

Caring for Creation: COP 26 and our French churches

Dr Chris Walley

Reader, Holy Trinity Cannes

Conseil d'Administration, A Rocha France

The Cast of Characters

- **Reverend Canon Peter Hooper** *Archdeacon of France.*
- **Jean-François Mouhot** *National Director of A Rocha France.*
- **Caroline Pomeroy** *Director Climate Stewards*
- **Chris Walley** *Reader at Holy Trinity Cannes & CA A Rocha France*
- **Rev Chris Parkman** *A Rocha France Les Courmettes*

Links

- A Rocha France <https://france.arocha.org/en/>
- Climate Stewards <https://www.climatestewards.org/>
- *Eglise verte*: <https://www.egliseverte.org/>

- For a basic survey of your church from Eco Church: <https://ecochurch.arocha.org.uk/> and then go to "View the survey questions" Some of them are particularly relevant to the UK situation but they are a good start.
- The survey for Eglise Verte is at <https://www.egliseverte.org/eco-diagnostic/>

- Me: cwalley@gmail.com or chris.walley@arocha.org

**POST – COP 26 CHALLENGES AND
RESPONSES
FOR ANGLICANS IN FRANCE**

26th UN Climate Change Conference of the Parties

Key 'takeaways' from COP 26

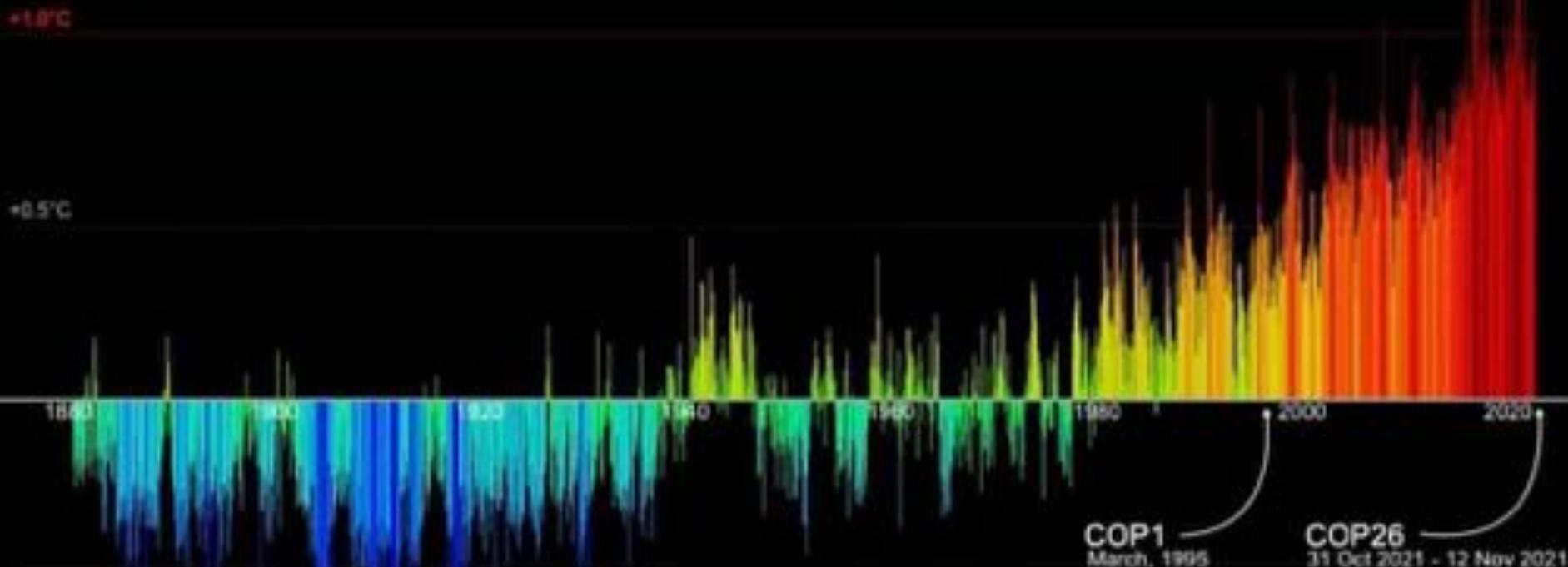
- *A certainty* about human-produced climate change
- *A clarity* about the direction of climate change
- *A necessity* of responding to climate change

1) *A certainty* about human-produced climate change

- There is a new certainty over the reality of the crisis.
 - Possible to question this ten years ago, even five years ago. Not now.
 - Climate change has gone from being a possibility, through a probability to a proven problem.
- Changes in climate and weather system are now recognisable.
- A lot more data in from oceans, atmosphere, satellites etc.
- Industry, agriculture, transport are all taking this seriously.

GLOBAL TEMPERATURE CHANGE 1880 - 2021

GLOBAL AVERAGE TEMPERATURE COMPARED TO THE 1951-1980 AVERAGE



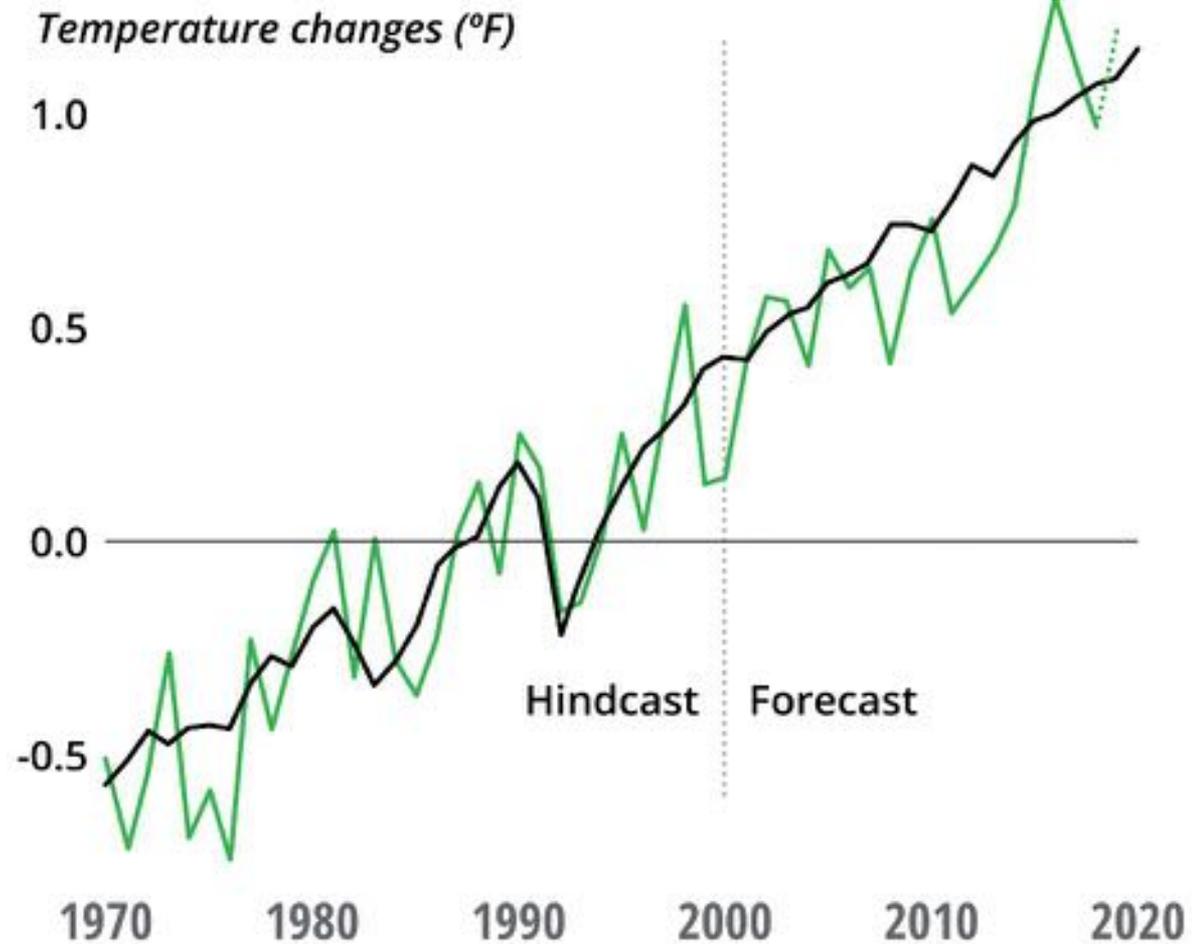
DATA: GISS Surface Temperature Analysis, version 4

GRAPHIC BY @SCOTTDUNCANWX

[MONTHLY DATA]
Deviations from the 1951-1980 means
Source: <https://data.giss.nasa.gov/gistemp/>

1) A certainty

- The temperature changes are as predicted.
- Can be repeated for things like sea-level change, ice-cap loss etc.



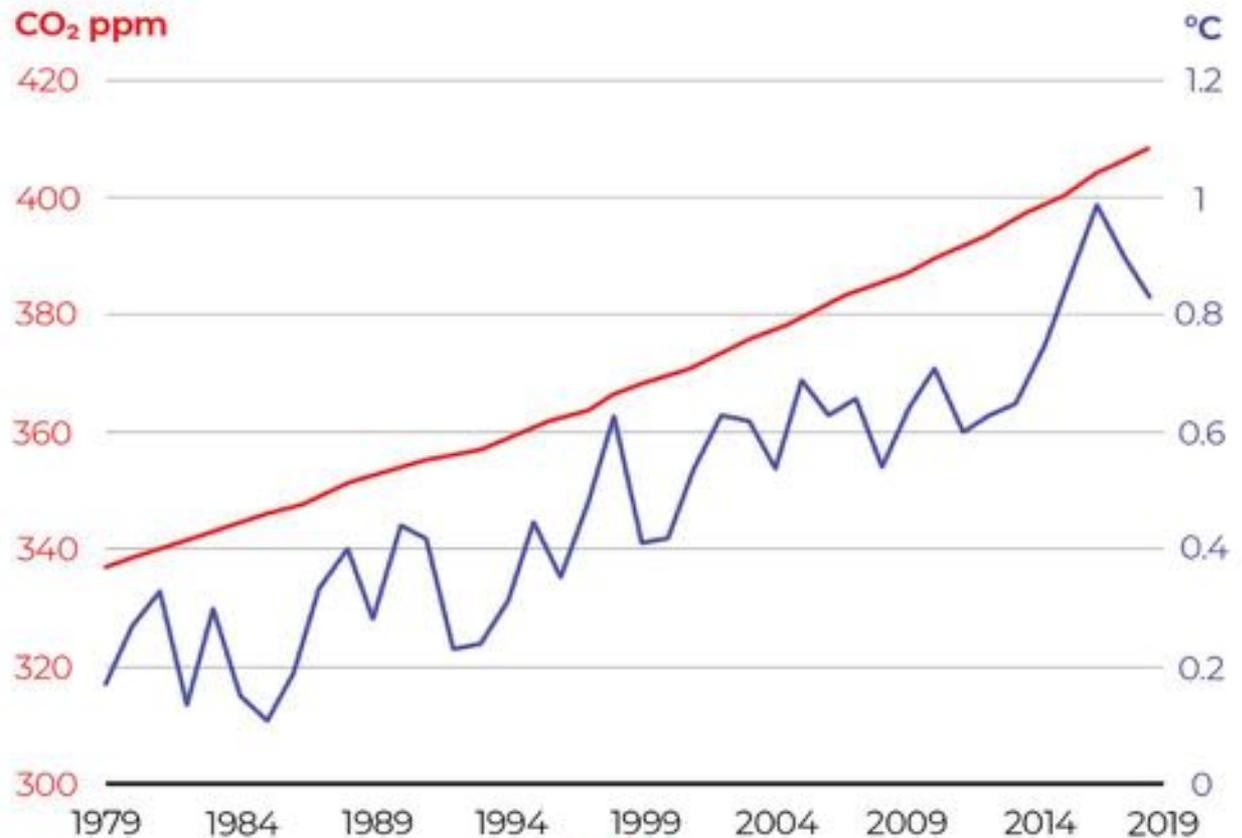
Forecast evaluation for models run in 2004,
ensemble mean vs. **observations (with 2019 estimate)**

1) *A certainty*

- Temperature changes match rising CO₂ levels.

Our climate over the last 40 years

Annual mean CO₂ emissions (ppm, from Mauna Loa observatory) versus global mean surface temperature anomaly (°C, NASA), 1979-2019.



Source: Author provided

A certainty

- In fact, the changes are more rapid than predicted.

2) *A clarity* about the direction of climate change

- Predictions are being refined on the effects of climate change.
- Climate change is complicated by the way that global weather systems react.
- *A caution on prediction.* The popular press prefers dramatic worst-case scenarios and in some cases uses figures running out to 2100. Nevertheless the overall trend is plain.
- **Direct effects**
 - High temperatures
 - Longer dry periods
 - Reduced snowfall
 - Extreme events: storms, flooding *etc.* But the wrong sort of rain!

Augmentation des températures en France

Prévisions d'anomalies moyennes annuelles par rapport à la période 1976-2005, en fonction de trois scénarios

— RCP 8,5 : pessimiste

Aucune action menée

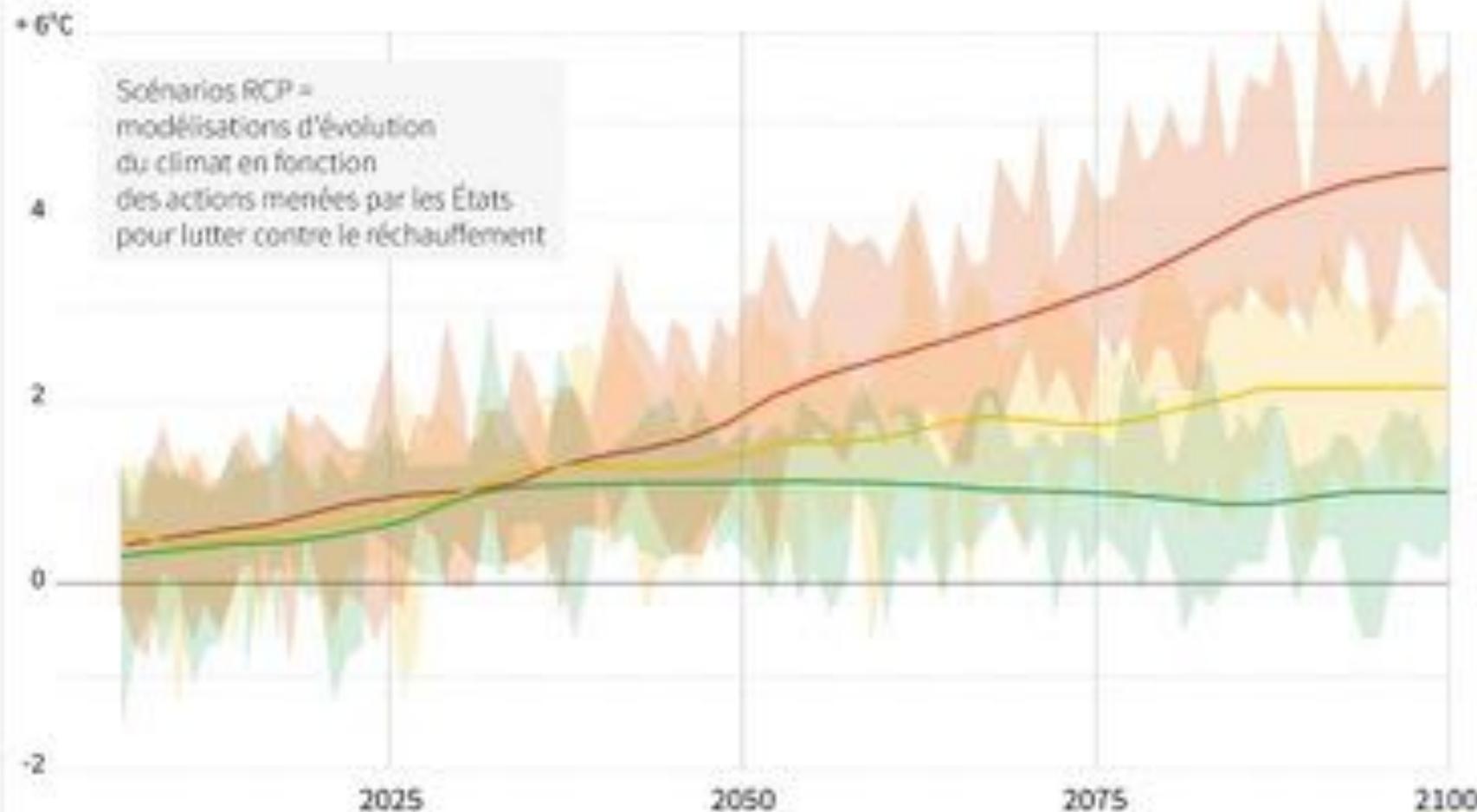
pour réduire le réchauffement

— RCP 4,5 : scénario intermédiaire

— RCP 2,6 : optimiste

Réchauffement maintenu

sous les 2°C en 2100



2) A *clarity* about the direction of climate change

Indirect effects

- Sea level rise
 - On average sea levels rose across most of the world by 15-20 cm (6-8 inches) between 1993 and 2020.
 - Another 15 to 20 cm rise is expected by 2050.
- Will be very bad news for many coastal areas of France.

2) A *clarity* about the direction of climate change

- Changes in crop type
- Damage to transport systems due to flooding et cetera
- More erosion
- Cracking and soil settlement
- Reduction in snow and frost
- More invasive species
- More wildfires





IMPACTS en France

déjà visibles et à venir d'ici 2050



FEUX DE FORÊT



SECHÈRE



VAGUES DE CHALEUR



INONDATIONS



STRESS EN EAUX



PÉRIODES D'HYVER



BASSIN DE LA NEIGE



SECHÈRESSE

Un manque de **2 Md de m³**

d'eau en 2050 si la demande reste stable

(Source : Scenar de l'Inra 2018)
 sous l'impact du changement climatique, l'agriculture et les villes assochant



FEUX DE FORÊT

50%

des forêts métropolitaines sources au risque incendie d'ici 2050

(Source : Météo France, Météo Climat)
 Changement climatique et extension des zones sensibles aux feux de forêts



CULTURES

Après + de **35 ans**

de croissance stagnation des rendements

(Source : Agreste, France AgriStat)
 (Source : INRAE)



MONTAGNE TIGRE

déjà installé dans

45

départements métropolitains

(Source : Ministère de l'Écologie et de la Forêt)



TEMPÉRATURE

+1,5°C

en moyenne en France métropolitaine depuis 1990 (Source : Météo France)
 (Source : INRAE)



MONTAGNE

-40 cm

d'enneigement en 30 ans au col de Flaine

(Source : Météo France)
 (Source : Météo France/INRAE)



3) *A necessity* of responding to climate change

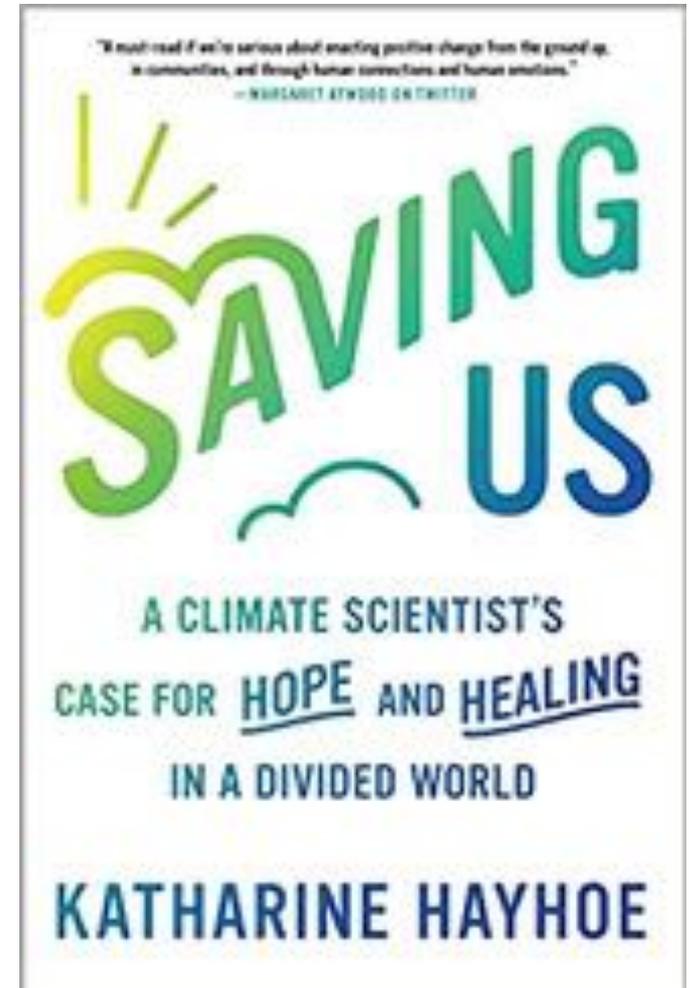
Important to note that this is not the only environmental problem.

- Micro-plastics
- Species loss
- Invasive species
- Disruption of ecosystems
- Salinisation of groundwater
- Air pollution
- Oceanic acidification

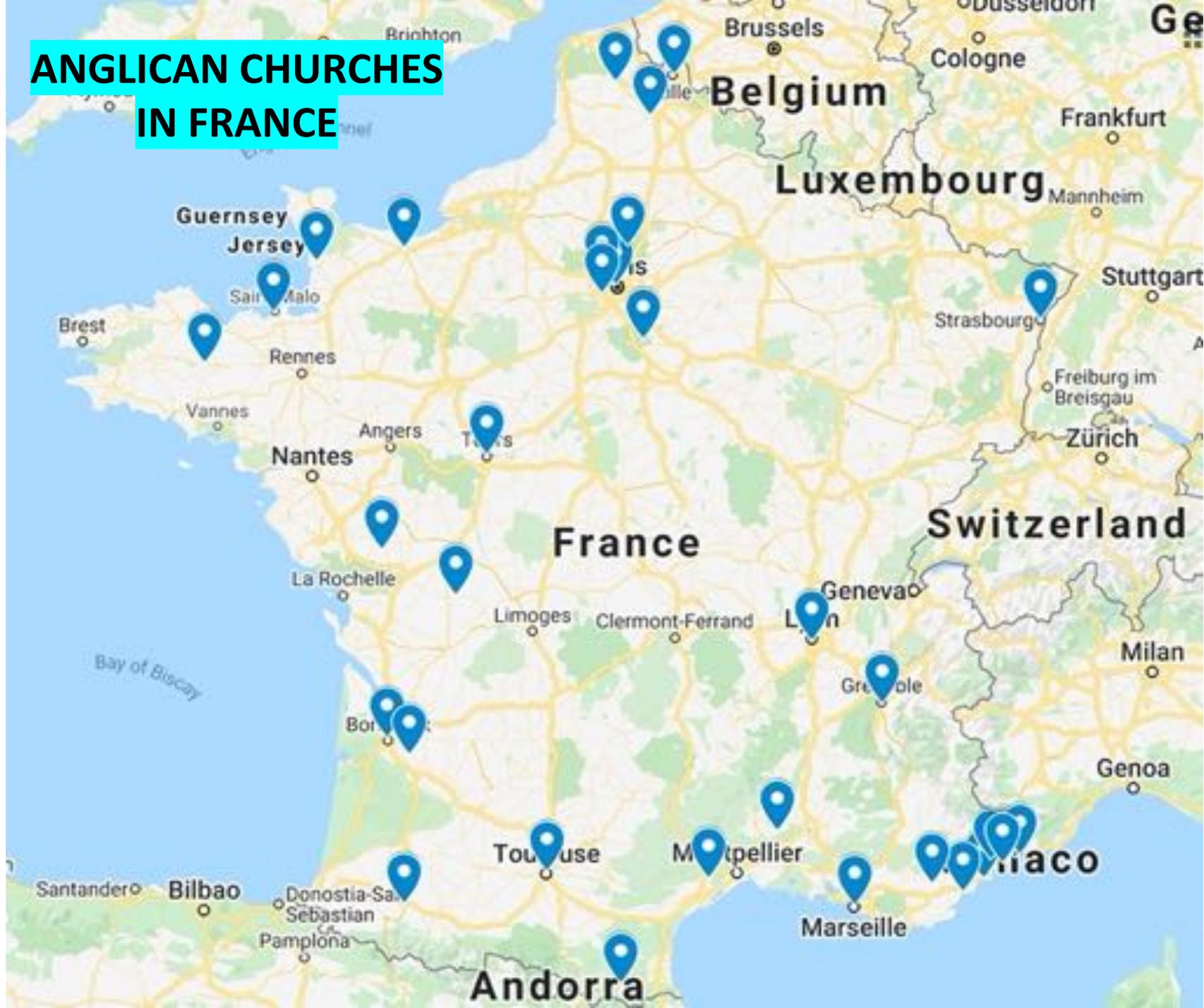
However this is the **big** one.

A Good Book

- **Saving Us: A Climate Scientist's Case for Hope and Healing in a Divided World**
- Katharine Hayhoe



ANGLICAN CHURCHES IN FRANCE



Large-scale/national responses

National strategies for CO₂ reduction

- A shift from fossil fuel to either renewables or nuclear.
- Nuclear fission as a 'bridge solution' may be a lesser evil.
- Need to support governmental initiatives to reduce fossil fuel use.
- Need to avoid the green politics/theology view in which we are against *everything* – wind turbines, solar, nuclear – but in favour of nothing.
- Should be aware of 'greenwashing' by politicians and companies.

Personal response for CO₂ reduction

- Cut consumption.
- Try to live simply.
- Reduce energy use.
- Reduce meat.
- Cut travel, especially flying.
- Seek contentment over consumerism.

Church response 1

- A fundamental moral issue.
- Because the world is made by God and reflects who he is, damaging it is an insult to him.
- Damage to the world is theft from future generations.
- However we need to be wary about imposing 'green guilt'.
 - Thou shalt not buy avocados from Peru,
 - Thou shalt not buy anything in plastic bottles.
 - Thou shalt cycle to church.
 - Thou shalt wear your clothes until they fall off you.
 - Thy thermostat must not go above 21^o Celsius.

Church response 2

- Our churches belong to an eco-diocese.
- “The Eco-Diocese is part of the wider Eco-Church scheme, which is a web-based survey and award scheme run by A Rocha UK.”
- A concern about the ‘carbon footprint’ we leave as individuals and churches.
- In February 2020 General Synod passed a motion calling on all parts of the C of E to cut carbon emissions reaching net zero emissions by 2030.
- A Net Zero Working Group exists.

Church response 3

- There are particular problems in France
 - Churches do not own buildings
 - Churches move around different buildings
 - Churches use old and historic buildings that are difficult to heat
 - Almost all church fellowships involve many car miles. In our case a 150 km round journey.
- Some measure of offsetting must be required.
- How much? 360⁰ Carbon is a good method.
- One Christian way of doing this is Climate Stewards.

Holy Trinity Nice



FRANCE
A ROCHA
Espoir et Conservation





- *A Rocha* is an international Christian organisation for nature conservation.
- *A Rocha* was created in Portugal in 1983 by Rev. Peter Harris.
- It takes its name from where it was founded: *A Rocha* = “the Rock” in Portuguese.
- An example of what Christian environmental action can mean.
- A possible partner with the Anglican Church in France.

Our convictions

- As Christians, we believe that God calls us to care for his creation, out of love for him and for humanity.
- A Rocha's mission is to preserve life and mobilise Christians through conservation projects, training, awareness-raising and prayer.



Two key roles

- To work actively in the field for the preservation and restoration of nature.
- To raise awareness in order to bring about a change in human behaviour leading to respect for the environment.

A ROCHA

A Rocha France

- Operating for twenty years.
- 12 employees.
- English and French websites.
- Recently awarded a €300,000 EU grant for national environmental education among churches.
- Two conservation centres.

Two Centres

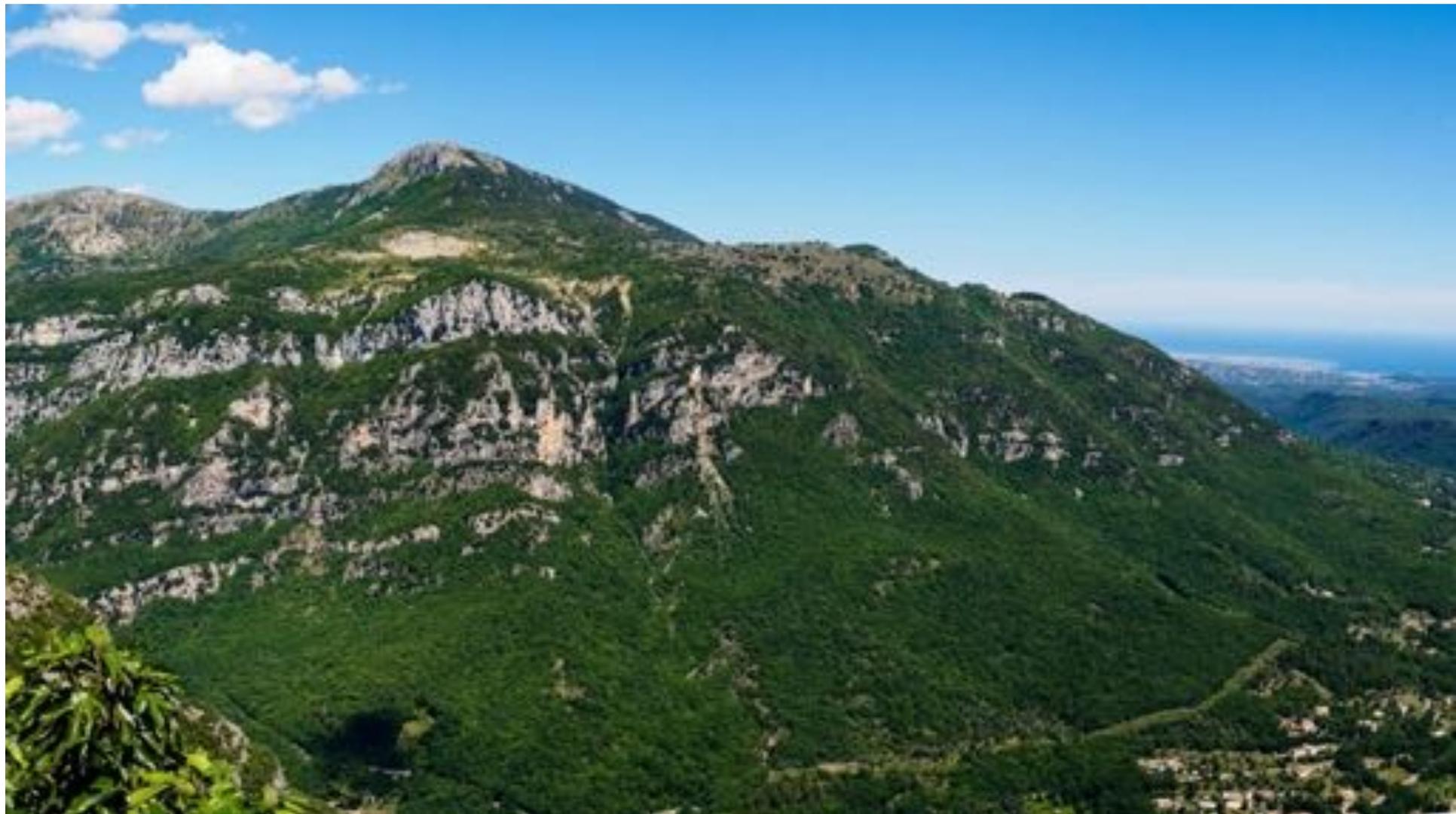


Les Courmettes

Mas Mireille



Les Courmettes





Mas Mireille Vallée des Baux

- Edge of the Camargue



Nature-based Solutions

- Nature-based Solutions (NbS) are “actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”.
- They are ways in which we keep and lock CO₂ in natural systems.
- They include mangrove swamps to protect coasts, green parks in cities, protecting soils and the creation and protection of woodlands and wetlands.
- No magic solution: perhaps better called nature-based *responses*.
- Two big possibilities for carbon stores.

SOLUTION 1: WOODLAND



Nature-based Solutions 1: WOODLAND

- Trees catch and store carbon.
- Can be complex.
 - Trees can be dark and so absorb more solar energy
 - They take years to absorb CO₂
 - When trees die they can release CO₂ back into the atmosphere
- Have great biodiversity benefits
- Mustn't be naïve: even a trillion extra trees will not be enough to compensate for our use of fossil fuels
- However; it's a start!

SOLUTION 2: WETLAND



Nature-based Solutions 2: WETLAND

- Wetlands: peat bogs, marshes etc.
- Reeds absorb CO₂. When they die create organic rich mud which, in theory, is preserved for ever.
- Many damaged wetlands exist, drained for agriculture.
- Easier to create or restore than woodland.
- In Europe, there is a cautious preference for wetland solution.

Mas Mireille in the Vallée des Baux





Vallée des Baux

Rhône delta

Petite Rhône

Rhône river

Vaccares

Camargue Nature Reserve

Saintes Maries de la mer

Salt making zone

Mediterranean sea

5 km

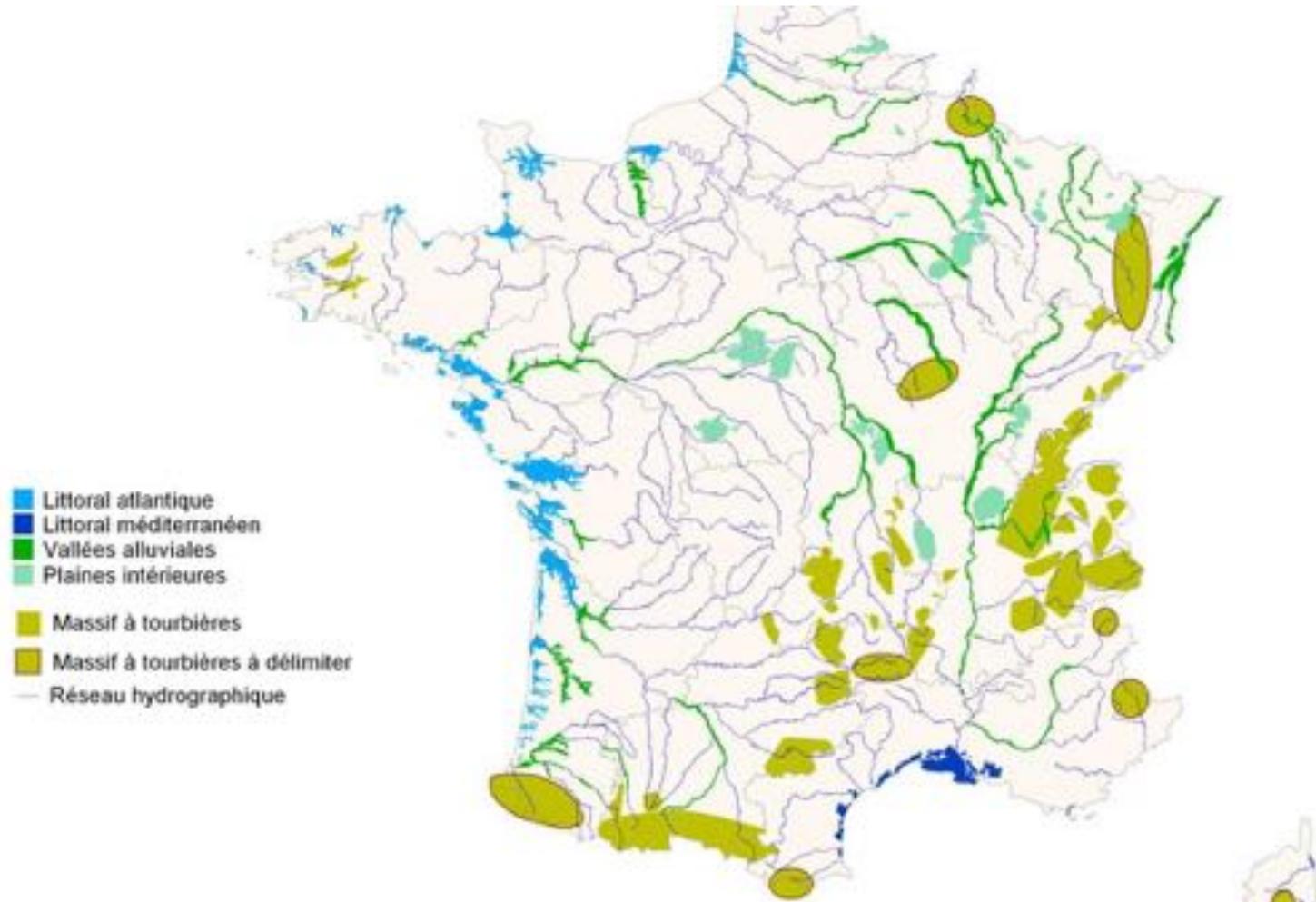




Could the wetland be expanded?



Other potential wetlands projects exist?



Peat bogs *Les tourbières*

Conclusions

- Climate change is one of the great crises of our time.
- As individuals and churches we must respond. We are accountable to God for our stewardship of what he has given us.
 - Need to support national measures to reduce CO₂ levels
 - Need to try to reduce our own carbon footprint.
 - Where we can't reduce our carbon footprint we need to consider offsetting
 - Can do that through Climate Stewards
 - May want to consider some sort of nature-based solution. Think creating or restoring woodlands and wetlands, trees and reeds.
 - Should be a subject of concern and prayer!

THE CHOICE



(©Pixabay)