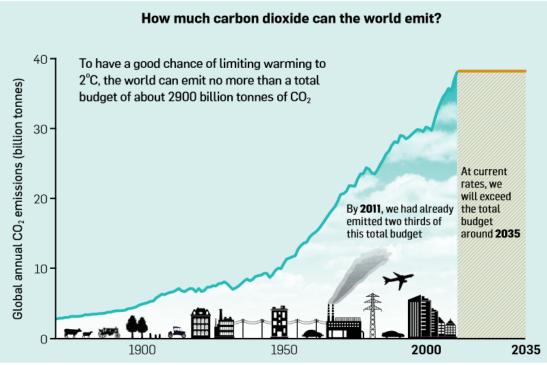
Introduction to the Climate First Party

August 2017

The Climate First party is a provisional political party which recognises that Climate Change is the most serious problem of our time and that we need to directly confront it immediately to prevent catastrophic disaster in the near future. Unlike other parties, which are afraid to make dealing with Climate Change the focus of their action for fear of being unpopular, Climate first honestly states what our country has to do to prevent world Climate Change, even if voters find the truth uncomfortable. In other words, we are appealing to those who have decided that Climate Change is an impending disaster and want to take real action now to stop it.

Our method is to outline a precise pathway of greenhouse gas-emission reduction, within NZ, which would transform NZ into the first post-carbon country by 2035 and keep NZ within its allowed carbon budget, based on our population as a percentage of the total world population. If we could achieve this we would become a model country, showing the world the way to the post-carbon future which is necessary if the world is to stay below 2°C of warming.

We take as our starting point the IPCC carbon budget for the world of 1000Gtns CO2 from FIGURE 1



Source: Information is sourced from the IPCC's Fifth Assessment Report, Working Group 1 (emissions data, Figure 6.8; carbon budget, SPM E.8)

2011 onwards (Figure 1). The current National Government accepts this figure because they included it in the consultation document for deciding on what commitment New Zealand would take to the Paris Climate Conference in 2015. Unfortunately, the NZ Govt

commitment is one of the world's weakest and in addition there is no policy in place to actually achieve their weak target.

Other political parties such as The Green Party have stronger targets but even these fall well short of the reduction level required to meet the world 2°C target. Their target of 40% below 1990 level by 2030, while it sounds good, is compromised by its gross-net comparison method. They mean that the **net** emissions in 2030 will be 40% below the **gross** emissions of 1990, in fact 5% above the 1990 net emissions. I believe that the 40% below target was chosen because if you project that forward in a straight line it reaches zero net emissions around 2050, which appears reasonable, until you look deeper.

However, the question that needs asking is **What does the world need to do to stay below 2°C**? And the answer is **stay within the 1000Gtn budget**. If this is to happen, the big emitters like China, USA, India and the EU must stay within their budgets in proportion to their percentage of the world population. These countries will not do this while small, privileged countries like NZ, Australia and Canada continue to emit well above their share of global emissions on a per-person basis. Fortunately, NZ, with its small population, highly democratic government, and easily-sustainable resource base is perfectly placed to be a model for the world on how to stay within its carbon budget.

The big problem, however is that six years have passed since 2011 and in that time NZ, because of the National Government's inaction, has already used up half of its ghg budget of 660 Mtns. (NZ is 0.066% of the world population therefore we should be allowed 0.066% of the world's 1000 Gtn total budget, which is 660 Mtns). This means that the only way that NZ can now be that model country is for us to reduce to negative net emissions, so that after that we are pegging back our budget overshoot which is expected to happen about 2022.

Climate First has calculated a year by year Required Emission Reduction Pathway (RERP) which, if begun in 2018 would require a reduction in gross emissions of 2.8MTns year on year until 2039, when our emissions would be minus 15.9 Mtns. Then, holding constant at that level until 2050 would bring us in exactly on budget in that year. Central to this would be increasing our forest sink from the current 18 Mtns up to 39 Mtns in 2039, and this is not as hard as it looks when you realise that in 2008 the forest sink was 33.8Mtns

The beauty of defining year-on-year required reductions is that if we met those reductions in the first few years we would have credibility as a model which was on target to meet its goals. This is in sharp contrast to so many nebulous future targets such as "pest-free by 2050" or even "carbon neutral by 2050".

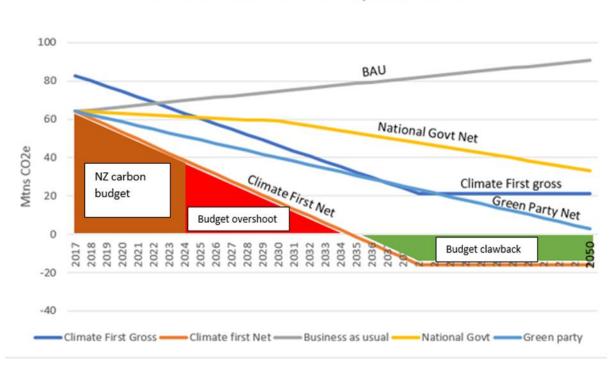
The following three charts explain how the emission reduction targets of The Climate First Party, The Green Party and the National Government differ.

Chart 1. Climate First

Following the orange line which represents the **net** emissions reduction path, means that net emissions will reduce from a projected 64 Mtns CO2e in 2017 down to 40 Mtns in 2030, down to zero in 2035 and finally to -15.9 Mtns in 2039. Then from there they would stay constant at -15.9 through to 2050. Notice that Gross emissions (without the forest carbon

sink) would reduce from 82Mtns in 2017 down to 21 Mtns in 2039, and stay constant thereafter. Climate First is the only party which has both a detailed gross and net reduction line because we are absolutely clear exactly what cuts would be necessary each year.

Chart 1. Climate First

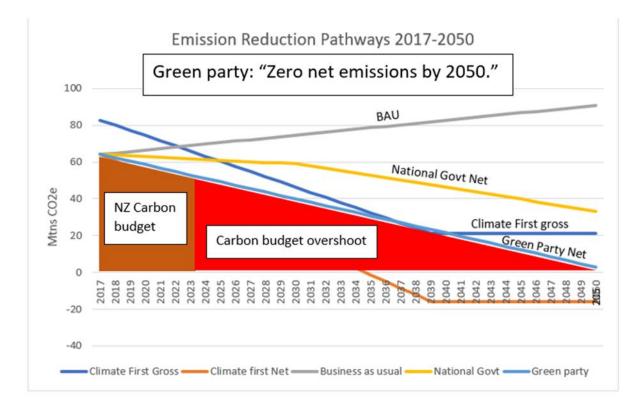


Emission Reduction Pathways 2017-2050

Thus, the negative emissions after 2035 would balance out the budget overshoot between 2024 and 2035.

Chart 2. Green Party Emission Reduction Pathway

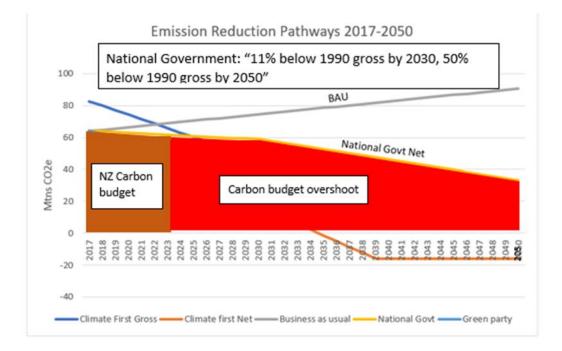
The green party's net reductions are not specified year by year and there is no gross



reduction line, because they have merely stated a net target of 40Mtns by 2030 and zero by 2050 without concrete measurable year on year emission figures. In addition, the Greens will exceed the budget in 2023 and arrive at 2050 752 Mtns over budget or more than double the allowable emissions.

Chart. 3 The National Party Target.

The National Party will surpass our budget in 2022 and reach 59 Mtns of emissions (The Paris target) in 2030 at which time they will have emitted nearly double our allowed amount. Then on a slightly steeper trajectory they will reach 51 Mtns in 2050, having emitted 2232 Mtns of CO2e, which is more than three times our allowable budget.



Conclusion.

Both National and The Greens, by 2050, will be far in excess of New Zealand's national carbon budget according to our population of 0.066% of the world population; one by three times and the other double. However, Climate First's reduction schedule will remain inside our carbon budget.