



CSRE

THE CENTRE FOR SUSTAINABILITY
THROUGH RESEARCH & EDUCATION

The Insurance Industry in a Climate Constrained World

Nariman Maalouf & Jeremy B Williams

Best Motor Practice Seminar
Emirates Insurance Association
Dubai, 26 June 2019

1. The politics of climate change: A brief history

Concerns over sustainability are not new

1987: The Brundtland Report:
Our Common Future

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”



Dr Gro Harlem Brundtland, Former Prime Minister of Norway

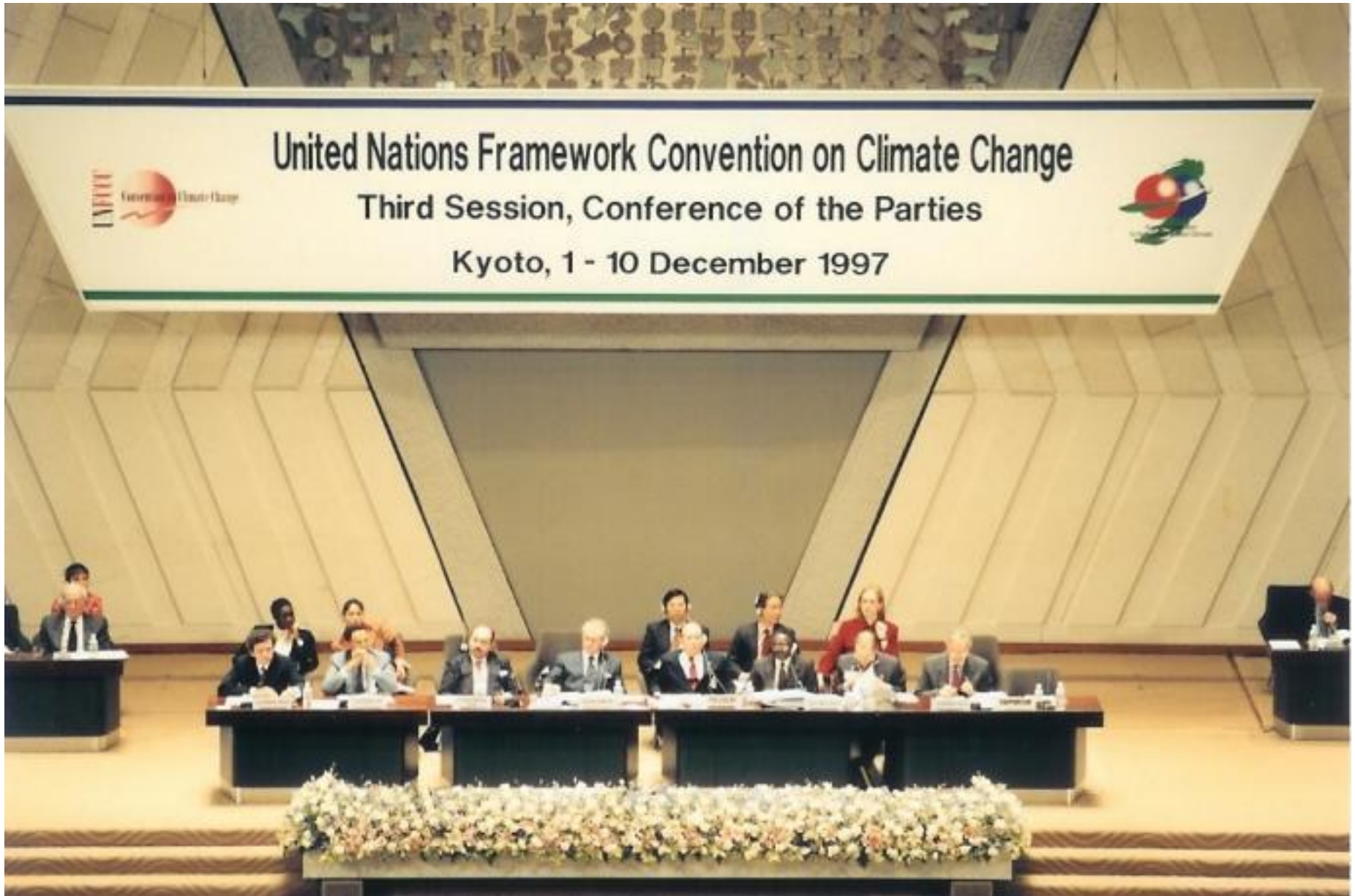
The Rio Conference created the United Nations Framework Convention on Climate Change (UNFCCC)



UNITED NATIONS CONFERENCE ON
ENVIRONMENT AND DEVELOPMENT
Rio de Janeiro 3-14 June 1992



The Kyoto Protocol



nature

International weekly journal of science

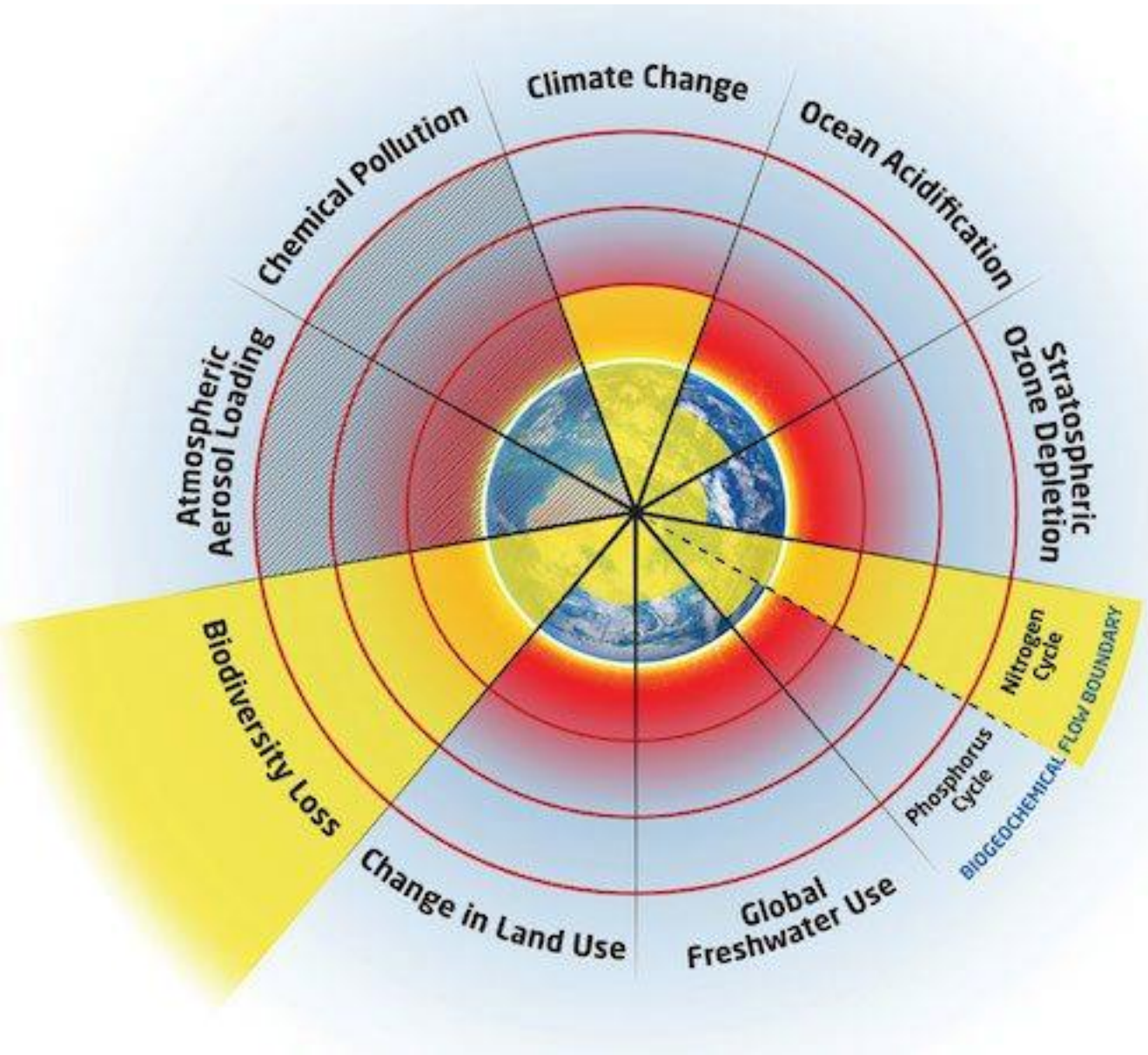
Nature **461**, 472-475 (24 September 2009) | doi:10.1038/461472a; Published online 23 September 2009

A safe operating space for humanity

Johan Rockström^{1,2}, Will Steffen^{1,3}, Kevin Noone^{1,4}, Åsa Persson^{1,2}, F. Stuart Chapin, III⁵, Eric F. Lambin⁶, Timothy M. Lenton⁷, Marten Scheffer⁸, Carl Folke^{1,9}, Hans Joachim Schellnhuber^{10,11}, Björn Nykvist^{1,2}, Cynthia A. de Wit⁴, Terry Hughes¹², Sander van der Leeuw¹³, Henning Rodhe¹⁴, Sverker Sörlin^{1,15}, Peter K. Snyder¹⁶, Robert Costanza^{1,17}, Uno Svedin¹, Malin Falkenmark^{1,18}, Louise Karlberg^{1,2}, Robert W. Corell¹⁹, Victoria J. Fabry²⁰, James Hansen²¹, Brian Walker^{1,22}, Diana Liverman^{23,24}, Katherine Richardson²⁵, Paul Crutzen²⁶ & Jonathan A. Foley²⁷

Google Scholar Cited by 7293 (as of 07-05-19)

Nine planetary boundaries



IPCC Fifth Assessment Report, 2013



Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system.

From the HEADLINE STATEMENTS of the WGI SPM

- Worldwide Scientific Collaboration -

259

AUTHORS

39

COUNTRIES

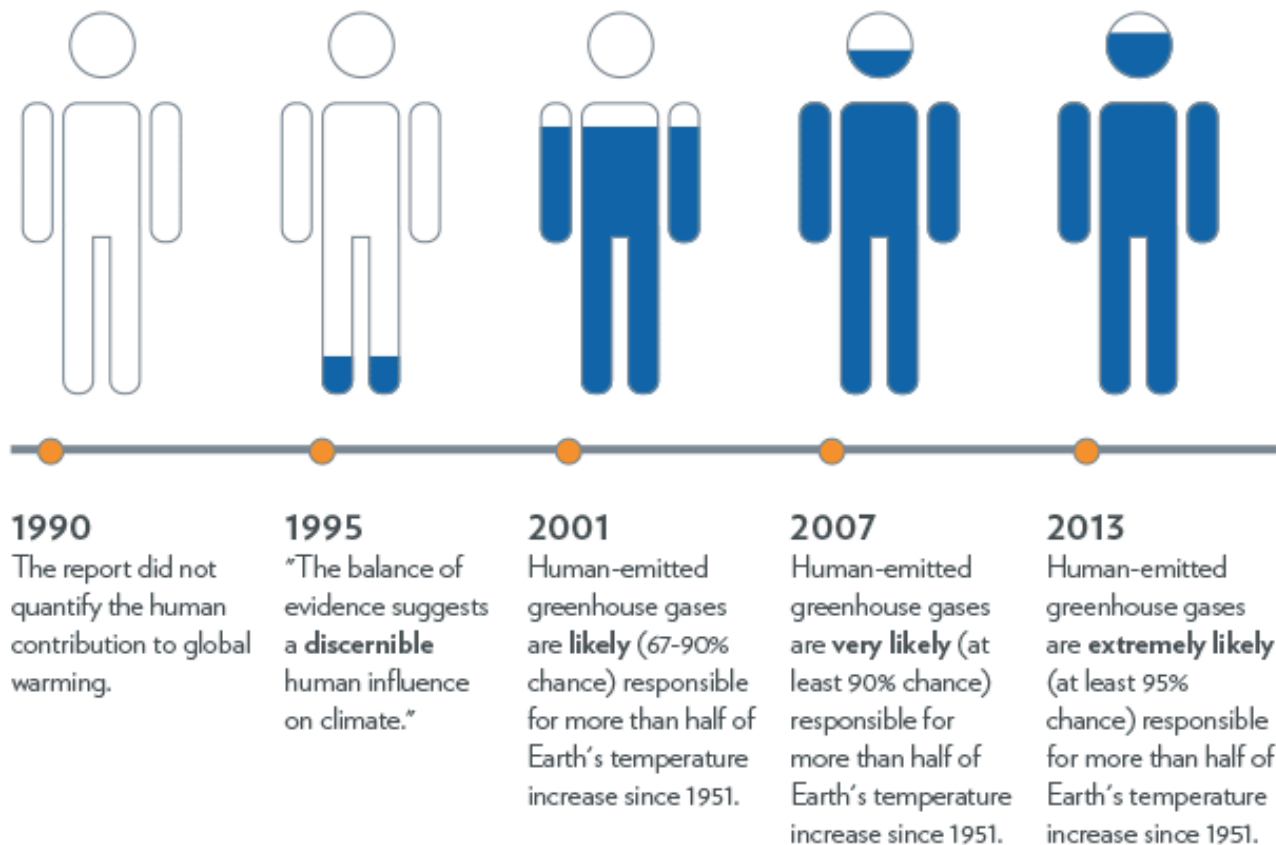
54677

COMMENTS

Q: How have the IPCC reports changed through time?

(1990-2013)

■ Amount of Human-caused Warming



Nobel Peace Prize
Winner, 2007

**SCIENTISTS ARE AS CERTAIN THAT
CLIMATE CHANGE IS REAL**

**AS THEY ARE THAT CIGARETTES
CAUSE CANCER.**

THE DEBATE IS OVER.



The Paris Agreement, 2015

Nations Unies

Conférence sur les Changements Climatiques 2015

COP21/CMP11

Paris France



2. The harsh reality of a climate-constrained world

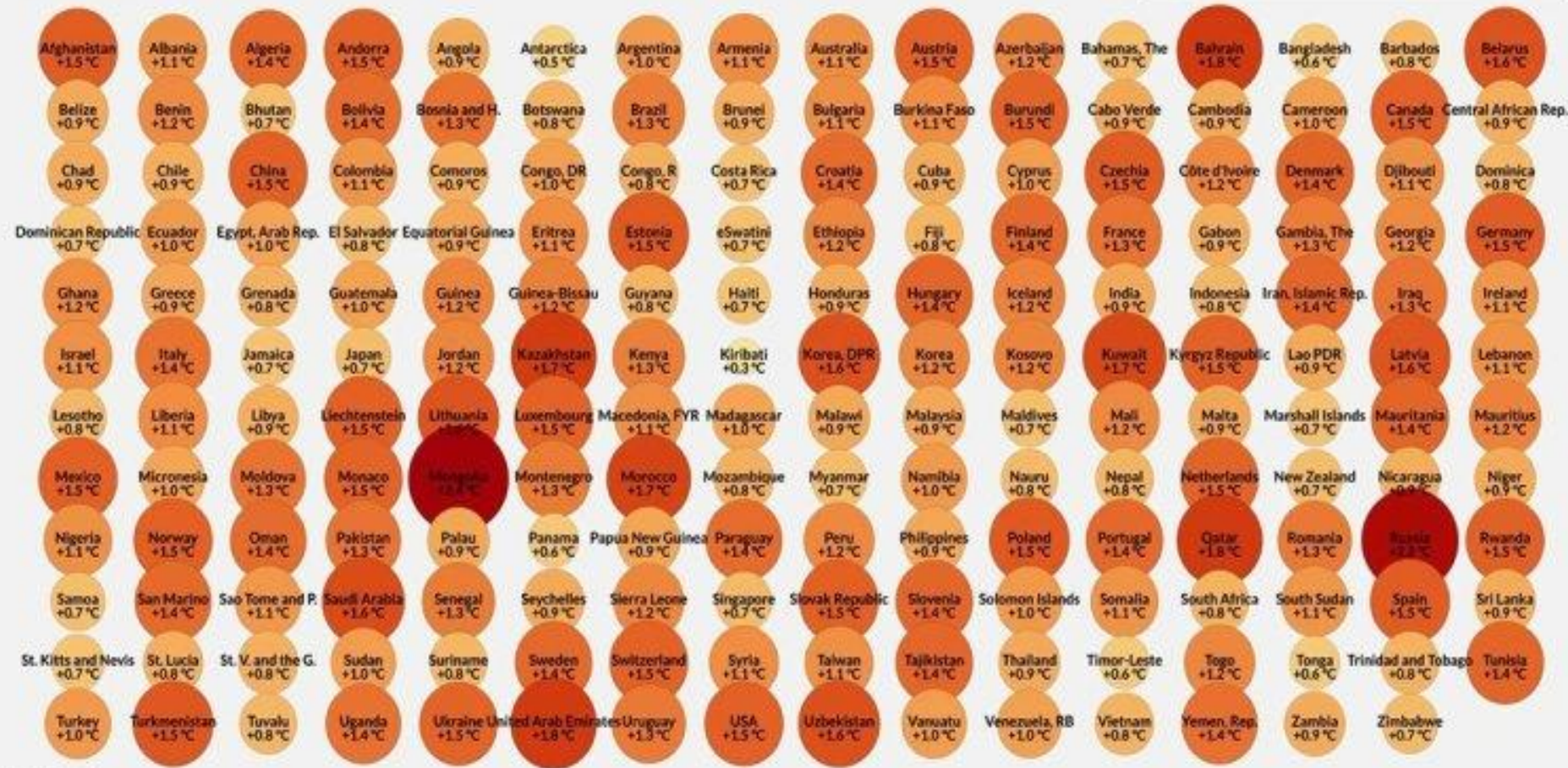


GLOBAL CLIMATE CHANGE

Vital Signs of the Planet

Temperature Anomalies by Country Years 1880 - 2017

2017



Data Source:

ipcc

INTERGOVERNMENTAL PANEL ON climate change

Global Warming of 1.5°C

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty



WG I WG II WG III

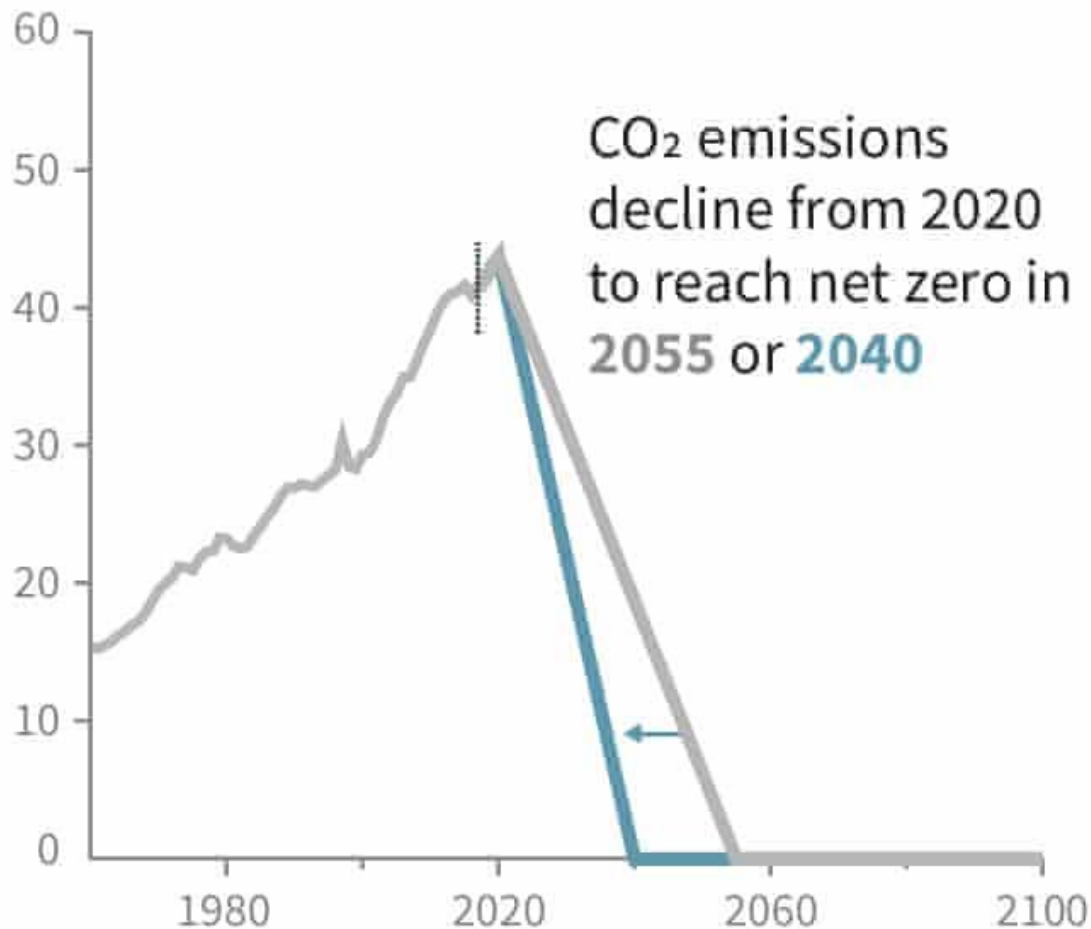


IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels

4 October 2018

The key takeaway from the Special Report

b) Stylized net global CO₂ emission pathways
Billion tonnes CO₂ per year (GtCO₂/yr)





NOAA NATIONAL CENTERS FOR
ENVIRONMENTAL INFORMATION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

APRIL 18, 2019

Assessing the Global Climate in March 2019

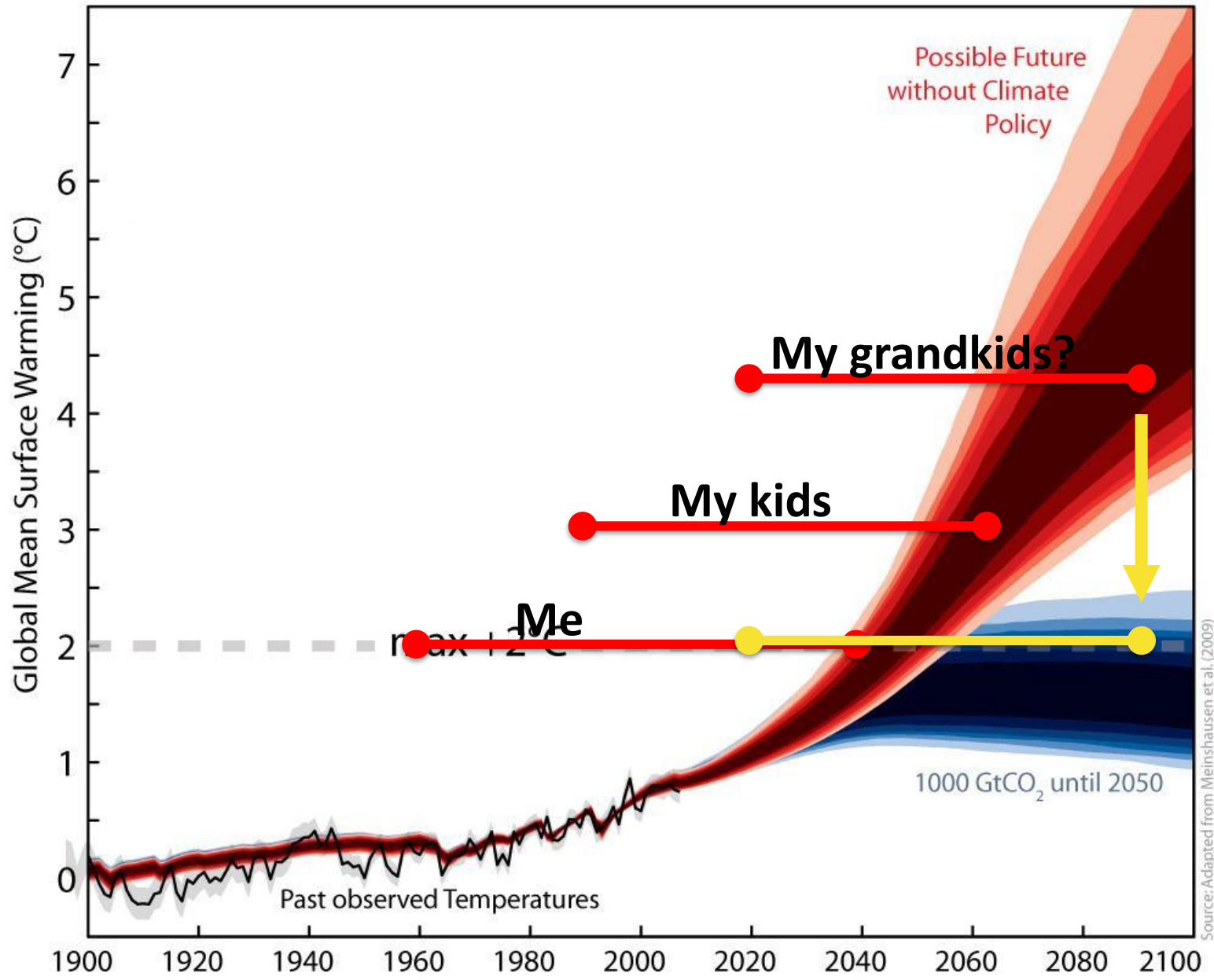
Second warmest March global temperature on record

The global land and ocean surface temperature departure from average for March 2019 was the second highest for the month of March in the 140-year NOAA global temperature dataset record, which dates back to 1880. The year-to-date temperature was the third warmest January–March on record.

At 1.91°F above the 20th century average of 54.9°F, March 2019 was also the 411th consecutive month with a global temperature above its long-term norm.

If you were born after December 1984, average temperatures will only ever have gone up during your lifetime.

The 2020s is the critical decade for action



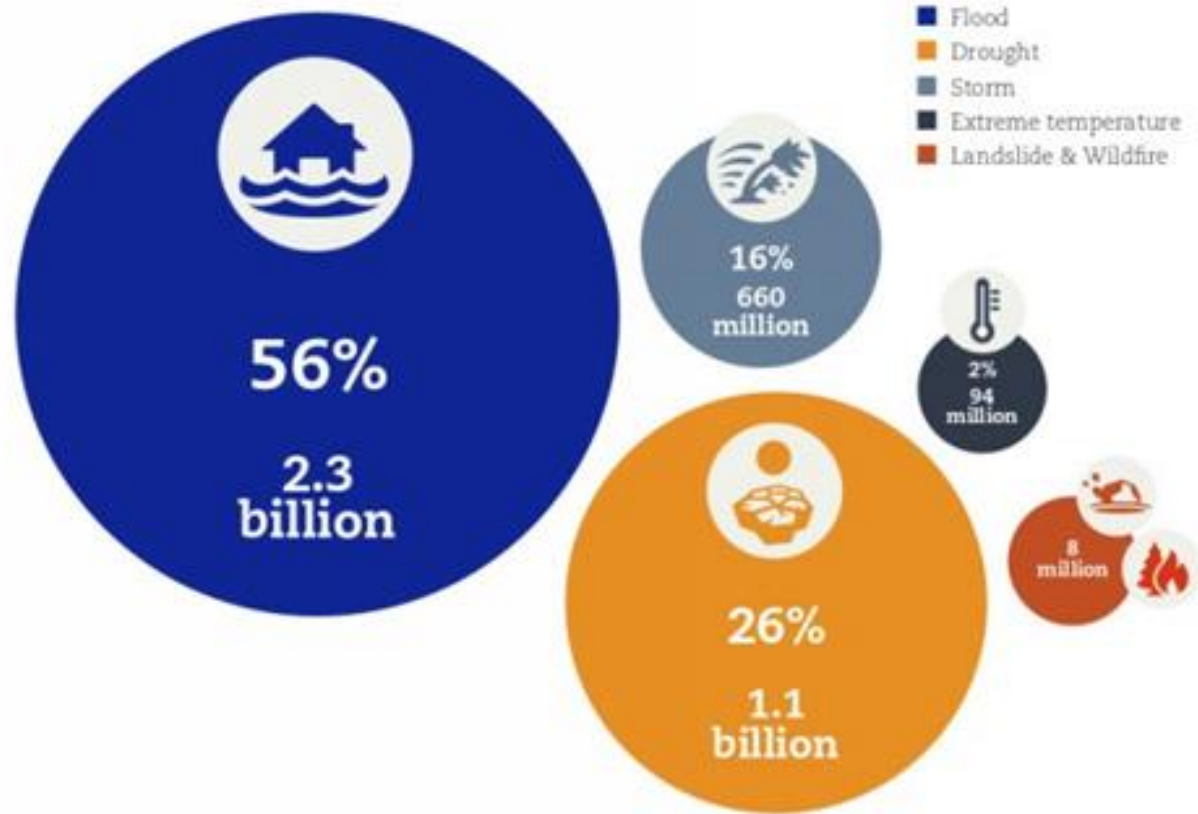
3. Why business-as-usual is no longer an option

The financial risks of doing nothing



<https://youtu.be/UXZhlJyuw8A>

Numbers of people affected by weather-related disasters (1995-2015)
(NB: deaths are excluded from the total affected.)



Building a risk-informed post-2015 development



World Conference on
Disaster Risk Reduction
2015 Sendai, Japan

Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR)

7 GLOBAL TARGETS

Reduce

**Mortality/
global population**

2020-2030 Average << 2005-2015 Average

**Affected people/
global population**

2020-2030 Average << 2005-2015 Average

**Economic loss/
global GDP**

2030 Ratio << 2015 Ratio

**Damage to critical infrastructure
& disruption of basic services**

2030 Values << 2015 Values

Increase

Countries with national
& local DRR strategies

2020 Value >> 2015 Value

**International
cooperation**

to developing countries

2030 Value >> 2015 Value

**Availability and access
to multi-hazard early warning
systems & disaster risk
information and assessments**

2030 Values >> 2015 Values

1 Global Outcome

13 Guiding Principles

4 Priorities for Action

7 Global Targets


At 4 levels

How the Insurance Industry Can Push Us to Prepare for Climate Change

by [Matthew E. Kahn](#), [Brian Casey](#), and [Nolan Jones](#)

AUGUST 28, 2017

- In Florida alone, floods could cause infrastructural and economic loss of \$400bn by 2100
- Behavioural economists suggest that people don't engage in buying insurance plans for three major reasons:
 1. A focus on short-term gains
 2. In the wake of disasters, individuals lose perspective and lack clarity on how to combat the situation
 3. Underestimation of risk exposure

A photograph of Henri de Castries, former CEO of AXA, speaking at a podium. He is wearing a dark pinstriped suit, a light blue shirt, and a dark tie with white polka dots. The podium is white with a red and orange geometric design on the left side. In the background, the AXA logo is visible on a blue screen. To the right of the image, there is a quote in bold black text.

“Climate risk for us is neither an ideological or theoretical issue: it is a core business issue.”

Henri de Castries

Former CEO, AXA

May 2015

4. The coming ESG revolution

ESG principles

ENVIRONMENTAL

- Climate change and carbon emissions
- Air and water pollution
- Biodiversity
- Energy efficiency
- Deforestation
- Waste management
- Water scarcity

SOCIAL

- Customer satisfaction
- Data protection and privacy
- Gender and diversity
- Community relations
- Employee engagement
- Human rights
- Labor standards

GOVERNANCE

- Board composition
- Executive compensation
- Audit committee structure
- Bribery and corruption
- Lobbyings
- Political contributions
- Whistle-blower schemes



ESG





Highlights of Swiss Re's Environmental, Social and Governance (ESG) approach

November 2018





Sustainable Development and the Insurance Industry

Presentation at the Sustainable Finance Forum Turkey, 16 May 2014
Dr. Astrid Zwick,
Head Corporate Responsibility, Munich Re Group



SHAPING OUR SUSTAINABLE FUTURE

ALLIANZ GROUP
SUSTAINABILITY REPORT 2018

Allianz 

	Swiss Re	Munich Re	Allianz
Dow Jones Sustainability Index	Named sector leader in 2016	Top Ten	Ranked no 01
Sustainability Initiatives	<p>Invested \$1.6 billion in green bonds</p> <p>Early mover in incorporating ESG benchmarks</p> <p>100% of assets are in consistence with ESG criteria</p> <p>Reserved 30% of investment threshold for underwriting</p> <p>Active presence in devising sustainable solutions for lead and renewable energy market</p>	<p>Ensuring access to insurance</p> <p>Efforts towards micro-insurance business</p> <p>Fostering public-private partnerships</p> <p>Integrating corporate strategy with ESG initiatives</p>	<p>Training underwriters</p> <p>Assessing transactions on the basis of ESG framework</p> <p>Assessed 470 transactions</p> <p>Generated £1.56 billion in revenue</p>

	Swiss Re	Munich Re	Allianz
Innovation	<p>First time ever provided a country-wide earthquake cover</p> <p>Propriety flood model for Florida hurricane affectees</p>	<p>Efforts towards group-wide carbon neutrality</p> <p>Developing web portal for reporting corporate responsibility mechanisms</p>	<p>Launched social innovation fund</p> <p>Invested 400,000 Euros in training, educating and equipping young generation</p>
Leadership	<p>Globally recognized, ensured participation in all global events</p>	<p>Developing global environment management strategy</p> <p>Assisted UNEP in developing PSI</p>	<p>Global leader in making efforts towards de-carbonization of economy</p>
Climate Change Strategy	<p>Developing knowledge, developing product and services, raising awareness and reducing its own carbon foot print</p>	<p>Putting knowledge to use in devising solutions</p>	<p>Anticipate, Care and Enable</p>

5. Implications for motor best practices

Dubai Smog

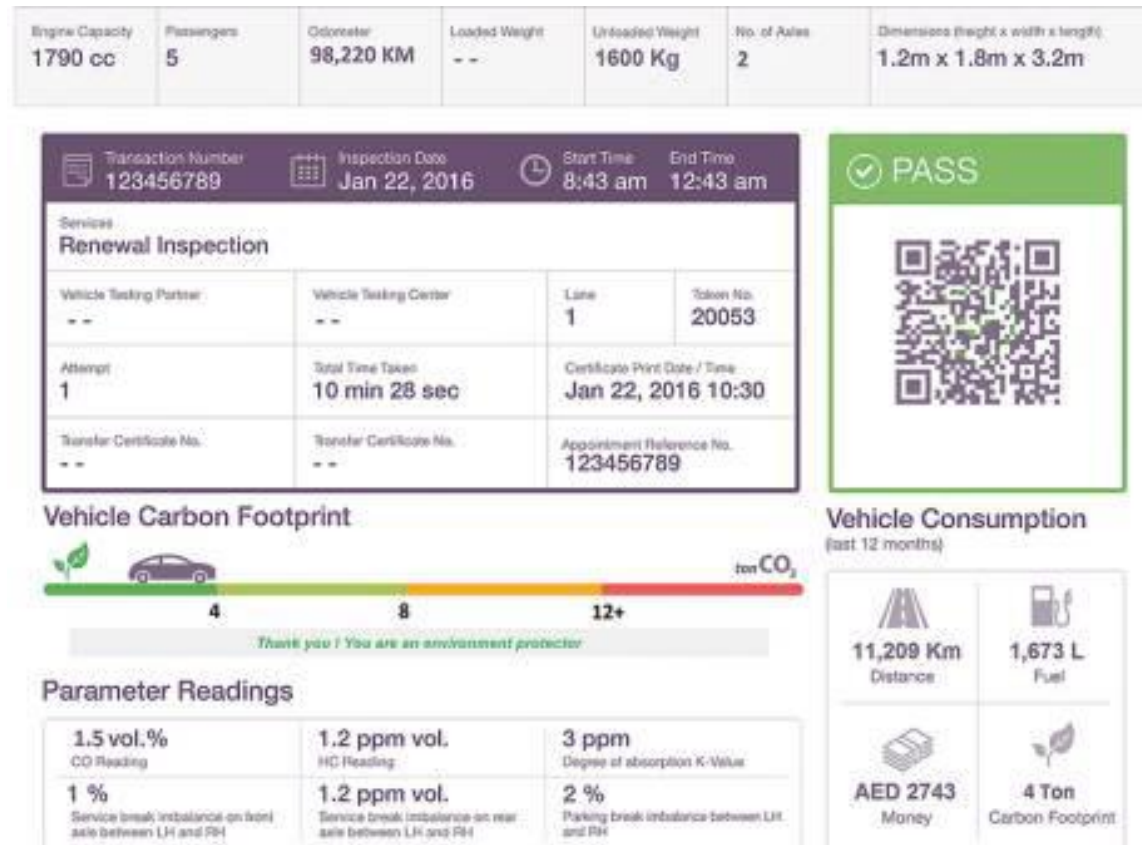
Sheikh Zayed Road



Price signals help shape consumer behaviour

RTA

- *What incentives might be given for becoming an 'environment protector'?*
- *Different premiums based on carbon footprint?*
- *Is it an appropriate role for insurers to pass on climate risk mitigation actions to policyholders by pricing in carbon offsets in their motor policies?*





“As long as the ‘systemic risk’ of carbon is not correctly embedded into regulatory frameworks, through efficient carbon pricing mechanisms and more broadly favourable treatment for longer-term investments that are necessary to limit climate risks, it will always be a story of a few responsible actors doing their best within a broader financial system that is not designed for sustainability.”

Henri de Castries

Former CEO, AXA

May 2015

Does it make sense for insurers to get policy holders to drive less?

RTA



- *What incentives systems could be put in place to reward motor policy holders for using public transport?*
- Dubai is adjudged to be a global leader among integrated transport systems around the world (2019 Deloitte City Mobility Index)
- And it is getting better ...

New 'suspended' public transport system in Dubai

Staff Reporter /Dubai

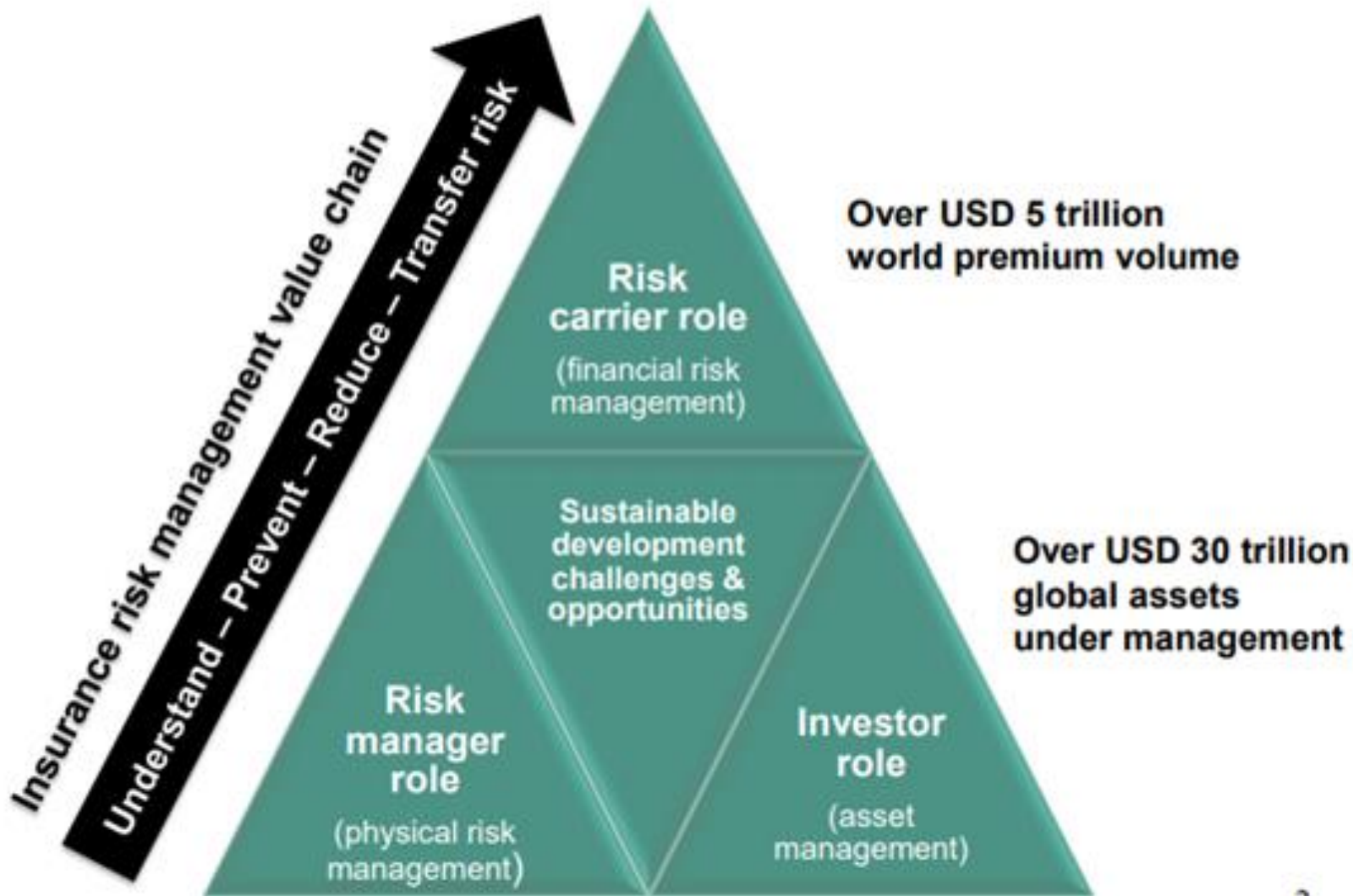
Filed on June 9, 2019 | Last updated on June 9, 2019 at 04.08 pm



(Picture retrieved from skytran.com)

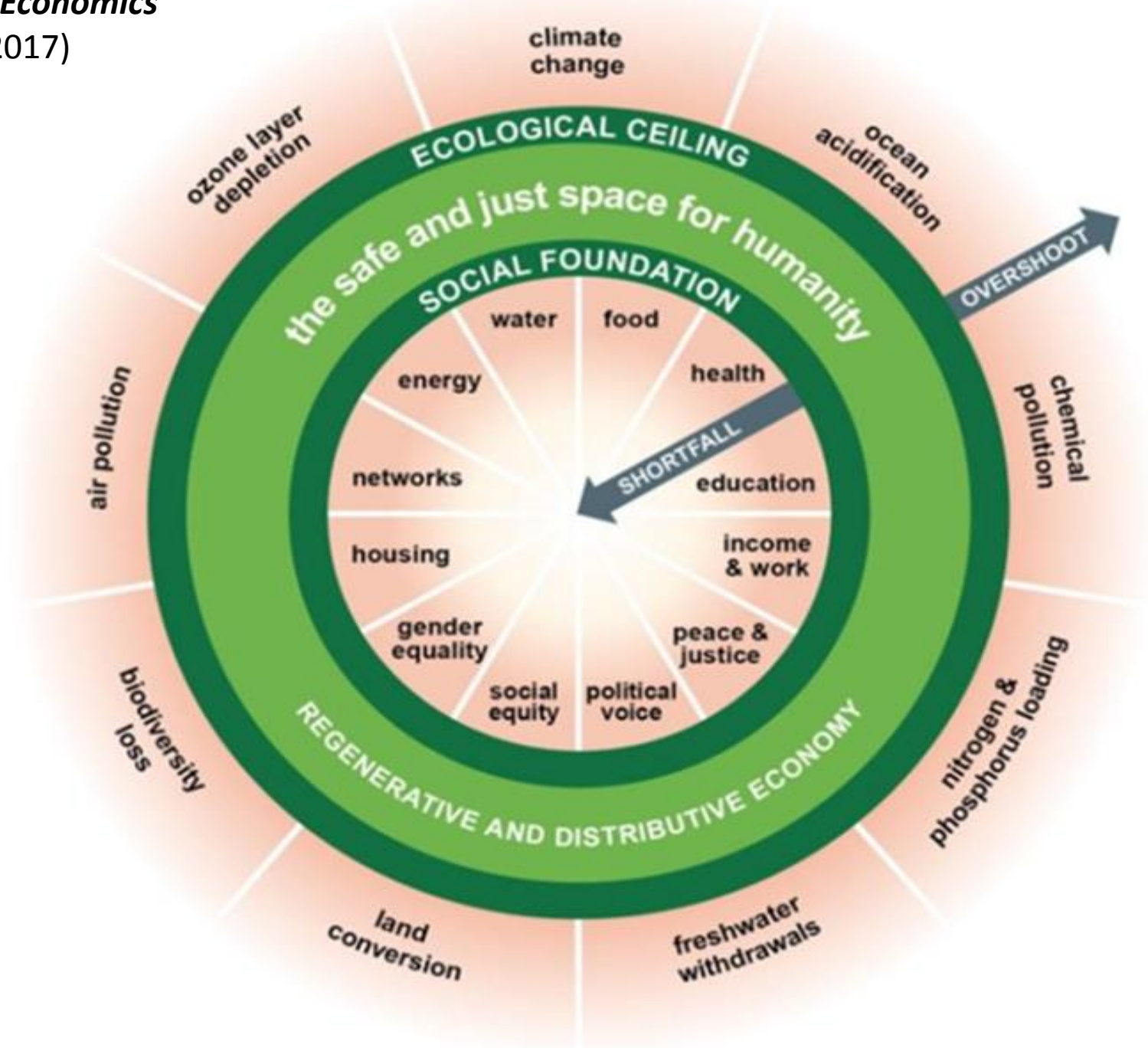
The signing of a MoU highlights RTA's continuous efforts to team with global specialist firms in developing advanced public transport.

6. Summary and conclusions



Doughnut Economics

Raworth (2017)




The Sustainable Development Goals



SUSTAINABLE DEVELOPMENT GOALS



A photograph of Christiana Figueres, UNFCCC Executive Secretary, speaking at a podium. She is wearing a teal blazer and has her right hand raised in a gesture. The background is a solid blue color.

“Please do not underestimate the power of what you, the insurance industry, can do in the solutions space – hold it within your hands to plan the sustainability transition in an orderly way.”

Christiana Figueres
UNFCCC Executive Secretary

شكراً

Thank You

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