

# St Matthew's Surbiton

## EARTH MATTERS

### Lent 2021

## Eco-Church: why we need it, what we can do

*Presentation by Ian Christie: Senior Lecturer, Centre for Environment and Sustainability, University of Surrey; Environmental Advisor, Diocese of Southwark; Fellow, WWF-UK*





Introduction: what on Earth is at stake?

# A reading from the Book of Greta

Image source: DN-SE



# A reading from the Book of Greta

- Speech to COP24 in Katowice, 15th December 2018:
- *“You are not mature enough to tell it like it is. Even that burden you leave to your children. But I don’t care about being popular. I care about climate justice and the living planet. We are about to sacrifice our civilisation for the opportunity of a very small number of people to make enormous amounts of money. We are about to sacrifice the biosphere so that rich people in countries like mine can live in luxury. But it is the sufferings of the many which pay for the luxuries of the few.”*
- From: Greta Thunberg, *No-One Is Too Small To Make A Difference*, Penguin, London, 2019

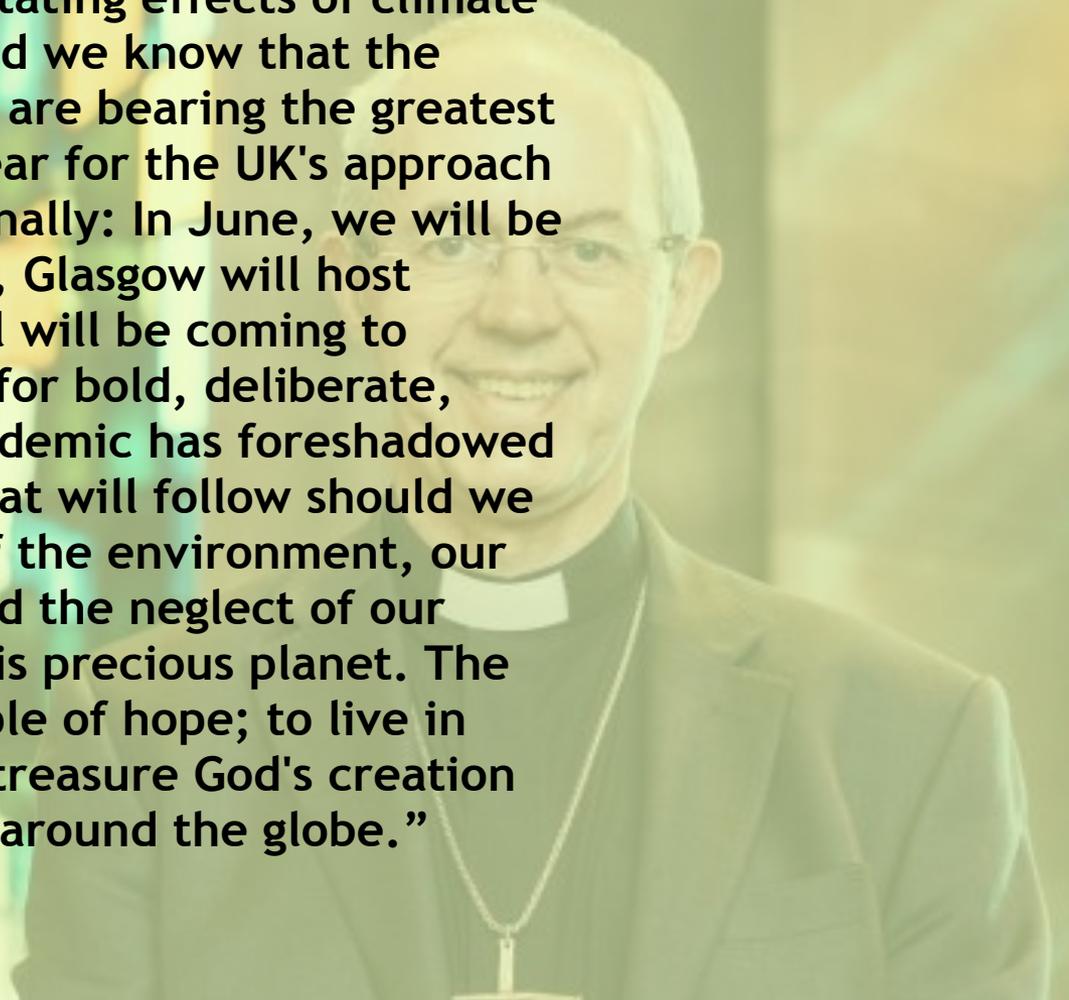
Image source: DN-SE

# Archbishop Justin Welby, February 2021



# Archbishop Justin Welby, February 2021

- **“The crises of climate change and biodiversity loss are the most grave and existential we face: as human beings, as a Church and as a global community...We are already seeing the devastating effects of climate change around the world, and we know that the poorest and most vulnerable are bearing the greatest burden. This will be a key year for the UK's approach to climate change internationally: In June, we will be hosting the G7. In November, Glasgow will host COP26. The Environment Bill will be coming to Parliament. Now is the time for bold, deliberate, collaborative action. The pandemic has foreshadowed the chaos and destruction that will follow should we not cease our exploitation of the environment, our greed for finite resources and the neglect of our interconnected nature on this precious planet. The Church is called to be a people of hope; to live in harmony with our world; to treasure God's creation and our brothers and sisters around the globe.”**



# Cardinal Peter Turkson, 24th May 2019

Image source:  
Catholic World Report



# Cardinal Peter Turkson, 24th May 2019

- “In recent months, young people have become increasingly explicit, as we see, for example, in the strikes for the environment. Their frustration and anger towards our generation is clear. We risk robbing them of their future, as well as “leaving to coming generations debris, desolation and filth” (Laudato Si, 161).
- “It is time to organize an intervention. As stated in *Laudato si*’, “the effects of the present imbalance can only be reduced by our decisive action, here and now” (LS 161). We will all have to make a radical change in our lifestyle: the use of energy, consumption, transport, industrial production, construction, agriculture... Each of us is called to act. But we must also take action together, starting with governments and institutions, families and people: we need all hands on deck. “Everyone’s talents and involvement are needed” (LS 14) to address this crisis and defeat the powerful interests that hinder our meaningful collective response to this unprecedented threat against our civilization.
- “It is right to join the scientists and the young in urging our human family, especially those who are in positions of political and economic power, to undertake drastic measures to change course. We must be “one world with a common plan” (LS 164). We need to appeal to political leaders to be far more courageous and to listen to the dramatic cry raised by the scientific community and the climate youth movement.”
- <http://press.vatican.va/content/salastampa/en/bollettino/pubblico/2019/05/24/190524b.html>

# What kind of crises do we face?

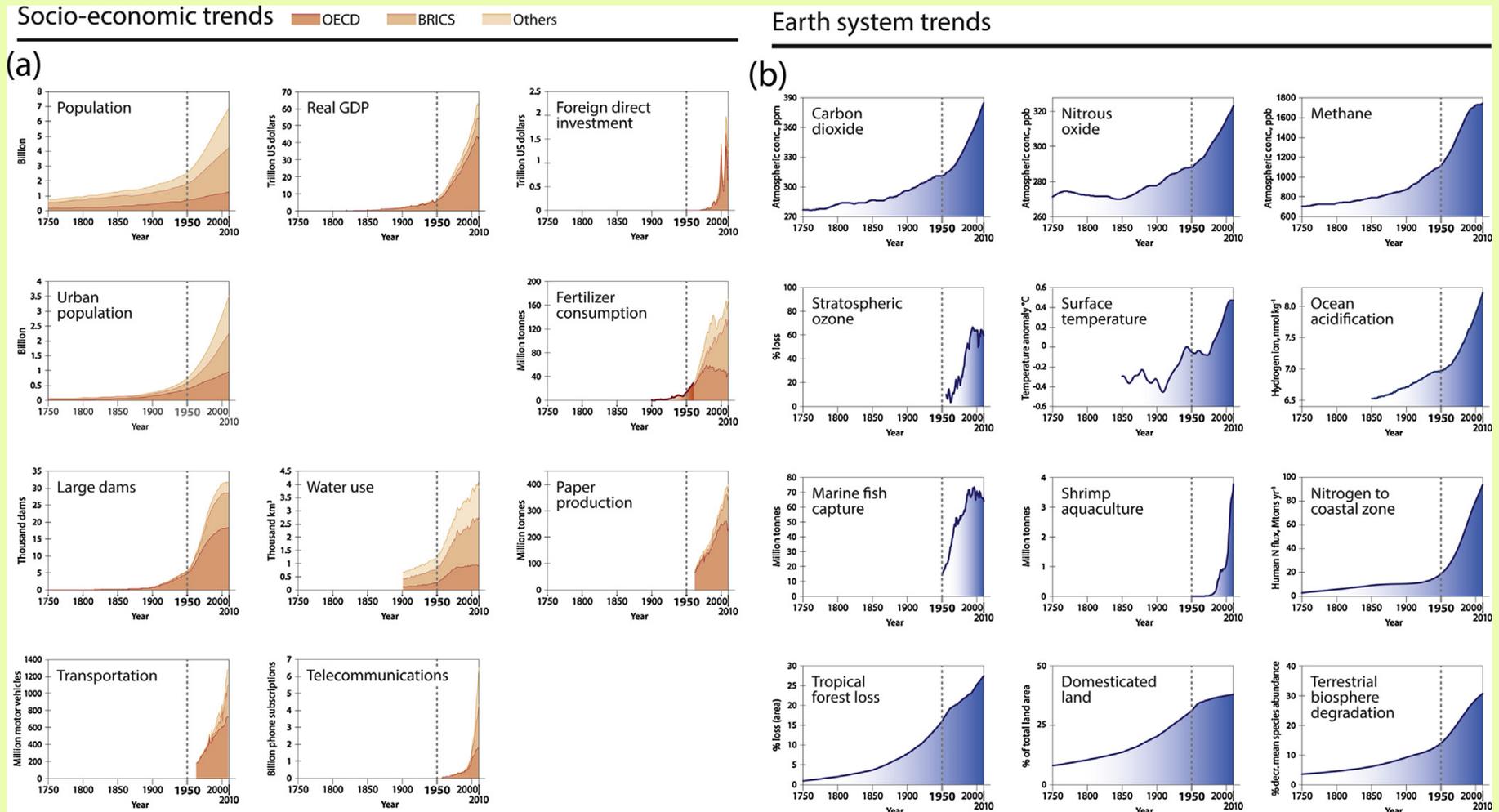
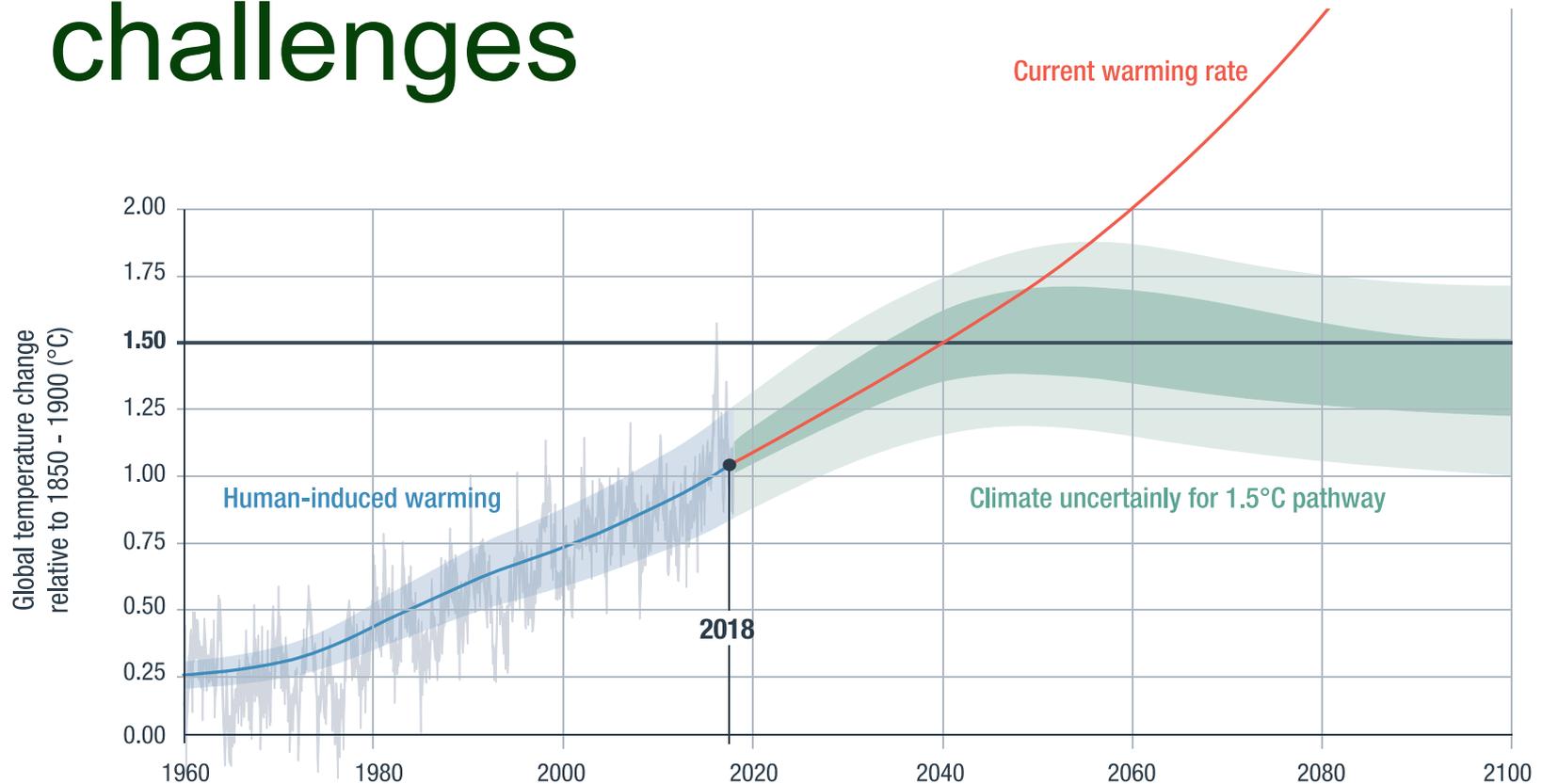


Fig. 2. (a and b) Earth system and socio-economic trends.

Source: W. Steffen, W. Broadgate, L. Deutsch, O. Gaffney and C. Ludwig (2015), 'The Trajectory of the Anthropocene: the Great Acceleration', The Anthropocene Review. 9  
See also: <http://www.futureearth.org/blog/2015-jan-16/great-acceleration>

# Human-made climate disruption: existential challenges



Human-induced warming reached approximately 1°C above pre-industrial levels in 2017.

At the present rate, global temperature would reach 1.5°C around 2040.

Adapted from the Special Report on Global Warming of 1.5°C (IPCC)

Source:  
IPCC (2018)

# Only One Earth



Only One Earth...but in the rich world  
we're consuming as if we had 2-3 spare  
planets to live on



# Bishop Hugh Montefiore (1920-2005)

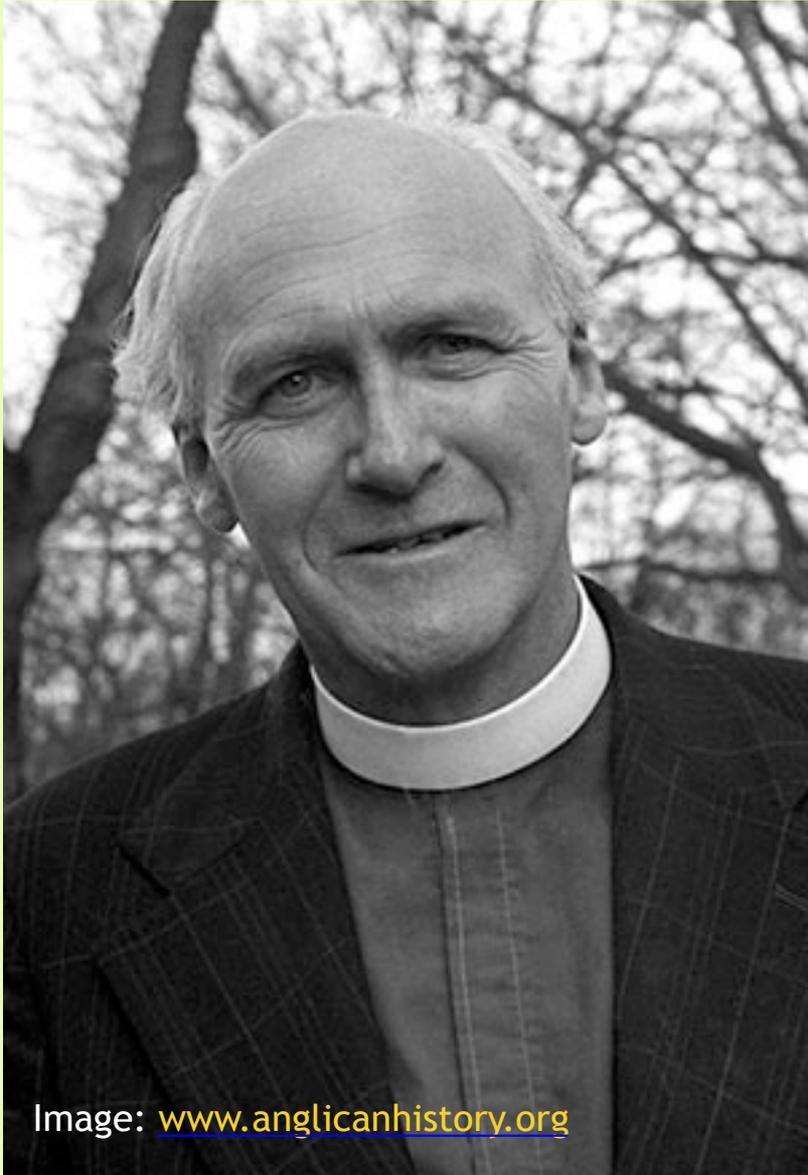
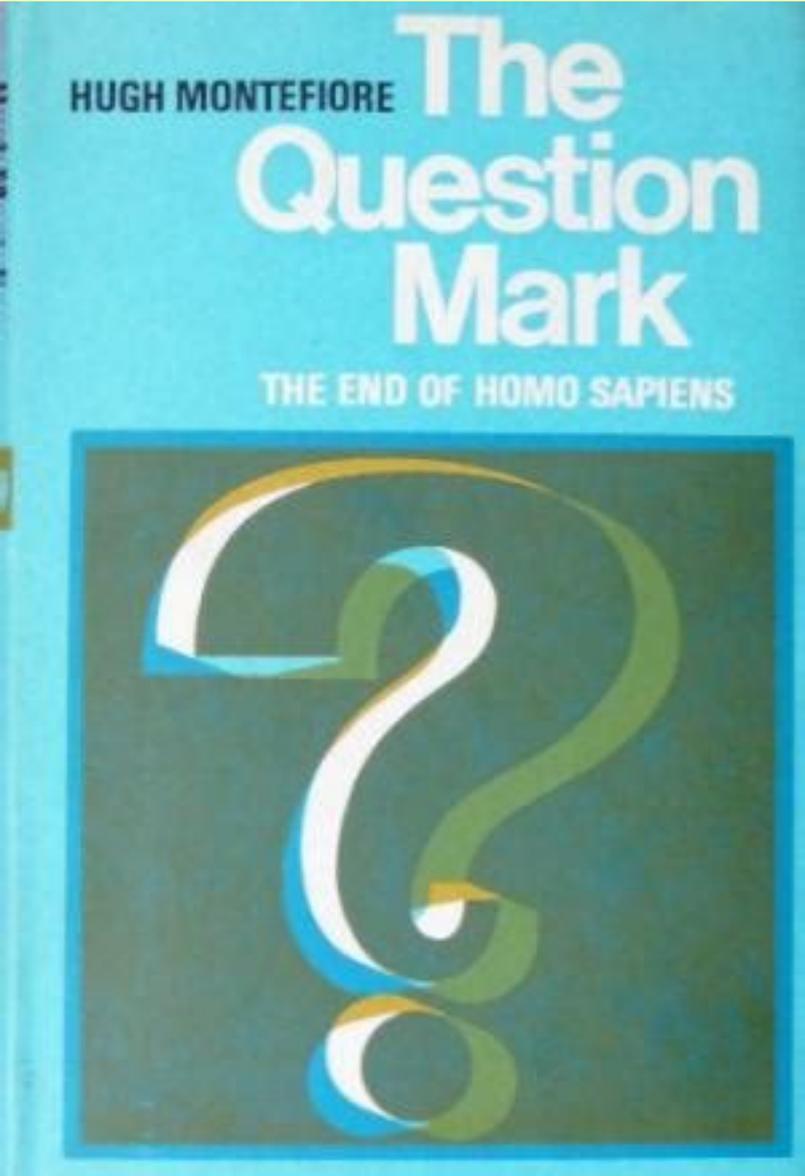


Image: [www.anglicanhistory.org](http://www.anglicanhistory.org)



# Bishop Hugh Montefiore

Hugh Montefiore in 'The Question Mark' (Collins, 1969):

“The crisis which faces *Homo Sapiens* today is fundamentally a spiritual crisis. Until it is faced and met, the future of mankind is in doubt...Once it is believed that men hold their dominion over all nature as stewards and trustees for God, then immediately they are confronted by an inalienable duty towards and concern for their total environment, present and future; and this duty towards environment does not merely include their fellow-men, but all nature and all life.”



Climate crisis, nature crisis

# The Earth Transformed, 1950 to date

- “The Great Acceleration”
- Population
- Production
- Consumption
- Pollution
- Urbanisation
- Habitat loss
- Species loss

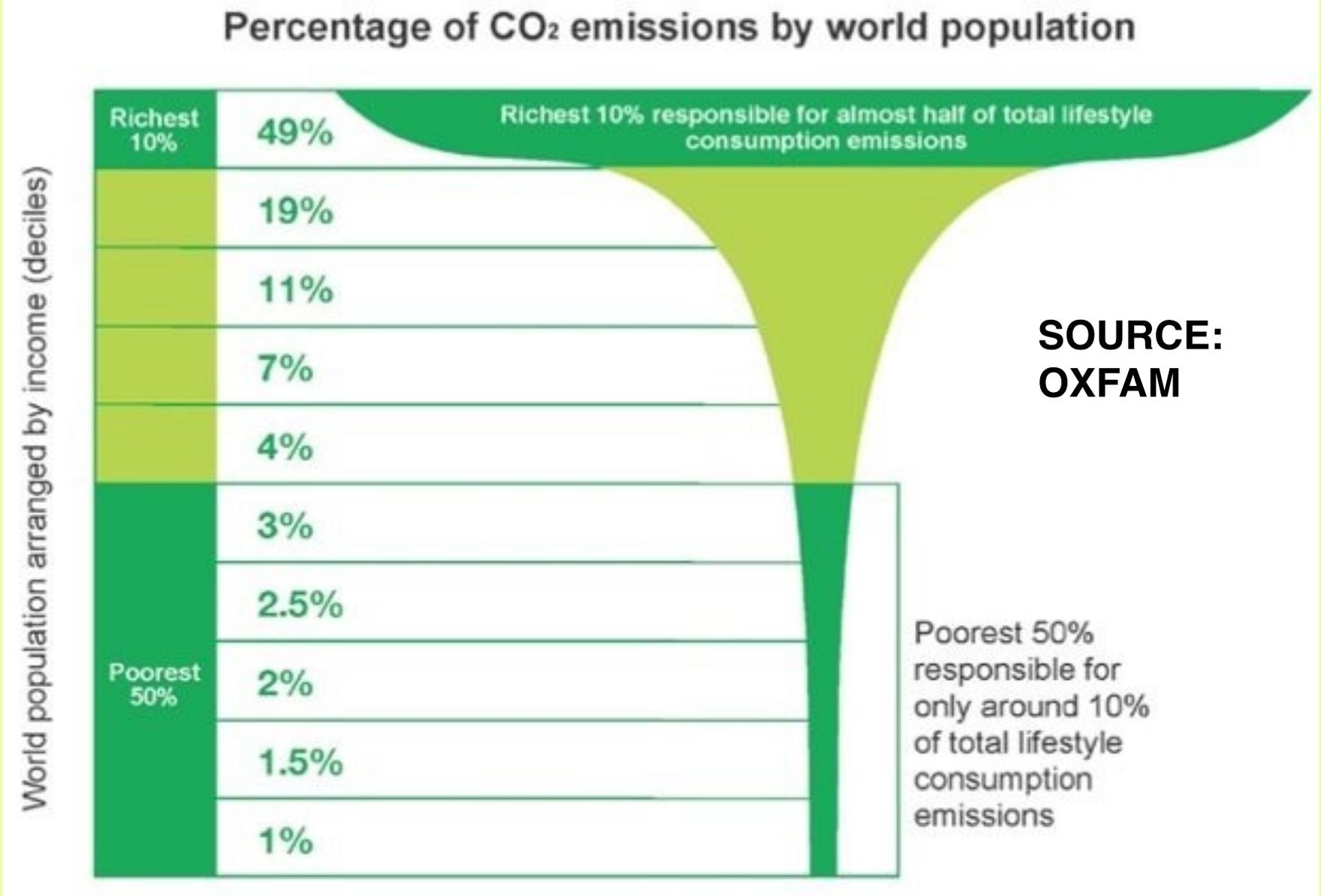
# Climate disruption makes other risks and environmental damage worse



Droughts, floods, storms, soil erosion, wildfires, damage to marine life, loss of habitats and wildlife, pollution, food and water stress



# Carbon inequality: emissions and emitters



# Climate crisis: major risk to poorer societies



**Food Insecurity**  
& *Climate Change*

## Future Scenarios

Emissions



MED

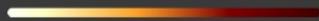
Adaptation



LOW

## Key

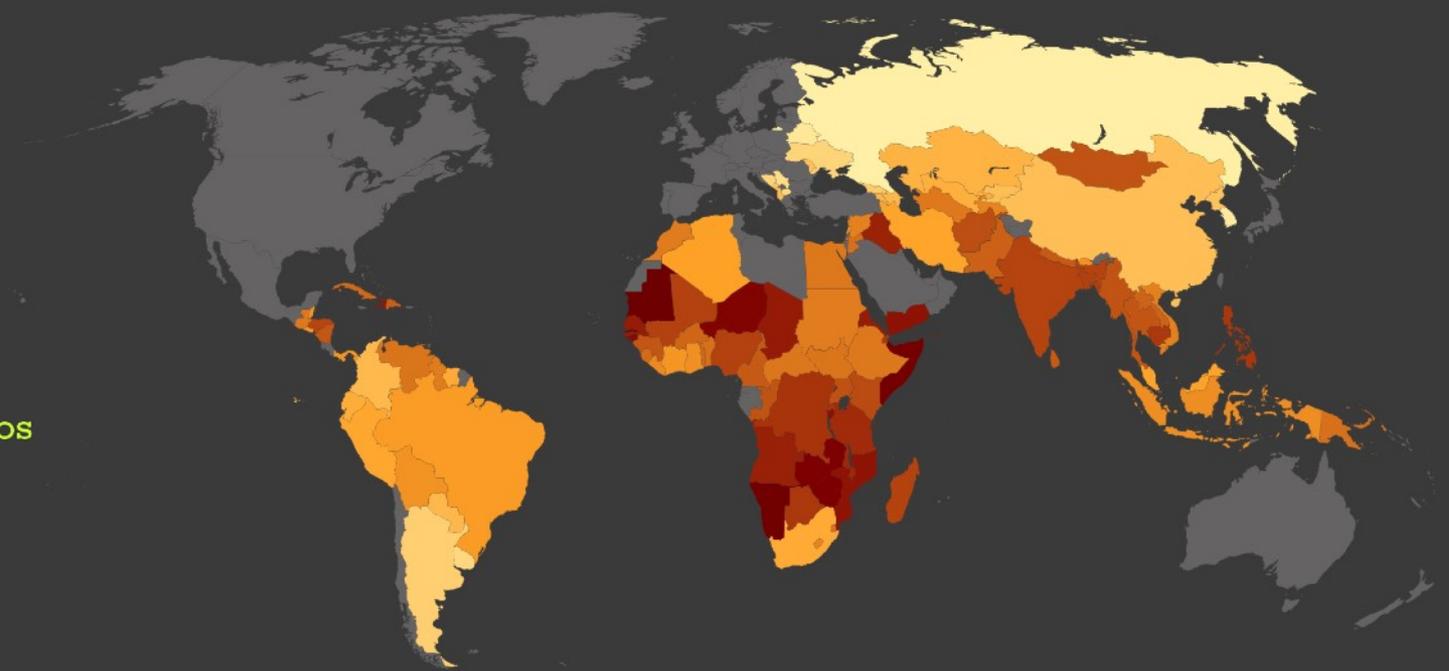
Vulnerability to food insecurity



LOW

HIGH

**2050s**



# Loss of biodiversity: genetic diversity, species, ecosystems



# Ecosystem disruption and development

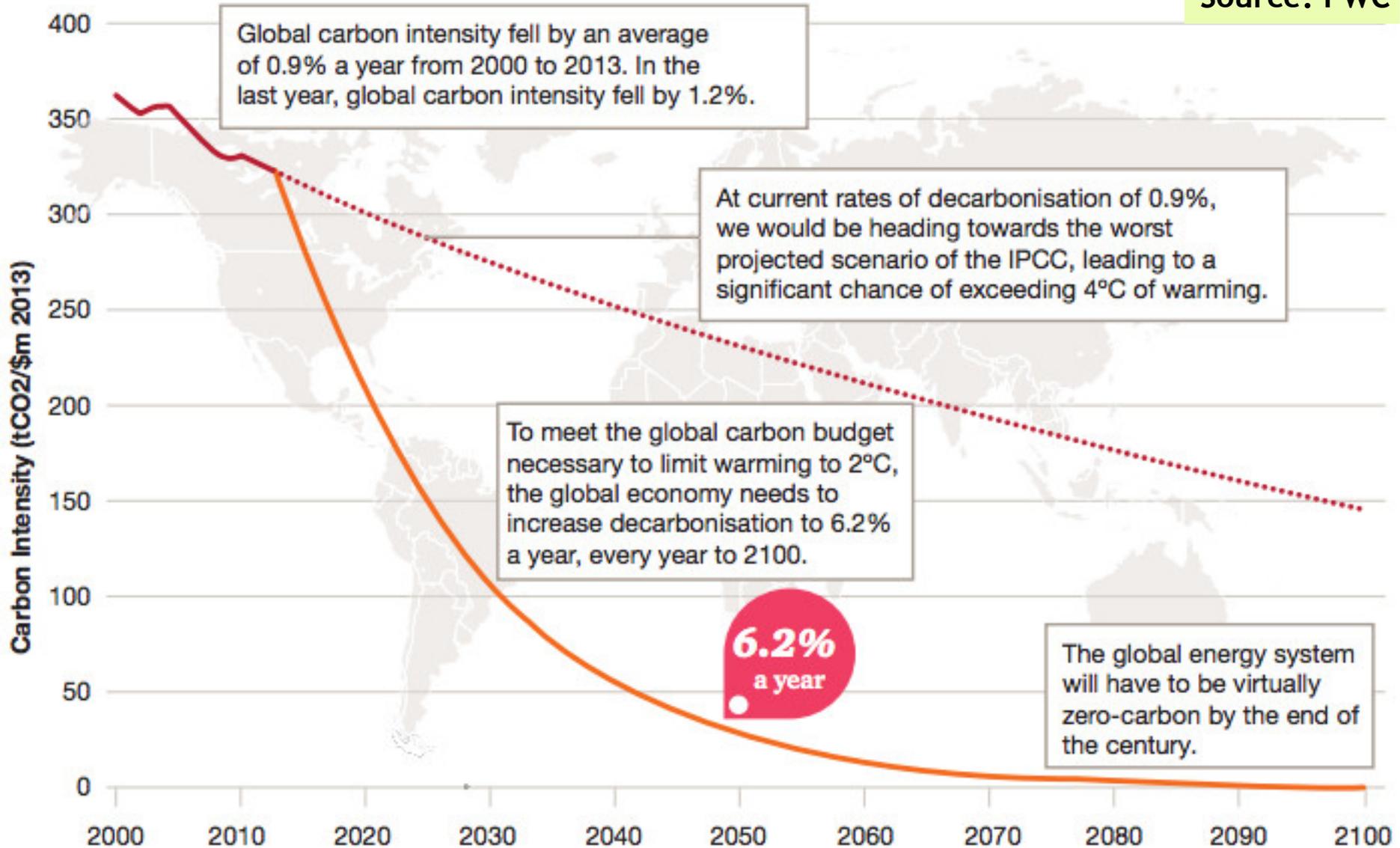
- Nazmul Chowdhury (ICCCAD): *“Forget making poverty history, climate change will make poverty permanent.”*

WATER, PRECIOUS LIQUID TREASURE,  
WATER, RUNNING OUT.

# A steep curve to zero-carbon energy

Source: PWC

## Pathway to two degrees



# What that steep curve means

## MOST IMPORTANT SHORT TERM

Renovate 3–5% of buildings per year



New buildings zero emissions from 2020



Best practice in agriculture



Zero deforestation by 2020s



STEPS FOR A  
**1.5°C**  
WORLD

low-e



Sustain renewables growth



No new coal power plants



Last fossil fuel car sold before 2035



Develop 1.5°C vision for aviation & shipping

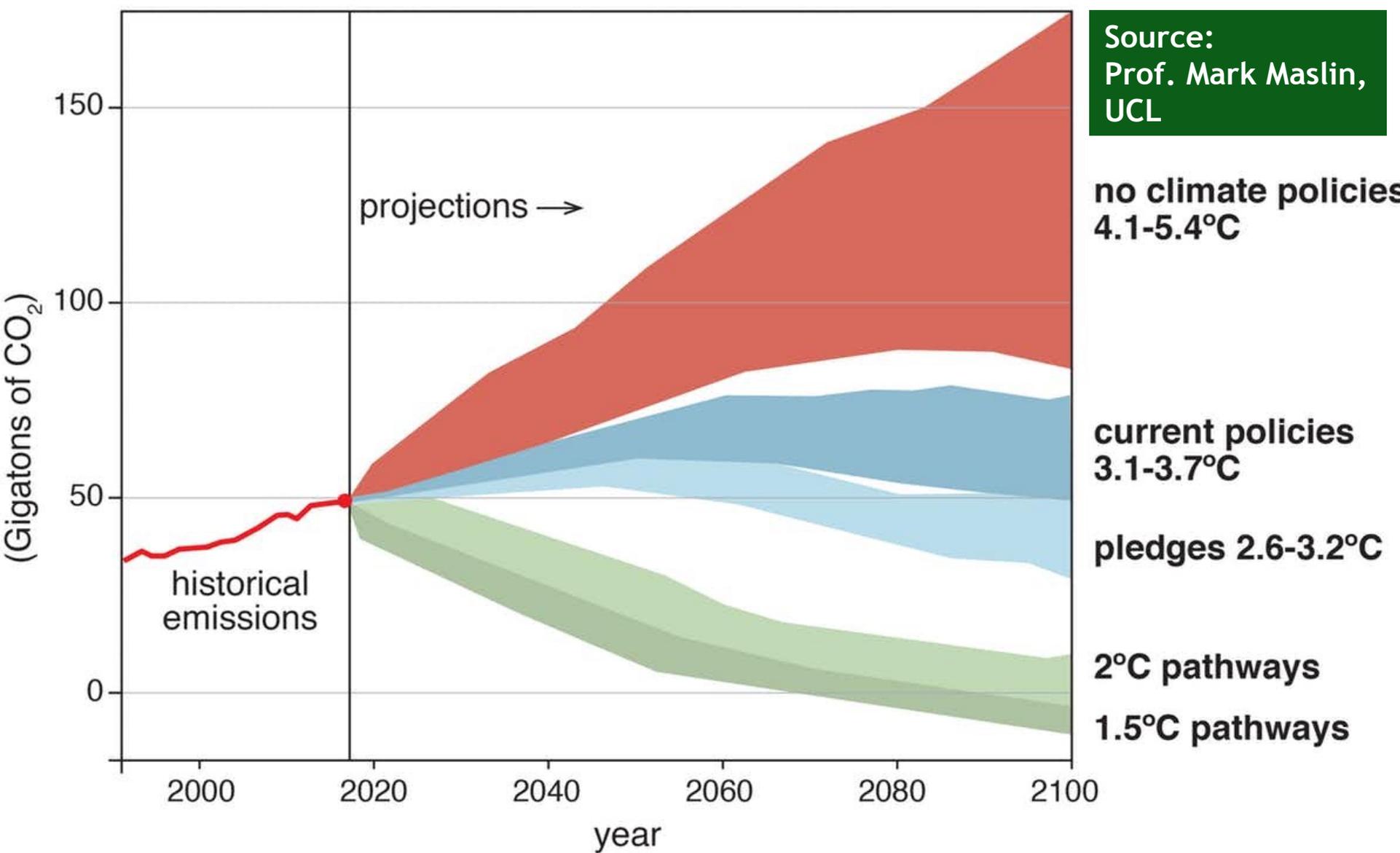


New industrial installations low carbon after 2020



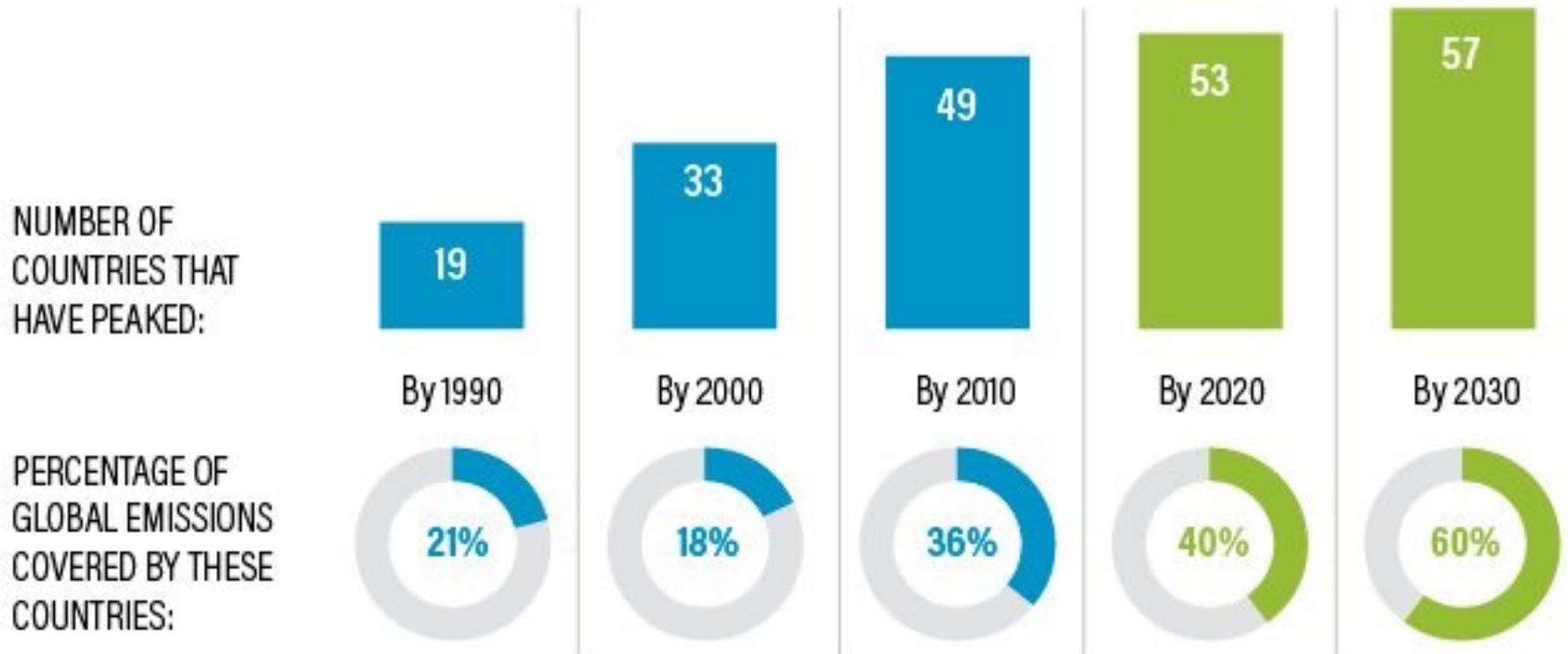
# The Emissions Reduction Gap

Past and future carbon emissions



# It can be done: 'peak carbon' (WRI, 2017)

## Growth in Peaking of Countries' GHG Emissions Over Time



Source: [wri.org/turning-points](http://wri.org/turning-points)



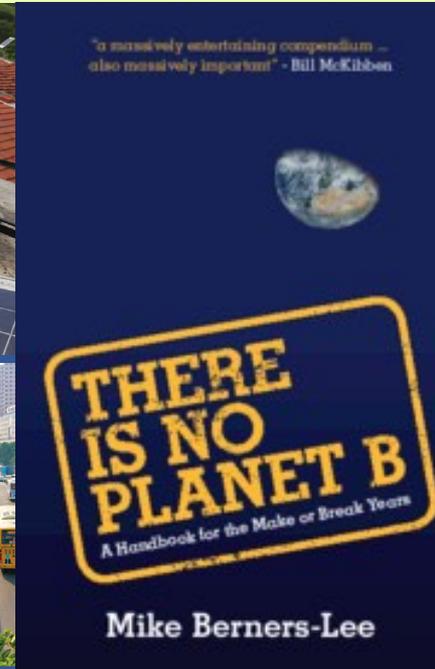
WORLD RESOURCES INSTITUTE

# We have the money, the technologies and the policy proposals needed to rise to the challenges



**Net Zero**  
**The UK's contribution to**  
**stopping global warming**

Committee on Climate Change  
May 2019



## **SEIZING THE GLOBAL OPPORTUNITY**

### **PARTNERSHIPS FOR BETTER GROWTH AND A BETTER CLIMATE**

The 2015 New Climate Economy Report

# Where do we stand?

- We have most of the technologies we need to make transitions to a sustainable economy...
- We have the money, evidence and knowledge...
- We have the grand global and national plans...
- What we lack so far - though things *are* moving:
  - political willpower to invest in and make a priority of sustainable economy and ecological stewardship
  - processes to unlock investments for a sustainable future
  - a critical mass of corporations committed to genuinely sustainable production and consumption
  - a critical mass of informed and concerned citizens with voice





FATHER FORGIVE

**What on Earth are the Churches doing?**

# Strong action by the Church of England

- General Synod vote, February 2020: achievement of **net-zero** greenhouse gas emissions from the church's entire operations by **2030** - well ahead of UK Government target date of 2050
- C of E is an international leader in pro-environmental and ethical investment policy and monitoring
- Inspiration taken from the Pope's 2015 Encyclical *Laudato Si*, and from 2019 School Strikes for the Climate
- Eco-Church initiative for congregations
- 2020 Lent Campaign focussed on climate action and care for Creation
- 2021 Tearfund report, *Burning Down The House*: young Christians want a lot more environmental action from the Church - and it matters to their faith. See [https://weare.tearfund.org/BurningDownTheHouse/?utm\\_source=Tearfund&utm\\_campaign=caa87e7b52-Burning+down+the+house+%E2%80%93+Main+%28Eng%29+%E2%80%93+Feb+21&utm\\_medium=email&utm\\_term=0\\_3245dce5e3-caa87e7b52-30526217](https://weare.tearfund.org/BurningDownTheHouse/?utm_source=Tearfund&utm_campaign=caa87e7b52-Burning+down+the+house+%E2%80%93+Main+%28Eng%29+%E2%80%93+Feb+21&utm_medium=email&utm_term=0_3245dce5e3-caa87e7b52-30526217)

# Church initiatives

- Eco-Church: A Rocha programme for churches to get engaged in Christian action on climate and nature conservation
- 2020 Call for Action on Climate from C of E Environment Working Group
- C of E: now a world-leader in ethical/environmental investment strategy and tools
- C of E: Net Zero by 2030
- Lent campaigns
- Church, multi-faith and faith/secular projects linked to Glasgow COP26 on climate, November 2021
- Engagement in Citizens' Forums on climate action



# Climate: *Local* Action Counts

- Global deals and national plans can only be put into practice *locally*....
- ... by households, communities and organisations - including churches...
- ...through investments and changes in the way we live

Christ Church  
West Wimbledon  
Eco-team  
in action

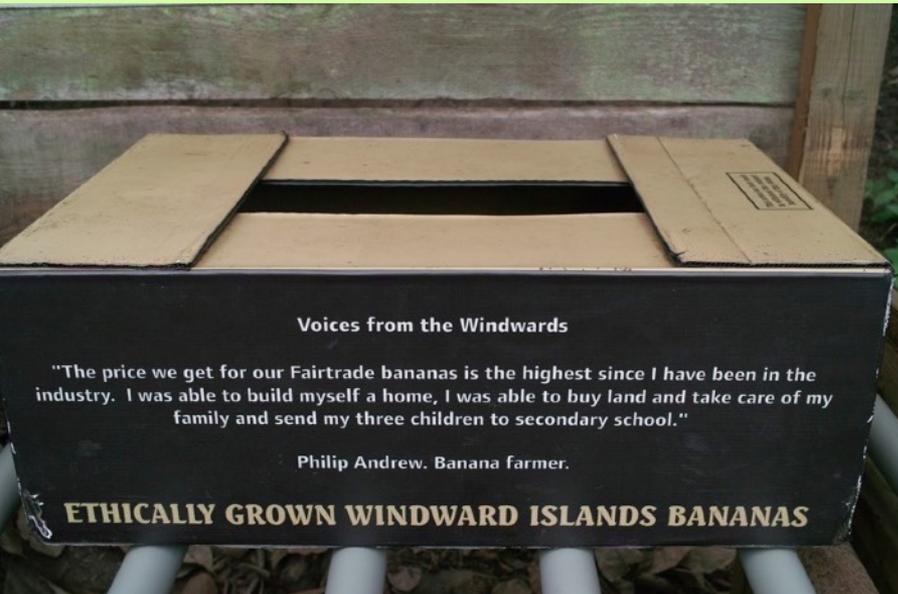


# Eco-Church - a great resource

- **Partnership: A Rocha, C of E, Tearfund, Christian Aid, Methodists**
- **A wonderful way to build on what you've already done in church**
- **Free resources**
- **Awards scheme**
- **<http://ecochurch.arocha.org.uk>**



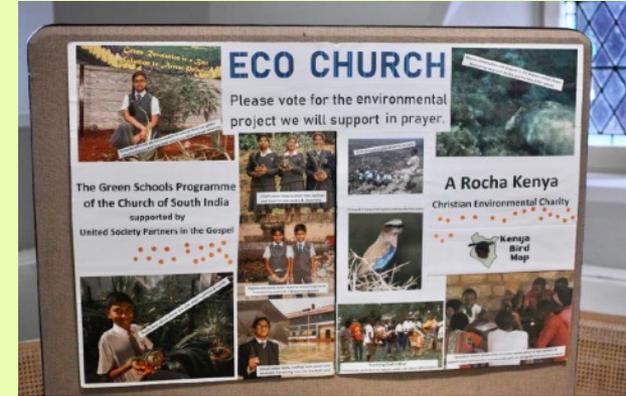
# Spending



- Do an audit of church **spending** and what **gets wasted**...
- How can we **purchase** better? Fair trade, local food, recycled goods - and using less energy and water and car/plane trips
- Can we **invest** in Green energy, maybe with others in diocese?
- Can we use the CofE **Parish Buying** scheme and **Green Energy Tariffs**?
- **What will we do with the savings?**

# What can we do?

- Eco-Church and similar non-faith schemes
- Talk to family, friends, neighbours, colleagues about climate and Nature and why it matters to you
- Write to your MP and councillors
- Write again to your MP and councillors
- Do *not* despair
- Focus on things you can do *easily*...
- And on a *few* things that are hard...diet and travel changes
- Make changes *in concert with others*



# In my church (first year in Eco-Church)

- Weekly Green Prayer in service sheet
- Climate and Nature crisis appear most weeks in the intercession prayers
- Creationtide photo and art display and reflection spaces in church
- High energy efficiency in refurbished hall
- 2 community eco-festivals held
- Guest speakers eg Southwark DEO
- Lent Carbon Fast
- Small group discussion series on creation care



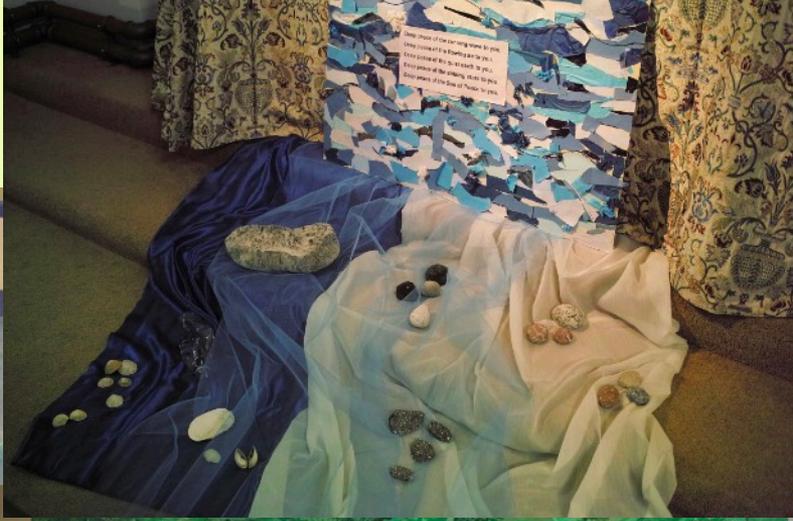
# In my church

For since the creation of the world, God's invisible qualities - his eternal power and divine nature - have been clearly seen, being understood from what has been made, so that people are without excuse.  
Romans 1 v 20

## Creationtide



The people will rise to the challenge. And since our leaders are behaving like children, we will have to take the responsibility they should have taken long ago.  
Greta Thunberg at UN Climate Conference, Poland, 2018



The land produced vegetation: plants bearing seed according to their kinds and trees bearing fruit with seed in it according to their kinds. And God saw that it was good.  
Genesis 1 v 12



## Creationtide



### ECO CHURCH

Please vote for the environmental project we will support in prayer.

The Green Schools Programme of the Church of South India supported by United Society Partners in the Gospel

A Rocha Kenya Christian Environmental Charity

Kenya Bird Map



British Birds

BIRDS OF HEATH and WOODLAND BIRDS

BIRDS OF PREY

The Fieldwork Book of GARDEN BIRDS

# Do one thing together

- Take up or keep going with Eco-Church

**Green Revolution is a Best Solution to Arrest Pollution**

Students will audit the consumption of natural resources within school campus and help their schools to adopt greener solutions.

**ECO CHURCH**

Please vote for the environmental project we will support in prayer.

**The Green Schools Programme of the Church of South India supported by United Society Partners in the Gospel**

Environmental education in schools

Pupils learn how to plant tree saplings and learn to save water & electricity

Organic and plastic waste depot at School helps teach Composting methods + Waste management

School water tanks, rooftop solar panels and rainwater harvesting from the baseball court

**A Rocha Kenya**

Christian Environmental Charity

**Kenya Bird Map**

To map all of Kenya's bird species and describe their status.

Marine conservation and research in the Western Indian Ocean Monitoring coral reef decline and the loss of fish species

Pupils learn about plants and also about nutrition & health

Secondary school scholars promote conservation of eco-systems & support local communities economically and run alongside Eco-tourism projects

**Farming God's Way**

Conservation agriculture to improve yields and reduce deforestation

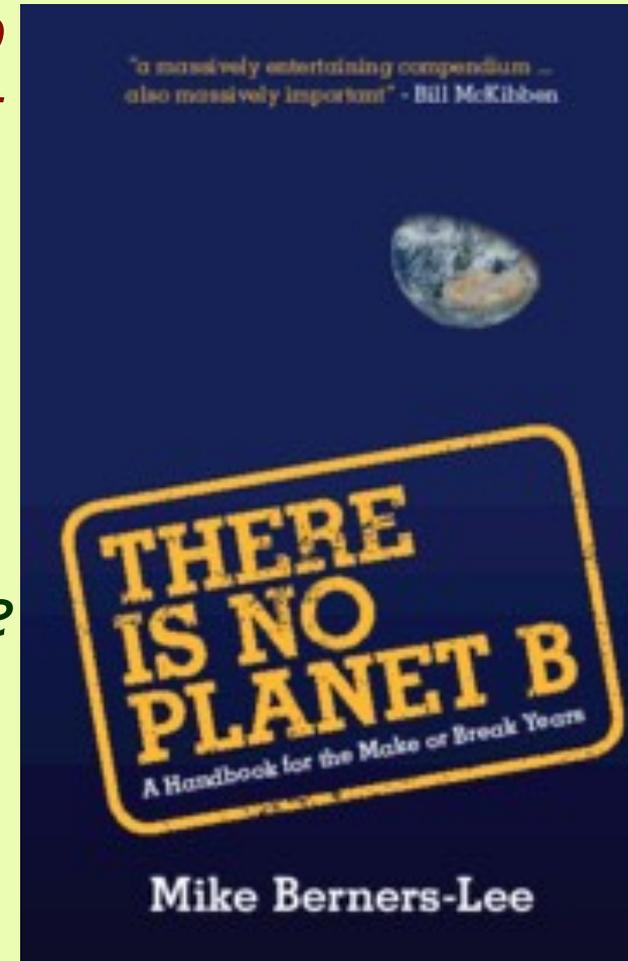
# Do one thing yourself

- If you're a meat/fish-eater, try going vegetarian for 3 days a week
- If you're a vegetarian, try going vegan 3 days a week
- If you're a vegan, try Oat Milk!



# Read one thing

- *“All the pathways of this book seem to be converging inescapably on values. It turns out to be the crunch point. I haven’t manipulated it that way. In fact, if I could have avoided a values discussion, the book would have been easier to write.”*
- Source: Mike Berners-Lee (2021), *There Is No Planet B*, Cambridge University Press, Cambridge
- <https://www.cambridge.org/core/books/there-is-no-planet-b/1C152963CE739459C346D76B439A0272>



# Research resources on environmental crises and action

- University of Surrey and partners: **Centre for the Understanding of Sustainable Prosperity (CUSP)**. See [www.cusp.ac.uk](http://www.cusp.ac.uk)
- University of Surrey and partners: **RESOLVE and Sustainable Lifestyles Research Group** - sustainable energy consumption, behaviour change, lifestyles. See <http://www.sustainablelifestyles.ac.uk>
- **The Yale Forum on Religion and Ecology**. See <http://fore.yale.edu>
- **The John Ray Initiative** on Christianity, ecology and science. See <http://www.jri.org.uk/introduction/>
- University of Sussex / Institute of Development Studies: **STEPS** - integrating development studies with science and technology assessment. See <http://www.steps-centre.org/index.html>
- Stockholm University, **Stockholm Resilience Centre** and **planetary boundaries** programme. See <http://www.stockholmresilience.org/>
- **Future Earth** programmes on research for global sustainability. Future Earth is a global platform for international scientific collaboration, with a 'federation' of projects and other initiatives related to Global Environmental Change. See <http://www.futureearth.org/>

# Worth reading: Faiths and Ecology

- Bell, C et al (eds) (2013), *Living Lightly, Living Faithfully: religious faiths and the future of sustainability*, Faraday Inst./KLICE : Cambridge
- Deane-Drummond, C et al (eds.)(2017), *Religion in the Anthropocene*, Cascade Books, Eugene
- Evans, A & Gower, R (2015), *The Restorative Economy*, Tearfund: London
- Grim, J & Tucker, ME (2014), *Ecology and Religion*, Island Press: Washington DC
- Maibach, E., Leiserowitz, A., Roser-Renouf, C., Myers, T., Rosenthal, S. & Feinberg, G. (2015), *The Francis Effect: How Pope Francis Changed the Conversation about Global Warming*, George Mason University and Yale University. Fairfax, VA: George Mason University Center for Climate Change Communication
- Northcott, M (2014), *A Political Theology of Climate Change*, SPCK: London
- Pope Francis I (2015), *Encyclical Letter: Laudato Si'*, Vatican Press: Rome
- UNEP, *Faith for Earth*, UNEP Science Division, 2018: <https://www.unenvironment.org/resources/publication/faith-earth-foresight-brief-no-008>
- White, L (1967), “The historical roots of our ecological crisis”, *Science* 155 (3767), pp. 1203-1207

# Worth watching: films on SD/environment

- *The End of the Line* (fisheries and sustainability)
- *Into Eternity* (nuclear waste and ethics of our relationship to people in the far future)
- *Manufactured Landscapes* (the transformation of the Earth by industry - especially in China)
- *Home* (Earth from the air)
- *Humanity* (the diversity of peoples and the challenges of the 21st century)
- *No Impact Man* (an American family tries to live sustainably)
- *The Overview Effect* (the impact of seeing the Earth from space)
- *Planetary* (becoming aware of the fragility of the Earth and the values needed to sustain it for us and future people)

# Thank you for your interest

- [i.christie@surrey.ac.uk](mailto:i.christie@surrey.ac.uk)
- [www.cusp.ac.uk](http://www.cusp.ac.uk)
- [www.surrey.ac.uk/ces](http://www.surrey.ac.uk/ces)

**Photo: conference on church  
action on climate change,  
Coventry Cathedral,  
September 2015**

