

# Global Ambition for Climate Change Mitigation: Net Zero++

Tejal Kanitkar

National Institute of Advanced Studies, Bengaluru, India

# Climate Discourse since 2019

# RACE TO ZERO



United Nations  
Climate Change



COP25  
CHILE

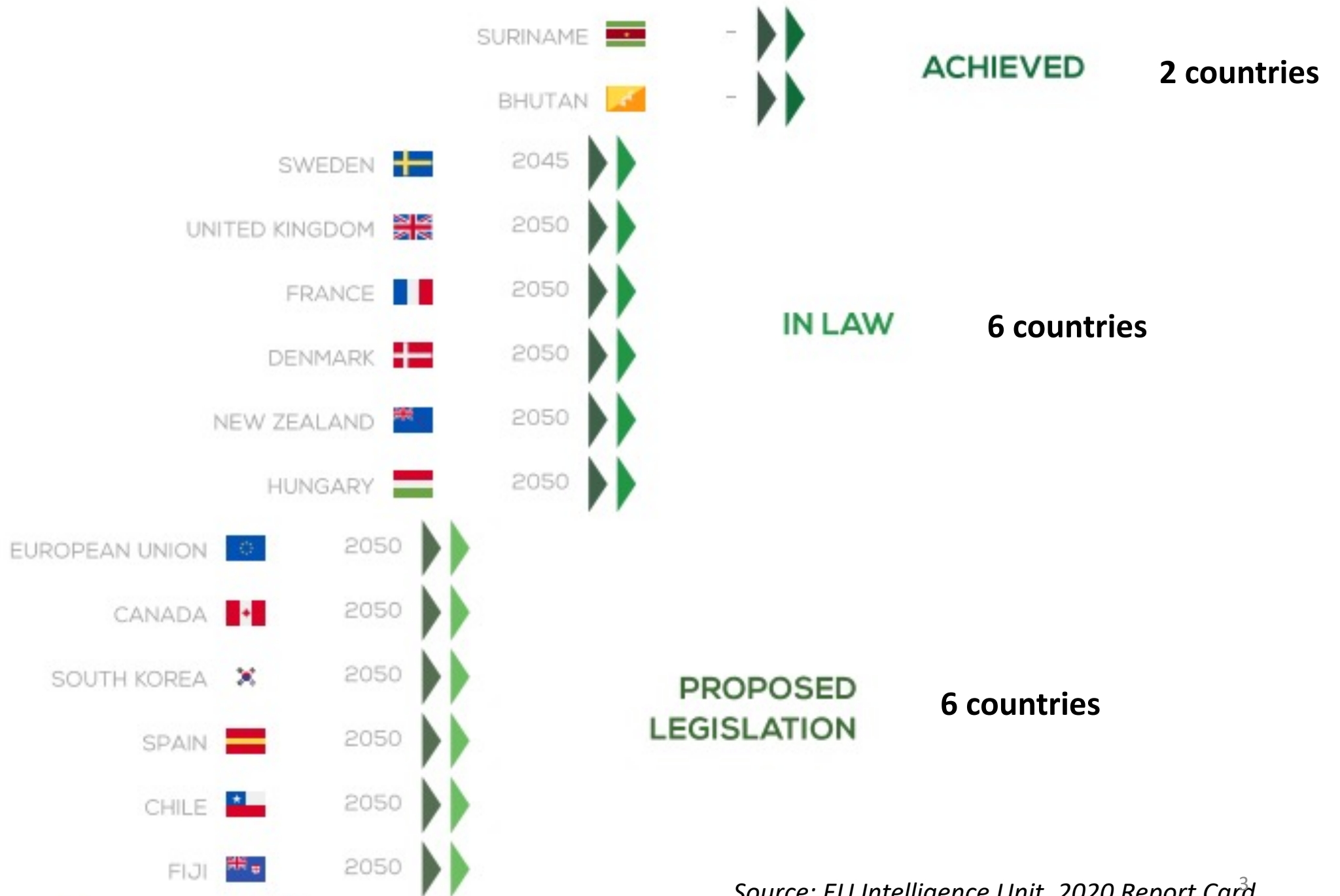


UN CLIMATE  
CHANGE  
CONFERENCE  
UN 2021











UK  
Canada  
France  
Japan  
New Zealand

But...



FINLAND		2035	
AUSTRIA		2040	
ICELAND		2040	
GERMANY		2045	
US		2050	
JAPAN		2050	
SOUTH AFRICA		2050	
BRAZIL		2050	
SWITZERLAND		2050	
NORWAY		2050	
IRELAND		2050	
PORTUGAL		2050	
PANAMA		2050	

COSTA RICA		2050	
SLOVENIA		2050	
ANDORRA		2050	
VATICAN CITY		2050	
MARSHALL ISLANDS		2050	
CHINA		2060	
KAZAKHSTAN		2060	

IN POLICY DOCUMENT

20 countries





# 98 Countries



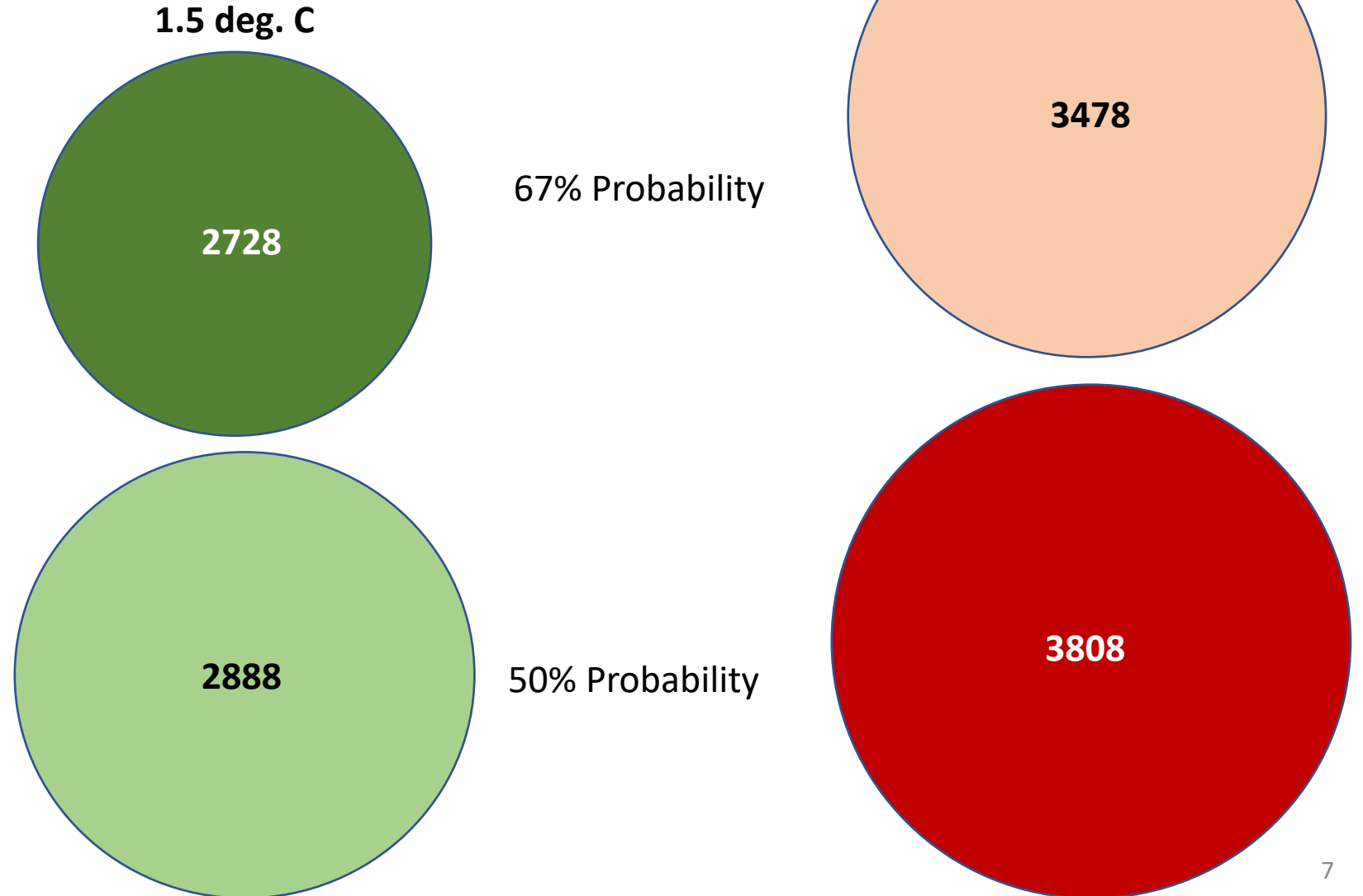
98 Countries

TARGET UNDER DISCUSSION

12/08/21

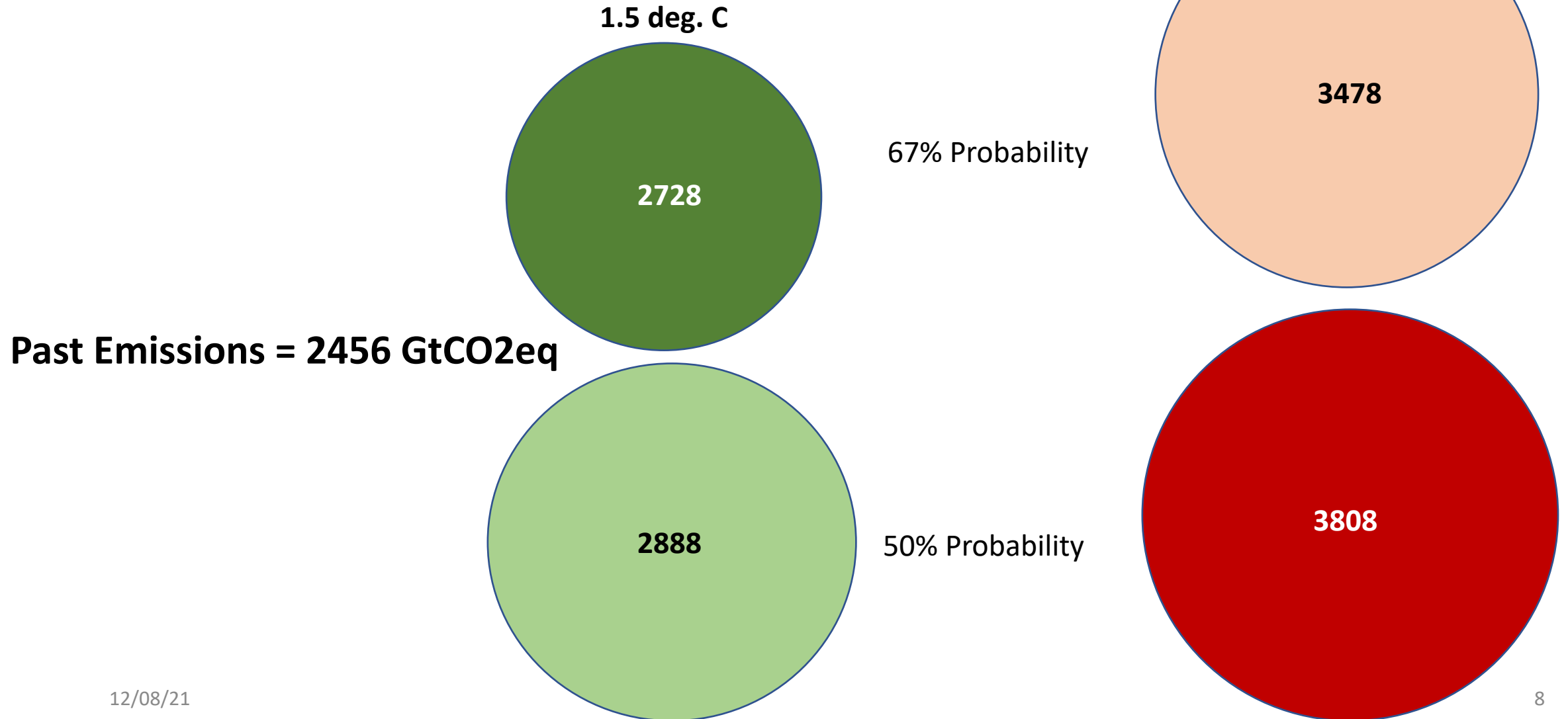
# Net-Zero by when??

- World has a finite carbon budget....
- Total Budget between 1850 till Net-Zero....



# Net-Zero by when??

- World has a finite carbon budget....
- Total Budget between 1850 till Net-Zero....

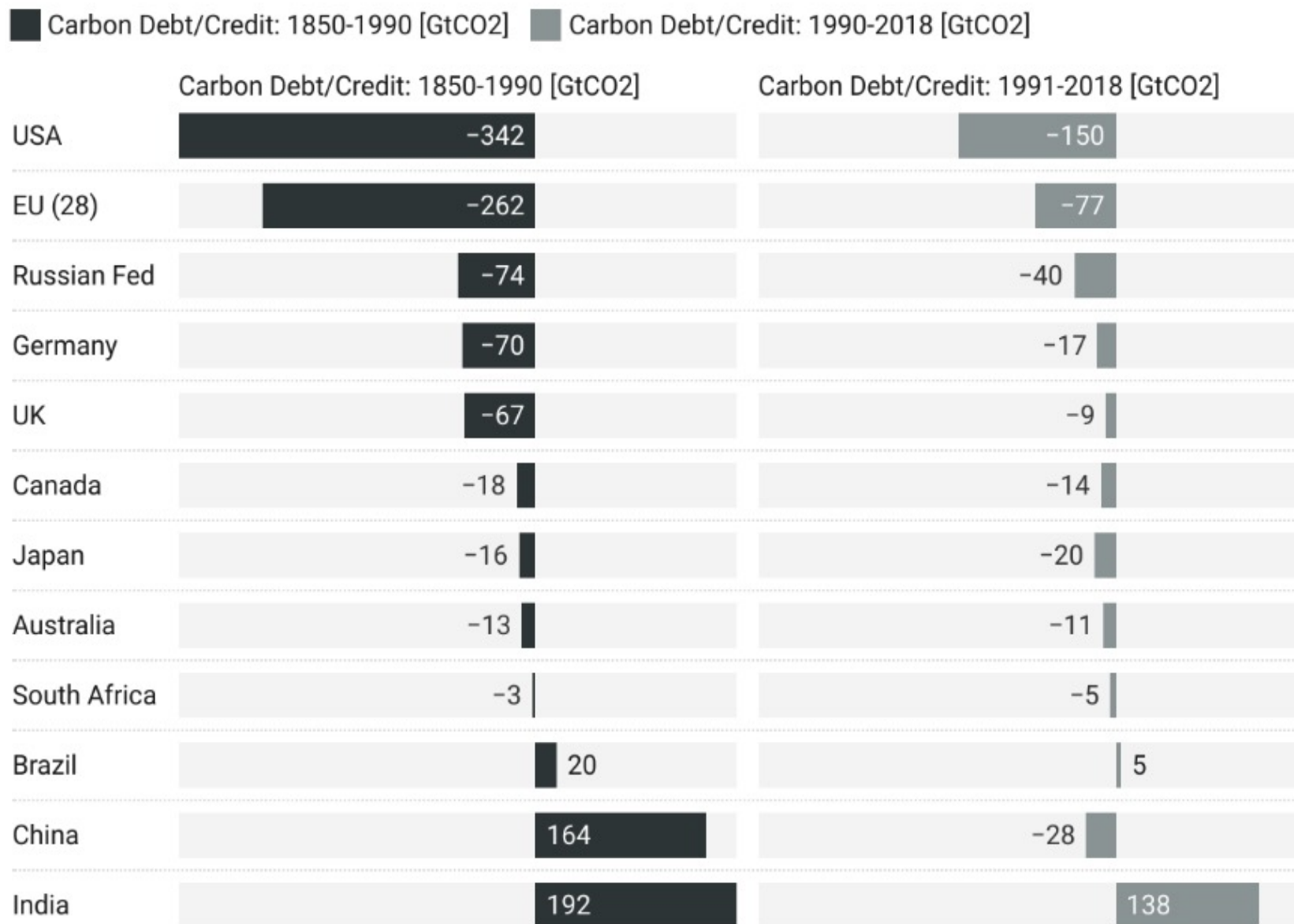




# Remaining Carbon Budget

		Remaining Carbon Budget [2019 till Net-Zero]	Past Emissions [1850 - 2018]
1.5 deg C	67% Probability	272	2456
	50% Probability	432	
2 deg C	67% Probability	1022	
	50% Probability	1352	

## All numbers in GtCO<sub>2</sub>eq (without LULUCF)



## Net Zero by When? ..... Given the RCB

	1.5 deg. C (67% Probability)	1.5 deg. C (50% Probability)	2 deg. C (67% Probability)	2 deg. C (50% Probability)
World	<b>2030</b>	<b>2037</b>	<b>2062</b>	<b>2076</b>
Annex-I Group	<b>2025</b>	<b>2028</b>	<b>2040</b>	<b>2047</b>
Non-Annex-I Group	<b>2034</b>	<b>2042</b>	<b>2074</b>	<b>2091</b>

Assuming of linear emissions reductions starting in 2020.  
Will change with increase-peak-reduction trajectory

# Gap between Needed and Proposed Year of Net-Zero

	Year proposed for Net-Zero Emissions	Year Needed for Net-Zero Emissions		Gap between proposed and required year (No. of years)*
		1.5 deg. C (50% Probability)	2 deg. C (67% Probability)	
<b>USA</b>	2050	2025	2032	18 - 25
<b>Canada</b>	2050	2025	2033	17 - 25
<b>Australia</b>	None	2024	2031	No proposed year
<b>Japan</b>	2050	2031	2046	Apr-19
<b>Germany</b>	2045	2030	2045	0 - 15
<b>UK</b>	2050	2035	2057	(7) - 15
<b>EU (28)</b>	2050	2031	2047	3 - 19
<b>Russian Fed</b>	None	2026	2036	No proposed year
<b>China</b>	2060	2031	2047	13 - 29
<b>Brazil</b>	2050	2041	2071	(21) - 9
<b>South Africa</b>	2050	2031	2047	3 - 19
<b>India</b>	None	2068	2135	No proposed year

*\*The values in brackets are negative values, implying that the target year is sooner than the required year to reach net-zero emissions for a particular region/country and a particular temperature target.*

# Conclusion → Net Zero Targets ARE NOT Ambitious

1

Net-Zero by 2050 by Annex-I → Low ambition and violative of equity

2

Attempt to shift goalposts

3

Attempt to shift burden to developing countries