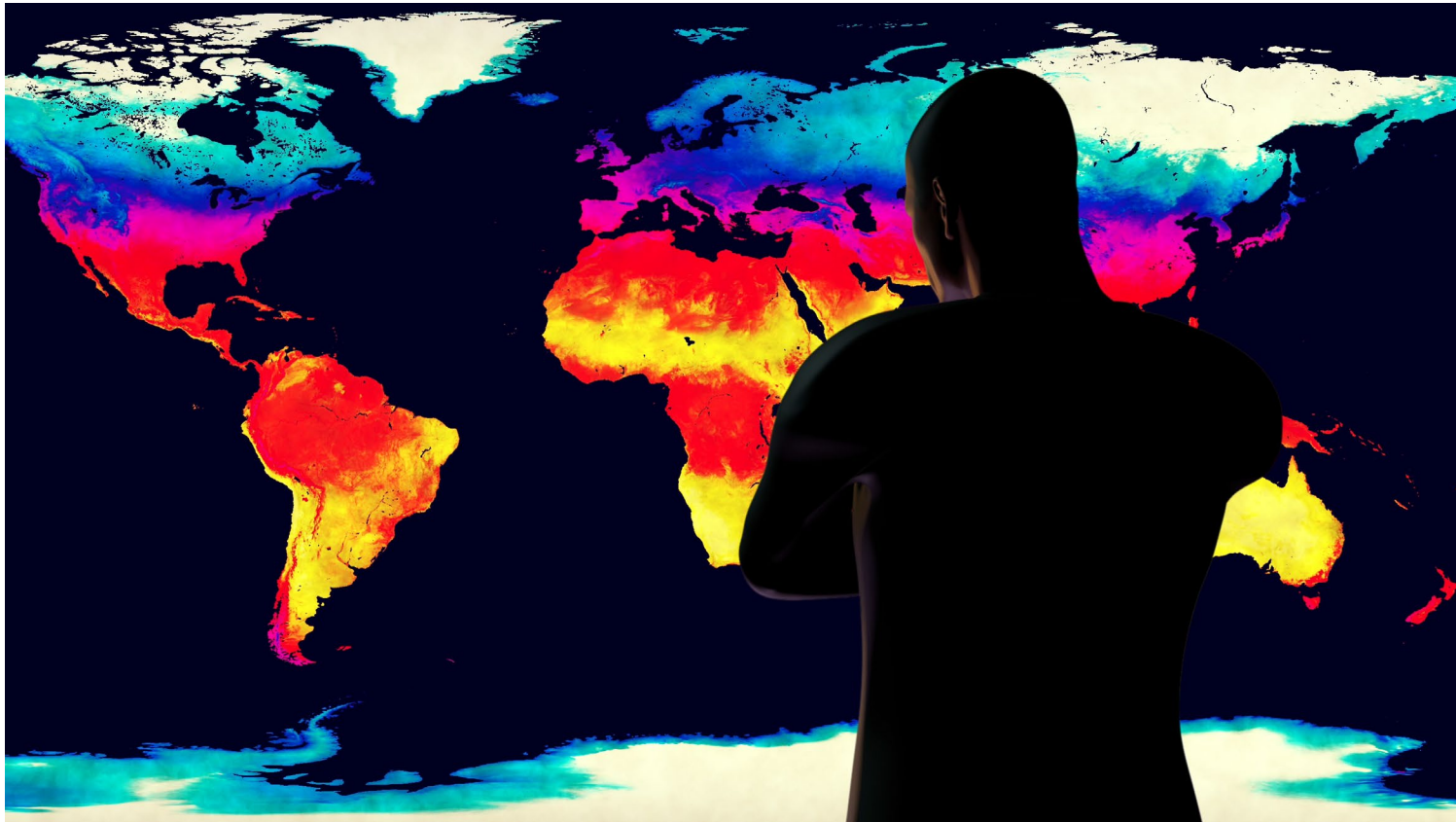
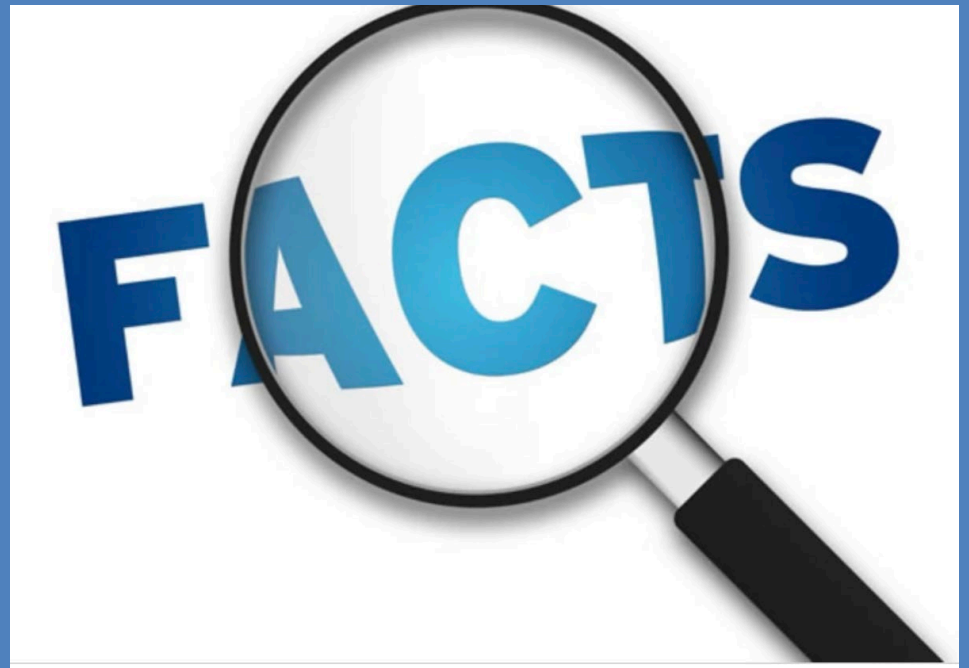


Climate Change and the Insurance Sector in the Caribbean: How Prepared Are You?



By
James Fletcher

© 2022



Greenhouse Gas Levels Are The Highest Ever Seen — And That's Going Back 800,000 Years

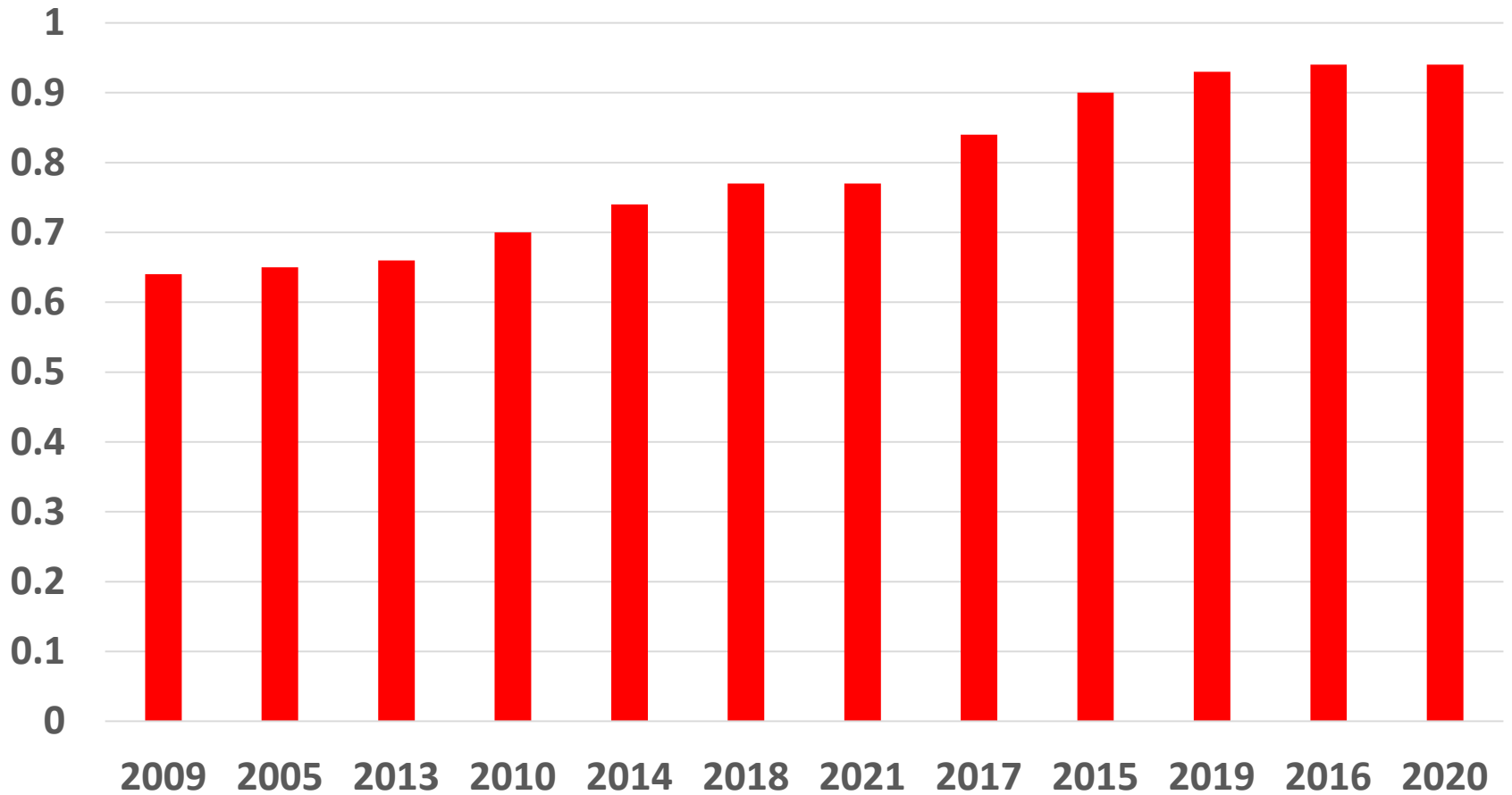
August 27, 2021 · 10:50 AM ET

DEEPA SHIVARAM



The Last 7 Years are the Warmest on Record since 1880

Temperature Deviation in °C

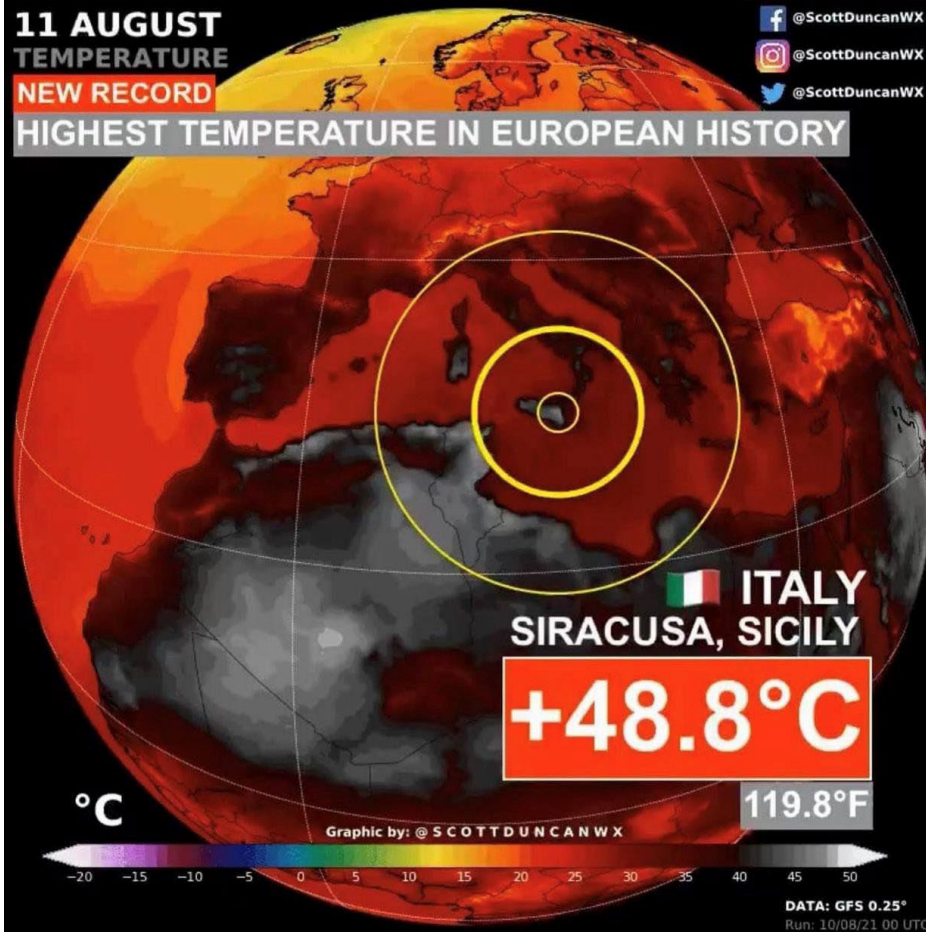


11 AUGUST
TEMPERATURE

NEW RECORD

HIGHEST TEMPERATURE IN EUROPEAN HISTORY

 @ScottDuncanWX
 @ScottDuncanWX
 @ScottDuncanWX



Siberian town hits highest temperature in recorded history for the Arctic Circle

Verkhoyansk, a Siberian town located 3,000 miles east of Moscow, Russia, reached 100.4 degrees Fahrenheit on Saturday.



Record-breaking heat wave strains 'limits of human survivability' in India and Pakistan



People in India and Pakistan are experiencing “unprecedented” heat wave with temperatures reaching 40 degrees Celsius or above. Image: REUTERS/Ritesh Shukla

This article is published in collaboration with
EcoWatch

09 May 2022

Olivia Rosane

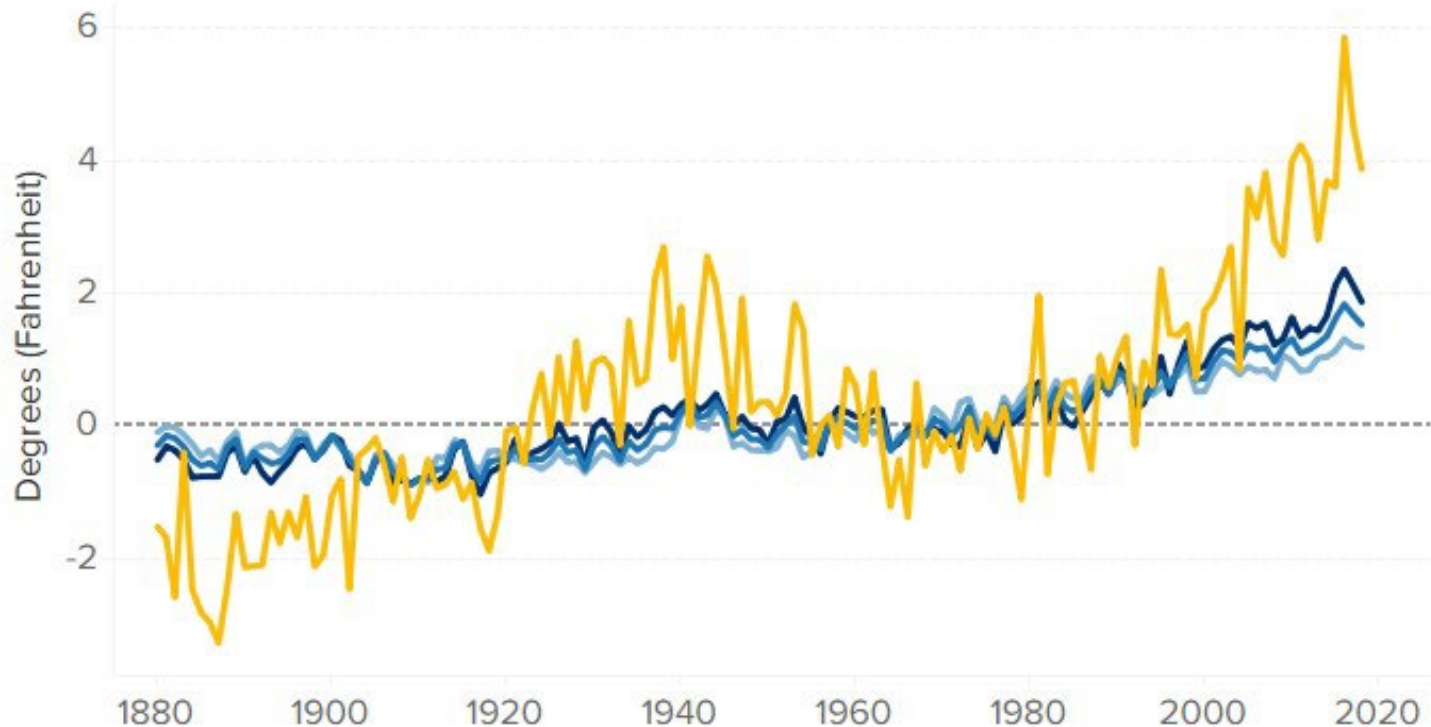
Freelance Reporter, EcoWatch

- At least a billion people in India and Pakistan experienced record-breaking heatwaves in April, with temperatures exceeding 40 degrees Celsius.
- The “unprecedented” heat waves were in keeping with what scientists predicted would happen with climate change, said an expert.

Rising Arctic temperatures

Differences in expected temperature based on 30-year averages

Arctic Global N. Hem S. Hem



NOTE: NASA's GISTEMP estimates the temperature deviations from 1951-1980 averages.

SOURCE: NASA/GISS Surface Temperature Analysis (GISTEMP v4, 9/10/2019)



Polar Ice Caps are Melting and Sea Levels are Rising

Greenland's ice is melting at the rate scientists thought would be our worst-case scenario in 2070

Morgan McFall-Johnsen Aug 14, 2019, 3:25 PM

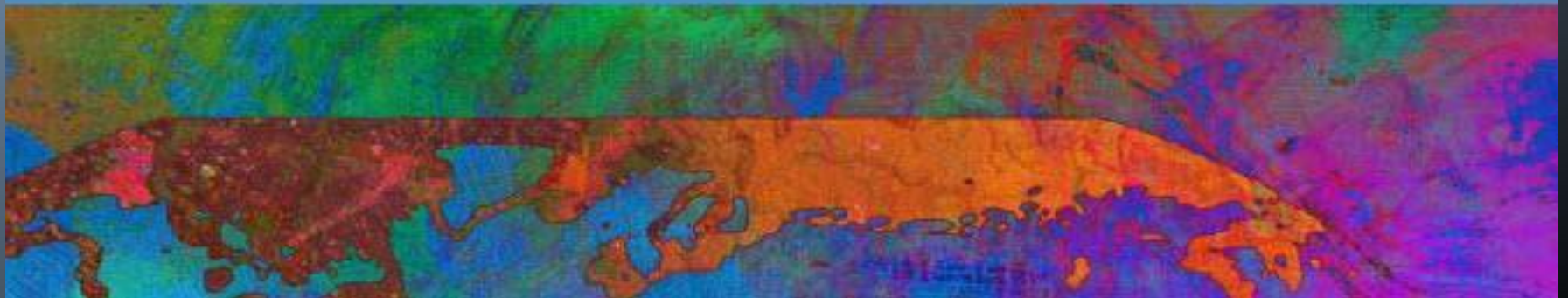


ipcc

INTERGOVERNMENTAL PANEL ON climate change

Climate Change 2021

The Physical Science Basis



INTERGOVERNMENTAL PANEL ON **climate change**

Summary for Policymakers



ipcc

INTERGOVERNMENTAL PANEL ON climate change

Climate Change 2022

Mitigation of Climate Change



WGIII

Working Group III contribution to the
Sixth Assessment Report of the
Intergovernmental Panel on Climate Change






**“Human influence has warmed the
climate at a rate that is unprecedented
in at least the last 2000 years”**

“In 2019, atmospheric carbon dioxide (CO₂) concentrations were higher than at any time in at least 2 million years”

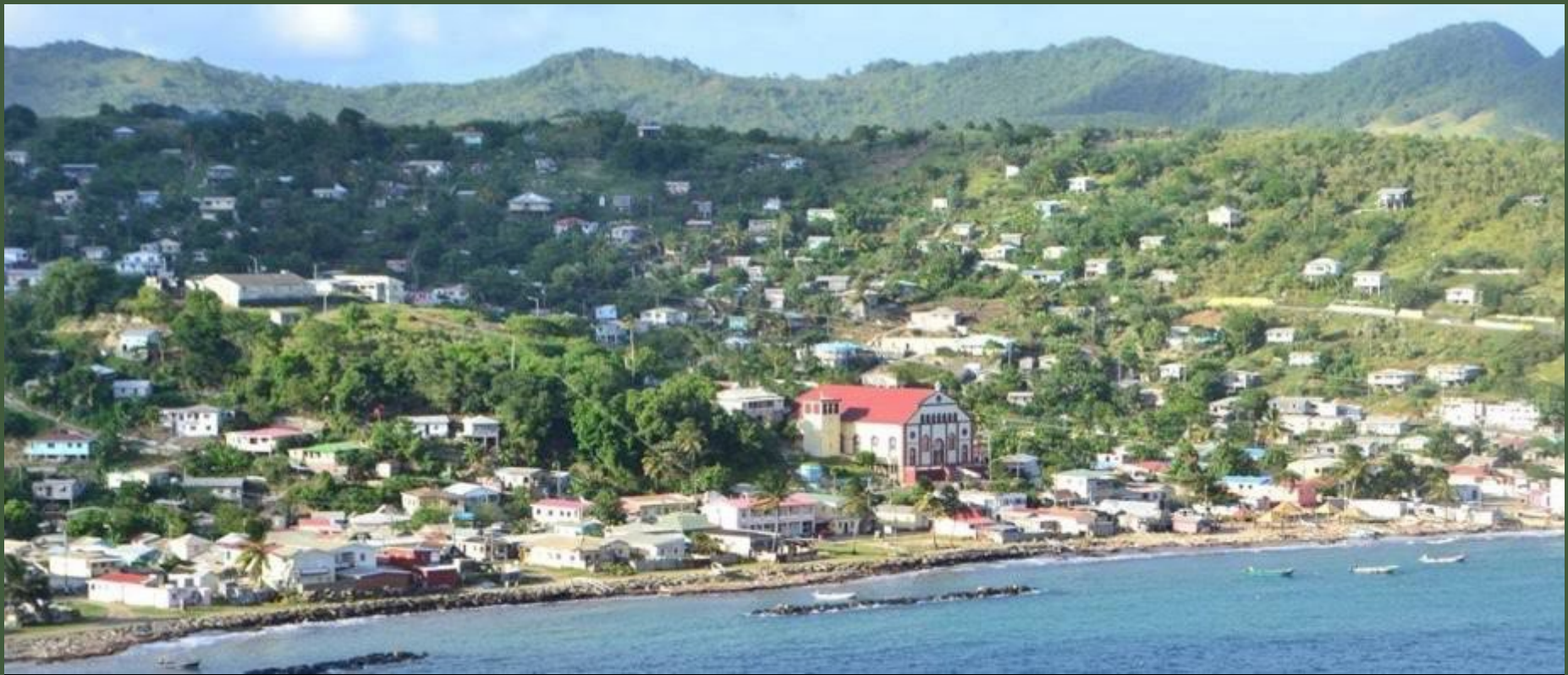




“The extent and magnitude of climate change impacts are larger than estimated in previous assessments “

The background of the slide is a composite image. It features a view of the Earth from space, showing swirling clouds and landmasses. The Earth is depicted with a fiery, orange and yellow glow, suggesting a high-temperature state. In the foreground, several dark, vertical smokestacks are visible, each emitting a thick, white plume of smoke that rises into the air. The overall color palette is dominated by warm tones of orange, yellow, and brown, creating a sense of urgency and environmental crisis.

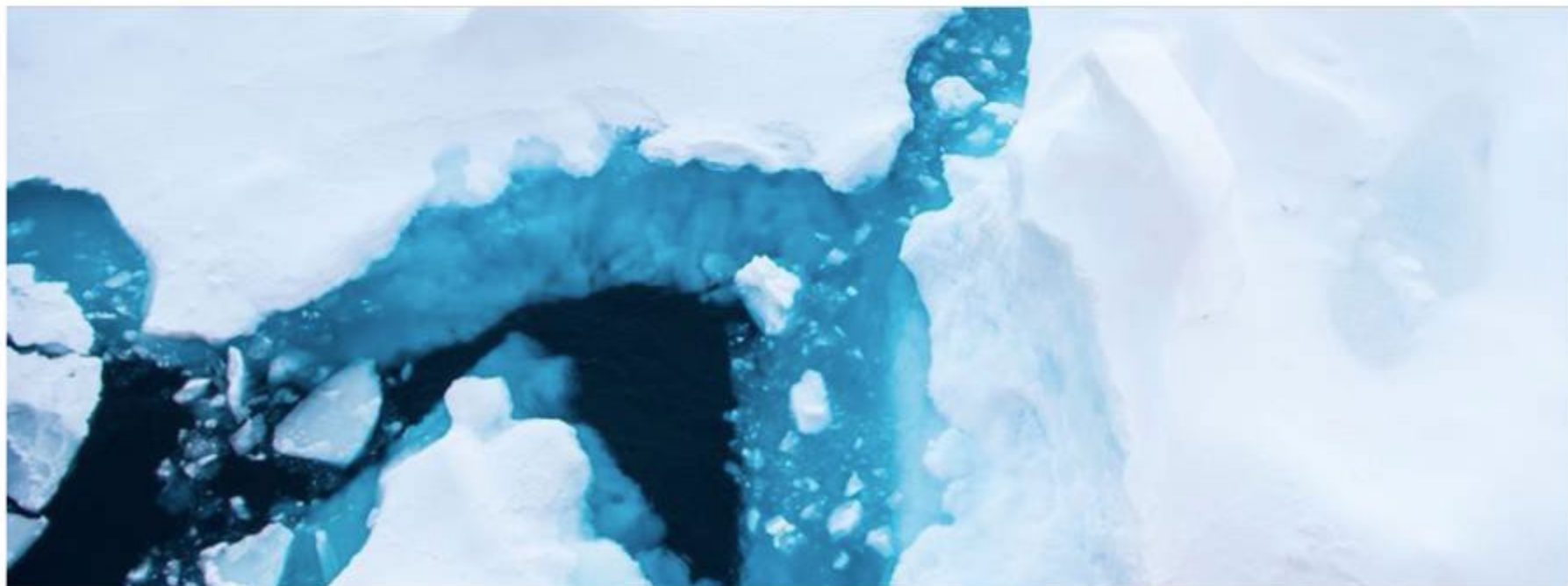
“Global warming, reaching 1.5°C in the near-term, would cause unavoidable increases in multiple climate hazards and present multiple risks to ecosystems and humans (*very high confidence*)”



**For all Caribbean Countries,
this will have Devastating
Consequences**

New study warns that sea levels will rise faster than expected

by Mongabay.com on 2 February 2021



- A new study has found that sea level rise may happen faster than current models project.
- The Intergovernmental Panel on Climate Change (IPCC) projects that the sea level will rise about a meter (39 inches) by the century's end, but this study finds that estimate to be conservative.
- The results suggest that sea levels will rise about 25 centimeters (10 in) more per century if carbon emissions are not curbed and the Earth continues to heat up.

A new study has found that sea levels are rising faster than expected, which would put 40% of the world's population [living in coastal regions](#) at elevated risk.

Published Feb. 2 in the European Geosciences Union journal [Ocean Science](#), the study

We're a nonprofit



Science

Ocean Warming Is Speeding Up, with Devastating Consequences, Study Shows

In 25 years, the oceans have absorbed heat equivalent to the energy of 3.6 billion Hiroshima-size atom bomb explosions, the study's lead author said.



By Bob Berwyn [Twitter](#)
January 14, 2020



Related

Climate Science Discoveries of the Decade: New Risks Scientists Warned About in the 2010s



Arctic Report Card 2019: Extreme Ice Loss, Dying Species as Global Warming Worsens



From Antarctica to the Oceans, Climate Change Damage Is About to Get a Lot Worse, IPCC Warns



Global Warming Is Hitting Ocean Species Hardest, Including Fish Relied on for Food



Share this article





Marine Health is Deteriorating





An autonomous glider floats about two miles off Atlantic City, after being deployed by a team from Rutgers University. Researchers are using the glider to sample ocean pH to help them understand how increasing carbon dioxide in the atmosphere is boosting levels of ocean acidity in the water.

PHOTOGRAPH BY ERIC NIILER

The Ocean Is Getting More Acidic— What That Actually Means

Thanks to carbon emissions, the ocean is changing, and that is putting a whole host of marine organisms at risk. These scientists are on the front lines.

The Pacific Ocean is so acidic that it's dissolving Dungeness crabs' shells

By Scottie Andrew, CNN

Updated 5:07 PM EST, Mon January 27, 2020



(CNN) — The Pacific Ocean is becoming more acidic, and the cash-crabs that live in its coastal waters are some of its first inhabitants to feel its effects.

More Frequent Flooding





Longer Droughts





Greater Water Insecurity

More Heat Waves



MORE THAN 200 MEDICAL JOURNALS CALL FOR URGENT ACTION ON CLIMATE CHANGE

Sep 6, 2021 | News | 0





**Increase in Respiratory
Disease** |



**Climate Change will have Profound
Impacts on Mental Health
and Wellbeing**



Increase in WASH Diseases and Other Adverse Health Impacts



HEALTH INSURANCE

PATIENT'S NAME: _____

RELATIONSHIP TO THE INSURANCE SUBSCRIBER: _____

DATE OF BIRTH: _____

COMPANY: _____

Is this a Health Insurance Claim? _____

HEALTH INSURANCE

COPIED Y N



Greater Food Insecurity



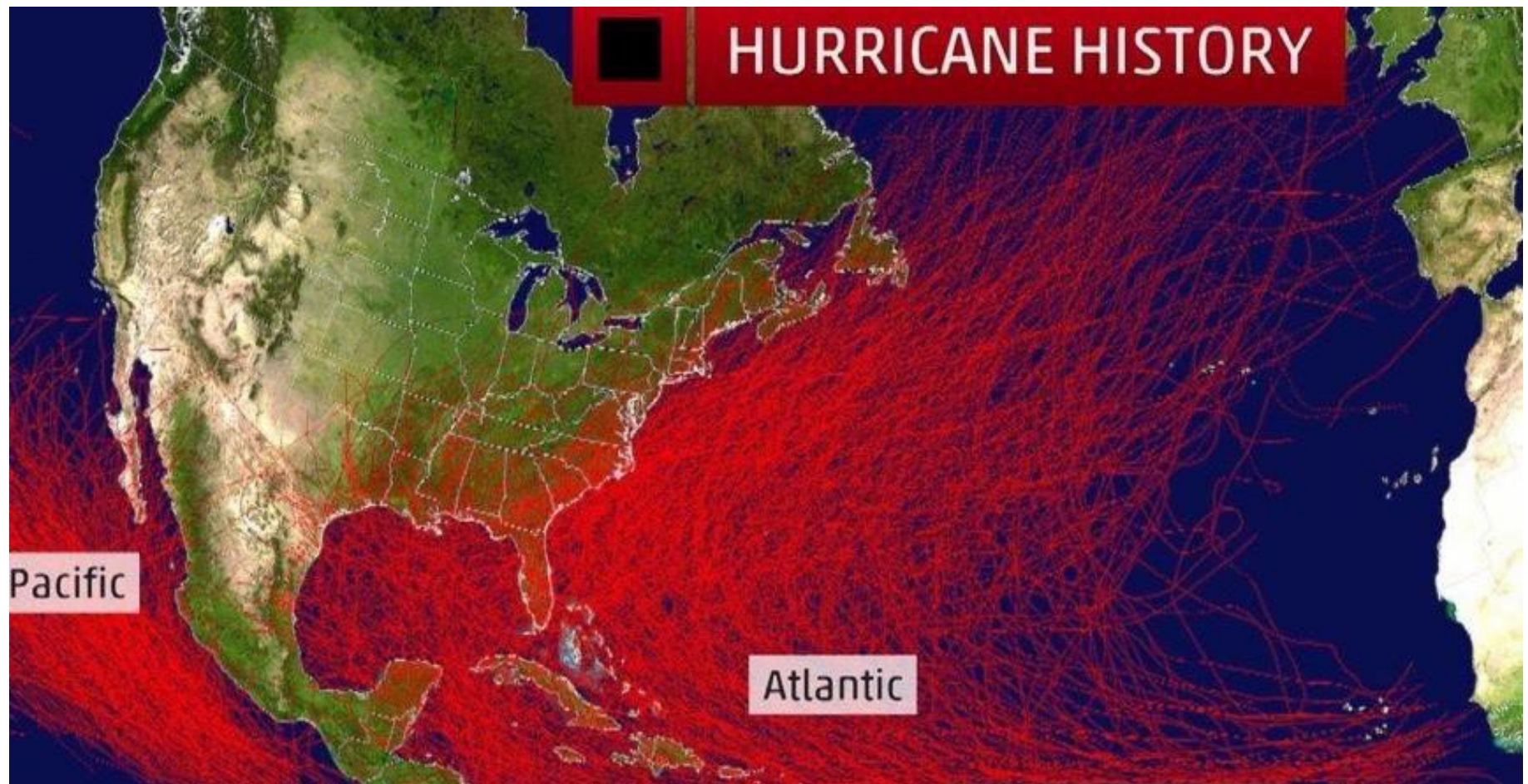
Inundation of Coastal Communities

More Forest & Bush Fires





Greater Loss and Damage



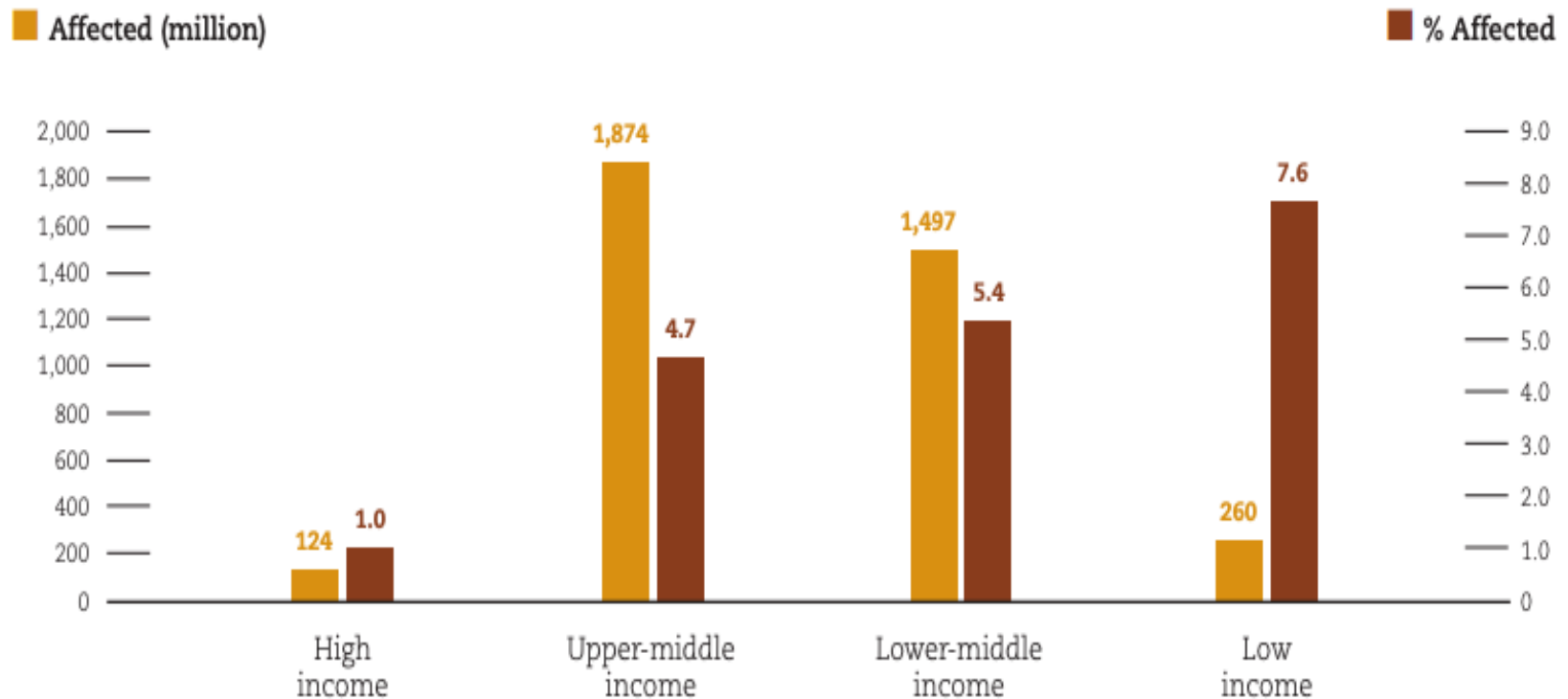
**More Intense
Hurricanes**



Country	Event	Year	Damage (% GDP)
Dominica	Hurricanes David & Frederick	1979	101
Saint Lucia	Hurricane Allen	1980	66
Jamaica	Hurricane Gilbert	1988	365
St Kitts and Nevis	Hurricane Luis	1995	85
	Hurricane Georges	1998	137
Antigua and Barbuda	Hurricane Luis	1995	61
Grenada	Hurricane Ivan	2004	203
Saint Lucia	Hurricane Tomas	2010	34
Dominica	TS Erika	2015	90
	Hurricane Maria	2017	226
BVI	Hurricane Irma	2017	309

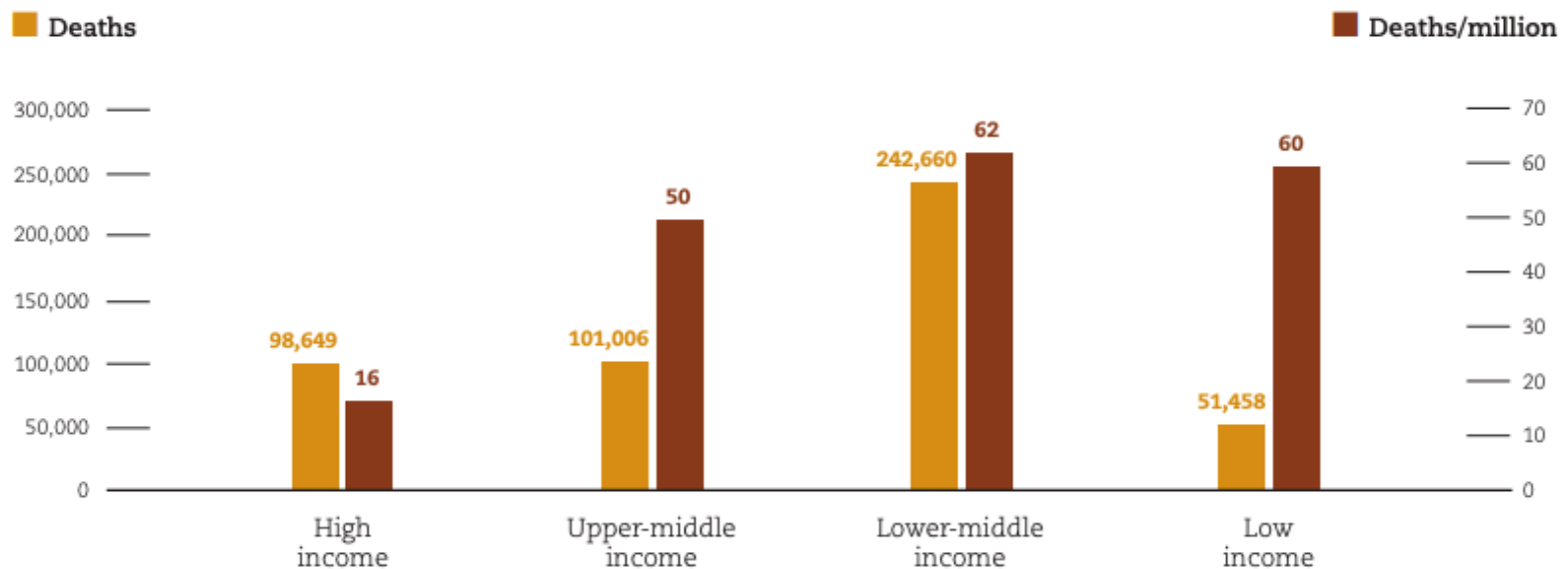
Climate-Related Disasters Disproportionately Impact Poorer Households

Climate-related disaster affected totals in absolute numbers and percentage of population potentially exposed (PPE) 2000-2017



Climate-Related Disasters Are More Fatal on Lower Income Populations

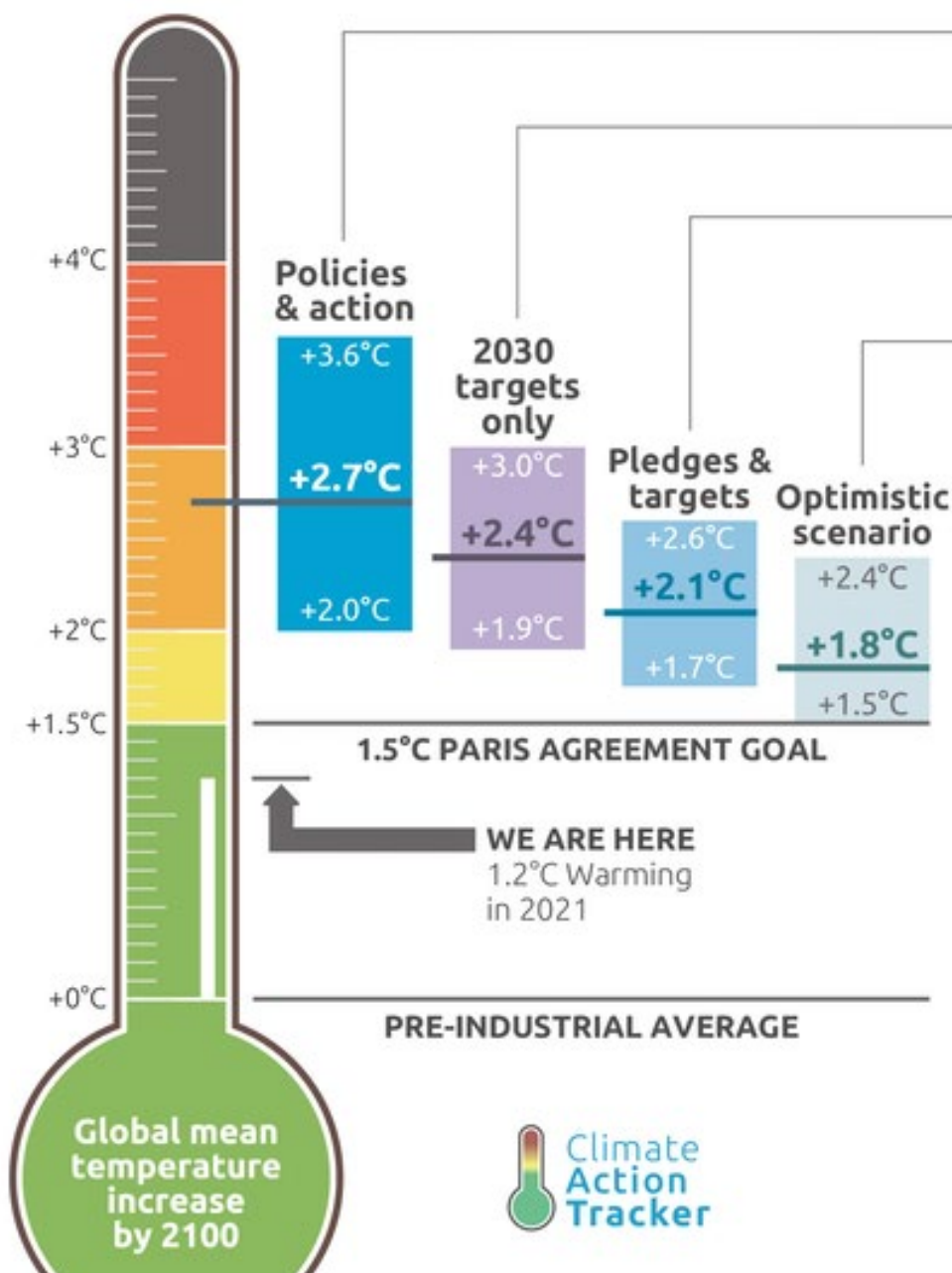
Climate-related disaster deaths in absolute numbers
per million population potentially exposed (PPE) 2000-2017



UNISDR, CRED 2018



**Many Caribbean Countries are in a
Continuous Cycle of Repair and
Recovery**



Policies & action

Real world action based on current policies

2030 targets only

Full implementation of 2030 NDC targets*

Pledges & targets

Full implementation of submitted and binding long-term targets and 2030 NDC targets*

Optimistic scenario

Best case scenario and assumes full implementation of all **announced** targets including net zero targets, LTSs and NDCs*

* If 2030 NDC targets are weaker than projected emissions levels under policies & action, we use levels from policy & action

CAT warming projections
Global temperature increase by 2100

Impacts of 2.5°C Warming on the Caribbean

Reduction of between 15% to and 25% in precipitation, with an intensification of drying in the southern Caribbean

Over 200 days excessively warm

Up to 6 fewer intense rainfall days

Hot and dry days increases of over 20 days for most of the Caribbean region, with a maximum of over 30 days for the Caribbean coast of South America

Temperatures warmer by between 1.5°C and 3°C across the Caribbean

Moderate to severe drought approximately 34% of the time



I DON'T BELIEVE IN
GLOBAL WARMING

**General Consensus is that by end of 21st
Century SLR will be between 1-2 metres
above present levels**

Quantification and Magnitude of Losses and Damages Resulting from the Impacts of Climate Change:

MODELLING THE TRANSFORMATIONAL IMPACTS AND COSTS OF
SEA LEVEL RISE IN THE CARIBBEAN

Prepared by The CARIBSAVE Partnership for UNDP Barbados and the OECS for CARICOM Member States

FULL DOCUMENT





Impacts of a 1m SLR in CARICOM

- 1,300 km² of land area lost
- Over 110,000 people displaced
- 149 tourism resorts damaged
- Loss or damage of 5 power plants
- 1% of agricultural land lost
- Loss or damage of 21 CARICOM airports
- Land surrounding 35 ports inundated
- Loss of 567 km of roads




Impacts of a 2m SLR in CARICOM

- **>3,000 km² of land area lost**
- **Over 260,000 people displaced**
- **>233 tourism resorts damaged**
- **Loss or damage of 9 power plants**
- **>3% of agricultural land lost**
- **Loss or damage of 31 CARICOM airports**
- **Land surrounding 35 ports inundated**
- **Loss of 710 km of roads**



**Total Rebuild Costs of Tourist Resorts
Projected between US\$10 Billion and
US\$23.3 Billion in 2050**

An aerial photograph of a coastal city, likely Saint Lucia, showing a large cruise ship docked at a port. The ship is white with a blue and yellow funnel. The port area is filled with shipping containers and industrial buildings. The city extends inland with residential and commercial buildings. A road and a body of water are visible in the background.

**Saint Lucia,
St. Vincent, Grenada and Dominica
will have rebuild or relocation
costs for seaports and airports
between 1% and 6% of GDP by
2050**



2021 Disasters in numbers



Extreme events
defining our lives

Natural disasters cost \$280 billion in 2021: German insurance firm

German reinsurance giant Munich Re has said that the climate crisis is behind the bulk of the costs. July's floods in western Europe were the second-costliest disaster of the year globally.

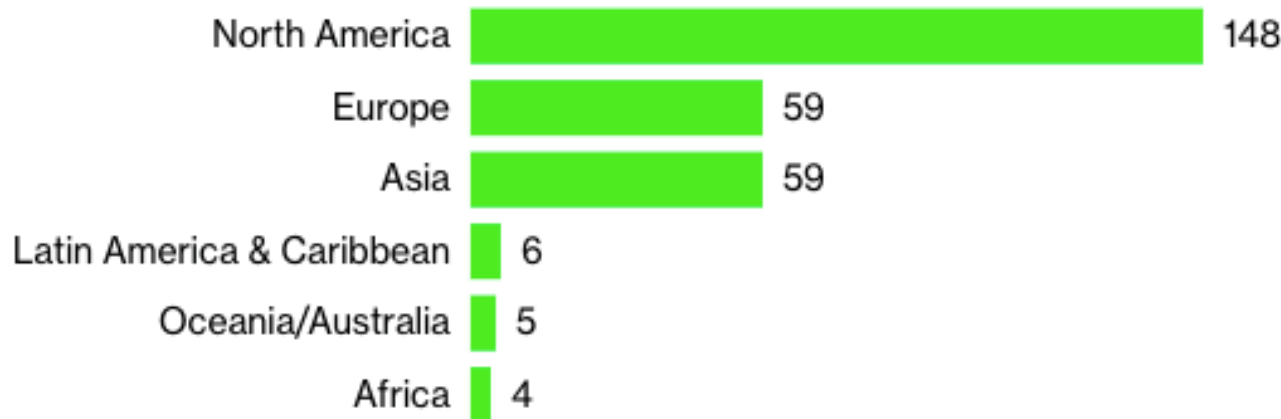


Flooding in Germany's Ahr valley destroyed homes and businesses and killed some 200 people

German reinsurance giant Munich Re [published a report](#) on Monday indicating that the results of natural disasters cost \$280 billion (€247 billion) globally in 2021, highlighting a trend expected to continue upward [as climate changes takes its toll](#).

The Costs of Disaster

Economic losses by region in billions (USD), 2021*



Data: Swiss Re Institute

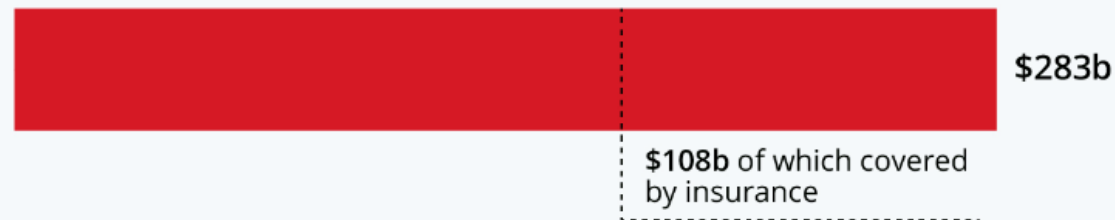
*Total of 280 billion includes 270 billion from natural catastrophes and 10 billion from man-made events.

Insured losses have been on a long-term growth trend of 5% to 7% for a while, according to Swiss Re, and extreme events caused by climate change shoulder much of the blame.

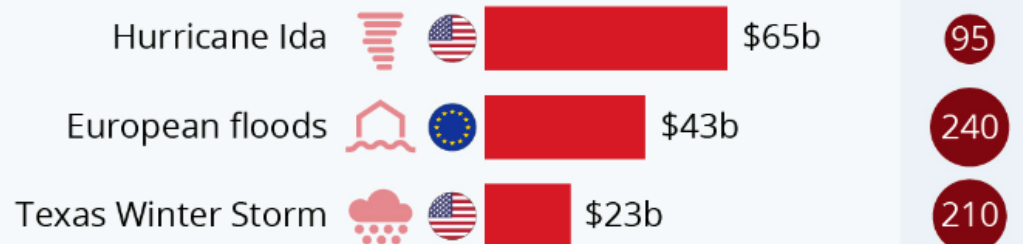
The Enormous Cost of Natural Disasters in 2021

Economic damage caused globally
by natural disasters in 2021

Economic losses



Most costly disasters



Sources: Aon, ReliefWeb



Share of economic losses (%)
by continent in 2021



**Annual
Adaptation Costs
in Developing
Countries are in
the range of
US\$70 billion,
and will reach
US\$140-300
billion in 2030
and US\$280-500
billion in 2050**





Should you Be Concerned?

what
can
we do

?



**We
MUST
Stop the
Self-
Inflicted
Damage**





**Build Smarter! Should you
Continue to Insure New
High-Risk Investments?**



**Our Development Agenda Must be
Climate-Informed. It Should Not
Worsen Our Situation**



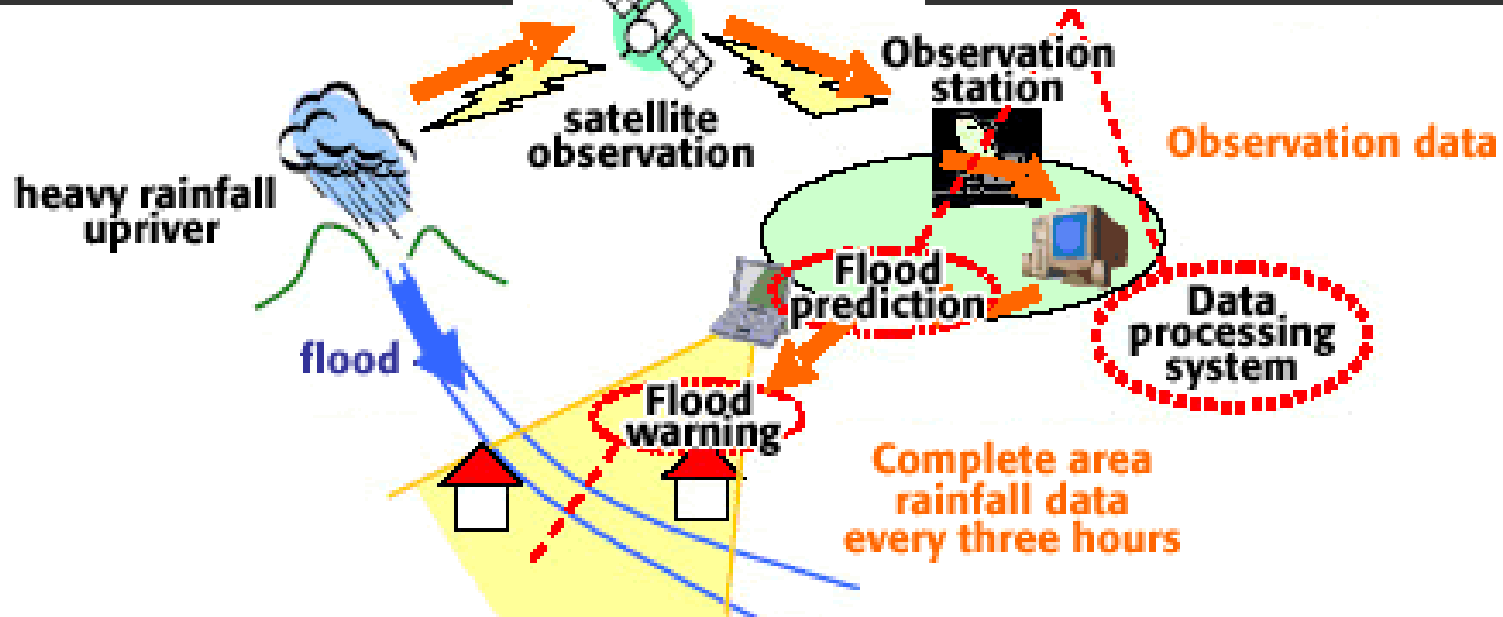
**Build Public and Private
Infrastructure to Higher
Levels of Resilience**

Development of an early flood warning system using satellite data

(Image of part of the R&D project no.1)

Overall design and maintenance of system

Development of individual module programs



Development of a flood information transmission system

Install Early Warning Systems

Increase Public Awareness and Education on Climate Change and Its Varied Impacts



Make Better Use of Evidence and Data in Decision Making





**Help Caribbean
Citizens
(and Governments)
Understand the
Importance of Risk
Mitigation -
Insurance**



Insurance Policy



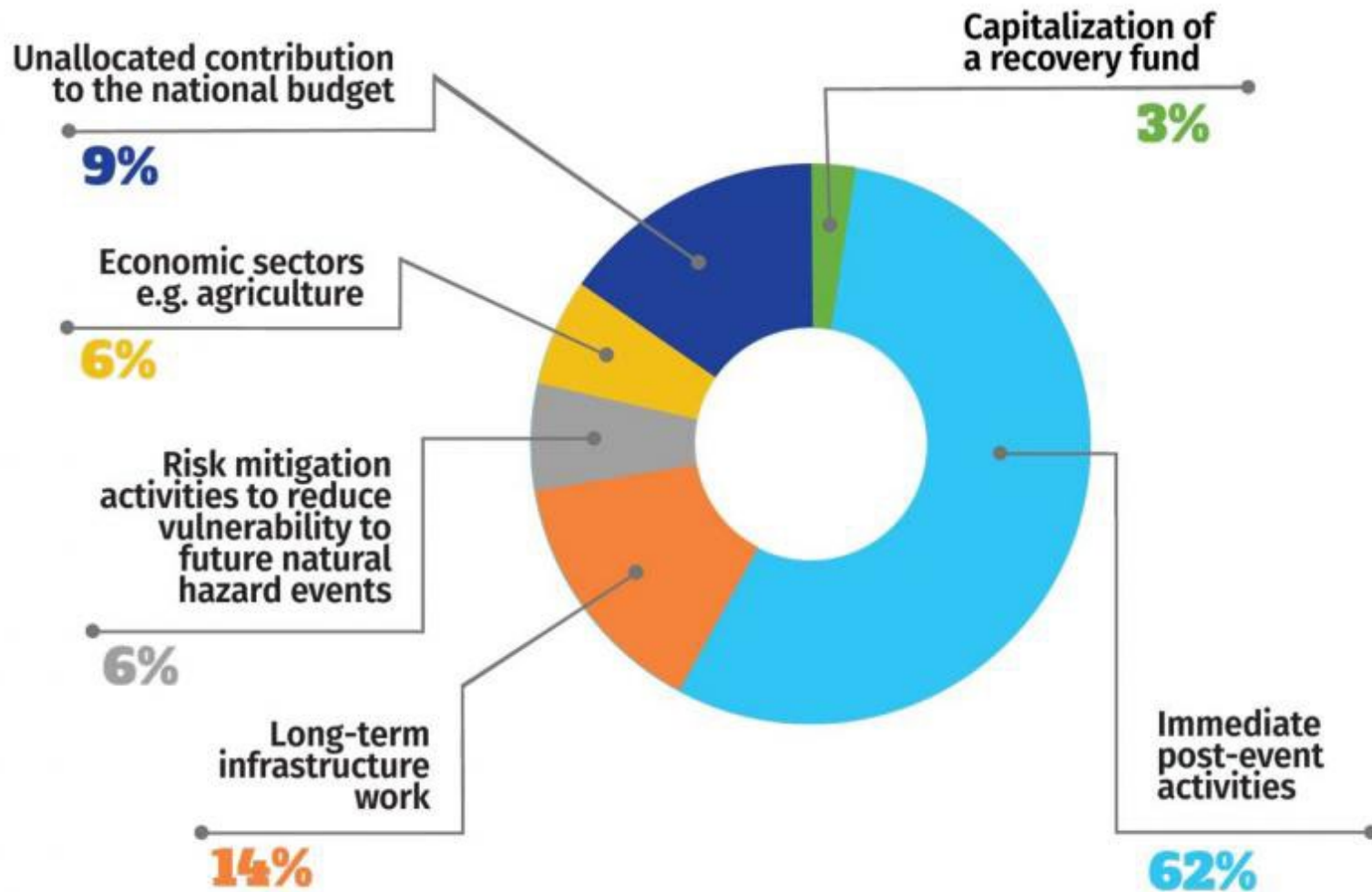
Celebrating 10 years
of innovation in catastrophe insurance...
in the Caribbean and Central America



Our Members in the Caribbean: Anguilla, Antigua & Barbuda, Barbados, Belize, Bermuda, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, St. Kitts & Nevis, Saint Lucia, St. Vincent & the Grenadines, The Bahamas, Trinidad & Tobago, Turks & Caicos Islands

Our Members in Central America: Nicaragua

Uses of Payouts by Category for All Countries to Date





Time is Running Out!

The Climate
Change
Crisis is a
Serious
an
Existential
Threat to
the
Caribbean



**ARE
YOU
READY?**



For More Information Visit:



www.caribbeanclimatejustice.org

Bedankt

Mèsi

谢谢您

Thank you!

Grazie

Danke

Merci

Takk

謝謝您

Obrigado

Gracias