The Big Ask

One Key Step for Real Climate Action
CONTENTS

FOREWORD .................................................................................................................. 1

INTRODUCTION ........................................................................................................... 3

1. THE GOLD STANDARD: DENMARK’S ENERGY STRATEGY ............................................. 4
   1.1 The World’s Most Ambitious Energy Strategy ......................................................... 5
   1.2 How it Came to Be ................................................................................................ 6
   1.3 What’s in the Plan? ............................................................................................ 8

2. TARGETS WITH TEETH: THE UK CLIMATE CHANGE ACT ........................................ 10
   2.1 Different Countries, Common Challenges ........................................................... 12
   2.2 A Climate Act to Ensure Action ......................................................................... 14

CONCLUSION .............................................................................................................. 16

FOOTNOTES ............................................................................................................... 17
Back in 1989 New Zealand led the world by making the Reserve Bank independent from Government. This has proven to be one of our most successful policy innovations, copied all over the world. The recipe was simple. Remove the politics (and the politicians) from the day to day, to stop them fiddling with stuff they don’t understand for short term gain. Instead politicians set the objectives, the goals, the “what” we are trying to achieve. The “how”, the best way to achieve that goal, is left to the experts.

If we are serious about getting change on other issues, like health, tax, or reducing emissions, we need to do the same thing there. That’s exactly what Generation Zero are suggesting, and that is why I wholeheartedly support the idea.

Successive governments have over-promised and under-delivered on reducing emissions. We currently have a target for emissions reductions, and no apparent plan or realistic chance of getting there.

This is just dishonest and deceitful. If we aren’t serious about reducing emissions, let’s say so and drop our targets. If we are serious, let’s get a plan and put in place a transparent way of holding ourselves to account for achieving it. Otherwise like so many important but not urgent things, they just get brushed under the carpet until a crisis hits.

I know what you are thinking, more bureaucracy, more cost. I don’t like it either. Ideally the role of implementing policy would be filled by the existing players - Ministry for Environment and/or the Parliamentary Commissioner for the Environment. This is how the public sector used to work. However successive governments have shackled departmental independence and nowadays the spin-doctors and Ministers micro-manage and politicise policy implementation.

Other countries are taking action on climate change, and it is only a matter of time before the farce that New Zealand’s approach has become is exposed in global forums, our politicians get embarrassed and we have to conform. Better to start weaning ourselves off fossil fuels now, than go cold turkey in 20 years time when we are seen to be the last pariah on this issue.

Gareth Morgan
Economist, author, motorcycle adventurer and philanthropist
INTRODUCTION

In our previous report, *A Challenge to Our Leaders*, we laid out the urgent need for action to move New Zealand off fossil fuels, and the significant gap that currently exists between rhetoric and reality in the Government’s response to climate change. Despite commitments to reduce our carbon emissions, they are increasing and current policies will do virtually nothing to turn that around. If the rest of the world acts as we currently are, dangerous climate change will be a near certainty, causing significant harm to future generations. This, and the inevitable future rise in fossil fuel prices, give strong reasons for New Zealand to move to a low carbon society powered by clean energy sources.

In this report, we lay out the case for one simple action to kick-start the clean energy transition: signing New Zealand’s carbon emissions targets into law, making it a legal obligation for our Government to take action on climate change. Our current targets are only ‘political commitments’ which are non-binding on the Government and are being treated as optional. Legal targets would change this.

In explaining the course of action New Zealand could take, we will look at two models for action from other countries that New Zealand can learn from. Generation Zero sees Denmark as the best model for action in existence: they have implemented a clean energy strategy with a goal of fossil fuel independence by 2050, on the back of bipartisan support for action. Here we look at how their strategy was developed and what it involves.

But the simpler commitment we are calling for derives from steps taken in the UK. In 2008 they passed the Climate Change Act. This law gave legislative force to their emissions targets, and established the Committee on Climate Change: an independent body to conduct authoritative analysis, advise the Government on the direction it should be taking, and keep track of its progress. In short, the Act requires the Government to have a real plan to deliver on its climate promises.

Generation Zero ultimately wishes to see New Zealand catch up with Denmark by implementing a plan to phase out fossil fuels by 2050. One simple and clear step New Zealand can take is to legislate our emissions targets into law, and establish a similar body to the Committee on Climate Change to ensure the Government is accountable to the targets it has set. This will not be a complete solution, but it will force changes to be made with full discussion around their ramifications, and is an important stepping stone to a comprehensive clean energy strategy. This is our Big Ask.

Alec Dawson  
*Lead Author*

Paul Young  
*Contributing Author*
In 2011, the Danish Government introduced its new energy strategy, after working to attract business buy-in and approval across the political divide. It established the ambitious target of fossil fuel independence by 2050, along with a set of policies to kick-off the transition. Denmark’s actions should serve as inspiration for New Zealand. It is a country with a similar population (5.6 million) and its current share of total energy from renewables is lower than ours (22% against 32%). There is no doubt that New Zealand is in a different situation, but there is no reason we cannot form our own strategy to transition to 100% clean energy. What is needed most of all is political will.
In November 2011, The Danish Government released *Our Future Energy*, presenting the Government’s plan to phase out fossil fuels for all energy by 2050. It outlined the changes that would have to be made and the transitions required in each ‘energy sector’ (electricity, heating, industry and transport) to increase energy efficiency and scale up renewable energy to meet the remaining demand.

In creating its plan for the clean energy transition, the Danish Government acknowledged that in the short term there would be increased energy costs as the transition began, but likened it to an insurance policy against a set of threats posed by continuing to rely on fossil fuels: climate change was one, as was rising costs as global energy demand and diminishing resources force fossil fuel prices ever higher in an unpredictable fashion. The Government was in effect rejecting a short-term view of its country’s energy position and choosing instead to implement a long-term plan with long-term benefits.

If we look at commitments made by Denmark’s Government in the past, we can see that this is not an empty set of targets. The Danish Government has been actively encouraging energy-saving activities and promoting energy efficiency since the oil price spikes of the 1970s, when the Government decided to set a goal for Danish Energy Independence. Over the same period, Denmark has actively supported its wind energy industry through research, development and deployment, which has led to it becoming a world-leader in the technology with roughly one-third of the global market for turbines.

Denmark routinely comes out on top or near the top in global assessments of countries’ performance on sustainable energy and climate change.\(^2^,^3\)
Denmark’s energy strategy process can be characterised by two key features: foresight and bipartisanship. Long before climate change was a pressing issue, the oil price spikes of the 1970s motivated Danish policy-makers to target energy independence and greater energy efficiency, which they attained, actually keeping their energy consumption stable while their economy and population increased (see Figure 1 on previous page). This translated into a policy conversation that involved both sides of the political divide as well as the business sector. The International Energy Agency has praised the fact that there has been political consensus around the action Denmark has chosen to take, and that there has been buy-in from all stakeholders into the long-term Government vision. The policies that have been developed have been characterised by engagement with the business sector, first in the form of presenting a business case (as implementing energy efficiency and reducing fossil fuel costs will ultimately save businesses money in Denmark), and also by understanding the need for investors to believe in the vision so that businesses are supported in making changes.

### 1.2 HOW IT CAME TO BE

- **2006**: Danish Prime Minister Anders Fogh Rasmussen first announces the long-term target of fossil fuel independence. March 2008: Centre-right Government sets up Danish Commission on Climate Change Policy.

  The Commission consists of 10 members including experts in climate, agriculture, transport and economics. Their task was “to examine how Denmark can reduce and ultimately eliminate dependency on fossil fuels in the long term, [and] describe how to implement this long-term vision.” In the terms of reference were two key targets: fossil fuel independence by 2050, and an 80-95% reduction in Denmark’s total greenhouse gas emissions by 2050.
September 2010: Commission presents its findings to the Government.

The Commission's research established that the goals were both technically realistic and affordable. Their report presented 40 recommendations detailing how the goals could be put into practice.


The document lays out the Government’s strategic framework for achieving the 2050 goal, along with a long list of immediate initiatives and information about expected economic and fiscal impacts.


This document provides a more comprehensive roadmap including interim milestones working back from 2050 and a number of new initiatives.


The agreement, backed by almost the entire Danish Parliament including four opposition parties, delivers a suite of costed policies to implement the strategy through to 2020. It is expected to achieve growth in the overall share of renewable energy from 22% to over 35% and reduce greenhouse gas emissions to 34% below 1990 levels.
In order to ensure they can measure progress and remain on track towards the goal of phasing out fossil fuels by 2050, the Danish Government has established several energy policy milestones; the key ones are shown in the graphic above. The Government acknowledges that there are many unknowns and it is not possible to say today what the optimum energy system in 2050 looks like, so the strategy must be flexible. However, four critical focus areas can be identified: improving energy efficiency; electrifying energy consumption in transport and heat; expanding energy supply from renewables; and research, development and demonstration.

The Government is now implementing a wide range of policies and actions across these four focus areas. They include both restrictions on fossil fuel use and the encouragement and development of renewable options. There are too many to list, but examples include:

- A directive for energy companies to increase energy-saving initiatives to double the 2010-12 level by 2015.
- No oil and gas-fuelled burners in new buildings from 2013,
- A requirement for 10% biofuels in transport by 2020.
- A ‘Green Business Scheme’ of 500 million DKK ($105 million NZD) per year to fund the implementation of renewable energy in businesses up until 2020.*

Rather than expecting a silver bullet, the emphasis is on a range of small targeted policy responses that will have an overall impact of significant change. This is precisely the benefit that a holistic plan provides: eliminating fossil fuels from the energy system requires changes over a range of sectors and over the course of several decades may require a large number of policy initiatives to create the most palatable transition. An overarching plan allows all of these initiatives to fit together in a cohesive way. And rather than resting on its laurels, Denmark continues to add to and strengthen its plans as required.
RESULTS
Overall, the measures in the Danish Energy Agreement 2012 are expected to achieve the following approximate results by 2020.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent renewable energy in final energy consumption</td>
<td>22%</td>
<td>35%</td>
</tr>
<tr>
<td>Electricity consumption supplied by wind power</td>
<td>22%</td>
<td>50%</td>
</tr>
<tr>
<td>Greenhouse gas emissions relative to 1990</td>
<td>-11%</td>
<td>-34%</td>
</tr>
<tr>
<td>Gross energy consumption relative to 2010</td>
<td>-</td>
<td>-7.6%</td>
</tr>
<tr>
<td>Use of coal, oil and gas relative to 2010</td>
<td>-</td>
<td>-25%</td>
</tr>
</tbody>
</table>

COSTS
The Danish Government is upfront that there will be short-term costs involved, but these are very affordable. By 2020, an average extra cost per household of approximately $360 NZD is estimated in order to finance all the measures, although there are ways this could be reduced. The Commission on Climate Change Policy estimated that the total expenditure on energy services would increase by approximately 5% to pay for the transition to fossil fuel independence. However, as energy costs are only a small percentage of GDP, the total cost translates to around 0.5% of GDP by 2050, when including the derived effects on the Danish economy. This is based on a scenario where GDP more than doubles over the period, with an average annual growth rate of 1.72%. That is, the cost is estimated to equate to four months worth of economic growth. Furthermore, this figure does not include the co-benefits of action, such as improved health.

CONCLUSION
The Danish energy strategy may not be perfect, and it does not perfectly mirror the needs of New Zealand. For example, our electricity generation comes from different sources and does not play as large a role in our current emissions profile. For this reason, policies such as subsidies for wind power (a big part of the Danish strategy) may not be the answer we require. However, the policy process is something we can aim to replicate: creating a clean energy plan with a goal of a fossil-free country by 2050, and a process of investigating the necessary steps to get there, could serve New Zealand in the same way it has served Denmark.
At present, New Zealand is very far behind Denmark in its level of commitment to building a low carbon country. We have ‘political commitment’ to emissions targets in 2020 and 2050 with no mechanism to ensure the Government is accountable to meeting them. Currently there is no credible plan for how it will do so. A good model for addressing this is the UK Climate Change Act, which legislated emissions targets into law, and established an independent Committee on Climate Change to advise the Government and monitor its progress along the way. By following this model and putting our emissions targets into law, New Zealand can give our emissions targets meaning.
DIFFERENT COUNTRIES, COMMON CHALLENGES

THE UK CLIMATE CHANGE ACT

Passed in 2008, the UK Climate Change Act was catalysed by Friends of the Earth’s “Big Ask” campaign, which led to 130,000 people writing to their MPs asking for emissions reduction targets to be signed into law. The Act did the following:

- Set a binding emissions reduction target for the UK of 80% by 2050 and a process to develop 5-year ‘carbon budgets’ that the Government is required to meet.
- Established the independent Committee on Climate Change.
- Compelled the Government to have a transparent plan for meeting its targets and carbon budgets.

This had a number of benefits for the process of making climate policy, including:

- Ensuring the Government was accountable to its targets and could not claim progress where none had been made.
- Established an authoritative independent voice on climate policy so that the only voices were not political parties.
- Gave certainty on the direction of Government policy, to the benefit of businesses, investors, councils and citizens.

In 2008 the UK introduced a new piece of legislation, the Climate Change Act, which legally declared a target of an 80% cut in greenhouse gas emissions by 2050. Originally expected to set a target of a 60% reduction, the process of the Act’s creation led to greater ambition. This was due to both pressure throughout the development of the Act, as well as updated science projections suggesting more drastic action had to be taken. The Act mandates the creation of five-year carbon budgets (i.e. a cap on total emissions over the period) to ensure progress towards the long-term target.

The law also created the Committee on Climate Change (CCC): an independent body whose role is to:

- Provide independent advice to Government on setting and meeting carbon budgets and preparing for climate change.
- Monitor progress in reducing emissions and achieving carbon budgets.
- Conduct independent analysis into climate change science, economics and policy.
- Engage with a wide range of organisations and individuals to share evidence and analysis.

Each year it issues a report laying out the carbon emissions of that year and the policy steps taken by Government, along with a set of recommendations for action to improve or continue progress.

The CCC’s position has allowed them the capacity to review requirements for a wide range of sectors of the UK economy and make recommendations accordingly. As a result, a number of their recommendations have been implemented by the UK Government. The first significant one was the Electricity Market Reform, introduced in 2011. This had the aim of decarbonising the UK Electricity Market through a combination of a price floor for carbon, feed-in tariffs for low-carbon generators, and an emissions performance standard for new power generation. Between them these policies represent a significant shift in the operation of the UK electricity market in favour of low-carbon generation.

The second implementation of recommendations came in the form of ‘The Green Deal,’ a policy to allow loans for energy-saving measures in UK homes, introduced at the beginning of 2013. Finally, the CCC has advocated for the continuation and expansion of a number of policies aimed at lowering emissions introduced before
2008. These include the renewables obligation, which has led to significant investment by the Government in the creation of offshore wind farms, and the CRC (Carbon Reduction Commitment) Energy Efficiency Scheme, which is a mandatory carbon emissions reduction scheme for non-energy intensive organisations in the United Kingdom.

The CCC does not merely recommend and advocate for these policies: it is also in the position to evaluate whether or not they are succeeding and recommend relevant changes. In the foreword to the 2012 progress report from the Committee, the Interim Chair Professor Dame Julia King mentions that improvement over the year was modest and calls for greater action. The first progress report was titled The Need for a Step Change for precisely the reason that it called for stronger action on climate change policy than had occurred prior to the creation of the Climate Act. This displays the role of the CCC as an agenda-setter: it gives a non-partisan perspective on what the Government needs to do to achieve adequate goals in relation to reducing carbon emissions.

The outcomes so far are positive. The Government has set its carbon budgets until 2027 (with the last one targeting a reduction of 50% below 1990 levels), allowing for significant certainty over its aims for the next decade. The UK is on track to meet its first three carbon budgets, but additional measures are needed to further reduce emissions after 2023 (see Figure 2). The Act is still relatively new and there is plenty more to be done, but the introduction of policy measures to implement it suggests it is having real impact.

Although New Zealand and the UK are different countries with different economies, populations and political environments, the steps that the UK have taken are entirely replicable here. The beauty of legislated targets is that they allow for flexibility: while the goal is locked in place, the policy mix implemented to achieve that goal can vary between nations and over time. As a result, Generation Zero thinks it is time New Zealand followed the UK and introduced our own Climate Change Act.
In New Zealand, the current Government has unconditional targets to reduce our net greenhouse gas emissions to 5 percent below 1990 levels by 2020, and 50 percent below 1990 levels by 2050.26 When the former commitment was made in 2013 it represented a shift from the previous stance of a 10-20% emissions cut by 2020, although the Government has maintained that this larger commitment does exist conditional on other countries making further commitments as well.

Ideally these targets would be stronger, as they fall well short of what is required for a reasonable probability of limiting warming under the globally-agreed target of 2°C.27 But most importantly, the Government has no plan showing how even these emissions targets will be met. When considering gross emissions (excluding forestry), New Zealand is currently on track to exceed our emissions levels in 1990 by 26% by 2020. In the longer term, if current policies were maintained New Zealand’s emissions are set to steadily increase on every possible measure.

In light of this, Generation Zero has a very simple ‘Big Ask’. We want a Climate Change Act making our emissions targets legally binding on the New Zealand Government, so that in law, they are obliged to meet them.

Additional features would make this stronger: like the UK Climate Act, it could oblige the Government to set 5-yearly carbon budgets and produce a clear plan to meet them, so that the Government was regularly accountable for taking policy steps to reduce emissions. Carbon budgets ensure that the most important bottom-line is being met: actual reductions in carbon emissions.28

This commitment also needs support and oversight the whole way through. As we have seen, our Government has set targets; but these have not been backed up with credible policy responses to reduce our carbon emissions. There needs to be an independent, apolitical body which can advocate reasonable targets for our Government, monitor its progress and make thoroughly researched recommendations for policies to be implemented along the way. It is not a matter of legally binding the Government to a specific course of action, but about keeping it accountable to its targets and ensuring it delivers with a credible plan.

We are advocating for the introduction of a Climate Commission, with the same role as the UK CCC. The Commission would not have decision-making authority, however it would make it clear, from an independent perspective, when the Government was failing to take sufficient action. For a detailed proposal of how a carbon budgeting process with a Climate Commission could work, see Carbon Budgeting: Integrated Planning for Climate Action by the Sustainability Council of New Zealand (available at www.sustainabilitynz.org).

One key reason we need such a Commission is to ensure the Government is truthful in its claims about its commitment to making a difference with regards to climate change. The current Government in New Zealand has adopted a mix of rhetoric, reaffirming the need for action and that climate change is a serious threat, claiming that we have a policy response in the form of the
Emissions Trading Scheme, but also stating that New Zealand should not act without global action on climate change and often painting alternative attitudes to climate change as ‘extreme’. The major public voices against these claims are the political parties in opposition, which has led to a state where climate change policy is highly politicised with bipartisan agreement over the steps to take (and with it business certainty and the assurance that we are taking action) not currently on the horizon.

In this context, we need an independent body to be the major source of authority on the best climate change policy in this country, who we can rely on to point out gaps between rhetoric and action from a non-partisan perspective. A Climate Commission would fill this gap. Ideally it would be made up a combination of climate scientists, economists and experts in energy and agriculture, following the model of the UK and Denmark in their independent expert bodies. This would allow for practical policy advice to come hand in hand with climate and energy expertise.

"THE KEY TO MORE AMBITIOUS INTERNATIONAL AGREEMENTS"

"Domestic legislation on climate is the absolutely critical, essential linchpin between action at the national level and international agreements. It is absolutely at the centre.”

— Christiana Figueres, Executive Secretary of the UN Framework Convention on Climate Change.

Countries legislating climate targets is becoming a trend. At the beginning of June 2014, Finland declared that it was to put into law its goal of an 80% reduction in greenhouse gas emissions by 2050. In the same month, Denmark has added to its clean energy plan with a climate law legislating a target of a 40% emissions reduction by 2020. This goes along with the strongest suite of climate rules yet in the United States, and even some encouraging statements from China.

This has all occurred without the existence of a binding international treaty on climate change. We might ask: why do countries make these commitments without an international agreement? A big part of the answer is that increasingly domestic legislation is being seen as an aid to international negotiations: it can advance an individual country’s bargaining position, as it displays that the country is already willing to back up the statements it is making, and is typically associated with greater ambition on the international level, meaning an eventual agreement is more likely. The process of policy-making is also a key factor in informing a country’s position: developing policy at home will give them greater knowledge of what they can commit to. Ultimately, this means that domestic legislation enables international action as much as the other way around: an important reason not to use the lack of an international agreement as an excuse not to act.
The overseas examples we have introduced in this report do not provide an exact blueprint for New Zealand. However, the important thing about the steps they have taken is that they do not just include specific policies but frameworks to ensure that policies fit into a wider picture and that the Governments concerned are accountable for making real progress on climate change.

A piece of legislation based on the UK Climate Change Act is a simple step we believe New Zealand should take. Putting emissions targets into law would show we are truly committed as a country to meeting them and ensure the Government has a real plan to do so. Backed by expert advice from a Climate Commission (like the UK Committee on Climate Change or the Danish Commission on Climate Change Policy) to inform us of the necessary steps, it will lead to a more productive and sincere discussion about how to make our way to a low carbon, clean energy future.

Ultimately, we hope it can lead to New Zealand becoming a success story like Denmark. Their development of a strategy which achieved bipartisan support and business buy-in, as well as setting ambitious goals and having genuine policy changes from the outset, is a sign of an entire nation committed to a clean energy future free from dangerous climate change. We believe in New Zealand’s ability to achieve the same. It is time to take the first step.

**Summary of Conclusions:**

- Denmark’s energy strategy shows that a comprehensive plan for a transition to zero fossil fuels by 2050 is possible and can be put into action.
- New Zealand’s current emissions targets lack teeth and need a mechanism to ensure the Government takes genuine action to keep up with them.
- The UK Climate Change Act provides a model for Government commitment and accountability that New Zealand can adopt by signing emissions targets into law.

**Recommendations:**

New Zealand should implement a Climate Change Act to:

- Legislate a binding 2050 emissions reduction target of at least 50% below 1990 levels (the current Government target).
- Set binding periodic carbon budgets to ensure progress.
- Establish an independent Climate Commission to advise the Government on carbon budgets and policies required to meet them, and hold the Government accountable.

The Government should task the Climate Commission with reviewing New Zealand’s 2050 target and conducting a feasibility study on pathways for New Zealand to achieve 100% renewable energy (including transport, heat and industry) by 2050.
8. Danish Commission on Climate Change, Green Energy - The Road to a Danish Energy System Without Fossil Fuels, 28 September 2010.
12. CCC website: http://www.theccc.org.uk/about/
17. Ibid.
18. Committee on Climate Change, Meeting Carbon Budgets - The Need for a Step Change, October 2009.
27. See our first policy report, A Challenge to Our Leaders: http://www.genzero.org.nz/challengetoourleaders
Generation Zero