

The ADB logo consists of the letters 'ADB' in a white, serif font, centered within a dark blue square. The background of the slide features a blurred image of a young green plant with a thin stem and several leaves, set against a light green and white background with a faint grid pattern.

**ADB**

***STRENGTHENING CAPACITY FOR ENVIRONMENTAL AND CLIMATE  
CHANGE LAW IN ASIA AND THE PACIFIC  
Colombo, Sri Lanka, 26 May – 1 June 2018***

**SESSION 8: CLIMATE CHANGE & CLEAN ENERGY LAW**



**Presented by Professor Carmen Gonzalez**

# Learning outcomes

## Session Topic

- Situate climate law within an understanding of the science & politics of climate change
- Understand the international regime on climate change, including REDD+
- Understand the scope and content of domestic climate law

## Teaching Methodology

- Understand the value of a brainstorming exercise to generate ideas
- Develop ability to give constructive feedback to peers
- Understand a range of methods for teaching climate change and clean energy law

See IUCN Academy Climate Law Teaching Resources (including simulations & negotiations)

<http://www.iucnael.org/en/online-resources/climate-law-teaching-resources>

# Introduction to climate law

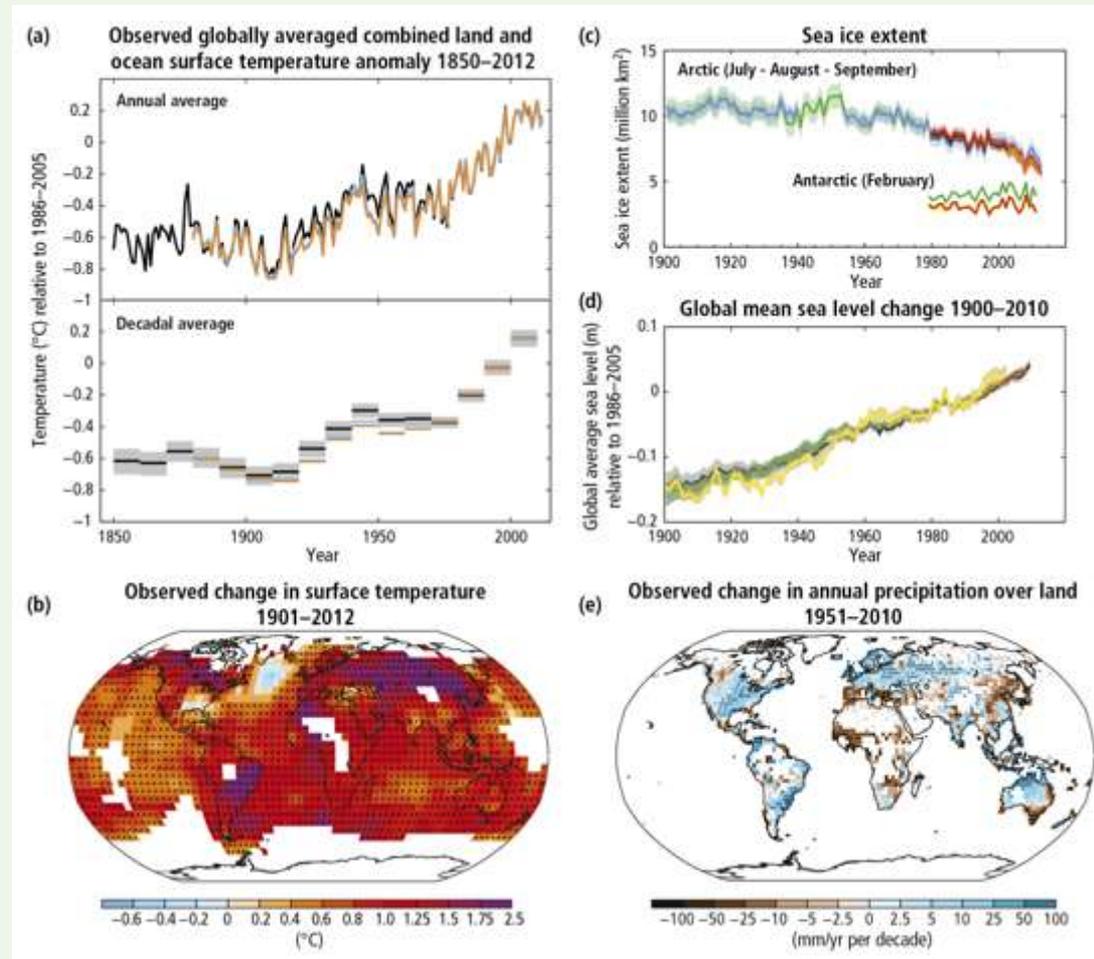
- Climate change is a global environmental issue that has been identified by scientists over the last 30 years as a significant threat to both humans and biological diversity.
- Climate law relates both to the **mitigation** of, and **adaptation** to, climate change.
- Vast scope of climate law and policy: *carbon markets, building codes, certification standards, trade law, urban planning, corporate securities disclosure rules, fuel efficiency requirements, agriculture and forestry policies, tort litigation, ocean law, migration law, public health legislation ....*

# What makes climate law unique?

- economic, social and environmental interconnectedness
- very long, almost unimaginable, timeframes
- the knowledge that present actors may knowingly leave future generations in an unsustainable position
- complicated patterns of cause and effect
- past responsibilities
- diversity of actors who engage with and shape climate law – ranging from banks to NGOs to mayors to industry associations to pension funds to citizen coalitions to international financial institutions

# The science of global climate change

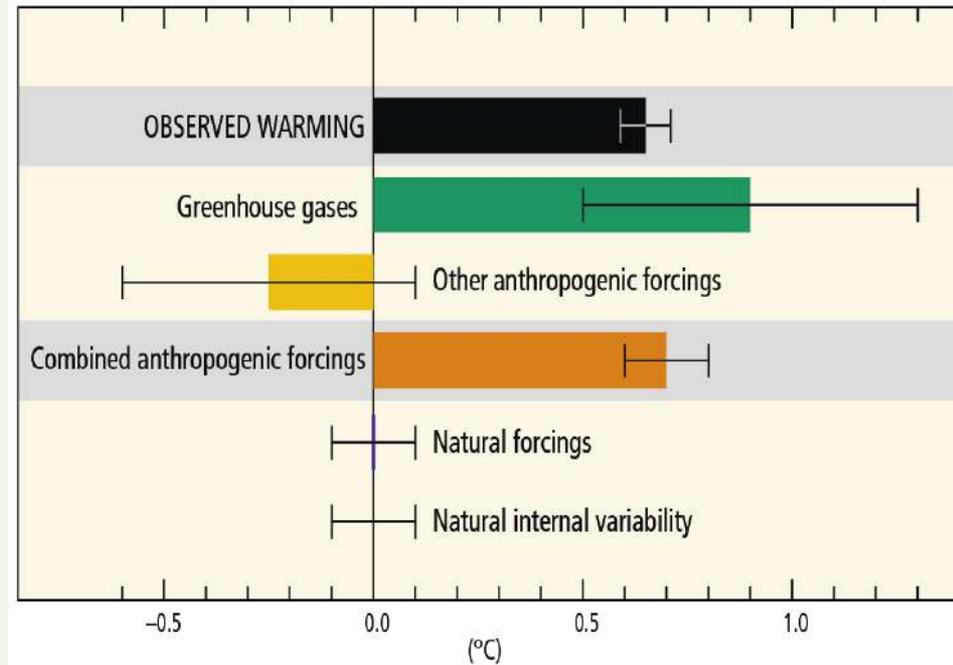
- Climate change as a global problem
  - Increase in global temperature
  - Sea level rise
  - Sea ice decrease
  - Changes in precipitation, more drought and more flooding



# The science of global climate change

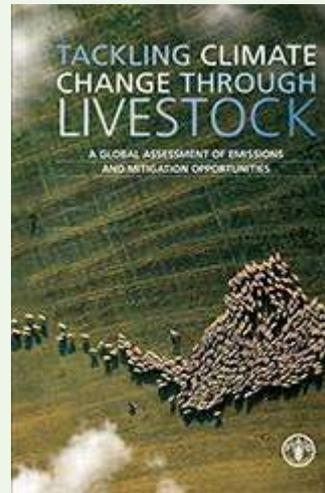
- Warming of the atmosphere and ocean system is *unequivocal*.
- It is *extremely likely* that human influence has been the dominant cause of observed warming since 1950.
- Concentration of greenhouse gases (GHGs) in the atmosphere has increased to levels unprecedented on earth in 800,000 years.
- The global surface temperature increase by the end of the 21st century is *likely* to exceed 1.5 C relative to the 1850 to 1900 period for most scenarios, and is *likely* to exceed 2.0 C for many scenarios.

Contributions to observed surface temperature change over the period 1951–2010



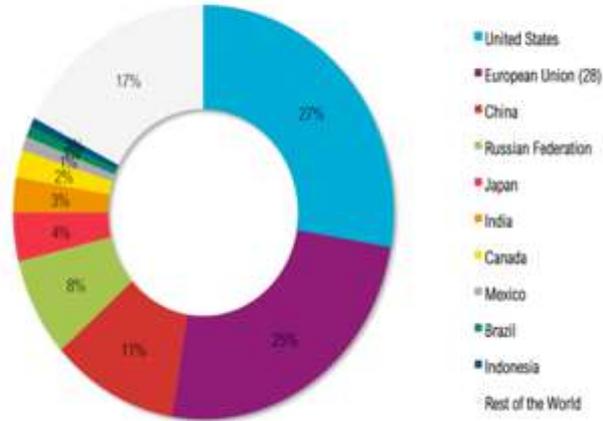
# Causes of global climate change

- Emissions of GHGs (CO<sub>2</sub>, methane, nitrous oxide and fluorocarbons)
- Burning of coal, oil, and gas produces CO<sub>2</sub> emissions
  - ❖ energy and cement production now account for about 90% of total CO<sub>2</sub> emissions
- Deforestation
- Increased livestock farming
- Economic and population growth further drive CO<sub>2</sub> emission increases from fossil fuel combustion



# Changing responsibility for global climate change

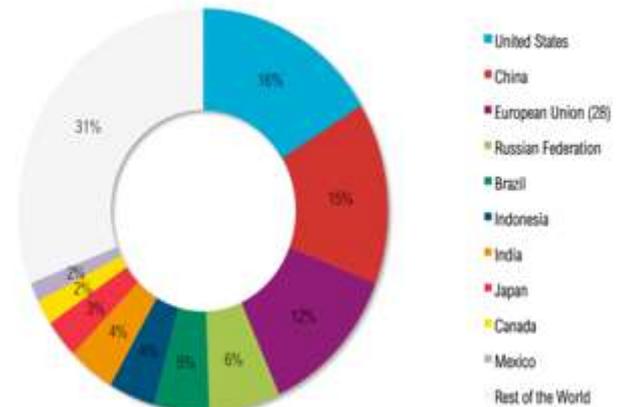
Cumulative CO<sub>2</sub> Emissions 1850–2011 (% of World Total)



<http://bit.ly/11SMjyA>

WORLD RESOURCES INSTITUTE

Cumulative GHG Emissions 1990–2011 (% of World Total)



<http://bit.ly/11SMjyA>

WORLD RESOURCES INSTITUTE

WRI, <https://wri.org/blog/2014/11/6-graphs-explain-world%E2%80%99s-top-10-emitters>

# Introduction to Global Climate Change Law

- 1992/94 UNFCCC signing and entry into force (197 Parties)
- 1997/2005 Kyoto Protocol signing and entry into force (192 Parties)
- 2015/16 Paris Agreement signing and entry into force (176 Parties)



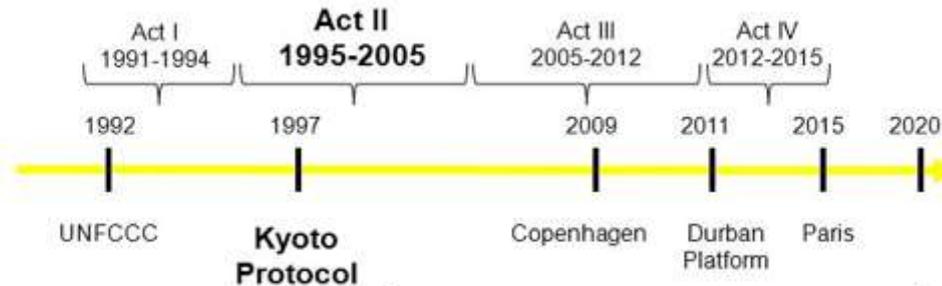
## Overview of UNFCCC

- Establishes basic system of governance
  - Ultimate objectives and principles
  - General obligations to develop national programs
  - Institutional arrangements
- No binding emissions targets
- Negotiations began in 1991, finished in 1992
- Convention opened for signature at Rio in 1992, entered into force in 1994 – 197 parties.



# Overview of Kyoto Protocol

## Act II Kyoto Protocol



- Key features:
  - Internationally-negotiated and -agreed limits on GHG emissions
    - Market-based architecture favored by US
  - Legally-binding
    - Detailed rules, rigorous accounting, compliance mechanism
  - Strong differentiation: targets applicable only to developed countries



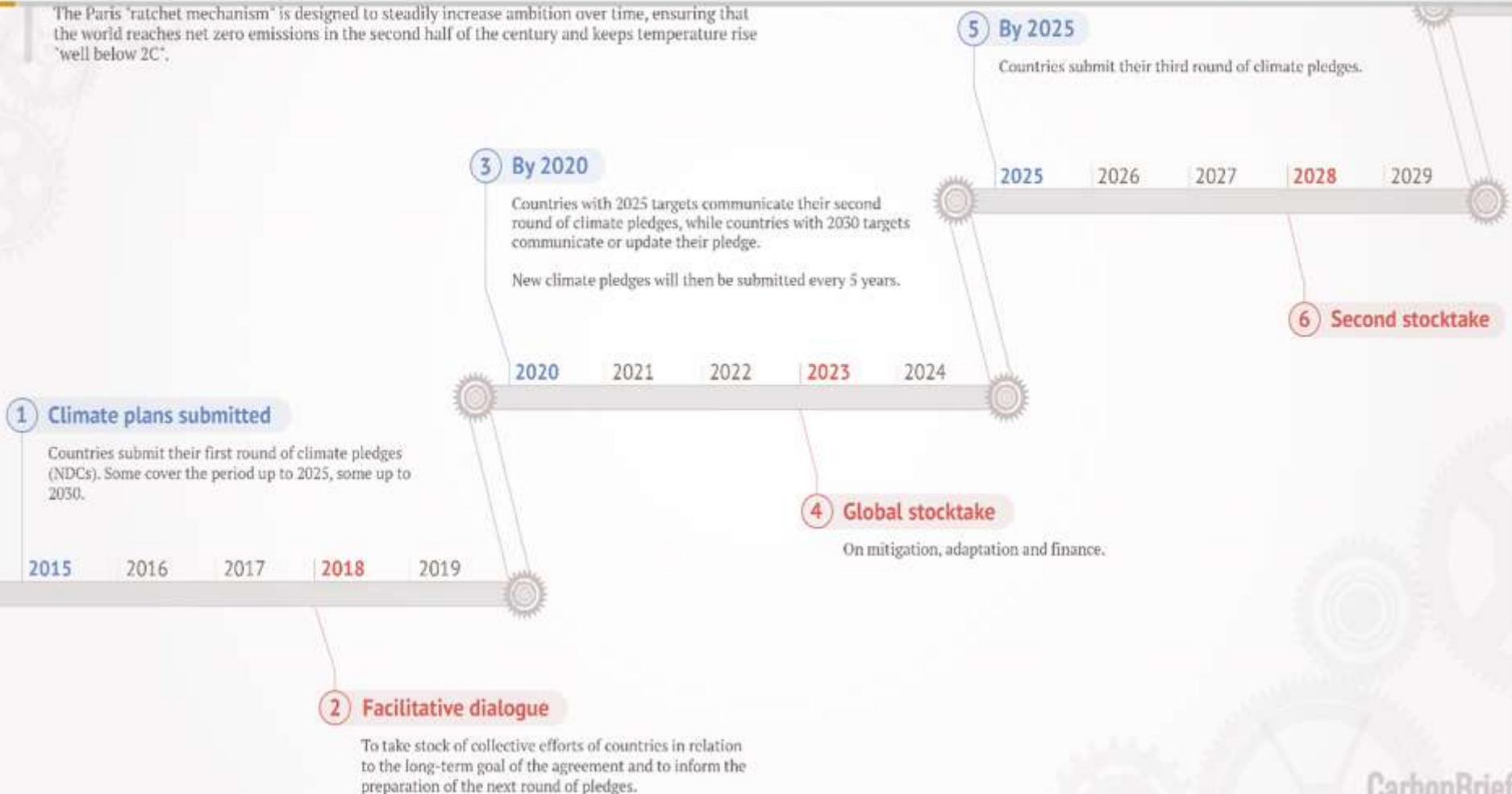
# The Paris Agreement

- Sets a global temperature goal: “well below 2°C” (Art. 2)
- Aims to reach “global peaking of GHG emissions as soon as possible,” to achieve balance of emissions and sinks by second half of 21<sup>st</sup> century (Art. 4)
- Establishes nationally determined contributions (NDCs) as way to achieve these global goals, with revisions every 5 years to increase contributions (Arts. 3 & 4)
- Sets a global stocktake every 5 years starting 2023 to assess collective achievement (Art. 14)
- Balance of finance for mitigation and adaptation (Art. 9)

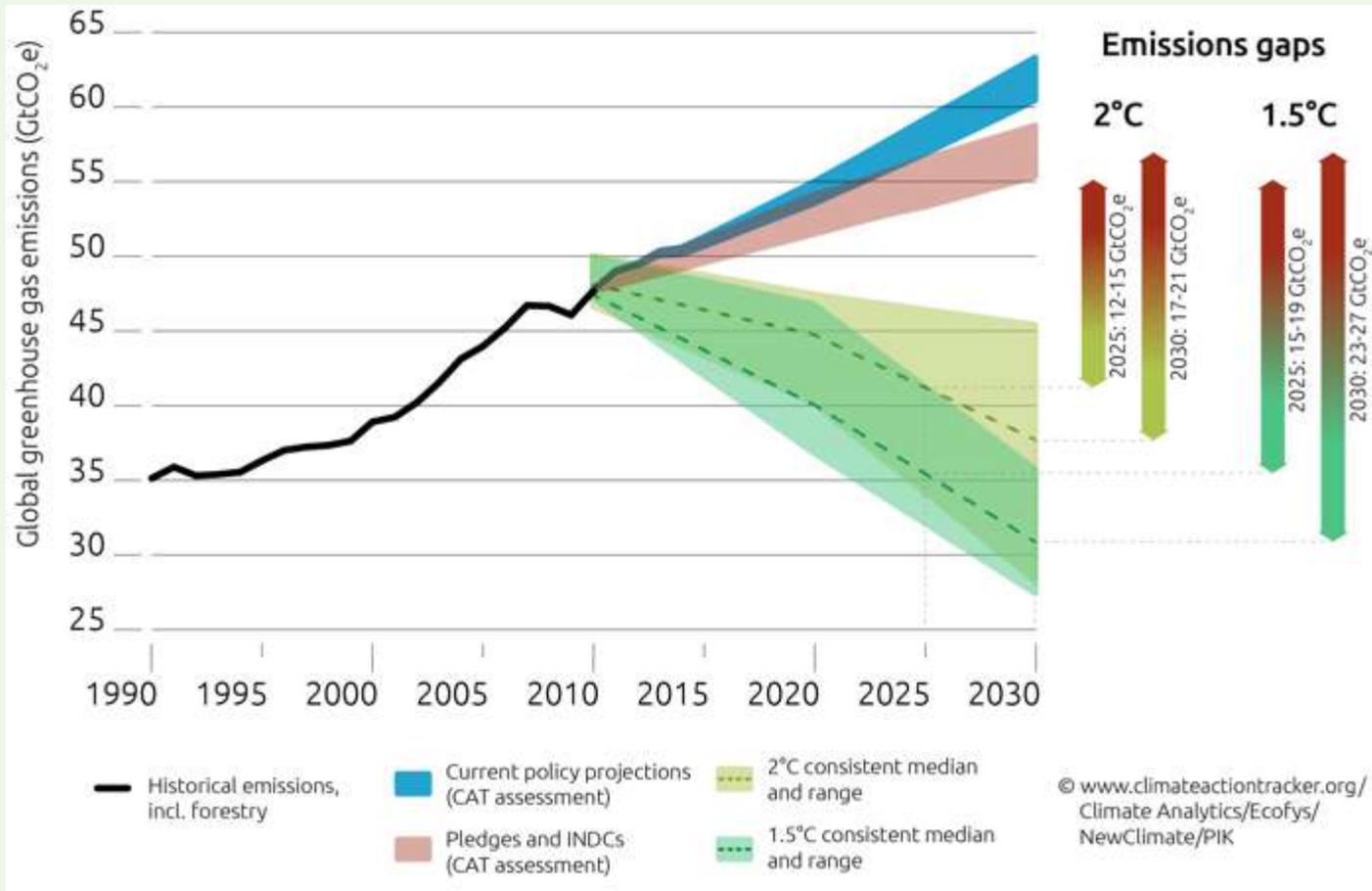


# Timeline for the Paris Agreement

The Paris 'ratchet mechanism' is designed to steadily increase ambition over time, ensuring that the world reaches net zero emissions in the second half of the century and keeps temperature rise 'well below 2C'.



# Emissions gaps of current NDCs



# Nationally Determined Contributions (NDCs)

➤ NDCs “communicate ambitious efforts” on:

- Mitigation and Adaptation
  - Finance
  - Technology transfer and capacity building
  - Transparency
- Of 176 Parties to the Paris Agreement, 169 have filed their first NDCs.



| Country          | First NDC | Country Page |
|------------------|-----------|--------------|
| MADAGASCAR       | FIRST NDC | COUNTRY PAGE |
| MALAWI           | FIRST NDC | COUNTRY PAGE |
| MALAYSIA         | FIRST NDC | COUNTRY PAGE |
| MALDIVES         | FIRST NDC | COUNTRY PAGE |
| MAU              | FIRST NDC | COUNTRY PAGE |
| MALTA            | FIRST NDC | COUNTRY PAGE |
| MARSHALL ISLANDS | FIRST NDC | COUNTRY PAGE |
| MAURITANIA       | FIRST NDC | COUNTRY PAGE |
| MAURITIUS        | FIRST NDC | COUNTRY PAGE |
| MEXICO           | FIRST NDC | COUNTRY PAGE |
| MICRONESIA       | FIRST NDC | COUNTRY PAGE |
| MONACO           | FIRST NDC | COUNTRY PAGE |
| MONGOLIA         | FIRST NDC | COUNTRY PAGE |
| MOROCCO          | FIRST NDC | COUNTRY PAGE |
| MYANMAR          | FIRST NDC | COUNTRY PAGE |



# How NDCs under Paris Agreement reinforce SDGs

## Analyzing the Degree of Alignment between the SDGs and INDCs



Source: WRI, 2016, *Examining the Alignment between the Intended Nationally Determined Contributions and the Sustainable Development Goals*



# Climate Change and the SDGs

## **SDG 13: Take urgent action to combat climate change**

13.1 Strengthen resilience

13.2 Integrate climate change into national policies

13.3 Improve education on climate change

13.a Implement developed country financial commitments

13.B Raise capacity for climate planning in LDCs and SIDS

## **SDG 7: Affordable, reliable, sustainable energy for all**

7.1 Universal access to energy

7.2 Increase renewable energy

7.3 Double global rate of energy efficiency

7.a Enhance international cooperation on clean energy research and technology

7.b Expand infrastructure for sustainable energy for all in developing countries



# Reducing Emissions from Deforestation and Forest Degradation (REDD+)

- **The Initial Idea:** Slow climate change by saving trees and reducing emissions from deforestation and forest degradation
  - REDD+:** includes the Conservation of Forest Carbon Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks
  - REDD++** extends REDD concept to land use for agricultural activity
- **The Legal Basis:**
  - The 2015 Paris Climate Accord included an explicit provision on REDD (Article 5) which draws on dozens of prior policy decisions.
  - There is a growing push through REDD+ to include avoided deforestation into future global emissions reductions schemes.



# National climate change legislation

- **Examples of national mitigation legislation**
  - Prescribing **targets** for the reduction of GHG emissions
  - Requiring **reporting** of GHG emissions for a national inventory
  - Imposing **economic measures** to reduce emissions:
    - “cap and trade”
    - carbon tax
  - Mandating **energy-specific measures**, like targets for renewable energy; feed in tariffs (“net metering”); energy efficiency standards
  - Creating **carbon sequestration measures**, like carbon farming



- As of 2018: more than 1,500 laws to mitigate and adapt to climate change have now been passed, an increase from about 60 laws in place two decades ago.

# National climate change legislation

- **Kinds of national adaptation legislation**
  - **Land and resources**
    - coastal land use controls (retreat policies)
    - endangered species protection
  - **Infrastructure**
    - building codes
    - utility siting requirements
    - updating flood insurance maps
  - **Business disputes and regulation**
    - corporate disclosure requirements
  - **Health and safety concerns**
    - vector migration education
    - drinking water protection
    - disaster response, management
  - **Governance and process**
    - environmental impact assessments
    - government planning



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# Climate Change Litigation

- **Urgenda Foundation v. the Netherlands**
    - “The Dutch government must reduce CO2 emissions by a minimum of 25% (compared to 1990) by 2020 to fulfil its obligation to protect and improve the living environment against the imminent danger caused by climate change.”
  - **Ashgar Leghari v. Pakistan**
    - government of Pakistan ordered to implement the National Climate Change Policy and convened a Climate Change Commission to oversee and report to the Court on progress.
  - **Philippines**
    - Human rights petition against top 47 climate polluters, “Carbon Majors”
- Enables the teaching fast-moving developments in law
  - Climate litigation also teaches comparative environmental law
  - The regulatory role of climate lawsuits



# Tracking Climate Change Litigation

- **THE STATUS OF CLIMATE CHANGE LITIGATION : A GLOBAL REVIEW**

United Nations Environment Programme ; Columbia University, Sabin Center for Climate Change Law (2017-05),

<http://wedocs.unep.org/handle/20.500.11822/20767>

- **GLOBAL TRENDS IN CLIMATE CHANGE LEGISLATION AND LITIGATION: 2018 SNAPSHOT**

Grantham Institute on Climate Change and the Environment et al,

<http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/04/Global-trends-in-climate-change-legislation-and-litigation-2018-snapshot-2.pdf>

