
International climate policy: Aftermath of Paris

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Outline

- ❑ Swing through time
- ❑ Highlights of the Paris Agreement
- ❑ Aftermath of Paris: Key challenges going forward
- ❑ Group discussion: Priorities post-Paris for countries
- ❑ Credibility of the Paris agreement
- ❑ Policy implications

Swing through time

1992



2017



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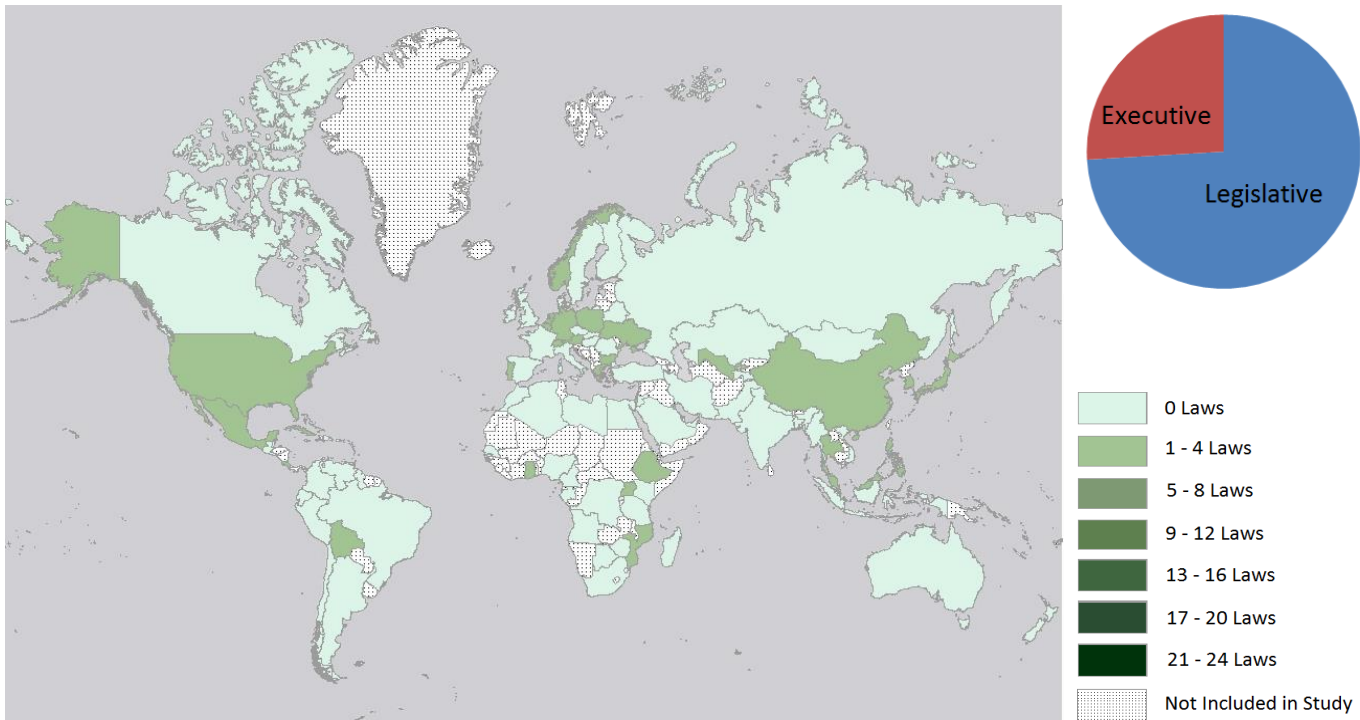
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Swing through time: 25 years of international effort

- ❑ 1992: UNFCCC and other Rio Convention adopted
- ❑ 1997: Kyoto Protocol with GHG targets for developed countries for 2008-2012; focused on mitigation; market-based mechanisms
- ❑ 2001: Marrakesh Accords: Kyoto Protocol's rulebook agreed adopted
- ❑ 2007: Bali Action plan, negotiations on post-2012 framework; growing importance of adaptation
- ❑ 2009: Copenhagen (perceived failure) 2010: Cancun agreements
- ❑ 2011: Mandate to reach new agreement by 2015 in Paris
- ❑ 2012: amendments for the 2nd commitment period of the KP agreed

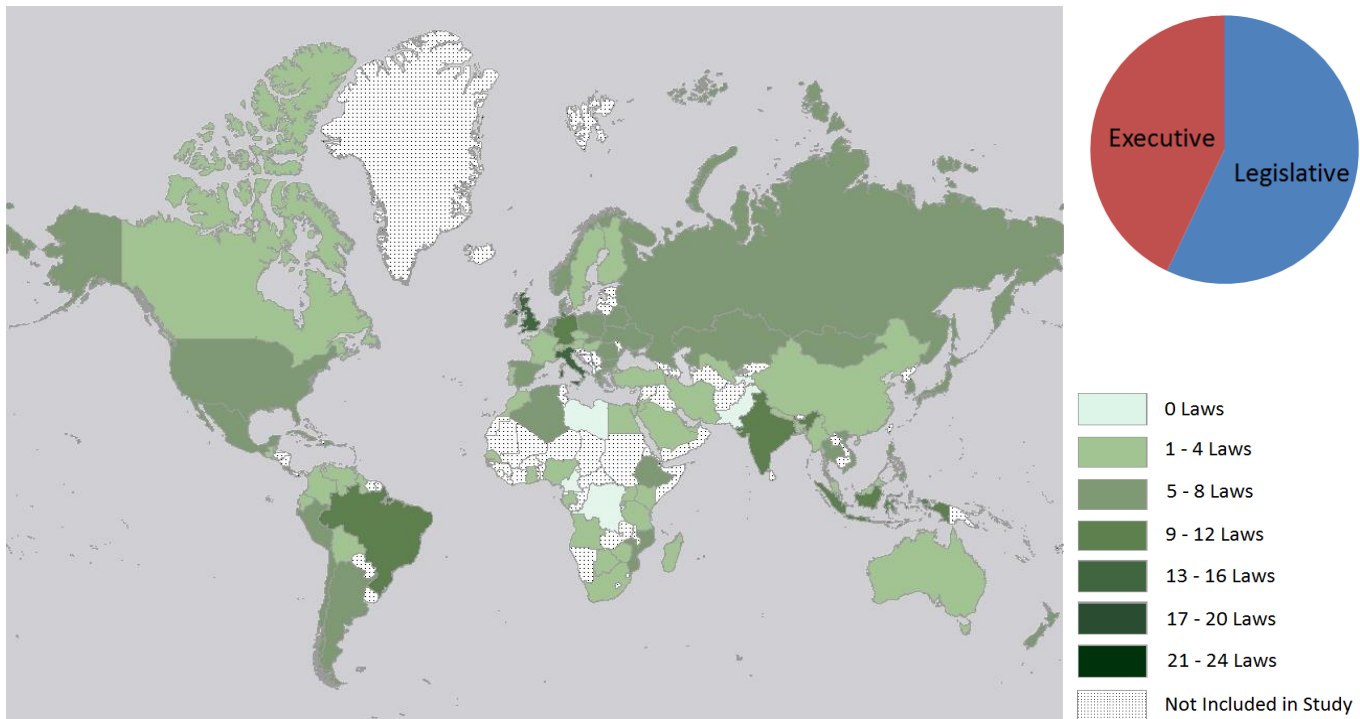
From UNFCCC (1992) to the Paris agreement (2017)

The number of climate or climate-related laws has gone up from around 50 in 1997 (the year of the Kyoto Protocol)...



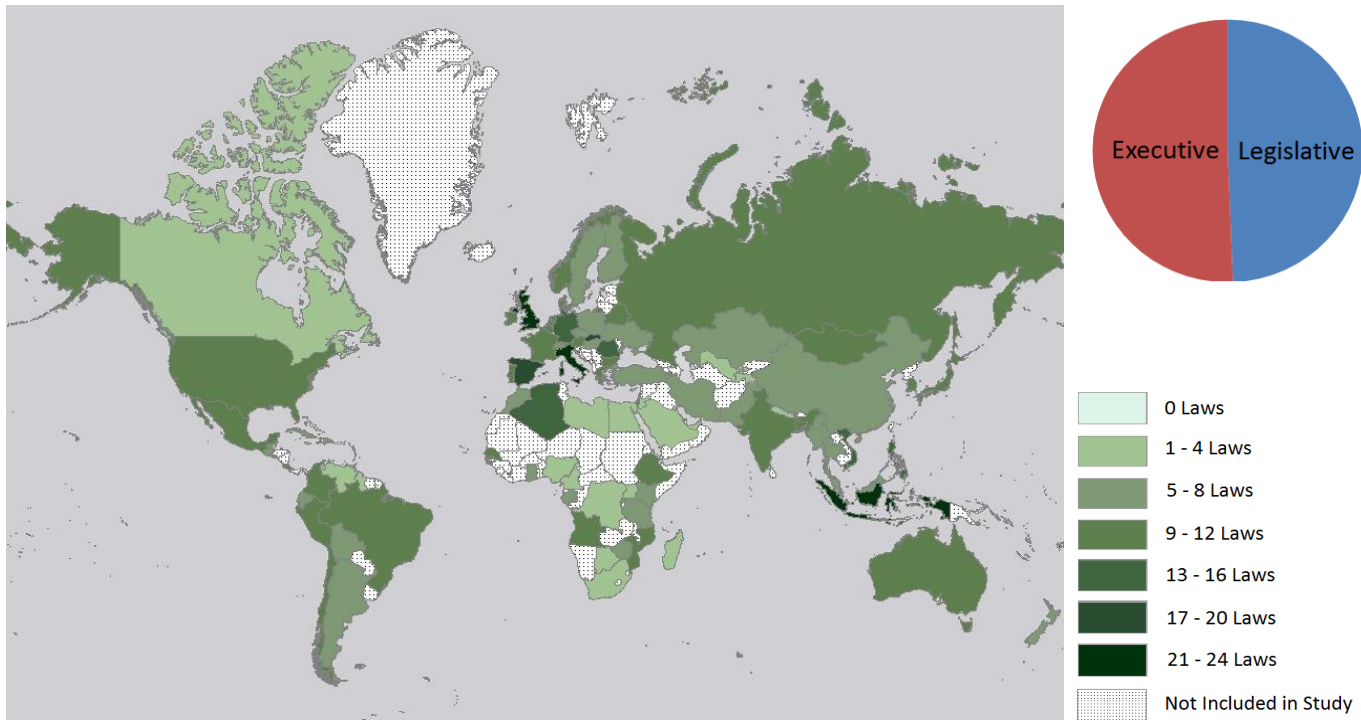
From UNFCCC (1992) to the Paris agreement (2017)

... to 400 climate or climate-related laws in 2009 (ahead of the Copenhagen Summit)...



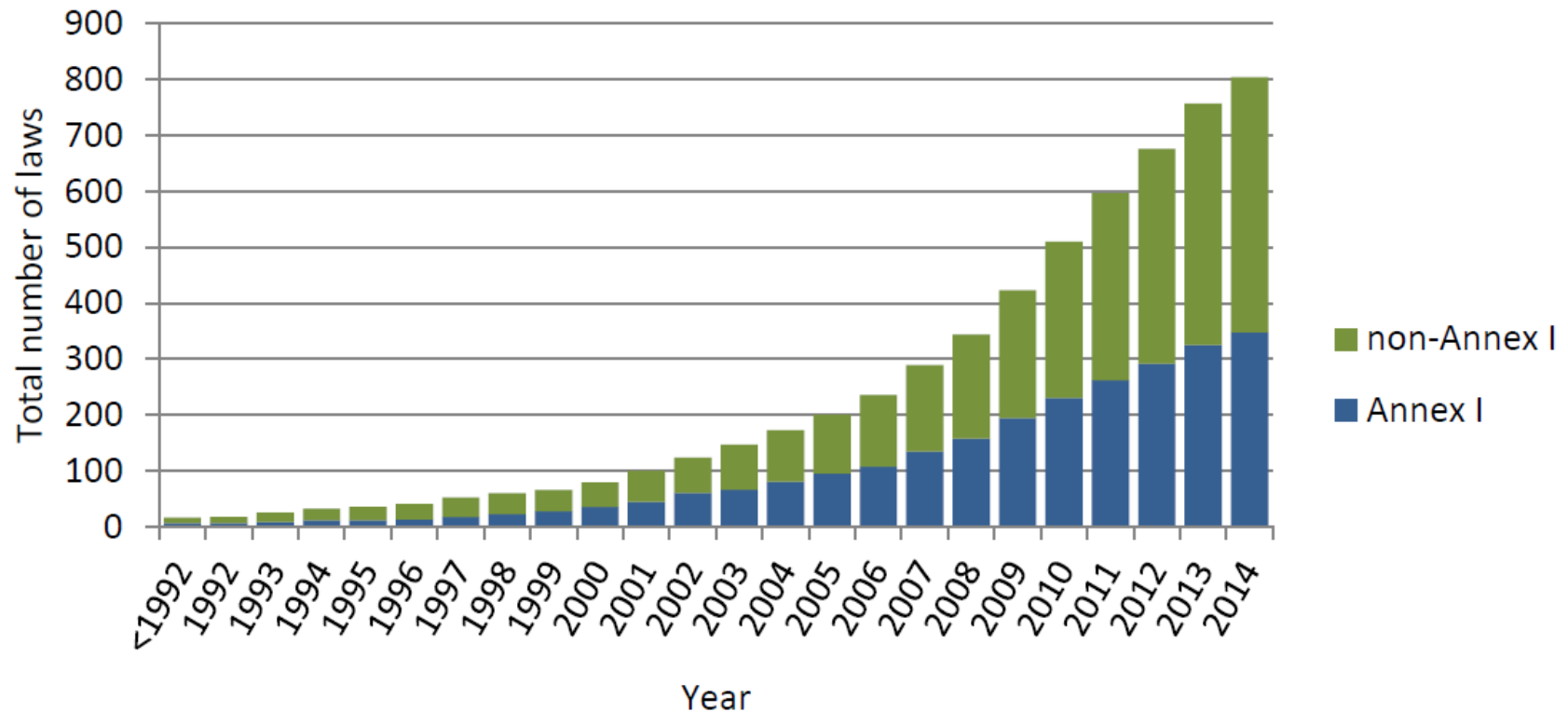
From UNFCCC (1992) to the Paris agreement (2017)

... to over 800 climate or climate-related laws at the end of 2014 (ahead of the Paris Summit in December 2015).



Number of climate laws doubles every 4-5 years

There are now over 800 climate laws and policies worldwide
From 54 laws when Kyoto was signed, and 426 in Copenhagen



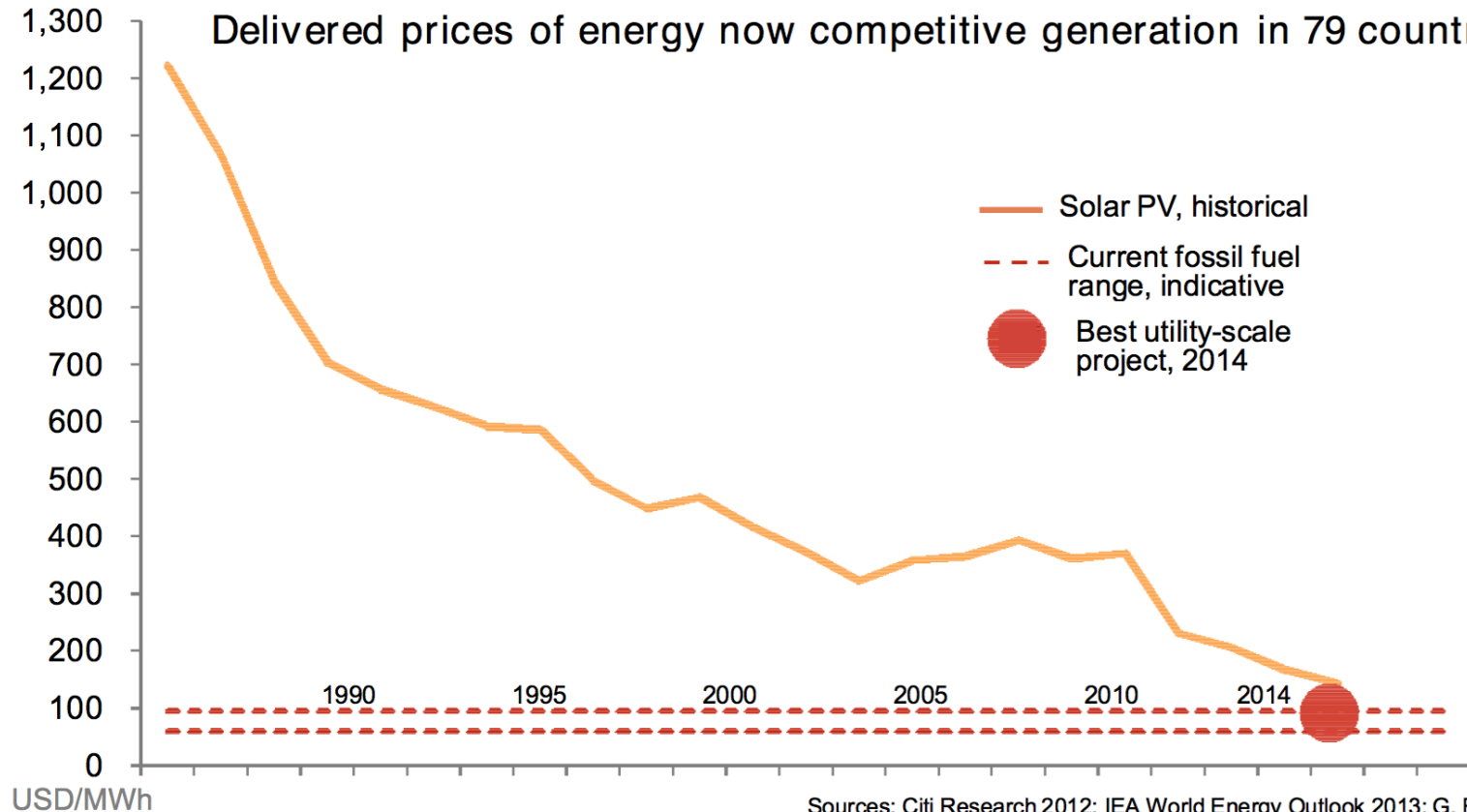
Source: 2015 Global Climate Legislation Study
Center for Climate Change
Economics and Policy

Technical progress

Solar PV module installed costs have fallen around 50% since 2010: currently well below \$1/watt.

System prices have come down by a factor of 4 over the last 7-8 years.

Delivered prices of energy now competitive generation in 79 countries.



Sources: Citi Research 2012; IEA World Energy Outlook 2013; G. F Nemet, "Beyond the learning curve", Energy Policy 34, 3218-3232 (2006)

Yet politics remained a challenge

- ❑ Equity considerations
 - ❑ Burden sharing
 - ❑ Who pays for actions by developing countries
- ❑ Additional challenges of economic and financial crisis/austerity
- ❑ Political and legal challenges of going for legally binding agreement in the US and China
- ❑ Short-termism of politicians across board
- ❑ Lack of trust

Paris: Make or break & Learning from the Copenhagen failure



Paris: Political tipping point?

- ❑ Largest number of participants in UNFCCC history
 - ❑ 30,372 total: 19,208 governments, 6306 NGOs, 2798 media (Copenhagen-27,294 participants)
- ❑ Largest COP site - ~1km²
- ❑ Largest number of heads of state (150) under one roof in the world history



12 December 2015: Paris Agreement Adopted



“For the first time, every country in the world has pledged to curb emissions, strengthen resilience and join in common cause to take climate action. What was once unthinkable has become unstoppable.”

Ban Ki-moon
UN Secretary-General



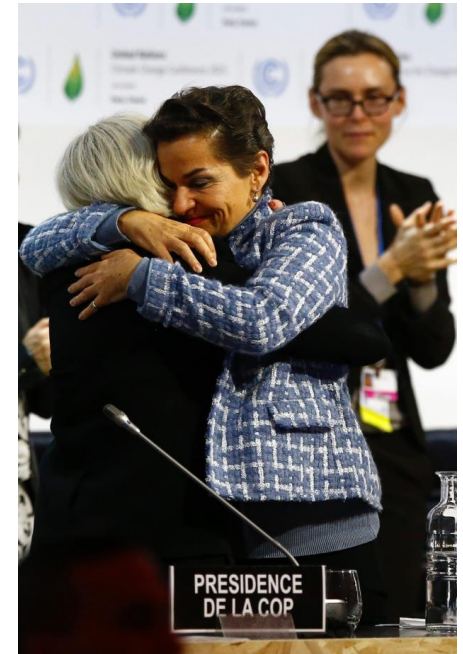
Nations Unies
Conférence sur les Changements Climatiques 2015

COP21/CMP11

Paris, France



Arnaud Bouissou - MEDIE / SG COP21



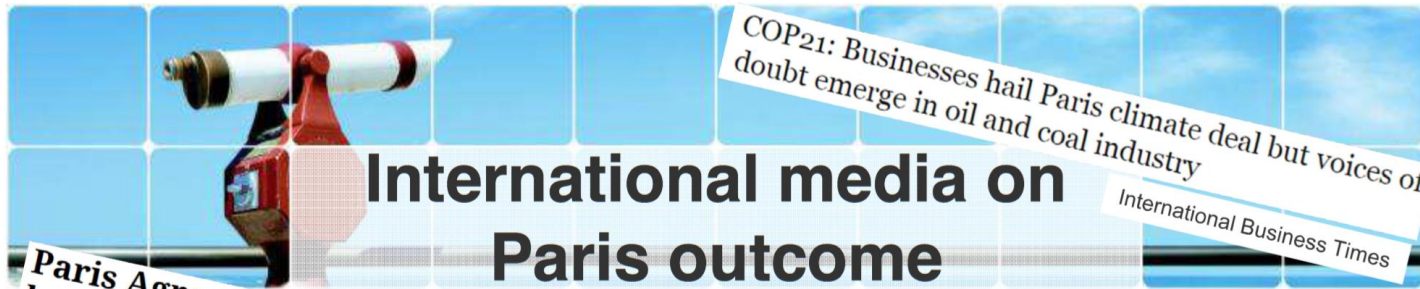
PRESIDENCE
DE LA COP



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International media on Paris outcome

COP21: Businesses hail Paris climate deal but voices of doubt emerge in oil and coal industry
International Business Times

Paris Agreement: No big losers at COP21, here's how everyone won something
Indian Express

Cop21 talks 'great success' for UAE
The National

COP21: The Paris climate deal is our best chance to save the planet - but every nation needs to support it
The Independent

Big polluters see no short-term change
Financial Times

Tears of joy as historic deal passed: Politicians hail deal to halt climate change after the world FINALLY agrees to work together to cut emissions
The Daily Mail

温暖化対策の新枠組み「パリ協定」を採択 COP21
Asahi Shimbun

Grand promises of Paris climate deal undermined by squalid retrenchments
The Guardian

Nations Approve Landmark Climate Accord in Paris
New York Times

"It's a fraud really, a fake.." "It's just bullshit for them to say: 'We'll have a 2C warming target and then try to do a little better every five years.' It's just worthless words. There is no action, just promises. As long as fossil fuels appear to be the cheapest fuels out there, they will be continued to be burned"

James Hansen in Guardian



Highlights of the Paris Agreement (PA)

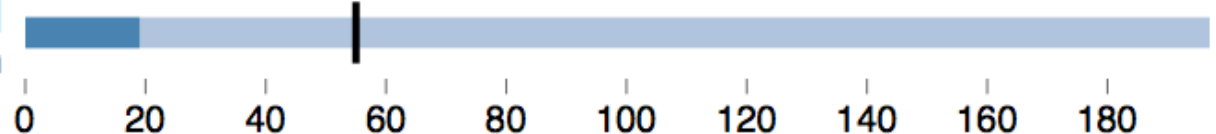
- ❑ Agreed by all 195 UNFCCC Parties as the basis of international long-term action from 2020
- ❑ 20 pages decision with a workplan to flesh out PA and pre-2020 action and 12 pages Paris Agreement as annex
- ❑ Undertake action to keep warming “**well below 2C**” and “**pursue efforts for 1.5C**”
- ❑ Recognises that **a gap in emissions** exists between what is planned and what is required, and that peaking of emissions must happen “as soon as possible”
- ❑ **USD 100bn annual** financial support from developed countries will be a floor from 2020. Developing countries encouraged to provide finance if in a position to do so
- ❑ **Loss and damage** provisions for the worst hit and poorest regions.
- ❑ Recognises the shift from “**billions to trillions**” and the important role for public finance to mobilise private investment
- ❑ Global **stocktake on progress** every 5 years from 2023, assessment in 2018



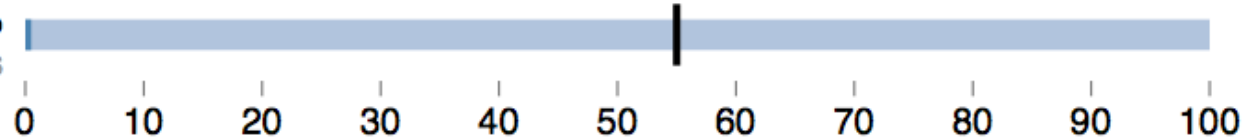
Entry into force and ratification

- ❑ PA enters into force after at least 55 UNFCCC Parties accounting for at least an estimated 55 % of the total GHG emissions have deposited their instruments of ratification, acceptance, approval or accession
- ❑ Opened for signature on 22 April 2016. As of 29 June 2016, there are 178 signatories to the Paris Agreement.

19 Parties have ratified
of 197 Parties to the Convention

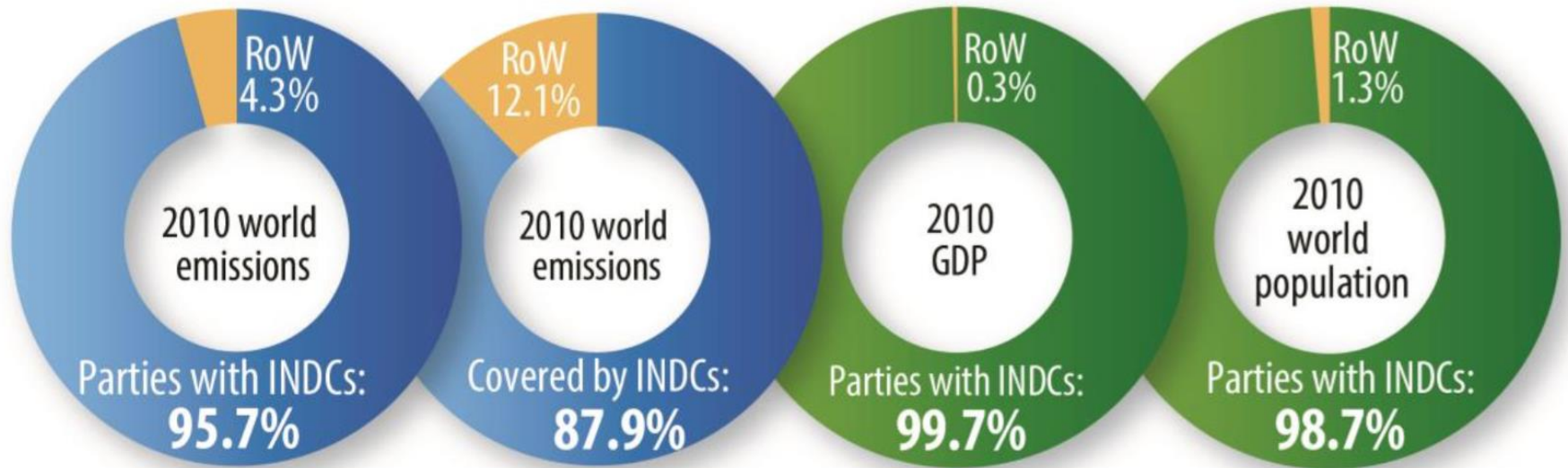


Accounting for 0.18%
of global GHG emissions



Nationally Determined Contributions (NDCs)

Coverage of the communicated intended nationally determined contributions as at 4 April 2016

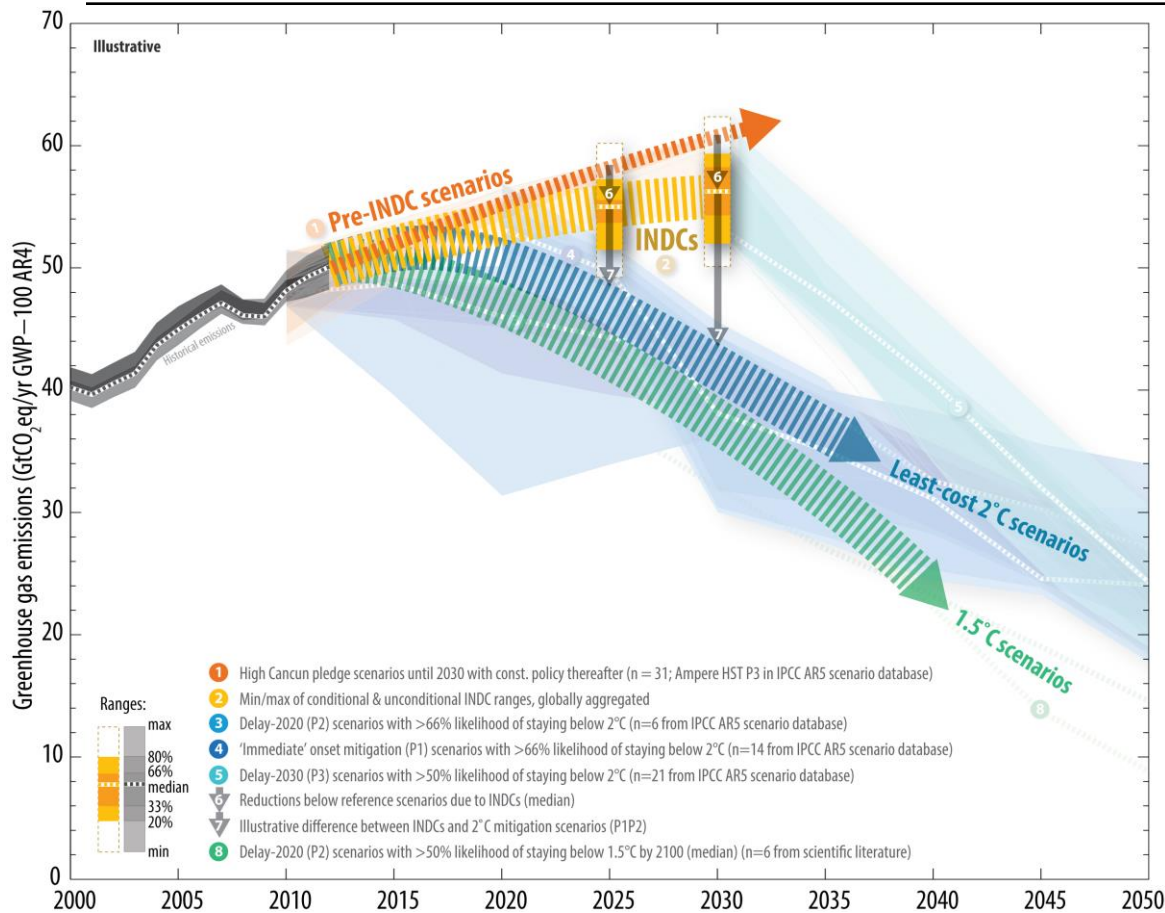


Source: UNFCCC Synthesis report on the INDCs, 2016.

Key issues for global action



Challenge 1: Filling the emission gap & ramping up ambition



- All countries participate in mitigation through NDCs
- Industrialized countries to have absolute targets
- Developing to move over time towards economy wide reduction or limitation targets
- Estimated aggregate annual global emission levels resulting from the INDCs **do not fall within least-cost 2 ° C scenarios** by 2025 and 2030

Source: UNFCCC
Synthesis report on
the INDCs, 2016.

- Credibility of NDCs
- Drivers of increasing ambition individually and collectively
- Long term socioeconomic trends, technology development & deployment
- Incentivizing non-state action

Concrete initiatives agreed

- ❑ **Mission Innovation** (to double public R&D spending in 21 countries/mostly G20 by 2020);
- ❑ **International Solar Alliance** (121 countries led by France and India to mobilise one trillion dollars by 2030);
- ❑ **Breakthrough Energy Coalition** (group of private sector giants and investors headed by Bill Gates, Tom Steyer, Richard Branson, George Soros, etc.);
- ❑ **Decarbonisation Portfolio Coalition** to decarbonise USD 600 bn in assets

Challenge: Identifying priority interventions & scaling-up



Non-State Action

- ❑ The Paris Action Agenda:
Encouraged to log actions into UNFCCC NAZCA Platform
 - ❑ 10,800 commitments: Over 2000 cities, 150 regions, 2000 companies, 425 investors and 200 civil society organisations.
- ❑ Decarbonisation Portfolio Coalition
 - ❑ Overseeing the decarbonisation of USD 600 bn in assets from 25 institutional investors (e.g. Allianz)
- ❑ Paris Pledge for Action – 700 cities <http://newsroom.unfccc.int/unfccc-newsroom/paris-pledge/>
- ❑ Examples:
 - ❑ Paul Polman, car companies, airlines, other business etc.
 - ❑ IKEA committed to 100% RES by 2020. It invests a total of US 2bn over the next five years
 - ❑ Apple committed to power all its offices, data centers and retail stores with 100% RES.
 - ❑ BT has a contract to purchase 100% renewable electricity for all UK operations, estimated to represent around 0.75% of all power use in the UK.



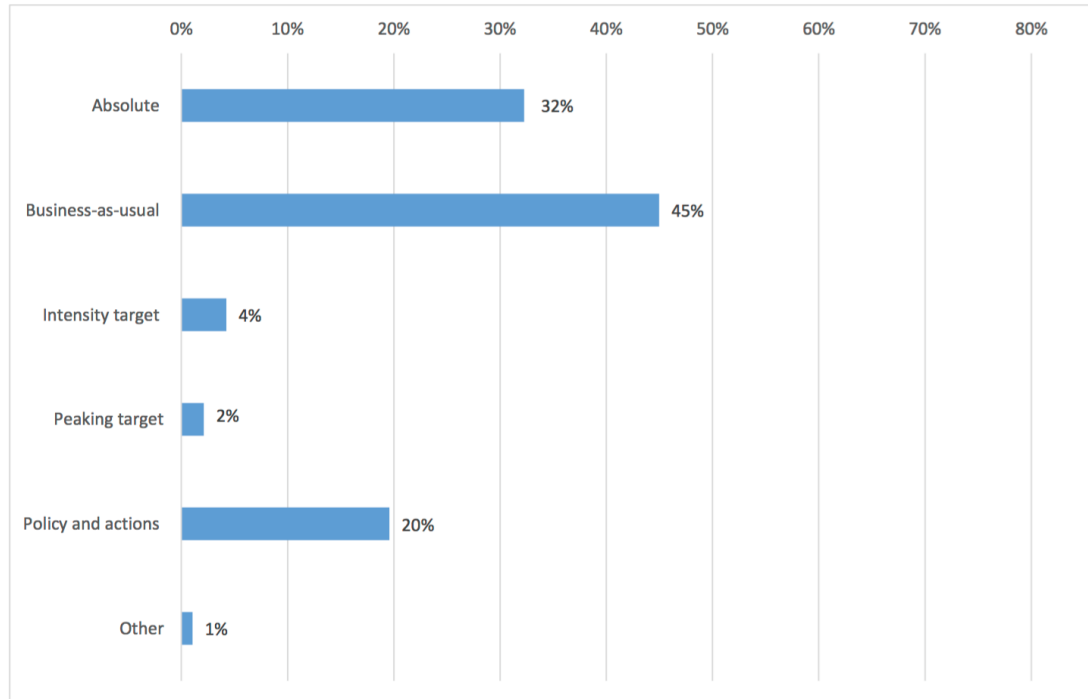
Challenges:

- Maintaining momentum: recognition & relationship to multilateral process
- Quantifying outcomes of action, avoiding double counting



Challenge 2: National implementation pathways, strategies

Types of mitigation target communicated in the intended nationally determined contributions



- ☐ Are national NDCs still ambitious enough post-Paris? (UK, EU)
- ☐ National implementation pathways, policies, politics (e.g. Clean Power Plan)
- ☐ Financing NDCs
- ☐ Priority areas for international support
- ☐ Private sector/ winners and losers

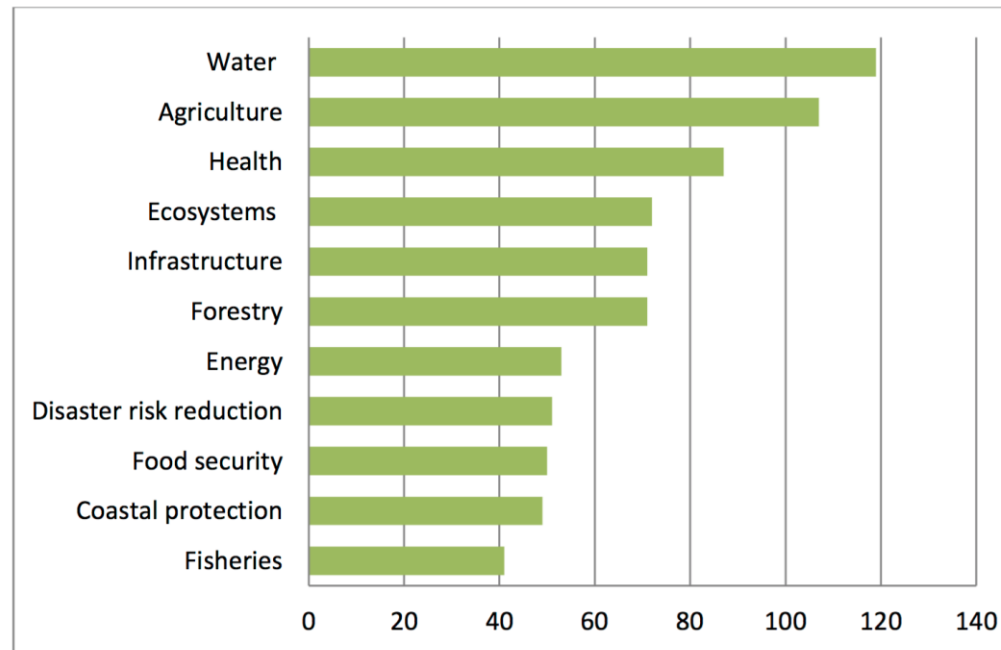
Note: The percentages shown are percentages of the Parties that submitted an INDC by 4 April 2016.

Source: UNFCCC Synthesis report on the INDCs.

Challenge 3: Implementing and financing adaptation & loss and damage

Priority areas and sectors for adaptation actions identified in the adaptation component of the communicated intended nationally determined contributions

(number of Parties referring to area or sector)



- ❑ Global goal & formal recognition of developing country efforts
- ❑ Cooperation should be strengthened, improved effectiveness and durability
- ❑ Adaptation plans with prioritization to be communicated periodically
- ❑ By 1 October 2015 100 Parties/38 LDCs included adaptation in INDCs
- ❑ Individual financial needs in NDCs from USD 100 mln to 200 bn up to 2025/30 (some USD 10mln to USD 3bn per year)
- ❑ Decision-making tools and capacities
- ❑ Methodologies for assessing adaptation needs/adequacy and effectiveness of adaptation (46b)
- ❑ Loss & Damage: Warsaw Mechanism continues, details still open

Challenge 4: Transparency and stocktake

- ❑ Transparency both for action and support (Article 13)
 - ❑ Clarity and progress of NDCs, achievement of NDC
 - ❑ Mandatory inventory as per IPCC good practice guidance
 - ❑ Support provided - finance, technology and capacity building
 - ❑ Build on UNFCCC approaches used to date
 - ❑ Non-intrusive, non-punitive, national sovereignty
 - ❑ Technical expert review, not defined in detail
 - ❑ Flexibility for developing countries
 - ❑ Accounting rules/methodological consistency/double counting
- Measurement & aggregation of various types of NDCs for stocktaking
 - Assessment of adaptation action
 - Quality control internationally
 - How to foster 'compliance' under the bottom-up mechanism?



Information needs strengthening

- ❑ GHG emissions inventories
 - ❑ Many outdated, incomparable inventories
 - ❑ 59 countries (all non Annex I) have official data from 2009 or earlier
- ❑ Climate change risk assessments
 - ❑ Only 37 countries produced national risk assessments which go beyond that in the national communication to the UNFCCC

Source: 2015 Global Climate Legislation Study



Challenge 5: Financing the transition

- ❑ Industrialized countries should continue to take the lead, progression beyond current efforts, intend to continue 100 billion \$, to be increased from 2025
- ❑ Developing countries can provide climate finance voluntarily and report on it
- ❑ Biennial communication of volumes and forecasts
- ❑ Funds: GCF, LDCF, SCCF, GEF as entities, AF maybe
- ❑ Simplified project approvals for LDCs and SIDS
- ❑ Significant role of public funds
- ❑ Should aim for balance between mitigation and adaptation
- ❑ All countries can use a market mechanism that combines features of CDM and JI
- ❑ Further market mechanisms (“cooperative approaches”) are possible, but not yet defined

Group discussion

- ☐ What are the top 5 five priorities/challenges post-Paris for my chosen country?
 - ☐ Group 1: United States
 - ☐ Group 2: China
 - ☐ Group 3: European Union
 - ☐ Group 4: Kenya



China Outlook

- ❑ **Likelihood of achieving NDC targets:** likely to meet its NDC targets to peak carbon emissions by 2030 and reduce the energy intensity by 60-65% by 2030 below 2005. But its overall GHGs are likely to continue to grow beyond 2030.
- ❑ **Increasing the ambition to keep temperature rise below 2 degrees:** requires China to overshoot the carbon intensity target in its NDC by 5-10% to 70% below 2005 levels and implement policies to reduce emissions of *non-CO₂* gases from chemicals and electrical industry.
- ❑ **Enhanced MRV:** Regions and industries (including SOEs) that suffer economic losses as a result of CC policies may seek to evade them. MRV and enforcement capacity will need to be improved.
- ❑ **Energy market reform to increase RE penetration:** further support will be required. As RE sources compete for grid access with fossil fuel in a flat energy market, the former may continue to be under-utilised, as local governments and market operators favour coal-fired utilities.
- ❑ **Develop transition strategies for steel and coal mining:** phasing down high-carbon and energy-intensive industries such as coal mining, coal-fired power generation, and steelmaking. Up to 100 billion yuan (\$15.27 billion) annually committed to cover the lay-offs in the steel and coal industry.



US Outlook

- ❑ **Likelihood of achieving NDC targets:** To meet NDC of 26-28 % reduction below 2005 by 2025, US needs to increase its ambition in the power sector, more comprehensive policies for coal mining, agriculture and forestry. Clean Power Plan is key for meeting the target,
- ❑ **Executive branch action can drive climate policy :**High degree of separation of powers between the Congress and executive branches makes alignment of different priorities difficult. Yet it vests the executive with powers to develop policies independently. Climate Action Plan in June 2013 directed federal agencies to reduce carbon emissions and proposed the Clean Power Plan, which aims to cut carbon emissions from the power sector by 32 per cent compared to 2005 levels by 2030 (risk of roll-back with elections?)
- ❑ **Subnational action as driver:** Authority extends beyond that of the Federal government or is shared with the federal and state governments. E.g.19 states to (representing 36% of GHG reductions to be delivered by the CPP) continue with CPP despite the stay by the Supreme Court.
- ❑ **Importance of energy intensive industries:** affects government's willingness to implement ambitious climate policies and gives industrial interests a strong voice in US climate policy-making. However, the economic importance of the energy intensive industries varies greatly between states, which means that there are leaders and laggards in climate policy at the state and local level.



EU Outlook

- ❑ **Likelihood of achieving NDC targets:** With current policy assessments the EU's emissions are likely to exceed its 2030 target by about 5-10%. It will need to at least double the annual rate of emission reductions from 2015 onward to meet the 2030 target focussing on power generation, industry, transport and buildings.
- ❑ **Reform despite resistance:** dealing with resistance from Member States with large fossil fuel resources and/or large pollution-intensive sectors as it moves ahead with the Energy Union and the reform of the EU ETS.
- ❑ **Energy Union as a give-and-take:** high-level compromises will be required. E.g. Germany might further help CER partners in modernising energy infrastructure, in return for acceptance a continuation of European decarbonisation ambition. Or France may cease its insistence on a strong public intervention into energy markets and prices if the price of allowances for the EU ETS is sufficiently high to make its nuclear power generators more competitive. However, such package at the European level will require heads of states and government rather than ministers of energy and environment.
- ❑ **More flexible energy grids:** Up to half of the generation capacity is expected to come from RE sources by 2030. With a quarter of this capacity coming from variable sources (wind and solar) the EU will need to work through the Energy Union to smooth out variability of supply, requiring greater interconnections and investment in capacity markets and demand-side management.



Paris: A tipping point?

❑ Political

- ❑ Multilateral solution with universal political support
- ❑ 187 countries moving forward with national action pledges
- ❑ Positive momentum to national processes

❑ Economic

- ❑ Policy certainty / direction of travel - to reach a balance of emissions/net zero by second half of century
- ❑ Policy confidence in that the existing ambition will *ratchet up* every five years to adjust and benefit from improved technology costs and knowledge.
- ❑ Transparency: new common accountability regime to provide information to investors on the opportunities and risks lie.

❑ Normative

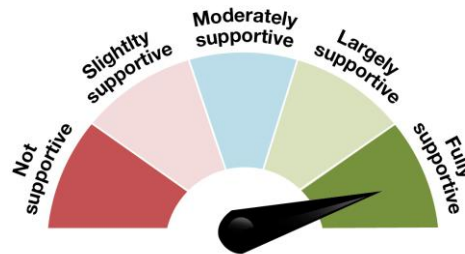
- ❑ Some shift from burden-sharing as the main ethical argument
- ❑ Irrelevance of science sceptics / economic skepticism coming to front
- ❑ Rise in public attention and support: non-state action around Paris, businesses, cities, regions, youth, faith communities, etc.

YET many political and technical challenges ahead!

Many of the biggest battles next move to the national & local levels.

Credibility of the NDCs

- ❑ Identify the determinants that have been suggested to increase credibility of policy/pledges by past theoretical and empirical studies
- ❑ Assess what these determinants could consist of applied to climate mitigation
- ❑ Identify a simplified set of indicators that can be used as a proxy for the evaluation of the determinants of credibility at a country level
- ❑ Assess these determinants at a country level on the scale from “not supportive” to “fully supportive” to credibility
- ❑ Apply the framework to G20 countries to illustrate overall trends



Credibility of the INDCs/pledges determines the extent to which others believe that they will be achieved

Determinants supporting credibility of INDCs

Elements	Determinants
Rules and procedures	Coherent and comprehensive legislative and policy basis
	Transparent, inclusive and effective decision-making process with sufficient political
Players and organisations	Dedicated public bodies supported by consultative mechanisms
	Supportive private bodies
Norms and opinions	A history of active international engagement on environmental issues
	Climate-aware public opinion
Past performance	Track record of delivering on past climate change commitments
	No history of policy abolition

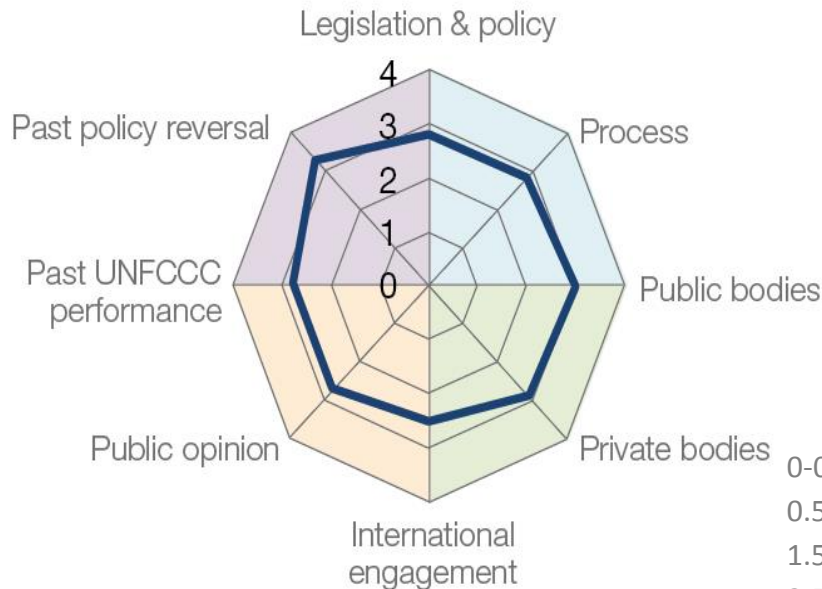
Indicators of credible transition governance

- ❑ Legislation & policy
 - ❑ High-level vision: long-term and near term objectives, framework legislation
 - ❑ Economy-wide emissions reduction targets; supporting sectoral policies
 - ❑ Carbon pricing policies
 - ❑ Barriers: fossil fuel subsidies
- ❑ Process
 - ❑ Mechanism for building buy-in from stakeholders
 - ❑ Stable, consistent & not easily reversible law & policy-making process (veto points)
 - ❑ Transparent, consistent and effective administrative and enforcement mechanisms
- ❑ Players
 - ❑ Dedicated public bodies supported by consultative mechanisms/ Supportive lobby groups

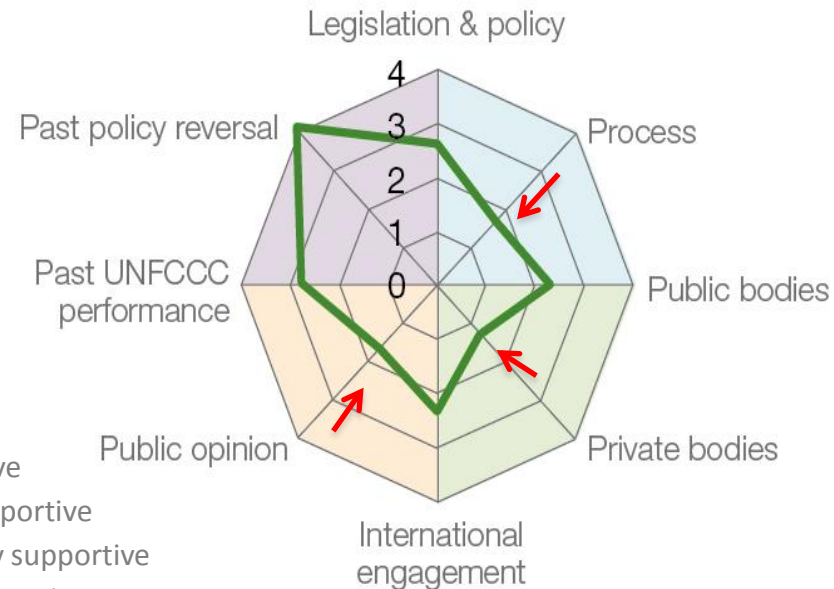


G20: Credibility of the NDC pledges

Industrialised economies



Developing/emerging economies

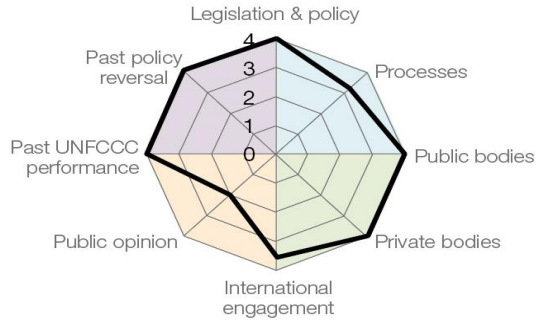


0-0.5: not supportive
0.5-1.5: slightly supportive
1.5-2.5: moderately supportive
2.5-3.5: largely supportive
3.5-4: fully supportive

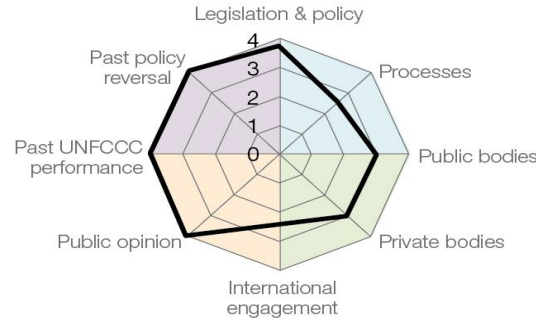
- ❑ The G20 has all the determinants on average moderately to largely supportive of credibility
- ❑ Need for framework legislation; stronger domestic targets; improved policy; reduced fossil fuel subsidies
- ❑ In emerging economies determinants are less supportive of credibility, in particular on **process**, **private bodies** and **public opinion**
- ❑ Scope for capacity building and awareness raising

Countries with most determinants 'largely supportive' to the credibility of mitigation pledges

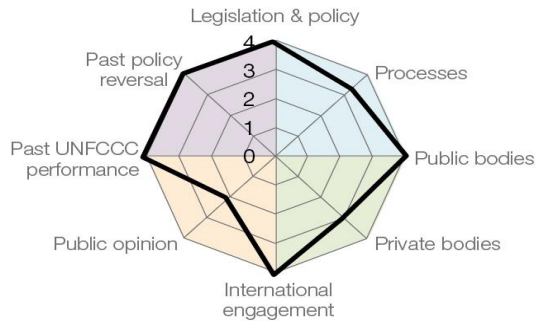
European Union



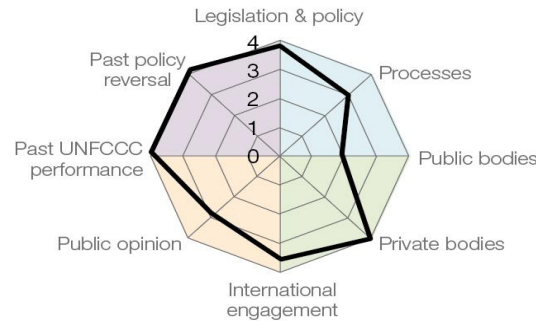
Korea



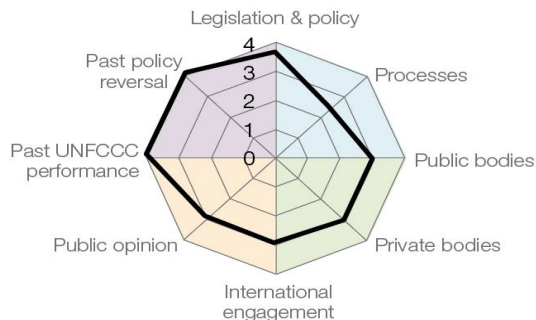
Germany



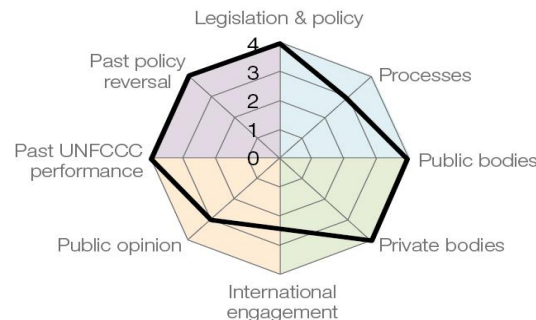
France



Italy



United Kingdom

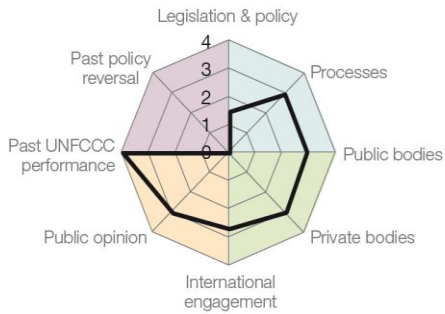


Top performers are countries with six or more of the eight determinants being 'fully supportive' or 'largely supportive' to credibility, and with no significant weakness (no determinant being slightly or not supportive)

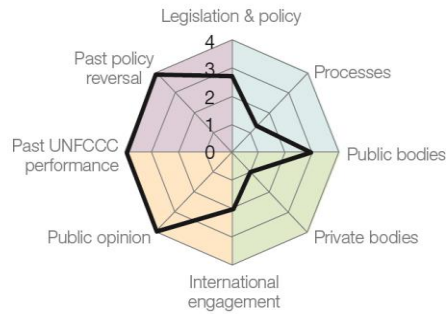
0-0.5: not supportive
0.5-1.5: slightly supportive
1.5-2.5: moderately supportive
2.5-3.5: largely supportive
3.5-4: fully supportive

Countries with most determinants 'moderately supportive' to credibility

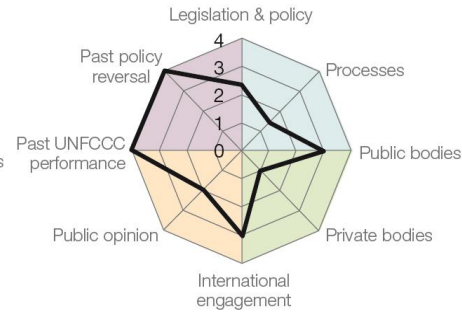
Australia



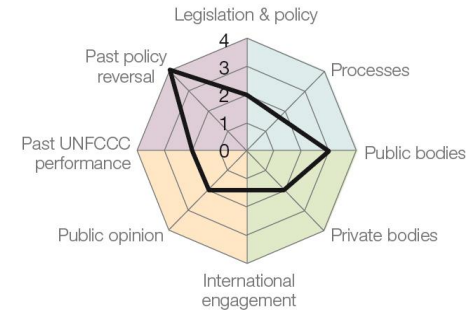
Brazil



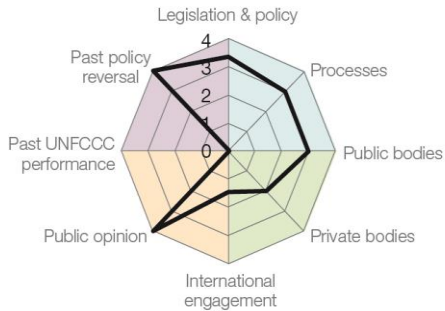
Russian Federation



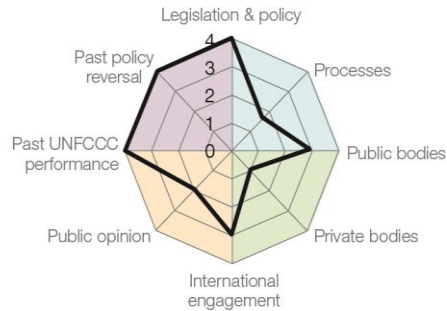
Turkey



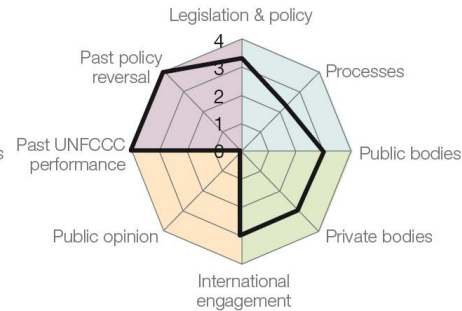
Japan



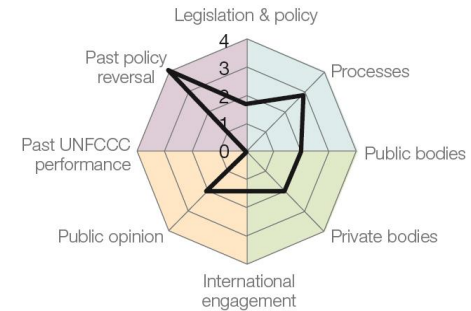
Mexico



South Africa



United States



0-0.5: not supportive

0.5-1.5: slightly supportive

1.5-2.5: moderately supportive

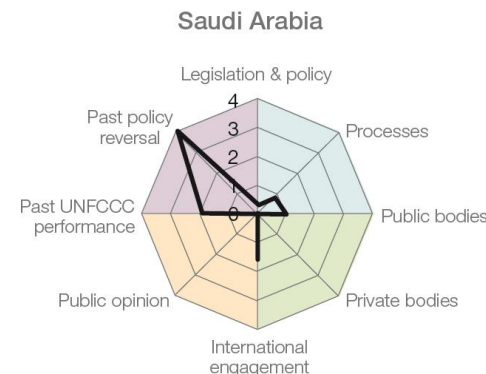
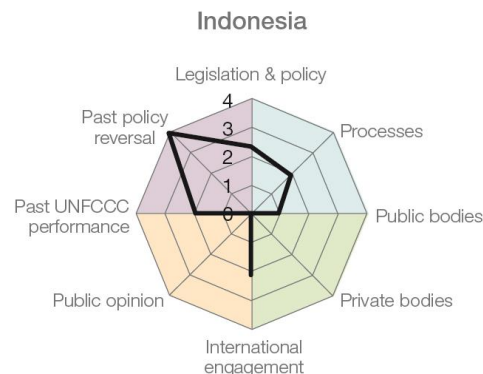
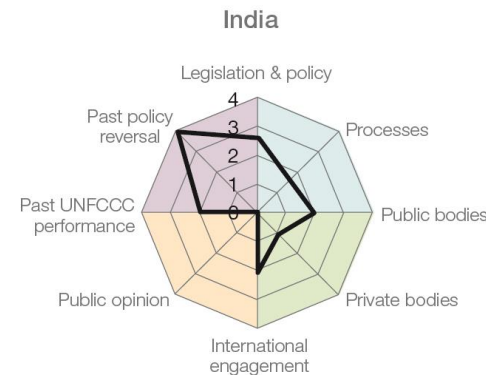
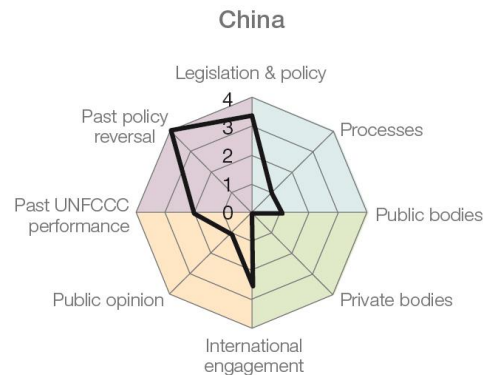
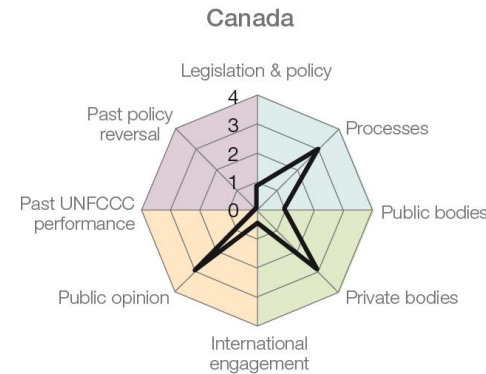
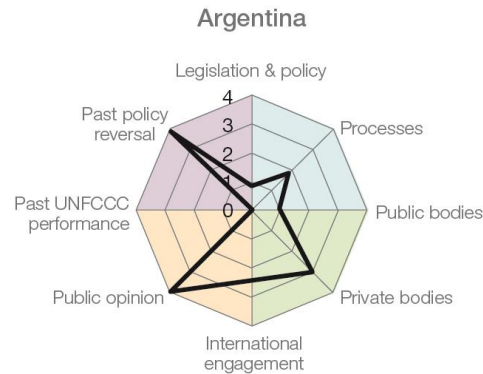
2.5-3.5: largely supportive

3.5-4: fully supportive



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Countries with potential for increasing support to credibility across several determinants



0-0.5: not supportive
 0.5-1.5: slightly supportive
 1.5-2.5: moderately supportive
 2.5-3.5: largely supportive
 3.5-4: fully supportive

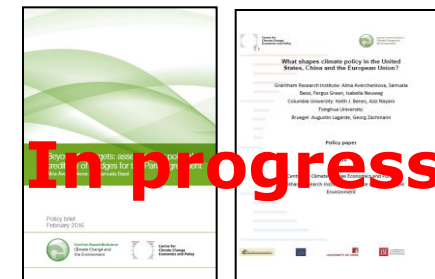
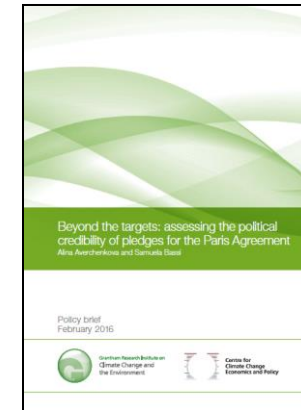


Policy implications

- ❑ **Success not merely determined by the level of INDCs**, but also by perception of their credibility (trust, prospect for ratcheting up & investment)
- ❑ Credibility is driven by multiple factors that interact and reinforce each other
- ❑ Country-level **rules & procedures, players & organizations, norms and past performance** can be indicative of the INDC's credibility
- ❑ Other dynamic factors: leadership, political consensus and the timing of elections
- ❑ G20 as a group scores moderately well across all the determinants: **No country has no credible basis for their INDCs**. Differences at the country level.
- ❑ **Policy makers can directly influence** some of the determinants, and hence strengthen credibility of their pledges and implementation
- ❑ **Transparency and better communication** is important for enhancing credibility, attracting investment and stronger position in negotiations
- ❑ Translating INDCs into credible legislation and policy at the national level is the critical next step

For more information see:

- ❑ Averchenkova, A. and Bassi, S. 2016. ***Beyond the targets: assessing the political credibility of pledges for the Paris Agreement.*** Policy brief
http://www.lse.ac.uk/GranthamInstitute/publication/beyond-the_targets/
- ❑ Neuweg, I., Averchenkova, A., Bassi, S. & Green, F. (GRI), Keith Benes (Columbia University), Lagarde, A. & Zachmann, G. (Bruegel) and Tsinghua University, forthcoming. ***What shapes climate policy in the United States, China and the European Union?*** Policy brief and Policy paper



Policy brief Policy paper



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Christiana Figueres (Executive Secretary, UNFCCC)

<http://www.lse.ac.uk/GranthamInstitute/legislation/>



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