



22. Homes destroyed by Hurricane Michael in Mexico Beach on October 11, 2018 #



Climate CRISIS Update

By Pauline Seales
Sept 2019

Pictures show 2018 fires and floods



2019 Climate Chaos



Summer brought
devastating hurricane Dorian to the
Bahamas and fires in the Amazon

Early in the year there were serious floods
in Nebraska and also Mozambique



at Marsh Harbour on Great Abaco Island have been razed by Dorian. Photo: Scott Olson/Getty Images

Climate Change

Climate Change

Global Warming

Climate Change

Global Warming

Climate Disruption

Climate Change

Global Warming

Climate Disruption

Global Weirding

Climate Change

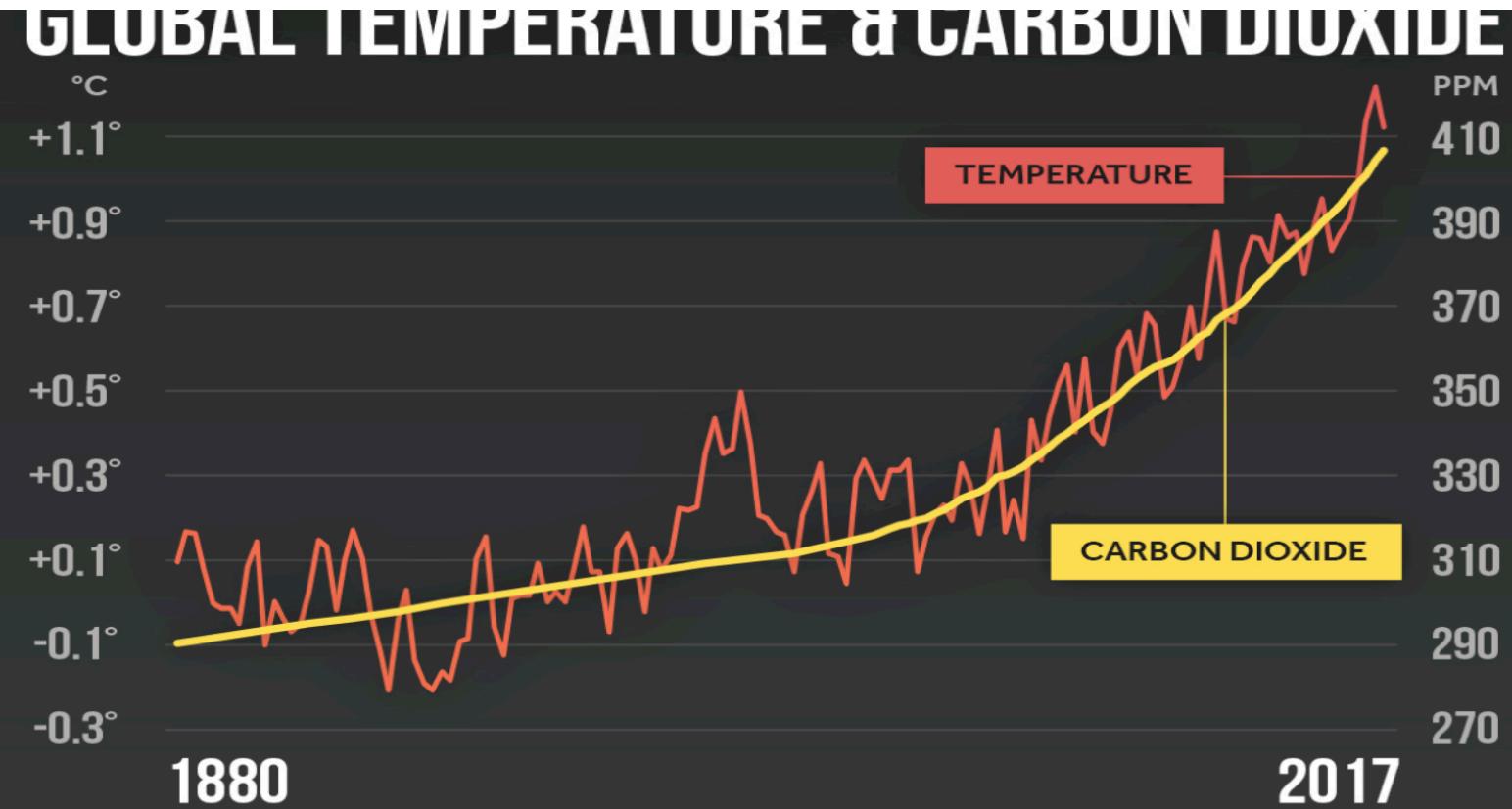
Global Warming

Emergency Climate Crisis

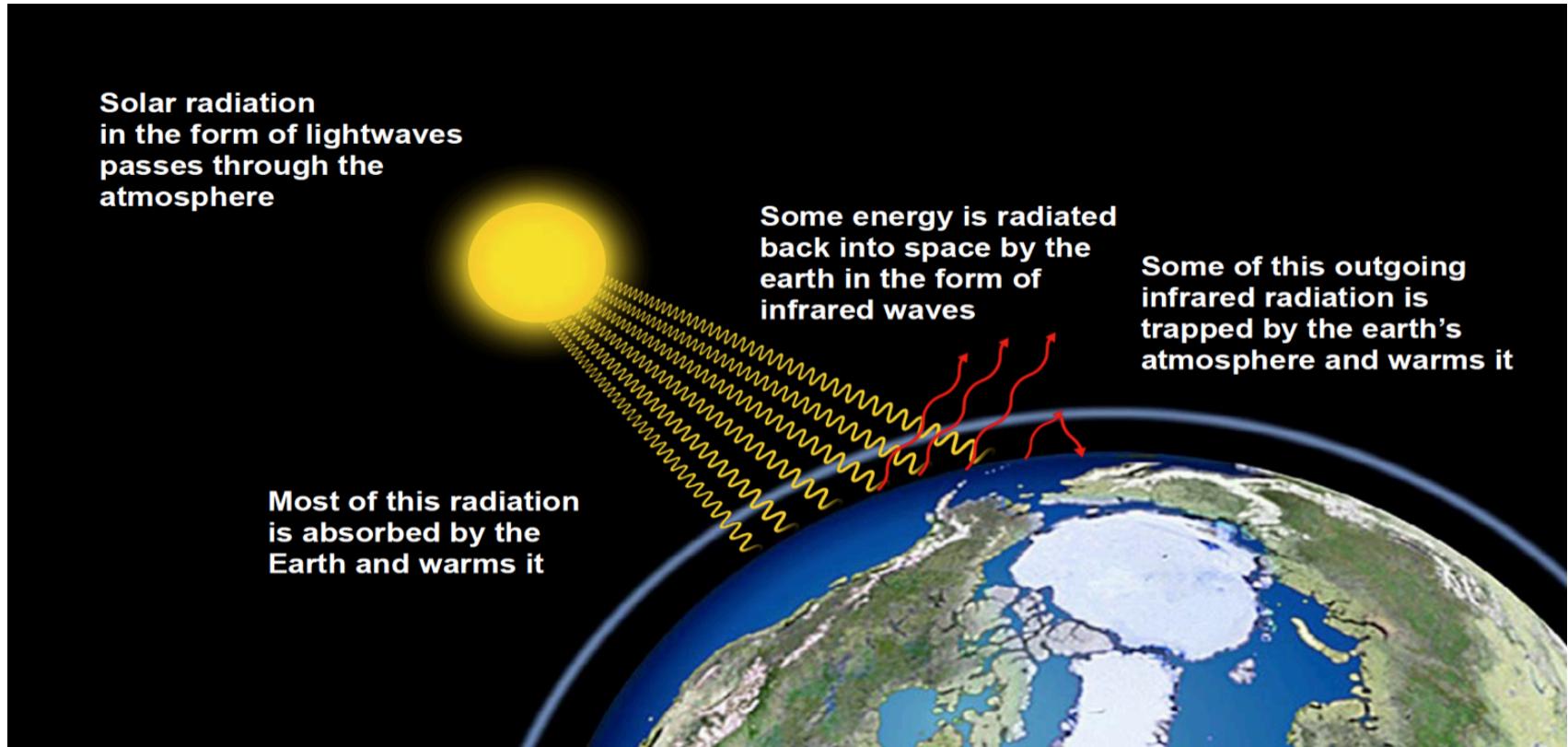
Climate Disruption

Global Weirding

It's getting **Hotter!** And there's more CO₂



Greenhouse Effect



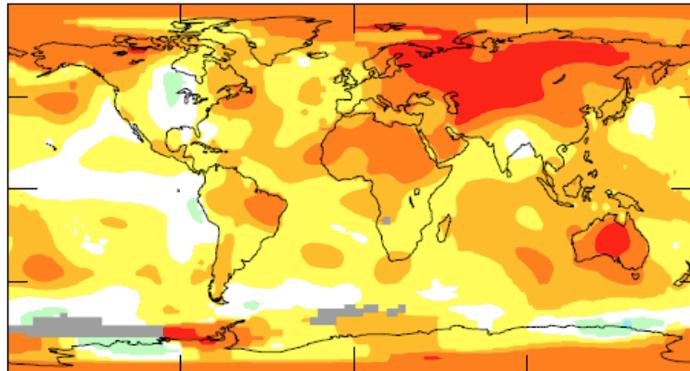


What's really warming the world?

Annual-Mean Surface Temperature ($^{\circ}\text{C}$) Relative to 1951-1980

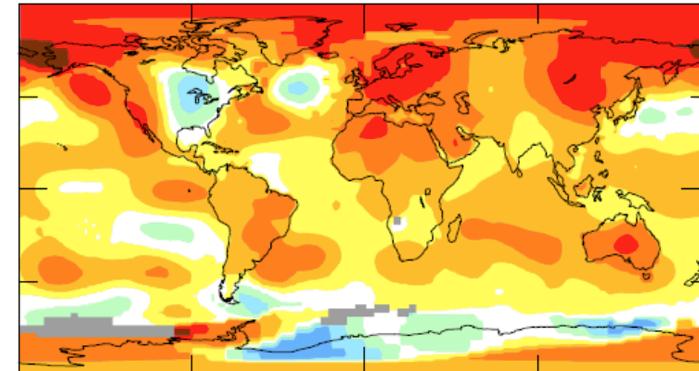
2013

0.66



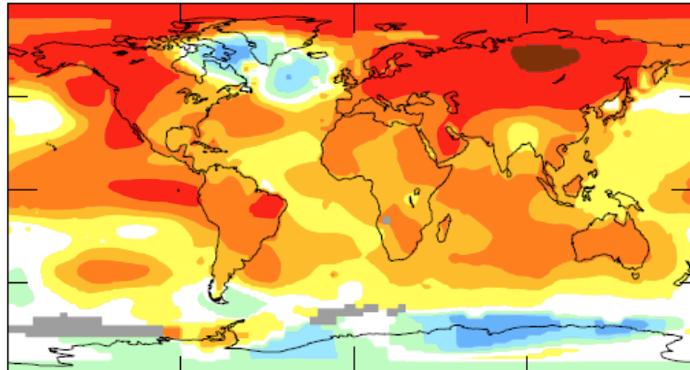
2014

0.74



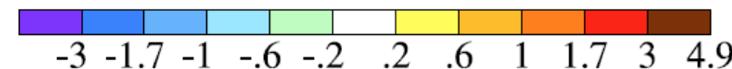
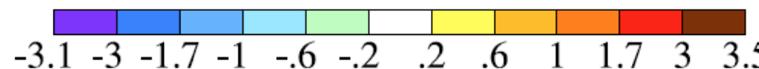
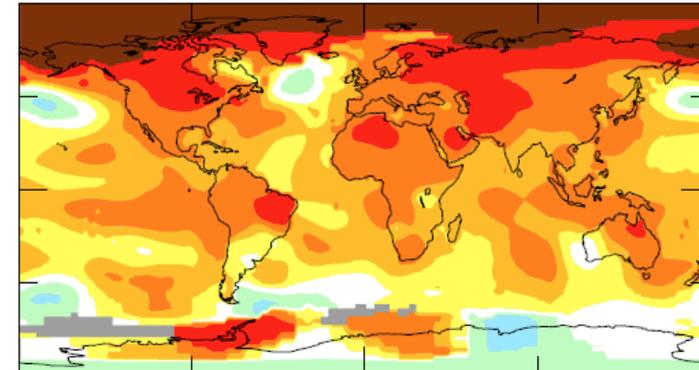
2015

0.87



2016

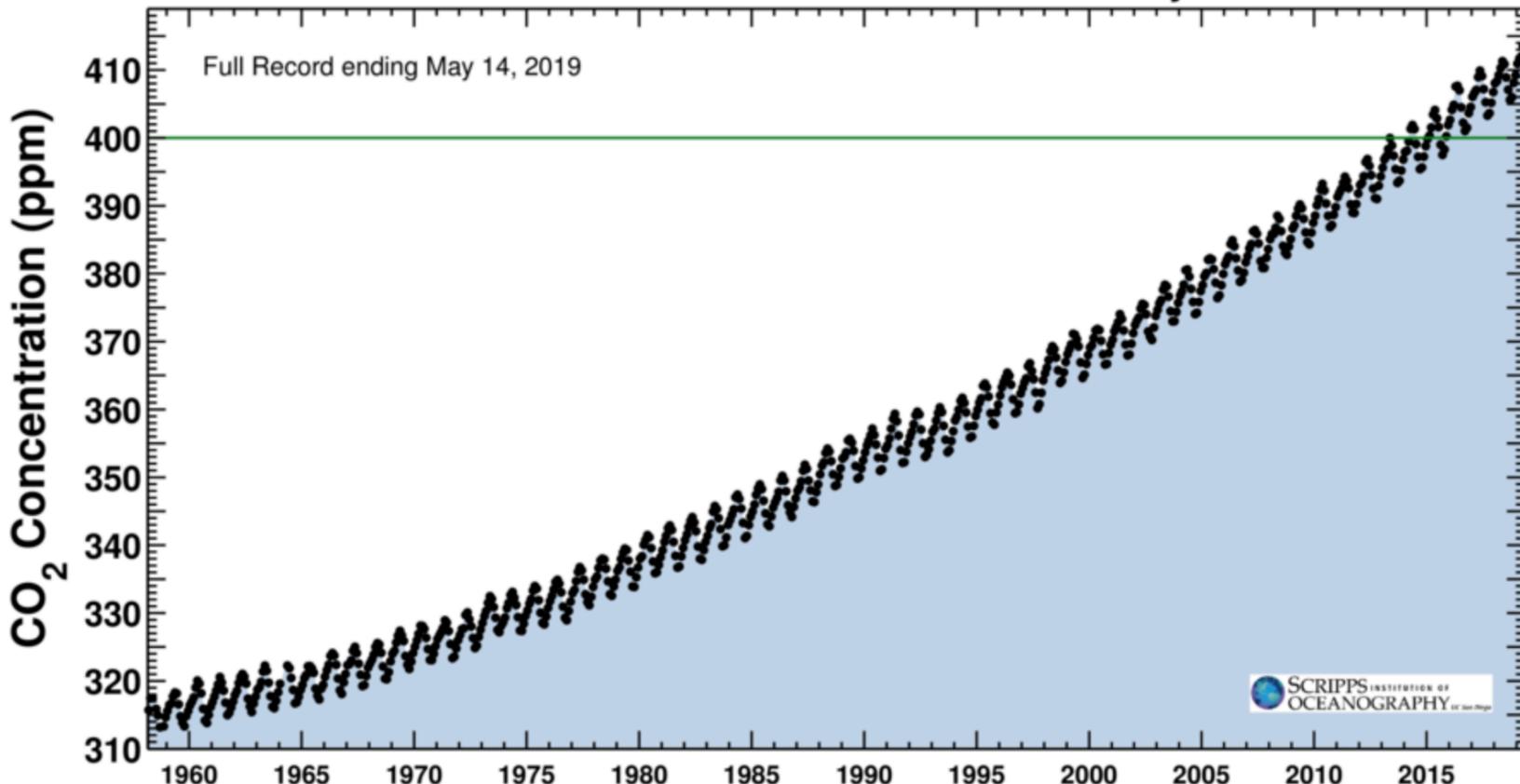
0.99



Latest CO₂ reading
May 14, 2019

415.26 ppm

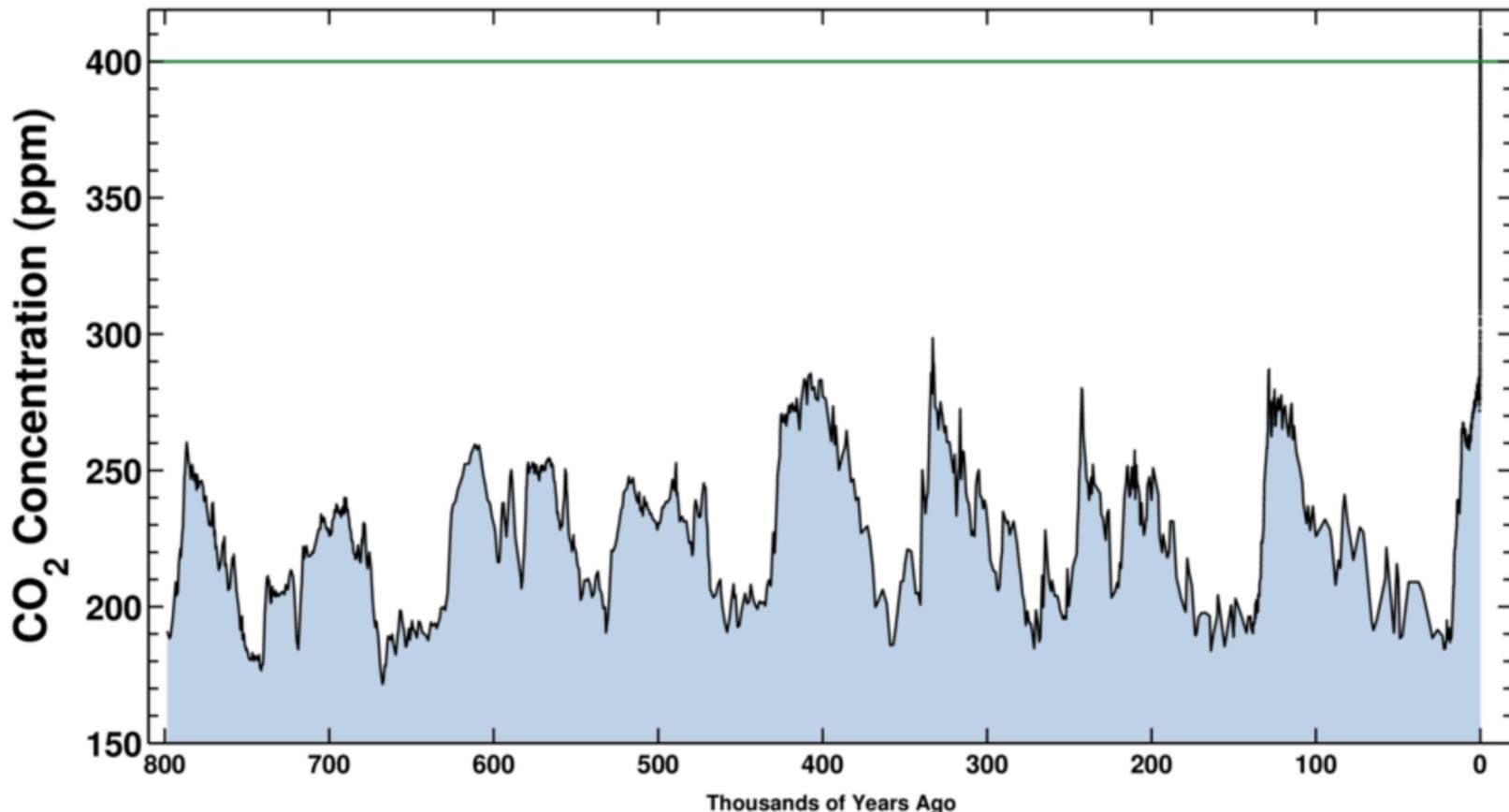
Carbon dioxide concentration at Mauna Loa Observatory



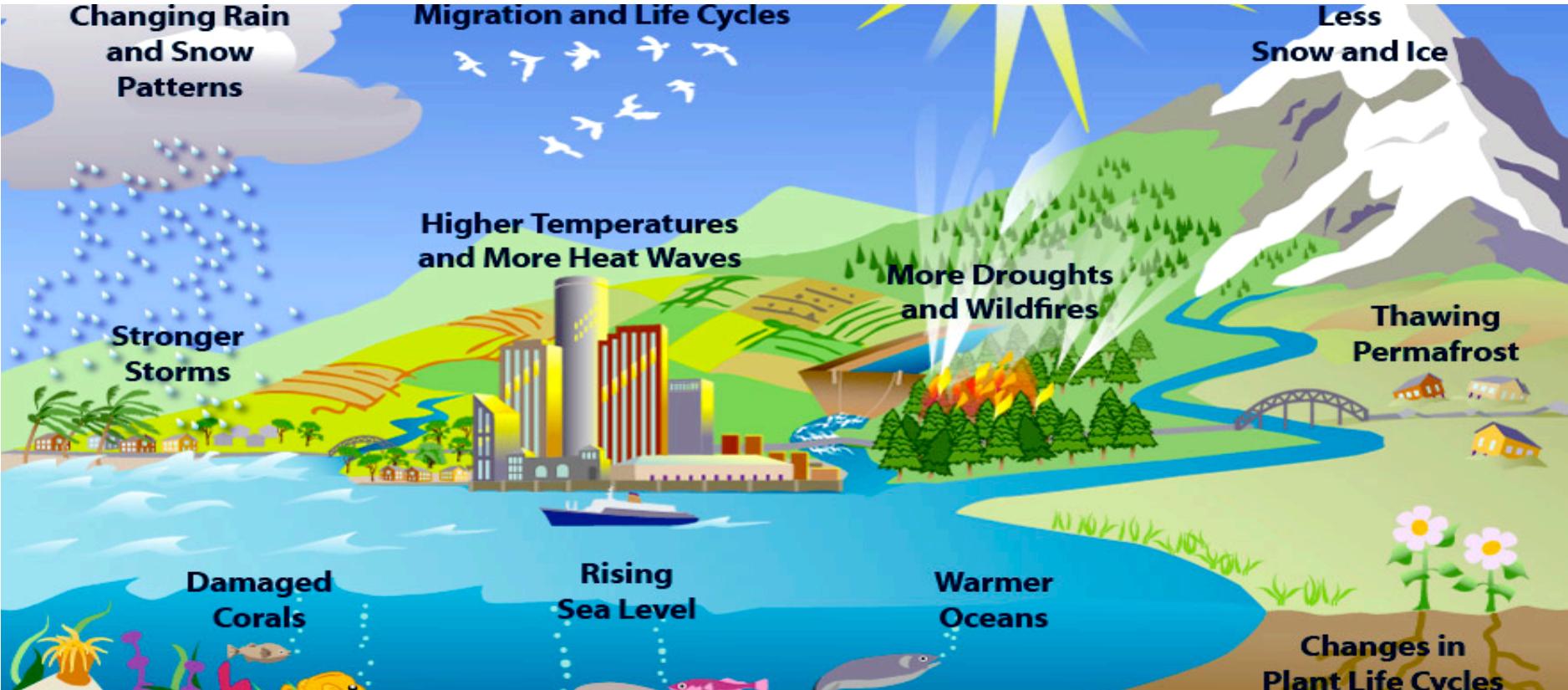
Latest CO₂ reading
May 14, 2019

415.26 ppm

Ice-core data before 1958. Mauna Loa data after 1958.



Climate Change has many effects



Do a few degrees matter?

Absolutely !

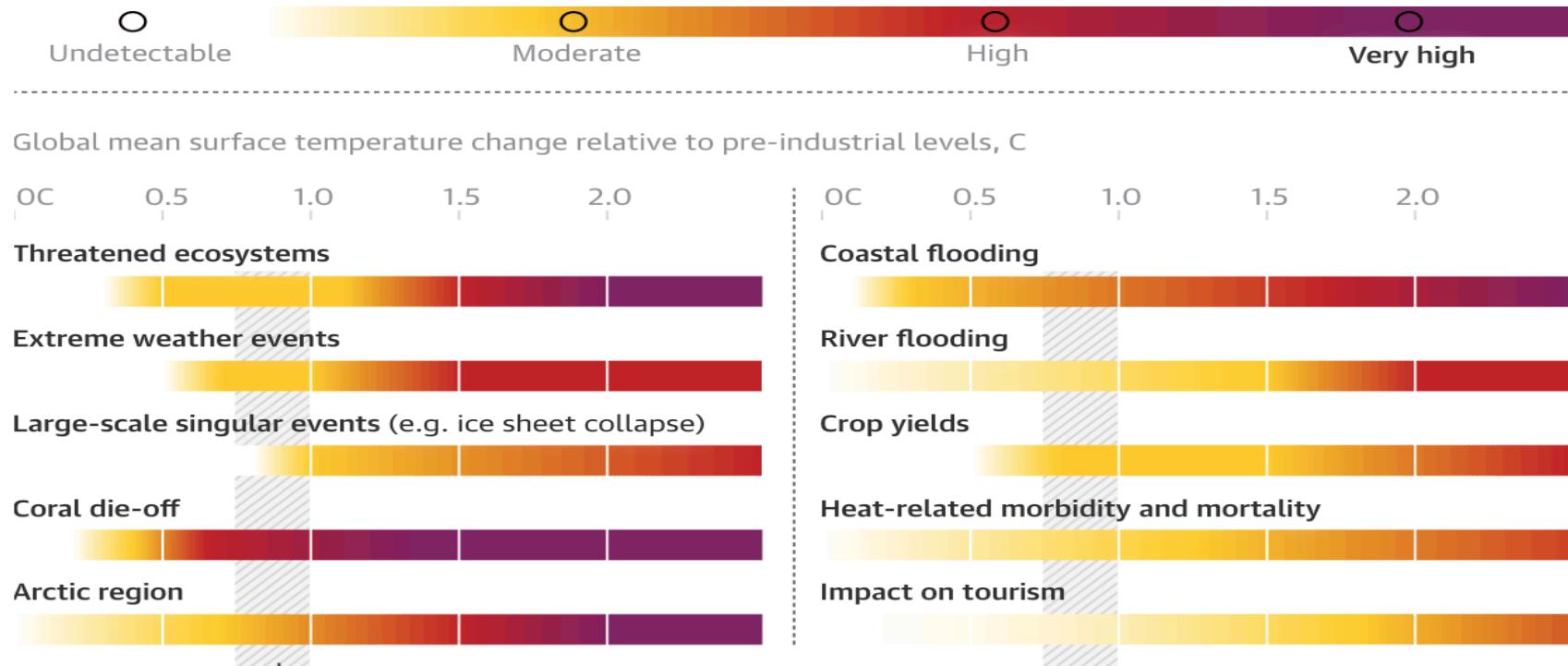
- we already see drastic effects with only
 1 deg C = 1.8 deg F change

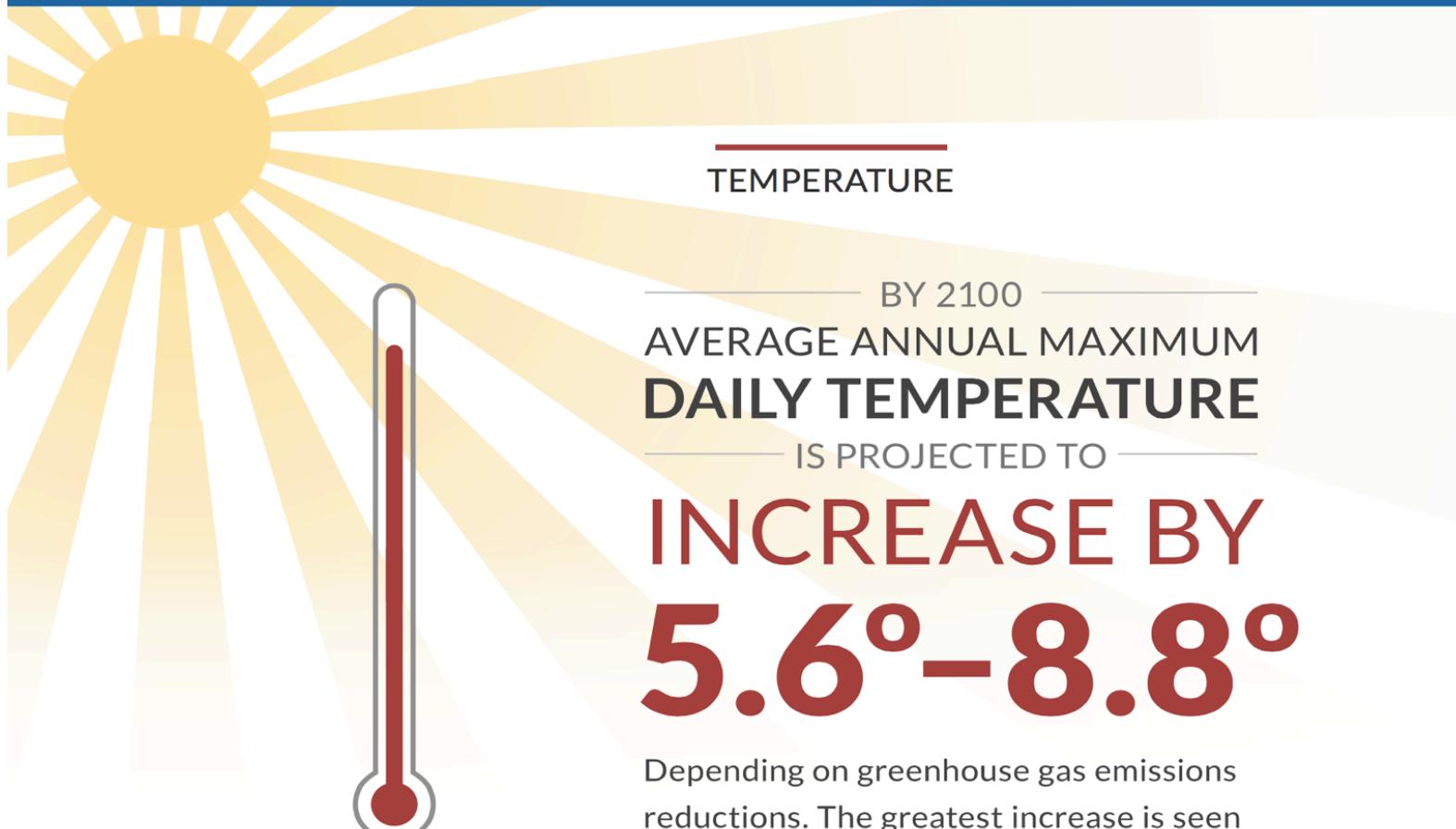
New IPCC Report says even 1.5 deg C is a problem but 2 deg C is MUCH WORSE

IPCC 2018 Summary

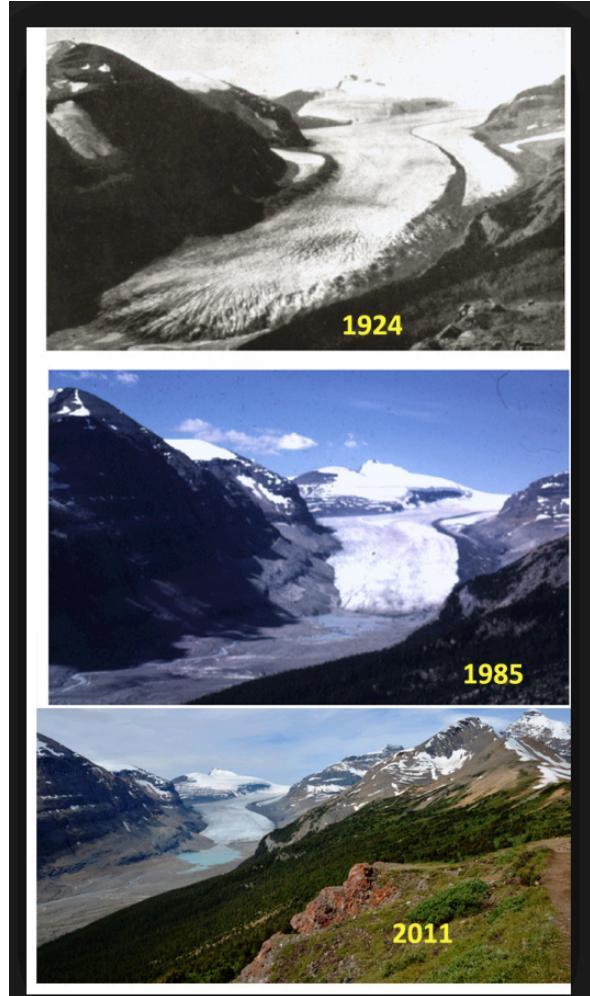
Intergovernmental Panel on Climate Change(U.N.)

Key to impacts and risks





- But it's NOT GAME OVER
- It's GAME ON



Ice is melting
everywhere and
sea level is
rising.

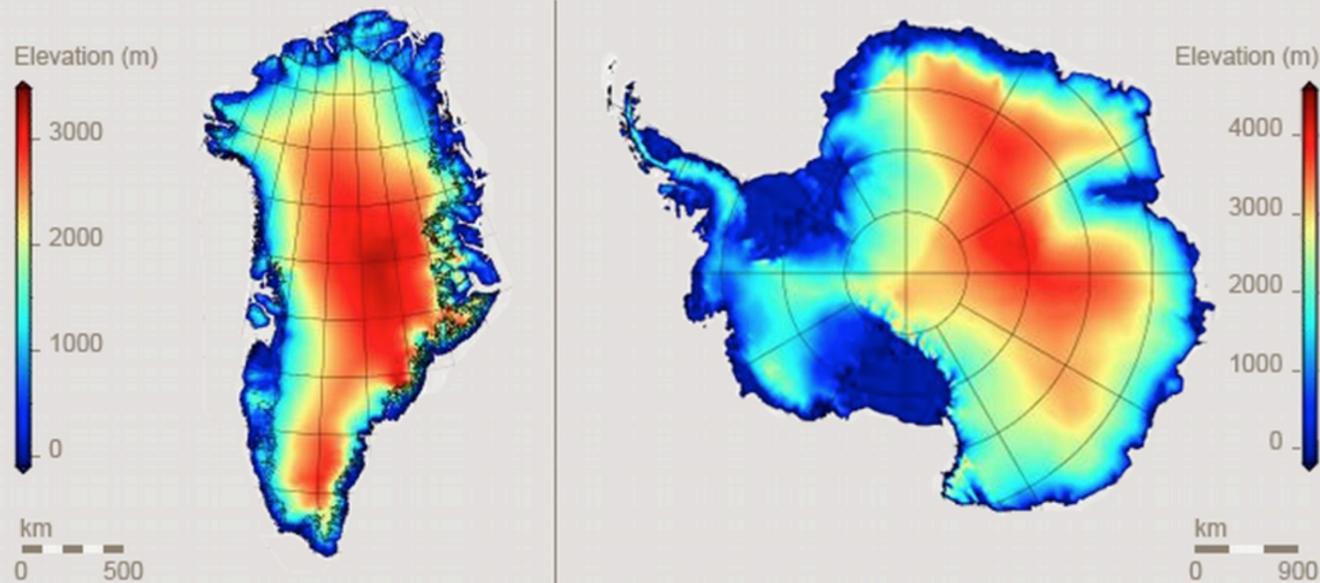
Saskatchewan
Glacier , Alberta

Greenland and Antarctica

Ice loss **doubled** in Greenland and **tripled** in the West Antarctic between 2009 to 2014.

Record decline of ice sheets

For the first time scientists map elevation changes of Greenlandic and Antarctic glaciers



Source: Helm et al., The Cryosphere, 2014

© DW

Santa Cruz, California, United States



Which sea level will we lock in?

When will this happen?

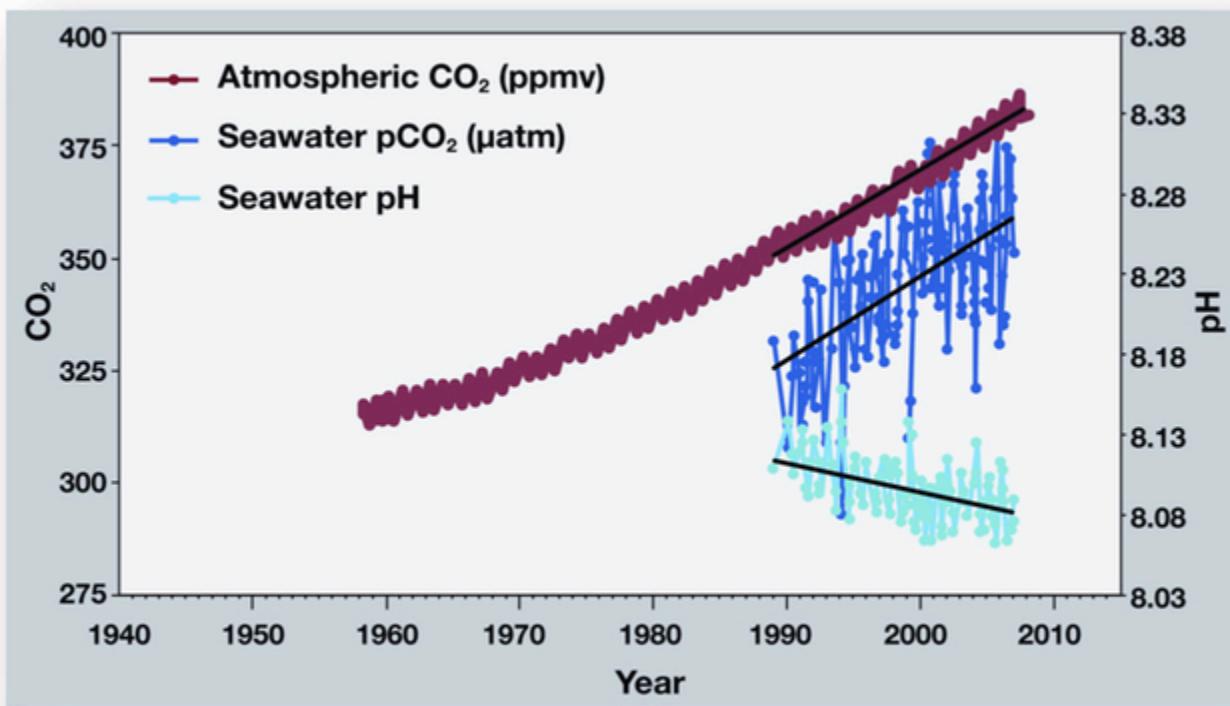


4°C Warming (7.2°F)



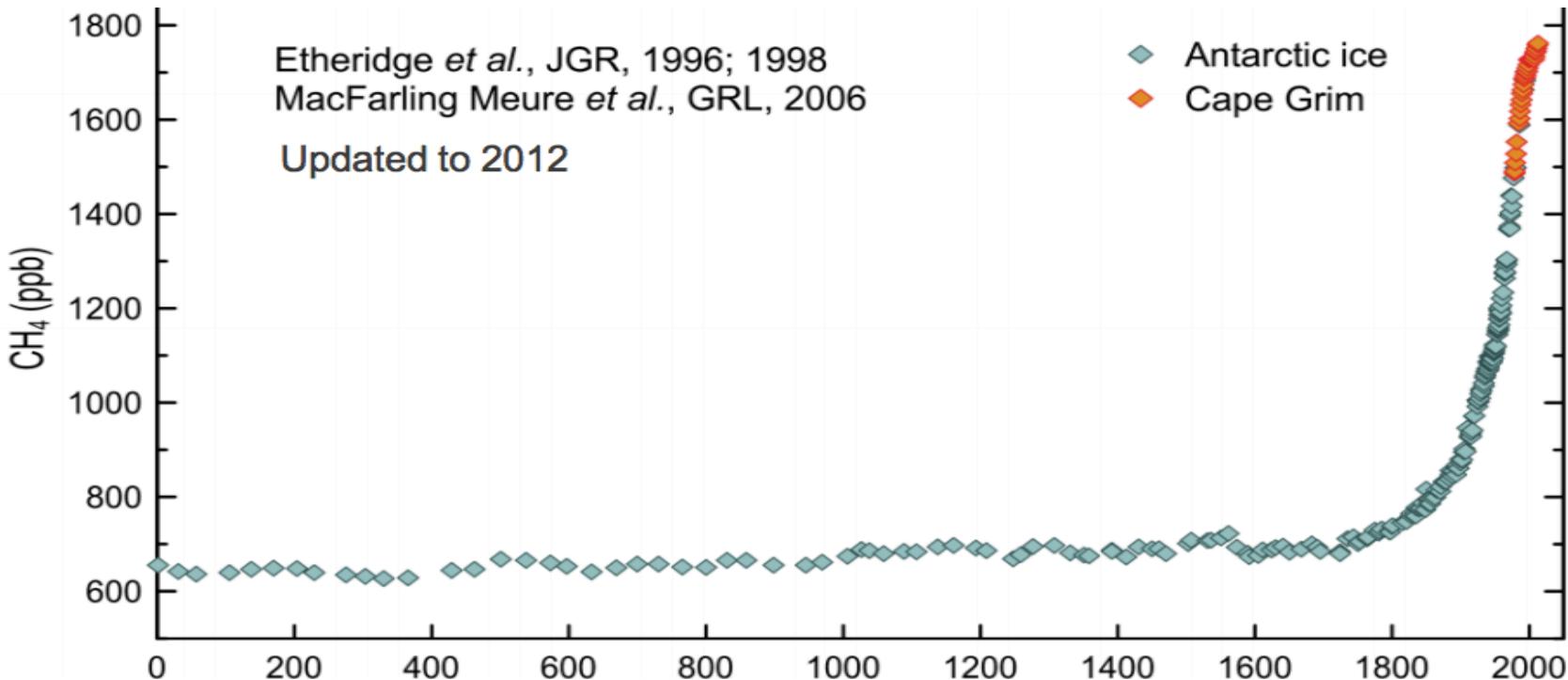
2°C Warming (3.6°F)

Ocean Acidification

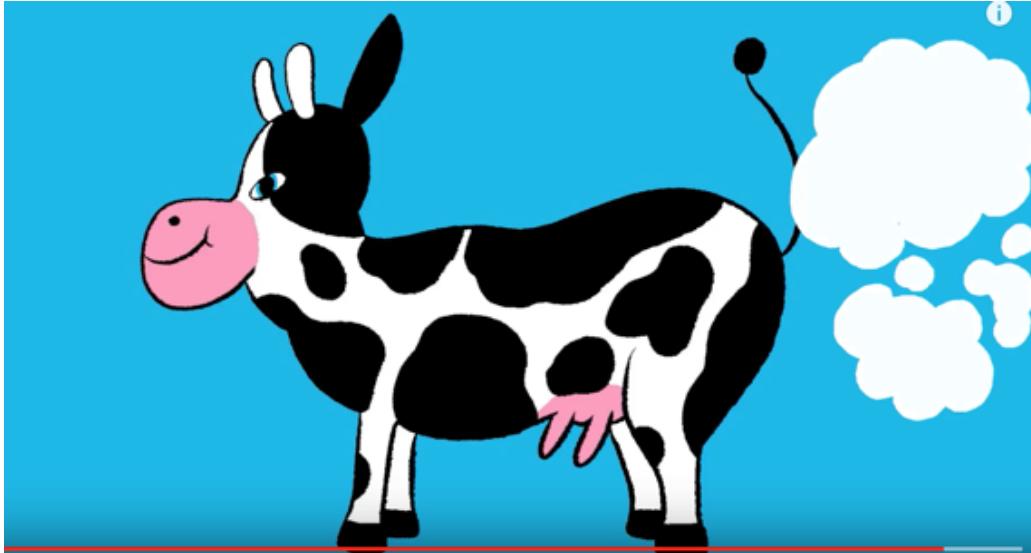


Human made carbon dioxide is being absorbed by the oceans making them approx. 30% more acidic so far

Methane levels for the past 2000 yrs



MEAT - especially BEEF - is a HUGE PROBLEM



Eat Less Meat

Changing your diet a little will help the planet a lot. Cows produce loads of methane - a super powerful greenhouse gas. Beef production also uses more water and needs more land. Changing to smaller amounts of meat (preferably chicken) and lots of veg is also better for your health.

Climate Change Summary so Far

It's Real

It's US

Scientists Agree

It's BAD

There's HOPE!!!

DRAWDOWN

THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN

Detailed Carbon Reduction
program by Paul Hawken.
Includes detailed analysis of
80 different solutions





Buy less new stuff



What to
reduce or
avoid

Drive MUCH less



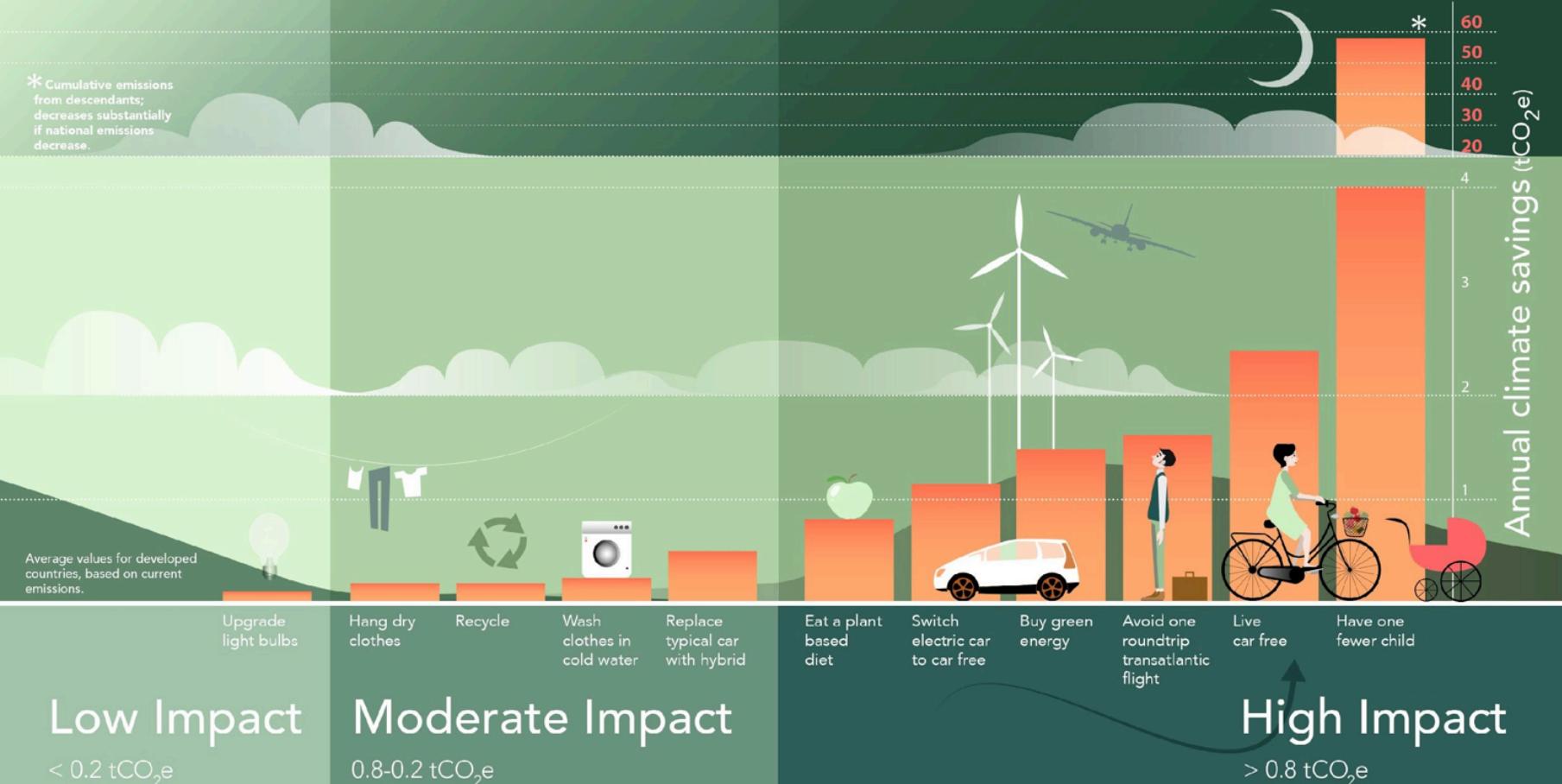


Enjoy



Personal choices to reduce your contribution to climate change

* Cumulative emissions from descendants; decreases substantially if national emissions decrease.



We need **URGENT** action by



Good News:

Santa Cruz City Council passed
an Emergency Resolution

Oct 27, 2018

Santa Cruz County Resolution
passed Jan 29, 2019.

Local action on Transportation

Campaign for Sustainable Transportation
works tirelessly to change the
Business as Usual" auto centric culture.

Opposing new parking garage – not needed

Opposing highway widening

Working for real solutions – bus passes, bus on
shoulder etc.

Supporting safer biking, walking etc.

Normal political mode

Emergency mode

Crisis constrained by business as usual	Crisis embraced with urgency by all
No urgent threat perceived, time of response not important	Known escalation beyond control if immediate action not taken
The crisis is one of many issues	The crisis is of highest priority
Budgetary restraints	All available resources devoted to the emergency
Slow rate of change, systemic inertia	Rapid transition & scaling up

Normal political mode

Targets & goals determined by political tradeoffs

Politics is adversarial & divisive

Emergency mode

Critical targets and goals not compromised

Collaborative and effective leadership

Based on material by The Climate Mobilization (TCM)

Green New Deal





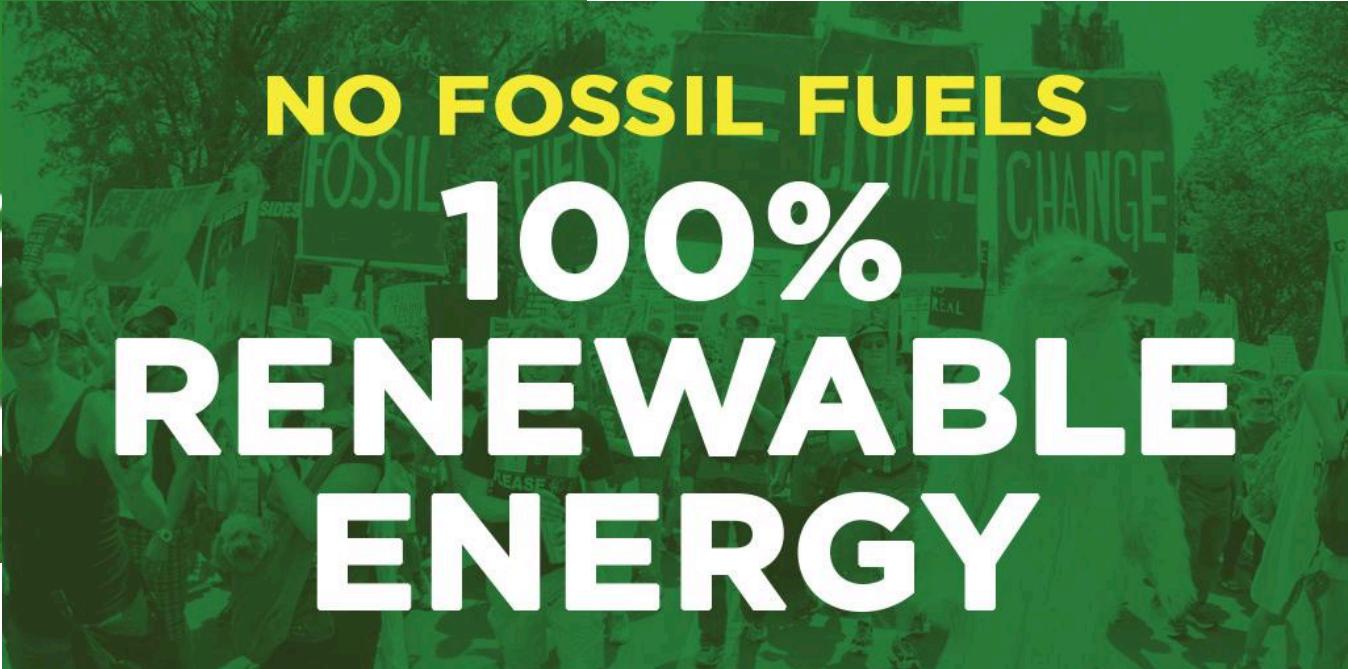
WE NEED
A GREEN
NEW DEAL



WE NEED
A GREEN
NEW DEAL

GREEN JOBS
GUARANTEE

WE
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NEW
A
NO FOSSIL FUELS
100%
RENEWABLE
ENERGY
S
GUARANTEE





JUST
TRANSITION

JUST
TRANSITION

JUST

FOSSIL FREE
AGRICULTURE

FOSSIL FREE
TRANSPORTATION



UHIST
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A DIGNITY FIRE

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INDIGENOUS
RIGHTS

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Good News

Feb 11 Congressman **Jimmy Panetta** agreed to back the **Green New Deal** **Thanks Jimmy!**

To Finance it we need **PUBLIC BANKING**.
CA AB 857 will authorize **Public Banking**
- **co-authored by Mark Stone**

Let him know we appreciate his support.

California Green New Deal

We cannot afford to wait for the federal government.

We are the most populous state in the USA and the 2nd highest GHG emitter

We need to act now. Write or call your representatives or visit their offices.

PLEASE CALL DIANE FEINSTEIN!



**Climate Strike
Sep 20-27
Big Kid action Sep 27
Join and bring your
parents
4pm Farmers Market Lot**

**Young people worldwide are
protesting. Their future is in
serious jeopardy!**



There really is HOPE!
Together we CAN do it.



For more details see <https://scruzclimate.org/>