

Hon James Shaw

Minister for Climate Change
Minister of Statistics
Associate Minister of Finance

Minita mō Te Rerekētanga o Te Āhuarangi
Minita Tatauranga
Hoa Minita Tahua Moni



18-M-02661

Carlton Brown
carltonbrown16@gmail.com

Dear Carlton,

Thank you for your email of 12 November 2018 to the Prime Minister about your book *Revolution: Ice Age Re-Entry*. I am responding on her behalf as the matters you have raised fall within my portfolio as Minister for Climate Change.

As you note in your email, the Earth has experienced many ice ages throughout its long history. The most recent one was at its peak about 20,000 years ago, while for the last 10,000 years the Earth's climate has been relatively stable.

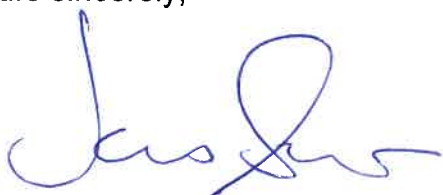
Studies of how and why the climate changed naturally in the past are one of the main reasons scientists are convinced that modern emissions of greenhouse gases are causing unnatural climate change. Historically, when carbon dioxide levels increased rapidly, the global warming that resulted was very disruptive and sometimes caused mass extinctions.

The evidence of anthropogenic climate change is best summarised by the Intergovernmental Panel on Climate Change (IPCC), whose Fifth Assessment Report was completed in November 2014 and is available at <http://ipcc.ch/report/ar5>. This report represents the global scientific consensus on climate change, which the New Zealand Government accepts. The Fifth Assessment Report states that it is extremely likely that more than half of the observed increase in global average temperature from 1951 to 2010 was caused by humans. The IPCC's best estimate is that all the warming over the period 1951-2010 was anthropogenic.

Based on this advice and scientific analysis, the Government considers it prudent to implement policies to reduce emissions that are a result of human activities. Accordingly, we will introduce new legislation to the House early this year, to set up

the framework for New Zealand's transition to a low-emissions, climate-resilient future. I encourage you to follow the Zero Carbon Bill's progress, as there will be opportunities during the select committee process to have your say on what should be included. The latest information about the bill can be found at www.mfe.govt.nz/have-your-say-zero-carbon.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'James Shaw', with a large loop at the end.

Hon James Shaw
Minister for Climate Change