



CLGCHILE

LÍDERES EMPRESARIALES CONTRA EL CAMBIO CLIMÁTICO



THE PRINCE OF WALES'S

CORPORATE LEADERS GROUP

Mesa de Descarbonización, Ministerio de Energía

Marina Hermosilla, Directora Ejecutiva

Líderes Empresariales Contra el Cambio Climático, CLG-Chile

23 de octubre de 2018



British Embassy
Santiago



Nuestra Misión

El cambio climático es un desafío global que requiere que actuemos colectiva y decisivamente para **desarrollar una economía baja en carbono y una sociedad con bajo riesgo climático.**

Movemos la acción a través del liderazgo empresarial y académico, **generando nuevas oportunidades de desarrollo sostenible para Chile.**

Cooperamos **proactivamente con el gobierno** para generar políticas y estrategias orientadas a escalar soluciones frente al desafío climático.

Agenda

- El cambio climático ya está con nosotros
- Último informe del IPCC: *Calentamiento global de 1,5 °C*
- Tendencias de los mercados
- Chile en el contexto mundial



Global Temperature

LATEST ANNUAL AVERAGE

2016

1.01°C

2017

0.9°C

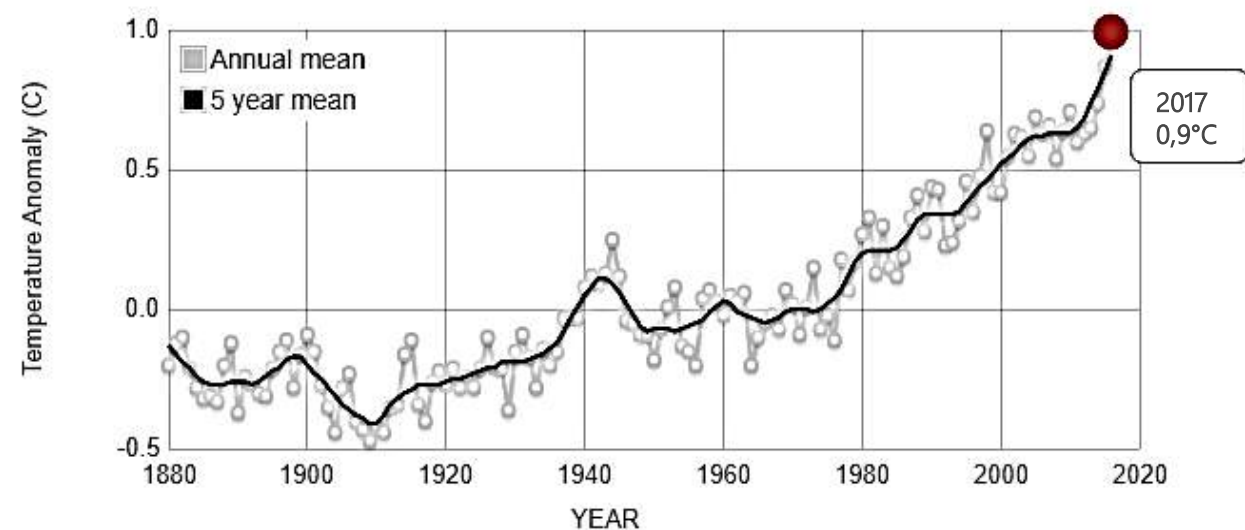
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This graph illustrates the change in global surface temperature relative to 1951-1980 average temperatures. Sixteen of the 17 warmest years in the 136-year record all have occurred since 2001, with the exception of 1998. The year 2016 ranks as the warmest on record. (Source: NASA/GISS). This research is broadly consistent with similar constructions prepared by the Climatic Research Unit and the National Oceanic and Atmospheric Administration.

GLOBAL LAND-OCEAN TEMPERATURE INDEX

Data source: NASA's Goddard Institute for Space Studies (GISS).

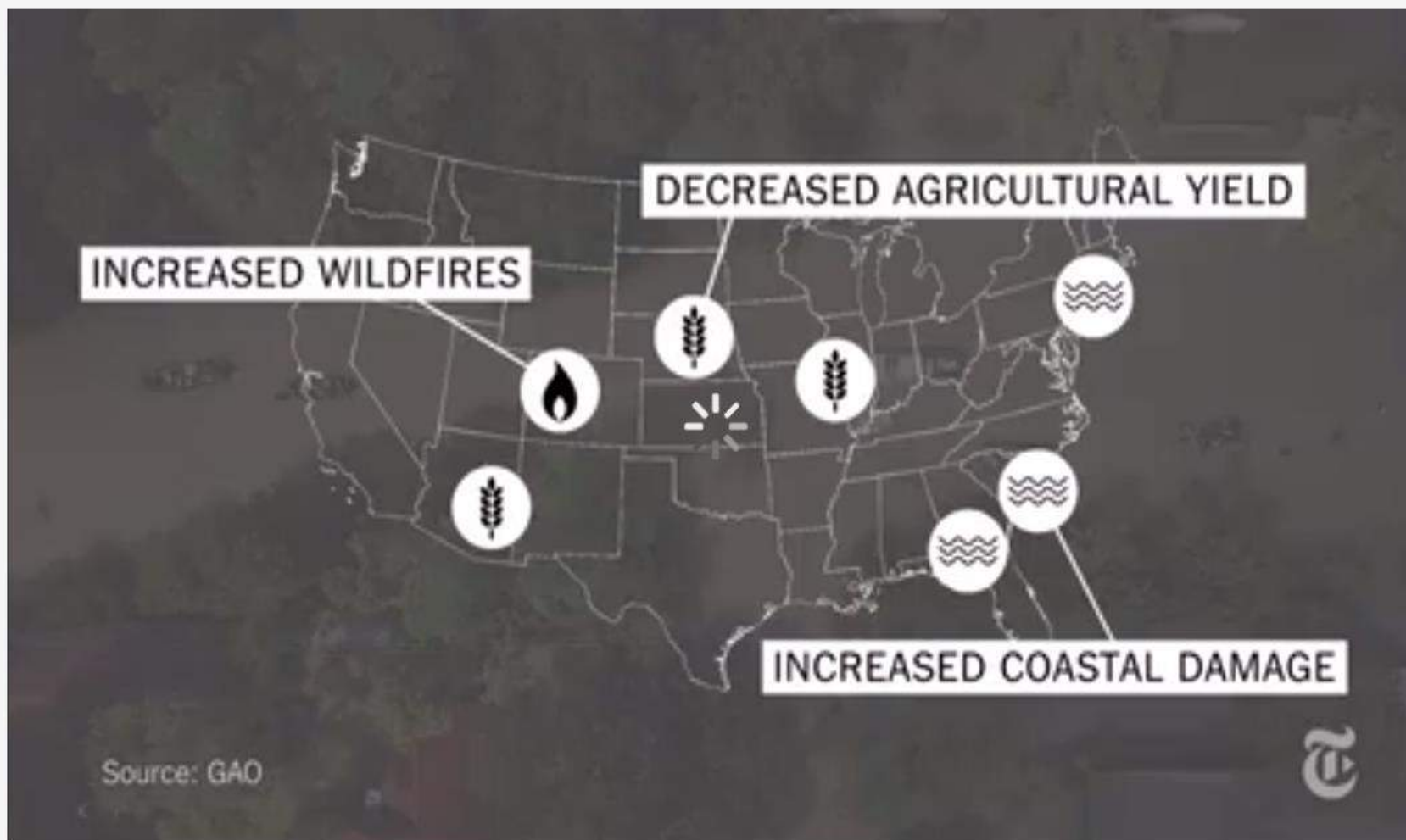
Credit: NASA/GISS



Click+drag
to zoom

RESET

Get Data: [HTTP](#) | Snapshot: [PNG](#)

**CLIMATE CHANGE**

Is the U.S. Ready for More Billion-Dollar Storms?

By DEBORAH ACOSTA | Jan. 29, 2018 | 5:39

The superstorms and wildfires of 2017 cost a record-breaking \$306 billion. As the Trump administration seeks to reverse environmental rules, is the federal government prepared to address even stronger storms?

Share:      

LA

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Autor: María

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19 June 2017 | E

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NOTICIAS

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**YALE
Climate
Connections**

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Wildfires and climate change are fueling each other, creating a vicious cycle

Right now, forests absorb global-warming pollution. But that's changing as temperatures rise.

AUDIO

01 : 30
MIN SEC

Wildfires and climate change are fueling each other, creating a vicious cycle

libsyn

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High-severity forest effects 10 years after 2000 Storrie Fire in northern Sierra Nevada leave area vulnerable to more fire. (Photo credit: Gary Boller)

Generalmente, durante los años más calurosos se producen más incendios

45 años de temperaturas e incendios en el oeste de los Estados Unidos

Temperatura promedio de primavera-verano (°F)

65.0

63.3

61.5

59.8

58.0

1970

1975

1980

1985

1990

1995

2000

2005

2010

2015



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California's Mendocino Complex of Fires Now Largest in State's History

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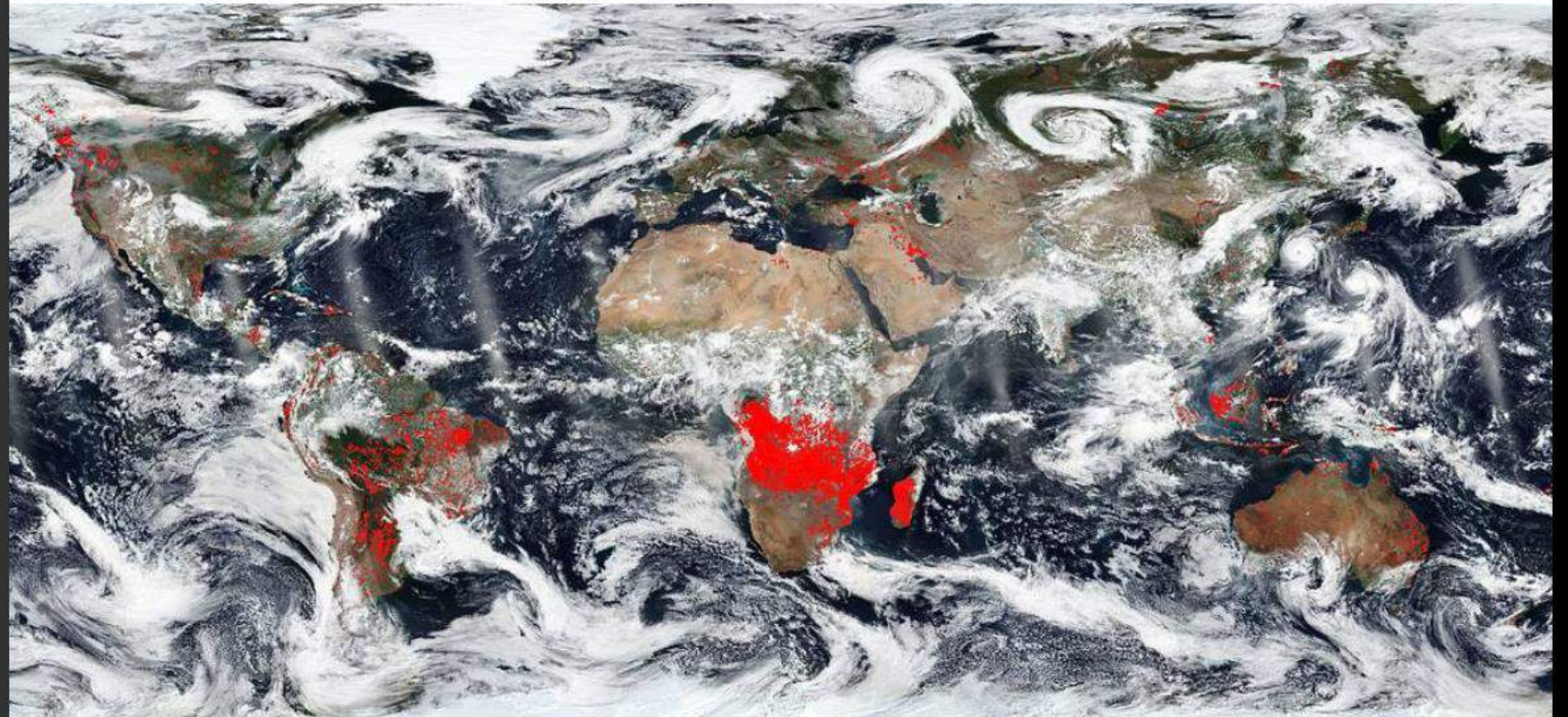
Smoke Obscuring Large Portions of Northern California and Oregon

2 months ago

Fire and Smoke

Aug. 23, 2018

A World On Fire



California's Gov. Brown sounds the alarm on drought

 **Doyle Rice**, USA TODAY 12:12 a.m. EDT April 10, 2015



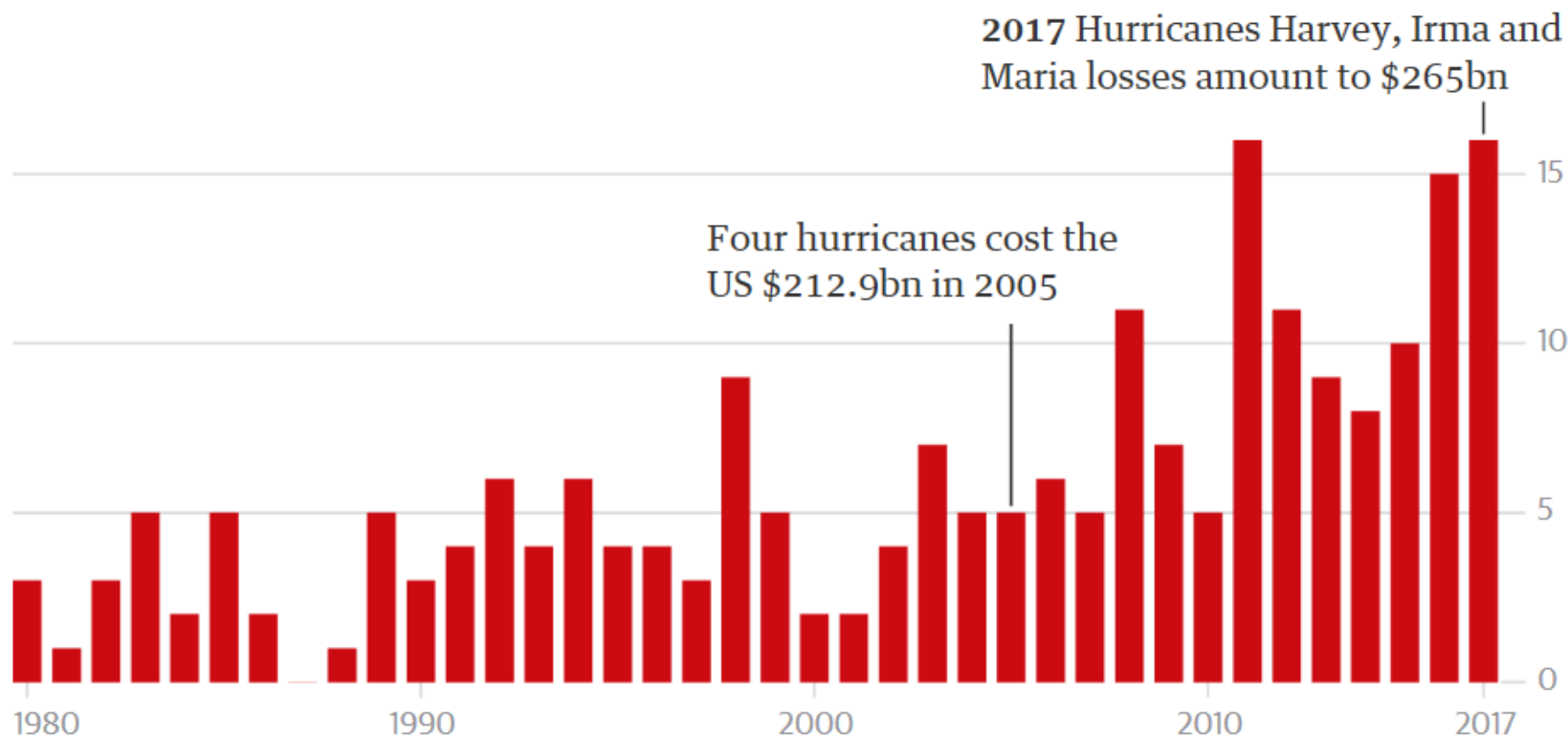
California Gov. Jerry Brown, in an interview with USA TODAY reporter Doyle Rice, warned Thursday that the "unprecedented" drought parching his state will lead to a summer of forest fires and potential water shortages. USA TODAY

Despite rains in the northern and southern portions of [California](#) over the last couple days, experts say the state's severe drought is on track to cause an economic loss there of roughly \$3 billion in 2015—up from roughly \$2.2 billion last year.

"There's going to be significantly more pain this year than there was last year," said Richard Howitt, a University of California, Davis professor emeritus of



16 billion-dollar weather events cost the US \$306.2bn in 2017

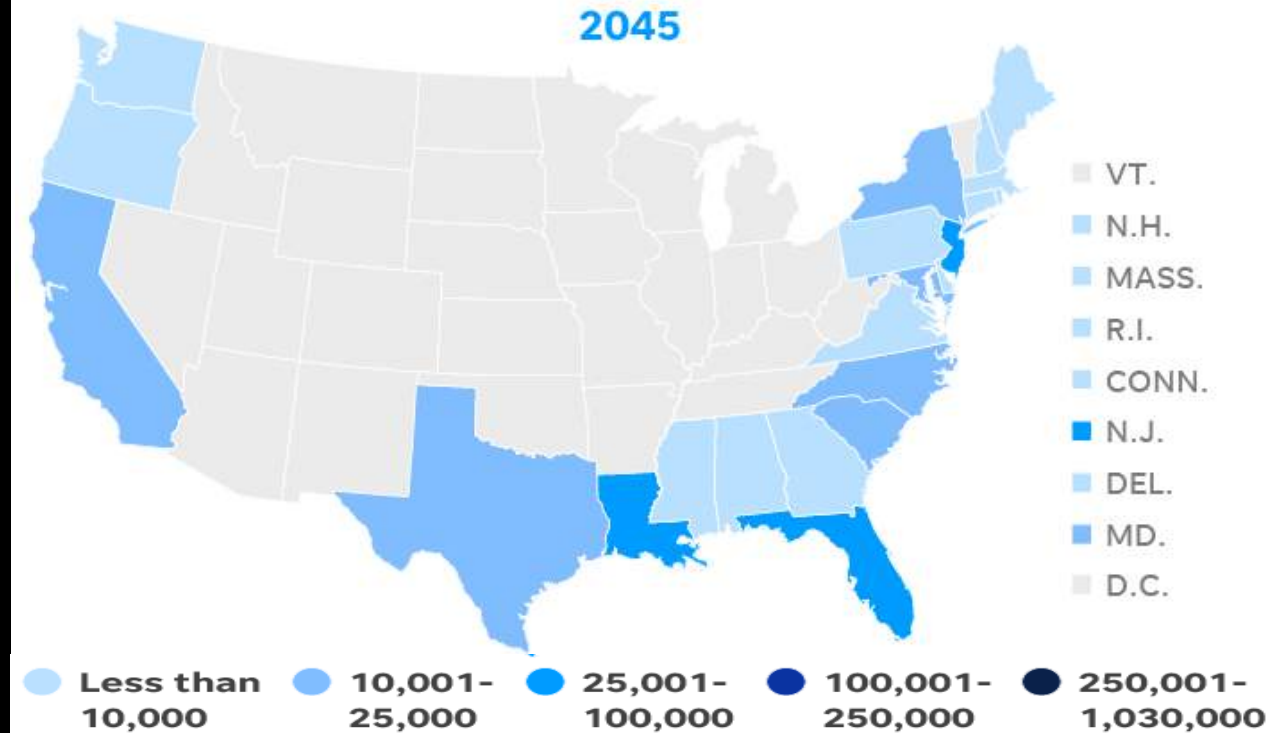


Guardian graphic. Source: NOAA. Data are inflation-adjusted

300,000 coastal homes in US, worth \$120 billion, at risk of chronic floods from rising seas

Residential properties at risk of chronic flooding

More than 310,000 existing homes are projected to be at risk of chronic inundation by 2045. The number is projected to grow to nearly 2.4 million by the end of the century.



SOURCE The Union of Concerned Scientists
www.ucsusa.org/underwater

COSTS TO U.S. GOVERNMENT



CLIMATE CHANGE

Billion-Dollar Storms: Is This the New Normal?

By DEBORAH ACOSTA | Jan. 29, 2018 | 5:39

In 2017 the U.S. saw some of the strongest and most expensive storms in history. As global temperatures continue to rise, things will get worse and more costly.

Share:     

Floods May Cost South Asia \$215 Billion a Year by 2030

By **Archana Chaudhary** and **Bibhudatta Pradhan**
 12 de septiembre de 2017 20:00 GMT-3

- Mounting climate change dangers threaten businesses, growth
- Unplanned urban sprawls, lack of climate planning to add costs

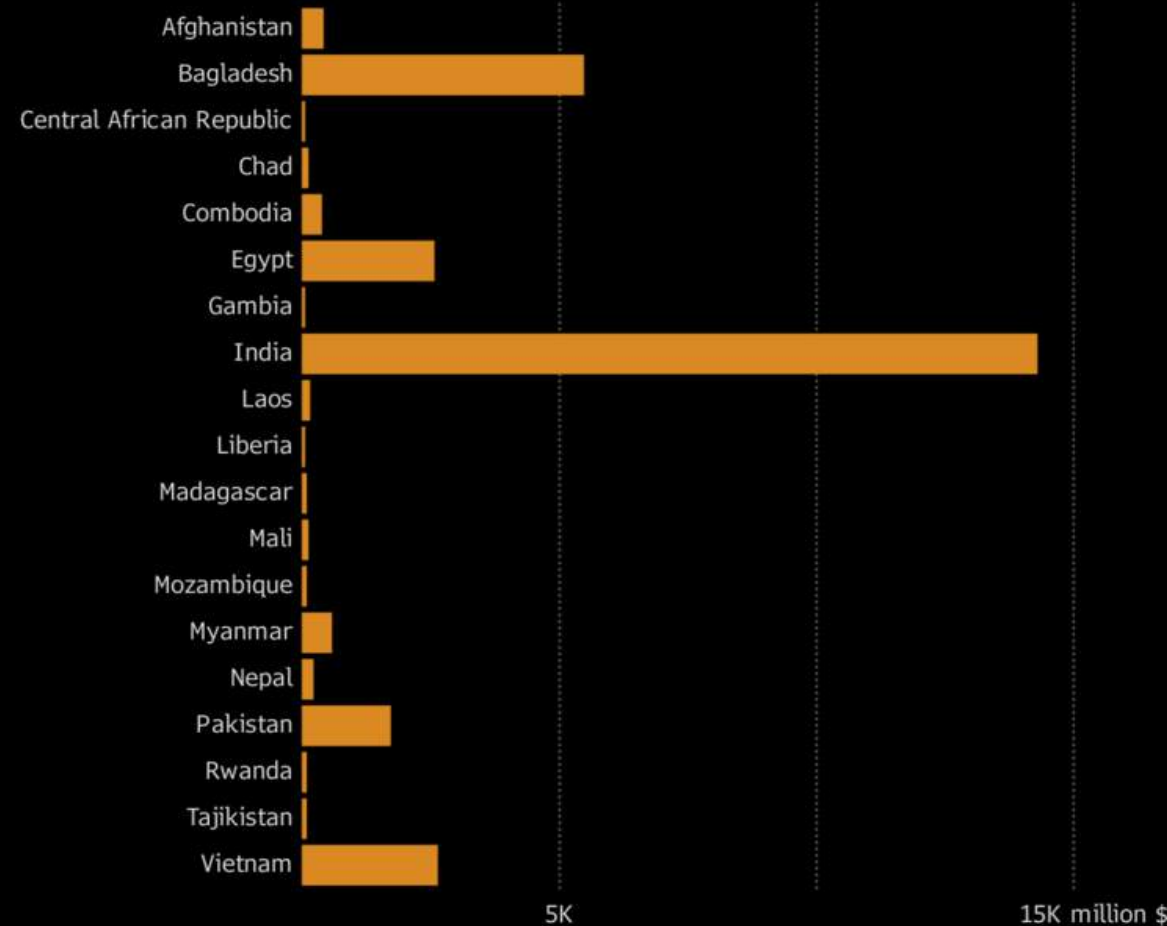


Villagers in West Bengal wade through flood waters on Aug. 23. Photographer: Diptendu Dutta/AFP via Getty Images

Floods Sweep Away Economies

Annual global economic losses amount to \$96 billion

■ GDP losses in millions of dollars



* The chart lists top 19 economies affected by river floods * Top 15 countries account for nearly 80% of total affected population * Analysis based on 2010 GDP data

Source: World Resources Institute



Australian rain proves fiercer than expected

August 8, 2018, by Tim Radford



A temporarily unhelpful underwater bridge in the Australian floods of 2010. Image: By Mattinbgn, via Wikimedia Commons

As the world warms, the storm clouds gather. And Australian rain is now often of a ferocity and intensity without precedent.

LONDON, 8 August, 2018 – Australian rain across much of the country is reaching an unexpected ferocity, and scientists who predicted a greater number of ever more intense rainstorms as the planet warms may have to think again – and think

ABOUT AUTHOR

Tim Radford, a founding editor of Climate News Network, worked for The Guardian for 32 years, for most of that time as science editor. He has been covering climate change since 1988.



9 August 2018

Australian state now "100 per cent in drought"

← Oceania, Agriculture

The Australian state of New South Wales has been declared entirely in a state of drought.

The Federal Government has announced immediate measures to provide thousands of farms with up to A\$576m (\$430m; £330m) in relief funding.

23 percent of the state is also experiencing "severe drought", according to the Australian Bureau of Meteorology.

The emergency conditions have been caused by a period of unusually dry weather with less than 10mm record in some parts of the state.

Southern Australia has experienced near-record levels of dry weather; rainfall has been 57mm below average for the



Science & Environment

Risk of water shortages for England warns Environment Agency

By Matt McGrath
Environment correspondent

1 hour ago 373



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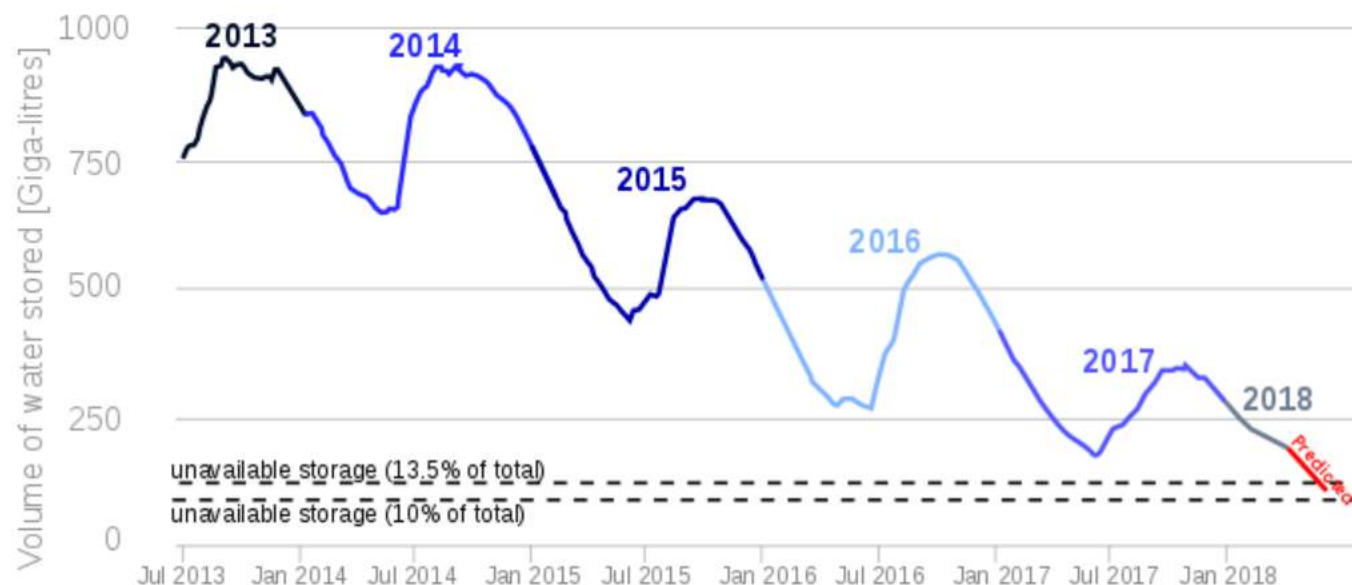


GETTY IMAGES

Ladybower reservoir in Derbyshire supplies water for drinking and hydro electricity

England is facing water supply shortages by 2050 unless rapid action is taken to curb water use and wastage, the Environment Agency has warned.

Its new report says enough water to meet the needs of 20 million people is lost through leakage every day.

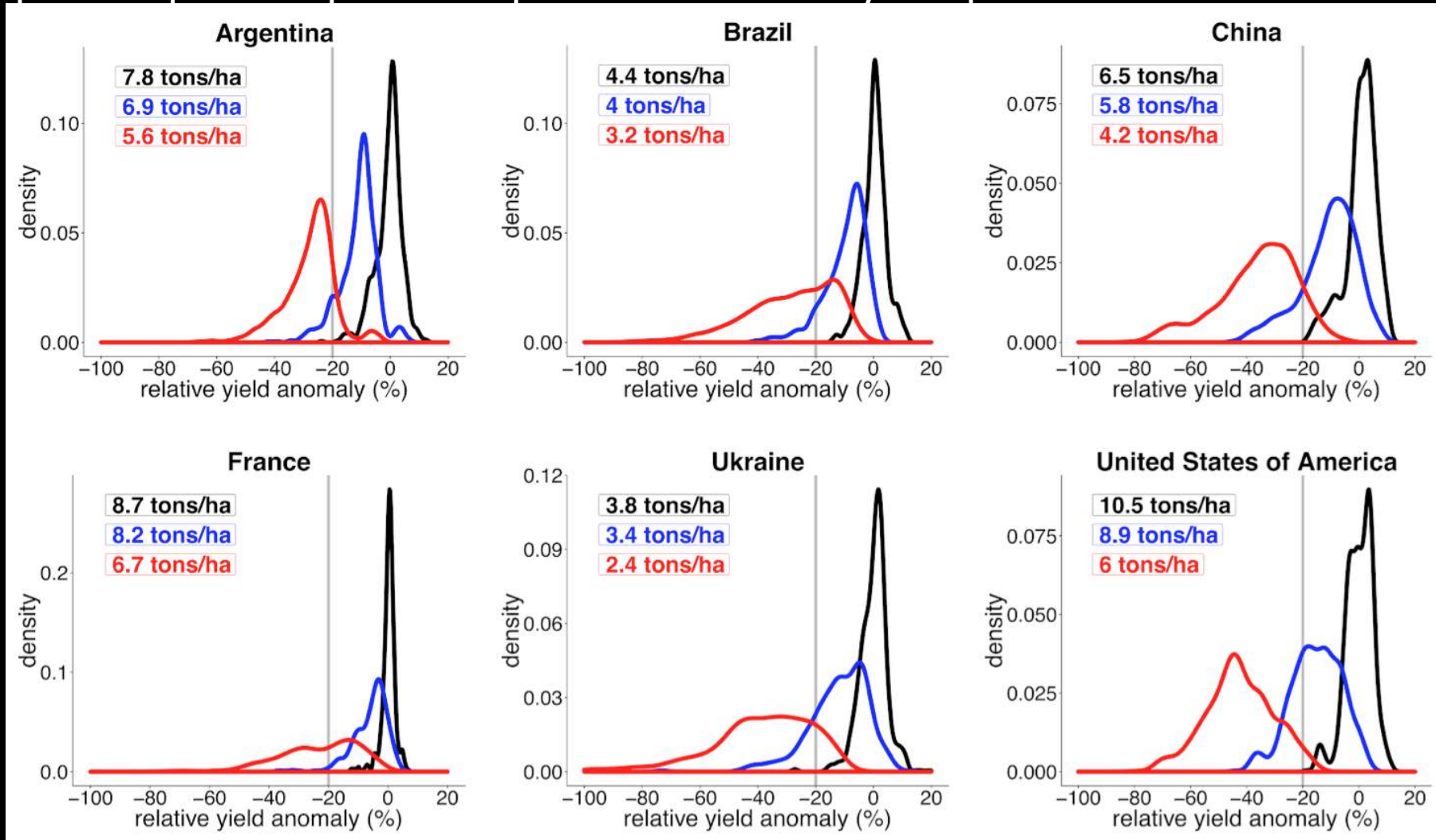


Graph of total reservoir water stored in the Western Cape's largest six dams from 30 June 2013 to 31 March 2018. The graph illustrates the declining water storage levels over the course of the Cape Town water crisis, and the impact of reduced consumption since early 2018. The prediction shows storage levels reaching around 12% by the end of May 2018 based on normal (pre-crisis) consumption. Data obtained from the [Climate Systems Analysis Group](#) (CSAG)

By [ARYN BAKER](#)

Photographs by [MIKHAEL SUBOTZKY](#) and [JOHNNY MILLER](#) for TIME

Cambios inducidos por cambio climático en el rendimiento de maíz en las regiones de mayor producción de los 6 principales países productores y exportadores.



Probability density functions of yield anomalies with respect to present-day average yield for present-day climate (black), following 2C of global warming (blue), and following 4C of global warming (red). The vertical gray line denotes a relative yield reduction of 20% and boxed values indicate mean present-day yield in these areas for present-day climate (1999–2008; black) and for 2C (blue) and 4C (red) warming.

Bees

Climate change is disrupting flower pollination, research shows

New research reveals that rising temperatures are causing bees to fly before flowers have bloomed, making pollination less likely

Damian Carrington

@dpcarrington

Thursday 6 November 2014 17.00 GMT



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Comments 121



The early spider orchid and miner bee, that depend on each other for reproduction, have become increasingly out of sync as spring temperatures rise, research has shown. Photograph: Friedhelm Adam/Getty Images

Sexual deceit, pressed flowers and Victorian bee collectors are combined in new scientific research which demonstrates for the first time that climate change threatens flower pollination, which underpins much of the world's food production.

The UK government [published its national pollinator strategy](#) on Tuesday. It was welcomed by the pesticide trade body, the Crop Protection Association and the National Farmers Union. But Joan Walley MP, chair of parliament's Environmental Audit Committee, said: "I am disappointed the government seems stubbornly determined to keep open the possibility of challenging the [EU ban on neonicotinoid pesticides](#), which have been linked to pollinator declines."



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Climate change is driving migration from Vietnam's Mekong delta

Published on 11/01/2018, 4:16pm

Saltwater intrusion and drought are destroying crops in one of the most fertile places on earth, prompting an exodus of farmers



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Global hunger rising again, driven by conflict and climate change – UN report



Farmers prepare land to plant turmeric. Bheri Ganga village, Surkhet district, western Nepal. Photo: ©IFAD/Sanjit Das/Panos

15 September 2017 – The number of people hungry around the world is up for the first time in more than a decade, says a new United Nations report issued today, pointing to violent conflicts and climate change as the major drivers.

"This has set off alarm bells we cannot afford to ignore: we will get bad harvests and all forms of

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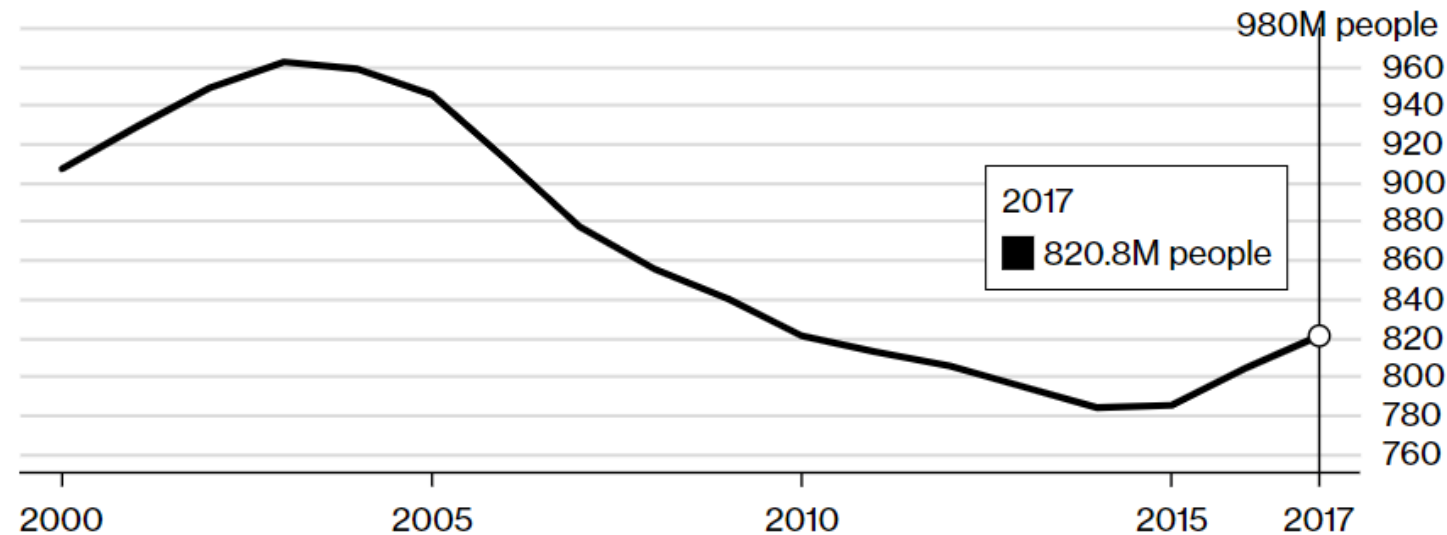
22

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alarming signs of rising food insecurity and high levels of malnutrition as more people go undernourished in Africa and Latin America.

World Hunger

The number of undernourished people climbed to an eight-year high

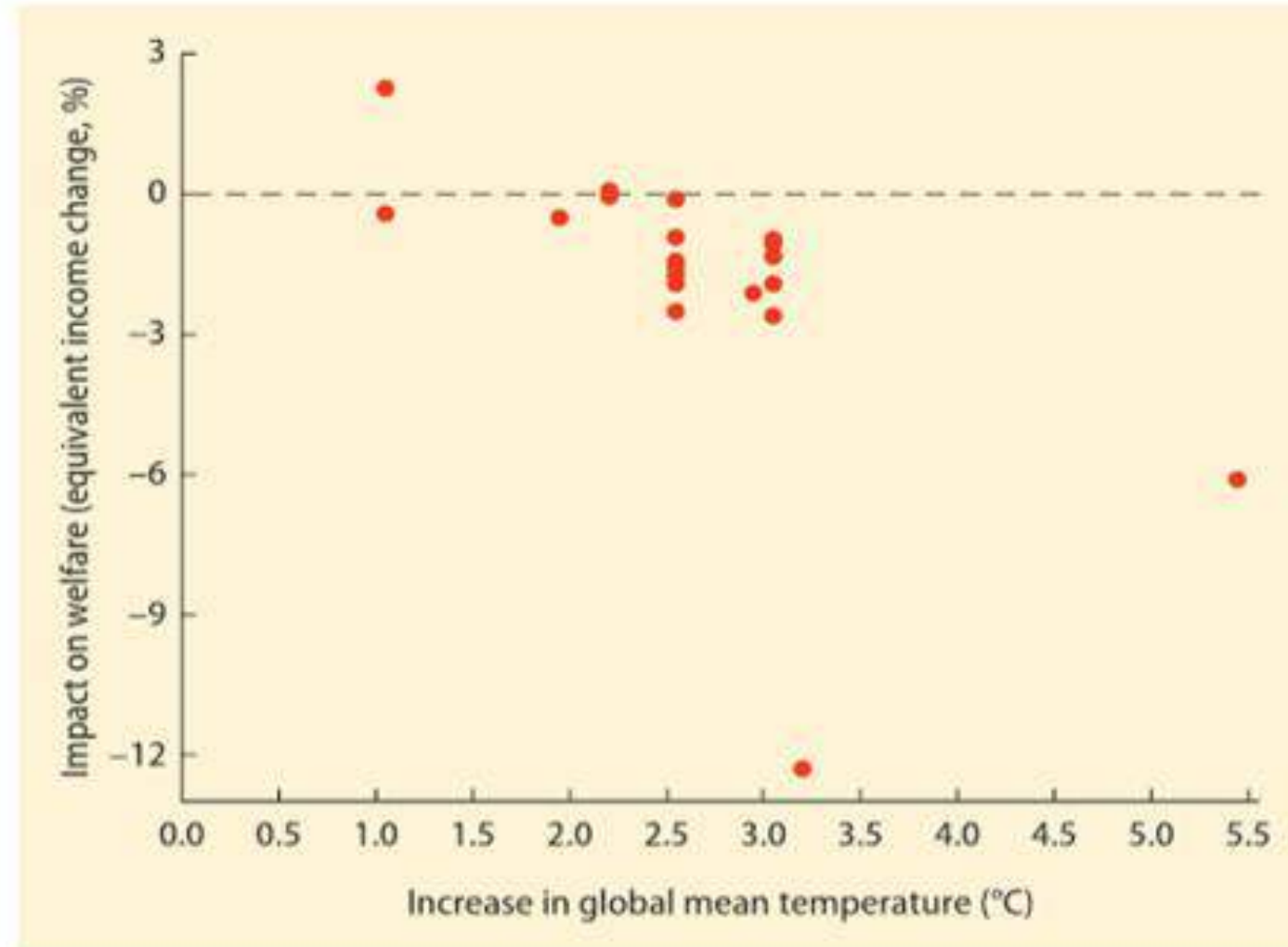


Source: United Nations

“Climate variability and extremes are already undermining food production in some regions,” the Food and Agriculture Organization and four other agencies said in a report Tuesday. “If action is not taken, the situation is expected to worsen as temperatures increase and become more extreme.”

FIGURE 1.1 The bigger the climate change, the bigger the total impact

(Estimates of the total impact of climate change increases with the magnitude of climate change)



Source: IPCC 2014b.

Note: The magnitude of climate change is proxied by the increase in the global mean surface air temperature (x-axis). Each dot represents one study.

Fuente: Shock Waves:
Managing the Impacts of
Climate Change on Poverty.
World Bank 2016

¿y cómo andamos por casa?

GLOBAL CLIMATE RISK INDEX 2017

Who Suffers Most From Extreme Weather Events?
Weather-related Loss Events in 2015 and 1996 to 2015

Sönke Kraft, David Eckstein and Inga Melchior



GERMANWATCH

Table 2: The Climate Risk Index for 2015: the 10 most affected countries

Ranking 2015 (2014)	Country	CRI score	Death toll	Deaths per 100 000 inhabitants	Absolute losses (in million US\$ PPP)	Losses per unit GDP in %	Human Development Index 2014 ¹¹
1 (23)	Mozambique	12.17	351	1.25	500.07	1.499	180
2 (138)	Dominica	13.00	31	43.66	611.22	77.369	94
3 (60)	Malawi	13.83	111	0.61	907.98	4.451	173
4 (10)	India	15.33	4317	0.33	40 077.22	0.501	130
5 (29)	Vanuatu	20.33	11	4.09	278.86	40.650	134
6 (94)	Myanmar	20.83	173	0.33	1 359.65	0.479	148
7 (138)	The Bahamas	22.83	33	9.07	80.64	0.904	55
8 (118)	Ghana	23.33	267	0.99	306.28	0.265	140
8 (34)	Madagascar	23.33	118	0.49	228.04	0.642	154
10 (62)	Chile	25.17	39	0.22	2 652.69	0.627	42

Para muestra, un botón...

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LA TERCERA

País

Lunes, 25 de abril de 2016

PORTADA PAÍS MUNDO

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Autor: P.Yévenes, D. A

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EL MERCURIO

Inicio | Editorial y cartas | Columnistas

Santiago de Chile, Ju 27/7/2017

00:11

Noticias

Domingo 16 de julio de 2017

Desde Coquimbo a Los Lagos: Sistema frontal hizo caer nieve en nueve regiones del país

La mayor nevazón de los últimos 46 años en Santiago dejó bellas imágenes de la capital, pero también problemas con el suministro eléctrico, las señales de telefonía móvil y en el tránsito vehicular.



**“El cambio climático probablemente provocará
escasez de agua y alimentos,
enfermedades pandémicas,
peleas por refugiados y por recursos,
y destrucción de regiones alrededor del mundo por
desastres naturales”.**

Departamento de Defensa de los EEUU. 2014

Climate Change Adaptation Roadmap.

Nations Unies

Conférence sur les Changements Climatiques 2015

COP21/CMP11

Paris France



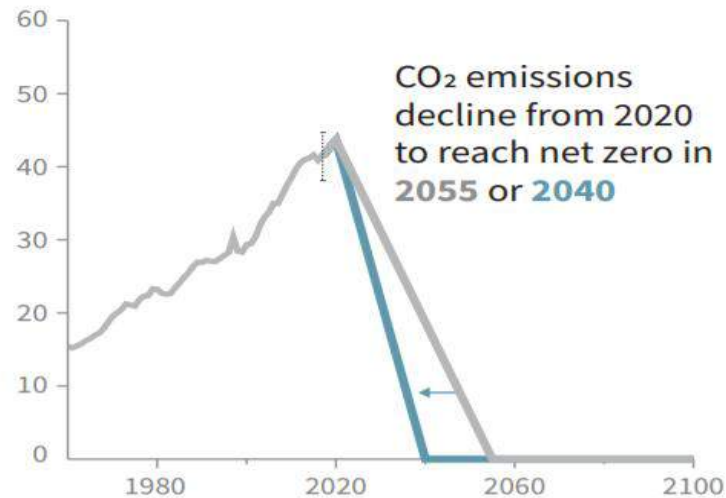
#ParisAgreement

“Long live the planet.

Long live Humanity. Long live life itself.”

ACUERDO ALCANZADO POR TODOS LOS PAISES DEL MUNDO, EXCEPTO SIRIA.

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

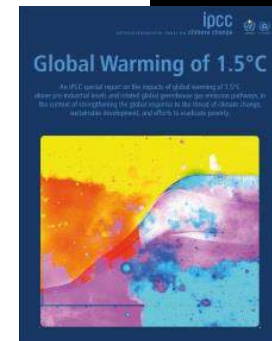
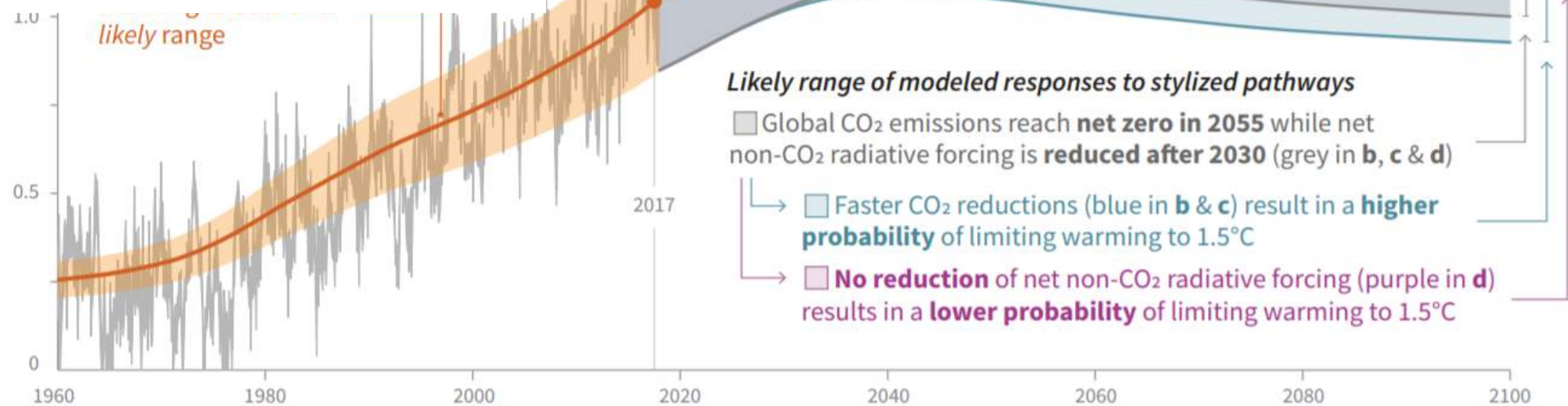


Faster immediate CO₂ emission reductions limit cumulative CO₂ emissions shown in panel (c).

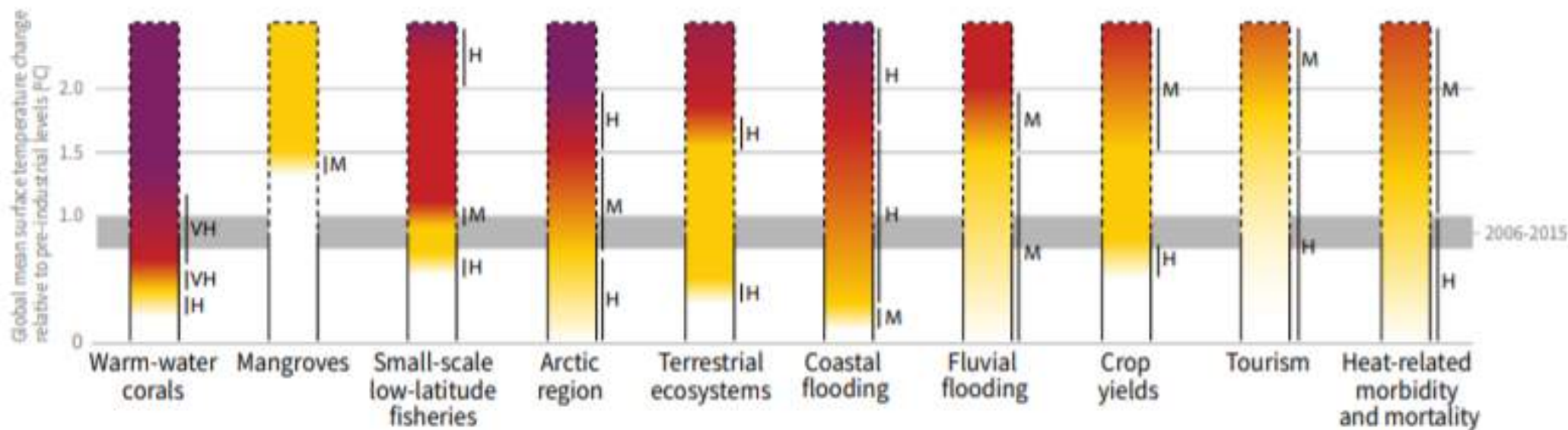
Source: IPCC Special Report on Global Warming of 1.5°C

and future non-CO₂ radiative forcing determine warming to 1.5°C

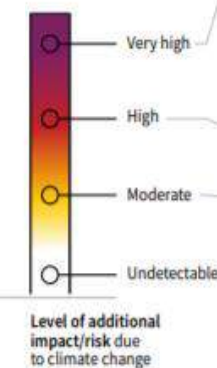
1 range and modeled
2: emission and forcing pathways



Impacts and risks for selected natural, managed and human systems



Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high

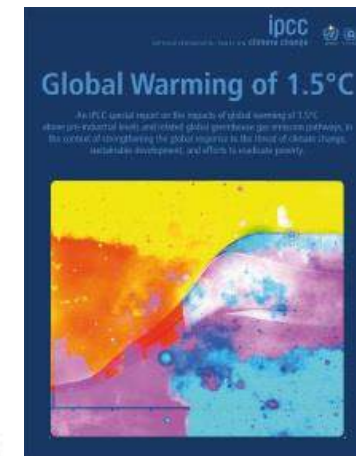


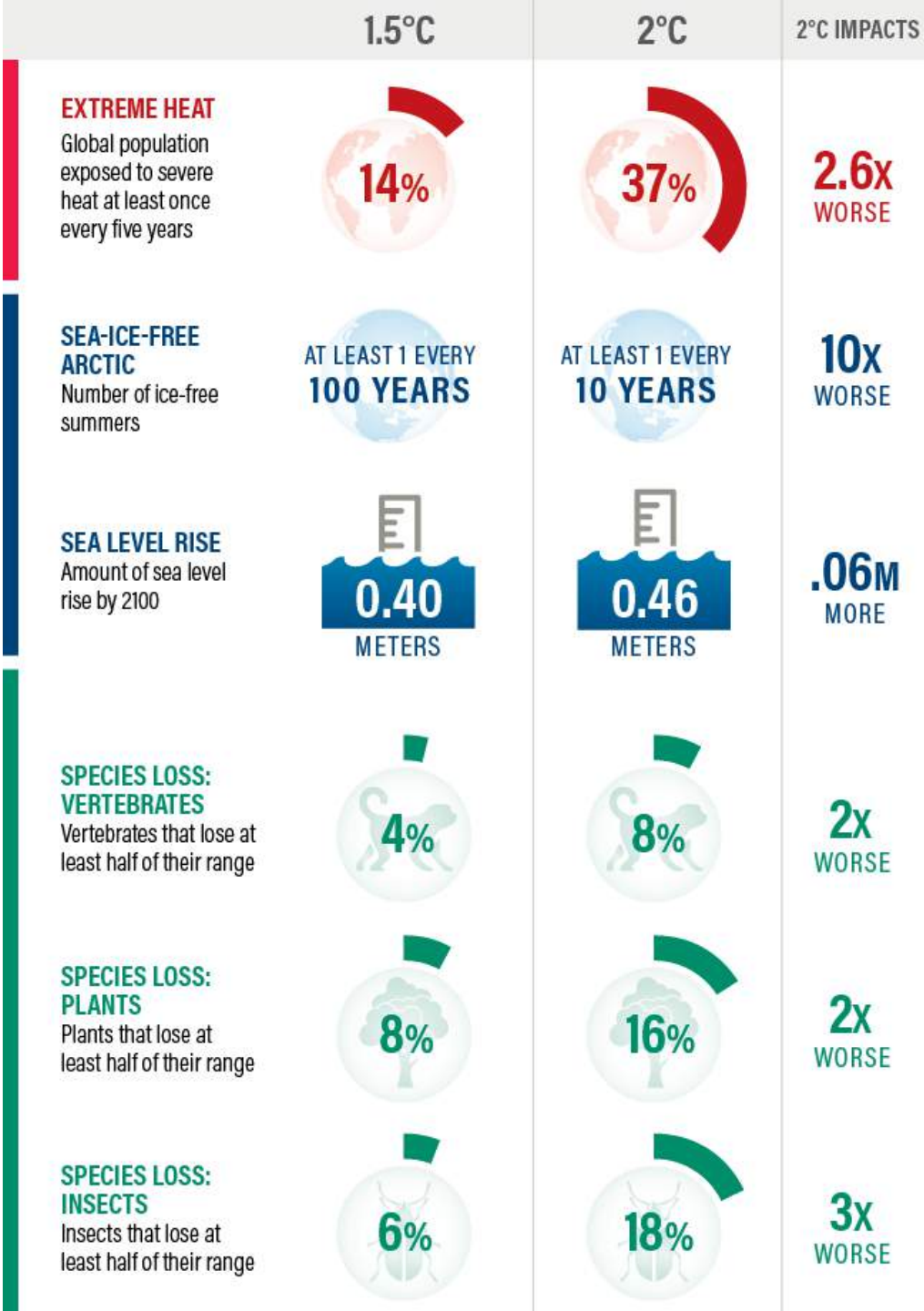
Purple indicates very high risks of severe impacts/risks and the presence of significant irreversibility or the persistence of climate-related hazards, combined with limited ability to adapt due to the nature of the hazard or impacts/risks.

Red indicates severe and widespread impacts/risks.

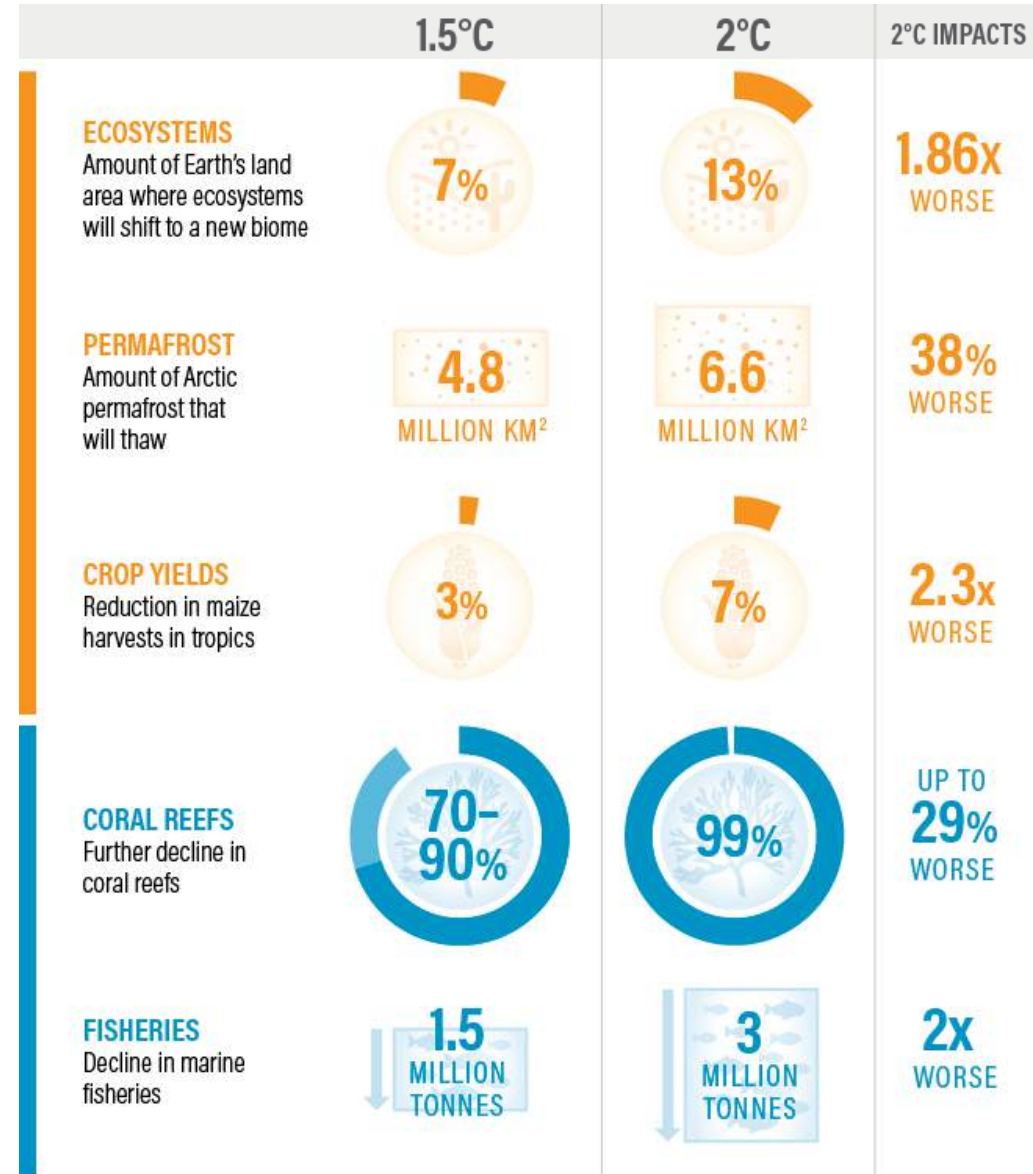
Yellow indicates that impacts/risks are detectable and attributable to climate change with at least medium confidence.

White indicates that no impacts are detectable and attributable to climate change.





HALF A DEGREE OF WARMING MAKES A BIG DIFFERENCE: EXPLAINING IPCC'S 1.5°C SPECIAL REPORT



Fuente: IPCC Special Report on Global Warming of 1.5°C, 2018

COP 21: Acuerdo de París

Objetivos



COP21 • CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

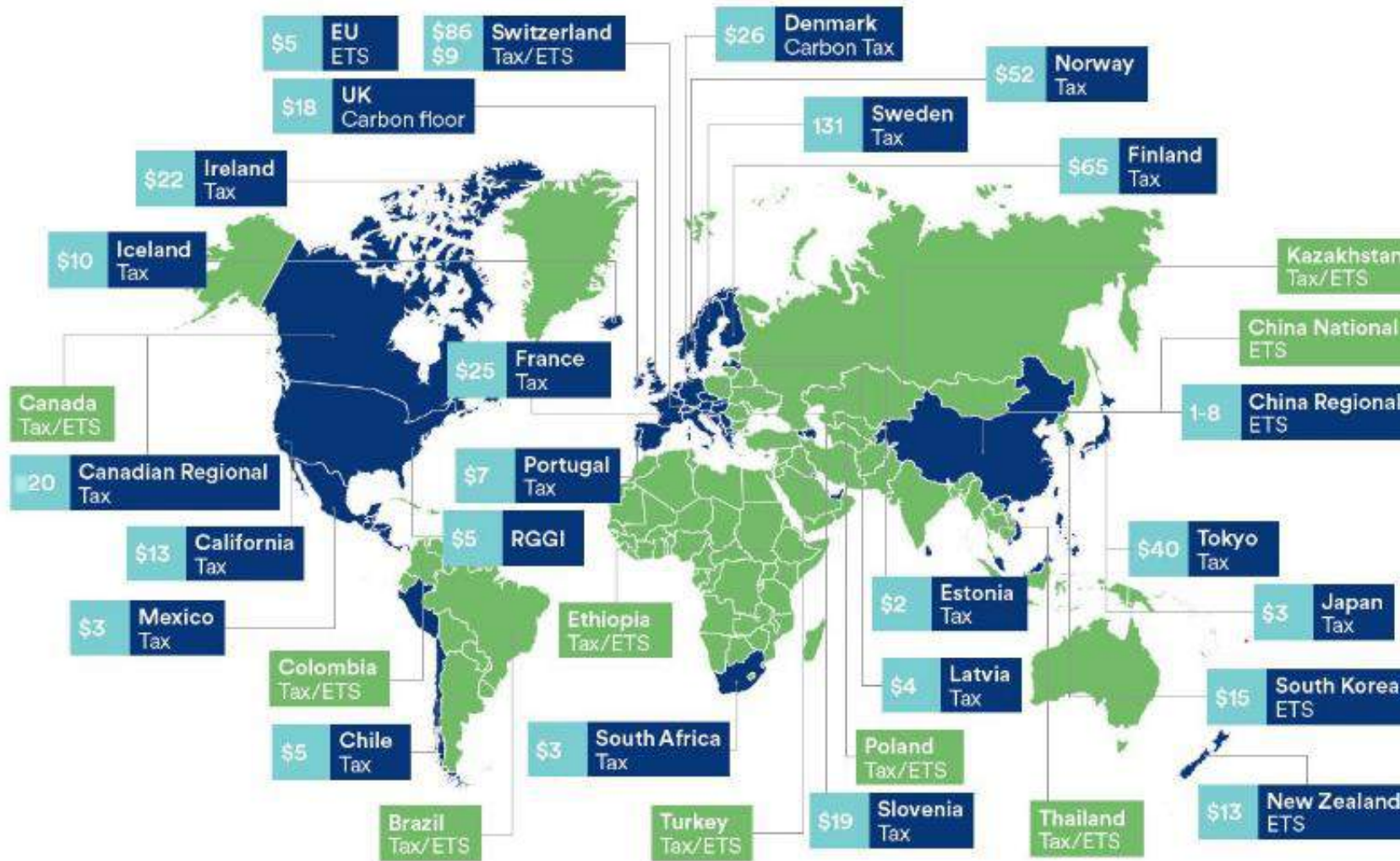
Fortalecer la respuesta mundial a la amenaza del cambio climático, en el contexto del desarrollo sostenible y los esfuerzos para erradicar la pobreza

Precio al carbono

- a) Mantener la elevación de la T° media mundial **debajo de 2 °C** respecto de la preexistente, intentando limitarlo a 1,5 °C, reconociendo que esto reduciría significativamente los riesgos del cambio climático.
- b) Incrementar y fomentar la **capacidad de adaptación** a los efectos adversos del cambio climático, así como el **desarrollo bajo en emisiones** de gases de efecto invernadero, de manera que no **menace la producción de alimentos**;
- c) Hacer que los **flujos financieros** sean consistentes con un desarrollo dirigido hacia un sistema de bajas emisiones de gases de efecto invernadero y resiliente al cambio climático.

El Acuerdo se llevará a cabo equitativamente, y bajo el principio de responsabilidades comunes pero diferenciadas, considerando las capacidades y circunstancias nacionales.

A nivel global, 42 países y 25 estados y provincias ya utilizan o están planeando poner en práctica mecanismos de precio al carbono.



Considerando los existentes y los que se están considerando desarrollar, abarcarán casi la mitad de las emisiones globales

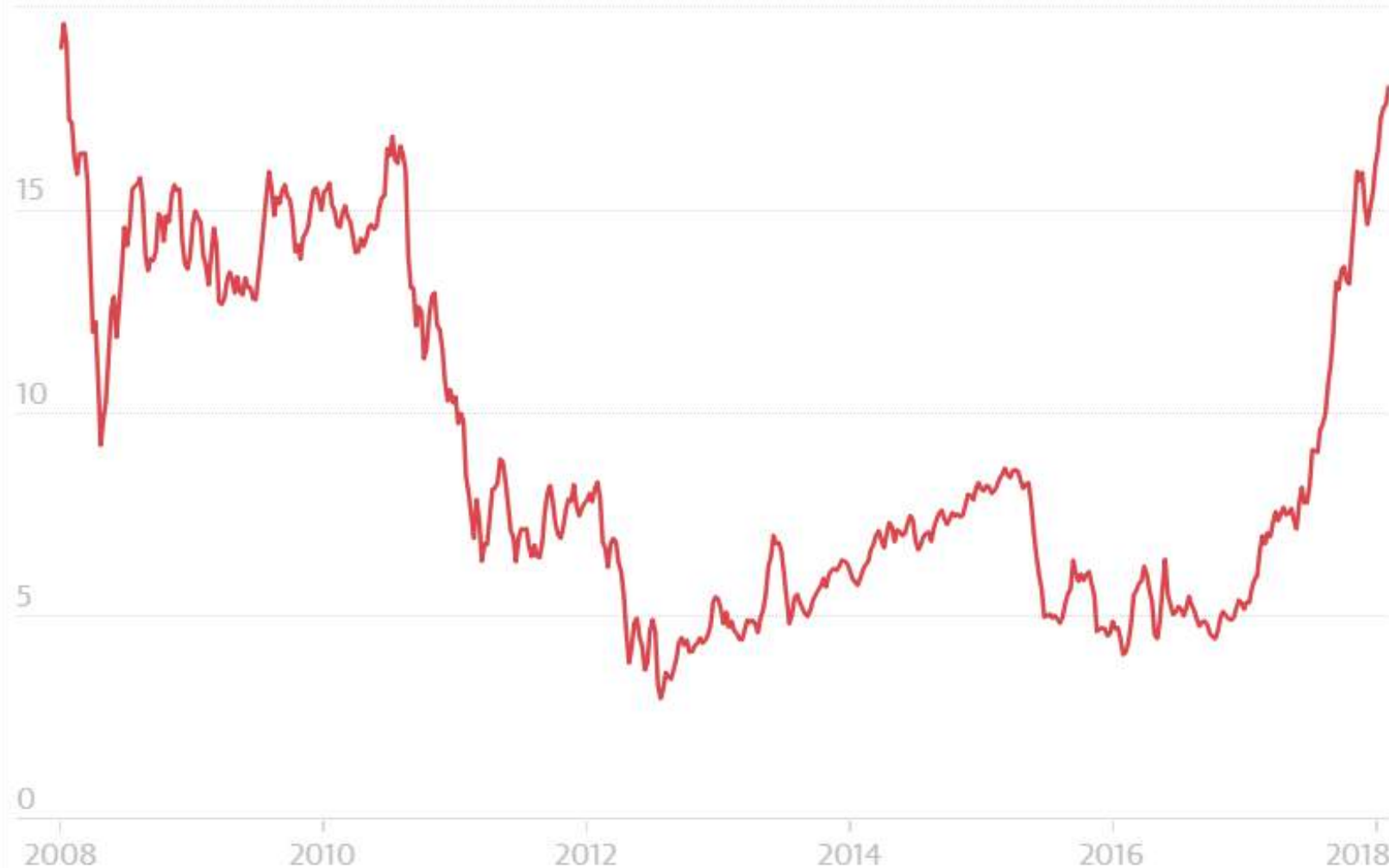
Y la UE está fortaleciendo el Acuerdo de París
a través de sus instrumentos...

EU carbon prices have hit a 10-year high

European allowance price, €

Price

20

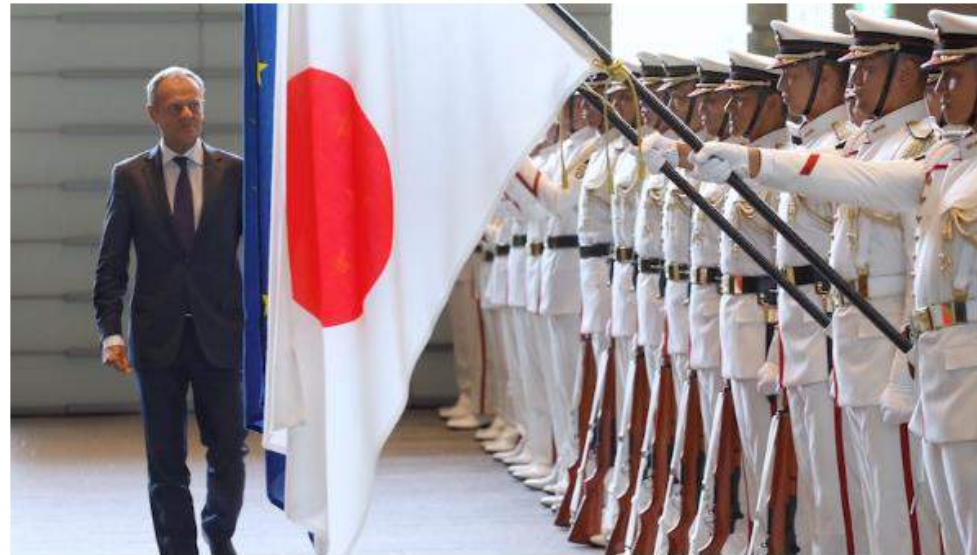


Guardian Graphic | Source: Sandbag

EU-Japan trade deal first to carry Paris climate clause

Published on 17/07/2018, 3:32pm

The world's largest ever trade deal is also the first Europe has signed that commits both parties to upholding the UN climate accord



European council president Donald Tusk (Photo: European Union)

By **Karl Mathiesen**

Europe's massive free trade deal with Japan is the first the EU has struck with a specific provision on the Paris climate agreement.

The deal, finalised at a meeting of leaders in Tokyo on Tuesday, will create the world's largest open trade zone.

114
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EU and China agree sweeping joint statement on climate action

Published on 16/07/2018, 1:32pm

Leaders put climate at centre of relationship, push for agreement on the Paris deal rulebook and reject Trump's efforts to undermine global cooperation



Chinese premier Li Keqiang and European Commission president Jean-Claude Juncker (Photo: European commission)

By [Soila Apparicio](#) and [Karl Mathiesen](#)

Climate change will become a “main pillar” of the relationship between the European Union and China, said leaders on Monday.

The [joint statement](#), adopted at a summit in Beijing, committed the world's largest and third largest carbon polluters to driving progress in UN climate talks.

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...y no solo la UE...

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Fossil fuel divestment

World's biggest sovereign wealth fund dumps dozens of coal companies

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New York City plans to divest \$5bn from fossil fuels and sue oil companies

ThinkProgress

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Jun 8, 2015 · 3 min read

Another Giant Pension Fund Divested From Oil, Coal, And Gas Companies

It's up to the fossil fuel companies whose greed to shoulder the cost of making New York safer

The Asahi Shimbun | Asia & Japan Watch

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The Asahi Shimbun > Business > article

Nippon Life won't invest in coal-fired power plant projects

By SHUHEI SHIBATA/ Staff Writer

July 13, 2018 at 16:30 JST

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Detained In Myanmar Energy & Environment Brexit North Korea Charged: The Future of Autos

ENVIRONMENT JUNE 15, 2017 / 12:43 PM / A YEAR AGO

Swedish pension fund sells out of six firms it says breach Paris climate deal

Gwladys Fouche

California First State in the Nation to Divest from Coal

SB 185 Signed by Governor Brown

Thursday, October 08, 2015

SACRAMENTO - Governor Jerry Brown today signed into law SB 185, which requires California's public pension funds, CalPERS and CalSTRS, to divest from holdings in thermal coal. The measure is the first of its kind in the nation. CalPERS and CalSTRS are the largest public pension funds in the nation, with \$293 billion and \$184 billion in assets, respectively.



fossil fuel at the New York Stock Exchange, Wall Street, New York City

INDEPENDENT

World's biggest coal company closes 37 mines as solar power's influence grows



REUTERS

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CLGCHILE

LIDERES EMPRESARIALES CONTRA EL CAMBIO CLIMATICO

ENVIRONMENT JUNE 3, 2016 / 7:21 PM / UPDATED 7 HOURS AGO

Big investors urge G7 to step up climate action, shift from coal

Alister Doyle

3 MIN READ



OSLO (Reuters) - Institutional investors with \$26 trillion in assets under management called on Group of Seven leaders on Monday to phase out the use of coal in power generation to help limit climate change, despite strong opposition from Washington.





Environment

Oil giant Shell warns public faith in fossil fuel industry is 'disappearing' and calls for carbon taxes

'I do think trust has been eroded to the point that it is becoming a serious issue for our long-term future'

Ian Johnston Environment Correspondent | @montaukian | 9 hours ago |

Click to follow
The Independent Online



Ben van Beurden called for governments to impose a price on carbon emissions. Getty

Oil giant Royal Dutch Shell is to increase its spending on renewable energy to \$1bn (£800m) a year, its chief executive announced as he warned the public's faith in the industry was "just disappearing".

Ben van Beurden suggested the public backlash against fossil fuel firms could threaten the industry's future.

He also said it was essential that countries imposed a price on carbon emissions to help phase out the use of coal and oil, sources of large amounts of greenhouse gases that are driving climate change.

indy100

This is the world's most powerful passport - and it's not what you'd expect

Did Richard Dawkins just perfectly sum up the problem with Brexit?

Boyfriend claims girlfriend is his sister. Big mistake.

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Exxon's New Chief Endorses Carbon Tax to Combat Climate Change

by Joe Carroll

23 de febrero de 2017 19:16 CLST Updated on 24 de febrero de 2017 2:01 CLST

→ Darren Woods makes first blog

→ Comment mirror's former CEO

In his first blog post since succeeding as CEO, Exxon's new chief focused on climate change, calling for a carbon tax.

KAOjsuTGCOe8RyTGFwArstg4jOGM84M

Our senior leveraged finance analysts have an average

environmental
LEADER

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ENERGY MANAGER TODAY

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BP Advocates for Putting a Price on Carbon

January 30, 2017

BP is part of a group of oil companies that favor such action: ExxonMobil, Royal Dutch Shell and StatOil. Those companies don't generally advocate for taxes or restrictions but they think that such measures would be more efficient than a patchwork of international laws. Moreover, they have major investments in test growing fuel in the United States.

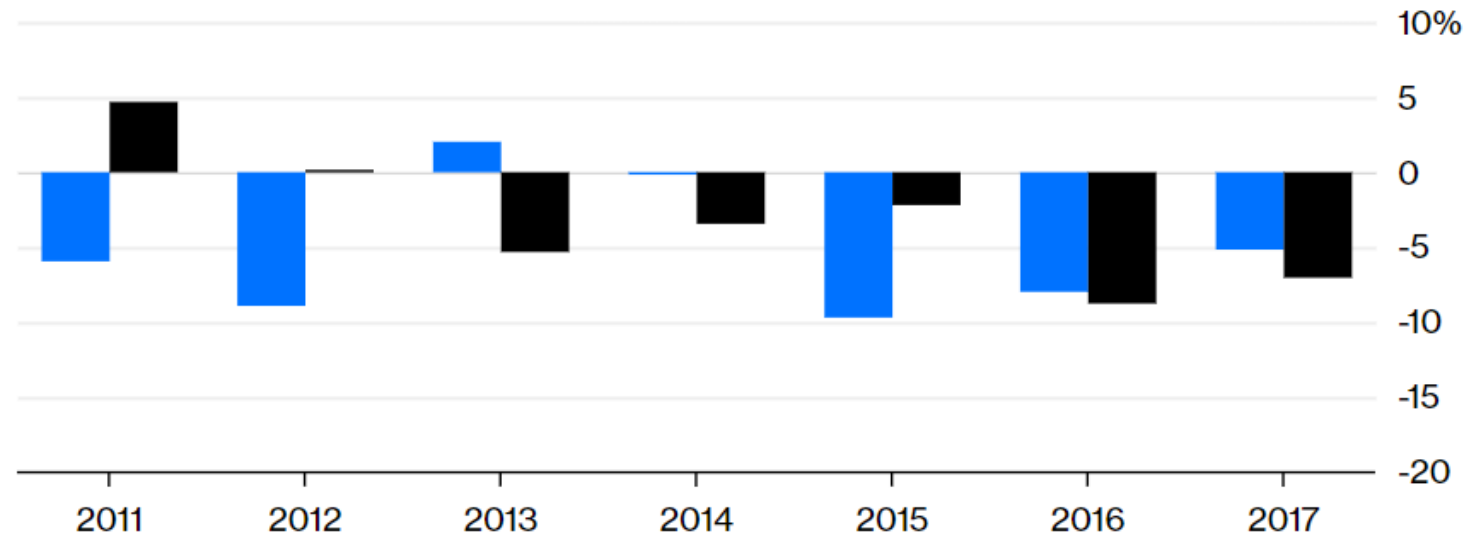


...los mercados responden consecuentemente...

Decline and Fall

In the U.S. and Europe, coal generation has dropped at a 5 percent average annual pace over the past five years

■ U.S. ■ EU27



Source: Genscape, Eurostat, Agora Energiewende, Bloomberg Opinion calculations

Note: 2017 Europe figure is from Agora Energiewende, and relates to the 28-nation European Union. All others are for the 27-nation EU, excluding the U.K.

Table 1: Standard and Poor's Top Ten 1980-2018

	1980	1990	2000	2010	2018
1	IBM	IBM	GE	Exxon*	Apple
2	AT&T	Exxon*	Exxon*	Apple	Microsoft
3	Exxon*	GE	Pfizer	Microsoft	Amazon
4	Standard Oil Indiana*	Phillip Morris	Citigroup	Berkshire	Facebook
5	Schlumberger*	Shell Oil*	Cisco Systems	GE	Berkshire
6	Shell Oil*	Bristol Meyers	Walmart	Wal-Mart	JP Morgan
7	Mobil*	Merck	Microsoft	Google	ExxonMobil*
8	Standard Calif*	Walmart	AIG	Chevron*	Alphabet, Inc. B
9	Atlantic Richfield*	AT&T	Merck	IBM	Alphabet, Inc. C
10	GE	Coca Cola	Intel	Proctor Gamble	Johnson & Johnson

* Represent Oil and Gas companies. Source: <https://us.spindices.com/indices/equity/sp-500>

Figure 1: ExxonMobil Growth Compared to Standard and Poor's 500, 2003 to Present

Exxon Mobil Corporation (XOM) ★

NYSE - Nasdaq Real Time Price. Currency in USD

82.16 -0.26 (-0.32%)

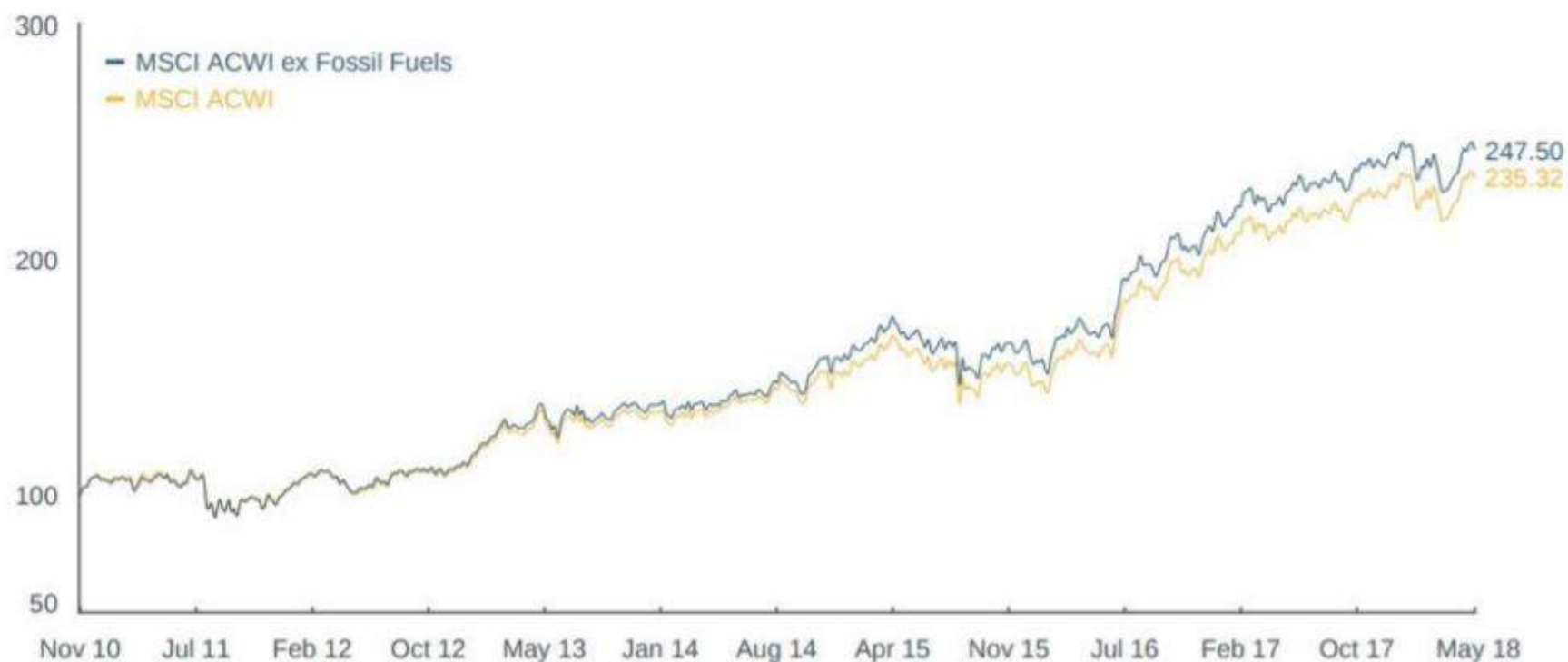
As of 3:06PM EDT. Market open.



Source: [Yahoo.com Finance](https://finance.yahoo.com)

Figure 2: Cumulative Returns of MSCI World Index vs. MSCI World Index ex Fossil Fuels, 11/2010 - 5/2018

CUMULATIVE INDEX PERFORMANCE - GROSS RETURNS (GBP) (NOV 2010 – MAY 2018)

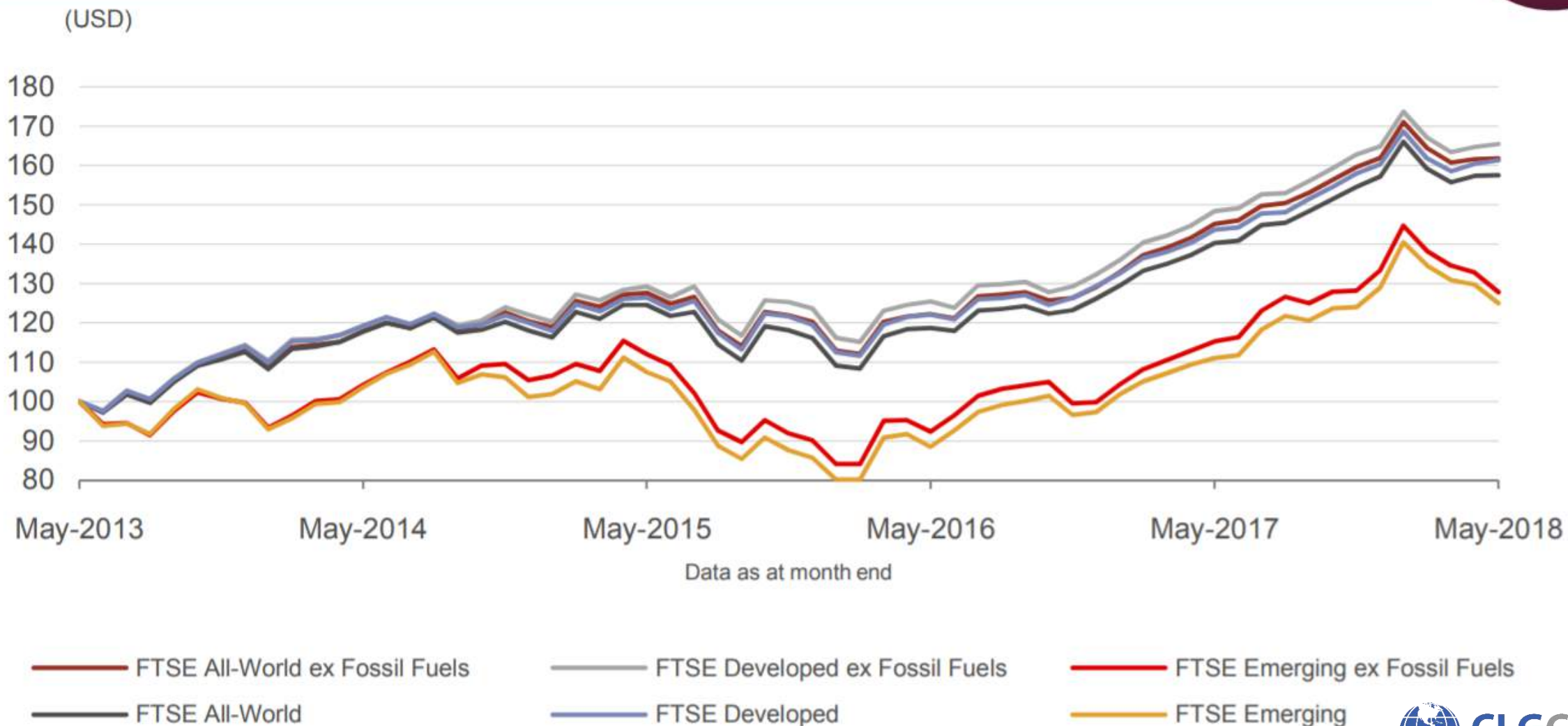


Source: <https://www.msci.com/documents/10199/b4b02abd-f3a7-4a4b-b459-e996a672cd8f>

FTSE All-World ex Fossil Fuels Index Series

FTSE
Russell

5-Year Performance - Total Return



...y surge cada vez más interés en inversión sostenible...

Figure 5: Electric Vehicle Sales Are Accelerating



Source: Bloomberg New Energy Finance. <https://about.bnef.com/future-energy-summit/new-york-videos/>

Global New Investment in Renewable Power and Fuels 2005-2015

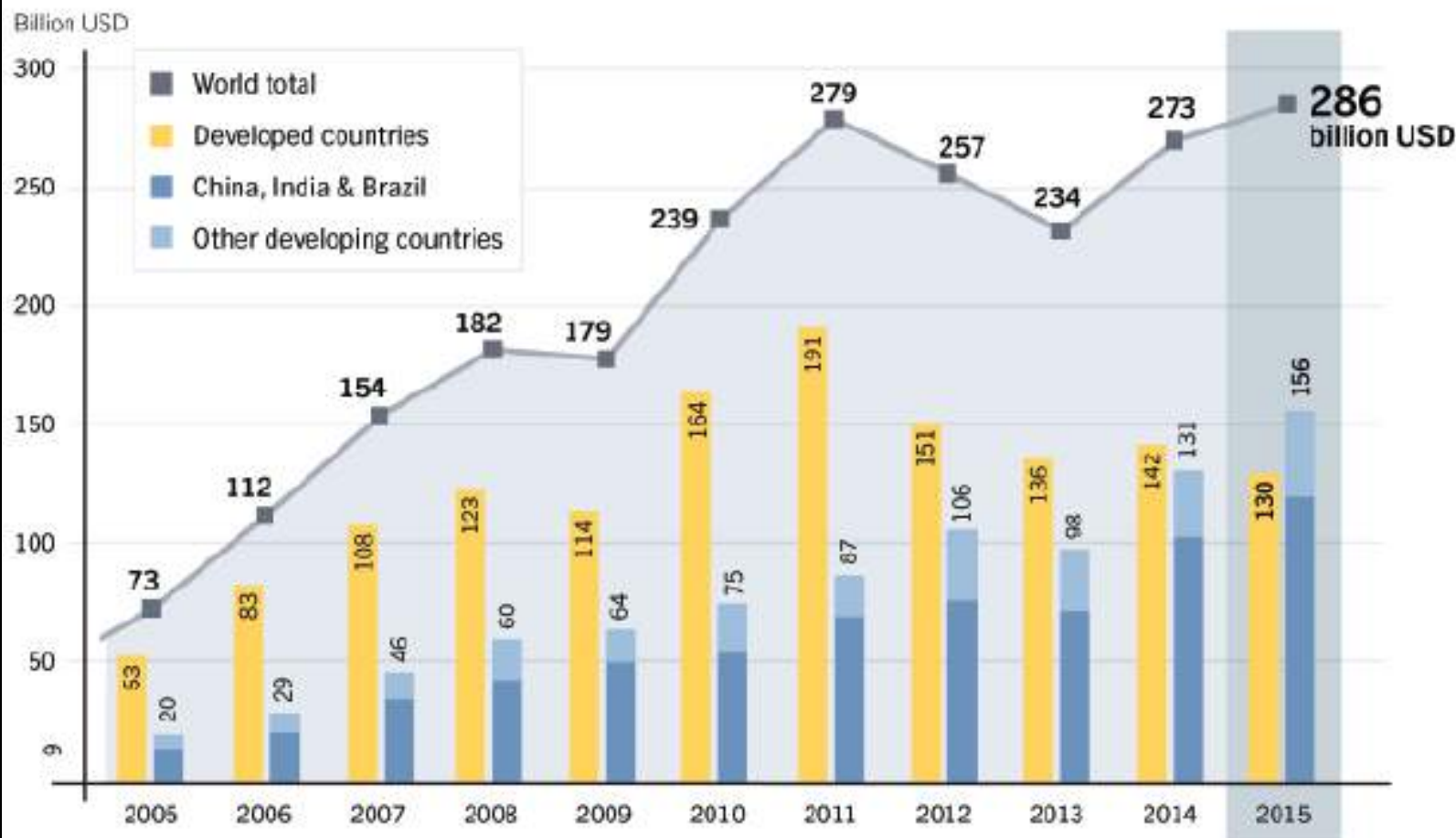
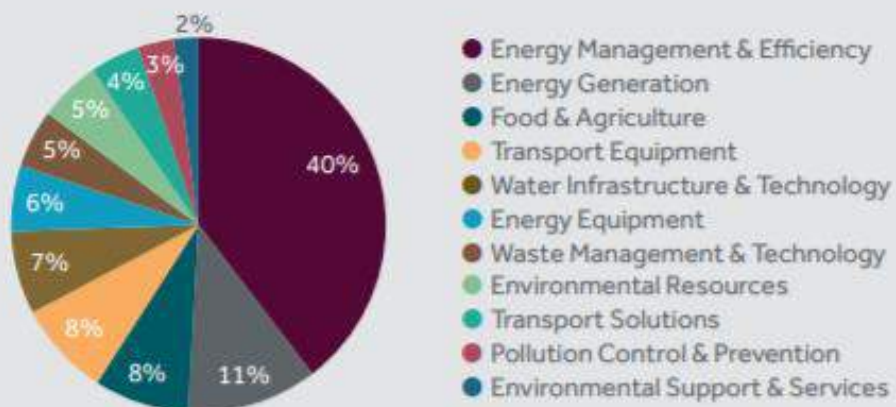


Figure 7. Green economy by green sector¹³



Source: FTSE Russell, data as of December 2017

Figure 8. Largest companies in the green economy¹⁴

Company	% of Market	Green activities
Microsoft	2.4	Cloud infrastructure & video conferencing
TSMC	2.4	High efficiency electronics
China Yangtze Power	1.4	Hydroelectric power generation
ABB	1.1	High efficiency power infrastructure & industrial automation
Amazon	1.1	Cloud infrastructure
Tesla	1.1	Electric vehicles
Monsanto	1.0	High yielding & drought resistant seeds
Waste Management	1.0	Waste management & recycling
Siemens	0.8	Renewable energy equipment, water treatment equipment, mobility solutions & high efficiency power infrastructure, industrial & building
NextEra Energy	0.7	Renewable & low carbon power generation
Honeywell	0.7	Automotive & building energy efficiency

Source: FTSE Russell, data as of December 2017

Fuente: FTSE Russell, Annual trends report 2018: Investing in the global green economy: busting common myths Defining and measuring the investment opportunity

Figure 2. Growth of the green economy vs fossil fuel sector⁹



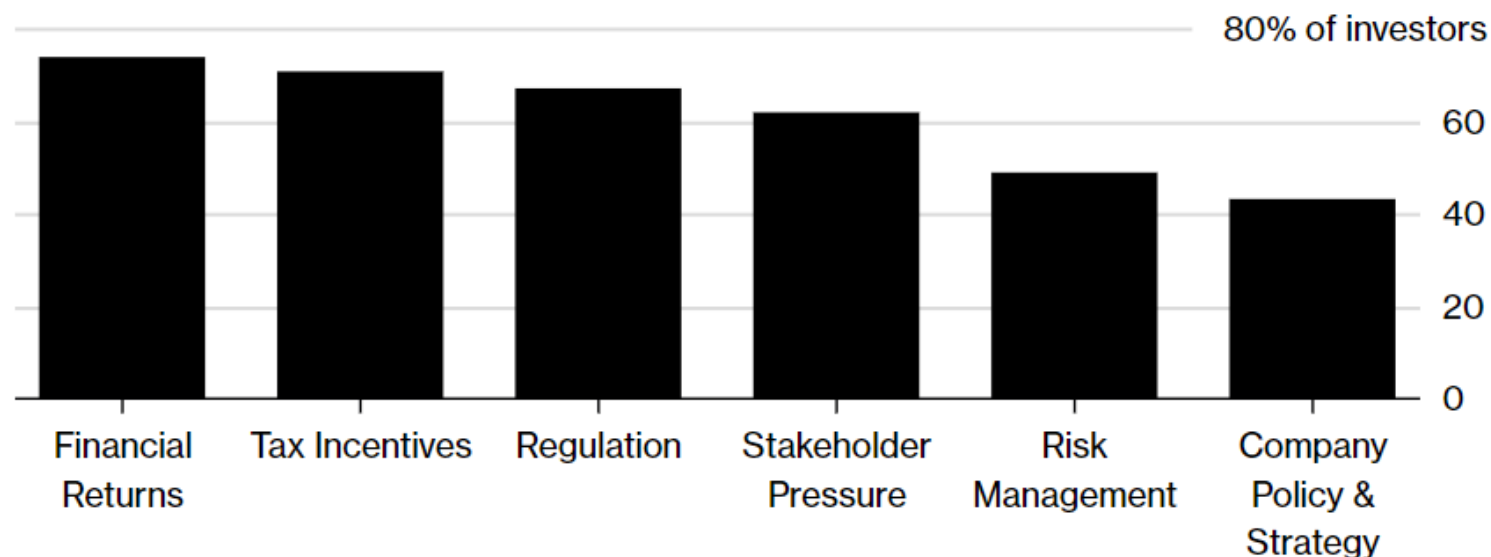
Source: FTSE Russell, data as of December 2017. Please see the end for important legal disclosures.

Nota: en este documento se trata el universo de la acciones públicas globales como un proxy para una evaluación de toda la economía. Como tal, nuestra definición de "economía verde" es la capitalización del mercado de renta variable global, ponderada por los ingresos verdes como una proporción del total de los ingresos, comparado con una evaluación macroeconómica del PIB global

crisis, as investors sought to avoid similar scenarios in the future. Asset managers with nearly \$82 trillion under management, have signed on to the Principles of Responsible Investment, pledging to take ESG into consideration when deciding where to allocate their money.

The Color of Money

Most investors said that they have an ESG strategy for financial returns

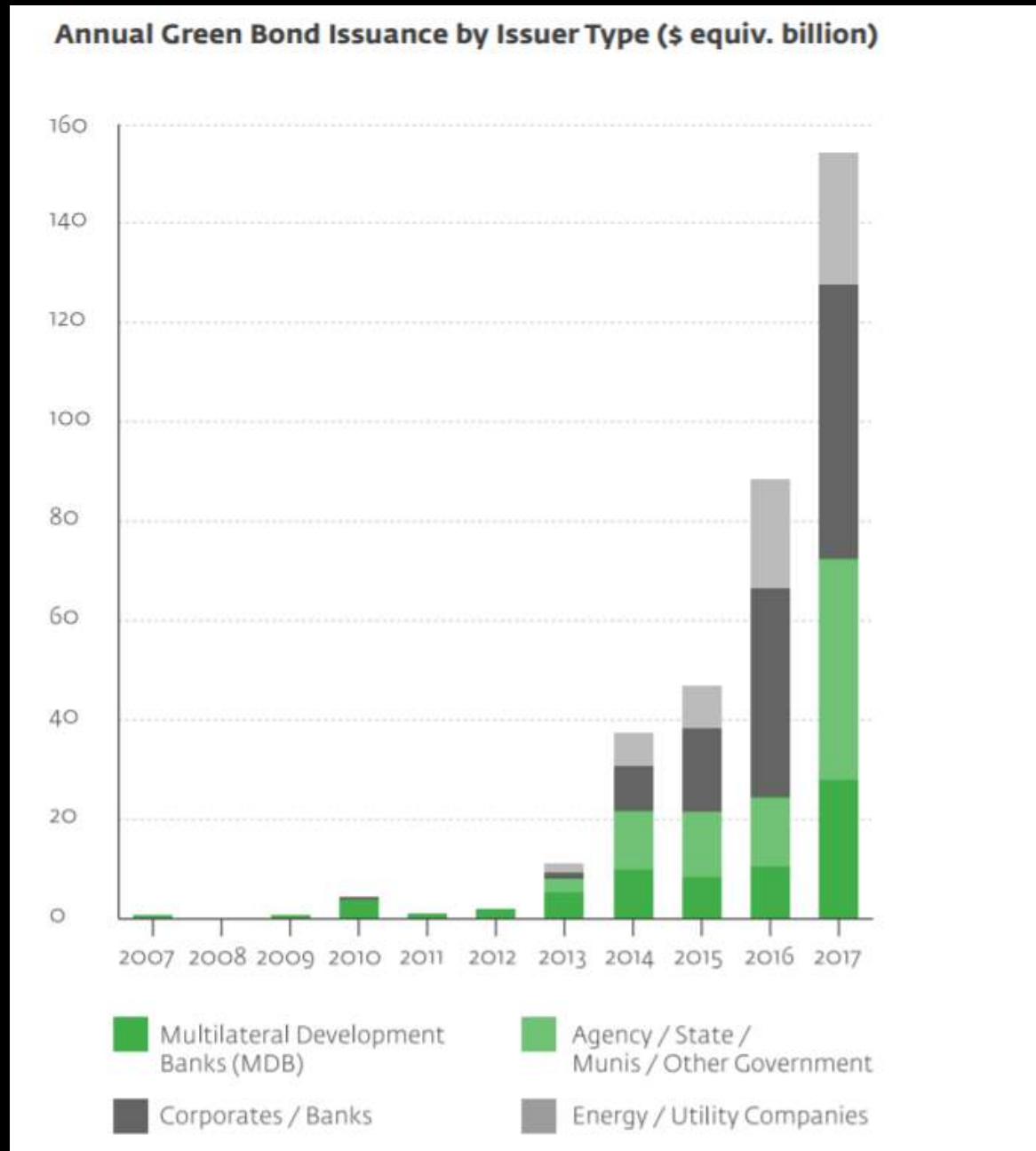


Source: HSBC Sustainable Financing and ESG Investing Report

Note: Data only includes investors with an ESG strategy

The Paris climate agreement from 2015 was ratified by nearly 200 countries and sent a signal to the global economy that decarbonization is firmly on

Crece interés por los Green Bonds



Fuente: https://www.ifc.org/wps/wcm/connect/7f9032cd-5568-40f5-bbef-101d084c53a8/201804_Perspectives_Issue-1.pdf?MOD=AJPERES



Sustainable Investing

Blossoming green-bond market growing toward \$250 billion year



Bloomberg Intelligence March 8, 2018

This analysis is by Bloomberg Intelligence analysts Gregory Elders, Jonathan Tyce, Shaheen Contractor and Jaimin Patel. It appeared first on the Bloomberg Terminal.

Green bonds' widening issuer embrace could drive new offerings to \$250 billion this year, surpassing 2017's record \$155 billion. France's over \$10 billion in

Green Bond Indices show a positive picture against Global Indices

Green bonds outperform

Indices rebased (Jan 2017 = 100)

— Green bond index
 — Global bond index



*ICE BofAML indices

Source: Bloomberg

© FT



Queremos atraer inversión sostenible a Chile...

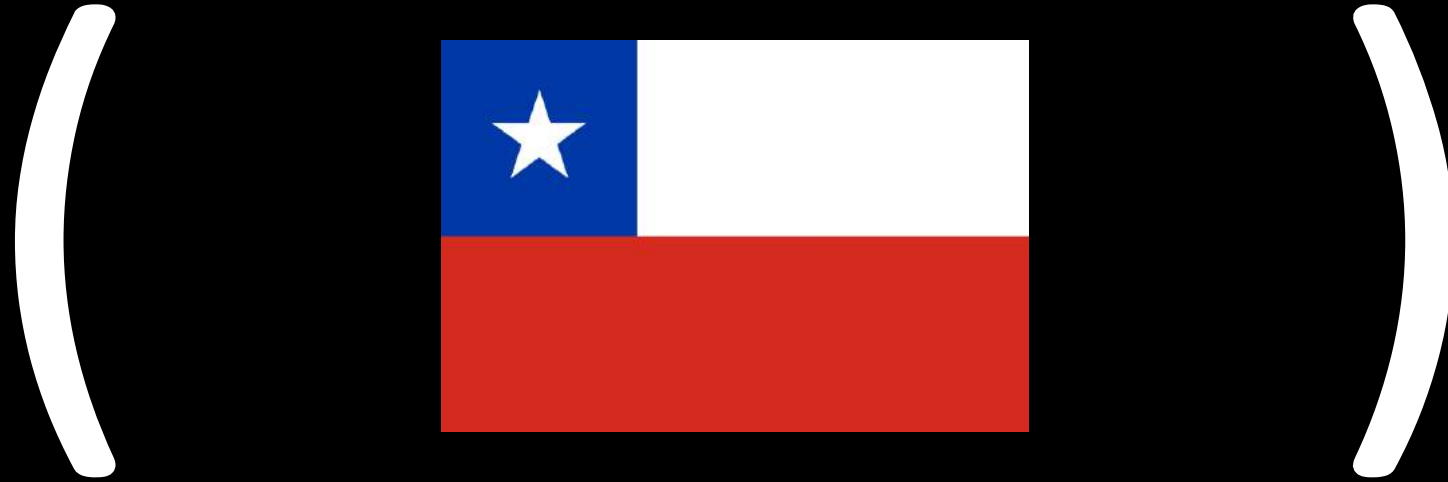
[Descargue el programa aquí](#)

Lugar: Auditorio SOFOFA, Andrés Bello 2777, Las Condes.
Fecha: Martes 24 de abril de 2018.
Hora: 9:30 a 12:30 hrs.

Habrà traducción simultánea

Cupos limitados

[Confirme su asistencia aquí](#)



...Chile emite sólo el 0,2% de las emisiones globales...

Country	2012	(%)
	(KtCO ₂ e)	
China	12,102,000	26.72%
United States of America (the)	6,125,000	13.52%
India	3,166,000	6.99%
Russian Federation (the)	2,280,800	5.04%
Japan	1,368,700	3.02%
Brazil	1,121,000	2.47%
Germany	916,200	2.02%
Indonesia	823,200	1.82%
Iran (Islamic Republic of)	786,000	1.74%
Mexico	725,000	1.60%
Canada	717,500	1.58%
Korea (the Republic of)	653,900	1.44%
Australia	602,100	1.33%
United Kingdom of Great Britain and Northern Ireland (the)	559,700	1.24%
Saudi Arabia	558,800	1.23%
South Africa	484,300	1.07%
Turkey	480,500	1.06%
France and Monaco	462,600	1.02%
Italy and San Marino and Holy See (the)	461,000	1.02%
Otros países (cada país < 1% del total GEI mundiales: 189 países)	10,898,715	24.06%
Total	45,293,015	100.00%

Chile	109,590	0.24%
--------------	----------------	--------------

Nota: No se considera el sector FOLU.

Fuente: EDGAR, "Emission Database for Global Atmospheric Research".

Link: <http://edgar.jrc.ec.europa.eu/overview.php?v=CO2andGHG1970-2016&dst=GHGemi&sort=asc7>



Chile

CLICK TO SEE PREVIOUS UPDATE 16 Aug 2018

SHARE



4°C+
WORLD

< 4°C
WORLD

< 3°C
WORLD

< 2°C
WORLD

< 1.5°C
WORLD

<< 1.5°C
WORLD

CRITICALLY INSUFFICIENT

HIGHLY INSUFFICIENT

INSUFFICIENT

2°C COMPATIBLE

1.5°C PARIS AGREEMENT
COMMITTEE

ROLE MODEL

Commitments with this rating fall outside the fair share range and are not at all consistent with holding warming to below 2°C let alone with the Paris Agreement's stronger 1.5°C limit. If all government targets were in this range, warming would reach between 3°C and 4°C.

Country summary

COUNTRY SUMMARY

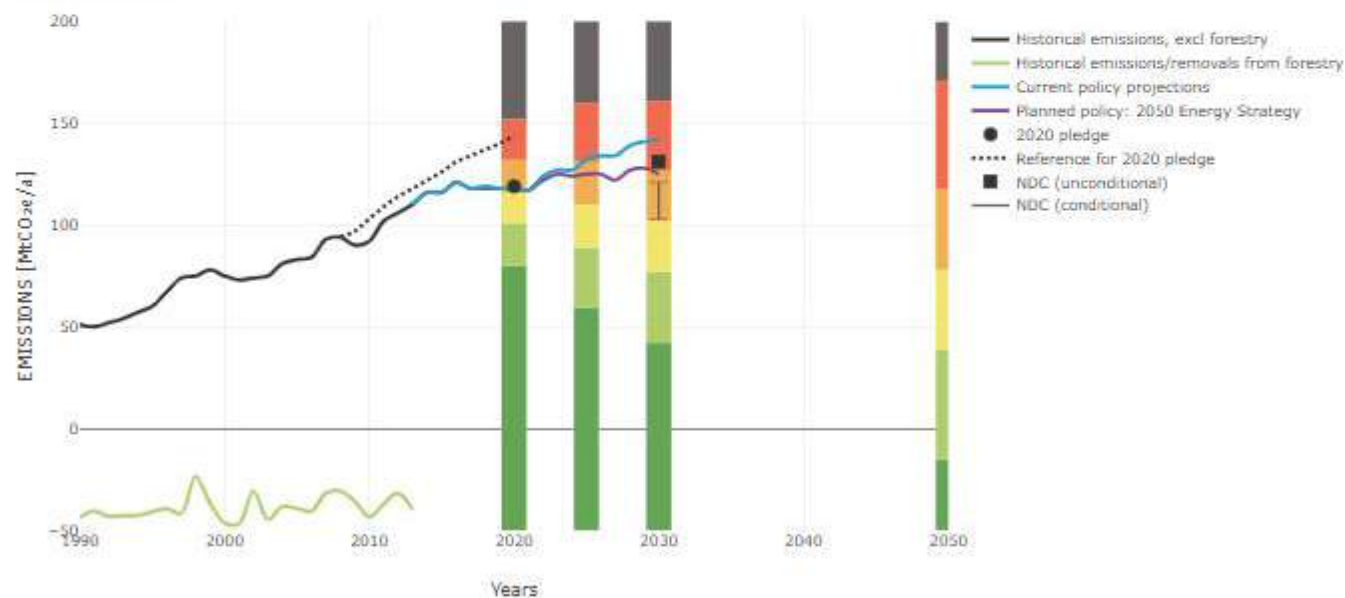
PLEDGES AND TARGETS

FAIR SHARE

CURRENT POLICY PROJECTIONS

ASSUMPTIONS

SOURCES



Graph
Footnotes

INSTRUCTIONS: Click each data series legend item above to deactivate or activate on the graph. To zoom in on the graph - click and drag to create a box - then release. To return to full scale, simply double click anywhere on the graph.

OK climateactiontracker.com



All countries Rating system



Chile

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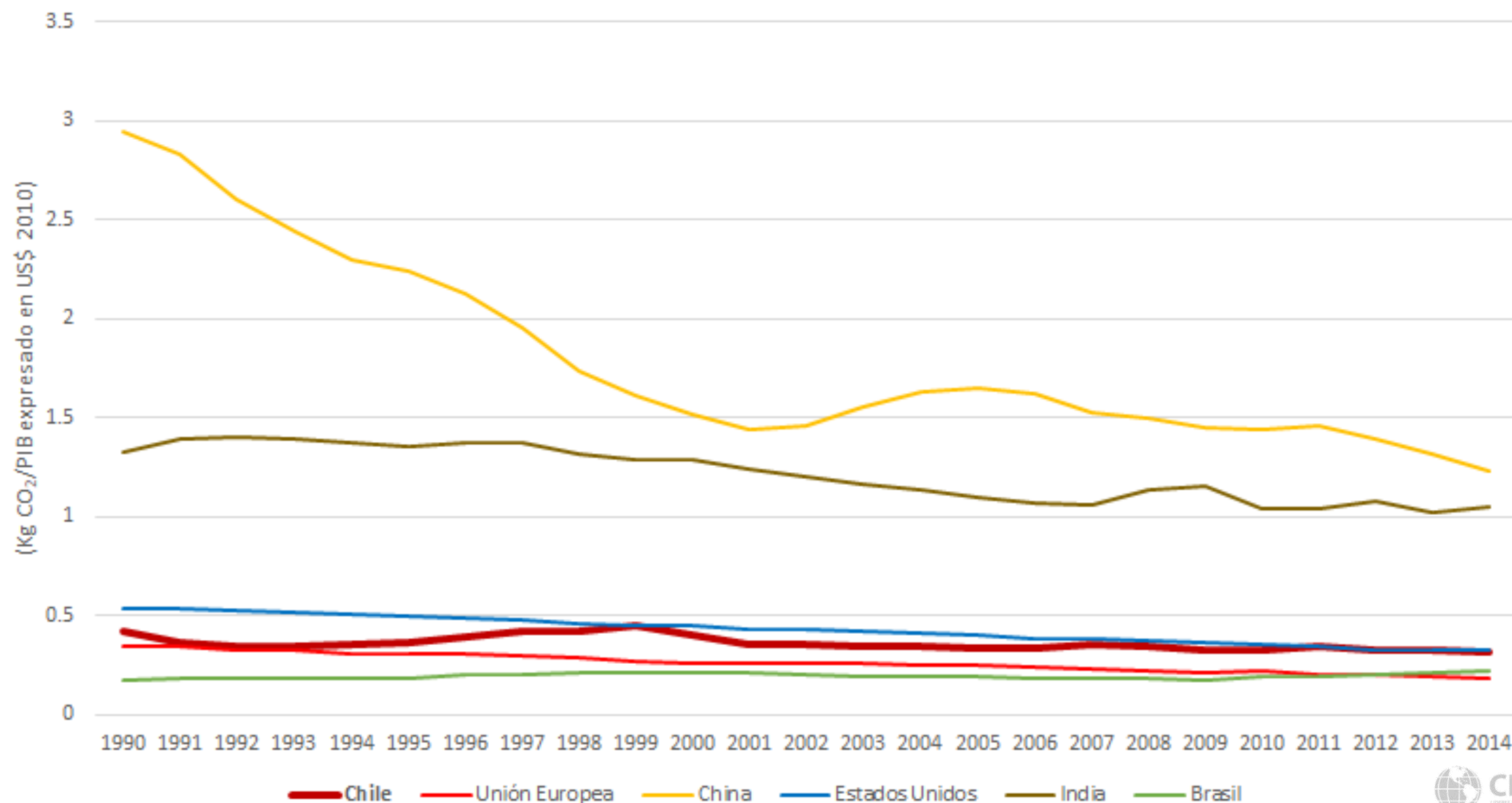
16 Aug 2018

SHARE

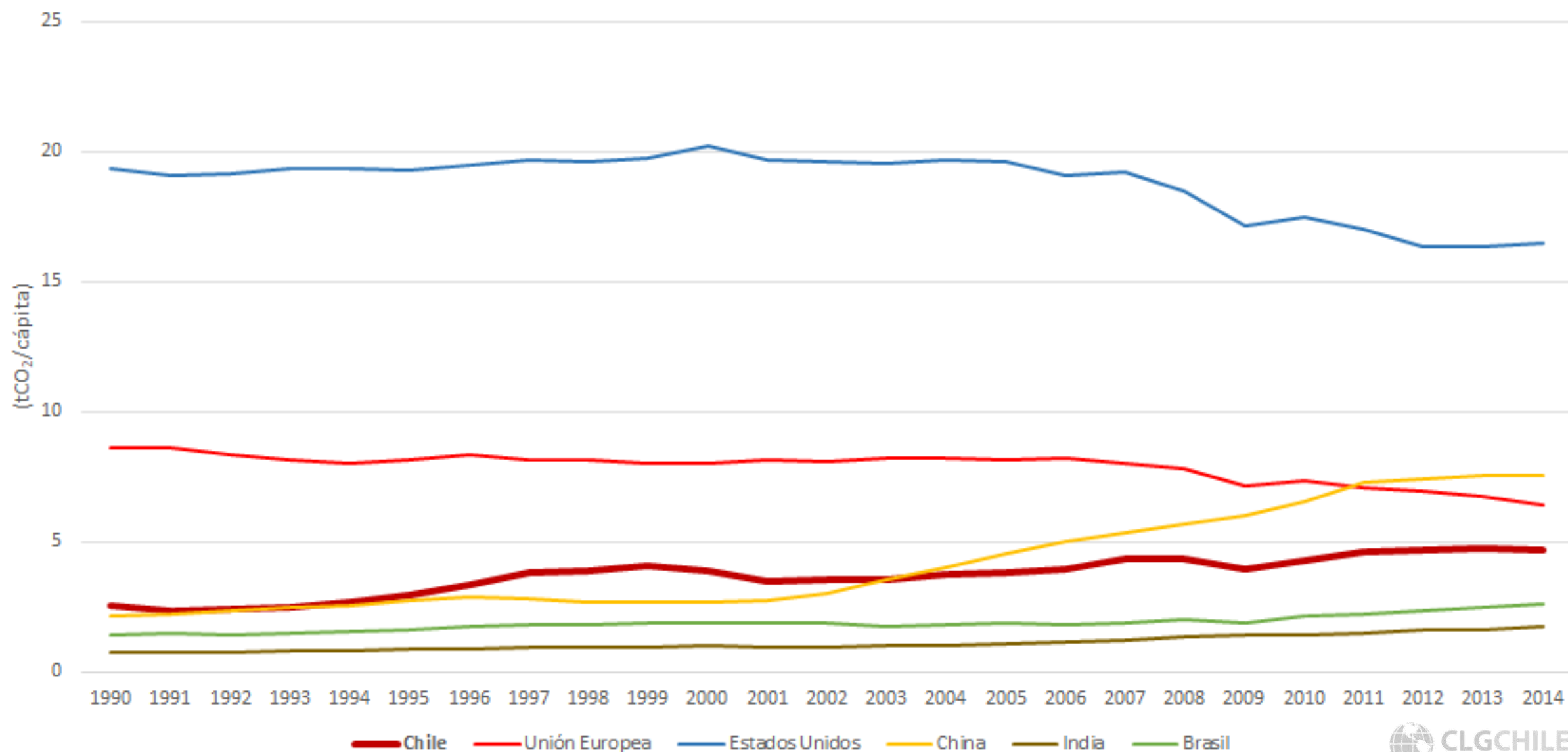


CRITICALLY INSUFFICIENT
4°C+ WORLD

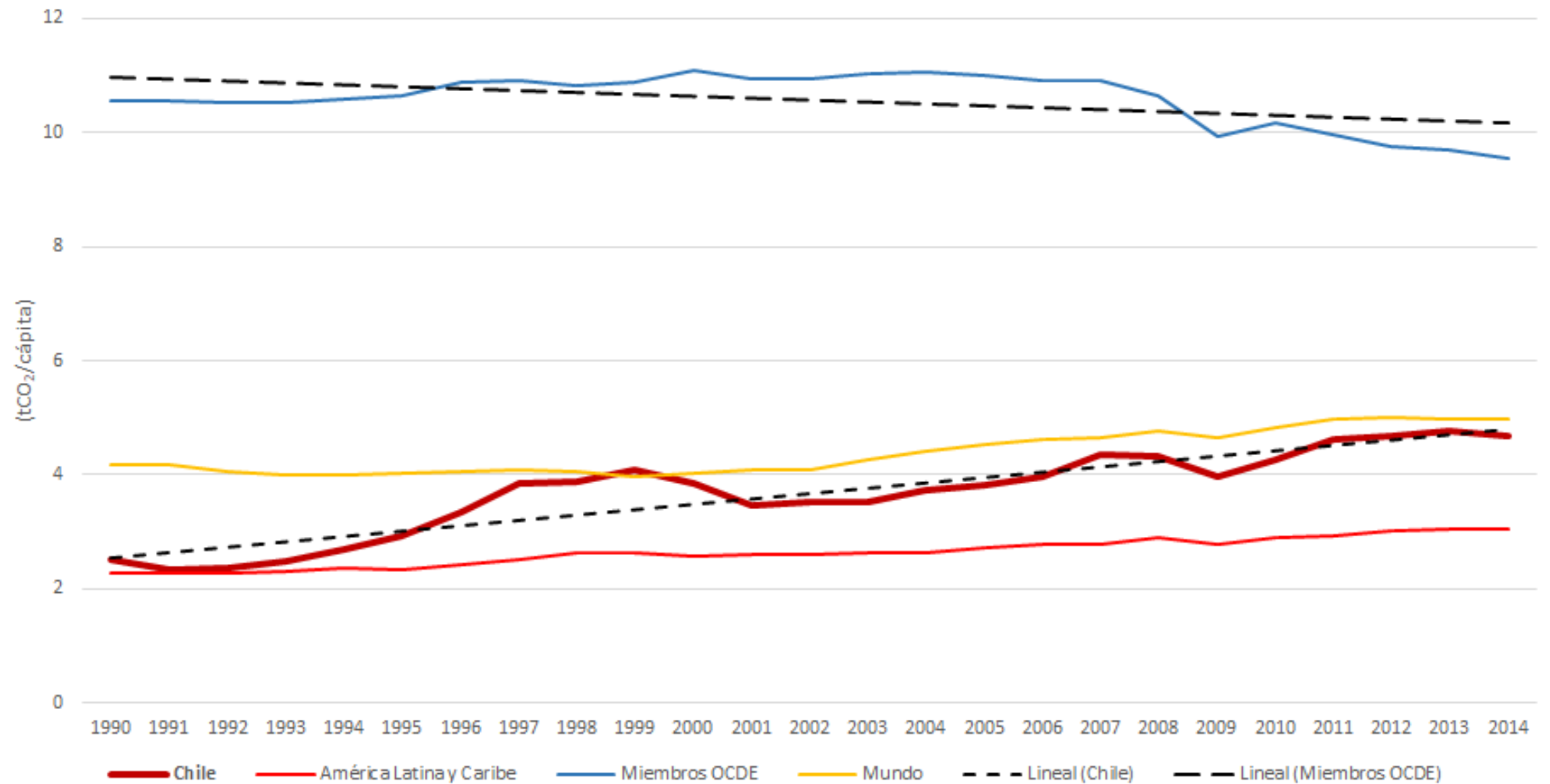
Emisiones de CO₂ por unidad de PIB de Chile versus los principales emisores mundiales



Emisiones de CO₂ per cápita de Chile versus los principales emisores mundiales

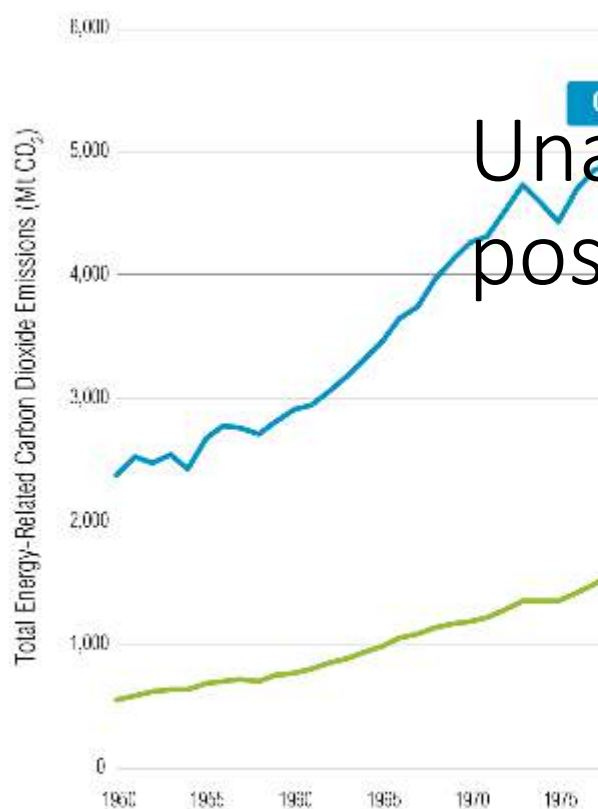


Emisiones de CO₂ per cápita de Chile versus AL&C, OCDE y Mundo



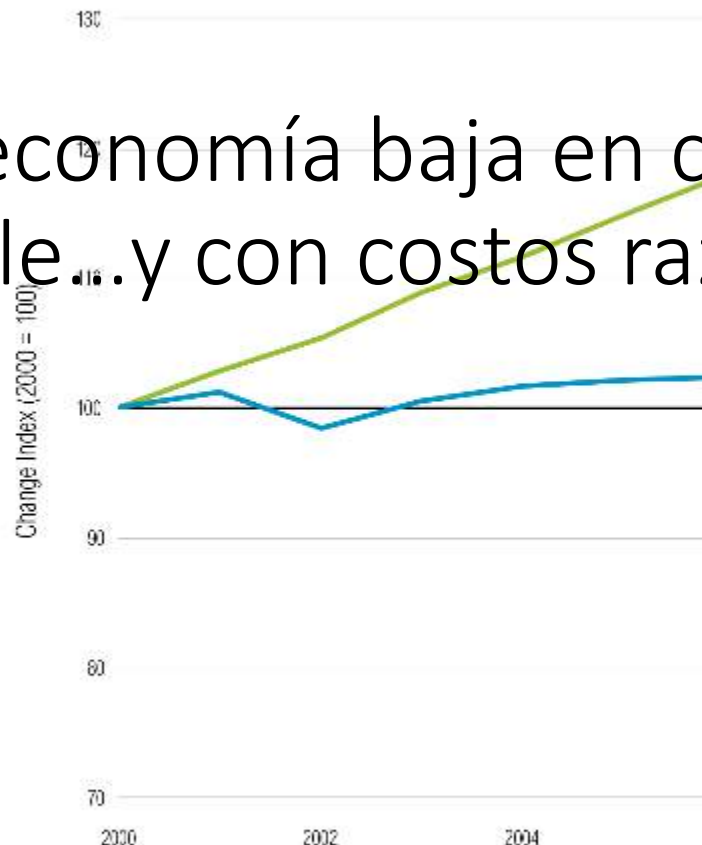
Fuente: Banco Mundial

U.S. CO₂ Emissions and GD



Sources: U.S. Energy Information Administration; I

Decoupling UK GDP and CO₂ Emis



Sources: BP Statistical Review of World Energy 2015; World

Since 2000, More Than 20 Countries Have Reduced Annual GHG Emissions While Growing Their Economies

COUNTRY	CHANGE IN CO ₂ (2000–2014)	CHANGE IN GDP (2000–2014)
Austria	-3%	21%
Belgium	-12%	21%
Bulgaria	-5%	62%
Czech Republic	-14%	40%
Denmark	-30%	8%
Finland	-18%	18%
France	-19%	16%
Germany	-17%	16%
Hungary	-24%	29%
Ireland	-16%	47%
Netherlands	-8%	15%
Portugal	-23%	1%
Romania	-22%	65%
Slovakia	-22%	75%
Spain	-14%	20%
Sweden	-8%	31%
Switzerland	-10%	28%
Ukraine	-29%	49%
United Kingdom	-20%	27%
United States	-6%	28%
Uzbekistan	-2%	28%

Sources: BP Statistical Review of World Energy 2015; World Bank World Development Indicators



“There is no plan B
because
there is no Planet B”

Ban Ki-moon



Gracias
www.clgchile.cl



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