UNFCCC June Climate Meetings | SB 64

Article 6
Markets Day

Clarity. Readiness. Action.

United Nations
Climate Change

in collaboration with

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

United Nations Climate Change in collaboration with giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Housekeeping Rules

- Keep your cellphones on silent
- Charging points available at the back of the room, please do not leave wires or your belongings across the floor to avoid any obstacles or accidental risks for participants finding their way to the seats
- Lunch will be provided at the canteen for participants **starting at 1230**
- Please ensure that you are back in the room by **1340 at the latest** after lunch so we can keep the programme as per planned times
- And, participate actively!

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The plan for the day

10:00 — 10:30	**Setting the scene** GIZ and UNFCCC
10:30 — 12:30	**Article 6 in 2026: Key developments and the road ahead** Panel · UNFCCC, UNEP-CCC, GIZ, IEA, Oeko-Institut, Perspectives, A6IP
12:30 — 13:45	**Lunch Break** Break
13:45 — 13:55	**High-level Address by Dr. Heike Henn** Head of Department for International Climate Policy, BMUKN
13:55 — 14:45	**UNFCCC Art. 6 Registry Infrastructure** Information session on UNFCCC Registries under Art 6.2 and Art. 6.4
14:45 — 16:00	**Navigating Article 6: Smart tools for smart decisions** UNFCCC and MIT Climate Pathways Project
16:15 — 17:45	**Straight Talk: International Carbon Markets under Art. 6** Multi-actor panel | Co-organized by: UNFCCC · BMUKN · GIZ · A6IP
17:45 — onwards	**Networking reception hosted by GIZ**

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Plan of the day

100–1030
Setting the scene

UNFCCC and GIZ

1030–1230
Article 6 in 2026:
Key developments and the road ahead

UNFCCC, UNEP-CCC, GIZ, IEA, Oeko-Institut, Perspectives, A6IP

1230–1345
Lunch

1345–1355
Special Address:
Dr. Heike Henn
Head of Department for International Climate Policy
BMUKN, Germany

1355–1445
UNFCCC Article 6 Registry infrastructure

UNFCCC

1445–1600
Smarter tools, smarter decisions

UNFCCC & MIT Climate Pathways Project

1615–1745
Straight talk on international carbon markets

Multi-actor panel | Co-organized by: UNFCCC · BMUKN · GIZ · A6IP

1745
Networking Reception

Setting the context

Holgar Triedel

Director
Climate and Climate Policy
GIZ

Daniele Violetti

Senior Director
UNFCCC Secretariat

Perumal Arumugam

Manager
Mitigation Division
UNFCCC Secretariat

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Session 2

Article 6 in 2026 :

Key developments and the road ahead

United Nations Climate Change in collaboration with giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Article 6 in 2026: Key developments and the road ahead

Andi Sanusi
Programme Officer
UNEP – CCC

Kazuhisa Koakutsu
Director
A6IP Center

Perumal Arumugam
Manager
Mitigation Division
UNFCCC Secretariat

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Article 6 in 2026: Key developments and the road ahead

Lambert Schneider
Research Coordinator
International Climate Policy
Oeko-Institut

Luca Lo Re
Energy Analyst
International Energy Agency (IEA)

Axel Michaelowa
Senior Founding Member
Perspectives

Ditebogo Lebea
Implementation Manger
The Article 6 Connect (A6C)
GIZ

ARTICLE 6 PIPELINE

Contextualizing country cooperation through Article 6

Andi Sanusi
Programme Officer

UN environment programme | copenhagen climate centre

UN environment programme

Article 6 Pipeline Overview

Our aim

Provide insights on the development of Article 6 activities and their impacts on countries' NDC and SDGs at the national and global level

Activities' tracking and classification

30+ Activity types

150+ Activity subtypes

6 Sectors

Sustainable Development Impacts

Insights from Article 6.4 Sustainable Development tool and initial reports

Institutional arrangements

- A6.2 Bilateral agreements
- Information from CARP
- Host Party Participation Requirements
- Eligibility lists

Existing climate policy

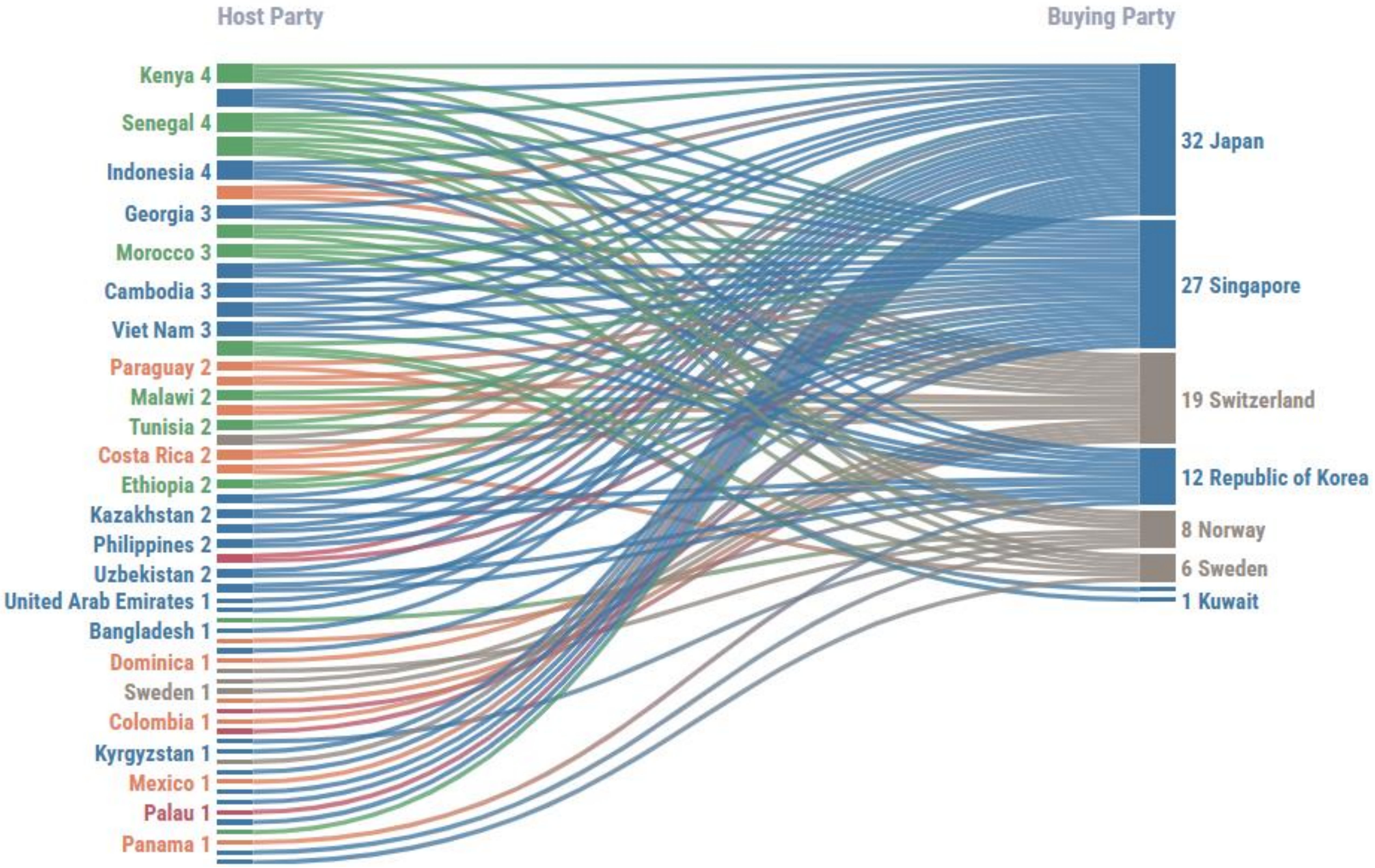
- Country **NDC commitment**
- **Net Zero** targets
- Current **emissions profile**

United Nations
Climate Change

UNFCCC as a strategic partner: The Article 6 Pipeline data is gathered through a strategic collaboration with the UNFCCC

Article 6.2 Framework

A6.2 – Who is cooperating with whom?

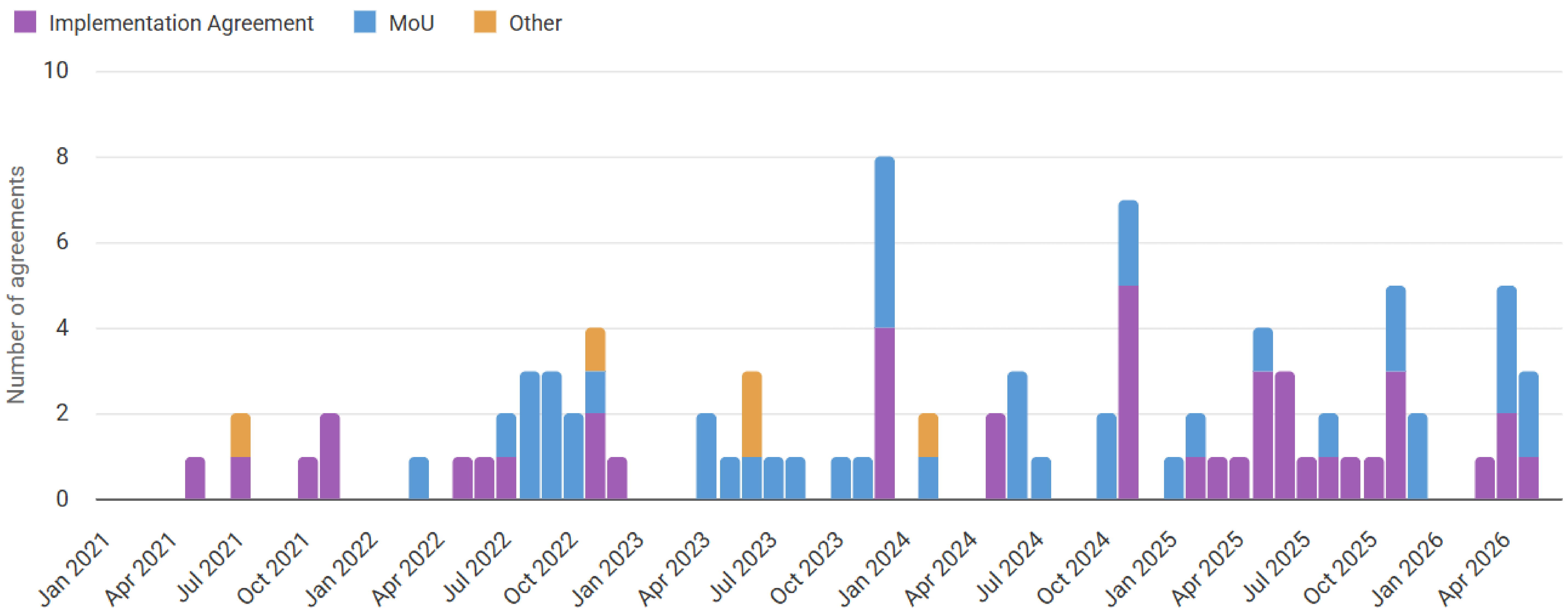


MoU and Implementation Agreements under Article 6.2

- Japan, Singapore, and Switzerland account for roughly **74% of all agreements**.
- Host country participation spans **57 countries across regions**, most of which are in Asia and Latin America.

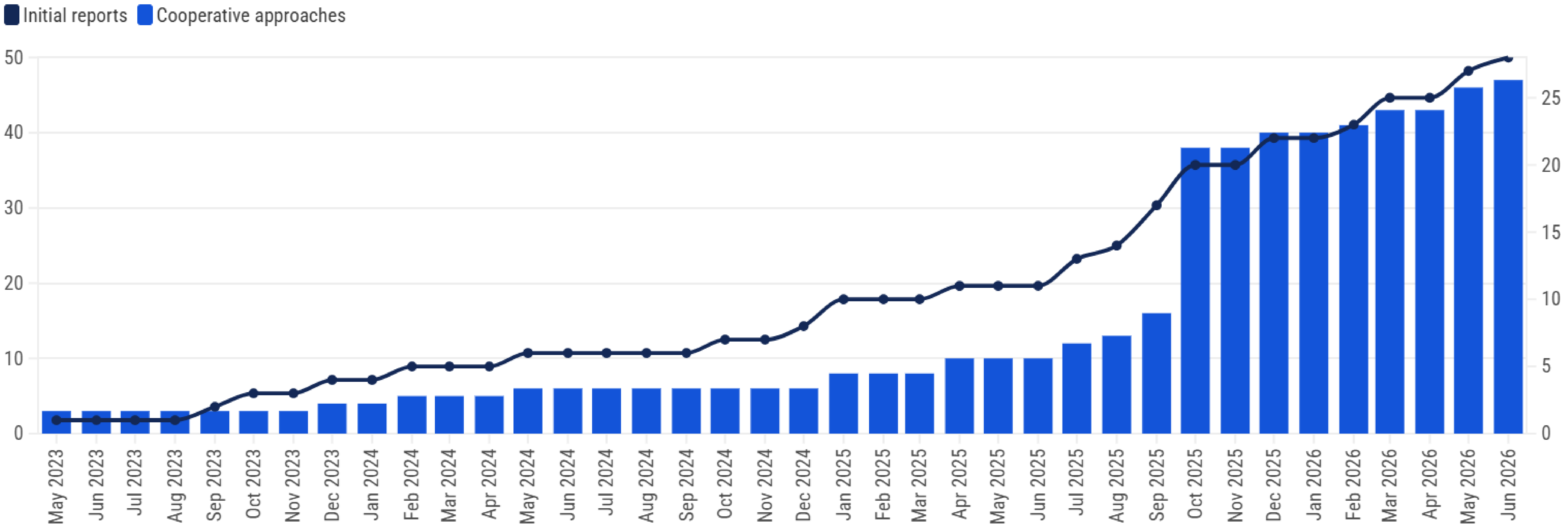
A6.2 – How has the cooperation developed over time?

A6.2 Agreements over time



- The number of agreements has **picked up since 2023**.
- Activity across 2024 to 2026 runs consistently **above the early period**, and **implementation agreements** account for a **growing share** of the most recent months.

A6.2 – Initial reports and cooperative approaches



A6.2 reporting trends

23 countries have submitted their initial reports as of June 2026, including **47 cooperative approaches**.

A6.2 – ITMOs

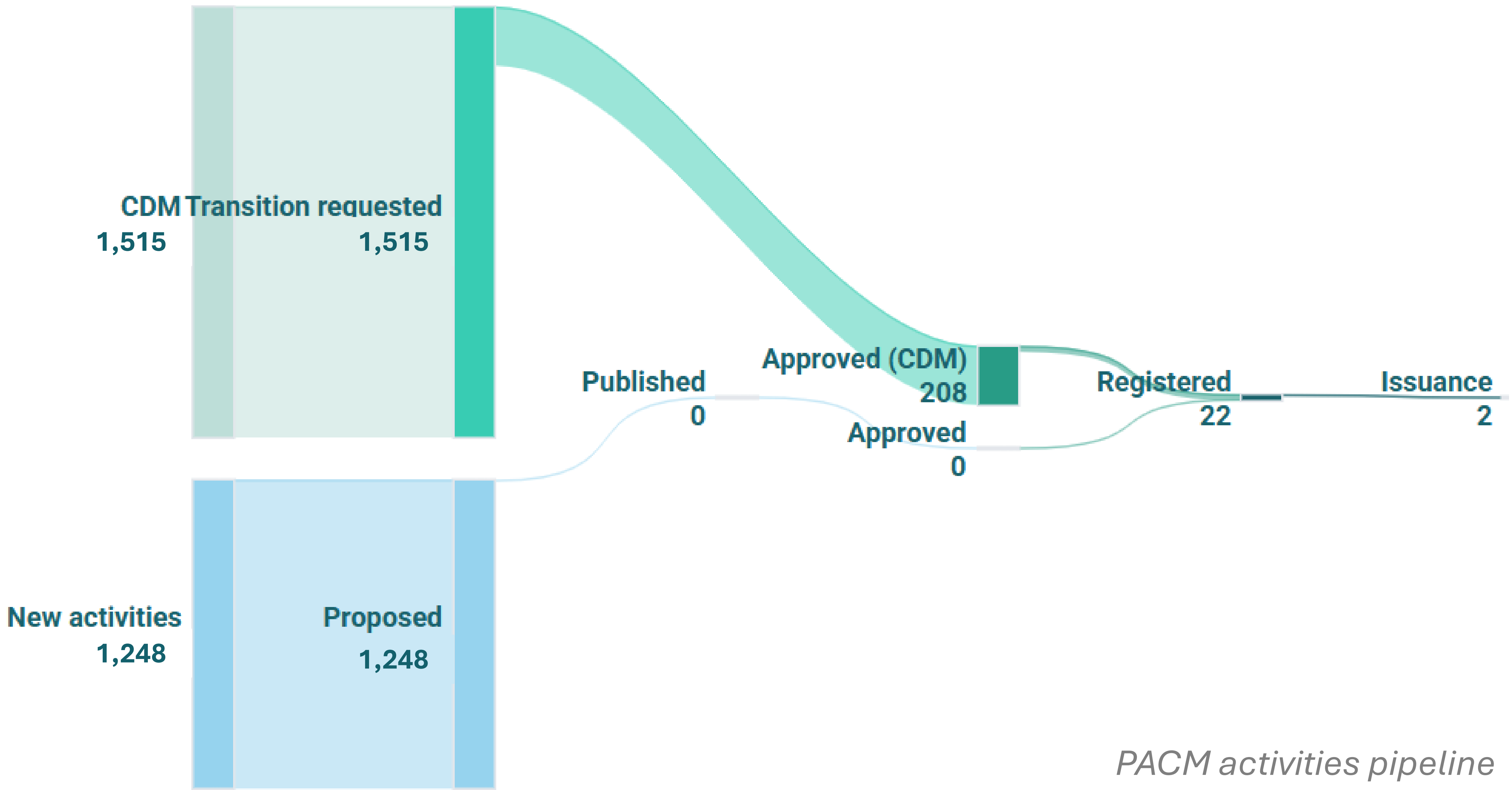
Year	Amount (tCO_2e)
2021	7,641,433
2022	9,596,807
2023	10,088,262
2024	414,319
Total	**27,740,821**

ITMOs reported in Agreed Electronic Format (AEF) submissions

Article 6.4

Paris Agreement Crediting Mechanism

PACM – Activity pipeline status



PACM activities pipeline

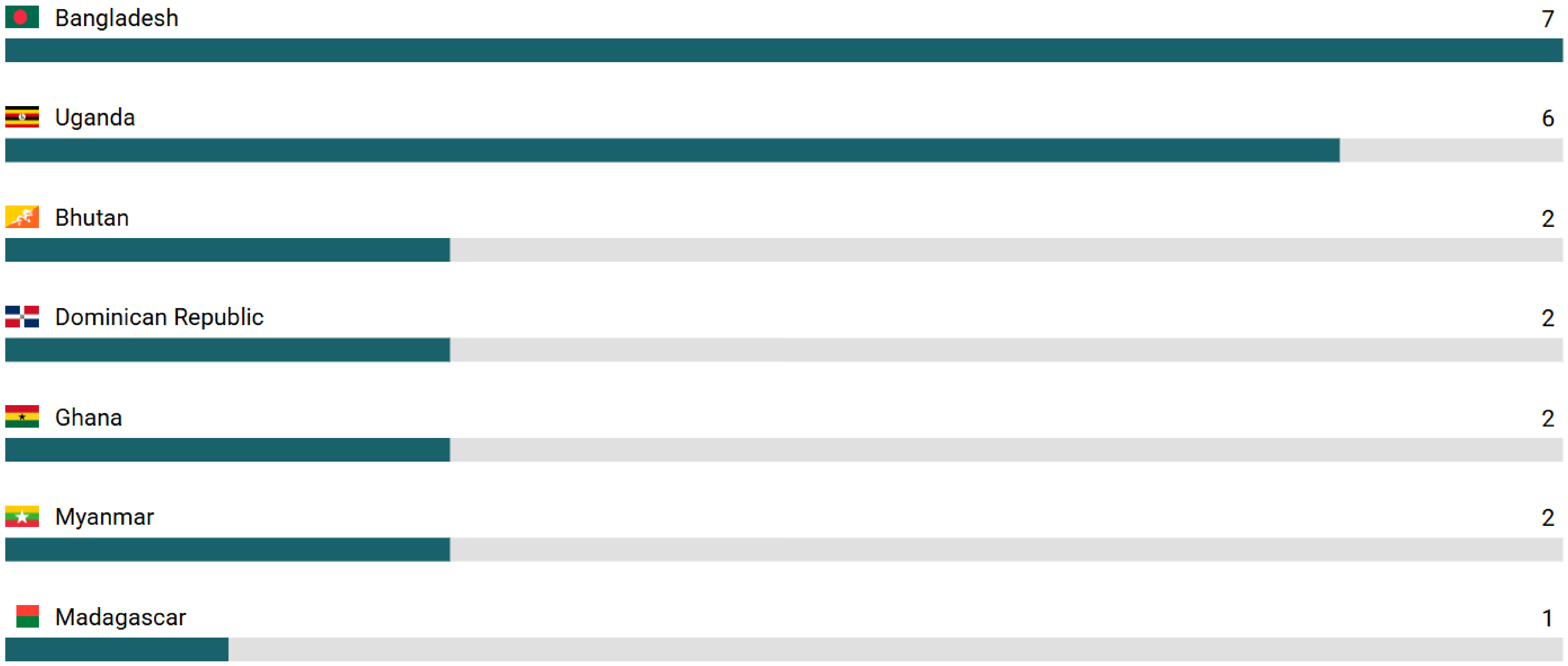
Out of the ~2,759 activities entering the PACM pipeline (1,515 CDM transitions and 1,248 PCNs), 22 are registered with 2 programmes having issued units.

PACM – What activities are registered?

22 Registered activities

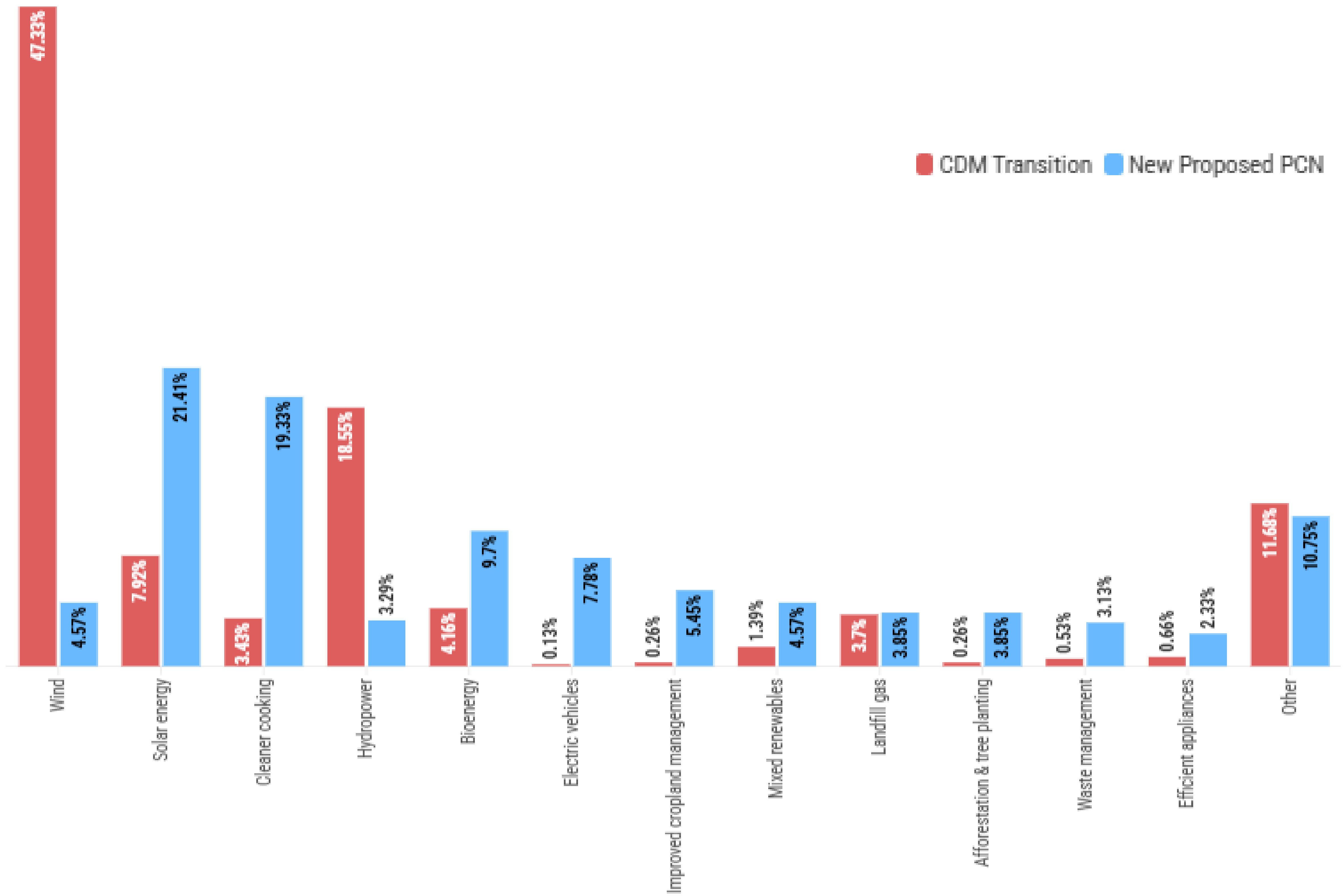
11 Projects
11 Programmes

Registered PACM activities account for around **12 million tCO2e** of estimated emission reductions, with about **94% concentrated in Bangladesh** (8.38 million) and **Bhutan** (2.92 million)



Registered activities as of 31 May 2026

PACM – What types of activities are more common?



Share of activity types within each stream (Projects and PoAs)

CDM transition activities are mostly legacy renewables, with wind and hydropower about two-thirds of the total

In contrast, the new PCN pipeline is more diversified, led by solar and cleaner cooking and broader, covering types such as electric vehicles, cropland and afforestation.

PACM – Methodology pipeline

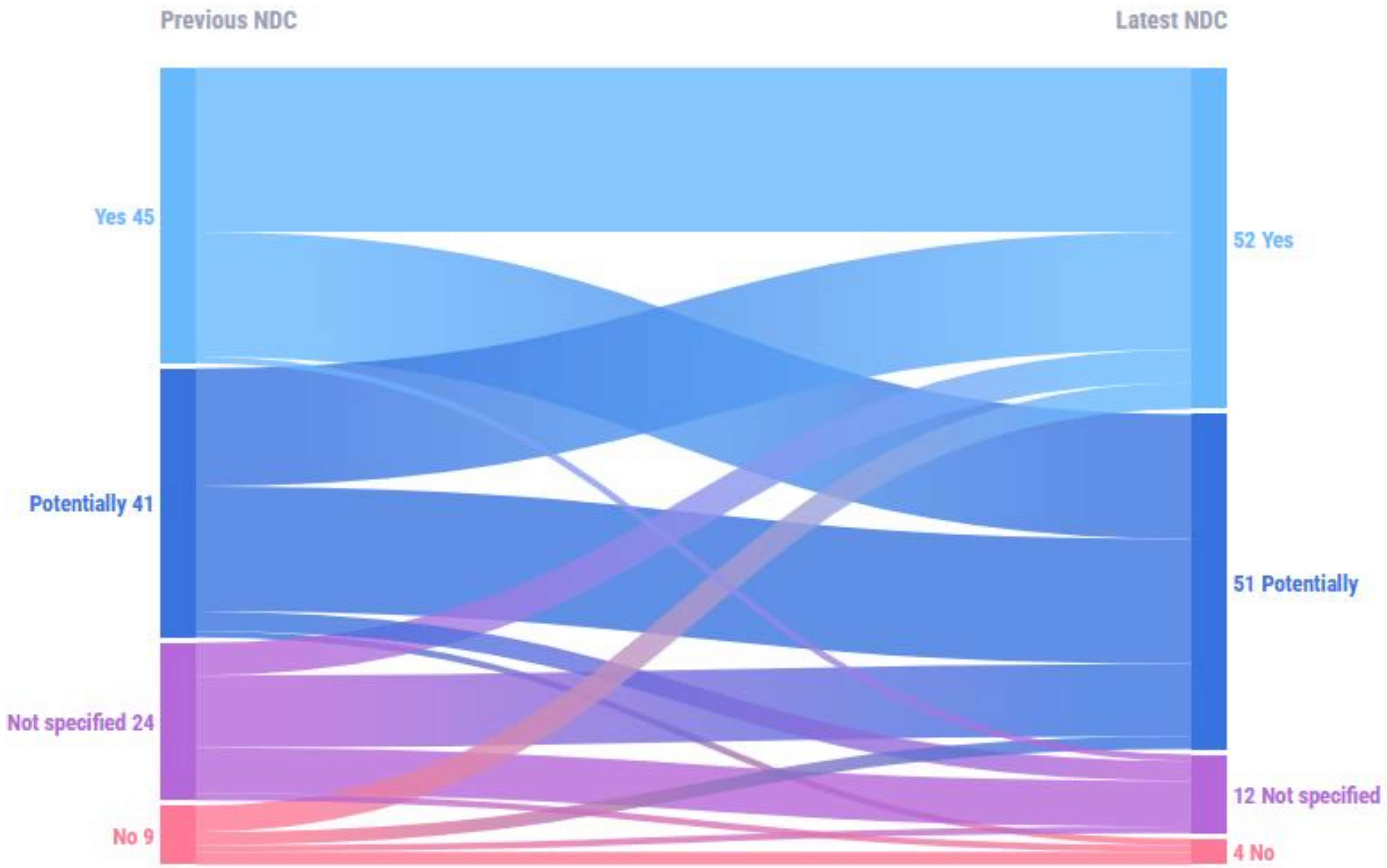
2 Mechanism Methodologies

The first two approved PACM methodologies already have a pipeline behind them, including **90 activities** and about **24 million tCO2e/year** of estimated mitigation.

		No. of activities	Estimated annual mitigation (tCO2e/year)
Flaring or use of landfill gas	CDM Transition	30	6.93 Mn
	Submitted PCN	48	11.09 Mn
N_2O abatement from nitric acid production	CDM Transition	11	5.70 Mn
	Submitted PCN	1	0.14 Mn
Total		90	23.86 Mn

Article 6 and NDC

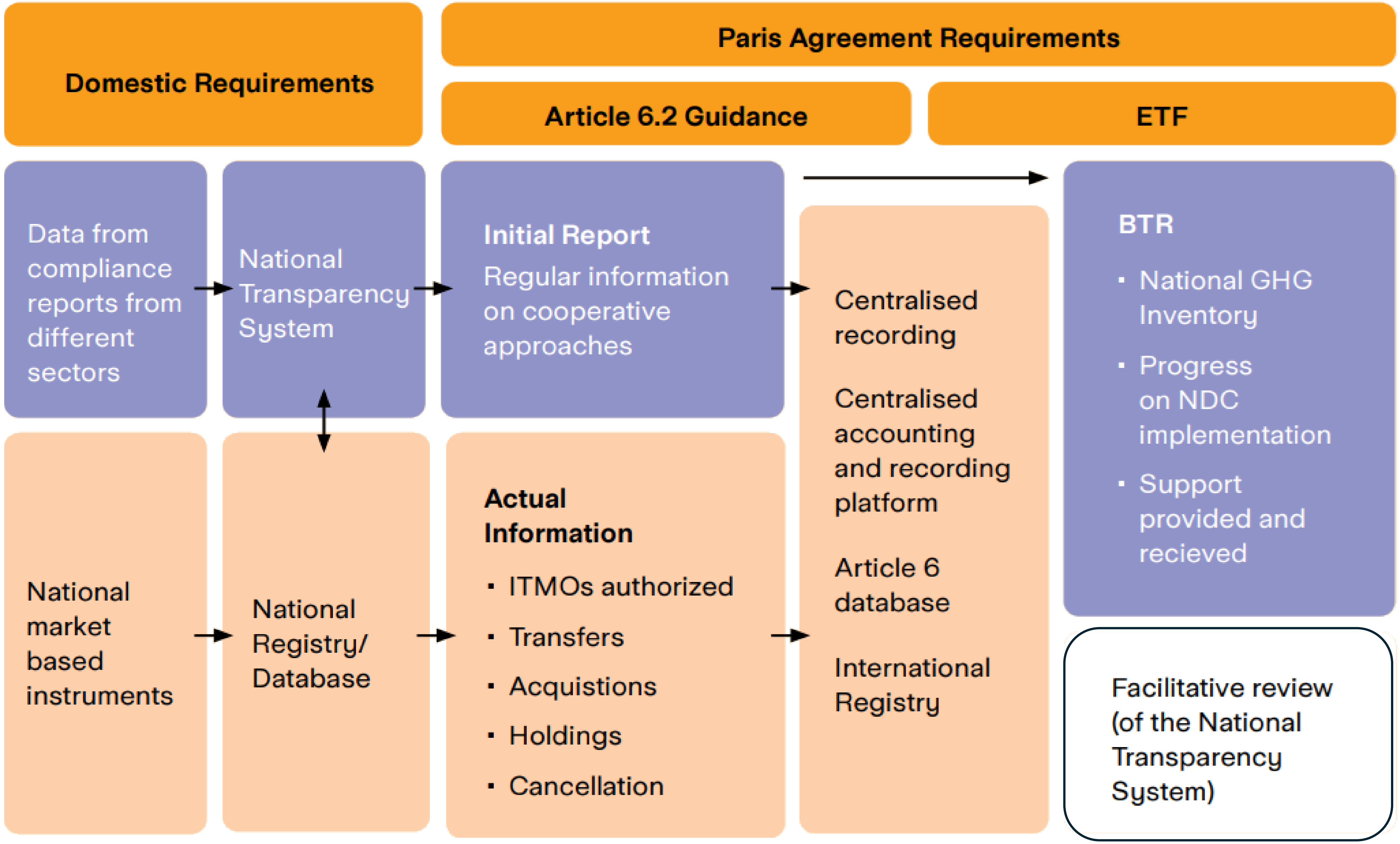
Who mentioned using Article 6 in their NDC 3.0?



Data source: Climate Watch

In the latest round, the intention to use Article 6 markets shifted upward, with **103 NDCs indicating an openness** to use Article 6

Article 6 reporting for NDC progress tracking



Source: ICAT (2023): 'Transparency for cooperative approaches under the Paris Agreement: A guide to navigating the links between Articles 6 and 13'

New features released

	Download function	Download the dataset in excel format and from specific charts
	A6 Pipeline account	Create an account to save favorite pages, charts and tables that you frequently use

Access the Article 6 Pipeline

UN environment programme | copenhagen climate centre

UN environment programme

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Session 2

Article 6 in 2026 :

Key developments and the road ahead

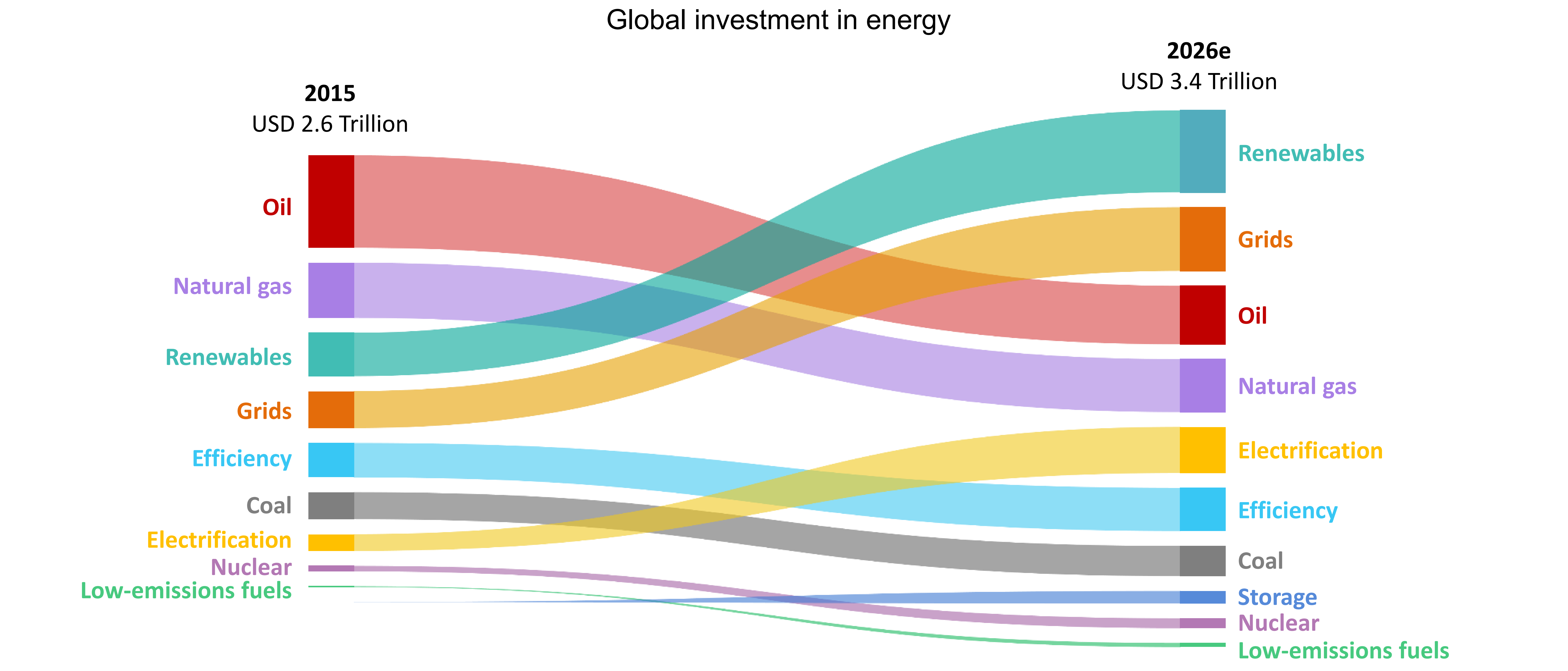
International
Energy Agency

World Energy Investment 2026

Luca Lo Re, Office of the Chief Energy Economist

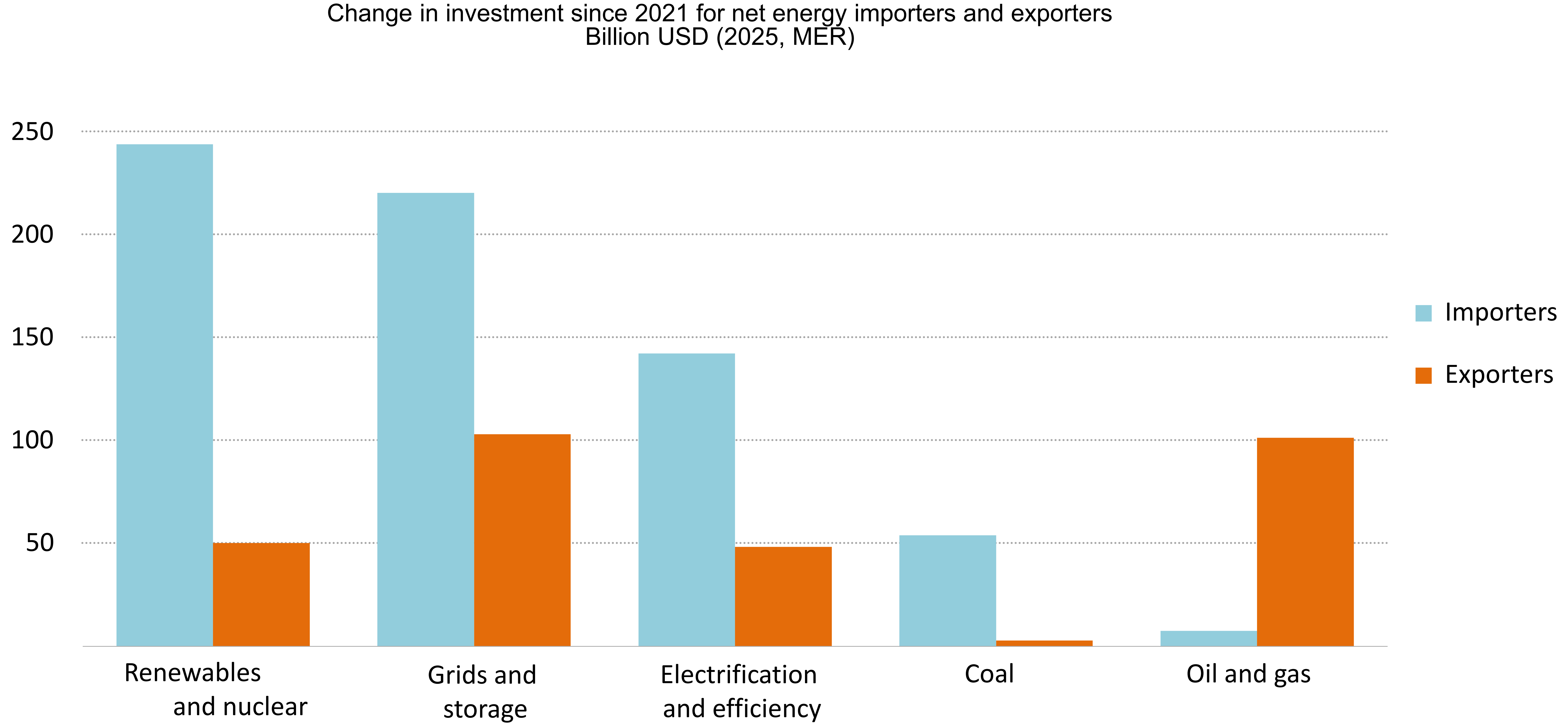
Article 6 Markets Day - Bonn, 8 June 2026

A decade of turbulence and transformation for energy investment



Coming so soon after the global energy crisis of 2021-2023, the Middle East conflict is reinforcing a strong prioritisation of energy security in country investment strategies

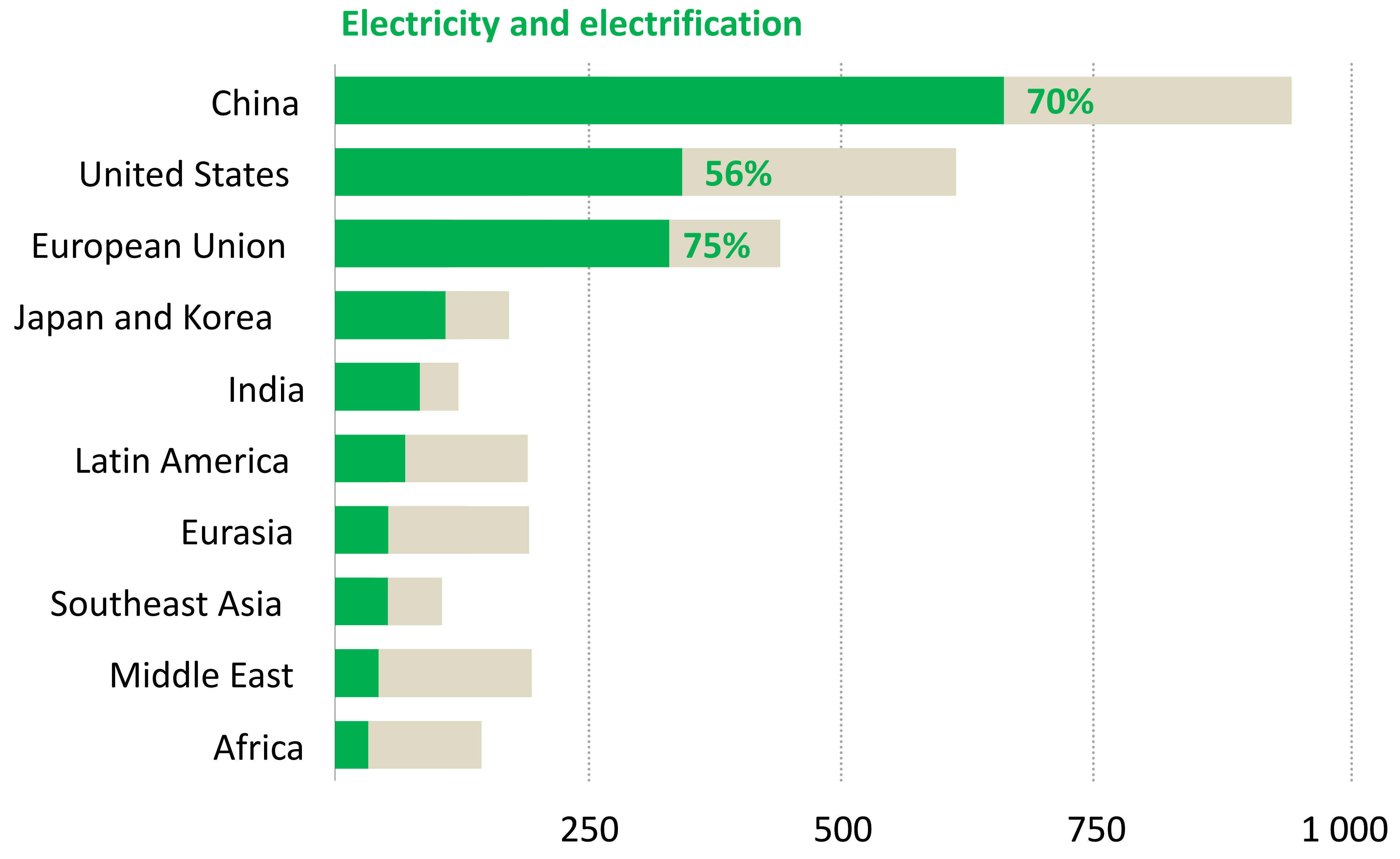
How did energy investment flows change with the last energy crisis?



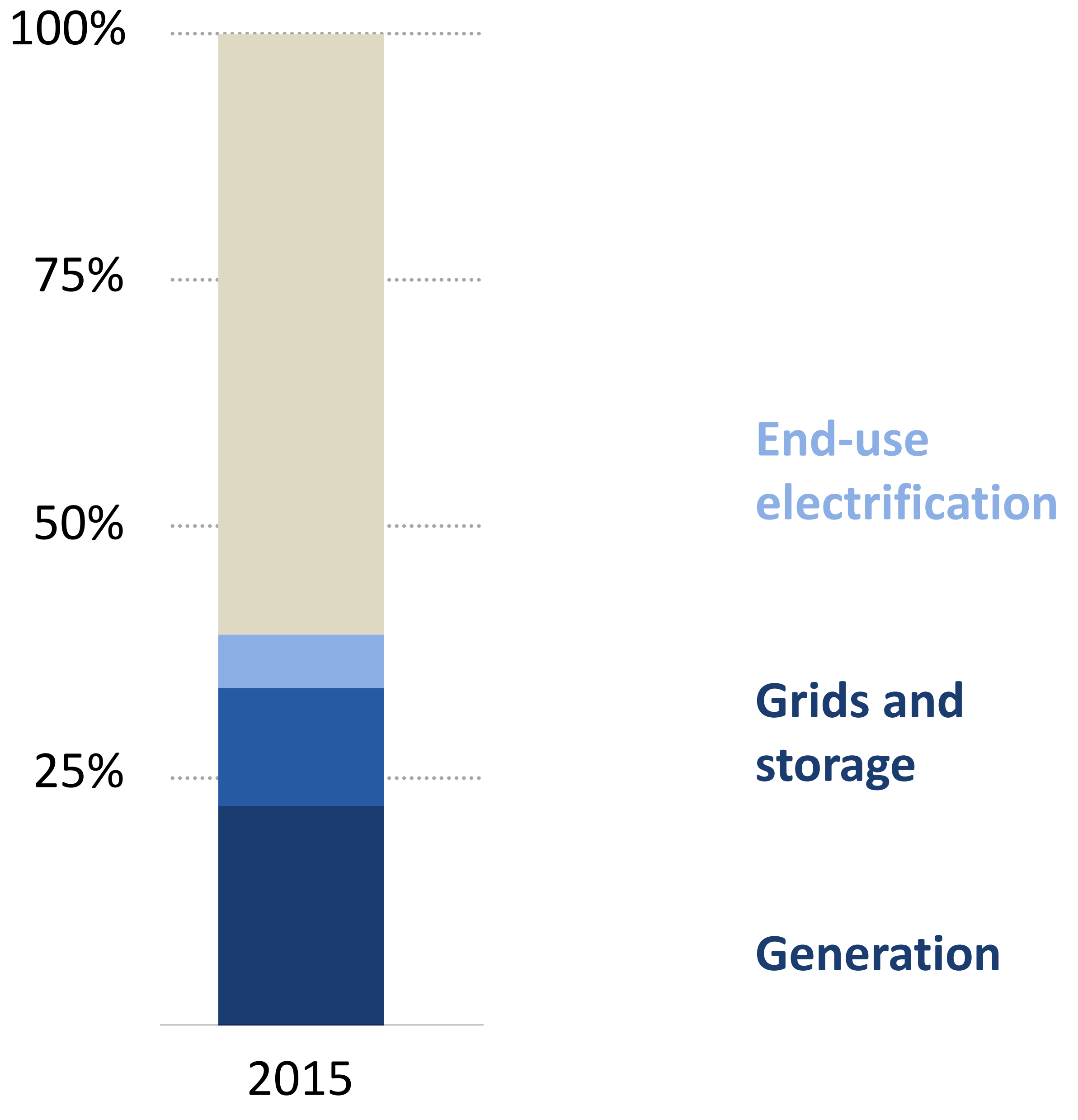
Energy investment picked up through the previous energy crisis, led by low-emissions power, grids, electrification and efficiency; Asia's net energy importers also looked to their domestic coal resources

Accelerating into the Age of Electricity

Electricity-related investment in total spending, 2026e, Billion USD (2025, MER)



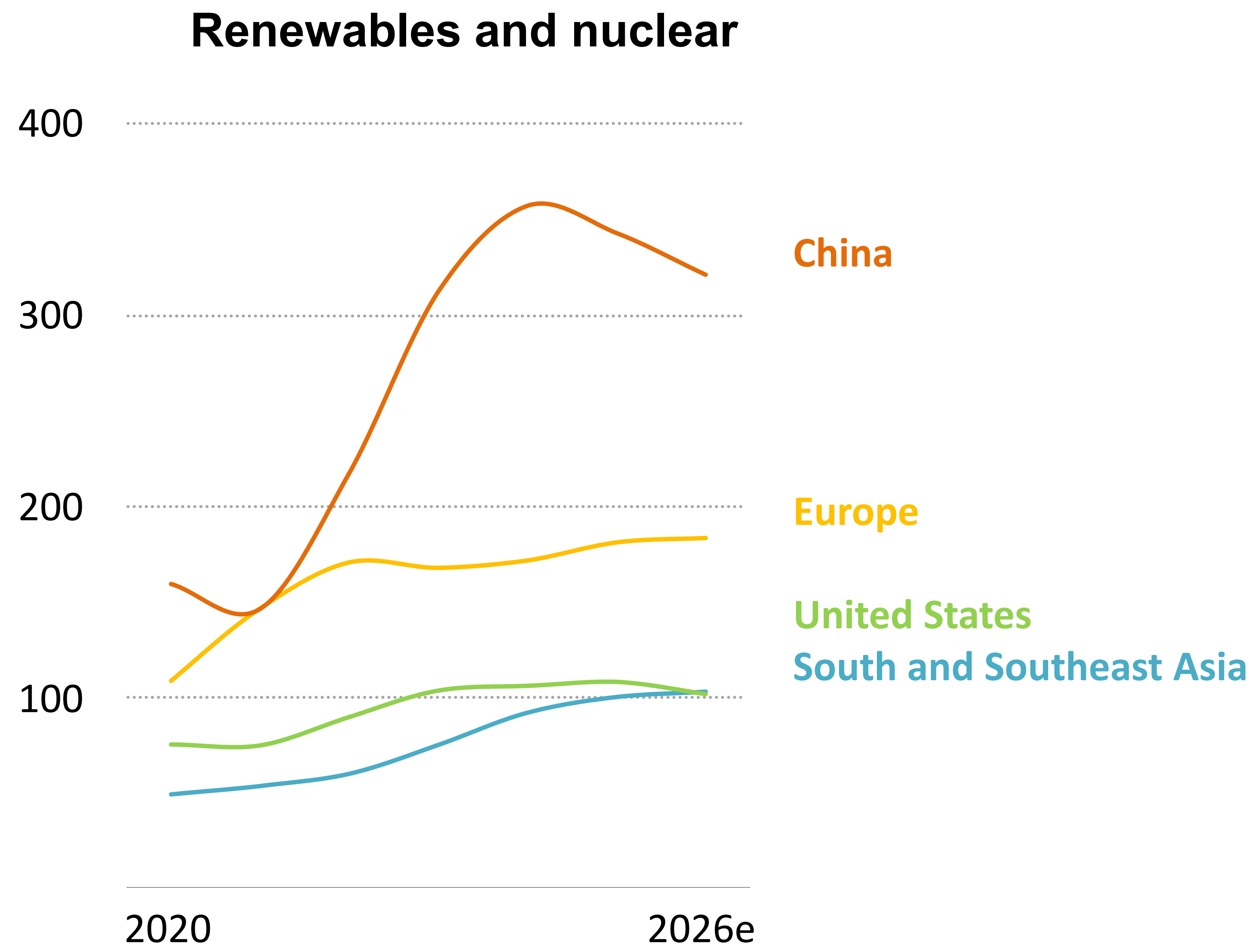
Share of global investment by sector



Investments in electricity supply and infrastructure around the world are expected to reach USD 1.6 trillion in 2026 and rise to USD 2 trillion when spending on end-use electrification is included.

Investments in grids & storage are picking up

Investment spending, Billion USD (2025, MER)

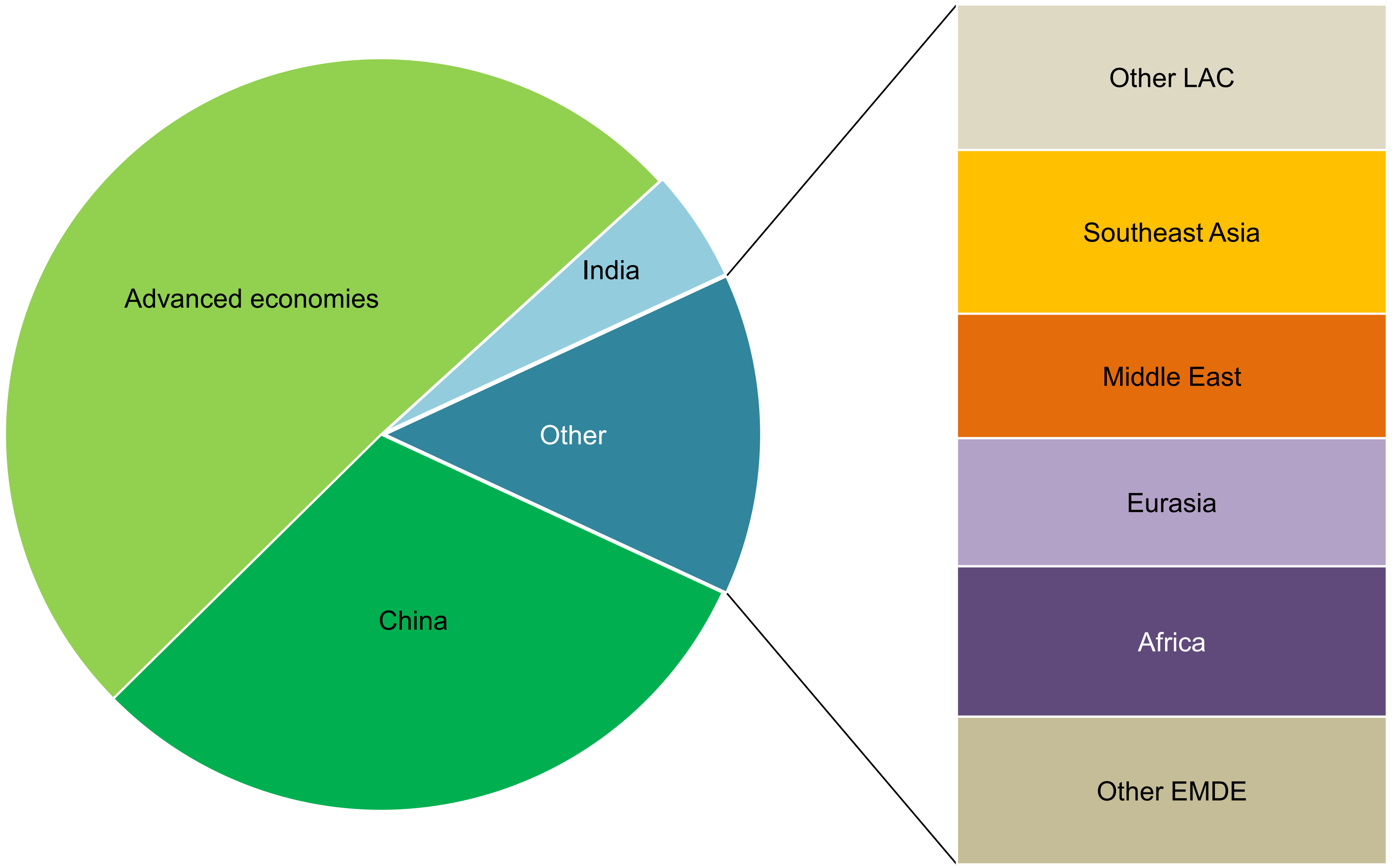


China Europe United States South and Southeast Asia

Renewables spending has dipped recently, largely because of China, but still makes up 70% of total power generation investment, while nuclear is making a comeback and spending on grids and storage is on the rise almost everywhere

EMDE clean energy investment accounts for 50% of the global total

Clean energy investment shares, 2025



Investment in EMDE outside China and India have increased by around 50% in the last decade; and they are expected to increase even further in the next decade. Article 6 could act as an accelerator.

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Session 2

Article 6 in 2026 :

Key developments and the road ahead

University of Zurich[UZH]

Institute of Political Science – Center for Comparative and International Studies

perspectives climate research

What two decades of carbon market experience teach us about getting it right

Axel Michaelowa, axel.michaelowa@pw.uzh.ch; michaelowa@perspectives.cc

SB 64 Article 6 Markets Day, Bonn, 8 June 2026

Agenda

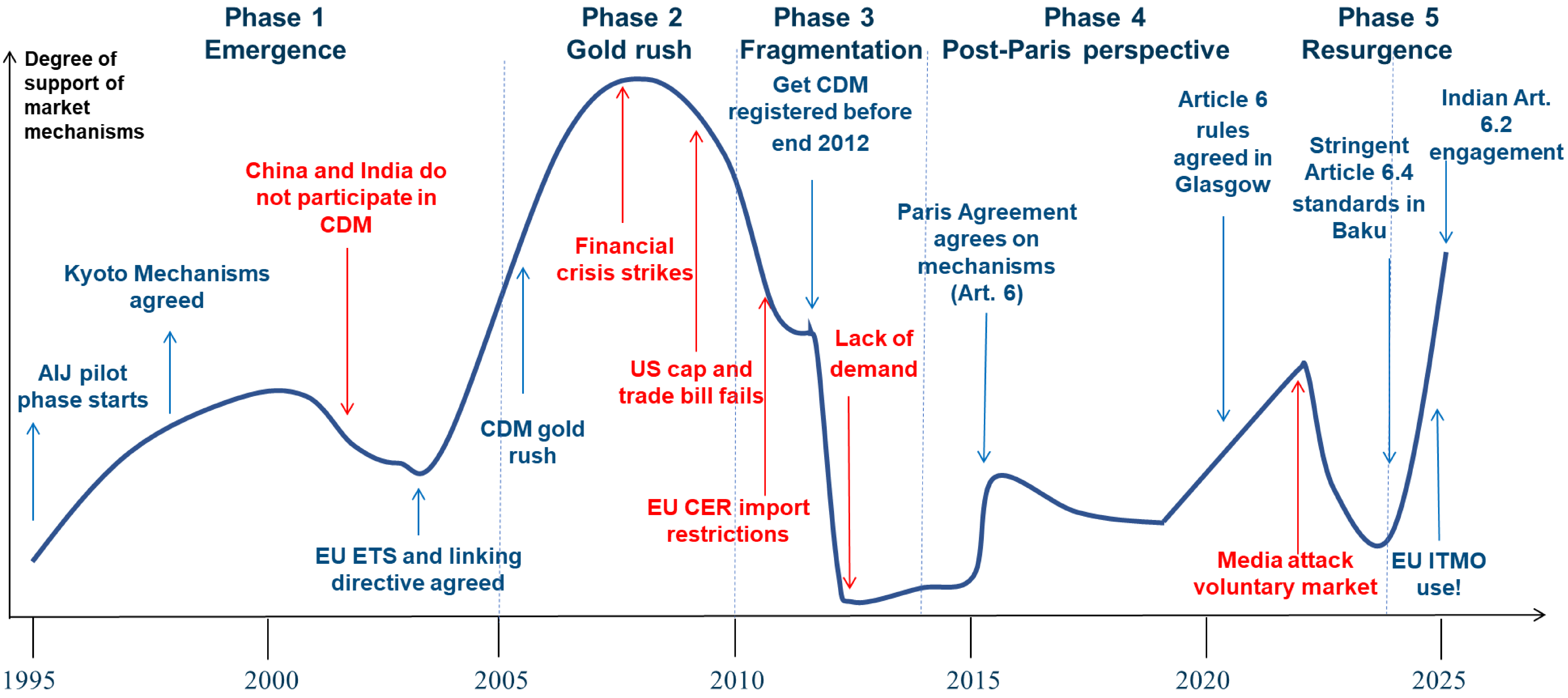
- **Trust** in international carbon markets is a **very volatile** commodity
- Key lessons from the **CDM** and **voluntary carbon market** regarding
  - ➢ **additionality** testing
  - ➢ **baseline** setting
  - ➢ **the right incentives for a third-party audit "with teeth"**
- **Recommendations for the Article 6 regulators**

CARBON TRUST

Trust™ Carbon

Source: New Yorker, 2023

The international carbon market rollercoaster

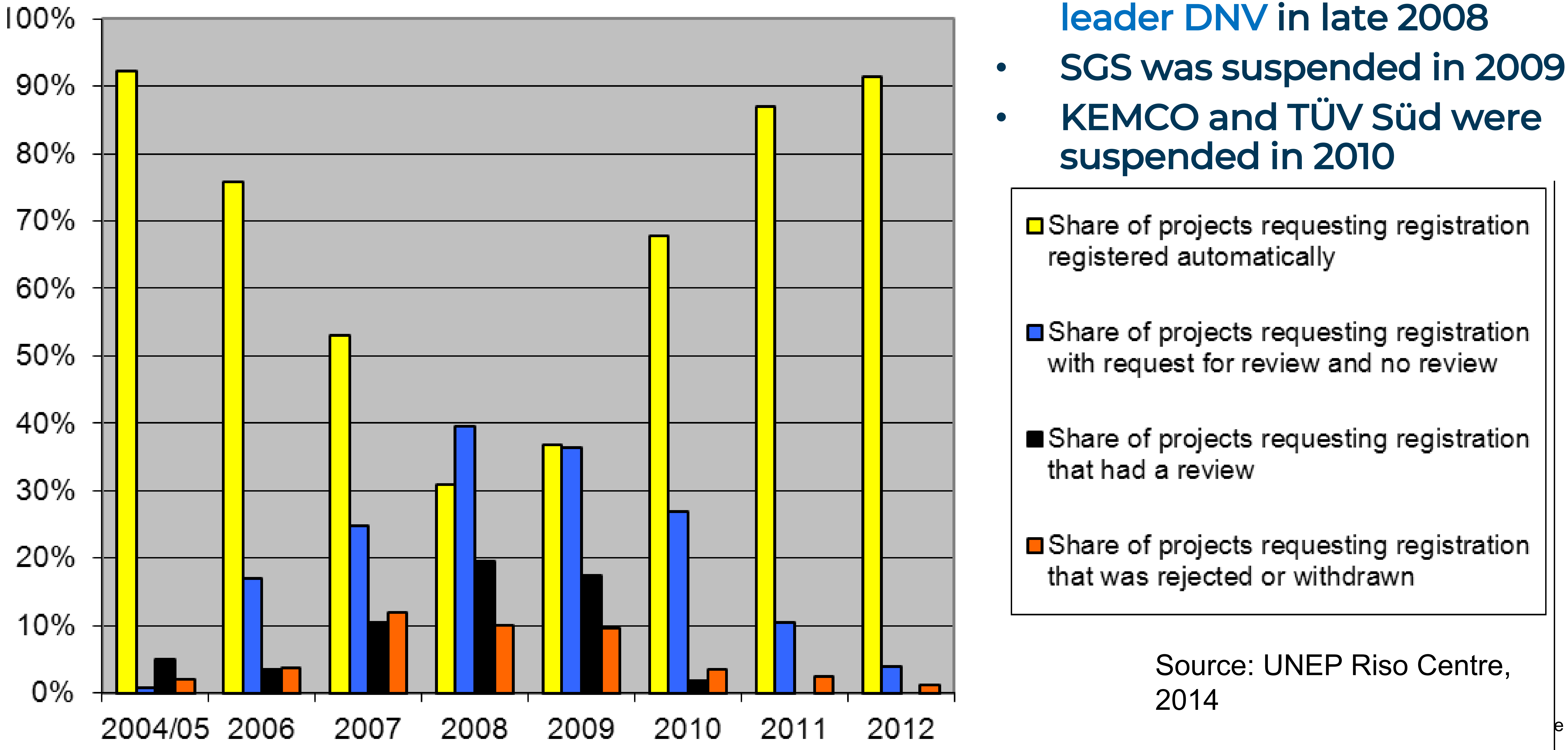


Loss of trust = lacking demand

Additionality under the CDM and VCM

- *Additionality is given if* projects are less profitable than the most attractive alternative or a benchmark or overcome prohibitive barriers, and are not common practice
- *Original idea*: Different types of additionality tests can be undertaken and non-additional projects are weeded out by independent validators
- *Actual practice:* Most CDM and VCM projects applied a barrier test
- *Outcome*: ~ 1/3 of CDM emission credits came from non-additional projects, but share was falling over time
- *Explanation of outcome*: Arms race between regulators and project developers, as auditors were a failure because they wanted to secure further audit revenues from the same project developers
- *Wider repercussion*: Credibility of CDM was seriously shaken and eventually the mechanism faltered due to lack of demand. The VCM repeated the same experience a decade later.

Clamping down on auditors – CDM case

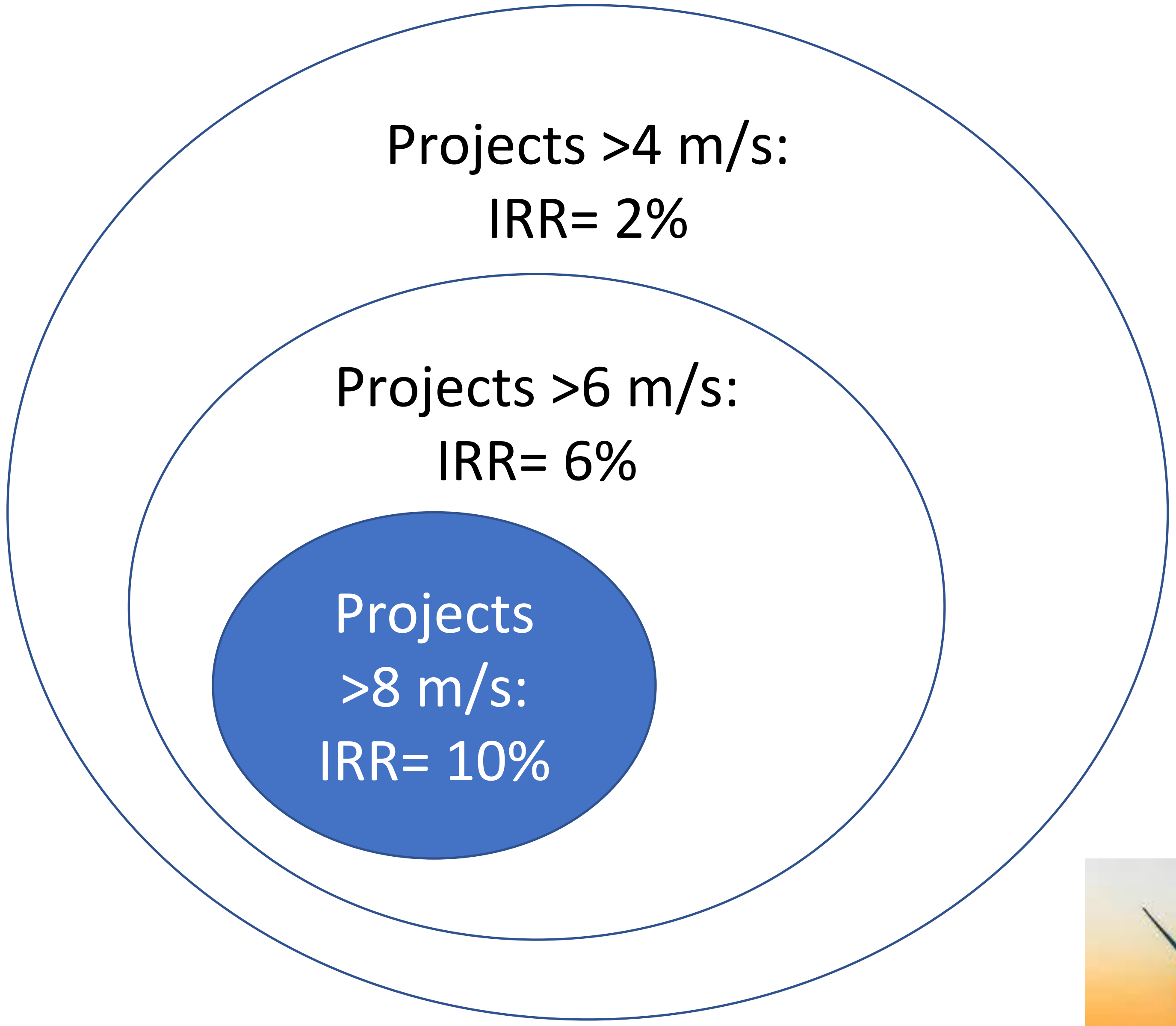


- The CDM EB suspended market leader DNV in late 2008
- SGS was suspended in 2009
- KEMCO and TÜV Süd were suspended in 2010

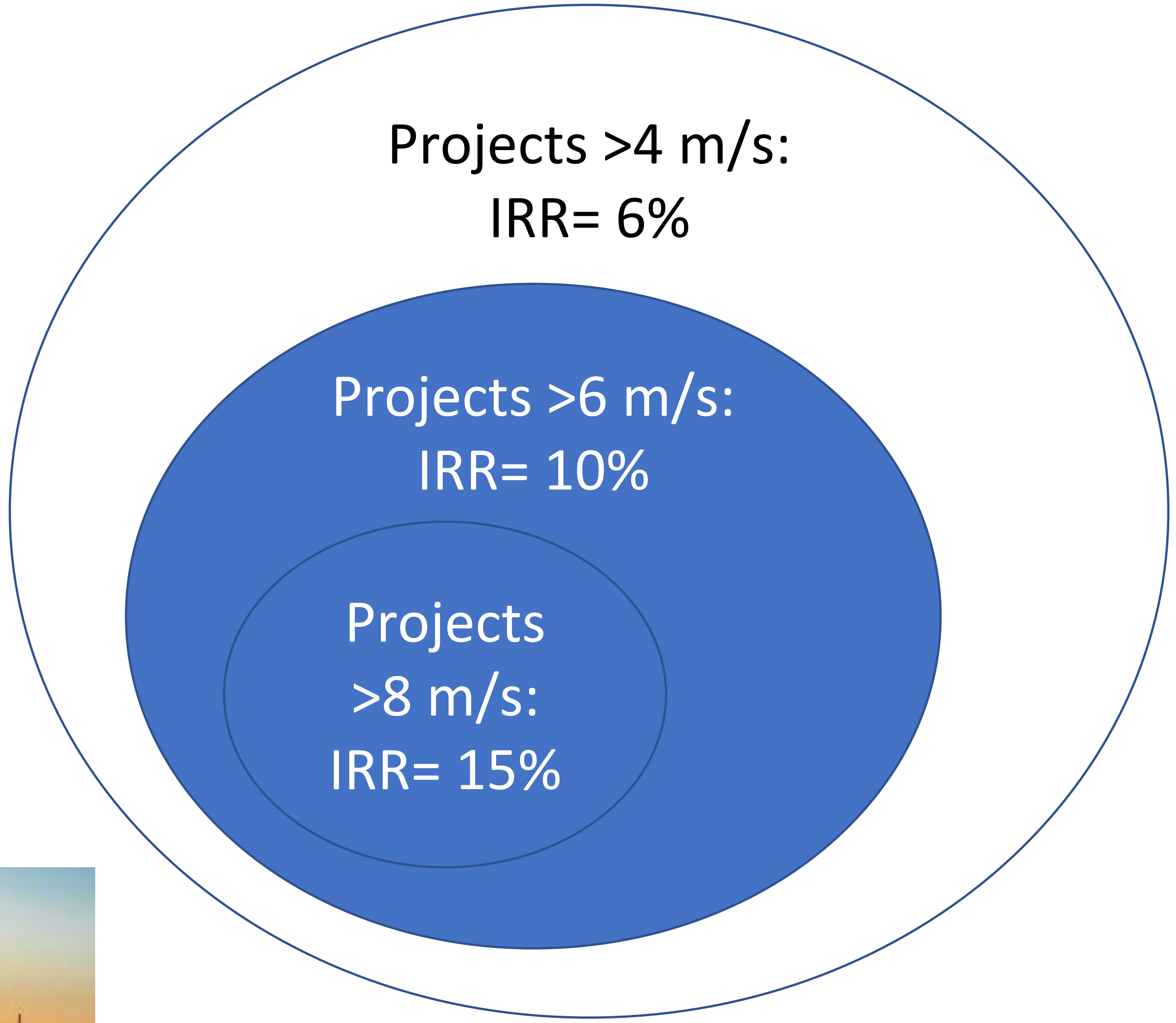
Source: UNEP Riso Centre, 2014

Change in additionality of projects over time

Example: Wind power



2010



2026

Baseline setting under the CDM and VCM

- *The baseline* represents business-as-usual emissions
- *Original idea*: Different ways of baseline setting exist depending on activity types – historical emissions, projections, benchmarks, best available technologies
- *Actual practice:* Most CDM and VCM projects applied a historical baseline using emissions intensity as key parameter. Revisions of methodologies led to an important role for default parameters
- *Outcome*: Some baseline methodologies were heavily contested from the start, others were applied for years without opposition but then became contested. Often, absolute baseline emissions actually increased.
- *Explanation of outcome*: Only few experts really understand the dynamics of key parameters and resources lacked to carefully assess parameters at the point of regulatory vetting of methodologies
- *Wider repercussion*: Credibility of specific activity types – avoided deforestation, cookstoves, chemical gases - was seriously compromised

Lessons and policy recommendations

- Robust additionality testing requires an investment test done in the way a bank tests a loan application
  - Gaming of investment tests will be attempted but robust validation can address it
  - Positive lists need to have a limited validity period
- Robust baseline setting requires
  - careful vetting of default parameters and prevention of perverse incentives
  - a conservative definition of business-as-usual
  - (in case of emissions reductions) downward adjustment to ensure alignment with the long-term goal of the Paris Agreement
- Robust independent auditing requires allocation of auditors by lottery
  - Carbon market regulators need to define a fee schedule and then administer the allocation
- Art. 6.4 has already taken up many lessons but challenges remain
  - Exceptions/alternative approaches could dilute regulatory stringency achieved to date
- Art. 6.2 approaches should not fall into the old (VCM/CDM) traps!

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Session 2

Article 6 in 2026 :

Key developments and the road ahead

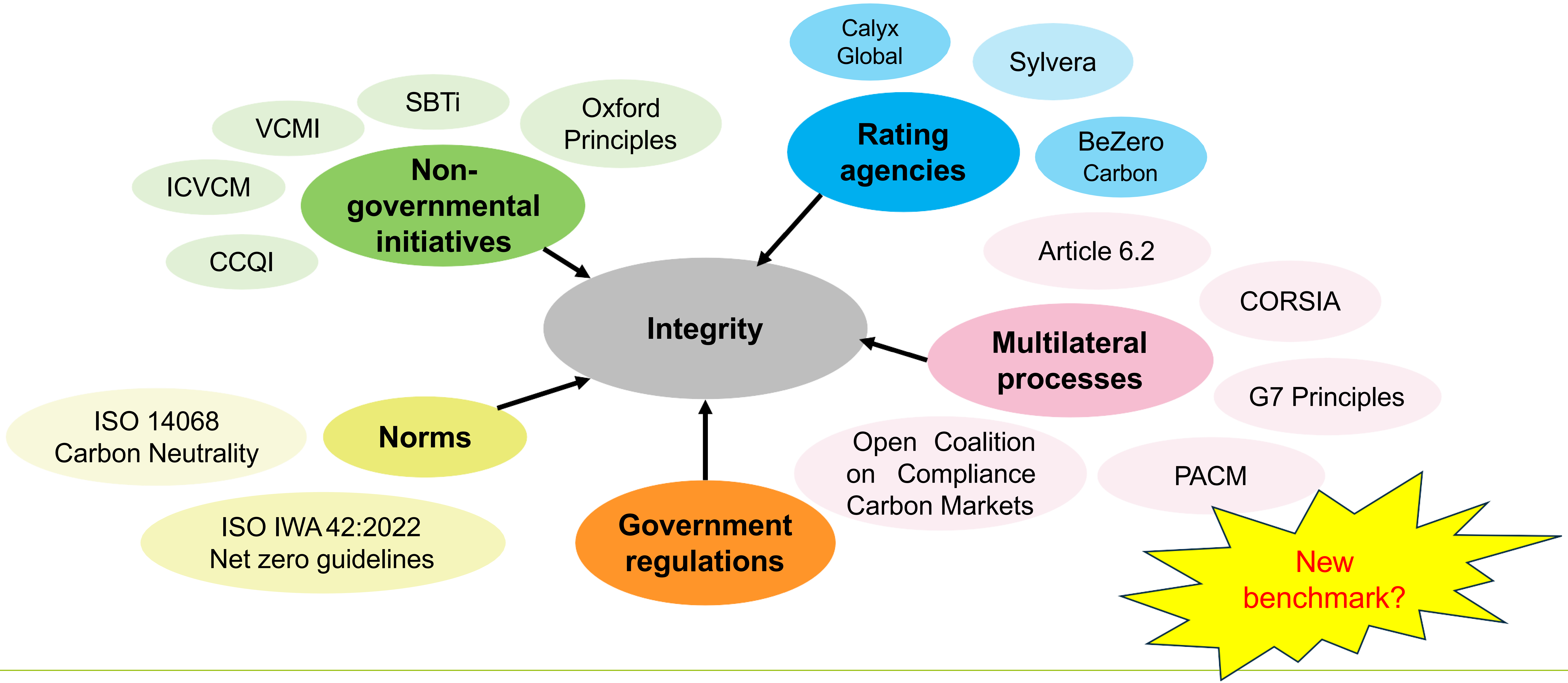
Is the PACM setting a new global benchmark for integrity?

UNFCCC / GIZ PACM day

Lambert Schneider | 8 June 2026

Note: this version of the presentation has been corrected and clarified based on feedback received compared to the version presented at the event.

The evolving institutional landscape on integrity of carbon crediting



Note: This slide only provides examples of relevant non-governmental initiatives, rating agencies, multilateral processes and norms.

Comparison of selected requirements - Additionality

	Multilateral processes		Non-governmental initiatives		Carbon crediting programmes		
	PACM	CORSIA	ICVCM	CCQI[1]	VCS	GS[2]	ACR
Prior consideration[6]	✓	✗	✗	✓	✗	✓	✗
Regulatory analysis: Laws deemed enforced	✓	✓	O[5]	✓	O[4]	O[4]	✓
Regulatory analysis: Updated at each verification	O[3]	✗	✗	✓	✗	✗	✓
Lock-in risk assessed	✓	✗	O[7]	✓	✗	✓	✗
Investment analysis: Impact of credits considered	✗	✗	✓	✓	O[8]	✓	NA

Notes: 1) Highest score under the CCQI. 2) Gold Standard rules were assessed based on their framework for Paris Alignment. 3) The additionality standard requires updates at the latest at the renewal of the crediting period but the two approved methodologies require regular updates. 4) Required for CORSIA eligible units for the first phase. 5) Legal requirements are deemed enforced for high-income countries but not for low-income countries. 6) This relates to whether public evidence of consideration carbon credits must be available within one year after the investment decision. 7) Some activity types are excluded due to risks related to lock-in. 8) Required for ICVCM eligible units.

Comparison of selected requirements - Quantification

	Multilateral processes		Non-governmental initiatives		Carbon crediting programmes		
	PACM	CORSIA	ICVCM	CCQI[1]	VCS	GS[2]	ACR
Downward adjustments to baselines	✓	✗	✗	✗	✗	✓	✗
Conservativeness based on systematic assessment of uncertainty[3]	✓	✗	✓	✓	✗	✓	✗
International leakage accounted for	✓	✗	O[4]	✓	✗	✓	✗

Notes: 1) Highest score under the CCQI. 2) Gold Standard rules were assessed based on their framework for Paris Alignment. 3) For carbon crediting programmes, this relates to whether carbon crediting programme rules requires methodologies to identify and assess uncertainty in a systematic manner. 4) The ICVCM requires that all relevant potential sources of leakage are considered but approved methodologies that do not account for international leakage.

Key findings

PACM sets an ambitious benchmark for carbon credit quality

- Sets an ambitious integrity benchmark, drawing on lessons learned from the past
- Many requirements build on the ICVCM and CDM but go beyond them (with few exceptions)
- Ambition means that fewer credits will be issued => Higher prices will need to be paid

Gold Standard aims to align closely with PACM requirements – other carbon crediting programs do not so far

There is increasing alignment in requirements but still notable differences

- Carbon credits will be tagged according to their eligibility in different markets
- PACM may support alignment through its ambition and recognition

Thank you for your attention!

Lambert Schneider
Research Coordinator for International Climate Policy

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Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.“

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Lunch Break 1230–1340

We will begin the next session at 1345 sharp

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Special Address

Dr. Heike Henn

Head of Department for International Climate Policy,
Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMUKN)

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Session 3

UNFCCC Article 6 Registry Infrastructure

International Registry
and Additional Registry Services (ARS) MVP

Objectives

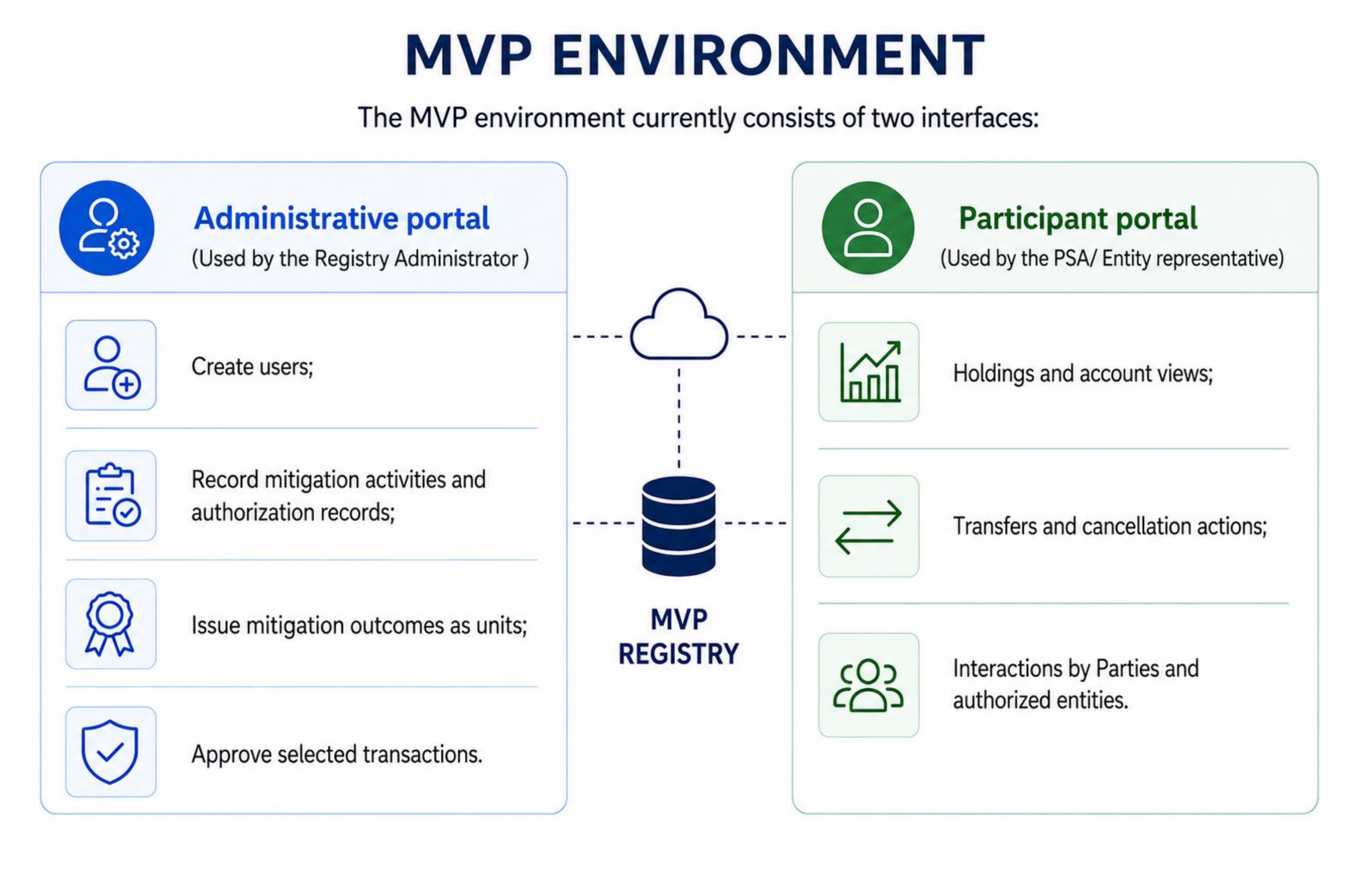
- Demonstrate selected MVP functionalities related to **the recording and tracking** of mitigation outcomes and ITMOs;
- Illustrate how selected **registry processes** may operate in practice;
- Provide an overview of the **MVP structure, accounts and registry actions**;
- Clarify the current **scope and limitations** of the MVP;
- **Gather feedback** from Parties and experts to support further development and refinement;

The MVP is provided for **demonstration and feedback purposes only** and does not represent a fully operational system.

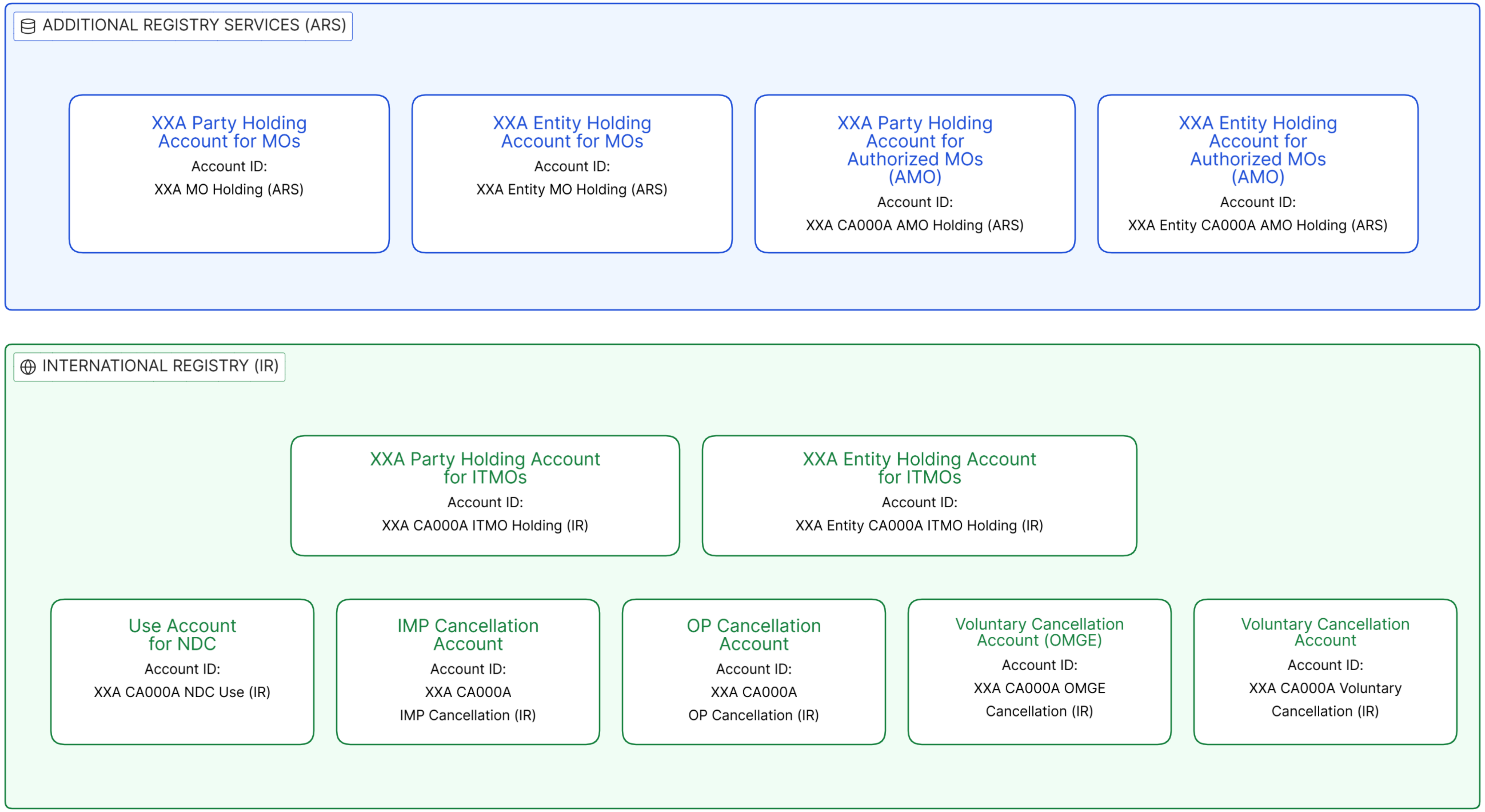
MVP STRUCTURE, ACCOUNTS AND PROCESSES

Overview of the MVP interfaces and operational arrangements

MVP structure

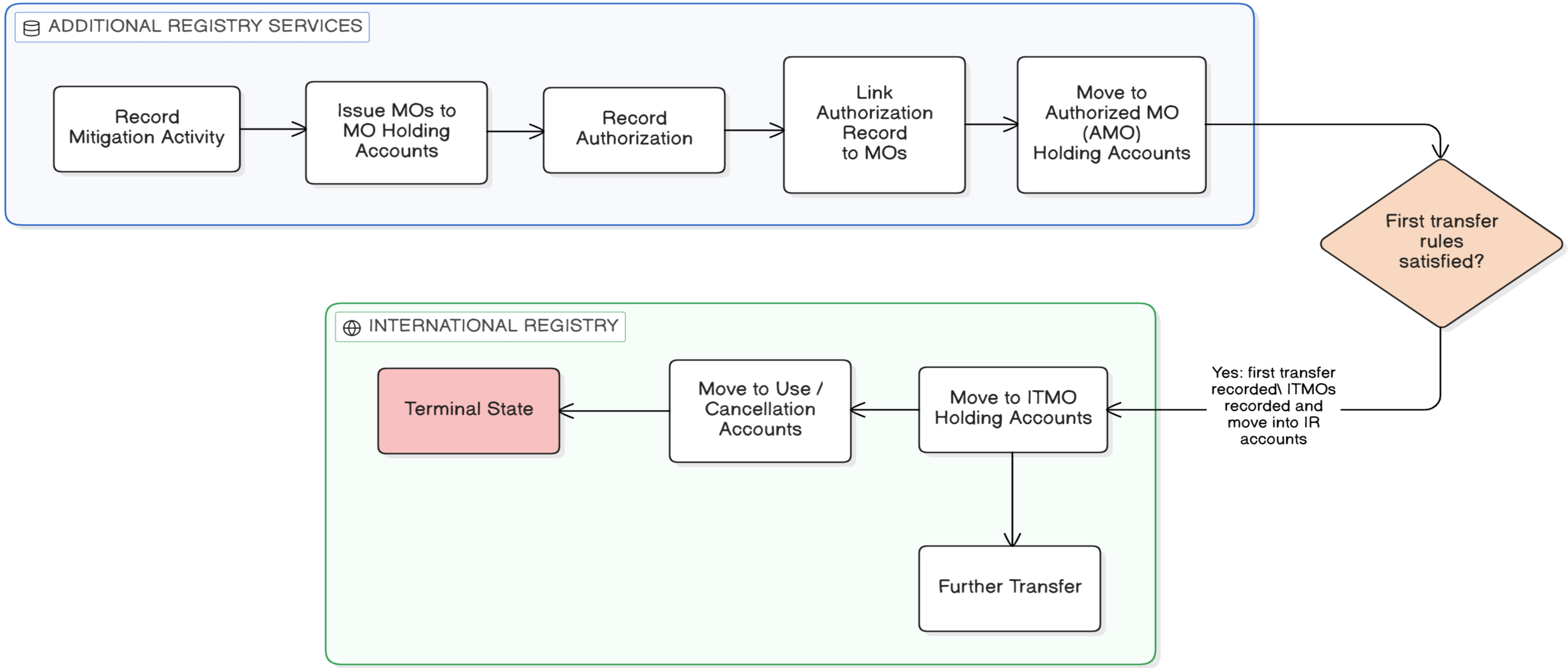


MVP accounts (cont.)



MVP registry processes (cont.)

Example of sequence of processes in the MVP (different arrangements may apply)



Authorization is **submitted to the CARP**. The MVP relies on these inputs for registry functions and operations.

Limitations of the MVP

The MVP demonstrates **selected functionalities only** and includes **simplified operational arrangements** for demonstration purposes.

Out of scope for the MVP

- **Interoperability** with other registries;
- Integration with external systems such as **CARP**;
- **Production-grade** user interfaces and workflows;
- Automated **identity verification** procedures;
- **Production data**.

Limitations of the MVP (cont.)

Technical limitations

Uses a **single registry section** as separate Party sections are not yet fully implemented;

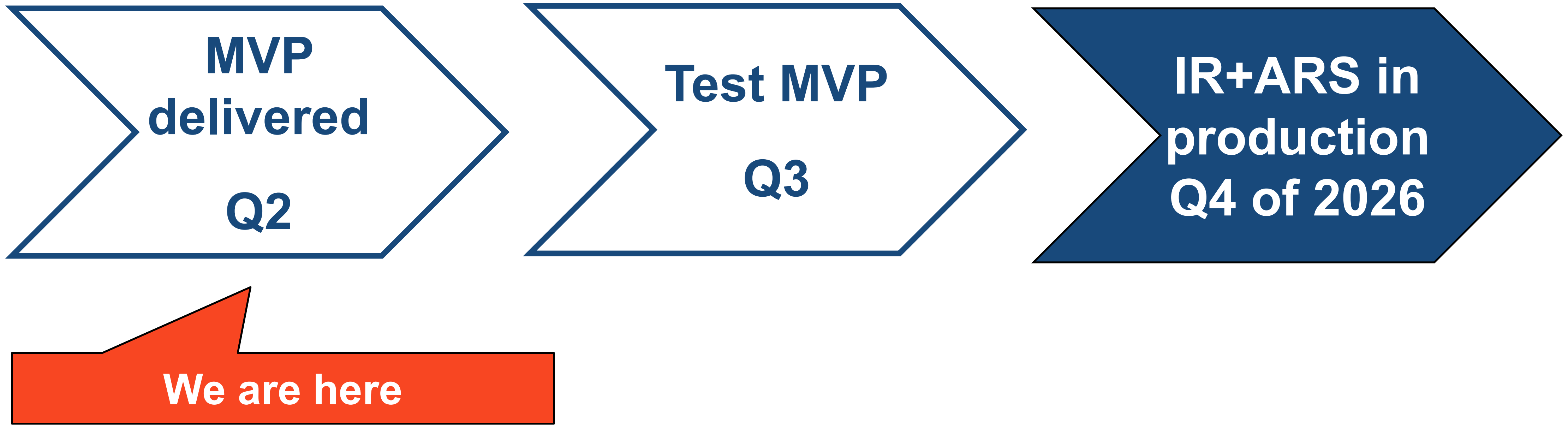
Relies on **manual or administrator-supported actions** for certain processes. In a production environment, these actions would be undertaken by the Party Section Administrator;

Includes **manually recorded first transfer actions**.

Functionalities are expected to evolve over time in accordance with **CMA guidance** and **Party inputs**

Timeline

- MVP for 6.2 Registry delivered in April 2026 (work started in mid-Jan 2026)
- Secretariat and interested stakeholders request access & test MVP
- Final registry will be delivered in Q4 of 2026



MVP ENGAGEMENT & FEEDBACK

Participant engagement and feedback opportunity

Expression of interest

- Expressions of interest submitted through the webinar registration form have been noted;
- If you have already indicated your interest, no further action is required;
- If not, you are invited to complete the form below.

Participation approach

- Access may be provided in phases;
- Participation may begin with Party users, followed by entity users.

Registration: Article 6.2 International Registry and ARS MVP engagement

https://forms.office.com/e/HBGCZJNEKS

Resources available to participants

The following materials are available to support your engagement with the MVP:

- User Guide – Participant Portal;
- User Guide – Administrative Portal;
- MVP Webinar Scenarios and Step-by-Step Guidance;
- Recording of the MVP Webinar.

Important notes:

- These materials are draft versions prepared for the MVP phase;
- Content may be updated as development progresses;
- Final versions will be released with the production system.

Providing feedback

We encourage all participants to provide feedback while exploring the MVP using the form below.

Your feedback will:

- Identify usability improvements;
- Support functional refinements;
- Inform future development priorities.

Article 6.2 International Registry and ARS MVP – Feedback

https://forms.office.com/e/qU0Bbv57Yn

Access to the MVP - Participant Portal

The secretariat is currently creating participant user accounts.

Participants will receive a separate email containing:

- Username;
- Temporary password;
- Multi-Factor Authentication (MFA) setup guidance.

Optional support sessions during SB64

Participants may use the form below to book a 20-minute support session to require assistance with:

- Accessing the MVP;
- Configuring MFA;
- Understanding MVP functionalities.

The secretariat will confirm:

- Allocated time slot;
- Meeting room details.

Article 6.2 International Registry and ARS MVP – Support Session Request

https://forms.office.com/e/aFm1KA05Qz

Mandate and documents available

Mandate for developing the international registry and ARS

- Decisions 2/CMA.3, 6/CMA.4 and 4/CMA.6.

Documents available on the UNFCCC website

- Procedure (initial version): International Registry and Additional Registry Services;
- Terms and conditions for entities;
- Interim process for Parties to open a Party section in the international registry;
- Presentations.

https://t1p.de/5levp

UNFCCC Article 6 registries: Article 6.4 Mechanism Registry

Article 6 Markets Day
8th June 2026

UNFCCC Secretariat
Mitigation Division

Role of UNFCCC registries

- **Article 6.4 mechanism registry**
  - ✓ Functions as the registry for A6.4 emission reductions (A6.4ERs) and eligible CERs;
  - ✓ Performs core lifecycle functions and supports the mechanism;
  - ✓ Support for AEF Generation

- **Article 6.2 international registry and the ARS**
  - ✓ Provides registry services for Parties without national registries;
  - ✓ Performs required tracking and recording functions;
  - ✓ Support for AEF Generation

Article 6.4 Mechanism Registry

Track units across its lifecycle

From issuance through authorization, transfer, acquisition, use, and cancellation — the registry records every action on every A6.4ER and MCU. This end-to-end audit trail is what makes corresponding adjustments enforceable and double-counting structurally impossible.

Transparency

All unit actions are recorded in structured form - visible to Parties, the Supervisory Body, and relevant stakeholders. The registry is not just an accounting tool; it is the public ledger that gives buyers, host countries, and regulators confidence.

Enabling broad participation

The registry defines who can act and under what authority — Parties establish sections, authorize entities, and govern who performs which registry actions. This architecture enforces the principle that mitigation outcomes move only when Parties decide they should, preserving sovereign control within a shared infrastructure.

System overview

- The Mechanism Registry is a standardized electronic **transactional system** established to track and manage the issuance, distribution, transfer, retirement, and cancellation of **Article 6.4 Emission Reductions (A6.4ERs)**. It is **maintained by the UNFCCC secretariat** and supports the implementation of Article 6.4 of the Paris Agreement.

- It has been developed consistent with CMA decisions, including the requirements for registries contained in decision 2/CMA.3.

- While the Mechanism Registry is under development, the secretariat is operating an interim registry solution and the MVP is being launched.

Document framework

- Decisions 3/CMA.3, 7/CMA.4 and 6/CMA.6
- The Mechanism Registry operates according to the Procedure: Article 6.4 Mechanism Registry .
- The Terms and conditions set out the legal basis on which the secretariat makes the Mechanism Registry available to entities (including activity participants).
- Until the final Mechanism Registry is available, various forms have been developed for users to request actions in the interim registry solution.

Timeline

- MVP commenced in January and delivered in April 2026
- Secretariat and interested Parties test MVP
- Final mechanism registry delivered in Q4 of 2026

Mechanism Registry Procedure Highlights

UNFCCC Secretariat
Mitigation Division

Mechanism Registry Procedure – Key Highlights

1. Registry Access & Account Authorization

- DNAs act as account authorities for Party accounts.
- May open holding, retirement, cancellation accounts as Parties.
- Approve account openings for public/private activity participants via LoA.
- Authorize public/private entities to open holding accounts in the A6.4 registry.
- May suspend, reactivate, or terminate accounts they authorized.

2. Issuance & Distribution Process

- Distribution instructions required to avoid accumulation of A6.4ERs in the pending account (risk: financial, operational, tax evasion, money laundering).
- SOP & OMGE levies issued automatically from pending account upon final approval; remaining A6.4ERs issued per distribution instruction.
  - -> DNAs may wish to monitor the issuance and distribution process and coordinate with activity participants and focal points to secure their interest.

3. Post-Issuance Authorization

- The mechanism registry automatically verifies whether the conditions for post-issuance authorization of issued MCUs are met.
- If they are, the registry updates the affected units to AERs and adjusts their status accordingly; if not, the secretariat informs the host Party.

4. Reporting and Fees

- DNAs receive **monthly registry reports** on Party-related holdings, transactions, and first-transfer status of AERs.
- **Fees**: The following fees shall apply to account holders
  a) An account opening fee for all accounts opened: (i) USD 500 for the first account opened by an account holder; (ii) USD 800 for the second and each subsequent accounts opened by an account holder;
  b) An annual account maintenance fee of USD 400 for each account;
- Party account holders (DNAs) are exempt from all fees.
- Activity participants are exempt from account-opening fees for their first account and from maintenance fees for the first 12 months.

Mechanism registry overview and links

✓ https://unfccc.int/process-and-meetings/the-paris-agreement/article-6/article-64-pacm/registry

Rules and regulations relating to the Mechanism Registry: https://bit.ly/4kx6L8F

Minimum viable product (MVP)

Minimum viable product (MVP)

- Overview of the Mechanism Registry MVP

Admin Portal

Registry Administrator actions:

- Create authorizations
- Issue and transfer units
- Open and close accounts

Participant Portal

- Party and entities accounts for holding and transferring credits.

MVP Exclusions: Refined user interfaces, system integrations, detailed error messages, naming conventions, and production data are **not** yet included.

Minimum viable product (MVP) - Benefits

- Early hands-on to test concepts
- Helps in understanding how the system will work in the background
- Provide feedback which will be valuable as we move ahead to develop the full registry
- Helps in understanding the scenarios faced by the user

The MVP should **not** be treated as the final system or used for real-world production data

- **NOTE:** The KYCs conducted and accounts opened will be carried over to the final version and will help the secretariat time when the full registry is launched

Contact us

- Please contact us if you have any questions or your if Party/entity wants to open an account.
- Contact us at a6.4mechanism-registry@unfccc.int
- Please do let us know if you would like access to the MVP for testing purposes (Note that this is not a production system)
- Hands on demonstrations tomorrow, 9 June and Wednesday, 10 June.

Expression of interest in Article 6 registries

Article 6.4 MVP hands of demonstration

Please send any further questions to the below email addresses:

a) Related to the Article 6.2 International Registry: international-registry@unfccc.int
b) Related to the Article 6.4 Mechanism Registry: a6.4mechanism-registry@unfccc.int

UNFCCC June Climate Meetings | SB 64

Article 6
Markets Day

Clarity. Readiness. Action.

United Nations
Climate Change

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giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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Session 4

Navigating Article 6: Smarter tools for smarter decisions

United Nations Climate Change

Massachusetts Institute of Technology

MIT Climate Pathways Project

United Nations Climate Change in collaboration with giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

UNFCCC Article 6 Capacity Building Unit

Support Parties to engage effectively with Article 6 of the Paris Agreement and the Paris Agreement Crediting Mechanism.

Direct Support and Technical Guidance by the UNFCCC Secretariat

Substantive support, technical guidance, knowledge products and country support through the Article 6 Capacity Building Unit & Markets, Non-Markets and Stakeholder Interaction Teams at UNFCCC Secretariat.

Through the Regional Collaboration Centres

Programmatic and capacity building support through the Regional Collaboration Centres in consultation with the UNFCCC Secretariat's substantive teams.

Through external partnerships

Issue-based coalitions and strategic partnerships with UN Agencies, Multilateral Development Banks, and other external stakeholders engaged in Article 6 and Carbon Markets support.

A new direction

United Nations Climate Change in collaboration with giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Gamified scenarios

Step into the role of a decision-maker and see how choices play out over time

Foresight tools

Quantitative, scenario-based, transparent

Immersive simulations & simulated case studies

Simulate complex authorization, evaluation, or pathway decisions amongst others

Today: scenario and foresight tool developed together with the MIT Climate Pathways Project

MIT Climate
Pathways Project

Navigating Article 6: Smart tools for smart decision-making

Florian Kapmeier – Research Affiliate, MIT Sloan Sustainability Initiative

Khaled Gaafar – Climate Interactive

Kaveh Dianati – Climate Interactive

SB 64, Article 6 Markets Day

Bonn, 8 June 2026

In collaboration with: MIT Climate Policy Center, MIT Sloan Sustainability Initiative, Climate Interactive

CONTENTS

MIT Climate Pathways Project

Polling App for Today + First Question

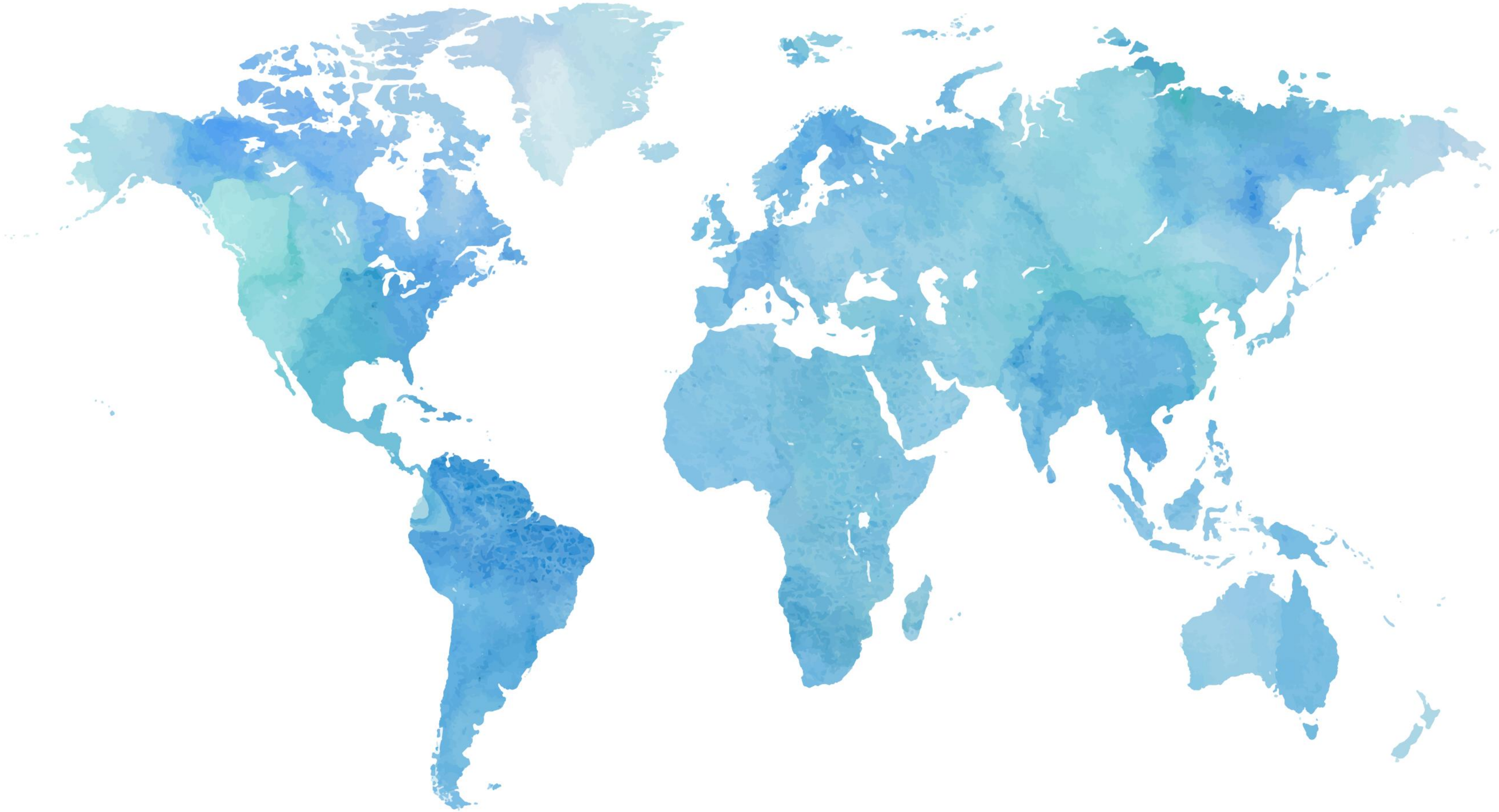
No need to register! After opening, just choose "Skip for now." Your answers are anonymous.

Please keep app open for today's entire session.

PollEv.com/climateinter935

MIT Climate Pathways Project

Which country are you representing?



MIT Climate Pathways Project

OUR MISSION

Leverage interactive simulations to advance the adoption of evidence-based climate policy through leaders in the public and private sector

MIT Climate Policy Center

MIT SLOAN Sustainability Initiative

CLIMATE INTERACTIVE

MIT Climate Pathways Project

Why Simulation?

Like pilots learning to fly, leaders need a safe environment to test out their policy ideas **before** bringing them to the bill signing or the boardroom.

MIT Climate Pathways Project

Why *Interactive* Simulation?

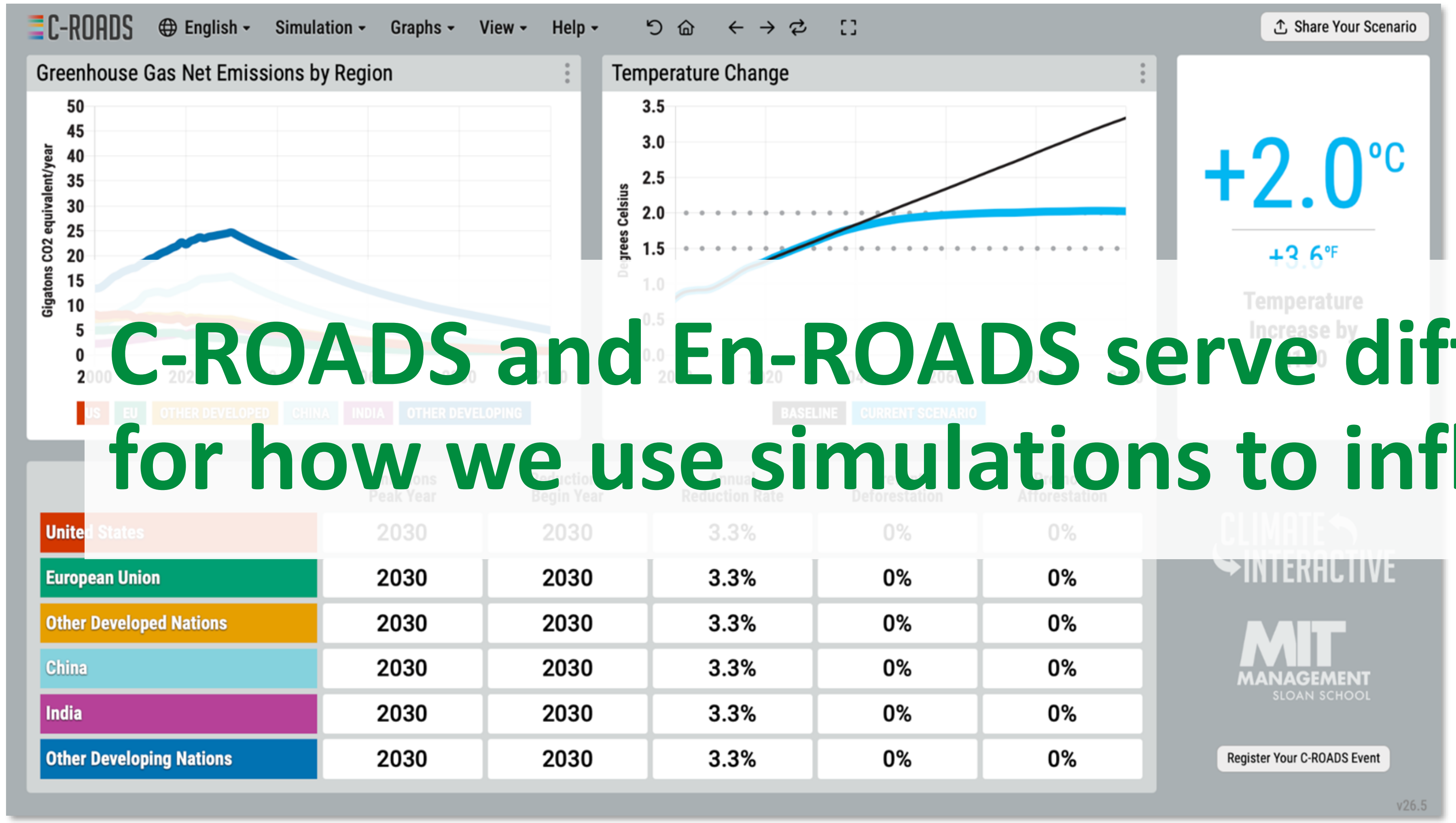
Leaders don’t need another slideshow presentation telling them what to do.

They need and want to **learn for themselves.**

> “Research shows that showing people research doesn’t work.”
>
> - Professor John Sterman

MIT Climate Pathways Project

The interactive C-ROADS and En-ROADS climate simulators are grounded in the best-available science and simulate scenarios in <1 sec



C-ROADS

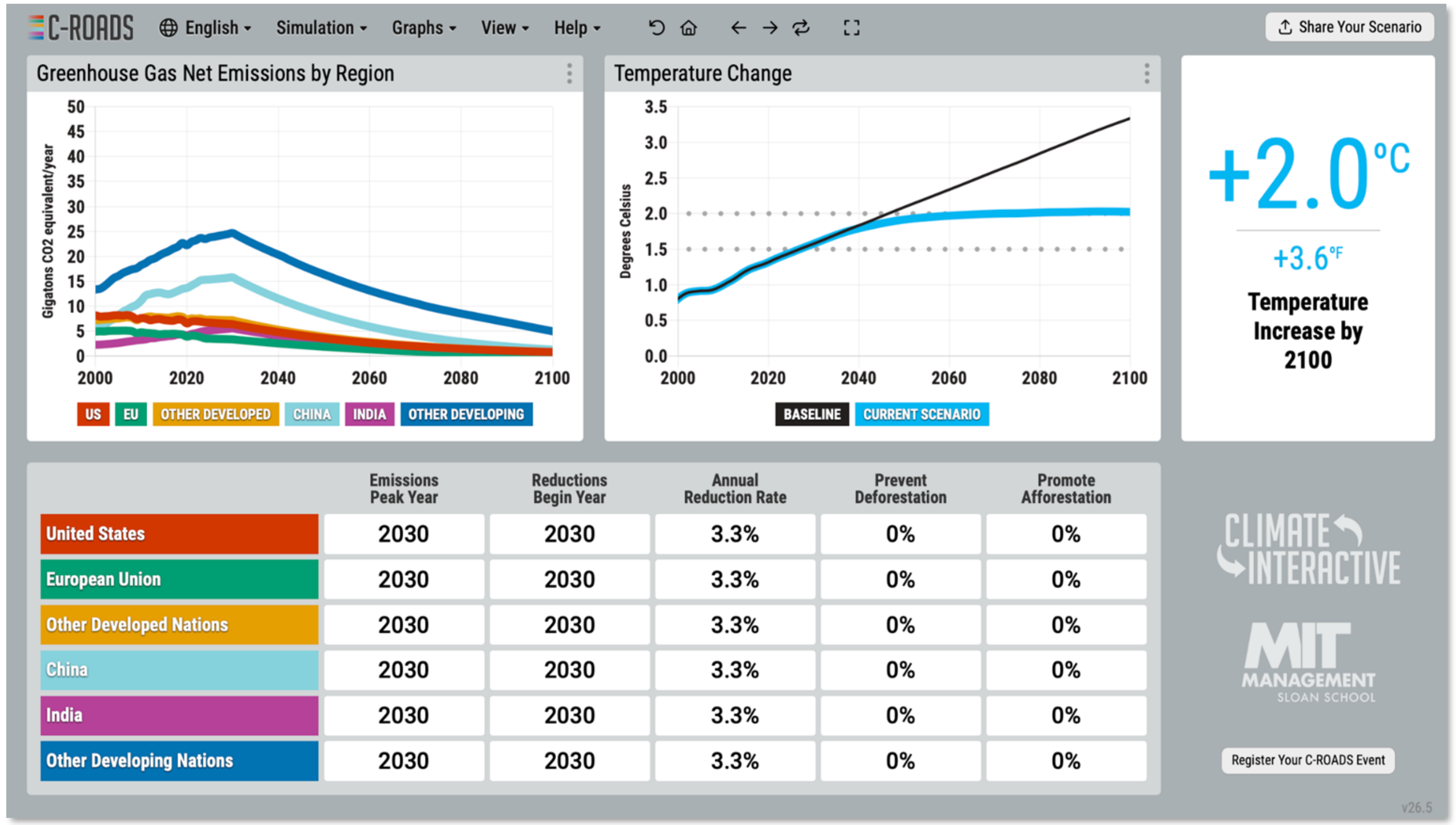
En-ROADS

C-ROADS and En-ROADS serve different purposes; serve as examples for how we use simulations to influence decision-making.

Both are co-developed by Climate Interactive & MIT Sloan

MIT Climate Pathways Project

C-ROADS focuses on emissions trajectories



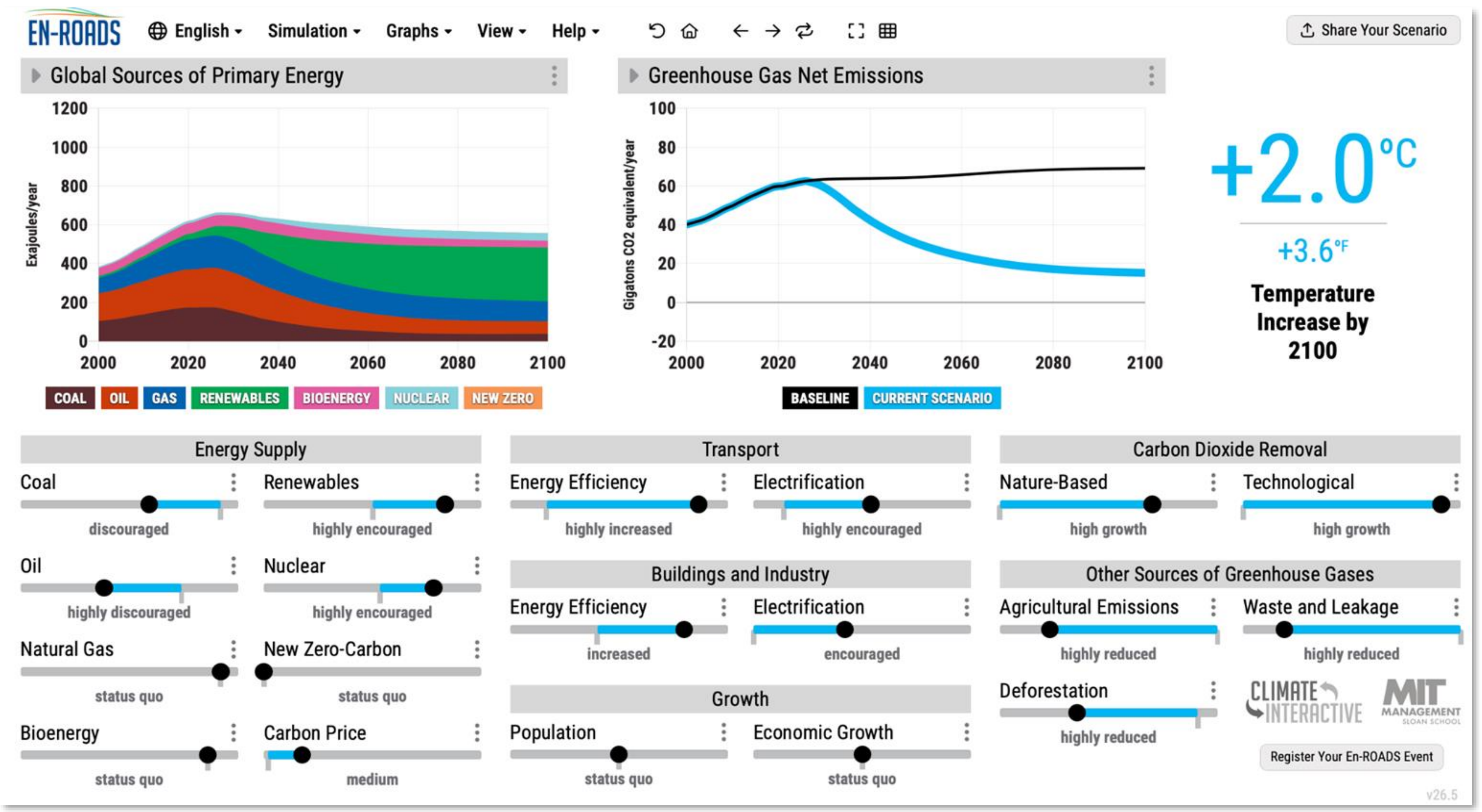
- Negotiation tool: How could climate actions from countries or regions affect our planet’s future?
- “Are current commitments sufficient to meet the goals of the Paris Agreement?”

Engagement example of 2008–2009:

- First global temperature estimate of Copenhagen pledges, helping shape negotiations, along with similar results from PIK analyses.

MIT Climate Pathways Project

En-ROADS focuses on climate solutions



- Decision-support tool: How could today's policy and technology choices shape our planet's future?
- "Which solutions work best and why?"

Engagement example 2014–2015:

- Used with UN Secretary Ban Ki-Moon's climate team to explore climate solutions.
- Informed strategic thinking and policy design for Paris Agreement negotiations.

MIT Climate Pathways Project

Design principles of our simulators

1. Rigorous, empirically grounded transparent models

2. Interface usability

3. Facilitated, interactive simulation-based experience

Source: Kapmeier, Sterman, Jones (2026)

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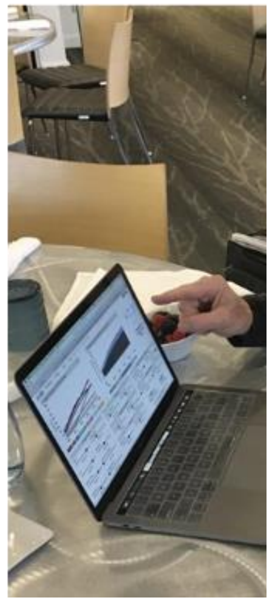
Pathways Project

3. Facilitated, interactive simulation-based experience

Examples for 3. Facilitated, interactive experiences



Above, from left: With J. Kerry, J. Curt

Left: 800 local leaders at Municipal Energy Day, Stuttgart

Right: 20 members of the US Congress and staffers, Washington DC

) representatives of Coalition of Finance for Climate Action (CFMCA) in Indonesia

Source: Kapmeier, Sterman, Jones (2026)

MIT Climate Pathways Project

GLOBAL REACH

500,000+ people around the world have participated in 15,500+ interactive simulations.

960+ Trained Facilitators

185 Countries

22 Languages

~1.6M Site visits

*As of Apr 27, 2026

MIT Climate Pathways Project

We engaged more than 25,000 leaders with interactive simulations, including:

6,321 leaders across government, with

177 Members of U.S. Congress

181 U.S. Congressional Staffers

503 Agency staff, appointees and candidates

8 U.S. Governors

26 U.S. Mayors

431 International Officials

As of March 31, 2026

4,753 additional government leaders participated in events where participant breakdown between categories is unknown

MIT Climate Pathways Project

Research on impact

Experience with our interactive simulations has been shown to increase participants:

- Knowledge of climate science
- Sense of urgency
- Desire to learn and do more

Also:

- Direct action
- Sustained for 6+ months

Source: https://mitsloan.mit.edu/centers-initiatives/climate-policy-center/mit-climate-pathways-project/mit-climate-pathways-project-impact-research

United Nations Climate Change in collaboration with giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

What are the main analytical gaps?

Decisions Parties told us they need help thinking through

Authorization

Country X · NDC −30% by 2030 · untapped potential in waste and energy efficiency.

A bilateral partner offers $20/tonne for 5 $MtCO_2e$/year — with corresponding adjustments.

Authorize? At what volume?

What does it do to our domestic gap? Could we have gone higher? What changes when our NDC tightens?

Choice of sectors

Country Y is shaping its Article 6 strategy.

Potential exists across five sectors. The DNA can realistically resource two.

Which two?

What combination wins on mitigation potential, methodological readiness, additionality, fiscal return, and co-benefits?

Overselling risk

Country Z is designing a 10-year authorisation framework.

How much can we safely sell?

Across rising abatement costs, tightening NDCs, and economic growth — what envelope still holds in 2035 or 2040?

Recognize these, or have we missed one?

Tell us yours.

MIT Climate Pathways Project

Identifying the analytical gaps on Article 6

What are your major analytical gaps and needs in relation to Article 6 that an interactive simulator can help address?

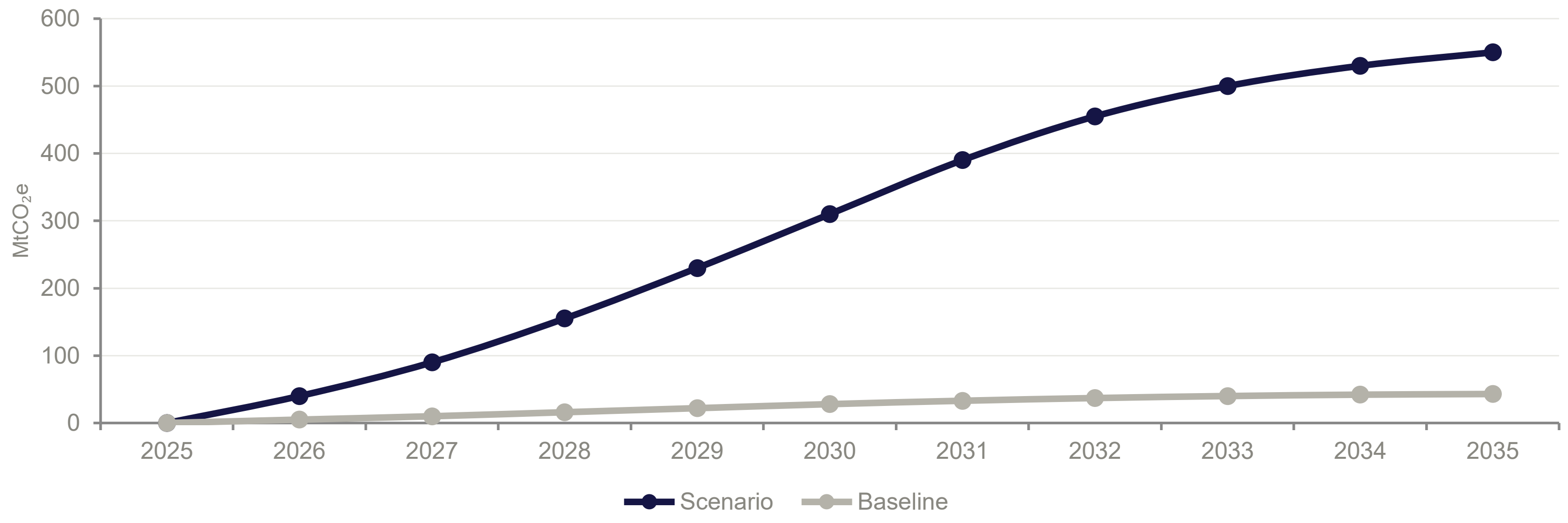
Identifying the analytical gaps on Article 6

Let’s get practical!

Visualization of an Article 6 simulator for decision support

EXAMPLE OUTPUT VARIABLE

Cumulative ITMOs available for transfer



?

INPUT VARIABLES (SLIDERS)

Volume sold under Article 6.2

% of surplus credits offered bilaterally

NDC ambition level

% reduction in emissions by 2035

?

?

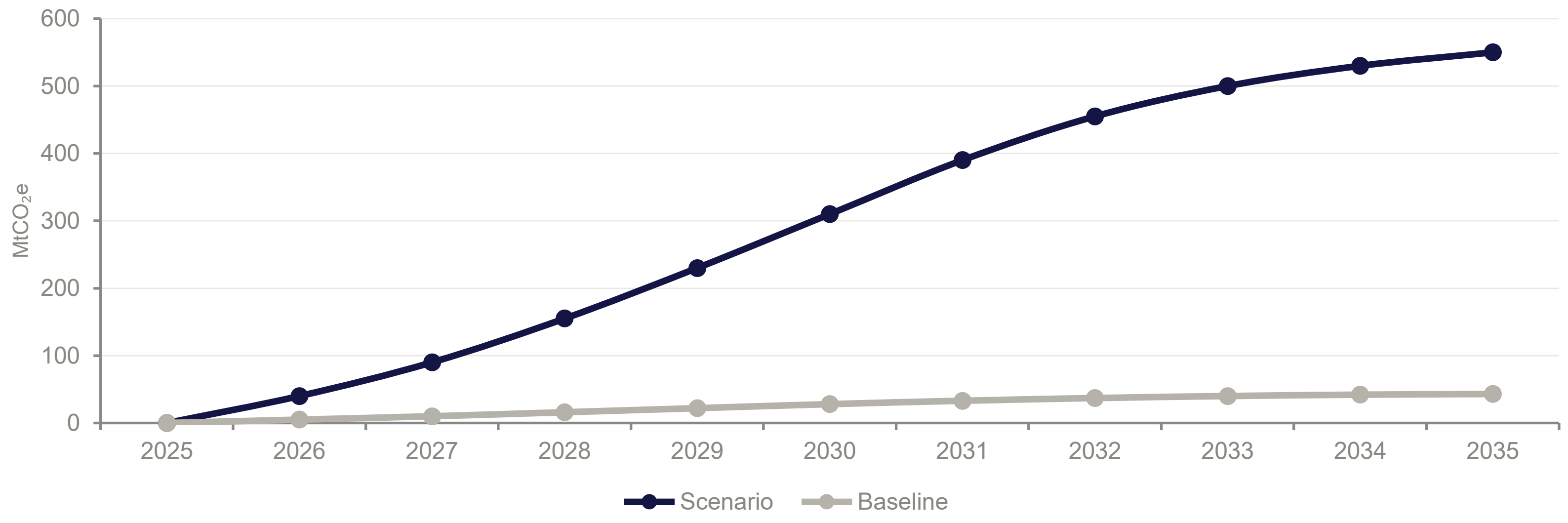
?

?

Visualization of an Article 6 simulator for decision support

EXAMPLE OUTPUT VARIABLE

Cumulative ITMOs available for transfer



Which behavior-over-time graphs would you like to see here?

MIT Climate Pathways Project

Identifying the analytical gaps on Article 6

Which behavior-over-time graphs would you like to see in an Article 6 simulator?

An Article 6 simulator for decision support

INPUT VARIABLES (SLIDERS)

Volume sold under Article 6.2

% of surplus credits offered bilaterally

NDC ambition level

% reduction in emissions by 2035

?

?

?

?

Which policy sliders would you like to see here?

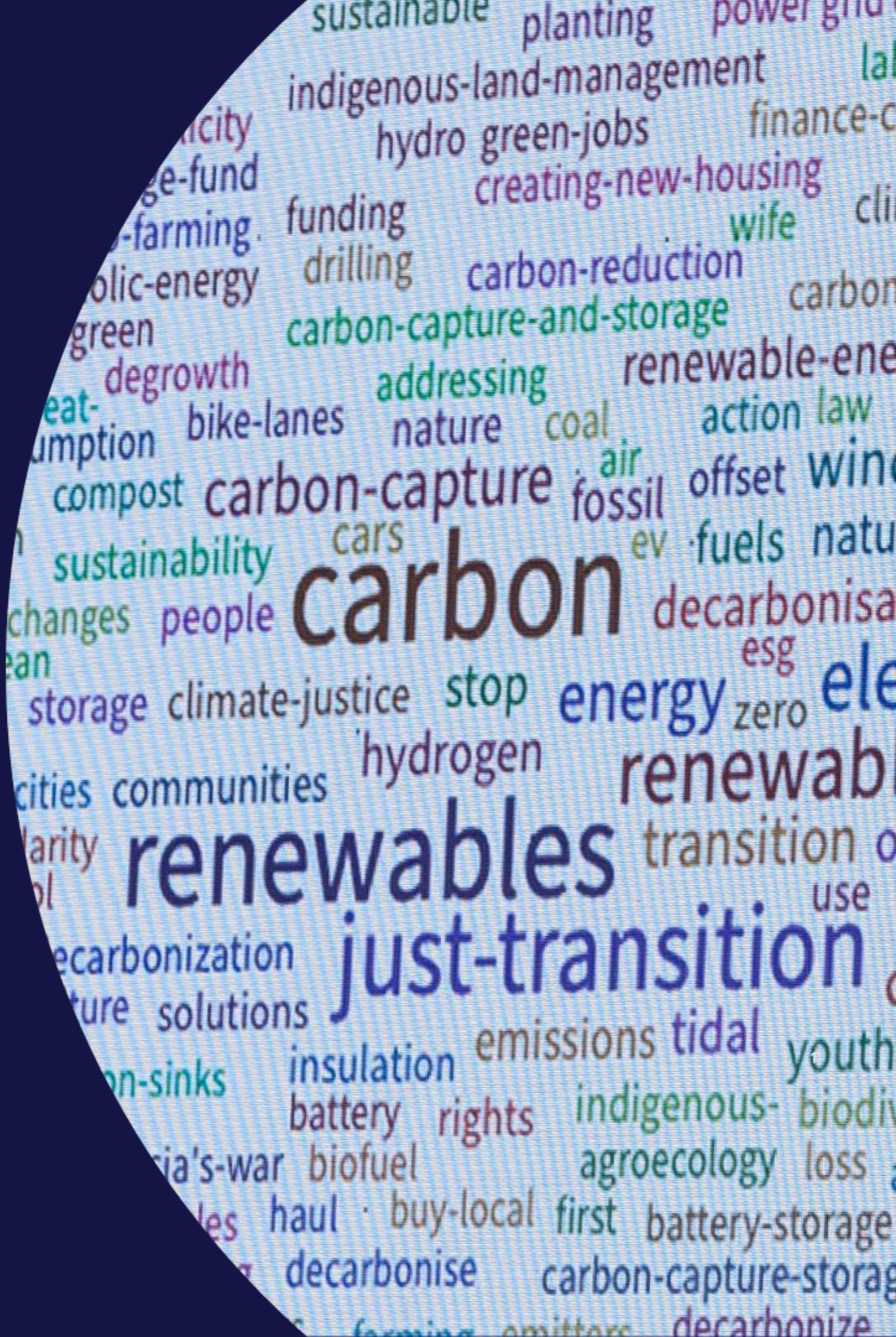
MIT Climate Pathways Project

Identifying the analytical gaps on Article 6

Which policy sliders would you like to see in an Article 6 simulator?

MIT Climate Pathways Project

Next Steps



United Nations Climate Change in collaboration with giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Interested in helping us build it?

Would you like to collaborating in realizing this tool and to strengthening decision-making under Article 6?

Scan the QR code and register your interest below!

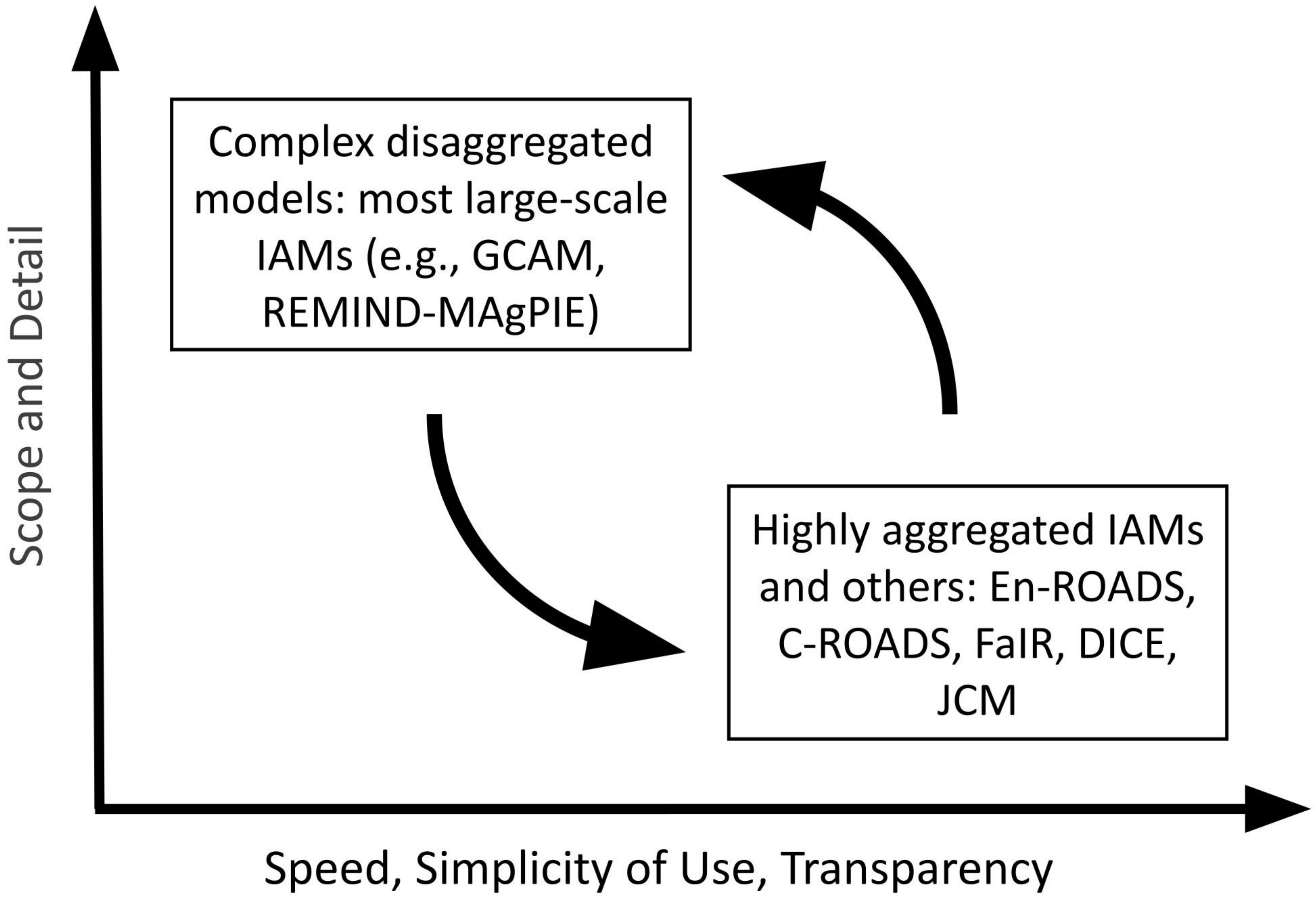
Thank You!

For enquiries, contact us at:

article-6-Capacity-Building@unfccc.int

MIT Climate Pathways Project

Relationship between En-ROADS and more disaggregated Integrated Assessment Models



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Session 5

Article 6 ready, go!

Straight Talk | International Carbon Markets under Article 6

Co-organized by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety

A6IP Paris Agreement Article 6 Implementation Partnership

Article 6 ready, go!

Setting the Scene

Ingrid-Gabriela Hoven
Managing Director of the Management Board, GIZ

Malin Ahlberg
Deputy head, International Climate Finance, Carbon Markets and Transformation Finance, BMUKN

Kazuhisa Koakutsu
Director of the Paris Agreement Article 6 Implementation Partnership Center, IGES

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

UNFCCC

A6IP

Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety

Article 6 ready, go!

Panel discussion

Kazuhisa Koakutsu
A6IP

Dr. Pacifica Ogola
Ministry of Environment, Climate Change and Forestry Kenya

Tirivanhu Muhwati
Carbon Markets Authority Zimbabwe

Monique Motty
African Development Bank

Kirsten Lefter
RWE Supply & Trading GmbH

Peer Stiansen
Ministry of Climate and Environment Norway

Perumal Arumugam
UNFCCC

Moderator: Gregor Sahler
GIZ

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

UNFCCC

A6IP

Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety

Article 6 ready, go!

Closing remarks

Perumal Arumugam
Manager Markets, Non markets and stakeholder interaction, UNFCCC

James Grabert
Director of Mitigation, UNFCCC

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
UNFCCC
A6IP
Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety

Q&A Session and Evaluation Survey

Mentimeter for Q&A

Evaluation Survey

SB 64 - Article 6 Markets Day

Article 6
Markets Day

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Closing Remarks

James Grabert

Director
Mitigation Division
UNFCCC

UNFCCC June Climate Meetings | SB 64

Article 6 Markets Day

Clarity. Readiness. Action.

Networking Reception

United Nations
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