

Media Release  
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## Musk Foundation's XPRIZE funds a short film featuring NZ-based Aspiring Materials and their promising carbon removal technology.

### Full Media Release below:

**Ōtautahi Christchurch:** Stories of climate change devastation can be overwhelming, day in, day out. There are few stories that provide hope and offer solutions that truly get to the heart of the emissions problem - heavy industry.

Here's some good news to share from **Aspiring Materials**, a NZ-based climate tech company that refuses to let the doom dominate. This week, a [short film about their carbon removal technology](#) designed to target emissions reduction in heavy industry has been released by the Musk Foundation's XPRIZE.

Based on Ōtautahi Christchurch, science-led Aspiring Materials has developed a solution that uses commonly found rocks to capture and permanently lock away carbon dioxide emissions, either directly from the atmosphere or more significantly from point source emissions.

Their patent-pending technology is remarkable for its ability to capture carbon dioxide emissions and lock it away permanently in a naturally occurring solid - magnesium carbonate. The solution essentially begins and ends with a rock.

Aspiring Materials are competing in the 4 year long global XPRIZE carbon removal competition, where the grand prize winner stands to win US\$50m. The team was selected by XPRIZE from a worldwide pool of over 1100 teams as just one of ten to produce a short film that showcases what "saving the world looks like". The 10 minute short film is reaching a global audience across the XPRIZE media network.

The film's story firmly puts New Zealand on the world stage of climate innovation, highlighting their technology, how it works and more importantly how it can enable heavy industries worldwide like steel, cement and energy to decarbonise.

*"What we've got here is a zero-cost gain for business and climate mitigation. When you're working right at the forefront of climate technology, it can be difficult for traditional businesses to really see what this breakthrough means. We often hear 'it feels too good to be true' - but fortunately, for the environment, for business and for humanity, it is true. Being selected to tell our story through this short film just shows how much value an international player like XPRIZE sees in what we're doing. Now we just want the world to hear it."* - Mark Chadderton, CEO at Aspiring Materials.

Produced by Ethik Studios, the film is being showcased across XPRIZE media channels on YouTube, X, LinkedIn, IGTV and Facebook. With XPRIZE being a global

accelerator of climate tech innovation, the film will reach a global audience watching and waiting for the next big science based solutions that could “rebalance Earth’s carbon cycle”.



**Watch the 10 minute film here: [Could Rocks Be the Climate Change Solution We've Been Searching For? - YouTube](#)**

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### **About Aspiring Materials**

Aspiring Materials is a mineral conversion company based in Ōtautahi Christchurch Aotearoa New Zealand who has developed a process that can capture and abate carbon dioxide emissions from heavy industry using ultramafic rocks.

The company was founded by geologist Dr. Christopher Oze and civil engineer Dr. Allan Scott after a decade of collaborative scientific research into developing construction materials able to be produced from the scarce resources available on Mars.

Today, the focus is all about Earth, pivoting years of research and experience towards carbon removal and abatement in heavy industry, using a commonly found abundant rock that contains the mineral olivine. Their patent-pending technology captures carbon dioxide emissions and locks it away permanently in a naturally occurring solid - magnesium carbonate.

The process to capture carbon emissions is net zero, it's a circular system and in addition to carbon capture, useful byproducts are made that can be used to further abate and supplement emissions intensive materials - silica, iron, nickel and hydrogen. These materials are already essential in the steel, concrete and energy industries and demand will only increase as the world transitions to a low carbon economy.

Seed investors Icehouse Ventures and Outset Ventures supported Aspiring Materials in 2021 as they began their commercial operation. In August 2023, lead investor Motion Capital, joined by Icehouse Ventures, invested additional funds to help the company accelerate the design and build of a pilot plant in New Zealand, that would enable scaling their technology for industrial applications and commercial trials.

### **About XPRIZE and the Carbon Removal competition**

XPRIZE Carbon Removal is aimed at tackling the biggest threat facing humanity - fighting climate change and rebalancing Earth’s carbon cycle. Funded by the Musk Foundation, this \$100M competition is the largest incentive prize in history.

This four-year global competition invites innovators and teams from anywhere on the planet to create and demonstrate solutions that can pull carbon dioxide directly from the atmosphere or oceans, and sequester it durably and sustainably. To win the grand prize (US\$50M), teams must demonstrate a working solution at a scale of at least 1000 tonnes removed per year; model their costs at a scale of 1 million tonnes per year; and show a pathway to achieving a scale of gigatonnes per year in future.

