

My name is Alasdair Skelton. I am a Professor of Geology.

Part of my job is to teach. I will do so now.

We are here to celebrate knowledge. **But – at the same time – we ignore knowledge.**

Would Alfred Nobel have celebrated? I'm not so sure.

Alfred Nobel died in 1896. In that same year soon-to-become Nobel laureate (1903), Svante Arrhenius taught us what I will teach you now: Why we must **keep fossil fuels in the ground.**

Earth's climate is controlled by 3 factors-

- The amount of sunlight it receives.
- The albedo effect, meaning how much of that sunlight is reflected back into space.
- And the greenhouse effect. This works like a special kind of blanket. It lets sunlight pass through, but captures heat radiated from the warmed surface of the Earth.

The greenhouse effect is powered by greenhouse gases, such as carbon dioxide in the air.

The amount of the carbon dioxide in the air is controlled by volcanoes which add carbon dioxide to the air and the weathering of rocks which takes it away again.

There is a natural balance between volcanic eruptions and the weathering of rocks which makes sure that there is neither too little nor too much carbon dioxide in the air. This is why there has been life on Earth for 3.5 billion years.

Can you imagine something more beautiful?

By burning fossil fuels, we upset this beauty. We add carbon dioxide to the air 100 times faster than volcanoes do.

This changes the chemistry of the air that we breathe. It heats the Earth. It is the reason that there are more heatwaves, more droughts, more floods ... causing more famines, more injustice, more suffering and more sadness.

How can we celebrate knowledge, while we ignore what we have known since 1896?

The children of the world have called on us **adults** to protect our beautiful planet.

They have asked us to protect their homes and the homes of all living things.

They have asked us **to be our own hope.** And theirs.

Rebel Mothers: Thank you for responding.

Thank you for caring about the beauty.

Thank you for caring about our children.

Thank you for caring about life

Thank you for **not ignoring what we have known since 1896.**