

[nature.com](#) [Publications A-Z index](#) [Browse by subject](#)

[Cart](#) [Login](#) [Register](#)

[Current Issue](#) [Careers](#) [Q&As](#) [Article](#)

**NATURE | CAREERS | Q&A**

## Turning point: Climate guardian

Virginia Gewin

*Nature* **540**, 473 (15 December 2016) doi:10.1038/nj7633-473a

Published online 14 December 2016

**Turning to faith for the greater good.** [We use cookies to improve your experience with our site. Accept and close](#) | [More info](#)

**Subject terms:** [Climate sciences](#) [Environmental sciences](#) [Religion](#)



BBVA Foundation, Spain

*Veerabhadran Ramanathan has modelled greenhouse-gas dynamics and quantified the chlorofluorocarbon (CFC) contribution to Earth's global warming. His work at the Scripps Institution of Oceanography in La Jolla, California, shows that CFC-replacing hydrofluorocarbons (HFCs) also have a potent climate-warming effect. This finding led in October to HFCs being added to the Montreal Protocol on Substances that Deplete the Ozone Layer. He has engaged for a decade with religious leaders to act on climate change.*

### When did you realize that science alone might not galvanize climate-change action?

Many of my colleagues and I could see that, by mid-century, we'd shoot past 2-degrees warming, yet there was no public support for the drastic actions needed to steer us away from the cliff. I was discouraged and depressed. Then I got an e-mail telling me I'd been elected to the Pontifical Academy of Sciences in Vatican City, a body of only 80 members, one-third of whom are Nobel laureates.

### How did your early contact with the Vatican affect your outlook?

I initially thought the e-mail was spam. Before I got involved with the Vatican, I didn't have the foggiest notion that religion could help to combat climate change. I've since gone on record to say that global warming has to be taught in every church, synagogue, mosque and temple before we are likely to take the sort of drastic actions necessary to head it off.

### Where did your involvement lead?

At a meeting hosted by the Vatican in 2011, I teamed up with Dutch Nobel laureate Paul Crutzen to focus on glaciers. That opened my eyes to the power of the Church. In the meeting's scientific report, we included a prayer to protect humanity. There was tremendous opposition, but I stood behind its inclusion. We saw the potential of mobilizing religion to help, and proposed a Vatican-hosted meeting on sustainability. This took place in 2014 under Pope Francis.

### What happened after that meeting?

In a *Science* paper that followed, we pointed out that we need a moral revolution: solving climate change requires a fundamental shift in humanity's attitude towards each other and nature (P. Dasgupta and V. Ramanathan *Science* **345**, 1457–1458; 2014). Faith leaders can make such a revolution happen. After the sustainability meeting, I had two minutes to give a summary to the Pope in the car park. I showed him that 50–60% of climate-warming pollution comes from the wealthiest people on the planet. The bottom 3 billion contribute just 5%, but will experience the worst effects of climate change. That appealed to the Pope. He asked what to do. I told him to ask people to be better stewards of the planet.

**Did you get backlash for contacting religious leaders?**

I was shocked — no pushback. Scientists know we need to think outside the box. It has become a moral, ethical issue.

**What happened after the Pope's encyclical, or church directive, last year on the environment?**

It had a huge impact on the Paris summit, in which 175 nations agreed to limit climate-change activity. A survey of people who saw the Pope during his US visit showed a statistically significant effect on how people view climate change. Pope Francis has done what he can. It's up to us to take it from here.

**What does the election of Donald Trump, who won 80% of the evangelical vote, mean for climate strategy?**

The US elections and the president-elect saying that the United States would withdraw from the Paris agreement hung over November's United Nations climate-change meeting. But I don't see the vote for Trump, by evangelicals or otherwise, as a vote against climate change. I think most people are protesting against economic inequality. The elections made my work with religious leaders ten times more important. We urgently need a non-political forum where we can talk about climate change.

We use cookies to improve your experience with our site. [Accept and close](#) | [More info](#)

**This interview has been edited for length and clarity.**

**Related links**

---

**Related links in Nature Research**

Turning point: Katharine Hayhoe

Balancing belief and bioscience

*Nature* Special: Science and the 2016 US election

A collection of articles on climate warming

**Related external links**

Pope's climate-change encyclical

**Nature** ISSN 0028-0836 EISSN 1476-4687

**SPRINGER NATURE**

© 2016 Macmillan Publishers Limited, part of Springer Nature. All rights reserved.

partner of AGORA, HINARI, OARE, INASP, ORCID, CrossRef, COUNTER and COPE