

COP21: December in Paris

Harvard Energy Journal Club

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Aykut Aydin

Outline

- COP21 Basics
- Background
- Main Issues Facing COP21
- INDCs
- Looking Ahead

What is COP21?

- 21st Annual meeting of the Conference of Parties (COP), reviewing the implementation of the United Nations Framework Convention on Climate Change (UNFCCC)
- Also known as 2015 Paris Climate Conference
- **Main Goal:** Reach a legally binding and universal agreement to limit the average global temperature rise by the end of the century to 2 °C.

More on COP21

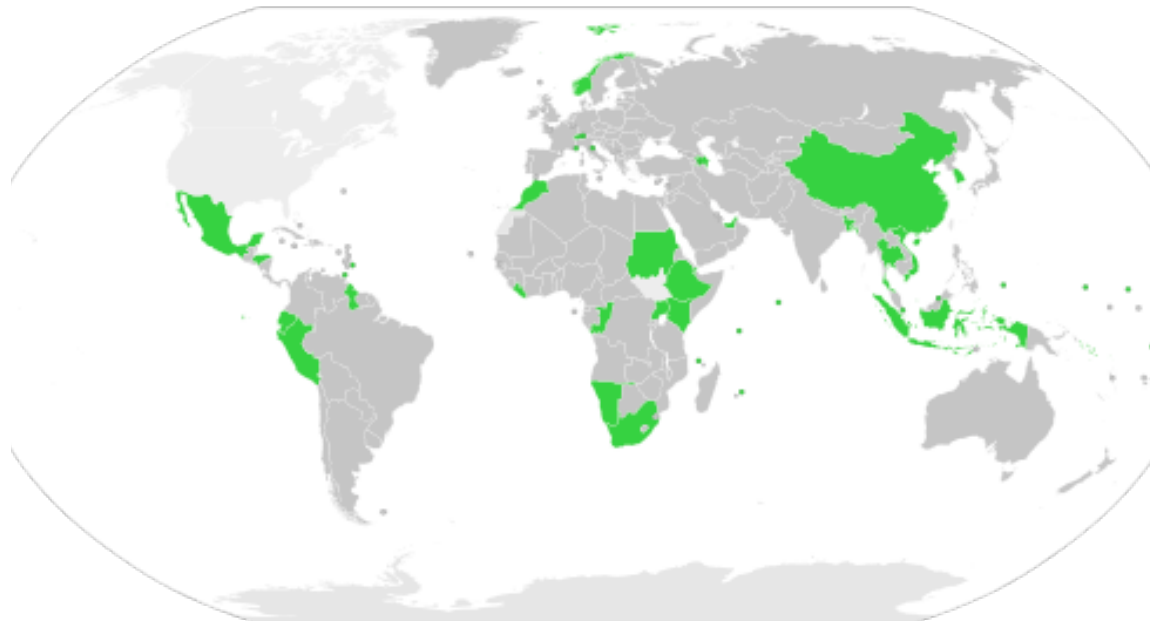
- Mitigation and adaptation strategies are equally important
- November 30th to December 11th in Paris
- Close to 50,000 participants with over official delegates
- Agreement text is being prepared in negotiations
- No, Obama won't be there...

Previously in UN...

- 1992 – At the Earth Summit in Rio, UNFCCC was founded
- 1997 – The Kyoto Protocol is formally adopted at COP3
- 2005 – The Kyoto Protocol enters into force
- 2009 – Copenhagen Accord drafted at COP15, but no legally binding agreement. Some countries pledged reductions.
- 2012 – Doha Amendment to the Kyoto Protocol for a second term
- 2014 – Lima COP20 paved way for the global agreement of COP21

Kyoto Protocol

- Worldwide cut in emissions of about 5% from the 1990 levels
- 192 parties agreed
- Required countries representing 55% of global emissions to ratify it to become active
- In 2004, Russia unexpectedly ratified it and it came into affect
- First term was 2008-2012
- Second term was established with the Doha Amendment for 43 countries



Copenhagen 2009

- COP 15 with similar goals gathered
- Copenhagen Accord was drafted, but it is not legally binding
- The document acknowledged the need for keeping temperature rises below 2 °C
- Ended in disarray
- Commonly deemed a failure

Main Issues for COP21

- Adaptation Strategies – as equally important as mitigation
- INDCs – each country declares their feasible contributions to mitigation
- Financing – a commitment of \$100 billion to developing countries per year should be realized by 2020, partially organized by the Green Climate Fund

INDCs

- Intended Nationally Determined Contributions
- Submitted to UNFCCC before COP21 (intended deadline was March 2015)
- Each nation proposing its emission reduction and other contribution goals
- <https://www.youtube.com/watch?v=7F5K1BN6iN8>
- <http://cait.wri.org/indc/>

INDCs Submitted:

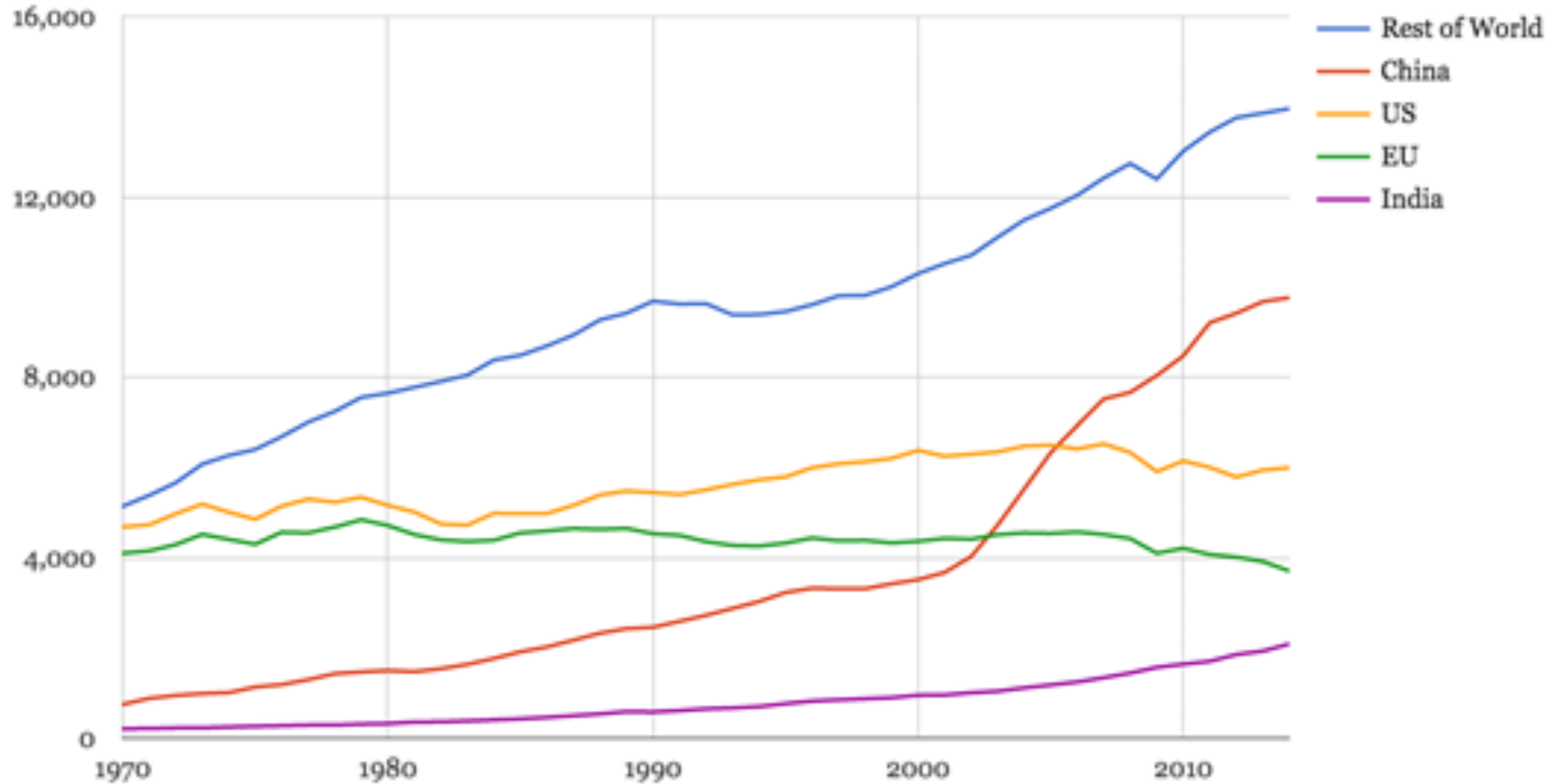
122

Global emissions covered by countries that submitted an INDC ⓘ

85.7%

Current CO₂ Emissions

Carbon dioxide emissions from energy use



INDC Examples

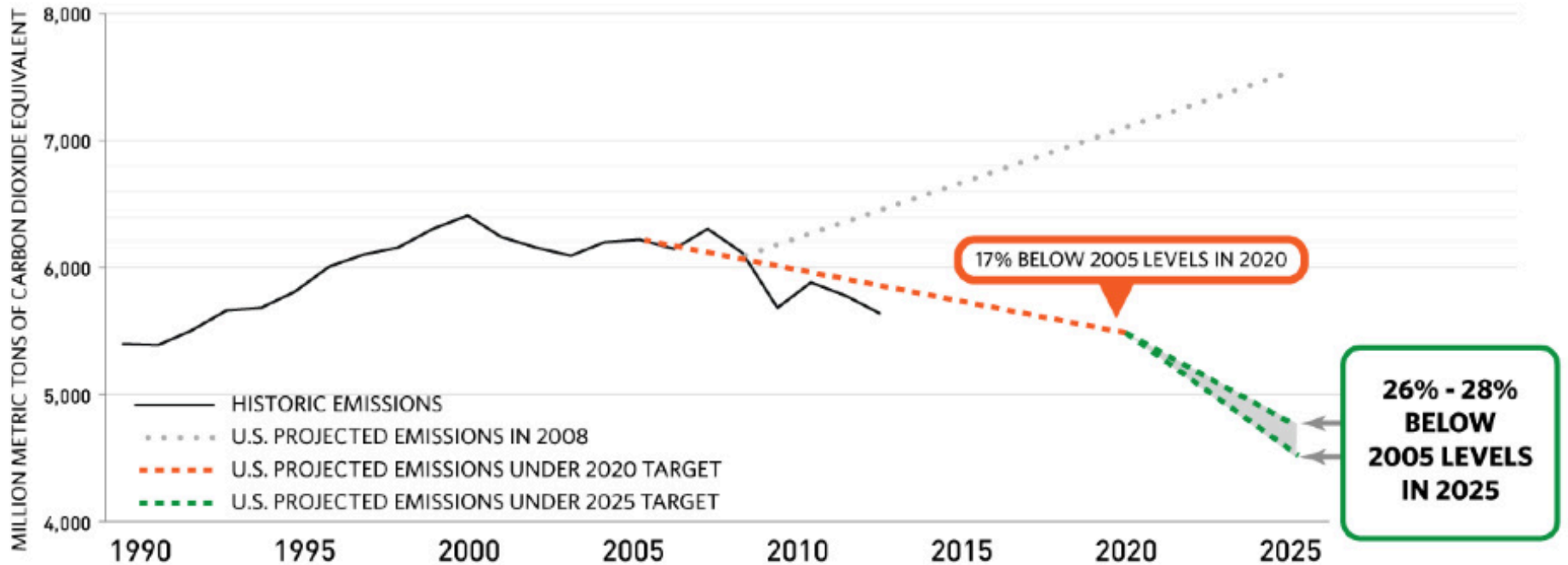
Country	Pledge
EU	Promised to cut emissions 40% by 2030 against 1990 level
US	Cut of 26-28% by 2025 against 2005 level
China	Will peak emissions by 2030 and reduce carbon intensity 60-65% by 2030 against 2005 level
Australia	Pledged to cut emissions 26%-28% of 2005 levels by 2030
Japan	Will cut greenhouse gas emissions 26% from 2013 levels by 2030
Indonesia	Said it will cut emissions 29% by 2030 compared to what it is currently on course for ('business-as-usual')
Brazil	Intends to cut emissions 37% by 2025 from 2005 levels
Mexico	Pledged to make emissions 22% lower by 2030 than business-as-usual
Kenya	Will cut emissions 30% by 2030 below business-as-usual
Canada	Committed to reduce greenhouse gas emissions 30% below 2005 levels by 2030

China

- Emissions targeted to peak 2030 and as early as possible
- Reducing carbon intensity (CO₂ emissions per GDP) by 60-65% with respect to 2005 levels
- Increasing its forest carbon stock volume by about 4.5 billion cubic meters. This implies covering over 50-100 hectares with forest. China increased its forest area by 49 hectares between 1990-2010.

U.S.

U.S. EMISSIONS UNDER 2020 AND 2025 TARGETS



India

- Pledges to source 40% of its electricity from renewable and low-carbon sources by 2030
- Reducing carbon emissions per GDP by 35%
- Population to pass China by 2028 with 1.45 billion people
- Prakash Javadekar, India's environment minister, said: "Though India is not part of the problem, it wants to be part of the solution. Our historical cumulative emission as of today is below 3%."

INDCs

INDCs as communicated by Parties

The COP, by its decision 1/CP.20, requested the secretariat to publish on the UNFCCC website the INDCs as communicated.




Further detailed information on INDCs and the INDC submission process is available on the [INDC website](#). To communicate an INDC to the secretariat please use the [INDC submission portal](#). Questions or requests for clarification can be addressed the secretariat at INDCs@unfccc.int.

All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

[Afghanistan](#) [Albania](#) [Algeria](#) [Andorra](#) [Angola](#) [Antigua and Barbuda](#) [Argentina](#) [Armenia](#) [Australia](#) [Austria](#) [Azerbaijan](#)

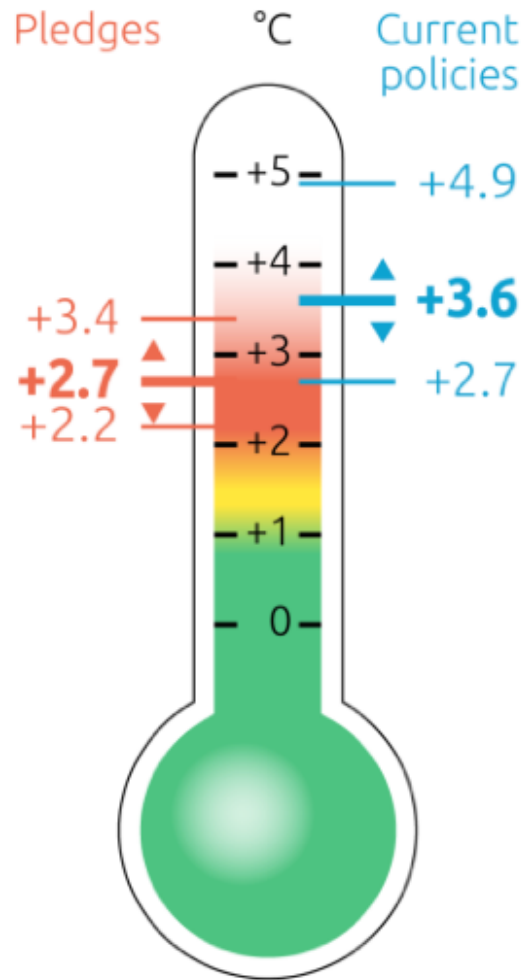
122 submissions found.

Search

Party	Date of Submission ↓	INDC Submission
Afghanistan	2015-10-13 13:43:02	 INDC_AFG_Paper_En_20150927_.docx FINAL.pdf (352 kb)
Ecuador	2015-10-13 09:04:15	 Ecuador INDC 01-10-2015 - english unofficial translation.pdf (618 kb)  Ecuador INDC 01-10-2015.pdf (641 kb)

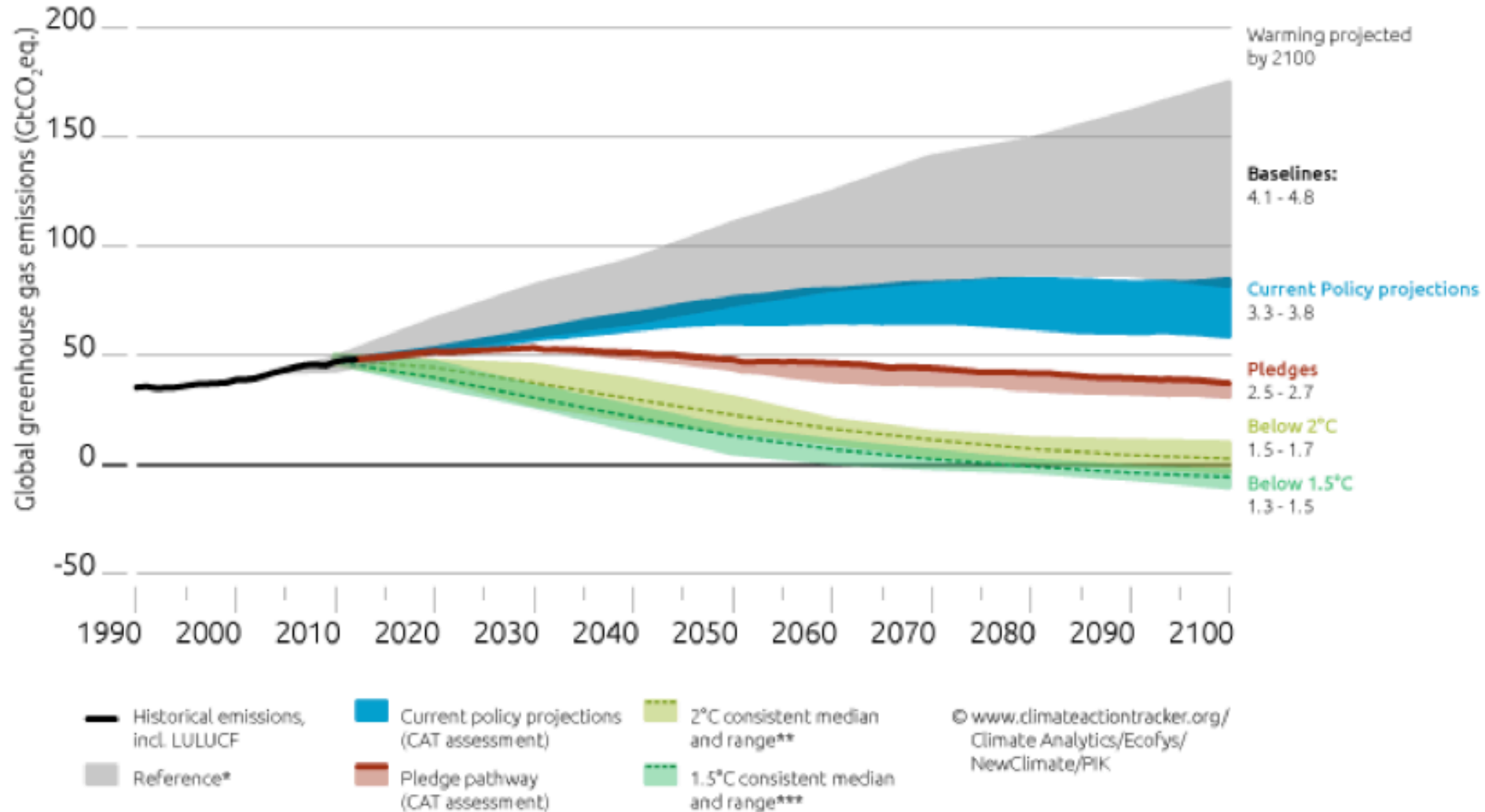
[http://www4.unfccc.int/submissions/INDC/
Submission%20Pages/Submissions.aspx](http://www4.unfccc.int/submissions/INDC/Submission%20Pages/Submissions.aspx)

Trouble with Current Pledges



While 2 °C limit is the heavily promoted target, most vulnerable countries ask the limit to be 1.5 °C by 2100.

GHG Emission Trajectories



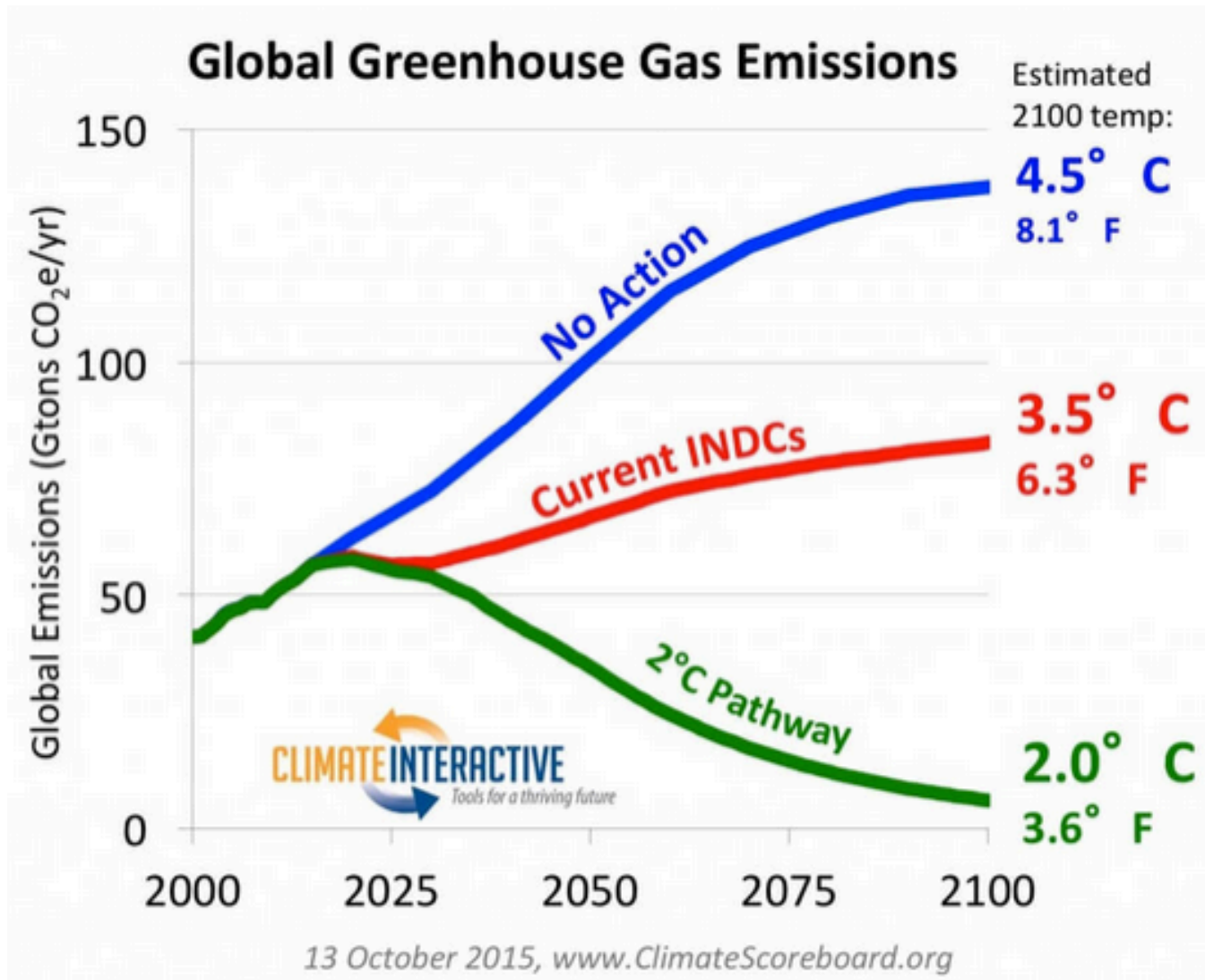
Source: <http://climateactiontracker.org/assets/publications/CAT_global_temperature_update_October_2015.pdf>, last accessed 10/15/2015

Climate Change Tracker Assessment of Certain INDCs

Country	Rating	Share of Global Emissions
China	Medium	24,03%
United States	Medium	15,54%
European Union	Medium	10,78%
Russia	Inadequate	4,89%
Japan	Inadequate	2,88%
Brazil	Medium	2,13%
Indonesia	Medium	1,60%
Canada	Inadequate	1,53%
Mexico	Medium	1,42%
South Korea	Inadequate	1,42%
South Africa	Inadequate	1,24%
Australia	Inadequate	1,21%
Ethiopia	Sufficient	0,20%
New Zealand	Inadequate	0,17%
Morocco	Sufficient	0,15%
Switzerland	Medium	0,12%
Norway	Medium	0,11%
Singapore	Inadequate	0,06%
Gabon	Not rated	0,01%

Source: <http://climateactiontracker.org/assets/publications/CAT_global_temperature_update_October_2015.pdf>, last accessed 10/15/2015

And under different assumptions:



Looking Ahead

End of negotiations in Bonn: optimism is the rule

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09.14.15

The 1300 delegates gathered in Bonn, Germany, for five days of negotiations, left the meeting feeling optimistic. The next round of negotiations will take place in October as a final meeting to prepare for a new agreement to be adopted during COP21 in Paris in December.