

Out-of-scope

---

**From:** s 9(2)(a)

**Sent:** Thursday, 4 October 2018 2:08 AM

**To:** J Ardern (MIN) <[j.ardern@ministers.govt.nz](mailto:j.ardern@ministers.govt.nz)>

**Subject:** New Zealand's Cooperation on Marine Cloud Brightening

Dear Prime Minister Ardern,

My name is s 9(2)(a)

We are the world's largest public-run campaign into a solution to Climate Change known as Marine Cloud Brightening, and therefore, we felt it our duty to write to you, in the hope you will lead the way in reversing climate change. Yes, no other country has tried to assume leadership of this- so why can't this be New Zealand's position, its power, its gift to the world. What greater legacy could you give than reversing climate change. I will write you a brief explanation of its mechanisms and advantages, as well as the hurdles yet to overcome.

Marine Cloud Brightening is a geo-engineering solution to Climate Change, meaning that it doesn't just hope to halt climate change but to reverse it, of obvious advantage. It does this by utilising an effect known as the Twomey effect- namely that clouds with more particles in them are brighter, and therefore more reflective. If clouds are more reflective, this would reduce the amount of solar energy that is absorbed and then reemitted by the earth, in turn reducing the amount of energy that is available to warm up the Earth. Marine Cloud Brightening would create these bright clouds through a fleet of about 300 unmanned ships that would spray superfine particles of water at heavily researched spray sites, for the maximum positive impact and to minimise the negative impact. Certain studies have found that, if implemented rightly, Marine Cloud Brightening could reverse climate change up to doubling of present day CO2 levels, whilst more conservative estimates tend to show both large scale cooling to counteract climate change and local cooling, therefore helping to retain glaciers and ice sheets, of obvious advantage. Not only this, but this cooling, or simple halting of climate change, could occur in a matter of months, is completely adjustable to our wishes and could be reversed if it is felt that there are adverse effects.

However, there are even more advantages. As Marine Cloud Brightening is simply enhancing a natural process, there should be no adverse health effects unlike those associated with Stratospheric Aerosol Injection, for example. However, the likely biggest draw to this solution is how cheap it could be- Professor Stephen Salter, the leading engineer in the world interested in the solution, has estimated that it would likely cost about £2.3 billion to finish off research, build the vessels, and implement it for 25 years, which is practically nothing. Of course, more research is needed, but the solution is close to the stage of a practical trial now, which, once completed, could help prove whether the solution works or not. Any adverse effects, if the practical trial becomes a failure, would be reversible in a matter of months.

It is for this I am trying to come to you. Currently, no country has implanted, or even funded any

practical trial, into Marine Cloud Brightening. New Zealand could be the first. This could be the way New Zealand changes the world for this generation, could be the supreme way of expressing your country's 'kindness,' as you put it at the UN. I understand that this should be done, in theory, by an international agreement- why can't New Zealand be the one to make it. At this moment we are faced with a crossroads, and you could be the one to take New Zealand and the world on the right path. Its cheap, it would be effective and it would save lives- all we need is one government to commit, to take that first step.

If you want any more information, please contact me directly or look on our website

**s 9(2)(a)** and hopefully, this could be the start of something very special for

**s 9(2)(a)** New Zealand and all humanity.

Yours Sincerely,

**s 9(2)(a)**

---