

# A Political Economy of Climate ‘Action’

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2 July, 2018

[Industry Agenda](#)[Future of Energy](#)[Energy](#)[Decarbonizing Energy](#)

# We're getting closer to completing the energy transition



Meeting the world's energy needs means ensuring universal access, mitigating climate change and cleaning up air pollution. Image: REUTERS/Ja

18 Jan 2018

**Fatih Birol**

Executive Director, International Energy Agency

This article is part of the [World Economic Forum Annual Meeting](#)

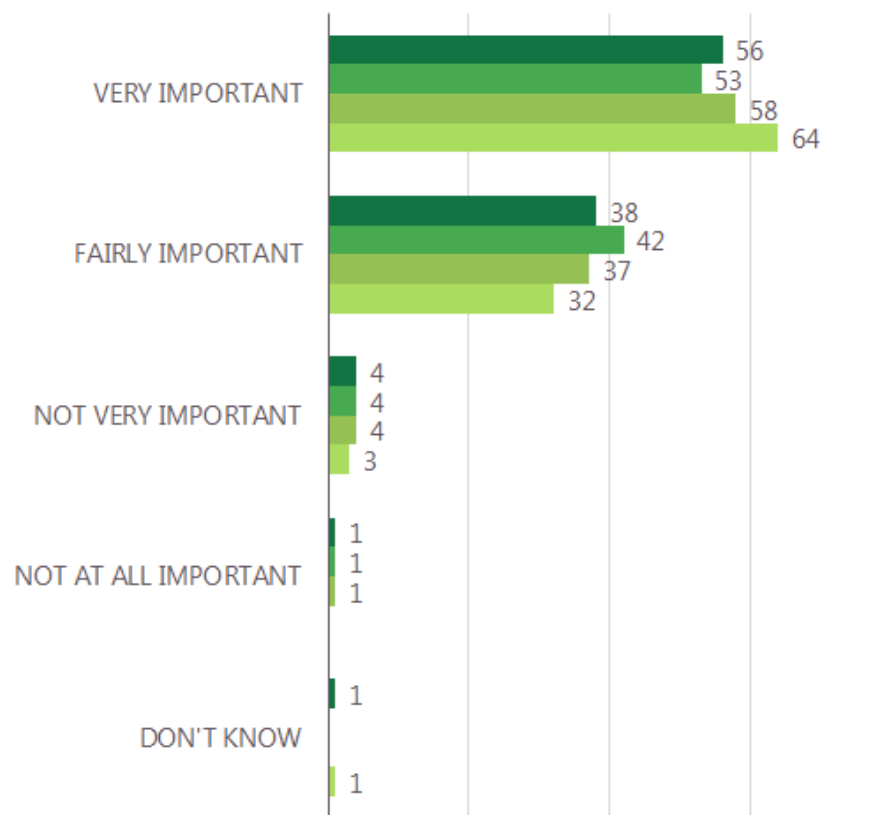
## Some basic principles and harsh truths

- People don't really seem to care about the environment (or at least not any more than they have ever done)
- If someone pays, it should be 'industry'
- 'Climate action' covers a multitude of sins and countries as as likely to credit for rhetoric as actually reducing emissions (cf Germany v UK)
- There is no evidence that we have done anything at all to reduce emissions that is distinguishable from the counterfactual ca. 1990
- IPCC scenarios do not account for political economy considerations and although modelers have slightly improved the logic of their scenarios, they don't seem to care (much) about history or inertia

# People will always say they care

How important is protecting the environment to you personally?  
(% - EU)

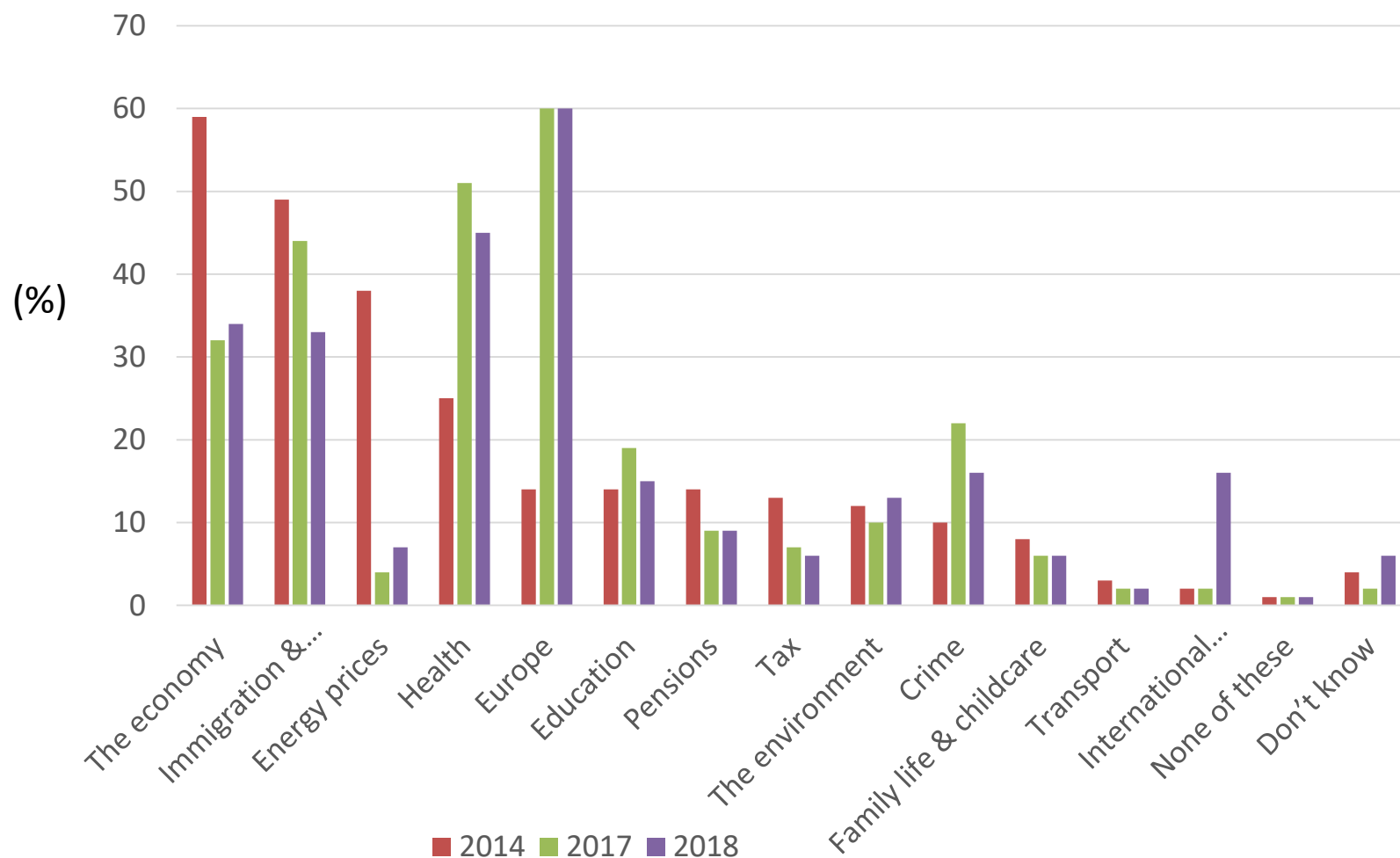
■ Sept.-Oct. 2017 ■ Apr.-May 2014 ■ Apr.-May 2011 ■ Nov.-Dec. 2007



Base: all respondents (n=27,881)

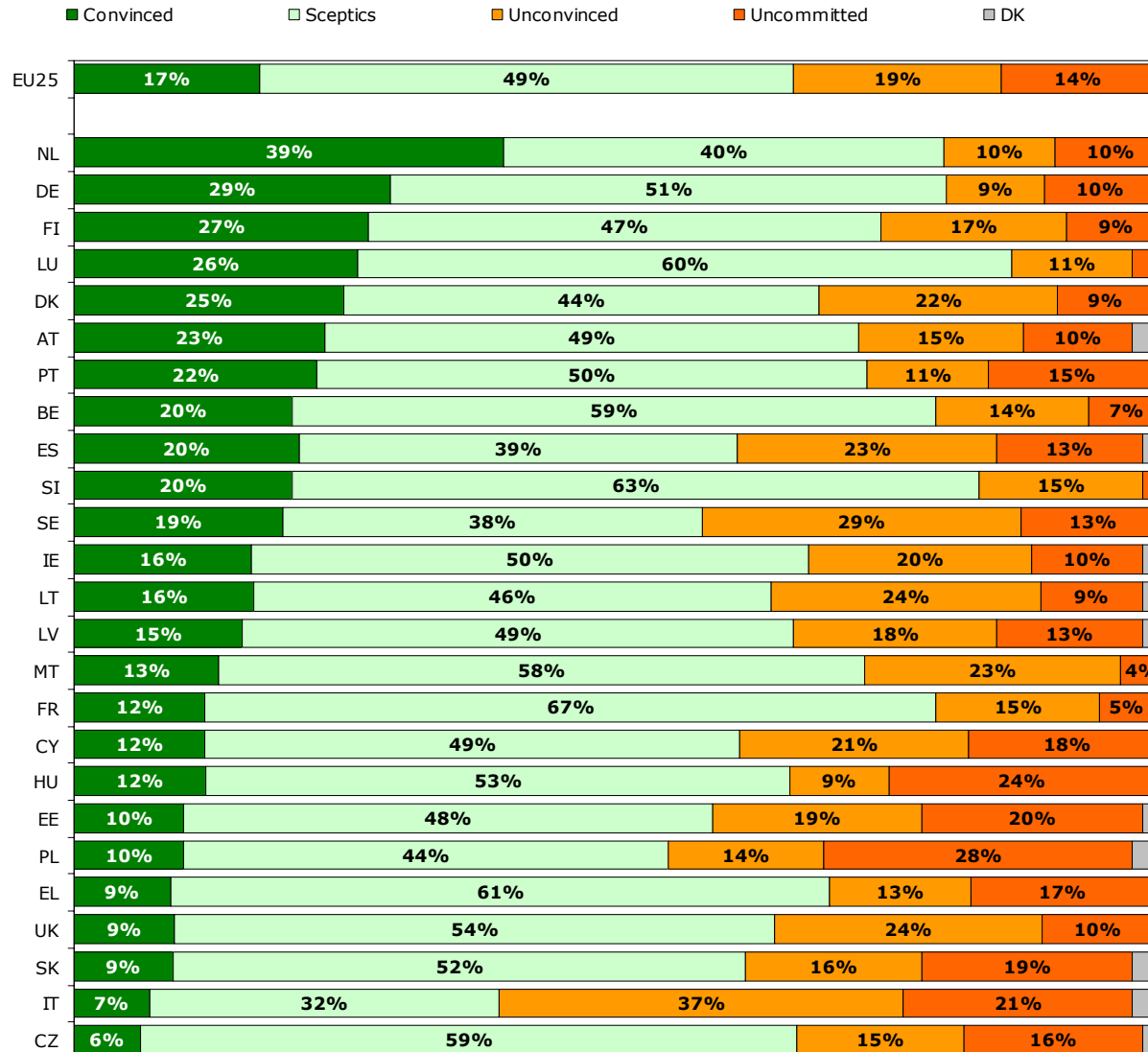
Special Eurobarometer 468, Nov 2017

# But environment is low on overall priority list



Most important issues facing the country (select up to three)

# Few are convinced their own actions matter

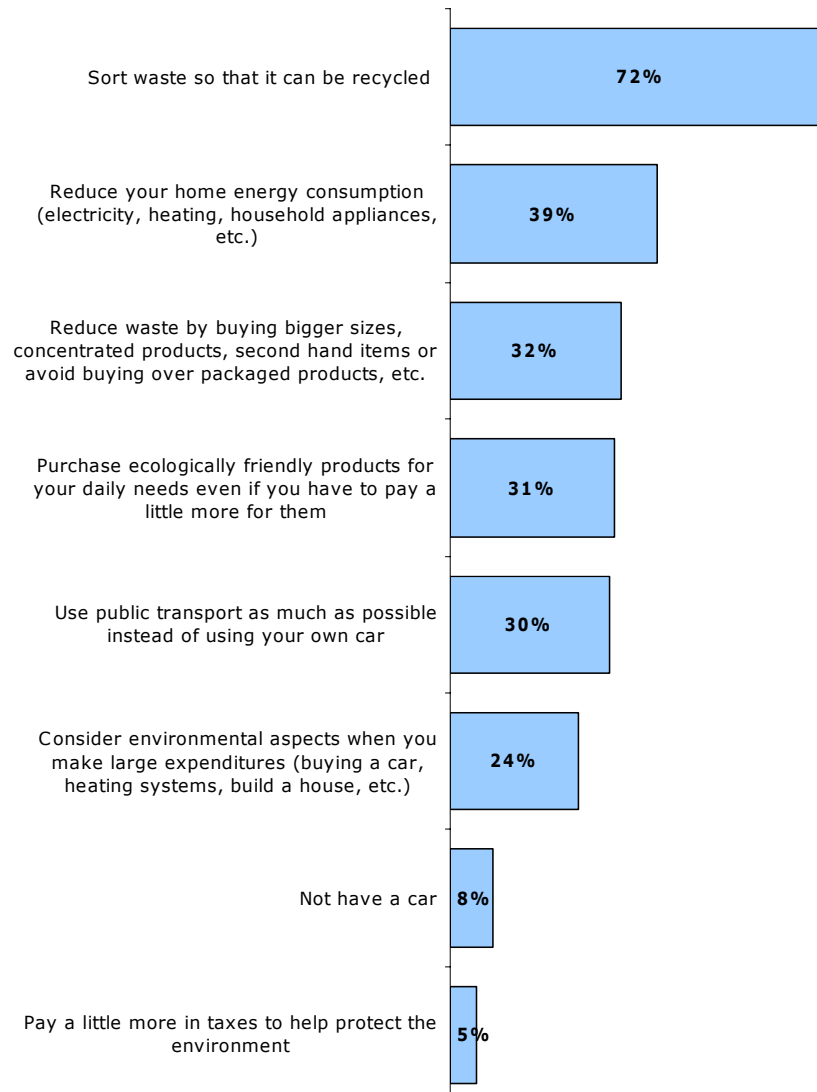


Which statement best reflects your own situation in relation to your effort to take care of the environment

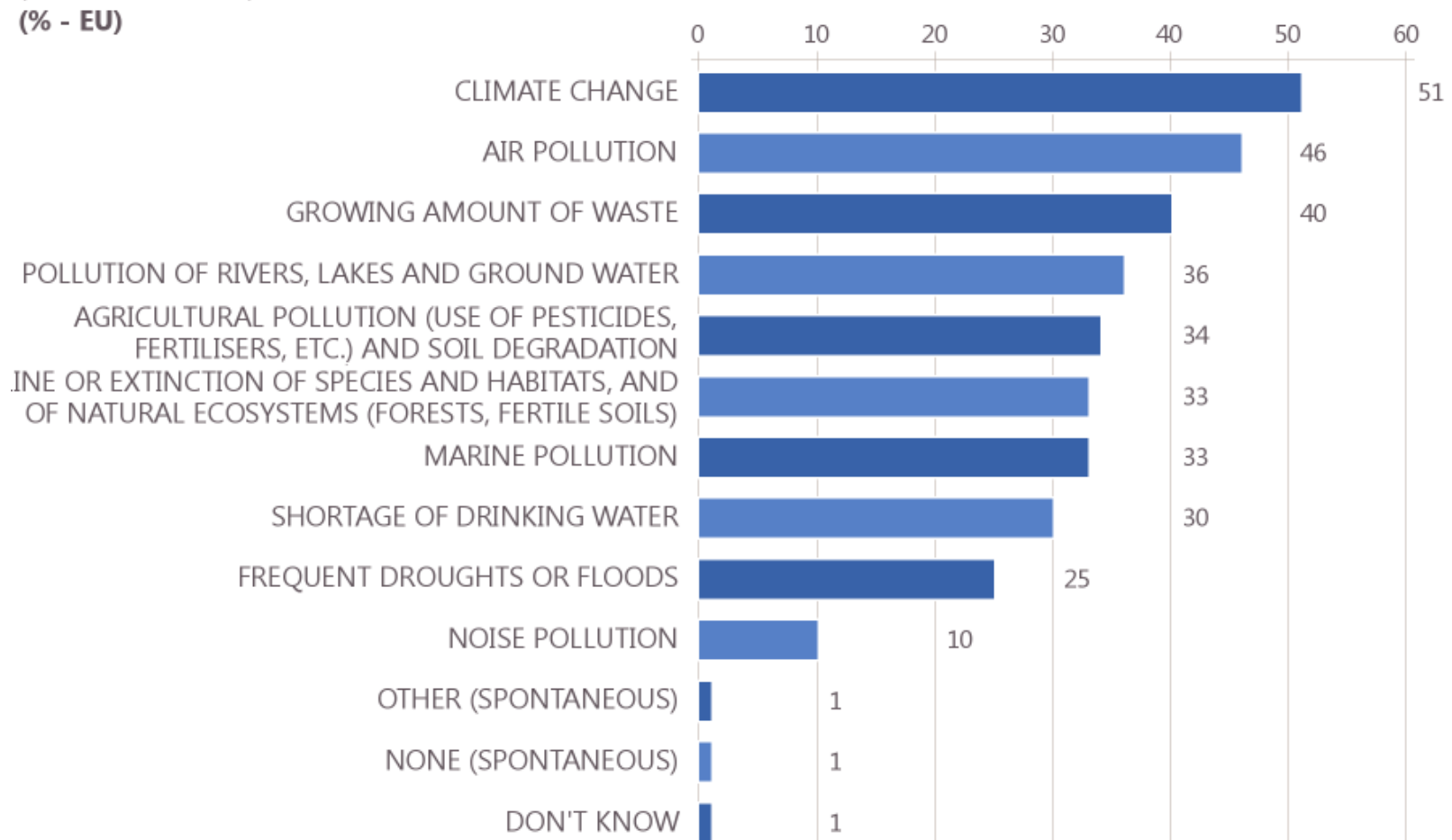
Eurobarometer EBS 217 (2005)



# and most are only willing to do 'easy' things



# Climate is a top environmental priority



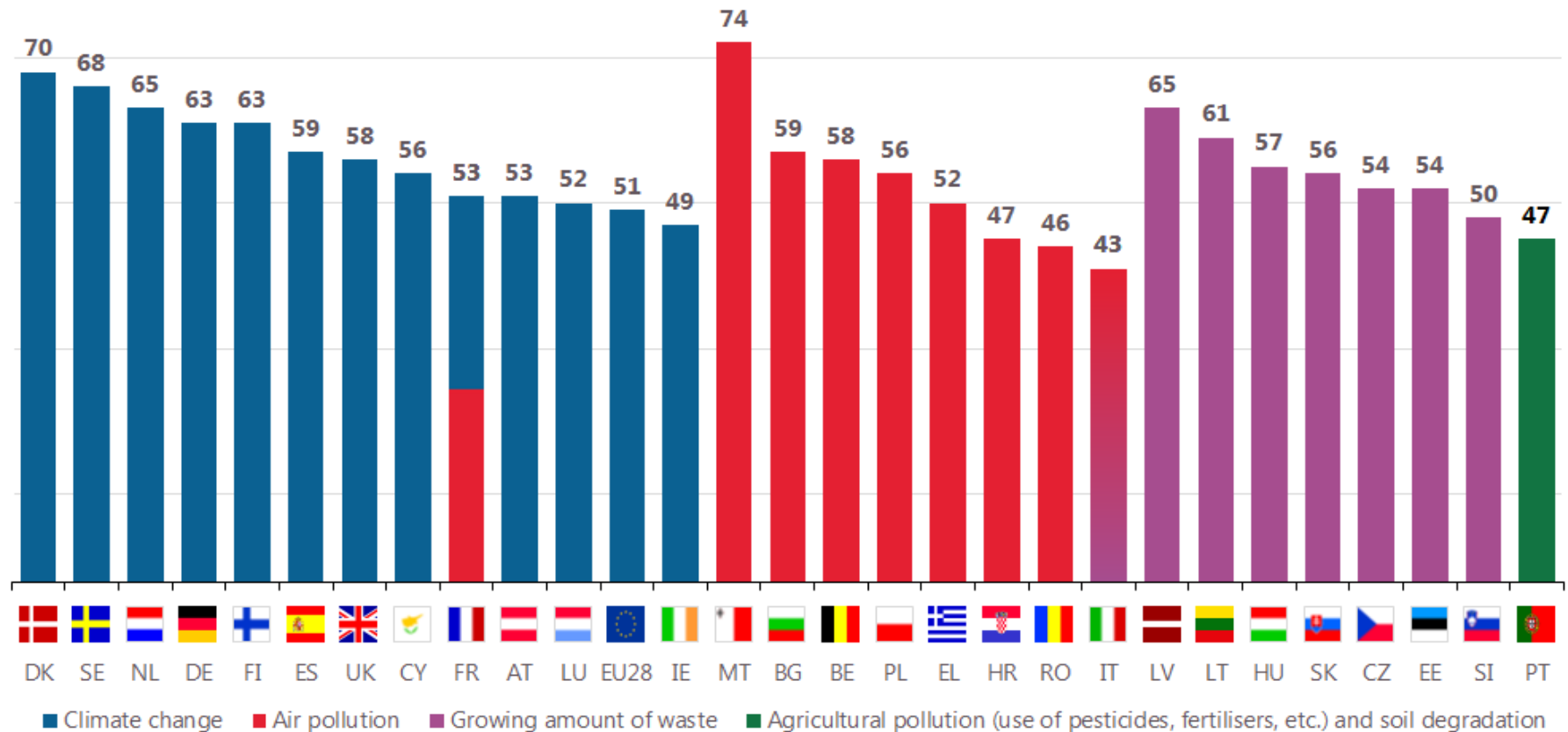
Base: all respondents (n=27,881)

Eurobarometer  
EBS 468 (2017)

**Top 4 most important environmental issues**



# But not everywhere...

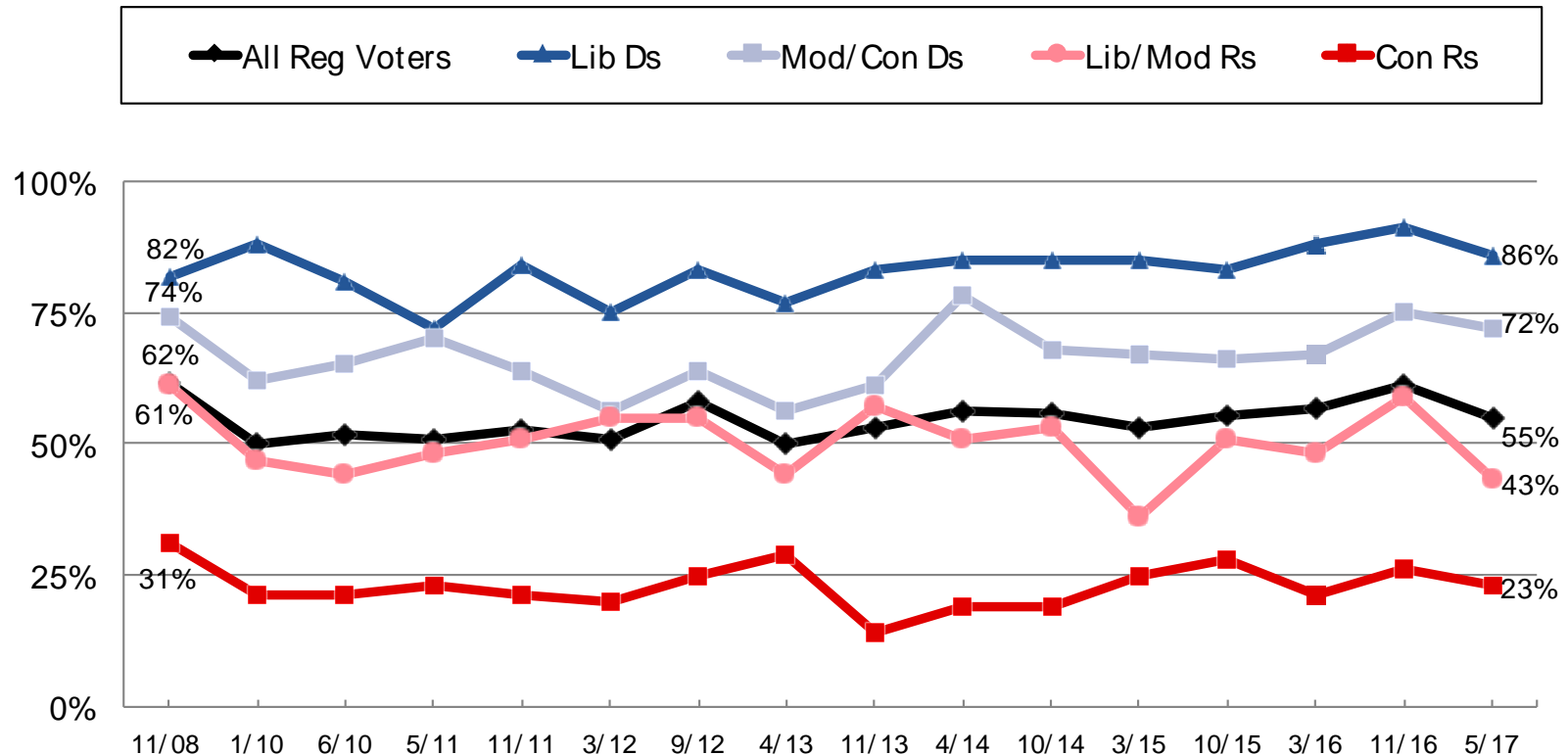


Base: all respondents (n=27,881)

Eurobarometer  
EBS 468 (2017)

Most important environmental issue by member state

# Underlying views are not changing (much)

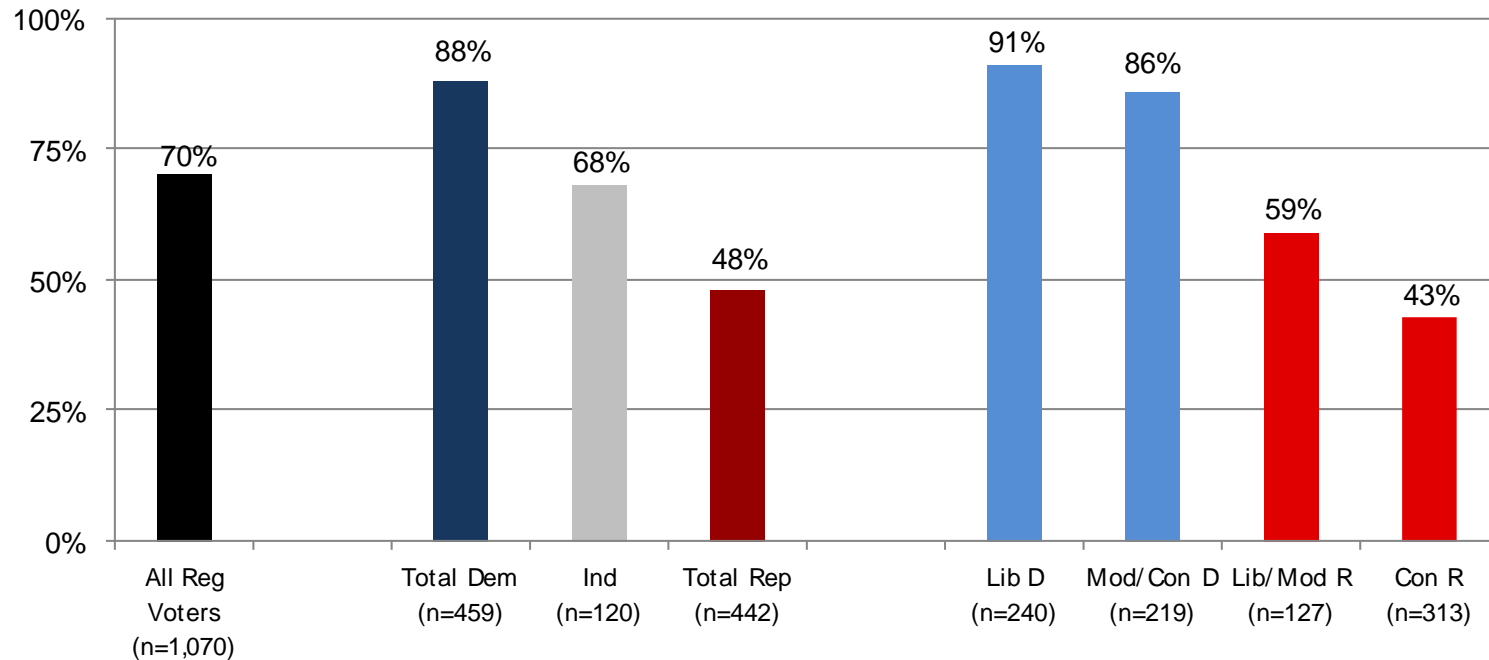


How worried are you about global warming?

May 2017. Base: Registered American Voters.

# Some notable partisan divisions (esp in USA)

- %who “strongly” or “somewhat support” -



How much do you support or oppose the following policy? Require fossil fuel companies to pay a carbon tax and use the money to reduce other taxes (such as income tax) by an equal amount.

May 2017. Base: Registered American Voters.

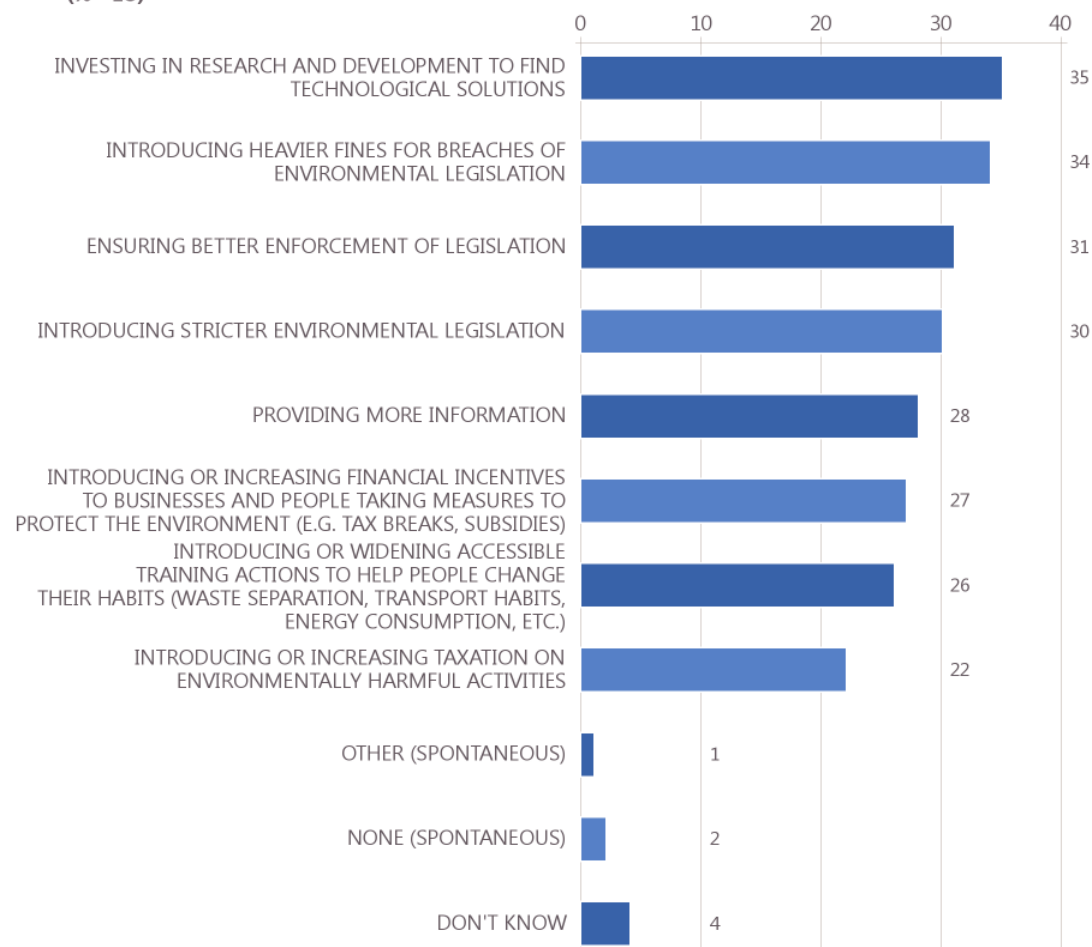
## With some partisan swings

"Do you think the U.S. government is doing too much, too little, or about the right amount in terms of protecting the environment? (Gallup Poll, US n~1000)

	Too much	Too little	About right	Unsure
Mar-18	9	62	28	1
Mar-13	16	47	35	2
Mar-12	17	51	30	2
Mar-11	16	49	33	2
Mar-10	15	46	35	4
Mar-06	4	62	33	1
Mar-05	5	58	34	3
Mar-04	5	55	37	3
Mar-03	7	51	37	5
Apr-00	10	58	30	2
Feb-92	4	68	26	2

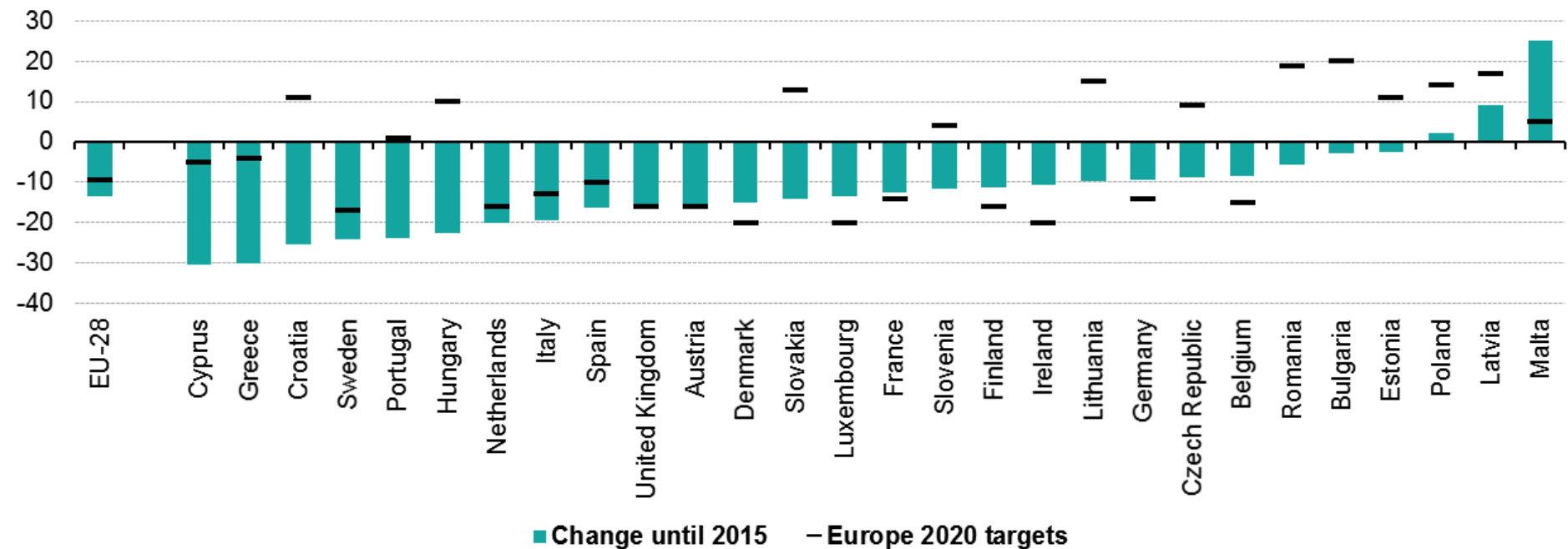
# Strong preferences for R&D and action on industry

**QD8** In your opinion, which of the following would be the most effective ways of tackling environmental problems?  
(MAX. 3 ANSWERS)  
(% - EU)



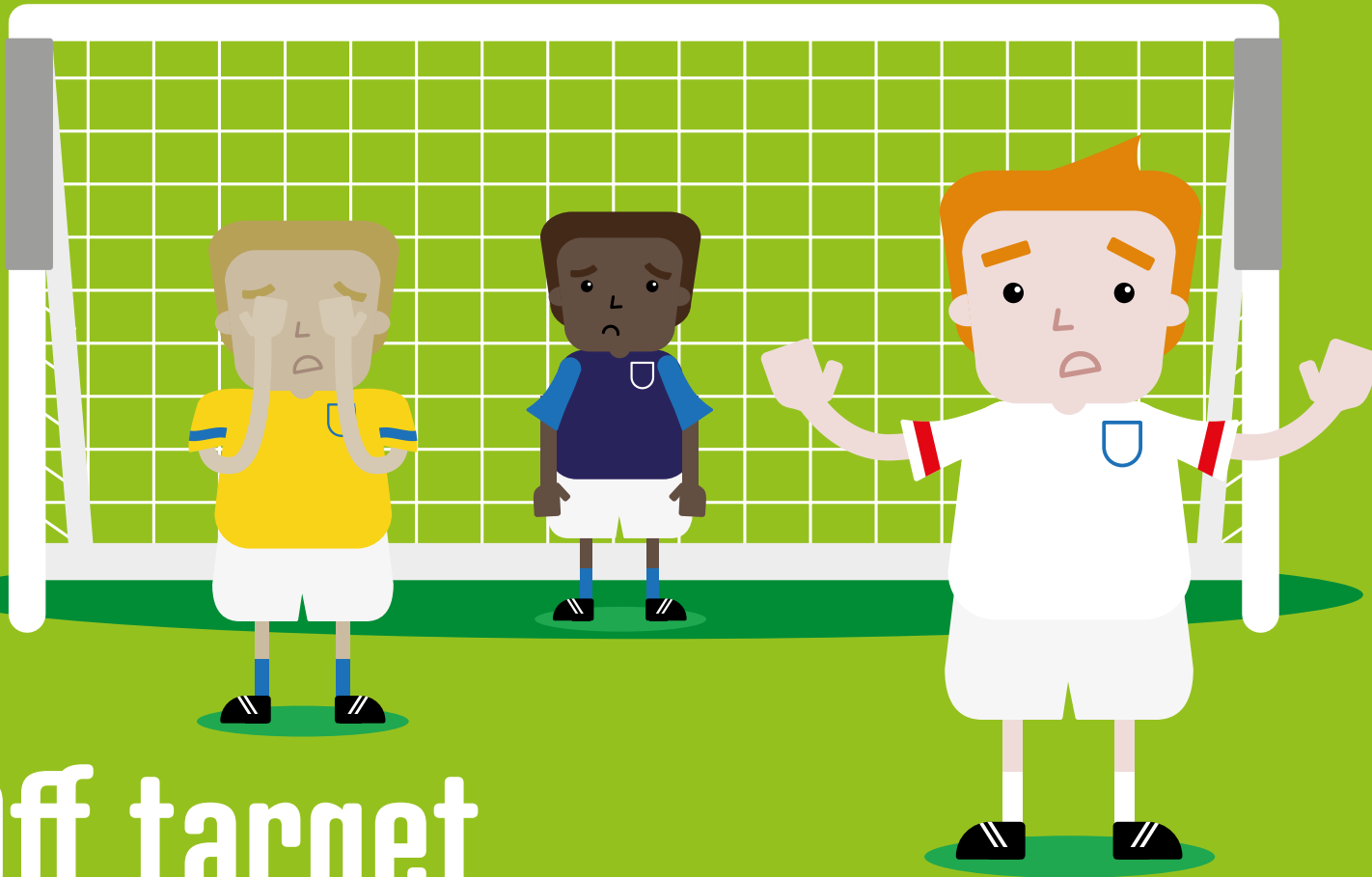
Base: all respondents (n=27,881)

# Competing Views of 'Success'



Note: Total emissions, excluding emissions covered by the Emissions Trading Scheme (ETS).

CAN Europe, Off target: Ranking of EU countries' ambition and progress in fighting climate change, June 2018



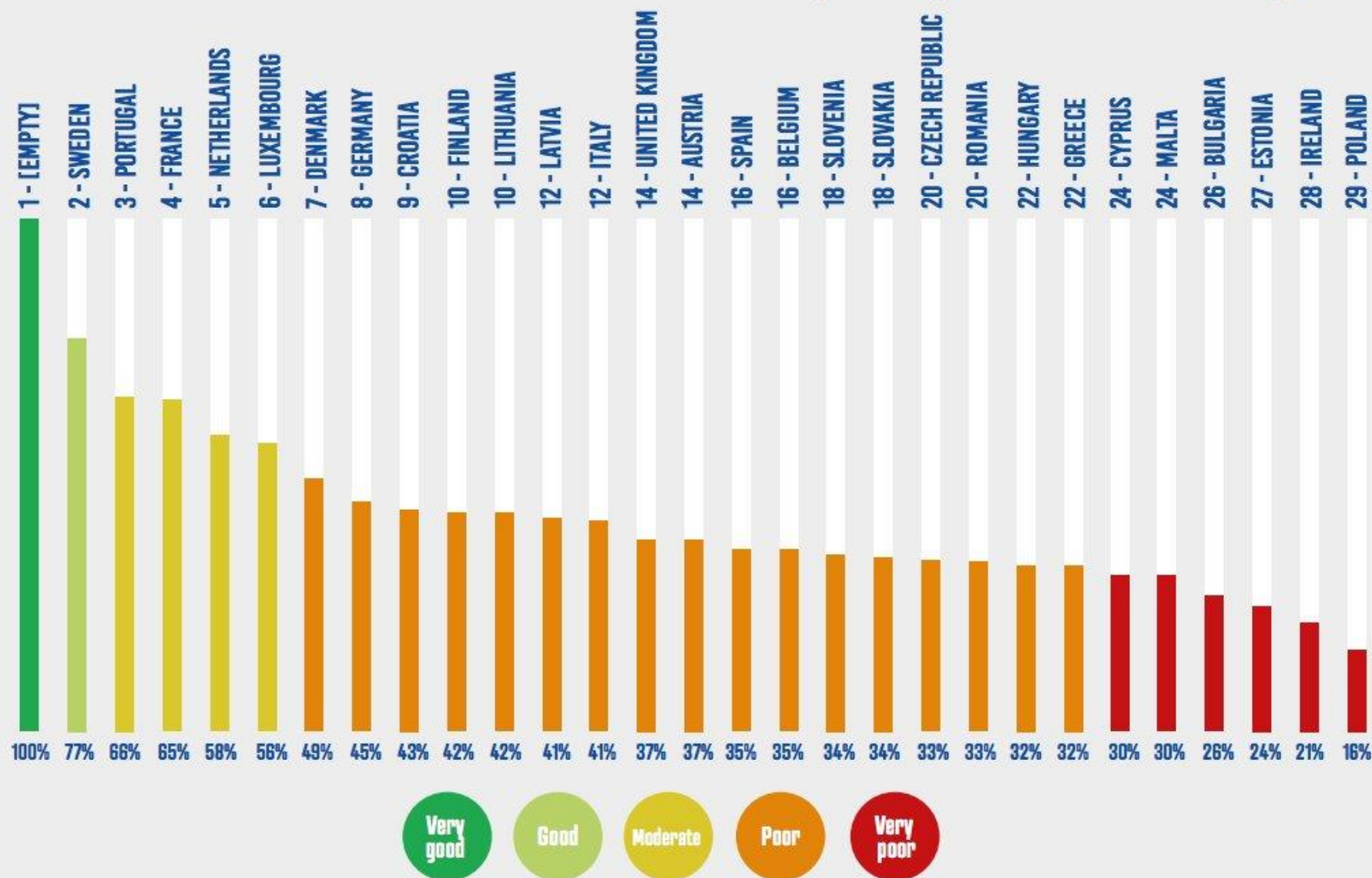
# Off target

Ranking of EU countries' ambition  
and progress in fighting climate change





# Where do EU countries stand on fighting climate change?

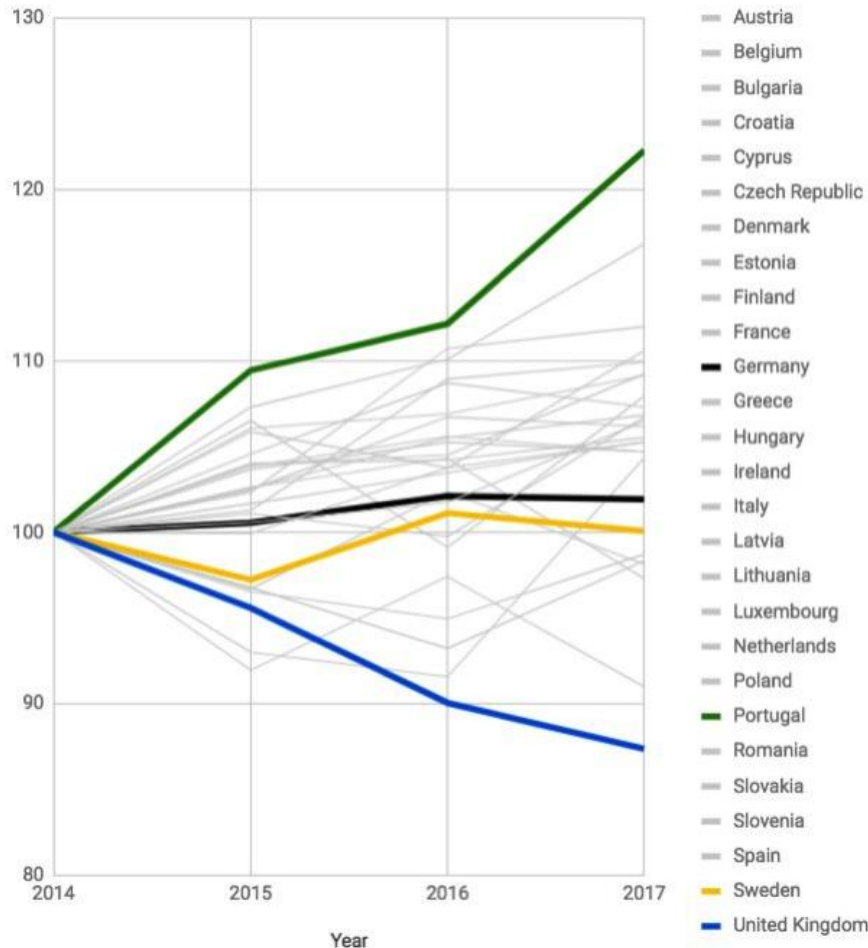




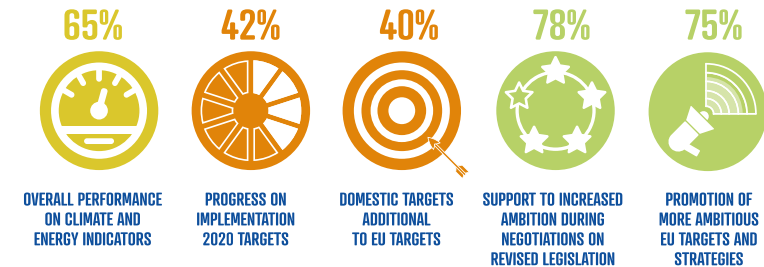
# NGO view versus Atmosphere's View

## EU CO2 emissions trends since 2014

Source: BP statistical review



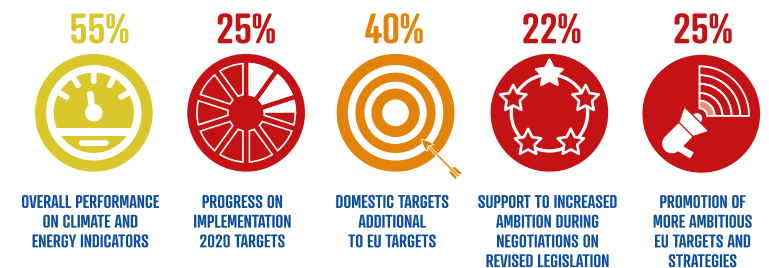
## Portugal - 3<sup>rd</sup>



## Germany - 8<sup>th</sup>



## United Kingdom - 14<sup>th</sup>





# IPCC First Assessment Report (1990)

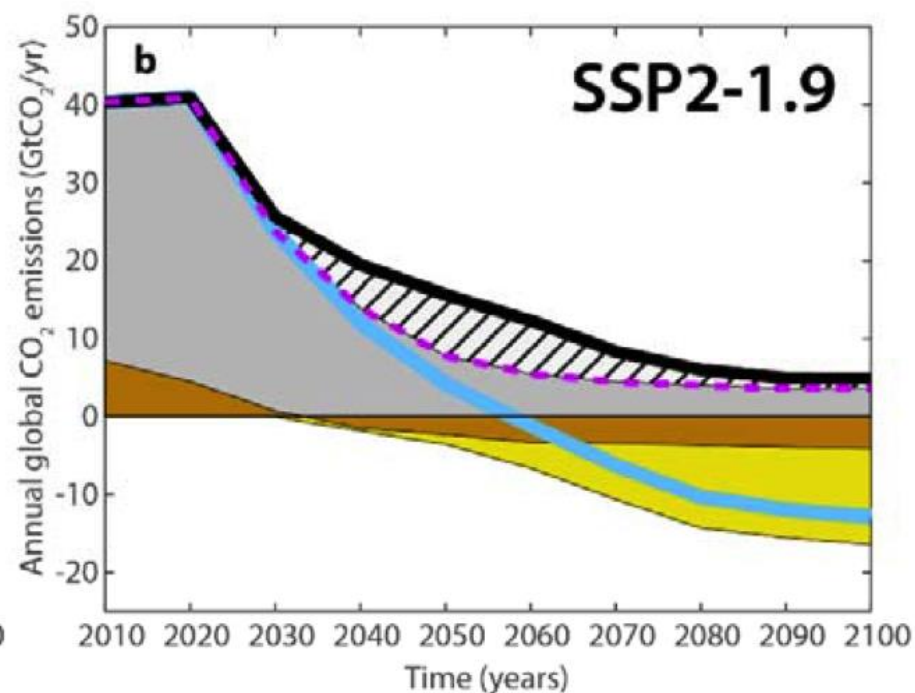
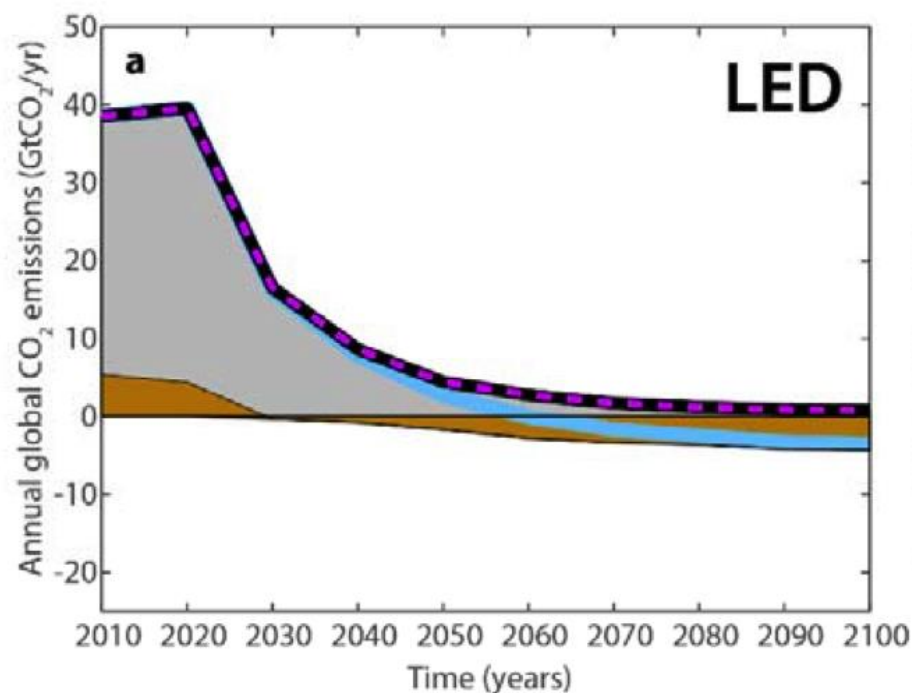
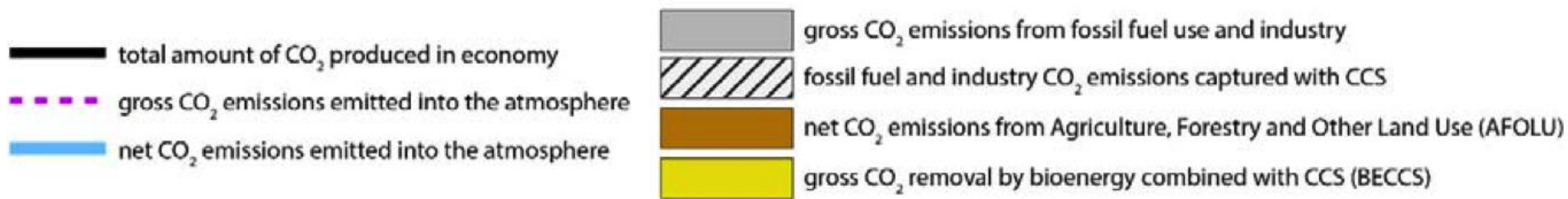
So assuming +2 ppm/year      2025  
   ~426 ppm

“The first of these scenarios [...] depicts a world in which few or no steps are taken to reduce emissions”

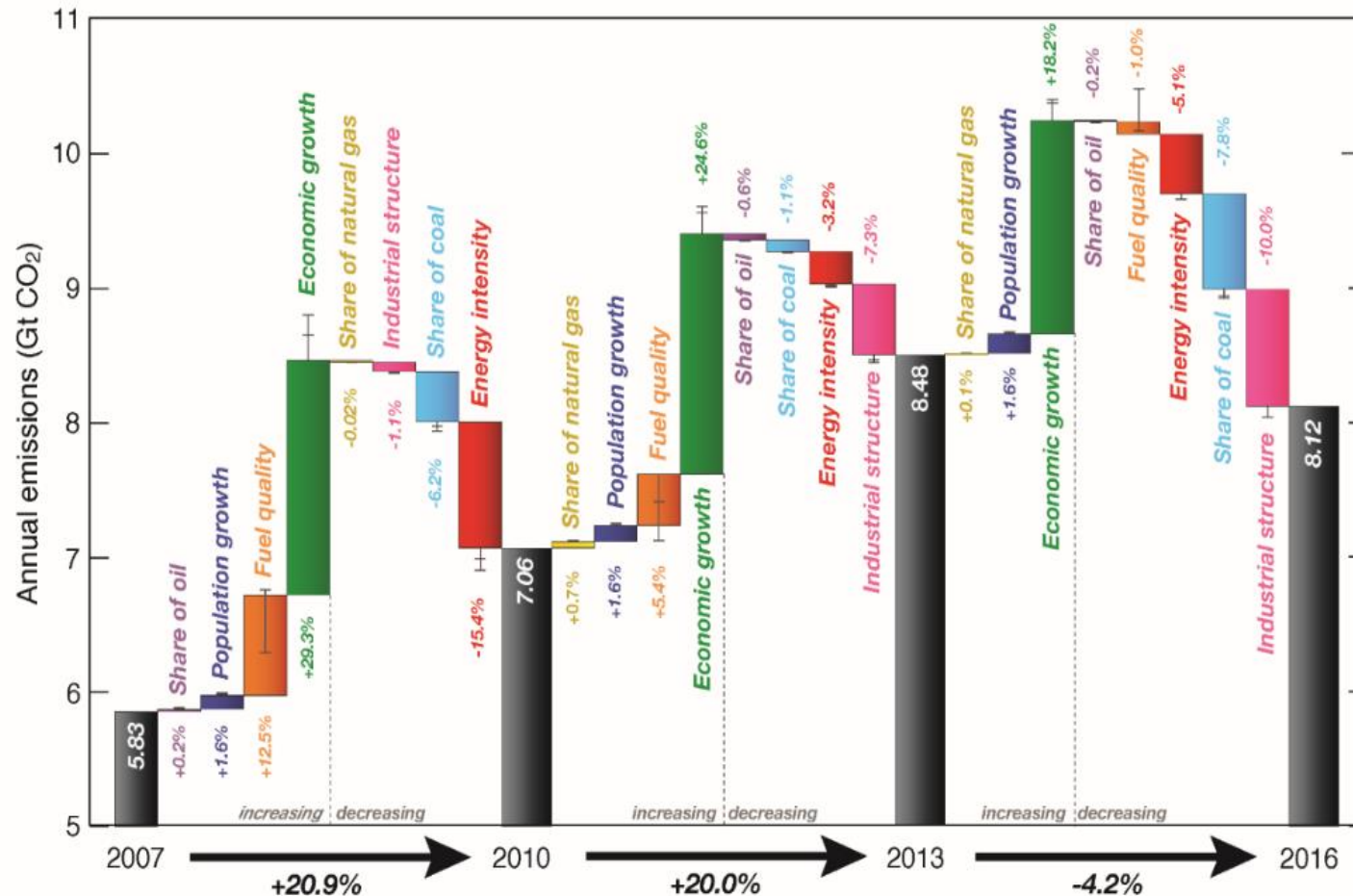
# Historical Trends vs IPCC Scenarios

- Five new socio-economic pathways (SSPs) have been introduced by IPCC to try to reflect a slightly greater awareness of future pathways
- Much of the focus since the Paris Agreement have focused on the prospects for meeting a 1.5 °C target
- Increasingly historically disconnected exercises in trends:
  - CO2 emissions
  - Vegetarianism
  - Energy efficiency
  - Carbon pricing
  - Demand response
- There is a clear tension emerging between imaginary technologies and unimaginable changes in society

# Examples of the dramatic changes envisioned



# Versus Reality of Changing Emissions Trajectories



D. Guan et al (in press), Drivers of China's CO<sub>2</sub> emissions 2007-2016, *Nature Geoscience*

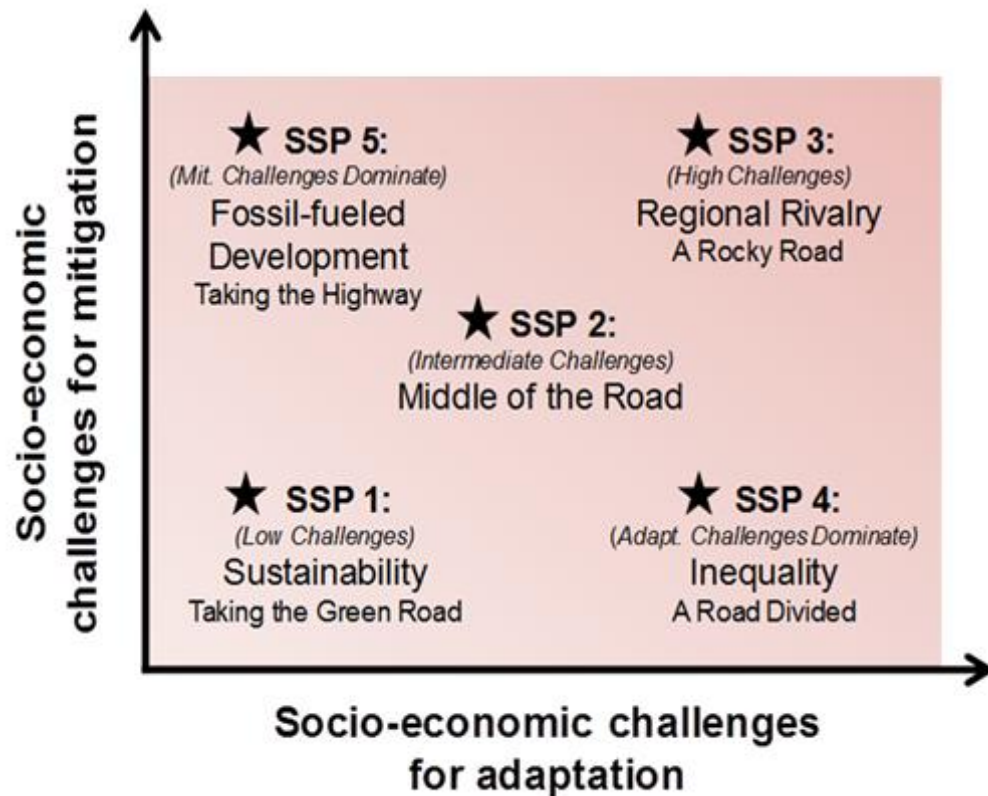
# Shared Socio-Economic Pathways (SSPs)

- Update on previous set of socio-economic scenarios (SRES, 2000)

Seeks to set out more logically consistent scenarios (e.g., on air pollutants)

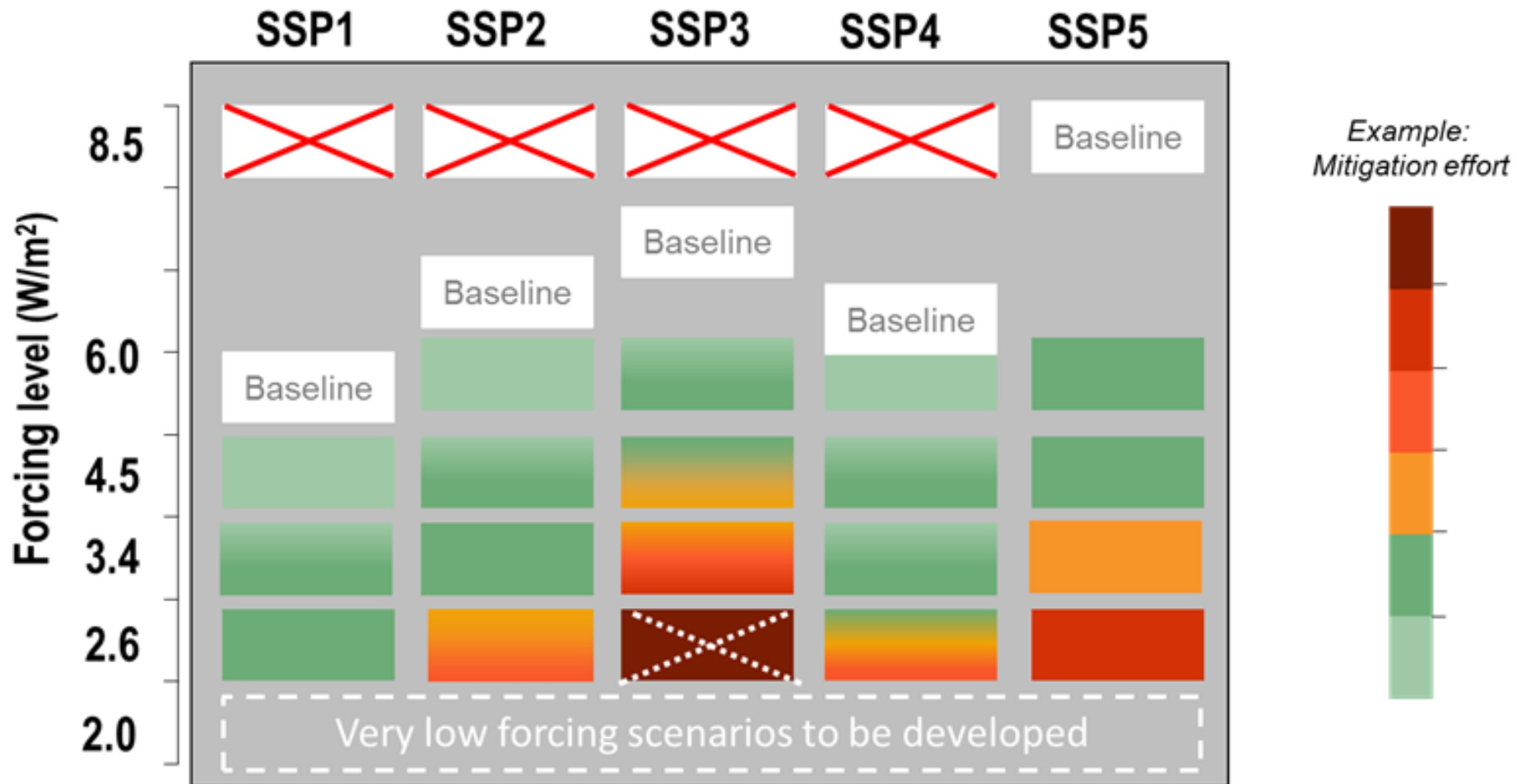
Still, the mitigation scenarios don't differentiate between plausibility of effort under different SSPs

Highest pop growth  
Lowest GDP  
Trade wars, etc





# Relationship between SSP and RCP



# Evidence of SSP5?

Newspaper of the Year

# FINANCIAL TIMES

MONDAY 2 JULY 2018 WORLD BUSINESS NEWSPAPER EUROPE

**Nobel intentions**

Prize-giving foundation on coping with controversy — HOW TO LEAD, PAGE 20

**Crypto cowboys**

How ranch owners are beefing up the supply chain — BIG READ, PAGE 7

**Ghost candidates**

Bad behaviour from fed-up job hunters — PILITA CLARK, PAGE 12

## Frontrunner stirs up voters in Mexico polls

Andrés Manuel López Obrador, the presidential frontrunner, was among the first to vote yesterday at a polling station in Mexico City, where he used to be mayor.

The anti-establishment candidate, who has galvanised voters furious with graft scandals and terrified by a record murder rate, had signalled his confidence by flashing a victory sign.

Mexicans look set to deliver an unequivocal victory to the leftist nationalist — at least if polls prove correct.

With 18,299 federal, state and local posts being decided, including the presidency, these are the biggest elections in Mexican history. More than 100 candidates and politicians have been murdered during the campaign.



Alfredo Estrada/AP/Getty Images

### Briefing

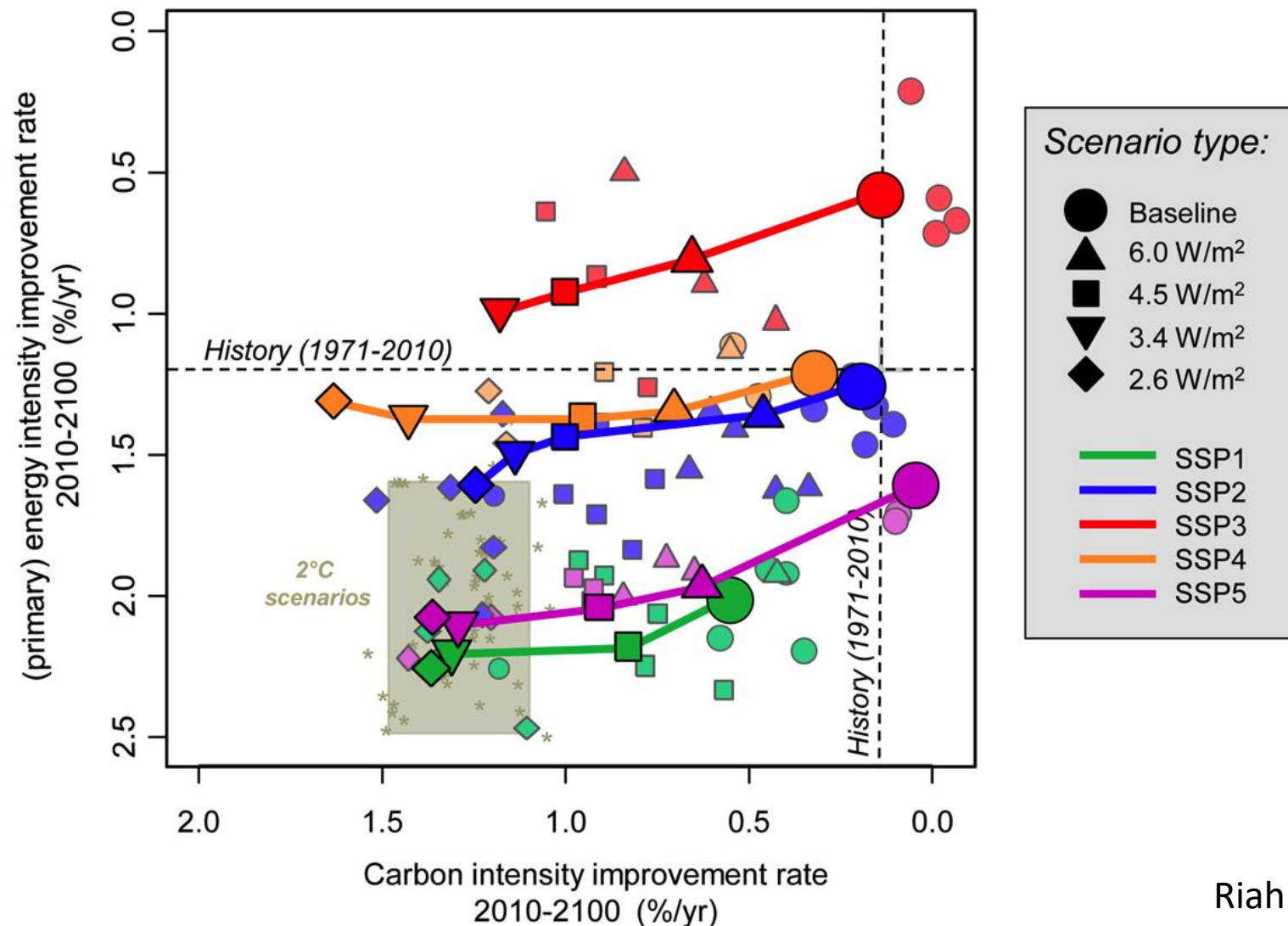
- **German crisis deepens over migration**  
Berlin's interior minister has rejected the migration deal Angela Merkel negotiated at last week's EU summit, increasing the likelihood of a break-up of Germany's governing conservative bloc. — PAGE 3
- **Renminbi fall sparks currency war fears**  
China's currency suffered its largest monthly fall against the dollar in June, sparking concern that Beijing is prepared to use devaluation as a weapon in an escalating trade war with the US. — PAGE 13
- **Salvini seeks European populist alliance**  
Matteo Salvini, Italy's deputy prime minister, has said next year's European elections are a chance to create an anti-elitist "international alliance of populists". — PAGE 3, WOLFGANG MÜNCHAU, PAGE 9
- **US presses Riyadh to lift oil production**  
Donald Trump has urged Saudi Arabia to ramp up its crude output by up to 2m barrels a day in order to offset falling supplies from Venezuela and Iran, highlighting US concern over rising oil prices. — PAGE 2
- **China's answer to SoftBank Vision Fund**  
China Merchants Group is teaming up with a London-based firm to launch a Rmb100bn (\$15bn) technology investment fund, aiming to be China's answer to SoftBank's \$100bn Vision Fund. — PAGE 13
- **Buffett gains as banks sail through tests**  
Warren Buffett's Berkshire Hathaway is set to net \$1.7bn in dividends after Wells Fargo and other banks sailed through the Fed's stress tests. — PAGE 13
- **Beijing's Balkans push spurs EU anxiety**  
China has lavished investment pledges on Balkan states as it prepares for a summit with 16 EU countries and accession members, stoking fears in

## Trump car tariffs threaten to spark full-scale trade war, warns Brussels

◆ President's threat spreads EU alarm ◆ Trade partners target \$300bn of US products

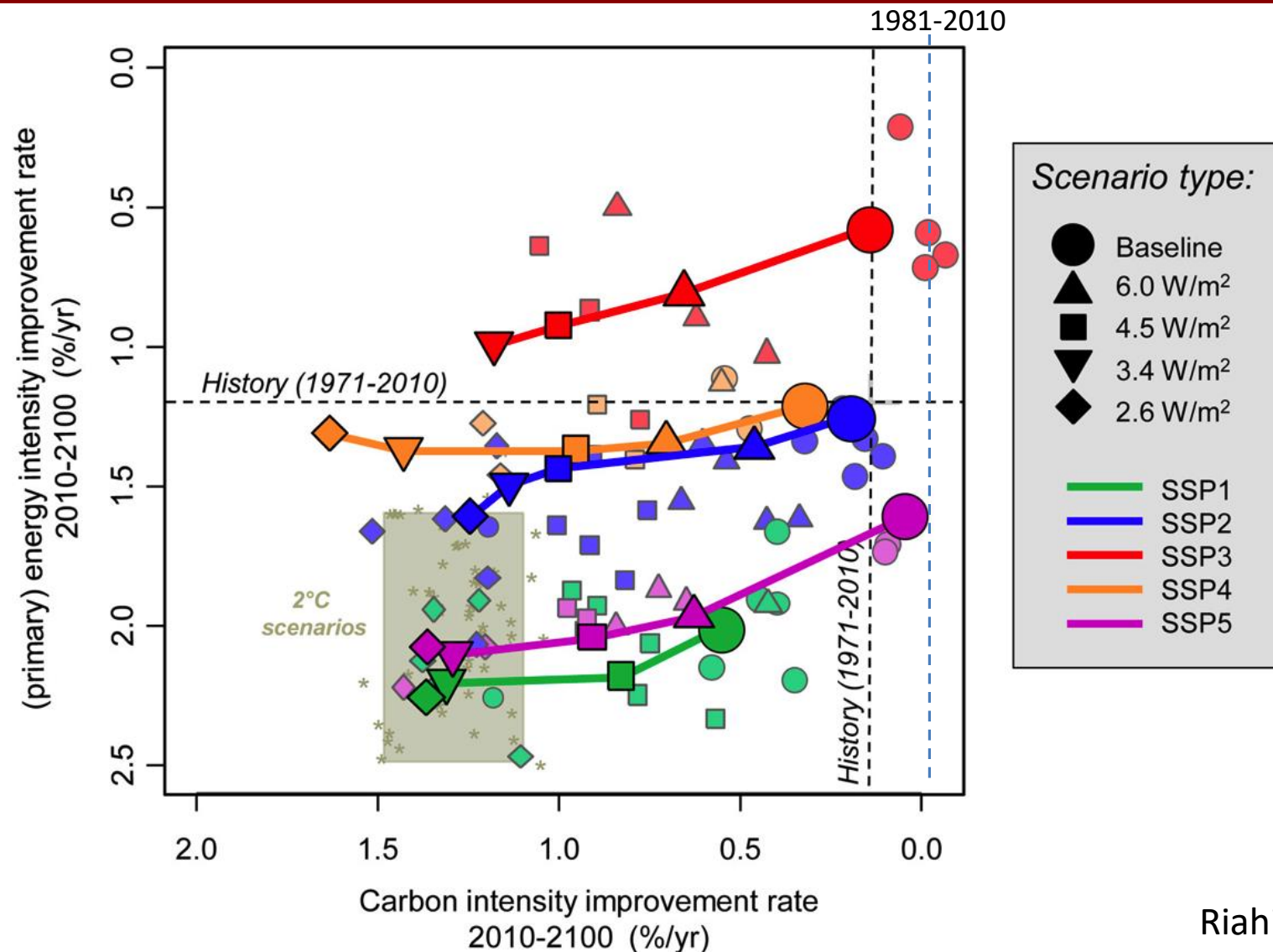


# Energy and Carbon Intensity Improvements



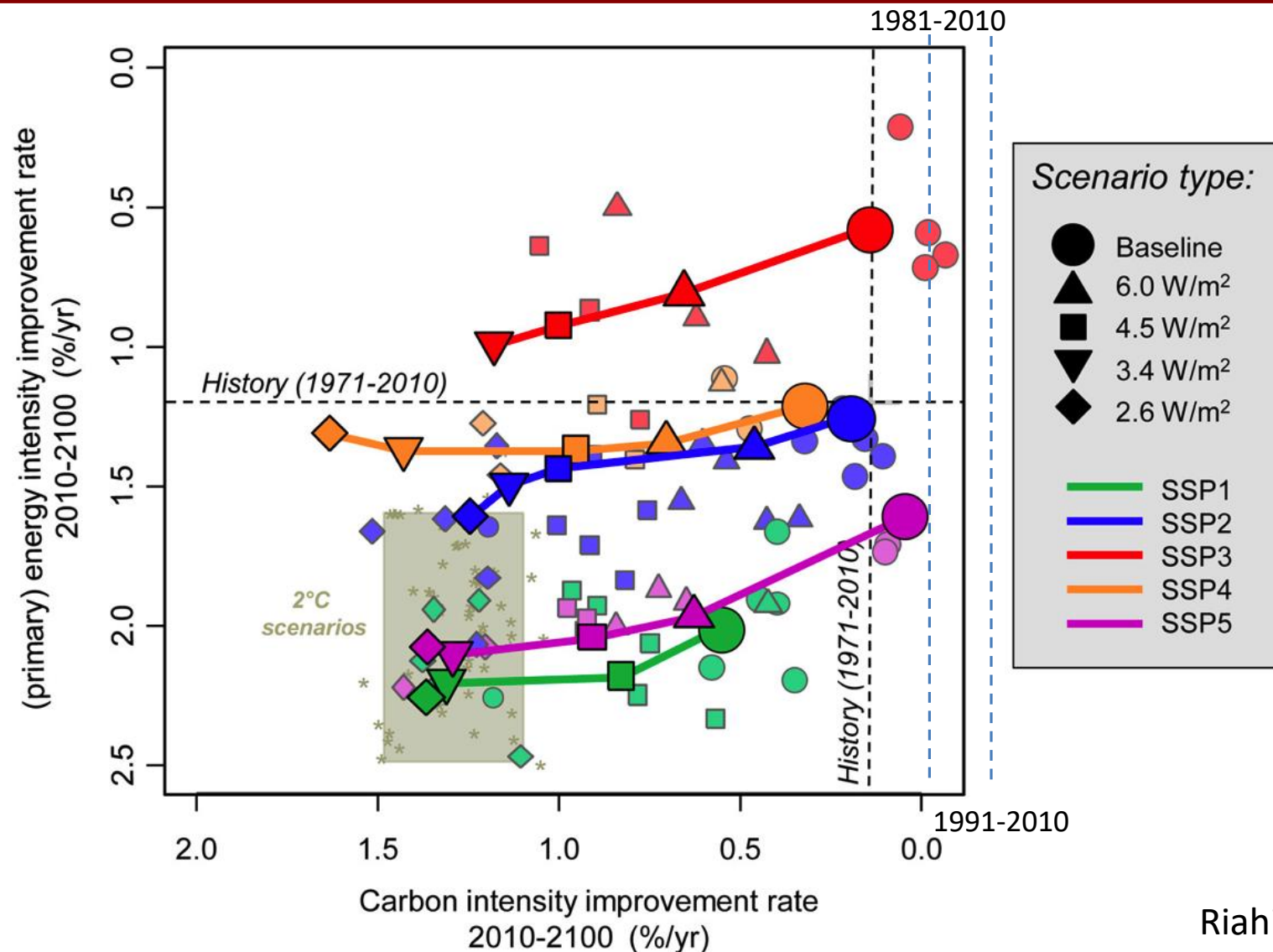
Riahi et al (2017)

# Energy and Carbon Intensity Improvements



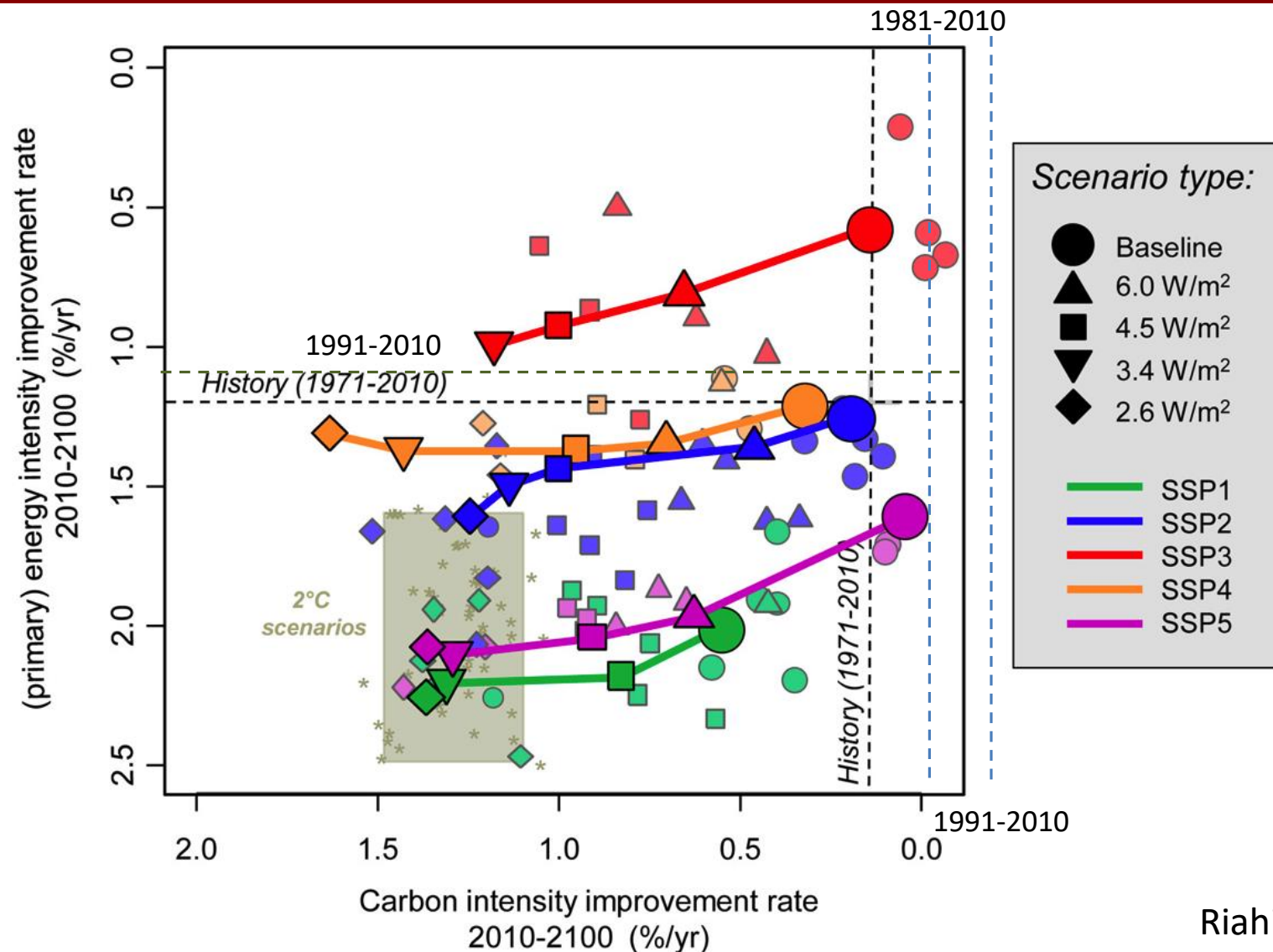
Riahi et al (2017)

# Energy and Carbon Intensity Improvements



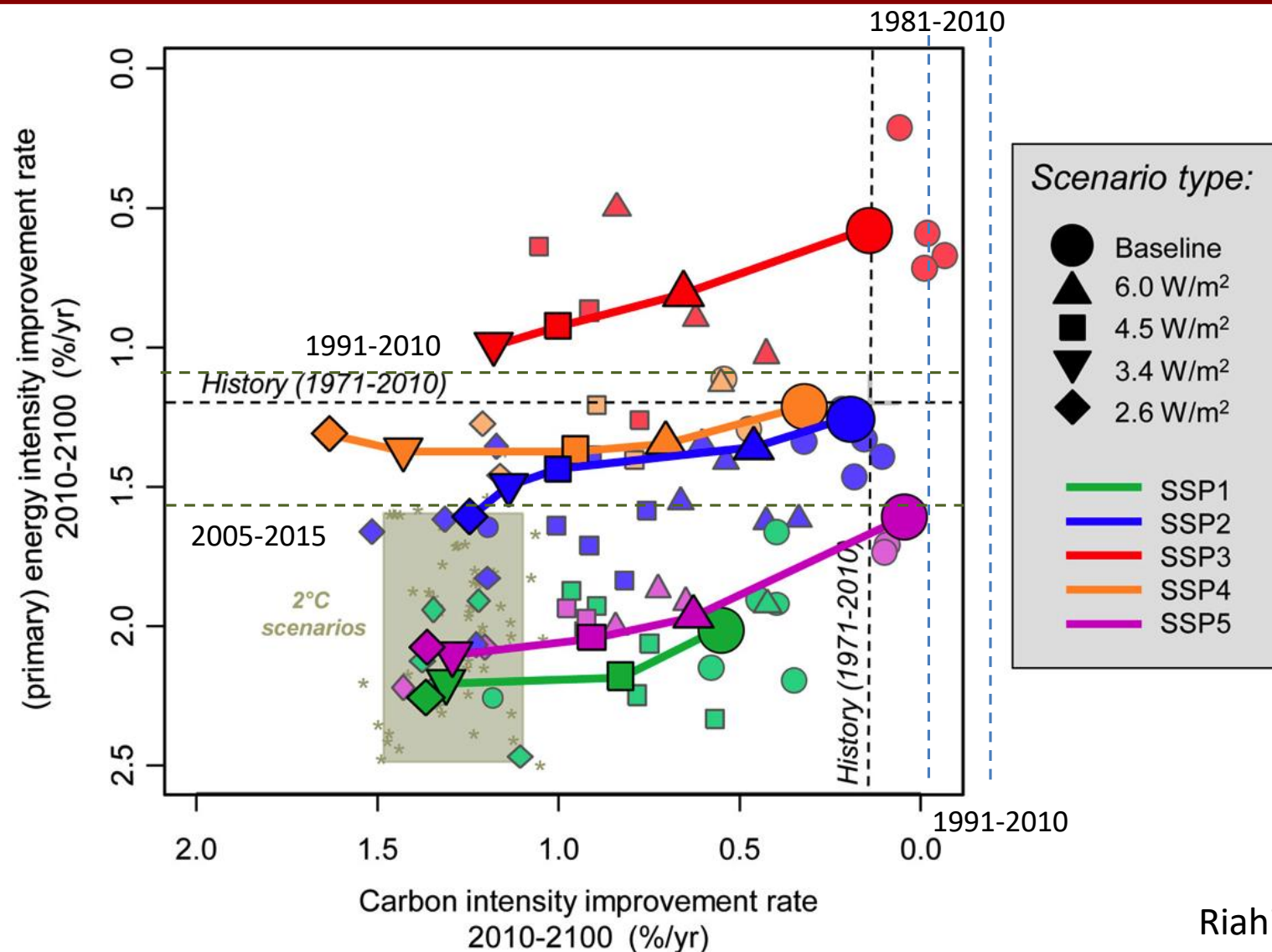
Riahi et al (2017)

# Energy and Carbon Intensity Improvements



Riahi et al (2017)

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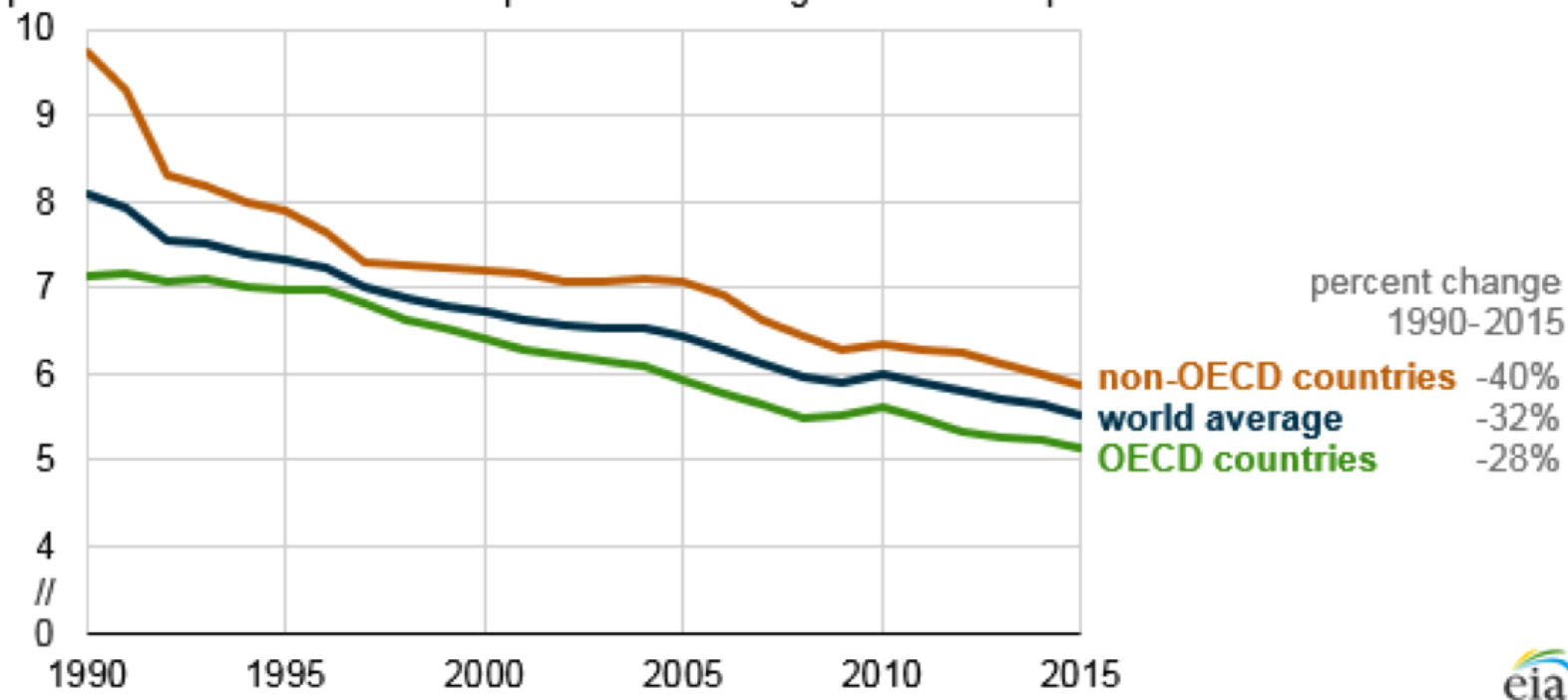
Riahi et al (2017)



# Actual changes in energy intensity

## World energy intensity, 1990-2015

quadrillion British thermal units per trillion dollars gross domestic product



EIA (2016)

<https://www.eia.gov/todayinenergy/detail.php?id=27032>

If improvement *had been* 2% over 1990-2015 then world energy intensity would be almost half current levels!

# Final Thoughts

- Climate action and the energy transition mean very different things to different people and is not simply a question of GHG trajectories
- In response to the diversity of pressures and the lack of accountability, politicians have behaved quite rationally
- There are, of course, many possible unknown unknowns or potential gamechangers but little evidence of abrupt change
- We will hopefully hold forces seeking to undermine the international order at bay, but that is hardly a given
- There is a deep-seated optimism that pervades most modeling efforts that underplays the magnitude of the challenges we face in achieving deep decarbonisation

# Thanks!

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