

Climate change is upon us and we must act

Observer editorial

Global warming is here. It has arrived. And the effects are already devastating



Sat 17 May 2014 19.04 EDT



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It is often claimed by those who deny the reality of climate change that scientific forecasts about the impact of global warming are far too uncertain to merit taking action. There is no reason to suffer the inconvenience of leaving the planet's fossil fuels unburned when the current analyses of meteorologists, oceanographers and geophysicists will probably turn out to be false alarms, they argue.

Such contention is dangerously false. For a start, scientists' warnings about future [weather](#) patterns are certainly not overreactions to the evidence they have gathered. In most cases, observed climate changes – the slump in [summer sea ice](#) coverage in the Arctic in recent years is a good example – have turned out to be far more drastic than researchers had originally predicted. Their views of the future – melting icecaps, spreading deserts and acidifying oceans – are cautious evaluations that most probably underestimate the likely impact of global warming.

There is another, more straightforward reason to repudiate deniers' claims about scientists' "false alarms", however. The impact of climate change is not an issue that is going to be determined in far-off years for the simple reason that it is already happening. This is a point made clear by Nasa glaciologist Eric Rignot who reveals that his observations show that a large part of the [West Antarctica](#) ice sheet has now begun to disintegrate and that the entire sheet appears today to be in irreversible retreat.

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"One of the feared tipping points of the climate system appears to have been crossed," says [Stefan Rahmstorf](#), an expert on the physics of the ocean at Potsdam University. Certainly the consequences of this massive destabilisation of ice cover at the south pole are going to be considerable, scientists now argue

The last assessment report of the [Intergovernmental Panel on Climate Change](#) (IPCC) put a modest figure of one to three feet as the likely rise in sea levels that will be experienced this century. The disintegration of the entire West Antarctic ice shelf extends that forecast drastically. A figure of 10 feet is now a more than likely option over the coming centuries. Vast tracts of heavily populated coastline around the world face inundation. Millions are likely to lose their homes. It may take more than a century for this devastation to occur. Nevertheless, it now looks to be inevitable, says Rignot. Nor will the residents of low-lying regions such as Bangladesh or Florida be surprised at this forecast. They are already experiencing the consequences of rising sea levels triggered by melting icecaps.

A useful example is provided by [Miami](#). The city is built on top of porous limestone and its foundations are now absorbing water from rising seas at an alarming rate. Water now bubbles up through pipes and drains and taints fresh water supplies while seawater regularly flows out of drains into streets, which become flooded.

Civil engineers currently estimate that the cost of putting right the damage to Miami could rise to billions of dollars and that, please note, is the price that a single city will have to pay to deal with just one aspect of global warming. Repeat it across the globe and you get a notion of the vast cost we now face for having failed to deal with climate change for the past two decades and for faltering in our commitment to agree to curb emissions of carbon dioxide from our factories, power plants and cars.

The result of this continued inaction has been straightforward: climate change – once a far-off threat – is now upon us and is already bringing alarming change to our planet, as the citizens of Miami are now experiencing, along with those living near spreading deserts in Africa, in the far north where tundras are melting, and in high mountain areas in the Andes and Himalayas whose glaciers are now disappearing. As Leonard Berry, director of the Florida Centre for Environmental Studies at Florida Atlantic University puts it: "Climate change is not a future thing, it's a 'happening now' thing."

After a week that has seen several UK newspapers give wild and inordinate coverage to false claims that some scientists have tried to suppress inconvenient climate research, this point needs emphasising. A world bedevilled by climate change is not a remote, questionable prospect. It is a reality that has already arrived and is destined to have increasingly profound impacts until we wake up to the threat and act coherently.

- This article was amended on 19 May 2014 to clarify the probable rate of the rise in sea levels.

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... because that is when the US withdraws from the Paris climate accord, on 4 November. Five years ago nearly 200 countries committed to a collective global response to tackle the climate crisis. But when Donald Trump took office he announced that the US would leave the Paris agreement. On the one issue that demands a worldwide response to help safeguard the Earth for future generations, the US has chosen to walk away. The president is playing politics with the climate crisis – the most defining issue of our time.

The stakes could scarcely be higher and with your help we can put this issue at the center of our 2020 election coverage. The election will be a referendum on the future of democracy, racial justice, the supreme court and so much more. But hovering over all of these is whether the US will play its role in helping take collective responsibility for the future of the planet.

The period since the Paris agreement was signed has seen the five hottest years on record. If carbon emissions continue substantial climate change is unavoidable. The most impacted communities will also be the most vulnerable. Instead of helping lead this discussion the White House prefers to roll back environmental protections to placate the fossil fuel industry.

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