Climate on Tap

IPCC Report #6

Facilitator:
Laura Tucker

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Local 2020

What do you think we should focus on as a planet to solve the climate crisis?

**Take a few minutes to ponder this,
then share your thoughts with those at your table
or with the person next to you.**

We have seen the headlines:

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'Almost out of time': stark warning from scientists on climate disaster

On eve of IPCC report, call for action on a crisis 'playing out in real time'

Fiona Harvey
Environment correspondent

The fires, floods and extreme weather seen around the world in recent months are just a foretaste of what can be expected if global heating takes hold, scientists say, as the world's leading authority on climate change prepares to warn of an imminent and dire risk to the global climate system.

The Intergovernmental Panel on Climate Change will today publish a landmark report, the most comprehensive assessment yet, less than three months before vital UN talks that will determine the future course of life on Earth.

Policymakers have already previewed the findings, finalised on Saturday night, which have been the subject of an intense two weeks of online discussion from experts around the world, and represent eight years of work from leading scientists.

Doug Parr, policy director at Greenpeace UK, said governments must take heed of the warnings. "Practical, funded and deliverable plans [by governments] to keep us below the supposedly safe limits [of heating] are almost non-existent. Urgent climate action was needed decades ago - now we're almost out of time. The UK government has a huge responsibility as host of the UN climate talks to ensure world leaders sign up to

'If emissions continue to rise, increasingly severe impacts occur'

Simon Lewis
University College London

policies that not just put the brakes on the climate crisis, but slam it into reverse."

The IPCC, made up of hundreds of the world's foremost climate scientists, publishes comprehensive assessments roughly every seven years, with this report the sixth since 1988. This one will be different, however: previous work has shown that the 2020s are a crucial decade, in which greenhouse gas emissions must be halved in order to limit heating to 1.5C above pre-industrial levels, established by previous IPCC reports as the threshold of safety, and the lower of two goals in the 2015 Paris agreement.

Michael Mann, distinguished professor of Earth

from around the globe …

THE FOOD SUPPLY IS AT DIRE RISK, U.N. EXPERTS SAY

OPTIONS ARE DWINDLING

Exploitation of Land and Climate Change Pose Grave Danger

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CLIMAT
ÇA COMMENCE DANS L'ASSIETTE

Le Monde
Un rapport spécial du GIEC
L'HUMANITÉ ÉPUISE

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Rule of tree
Land use the key to climate

Wir packen das

USA erwägen schärfere Waffengesetze

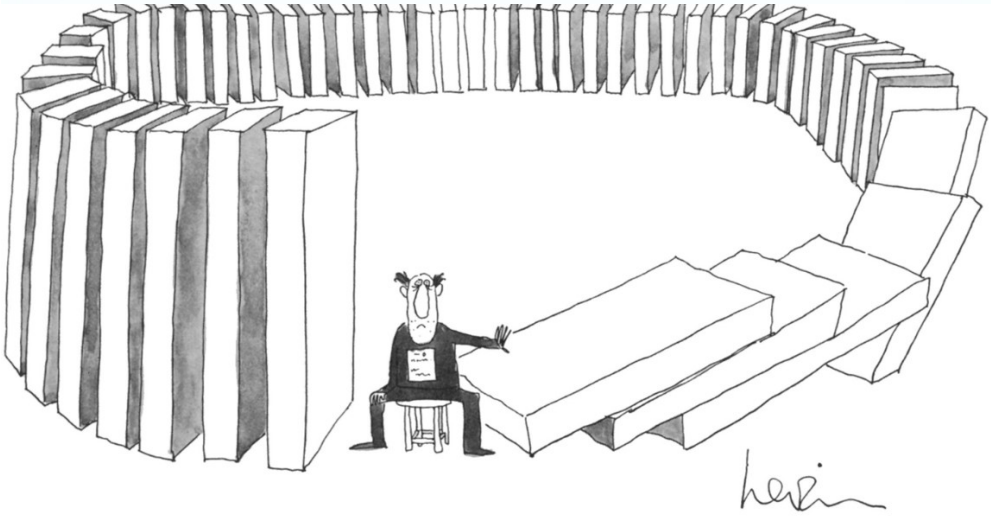
La ONU alerta de que el modelo alimentario agrava la crisis climática

Pide cambiar la dieta y reducir la carne. El derroche

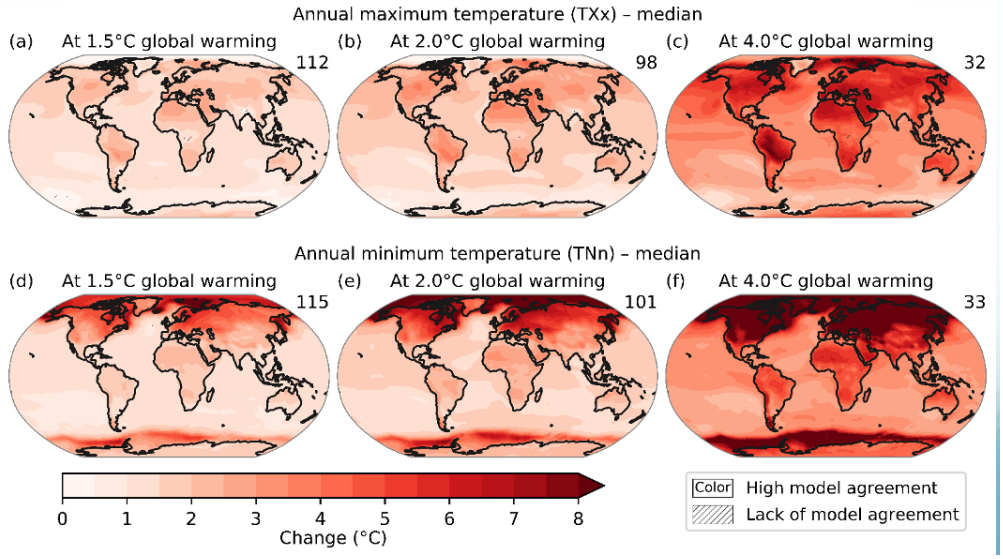
Weltklimarat ruft zum Umdenken in der Agrarpolitik und im Konsum auf

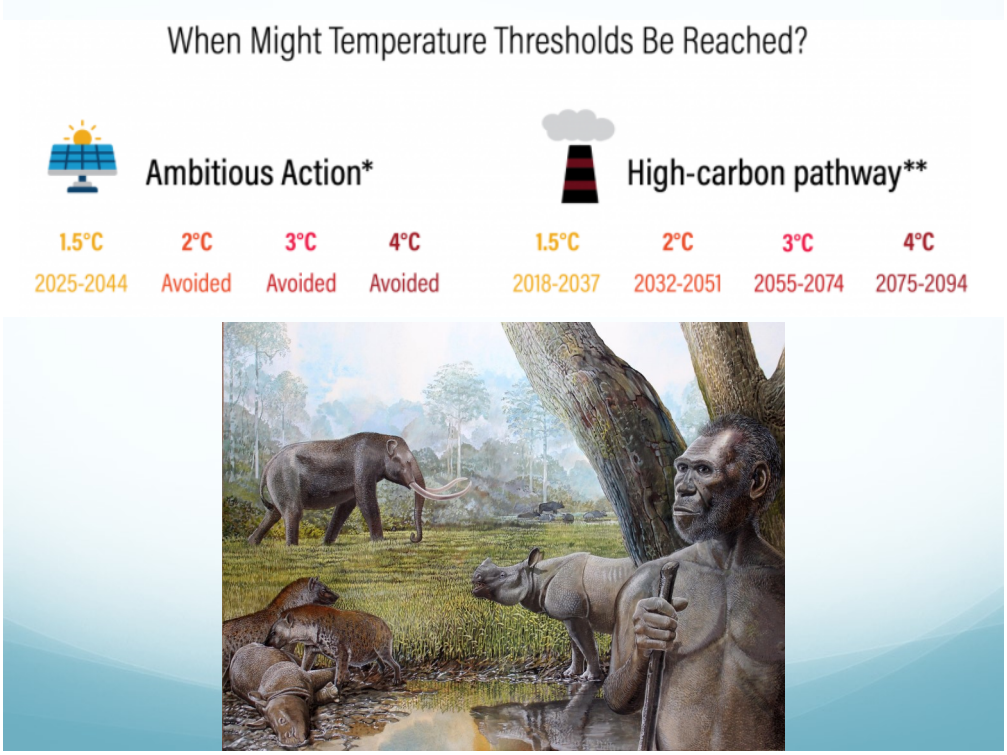
The IPCC's volunteer scientists build consensus with all UN governments before releasing these reports. There are heated scientific arguments over the data, but in this unusual system, there must be an unanimous agreement by the scientists and their governments that the report accurately represents the data. This is what makes the IPCC the most authoritative and respected body on climate change.

IPCC Report #6 – Information and Implications



The last decade was hotter than any period in the last 125,000 years

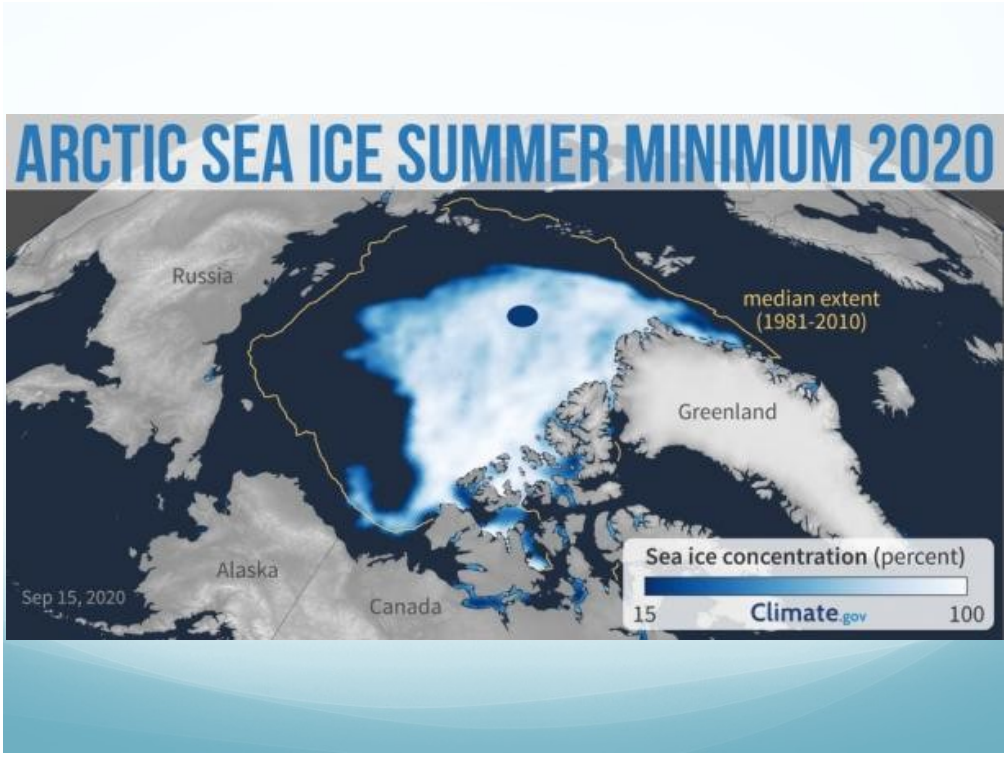




If the world takes a carbon-intensive pathway (SSP5-8.5), global warming could climb to 3.3-5.7 degrees C (5.9-10.3 degrees F) higher than pre-industrial levels by the end of the century. To put that in perspective, the world has not experienced global warming of more than 2.5 degrees C (4.5 degrees F) for more than 3 million years, a period with a very different climate system.

Why should we care about a half degree of warming?

Arctic Sea Ice – lowest level in at least 1,000 years

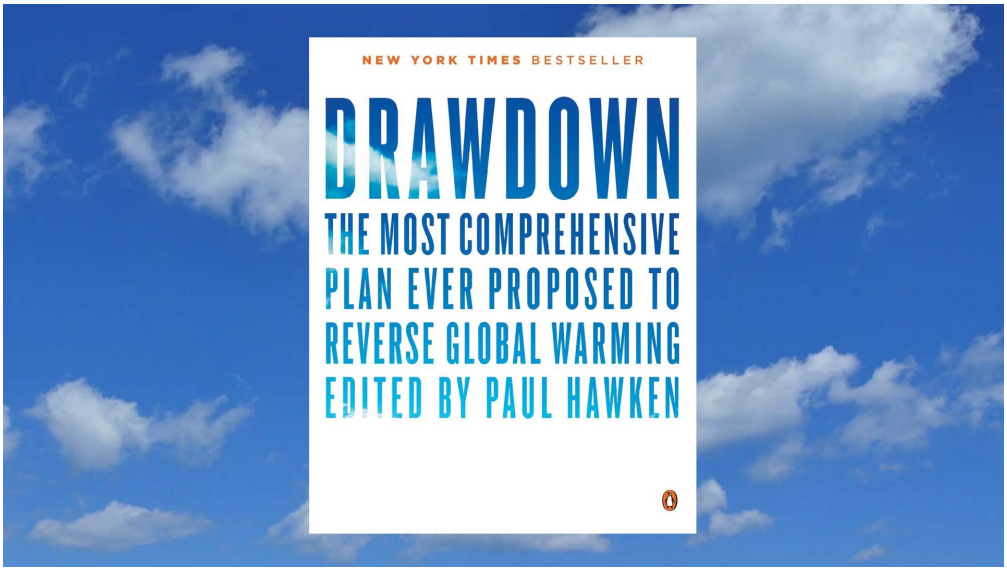


At the end of July, 40% of the 4,000-year-old Milne Ice Shelf, located on the north-western edge of Ellesmere Island, calved into the sea. Canada's last fully intact ice shelf was no more. The Arctic is unravelling. And it's happening faster than anyone could have imagined just a few decades ago. Northern Siberia and the Canadian Arctic are now warming three times faster than the rest of the world. In the past decade, Arctic temperatures have increased by nearly 1C. If greenhouse gas emissions stay on the same trajectory, we can expect the north to have warmed by 4C year-round by the middle of the century.

Limiting global warming to 1.5 degrees C by the end of the century is still within reach, but requires transformational change.

- **Accelerate the increased share of renewables in electricity generation five times faster**
- **Phase out coal in electricity generation five times faster**
- **Reduce the carbon intensity of electricity generation three times faster**
- **Accelerate the uptake of electric vehicles 22 times faster than the significant rates of adoption in recent years**
- **Accelerate the increase in the share of low-carbon fuels by eight times faster**
- **Accelerate the increase in annual tree cover gain five times faster**

100 proven solutions to solve the climate crisis



Next Climate on Tap on November 3rd!

ELECTRICITY GENERATION
Biomass
Cogeneration
Concentrated Solar
Energy Storage (Distributed)
Energy Storage (Utilities)
Geothermal
Grid Flexibility
In-Stream Hydro
Methane Digesters (Large)
Methane Digesters (Small)
Micro Wind
Microgrids
Nuclear
Rooftop Solar
Solar Farms
Solar Water
Waste-to-Energy
Wave and Tidal
Wind Turbines (Offshore)
Wind Turbines (Onshore)

FOOD
Biochar
Clean Cookstoves
Composting
Conservation Agriculture
Farmland Irrigation
Farmland Restoration
Improved Rice Cultivation
Managed Grazing
Multistrata Agroforestry
Nutrient Management
Plant-Rich Diet
Reduced Food Waste
Regenerative Agriculture
Silvopasture
System of Rice Intensification
Tree Intercropping
Tropical Staple Trees

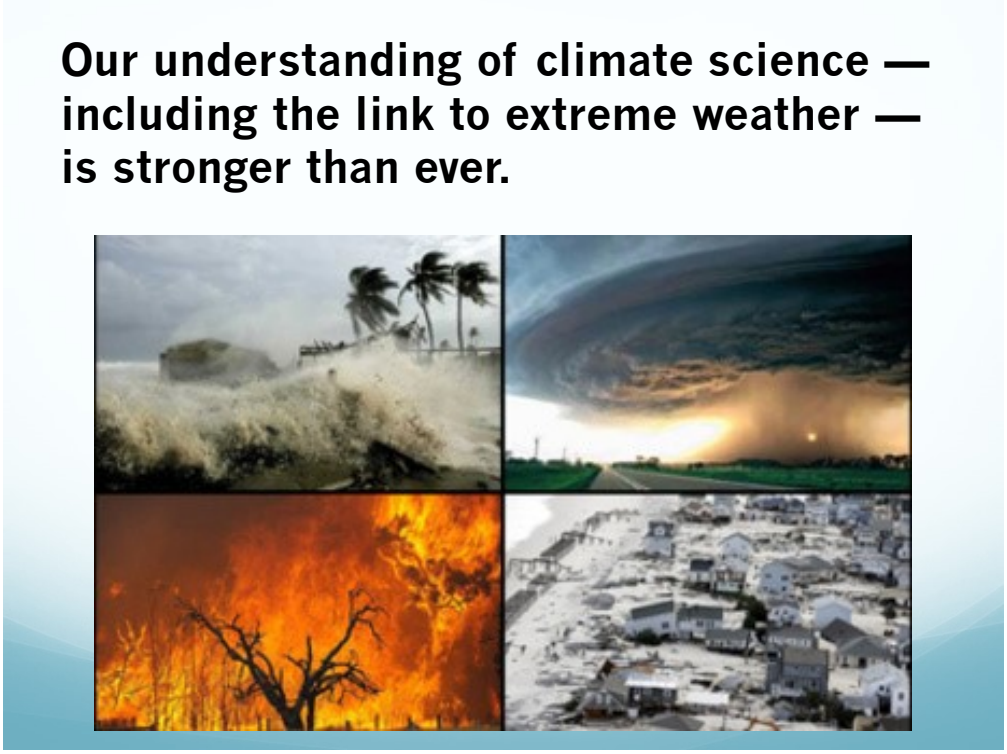
WOMEN AND GIRLS
Educating Girls
Family Planning
Women Smallholders

BUILDINGS AND CITIES
Bike Infrastructure
Building Automation
District Heating
Green Roofs
Heat Pumps
Insulation
Landfill Methane
LED Lighting (Commercial)
LED Lighting (Household)
Net Zero Buildings
Retrofitting
Smart Glass
Smart Thermostats
Walkable Cities
Water Distribution

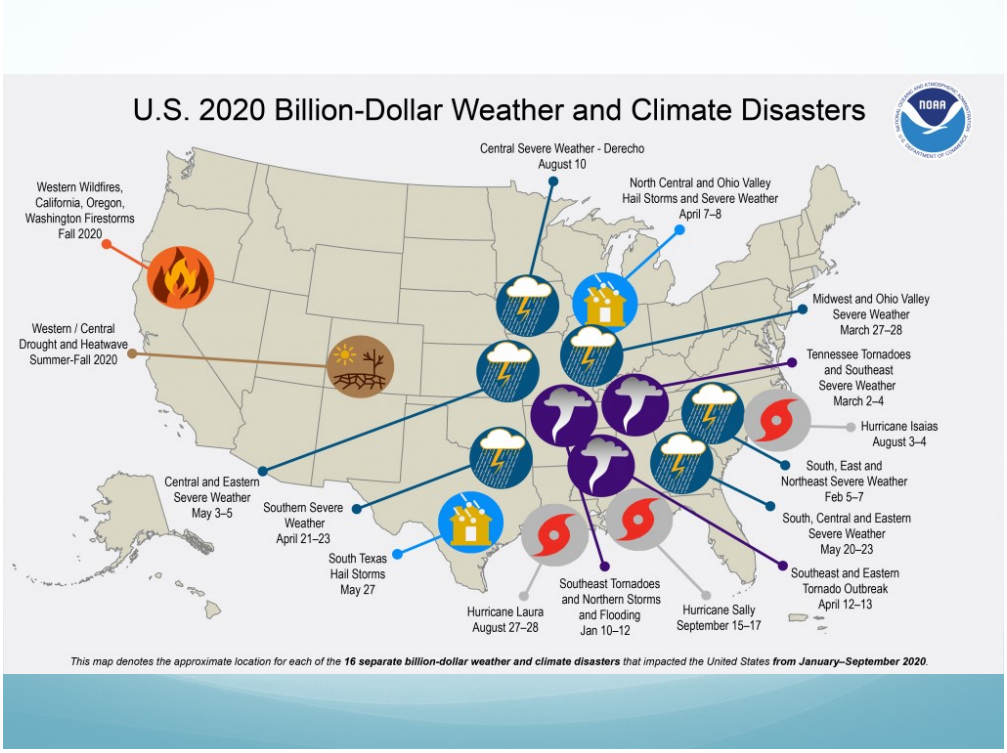
LAND USE
Afforestation
Bamboo
Coastal Wetlands
Forest Protection
Indigenous Peoples' Land Management
Peatlands
Perennial Biomass
Temperate Forests
Tropical Forests

TRANSPORT
Airplanes
Cars
Electric Bikes
Electric Vehicles
High-speed Rail
Mass Transit
Ridesharing
Ships
Telepresence
Trains
Trucks

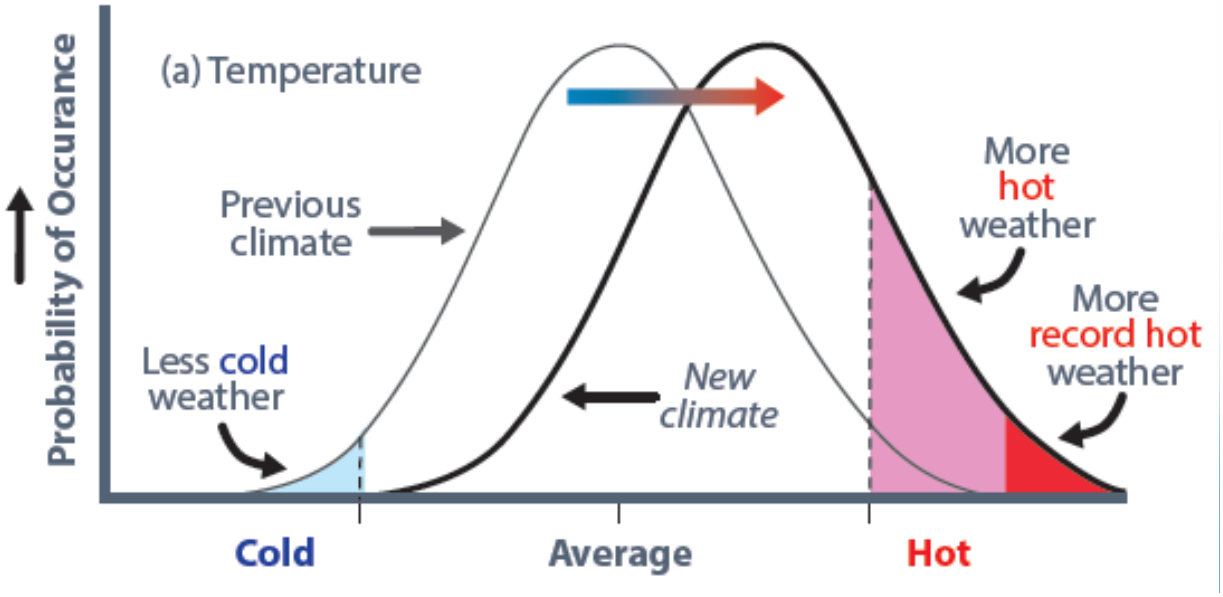
MATERIALS
Alternative Cement
Bioplastic
Household Recycling
Industrial Recycling
Recycled Paper
Refrigerant Management
Water Saving - Home



Scientists can now link specific weather events to human-made climate change. This hasn't always been the case. As recently as 20 years ago, we couldn't say for certain that Hurricane Ida's intensity was a result of climate change, but the record number of intense storms we are seeing now statistically could not occur without the effects of a dramatically changing climate.

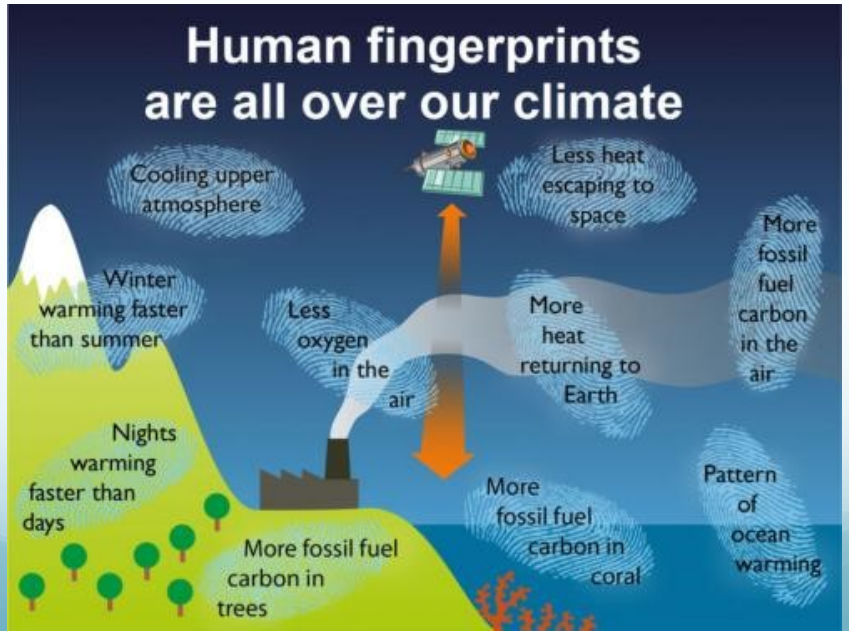


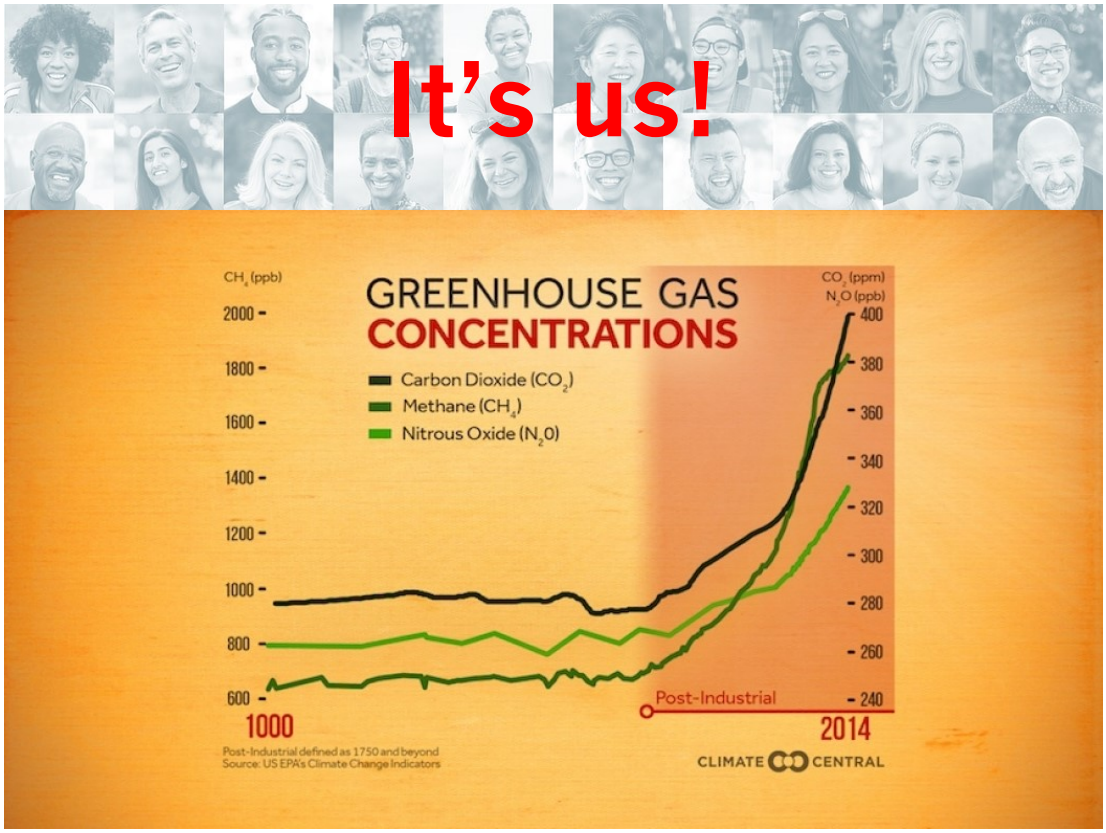
The new normal?



It's us!

It is now unequivocal that human-caused emissions, such as from burning fossil fuels and cutting down trees, are responsible for recent warming.

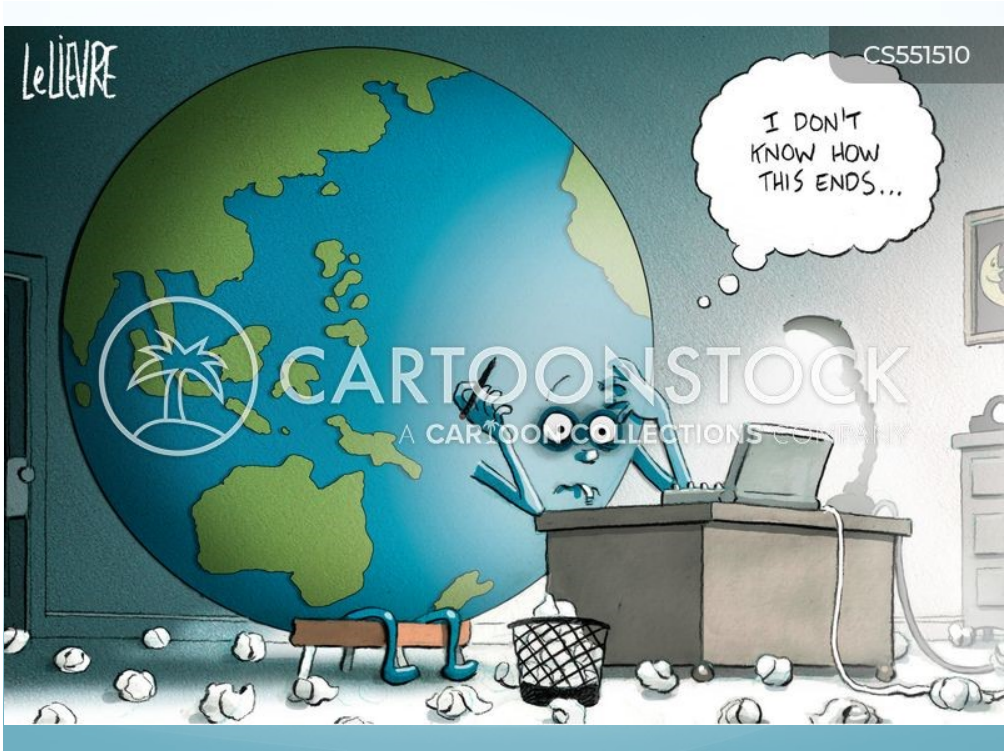




The changes we are already seeing are unprecedented in recent history and will affect every region of the globe.

Southern Africa, the Mediterranean, the Amazon, the western United States and Australia will see increased droughts and fires, which will continue to affect livelihoods, agriculture, water systems and ecosystems. Changes in snow, ice and river flooding are projected to impact infrastructure, transport, energy production and tourism in North America, the Arctic, Europe, the Andes and more. Storms will likely become more intense over most of North America, Europe and the Mediterranean.

Climate change has already impacted every region on Earth. We are not only smashing record after record for warming and other impacts, but the world in which we live today has no recent parallel.



Which path do we take?

If we can get to net zero with our CO2 emissions (i.e. if we remove as much CO2 as we generate, through planting trees, sustainable agriculture, etc.), heating will cease to increase and temperatures will stabilize in a couple of decades. We will still be dealing with the severe weather effects we see now, but we will limit even worse effects. Unfortunately, some effects like sea level rise will remain irreversible for centuries. But it is clear — reducing emissions and increasing removal of CO2 in the short term will leave future generations with a better planet.

What are is your vision of a livable future?

Climate on Tap

Thank you for coming!
Questions?

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