IS JET TRAVEL BECOMING THE DIRTIEST WAY TO CROSS THE PLANET?

Video transcript: Introduction with Helen Czerski

HELEN CZERSKI:

Spend any time at an airport, and you quickly realise the sheer scale of modern air travel.

Since the 1970s, the number of flights worldwide has tripled, as tickets have become cheaper and more accessible.

At this very moment, half a million people are in the skies all over the world.

This beautiful animation shows the flight paths of the many thousands of planes that have been in the air criss-crossing the globe just in the past 24 hours.

But this unprecedented ability to travel the world comes at a cost – ever rising emissions of carbon dioxide.

The car industry has produced innovations to lower carbon emissions. There are bio-fuelled engines, electric cars and even solar-powered cars making their way into production. But all passenger planes burn aviation fuel, and that means that they leave a trail of carbon emissions in their wake.

Although air travel currently accounts for a small proportion of total carbon emissions, it's the fastest growing of any source.

If air travel continues to expand at the current rate, it's estimated that by 2050 it could account for 15% of all human produced carbon emissions. And if the climate predictions that go along with that are accurate, that could lead to a pretty bleak future.

But in our increasingly global society, as more countries open up to trade and tourism, air travel is essential to the global economy.

We shouldn't give up on our dreams of taking to the sky and travelling the world. We do need to find another way of doing this without the associated carbon footprint – a radical new technology that will bring air travel into 21st century.

Banner image courtesy of Getty Images

Global flight path animation courtesy of Kiln.it

Step 5 background image courtesy of Getty Images

Step 6 images courtesy of Getty Images, Solar Impulse, Bloomberg via Getty Images and NASA