



**Puviin Varman**

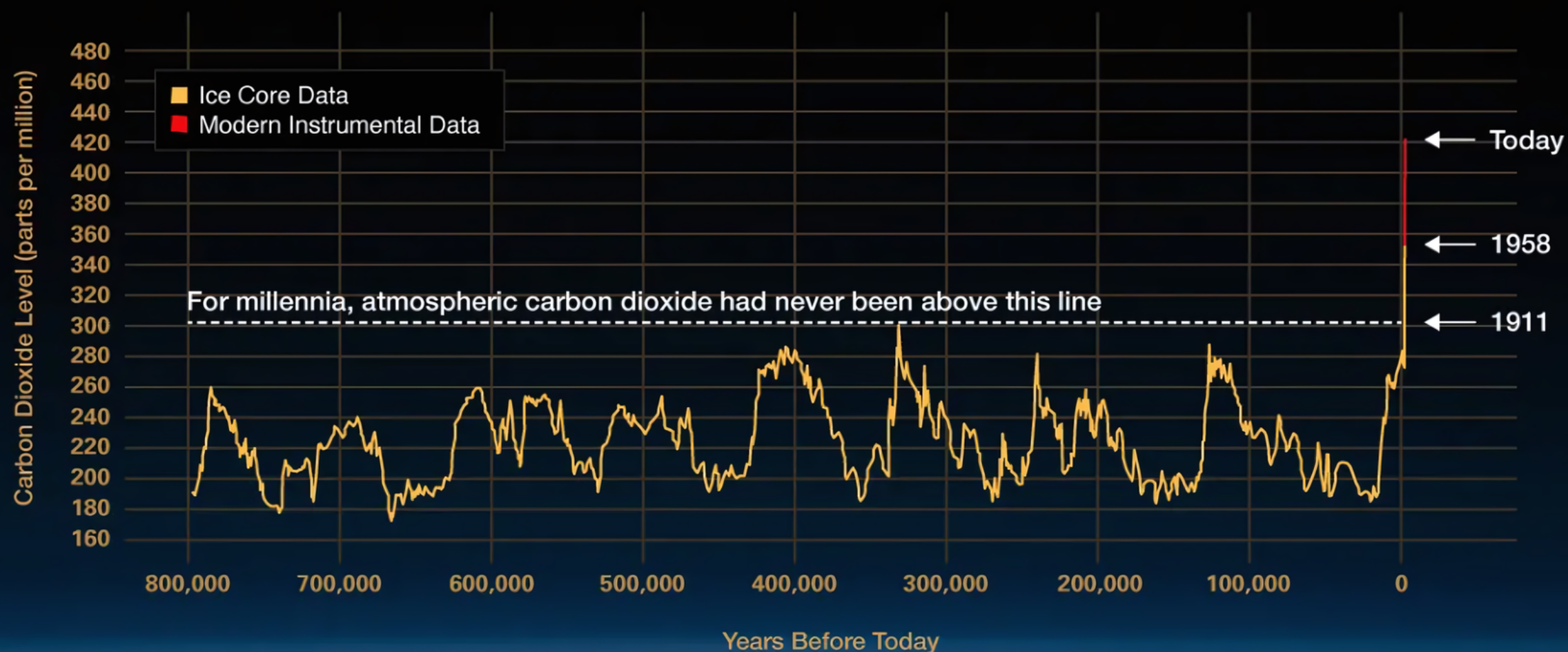
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# KEY STAKEHOLDERS **WITHIN** CARBON MARKETS

**WHY CARBON MARKETS?  
CLIMATE CHANGE EVIDENCE**

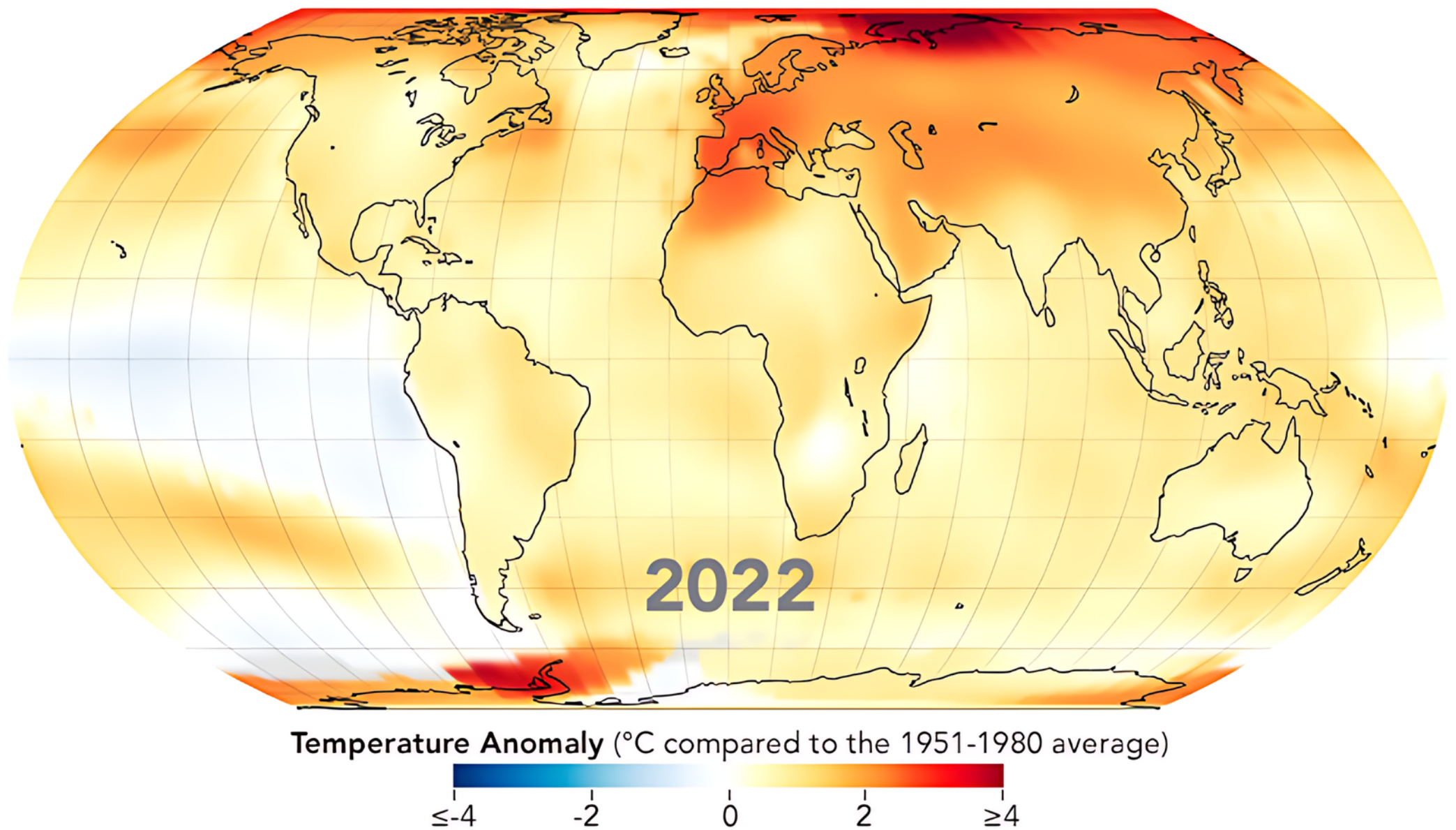




## Evidence 1

**The rate of change of atmospheric CO<sub>2</sub> since the mid-20th century is unprecedented over millennia.**

Source:- Luthi, D., et al.. 2008; Etheridge, D.M., et al. 2010; Vostok ice core data/J.R. Petit et al.; NOAA Mauna Loa CO<sub>2</sub> record.

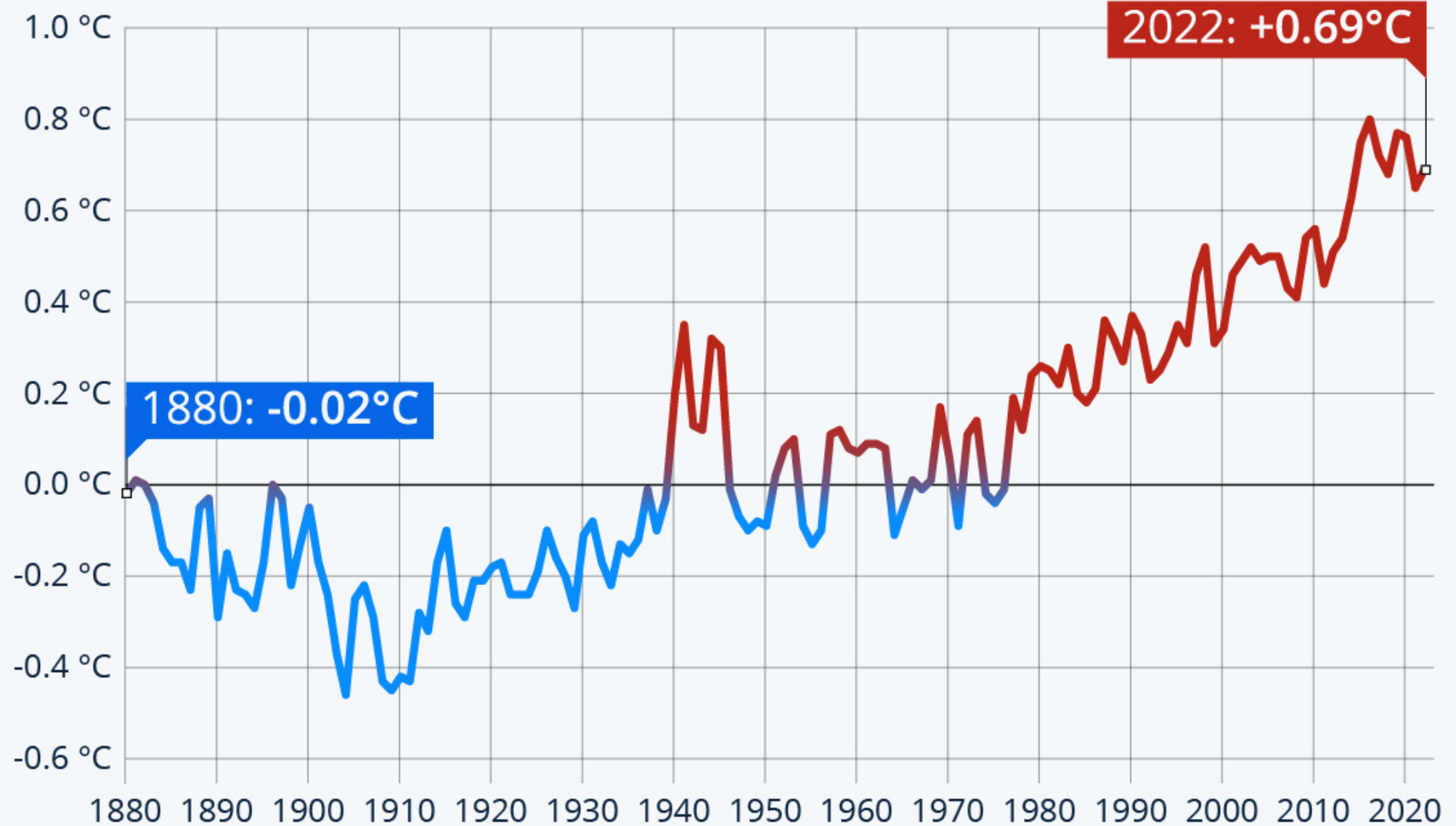


## Evidence 2

### Global Temperature is rising

The image above shows global temperature anomalies in 2022, which tied for the fifth warmest year on record. The past nine years have been the warmest years since modern recordkeeping began in 1880.

Source:- Luthi, D., et al.. 2008; Etheridge, D.M., et al. 2010; Vostok ice core data/J.R. Petit et al.; NOAA Mauna Loa CO2 record.



## Evidence 3

### The Ocean Is Getting Warmer

To date, the ocean contains about 90 percent of the heat from human-induced global warming, and the year 2022 was the warmest ever measured for the global ocean.

Source:- NOAA National Centers for Environmental Information (NCEI)



## Evidence 4

### The Ice Sheets Are Shrinking

The Greenland and Antarctic ice sheets have decreased in mass. Data from NASA show Greenland lost an average of 279 billion tons of ice per year between 1993 and 2019, while Antarctica lost about 148 billion tons of ice per year.

Source:- "Continuity of Ice Sheet Mass Loss in Greenland and Antarctica From the GRACE and GRACE Follow-On Missions." Geophysical Research Letters 47, Issue 8

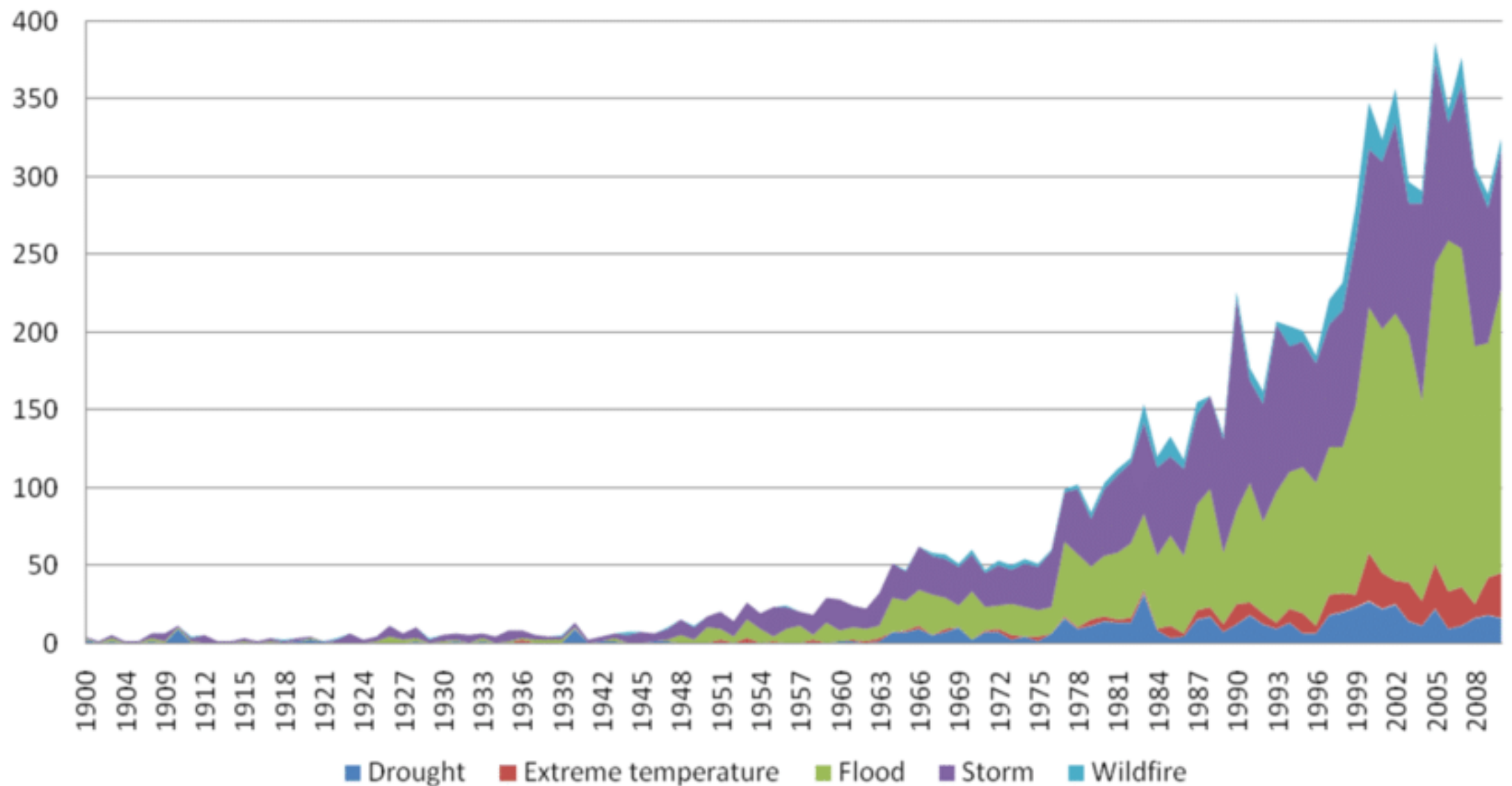


## Evidence 5

### The Sea Level Is Rising

Global average sea level rose by about 0.76 centimeters (0.3 inches) from 2022 to 2023 – nearly four times the increase of the previous year. We are on track to double the amount of change in the next three decades compared to the previous century,

Source:- [https://www.lemonde.fr/en/environment/article/2024/03/22/global-sea-level-jumped-due-to-el-nino-and-climate-change-nasa\\_6644252\\_114.html](https://www.lemonde.fr/en/environment/article/2024/03/22/global-sea-level-jumped-due-to-el-nino-and-climate-change-nasa_6644252_114.html)



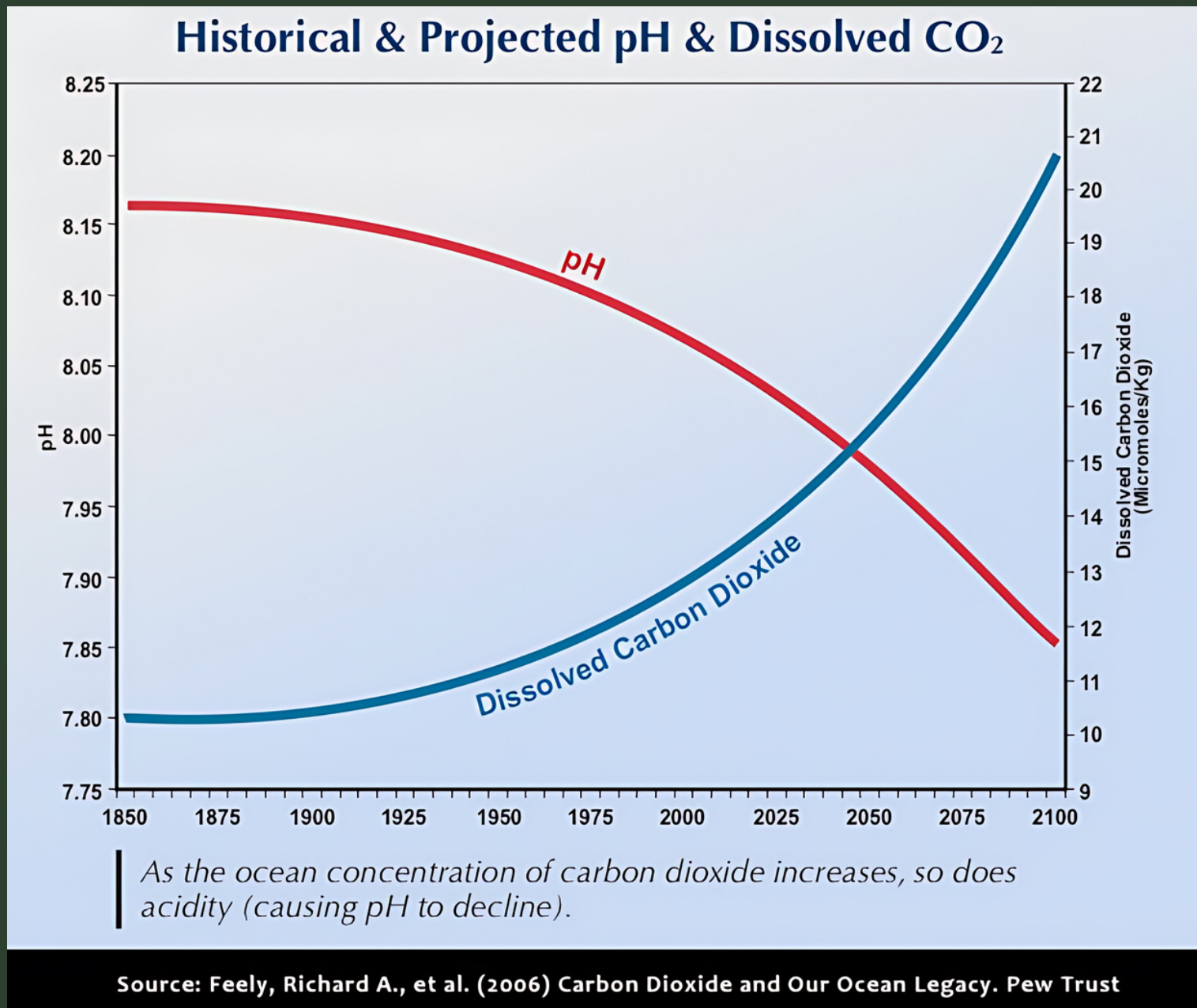
Source: EM-DAT: The OFDA/CRED International Disaster Database – [www.emdat.net](http://www.emdat.net) – Université catholique de Louvain – Brussels – Belgium.

## Evidence 6

### Extreme Events Are Increasing in Frequency

The number of reported cases of different places around the world recording record high temperatures, droughts, floods and storms have been increasing drastically since the 1900s.

Source:- Simpson, Brent & Burpee, Gaye. (2015). Agricultural Extension and Adaptation Under the “New Normal” of Climate Change. 1489-1509. 10.1007/978-3-642-38670-1\_68. |



## Evidence 7

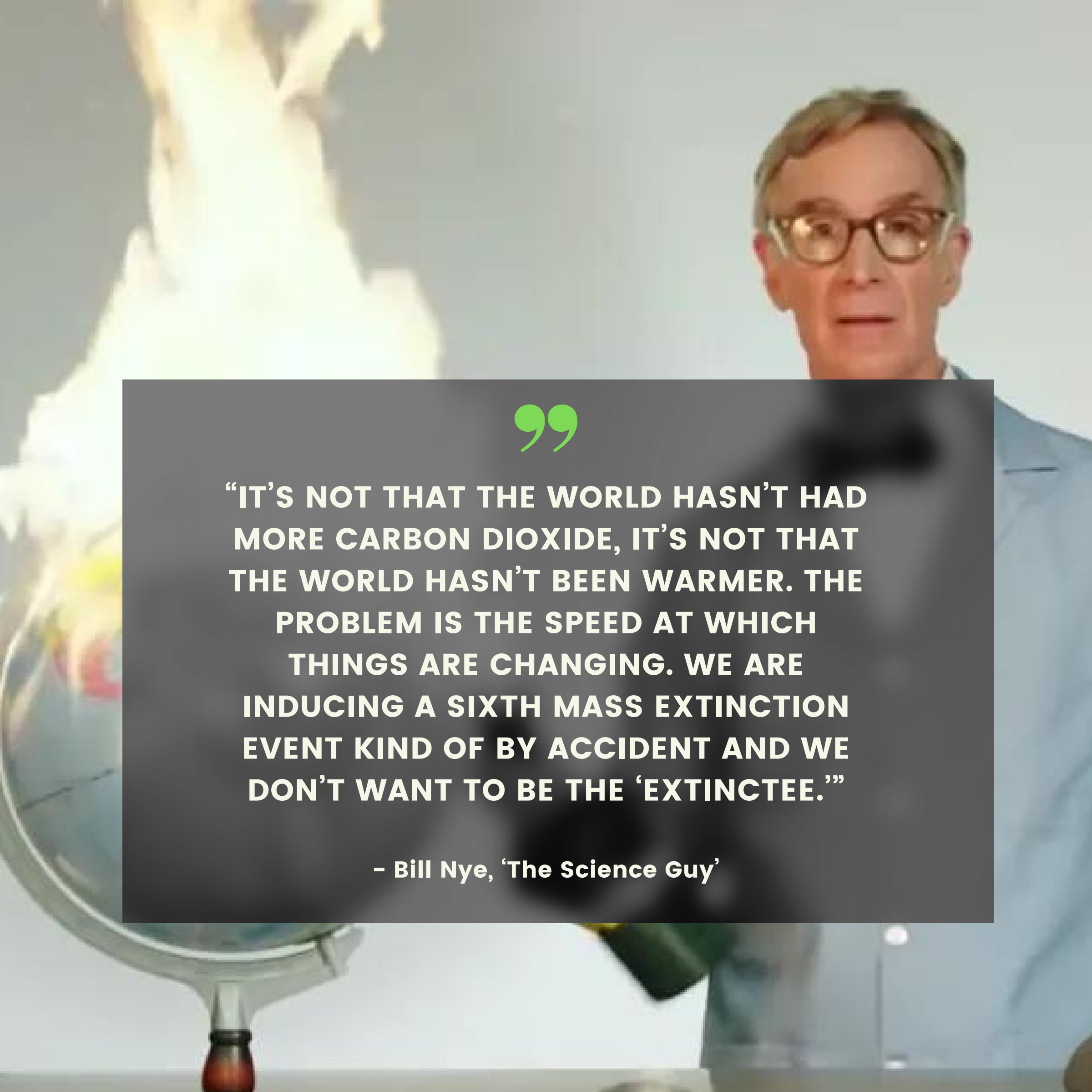
### Ocean Acidification Is Increasing

Since the start of the industrial revolution the acidity of surface ocean waters has increased by about 30% due to the increased CO<sub>2</sub> absorbed into the ocean.

Source:- <http://www.pmel.noaa.gov/co2/story/Ocean+Acidification>

**In true willy wonka style.....**



A background image featuring Bill Nye, 'The Science Guy', in a science laboratory. He is wearing his signature glasses and a blue lab coat. In the background, a large, bright orange and yellow volcano is erupting, with smoke and ash rising into the air. A globe is visible in the lower-left foreground.

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**“IT’S NOT THAT THE WORLD HASN’T HAD MORE CARBON DIOXIDE, IT’S NOT THAT THE WORLD HASN’T BEEN WARMER. THE PROBLEM IS THE SPEED AT WHICH THINGS ARE CHANGING. WE ARE INDUCING A SIXTH MASS EXTINCTION EVENT KIND OF BY ACCIDENT AND WE DON’T WANT TO BE THE ‘EXTINCTEE.’”**

**– Bill Nye, ‘The Science Guy’**

CARBON MARKETS COULD PROVE TO BE ONE OF OUR BIGGEST AIDS AGAINST CLIMATE CHANGE AS IT DRIVES INTEREST AND CRUCIAL FUNDS TOWARDS RESEARCH AND IMPLEMENTATION OF PROJECTS TO REMOVE CARBON DIOXIDE FROM OUR ATMOSPHERE.

**DONT MISS MY NEXT POST, THE 1ST OF A SERIES OF 8 POSTS, WHERE I SHARE ABOUT THE KEY STAKEHOLDERS WITHIN THE CARBON MARKETS STARTIING OFF WITH “PROJECT DEVELOPERS”.**

**DON'T  
MISS OUT**



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