TABLED DOCUMENT NO.1

Good morning, Councillors of the Bay of Plenty Regional Council.

Thank you Madame Chairperson for the opportunity to speak in this public forum.

I wish to support the move to declare a Climate Change Emergence and the establishment of a climate change Fund, But with a proviso, action NOW

The key issue is to ensure that the declaration is backed up by concrete action on climate change by Council. In the interim, Council has the option to ring-fence a specified amount of funds for climate change from available reserves, with the specific use of these funds remaining undetermined for the time being until such time as a fund is established.

I prefer the Nelson option of a further \$30,000 will go towards the establishment of a climate forum and taskforce and \$124,500 towards employing a 'climate champion, etc

The Carbon Reduction Group has already started a process of community cooperation.

The 2020 / 2021 submission process is too late. The action needs to start now. This can not be a PR excise.

While the government is moving in the right direction, the legislative process will take years to come into effect and implement the appropriate incentives to promote movement to a lower emissions economy. We cannot wait. Scientists are warning about the costs of delay. The more opportunities we take to move ourselves and the broader society to effective action, the better we will be. Delay only increases the costs and reduces the chance of exploiting the opportunities.

How to get there is about being smarter, realizing / grasping the opportunities and challenges that the issue presents. It is about finding pathways and leadership to get there.

Regional Council, I believe is in a unique position to lead and facilitate a planned discussion and action. The operative word is from today and that should be an amendment to the policy going forward.

I will offer some suggestions about a way forward and time lines.

- 1. A vision what we want to become? Net zero by 2050 From Today
- 2. **Pathways** how do we get there? Starting Tomorrow
- 3. **Communication** to all the community? forum, network involving all.
 - 2 + 3 have to be interactive

All the community has to be involved as individuals, with expertise from every part of the community. We do not know you will have the ideas to progress solving the issue, and the ability to lead will come from.

Here are some pathways to get to that first 1 million tons of GHG reductions.

EVs make BOP the most EV friendly in NZ. 250 k EVs save 1 million tons GHG

Well run Electric Buses for schools, businesses and visitors, with free rides for schoolchildren to normalise public transport for the long term future. This will reduce congestion.

Agriculture sector commit to 10% reduction of GHG by 2030, 3 million tons GHG, Our food production must continue, but we can all play our part here, if the education / support and measurement is available.

How much does our Bay wide kiwifruit / avocados sectors contribute to GHG

We have world standard facilities in the BOP for breeding new varieties of kiwi fruit. How about breeding other climate proof crops? Forget about Cameron and Jackson, it would be better eating the cereals, fruits, nuts of crops, than turning them into GE patties or milk.

There must be other options out there.

I can appreciate council processes, after being on WBOPDC for 12 yrs. This is a issue that you have to take very seriously, and that needs leadership by all.

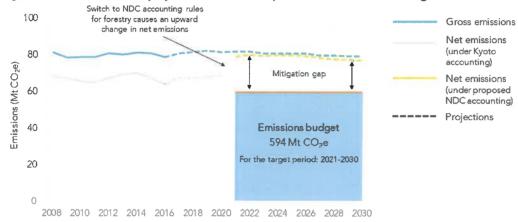
I wish you well in your deliberations and hope we all can move forward.

Thank You

	to 2020	to 2025	to 2030	to 2035	to 2040	to 2045	to 2050		
Start Gross Emissions	Stabilize	80.85	71.04	61.42	51.98	42.71	33.58		
Methane Reductions (2050 target = 24%-47%)		2.56	2.37	2.19	2.03	1.87	1.73	7.5% per 5 yrs = 37.4% total	
Subtotal: Total - Methane reductions		78.29	68.67	59.23	49.96	40.83	31.85		
Reductions in Other Gases		7.25	7.25	7.25	7.25	7.25	7.25		
GROSS EMISSIONS at end of 5 years	80.85	71.04	61.42	51.98	42.71	33.58	24.60		
CH4 decreasing 15% by 2030 + 7.5% PER 5YRS	34.13	31.57	29,20	27.01	24.99	23.11	21 38	37.4%	
CO2	36.02	30.02	24.02	18.02	12.02	6.02			NOTE: 1Mt = 0.25m EVs
N20	9.12								NOTE: TIVIL = 0.25m EVS
		8.12	7.12	6.12	5.12	4.12		1.0 Mt per 5 yrs	
all other ghg	1.58	1.33	1.08	0.83	0.58	0.33	0.08	0.25 Mt per 5 yrs	
TOTAL GROSS EMISSIONS	80.85	71.04	61.42	51.98	42.71	33.58	24.60	69.6%	
Estimated Offsets from trees Mt (new rules after 2020)	5.00	10.00	12.50	15.00	17.50	20.00	22.50	27.8%	
TOTAL NET EMISSIONS	75.85	61.04	48.92	36.98	25.21	13.58	2.10	2.6%	
Gross Emissions Reduction Target for next 5 yrs (Mt)	9.8	9.6	9.4	9,3	9.1	9.0	2.1		

Chapter 2 | Climate change, emissions and the New Zealand context

Figure 2-12 New Zealand's projected emissions compared with its 2030 NDC budget



Source: MfE (2018a).

Notes:

- 1. Net emissions are based on target accounting rules for forestry. Rules are specific to each target period.
- 2. Emissions projections are for the period 2017-2030. Projections are based on current mitigation policies.

F2.8

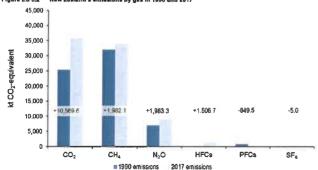
Meeting New Zealand's first commitment under the Paris Agreement will be highly challenging, even with immediate and strong action to reduce domestic emissions. International offsets can play a part in meeting this commitment, but any delay in domestic reductions will make future commitments even more difficult to achieve.

Table ES 3.1 New Zealand's gross emissions by gas in 1990 and 2017

	Change from	quivalent	kt CO,-ei	
Change from 1990 (%)	1990 (kt CO ₂ - equivalent)	2017	1990	Direct greenhouse gas emissions
41.5	10,568.6	36,023.7	25,455.2	CO2
6.2	1,982.1	34,132.1	32,150.0	CH4
27.8	1,983.3	9,116.5	7,133.2	N₂O
NA.	1,505.7	1,505.7	0.0	HFCs
-93.4	-849,5	60.5	909.9	PFCs
-24.9	-5.0	15.0	20.0	SF ₆
23,1	15,185.2	80,853.5	65,668.3	Gross, all gases
	15,185.2	80,853.5	65,668.3	Gross, all gases

Note: Gross emissions exclude net removals from the LULUCF sector. The per cent change for HFCs is not applicable (NA) because no emissions of HFCs occurred in 1990. Columns may not total due to rounding. Percentages presented are calculated from unrounded values.

Figure ES 3.2 New Zealand's emissions by gas in 1990 and 2013



		7.5% per 5 yrs = 37.4% total				37.4%	6.0 Mt ner 5 vrs = 1.2 Mt ner vear 1	1.0 Mt per 5 vrs	0.25 Mt per 5 vrs	%9.69	27.8%	2.6%	
to 2050	33.58			7.25	24.60	21.38 3		3.12 1				2.10 2	2.1
to 2045	42.71	1.87	40.83	7.25	33.58	23.11	6.02	4.12	0.33	33.58	20.00	13.58	9.0
to 2040	51.98	2.03	49.96	7.25	42.71	24.99	12.02	5.12	0.58	42.71	17.50	25.21	9.1
to 2035	61.42	2.19	59.23	7.25	51.98	27.01	18.02	6.12	0.83	51.98	15.00	36.98	9.3
to 2030	71.04	2.37	68.67	7.25	61.42	29.20	24.02	7.12	1.08	61.42	12.50	48.92	9.4
to 2025	80.85	2.56	78.29	7.25	71.04	31.57	30.02	8.12	1.33	71.04	10.00	61.04	9.6
to 2020	Stabilize				80.85	34.13	36.02	9.12	1.58	80.85	5.00	75.85	8.6
	Start Gross Emissions	Methane Reductions (2050 target = 24%-47%)	Subtotal: Total - Methane reductions	Reductions in Other Gases	GROSS EMISSIONS at end of 5 years	CH4 decreasing 15% by 2030 + 7.5% PER 5YRS	CO2	NZO	all other ghg	TOTAL GROSS EMISSIONS	Estimated Offsets from trees Mt (new rules after 2020)	TOTAL NET EMISSIONS	Gross Emissions Reduction Target for next 5 yrs (Mt)