

**Evolución Sostenible**  
por AED

**LEADERSHIP FOR THE DECADE OF ACTION**

Egbert Mulder

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**TOPICS**



1. LEADERSHIP FOR THE DECADE OF ACTION
2. LIFE ON EARTH: BIOSPHERE, ATMOSPHERE, OCEANS (1970 - 2100 AND BEYOND)
3. THE FOUR PILLARS OF CIRCULAR LEADERSHIP
4. VR WORKSHOP EARTH FROM SPACE ©

**Interviews 150+ Leaders & Scientists**

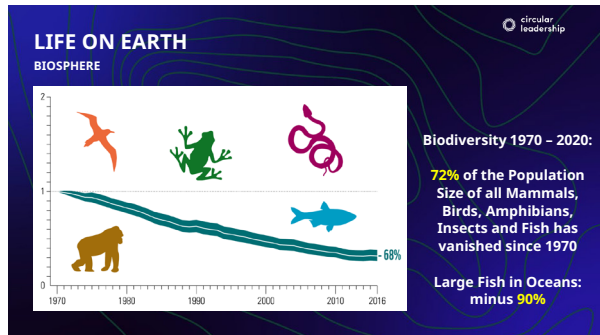


**LEADERSHIP FOR THE DECADE OF ACTION**  
INSIGHTS | MISSION | COMPETENCES | ACTIONS

**LIFE ON EARTH**

WHAT IS HAPPENING WITH LIFE ON EARTH?  
1970 - 2020 - 2050 - 2100 and beyond

- BIOSPHERE
- ATMOSPHERE
- OCEANS

### LIFE ON EARTH BIOSPHERE

#### Terrestrial Vertebrate Biomass

#### Wild Animals vs Humans

**Wildlife**  
Humans just 0.01% of all life but have destroyed 83% of wild mammals - study

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**Biomass distribution of animals on Earth**  
Number of Species: Wild Animals n = 5200, Farmed Animals n = 24, Humans n = 1 Homo Sapiens

### LIFE ON EARTH BIOSPHERE

## LOSS OF SPECIES BIODIVERSITY

EVERY 20 MINUTES  
3,500 HUMAN LIVES AND LOSES 1 OR MORE SPECIES

77,000 SPECIES LOST A YEAR

EVERY 60 MINUTES  
700 ACRES DESTROYED

1 OUT OF 4 AMPHIBIANS  
20% OF THE WORLD'S SPECIES COULD BE GONE IN 30 YEARS  
BIRDS  
CONIFERS  
MAMMALS & MARINE TURTLES

### LIFE ON EARTH ATMOSPHERE

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#### Atmospheric CO<sub>2</sub> currently measures 419.6 parts per million

Atmospheric levels of all three greenhouse gases hit record high

Activists warn world "is heading in wrong direction" and call for "stronger climate action"

Atmospheric levels of all three greenhouse gases have reached record highs, according to a study by the World Meteorological Organization, which scientists say means the world is "heading in the wrong direction".

The WMO found there was the biggest year-on-year jump in methane concentrations in 2020 and 2021 since systematic measurements began almost 40 years ago.

Methane levels have risen rapidly in recent years, pushing scientists to warn that it could be a "wild card" in the fight to limit global warming.

**Too many people or too much consumption?**

### LIFE ON EARTH ATMOSPHERE

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

**Carbon emissions of richest 1 percent more than double the emissions of the poorest half of humanity**

Published: 21st September 2020

The richest one percent of the world's population are responsible for more than twice as much carbon pollution as the 50 poorest people who make up the poorest half of humanity during a period of 20-year period of unprecedented emissions growth.

Oxfam's new report 'Globality Carbon Inequality' is based on research conducted with the Stockholm Environment Institute and is being released as world leaders prepare to meet at the UN General Assembly to discuss global challenges including the climate crisis.

The report assesses the consumption emissions of different income groups between 1990 and 2017 - 25 years when humanity doubled the amount of carbon dioxide in the atmosphere.

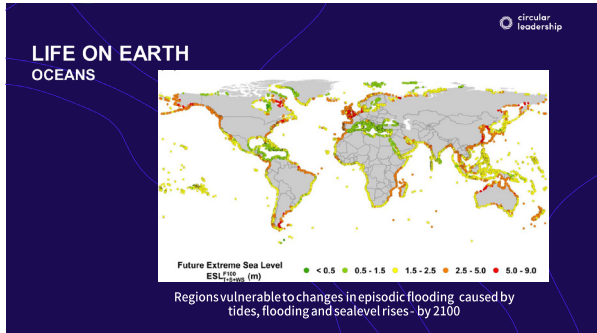
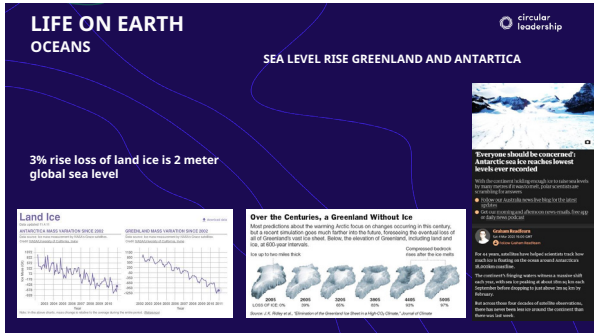
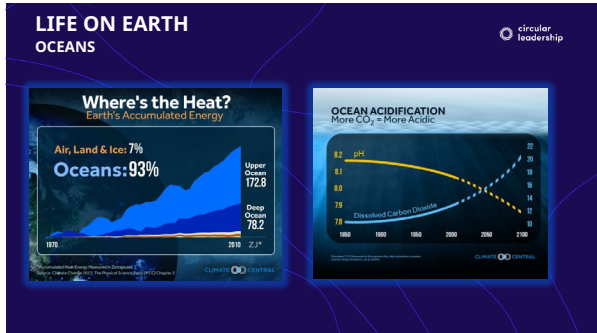
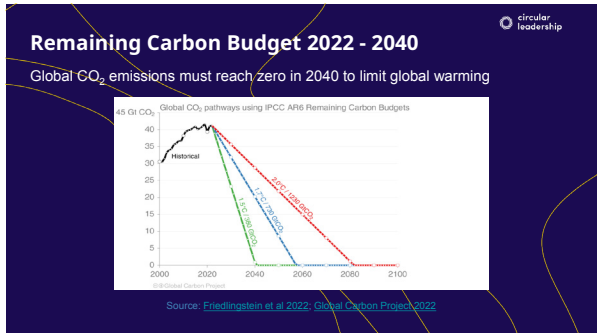
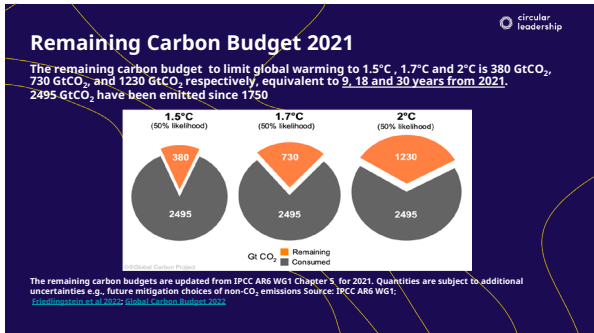
### 2100 WARMING PROJECTIONS

Emissions and expected warming based on pledges and current policies

Warming projected by 2100

- Baseline: 1.1 - 1.5°C
- Current policies: 2.8 - 3.2°C
- Optimistic policies: 2.5 - 2.8°C
- Pledges & Targets: 1.6 - 1.7°C
- 2°C consistent: 1.6 - 1.7°C
- 1.5°C consistent: 1.3°C

IPCC 2023: Current policies 2.8 - 3.2°C in 2100



**LIFE ON EARTH**  
OCEANS

**CORAL REEFS**  
EVERY FRACTION OF A DEGREE MATTERS

Source: IPCC

**LIFE ON EARTH**  
OCEANS

**+ 1.5°C**  
70 to 90% of coral reefs will vanish

Source: IPCC

**LIFE ON EARTH**  
OCEANS

**+ 2°C**  
99% of coral reefs will vanish

Source: IPCC

**Smoke from Canada's wildfires has reached as far as Norway**  
By Laura Pothoven, CNN  
Published 5:52 AM EDT, 14 June 3, 2023

**Chinese cities break heat records, stressing electricity grid**  
By Reuters  
June 16, 2023 3:12 AM EDT Updated 12 days ago

**Climate change has sent temperatures soaring in Texas**  
By Eric Lipton, The Texas Tribune, Tyler Schwaner, The Texas Tribune  
Published June 17, 2023 at 4:45 PM EDT

**Arctic Circle sees 'highest-ever' recorded temperatures**  
By Reuters

**Climate change: Sudden heat increase in seas around UK and Ireland**  
By Reuters  
Published 11:19 AM EDT, 14 June 03, 2023

**Will India lightning strike deaths rise as climate change worsens?**  
By Thomson Reuters Foundation  
4 minutes read · June 03, 2023

**Thousands of dead fish have washed up on a Thai beach. Experts say climate change may be to blame**  
By Reuters and Laura Pothoven, CNN  
Published 2:44 AM EDT, 14 June 03, 2023

**Climate change may have annulled a century of gains that caused the world to reach net zero along a roughly 4 kilometer (2.5 mile) stretch of beach at Thailand's southern Chumphon province on Thursday, an expert says.**

**Tropical forests nearing critical temperatures thresholds**  
By Linnea Pothoven, Reuters HOOD

**Panama Canal announces prolonged transit restrictions due to drought**  
By Reuters  
June 16, 2023

**Climate Change Knowledge Portal For Development Practitioners and Policy Makers**  
Risk > Historical Hazards  
Costa Rica is at risk from several natural disasters, which pose a great threat under a changing climate. Costa Rica has the 8th highest economic risk exposure to three or more hazards and 6.8 percent of its total area is exposed to three or more adverse natural events. Further, 77.9 percent of Costa Rica's population and 80.1 percent of the country's gross domestic product reside in areas at high risk of multiple hazards, including floods and landslides, cyclones, storm surge, and sea level rise.



**Central America is highly vulnerable to climate change**  
Vulnerability and readiness to climate disruptions, index 0-100

ND-GAIN Index  
2014-2030

Source: Notre Dame Global Adaptation Initiative | CIEG7

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**Some of the changes observed in the last few months have been quite shocking, from the record-breaking ocean temperatures to record low Antarctic sea ice extent.**

**Climate science's projections are pretty robust over the last decades. Unfortunately, humanity's stubbornness to spew out ever higher amounts of greenhouse gases has also been pretty robust.**

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**'Off-the-charts records': has humanity finally broken the climate?**

Extreme weather is smacking us in the face with twice the force, but a tiny window of hope remains, say leading climate scientists.

► Dramatic climate action needed to curtail truly extreme weather

by Hannah Crigmore, Nina Johnson, Oliver Milman, Adam Morton, Ari Nambiar and Jonathan Watts

10 October 2023

Many of the scientists were blunt about our future prospects. Prof Natalie Mahowald, of Cornell University, US, said: "What we are seeing this year is just the tip of the iceberg, so to speak, of what we expect to happen." Meinshausen said: "If we do not halt global warming soon, then the extreme events we see this year will pale against the ones that are to come."

Living the predictions

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**LIFE ON EARTH: 2050 - 2100**

- 2 - 4 degrees global warming inevitable?
- 6 tipping points: melting polar caps irreversible?
- 2 - 6 meter sea level rise? (65 meters waiting in future)
- End of coastal cities: New Orleans, Mumbai, Miami, Venice, Amsterdam, New York, London?
- 2050 - 2100: homeland of 50% of World Population (4 billion people) can be UNINHABITABLE

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**LIFE ON EARTH**

*Human Activity is Putting the Earth on a Trajectory Towards Environmental Collapse.*

*HOMO SAPIENS is the Real Threat to Life on Earth and the Only Species that is Able to Extinct Itself.*

*"Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders."*

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**THIS IS THE MOST DECISIVE DECADE IN THE HISTORY OF MANKIND**

**THE TIME TO ACT IS NOW**

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**MISSION:**  
Put Climate and Biodiversity at the Heart of all Decision Making

**ACTIONS**

2030: Reduce footprint to 50 - 70%  
2040: Reduce footprint to zero %  
2050: 100% all historical damage restored

**FOUR PILLARS OF CIRCULAR LEADERSHIP**

Leadership in the Decade of Action: Creating Systems Change

- MULTI LEVEL SYSTEM THINKING**  
help leaders to see the bigger picture, to transcend their ego and biases  
enhance collaboration and cooperation across boundaries and cultures
- LONG TERM ACTIVATION**  
act with more wisdom and responsibility for the common good  
overwhelming emotion > foster empathy and compassion for others and the planet
- PERSONAL ENGAGEMENT**  
change in self-concept and value system  
more ethical and sustainable decisions and actions  
sense of connection to other people and the Earth as a whole
- DISRUPTIVE INNOVATION**  
appreciation and perception of beauty > inspires creativity and innovation

*"I believe that if the political leaders of the world could see their planet from a distance, their outlook would be fundamentally changed"*

- MICHAEL COLLINS, APOLLO 11

**VR WORKSHOP EARTH FROM SPACE®**

OUR MISSION:  
ONE MILLION LEADERS BEFORE 2030

**AED**  
CUALIDAD EMPRESARIAL PARA EL DESARROLLO

OUR PARTNER FOR:  
COSTA RICA  
CENTRAL AMERICA  
CARIBBEAN