

The scorching temperatures and forest fires of this summer's heatwave have finally stirred the world to face the onrushing threat of global warming, claims the climate scientist behind the recent "hothouse Earth" report.

Following an unprecedented 270,000 downloads of his study, Hans Joachim Schellnhuber, said he had not seen such a surge of interest since 2007, the year the Nobel prize was awarded to Al Gore and the Intergovernmental Panel on Climate Change.

"I think that in future people will look back on 2018 as the year when climate reality hit," said the veteran scientist. "This is the moment when people start to realise that global warming is not a problem for future generations, but for us now," said the veteran scientist and outgoing director of the Potsdam Institute for Climate Impacts.

The heatwave has dominated headlines across the northern hemisphere this summer. New temperature records have been set in Africa and cities in Australia, Taiwan, Georgia and the west coast of US. Heat stroke or forest fires have killed at least 119 in Japan, 29 in South Korea, 91 in Greece and nine in California. There have even been freak blazes in Lapland and elsewhere in the Arctic circle, while holidaymakers and locals alike have sweltered in unusually hot weather in southern Europe.

Coming amid this climate chaos, the "hothouse Earth" paper by Schellnhuber and his co-authors struck a chord with the public by spelling out the huge and growing risk that emissions are pushing the planet's climate off the path it has been on for 2.5m years. Schellnhuber said the paper's release had accidentally been delayed, but the timing proved serendipitous. "It came out at a time when temperatures in Germany reached 38C so people could personally experience a heatwave. But this is just the beginning."

Even in the US, which president Donald Trump has vowed to pull out of the Paris accord, public opinion surveys have shown a growing acceptance of climate science. Last year's mega-typhoons and a hot May helped 73% of the public to acknowledge the reality of climate change, including a record 60% who now recognise that the causes are manmade. With millennials overwhelmingly in favour of tougher action, several pollsters are predicting that climate could be a factor in the midterm elections in the autumn.

Schellnhuber said he was concerned about the widening gap between scientists' increasingly alarmed descriptions of climate destruction and leaders' weak statements of what is politically possible.

"Politicians prefer small problems that they can solve and get credit for. They don't like big problems that, even if they succeed, leave the rewards for their successors," he said. "But once you pile up public pressure, politicians find it hard to avoid taking responsibility."

The hothouse paper spells out the actions that governments need to take, including carbon

laws that aim to halve emissions every decade and stronger safeguards for natural sinks, such as oceans and forests that are currently being lost.

"This is very dangerous. We are not just doing wrong ourselves with emissions, we are also killing our best friends - forests and oceans - that might ease the impact," Schellnhuber said.

He and others have drawn up a detailed action plan will be unveiled ahead of the Californian climate summit in September. It will include more ambitious targets than those outlined in the Paris accord, which aims to keep temperature rises below 2C. 49 countries' emissions have already peaked, but overall government commitments to date are lagging so much that the world is on a course for 3C of warming, at which level the risk of reaching an irreversible tipping point gets higher.

The authors say it is economically and technologically feasible to make more drastic emissions cuts that can keep warming at 1.5C.

"What is unrealistic is to be on a trajectory towards 3C," said Johan Falk, innovation fellow at Future Earth and Stockholm Resilience Centre. "Solutions exist, but they have to be adopted by the leadership of countries and companies."

With the world now believed to be in an "anomalously warm" phase until at least 2022, Schellnhuber says the global public will increasingly feel the impacts of climate change and, he hopes, demand more urgency from their governments.

On 8 September, climate groups are calling for a mass mobilisation ahead of the California summit. Asked if he thinks scientists should attend, Schellnhuber has little hesitation.

"There's a time to sit down and work at your desk and there's a time to get up and leave the area where you are comfortable. That time is now."

Source: theguardian.com