## Feeling the Hea

Even the scientists admit to feeling personal anxiety, grief or distress, over global warming

## **By John Gibbons**

s the climate emergency deepens, the pendulum of public and political opinion is swaying wildly, from optimism to absolute despair, and every point in between. However, one group uniquely placed to offer both a personal view and an expert perspective are the hundreds of scientists who co-author the mammoth Intergovernmental Panel on Climate Change (IPCC) assessment reports.

The science journal *Nature* recently canvassed the views of these IPCC experts. The results are far from encouraging. A total of 234 scientists replied to the anonymised survey, and three in five of them believe the Earth will heat by at least a devastating 3°C by the end of the century.

The target of the 2015 Paris Agreement was to limit global warming to "well below" the 2°C danger line, and ideally, to as close to 1.5° as possible. Seven years and one global pandemic later, global emissions remain on an extremely dangerous trajectory.

When asked if they believed the world now faces a "climate crisis", nine in 10 respondents agreed. Almost two thirds of the scientists surveyed admitted to personally experiencing "anxiety, grief or other distress" because of their concerns over climate change.

What is particularly sobering about these findings is that senior scientists are professionally sceptical and cautious, with their careers built around objective observation and empirical data, rather than personal feelings or impressions.

They are, in essence, the very last group you would expect to be sounding the alarm bells – unless they truly believe the situation is indeed dire. The scientists surveyed by Nature are members of the IPCC working group charged with assessing the causes and extent of climate change. It published its Working Group report last August.

According to the IPCC: "Unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5 °C or even 2°C will be beyond reach".

When asked whether they believed they would witness "catastrophic impacts of climate change in your lifetime", an astonishing 82% of respondents said yes. With ages of IPCC scientists ranging from the 30s-60s, this indicates just how close the great majority believe we are now to catastrophe.

On a more positive note, one in five scientists said they still expect nations to act to limit global warming to around 2°C.

While traditionally, scientists have been extremely reluctant to engage in climate advocacy of any kind, fearing it might be seen as a loss of objectivity, the Nature survey found 81% of respondents agreeing that climate scientists "should engage in advocacy on this issue".

Some two thirds of scientists report that they already engage in climate-advocacy work, with science-promotion via speeches, articles and videos being by far the most common mediums. Two in five said they personally contacted lawmakers or government officials to advocate on climate-policy issues, and a similar number sign petitions and letters supporting climate action.

However, just one in four scientists admitted

to participating in climate demonstrations – it appears that being photographed waving a banner remains a "bridge too far" for the majority of working scientists. Whether this too changes as climate impacts intensify remains to be seen.

While as individuals, most scientists are happy to engage in advocacy, three quarters of respondents did not think the IPCC itself should engage in advocacy work, believing it is more effective when it is seen to be strictly "sticking to the science". Given the repeated efforts, mainly from the right, to politicise climate science and to discredit scientific evidence by casting doubt on the integrity and honesty of the entire IPCC process, this caution is understandable.

The stone wall that most scientists erect between their personal lives and their work has, in the face of the climate emergency, begun to crumble. Two in five survey respondents admitted that their knowledge of global warming has affected their decision on where to live.

When it came to the most intimate personal decision on whether or not to have children, some 17% stated it had had an impact, while 21% said that global warming had influenced their lifestyle choices, including those relating to diet, transport and travel.

Being a professional in a field often confers feelings of invincibility: many doctors for instance intuitively believe that illness is something that happens to other people, and can feel genuinely shocked to find themselves as patients. Similarly, scientists may have hitherto felt professionally immune to touchy-feely concepts like "climate anxiety". We now know for sure that this is no longer the case.

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