



Dry, cracked soil at the Lordsburg Playa in New Mexico, USA. Credit: Martina Klose (distributed via [imaggeo.edu.eu](https://www.imaggeo.edu.eu))

Scientists calculate deadline for climate action

Human activities, such as transport and industry, are changing the Earth's climate. Greenhouse gases from these activities trap heat in the Earth's atmosphere, making it warmer. In 2015, governments around the world agreed that, to avoid dangerous climate change, we should limit the increase in global temperature to well below 2°C. To do so, we need to take 'climate action', that is, to limit the amount of greenhouse gases that we release into the atmosphere.

In a new [study published in the EGU journal Earth System Dynamics](#), a team of scientists from the Netherlands and the UK found that we are running out of time to limit the increase in global temperature to 2° C at the end of the century. They said that we need to act strongly to stop climate change before 2035.

To limit our greenhouse-gas emissions, we need to start using more renewable energy. At present, most of the energy used around the world comes from oil, gas and coal. The problem is that burning these 'fossil fuels' to generate energy, like electricity, emits greenhouse gases that contribute to global warming. When you burn coal, it is 'used up' and gone: fossil fuels are not renewable. Renewable energy comes from sources like sunlight, water and wind. These can be used to make electricity and that source cannot be 'used up'. So, not only can we capture as much energy as we want from these sources, it's clean energy because it does not release greenhouse gases or other pollutants.

If we can quickly change the way we generate energy around the world, we can avoid dangerous climate change. Henk Dijkstra from Utrecht University in the Netherlands says: "We hope that 'having a deadline' may stimulate the sense of urgency to act for politicians and policy makers."

Discuss with your teacher or parents

What is the global (average) temperature?

What do you think 'climate action' is and what could you do to help?

What are renewable energies? What types of renewable energies do you know?

Find out more about non-renewable and renewable energy in this resource from Tes: egu.eu/2WYEC8

What can we do to tackle climate change? Find out more on this Fun Kids video: egu.eu/9AHNL7

This is a kids' version of the European Geosciences Union (EGU) press release '[Deadline for climate action – Act strongly before 2035 to keep warming below 2°C](http://www.egu.eu/education/planet-press/)'. It was written by Bárbara Ferreira (EGU Media and Communications Manager), reviewed for scientific content by Tim Lane (Lecturer in Geography, Liverpool John Moores University) and John Connolly (Lecturer in Physical Geography, Dublin City University), and for educational content by Abigail Morton (Earth and Space Science teacher at Woburn Memorial High School in Woburn, Massachusetts, USA). For more information, please check: <http://www.egu.eu/education/planet-press/>.

