

12 July 2019

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Environment Select Committee
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Dear Chairperson

Submission on the Climate Change Response (Zero Carbon) Amendment Bill

1. BusinessNZ is pleased to have the opportunity to provide a submission to the Environment Select Committee (the Committee) on the Climate Change Response (Zero Carbon) Amendment Bill, which was referred to the Committee on 21 May, 2019.¹

Introduction

2. This Bill is a defining Bill of our generation. If it achieves what it is set out to, it will reshape our economy and the way we live as a society. BusinessNZ supports this Bill.
3. The ambition that this Bill belies places an incredibly high burden of proof on policy makers to be clear about its economic and social impacts and – unlike the reforms of the 1980s – better managed as to their outcomes.
4. It is therefore important not to approach this issue through rose tinted glasses. We all seek, and business is especially working hard towards, a transition that shifts us as quickly as economically possible to a low-emissions future. But we also need to be realistic that the future will not eventuate as modelled and is highly uncertain, especially around the pace and nature of technological change and international climate action (as opposed to rhetoric).
5. Given this uncertainty, the goal of policy makers must be to ensure that policy settings are resilient to alternate futures coming to pass, and to allow the

¹ Background information on BusinessNZ is attached in Appendix One.

'what-if' questions to be asked and for this to be feed back into policy settings in ways that retain the overall integrity of the system and the goals being sought.

6. The balance of this submission reflects on the uncertainty that we will face in light of factors New Zealand primarily cannot control and the need to ensure that the policy settings contained in the Bill are sufficiently flexible and adaptive.

The Modelling and Cost-Benefit Numbers

7. While we support this Bill, we nonetheless continue to be concerned about the heavy reliance on the modelling in both the setting of the targets and the mechanisms to achieve them. In our submission to the Ministry for the Environment (the 'MFE') we said:

"12. We have no confidence in the modelling or its reliability for the purpose of decision making with respect to an emissions reduction target. We are concerned that the modelling undertaken by GLOBE-New Zealand, the Productivity Commission and MFE is being used as supporting, or justifying a target. The modelling provides a set of information that is highly assumption dependent and simply cannot, in any shape or form, be used as endorsing a particular course of action. Modelling, like the science, is informative but cannot be determinative.

13. The two models on which MFE relies vary on the one hand between wishful thinking in terms of the uptake of new technology and a reliance on a 'then magic happens' approach to assumptions (such as the uptake of a methane vaccine and the assumption that all other jurisdictions are taking commensurate action), and truly alarming economic results on the other. The analysis by NZIER suggest that GDP will continue to grow but will be in the range of 10% to 22% less in 2050, compared with the current state of action on climate change. These are quite staggering in terms of trade-offs for uncertain (indeed only modelled) benefits and suggest caution."²

8. While we acknowledge that this modelling was undertaken prior to the announcement of the new, split targets, we continue to stand behind these sentiments, indeed they are reinforced by the Regulatory Impact Statement (the 'RIS') and the modelling recently undertaken by the BusinessNZ Energy Council (the 'BEC'). For example, the RIS states:

"The results must be read with care because of uncertainties and limitations in the analyses. For example:

- modelling is subject to many general and specific limitations, discussed further below;
- competitiveness risks depend on what action our international competitors take in the future, and innovation is an uncertain and risky process;
- the nature and scale of any wider co-benefits can only be determined

² BusinessNZ submission to the Ministry for the Environment dated 19 July, 2018 entitled 'Our Climate Your Say: Discussion Document', page 4

once specific emissions reduction policies are considered.

The results presented should be treated as indicative only and not predictions of the future.”³

9. We also note the comment in the RIS that says:

“A range of economic modelling and analysis suggests that New Zealand’s transition to a low-emissions economy will be challenging but achievable, *if specific assumptions made in the modelling on innovations and transitions across the energy, transport and agriculture come to fruition.*”⁴

(emphasis added)

10. Needless to say this caveat highlighted above is critical. This is more so given that while we talk about there being an optimal emissions reduction pathway there is nothing of the sort. This can only ever be known in hindsight and once all the relative costs and benefits of action have been revealed. It is also important to the attainment of resilient policy settings that policy makers avoid path-dependency. That is they need to avoid structuring policy settings in ways that attempt to deliver on what the models have said should happen. We know that the models are simply an aggregation of a range of technically feasible outcomes but which may never eventuate in the real world.

11. We also remain concerned at the circularity of the argumentation in the RIS – we have a target based on the expectations - at least at some rudimentary level – that beneficial policies can be implemented that will allow the target to be achieved. Yet the RIS is quite clear that:

“• implementation risks will arise not as a result of setting the target in primary legislation, but rather from the policies put in place in pursuit of its achievement. *These are presently unknown and will depend on the transition pathway.*”⁵

(emphasis added)

12. According to the RIS, the need to determine the pros and cons of particular policy initiatives will be case-specific and best carried out as a part of each policy’s own RIS. While we agree that this is the right approach, it opens the possibility of the actual pace of the transition being faster, or slower, than otherwise anticipated by the modelling. Without this information – a careful tracing through of the mechanisms that are anticipated to deliver the targeted outcomes – this is all speculative and the eventual legislative framework needs to accommodate this.

³ Regulatory Impact Statement: Zero Carbon Bill, dated May 2019, page 163.

⁴ Regulatory Impact Statement, *op cit*, page 4.

⁵ Regulatory Impact Statement, *op cit*, page 12.

13. In addition, the RIS seems confident that:

“ there remains the unlikely risk of New Zealand incurring the significant costs of the transition unduly (and without any material impact on climate change) if the rest of the world does not act accordingly. This risk may be mitigated through concerted international engagement and cooperation in a range of bilateral, regional and multilateral fora, in which New Zealand may hold others to account by communicating its ambitious target and ongoing efforts to reduce emissions at home.”⁶

14. Both of these claims are highly contested. First, the OECD has undertaken modelling of the impact of climate change inaction, relative to action. It found that:

- “• As temperatures continue to rise to a projected 4°C above pre-industrial levels by 2100, AD-DICE projections suggest that **GDP may be hurt by between 2% and 10% by the end of the century relative to the no-damage baseline scenario** (under the likely ECS range). As experimental projections with the AD-DICE model show, continuing to emit greenhouse emissions as usual until 2060 will commit the world to economic damages in a range of 1% to 6% by the end of the century even if emissions fall to zero in 2060. However, assessments of impacts for higher temperature increases are much less robust; they could event lead to damages of 12% by 2100 when non-linearities in the climate damage functions are strong.”⁷

15. In light of the range of economic costs to New Zealand of adopting a net-zero (by 2050) target outlined in the quote above: 10 to 22 per cent of GDP, this OECD study suggests that even if New Zealand were exposed to economic costs of climate change at the upper end of the OECD estimates (10 per cent of GDP by 2100), it still wouldn't be economically worthwhile to pay a price of 10 to 22 per cent of GDP 50 years earlier to prevent such outcomes.

16. We also note that with respect to the claim that we can avoid the cost of inaction through concerted action, the reviewer of the RIS plainly states that:

“ ... little evidence or argument is available to support that assumption.”⁸

17. In an earlier report NZIER noted:

“Our previous modelling (NZIER and Infometrics 2009) found that equivalent rest-of-the-world action *can approximately halve domestic costs relative to unilateral action.*”⁹

(emphasis added)

⁶ Regulatory Impact Statement, *op cit*, page 12.

⁷ OECD 2015, The Economic Consequences of Climate Change, OECD Publishing Paris, <http://dx.doi.org/10.1787/9789264235410-en>, Key Findings, second bullet-point, page 12.

⁸ Regulatory Impact Statement, *ibid*, page 15.

⁹ NZIER report to Ministry for the Environment entitled 'Economic impacts of removing NZ ETS transitional measures A Computable General Equilibrium analysis', dated December 2015, section 5.6, page 14.

18. This reinforces the need to calibrate action taken domestically with action (not promises) being taken by the rest of the world.

BusinessNZ Energy Council BEC2060 Scenarios: Understanding Uncertainty

19. As if to sheet home this uncertainty about the future and the supposed ease with which we can develop a pathway towards political targets we need look no further than overseas experiences in energy markets for lessons of what to avoid, if not already too late, in New Zealand. These lessons are demonstrative of the results that are emerging from the modelling being undertaken by the BusinessNZ Energy Council in its BEC2060 Energy Scenarios project.
20. Applying targets, policies, and interventions in particular parts of the energy supply chain, is an example of the dangers of reductionist thinking. The energy supply chain is becoming increasingly interconnected - we already see the hallmarks of the connectivity between natural gas and electricity markets. As electric vehicles increase in number, we will see emerge connections between electricity markets and transport decisions. If hydrogen develops as a fuel, via electrolysis (an electricity-intensive process), the impact of electricity prices on the production of hydrogen will take on some significance. And hydrogen, if it emerges, is likely to form part of the transport network: more interconnections. We have seen from some early results in our BEC2060 modelling that the potential to capture CO₂ (from any number of processes, e.g., fossil fuel generation, or biomass combustion) raises the prospect of the creation of "green" syngas with hydrogen. Again, more interconnections between markets.
21. One can quickly see that the future energy supply chain is likely to be substantially more interconnected than it is today, and on an unprecedented level in modern history. These interconnections will drive the incentives for consumption and investment. But, at this point in time, which technologies emerge, and when, is highly uncertain. Indeed, the nature of the interconnections themselves are uncertain, as they depend on, for example, the varying nature of supply and demand and price discovery.
22. While it is tempting to isolate a particular part of the sector (e.g., electricity) and apply targets, it is, in our view, almost inevitable that this will have a ripple effect into other parts of the supply chain. As we cannot anticipate what these will be, any ripple effects considered inconsistent with future government aspirations will compel these governments to intervene in these other sectors, to "fix" the incentives and behaviours. Before long, we will end up with a nested web of interventions that are impossible to predict, and from which we may not be able to extract ourselves. One need only look at the electricity market of Ontario, Canada, for an example of these risks.¹⁰
23. The prospect of increasing complexity in energy markets, as an example of the broader complexity of the desired economic transition, suggests caution in

¹⁰ For more information on the Ontario market, see <https://www.fraserinstitute.org/studies/understanding-the-changes-in-ontarios-electricity-markets-and-their-effects>.

designing policy frameworks. Reliance should be primarily on policy instruments that act at the system-level (e.g., the carbon price), which then allows the various markets within that system to collectively adapt to find the most efficient response. While governments can express aspirations for various parts of the system, any actions which are likely to change incentives in that part, in isolation, should be approached with extreme caution, and - at the very least - be subject to rigorous cost-benefit tests which consider in detail consequential effects in other sectors.

24. The BECs TIMES-NZ model is uniquely placed to assess the complex interactions in the NZ energy system and we have done this with respect to the second evolution of our BEC scenarios (the BEC2060 Energy Scenarios Project). This project has generated a set of modelling results for two quite different stories about the future that are based around combinations of factors about which we are highly uncertain (for example, the price of carbon, and the extent to which government wishes to intervene in pursuit of emission reductions). How New Zealand responds to climate change relative to the rest of the world is one of these combinations. The purpose of our modelling and storytelling is to encourage the asking of the 'what-if' questions and to be open to alternate futures coming to pass. This capability is critical to the development of resilient, durable long-term policy and investment decisions.
25. As can be seen in a sample of the BEC2060 energy scenarios graphs attached in Appendix Two, whether we lead or lag the rest of the world in climate change ambition has implications for the modelled economic and emissions outcomes. Insights can be drawn from the distinctions between the two stories and their results. This allows us to think critically about the differences between them, the drivers, and the policy and investment levers required to achieve them, and the trade-offs, explicit or implied between them and their acceptability.
26. Much of the impact analysis we are dealing with is macro-economic in nature. However, ultimately these will manifest at the level of the household and the firm as policy-settings are aligned with the ambition of the targets. It is, therefore, important that we do not overlook the micro-economic impacts even though at this stage in the absence of specific policy responses (a task that falls to the soon to be established Climate Change Commission [the 'Commission']) they are even harder to grasp than the macro-economic effects. Having said that, we know that the emissions trading scheme will be the main tool used to drive the low emissions transition and that estimates of the pass-through costs at various prices of carbon can be made. Below is some information from the MFE on this point.

Estimated NZ ETS Pass-through Costs

| Vehicle fuel users, including household consumers | | |
|--|------------------------|------------------------|
| | Effective carbon price | Effective carbon price |
| NZ ETS cost | \$50 | \$100 |
| per litre of premium 95 fuel | \$0.12 | \$0.24 |
| Per litre of regular 91 fuel | \$0.12 | \$0.24 |
| Per litre of diesel fuel | \$0.13 | \$0.26 |
| Consumers, including households | | |
| | Effective carbon price | Effective carbon price |
| NZ ETS cost | \$50 | \$100 |
| Per kWh of electricity | \$0.02 | \$0.04 |
| Per kWh of natural gas | \$0.01 | \$0.02 |
| Industrial users | | |
| | Effective carbon price | Effective carbon price |
| NZ ETS cost | \$50 | \$100 |
| Per GJ of natural gas | \$2.68 | \$5.36 |
| Per GJ of sub-bituminous coal | \$4.52 | \$9.04 |
| Per GJ of lignite | \$4.58 | \$9.16 |
| Estimated annual NZ ETS costs passed through to households | | |
| Annual NZ ETS cost for an average NZ household: | Effective carbon price | Effective carbon price |
| | \$50 | \$100 |
| Petrol | \$145 | \$290 |
| Electricity | \$161 | \$322 |
| Natural gas (if used) | \$70 | \$140 |
| TOTAL | \$376 | \$752 |

27. These impacts are not trivial, especially to low income households, and their impact on households will be regressive.

28. Finally, it is worthwhile noting that the possibility of unknown impacts is a well-known phenomenon, and indeed was foretold in the now (in)famous 1984 Treasury Briefing to the incoming Government:

“The essential feature of the economy is the web of interdependencies underlying the aggregate statistics which summarise countless decisions taken in people’s daily lives. Although the objective of economic management is to get these statistics moving in the right direction, there are no simple relationships between them that can be relied upon in designing policy. Economic policies generally operate indirectly by affecting the environment in which people make decisions. Few policies operate by the Government commanding directly the result it wants. Even in the public sector, the Government must attempt to further its objectives by establishing a favourable incentive structure. In affecting the economic environment, policies produce changes which are both intended and unintended. Effective policy achieves the maximum of the former with the minimum of the latter.”¹¹

29. It is worthwhile reflecting on the prescience of this advice, especially in light of the implications – many intended, but also many unintended – of the economic reforms of the 1980s and 1990s. These lessons have been hard learnt and so this advice is especially worthy of further reflection as we move to implement a fundamental piece of economic and social reform in the form of the Bill, and secure a just transition in doing so.

¹¹ Economic Management, Treasury Briefing, 14 July 1984, page 111.

Providing a sufficiently flexible legislative framework

30. All of the above speaks to the need to accommodate the uncertainty and risks, as well as the ability to seize opportunities, within a sufficiently flexible legislative framework, especially in light of what are evidently ambitious reduction targets.
31. There is no easy or straight-forward way to address climate change. If these were possible, we would be doing them already, and in many cases of course businesses are already taking action. The sheer volumes that have been written in the last two years in New Zealand alone is a testament to this difficulty. We need, therefore, to temper impatience to act with sound policy that delivers robust positive economic, environmental and social outcomes.
32. Comparisons to other countries who have reduced their emissions and have continued to grow are informative, but not determinative in terms of what we should do. There are two elements to this – first, there is no clear data about the level of GDP growth that they have forgone and how much less wealthy are they as a result. Second (this is probably most relevant to the UK who is frequently used as an exemplar) whether the reduction of emissions:
 - a. would have happened anyway as a part of the normal functioning of the economy –the UK is a case in point with the use of cheap and plentiful North Sea gas displacing coal fired power and process heat; or
 - b. occurred due to the off-shoring of emissions (we note that in the UK its steel production fell by 50% between 2000 and 2016 while its steel consumption fell by only 18%, implying the importation of steel whose emissions are not counted in the UK inventory).
33. Given our unique geographical and economic circumstances such comparisons are interesting, but not necessarily determinative to the action we should take.
34. The balance of this submission seeks to ensure that the legislative framework is sufficiently attuned to our domestic circumstances, able to be aligned to the action being taken by the rest of the world (as that matters substantially given we are a trade dependent nation) and flexible to changing circumstances.
35. Another way of looking at this is that the Committee should think about what New Zealand should do regardless of whether others take action, as well as what New Zealand must do when others do take action. This will allow for the identification of the zone of minimum regrets and in doing so, the identification of a range of actions that make sense from the perspective of a growing resilient, adaptable economy which is more productive and competitive.
36. In general, we are pleased with the consideration given to these factors, but also consider that further changes are warranted to the Bill to heighten regard to them. Our hope is that what eventuates from the Bill is an outcomes focused organisation that uses flexible, risk-based tools in the delivery of their assigned tasks. Models we have in mind are those of used in the areas of civil aviation and food safety by the Civil Aviation Authority and the Food Safety Authority,

respectively.¹² The following sections are set out with this in mind.

The Review of the Target

37. We think that the first scheduled review of the target should be brought forward. In our submission to the MFE on the target options, we said with respect to target setting:

"32 We agree that having a clear target is helpful to business in their decision making processes, but what happens if we set the target too high and find that it isn't achievable, or too low to move the needle? Or what if other jurisdictions do not take the action that they have promised to take? These questions lie at the core of implementing stable, long-term durable policy settings that don't become unstable through political intervention if they become unachievable, or need to be dramatically strengthened."¹³

38. Our suggested response to mitigating this risk is set out in paragraph 34 of the same submission, and was to essentially have a pair of target bookends of:

- legislating the current target of an all gases 50% reduction by 2050 and an 'anchor' net zero all gases target by 2100; and
- requesting the Climate Commission to advise on the target pathway between the two bookends.

39. While we see little merit at this point in proposing alternative targets, we consider that in light of the sentiments outlined above, the first review should be brought forward. We suggest this be achieved by the following:

Amend section 5P(1) by adding a new subparagraph (a) as follows:

- (a) by 31 December 2022;"
- renumbering existing paragraphs (a) and (b) accordingly; and
- deleting "2036" from renumbered paragraph (b) and substituting "2041".

40. We consider this timing to be appropriate as undoubtedly a number of valuable lessons will have emerged from the development of the first three budgets.

41. We also note that should the Committee agree to bring the review date forward, that the outcome of the review needs to be able to be factored into the relevant budgets, rather than wait until the 2036 to 2040 budget and beyond (while we recognise that there is a balance to be struck between budget

¹² More specifically, how can we design a framework that appropriately balances risks with the pursuit of innovative outcomes. In the case of civil aviation, and in fact the transport regulatory regime more generally, we have attracted the likes of Zephyr and Ohmio to New Zealand, and we wonder whether this innovative thinking can be transferred to the new Commission as it seeks to reshape the New Zealand economy.

¹³ BusinessNZ submission to the Ministry for the Environment, *ibid*, page 10.

predictability and change, we consider that if the target does change that it should be factored into the economic signals sent via the budgets at the earliest possible opportunity, rather than wait). We suggest this be achieved by the following:

Amend section 5ZB (1) so that it reads:

"(1) The Commission may, when providing advice and recommendations on a future emissions budget under **section 5X**, or when providing advice and recommendations on reviewing the 2050 target under **section 5P**, recommend that any emissions budgets notified under"

Factors to be Considered when Reviewing the Target

42. Regardless of whether the first review date is brought forward, we also consider there to be a deficiency in the factors that are to be considered by the Commission before recommending a change to the target. Specifically, we consider that the implications for global emissions should be considered.¹⁴ Such an amendment reflects the global nature of the problem being addressed and the deep interrelationship between what we do domestically and its implications globally towards the attainment of the Paris Agreement goals (as set out in new clause 4 of the Bill). We suggest this be achieved by the following:

Amend section 5Q(2)(a) by inserting new subparagraph (viii):

"(viii) the impact on international emissions arising from the 2050 target."

Matters to be Considered by the Commission

43. We think that there is merit in making a similar amendment to clause 5L which sets out the matters the Commission must consider when performing its duties. We suggest this be achieved by the following:

Amend section 5L by adding a new paragraph (g) as follows:

"(g) short and long term trends in:
(i) the impact on international emissions arising from action taken in New Zealand;

¹⁴ As a proxy for consideration of the impact on New Zealand domestic businesses of changes in the target, whereby there may be an increase (or decrease) in international emissions caused by domestic policy/actions to reduce emissions in New Zealand ["investment/carbon leakage"]. Such analysis should have occurred in the context of the decision to ban the issuance of new offshore petroleum permits outside onshore Taranaki.

Matters relevant to Advising on, and setting Emissions Budgets

44. Similarly with respect to the matters relevant to advising on, and setting emissions budgets. We suggest this be achieved by the following:

Amend section 5Z(2)(b) by adding new paragraph (ix) as follows:

"(ix) the impact on international emissions of actions taken to achieve the 2050 target."

The use of International Units

45. We appreciate that there must be a strong incentive to abate emissions domestically, and that ultimately gross emissions must be reduced¹⁵. However, with such an objective in mind we are surprised at the distinction being made between domestic and offshore mitigation opportunities. Such a distinction is arbitrary.¹⁶

46. It is widely recognised that to meet such ambitious new targets without access to international units of appropriate quality – at least over the next decade and possibly beyond - would disadvantage New Zealand businesses by requiring them to abate, or buy New Zealand units, at prices that are higher than their trade competitors, thus placing them at a competitive disadvantage. Access to international units acts as a competitive break on the price of domestic offsets, and facilitates international carbon finance flows.

47. Officials seem to think that the use of international units reduces the size of the challenge or the strength and clarity of the Bill's signal to incentivise change. It does, of course, nothing of the sort. The size of the challenge is set by the target. And businesses are constantly assessing the optimal mix of what action to take to abate or offsets to buy. Neither course of action is costless, more so when incurred before trade competitors face a similar cost. Access to international units simply allows for a smoother, less costly transition in a way that is linked to the costs faced by their competitors. This is a good thing, and consistent with the Bill insofar as we have a net short-term gases target. Ultimately, however, given the desire to reduce gross emissions, all offsets - domestic and international - will need to diminish in use.¹⁷

48. In its stage 2 report, NZIER noted that the extent of the adjustment to

¹⁵ We note, however, that Article 4 of the Paris Agreements says that "In order to achieve the long-term temperature goal [parties must] undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century,...."

¹⁶ As we have done in all of our previous submissions, we acknowledge the important role that domestic offsets generated via forestry will play in helping New Zealand achieve its targets. Their availability is vital in the offset of the long-lived gases, especially those for who no commercial technological alternative is available, such as in the manufacture of aluminium, steel and methanol, to name but a few. It is false to consider any such use as a 'free-pass' or a 'get-out-of-jail-free' card.

¹⁷ Indeed, it can be expected that the supply of international units would diminish over time as the countries of origin move to implement their own mitigation targets.

economic growth can be moderated by, inter alia, using international units to offset some of the emissions target, rather than seeking to reduce emissions domestically only. Its modelling, as outlined in Table 7 of the RIS appear to unequivocally demonstrate a lower economic impact if international units are allowed (though of course the usual and heavy riders concerning the modelling apply). This impact is consistent with its earlier work, as noted above.

49. We also note the risks associated with moving ahead of our trade competitors in the absence of access to international units was identified in an earlier Landcare Research report completed in the context of the previous 2030 emission reduction target setting exercise. In this report it evaluated the effect of a scenario if New Zealand faced a unilateral climate policy and could not purchase international offsets. In this scenario Infometrics did not model an explicit emissions reduction target, but rather assessed the level of domestic emissions reductions that could be achieved if New Zealand faced a carbon price of \$300/tCO₂-e over the entire commitment period while the rest of the world continued to face the global carbon price that reached \$50/tCO₂-e by 2030. The modelling results were extremely informative:

"New Zealand's carbon price would have to be at least \$300/tCO₂-e in order for the country to be close to achieving a target of 10% below 1990 emissions reduction without having to purchase international offsets (and without pricing agriculture or forestry emissions). This unilateral approach would result in a -2.25% reduction in RGNDI and a 2.1% reduction in RGDP, while reducing gross GHG emissions by almost 30% relative to the baseline (i.e. about 7% below 1990 emissions). *This approach has large consequences for New Zealand's balance of trade, as the relatively high domestic carbon price reduces the country's competitiveness and firms and consumers purchase more goods from overseas.* The key sectors impacted by the high price are primary energy, energy-intensive manufacturing, and transport, while food and wood product manufacturing and services are relatively unaffected."¹⁸

(emphasis added)

50. In light of this, we consider that a number of relatively minor amendments be made to the Bill in order to reflect the important role of international units, at least in the short to medium term. We suggest this be achieved by the following:

Amend section 5W(1) so that it reads:

"(1) Emissions budgets must be met, as far as possible ~~is~~ realistic, through domestic emissions reductions and domestic removals".

51. This formulation implies some additional flexibility but also imports the same language from 5W(2). We also find the language of limits unduly constraining

¹⁸ Landcare Research report for the Ministry for Primary Industries & Ministry for the Environment entitled 'Modelling the economic impact of New Zealand's post-2020 climate change contribution', dated May 2015, page 31.

in a world of so many unknowns. Therefore, we suggest the following amendment:

Amend section 5X(1)(e) as follows:

"(e) the appropriate ~~limit on the~~ amount of offshore mitigation that may realistically be used to meet the emissions budget, including the reasons for the ~~proposed limit amount~~ and how the limit amount meets the requirement of section 5W(1)".

52. We consider the budgetary focus to be tactical and unnecessarily short-sighted. Instead we think that the Commission should be allowed the space to think strategically and long term about the issue of international units and for it to be allowed to 'nest' any emissions budget considerations of such units into this longer-term strategic consideration. Therefore, we suggest the following amendment:

Amend section 5L by adding a new paragraph (g) as follows:

"(g) short and long term trends in:

(i)

(ii) opportunities for offshore mitigation

53. Finally, the issue of international units arises again in clause 5ZI. See the section below on monitoring for the suggested amendment.

The Pursuit of Bipartisanship

54. The proposal to bring the review forward also speaks to our strong and often stated desire for political bipartisanship. We have long argued for the need for a bipartisan approach to climate change policy as the best way to provide policy predictability for business and to underpin the confidence needed by business to invest and create jobs in the low emissions economy.

55. But in our submission to the Productivity Commission on its issues paper on the transition to a low emissions economy, we argued that bipartisanship can be fragile. We noted that:

"- policy consensus and 'independent' institutions can be undone. For example, the previously shared political and policy consensus that existed around superannuation, free trade and monetary policy no longer hold even though the outcomes sought remain agreed (at least on the face of it). The presumption that independence will provide policy durability is a chimera. A focus on new Acts, institutions and mechanisms, regardless of how stable or independent they are claimed to be, are only independent (if they are that at all) while a political consensus exists. We last saw this playing out in the climate change space with the establishment, and subsequent disestablishment of the Climate Change Office, and are seeing it play out on a global scale in American climate change

policy. It is unclear why this would not happen with the now suggested climate commission. While it is important that policy settings are durable, there will inevitably always be a contest of ideas about how to reach the targets and this could vary over time. This risk is inevitable, but is mitigated if the targets or desired outcomes are agreed and further reduced with an enduring focus on high quality advice and decision making¹⁹

56. Regrettably, this seems to be playing out in the strong statements from the National Party that it will not support the methane targets. The absence of bipartisanship in this regard sends a poor signal to investors to wait until there is a change of government before acting. It also has implications for the extent of action required to reduce the other gases. We urge all parties to come to a common landing on the target as it sets the tone for all subsequent actions.

57. While the target is the most obvious factor in reaching bipartisanship, so too must there be bipartisan confidence in the nature of the new institution being established – the Commission - and its ability to fulfill its duties and obligations to a sufficiently high standard. While there is clearly some evidence of bipartisanship throughout the Bill, the most obvious manifestation of this is in clauses 5E, 5F and 5G. We do not believe the Bill, as drafted appropriately reflects the long term desire for bipartisanship. We suggest this be achieved by the following:

Amend new section 5E(1)(c) as follows:

"(c) the Minister has consulted representatives of all political parties in Parliament, and has obtained the support of parties whose parliamentary members comprise at least 75% of all Members of Parliament."

and

Amend section 5F by inserting new subsection 2A as follows:

"(2A) The Minister must consult representatives of all political parties in Parliament before appointing a person to the nominating committee."

When emissions budgets may be revised

58. Consistent with the need for flexibility in the overall institutional arrangements in light of the patent uncertainty we face, we agree that emissions budgets should be able to be revised. This ability must, of course, be balanced with the need for predictable settings. However, having said that, we think that the balance is currently skewed too heavily towards inflexibility with respect to budget revisions and the previous language used in clause 5ZB (or at least a

¹⁹ BusinessNZ submission to the Productivity Commission dated 2 October, 2017, entitled 'Low-Emissions Economy' pages 5-6.

test of no greater level) be reflected in 5ZB(6). We suggest this be achieved by the following:

Amend section 5ZB(6)(a) as follows:

"(a) after an emissions budget period has begun, unless there are significant and material reasons to do so".

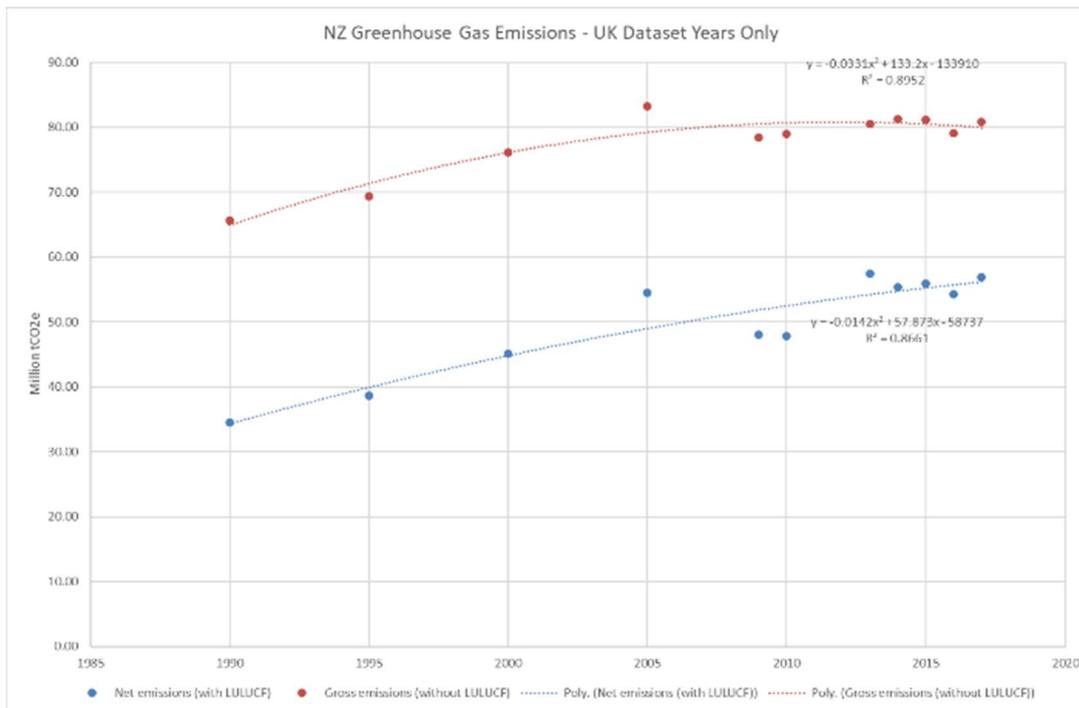
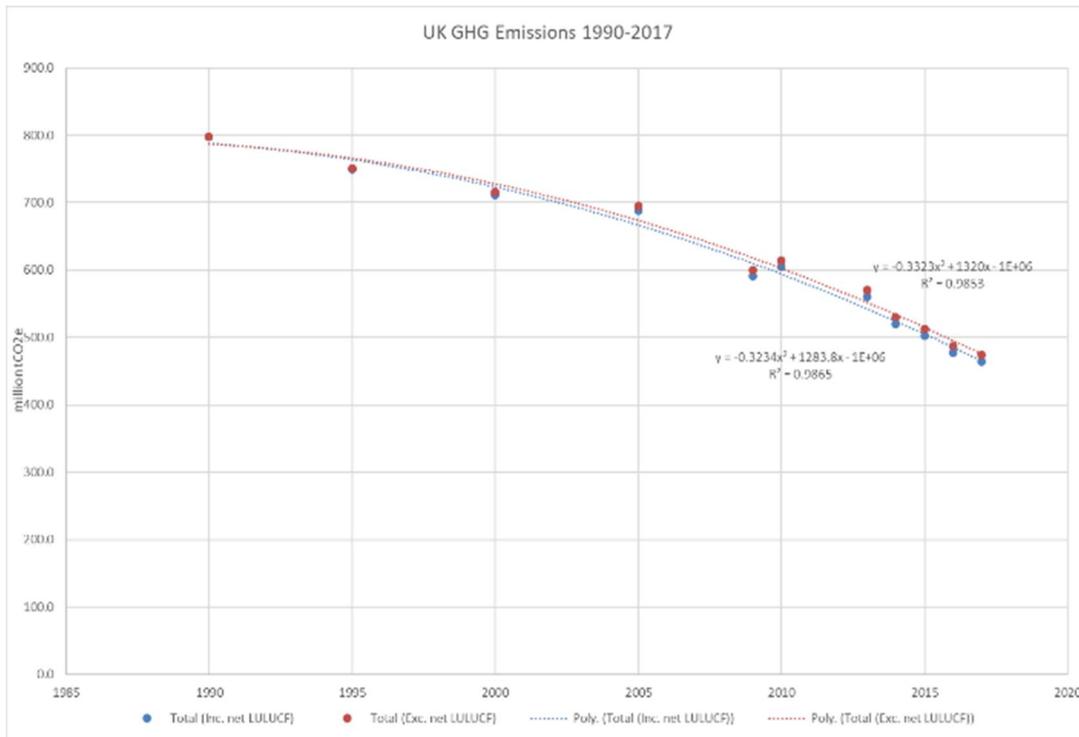
Banking and Borrowing

59. We agree that banking and borrowing are appropriate tools. Clause 5ZC provides the power to bank or borrow with a restriction on borrowing set at 1% of the next emissions budget. This 1% cap on borrowing has been lifted from UK legislation. However, as can be seen from the correlation graphs below²⁰, we believe that a greater margin is warranted for the New Zealand context, because:

- a. the UK emissions profile is significantly less impacted by forestry planting / harvesting cycles and also through the inherent averaging of many more emitters;
- b. no quantitative assessment of the emissions volatility has been provided in the context of the proposal to simply replicate the UK threshold; and
- c. it is unclear how the NZ ETS accounting treatment and reporting requirements (up to 5-yearly for forestry) will interact with the budget which may be set on an UNFCCC accounting basis (e.g. reference level accounting).

²⁰ Sources: UK inventory data taken from https://uk-air.defra.gov.uk/library/reports?report_id=981 NZ inventory data taken from <https://www.mfe.govt.nz/publications/climate-change/new-zealands-greenhouse-gas-inventory-1990-2017>

Comparison of UK and NZ Emissions Variability²¹



60. In light of this, one approach could be to request that the setting of a mandatory cap on borrowing not yet be legislated but instead be based on the Commission’s assessment of emissions. An alternate, which we prefer, is to recognise the factors that mean a 1% threshold is inappropriate, and to provide

²¹ Source: Frazer Lindstrom Limited.

for automatic banking, with no upper limit, and automatic borrowing up to 5%. The Bill could then provide for the Minister to determine only the level of borrowing that exceeds this new, higher threshold. We suggest this be achieved by the following:

Amend section 5ZC as follows:

- (1) If the total emissions in an emissions budget period are lower than the emissions budget for that period, the excess reduction ~~may~~will be carried forward to the next emissions budget period (**banked**).
- (2) If the total emissions in a particular emissions budget period are greater than the emissions budget for that particular period, up to $\pm 5\%$ of the next emissions budget ~~may~~will be carried back (**borrowed**) to make up the excess emissions in that particular emissions budget period.
- (3) The Minister ~~must~~may decide ~~whether to bank or borrow, and must determine the extent to which banking or borrowing is permitted~~ emissions exceeding the amount able to be borrowed under subsection (2).
- (4) Before the Minister makes a decision under **subsection (3)**,—
 - (a) the Commission must, in its report on an emissions budget period, ~~provide advice report~~ on the quantity of emissions that may be banked or borrowed between 2 adjacent emissions budget periods under subsections (1) and (2), and provide advice on the quantity of emissions that may be borrowed under subsection (3); and
 - (b) the Minister must have regard to that advice.

Monitoring

61. In order to enhance accountability, robust monitoring mechanisms are required. While this is mostly accommodated for in clause 5ZI, these clauses as drafted contain some problematic elements as they relate to the timing of events. For example, as an ex post, after the event clause (2 years after the end of the relevant budget period) it appears that the Minister can still take decisions on budgetary outcomes that have already happened. This needs to be tidied up. We have also amended this clause to be consistent with our views above on international units. We suggest this be achieved by the following:

Amend section 5ZI as follows:

- (1) Not later than 2 years after the end of an emissions budget period, the Commission must prepare a report evaluating the progress made in that emissions budget period towards meeting

- the emissions budget in the next emissions budget period, including—
- (a) an evaluation of how well the emissions reduction plan has contributed to that progress; and
 - (b) an evaluation of any banking or borrowing that may occur under section 5ZC(1) and (2) and a recommendation on any banking and borrowing under section 5ZC(3) that would be appropriate; and
 - (c) an assessment of the amount of offshore mitigation ~~required—used~~ to meet the emissions budget for the period to which the report relates, ~~subject compared~~ to the ~~limit amount~~ proposed by the Commission under **section 5X(1)(e)**.
- (4) Not later than 3 months after receiving the Commission's report, the Minister must present a report to the House of Representatives in which the Minister sets out a response to the Commission's report, including the Minister's ~~decisions on—~~
- (a) response to:
 - (ai) any banking or borrowing under section 5ZC(1) and (2); and
 - (bii) the amount (if any) of offshore mitigation that has ~~been required—was used~~ to meet the relevant emissions budget (~~subject compared~~ to ~~any limit on~~ the amount proposed by the Commission under **section 5X(1)(e)**); and
 - (b) decision on any borrowing under section 5ZC(3).

Other Issues

62. There are three other substantive issues we would like to bring to the Committee's attention, being:

a. the 2050 Target: Technical Drafting Issue:

It appears that there is a technical drafting issue with the definition of the 2050 target in clause 5O. In brief, it excludes offshore mitigation from the calculation of "net emissions of greenhouse gases in a calendar year, other than biogenic methane", as set out in clause 5O(1)(a).

In contrast, the definition of emissions budgets in clause 5V does include offshore mitigation. The explanatory note to the Bill

states that "emissions budgets can be understood as interim targets or "stepping stones" to New Zealand's emissions reduction target". Exclusion of offshore mitigation from the 2050 target, when it is included in the emissions budgets, therefore appears to be an error.²²

b. adaptation:

We recommend that the Part 1C, Adaptation, be deleted in its entirety. In our submission to MFE on the climate change targets we noted that:

"The Zero Carbon Bill must address therefore address adapting to climate change as New Zealand needs joined up action on both climate change mitigation and adaptation. We are, however, less certain as to whether this should be a responsibility of the Commission. Giving it such responsibility risks a burgeoning of its overall ambit with a consequential loss of focus on mitigation, as this must be its primary focus."

This is not to suggest that adaptation is an unimportant element of the overall picture, nor to suggest that there is not a set of functions to be undertaken. The risks are clear especially around sea level rise, and it is important for some sectors of the economy that there is a clear, consistent pathway to reduce these risks through adaptation, consistent with the government's obligations under the Paris Agreement. However, we continue to believe that the Commission's primary focus – that of mitigation – must not be overshadowed by what will be a large role in adaptation planning and that such tasks are better carried out by either the MFE, or the Department of Prime Minister and Cabinet. Evidence suggests that organisations fail due to having too many, too complex objectives (ref: the Electricity Commission).²³ We also suggest this also be achieved by the following:

Amend section 5B as follows:

The purposes of the Commission are—

²² By way of explanation, "Net emissions" is defined in new section 4(1) as "gross emissions combined with emissions and removals from land use, land use change, and the forestry sector". In contrast, "net budget emissions" is defined in section 5S as "means gross emissions, offset by removals and offshore mitigation". However, section 5S does not apply to subpart 1, in which the definition of the 2050 target in section 5O is contained. Therefore, the 2050 target is to be interpreted by reference to section 4(1), as proposed to be amended by the Bill.

"Removals" is defined in existing section 4(1) in relation to a "removal activity that is listed in Part 1 or 2 of Schedule 4". Those activities consist of forestry in New Zealand, embedding emissions or storing carbon dioxide after capture which would result in reduction from emissions reported in New Zealand's annual inventory report, or exporting or destroying hydrofluorocarbons or perfluorocarbons. Only these activities are covered by "removals" in relation to the 2050 target. In contrast, "offshore mitigation" as defined in section 5S, is not included in the removals definition applying to the 2050 target.

²³ The Insurance Council opposes this position.

- (a) to provide independent, expert advice to the Government on mitigating the effects of climate change (including through reducing emissions of greenhouse gases) ~~and adapting to the effects of climate change~~; and
- (b) to monitor and review the Government's progress towards its emissions reduction ~~and adaptation~~ goals.

A range of consequential amendments (such as to clause 5J (g) and (h)) would also be required to give effect to this more substantive change.

We acknowledge that there are risks and benefits of either retaining adaptation as a function for the Commission, or not and ultimately where it should reside, is a judgement call. Should the Committee wish to retain Part 1C on Adaptation we have reservations about the powers conferred on the Minister to gather information in clauses 5ZV and 5ZW, especially as they relate to commercial 'lifeline' businesses. We believe that proposed information gathering powers are excessive in terms of potential breadth and resource costs, while the protections and abilities to withhold information non-existent (such as the protection of legal privilege). The information held by lifeline businesses regarding infrastructure could be commercially sensitive in nature and obligations to disclose such information (even potential obligations) would, in almost all circumstances, put them at a commercial disadvantage. We also note that until local government develops greater capability and capacity in the identification of long-term resilience requirements for their local communities, including the provision of appropriate information for local lifeline businesses to act on in a co-ordinated manner, requesting information on targets and controls from such business will be a less fruitful exercise. Finally, we note that it is unclear from 5ZW who the administering agency would be; and

- c. the matters the Minister must have regard to before appointing a Commissioner:

We note that the UK Climate Change Act 2008, Schedule 1 — The Committee on Climate Change, has the following with respect to the skills and experience that the UK considers desirable on its committee:

- “(3) In appointing a member, the national authorities must have regard to the desirability of securing that the Committee (taken as a whole) has experience in or knowledge of the following—
 - (a) business competitiveness;
 - (b) climate change policy at national and international level, and in particular the social impacts of such policy;

- (c) climate science, and other branches of environmental science;
- (d) [.....]
- (e) economic analysis and forecasting;
- (f) emissions trading;
- (g) energy production and supply;
- (h) financial investment;
- (i) technology development and diffusion"

While one could (if one looks hard enough) find skills and knowledge such as that expressly stated in the above section [such as (a), (e), (f), (g), (h) and (i)], we consider them important enough to our economic future as to warrant explicit listing in clause 5H (1) of the Bill.

We appreciate (and indeed agree) that we want a balance on the Commission that tilts away from sector expertise, as we want to ensure that there is appropriate distance between that of the governance roles and the executive.²⁴ However, we do not think that the addition of the above factors means sectoral expertise is required on the Commission, as these technical skills properly reside in the executive, rather a sufficient understanding of them to allow the Commissioners to test the robustness and durability of the advice from the executive on these matters.

63. Finally, there are range of tidy-ups that we would like to bring to the Committee's attention, being:

Amend clause 5L as follows:

In performing its functions and duties and exercising its powers under this Act,

the Commission must consider, where relevant,—

- (b) technology that could be efficiently developed and adopted and the likelihood of any advantages arising from early adoption of the technology and any barriers to early adoption; and
- (e) the distribution of benefits, costs, and risks across and between generations; and

²⁴ We recognised, and indeed welcomed this not being the case in the instance of the Interim Commission, but note that the specific tasks it was set, and the timeframes under which it operated, made this an appropriate deviation from standard governance arrangements. We do not think – for the sake of long-term durability of the Commission, that this is appropriate as a model going forward.

Amend clause 5M as follows:

The Commission may—

- (a) ~~publish and invite submissions on~~ discussion papers and draft reports and invite submissions on them;

Amend clause 5Z as follows:

(2) The Commission and the Minister must—

(b) have regard to the following matters:

(iii) existing technology and anticipated technological developments, including the costs and benefits of early adoption of these in New Zealand and barriers to early adoption:

(vii) the distribution of those impacts across the regions and communities of New Zealand, and within and from generation to generation:

64. We would also respectfully suggest that the sequence of clauses 5ZD and 5ZE be reversed as the latter outlines what the Commission must do while the former then addresses what the Minister must do having received the Commission's plans.

APPENDIX ONE: ABOUT BUSINESSNZ

[BusinessNZ](#) is New Zealand's largest business advocacy body, representing:

- Regional business groups [EMA](#), [Business Central](#), [Canterbury Employers' Chamber of Commerce](#), and [Employers Otago Southland](#)
- [Major Companies Group](#) of New Zealand's largest businesses
- [Gold Group](#) of medium sized businesses
- [Affiliated Industries Group](#) of national industry associations
- [ExportNZ](#) representing New Zealand exporting enterprises
- [ManufacturingNZ](#) representing New Zealand manufacturing enterprises
- [Sustainable Business Council](#) of enterprises leading sustainable business practice
- [BusinessNZ Energy Council](#) of enterprises leading sustainable energy production and use
- [Buy NZ Made](#) representing producers, retailers and consumers of New Zealand-made goods

BusinessNZ is able to tap into the views of over 76,000 employers and businesses, ranging from the smallest to the largest and reflecting the make-up of the New Zealand economy.

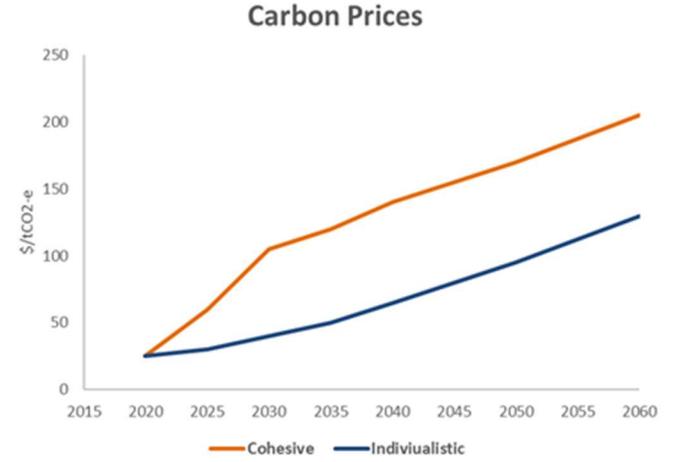
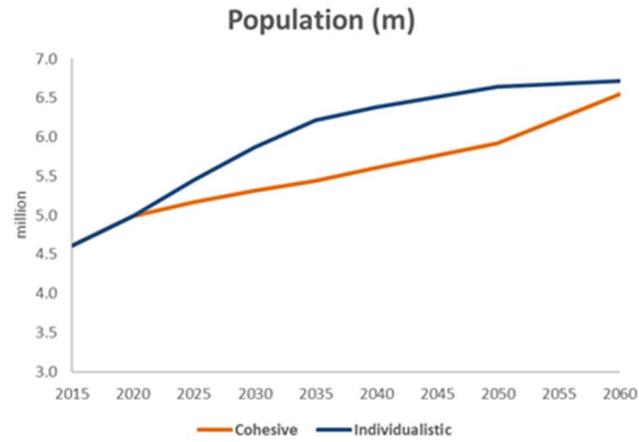
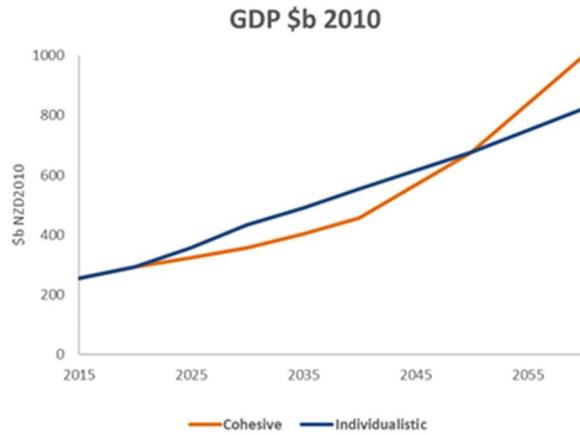
In addition to advocacy and services for enterprise, BusinessNZ contributes to Government, tripartite working parties and international bodies including the International Labour Organisation ([ILO](#)), the International Organisation of Employers ([IOE](#)) and the Business and Industry Advisory Council ([BIAC](#)) to the Organisation for Economic Cooperation and Development ([OECD](#)).



www.businessnz.org.nz

APPENDIX TWO: BUSINESSNZ ENERGY COUNCIL BEC2060 ENERGY SCENARIOS

Input data:



Output data:

