off course.\(^{82}\) Arguably, this test is now upon us: the CCC’s annual progress report for 2016 states that the UK is at a “critical point” in its climate policy development.\(^{83}\) Most of the UK’s emissions reductions to date have been the result of a radical decarbonisation of the energy sector. Significant progress in other sectors — including transport, residential buildings, industry, and innovation — is now necessary to meet future targets.

Indeed, forecasts show that the UK is currently not on track to meet its carbon budgets for 2023–2027 and 2028–2032, set at 50% and 57% below 1990 levels respectively (see graph above). This has been the subject of much discussion and scrutiny. The UK government has stated that its next policy package, deferred several times but now due in June 2017, will close the policy gap by setting out a plan to meet these targets.

In contrast to the precise dates and duties appearing elsewhere in the Act, policy plans must be submitted “as soon as is reasonably practicable” after setting a target.\(^{84}\) ClientEarth, a legal climate advocacy group, take the view that the Secretary of State’s current lengthy delays are in breach of this duty.\(^{85}\) But the legal situation is uncertain, which highlights a deficiency in the UK model. The Zero Carbon Act will avoid such outcomes, and promote transparency and long-term certainty, by including specific deadlines for the preparation of policy plans.

These developments nonetheless illustrate the overall value of the UK Act. Despite these delays, the uncertainty created by Brexit, and the resistance to climate ambition shown by Theresa May’s Conservative Government, the Act has ensured that the UK remains bound to its economy-wide long-term emission reductions pathway. The UK Government must continue to take into account advice from the CCC, to prepare policy for future emissions reductions, and ensure that its carbon budgets are met. Failure to do so can result in the Government being held legally accountable in court.

The Act’s reporting requirements, combined with the oversight of the CCC, have meant that these roadblocks to the UK’s transition to a low carbon economy have been identified as early as possible. Early identification permits issues to be proactively addressed at least cost, driven by the Act’s clear targets. The fact that the UK Government is currently facing backlash for the policy gap regarding its 2023–2027 and 2028–2032 carbon budgets illustrates the power of the Act to transparently expose an absence of policy, which in turn promotes public engagement and debate on climate issues. Equally, the Secretary must still meet his or her duties under the Act’s long-term framework, in light of expert advice from the CCC, thus mitigigating the likelihood of knee-jerk policies that depart from long-term objectives.

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84. Section 14.
D Lessons for New Zealand

The UK situation can be contrasted with New Zealand, where the government is likely to face little to no accountability for failing to prepare an adequate domestic emissions reduction plan for the next few years, let alone for the period 2028–2032. New Zealand’s failure to reduce domestic emissions is not a transparent issue for many New Zealanders, nor is the executive government institutionally driven to implement emissions reductions policy as part of an economy-wide long-term strategy.

The strengths of the UK Act, and the similarities between the legal systems of New Zealand and the UK, means that the UK model is a valuable starting point towards developing best-practice climate legislation specific to New Zealand’s circumstances. The Zero Carbon Act is largely based on the UK Act for this reason.

The three key pillars of the UK Act — accountability, independent expert advice, and transparency — are equally applicable and necessary in a New Zealand climate change context. Each pillar complements the others: the model has the most merit when implemented as a whole. For example, legally binding carbon budgets are not only an accountability measure, but are set in accordance with expert scientific advice, and transparently outline the pathway to a low carbon future. The Act’s requirements for reporting and policy-plan preparation provide certainty for businesses, communities and other stakeholders to invest and undertake complementary mitigation and adaptation strategies with more confidence, while also promoting public engagement and greater accountability. The CCC has been likewise structured so as to not only provide expertise, but to strengthen the other pillars through its independent watchdog role.

Yet the UK Act is not a ready-made blueprint for New Zealand. For example, the requirement to set policy plans “as soon as is reasonably practicable” has given rise to considerable uncertainty in the UK. The Zero Carbon Act will avoid such outcomes, and promote transparency and long-term certainty, by including specific deadlines for the preparation of policy plans. There is also some uncertainty as to how the UK Act’s binding duties can be enforced at law. The Zero Carbon Act will remedy this deficiency by explicitly addressing who has standing to bring a judicial review claim against the Government, and what orders the judiciary is permitted to impose.

Other aspects of the UK Act do not align ideally with our cultural, legal, and climate change profile. These critical differences, which include the prominence of agricultural emissions in New Zealand, and the significance of the Treaty of Waitangi, must be addressed to ensure that legislation based on the UK model is fit for purpose in a New Zealand context.

The Zero Carbon Act borrows the best of the UK with an eye to the unique needs of New Zealand’s social and economic profile.
Case study 2: Ireland — Climate Action and Low Carbon Development Act 2015

A  History of the Act

On 10 December 2015, the Climate Action and Low Carbon Development Act 2015 (“the Irish Act”) was signed into law by the President of Ireland. While earlier legislation dealt with discrete efforts to combat and cope with climate change, the Irish Act must be viewed as “Ireland’s first overarching piece of climate change legislation”.

The passage of the Irish Act coincided with the drafting of the Paris Agreement and occurred a few weeks after the People’s Climate March of 4,500 participants descended on Dublin. But it would be a mistake to assume there was strong popular demand for the new legislative regime. Against the backdrop of the 2008 economic crisis, environmental issues have not been a high priority in Irish politics: less than 2% of polled public opinion mentioned “the environment, climate or energy” as one of the two most important issues facing the country.

Policymakers in the public sector, however, recognised the need for holistic reform of the Irish economy to address the anticipated consequences of climate change. In 2012, the Environmental Protection Agency (“EPA”) — the body responsible for monitoring GHG emissions — assessed Ireland’s climate strategy “to 2020 and beyond” as part of a broader programme of policy review announced by the Minister for the Environment, Community and Local Government (“the Minister”). The EPA concluded, among other things, that the creation of a “national framework is vital to progress effective actions on both mitigation of, and adaptation to climate change supported by sectoral, national and where necessary regional and local strategies”.

It took over three years for this recommendation to progress from an abstract policy to a draft bill and then through the two legislative houses of the Oireachtas before its enactment in late 2015. Moreover, as outlined below, some components of the Irish Act will not be effected until the end of 2017.

B  Design of the Act

The centrepiece of the Irish Act is the national transition objective of “a low carbon, climate resilient and environmentally sustainable economy by the end of year 2050”. For the purpose of enabling the pursuit and achievement of this objective, the Minister is responsible for making, and submitting to the Government for approval, national mitigation plans and a national adaptation framework.

87. McCann Fitzgerald Climate Action and Low Carbon Development Act 2015: A Brief Overview (February 2016) at 1.
89. At 183–184.
91. At 11.
92. Climate Action and Low Carbon Development Act 2015 (Ireland), s 3(1).
93. Section 3(2)(a)–(b).
From the date of enactment, the first mitigation plan must be submitted by the Minister within 18 months (10 June 2017), and the adaptation framework must be implemented within 24 months (10 December 2017). These are to be reviewed and updated every five years.

The mitigation plans are intended to lower Ireland’s level of GHG emissions, whereas the purpose of the adaptation framework is to set out a strategy to reduce Ireland’s vulnerability to the negative effects of climate change while taking advantage of any positive effects that may occur. Within three months of the submission of the national adaptation framework, the Government must request from all Ministers the making of a sectoral adaptation plan in respect of their executive portfolios.

In formulating a national framework and sectoral plans for adaptation, the Ministers must take into account:

- Ireland’s international legal obligations and any likely future adaptation commitments.
- The need to promote sustainable development.
- The need to achieve the objectives at the least cost to the national economy through measures that are cost-effective and do not impose an unreasonable burden on taxpayers.
- Relevant scientific or technical advice.
- The findings of relevant research on the effectiveness of mitigation and adaptation measures.
- Recommendations or advice from the Climate Change Advisory Council (“the Advisory Council”).

Newly established in accordance with the Irish Act on 18 January 2016, the Advisory Council is an independent body responsible for advising the Ministers of Government in relation to the preparation of national mitigation plans, the national adaptation framework, sectoral adaptation plans, and any other policies relevant to the reduction of GHG emissions and climate change adaptation. The Advisory Council is required to conduct an annual review of the progress made in achieving GHG emissions reductions and advancing toward the national transition objective; the review is to provide the basis for an annual report prepared by the Advisory Council for delivery to the Minister and then general publication.

While the Advisory Council has a statutory mandate to act independently in the performance of its functions, four out of the nine to 11 seats on the Advisory Council must be filled by the heads of state agencies: the Director General of the EPA; the Chief Executive of Sustainable Energy Ireland — The Sustainable Energy Authority of Ireland; the Director of Teagasc — The Agriculture and Food Development Authority; and the Director of the Economic and Social Research Institute.

C Operation of Act

While it would be premature to make any conclusive remarks about the operation of the Irish Act, Ireland continues to come under fire for failing to pull its weight in global efforts. It is striking to note that, in the twelve months since it enacted its new framework legislative, Ireland’s overall ranking

94. Section 4(1)(a).
95. Section 5(1).
96. Sections 4(1)(b) and 5(1)(b)(i).
97. Section 4(2).
98. Section 5(2).
99. Section 6.
100. Section 7(1).
101. Section 11(1).
102. Section 12.
103. Section 11(3).
104. Section 9(2).
105. See generally Little, above n 88.
in the Climate Change Performance Index ("CCPI") dropped from 12 down to 21 out of 61 countries, reflecting an “unchangingly poor policy ranking and growing emission levels”.  

In particular, while this overall rating is "moderate", the 2017 CCPI report rated Ireland's climate policy as "very poor".  

It should be mentioned, however, that New Zealand performs even worse with an overall ranking of 48 out of 61.  

Clearly the implementation of the Irish Act — a loose framework for cross-sectoral coordination of mitigation and adaptation goals — is not seen to be a serious enough step towards a proper policy profile. This might be symptom of insufficient scrutiny from Irish civil society, which has not placed the same degree of pressure to adopt serious commitments as witnessed in the UK experience (see case study 1 in this paper). Indeed, the principal criticism levelled at the operation of the Irish Act is its failure to set out concrete targets for GHG emission reductions or a clear pathway to reach the national transition objective.  

The apparent contribution of the Irish Act to the reduction of GHG emissions is merely to provide tools, not to prescribe targets.  

The provisions of the Irish Act are largely couched in abstract language, failing to offer clear guidance as to whether executive specification of policy measures to manage GHG emissions will be vulnerable to judicial review.  

This lack of specificity is even greater in respect of obligations when formulating a national framework and sectoral plans for adaptation; for example, “the Minister and the Government shall take account of ... the need to have regard to ... any likely future adaptation commitments of the State”.  

It has been observed that the phrase “have regard to” indicates a low threshold for executive compliance in Irish administrative law, and therefore a high threshold for review by private citizens.  

Ireland is grabbing headlines as the first country to pledge complete divestment of public funds from fossil fuels.  

But academics and activists are already condemning the initial mitigation plan, which is to be implemented by June 2017, and both the Advisory Council and the EPA admit that “nothing short of transformational change” is required to meet the national transition objective.  

However, the creation of an expert voice should promote a shift in policy. The candour of the Advisory Council's inaugural report suggests it will not pull any punches in exercising its statutory functions:  

The [Advisory] Council is concerned that official projections of [GHG] emissions indicate that Ireland will not meet its 2020 emissions targets. This will represent a significant deviation from the necessary path to decarbonising the economy by 2050. There is an urgent need to enhance implementation of existing policies and measures and to identify additional policies and measures to return the economy to a path towards sustainability.  

But the Advisory Council cannot point to an express standard in primary legislation against which to measure Ireland's climate policy trajectory.  

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106. Jan Burck and others Climate Change Performance Index: Results 2017 (Germanwatch and Climate Action Network Europe, November 2016) at 5 and 12–13. Index categories include emissions level, development of emissions, renewable energies, efficiency and climate policy.  

107. At 24–25. The CCPI performance range includes very good, good, moderate, poor and very poor.  

108. At 13.  

109. Little, above n 88, at 183; McCann Fitzgerald, above n 87, at 1. The criticism of ambiguity was also contained in submissions on the draft bill, with some submitters recommending a determinate carbon budget: see for example “A Joint Submission From A Group of Concerned Citizens to the Oireachtas Joint Committee on Environment, Culture and the Gaeltacht on the Outline Heads of the Climate Action and Low-Carbon Development Bill” (30 April 2013) available online <www.foe.ie/download/pdf/pricepaulandmcdonnellilissubmissionpdfversion.pdf>  

110. McCann Fitzgerald, above n 87, at 3.  

111. Climate Action and Low Carbon Development Act, s 7(1)(a)(ii).  

112. McCann Fitzgerald, above n 87, at 2.  


115. Climate Change Advisory Council First Report (November 2016) at i, available online <www.climatecouncil.ie/media/CCAC_FIRSTREPORT.pdf>
D Lessons for New Zealand

Ireland — like New Zealand, northern Europe and the rest of Great Britain — falls within a temperate oceanic climate zone, as defined by the Köppen classification. This places both Ireland and New Zealand in the privileged position of enjoying relative climatic stability in the immediate future despite their continued high GHG emissions. The relevance of Ireland as a comparator is further underscored by its economic profile of extraordinary dependence on agriculture compared with other high-income countries. It is therefore unsurprising that the proportion of emissions from agriculture in total national GHG emissions in Ireland was about 30% in 2012, compared to an EU average of 9%.\textsuperscript{116} The contribution of agriculture to New Zealand’s GHG emissions sits even higher at 48% as of 2013.\textsuperscript{117} Ireland and New Zealand also share a dependence on non-renewable energy sources; about 80% and 60% respectively.\textsuperscript{118}

There are superficial similarities between the Irish Act and the proposed Zero Carbon Act, the most obvious being the shared emphasis on 2050 as the relevant horizon for policy formulation. Moreover, the regimes recognise the fact that the reduction of GHG emissions cannot be separated from the need to facilitate a transition to a new economy. But a subtle difference in focus is worth noting. The Irish Act identifies the end goal of a low carbon, climate resilient and environmentally sustainable economy by 2050. The Zero Carbon Act, on the other hand, focuses on the 2050 goal of zero net emissions of long-lived GHGs (such as carbon dioxide and nitrous oxide) and sustained reductions in short-lived GHGs (such as methane), and it is the transition to these goals that is to be fair, cost-effective and transparent. The Zero Carbon Act prescribes concrete targets to be met while ensuring the economic transition is well managed. Of course, the Irish Act was drafted prior to the Paris Agreement, and it may well be that the Minister under the advice of the Advisory Council adopts targets of similar specificity in exercising the powers under the Irish Act. A further point of difference is the absence of any reference to transparency in the Irish Act, whereas this has been elevated to purposive prominence under the proposed Zero Carbon Act.

Both the Irish Act and the Zero Carbon Act are intended to coordinate policy across the public sector through the use of reporting mechanisms and independent monitoring of compliance, which perhaps reflects the influence of the UK’s Climate Change Act 2008.\textsuperscript{119} But the partial autonomy of the Advisory Council can be contrasted with the absolute independence intended for New Zealand’s Climate Commission (“the Commission”). Unlike the Advisory Council, the Commission would not be composed of the heads of other state agencies acting in an official capacity; the Commission would sit above such agencies is a position of real oversight. Indeed, it is unclear how far the statutory functions of the Advisory Council move beyond the role presently performed de facto in New Zealand by policy advisers within the Ministry for the Environment. While the agencies represented on the Advisory Council are equivalent to Crown entities and state-owned enterprises, it is nevertheless necessary to quarantine the Commission from the broader bureaucratic machinery as well as industry, non-governmental organisations and the ebb and flow of electoral politics.

\begin{itemize}
\item \textsuperscript{116} Ana Corina Miller and others “Expanding Agri-Food Production and Employment in the Presence of Climate Policy Constraints: Quantifying the Trade-Off in Ireland” in Constanin Zopounidis and others Agricultural Cooperative Management and Policy (Springer International Publishing, Switzerland, 2014) 223 at 224.
\item \textsuperscript{117} Ministry for the Environment New Zealand’s Greenhouse Gas Inventory 1990–2013 (10 April 2015) at 1, available online <www.mfe.govt.nz/sites/default/files/media/Climate%20change/national-inventory-report%20updated%2029%20July%202015.pdf>
\item \textsuperscript{119} The UK’s climate governance regime is especially close to home for the Republic of Ireland considering Northern Ireland has consented to its application; see generally Sharon Turner “Northern Ireland’s Consent to the Climate Change Act 2008: Symbol or Illusion?” (2013) 25(1) Journal of Environmental Law 63.
\end{itemize}
New Zealand can learn a lot from the lack of specificity under the Irish Act, as well as the fact the Advisory Council is ripe for capture by the mandatory representatives from other state agencies. If we are to take climate change seriously, some rigid provisions ought to be drafted so that the Commission has an objective yardstick against which to monitor government departments. Indeed, the proposed content of the Zero Carbon Act attempts to tackle these concerns: the two-baskets approach — separate targets for long-lived GHGs and for short-lived GHGs — already goes far beyond the terms of the Irish Act, which leaves such crucial questions to be determined by the Minister under the advice of the Advisory Council.

The emphasis on pathways for sectoral adaptation plans under the Irish Act, coupled with the absence of clear targets for mitigation, perhaps indicates that Ireland is yet to accept a role in reducing the impact of climate change and is therefore focusing its efforts on managing the consequences. However, the preferred approach under the proposed Zero Carbon Act is to set determinate targets at the high level of legislation and then to leave sectoral decisions to policymakers and regulators, especially in setting carbon targets for different sectors of the New Zealand economy.

The Irish Act is not wholly without merit. There are clear milestones for the updating of climate change policy in Ireland through the provision of annual reports and the prescribed five-yearly update to the national mitigation plans and adaptation framework. But again we see these processes mediated by the executive government — for example, the Advisory Council delivers its annual report through the Minister, not directly to the public or the legislature. The basic limitations to the Irish Act are the limited independence of the Advisory Council and a general lack of specificity. It is for this reason that the Zero Carbon Act will specify hard targets and have the Commission legally structured such that it reports directly to New Zealand’s Parliament.

120. Compare New Zealand’s Climate Change Adaptation Technical Working Group, a body composed of “representatives from central and local government, the banking and insurance sector, engineering, science, and local communities” tasked with providing “advice on how New Zealand can adapt and build resilience to the effects of climate change”: Paula Bennett “Climate change adaptation experts appointed” (22 November 2016) <www.beehive.govt.nz/release/climate-change-adaptation-experts-appointed>
Case study 3: Victoria — Climate Change Act 2017

A  History of the Act

The Australian State of Victoria’s climate change legislation has its origin in a commitment of the Victorian Labor Government as part of its 2006 State election manifesto. Legislation was introduced into Parliament in July 2010 and the Climate Change Act 2010 was passed in September of that year with broad support of opposition coalition MPs. That Act set a GHG emissions reduction target of 20% below 2000 by 2020. It set out principles for the government to consider in developing climate change policy, required adaptation plans to be made, and required climate change effects to be considered by specified decision makers.

The 2010 Act was amended significantly in 2012 by the then Liberal Government, with opposition by Labor. The 20% reduction target was deleted. The reasons for that deletion were the target was seen to lack enforceability and distort the operation of a national carbon price and trading scheme that had been enacted under Julia Gillard's (Labor) Commonwealth Government in 2011. That Commonwealth carbon price scheme was subsequently repealed in 2014 under Tony Abbott’s (Liberal) Government.

The Victorian Act was then reviewed in 2015 by an independent committee as part of the election manifesto of the Labor Government who took office in 2014. The independent review committee considered the Government’s desire to restore Victoria as a climate change leader and the increasingly important role of sub-national government in reducing emissions. The committee noted South Australia, Tasmania and the Australian Capital Territory had legislated emissions reduction targets, that Victoria’s emissions were greater than those three sub national jurisdictions combined, and that Victoria faces disproportionate risks from climate change and competition from decarbonised economies. The committee's recommendations were almost entirely accepted by the Government, and the Climate Change Act 2017 (“2017 Act”) was passed by the Victorian Parliament on 23 February 2017 against the opposition of the Liberal Party.

B  Design of the Act

The 2017 Act has three salient features, which are broadly similar to those proposed for the Zero Carbon Act.

122. Victorian Parliamentary Debates, Legislative Assembly, vol 11, 12 August 2010 at 3137 and 3139; and Victorian Parliamentary Debates, Legislative Council, vol 13, 3 September 2010 at 4557. See also Climate Citizen “Victorians want Baillieu State Government to act on climate change, clean energy” (10 March 2012) <takvera.blogspot.co.nz/2012/03/victorians-want-baillieu-state.html>
123. Climate Change Act 2010 (Vic), s 5.
125. Section 16.
126. Section 14.
127. Climate Change and Environment Protection Amendment Act 2012 (Vic), s 4(4).
128. Department of Premier and Cabinet, above n 121, at viii.
131. At 12.
First, the 2017 Act has a long-term emissions reduction target of net zero GHG emissions by 2050, with interim target periods of 5 years, set 8 years in advance.\textsuperscript{133} The government must receive and consider independent expert advice on meeting the long-term target and before setting the interim targets.\textsuperscript{134} These targets are intended to send a stable signal to businesses and the wider Victorian community.\textsuperscript{135} The Premier and Minister for Energy, Environment and Climate Change are accountable for meeting each interim target and the long term target.\textsuperscript{136} Interim targets may only be amended in exceptional circumstances.\textsuperscript{137} The interim and long term targets under the Zero Carbon Act will operate in a similar way, although eligible offsets from outside of the State can be deducted towards meeting the Victorian target.\textsuperscript{138}

Secondly, the 2017 Act imposes requirements on the government to address climate change in a transparent manner. The expert advice received in setting interim targets and climate change strategies must be published online.\textsuperscript{139} Within two years of the end of each interim target period the government must report its emissions, state whether the target was met, and if it was not explain why.\textsuperscript{140} The government must also annually report on the State's GHG emissions.\textsuperscript{141} The Zero Carbon Act will achieve transparency through similar mechanisms.

Thirdly, the 2017 Act requires mitigation and adaptation strategies to be produced by the government on a five-yearly basis.\textsuperscript{142} When preparing adaptation and mitigation strategy the government must consider the following principles:\textsuperscript{143}

- Informed decision-making based on the best practicably available information that integrates long, medium and short term considerations.
- Equity between generations, the needs of those most vulnerable to climate change, maintaining the environment for future generations.
- Community engagement, especially with respect to those most vulnerable or marginalised, by providing information, opportunities for involvement in decision-making, and consultation.
- Compatibility of policy programmes within the State, and with other states and territories, the federal government, other countries and international bodies.

The mitigation strategy must include a whole-of-government pledge, pledges by each sector of government, and any optional pledges from local governments and proposals from the business sector or wider community.\textsuperscript{144} The adaptation strategy must consider recent science, medium- and long-term adaptation objectives, and actions that may be taken to ensure the effects of climate change are considered in the State's operations.\textsuperscript{145} The Zero Carbon Act will likewise require mitigation and adaptation strategies to be produced.

A unique feature is the extent to which the government bodies must consider the climate change strategies when making decisions. The 2017 Act requires all government decision making by bodies

\begin{itemize}
\item 133. Climate Change Act 2017 (Vic), ss 6 and 10.
\item 134. Section 12.
\item 135. Wilder, Skarbek and Lyster, above n 130, at 12.
\item 136. Climate Change Act 2017, s 8.
\item 137. Section 16.
\item 138. Sections 6(2) and 9.
\item 139. Sections 13 and 33.
\item 140. Sections 54–55.
\item 141. Section 52.
\item 142. Sections 29 and 34.
\item 143. Sections 23–28.
\item 144. Section 30.
\item 145. Section 35.
\end{itemize}
under prescribed legislation to consider the climate change adaptation and mitigation strategies as well as the potential climate change, economic, environmental health and social effects of the decision.  

146. Section 17.

147. Section 18.

148. Wilder, Skarbek and Lyster, above n 130, at 115.

149. Section 12.

150. Parts 7 and 8.


152. At 22.

153. At 35.

154. At 25–26 and 30.

However, the 2017 Act does not set up an independent climate commission like the Zero Carbon Act’s proposed Climate Commission. In making recommendations towards the 2017 Act, the review committee considered that other agencies could fulfil the monitoring and reporting and advice functions.  

148. The Act also leaves open who is to provide independent expert advice on setting interim targets.  

149. It is unclear at this stage what body the government will consider is most appropriate to fulfil the review functions required by the Act. The absence of a prescribed independent advisory body creates a risk of the advice varying in quality and independence. An expert body with statutory independence, like that proposed under the Zero Carbon Act, would be a stronger check on the government’s climate change policy creation and implementation.

The 2017 Act goes on to provide for the continuation of a scheme of Forestry and Carbon Management agreements to encourage carbon sequestration on private and Crown land.  

150. The Zero Carbon Act avoids establishing or prescribing such schemes, and is instead focussed on providing a high-level framework response to climate change. Arrangements for carbon sequestration could be implemented through government policy or other legislation in New Zealand if that formed a part of the mitigation strategy.

C Operation of Act

Whilst it is too early to assess how well the revised Victorian legislation will work, a number of positive policy steps have been taken already. These will receive support from the 2017 Act.

First, the Government published a Climate Change Framework in 2016 with emissions reductions targets.  

151. One of the key policy pillars for Victoria in the Framework is a shift towards using a clean electricity supply and increasing energy efficiency, and towards this the Government has set renewable energy targets.  

152. This reflects the fact that electricity generation is the predominant source of Victoria’s emissions — about 83%.  

153. The Framework also considers what changes should be made to the transport and agricultural sectors and built environment.

154. Although this Framework was published before the 2017 Act came into force, it foreshadows the Act’s emissions targets and will be supported by the legal mechanisms provided for by the Act.

Secondly, the Victorian government has established an adaptation plan for 2017–2020, with the goals of building an understanding of Victoria’s climate change risks, creating partnerships with...
local governments to respond to the risks, and tackling immediate priorities.\textsuperscript{155} Most of the outputs planned under an earlier adaptation plan, 2013–2016, were successfully delivered.\textsuperscript{156}

Thirdly, the Government launched a TAKE2 pledge scheme in June 2016. The Government has pledged to reduce emissions from government operations by 30\% below 2015 levels by 2020, and some government departments and local authorities have also made pledges.\textsuperscript{157} The Government is encouraging the private sector to make similar pledges, and some businesses have done so.\textsuperscript{158}

\section*{D Lessons for New Zealand}

The Victorian legislation had an unfortunate false start, with a 2020 target being set, repealed, and then eventually replaced with a 2050 target. The 2017 Act now provides a strong framework to address climate change, but the confused signals sent in the interim years are regrettable. This demonstrates the importance of having broad cross-party support for legislated carbon targets. There is a danger, otherwise, of carbon targets becoming a political football. The requirement under the 2017 Act, and the Zero Carbon Act, for targets to be set well in advance should minimise the risk of bipartisan politics interfering with the climate change response.

The high-level framework provided by the 2017 Act would work well in New Zealand. Victoria has a similar cultural, political, economic and social background to New Zealand. In particular, Victoria has a comparable reliance on non-renewable energy to New Zealand: 84\% of energy comes from non-renewable sources, compared with 60\% in New Zealand.\textsuperscript{159} New Zealand’s significant agricultural economy is a difference to bear in mind: agriculture is responsible for 48\% of emissions in New Zealand, but only 16\% in Victoria.\textsuperscript{160} The Zero Carbon Act’s ‘two-baskets’ approach to long-lived and short-lived GHGs will provide a proportionate response to this difference in emissions profile.

Although Victoria is part of a federal system, that does not make its approach inapplicable in a unitary state such as New Zealand. State governments in Australia have a significant degree of control over climate policy, although they will need to consider how their policies interact with those promulgated by the Commonwealth government. There is the risk of inconsistency or incongruity with Commonwealth legislation, as occurred in 2012 leading to the deletion of Victoria’s 2020 emissions target. But New Zealand will have a freer hand in setting and progressing towards legislated emissions targets.

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{156}] Ibid at 62.
\item[\textsuperscript{157}] Department of Environment, Land, Water and Planning, above n 151, at 15.
\item[\textsuperscript{158}] See generally Victoria State Government “Pledge directory” TAKE2 <\url{www.take2.vic.gov.au/pledge-directory}>
\item[\textsuperscript{159}] Ministry of Business, Innovation and Employment, above n 118; Department of Environment, Land, Water and Planning, above n 151, at 23.
\item[\textsuperscript{160}] Department of Environment, Land, Water and Planning, above n 151, at 35; Ministry for the Environment, above n 117, at 1.
\end{enumerate}
\end{footnotesize}