The Methodology behind the Global Landscape of Climate Finance 2025

December 2nd, 2025

Context

Webinar agenda

Why do we need a number?

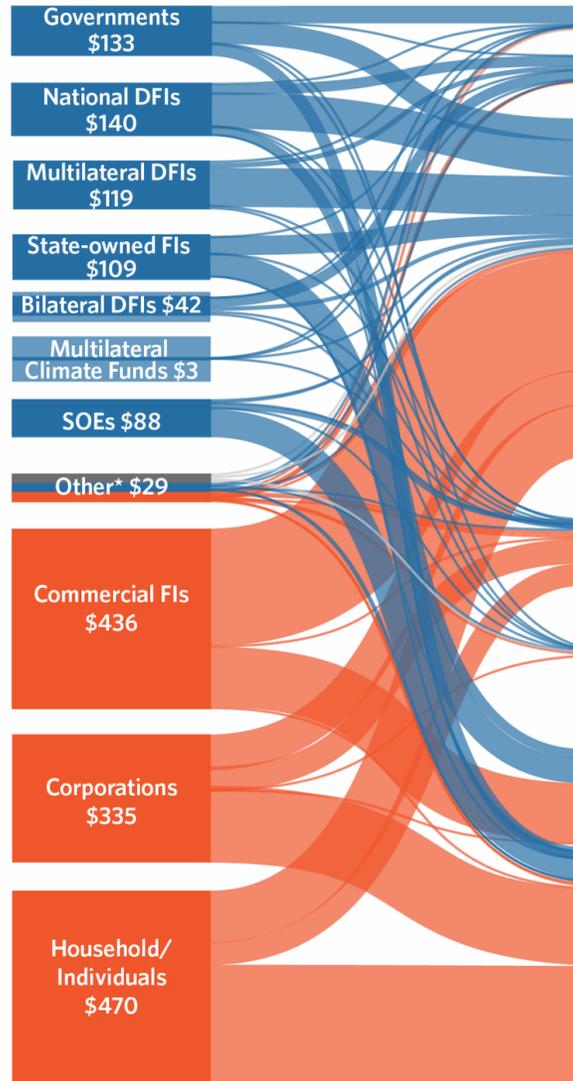How does CPI produce this number?

What makes CPI confident in this number?

How is this number used?

LANDSCAPE OF CLIMATE FINANCE IN 2023
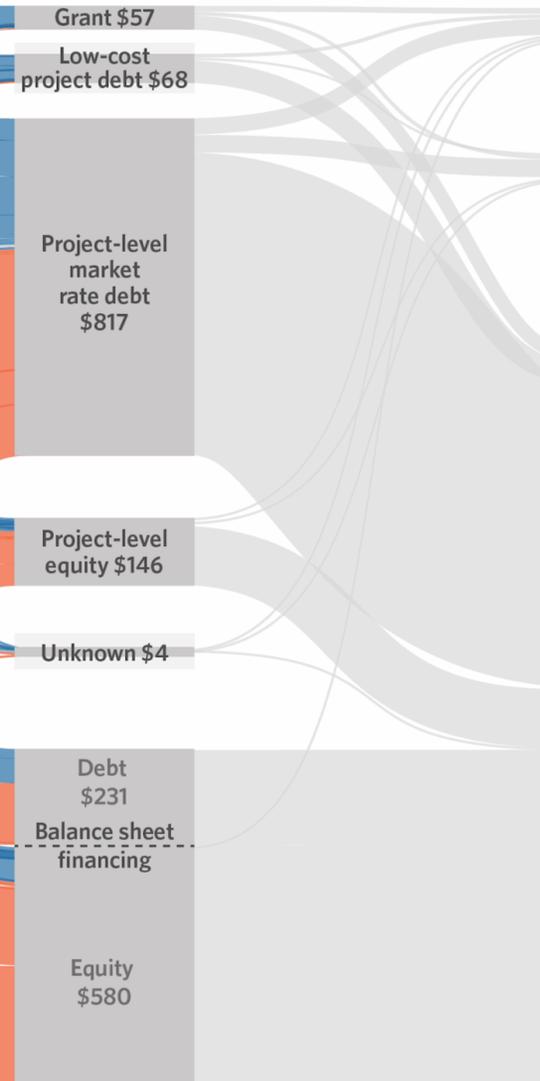
Values are in USD billion

CLIMATE POLICY INITIATIVE

1.9 TRILLION USD IN 2023

SOURCES AND INTERMEDIARIES

Which types of organizations are sources or intermediaries of capital for climate finance?

INSTRUMENTS
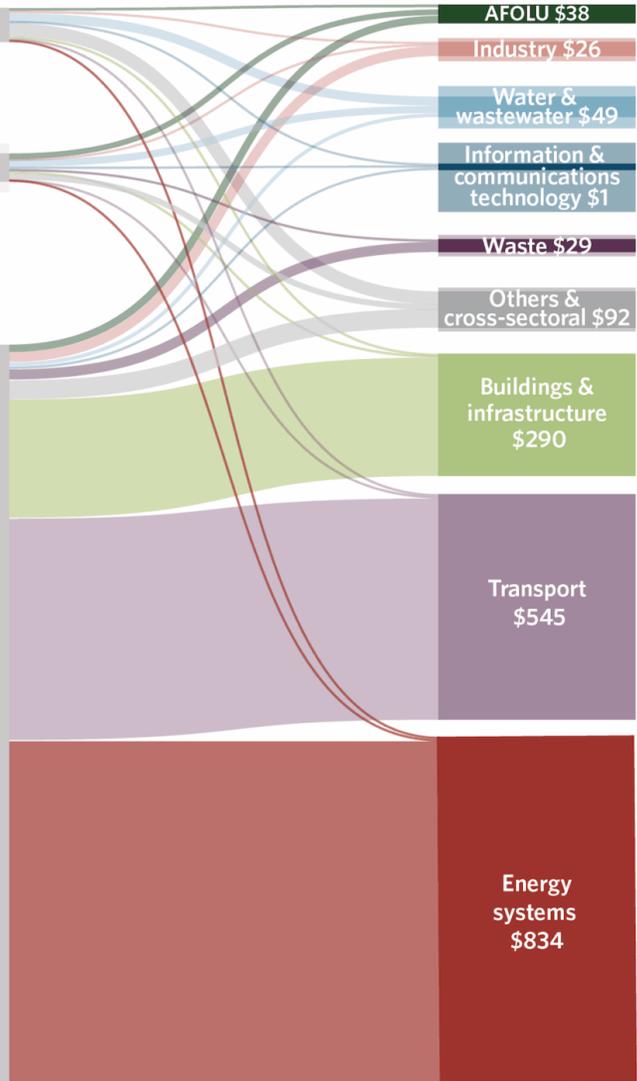
What mix of financial instruments is used?

USES

What types of activities are financed?

SECTORS

What is the finance used for?

Sources and Intermediaries:
- Governments $133
- National DFIs $140
- Multilateral DFIs $119
- State-owned FIs $109
- Bilateral DFIs $42
- Multilateral Climate Funds $3
- SOEs $88
- Other* $29
- Commercial FIs $436
- Corporations $335
- Household/Individuals $470

Instruments:
- Grant $57
- Low-cost project debt $68
- Project-level market rate debt $817
- Project-level equity $146
- Unknown $4
- Debt $231
- Balance sheet financing
- Equity $580

Uses:
- Adaptation $65
- Dual benefit $58
- Mitigation $1,781

Sectors:
- AFOLU $38
- Industry $26
- Water & wastewater $49
- Information & communications technology $1
- Waste $29
- Others & cross-sectoral $92
- Buildings & infrastructure $290
- Transport $545
- Energy systems $834

PUBLIC   **PRIVATE**

"Other" public sources include export credit agencies and unknown public funds
"Other" private sources include institutional investors, funds, philanthropies, and unknown

"AFOLU" stands for agriculture, forestry, other land use, and fisheries.
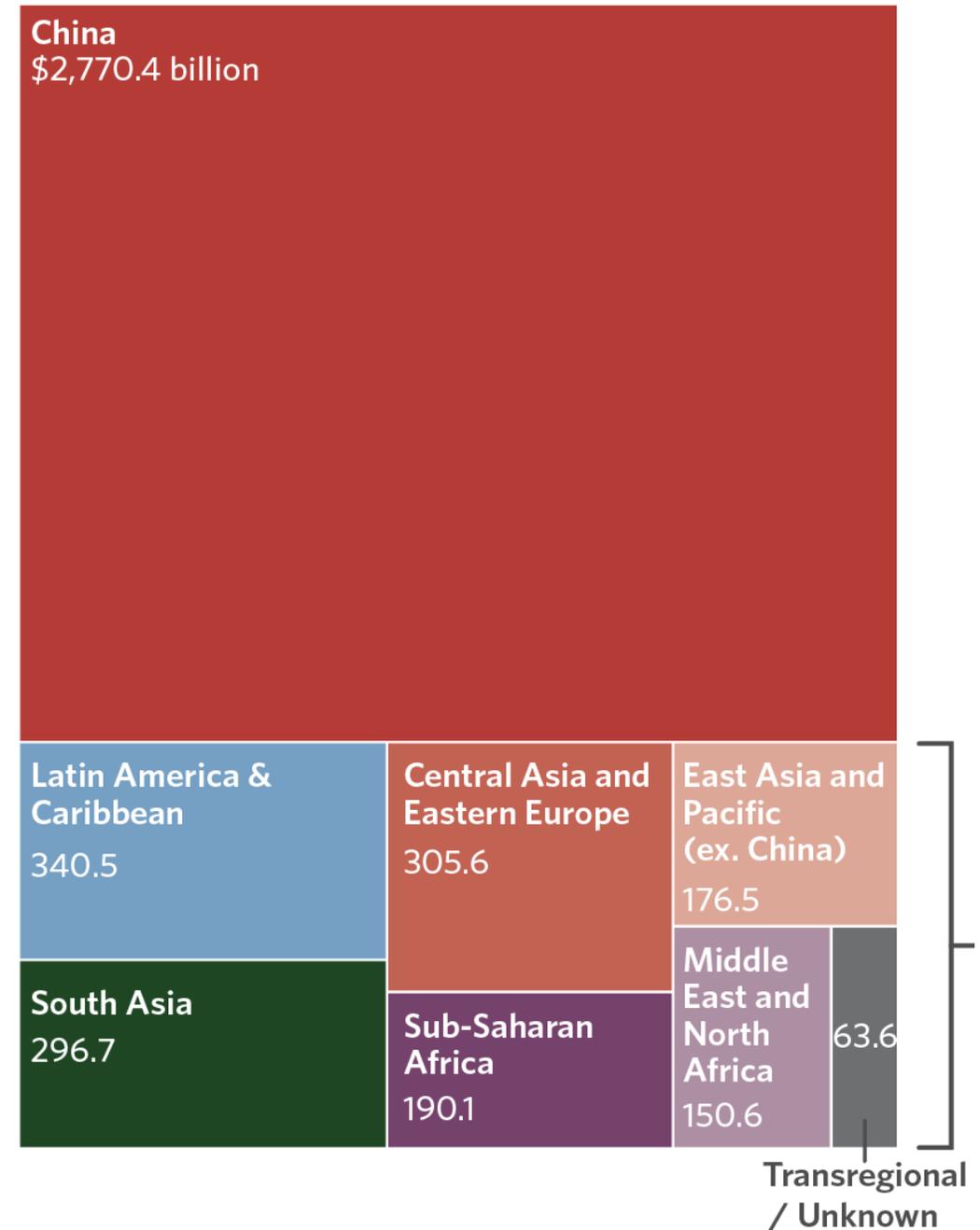
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The value of a number

- **More than a decade of data:** uniquely comprehensive assessment of climate finance flows, updated annually since 2011.

- **State of play:** global evidence base on where climate finance comes from, who it flows to, and in what forms it is provided.

- **Transparency and accountability:** provides baseline for measuring progress in real time.

- **Gaps and opportunities:** guides effective capital allocation and strong climate policy making.

Regional breakdown of climate finance to EMDEs

China
$2,770.4 billion

Latin America & Caribbean
340.5

South Asia
296.7

Central Asia and Eastern Europe
305.6

Sub-Saharan Africa
190.1

East Asia and Pacific (ex. China)
176.5

Middle East and North Africa
150.6

63.6

Transregional / Unknown

Over a decade of climate finance tracking progress

ABSTRACT

Developed countries have committed under the international negotiations to jointly mobilising USD 100 billion per year by 2020 for climate change mitigation and adaptation in developing countries. Yet consistent and comprehensive data to track this commitment are currently lacking. Such data will also help governments and the private sector understand how much and what type of climate finance is flowing today, so as to be able to evaluate progress and effectiveness of international climate finance flows. Estimates based on available data are highly uncertain and incomplete, highlighting several challenges in establishing a robust tracking system.

OECD (2012) *Tracking Climate Finance: What and How?*

Definitons of Climate Finance

What is climate finance?

"Climate finance aims at reducing emissions, and enhancing sinks of greenhouse gases, aims at reducing vulnerability, increasing adaptive capacity, and mainstreaming and increasing resilience of human and ecological systems to negative climate change impacts." (UNFCCC SCF, 2024)
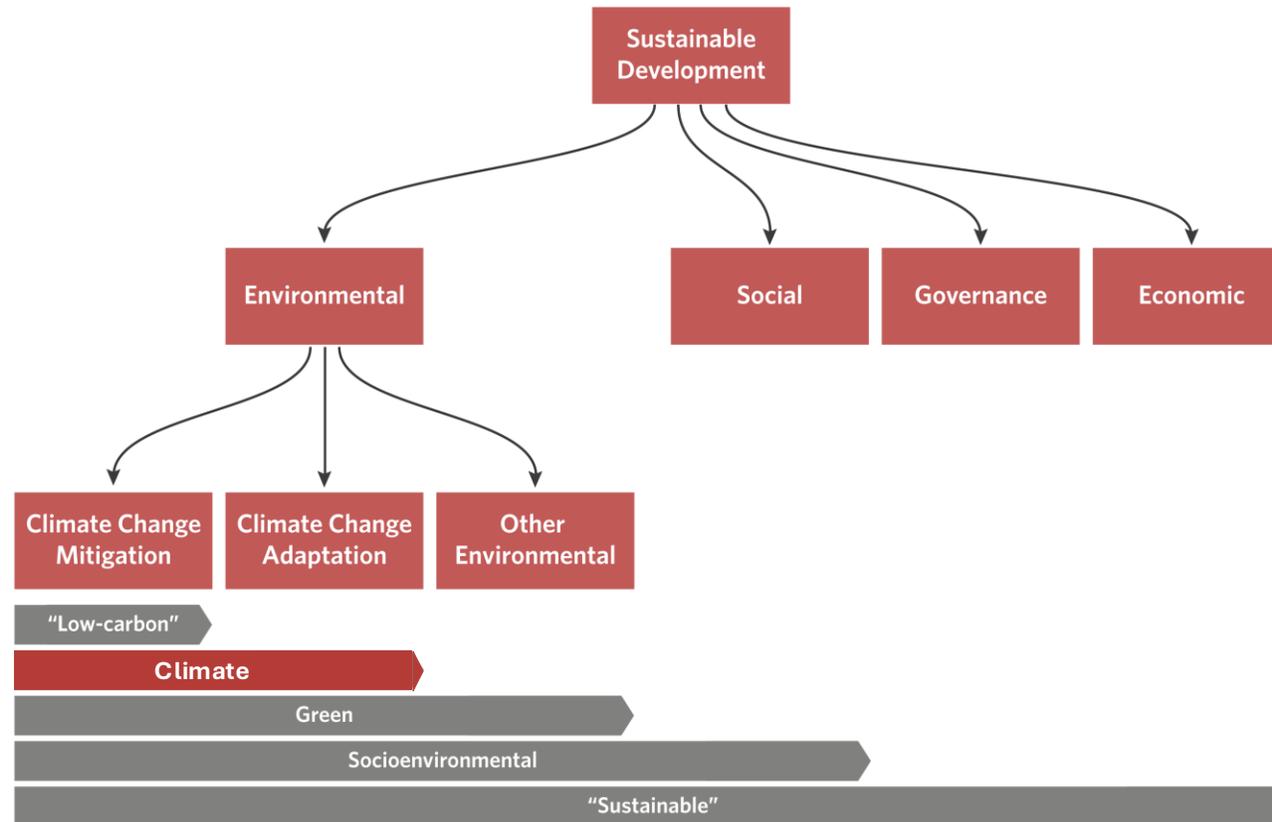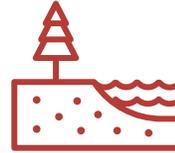

Source: UNEP Inquiry 2016

CPI's working climate finance definition

Mitigation finance + **Adaptation finance** + **Dual benefits finance**

Resources directed to activities either: contributing to reducing or avoiding GHG emissions, including gases regulated by the Montreal Protocol; or maintaining or enhancing GHG sinks and reservoirs.

Resources directed to activities aimed at reducing the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

Resources directed to activities contributing to both "climate change mitigation" and "climate change adaptation" and meeting the respective criteria for each category.
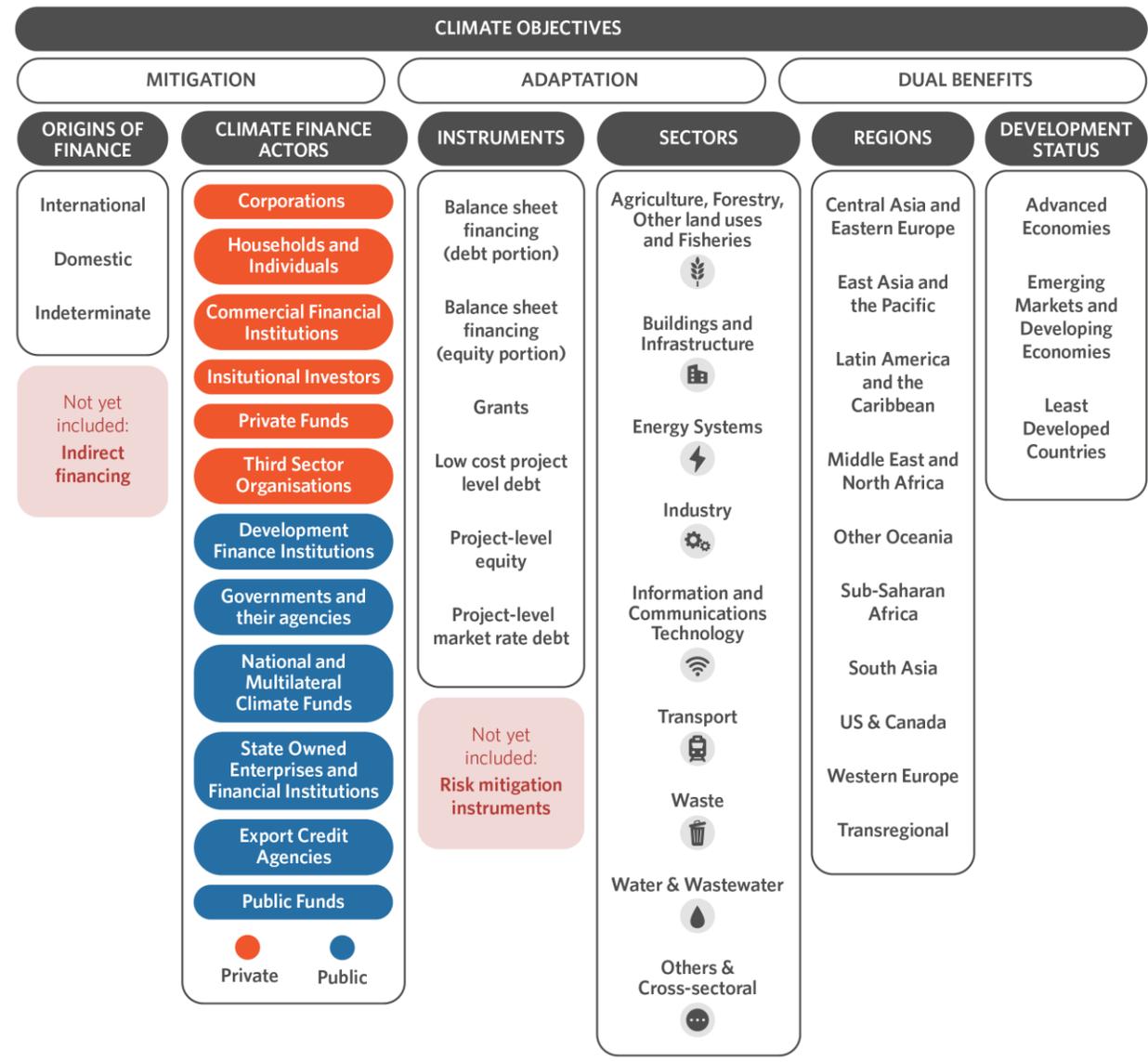
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Total climate finance
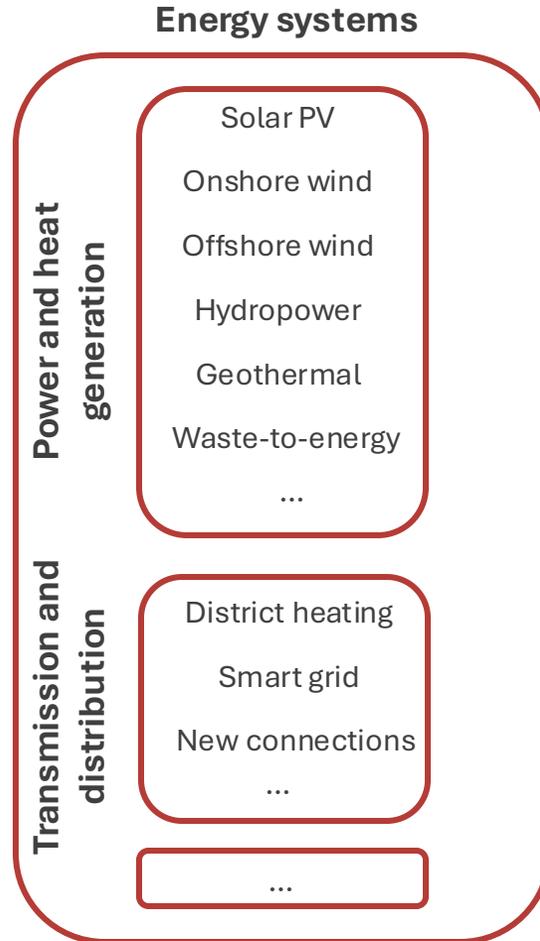
Tracking framework

Sources

Actors

Instruments

Sectors

Regions

Development status

CLIMATE OBJECTIVES

| MITIGATION | | | ADAPTATION | DUAL BENEFITS | |

ORIGINS OF FINANCE	CLIMATE FINANCE ACTORS	INSTRUMENTS	SECTORS	REGIONS	DEVELOPMENT STATUS
International	Corporations	Balance sheet financing (debt portion)	Agriculture, Forestry, Other land uses and Fisheries	Central Asia and Eastern Europe	Advanced Economies
Domestic	Households and Individuals			East Asia and the Pacific	
Indeterminate	Commercial Financial Institutions	Balance sheet financing (equity portion)	Buildings and Infrastructure		Emerging Markets and Developing Economies
	Insitutional Investors			Latin America and the Caribbean	
Not yet included: **Indirect financing**	Private Funds	Grants	Energy Systems		Least Developed Countries
	Third Sector Organisations	Low cost project level debt		Middle East and North Africa	
	Development Finance Institutions		Industry		
	Governments and their agencies	Project-level equity		Other Oceania	
	National and Multilateral Climate Funds	Project-level market rate debt	Information and Communications Technology	Sub-Saharan Africa	
	State Owned Enterprises and Financial Institutions	Not yet included: **Risk mitigation instruments**	Transport	South Asia	
	Export Credit Agencies		Waste	US & Canada	
	Public Funds			Western Europe	
	Private ⬤ Public ⬤		Water & Wastewater	Transregional	
			Others & Cross-sectoral		

Sectoral taxonomy

Example:

What does not count as climate finance

Energy systems

Power and heat generation	
	Solar PV
	Onshore wind
	Offshore wind
	Hydropower
	Geothermal
	Waste-to-energy
	...

Transmission and distribution	
	District heating
	Smart grid
	New connections
	...

| ... |

Technology	Transition related?	Climate finance?	Exclusion criteria
Energy			
Renewable Energy (Power Generation and Direct Use)	✔	~	Excludes large hydro projects not financed by a DFI with environmental safeguards.
Energy Efficiency	✔	~	Included, with a conservative approach. Energy efficiency measures and retrofits for power plants are included only when applied to renewable assets, ensuring a clean energy gain.
Electrified Heat	✔	~	Included only when fueled by renewable energy.
Hydrogen	✔	~	Included only when produced using renewable energy.
Carbon capture, use, and storage (CCUS) and carbon removal measures	✔	~	Included only when technologies demonstrate 100% carbon removal capacity, which is extremely rare, economically unviable, and largely unavailable at scale. Without this, concerns remain around long-term carbon lock-in and the reinforcement of fossil fuel dependence.
Power transmission and distribution (T&D)	✔	~	Included only if the project explicitly states it is connected to a renewable energy power plant.[16]
Nuclear	�’	✗	Excluded due to ongoing debates regarding risks and benefits.
Fossil fuels	✗	✗	Excluded.
Transport			
Electrified transport	✔	~	Fully battery electric vehicles are included, but plug-in hybrid and fuel cell EVs are excluded.

Project example

Project details

Company A

Company A financed the build of the 466. 7MW Solar PV Plant (Phase II) with a long-term power-purchase agreement with the national energy corporation

USD 87mn

Source

Domestic

Actor

Private
  → *Corporation*

Instrument

Equity
  → *Balance sheet financing*

Sector

Energy systems
  → *Power and heat generation*
    → *Solar PV*

Region

South Asia
  → *India*

Development status

Emerging markets and developing economies
  → *Emerging markets*
    → *Lower middle income*

Project example

Project details

Export Import Bank of Korea

Supplementary loan for [sewage system development in Ta Khmau Town](#) in Cambodia to improve hygiene levels by preventing environmental pollution of the project area

USD 60mn

Source

International

↳ *Korea*

Actor

Public

↳ *Export Credit Agency (ECA)*

Instrument

Low-cost project debt

↳ *Concessional loan*

Sector

Water and wastewater

↳ *Wastewater treatment*

↳ *Infrastructure and management*

Region

East Asia and Pacific

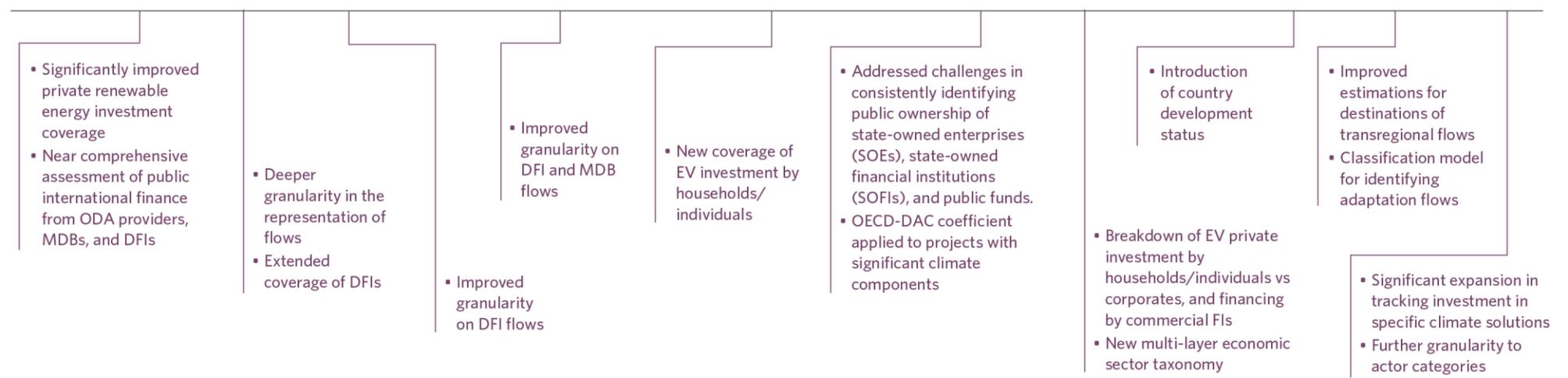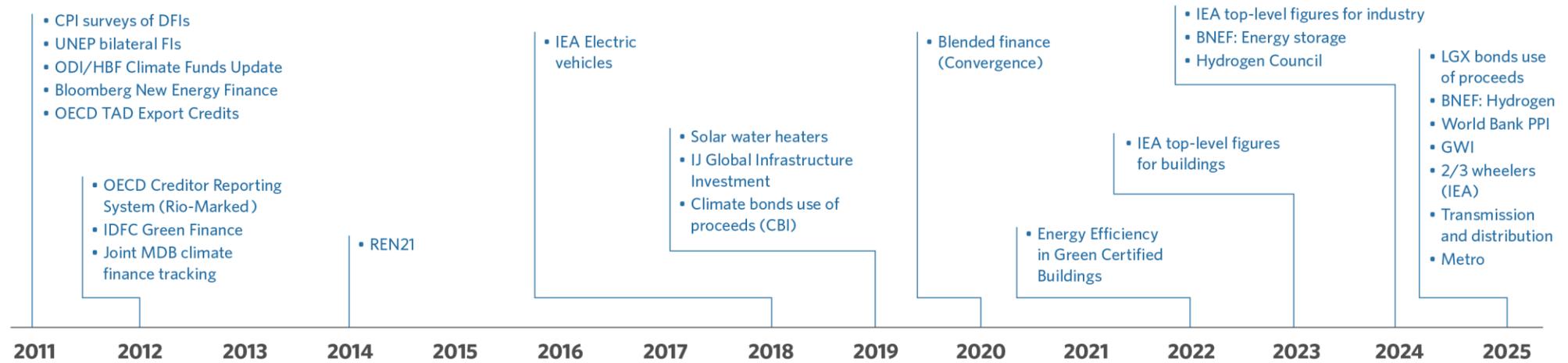↳ *Cambodia*

Development status

Least developed country

↳ *Lower middle income*

Data Collection

CPI's rigorous and evolving methodology

DATA ADDITIONS

- CPI surveys of DFIs
- UNEP bilateral FIs
- ODI/HBF Climate Funds Update
- Bloomberg New Energy Finance
- OECD TAD Export Credits

- OECD Creditor Reporting System (Rio-Marked)
- IDFC Green Finance
- Joint MDB climate finance tracking

- REN21

- IEA Electric vehicles

- Solar water heaters
- IJ Global Infrastructure Investment
- Climate bonds use of proceeds (CBI)

- Blended finance (Convergence)

- IEA top-level figures for buildings

- Energy Efficiency in Green Certified Buildings

- IEA top-level figures for industry
- BNEF: Energy storage
- Hydrogen Council

- LGX bonds use of proceeds
- BNEF: Hydrogen
- World Bank PPI
- GWI
- 2/3 wheelers (IEA)
- Transmission and distribution
- Metro

| 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |

- Significantly improved private renewable energy investment coverage
- Near comprehensive assessment of public international finance from ODA providers, MDBs, and DFIs

- Deeper granularity in the representation of flows
- Extended coverage of DFIs

- Improved granularity on DFI and MDB flows

- Improved granularity on DFI flows

- New coverage of EV investment by households/individuals

- Addressed challenges in consistently identifying public ownership of state-owned enterprises (SOEs), state-owned financial institutions (SOFIs), and public funds.
- OECD-DAC coefficient applied to projects with significant climate components

- Introduction of country development status

- Breakdown of EV private investment by households/individuals vs corporates, and financing by commercial FIs
- New multi-layer economic sector taxonomy

- Improved estimations for destinations of transregional flows
- Classification model for identifying adaptation flows

- Significant expansion in tracking investment in specific climate solutions
- Further granularity to actor categories

METHODOLOGY IMPROVEMENTS

The GLCF synthetizes data from over 30 sources

37 Proprietary DFI Surveys

CLIMATE POLICY INITIATIVE
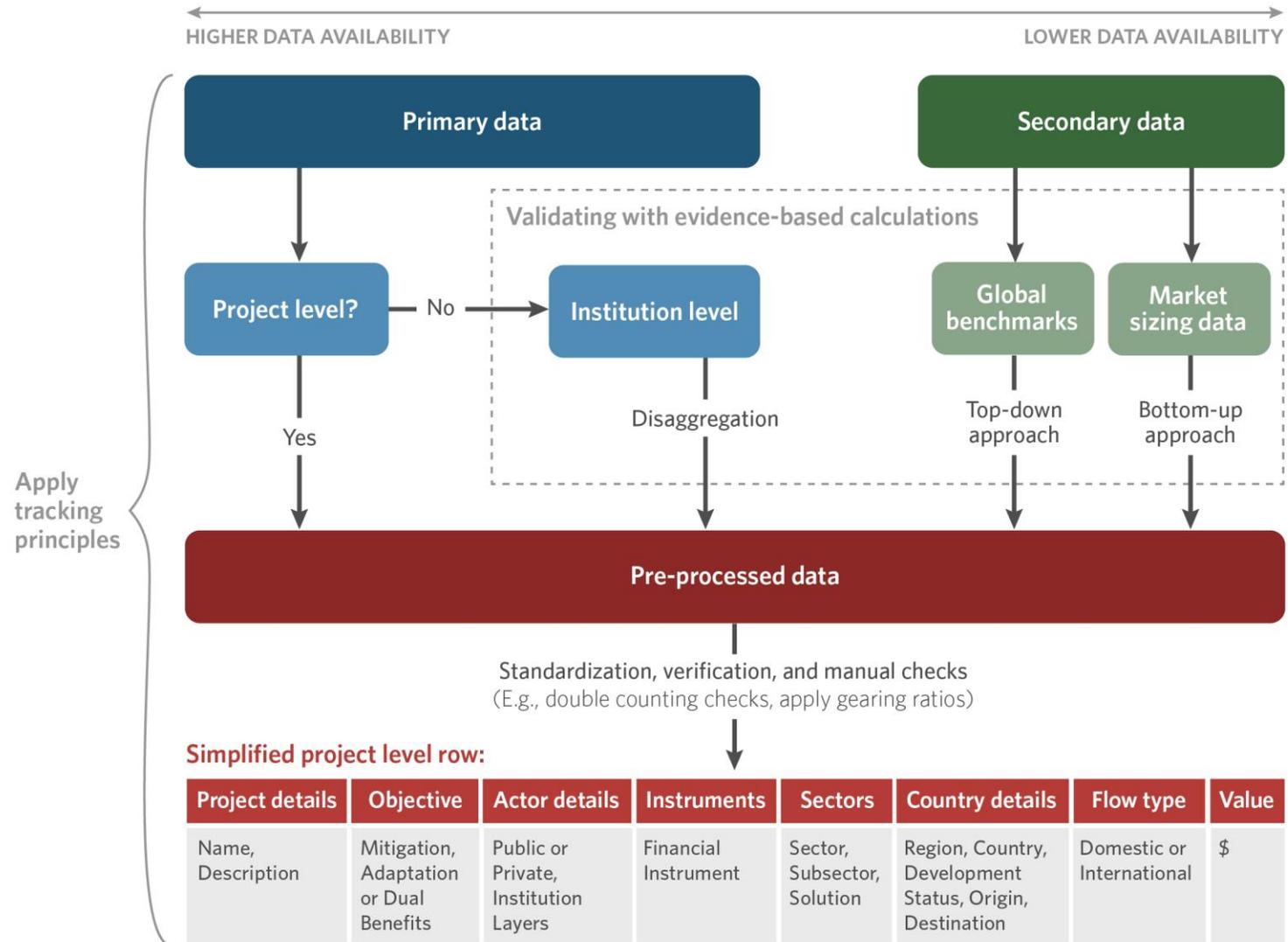
CPI's eight guiding principles to ensure data quality
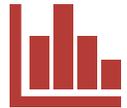
1. Track real-economy investments

2. Track tangible financial commitments

3. Benchmark against reputable data sources

4. Avoid double counting

5. Err toward conservativeness

6. Do not track carbon lock-in

7. Comply with data confidentiality and licensing rules

8. Maximize flows granularity

Different methodologies to harmonize complex datasets

HIGHER DATA AVAILABILITY   LOWER DATA AVAILABILITY

Primary data   **Secondary data**

Validating with evidence-based calculations

Project level? — No → **Institution level**   **Global benchmarks**   **Market sizing data**

Yes   Disaggregation   Top-down approach   Bottom-up approach

Apply tracking principles

Pre-processed data

Standardization, verification, and manual checks
(E.g., double counting checks, apply gearing ratios)

Simplified project level row:

Project details	Objective	Actor details	Instruments	Sectors	Country details	Flow type	Value
Name, Description	Mitigation, Adaptation or Dual Benefits	Public or Private, Institution Layers	Financial Instrument	Sector, Subsector, Solution	Region, Country, Development Status, Origin, Destination	Domestic or International	$

Scale and complexity demand a robust framework

Data dimension [2017-2023]

- *20 million rows database detailing climate finance*
- *30 data sources*
- *100,000 projects*
- *USD 10.9 trillion tracked*

Data coverage [2017-2023]

- *16k institutions*
- *Cross-cutting sectors and geographies*

Challenges

- *Duplicate or partial entries from overlapping sources*
- *Heterogeneous formats and reporting standards*
- *Missing or incomplete project descriptions*
- *Inconsistent institution naming conventions*
- *Lag in data publication from key sources*
- *Missing metadata for sector, geography, or financial instrument*

Data Processing

Turning imperfect data into insights

Standardisation

LLM Data Augmentation

Data Source

Ancillary Data (gearing ratios, price points etc)

Climate Investment Data

Automated Validation

Automated Double Counting Checks

Cloud Infrastructure
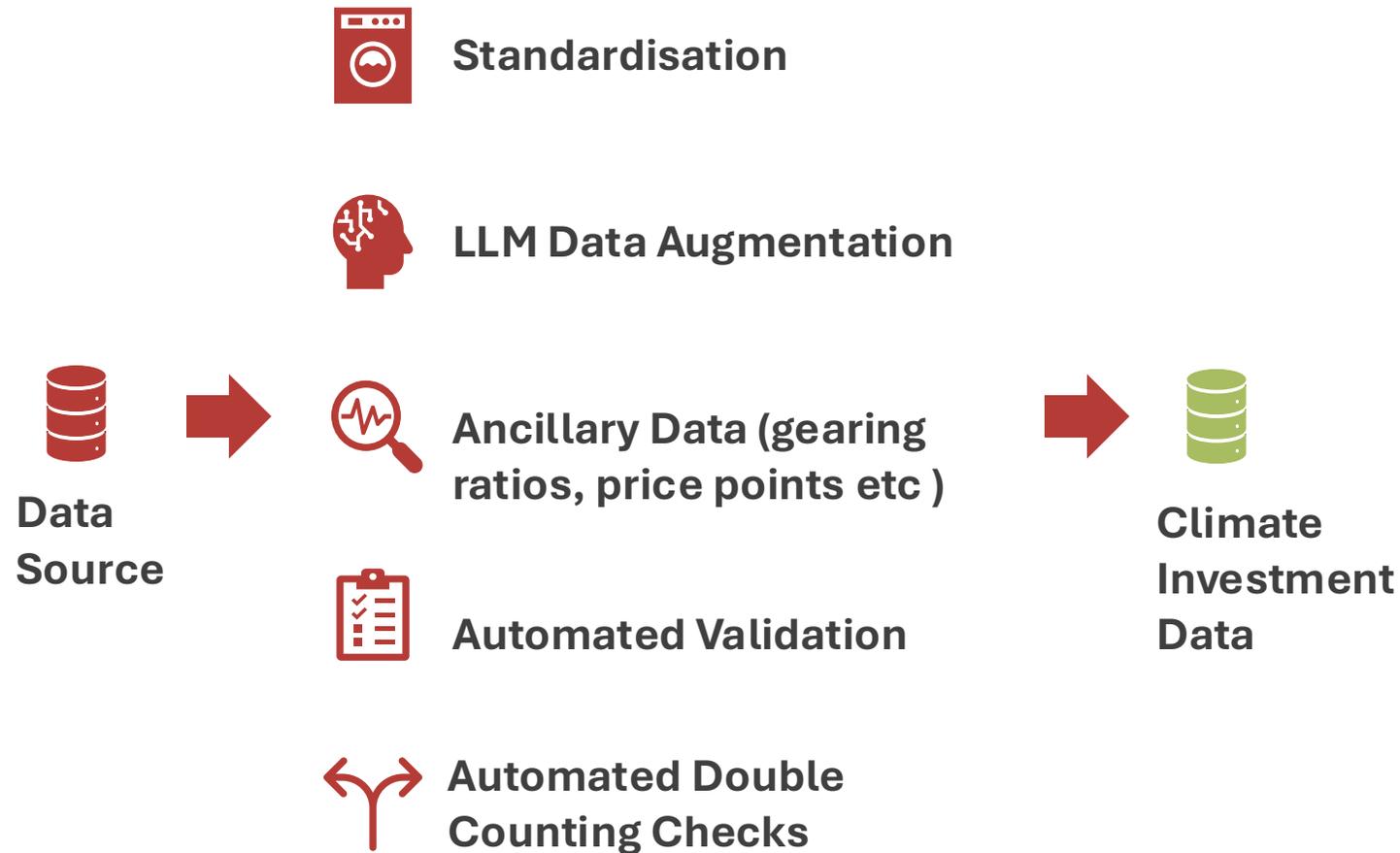
Why these techniques matter

- o *Real-world climate finance data is imperfect, fragmented, and inconsistently reported*

- o *Advanced processing allows us to clean, harmonize, and reconstruct datasets at scale*

- o *Ensures accuracy, comparability, and completeness across the entire data engine*

Sectoral methodologies approach

Primary Data Integration / Secondary Data Integration	Benchmarking / Validation	Sectoral Processing	Benchmarking / Validation / Double counting checks	Full Climate Finance Database Processing	Validation / Double counting checks
1	**2**	**3**	**4**	**5**	**6**
Project and institution-level (Primary) data and aggregated benchmark (Secondary) data is processed	Value is compared to **data source bench marks** and auto-validated	Data sources combined to generate sector data (Energy systems for example)	Value compared to **sectoral benchmarks**. Double counting checks applied and auto-validated	Sectoral data is combined to create full climate finance database	Double counting checks and auto-validation applied to full climate finance database

Filling the gaps – Primary data

Why?

While CPI prioritizes project-level granularity, many data sources contain incomplete or partially aggregated information.

How

To address this, we apply a set of carefully developed methodologies to fill in missing information while maintaining the integrity and comparability of the data.

Example: Energy systems capacity multipliers

- Consolidation of technology- and geography-specific capacity multipliers to ensure full coverage even when financing data is missing.

- When direct financing data is unavailable, investment cost multipliers are applied to estimate total investment based on project size (MW).

- Country-level multipliers from IRENA's Renewable Power Generation Costs reports used whenever available.

- BNEF asset finance and capacity data used to calculate country–technology averages when IRENA country-level values are missing.

- IRENA regional multipliers applied only when neither country-level nor country–technology multipliers exist.

- Ensures complete investment calculations across all countries and technologies. Maintains comparability across geographies and datasets.

- **Provides a transparent, tiered fallback logic when data is inconsistent or incomplete.**

Filling the gaps – Secondary Data

Why?

- Many activities investments cannot be measured using project-level data.

- For example, household purchases often require modeled calculations rather than direct observation, validating the need for tailored methodologies.

How?

CPI enhances the scope of climate finance tracking by applying evidence-based calculations to reputable sources.

Example: Electric vehicle investment

Accounting for every EV sale across the globe unfortunately remains beyond us, however we carry out an extensive market research exercise using vehicle sales at country/ regional granularity (accounting for incentives), coupled with vehicle price benchmarks, loan-to-value ratios, corporate vs household purchase ratios, to generate data that follows GLCF standards.

How the data is being used

How do we present this data?
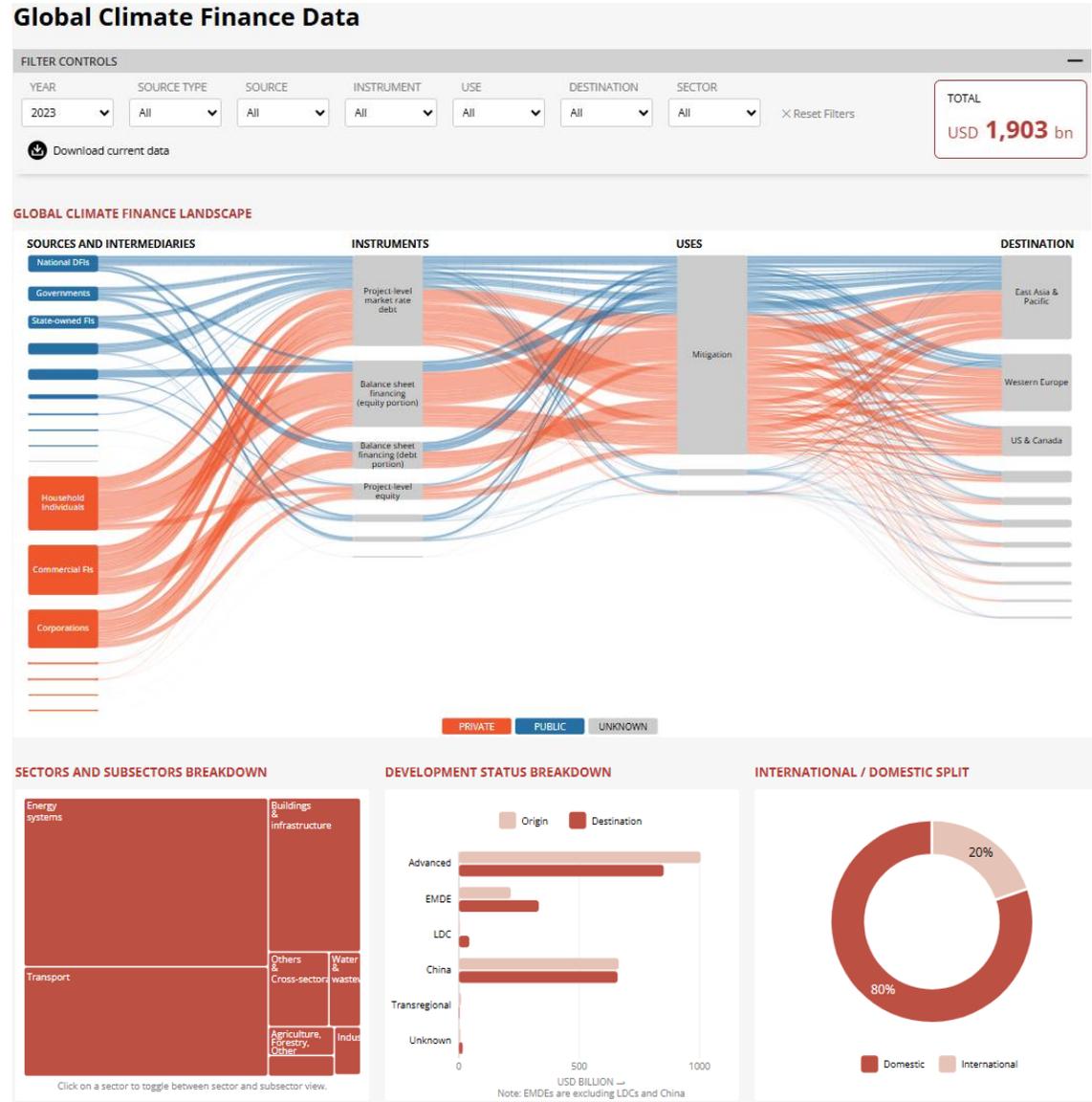
- **Combine with CPI's deep expertise** in public finance, private capital mobilization, and climate finance architecture

- **Develop sector, geography, and instrument deep dives** enabled by methodologies designed for high granularity

- **Evidence-backed interpretations**, grounded in over a decade of CPI's research, partnerships, and institutional knowledge

- **The result:** Clear, focalized insights that support policymaking and system-level reform

Organizations and events that featured Global Landscape data

Supporting international climate progress
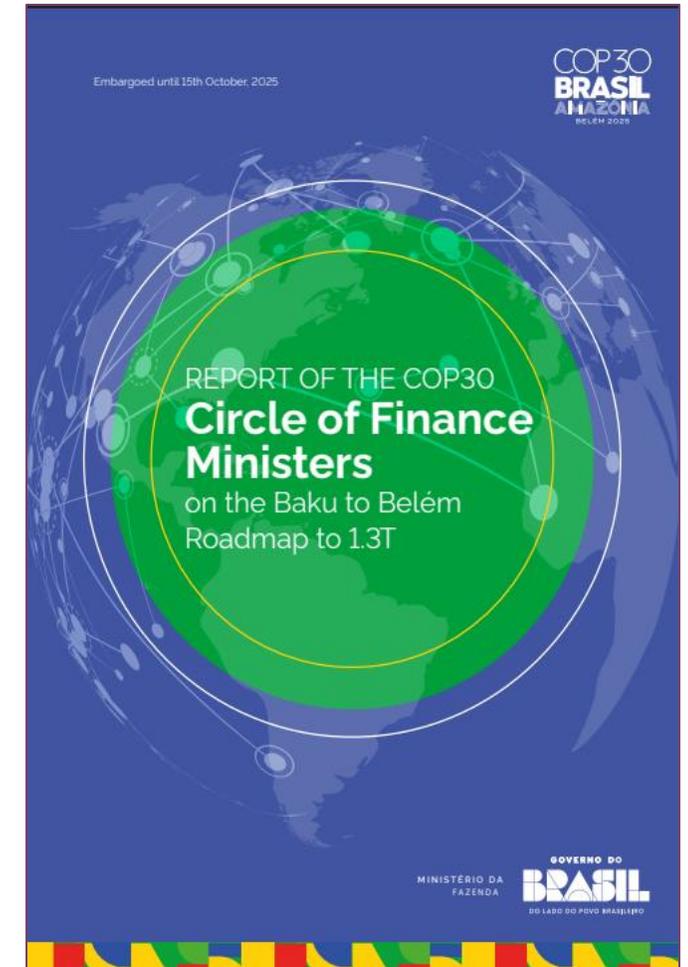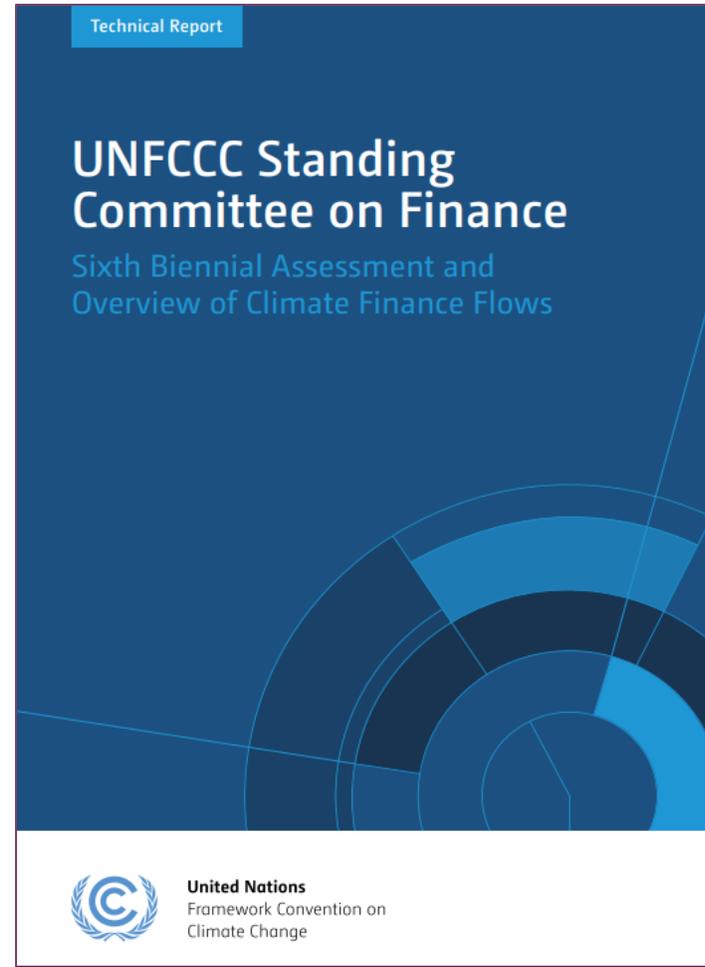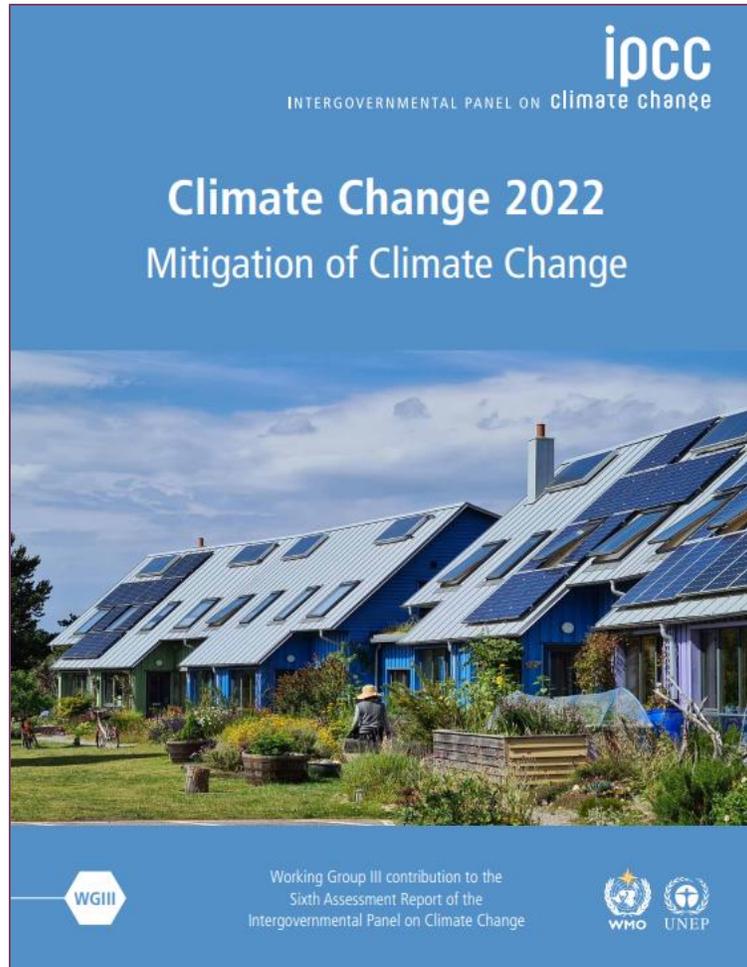
Media mentions of the Global Landscape

AP

Bloomberg

devex
Do Good. Do It Well.™

The Economist

FT

Forbes

IMPACTALPHA

MONGABAY

Net Zero Investor

responsible investor

TIME

225,000+
Social media followers

36,000+
Page views

8,000+
Report downloads

What's next?

1. **Data dashboard** – updated data dashboard available in January 2026.

2. **GLCF 2026** – published in early summer.

    i. Covering 2024 climate finance data

    ii. Early insights on 2025 climate finance

    iii. Updated methodology

3. **Sectoral, thematic and regional reports** – more reports leveraging GLCF data to deep dive into areas of global interest

Useful Links

- [Three-part webinar series](#)
- [GLCF: EMDE Spotlight](#)
- [GLCF Methodology](#)
- [GLCF Dashboard](#)

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