The Carbon Crisis in 90 seconds.

This is a banana; and this is a chunk of coal.
The banana is sweet and delicious and fun to eat... the coal is... none of those things.

But they are much more alike than they seem. Both were made by plants and store energy from the sun and carbon gas from the air around us.

When you eat the banana, you use the energy stored in the banana to run and jump; and you release carbon gas back into the air around you.

Now, carbon in the banana is young fast carbon: just weeks ago the banana was carbon gas in the air, and hours after you eat it, you breathe out the same carbon back into the air.

When we burn coal in power plants, we use the energy stored in the coal to generate electricity that powers our homes and factories; and we release carbon gas back into the air around us.

But, the carbon in the coal is old slow carbon. Plants took the coal carbon out of the air hundreds of millions of years ago. That carbon has been locked up ever since, and would stay locked up, if people hadn't dug up the coal and burned it.

So now by burning coal and oil, people are adding lots and lots of old carbon to the atmosphere, faster than plants and the oceans can take it out.

Why do I care? Because carbon gas in the atmosphere acts like a blanket, trapping heat, and making the whole planet warmer.

My name is Peter, and I'm a carbon cycle scientist at NASA. We use satellites to watch how the world is warming. We can see the glaciers and the ice caps melting; and the air, land, and oceans warming. So we know we all have to change the way we produce and use energy, to burn less coal and oil, to prevent the planet from getting too warm.