

Raising awareness on adaptation of transport infrastructure to climate change impacts

The UNFCCC process: focus on adaptation in transport

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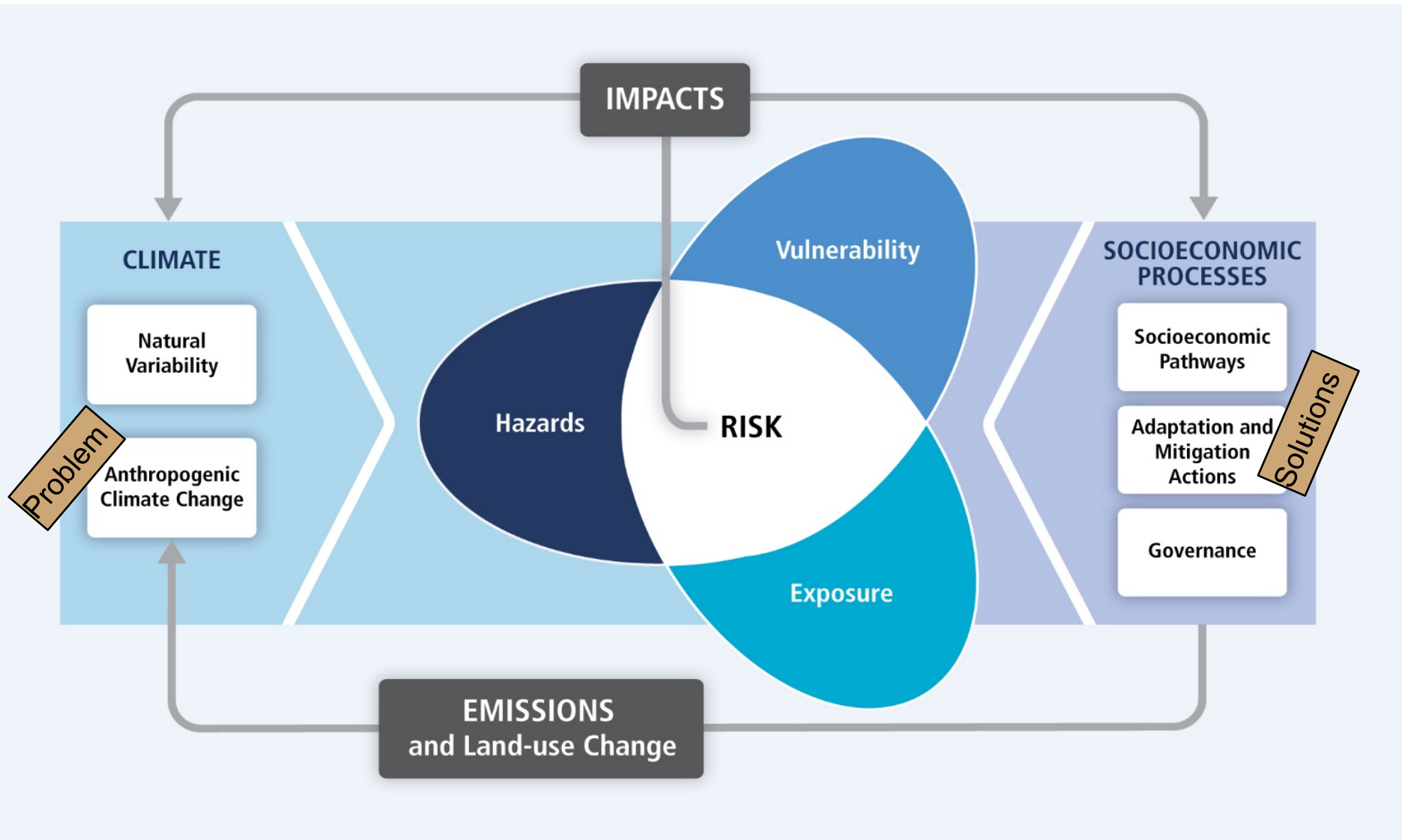
Athens, 18 Nov. 2019



- Milestones under the UNFCCC process
- The Paris Agreement
 - Purpose and long-term goals
 - Landscape and interrelationships
 - (i)NDCs – focus on adaptation
- Opportunities for participation
 - Marrakech partnership – action on transport
- Some resources: Nairobi Workprogramme
- Closing remarks



Risk of climate-related impacts

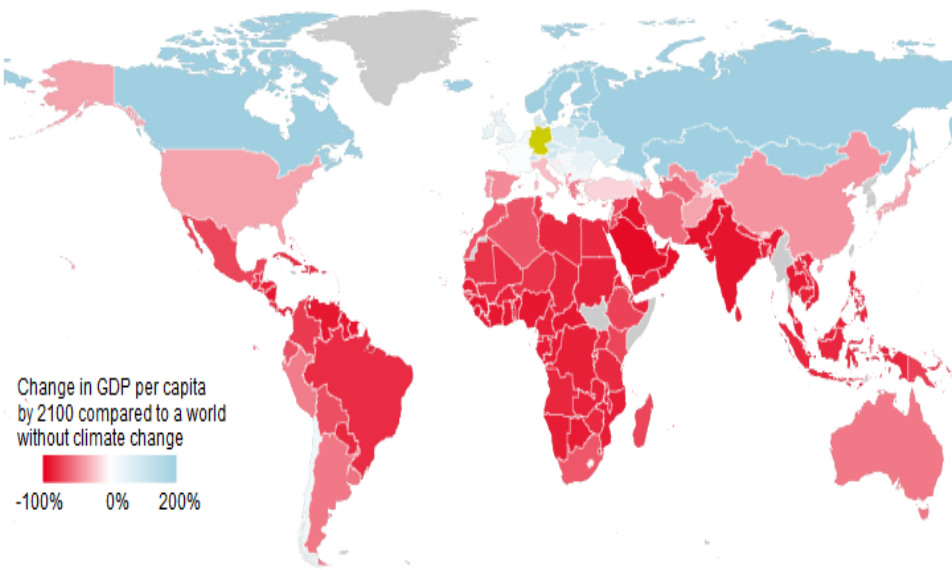


Source: Figure SPM.1 in IPCC, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

Estimated economic impacts of climate change

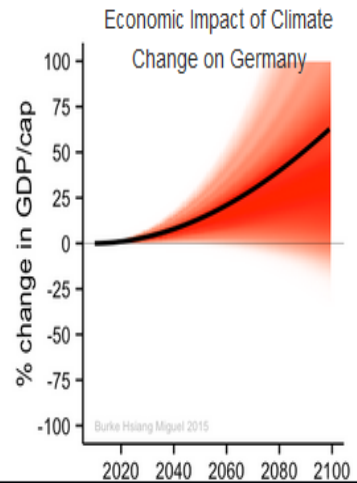
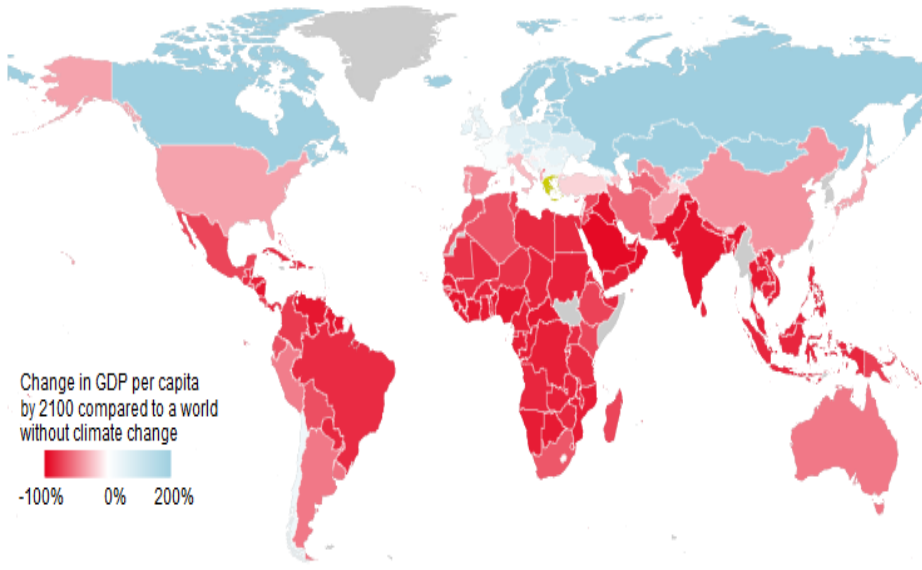
Economic Impact of Climate Change on Germany

Select a country/region or click on the map to get estimates of how climate change will affect GDP per capita as calculated in Burke, Hsiang, and Miguel (2015) [Back to main page](#)



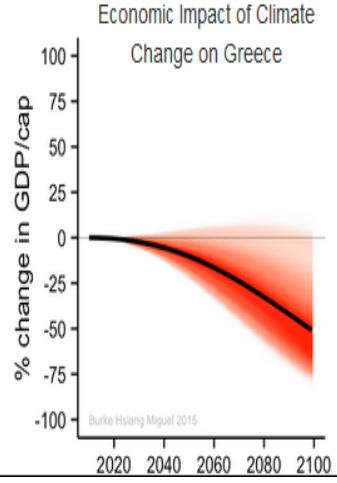
Economic Impact of Climate Change on Greece

Select a country/region or click on the map to get estimates of how climate change will affect GDP per capita as calculated in Burke, Hsiang, and Miguel (2015) [Back to main page](#)



Likelihood climate change will reduce Germany's GDP per capita by

- more than 0%: **9%**
- more than 10%: **5%**
- more than 20%: **2%**
- more than 50%: **0%**



Likelihood climate change will reduce Greece's GDP per capita by

- more than 0%: **94%**
- more than 10%: **90%**
- more than 20%: **86%**
- more than 50%: **50%**

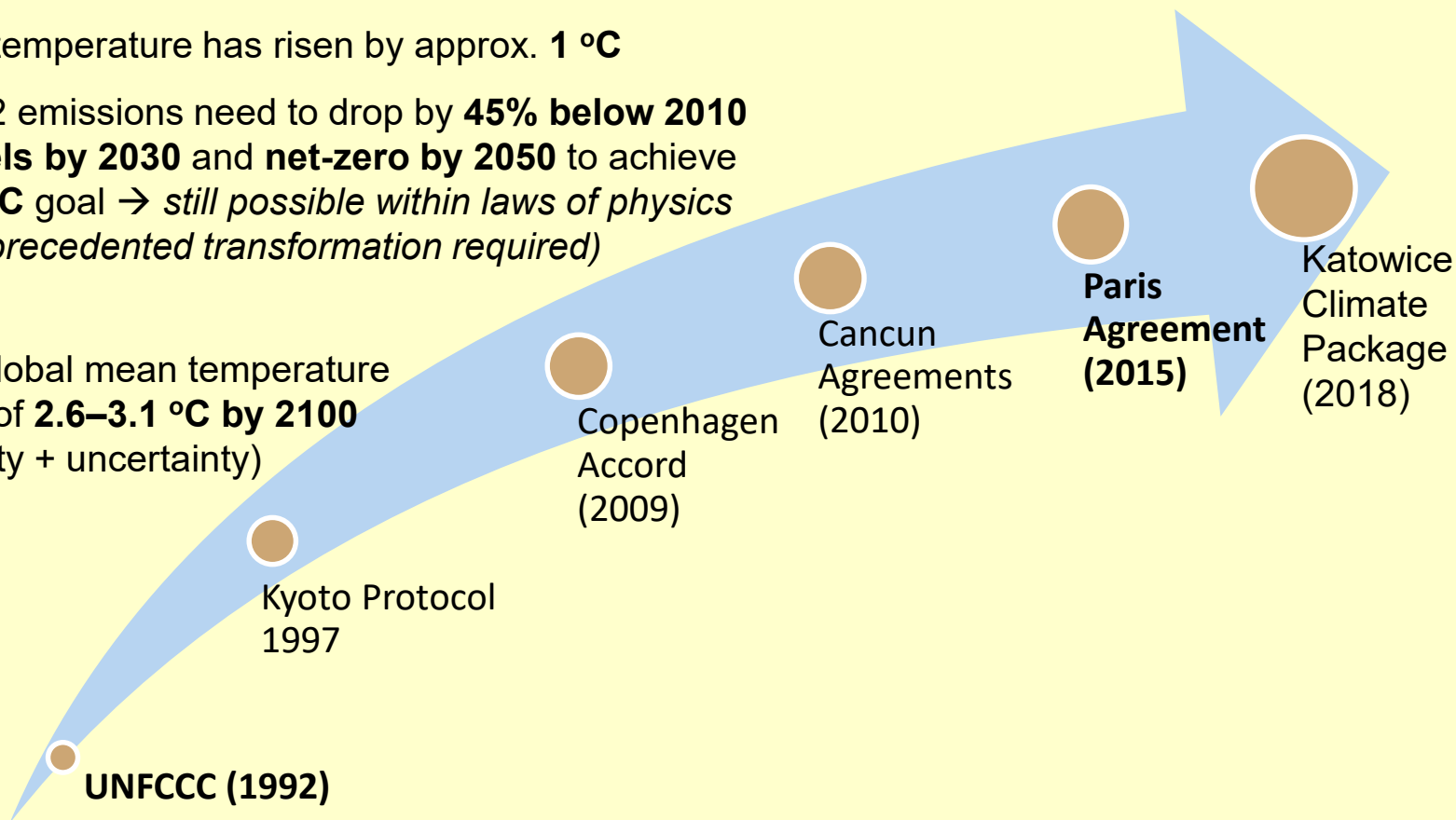
The multilateral process - Timeline and milestones

IPCC Assessments:

- AR5: we are not on track to stay below 2 °C
- SR 1.5:
 - Av. temperature has risen by approx. 1 °C
 - CO2 emissions need to drop by **45% below 2010 levels by 2030** and **net-zero by 2050** to achieve **1.5°C goal** → *still possible within laws of physics (unprecedented transformation required)*

(I)NDCs:

- Median global mean temperature increase of **2.6–3.1 °C by 2100** (probability + uncertainty)



Climate change: Environmental → Developmental → Existential



Purpose/Objective of the Paris Agreement

Strengthen the global response to the threat of CLIMATE CHANGE

Long-term temperature goal
(2°C/1.5°C)

Climate resilience and low
emissions development

Financial flows

Action

* Adaptation

* Mitigation

Means of implementation

* Finance

* Tech dev. & transfer

* Capacity-building

Accountability (individual and aggregate level)

* Transparency of action
and support

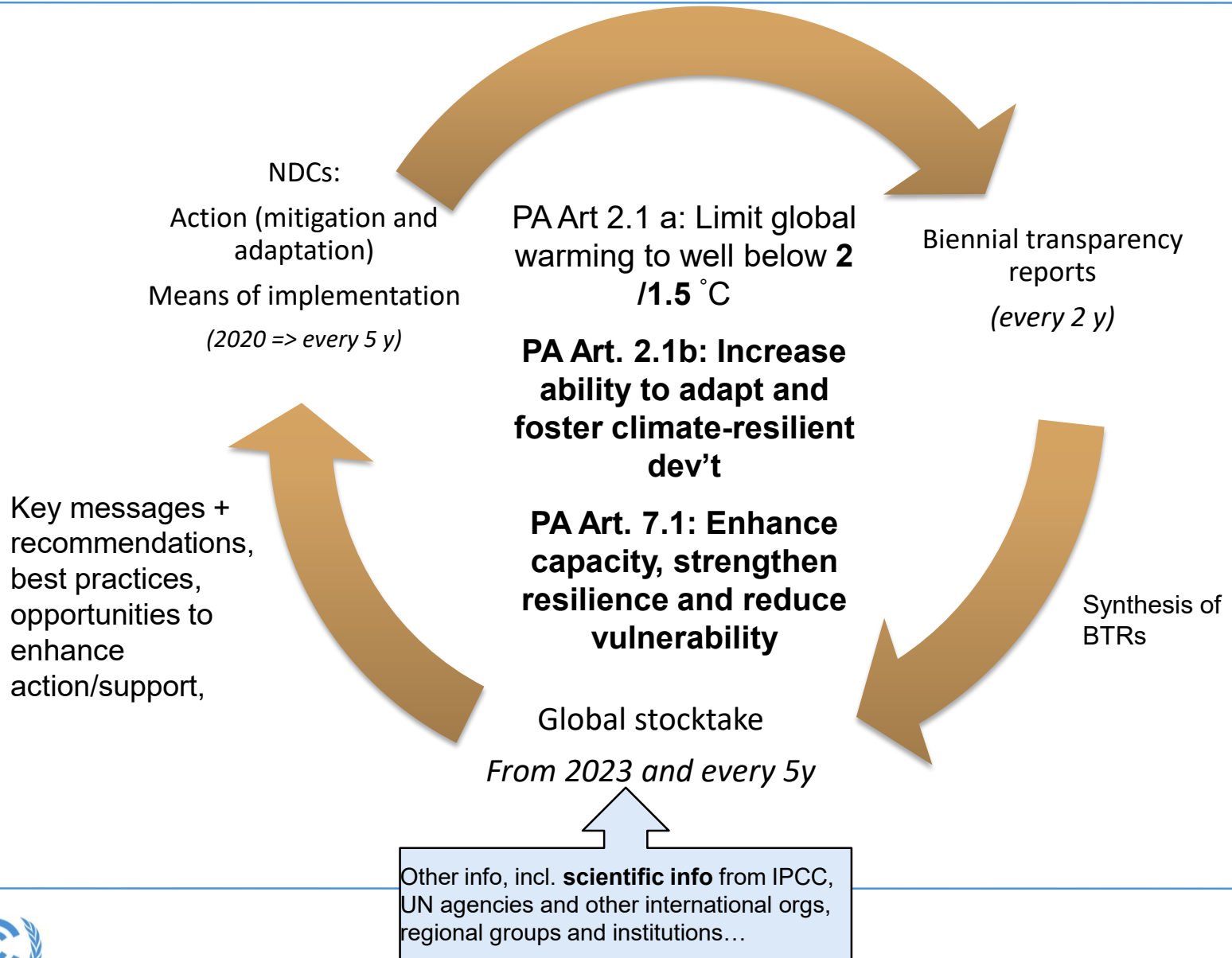
* Global stock-take

* Facilitating
implementation and
compliance

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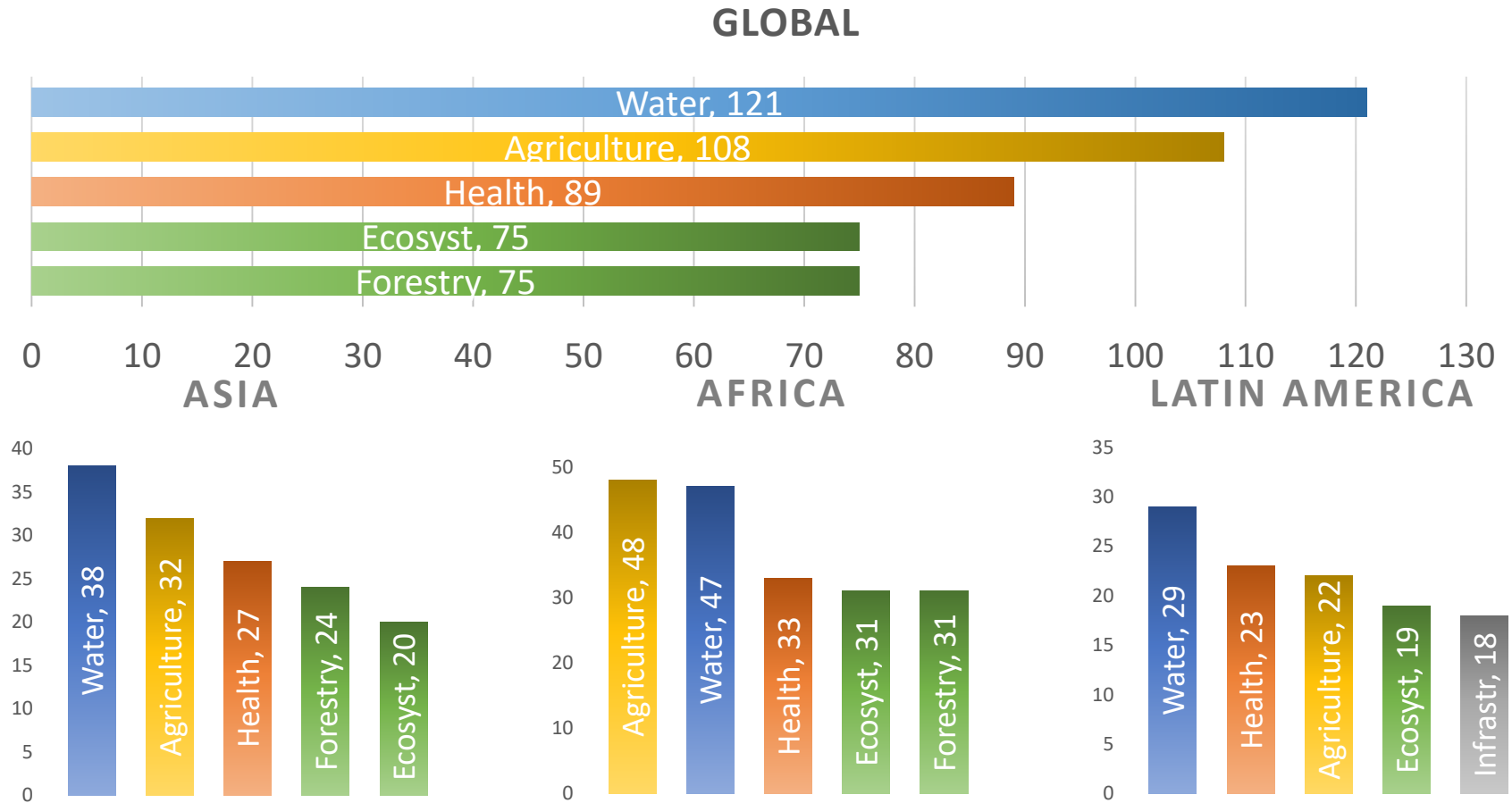


Ambition mechanism



Paris Agreement | Adaptation priority sectors in (I)NDCs

- ❖ 132 out of 194 contain a section on adaptation
- ❖ Only about six UNECE members have included some adaptation elements

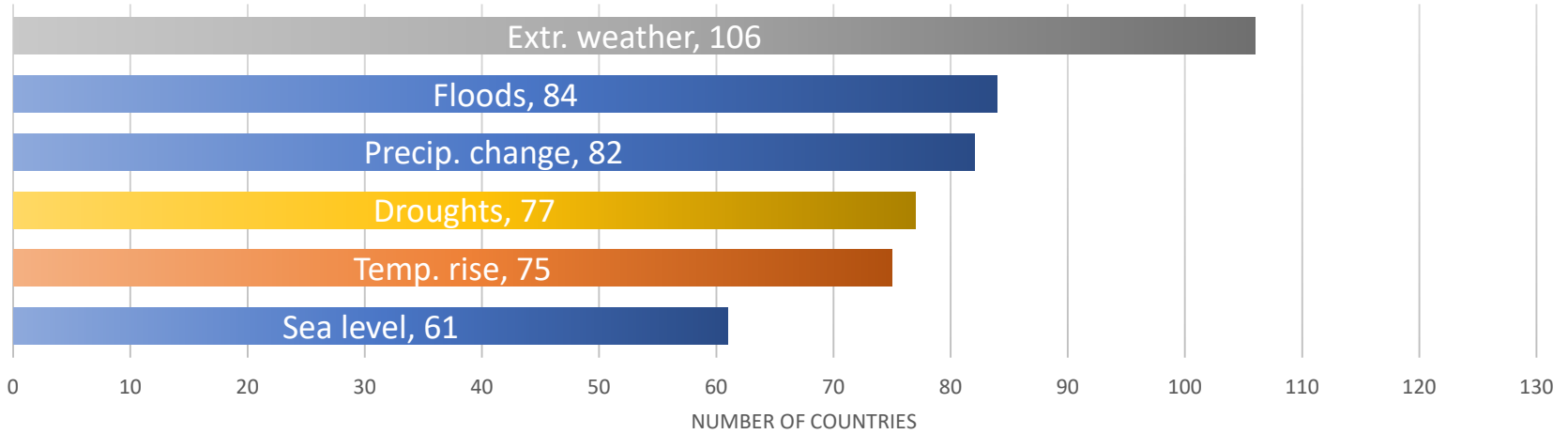


75 % of (I)NDCs prioritize climate action in the transport sector

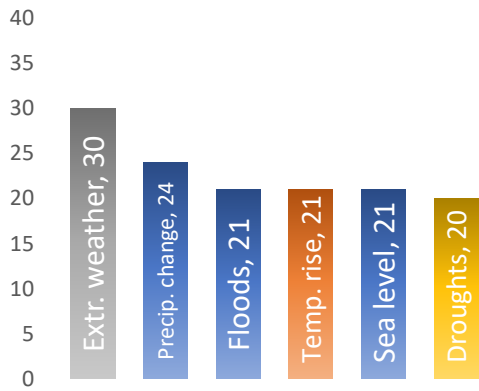
Only 16% prioritize adaptation in transport (2 from Eastern Europeans)

Paris Agreement | Climate hazards identified in adaptation components of (I)NDCs

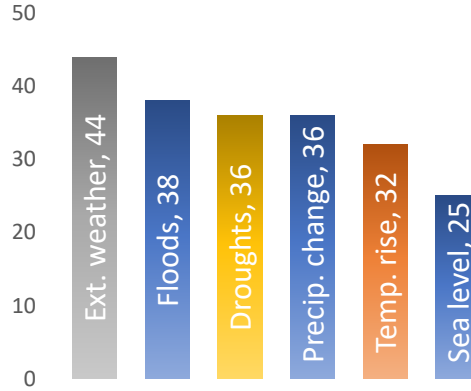
GLOBAL



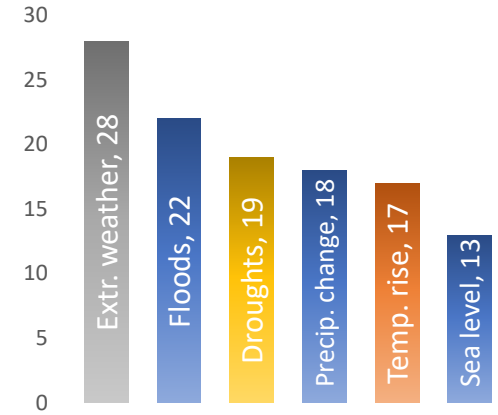
ASIA

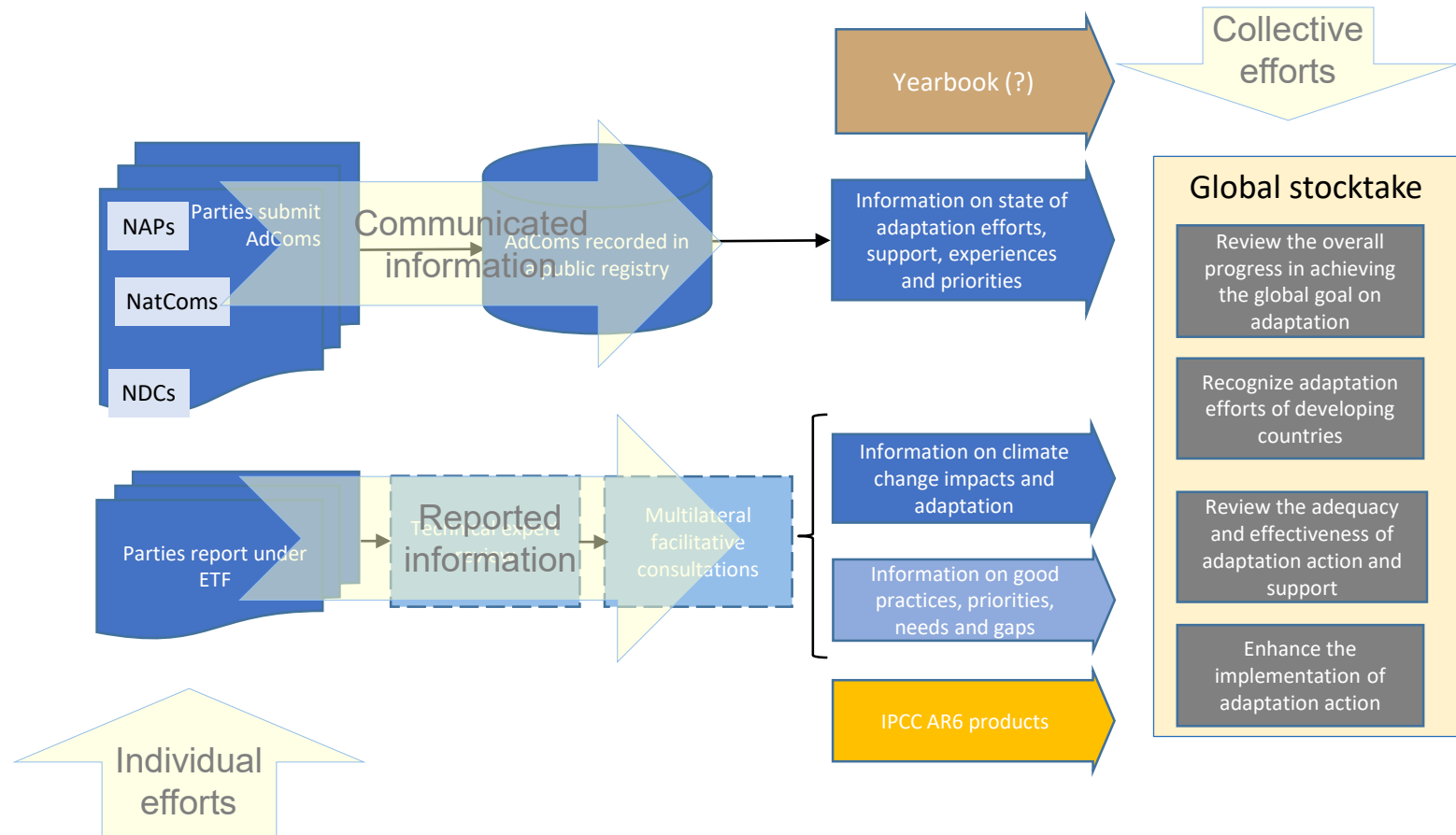


AFRICA



LATIN AMERICA

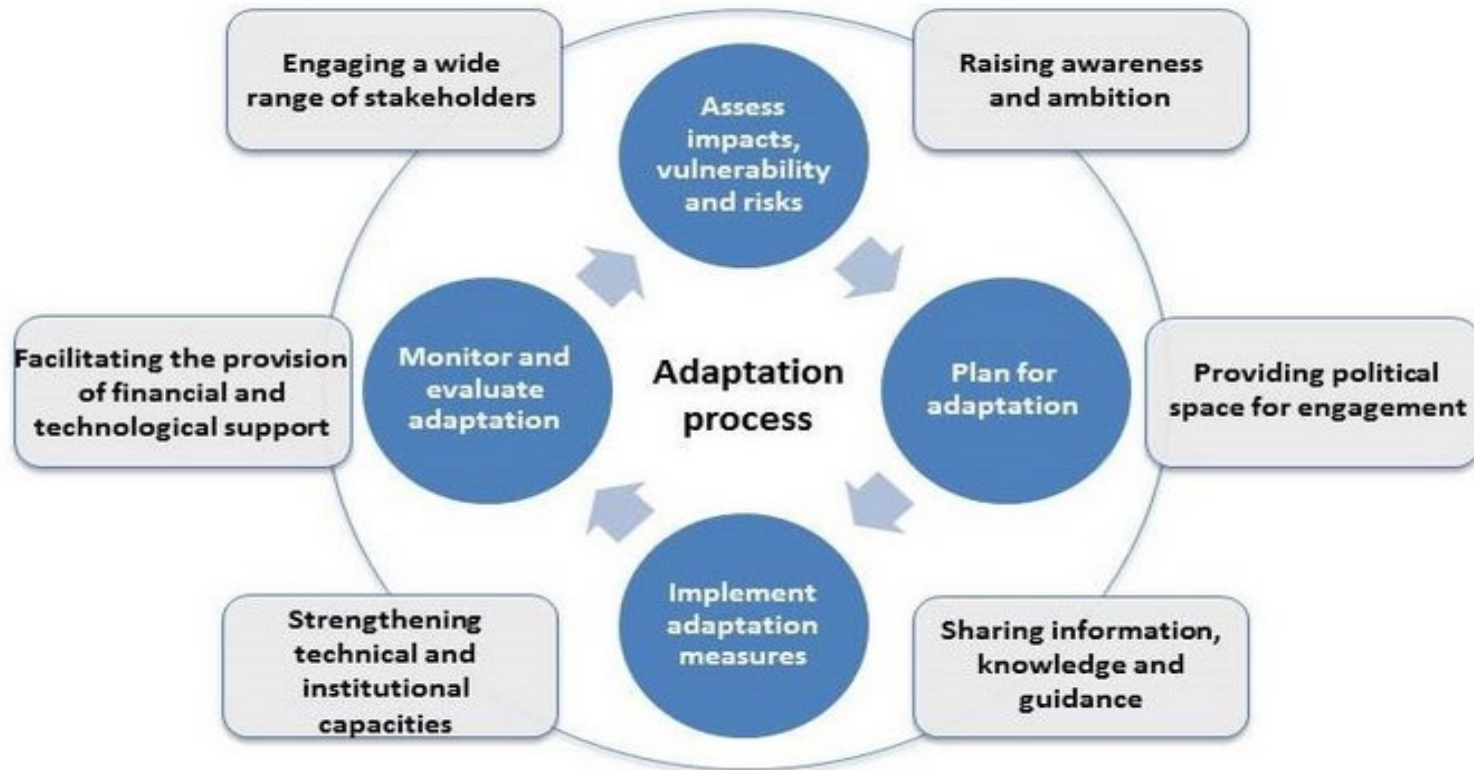




- Info on support provided (dev'd) and received (dev'g)
- Supported adaptation projects



How Parties address climate change adaptation



National Adaptation Plans ▼

Adaptation Committee ▼

Least Developed Countries Expert Group ▼

Nairobi work programme on impacts, vulnerability and adaptation to climate change ▼

Technical Examination Process on Adaptation ▼

Adaptation planning and implementation

Element A: Laying the groundwork and addressing gaps

- Initiating and launching of the NAP process
- **Stocktaking: identifying available information on climate change impacts, vulnerability and adaptation and assessing gaps and needs of the enabling environment for the NAP process**
- Addressing capacity gaps and weaknesses in undertaking the NAP process
- Comprehensively and iteratively assessing development needs and climate vulnerabilities

Element B: Preparatory Elements

- **Analysing current climate and future climate change scenarios**
- **Assessing climate vulnerabilities and identifying adaptation options at the sector, subnational, national and other appropriate levels**
- Reviewing and appraising adaptation options
- Compiling and communicating national adaptation plans
- Integrating climate change adaptation into national and subnational development and sectoral planning

Element C: Implementation Strategy

- **Prioritizing climate change adaptation in national planning**
- Developing a **(long-term) national adaptation implementation strategy**
- Enhancing capacity for planning and implementing adaptation
- Promoting coordination and synergy at the regional level and with other multilateral environmental agreements

Element D: Reporting, Monitoring and Review

- **Monitoring the NAP process**
- Reviewing the NAP process to assess progress, effectiveness and gaps
- Iteratively updating the national adaptation plans
- Outreach on the NAP process and reporting on progress and effectiveness



Developed countries strategies and plans

ADAPTATION PLANS AND STRATEGIES

ADAPTATION STRATEGIES AND PLANS

Country	Title	Language	Date Posted
 Australia	National Climate Resilience and Adaptation Strategy		
 Austria	The Austrian Strategy for Adaptation to Climate Change		
 Belgium	Belgium National Adaptation Strategy 2010	English	
 Bulgaria	Third National Action Plan for the Period 2013-2020		
 Canada	Adapting to Climate Change - An Introduction for Canadian Municipalities	English	
 Croatia	Adaptation to Climate Change in Croatia	English	
 Czech Republic	Strategy on Adaptation To Climate Change in Czech Republic	Czech	
 Denmark	Danish Strategy for Adaptation to a changing Climate	English	
 Finland	Finland's National Adaptation Strategy - an integral part of the National Energy and Climate Strategy	English	

32 Developed countries: <https://www4.unfccc.int/sites/NAPC/Pages/adaptation-plans-and-strategies.aspx>

16 Developing country NAPs

- MPGCA has organized **Transport Action Events** at each COP since the 21st session (2015) → some topics at COP24: **setting strategic visions and tools**, and **developing safe and affordable services for the sector**
- In 2015, the COP decided as part of the pre-2020 action to mandate the appointment of two champions to trigger more ambitious action, mostly by non-Party stakeholders, including in the transport sector
- At COP 22, over 395 individuals and 55 organizations signed a **declaration on resilient transport in a changing climate** making a **commitment to accelerate efforts to make transport infrastructure, systems and services more resilient to current and future climate change** by integrating adaptation into all their relevant policies or guidelines, investment decisions, infrastructure design and construction parameters, and transport operations
- As of Dec 2018, there were **22 MPGCA transport initiatives** touching on all transport modes → the initiatives are at various stages (defining targets, indicators, etc.,)

16. Navigating a Changing Climate

Navigating a Changing Climate:

Think Climate to reduce emissions, strengthen resilience and adapt waterborne transport infrastructure

Objectives

Provide a platform to share knowledge and provide technical support to the owners, operators and users of waterborne transport infrastructure, enabling them to:

- Reduce greenhouse gas emissions and promote a shift to low carbon maritime and inland navigation infrastructure
- Act urgently to improve preparedness, strengthen resilience, and adapt maritime and inland navigation infrastructure
- Seek integrated and sustainable solutions, with an emphasis on Working with Nature

Some relevant resources | Nairobi Workprogramme

Knowledge platform: contains Adaptation case studies; [Methods and tools](#); Relevant publications, technical documents, training material and online portals; Latest [news](#) on adaptation under UNFCCC process, and from its 360 NWP partner organizations.

INFORMATION TYPE ▾ GEOGRAPHIC REGION ▾ ADAPTATION SECTOR/THEME ▾ ADAPTATION ELEMENT ▾ CLIMATE HAZARD ▾

SEARCH:

transport

SEARCH:

agriculture



SELECTED TAGS:

SELECTED TAGS:

CLEAR TAGS

NWP PARTNER ORGANIZATIONS (3 RESULTS)

NWP PARTNER ORGANIZATIONS (209 RESULTS)



NWP ACTION PLEDGES (6 RESULTS)

NWP ACTION PLEDGES (38 RESULTS)



CASE STUDIES (22 RESULTS)

CASE STUDIES (229 RESULTS)



TOOLS (4 RESULTS)

TOOLS (114 RESULTS)



Thank you

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