

Welcome to this week's presentation & conversation hosted by the **Canadian Association for the Club of Rome**, a Club dedicated to intelligent debate & action on global issues.

The views and opinions expressed in this presentation are those of the speaker & do not necessarily reflect the views or positions of CACOR.

Navigating the Great Transition Pope Francis' Plea for an Integral Ecology and Planetary Friendship.

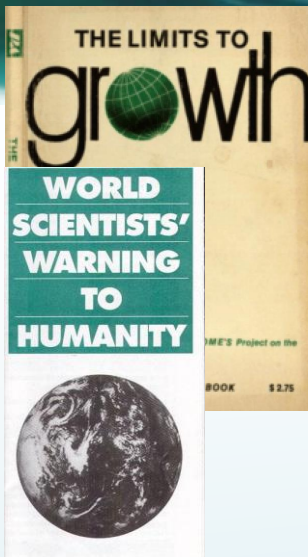
Biography: Dr. Tom McAuley—geological engineer & water resources specialist with PhD in theology & ethics—has done water resources engineering for 30+ years, including 12 years with the International Joint Commission. Tom is passionate about how we're shaping the planet's future, with interests in spirituality, family, hiking, Bernard Lonergan, Earth-keeping, just futures, sustainable communities, & kayaking. He has taught & spoken in academic & interfaith settings. During the pandemic, he created & taught *Faith, Ethics, & the Anthropocene* at St. Paul U

Description: Current actions & Nationally Determined Contributions to the Paris Agreement are insufficient to prevent critical climate tipping points. In this update, he will highlight recent research on climate and biodiversity, underscoring the urgent need for a deep, transformative shift in human behaviour. Without such change, an already challenging future may become dangerously unstable. He will also reflect on the leadership of Pope Francis, who has powerfully called for a bold cultural revolution to care for our common home. His insights offer valuable guidance on the path forward in the Great Transition.

CACOR acknowledges that we all benefit from sharing the traditional territories of local Indigenous peoples (First Nations, Métis, & Inuit in Canada) and their descendants.



Website: canadiancor.com
YouTube: [Canadian Association for the Club of Rome](#)
2025 April 30 Zoom #244



1972 Early Wake-up Calls

1992

"A great change in our stewardship of the earth and the life on it is required if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated."

2000 - EARTH CHARTER

"We stand at a critical moment in Earth's history, a time when humanity must choose its future.

As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise.





Laudato Si' - On the care of our common home (1)

Some key messages

I urgently appeal, then, for a new dialogue about how we are shaping the future of our planet. LS15

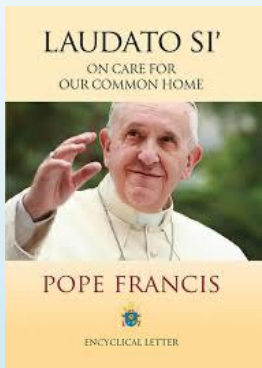
“If we are truly concerned to develop an ecology capable of remedying the damage we have done, no branch of the sciences and no form of wisdom can be left out...” LS63

➤ caring for our environment is not just a moral duty but a spiritual imperative

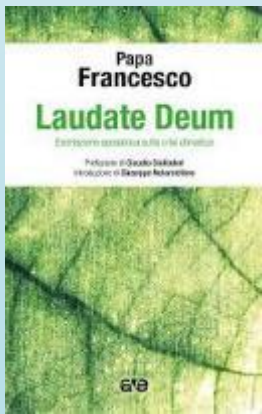
Pope Francis References

Sustainable Humanity, Sustainable Nature: Our Responsibility

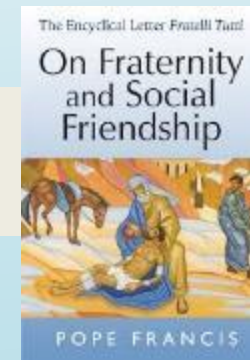
Statement of the Joint Pontifical
Academies of Sciences and Human
Sciences Workshop, 2014



2015 - Laudato Si': On the care for our common home



2020 - Fratelli tutti: On fraternity and social friendship

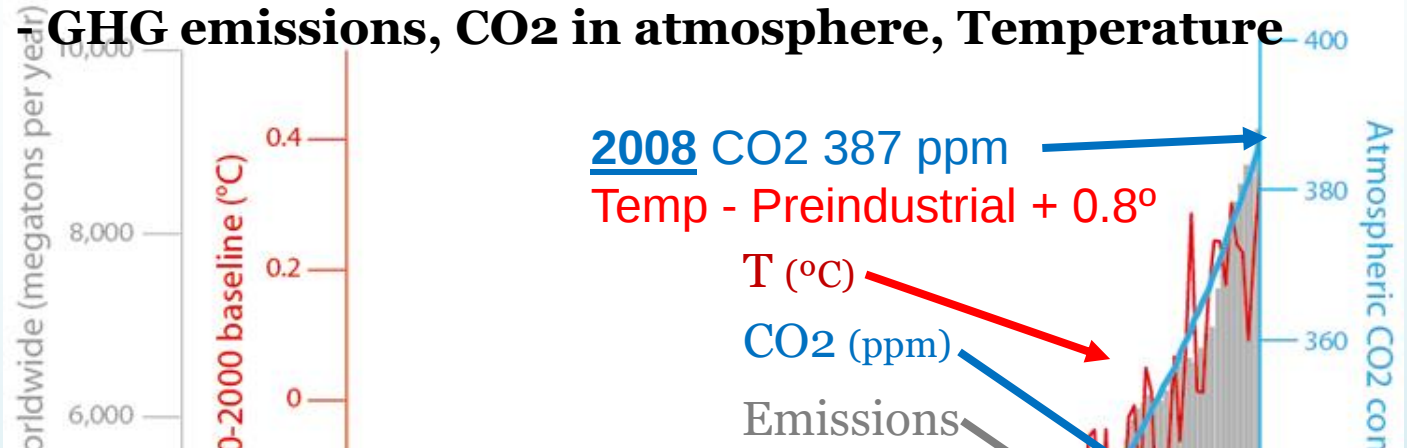


2023 - Laudate Deum: Apostolic Exhortation to all people of good will on the climate crisis.

An Update:

Emissions and a Heating World

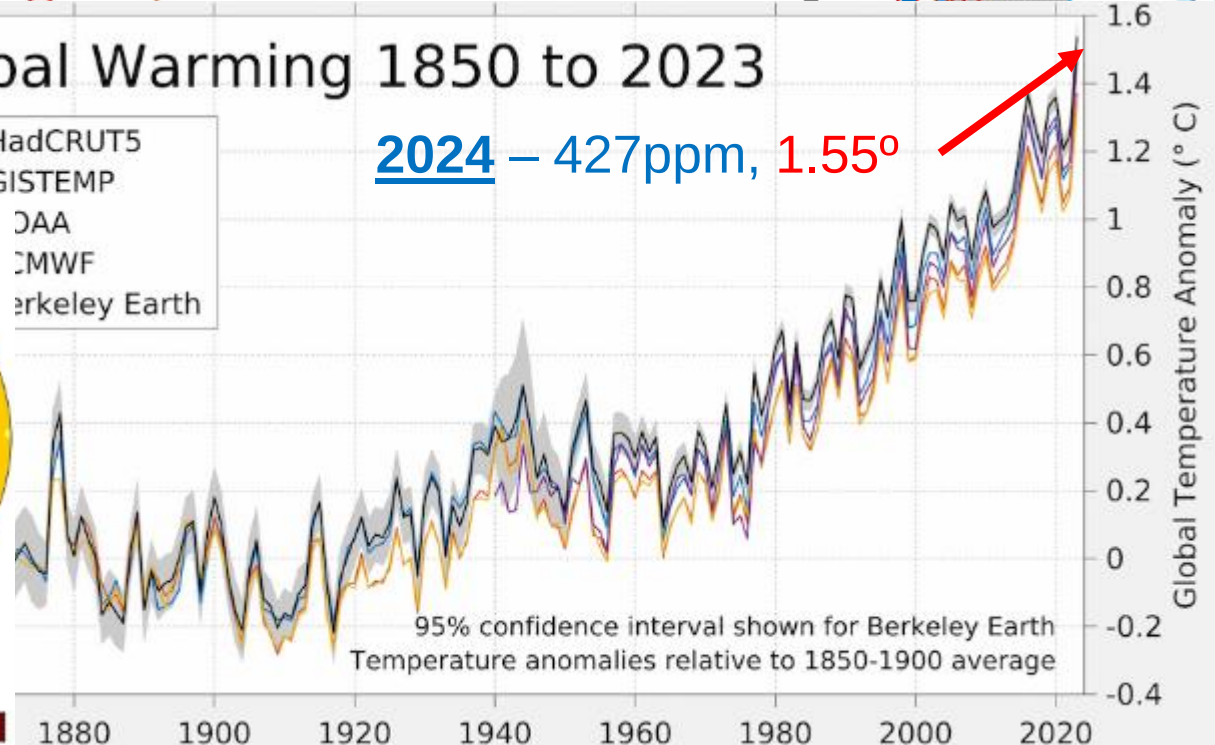
GHG emissions, CO₂ in atmosphere, Temperature



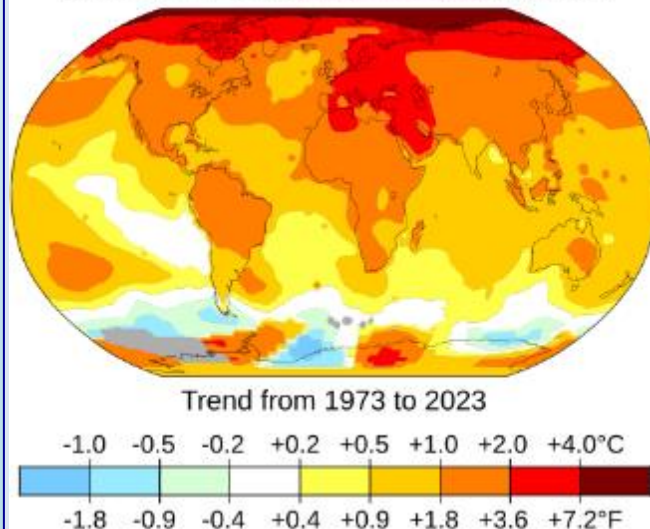
Global Warming 1850 to 2023

Legend:
— HadCRUT5
— GISTEMP
— NOAA
— JMA
— Berkeley Earth

2024 – 427ppm, 1.55°

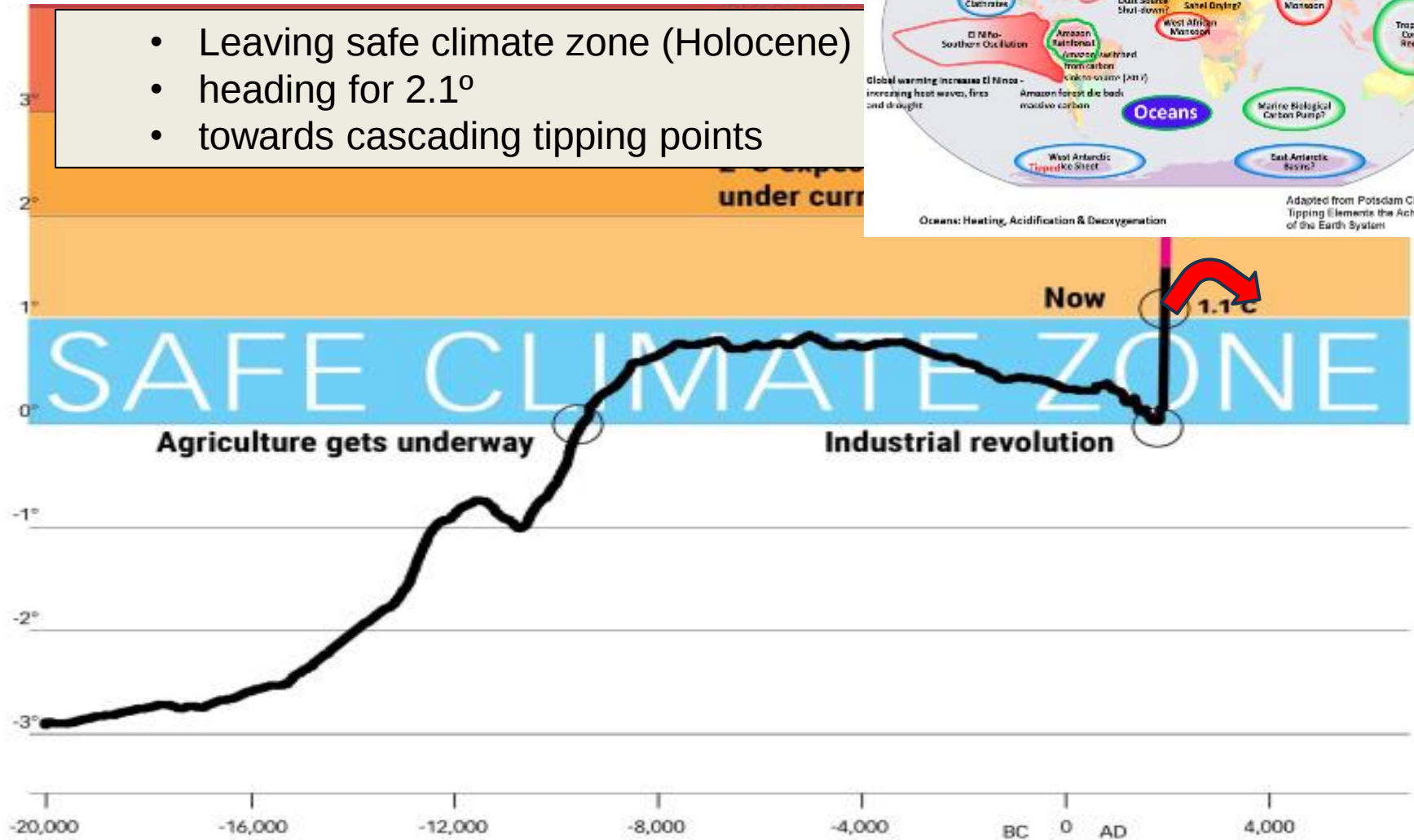


Temperature change over the past 50 years



Climate Futures

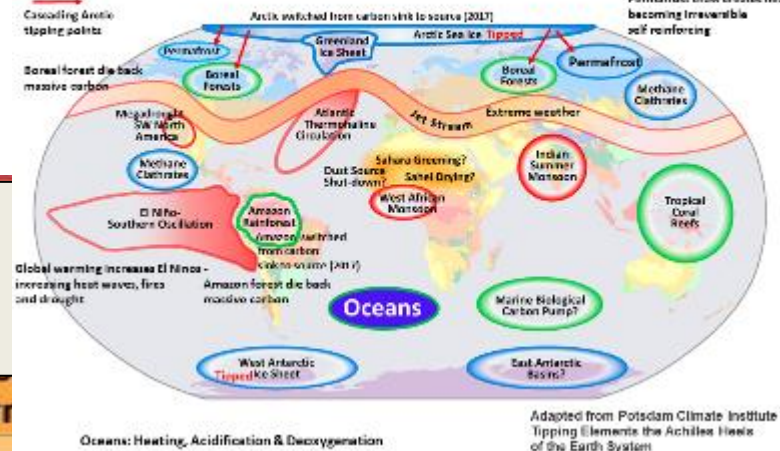
- Leaving safe climate zone (Holocene)
- heading for 2.1°
- towards cascading tipping points



Based on graph by Jos Hagelaars at <https://ourchangingclimate.wordpress.com/2013/03/19/the-two-epochs-of-marcott/> from A Reconstruction of Regional and Global Temperature for the Past 11,300 Years by Shaun A. Marcott, Jeremy D. Shakun, Peter U. Clark, Alan C. Mix at <http://science.sciencemag.org/content/339/6124/1198>

Global Warming Vulnerable Tipping Points

Committed global warming (>2°C) commits most, most likely past tipping
Thawing permafrost is emitting CO₂, methane & nitrous oxide



Economic Risk & Decline

Greening makes Sound Economic Sense

 Reuters

Climate change damage could cost \$38 trillion per year by 2050, study finds

Damage to farming, infrastructure, productivity, and health from  The Guardian cost an estimated \$38 trillion per year by 2050,...

Apr 17, 2024

[Climate breakdown will hit global growth by a third, say central banks](#)

New modelling finds risk to global economies much worse than previously thought, but group of central banks says even this may be an underestimate.

Nov 8, 2024

Davos 2025 - key climate takeaways for business leaders

- **The cost of inaction is high.** Extreme weather and other physical climate hazards could wipe out as much as 7% of corporate earnings annually by 2035
- Every dollar invested in **adaptation and resilience measures** can generate up to 19 US\$ in avoided losses.
- **Green markets are set to grow** from US\$5 trillion in 2024 to US\$ 14 trillion by 2030.

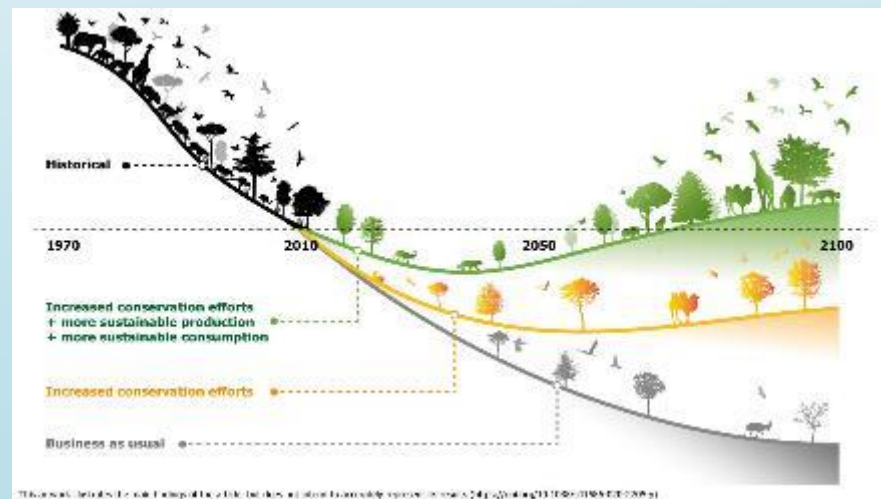
Biodiversity Decline



Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'- UN Report:

<https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>

PARIS, 6 May [2019] – **Nature is declining globally at rates unprecedented in human history** – and the rate of species extinctions is accelerating, with grave impacts on people around the world now likely, warns a landmark new report from the **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)**, the summary of which was approved at the 7th session of the IPBES Plenary, meeting last week (29 April – 4 May) in Paris.



On the care of our common home (2)

“some key messages”

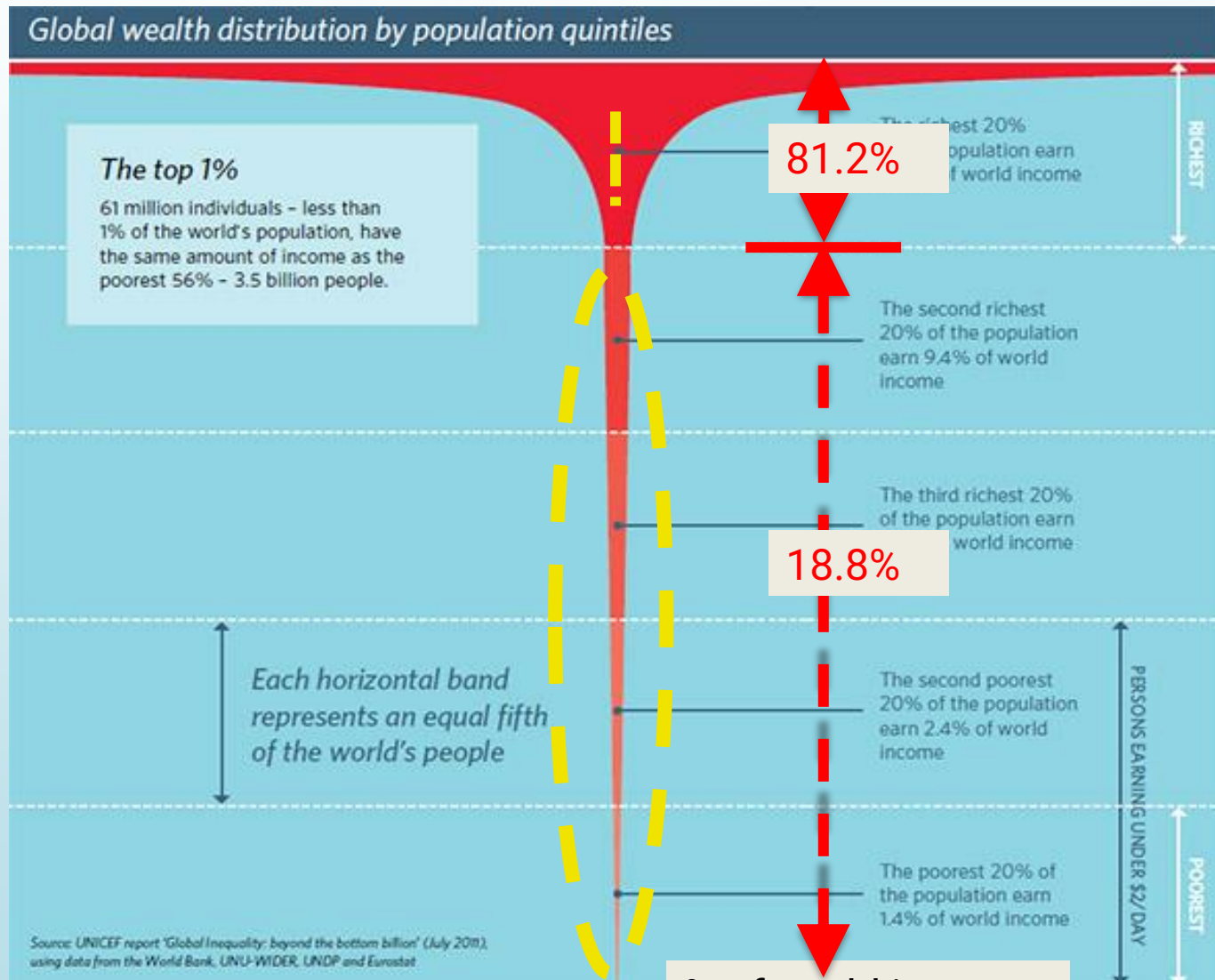
“Whether religious or not, everyone can agree that the *earth is a shared inheritance*, whose fruits are meant to benefit everyone both today and tomorrow.



... God created the world for everyone. Consequently,
“it is not in accord with God’s plan that this gift be used in such a way
that its benefits favour only a few.
This calls into serious question the unjust habits of a part of humanity”
(LS93).

Global wealth distribution

An unlevel playing field



UNICEF report – 'Global Inequality ...2011'

% of world income

Carbon Inequality

Percentage of CO₂ emissions by world population



What little carbon dioxide we can still safely emit is being burned indiscriminately by the superrich. We share new evidence of how the yachts, jets and polluting investments of 50 of the world's richest billionaires are accelerating the climate crisis.

Oxfam, Oct. 2024, Carbon Inequality Kills



Oxfam: Superyachts and jets
rich EU citizens produce the same
emissions as 13,393 EU citizens

OXFAM





Towards a more just and fraternal world

“When nature is viewed solely as a source of profit and gain, this has serious consequences for society.

This vision of “might is right” has engendered immense inequality, injustice and acts of violence against the majority of humanity, since resources end up in the hands of the first comer or the most powerful: the winner takes all...” LS82

“endorsing utilitarian deregulation and global neoliberalism means imposing the law of the strongest as the only rule; and it is a law that dehumanizes.”

- Feb.26, 2025 letter to the Pontifical Academy for Life

Completely at odds with this model are the ideals of harmony, justice, fraternity and peace as proposed by Jesus. LS82



Towards an 'Integral Ecology' (1)

Laudato Si'

Ch3. The Human Roots of the Ecological Crisis (101)

Technology: Creativity and Power (102-105)

The Globalization of the Technocratic Paradigm (106-114)

The Crisis and Effects of Modern Anthropocentrism (115-136)

4. Integral Ecology (137)

Environmental, Economic, and Social Ecology (138-142)

Cultural Ecology (143-146)

Ecology of Daily Life (147-155)

The Principle of the Common Good (156-158)

Justice Between the Generations (159-162)

5. Lines of Approach and Action (163)

Dialogue on the Environment in the International Community (164-175)

Dialogue for New National and Local Policies (176-181)

Dialogue and Transparency in Decision-Making (182-188)

Politics and Economy in Dialogue for Human Fulfillment (189-198)

Religions in Dialogue with Science (199-201)

6. Ecological Education and Spirituality (202)



Towards an 'Integral Ecology' (2)

202. To reorient the route, first humanity has to change.

We are lacking a consciousness of our common origin, our mutual belonging, and our shared future.

This basic knowledge would permit development of new convictions, new connections, new styles of life.

Thus emerges a great cultural, spiritual and educational challenge which implies a long process of transformation.



Towards an 'Integral Ecology' (3)



Environmental education has broadened its goals. LS210

- include a critique of the “myths” of a modernity
 - grounded in a utilitarian mindset
 - individualism, unlimited progress, competition,
 - consumerism, the unregulated market
- seeks to restore ecological equilibrium, establishing
 - harmony within ourselves, with others,
 - with nature and other living creatures,
 - and with God
- needs educators capable of developing an ethics of ecology, ...solidarity, responsibility and compassionate care.



LAUDATO SI'

Action Platform

**ECOLOGICAL
ECONOMICS**



**RESPONSE
TO THE
CRY
OF THE
POOR**



**ECOLOGICAL
EDUCATION**



**ADOPTION OF
SIMPLE LIFESTYLES**



**RESPONSE
TO THE
CRY
OF THE
EARTH**



**COMMUNITY
ENGAGEMENT
AND
PARTICIPATORY
ACTION**



**ECOLOGICAL
SPIRITUALITY**





“Yes, there is good news”

The Great Transition is Underway



smart
eco
cities



- Movements, networks, Org's
- Rewilding
- Land restoration
- Smart Eco-cities
- Agroecology, permaculture
- Sustainable Development Goals
- Future Economies, Economy for the Common Good
- Outdoor education



**LAUDATO SI'
MOVEMENT**

Catholics for Our Common Home



Sustainable Development Goals



Economics
for the
Common
Good

Jean Tirole
Winner of the Nobel Prize in Economics



Kunming-Montreal
GLOBAL BIODIVERSITY FRAMEWORK

AN ECONOMIC MODEL FOR THE FUTURE

**TRANSFORMING ECONOMY
FOR PEOPLE AND PLANET**

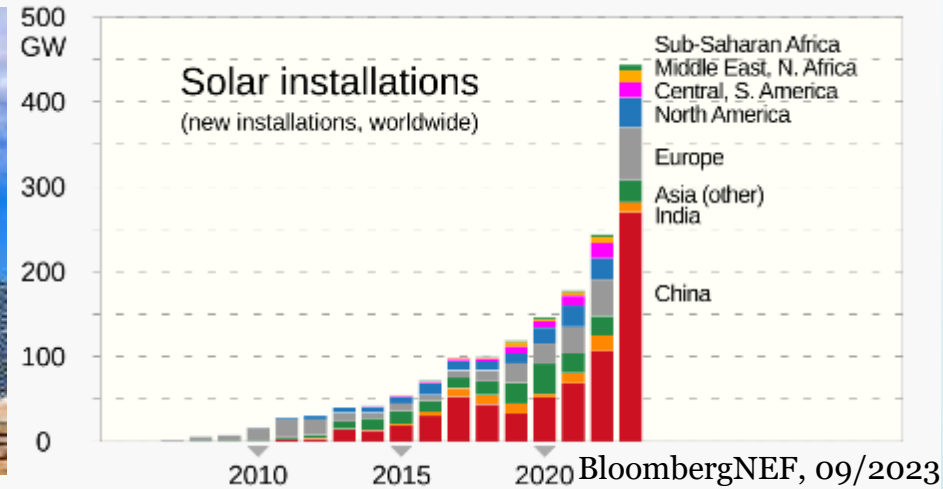


afr100

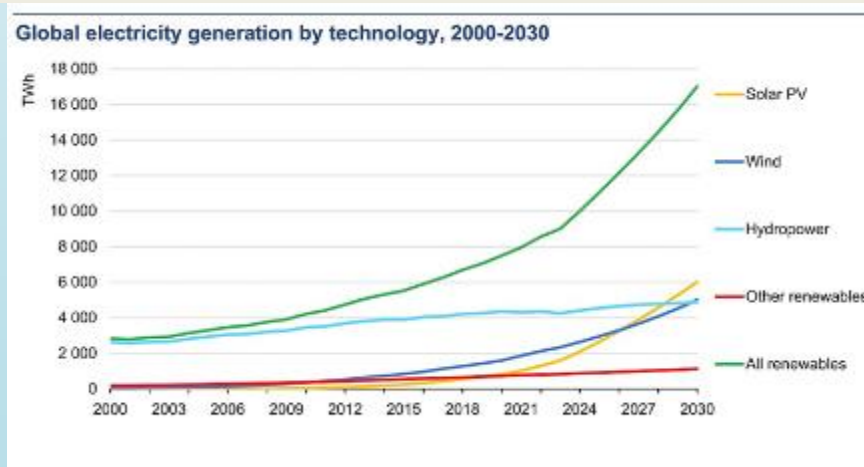
A New Phase for AFR100:
Accelerating Africa's Locally Led
Land Restoration Movement



Clean Energy – No turning back



“The global power mix is set to transform by 2030” International Energy Agency



“To restore stability to our planet, therefore, we must restore its biodiversity” — Sir David Attenborough

Rewilding – *Putting hope into action*

- A growing global movement focused on restoring ecosystems and biodiversity
- Projects are expanding (more than 70 countries) across Asia, Africa, Europe, Australia, Latin America, and North America
- Global Rewilding Alliance, Rewilding Europe
- The [UN Decade on Ecosystem Restoration](#) is further amplifying the rewilding movement,

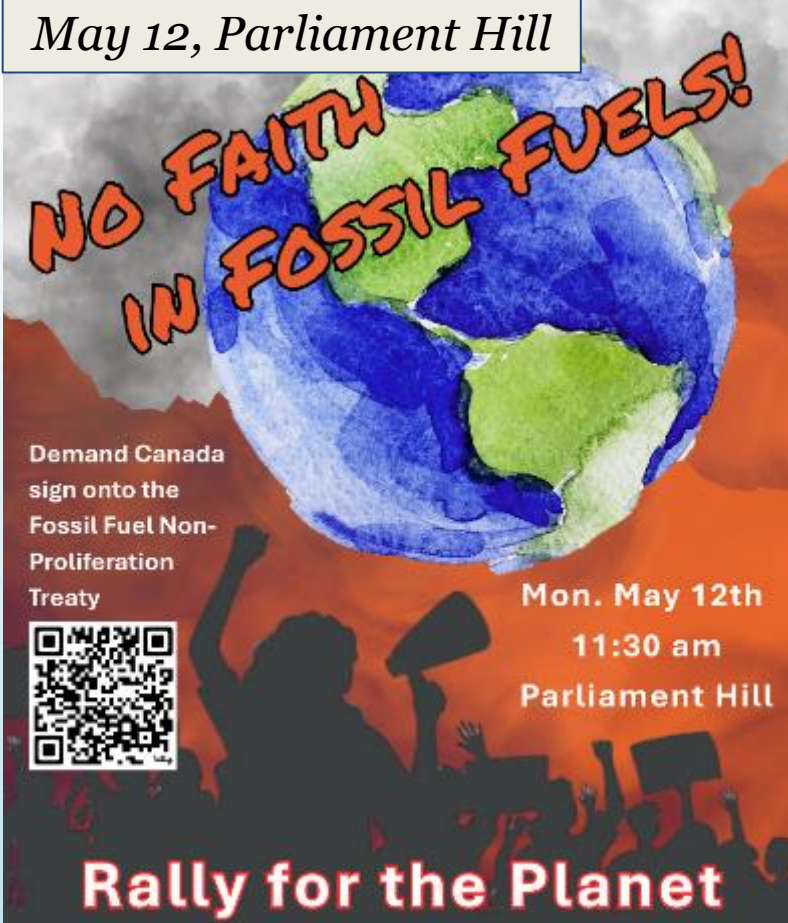
- **UN Convention on Biological Diversity (CBD)**
 - COP15/16 - Kunming-Montreal Global Biodiversity Framework
 - 12/2022, adopted by 190+ countries
 - 30-30-30 (target 3)
 - **protecting 30% of the planet’s oceans, lands, and freshwaters by 2030**



*Questions,
Dialogue

End*

May 12, Parliament Hill



**NO FAITH
IN FOSSIL FUELS!**

Demand Canada
sign onto the
Fossil Fuel Non-
Proliferation
Treaty

Mon. May 12th
11:30 am
Parliament Hill

Rally for the Planet

Logos at the bottom include: ORCTHCFRI, KAPOR, CENTRE ORLA, BUDGET SERVICE, CANADA FOR FUTURE, CAFES Ottawa, and MOVEMENT LAUDATO SI' MOVEMENT.



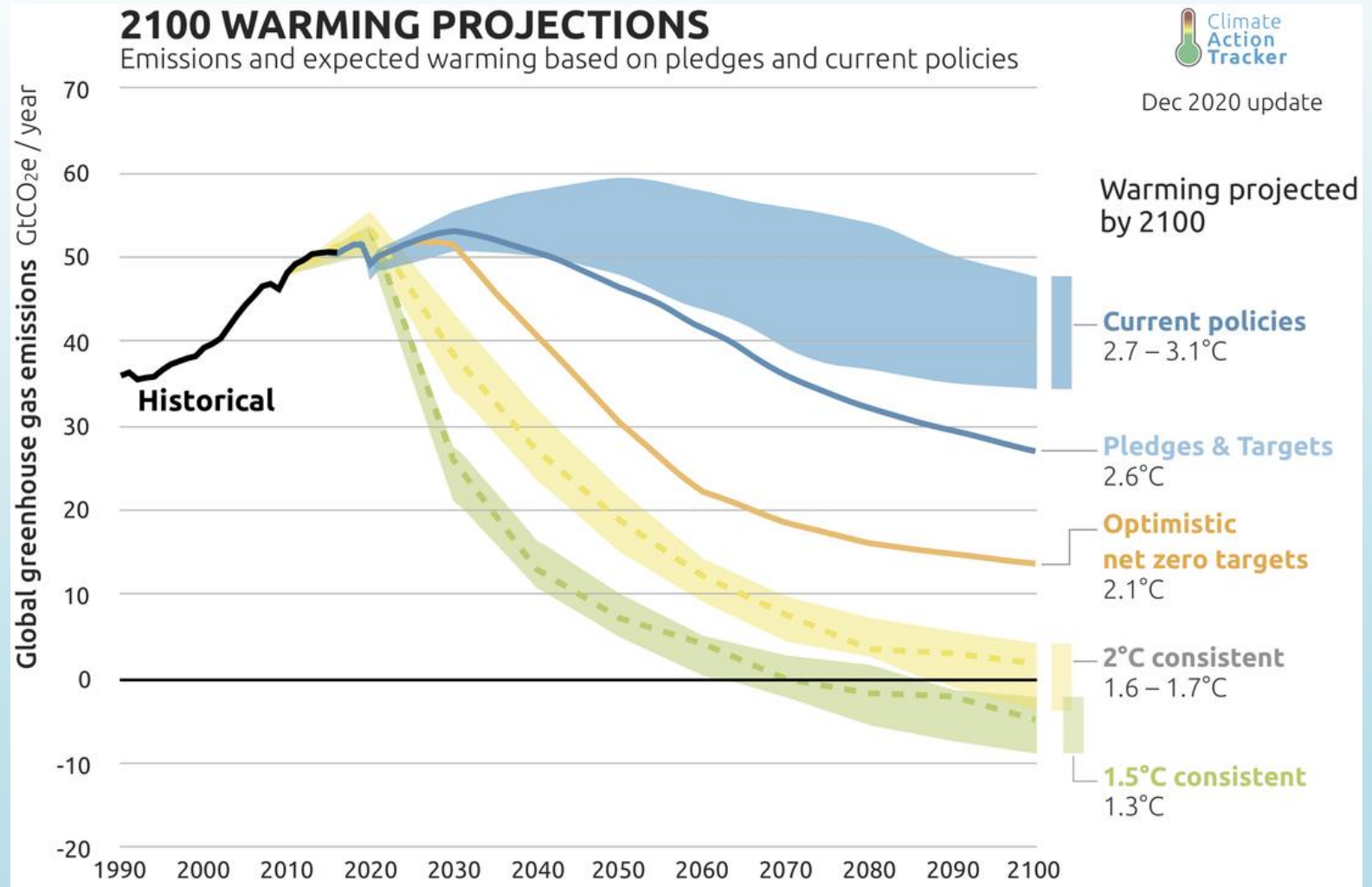
Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada

EXTRA SLIDES

(if needed for discussion)



TOWARDS A JUST WORLD ON A SAFE PLANET

Earth System Boundaries,
justice and transformations



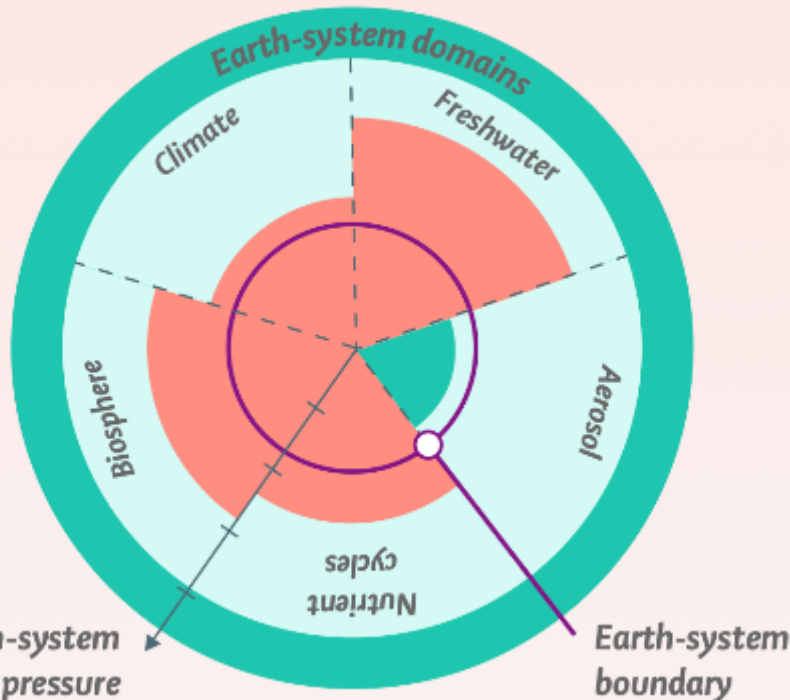
Johan Rockström, Co-Author

A JUST WORLD ON A SAFE PLANET:
a *Lancet Planetary Health*–Earth Commission
report on Earth-system boundaries,
translations, and transformations



#SafeAndJust

THE LANCET *Planetary Health*



The three I's of justice

Interspecies justice. A stable Earth system is needed for justice between humans and other species.

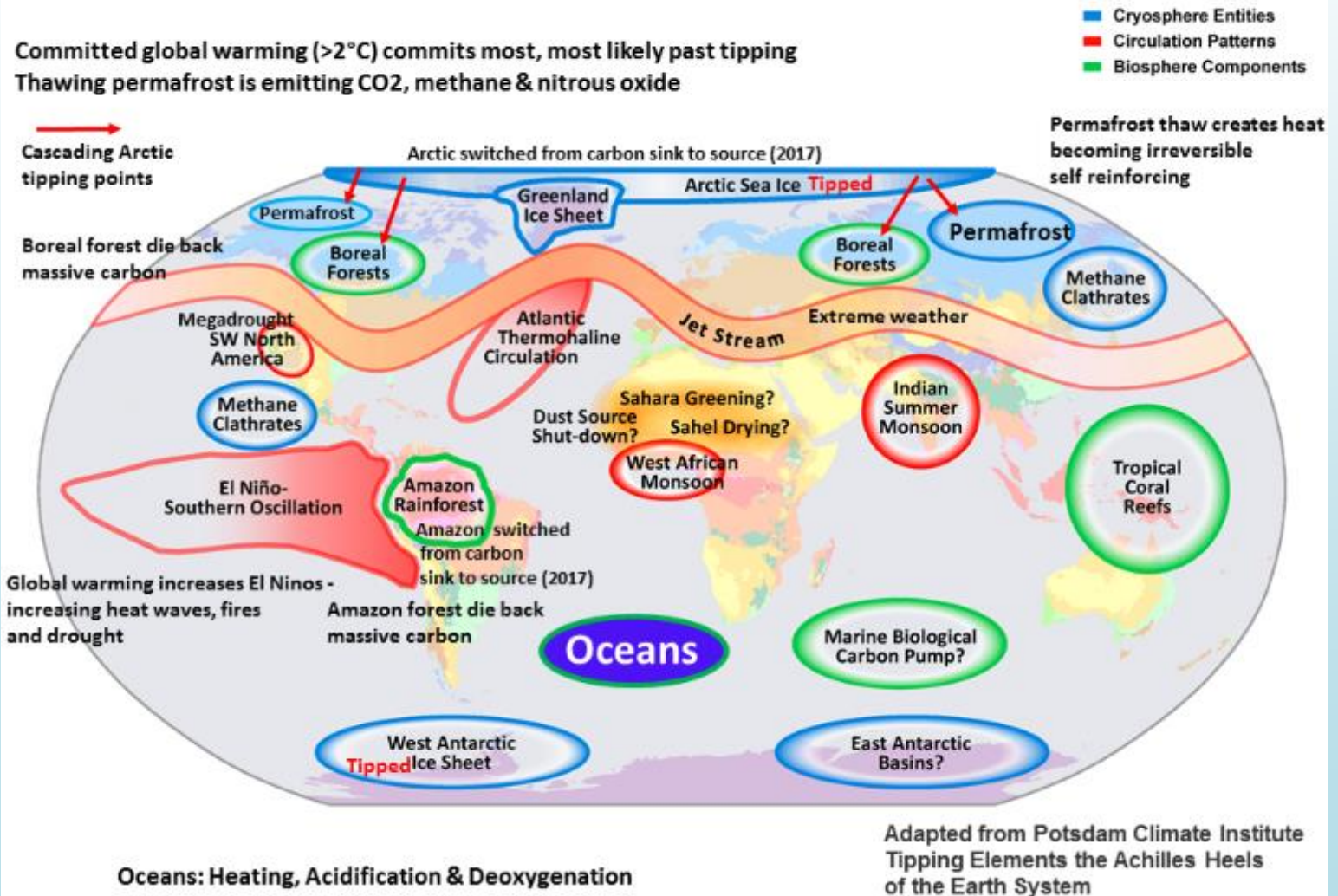
Intergenerational justice between past and present generations, and between us and the generations of the future.

Intragenerational justice among individuals, communities, and nations through meeting minimum needs or reducing suffering.

Climate Futures (3)

Global Warming Vulnerable Tipping Points

Committed global warming ($>2^{\circ}\text{C}$) commits most, most likely past tipping
Thawing permafrost is emitting CO_2 , methane & nitrous oxide





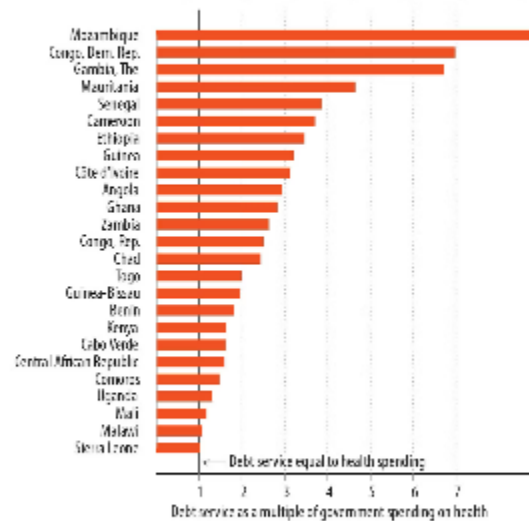
Harm & Responsibility

Climate Justice & Debt Justice for Equitable and Just Transition in the Global South

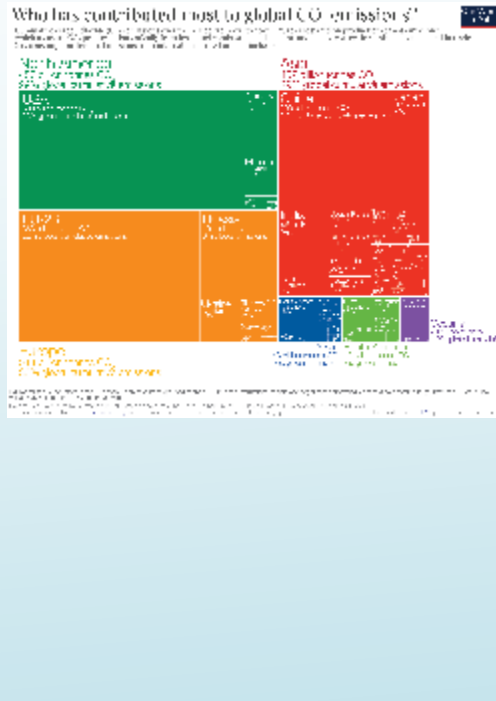
Chart 1

Neither healthy nor wealthy

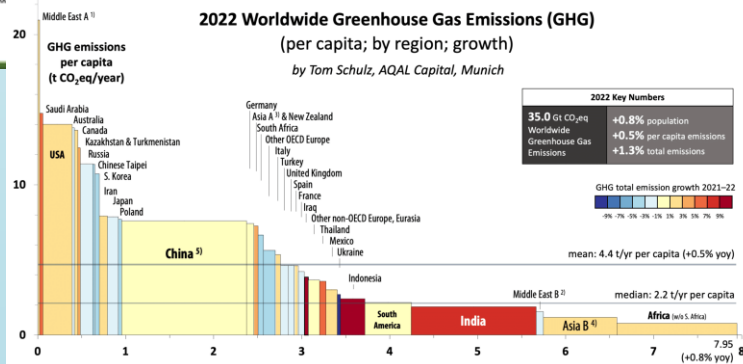
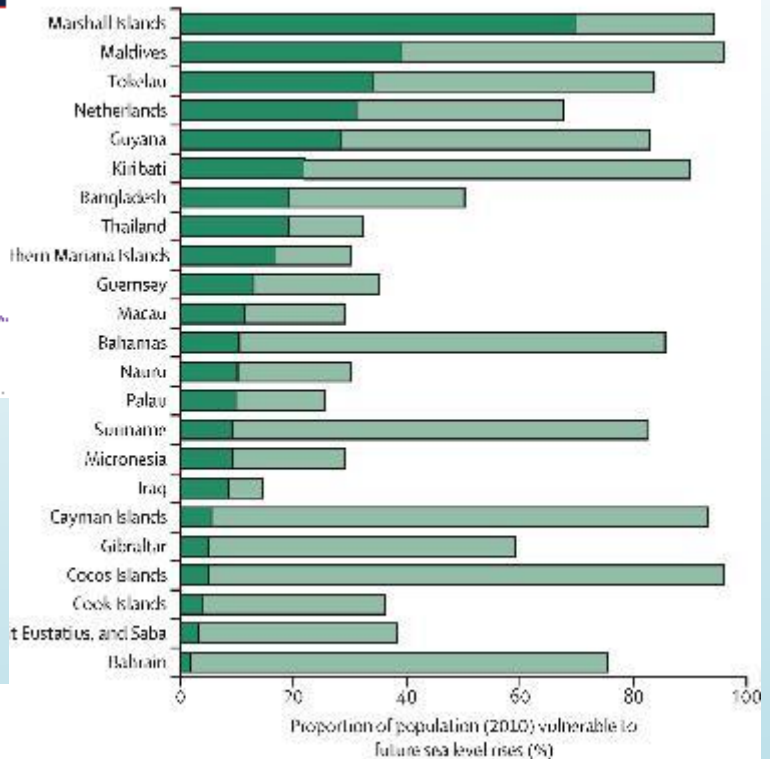
A number of sub-Saharan African countries spend more on debt servicing than on health.



Sources: World Health Organization; and World Bank, International Debt Statistics (<https://dataatopics.worldbank.org/debtstats/>)



B





*"A Christian who does not protect Creation ...
is a Christian who does not care about the work of God,
that work that was born from the love of God for us."*

Pope Francis - February 9, 2015

225. ... An integral ecology includes taking time to recover a serene harmony with creation, reflecting on our lifestyle and our ideals, and contemplating the Creator who lives among us and surrounds us, whose presence "must not be contrived but found, uncovered".

226. We are speaking of an attitude of the heart, one which approaches life with serene attentiveness, which is capable of being fully present to someone without thinking of what comes next, which accepts each moment as a gift from God to be lived to the full.

230-31 An integral ecology is also made up of simple daily gestures which break with the logic of violence, exploitation and selfishness. ...

Love, overflowing with small gestures of mutual care, is also civic and political, and it makes itself felt in every action that seeks to build a better world.