United Nations Framework Convention on Climate Change

Synthesis report on the aggregate effect of INDCs

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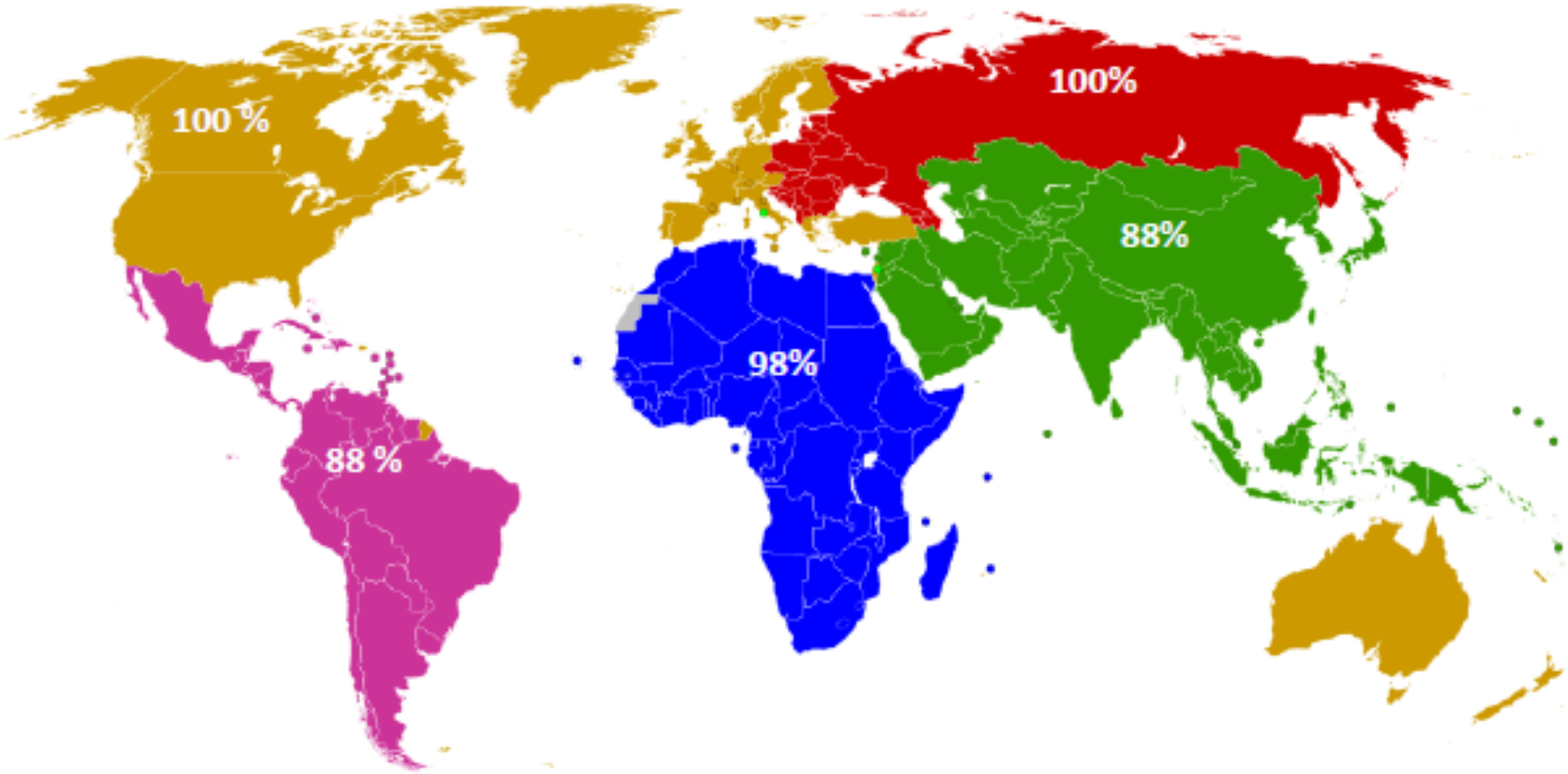
UNFCCC secretariat, MDA

- Total INDCs received: 156
- Parties covered: 184 / 94%
- Global emissions covered: 94%

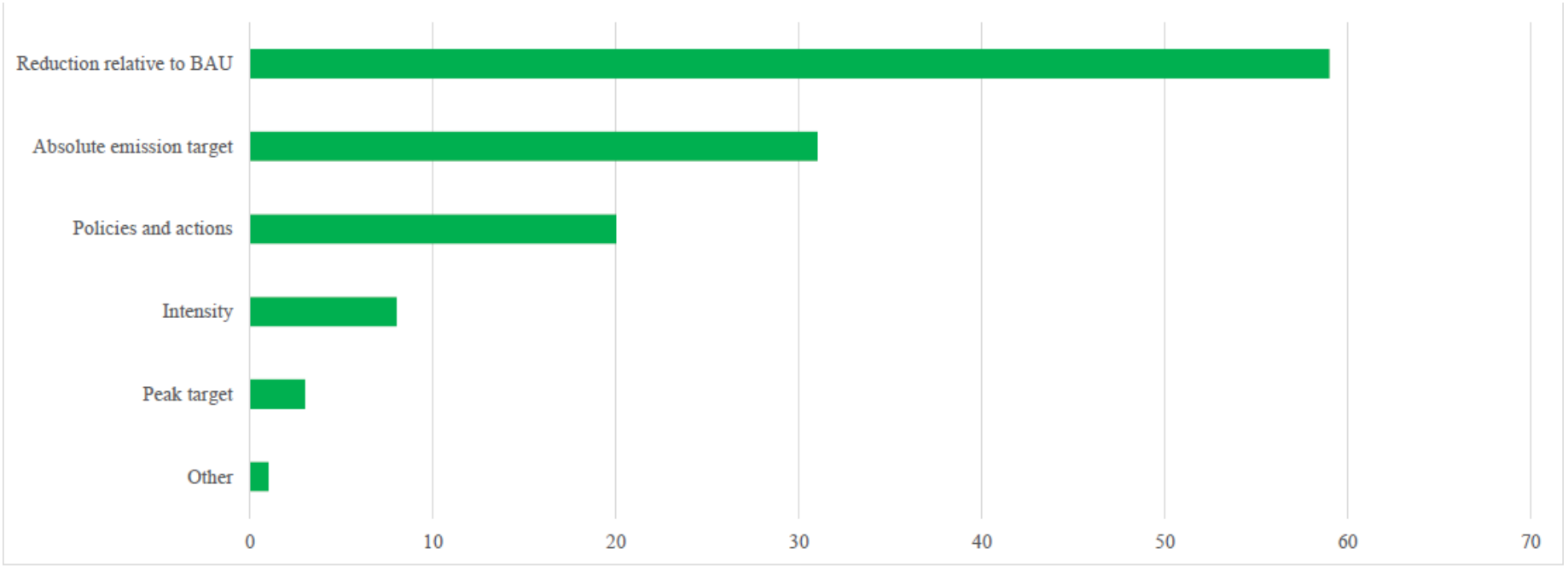
Regional participation



- Synthesis of information
- Global aggregate emissions in 2025 and 2030, and in relation to:
  - Past and present levels (1990, 2000 and 2010)
  - Reference case (pre 2020 action)
  - Cost optimal scenarios towards 2C
- Adaptation component
- Emerging trends

119 INDCs by 147 Parties

86 % of 2010 emissions


Reduction relative to BAU
Absolute emission target
Policies and actions
Intensity
Peak target
Other
0
10
20
30
40
50
60
70

- Many up to 2030
- A few up to 2025.
- A few both 2025 and 2030
- A few up to 2035, 2040 or 2050,

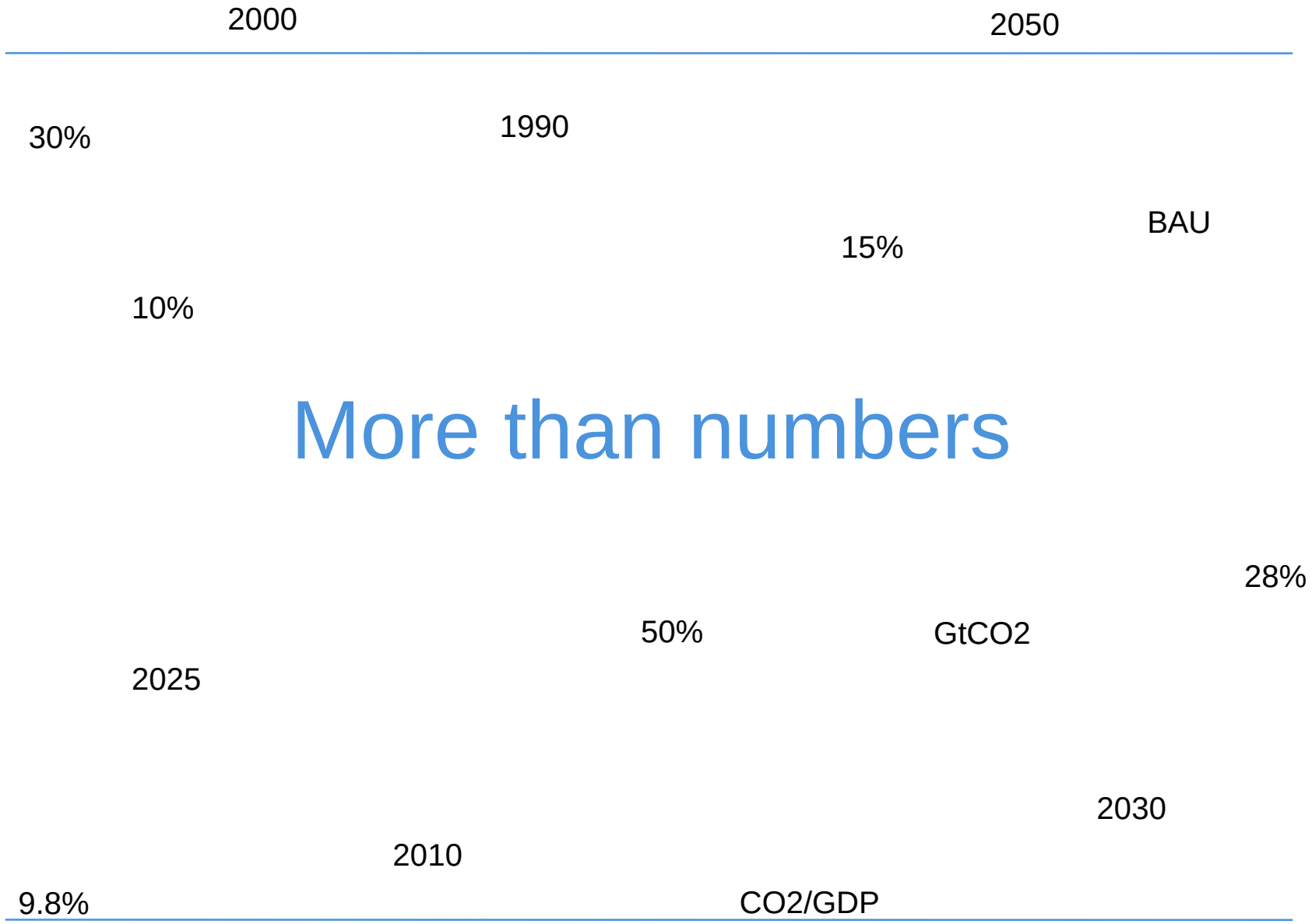
- General: Outcome of the ADP, efforts of others, markets and forests
- Some include an unconditional mitigation component alongside an enhanced conditional one

- Comparisons with the past
- Narratives on national efforts
- References to IPCC
- Use of indicators (efficiency, energy matrix, emissions per capita or GDP)
- No conditional components
- Link to national priorities

- General statements on the need for finance, technology and capacity building

- Specific on the conditions to implement INDCs or any conditional component

- Coverage
- Assumptions and methodologies
- Planning processes


2000
2050
30%
1990
BAU
15%
10%
More than numbers
28%
50%
GtCO2
2025
2030
2010
9.8%
CO2/GDP

- Increasing **participation in and scope** of climate action
  - National in scope and quantified
- Increasing **institutional and political** processes
  - Some backed by law
  - Higher public acceptance
- Increasing interest in **cooperation**
  - Markets
  - Finance, technology and technical assistance
- Increasing **ambition** and commitment to 2C
  - Balance national circumstances with science

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Methods and Effect

Side event at COP 21

1 December, 2015

Barbara Muik, UNFCCC secretariat, MDA

Methods

Estimates of global emissions in 2025 and 2030

- Party by Party calculation; country-level analysis limited to GHG emissions covered by the INDCs

- Adding:
  - Aggregate levels of emissions resulting from the implementation of the communicated INDCs in 2025 and 2030

  - Levels of emissions not covered by the INDCs in 2025 and 2030 using IPCC (pre-INDC) reference scenarios; emission growth rates of relevant countries, regions, sectors and gases

Estimates of global emissions in 2025 and 2030

- Extrapolations/interpolations for 2025/2030, when needed

- Emission level expressed as a median value with an associated range (20th to 80th percentile)
  - Ranges of effort expressed by Parties in their submissions
  - Conditions expressed by Parties in their submissions
  - Uncertainties underlying the aggregation of the INDCs

Estimates of cumulative CO_2 emissions

- Linearly estimated trajectory of GHG emissions between the last historical data point and estimated emission levels for 2020, 2025 and 2030
- Share of CO_2 emissions of total GHG emissions from the IPCC pre-INDC reference scenarios
- Summed for the cumulative emission estimate, starting after 2011
- Cumulative emissions in line with keeping global average temperature rise below 2°C from contribution of Working Group I to IPCC AR5

Estimates of global emissions 2025/2030 in relation to

- The global emission levels in 1990, 2000 and 2010
  - Contribution of Working Group III to the AR5; harmonised with 2005 emissions from the IPCC pre-INDC reference scenarios and adjusted for the different GWP values

- The global emission levels in 2025 and 2030 corresponding to pre-INDC trajectories
  - IPCC AR5 database: 22 reference scenarios under the AMPERE project; reflecting the effect from the efforts communicated by Parties for the pre-2020 period and assumed no change in climate policies thereafter until 2030

Estimates of global emissions 2025/2030 in relation to

- The global emission levels in 2025 and 2030 corresponding to 2 °C scenarios
  - IPCC AR5 database: all scenarios with a 66% or higher probability of remaining below 2°C over the course of the 21st century
  - P1 policy scenarios: immediate (e.g. as of 2010) enhanced global mitigation action that is sufficient to achieve a least-cost emission trajectory over the course of the 21st century
  - P2 policy scenarios: enhanced global mitigation action as of 2020 that is sufficient to achieve a least-cost emission trajectory over the course of the 21st century

Aggregate effect

Global emissions levels

2025

55
(52-57)
Gt CO_2 eq

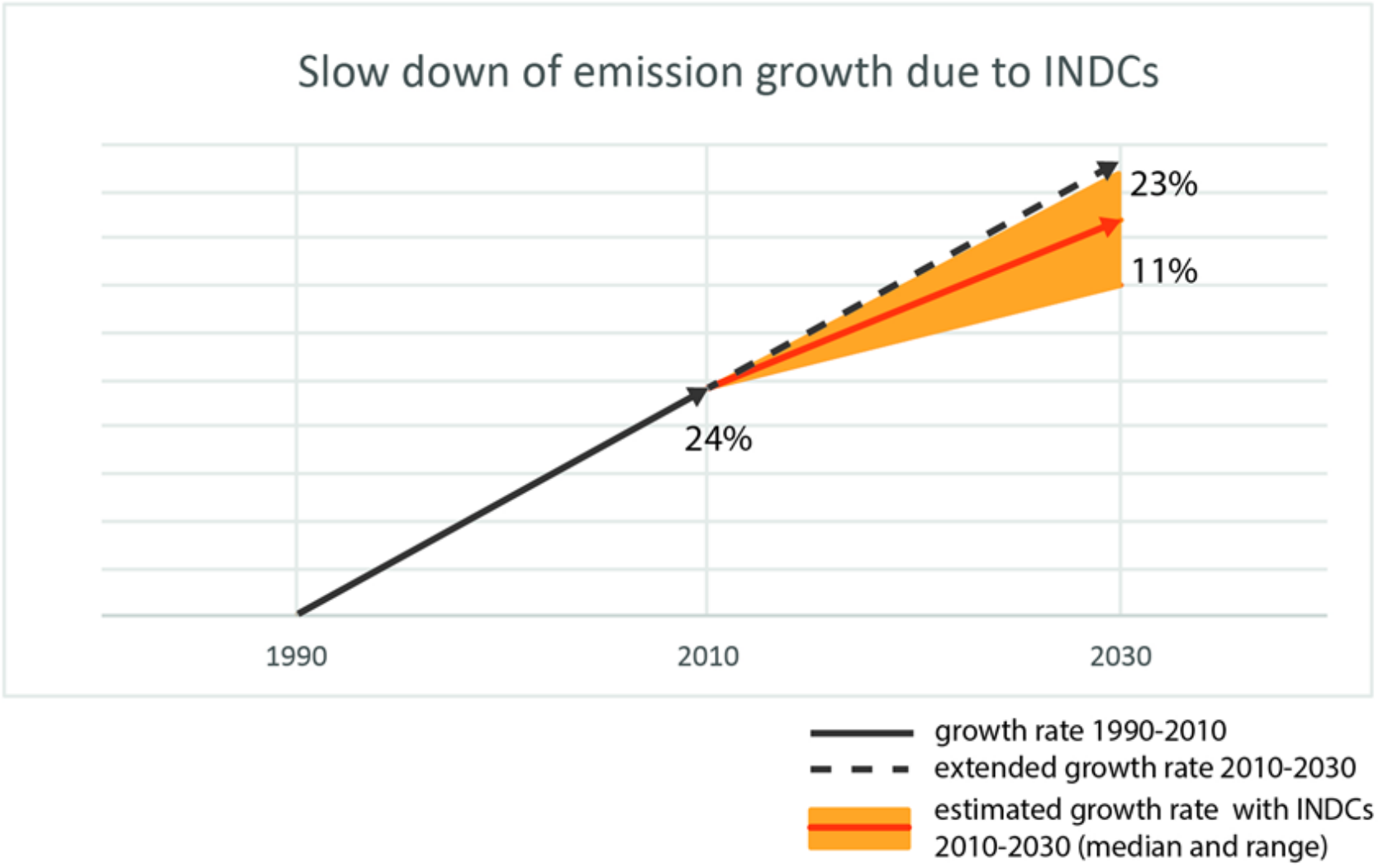
2030

57
(53-59)
Gt CO_2 eq

Expected change

by 2030 in relation to	1990	2000	2010
Emissions	+45 %	+39 %	+17 %
Per capita emissions	-9%	0%	-5%

INDCs synthesis report – Aggregate effect



Expected gain with respect to the reference scenarios

2025

3
(0-6)
Gt CO_2 eq

2030

4
(0-8)
Gt CO_2 eq

Expected gap with respect to the 2 °C scenarios

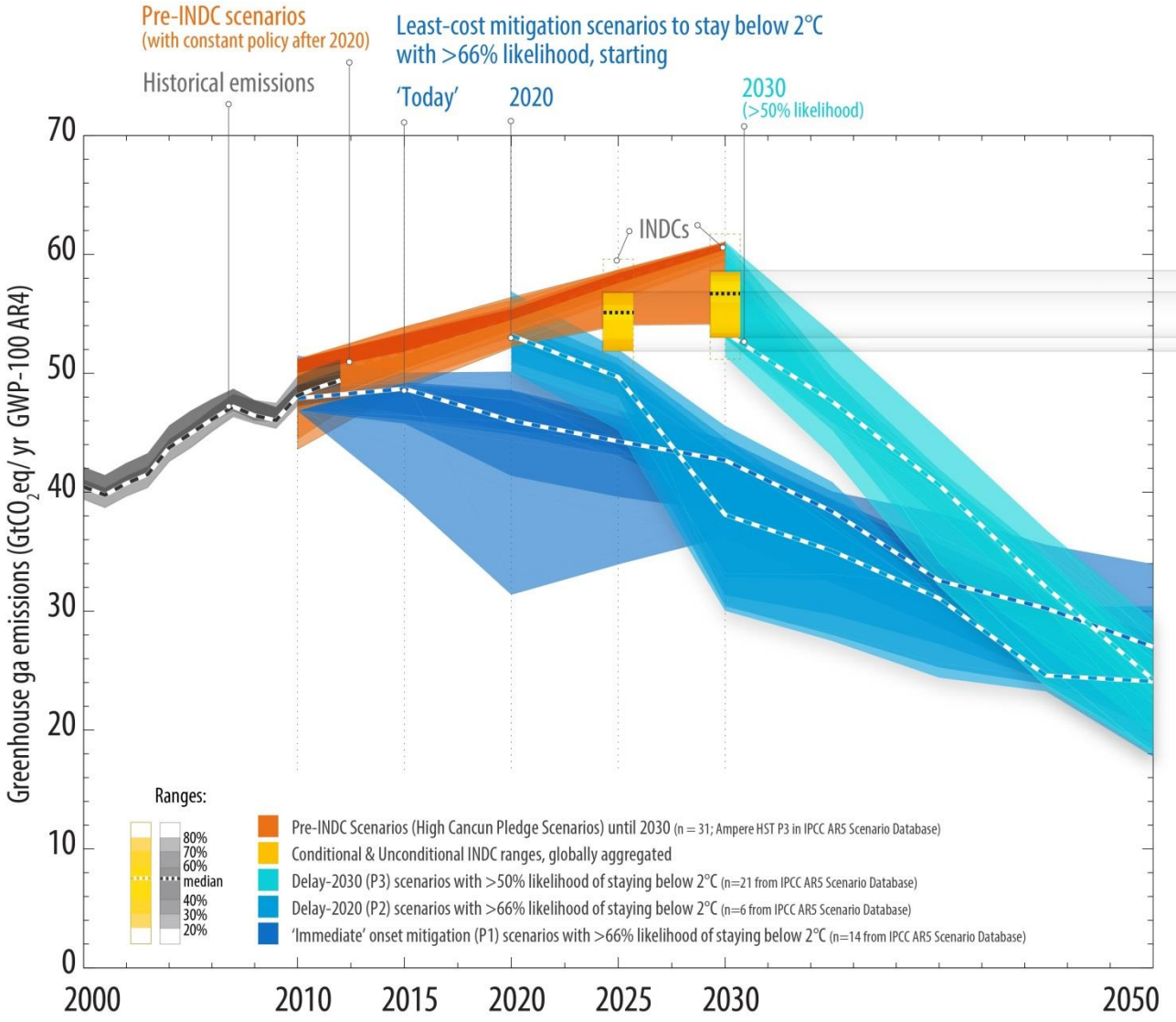
2025

9
(5-13)
Gt CO_2 eq

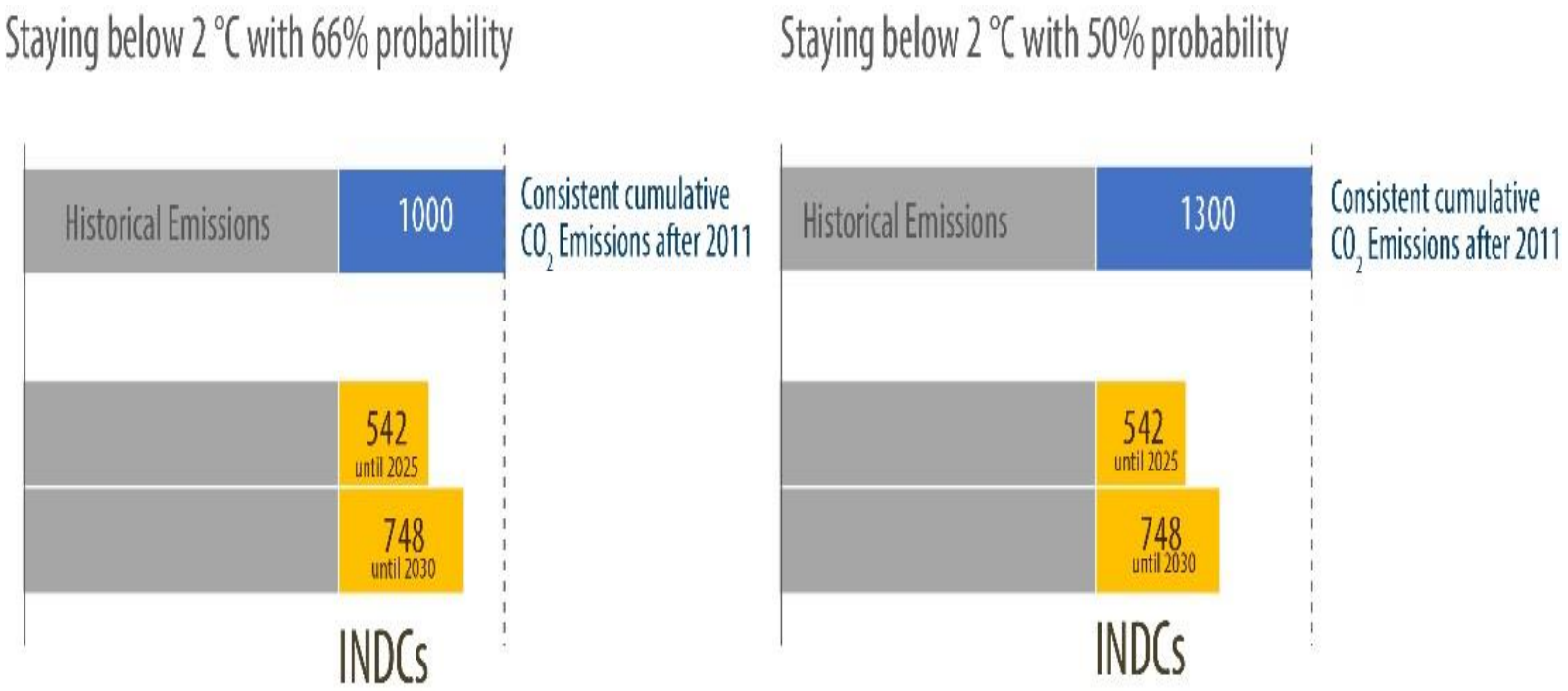
2030

15
(11-22)
Gt CO_2 eq

Results


Pre-INDC scenarios
(with constant policy after 2020)
Historical emissions
Least-cost mitigation scenarios to stay below 2°C
with >66% likelihood, starting
'Today'
2020
2030
(>50% likelihood)
INDCs
Greenhouse ga emissions (GtCO2eq/ yr GWP-100 AR4)
70
60
50
40
30
20
10
0
2000
2010
2015
2020
2025
2030
2050
Ranges:
80%
70%
60%
median
40%
30%
20%
Pre-INDC Scenarios (High Cancun Pledge Scenarios) until 2030 (n = 31; Ampere HST P3 in IPCC AR5 Scenario Database)
Conditional & Unconditional INDC ranges, globally aggregated
Delay-2030 (P3) scenarios with >50% likelihood of staying below 2°C (n=21 from IPCC AR5 Scenario Database)
Delay-2020 (P2) scenarios with >66% likelihood of staying below 2°C (n=6 from IPCC AR5 Scenario Database)
'Immediate' onset mitigation (P1) scenarios with >66% likelihood of staying below 2°C (n=14 from IPCC AR5 Scenario Database)

Cumulative emissions



United Nations Framework Convention on Climate Change

Adaptation components of INDCs: an overview

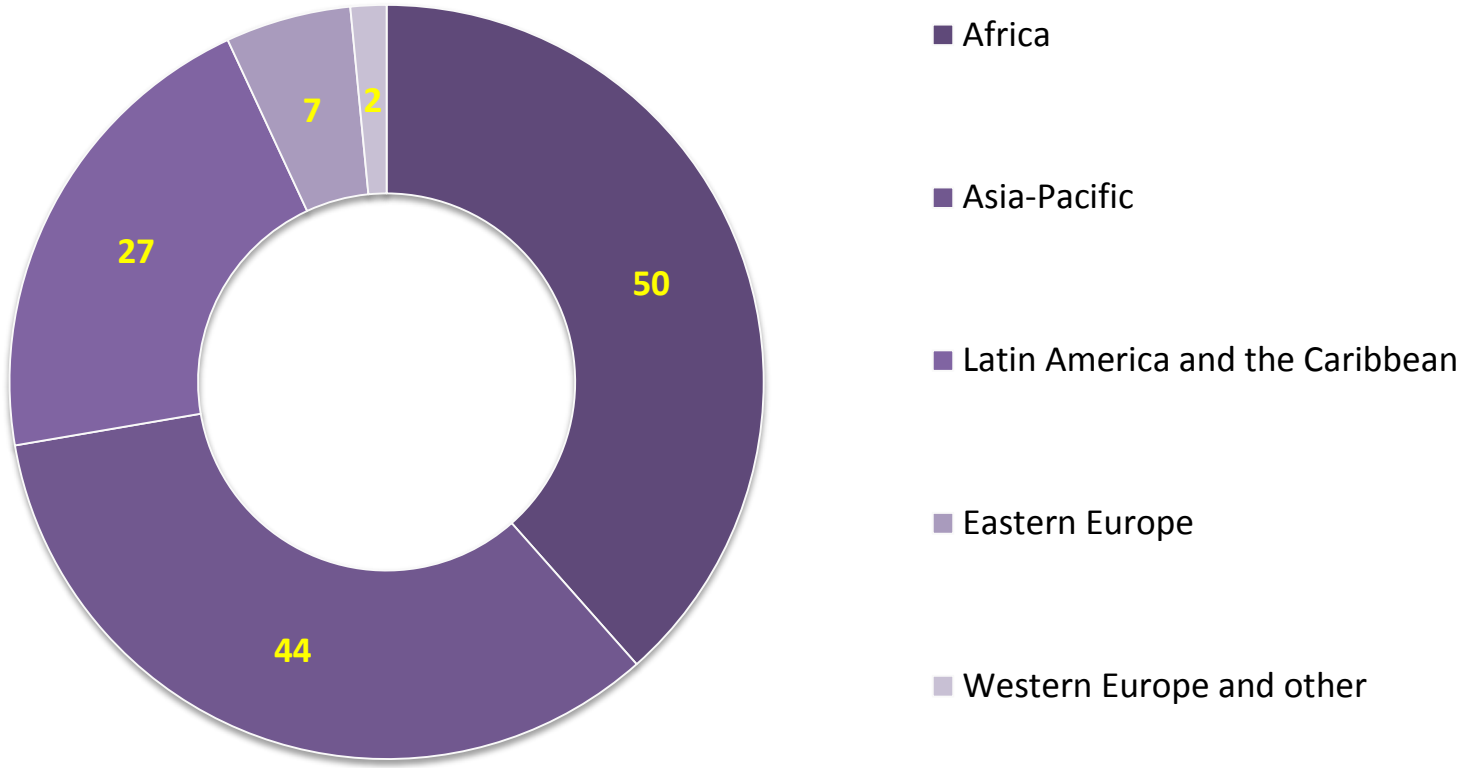
Presentation of the INDCs synthesis report

1 December 2015 – Paris Le Bourget, France

[Matti Goldberg]
UNFCCC secretariat

130+ ADAPTATION COMPONENTS

REGIONAL DISTRIBUTION (status 27 November 2015):



ELEMENTS OF THE ADAPTATION COMPONENTS

PRIORITY ACTIONS

Actions on all sectors: Water, Agriculture, Health, Ecosystems, Forestry, Desertification etc.

2015-2030

Cross-cutting measures and integrated approaches

Programmatic approaches

Economic diversification

Implementation underway

IMPACTS AND VULNERABILITIES

Vulnerable Parties, sectors, zones, groups

Vulnerability assessments

Observed and projected impacts

Drivers of vulnerability

Development challenges

Key climate hazards

Socio-economic consequences

Transboundary risks

SUPPORT

Support needs

Domestic resources

Bilateral support

Multilateral support

South-South cooperation

GOALS AND VISIONS

Development aspirations

Survival

MDGs/SDGs

2ºC/1.5ºC limit

NATIONAL FRAMEWORKS

National Adaptation Plans/NAPAs

Development strategies

Climate change laws

Investment plans and strategies

Sector-specific plans

Green growth strategies

DRR plans and strategies

Coordinating mechanisms

ADAPTATION-MITIGATION SYNERGIES

Mitigation and other benefits

MONITORING AND EVALUATION

Continuous and flexible

Developing indicators

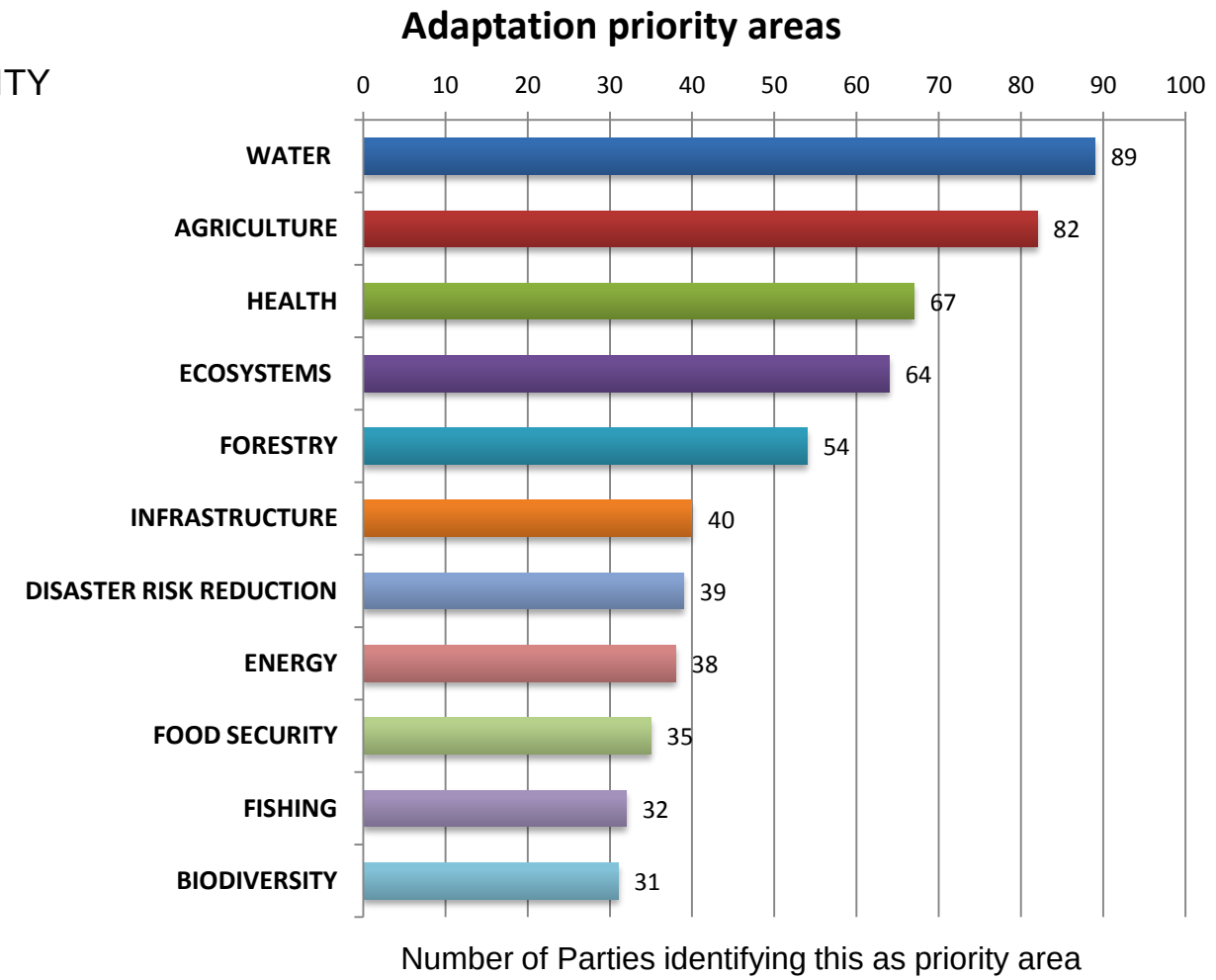
LOSS AND DAMAGE

Projected costs of impacts

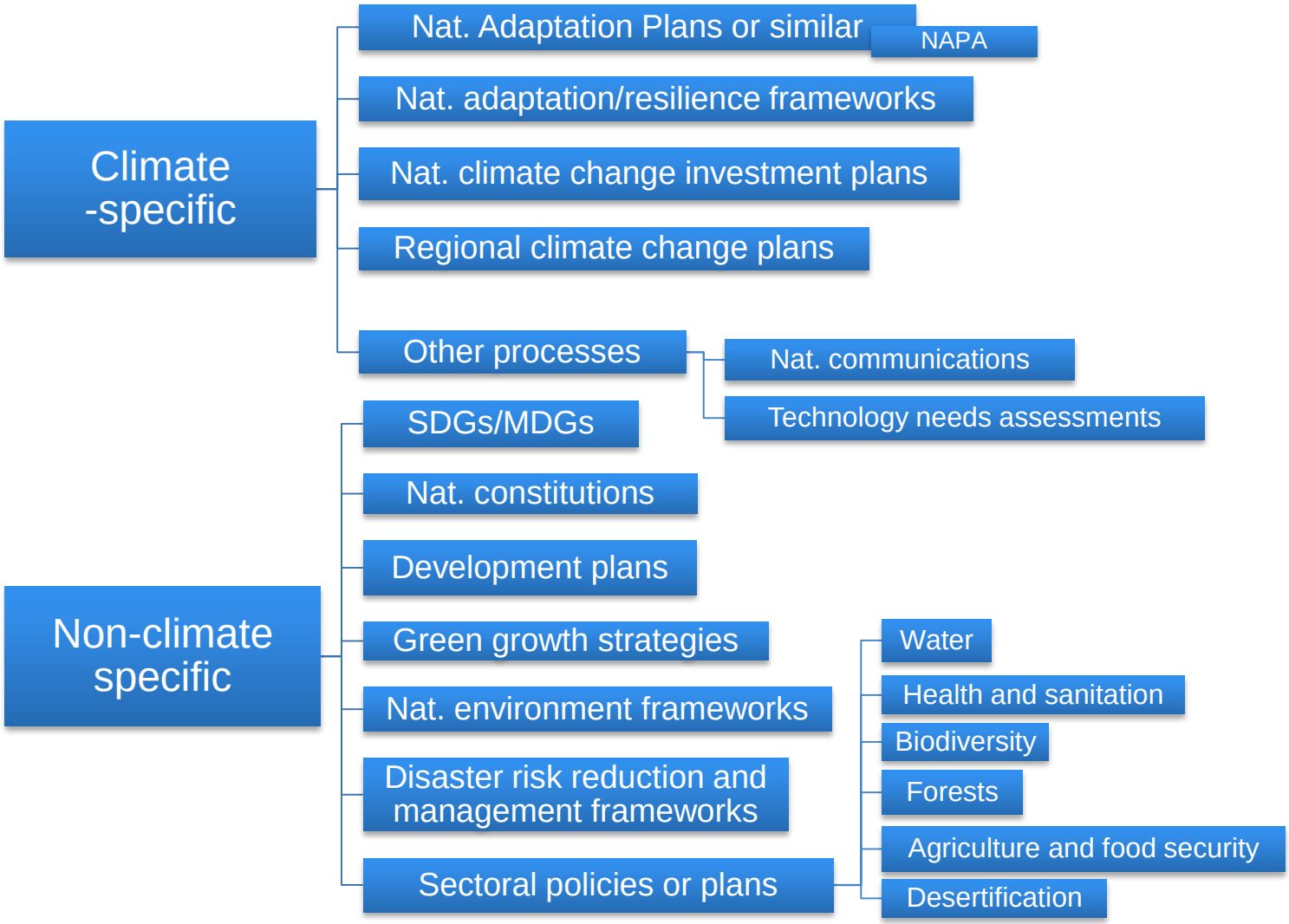
Disaster risk reduction

PRIORITY AREAS IDENTIFIED IN THE ADAPTATION COMPONENTS

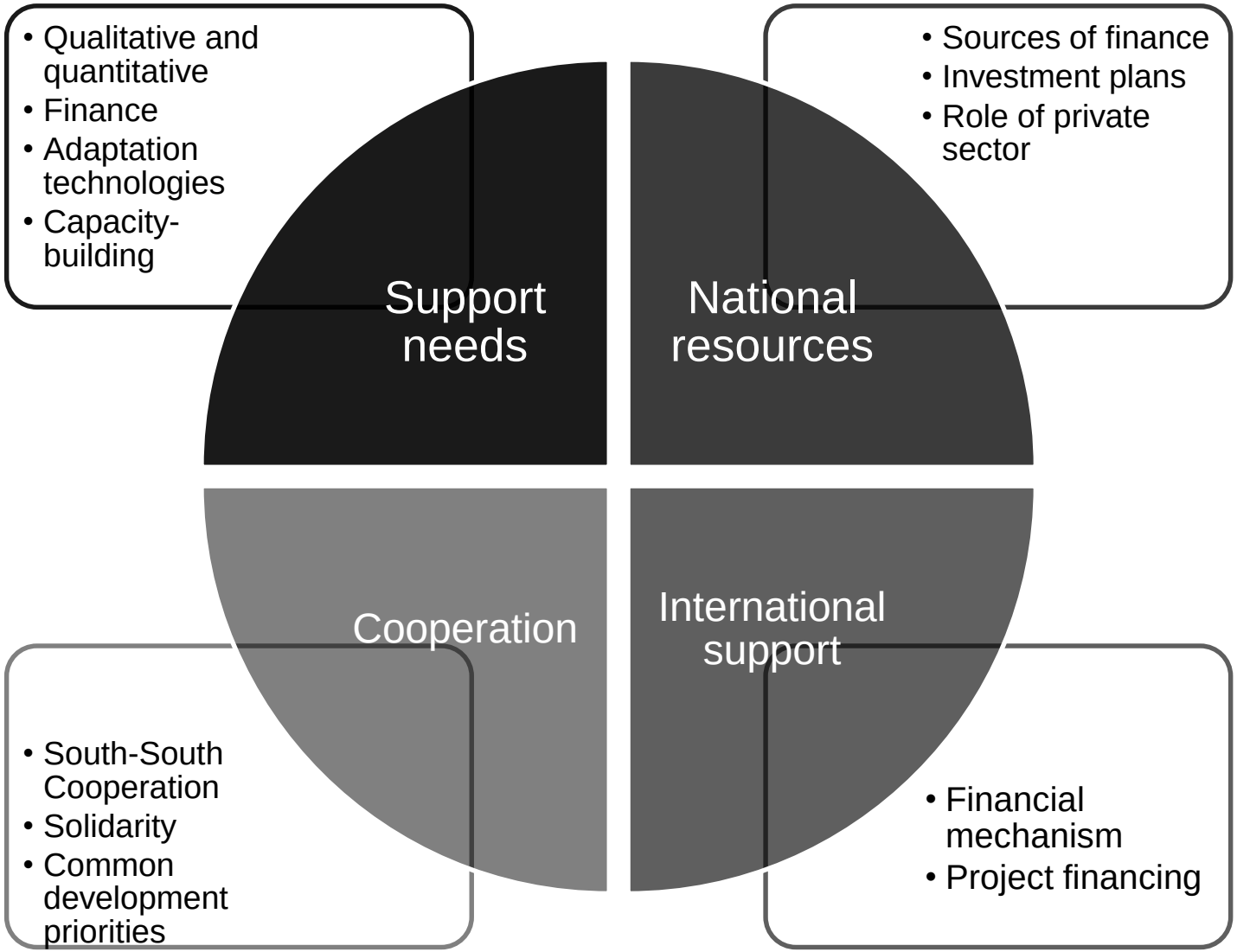
- ACTIONS ON PRIORITY AREAS/SECTORS
- BROAD/STRATEGIC ⇔ SPECIFIC/ PROJECT-BASED
- TIMEFRAMES:
  - 2015-2020
  - 2020-2030
- QUANTITATIVE OBJECTIVES



FRAMEWORKS INFORMING THE ADAPTATION COMPONENTS



SUPPORT IN THE ADAPTATION COMPONENTS



Thank you for your attention