

# Climate Justice: National and International Communities and their Human Rights

## Towards Climate Justice: Community Work and Human Rights Approaches to Climate Action



**John Sweeney, Emeritus Professor**



Ballinasloe 20<sup>th</sup> February 2020



Eliana Muñoz

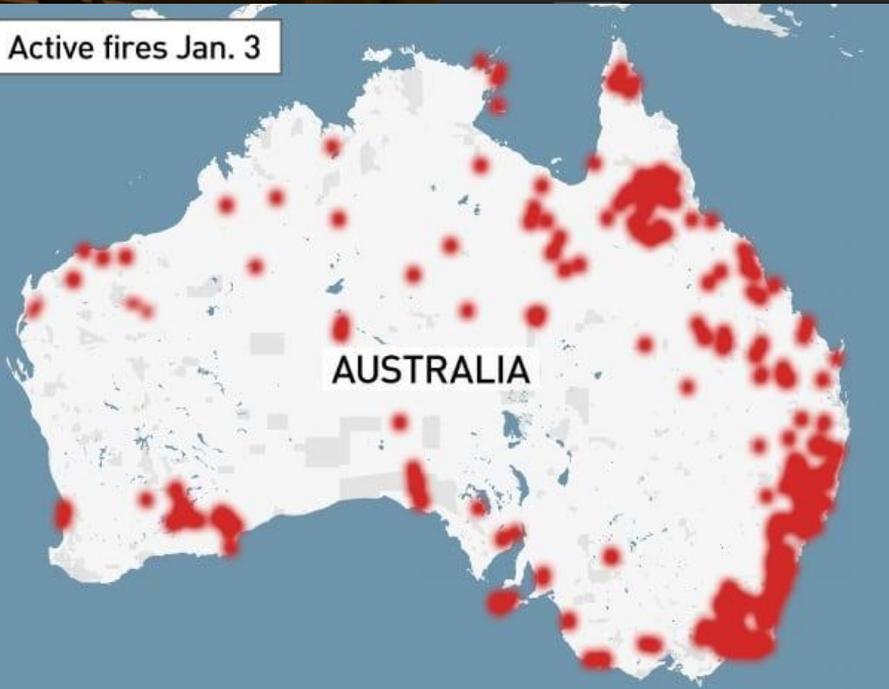


#AUSTRALIA 🇦🇺 IS ON FIRE. WE CAN'T IGNORE THE CRY OF NATURE. THERE IS ONLY ONE PLANET. ❤️

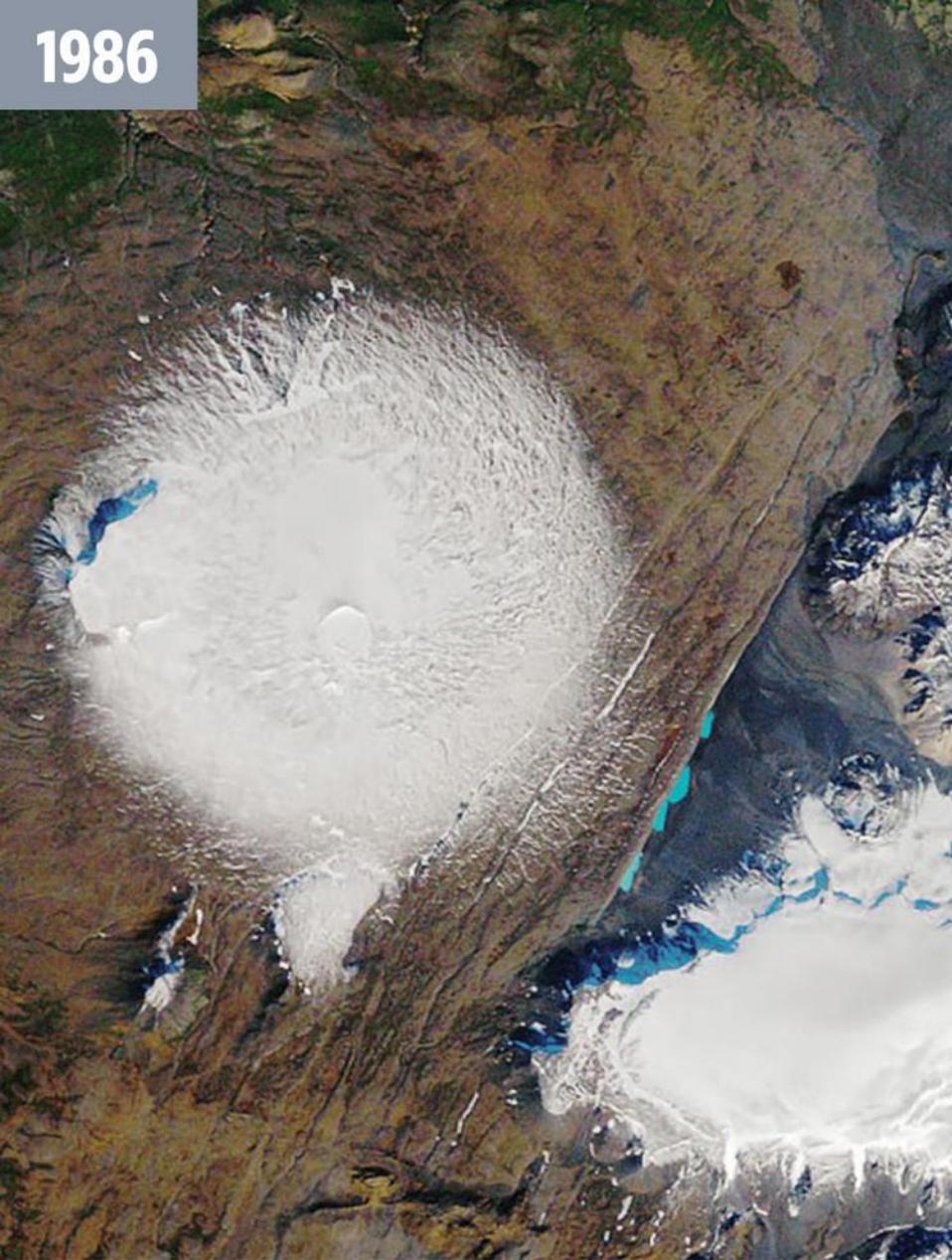


JAMES ROSS/AP

Active fires Jan. 3



1986



2019



Okjokull is the first Icelandic glacier to lose its status as a glacier



### Bréf til framtíðarinnar

Ok er fyrsti nafnkunni jökullinn til að missa titil sinn.  
Á næstu 200 árum er talið að allir jöklar landsins fari sömu leið.  
Þetta minnismerki er til vitnis um að við vitum  
hvað er að gerast og hvað þarf að gera.  
Aðeins þú veist hvort við gerðum eitthvað.

### A letter to the future

Ok is the first Icelandic glacier to lose its status as a glacier.  
In the next 200 years all our glaciers are expected to follow the same path.  
This monument is to acknowledge that we know  
what is happening and what needs to be done.  
Only you know if we did it.

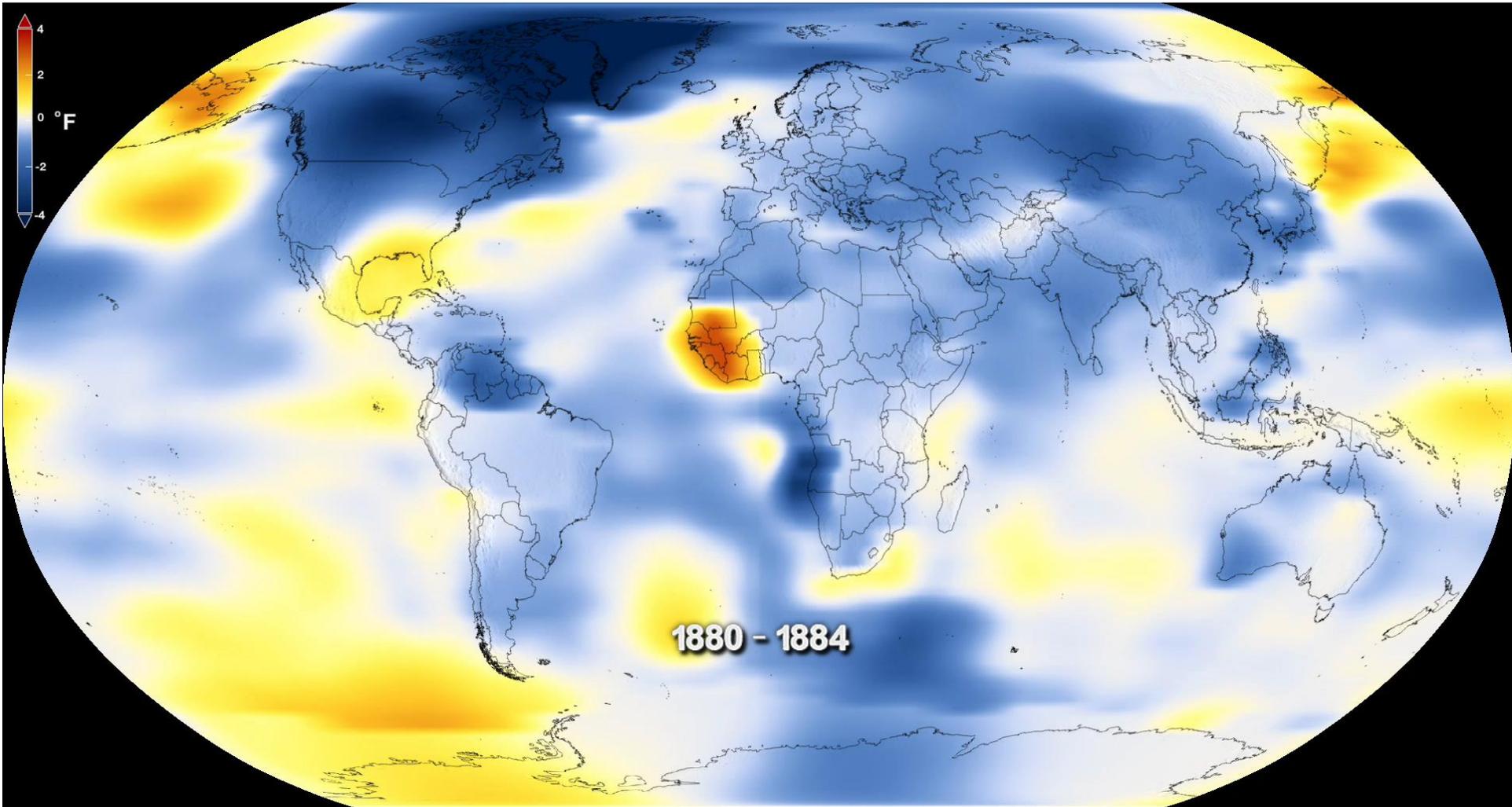
Ágúst 2019  
415ppm CO<sub>2</sub>

# A letter to the future

Ok is the first Icelandic glacier to lose its status as a glacier.  
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# 5-yearly average temperature differences relative to 1951–1980 from 1880-2019



The year 2019 ranks as Earth's 2<sup>nd</sup> warmest year on record (after 2016). 18 of the 19 warmest years in the instrumental record have now occurred since 2000.

If you're younger than 30, you've never experienced a month in which the average surface temperature of the Earth for any month was below the average of the 20<sup>th</sup> Century.

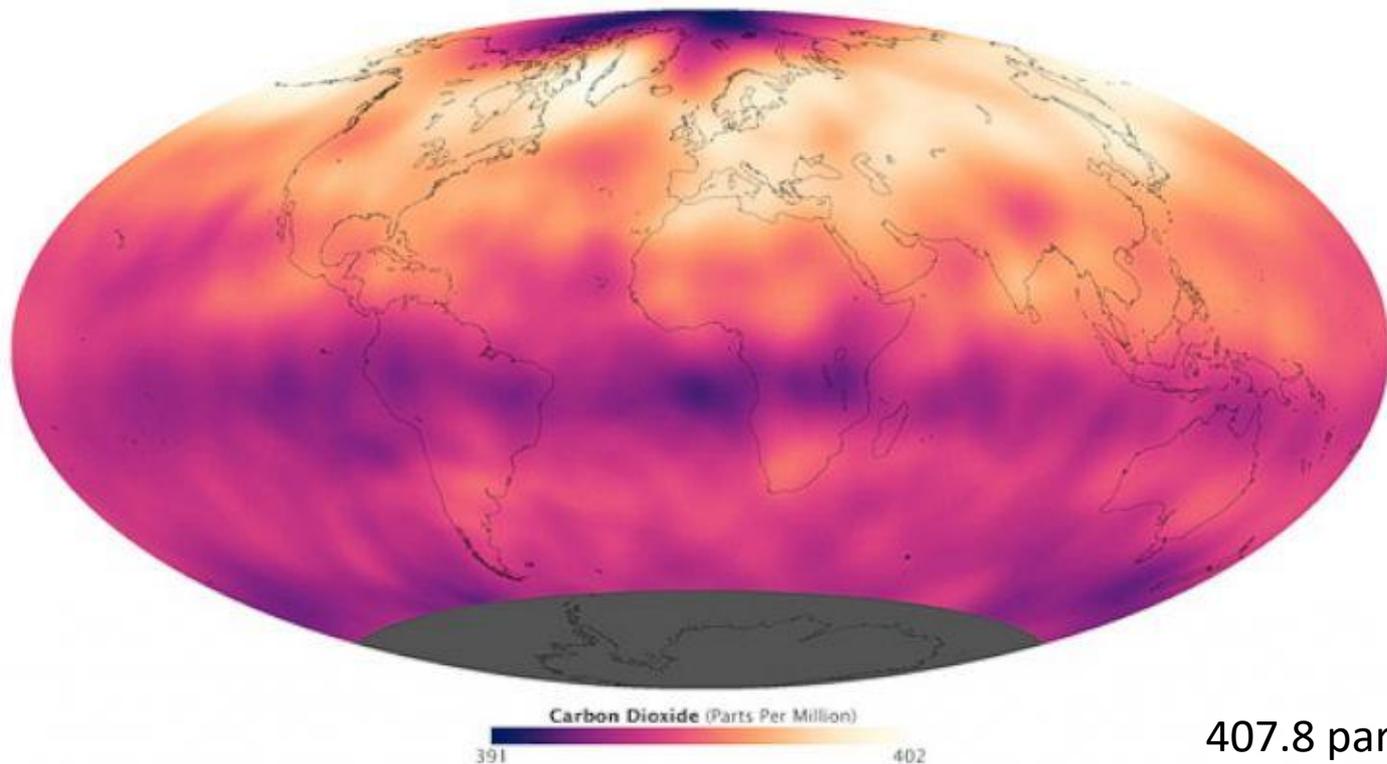
25<sup>th</sup> November 2019

## Climate-heating greenhouse gases hit new high, UN reports

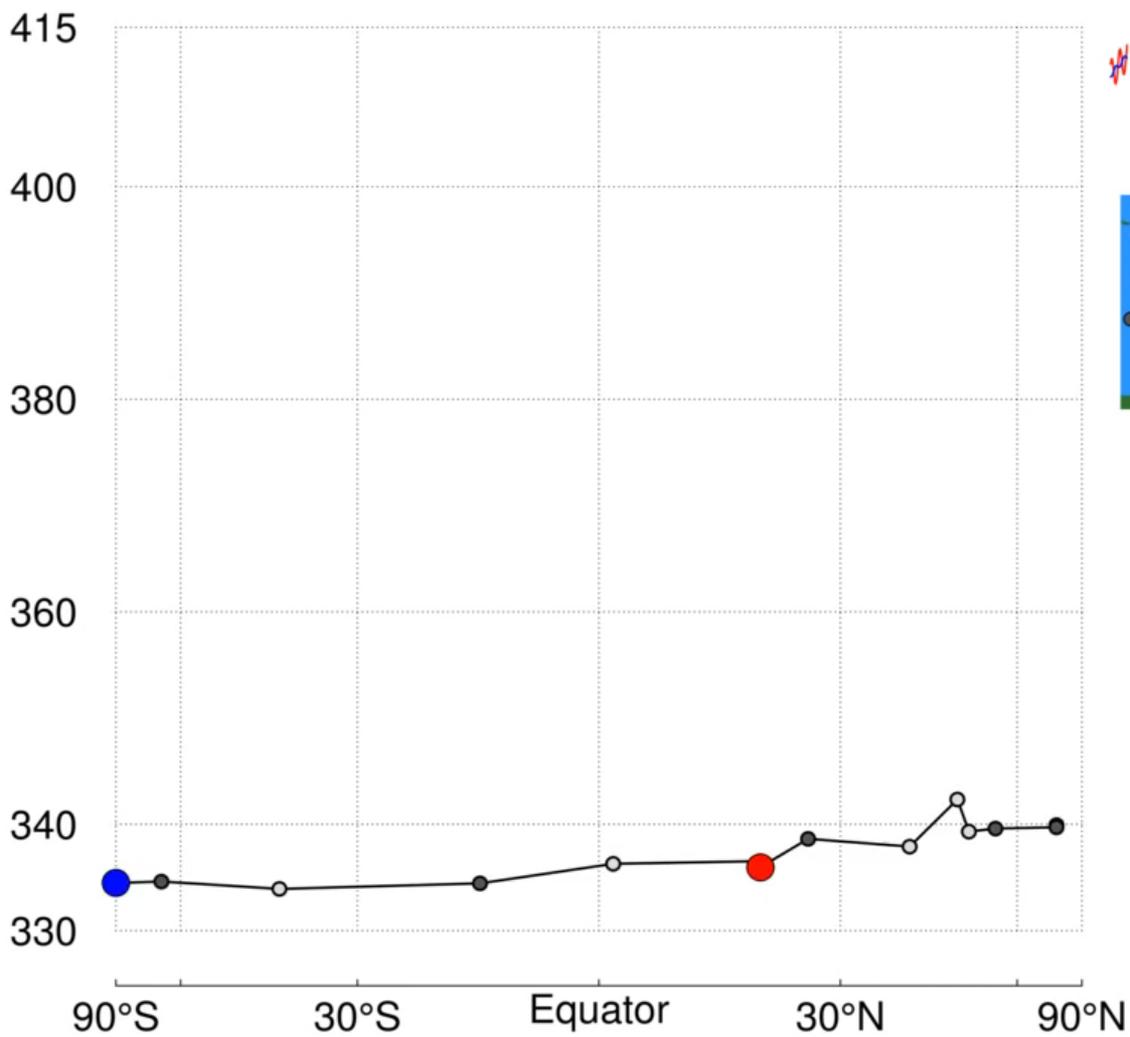
“There is no sign of a slowdown, let alone a decline, despite all the commitments under the Paris agreement on climate change. We need to increase the level of ambition for the sake of the future welfare of mankind.

“It is worth recalling that the last time the Earth experienced a comparable concentration of carbon dioxide was 3-5M years ago. Back then, the temperature was 2-3C warmer and sea level was 10-20 metres higher than now.”

WMO Secretary-General Petteri Taalas

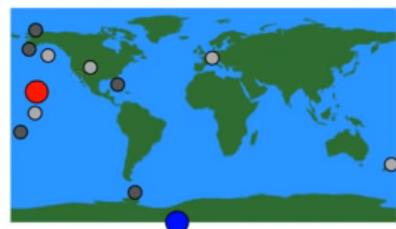


407.8 parts per million



## Atmospheric CO<sub>2</sub> (ppm)

GLOBALVIEW+CO<sub>2</sub> (1979–2016); <http://www.esrl.noaa.gov/gmd/ccgg/obspack/>  
 ● Mauna Loa ● South Pole ● Background conditions ○ Local signals  
 Contact: andy.jacobson@noaa.gov



**1979**



1979 1981 1983 1985

415  
415  
400  
400  
380  
380  
360  
360  
340  
340  
330  
330

Last Year **Ireland** emitted  
the equivalent of

**61M tonnes**

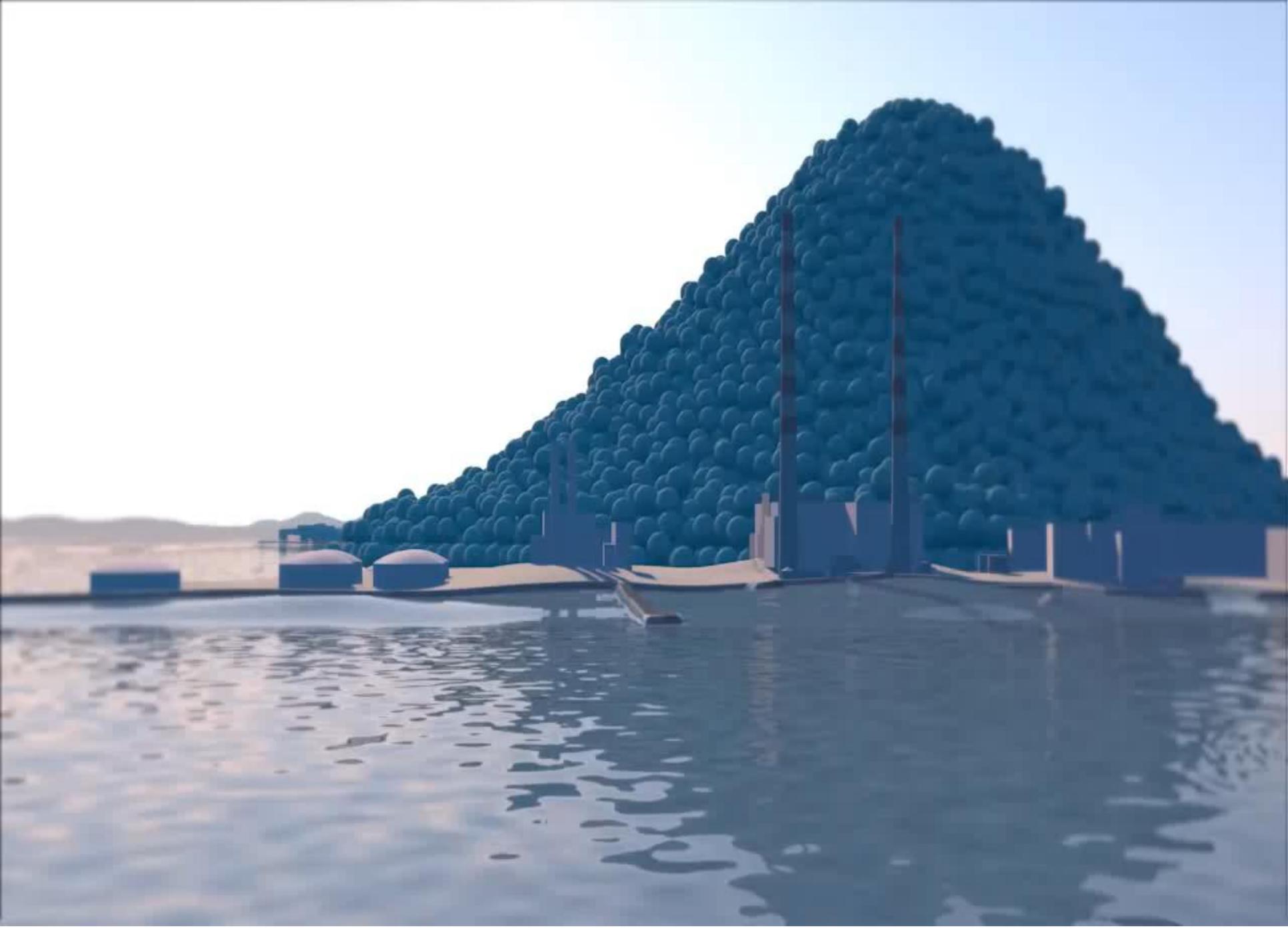
Each of us on average was  
responsible for

**12.8 tonnes**

On an individual basis,  
we are the third worst  
in the EU.

Our emissions are 50%  
higher than the EU  
average





# Projections for Temperature (RCP 8.5)

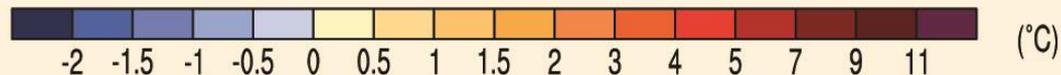
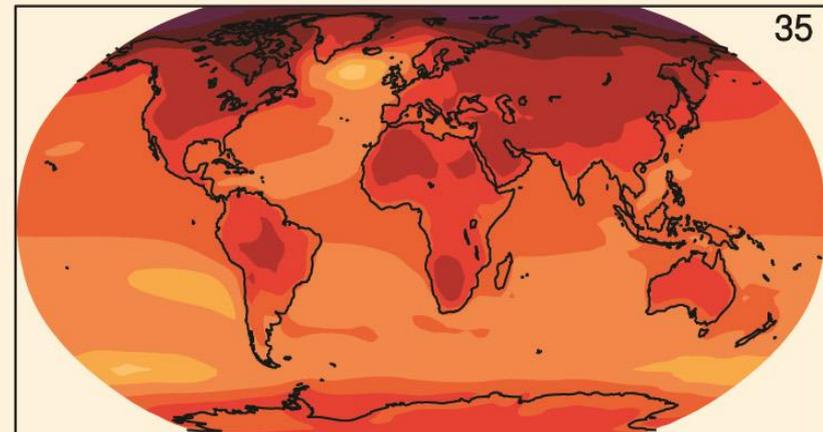
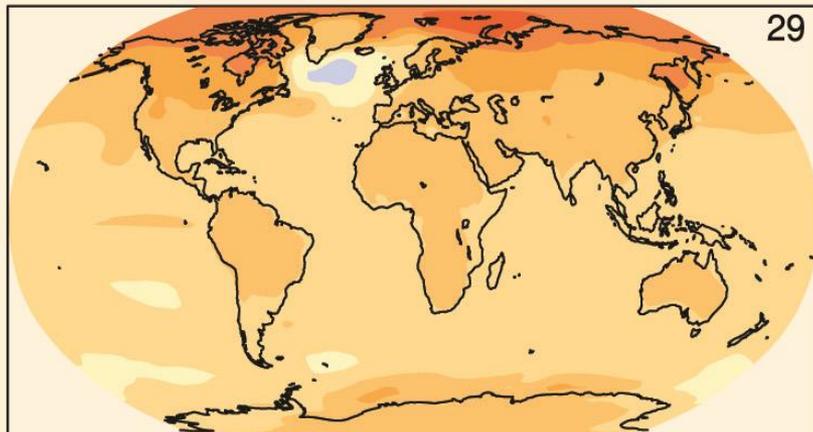
- Projected rise in temperature 0.3-0.7°C by 2016-35 (relative to 1986-2005)
- 50% chance of a rise in temperature  $\sim 4.0^{\circ}\text{C}$  by 2081-2100 (relative to 1850-1900)
- For most regions the once in 20 year maximum temperature will double in frequency. For many regions it will become 10-20 times more frequent.

**RCP 2.6**

**RCP 8.5**

Change in average surface air temperature (1986 - 2005 to 2081 - 2100)

a)



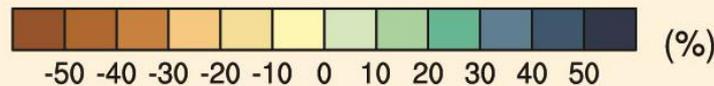
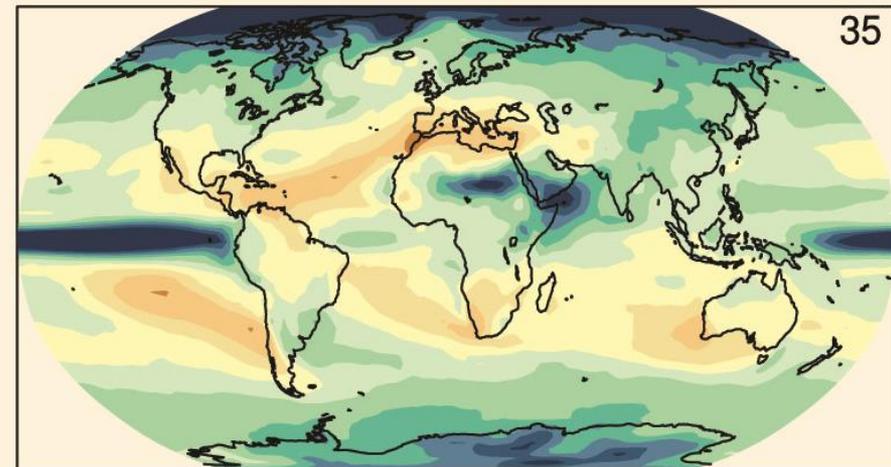
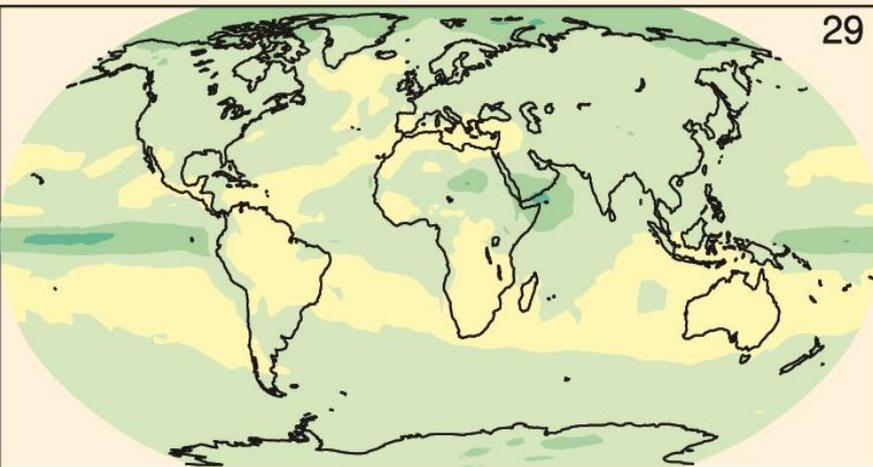
# Projections for Precipitation (RCP 8.5)

- Precipitation will increase 1-3%/degree rise in temperature
- In many regions extreme precipitation events will become more intense and frequent.
- A longer, more reliable and heavy monsoon rainfall season is likely for Asia.

RCP 2.6

RCP 8.5

Change in average precipitation (1986 - 2005 to 2081 - 2100)

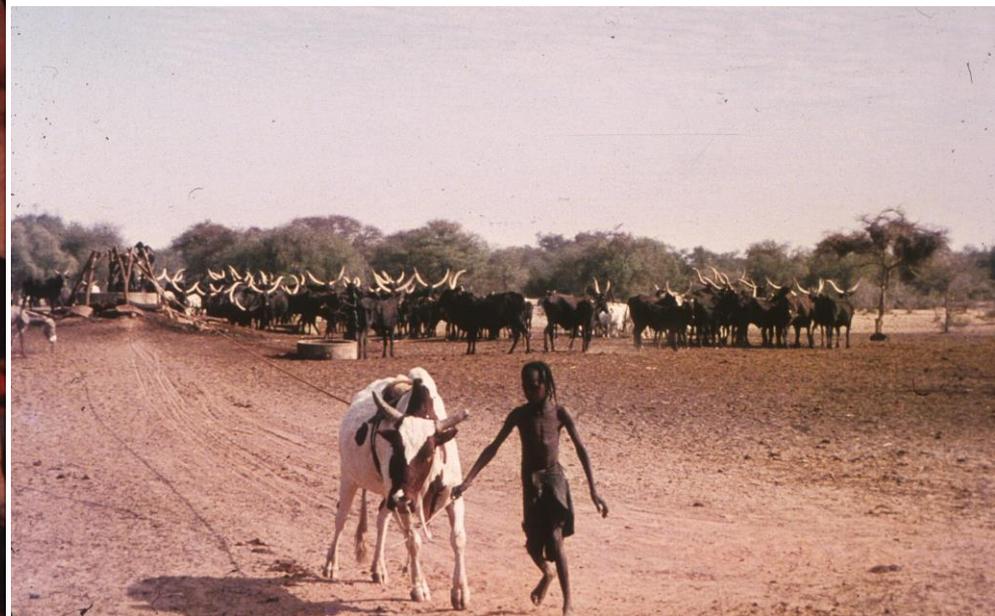




Traditional nomadic pastoralism and livestock farming in arid zones cannot deal with long term reductions in rainfall and rapid population growth:

- rotations become too short;
- land degradation accelerates

If the rains fail, the social fabric collapses



# Mulungushi, Zambia September 2015





“The rains have become unreliable. They arrive 3 weeks later than before and leave earlier. Our seeds wither and our harvest is poor.”



Who is responsible?



Victoria  
Falls  
June 2015

Kariba  
Dam





Victoria Falls

September 2015



Victoria Falls

December 2019

# Consequences of Power Losses



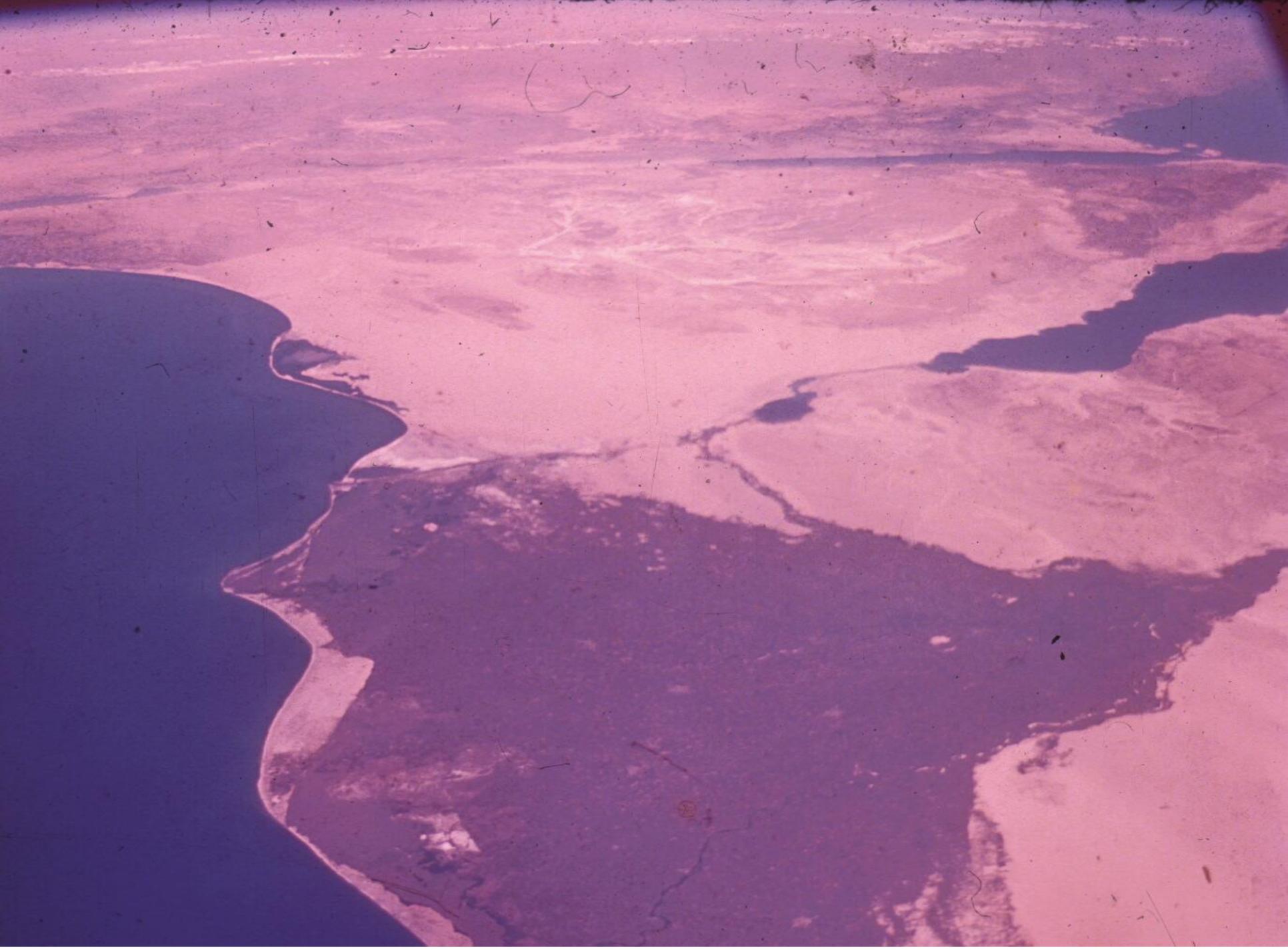




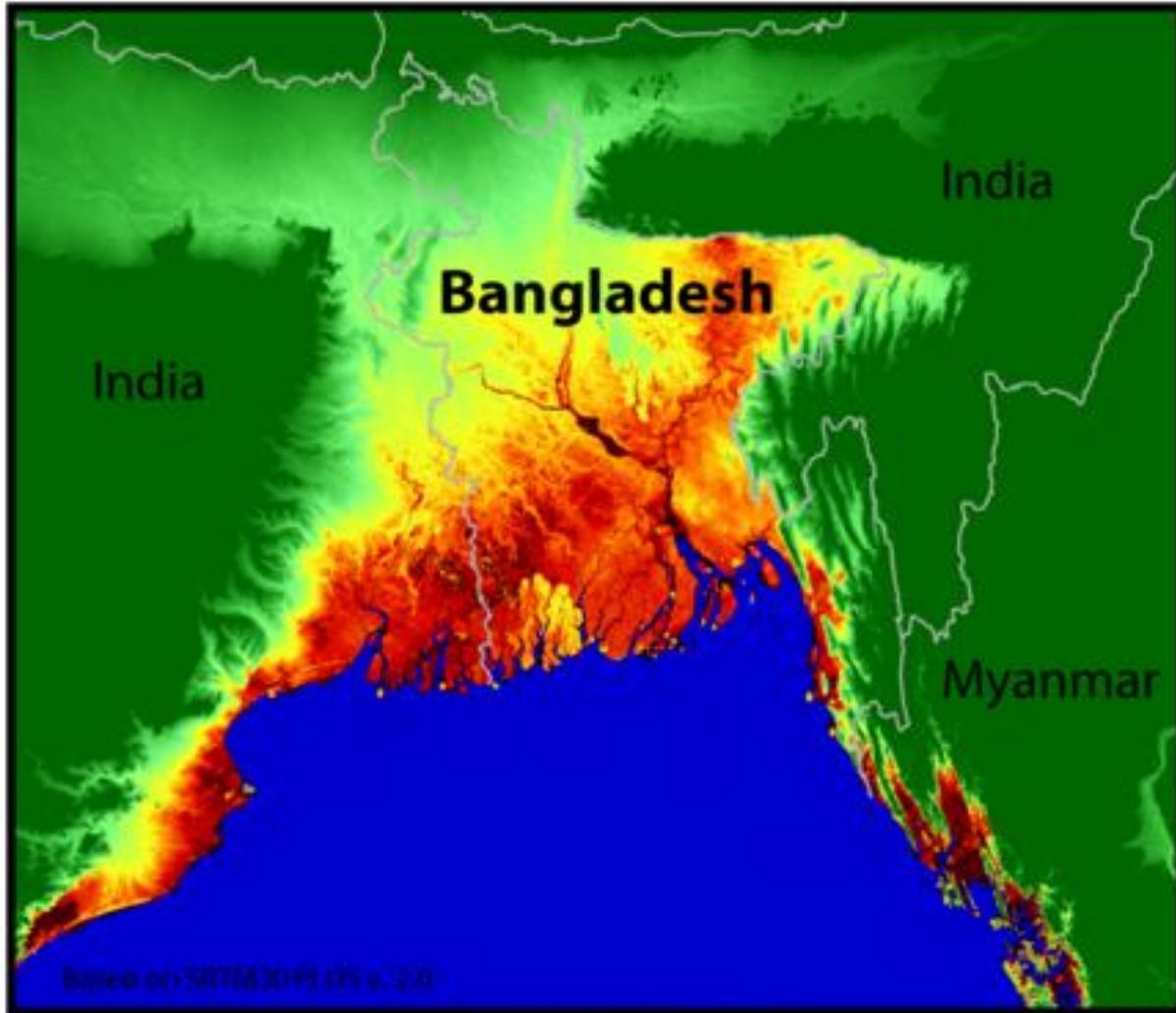
What Happens When a Country Drowns?

Have we the moral right to acquiesce in the destruction of a nation's homeland?



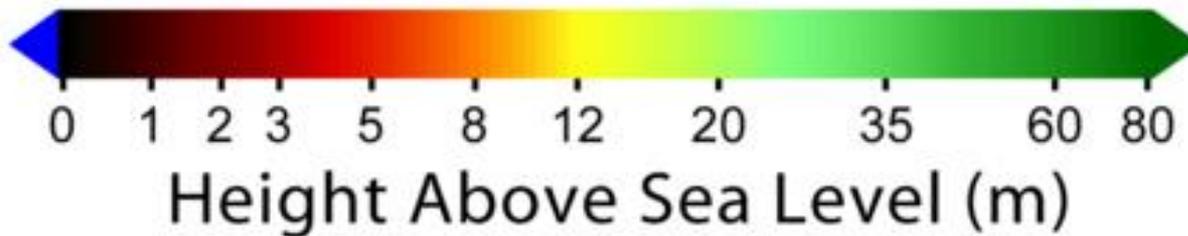


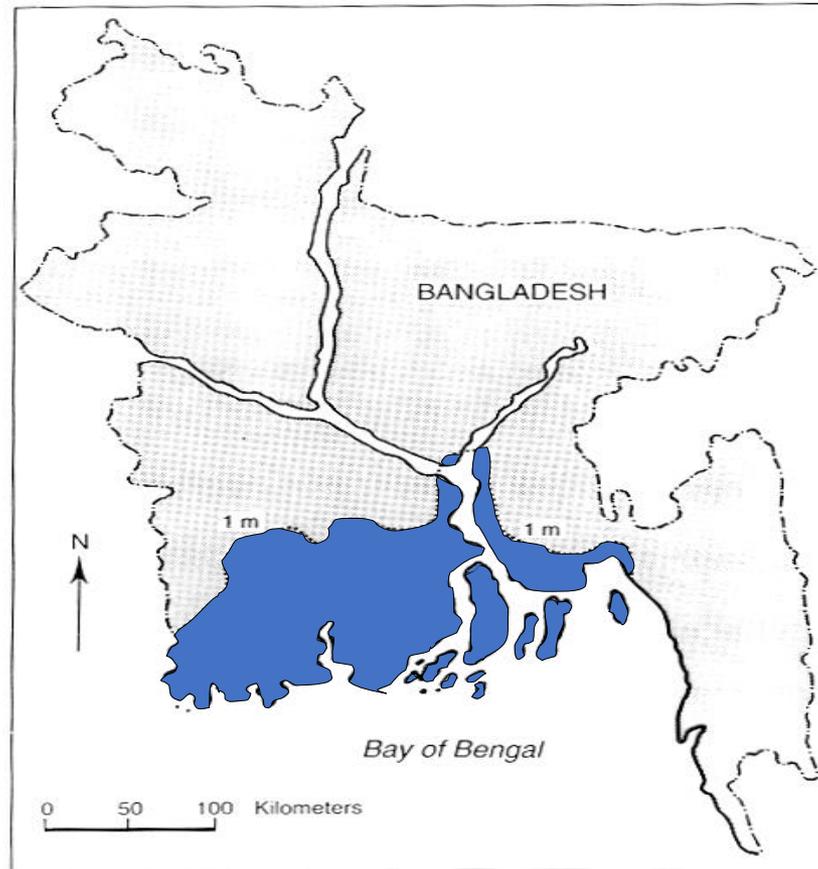
# Sea Level Risks - Bangladesh



6M

160M





Land at risk in Bangladesh due to a 1m rise in sea level (after Huq *et al.* 1995).



Severe erosion, Bhola Island Bangladesh © 2008

# Glaciers and ice sheets are melting faster

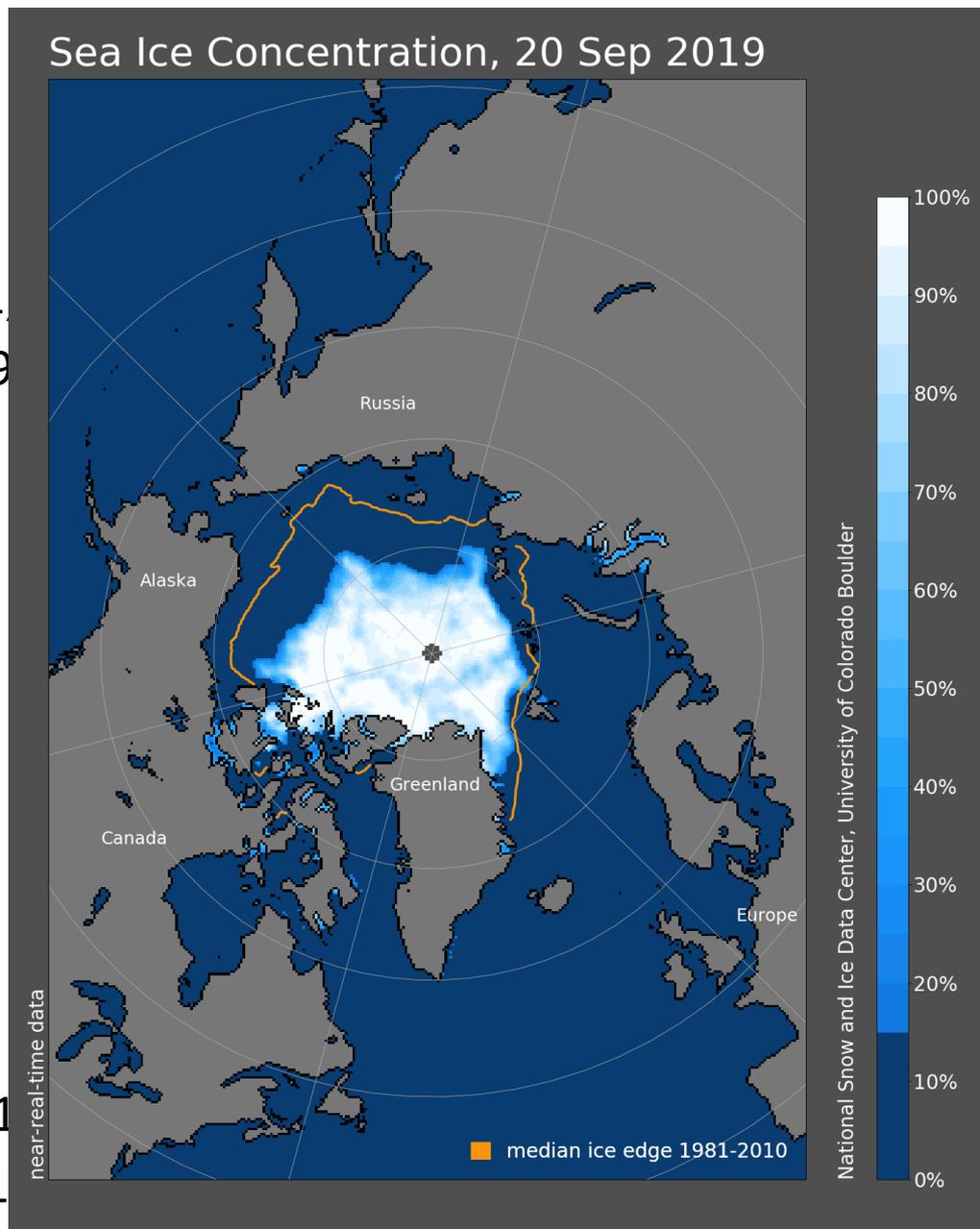
- Greenland is melting much more quickly in recent years.

Average losses: 34 Gt/year 1992-2001  
215 Gt/year 1993-2009

- Arctic sea ice cover has decreased by 4% per decade since 1979. Mean winter sea ice thickness has halved.

- The Antarctic ice sheet is now indisputably losing mass.

Average losses: 30 Gt/year 1992-2001  
147 Gt/year 2002-2011





Rear-Admiral Sir John Franklin



Sir John Franklin, FRGS (16 April 1786 – 11 June 1847) was a British Royal Navy officer and Arctic explorer who mapped almost two thirds of the northern coastline of North America. In his last expedition, he disappeared while attempting to chart and navigate a section of the Northwest Passage. The entire crew of 129 perished from starvation, hypothermia, tuberculosis, lead poisoning, scurvy and exposure and the expedition's icebound ships were abandoned in desperation. Blade cut marks on the bones of some of the crew found on King William Island strongly suggested that conditions had become so dire that some crew members resorted to cannibalism

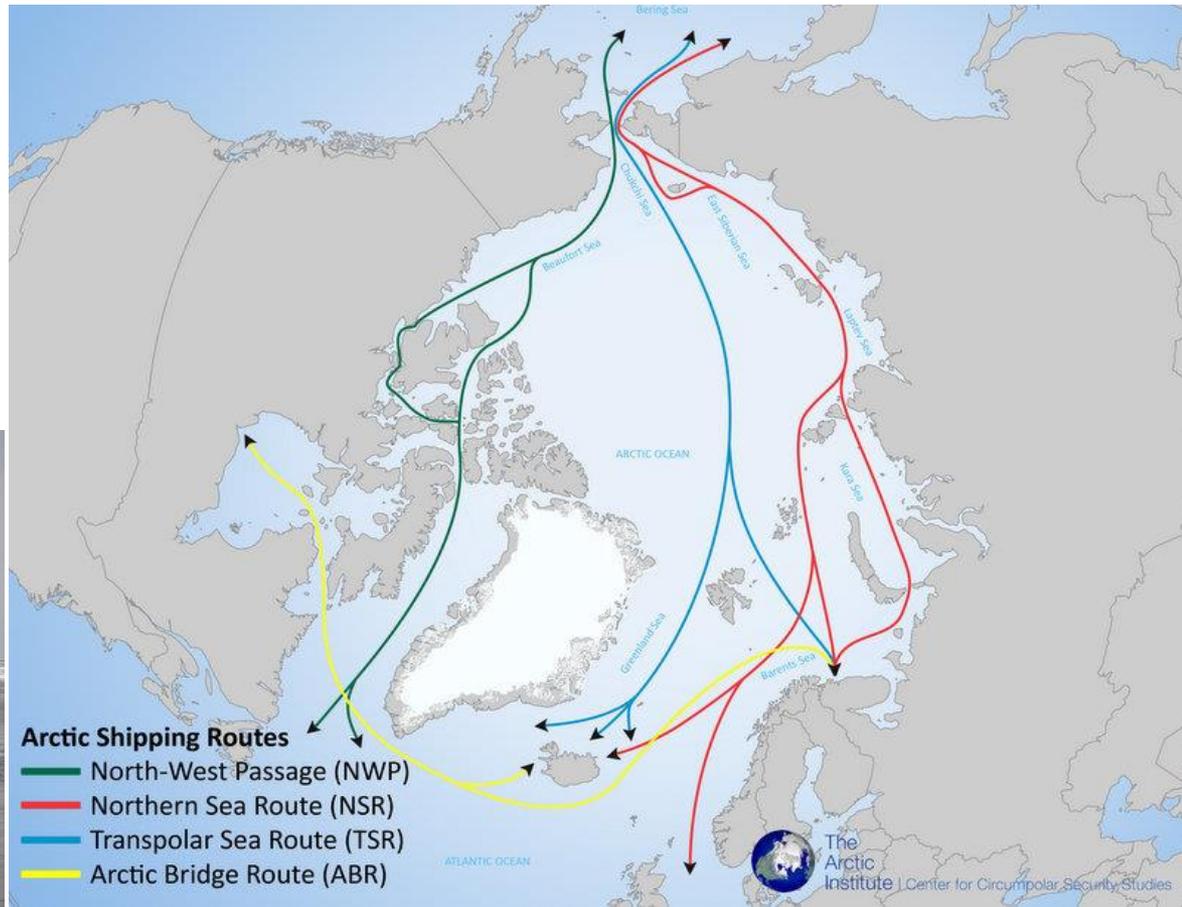


TO THE GREAT ARCTIC NAVIGATOR  
AND HIS BRAVE COMPANIONS  
WHO SACRIFICED THEIR LIVES IN COMPLETING  
THE DISCOVERY OF THE NORTH WEST PASSAGE  
A. D. 1847.8.  
ERECTED BY THE UNANIMOUS VOTE OF PARLIAMENT



Last year the number of vessels crossing waters governed by the international Polar Code—a set of strict safety and environmental rules—was 879, nearly 60 percent higher than in 2012. Vessel typically completed the westbound voyage in only six days. 85% of vessels on the Northern Sea Route are carrying gas or oil, and 80 percent were high-capacity tankers

Tschudi, a Norwegian shipping company, has bought and revived an idled iron ore mine in the north of Norway to ship ore to China through the Northeast Passage. The voyage to Lianyungang in China took 21 days in 2010, compared with the 37 days typically required to sail to China through the Suez. Tschudi executives estimate they save \$300,000 a trip.

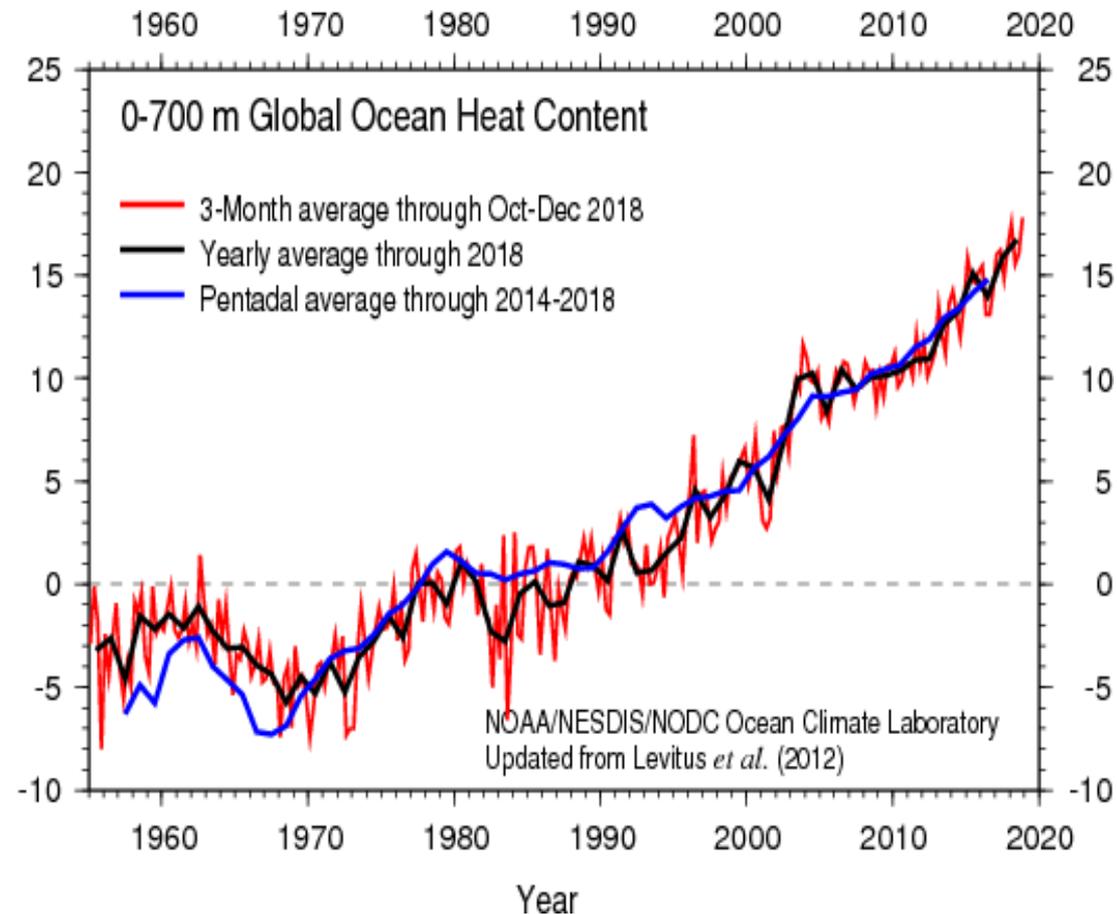
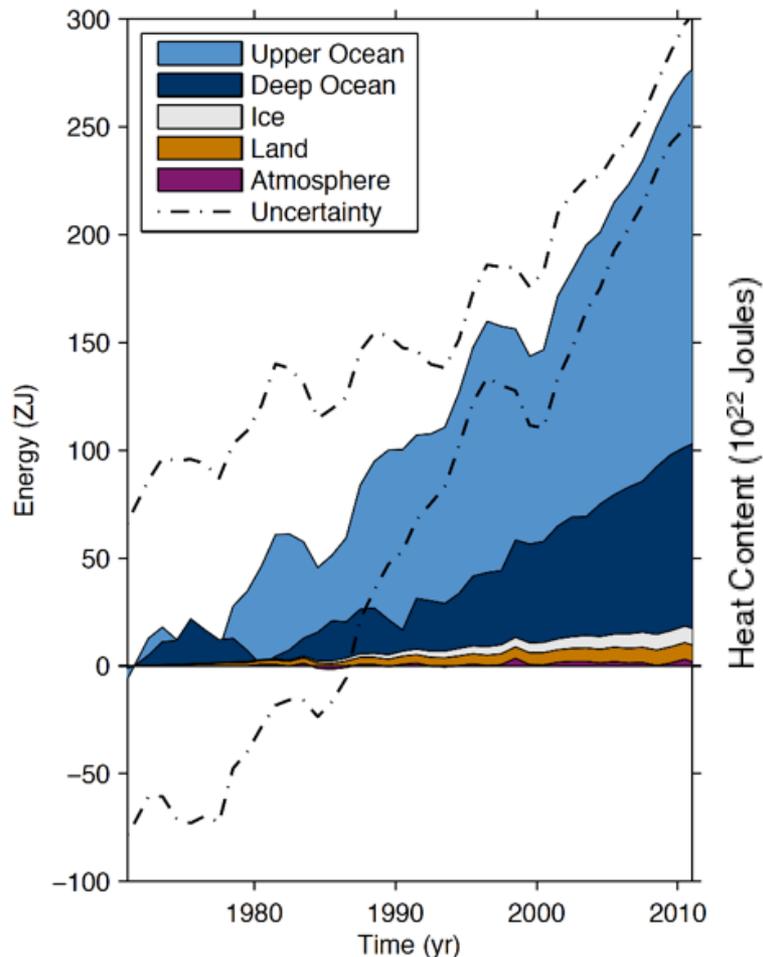


# What has the science been saying since AR5?

- Improved Modelling
- Climate Change Attribution Advances
- Increased awareness of probably higher climate sensitivity estimates
- Indications of greater variability in the polar jetstream

# Continued Uptake of Anthropogenic Heat by the Ocean

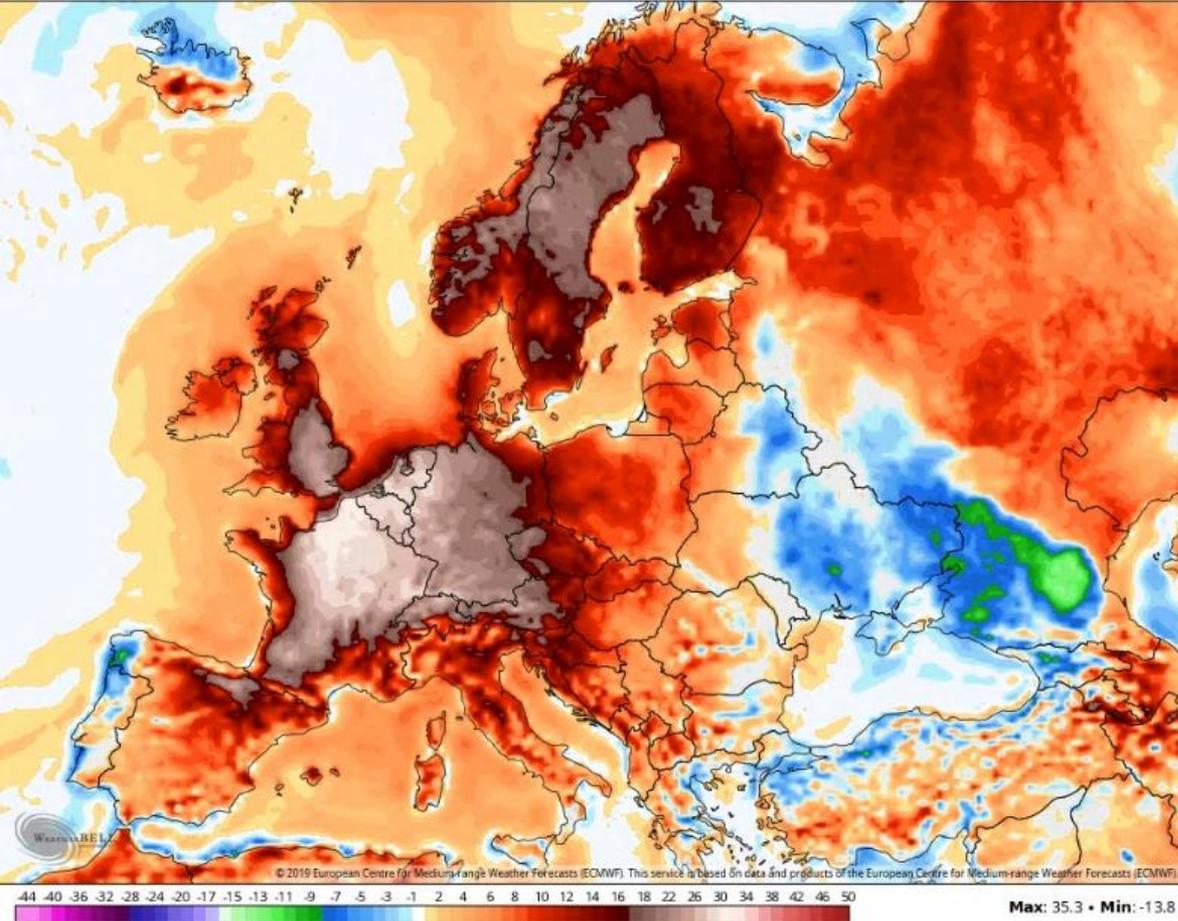
Warming of the ocean accounts for about 93% of the increase in the Earth's energy inventory between 1971 and 2010 (high confidence), with warming of the upper (0 to 700 m) ocean accounting for about 64% of the total. (IPCC, AR5)



# Attribution of Extreme Events to Climate Change

- 43 research papers looking at links between climate change and extreme weather events, of which 32 found that climate change made the events more likely or more intense.
- 75% of all papers over the past 3 years and 100% of those that looked at heatwaves found positive links with climate change
- Pace of investigation and rate of positive link discoveries is accelerating

The old argument that you can't link climate change to a particular extreme event is no longer tenable



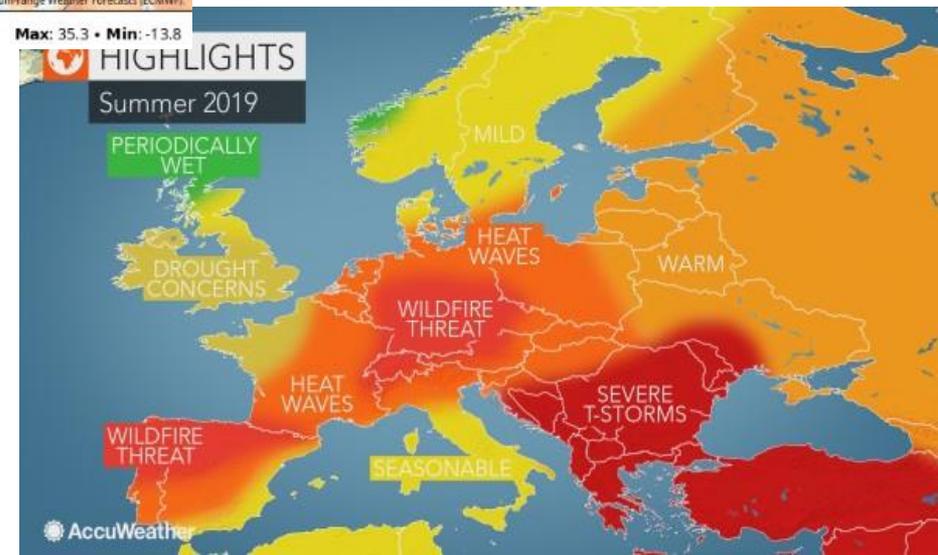
Combining information from models and observations, we find that such heatwaves in France and the Netherlands would have had return periods that are about a hundred times higher (at least 10 times) without climate change.

Over France and the Netherlands, such temperatures would have had extremely little chance to occur without human influence on climate (return periods higher than ~1000 years).

In July 2019, France experienced its second heat wave in less than a month, beating several regional and national temperature records. A national record temperature of 46.1 °C was measured in the southern commune of Gallargues-le-Montueux in the June event..

World Weather Attribution is a partnership of:

- Environmental Change Institute, University of Oxford (ECI)
- Royal Netherlands Meteorological Institute (KNMI)
- Laboratoire des Sciences du Climat et de l'Environnement (LSCE)
- University of Princeton
- National Center for Atmospheric Research (NCAR)
- Red Cross Red Crescent Climate Centre (The Climate Centre).



# In Search of Cooler Climes!

## With 1.5°C Warming

40% of the cities become annually heat stressed

Lagos enters heat stress analogous to Delhi today

Shanghai enters heat stress analogous to Karachi today

## With 2.7°C Warming

Tokyo becomes annually heat stressed

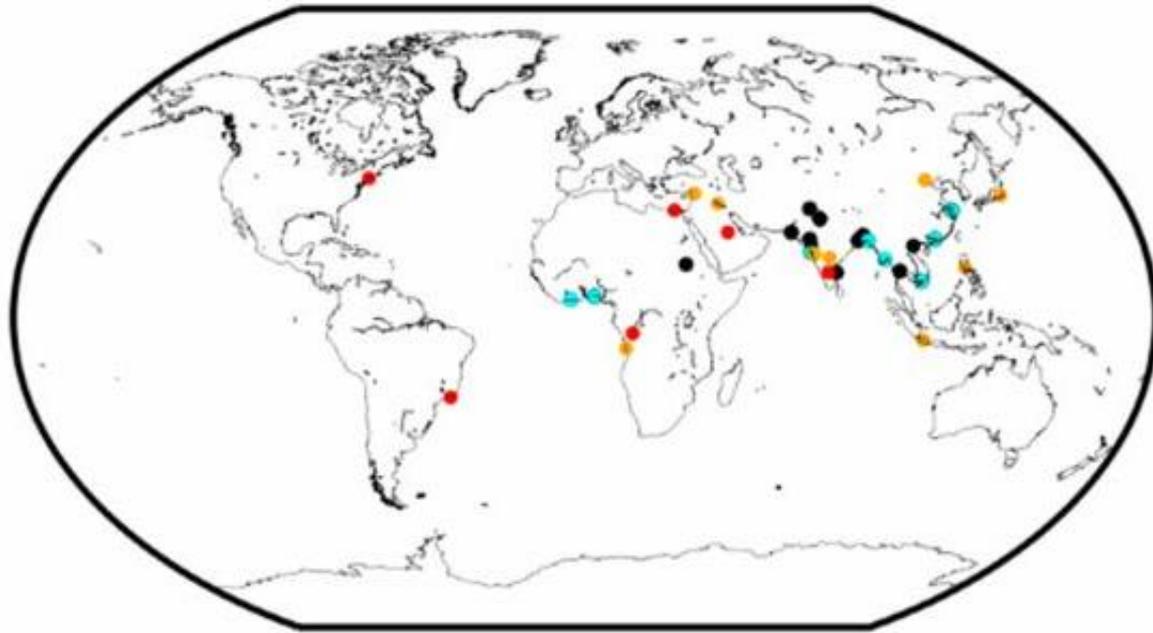
Beijing becomes annually heat stressed

## With 4°C Warming

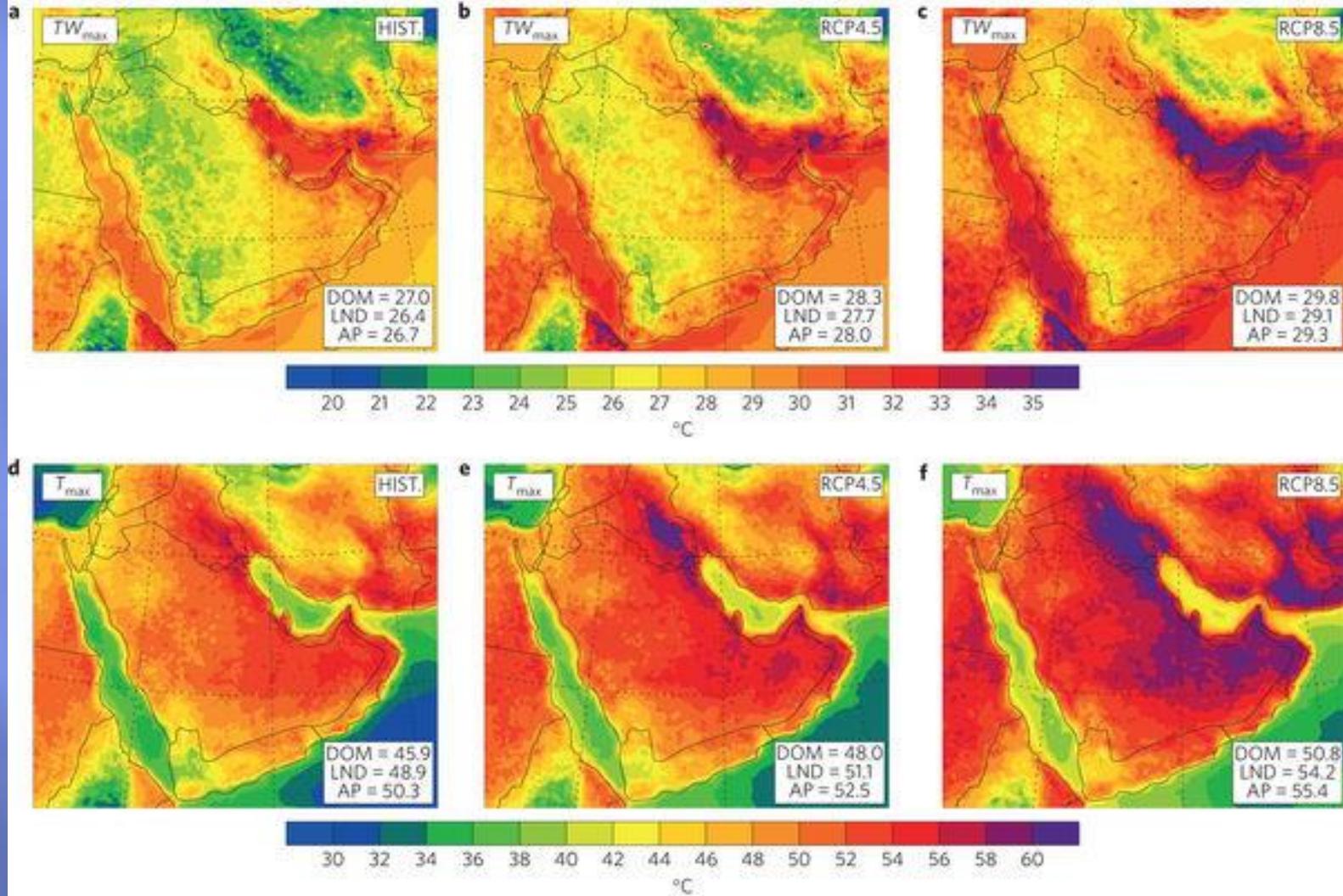
80% of the cities become annually heat stressed

New York becomes annually heat stressed

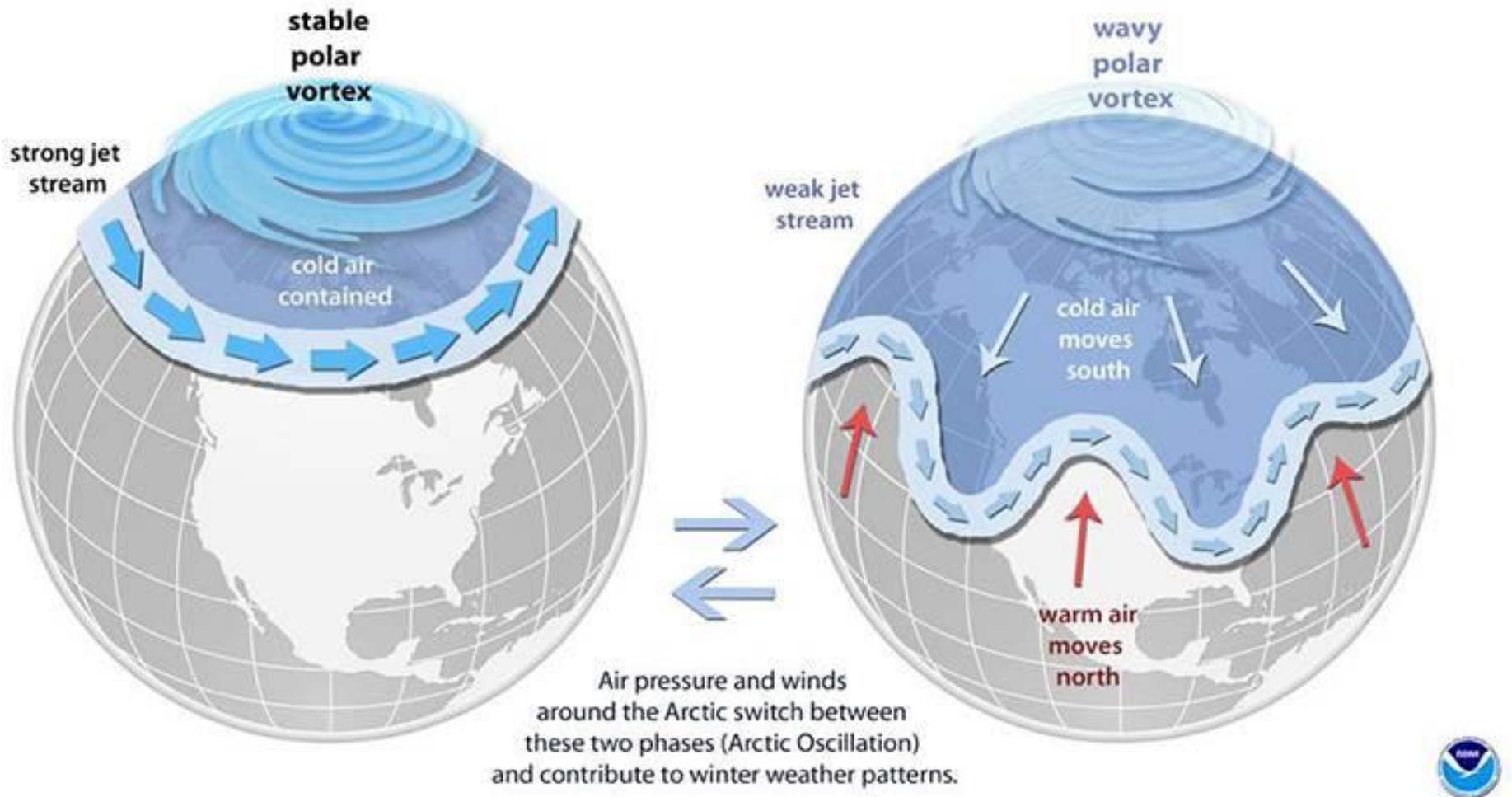
Rio de Janeiro becomes annually heat stressed



Global warming and deadly heat  
Tom K. R. Matthews, Robert L. Wilby, Conor  
Murphy  
Proceedings of the National Academy of  
Sciences Mar 2017, 201617526; DOI:  
10.1073/pnas.1617526114

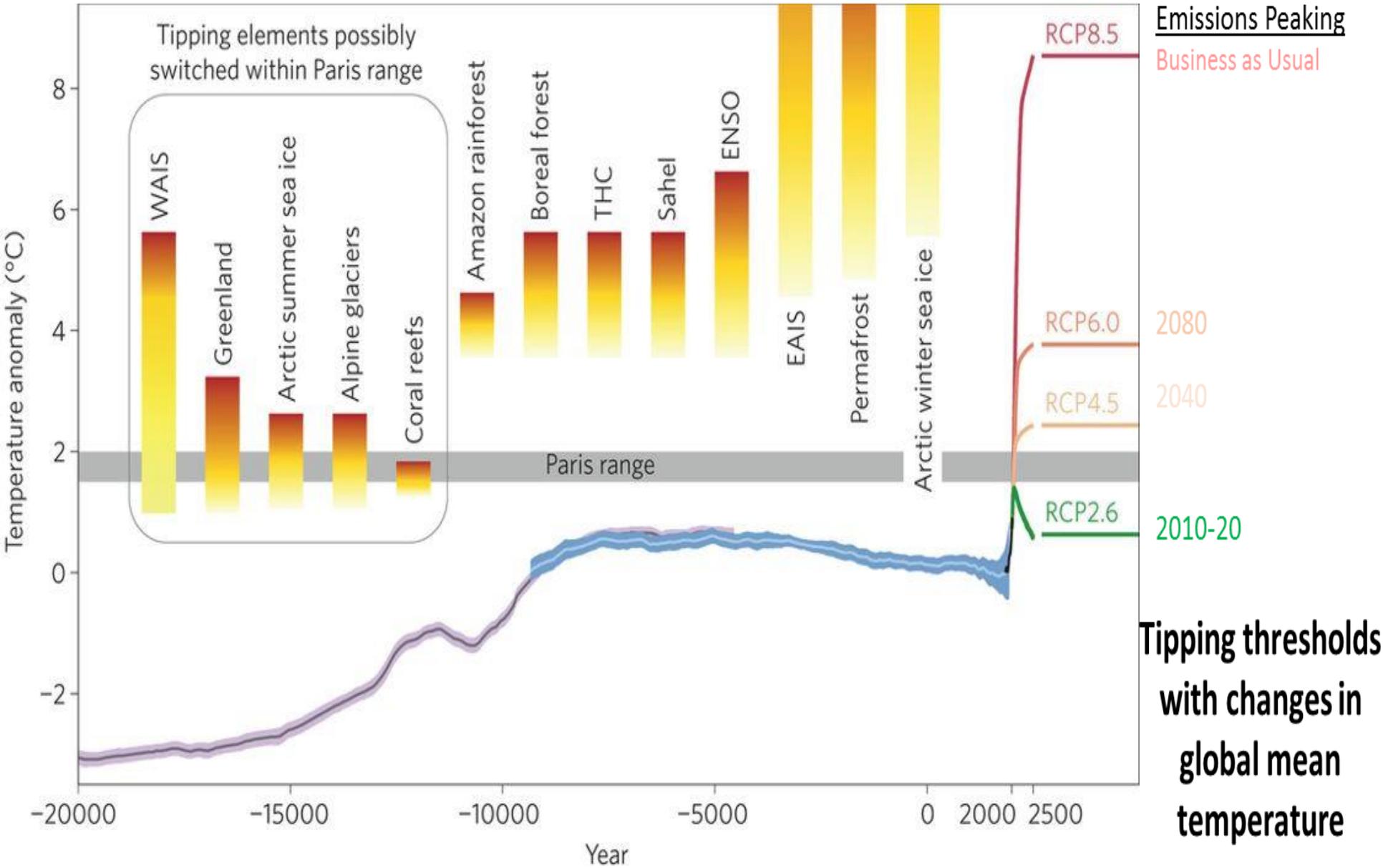


Ensemble average of the 30-year maximum Wet bulb ( $TW_{max}$ ) (a–c) and Dry bulb (d–f) ( $T_{max}$ ) temperatures for each GHG scenario. Averages for the domain excluding the buffer zone (DOM), land excluding the buffer zone (LND) and the Arabian Peninsula (AP) are indicated in each plot.  $TW_{max}$  and  $T_{max}$  are the maximum daily values averaged over a 6-h window.



The Jetstream has weakened since the 1960s and meanders more, giving anomalous weather events.

Is the warming of the Arctic (due to changes in sea ice) reducing the temperature gradient that drives the Jetstream.



WAIS: West Antarctic Ice Sheet    THC: Thermo-Haline Circulation    ENSO: El Niño Southern Oscillation    EAIS: East Antarctic Ice Sheet

Source: Schellnhuber, Rahmstorf and Winkelmann (2016)

# Selected Significant Climate Anomalies and Events: January 2020

## GLOBAL AVERAGE TEMPERATURE

January 2020 average global land and ocean temperature was the highest for January since records began in 1880.

### ALASKA

January 2020 was Alaska's coldest January since 2012 and tied with 1970 as the 13th coldest on record.

### CONTIGUOUS UNITED STATES

The contiguous U.S. had its fifth warmest January on record. No state ranked average or below average for January.

### HAWAIIAN REGION

The Hawaiian region temperature departure from average for January 2020 was the second highest for January on record.

### SOUTH AMERICA

South America had its second highest January temperature departure from average on record.

### ARCTIC SEA ICE EXTENT

January 2020 Arctic sea ice extent was 5.3 percent below the 1981–2010 average—tying with 2014 as the eighth smallest January sea ice extent since satellite records began in 1979.

### EUROPE

Europe had its second warmest January on record, behind 2007. Several European countries had a top 5 warm January.

### ASIA

Much of Russia had temperature departures that were at least  $+5.0^{\circ}\text{C}$  ( $+9.0^{\circ}\text{F}$ ) or higher. Overall, this was Asia's second warmest January on record.

### CARIBBEAN REGION

January 2020 was the Caribbean's second warmest January on record.

### AUSTRALIA

Australia had its third warmest January on record. Regionally, Queensland had its second warmest January on record, while New South Wales had its fifth warmest January.

### ANTARCTIC SEA ICE EXTENT

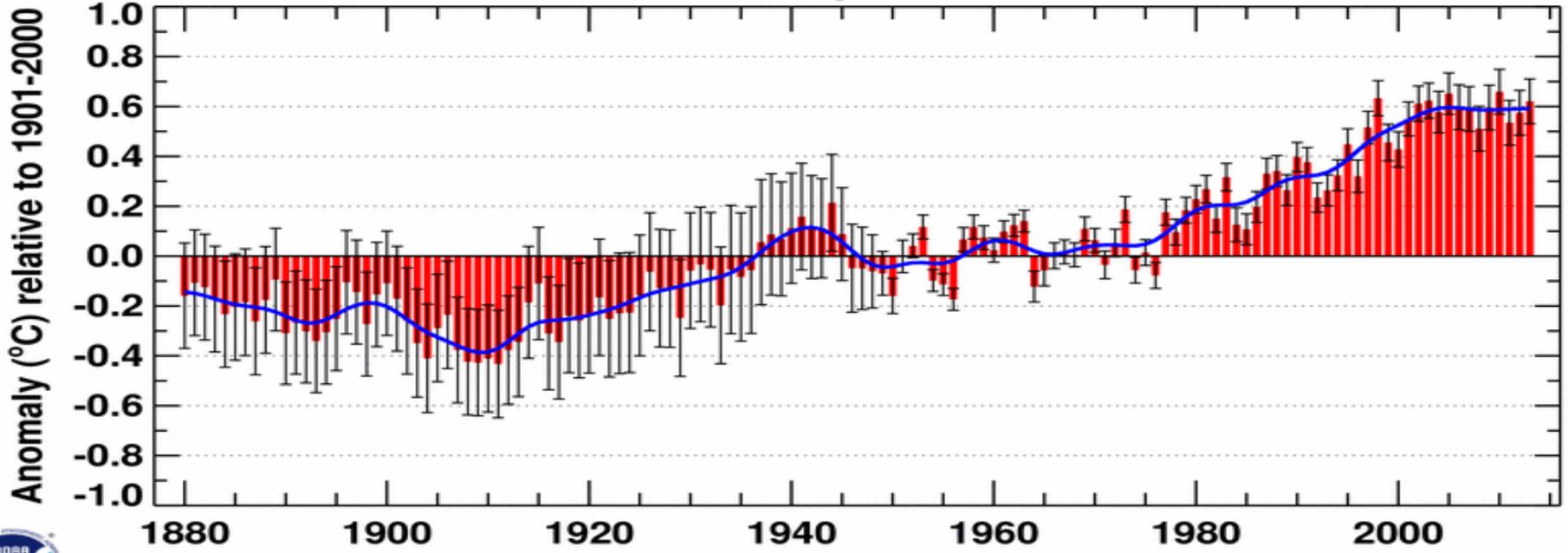
January 2020 Antarctic sea ice extent was 9.8 percent below the 1981–2010 average—tying with 2011 as the tenth smallest January sea ice extent on record.

Please note: Material provided in this map was compiled from NOAA's State of the Climate Reports. For more information please visit: <http://www.noaa.gov/state-of-climate>



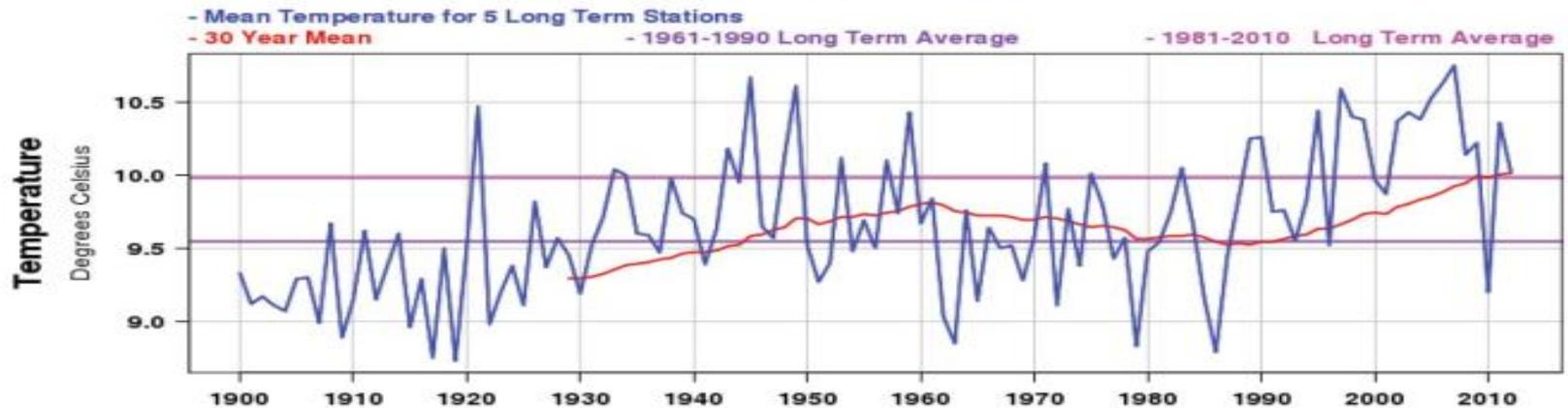
# As a mid latitude country Ireland can expect to mirror global average temperature trends

## Jan-Dec Global Mean Temperature over Land & Ocean



NCDC/NESDIS/NOAA

## Ireland Mean Temperature 1900-2012



# All of Ireland is now 0.5°C warmer on average than 30 years ago

## 1961-90 and 1981-2010 averages for Temperature: Dublin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
<a href="#">Casement Aerodrome</a>													
Mean Temperature 1981-2010	5.1	5.1	6.8	8.2	10.9	13.6	15.7	15.4	13.3	10.3	7.2	5.4	9.7
Mean Temperature 1961-1990	4.9	4.6	6.0	7.5	10.1	13.1	15.2	14.8	12.6	10.1	6.7	5.6	9.3

## 1961-90 and 1981-2010 averages for Temperature: Cork

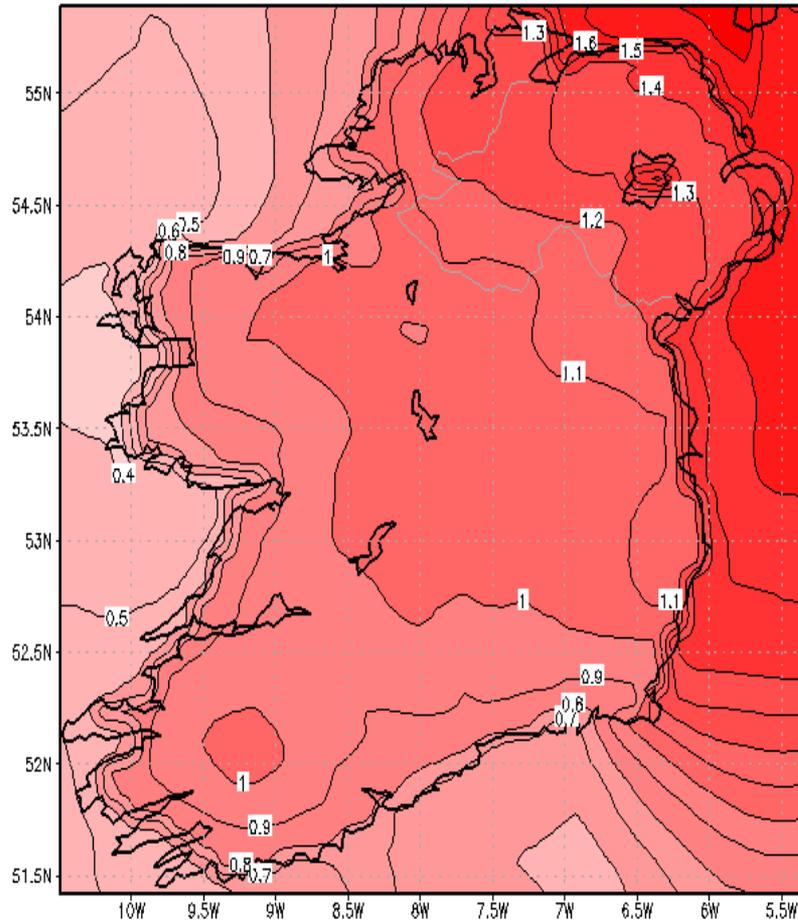
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
<a href="#">Cork Airport</a>													
Mean Temperature 1981-2010	5.6	5.7	6.9	8.4	10.9	13.5	15.3	15.2	13.3	10.5	7.8	6.1	9.9
Mean Temperature 1961-1990	5.1	5.0	6.2	7.7	10.2	12.9	14.8	14.5	12.7	10.3	7.2	6.1	9.4

## 1961-90 and 1981-2010 averages for Temperature: Donegal

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
<a href="#">Malin Head</a>													
Mean Temperature 1981-2010	5.9	5.8	6.9	8.3	10.5	12.7	14.5	14.7	13.3	10.8	8.2	6.4	9.8
Mean Temperature 1961-1990	5.4	5.2	6.2	7.6	9.9	12.3	13.8	14	12.7	10.7	7.5	6.3	9.3

# Regional Climate Model Projected Temperature Changes from 1961-90 to 2021-50

DJF 21-50 WRFmax-temp anomaly in (°C) from 61-90

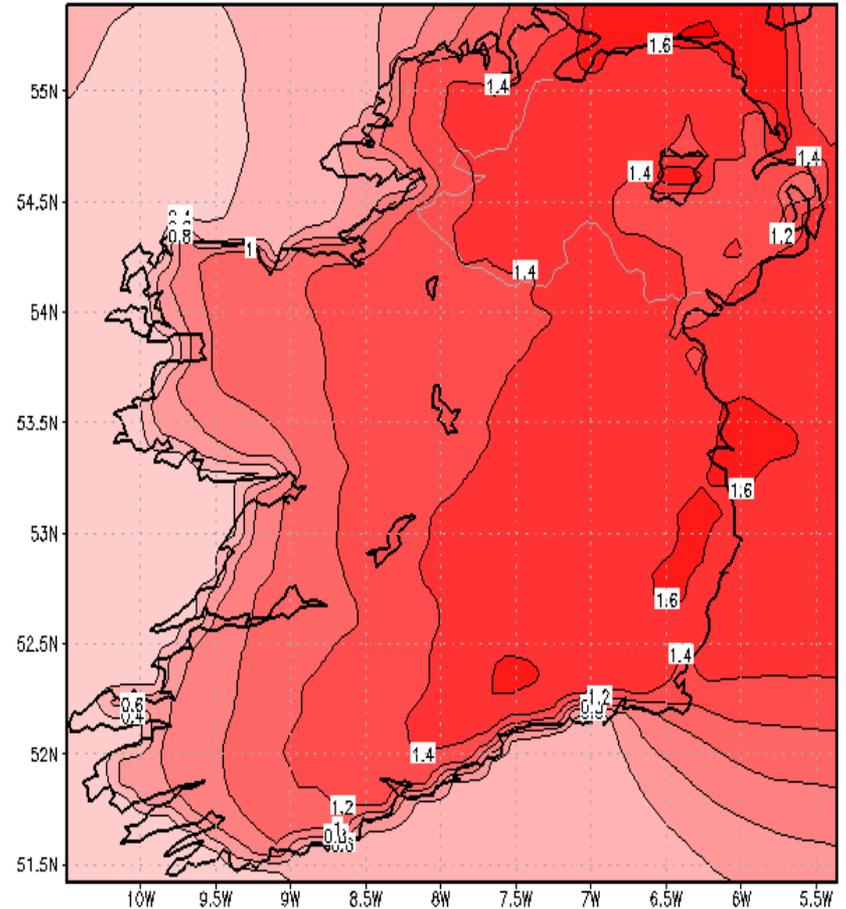


GCM: EC-Earth

RCP8.5

RCM: WRF

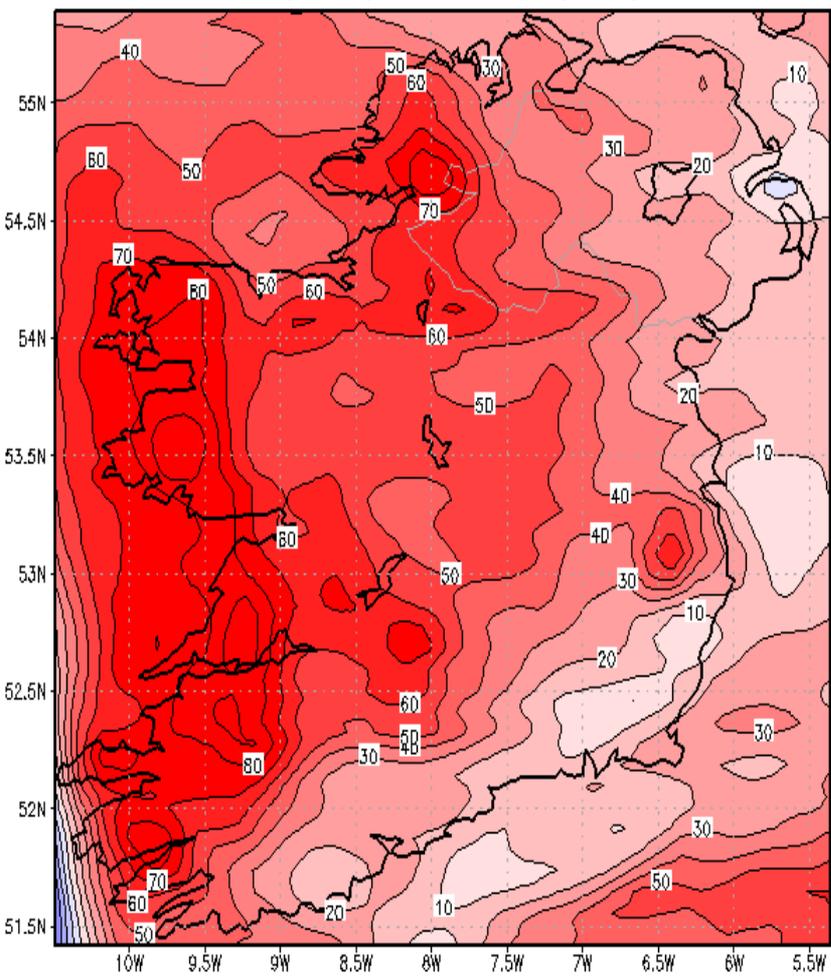
JJA 21-50 WRFmax-temp anomaly in (°C) from 61-90



(ICARUS, Maynooth University)

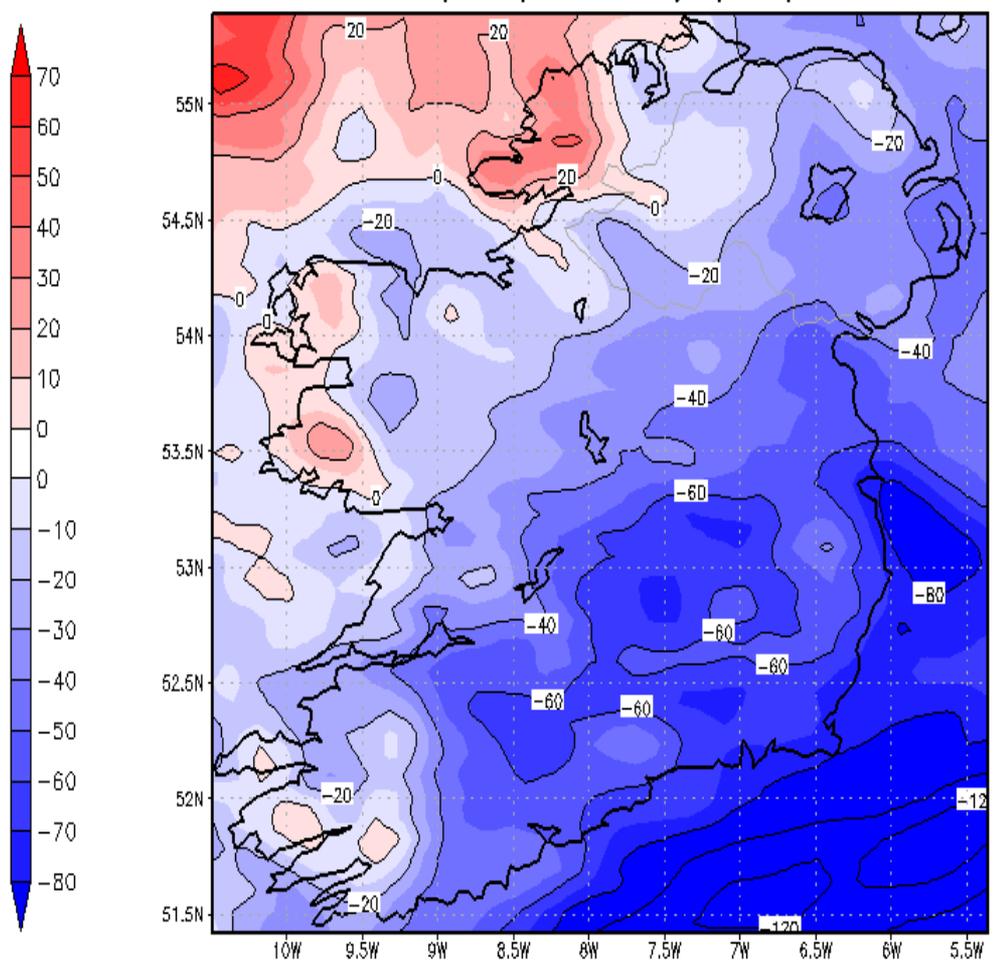
# Regional Climate Model: Projected Rainfall Changes from 1961-90 to 2021-50

DJF 21-50 WRFprecip anomaly (mm) from 61-90



GCM: EC-Earth RCP8.5 RCM: WRF

JJA 21-50 WRFprecip anomaly (mm) from 61-90



(ICARUS, Maynooth University)

# Winter 2013/14



**Stormiest Winter on Record and at least for 143 years**

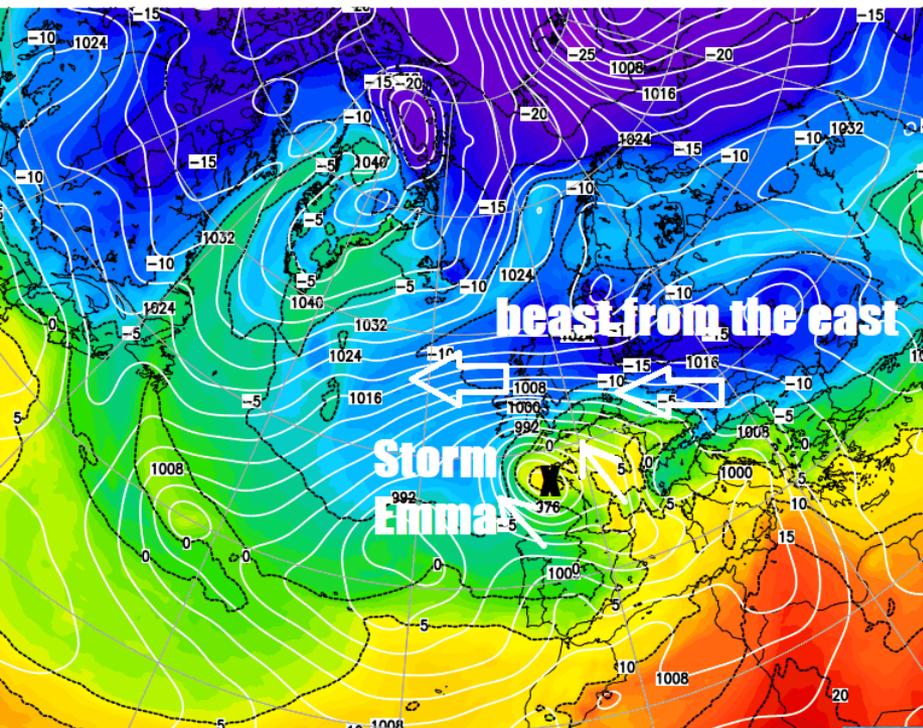
Winter 2015/16

Wettest Winter on Record over half of Ireland

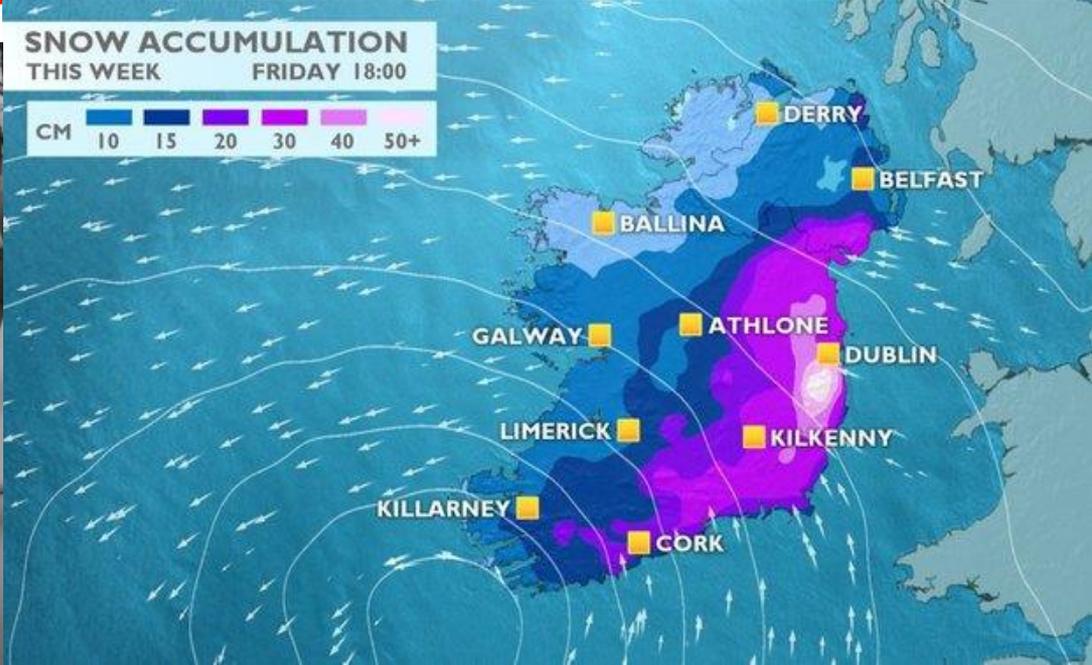


Highest Daily Flow Recorded on the River Moy – December 2015



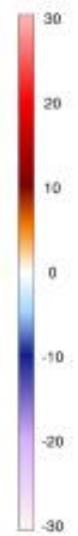
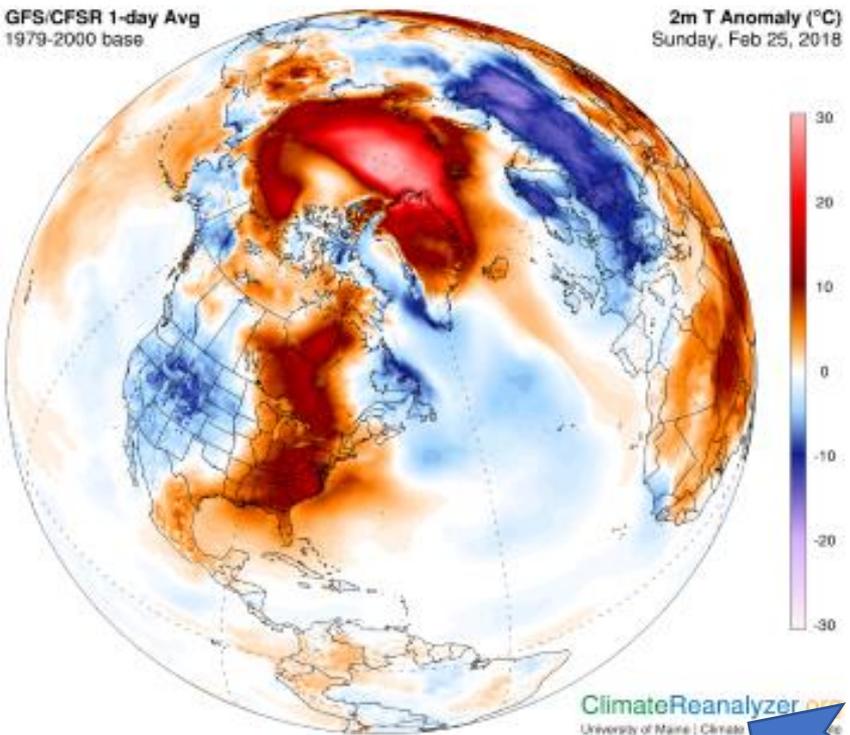


(c)2018 www.netweather.tv



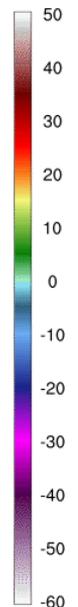
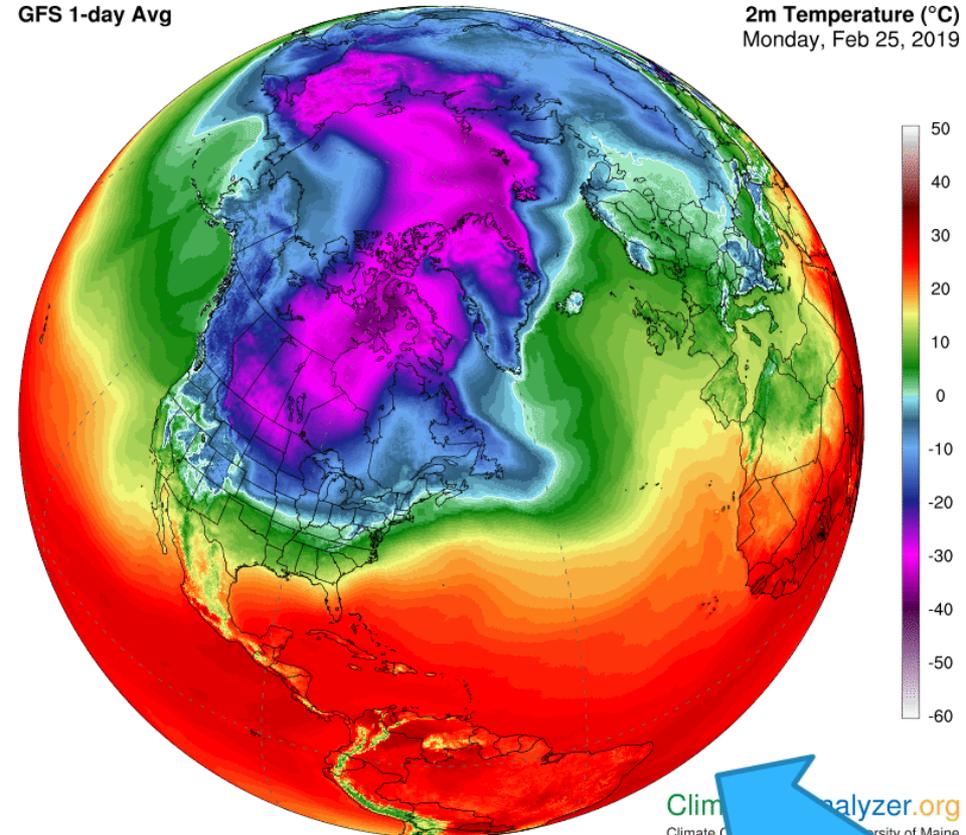
GFS/CFSR 1-day Avg  
1979-2000 base

2m T Anomaly (°C)  
Sunday, Feb 25, 2018



GFS 1-day Avg

2m Temperature (°C)  
Monday, Feb 25, 2019



World +0.6 °C  
Northern Hemisphere +1.1 °C  
Arctic +5.8 °C  
Tropics +0.2 °C  
Southern Hemisphere +0.2 °C  
Antarctic +0.2 °C

ClimateReanalyzer.org  
University of Maine | Climate



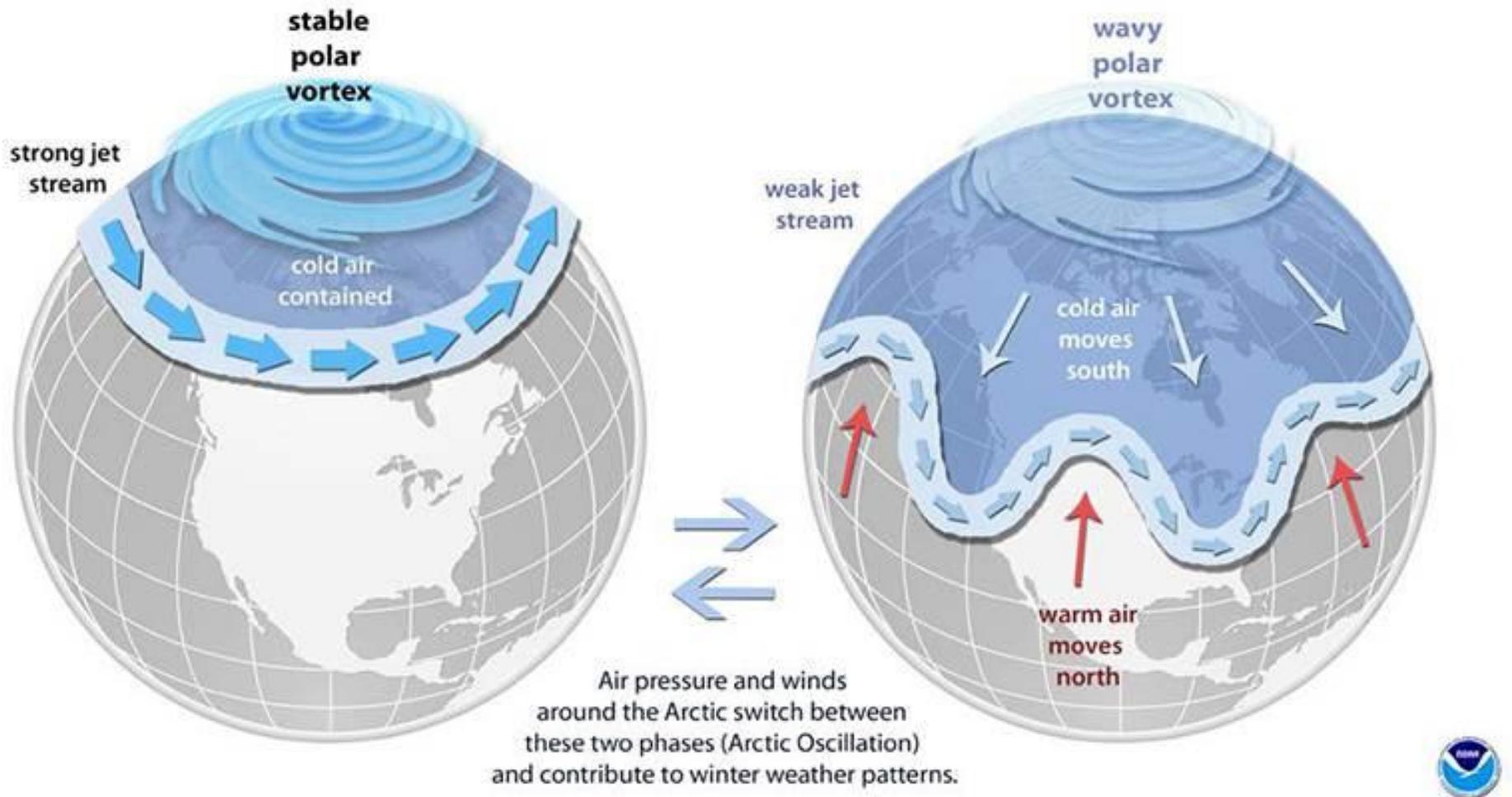
ClimateReanalyzer.org  
University of Maine



North Pole above freezing and abnormal warmth in the Arctic in February/March 2018

Snow in the Sahara Desert in January 2018

Abnormal cold in North America and abnormal warmth in western Europe February 2019



The Jetstream has weakened since the 1960s and meanders more, giving anomalous weather events.

Is the warming of the Arctic (due to changes in sea ice) reducing the temperature gradient that drives the Jetstream.

# Threatened Landscapes of Ireland



Bogs



Salt Marsh



Machair



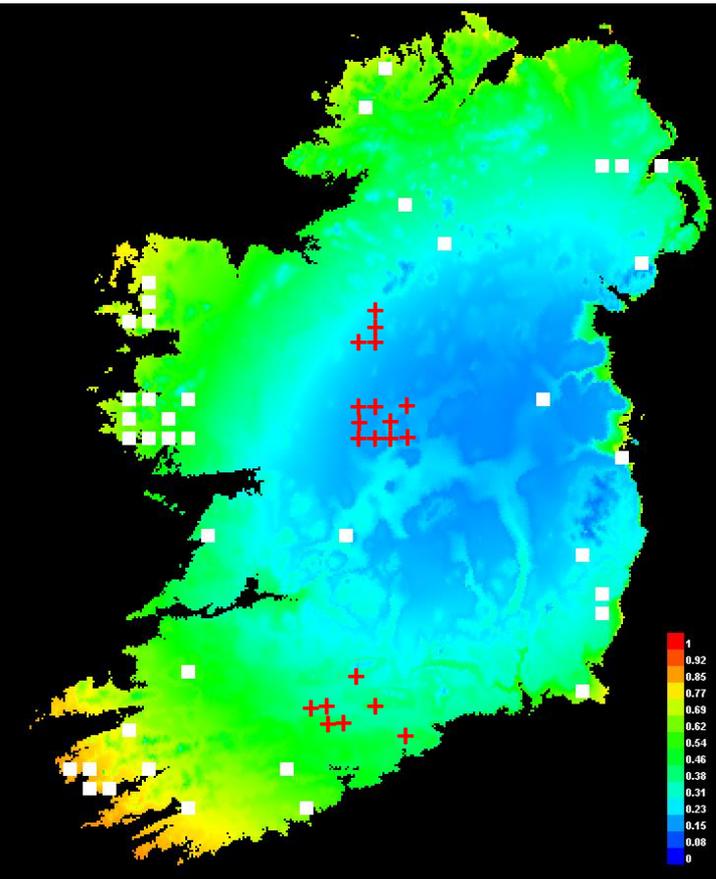
Montane habitats

# Some vulnerable species in Ireland



Predicted areas of climatic suitability

*Gunnera tinctoria* (Giant rhubarb)



Gunnera on Achill

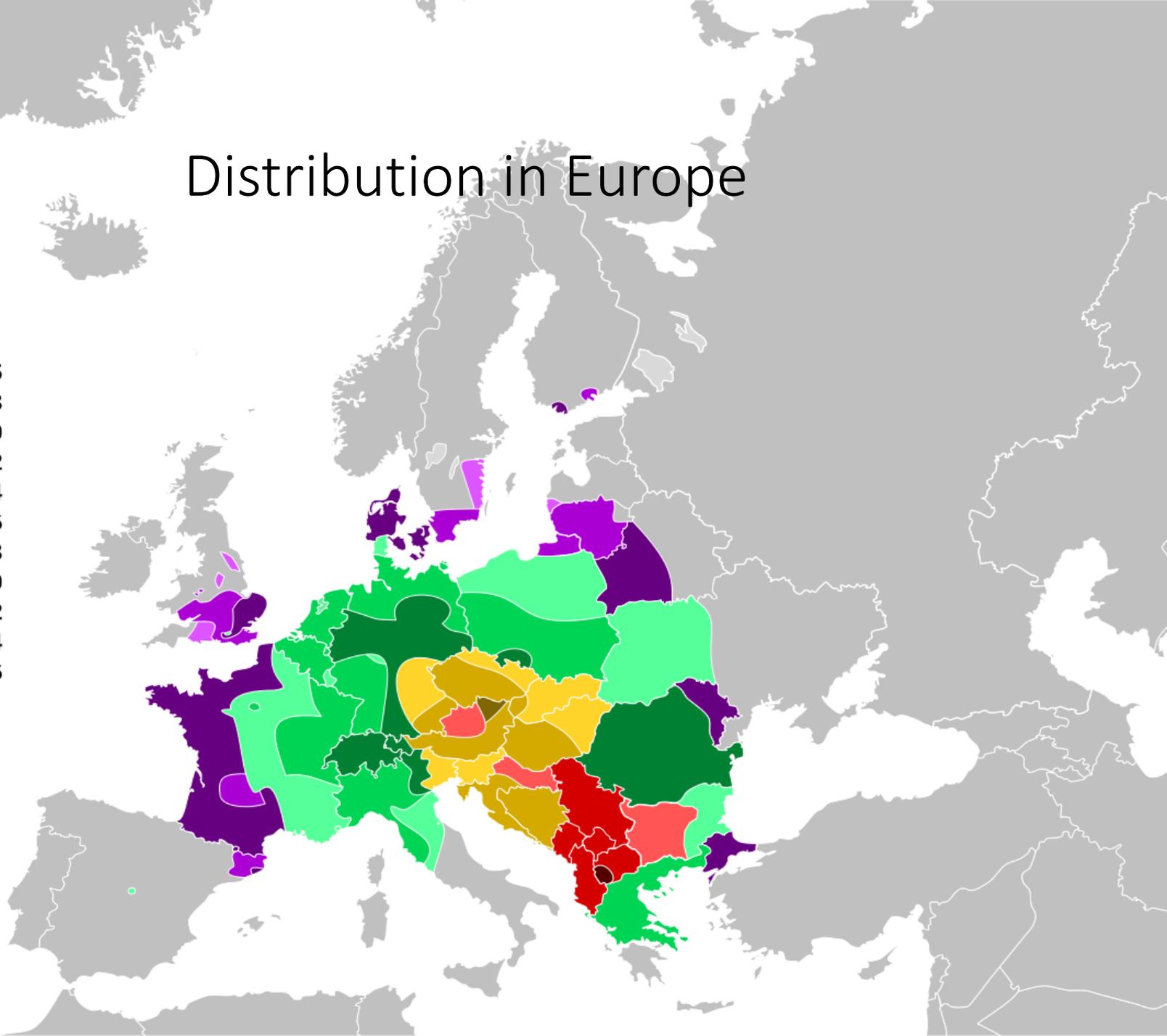
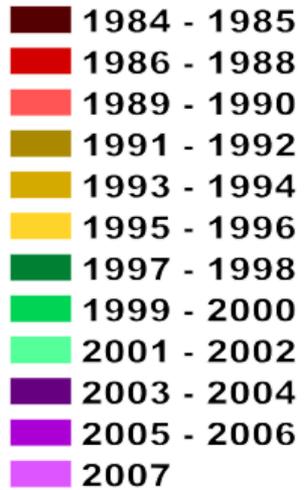
Source: National Botanic Gardens

Imminent Arrivals e.g. Horse Chestnut Leaf Miner  
*Cameraria Ohridella*



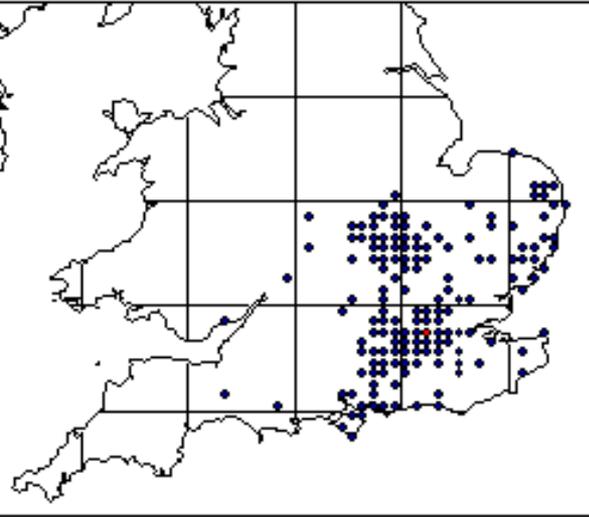
- > Premature defoliation
- > In severe cases leaves start falling in July.
- > The larvae of the last generation hibernate in the leaves
- > Eradication success rate 2%

# Distribution in Europe

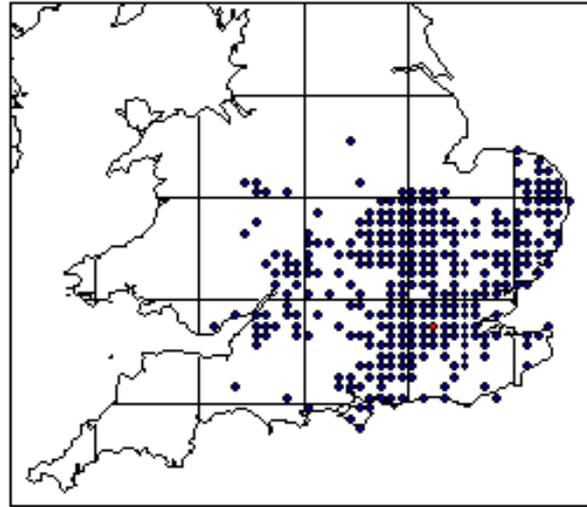


# Rapid Spread across England and Wales

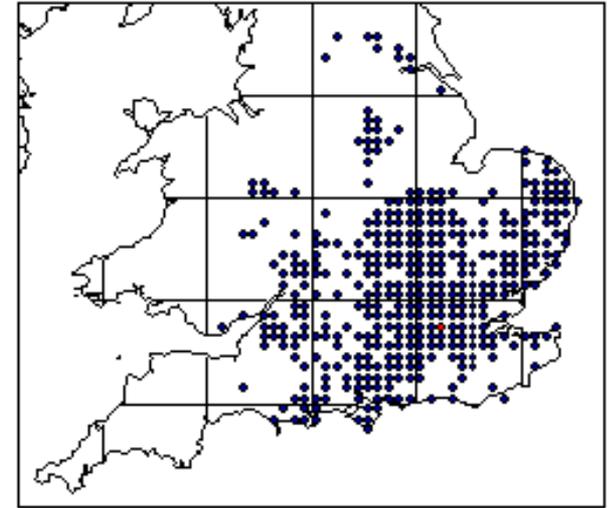
2005



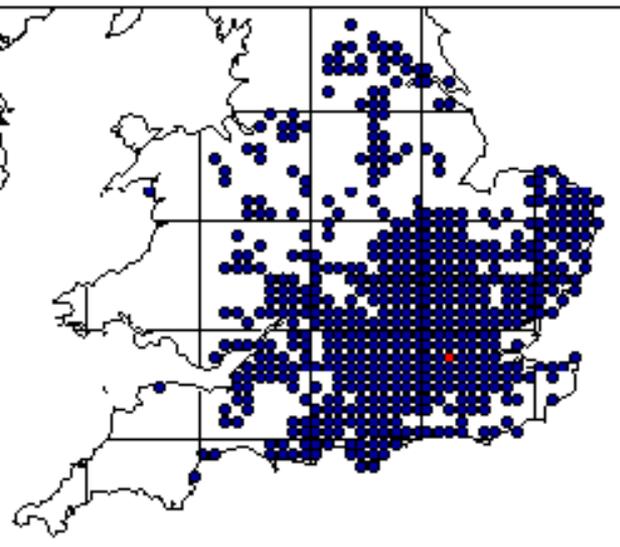
2006



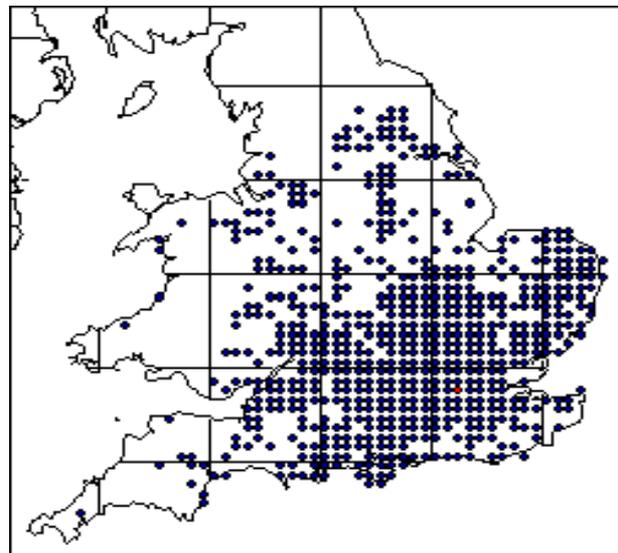
2007



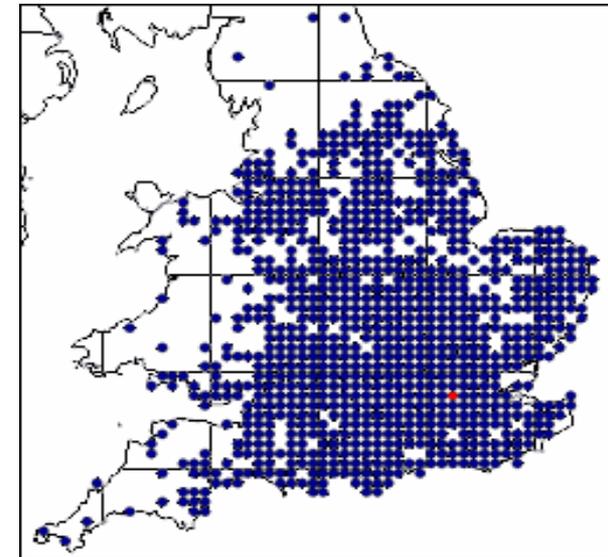
2008



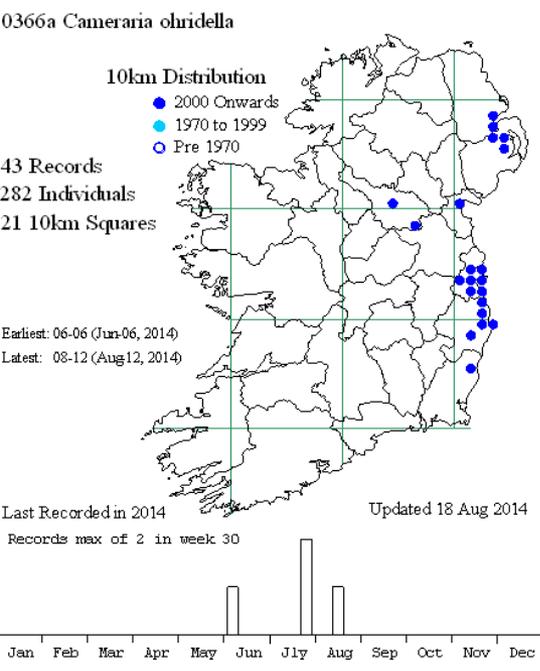
2009



2010



# Horse Chestnut Leaf Miner arrived in Ireland in 2014



**We are the last generation that can fight climate change. We have a duty to act.**

**“Today one cannot be a leader on hunger without also being a leader in climate change.”**

**(Ban Ki-moon Dublin, May 2015)**



# Paris COP21



## Jordan's INDC Summary

Jordan nationally determines to reduce its greenhouse gas emissions by a bulk of 14 % until 2030. This contribution of GHGs reduction will be unconditionally fulfilled at, maximally, 1.5 % by the Country's own means compared to a business as usual scenario level.

However, Jordan, conditionally and subject to availability of international financial aid and support to means of implementation, commits to reduce its GHGs emissions by additional, at least, 12.5 % by 2030.

The outcome targets above are accompanied by a diverse combination of numerous GHGs cut-oriented actions in all involved sectors of emissions in addition to the adaptation actions in targeted sectors. These actions (policies, strategies, legislations, measures, etc) are articulated in this document. The methodological approaches underlying Jordan's INDC are included in this communication as well.

The Paris Agreement does not enter into force until 2020

Nationally Determined Contributions (NDCs) are not unconditional and the common 'rule book' was not completely finalised at COP24 in December 2018

Table 1: The State of Palestine's conditional mitigation contribution

Independence	Status quo
24.4% by 2040 relative to business-as-usual	12.8% by 2040 relative to business-as-usual

Until independence is achieved, two scenarios are provided for the NDC:

- *Independence* scenario—by ending the Israeli occupation, Government of the State of Palestine achieves independence and is able to exercise full control over its resources.
- *Status quo* scenario – reflecting a continuation of the Israeli occupation of the State of Palestine. This does not mean that this is an acceptable situation.

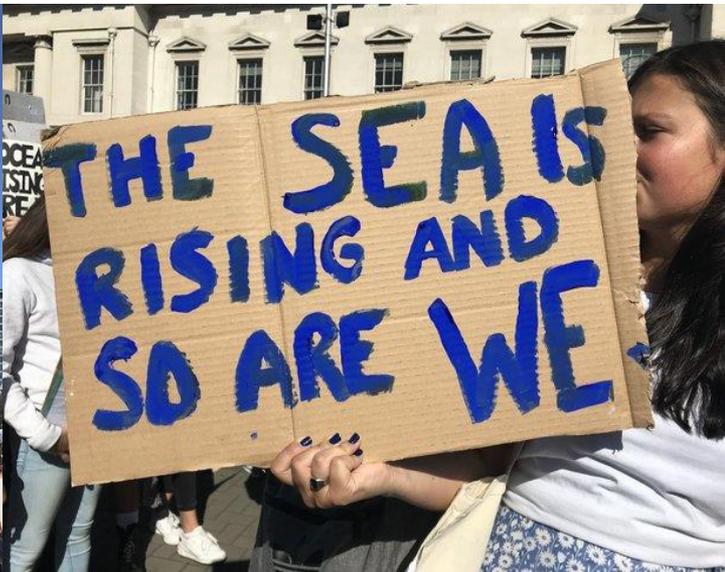
Israel intends to achieve an economy-wide unconditional target of reducing its per capita greenhouse gas emissions to 7.7 tCO<sub>2</sub>e by 2030 which constitutes a reduction of 26% below the level in 2005 of 10.4 tCO<sub>2</sub>e per capita. An interim target of 8.8 tCO<sub>2</sub>e per capita is expected by 2025.

The earth, our home, is beginning to look more and more like an immense pile of filth...once beautiful landscapes are now covered with rubbish.





Dublin Friday 20<sup>th</sup> September 2019





COP25

CHILE

MADRID 2019

UN CLIMATE CHANGE CONFERENCE

# EU Green New Deal

- Commission Vice-President Frans Timmerman announced EU Green New Deal at COP25. The EU will be carbon neutral by 2050.
- Implies 2030 target increase to 50-55% reduction in emissions. (Denmark recently announced 70% reduction target by 2030) No active plan for Ireland following the election.
- Formal impact assessment sought especially by Germany. Likely to take up until summer and possibly delaying new pledges for EU until after COP 26
- EU-China Summit in September seen as crucial (G7 and G20 both chaired by non ambitious countries (US/Saudi Arabia)).

# The Rule Book for Paris

- Talks on “common reporting tables” and “common tabular formats” broke down with many countries pleading for more time to find agreement and China insisting that the negotiations be abandoned until next year.
- Negotiations on carbon trading failed due to blocking by Brazil, India and China.
- Loss and Damage negotiations went nowhere since large developed countries (especially the US) were unwilling to open a separate funding stream from the Green Climate Fund.
- Opposition to linking carbon credits trading to human rights (dams, deforestation) emerged from some large developing countries



COP25  
CHILE  
MARCH 2015  
CLIMATE CONFERENCE

Sala /  
Meeting  
Room **06**



**THE EMPEROR  
HAS NO  
CLOTHES**



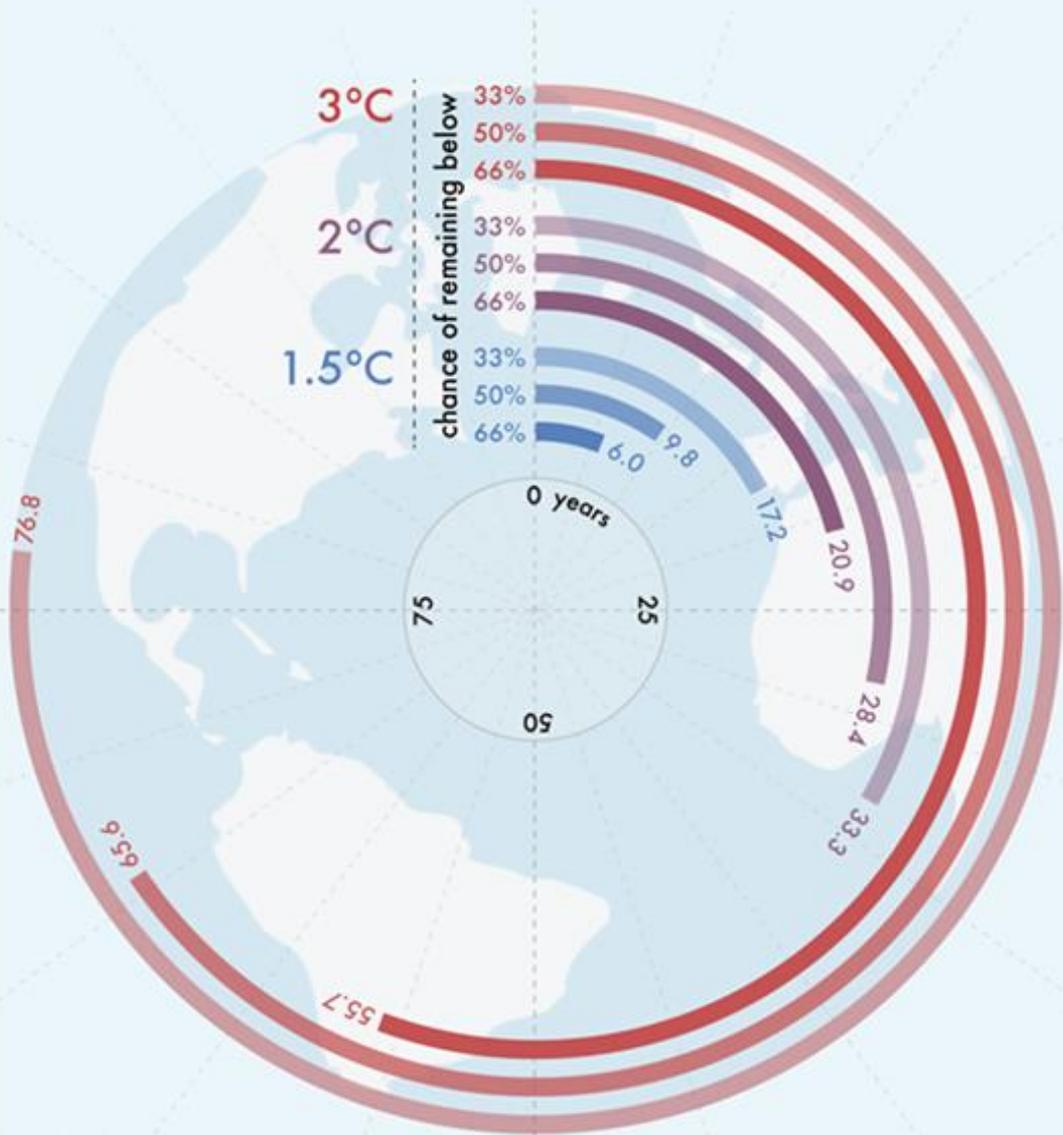


“You only talk about moving forward with the same bad ideas that got us into this mess, even when the only sensible thing to do is pull the emergency brake. You are not mature enough to tell it like it is. Even that burden you leave to us children...

Our civilization is being sacrificed for the opportunity of a very small number of people to continue making enormous amounts of money... It is the sufferings of the many which pay for the luxuries of the few... You say you love your children above all else, and yet you are stealing their future in front of their very eyes...”

# Carbon Countdown

How many years of current emissions would use up the IPCC's carbon budgets for different levels of warming?



<http://bit.ly/carboncountdown>

At current levels of emissions, to have a 50:50 chance of avoiding 1.5°C warming, the carbon budget for the entire 21<sup>st</sup> Century would be exhausted within the next decade.

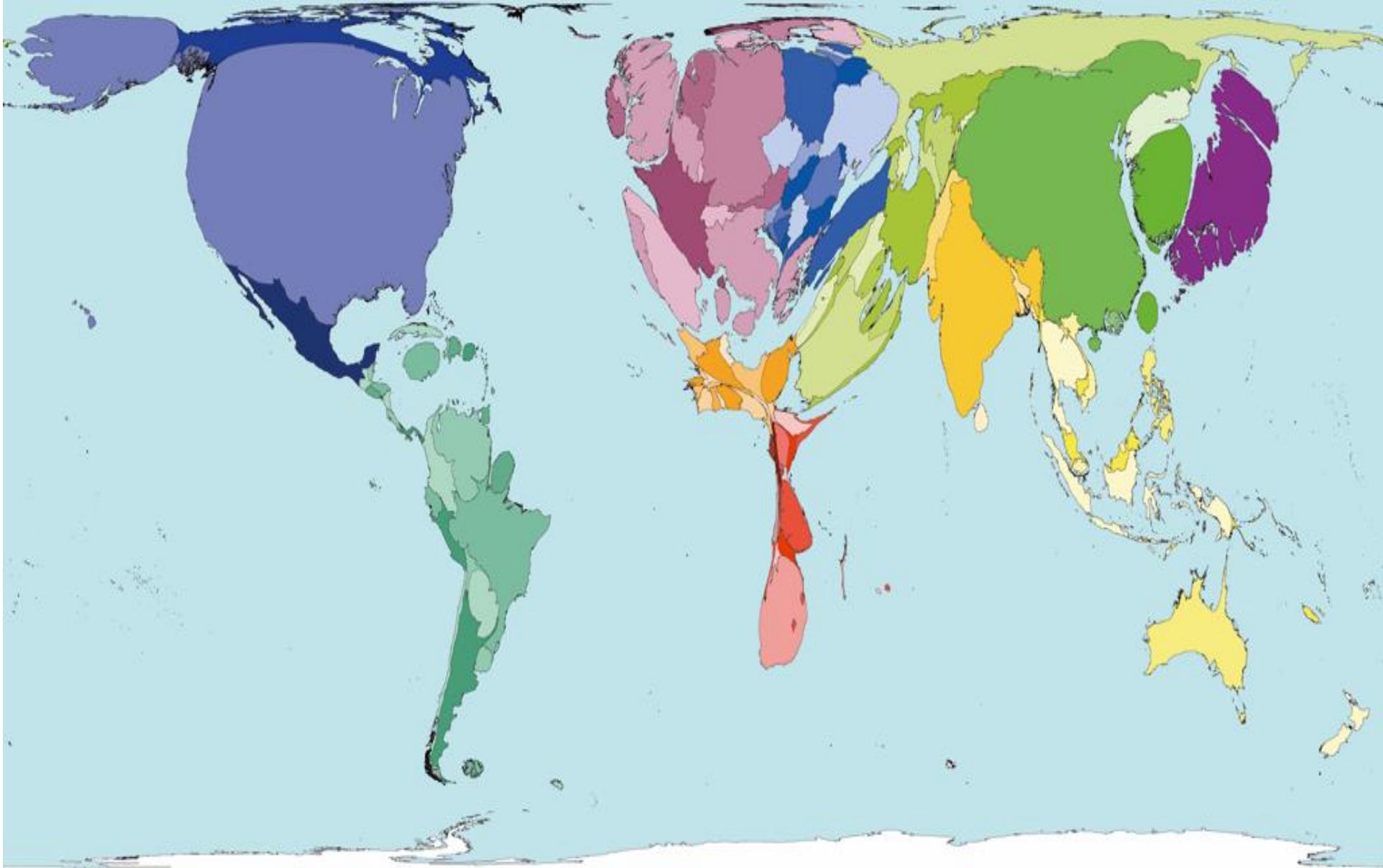
At current levels of emissions, to have a 50:50 chance of avoiding 2°C warming, the carbon budget for the entire 21<sup>st</sup> Century would be exhausted within the next 3 decades.

# Emissions Gap Report 2019



**Cut global emissions by 7.6 percent every year for next decade to meet 1.5°C Paris**

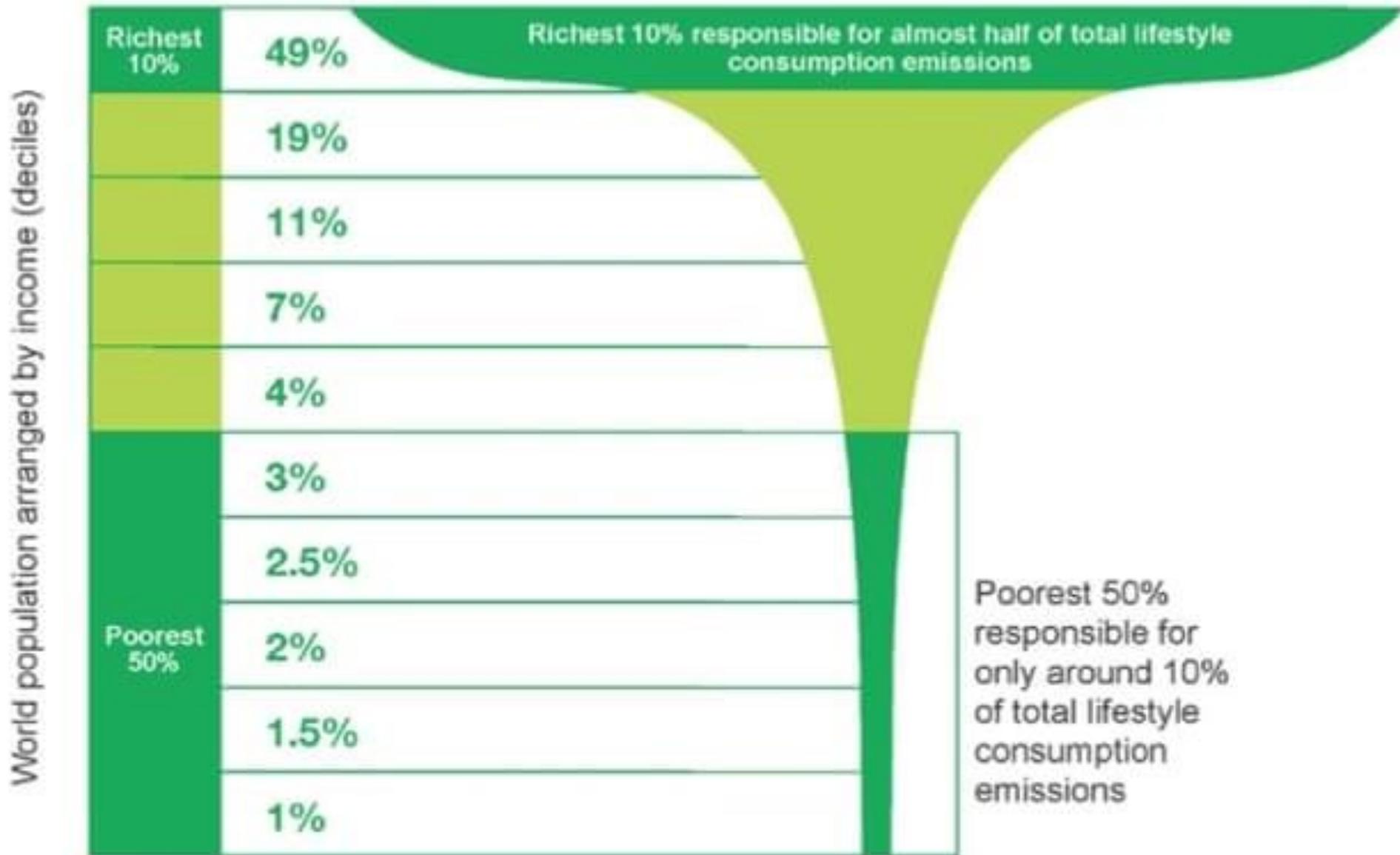
- On current unconditional pledges, the world is heading for a 3.2°C temperature rise
- Technologies and policy knowledge exist to cut emissions, but transformations must begin now
- G20 nations account for 78 per cent of all emissions, but 15 G20 members have not committed to a timeline for net-zero emissions



# Greenhouse Gas Emissions by Country

Ireland emits more greenhouse gases than the 400M poorest people on earth <sup>66</sup>

# Percentage of CO<sub>2</sub> emissions by world population



The world's richest 10% produce half of global carbon emissions



Rank	Country	Score***	Categories
1.*	-	-	
2.	-	-	
3.	-	-	
4.	▲ Sweden	75.77	
5.	▲ Denmark	71.14	
6.	▼ Morocco	70.63	
7.	▲ United Kingdom	69.80	
8.	▼ Lithuania	66.22	
9.	▲ India	66.02	
10.	▲ Finland	63.25	
11.	▲ Chile	62.88	
12.	- Norway	61.14	
13.	▲ Luxembourg	60.91	
14.	▼ Malta	60.76	
15.	▼ Latvia	60.75	
16.	▼ Switzerland	60.61	
17.**	▲ Ukraine	60.60	
18.	▲ France	57.90	
19.	▲ Egypt	57.53	
20.	▼ Croatia	56.97	
21.	▲ Brazil	55.82	
22.	▼ European Union (28)	55.82	
23.	▲ Germany	55.78	
24.	▼ Romania	54.85	
25.	▼ Portugal	54.10	
26.	▼ Italy	53.92	
27.	▼ Slovak Republic	52.69	
28.	▲ Greece	52.59	
29.	▼ Netherlands	50.89	
30.	▲ China	48.16	
31.	▲ Estonia	48.05	
32.	▼ Mexico	47.01	
33.	▲ Thailand	46.76	
34.	▲ Spain	46.03	
35.	▼ Belgium	45.73	
36.	▲ South Africa	45.67	
37.	▲ New Zealand	45.67	
38.	▼ Austria	44.74	
39.	▼ Indonesia	44.65	
40.	▼ Belarus	44.18	
41.	▲ Ireland	44.04	
42.	▼ Argentina	43.77	
43.	▼ Czech Republic	42.93	
44.	▼ Slovenia	41.91	
45.	▲ Cyprus	41.66	
46.	▲ Algeria	41.45	
47.	▼ Hungary	41.17	
48.	▲ Turkey	40.76	
49.	▼ Bulgaria	40.12	
50.	▼ Poland	39.98	
51.	▼ Japan	39.03	
52.	- Russian Federation	37.85	
53.	▼ Malaysia	34.21	
54.	▼ Kazakhstan	33.39	
55.	▼ Canada	31.01	
56.	▼ Australia	30.75	
57.	▲ Islamic Republic of Iran	28.41	
58.	▼ Korea	26.75	
59.	▼ Chinese Taipei	23.33	
60.	- Saudi Arabia	22.03	
61.	▼ United States	18.60	

**Index Categories**

- GHG Emissions (40% weighting)
- Renewable Energy (20% weighting)
- Energy Use (20% weighting)
- Climate Policy (20% weighting)

\* None of the countries achieved positions one to three. No country is doing enough to prevent dangerous climate change.  
 \*\* The position of Ukraine in the overall ranking is highly influenced by the effects of the ongoing conflict in the Donbas region on key CCPI indicators.  
 \*\*\*rounded

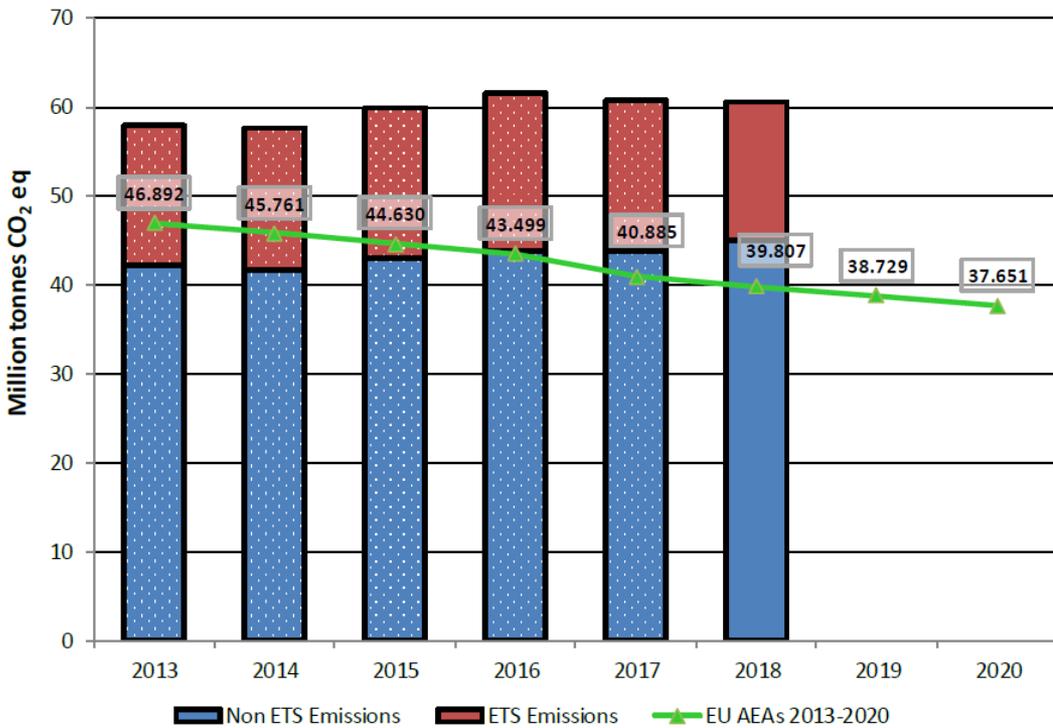
### Ireland

In the 2019 CCPI, Ireland climbs up to place 41st and thereby moves up from the group of *very low* to *low*-performers. Ireland’s GHG per capita emissions remain at a relatively *high* level, and significant challenges lie ahead in meeting the 2030 target and aligning Ireland’s emissions trajectory with a net zero goal for 2050. Therefore, the country still ranks among the bottom ten performers in this indicator. Ireland moved up in the Energy Use category, from *low* to *medium*-performers. At the international level, Ireland has in the past, called for less demanding targets due to claims regarding the economic importance of the agricultural sector. On a positive note, the government has indicated its support for an EU net zero target by 2050. The country is rated *low* for its international climate policy performance, and *very low* for national performance. Experts acknowledge the new Climate Action Plan’s governance proposals, including putting the 2050 target into law and introducing legally-binding five-year carbon budgets, as positive if enacted without delay. They highlight however, that the Government must go much further in implementing policies across all sectors that drive sustained emissions reductions over the next decade. Near-term ambition needs to be ratcheted up quickly by specifying deep cuts in fossil fuel and reactive nitrogen usage to put Ireland on a net zero emissions pathway aligned with the Paris temperature goals.

- Ireland's greenhouse gases increased again once the the recession ended. 2015-2019 showed an increase of 6%

- Non Emissions Trading Sector Emissions are increasing rapidly mainly in the agricultural sector as a consequence of Harvest 2020

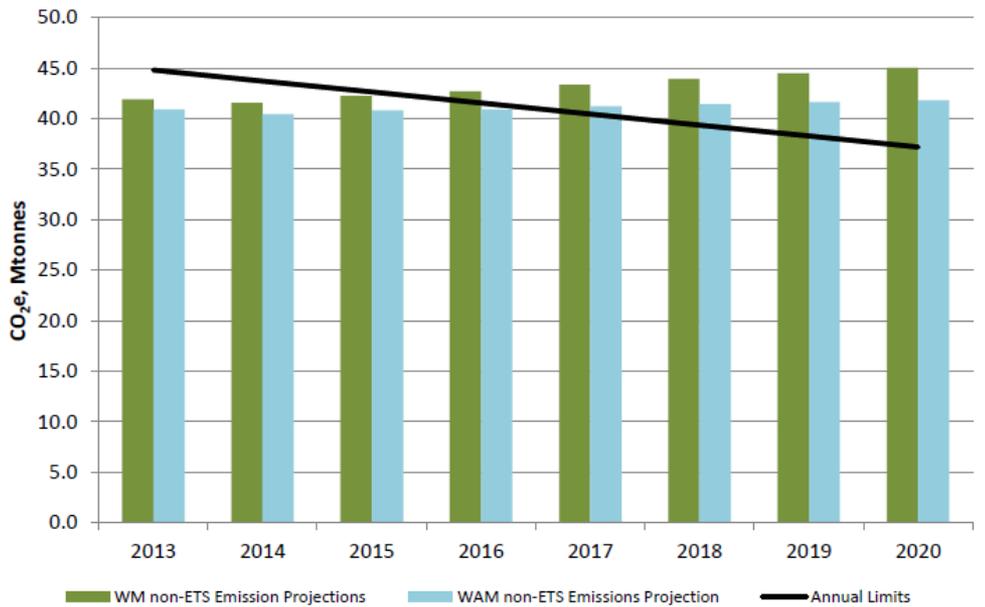
- Exceedances of national limits have occurred in 2016 and onwards and may render the state ultimately liable to large financial penalties



(Extract from Regulations: DECISION No 406/2009/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL 23 April 2009)

If the greenhouse gas emissions of a Member State exceed the annual emission allocation specified pursuant to Article 3(2), taking into account the flexibilities used pursuant to Articles 3 and 5, the following measures shall apply:

- a deduction from the Member State's emission allocation of the following year equal to the amount in tonnes of carbon dioxide equivalent of those excess emissions, multiplied by an abatement factor of 1,08;
- the development of a corrective action plan in accordance with paragraph 2 of this Article; and
- the temporary suspension of the eligibility to transfer part of the Member State's emission allocation and JI/CDM rights to another Member State until the Member State is in compliance with Article 3(2).



# CLIMATE ACTION PLAN 2019

To Tackle Climate Breakdown

How  
credible is  
it?



Riailas na hÉireann  
Government of Ireland

# Positive Aspects of Climate Action Plan

---

5 –year emissions budgeting supported by new legislation

---

Establishment of a Climate Action Delivery Board chaired by the Department of the Taoiseach tasked with quarterly progress reporting

---

Strengthened Climate Action Council and standing Oireachtas Committee

---

Government investments subject to carbon impact assessment

---

Enshrining of 2050 targets into legislation

# Negative Aspects of Climate Action Plan

Short term action limited to 2030 compliance and amounts to an emissions reduction rate of 2% per annum. Early and deeper emission cuts are required now to establish a Paris compliant pathway.

Over-reliance on marginal abatement cost curves to determine short term mitigation. No long-term vision in line with Paris Agreement requirements.

Cost of mitigation repeatedly emphasised. Damage costs of inadequate mitigation largely ignored.

The recommendations of the Joint Oireachtas Committee are not fully implemented and the mandate of the public, as evident in the Citizens' Assembly, is also diluted.



Is the public aware of the transition necessary to achieve 2030 compliance?

Is the commitment of government convincing?

- Reduction in national herd (~1.5M) /abandonment of Foodwise 2025 production targets
- 1,000 more Wind turbines
- 840,000 EVs/PHEVs by 2030 (Currently 2.7M vehicles on Irish Roads)
- Ban on petrol/diesels vehicles in 2030
- 45,000 deep retrofits per year to 2030
- Installation of 600,000 heat pumps by 2030
- Afforestation 300,000Ha (2X area of Co. Kildare) to sequester 1Mt C. (Agricultural emissions 20Mt)

# What is Ireland's Fair Share of the World's Remaining Carbon Budget?

## Common But Differentiated Responsibility (UNFCCC, 1992)

“The fair share quota is assessed as a maximum of c. 391 million tonnes of carbon dioxide (MtCO<sub>2</sub>), equal to 83 tonnes of carbon dioxide (tCO<sub>2</sub>) per capita, from 2015, based on a precautionary estimate of the Global Carbon Budget (GCB) and specific interpretation of global equity. “

(McMullin et al, 2019)

 Sustained reduction of 11% per year at least

 Under our present emissions projections Ireland enters a situation of increasing Carbon debt to the rest of the world by 2024



Intergenerational  
solidarity is not  
optional, but  
rather a basic  
question of  
justice, since the  
**world we have  
received also  
belongs to  
those who will  
follow us.**





For all the difficulties involved, there is a growing “conviction that our planet is a homeland and that humanity is one people living in a common home [\*Laudato Si'\*](#)