



# International Climate Governance

**MIT IAP 2017** 

Arun Singh, asingh25@mit.edu

### Quick recap from previous sessions...

 Fundamentals of Climate Science and Global Climate System and Climate Modeling

Economics and Policy of Climate Change

### **Learning Objectives**

By the end of this session, I hope you'd be able to answer the following questions:

- Why is an internationally agreeable process needed to address Climate Change?
- Which are the main international bodies responsible for international climate governance?
- What is the history of international climate negotiations?
- What are some of the important underlying principles dictating international climate negotiations?
- What are the important features of current international agreement (the Paris Agreement) on climate change?
- Where do we stand today and what are the challenges in implementing Paris Agreement?

### Why do we want an international agreement?

- Scientific reasons
  - CO<sub>2</sub> is a stock pollutant doesn't matter where it's emitted
- Tragedy of the commons
  - "commons" problem requires coordinated, collective action
  - action is in no one's best interest individually, but everyone's collectively

## Both the treaty process and the final agreement matter...

The goal here is environmental improvement by means of an international agreement on climate action.

But what are the mechanisms by which we get there?

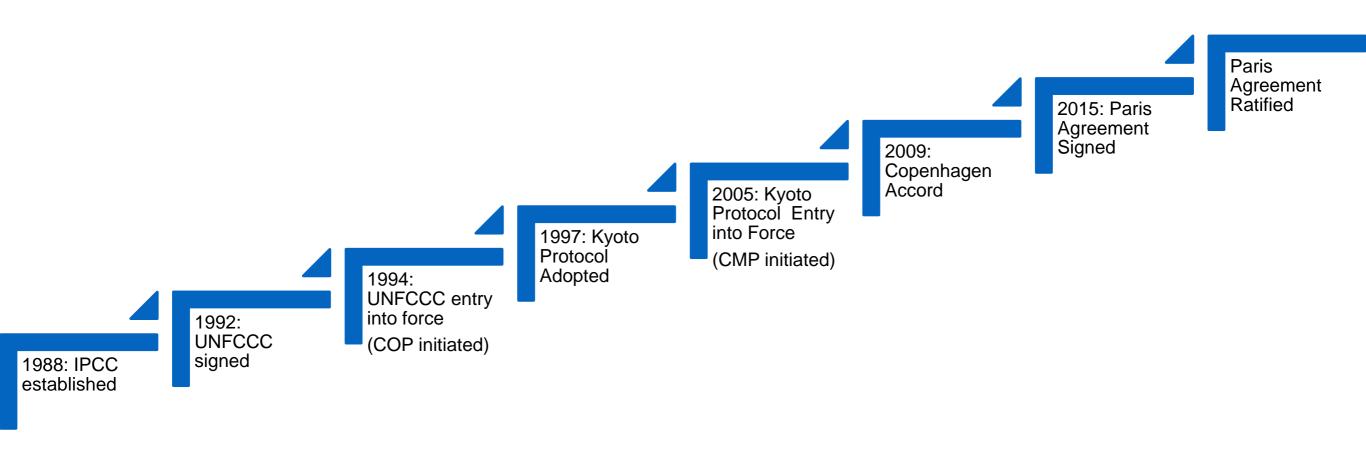
#### The three 'C's

- increase government concern for an issue
- enhance the contractual environment
- build national capacity

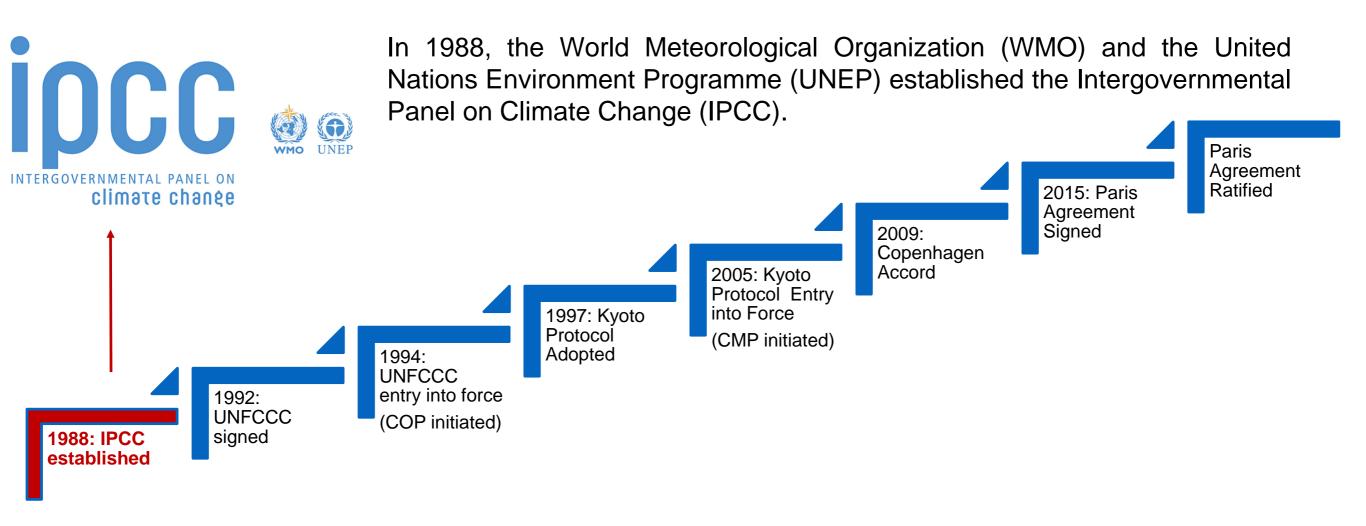


### International Climate Governance History of the UNFCCC

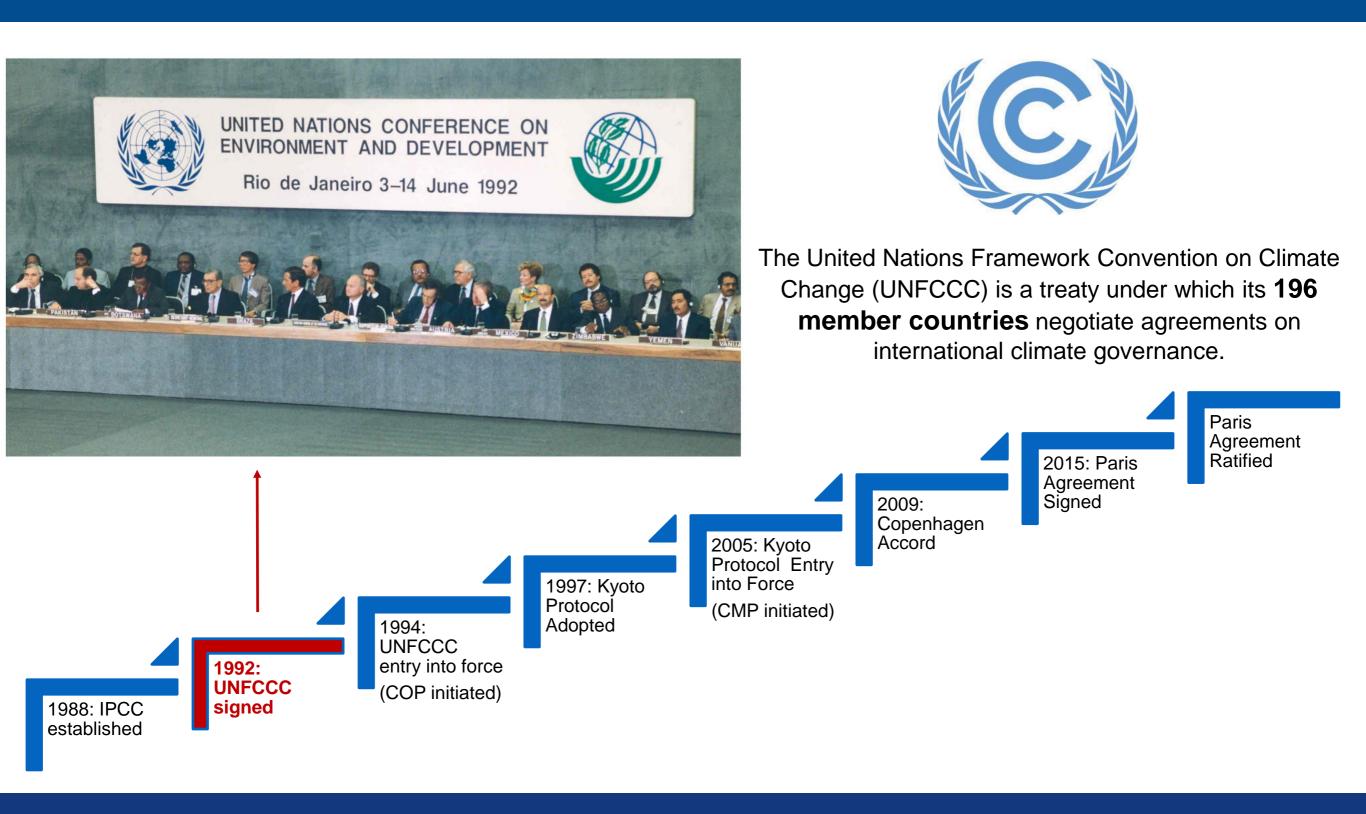
#### **Timeline**



#### 1988: IPCC established



### 1992: UNFCCC signed



# The 196 member countries can be divided into many categories— let's go over a few.

**Developed countries** = industrialized countries (e.g. United States, European Union)

**Rapidly developing countries** = countries with economies that are growing quickly (e.g. China, India)

**Developing countries** = countries with economies that are still developing that are especially vulnerable to all effects of climate change (e.g. Uganda, Bangladesh)

**Small island developing countries** = countries especially vulnerable to climate change due to extreme weather and sea level rise (e.g. Marshall Islands, St. Lucia)

Small Island Developing
States (SIDS)
40 low lying states

#### **Umbrella Group**

Non-EU developed countries Australia, Canada, Japan, New Zealand, Kazakhstan, Norway, the Russian Federation, Ukraine and the US Least Developed
Countries
48 LDCs identified by the UN

European Union 28 member countries

#### G77+China

(Developing + Rapidly Developing Countries)

### What is the goal of the UNFCCC?

"The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."

**COP: Conference of the Parties** 

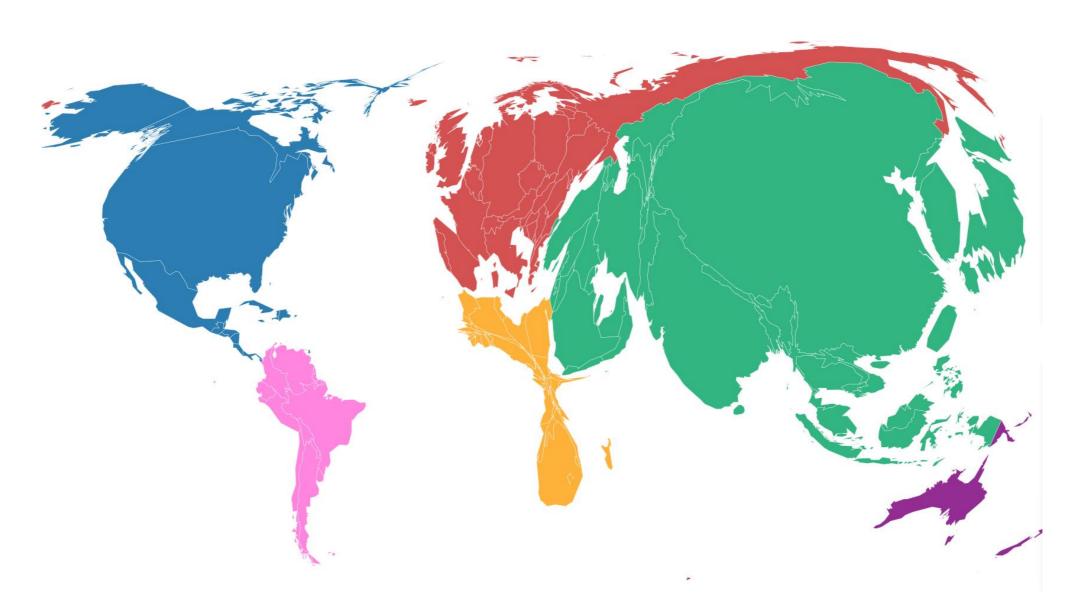
1.5°C

2°C

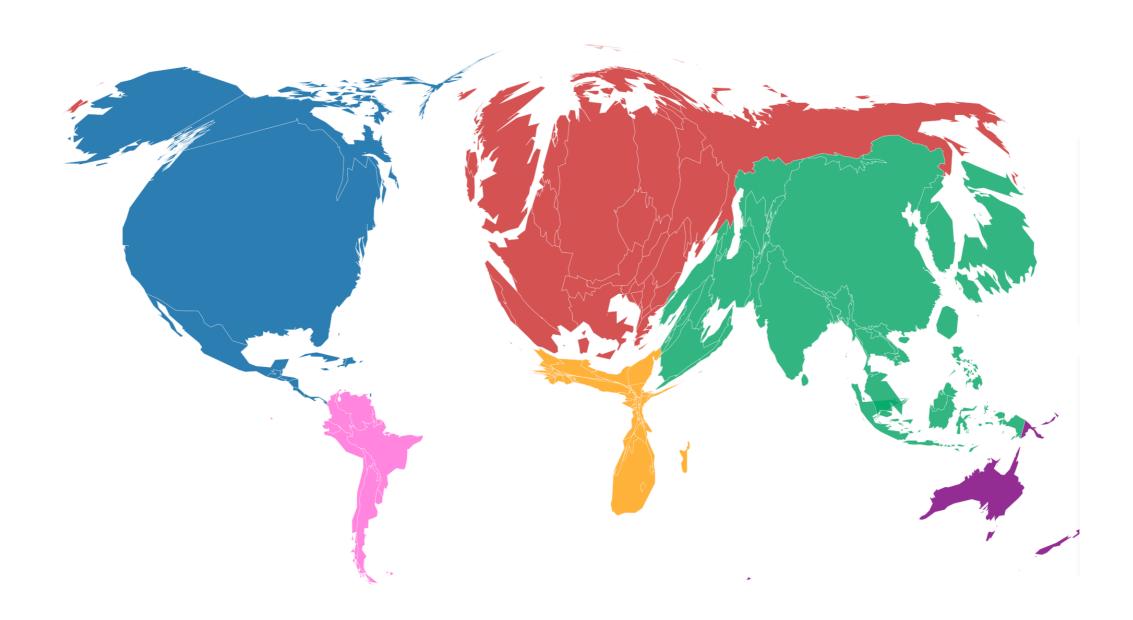
### What principles guide the UNFCCC?

"The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities\* and respective capabilities."

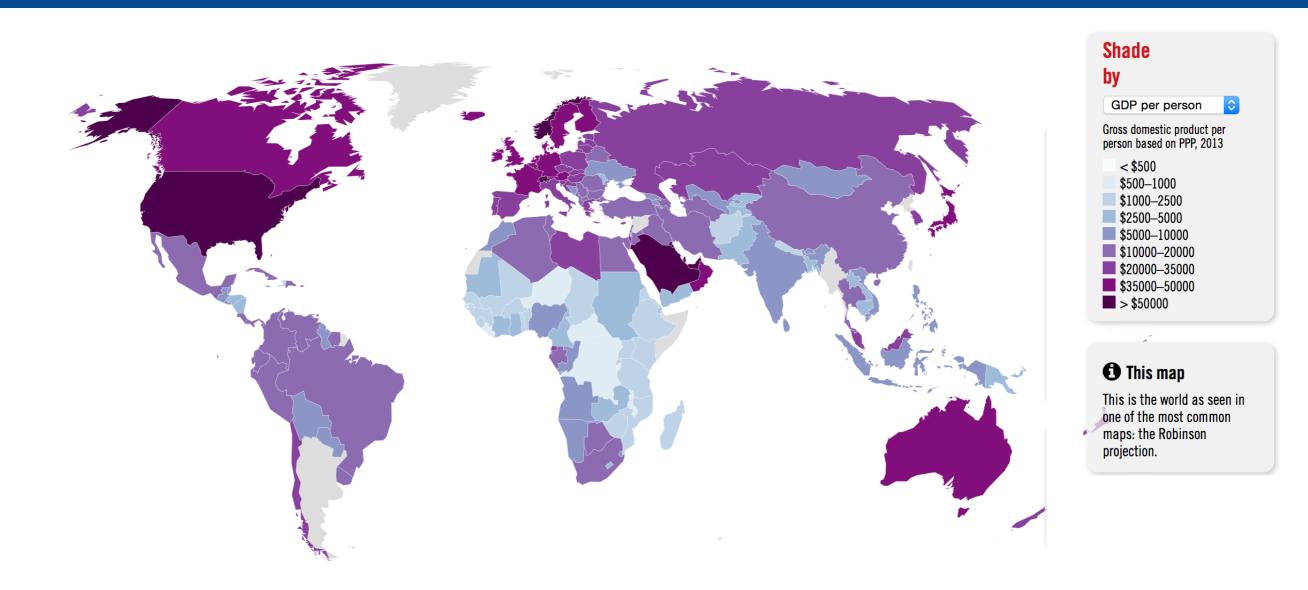
<sup>\*</sup> This has been modified to Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC), adopted in Lima negotiations in 2014



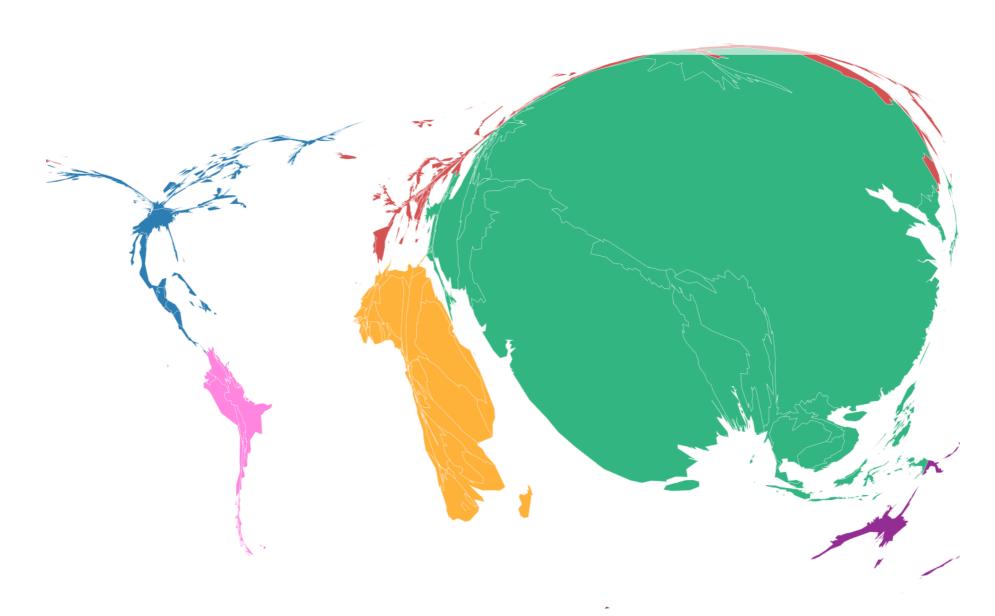
Annual CO<sub>2</sub> Emissions, 2013



Historical, Cumulative CO<sub>2</sub> Emissions, 1850-2011



GDP Per Person in 2013



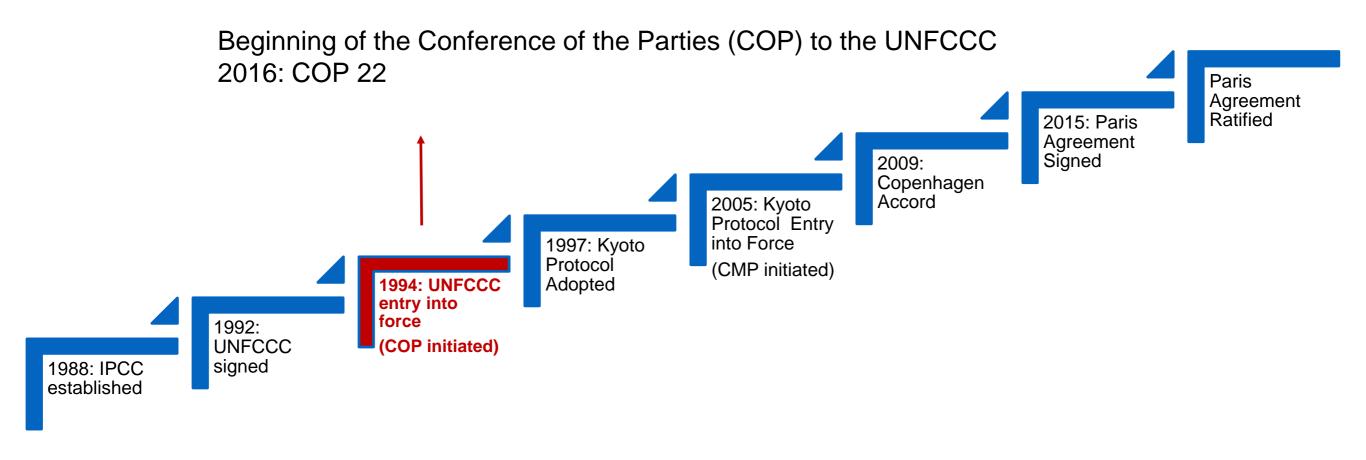
Vulnerability to Climate Change

Number of People Injured, Left Homeless, Displaced, or Requiring Emergency Assistance Due to Floods, Droughts, or Extreme Temperatures in a Typical Year

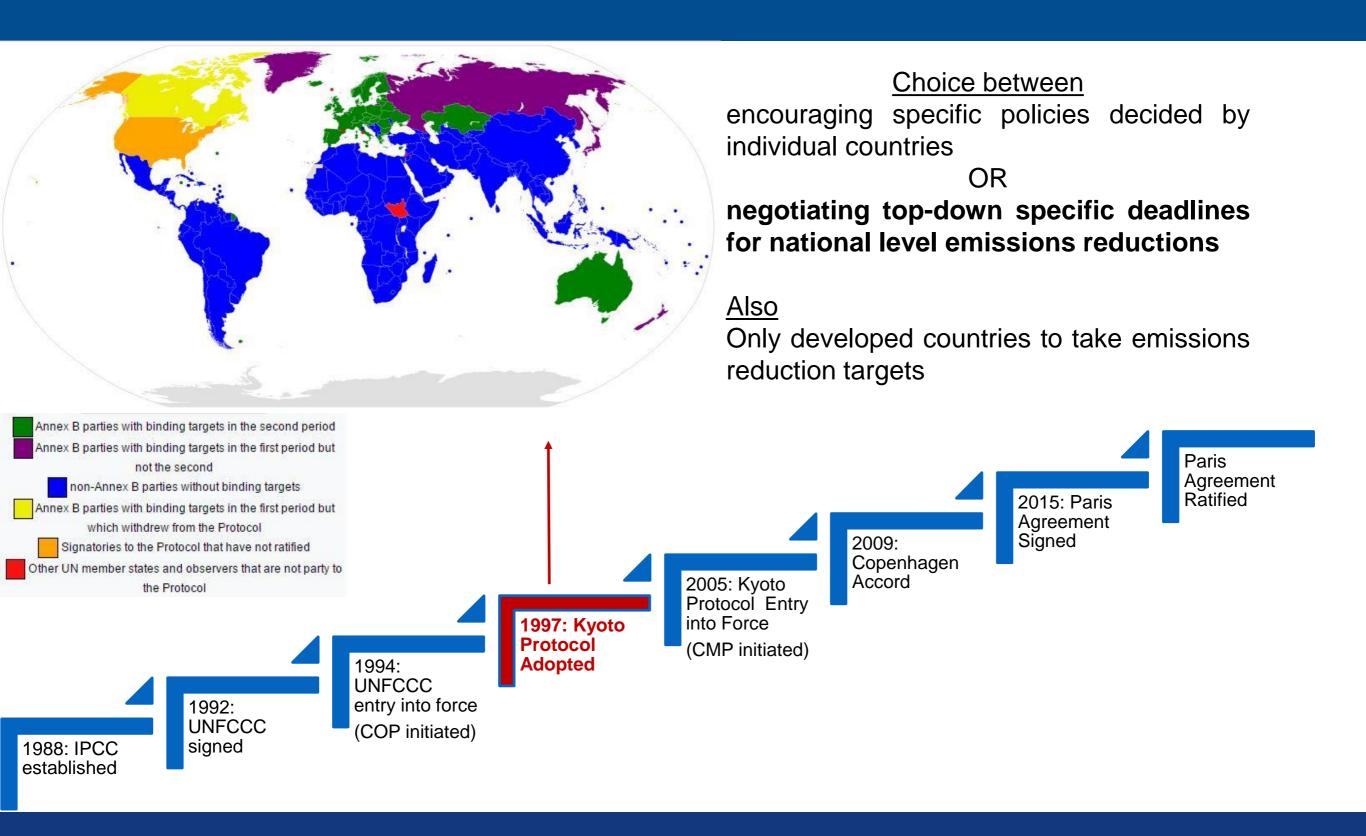
Who should mitigate their emissions?

Who should pay for implementation?

### 1994: UNFCCC entry into force

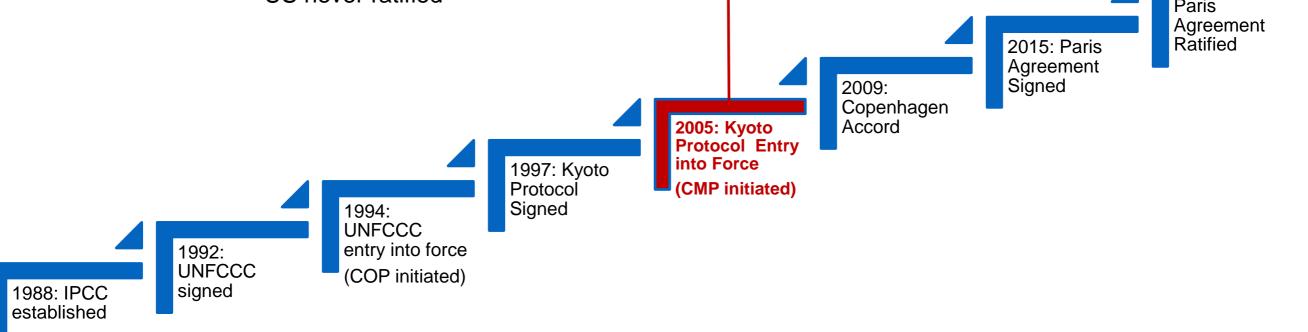


### 1997: Kyoto Protocol Adopted



#### 2005: Kyoto Protocol Entry into Force

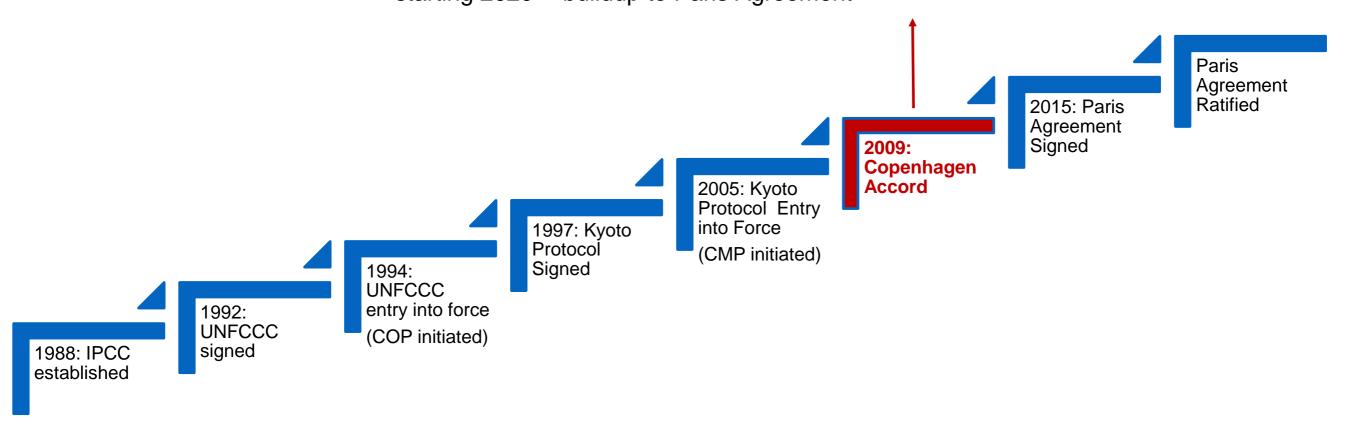
- Ratification process: Protocol enters in to force on the 90<sup>th</sup> day after at least 55 countries
  accounting for at least 55% of the total CO<sub>2</sub> emissions for 1990 of Annex-1 countries
  ratify
- Ratification by Russia on 18 November 2004 satisfies the 55% clause and brings the treaty into force effective 16 February 2005
- First commitment period 2008-2012
- Canada withdraws from the protocol in 2011
   US never ratified
   Paris Agreement Ratified



### 2009: Copenhagen Accord



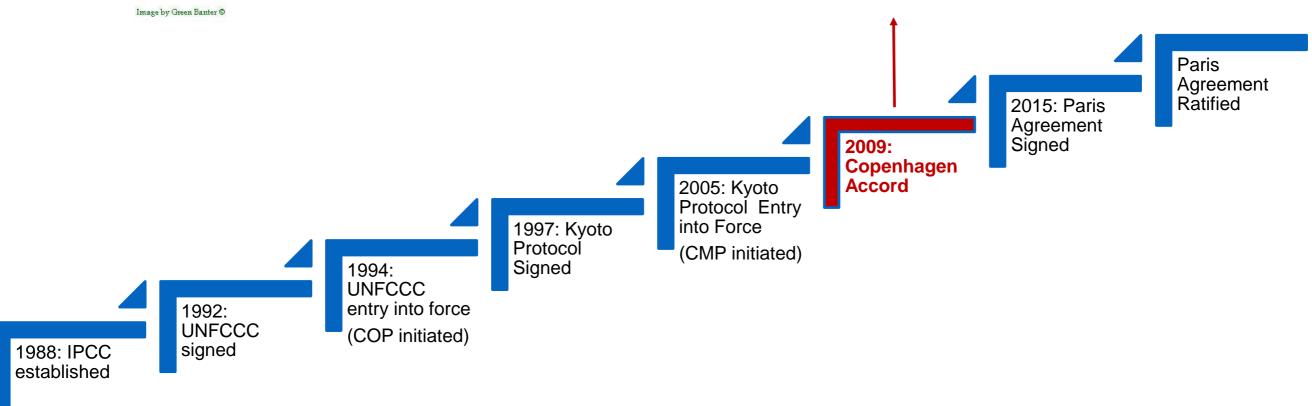
- Objective: To establish global climate agreement for the period from 2012.
- Background: dissatisfaction with no commitments from major developing countries
- · Emphasis on moving to a system with individual commitments
- Pledge and Review process: Countries to "publicly state their emissions reduction goals, however construed, and then allow progress toward those claims to be periodically evaluated by the international community" (Source: Brookings Institution)
- **Doha (2012):** Decide successor agreement to Kyoto Protocol by 2015, to be implemented starting 2020 -- buildup to Paris Agreement



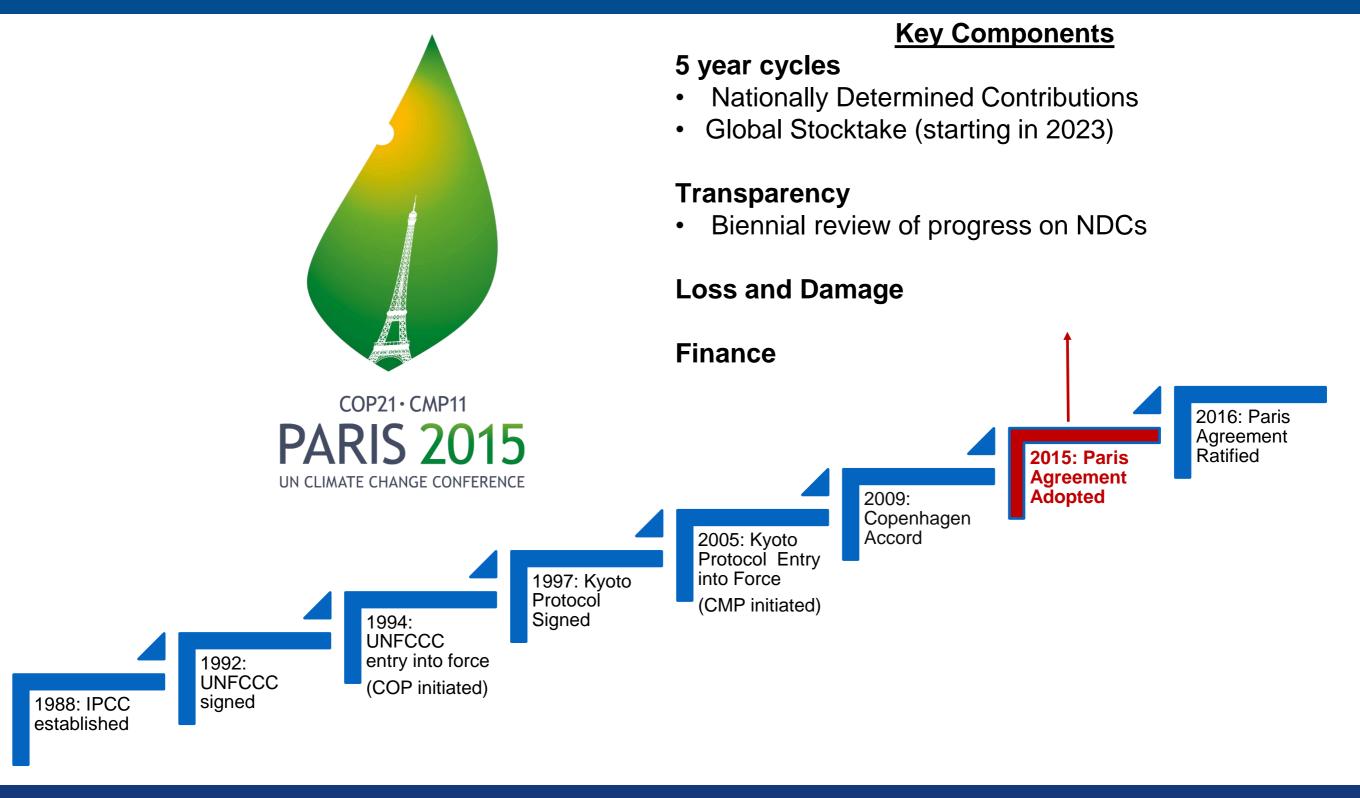
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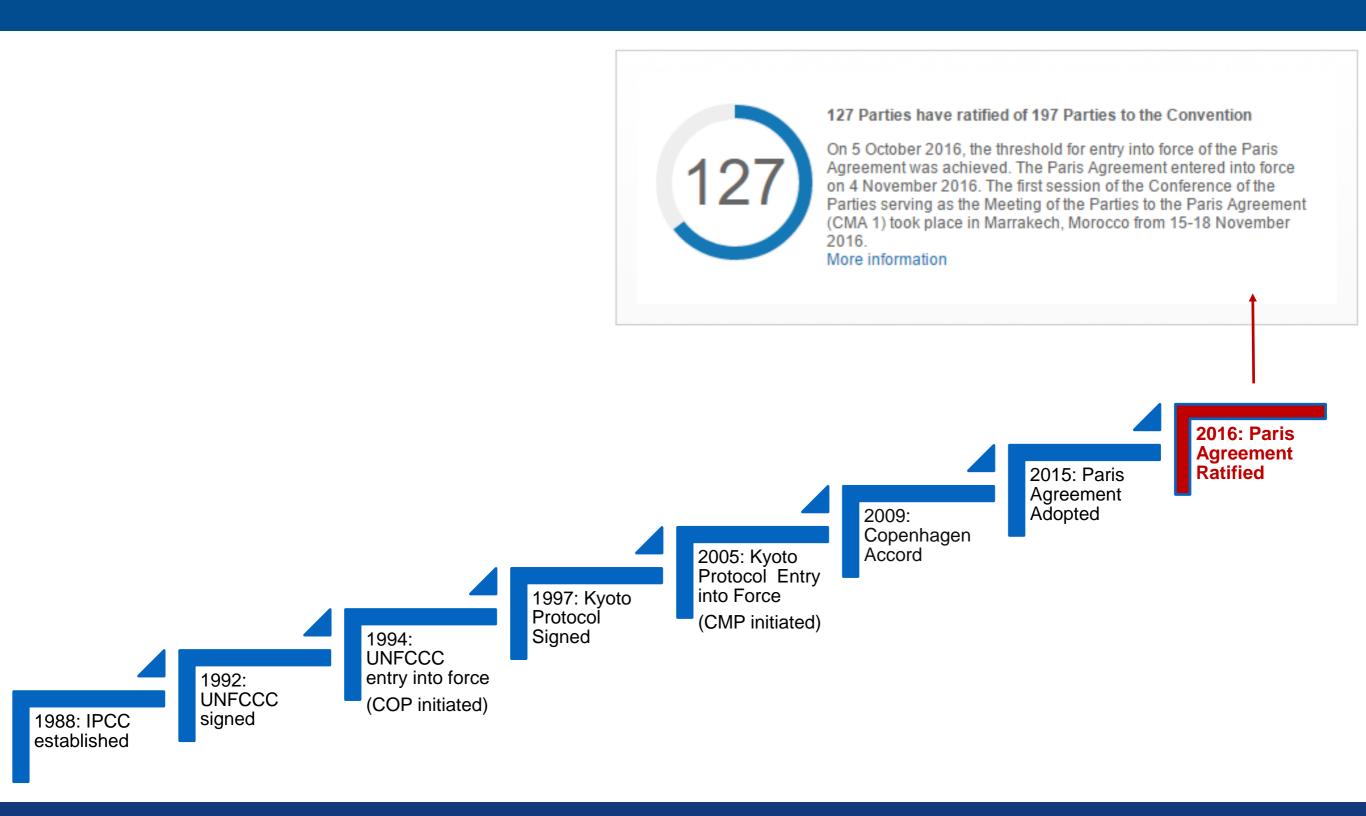
#### Failure or Success?



#### 2015: Paris Agreement



### 2016: Paris Agreement Ratified





# The Paris Agreement Components and Challenges Ahead

## Paris Agreement: Nationally Determined Contributions (NDCs)

Note: Exhibit removed as the work is not publish ready

#### Paris Agreement: 5-Year Global Stocktake Cycles



## Paris Agreement: Transparency Framework (the legally binding part)

- All countries required to report on GHG emissions and implementation efforts at least every two years.
- Undergo expert review, technical analysis, peer review
- Developed countries to provide information on financial, technology transfer, and capacity building support

Modalities, procedures, and guidelines for these processes to be decided

#### Paris Agreement: Finance

- 1. Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention.
- 4. The provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties, especially
- 7. Developed country Parties shall provide transparent and consistent information on support for developing country Parties provided and mobilized through public interventions biennially in accordance with the modalities, procedures and guidelines to be adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement, at its first session, as stipulated in Article 13, paragraph 13. Other Parties are encouraged to do so.

#### 2016: Marrakesh COP 22

Objective of COP22, 23, 24: decide work plans on implementing the Paris Agreement.

#### **Marrakesh: Several Names**

- "COP of Action"
- "COP of Implementation"
- "COP of Adaptation"
- "COP of Finance"
- "The African COP"

#### **Discussion Issues:**

- Transparency and Global Stocktake
- Finance
- Adaptation
- Capacity Building
- Technology Transfer
- Loss and Damage

**Day 1:** 



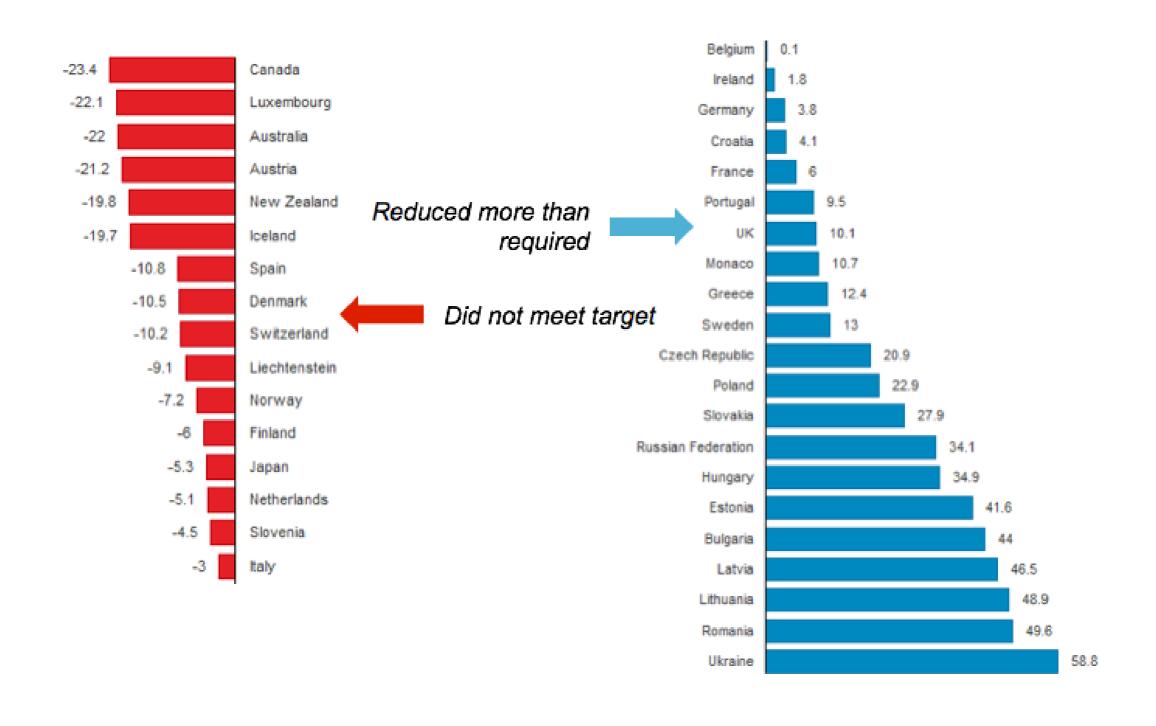
Day 2:



### Questions?

### **Extra Slides**

### Results of Kyoto Protocol (2012)



### Copenhagen Accord





- Last minute political agreement between leaders of US, EU, China, India, Brazil, South Africa
- "Pledge and review"
  - pledge domestic commitments with review to hold states accountable
  - monitoring and verification for all countries
  - submissions cover ~80% of 2005 global emissions
- Finance pledges (\$100 bn/yr by 2020) for mitigation, and commitment to fund adaptation
- Not adopted officially by conference (blocked by Bolivia, Cuba, Nicaragua, Venezuela, and Sudan)