Global Landscape of Climate Finance 2026

CLIMATE POLICY INITIATIVE

AUTHORS

Sasha Abraham, Pedro de Aragão Fernandes, Jake Connolly, Varun Shankar, Matthew Price, James Dixon, Juliette Allisy Videlaine, Eddie Dilworth, Daniel Abutu, and Chavi Meattle. This work was conducted under the guidance of Dr. Barbara Buchner.

CONTRIBUTORS

The report also benefited from the expert contributions of CPI colleagues including Costanza Strinati, Mairead Barron, Christina Lee, Morgan Richmond, Pallavi Sherikar, Jose Diaz, William Wallock, Charles Baudry, Jessie Press-Williams, Alexandre Kirchherr, Tinglu Zhang, and Medha Sinha.

The report was copy-edited by Kirsty Taylor and Jana Stupperich.
Data visualization design and layout was led by Angela Woodall-Pavuk, Pauline Baudry, Elana Fortin, and Constantin Nimigean.

ACKNOWLEDGMENTS

The authors would also like to thank CPI colleagues Dharshan Wignarajah, Bella Tonkonogy, Rob Kahn, Priscilla Negreigos, Valerio Micale, Jonathan First, Frederick Fabian, Nicole Pinko, Tini Thomas, Neha Khanna, Uma Pal, Jaspreet Kaur, Lucie Xia, Akshay Nambiar, Bilegsaikhan Byambadorj, Sean Stout, and Baysa Naran, who provided advice, editing and internal review.

The authors would also like to recognize CPI's interns for their contributions to this work: Danial Firdaus, Riya Dhawan, and Minahil Nadeem.

We are also grateful to development finance institutions for sharing valuable data that informs the report and its analysis, as well as Charlene Watson (independent expert), Tim Bosch (German Federal Ministry for Environment, Climate, Nature and Nuclear Safety), and Dan Grishin and colleagues (UK Department for Energy Security and Net Zero), as well as all members of the CPI Climate-Aligned Climate Finance Tracking Group for their expert review.

CONTACT

Sasha Abraham, sasha.abraham@cpiglobal.org

PRESS CONTACT

Jana Stupperich, jana.stupperich@cpiglobal.org

ABOUT CLIMATE POLICY INITIATIVE

CPI is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has offices in Austria, Brazil, India, Indonesia, South Africa, the United Kingdom, and the United States.

RELATED CPI WORKS

GLCF Data Dashboard

Assessing Top-Down Climate Finance Needs Methodology (2025)

Global Landscape of Climate Finance 2025: EMDE Spotlight (2025)

Net Zero Finance Tracker

Assessing the Quality of Adaptation Finance

RECOMMENDED CITATION

Climate Policy Initiative. 2026. Global Landscape of Climate Finance 2026. glcf.climatepolicyinitiative.org

Executive summary

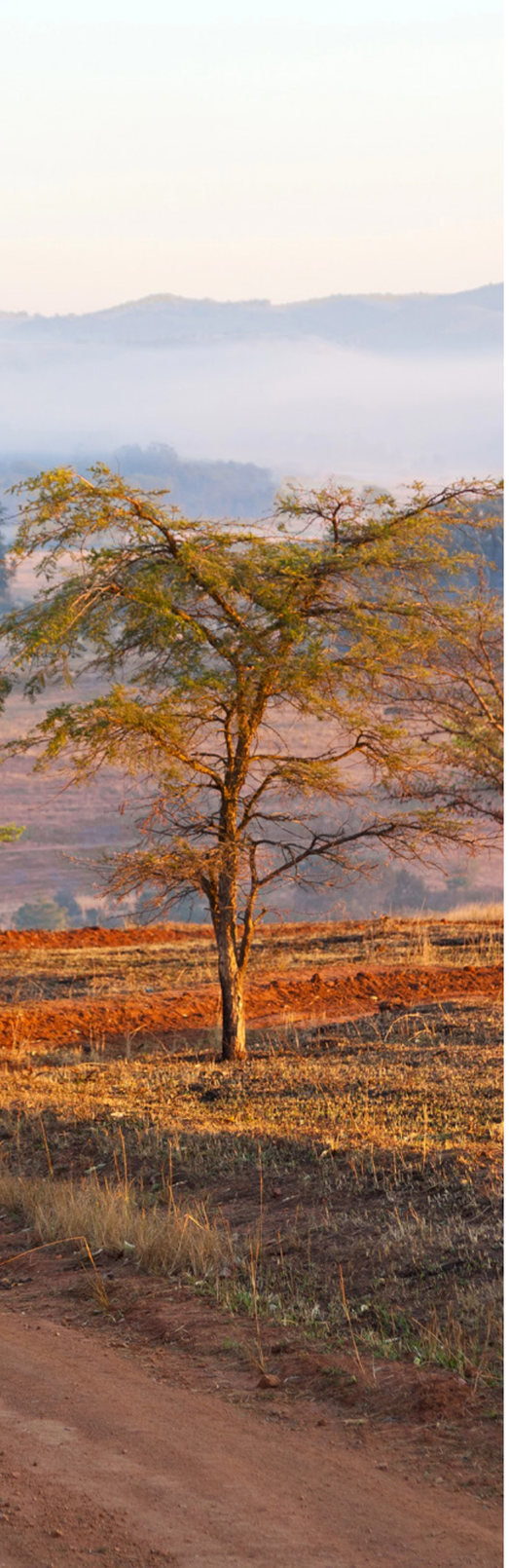
MAINTAINING MOMENTUM AMID SHOCKS

Global climate finance surpassed USD 2 trillion for the first time in 2024. Flows have grown every year over the last half-decade, despite COVID-19, energy market volatility, sovereign debt pressure, and geopolitical conflicts. This points to resilient underlying momentum and a maturing investment market for key climate solutions, not a fragile niche.

While the annual rate of climate finance growth slowed to 6% in 2024, from 16% and 22% in the two previous years, the impact potential of investment is increasing. As clean technologies become cheaper, more scalable, and commercially viable, each climate dollar can deliver greater emission reductions and resilience benefits. Early policy support and investment have moved renewable energy from an emerging technology into a competitive investment opportunity. As a result, mitigation finance reached USD 1.9 trillion in 2024.

There is now opportunity to expand that success across a wider range of climate solutions needed for a low-carbon, climate-resilient future. At the same time, rising costs of inaction for economies, businesses, and communities increase the urgency and scale of this need. Further acceleration must take us to at least USD 6.2 trillion annually by 2035[1] to ensure a climate-aligned, sustainable world where every person can thrive.

1 USD 6.2 trillion is the minimum level of investment needs identified across all scenarios analyzed as part of CPI's Top-Down Needs Assessment, representing a lower bound of estimated needs rather than an explicit target. See p. 13 for details.



CURRENT ENGINES OF GROWTH

There are several key reasons why climate finance continues to grow, despite headwinds:

DOMESTIC MARKETS, INCLUDING HOUSEHOLDS, ARE BOOSTING GROWTH: Over USD 1.7 trillion (or 85%) of climate investment was through domestic markets in 2024, with the vast majority going toward mitigation. Domestic private actors accounted for 60% of total mitigation finance, having driven around 70% of net growth since 2019. As part of this, households invested USD 332 billion (around 20% of all domestic climate finance) in low-carbon solutions. These included EVs, efficient appliances, heat pumps, and small-scale renewables, taking advantage of falling costs, better performance, shortening payback periods, and fiscal incentives. This bottom-up investment is improving energy efficiency, grid stability, and reducing exposure to fossil fuel price volatility.

STRONG POLICIES ARE SUPPORTING PRIVATE INVESTMENT: From EU carbon pricing and building standards, to India's solar and green hydrogen initiatives—strong policy signals are coinciding with large-scale private investment in energy, transport, and buildings. Flows from commercial financial institutions more than doubled to USD 572 billion from 2019 to 2024, supported by policies, transition planning, improving economics, and increasingly standardized investment structures such as power purchase agreements.

EMDEs ARE IN THE DRIVING SEAT FOR FUTURE GLOBAL GROWTH: Climate finance remains highly concentrated, with advanced economies and China consistently accounting for around 80% of global flows since 2019. However, emerging markets and developing economies (EMDEs) excluding China and least developed countries (LDCs) are now growing at a faster rate than other country groupings. The 25% compound annual growth rate (CAGR) of their climate finance since 2022 is the highest of all country groupings. South-South flows also doubled since 2021, reaching USD 27 billion in 2024.[2] This highlights EMDEs' roles as both recipients and providers of capital, technology, and implementation capacity. As climate finance growth faces constraints elsewhere, South Asia, sub-Saharan Africa, and Latin America hold significant investment opportunities in areas including grid expansion, utility-scale and distributed solar, and clean transport.

ENERGY SECURITY IS BECOMING MORE AFFORDABLE PER CLIMATE DOLLAR: Falling technology costs mean each dollar buys more clean capacity. From 2010 to 2024, the levelized cost of electricity fell by around 90% for solar PV, 70% for onshore wind, 62% for offshore wind, and 93% for battery storage, making most new utility-scale renewables cheaper than new fossil alternatives (IRENA, 2025). Clean energy investment grew by 17% in 2024 and now accounts for around half of mitigation finance. This reflects a structural shift toward electrification, deployment of renewable power, and energy security as countries seek to reduce exposure to volatile fossil fuel markets while meeting rising electricity demand. Clean energy investment is now estimated at roughly twice that of fossil fuels, with renewables and battery storage central to the shift.

2 South-South flows are a subset of climate finance flows to all EMDEs, covering only the investment that comes from other EMDEs.

FURTHER LEVERS FOR CHANGE

Progress does not only depend on increasing climate finance volumes. It also requires defragmentation across actors and finance that is better targeted, better structured, and better aligned with risk and real-economy needs.

- **GROWTH IS SLOWING WHEN ACCELERATION IS NEEDED.** While annual climate finance volumes reached record levels, growth has decelerated from a 30% surge in 2021 to 6% in 2024 and an estimated 2–3% in 2025. At these rates, flows cannot reach even the lowest estimated mitigation needs until well into the 2030s, putting investment further off track. While some deceleration may reflect cases of maturing markets or declining clean technology costs, a step change is still required to move from incremental expansion to sustained, double-digit growth.

- **RETREATING INTERNATIONAL PUBLIC FLOWS RAISE THE IMPORTANCE OF DOMESTIC AND CATALYTIC SOLUTIONS.** After increasing by 33% in 2022 and 20% in 2023, international public climate finance fell by 6% in 2024. Tightening fiscal space, competing budgetary demands, and higher interest rates have constrained donor countries' concessional lending, pointing to a structural, not cyclical, retreat. This shift raises the importance of domestic resource mobilization, capital market deepening, and policy reform, as well as renewed resolve for and effectiveness of international cooperation on climate. Countries and sectors with weaker financial systems, higher risks, or limited project pipelines require targeted support to attract investment. Development finance providers will need to target their capital to leverage additional investment.

- **ACTORS MUST COLLABORATE TO SUPPORT LDCs AS DEVELOPMENT FINANCE COMES UNDER STRAIN.** LDCs saw a 24% year-on-year decrease in international public climate flows in 2024. Grants and highly concessional public debt remain irreplaceable for many LDCs, given their limited fiscal space, yet both have fallen for two consecutive years. More effective coordination by governments, public development banks, and multilateral climate funds is needed to stretch scarce public resources. Blended finance and greater crowding-in of long-term private finance will be vital to bridge sustainable development funding gaps.

- **PUBLIC FINANCE CAN SHIFT FROM COMMERCIALLY VIABLE TECHNOLOGIES TO OTHER AREAS.** Nearly 95% of mitigation finance goes to three sectors—energy, transport, and buildings—where many technologies are mature, incentives clear, and revenue models established. Other sectors with high abatement potential—such as industry, AFOLU, and waste—receive small and volatile shares, reflecting more uncertain business models, higher technology or implementation risks, weaker policy environments, and fragmented beneficiaries. Public and blended finance must avoid competing with private capital in mature sectors and create pipelines and de-risk investment where commercial finance is not yet scaling.

- **AN INFLECTION POINT FOR ADAPTATION FINANCE TO SUSTAIN DEVELOPMENT GAINS.** Adaptation investment has increased since 2019, albeit from a low base. With flows reaching USD 64 billion in 2024, they must accelerate rapidly to safeguard development progress and curb rising inequality. Aligning public and private investment portfolios with growing climate risks can help meet the scale and urgency of the challenge. Public funders should replicate successful models to catalyze private capital. Improvements to identification, quantification, and reporting of adaptation finance may also capture currently untracked flows.

LANDSCAPE OF CLIMATE FINANCE IN 2024

CLIMATE POLICY INITIATIVE

Values are in USD billion

SOURCES AND INTERMEDIARIES

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

INSTRUMENTS

What mix of financial instruments is used?

DEVELOPMENT STATUS

What is the development status of the destination country?

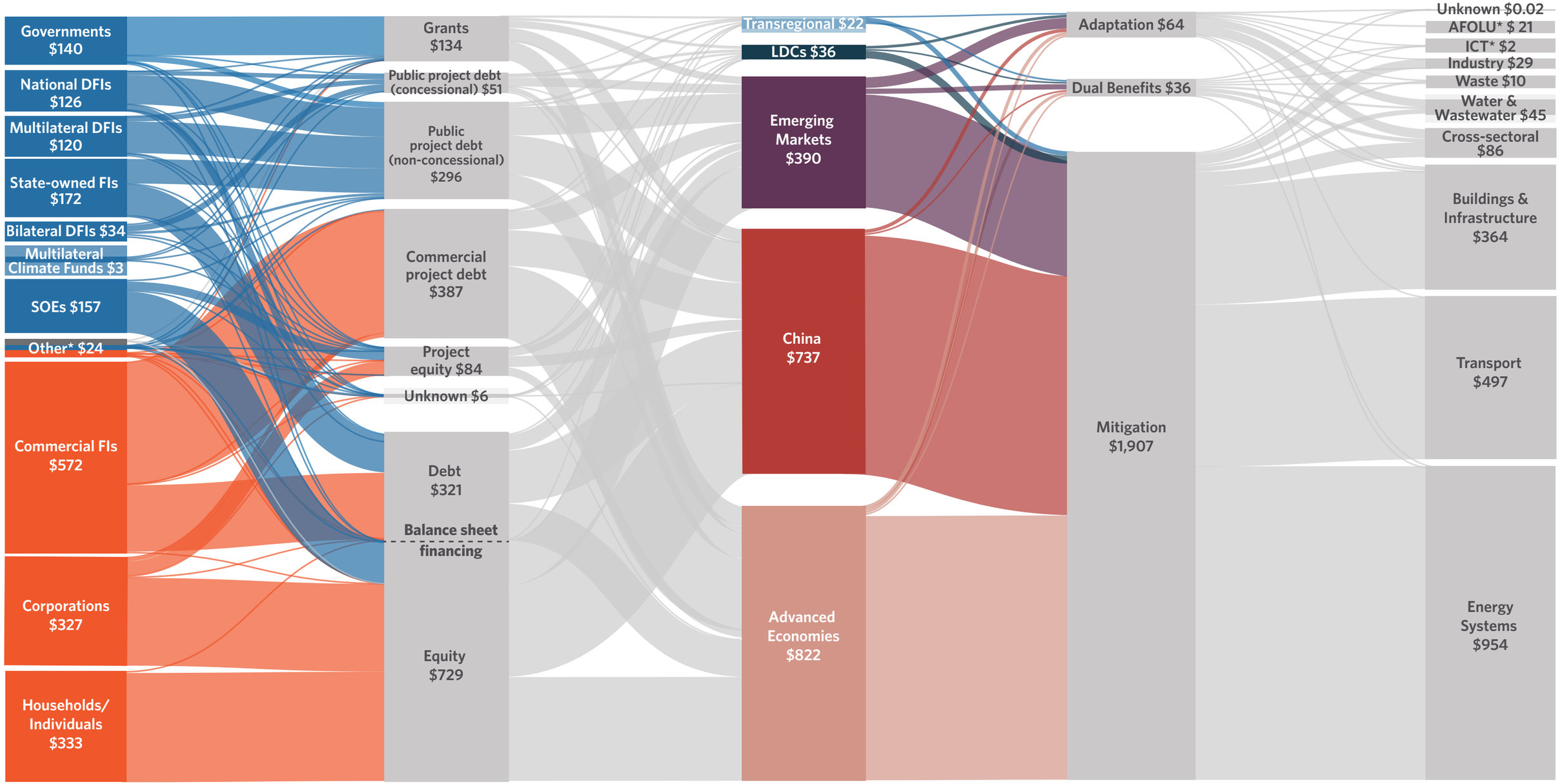
CLIMATE USES

What climate challenge do flows target?

2 TRILLION USD IN 2024

SECTORS

What is the finance used for?



PUBLIC PRIVATE

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

* *AFOLU: Agriculture, forestry, other land use, and fisheries.*
* *ICT: Information and communication technology.*

Recommendations overview

Four agendas can help drive climate investment to where it can make the greatest impact:

Agenda 1: Align climate investment with outcomes that matter to people	Agenda 2: Advance country ownership and enabling conditions	Agenda 3: Deepen adaptation finance	Agenda 4: Scale private capital mobilization
Strengthening energy, food, and economic security	Reducing fragmentation by better aligning domestic and international finance and policy at the country level	Expanding reach, raising quality, and building domestic capacity for climate and development resilience	Replicating proven approaches across markets and deploying instruments that can reduce the cost of capital
a) Embed security and competitiveness in the clean energy transition, avoiding costly fossil fuel lock-in. b) Ensure climate investment aligns with food security, protecting and boosting livelihoods, and economic resilience.	a) Make country-led investment strategies the organizing framework, anchored in fiscal and financial realities. b) Build country-led systems for effective domestic investment and local implementation and delivery.	a) Use resilience investment as a tool to manage fiscal and financial risk and build domestic capacity to act on climate risk. b) Ensure adaptation financing approaches capture the full breadth of activities that build climate resilience and guard against maladaptation. c) Apply rigorous quality standards to all forms of adaptation finance.	a) Shift private portfolios and products toward climate-aligned investment in EMDEs, building on the enabling environment created by the earlier recommendations. b) Ensure high-potential, underserved sectors and markets are not left behind in the scale-up of private climate investment. c) Use regional institutions to channel and de-risk climate finance, improving risk understanding and reducing the cost of capital.

Contents

Introduction

The most comprehensive analysis of climate finance trends

The Global Landscape of Climate Finance (GLCF) tackles the core questions of global climate finance: How much climate finance is flowing? Where is it coming from? Where is it flowing to? And how is it being delivered? Supported by the most rigorous methodologies in the field (see Box 1), the GLCF lays an evidence-based foundation for identifying trends, contextualizing gaps, and tracking progress. This report provides authoritative numbers to map insights across uses and sources of finance, instruments, sectors, and regions.

Five consecutive years of increasing climate finance—and record flows surpassing USD 2 trillion in 2024—point to resilient underlying momentum amid global challenges. However, the rate of growth has slowed. With substantive shifts in the international order reshaping global climate and development cooperation, it is time for a fresh look at strengthening the international climate finance architecture to retain resilience to shocks and sustain progress. This report provides the robust evidence and analysis needed to pursue progress in the current context.

This edition of the GLCF analyzes global tracked climate finance investments for 2019 to 2024. By combining advanced data science capabilities with extensive data sources, it produces a comprehensive picture of global flows: public and private, domestic and international.

Box 1: Climate finance tracking methodology

This analysis follows CPI's approach to and definition of climate finance outlined in the GLCF Methodology 2025. The 2026 methodology document will be released later this year. Refined over more than a decade and drawing on over 30 data sources and a multitude of ancillary data, this methodology enables uniquely comprehensive and granular tracking of global climate finance. CPI's data experts evaluate, validate, and harmonize new datasets as they become available, resulting in a necessary lag between real-world activity and reported data.

The GLCF captures primary capital flows directed toward low-carbon and climate-resilient development. Our scope follows CPI's working definition of climate finance, aligned with that of the UNFCCC Standing Committee on Finance, while applying consistent inclusion and exclusion criteria across editions. The report includes:

- Investments with direct or indirect mitigation or adaptation benefits.
- Policy support and capacity-building expenditures that enable climate action.
- Total primary transactions and investment costs.

To ensure comparability across editions, avoid over-reporting, and focus only on new climate-related investments, the GLCF excludes:

- Secondary market transactions (e.g., resale of assets, public trading), which do not represent new climate-specific investments.
- Financial risk-management instruments (e.g., guarantees, insurance). While these may catalyze private finance, they are not counted since it is possible that no actual disbursement will occur.

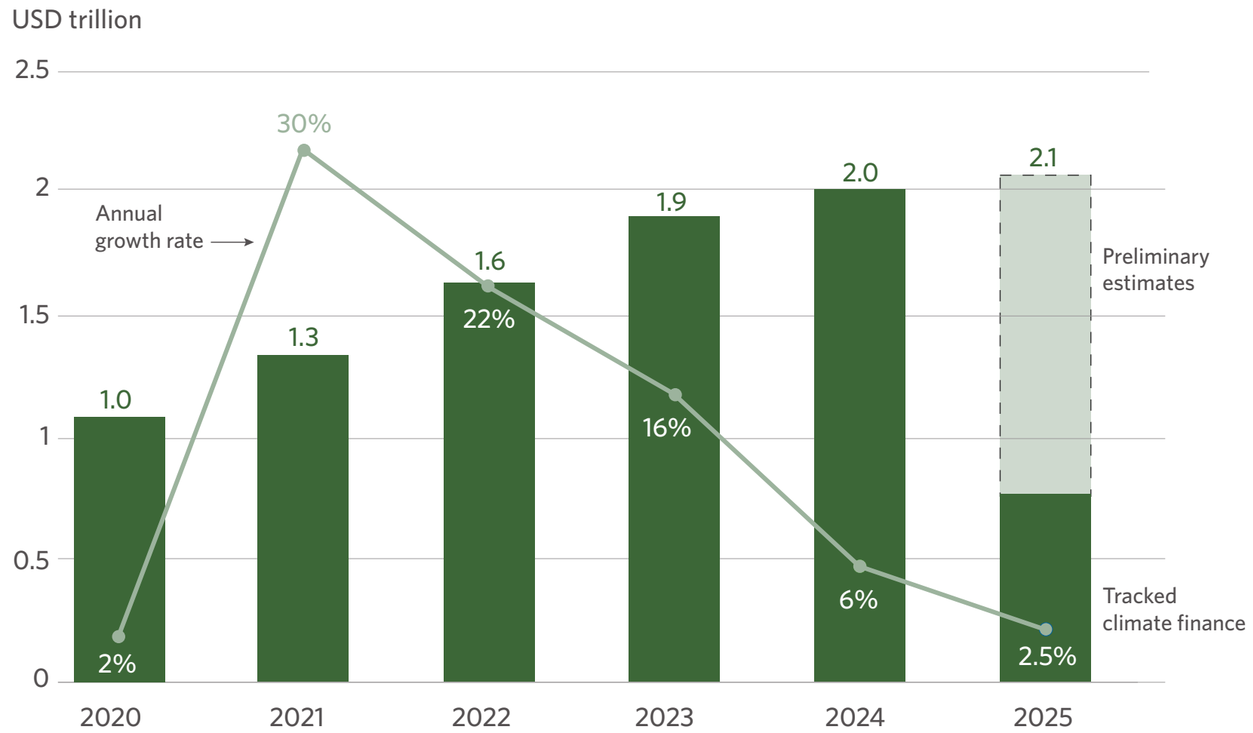
The GLCF captures all climate finance—domestic and international, public and private—regardless of geography. CPI continuously refines its approach and expands coverage, maintaining its position as the most comprehensive and reliable source of climate finance data. While the underlying data is improving, many unknowns and gaps remain. See Annexes I and II for further details on methodology and complementary data. CPI will update its climate finance database later in 2026 to incorporate additional data released after publication and publish new data to the GLCF Data Dashboard.

Early snapshot for 2025

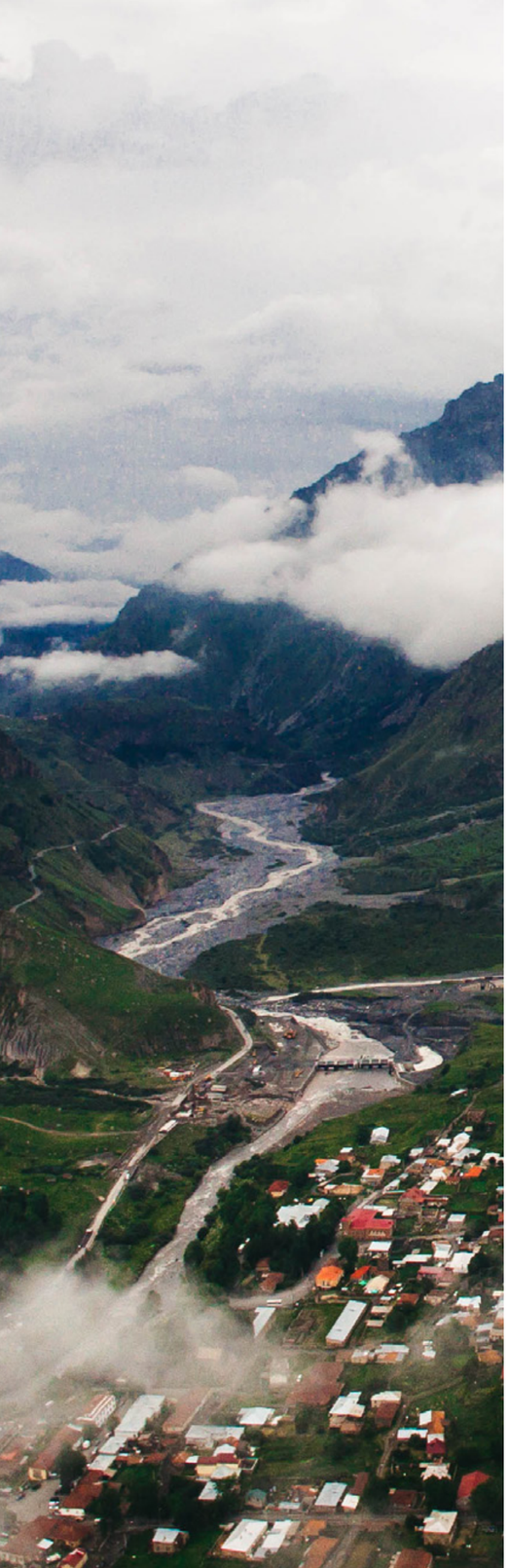
Preliminary estimates indicate approximately USD 2.06 trillion in global climate finance in 2025. Despite increases in absolute terms, annual growth is expected to have slowed further, falling to approximately 2.5% from 2024 to 2025, far below the investment levels needed (See p. 13).[3]

While this report focuses on flows through 2024, pages 11-12 also present preliminary data for 2025. Combining available real-time data with rigorous estimation methods provides early insights into recent developments in an evolving landscape (see Annex I – p. 73).

Figure 1.1: Tracked and estimated climate finance, and growth rate



3 BloombergNEF Energy Transition Investment Trends (BNEF, 2026b) and IEA World Energy Investment 'Clean Energy' (IEA, 2025e) also report falling year-on-year growth since 2021-22, despite differences in tracking boundaries and methodologies (see Annex I – p. 70).



Headwinds, progress, and emerging signals in 2025

Climate finance growth was hindered by disruptions in a few historically dominant markets in 2025. Investments reportedly fell in utility-scale solar PV and onshore wind—solutions that accounted for 27% of flows in 2024. A significant drop in climate investment in China drove the observed decrease, amid uncertainty around new renewable power pricing reforms (PRC, 2025; Reuters, 2025; BNEF, 2026b). Overall, a year-on-year 9.5% drop in global renewable energy investment was reported for 2025, driven by these two technologies (BNEF, 2026b). Despite the China-led decline, solar PV was the world's most cost-competitive power source in terms of levelized cost of electricity in 2025 (Wood Mackenzie, 2025), and growth persisted in emerging energy markets. Investment in the Middle East and Africa defied drops across most other regions, supported by high irradiance levels and robust net capacity factors (Wood Mackenzie, 2025).

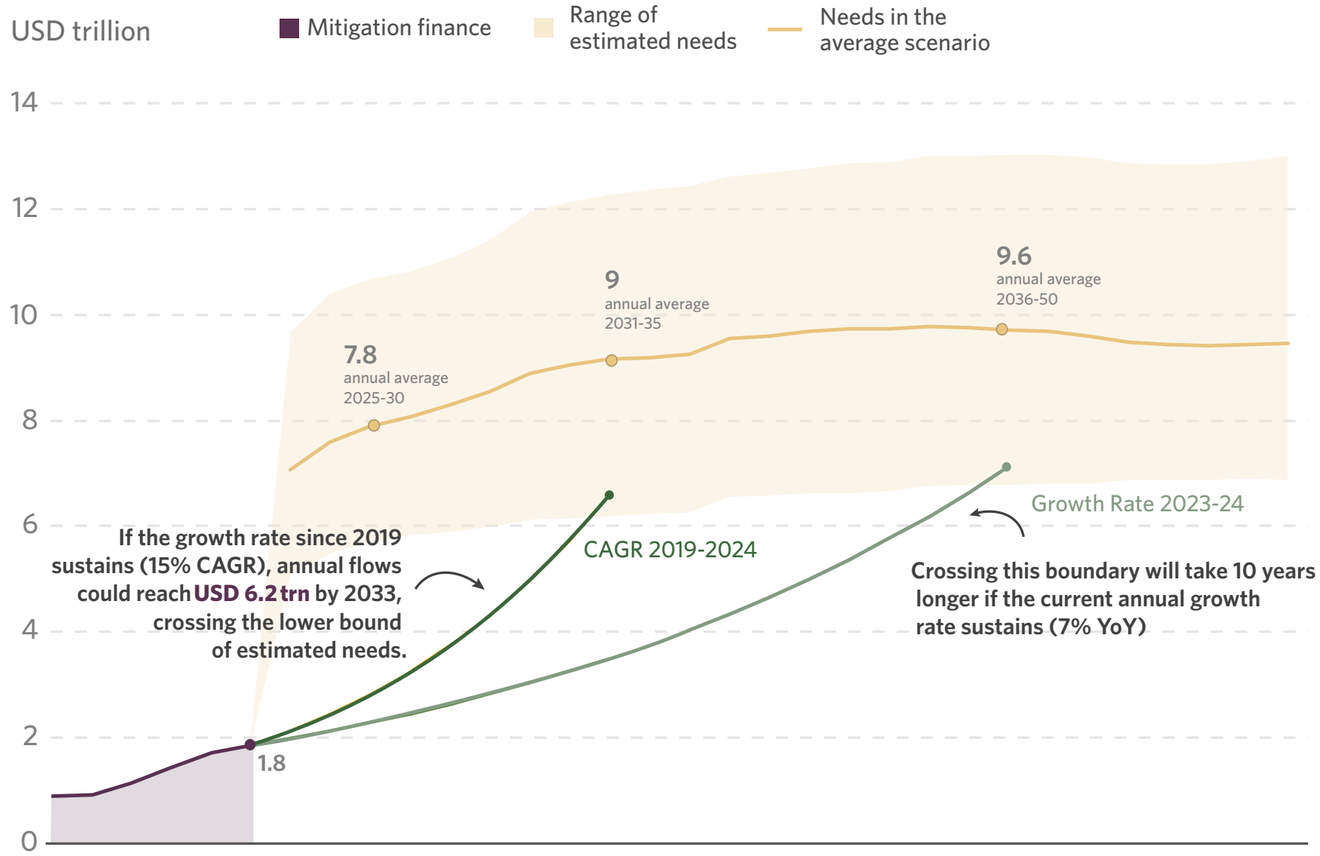
Battery electric vehicles (BEVs) made up most of the 2025 climate finance increase, alongside growth in other maturing technologies. Incentives and falling prices sustained BEV sales in China and Europe, the two largest markets (IEA, 2026b). Emerging markets have also registered strong increases in sales, observed in India, Indonesia, Viet Nam, and Thailand in Asia, and Brazil and Mexico in Latin America (BNEF, 2025a). Battery energy storage was the fastest-growing power sector technology in 2025 (IEA, 2026a), and small-scale solar expanded amid high retail electricity prices and policy support (IEA, 2025d). Significant offshore wind capacity additions and expenditure were reported for 2025, rebounding after a recent slowdown, especially in China (Rystad Energy, 2025).

Emerging sectors saw strong growth in 2025, though they still made up only a small share of climate finance. Investment in industrial energy efficiency and heat pumps is expected to have risen (IEA, 2025e), helping to reduce exposure to fossil fuel price and supply shocks. Recent conflicts exacerbating the challenges of fossil fuel dependence are likely to spur further electrification and energy efficiency measures through 2026.

Climate contributions from bilateral DFIs are projected to have fallen in 2025, with an expected increase from multilateral DFIs. Climate contributions from bilateral DFIs are projected to have fallen in 2025, with an expected increase from multilateral DFIs. This follows historic highs in public climate finance in 2023 and 2024 (OECD, 2026b). The possible divergence between these channels may reflect national governments' continued contributions to multilateral DFIs alongside bilateral reductions as development budgets face pressure. Preliminary data shows a 23% drop in total Official Development Assistance (ODA) to USD 174 billion in 2025, the steepest annual decline on record (OECD, 2026a). Together, the US, Germany, France, the UK, and Japan accounted for 96% of this drop. Looking forward, renewed efforts on international cooperation and development financing must maintain growth in international public climate flows and also capitalize on the strong and varied opportunities for mobilizing greater private investment.

Climate finance is increasing, but so is the investment gap

Figure 1.2: Global tracked mitigation finance and estimated climate investment needs



Note: Includes mitigation finance for Energy Systems, Transport, Buildings & Infrastructure, Industry, AFOLU.

Climate finance is increasing, but not at pace with the scale of the challenge. An average of USD 7.8 trillion in annual mitigation finance is needed from 2025 to 2030 to avoid the worst impacts of climate change, rising to USD 9 trillion annually from 2031 to 2035. The year 2035 is a critical milestone as countries seek to align updated nationally determined contributions (NDCs) with long-term investment and transition pathways. Doing so becomes more demanding with each year of insufficient investment.

Falling technology costs signal continued momentum, but growth in total investment remains a must. As technology costs drop, each climate dollar can translate into greater installed clean energy capacity. More low-carbon solutions are reaching commercial viability, including solar PV, wind turbines, hydroelectric power, and BEVs, raising the likelihood of sustained progress. However, at the CAGR of around 15% from 2019 to 2024, annual investment would only meet the lowest estimated needs by 2033, an annual average of USD 6.2 trillion from 2031 to 2035. The current CAGR would therefore result in a climate finance shortfall of at least USD 16 trillion.

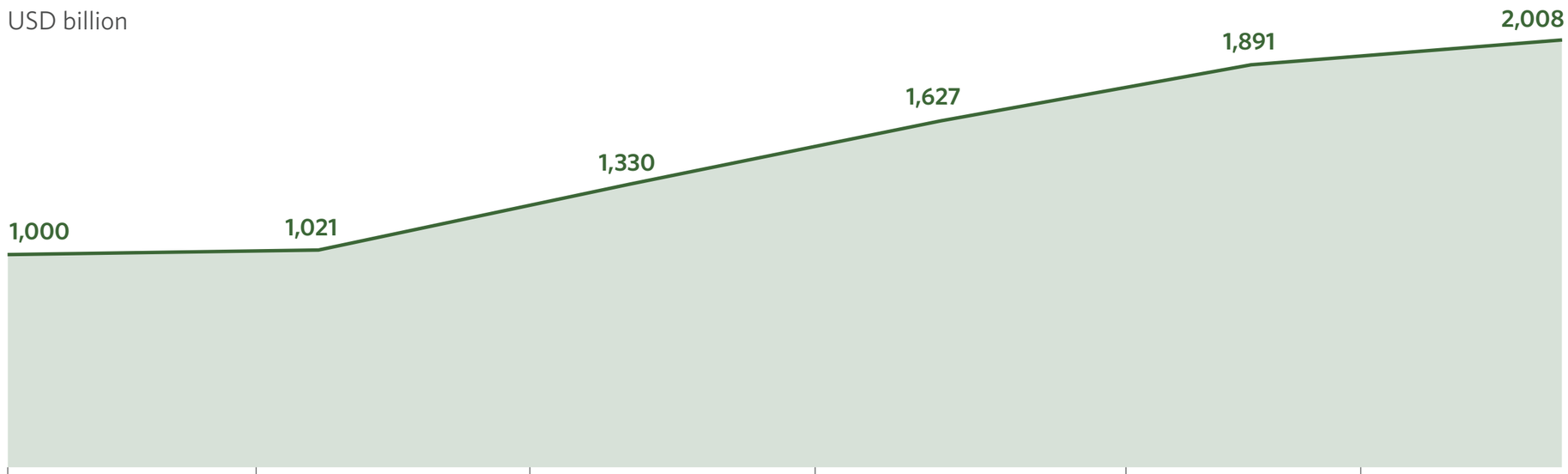
This substantial gap would see mitigation opportunities go untapped, drive temperature increases of above 1.5°C, and cause serious economic and social consequences. Avoiding temperature overshoot requires rapid, sustained investment growth from all sources.[4] Every fraction of a degree matters, and every million mobilized puts the world on a stronger, more prosperous track.

4 CPI's Top-down Needs approach compiles and standardizes investment-needs estimates from various sources to provide a comprehensive, unified understanding of the funding gap required to limit the global temperature rise to 1.5°C by the end of this century. Given the variation across scenario models, assumptions, and sectoral coverage, Figure 1.2 presents needs as a range rather than a single estimate. The lower bound of this range represents the estimated minimum level of investment required in a given year. For details, see Top-Down Climate Finance Needs: Methodology (CPI, 2025a).

Drivers of growth in 2024

Climate finance growth continues, but at a slower rate

Figure 2.1: Global climate finance growth and trends



2019	2020	2021	2022	2023	2024
Ambition rises ↗ 15%	**COVID-19 and recovery** ↗ 2%	**Commitments strengthen** ↗ 30%	**Competing imperatives** ↗ 22%	**From pledges to delivery** ↗ 16%	**Expansion amid constraints** ↗ 6%
• EU Green Deal launched; Climate Law sets binding 2050 neutrality • ESG investment and climate disclosure accelerate globally • COP25: No agreement on Article 6 carbon markets	• Pandemic disrupts supply chains, reduces energy demand, and restricts government budgets • COP26 postponed • EU taxonomy for sustainable finance published • Green Recovery: $368bn announced in national spending to reduce GHGs	• US re-enters Paris Agreement • China's 14th Five-year Plan strengthens support for EVs • EU Fit for 55 Package sets out proposals to cut emissions by 55% by 2030 • NextGenerationEU confirms 37% climate spend from EUR 750bn recovery fund • COP26: Glasgow Climate Pact reaffirms $100bn pledge • JET-P programs emerge	• Ukraine invasion triggers fossil fuel price spikes. ODA budgets shift to humanitarian response. • Global inflation exceeds 8%. Rising interest rates constrain EMDE investment • Subsidies and investment in new fossil fuels both exceeded $1tn • REPowerEU launches • Inflation Reduction Act mobilizes $370bn for clean energy • COP27 establishes Loss & Damage Fund	• EU CBAM announces future carbon tax on imported goods • High interest rates pose risks for renewable projects • COP28 Global Stocktake sets targets to triple renewables and double energy efficiency by 2030 • Loss & Damage Fund pledges rise to $700m, but $400bn is required	• Electricity demand surges (cooling, industry, buildings, data centres) • Corporate renewable energy PPAs exceed 60GW • New Collective Quantified Goal set at $300bn annually by 2035 • Global external debt reaches $8.9tn; servicing costs constrain climate finance

Growth since 2019 indicates maturing markets for climate solutions

Climate investment has seen huge progress in the past half-decade, despite challenges from COVID-19, energy market volatility, sovereign debt pressures, tightening financial conditions, and conflict. Several developments in 2024 reinforced momentum. The New Collective Quantified Goal (NCQG) set a target of USD 300 billion per year in international climate finance by 2035, led by developed countries, signaling a renewed commitment to supporting developing economies' transition and resilience. This sits alongside a broader call to enable the scaling of climate finance to USD 1.3 trillion a year by 2035 for developing countries from all sources (UNFCCC, 2024).

Continued cost declines strengthened the competitiveness of renewable energy (IEA, 2025e; IRENA, 2025), while rising electricity demand across transport, industry, buildings, and digital infrastructure spurred investment in generation, storage, and electrification (Ember, 2025a; IEA, 2025e; MIT News, 2025). Stronger industrial policy frameworks and corporate clean energy buying also continued to support large-scale private investment (BNEF, 2026a).

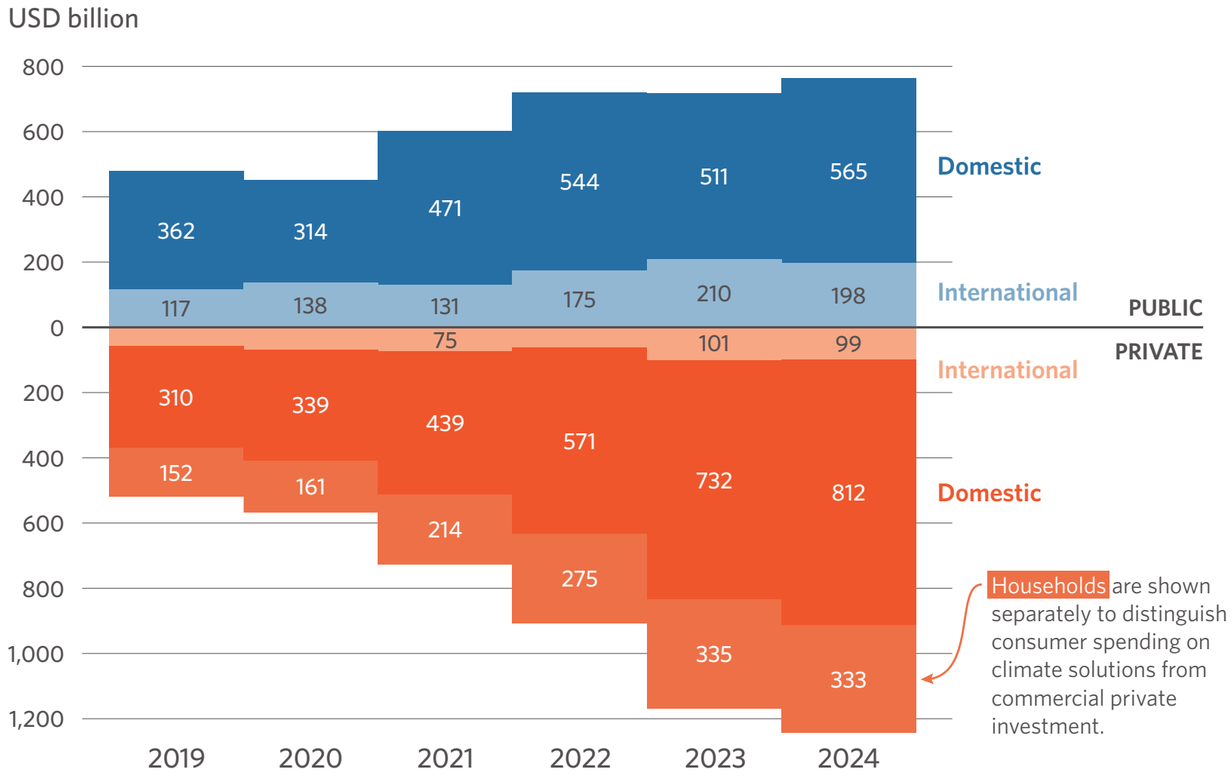
Nevertheless, a deceleration in climate finance breeds concern. Growth has slowed for three years since a green recovery-driven surge of 30% in 2021, falling to 6% in 2024.[5] Although absolute volumes continue to rise, stronger policies are needed to accelerate capital for underfunded sectors and regions.

Increased flows are particularly vital for EMDEs' sustainable development, economic growth, and an equitable low-carbon transition. Scaling concessional finance, strengthening domestic financial systems, and expanding blended finance could help mobilize greater private investment in these markets while addressing barriers, including high costs of capital and limited fiscal space (CGD, 2024a; ODI Global, 2024; IRENA, 2025).

5 New data sources, data updates, and improved methodologies have influenced values in historic years (see Annex I - p.67). Climate finance volumes across 2019–21 increased by an average of USD 50 billion annually, primarily due to revised accounting for green bonds, while average volumes for 2022 and 2023 declined by USD 30 billion following data updates and methodological refinements.

Private finance outpaces global public sources

Figure 2.2: Sources of climate finance



Note: Investments with an unknown financial source are excluded from this graphic. These flows represent 0.04% of flows since 2019.

Private investment continued to drive climate finance growth in 2024, with flows exceeding USD 1.2 trillion and a 19% CAGR since 2019. Public climate finance has grown more slowly since 2022, shifting from a roughly equal public-private split (52%-48%) across 2019-20 to 62% private finance in 2023-24. Profit-driven investments from commercial financial institutions (FIs) and corporations account for 75% of private finance growth since 2019 (48% and 26%, respectively), with household purchases making up the remainder.

For EMDEs, domestic resource mobilization must be central to climate investment, given that most flows stay within their country of origin. Domestic savings, stronger local banking systems, and deeper domestic capital markets will be critical. Strengthening domestic financial ecosystems can help reduce reliance on external capital, lower perceived investment risks, and create more stable, scalable pipelines for climate-related investment (Systemiq, Blended Finance Taskforce and FSD Africa, 2024; CPI, 2025d; D'Orazio, 2025). Two structural features underscore the importance of domestic resources:

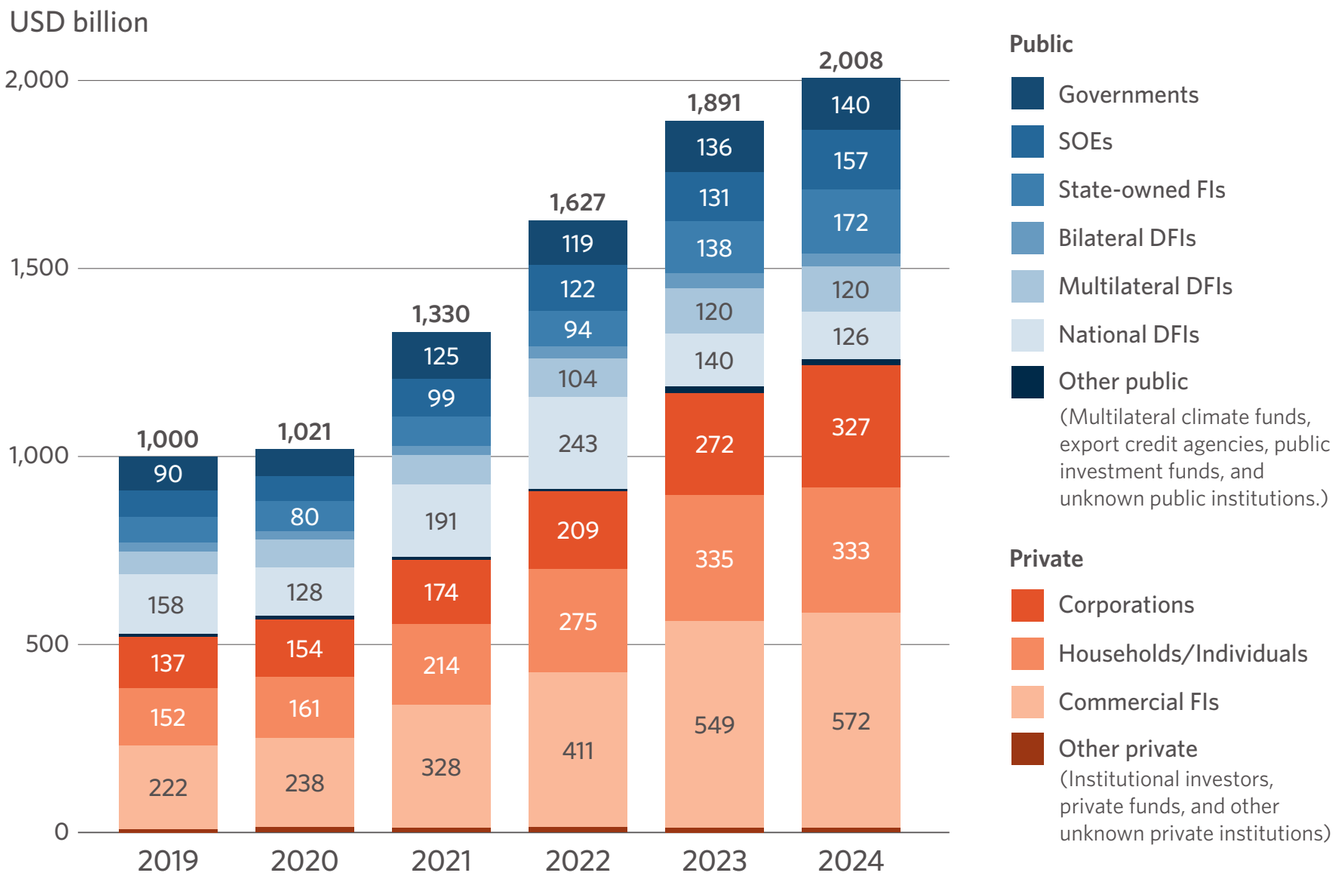
- **Globally, cross-border flows remain limited.** Since 2019, around 90% of private and 74% of public flows have remained in their country of origin. This "home bias" reflects investors' risk sensitivity and the central role of national policies, subsidies, and planning frameworks in anchoring investment (OECD, 2022; CPI, 2025d; IEA, 2025e). Recent energy security concerns and broader global economic fragmentation are reinforcing these trends.
- **International public climate finance is contracting.** After year-on-year increases of 33% in 2022 and 20% in 2023, these flows fell by 6% in 2024.[6] Tightening fiscal space, competing budgetary demands in donor countries, and higher global interest rates constrain concessional lending, pointing to a structural retreat from cross-border public flows (IMF, 2024; Carbon Brief, 2025; CGD, 2025a). Recent ODA cuts led by four major providers will likely be reflected in climate flows from 2025 (see pp. 11-12).

Private climate finance flowing overseas shows early progress, averaging USD 100 billion across 2023 and 2024, up from USD 63 billion in 2022. While still a modest 5% of overall flows in 2024, this increase reflects improving risk-return profiles in international markets, supported by approaches to help crowd in private investment, including blended finance and risk-mitigation instruments such as guarantees (OECD, 2025b).

6 OECD DAC climate finance (from developed countries to developing countries) grew, reaching USD 132.8 billion in 2023 and USD 136.7 billion in 2024 (OECD, 2026b). However, CPI's broader coverage includes international climate investment regardless of the development status of donors and recipients, while OECD data focuses on international flows to ODA-eligible countries. In addition, the OECD captures only a limited share of private finance, mobilized by public interventions. CPI's climate finance figures cover international and domestic climate investments from both public and private sources.

Commercial FIs drive flows as DFIs pivot to catalytic roles

Figure 2.3: Climate finance by actor



Note: Unknown actors represent USD 0.65 billion as a yearly average.

Commercial FIs increased their flows to USD 572 billion in 2024. Commercialization of clean energy, stronger policies, improved risk-mitigation tools, and standardized project structures have supported the mainstreaming of climate investment into core banking and capital markets (IEA, 2024b, 2025e; BNEF, 2025b).

Corporate climate finance saw a 19% CAGR since 2019, driven by similar incentives. Companies are increasingly required to make sustainability disclosures, with 94% of energy sector companies (by market capitalization) now reporting (OECD, 2025a; SBTi, 2026).

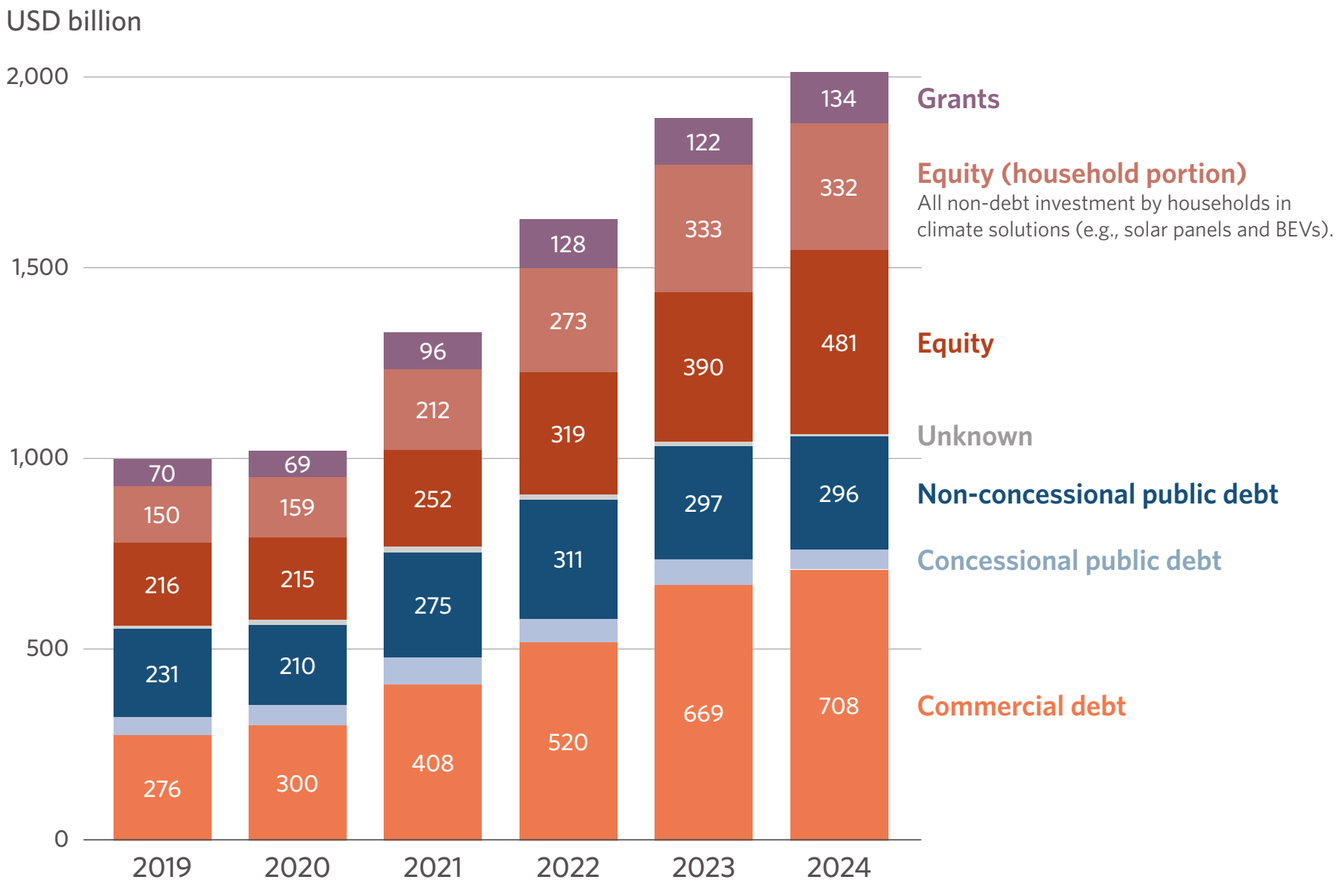
Climate finance from households scaled rapidly. Their investment in small-scale solar rose to USD 87 billion in 2024, and their BEV purchases to USD 111 billion. This growth reflects falling costs, shortening payback periods, and subsidies and tax incentives in advanced economies and China (Dabush *et al.*, 2025; Minier and Bustamante, 2025). Decentralized solar is increasingly popular in EMDEs, where unreliable grids and high electricity costs make self-generation attractive (Weinand *et al.*, 2023; IEA, 2025e).

Amid the overall slowdown in public flows, providers saw divergent trends. State-owned financial institutions (SOFIs) and enterprises (SOEs) had respective CAGRs of 21% and 17% since 2019. China drove growth, accounting for 72% of SOE and SOFI flows. Through initiatives such as the G20 capital adequacy framework reforms, multilateral DFIs have made efforts to maximize investment and leverage private capital through guarantees, blended finance, and policy-based lending (G20, 2023; CGD, 2024b; Zero Carbon Analytics, 2024). By contrast, national DFI flows fell to USD 126 billion in 2024 from a peak of USD 243 billion in 2022, as a few large FIs have reduced their climate flows by around 50% since 2019.

Multilateral climate funds (MCFs) provided a modest (0.2%) but vital share of investment, totaling USD 3.4 billion in 2024. MCFs play a complementary role to other DFIs, providing USD 1.8 billion in grants and USD 1.3 billion in concessional loans in 2024. In addition, their governance structures often ensure equal representation of EMDEs (IEA, 2025e).

Maturing markets see more commercial debt

Figure 2.4: Climate finance by instrument



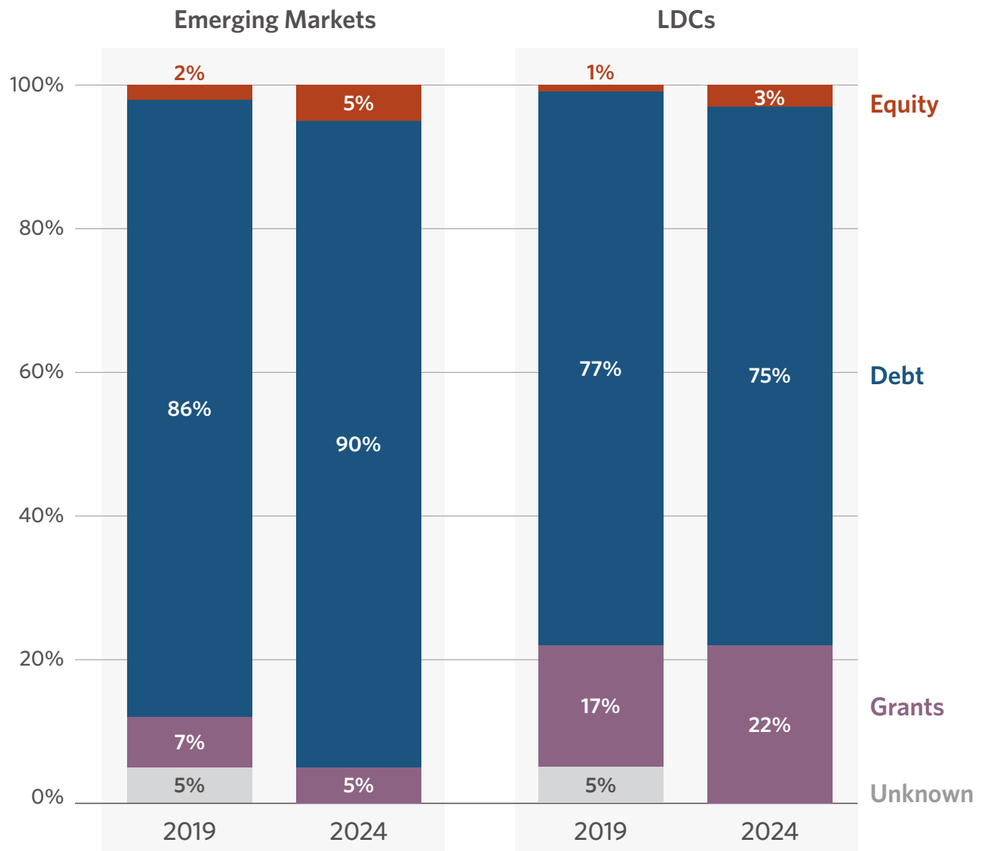
Commercial debt was the fastest-growing instrument class, with a CAGR of 21% since 2019. In China, this reflected the rapid scaling of domestic clean energy manufacturing and deployment, supported by state-directed credit, industrial policy, and support for private sector participation in the energy sector (IEA, 2025e). In advanced economies, commercial debt growth was underpinned by investor appetite for renewable energy and infrastructure assets.

Equity investment (non-household) reached USD 481 billion in 2024, with a CAGR of 17% since 2019. The most pronounced growth was in EMDEs (excluding China and LDCs), tripling from USD 32 billion in 2019 to USD 98 billion in 2024. Catalytic equity is particularly important in debt-constrained countries, as it can absorb first-loss risk to crowd in commercial capital (see p. 20). Climate-related purchases from households (equity) have also scaled, reaching USD 332 billion in 2024, mostly of EVs (33%) and small-scale solar purchases (26%) (see p. 17).

The composition of public finance has remained fairly consistent since 2019. Over 60% of these flows came in the form of non-concessional debt. While non-concessional, these loans are often offered on more favorable terms than recipient countries could obtain independently by leveraging the credit ratings and lower funding costs of public FIs. Grant funding has remained above USD 120 billion since 2022, nearly doubling since 2019. Concessional public debt has seen the weakest overall growth since 2019.

Catalytic equity is key to closing EMDEs' finance gap

Figure 2.5: Investment by DFIs and multilateral climate funds, by instrument



Note: "Emerging Markets" covers EMDEs excluding China and LDCs (see Box 4)

Even modest equity investment could meaningfully accelerate climate finance for EMDEs if strategically deployed. Each dollar of catalytic equity can mobilize approximately USD 9 in total project equity, and USD 30 in total project CAPEX over the investment lifecycle, according to analysis of over 70 EMDE transactions (CPI and GFANZ, 2025).

Catalytic equity is underused by development finance providers. By absorbing early-stage risk and providing the foundation for leverage, equity generates larger volumes of total investments in funds and projects, enabling financial structures to close and projects to progress (CPI and GFANZ, 2025). This is particularly important in EMDEs with elevated risk profiles and heavy debt servicing burdens (IEA, 2021).

Delivering the clean energy infrastructure needed to align EMDEs with a net zero pathway will require USD 1.3 trillion in annual investment by 2035, with USD 375 billion as equity (CPI and GFANZ, 2025).[7] Equity allocations from DFIs[8] and MCFs are insufficient, despite positive trends. Equity has grown from 2% of these actors' total climate investment in Emerging Markets (EMDEs excluding China and LDCs) in 2019 to 5% in 2024; and from 1% to 3% in LDCs. In real terms, this represents 3x growth in Emerging Markets (reaching USD 4.8 billion) and 4x growth in LDCs (reaching USD 559 million). While this trajectory is encouraging, equity remains a small fraction of public climate flows. Though DFIs and MCFs have historically focused on debt financing, they are well-positioned to absorb risk and crowd in private capital by deploying equity and catalytic equity.

As public FIs face pressure to "do more with less," DFIs, impact investors, and philanthropies could prioritize equity in their portfolio allocations to mobilize private capital. Deployed alongside complementary policy reforms, guarantees (See Box 2) and technical assistance, catalytic equity makes highly efficient use of scarce development finance resources to accelerate the climate transition.

Box 2: The role of guarantees

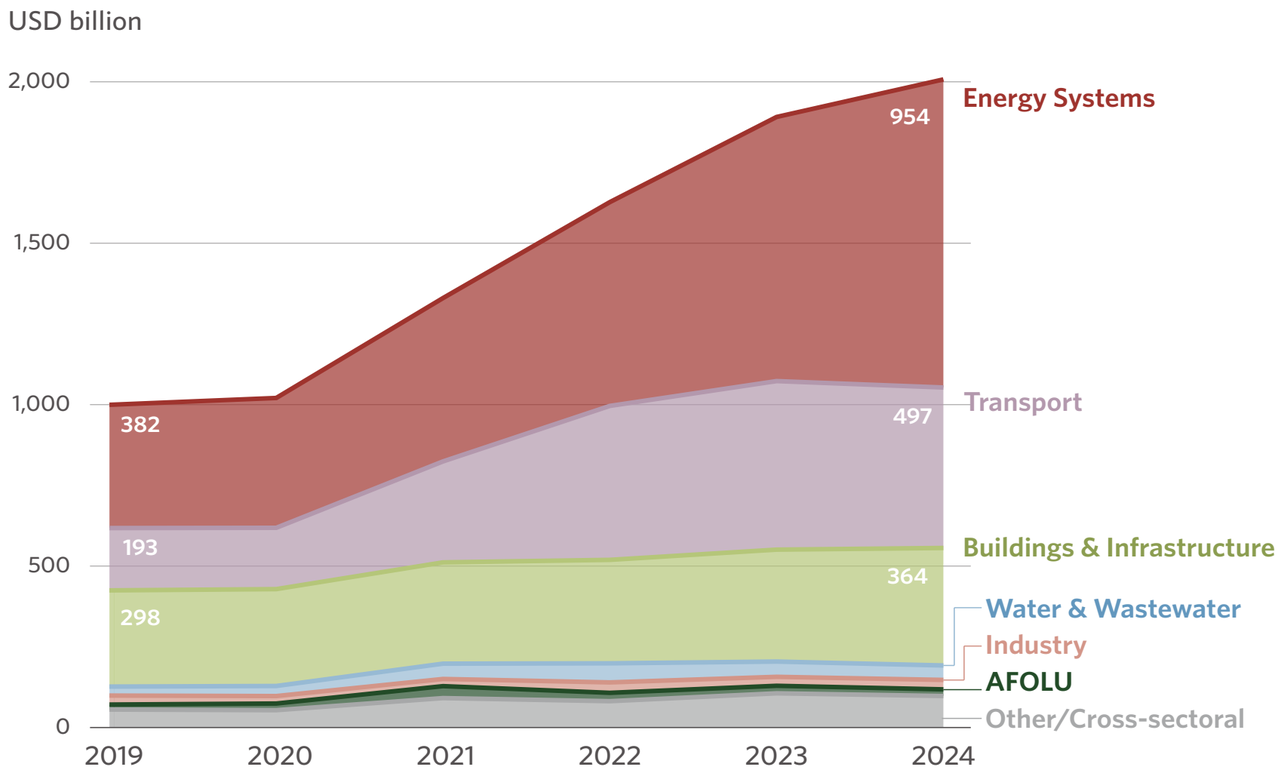
Another important risk-mitigation tool, alongside catalytic equity, guarantees reduce specific risks faced by lenders and investors, helping projects to attract financing on more favorable terms.

Although the GLCF does not track guarantees,[9] they are powerful tools for mobilizing private climate investment, particularly for projects with lower revenue-generation capacity, such as nature-based solutions. Recognizing this potential, CPI works to advance the use of guarantees through initiatives such as the Green Guarantee Group, which aims to scale and improve guarantee deployment in support of climate and development objectives.

7 Includes mitigation uses only: For details, see Table A.2 of The Clean Energy Equity Investment Gap (CPI and GFANZ, 2025).
8 DFIs refers to bilateral, multilateral, and national institutions.
9 "While guarantees may catalyze private finance, they are not counted as climate flows since it is possible that no actual disbursement will occur". See challenges for tracking climate-aligned guarantees in the Landscape of Guarantees for Climate Finance in EMDEs (CPI, 2024).

Three sectors dominate growth

Figure 2.6: Climate finance by sector



Note: Other/Cross-sectoral includes Waste, ICT, and projects that cover multiple sectors within the CPI taxonomy.

Climate finance was highly concentrated in energy systems (48%), transport (25%), and buildings and infrastructure (18%) in 2024. This dominance reflects continued focus on scalable, commercialized mitigation technologies, which tend to have relatively supportive policy frameworks.

Energy systems and transport grew fastest, driven by improving technology affordability. These sectors have increased at CAGRs of 20% and 21%, respectively, since 2019. Between 2010 and 2024, the LCOE fell by around 90% for solar PV, 70% for onshore wind, 62% for offshore wind, and 93% for battery storage (IRENA, 2025). At the same time, structural demand for renewable energy has accelerated due to electrification across industry, buildings, and transport, alongside rapid expansion in AI-related computing. Data centers alone could be the fifth-largest electricity consumer globally by 2026 (MIT News, 2025). Big tech firms are meeting this demand through renewable energy, accounting for 43% of clean power purchase agreements signed in 2024 (BNEF, 2025b).

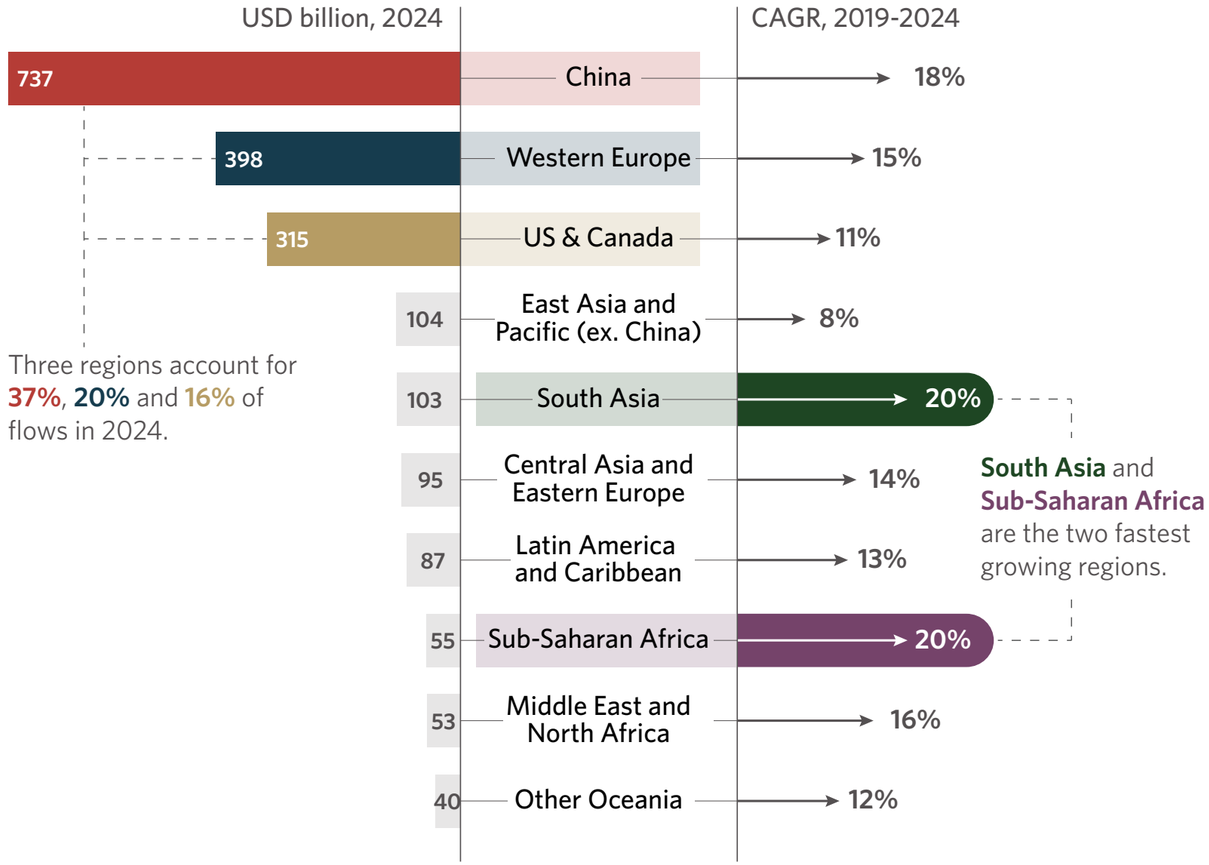
BEVs accounted for nearly 80% of all transport flows in 2024. Advanced economies made up around 56% of cumulative BEV finance growth since 2019. China represented a further 37%, supported by its 14th Five-Year Plan (2021–25), which prioritizes continued electrification and clean mobility expansion (IEA, 2022). Emerging markets (EMDEs, excluding China and LDCs) also saw BEV-related finance rise, from USD 0.9 billion in 2019 to USD 22 billion in 2024. Emerging export dynamics increasingly shape this trend. Non-OECD markets have been responsible for all growth in Chinese EV exports, with Mexico, Brazil, the UAE, and Indonesia top destinations in 2025 (Ember, 2025b).[10]

Buildings and infrastructure saw a slower 4% CAGR over 2019-24, falling as a share of total climate finance from 30% to 18%. This reflects fragmented project pipelines, rising construction and material costs, and weaker investment conditions in some large markets, particularly in parts of Asia where real estate and construction have slowed (IEA, 2025e).

10 We are expanding our coverage of urban rail and metro finance (see Annex II – p.76).

New finance hotspots are emerging beyond core markets

Figure 2.7: Climate finance by region, USD amounts and CAGR



China and key advanced economies remained primary destinations of climate finance, driven by strong policy foundations, albeit with stalling growth. Flows were concentrated in China (37%), Western Europe (20%), and the US and Canada (16%) in 2024.

- **China's** finance mainly went to energy systems (60%) and transport (28%), reflecting continued deployment of large-scale renewable energy, grid expansion, and electrification-led industrial policy. The country's action was underpinned by strong state coordination and deep domestic capital markets that enable infrastructure investment at scale (Hepburn *et al.*, 2021).
- **Western Europe's** flows were more diversified, with transport (36%), energy systems (32%), and buildings and infrastructure (24%) playing significant roles. This reflects stringent regulatory standards, carbon pricing through the EU Emissions Trading System, and strong building efficiency mandates under initiatives such as the EU Green Deal and national renovation wave programs (IRENA, 2025).
- **For the US and Canada**, climate finance grew significantly in 2023 and 2024 to around USD 315 billion. The Inflation Reduction Act created notable momentum across energy systems and transport (GIIA, 2024), though policy reversals in the US since early 2025 risk undermining this trajectory.

SHIFTING MOMENTUM IN SOME EMDE REGIONS

Targeted sectoral expansion in emerging economies is creating new climate finance hotspots beyond traditional core markets. South Asia and sub-Saharan Africa have grown the fastest since 2019, with CAGRs of 20%. Latin America and the Caribbean (LAC) and East Asia and the Pacific (excluding China), have also undergone strong growth.

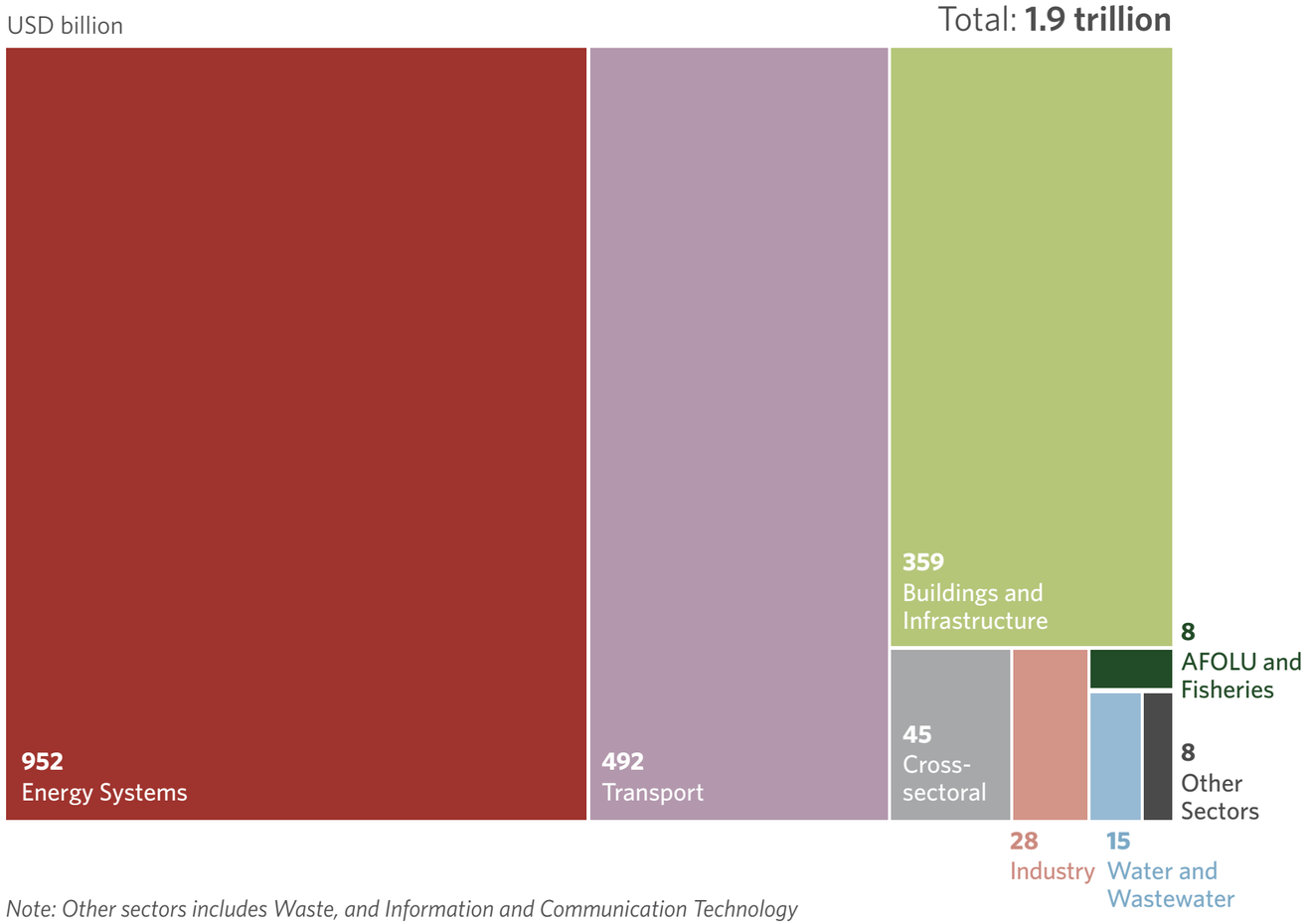
- **In South Asia**, India accounted for over 60% of climate finance in 2024, following a CAGR of 24% since 2019. Pakistan accounted for 25% of regional flows, as a small-scale solar boom accounted for 86% of the country's climate finance in 2024.
- **In sub-Saharan Africa**, 42% of flows went to energy systems in 2024. Investment is concentrated in a few countries, with 55% of energy finance going to South Africa and Nigeria.
- **In LAC**, between 2020 and 2022 climate investment grew with a CAGR of 28% to USD 78 billion. This was led by an expansion in small-scale solar PV and onshore wind in Brazil. While overall growth slowed to a CAGR of 5% between 2022 and 2024, climate investment in transport grew by 28%, largely due to EV sales in Brazil.
- **In East Asia and the Pacific** (excluding China), between 2022 and 2024, investment grew with a CAGR of 23% to USD 104 billion, driven by solar PV, BEVs, and energy efficiency.

Page 44 provides a spotlight on climate finance to EMDEs.

Mitigation Finance

Mature mitigation sectors continue to scale

Figure 3.1: Mitigation finance by sector in 2024



Note: Other sectors includes Waste, and Information and Communication Technology

As more private finance flows to dominant mitigation sectors, public support should shift to sectors with higher risks and scarce capital.

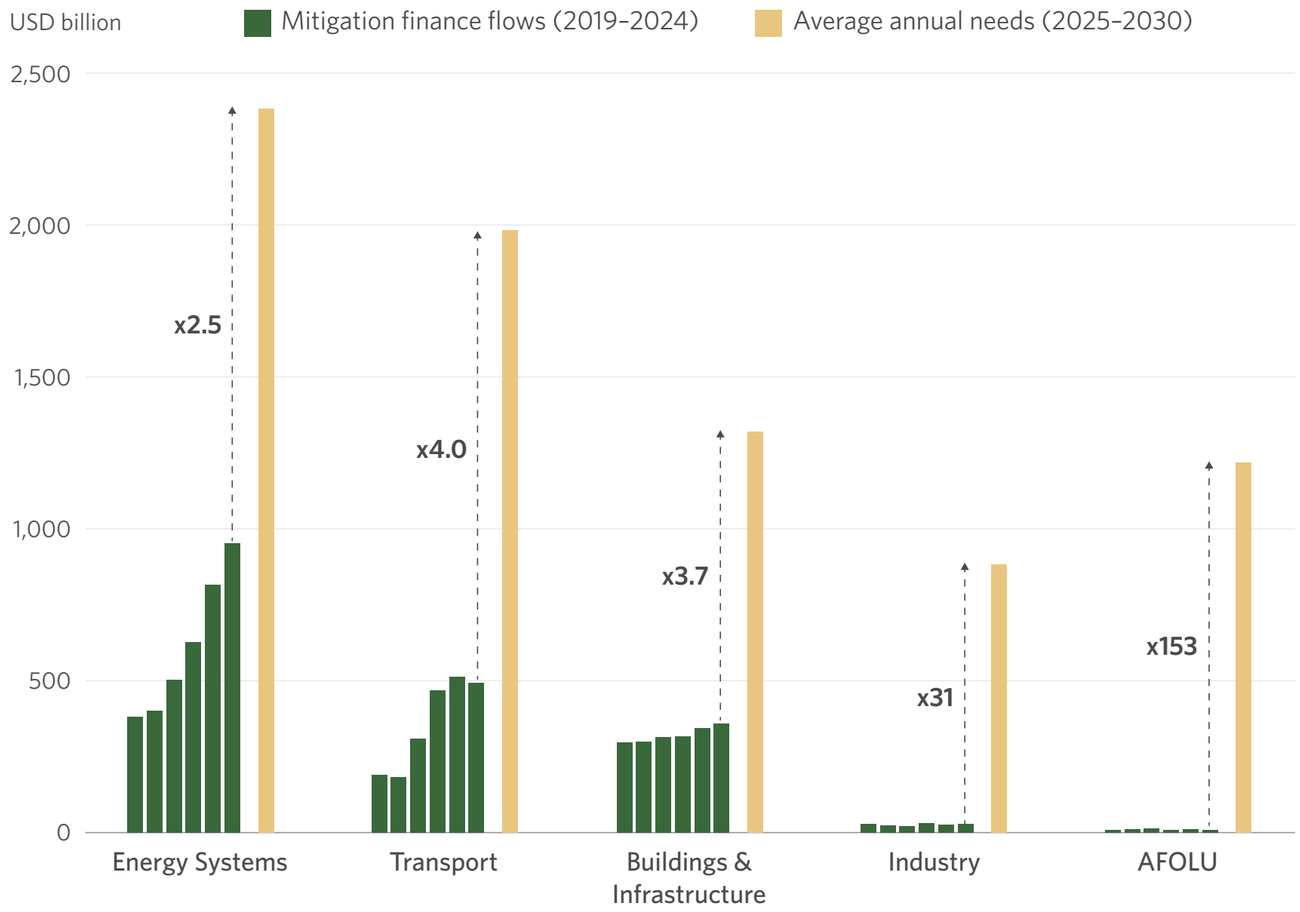
Mitigation finance reached USD 1.9 trillion in 2024, a 7% increase on 2023. With 95% of flows in energy systems, transport, and buildings and infrastructure, investment is scaling fastest in infrastructure-heavy sectors that have clearer policy support, project pipelines, and revenue models.

National policy, local financial systems, consumer incentives, and corporate investment decisions increasingly shape the landscape of mitigation finance. Domestic sources accounted for 88% of finance in 2024, largely from private actors. Local banks, corporations, and households played increasingly prominent roles, while international flows declined marginally.

Mitigation finance growth has slowed compared to recent years. To address this, public providers must avoid crowding out private capital in mature markets and instead create investable pipelines and reduce risk in sectors where private investment is low. Concessional support, incentives, and long-term policy frameworks can attract consumer finance and catalytic investment. Public and blended finance will be critical to improving bankability in industry, AFOLU, waste, and water. Cross-sectoral finance, which remained flat in 2024, requires growth to spur policy support, capacity building, and technical assistance. Such activities are important for building project pipelines and creating enabling environments to crowd in private finance.

Investment gaps vary sharply across sectors

Figure 3.2: Global mitigation finance flows vs. needs by sector



Targeted mobilization must accompany volume growth.

Mitigation finance needs to significantly exceed current flows, but closing the gap is not just about aggregate volume. In 2024, flows were well below estimated annual needs across all major sectors.[11] Energy systems required around 2.5x current finance, transport and buildings around 4.0x and 3.7x, with far larger gaps for industry (31x) and AFOLU (153x).

Energy systems present the largest opportunity for near-term scale-up. The sector has the highest mitigation potential—estimated at 12.2 $GtCO_2e$ by 2030 (UNEP, 2024)—and the largest finance base. While private actors may sustain investment in clean generation, public interventions are needed to accelerate grids, storage, and distributed energy systems, particularly in EMDEs with the highest energy access and security needs.

Transport and buildings need sustained consumer and infrastructure finance. Each sector has a sizable mitigation potential of 3.2 $GtCO_2e$ by 2030 (UNEP, 2024). Progress depends on policy incentives and affordability measures that enable households and individuals to adopt low-carbon technologies. Continued investment is also needed in enabling infrastructure to make those choices practical, such as EV charging networks, energy-efficient housing upgrades, and clean heating solutions.

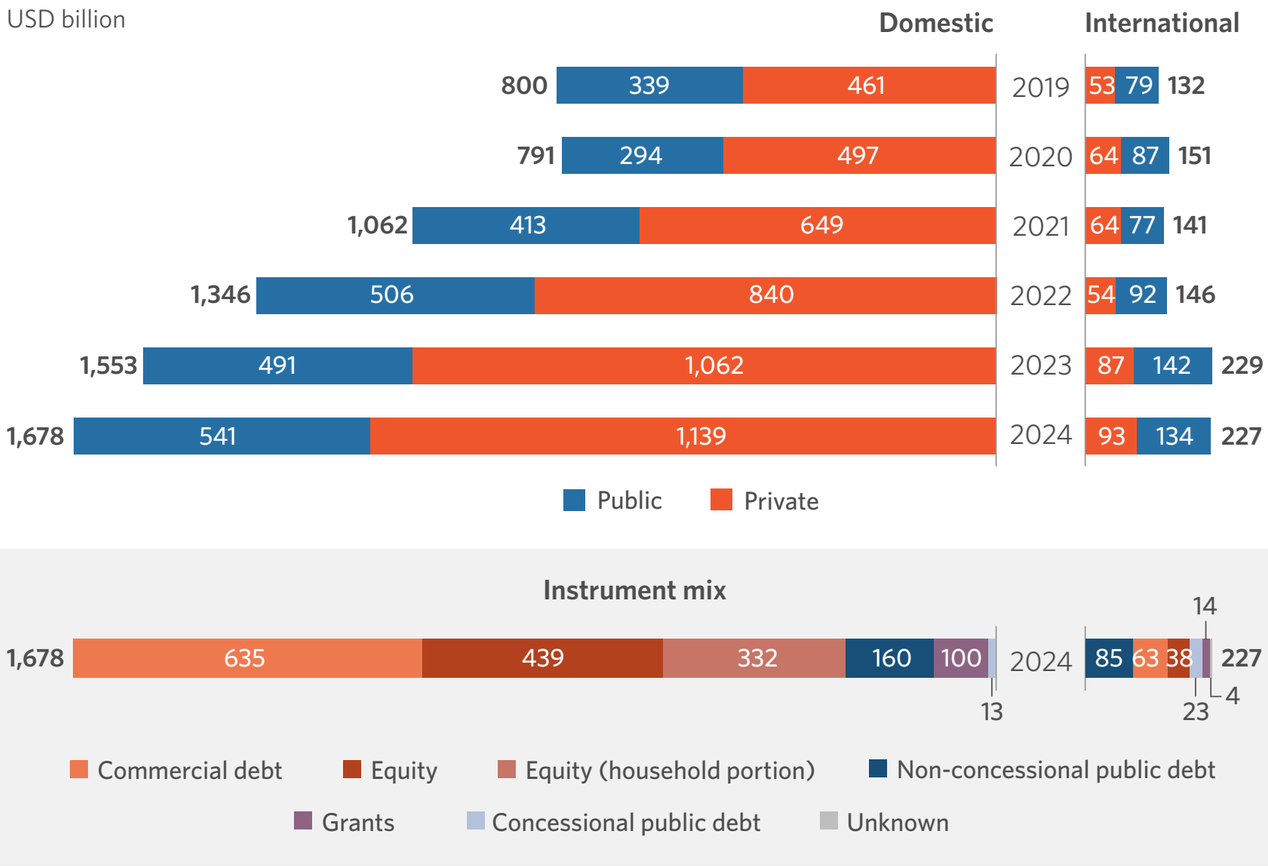
Harder-to-finance sectors require supportive public finance. Industry and AFOLU show the widest gaps, despite respective mitigation potentials of 4.4 and 8 $GtCO_2e$ by 2030 (UNEP, 2024). These sectors often have fragmented project pipelines, higher technology or implementation risks and harder-to-measure outcomes. Public and concessional finance are critical, but must be targeted: building pipelines, reducing risk, and crowding in private investment where commercial finance is not yet scaling.

In Emerging Markets, mitigation finance needs to shift from filling gaps to shaping markets. As ODA and concessional finance become more constrained, public actors should prioritize catalytic roles in mitigation, rather than directly funding commercialized technologies. This creates a larger role for domestic and international private actors in mature mitigation sectors, supported by public-private partnerships, guarantees, and risk-sharing tools where needed.

11 See p. 13 for a description of CPI's needs methodology, and *Top-Down Climate Finance Needs: Methodology* (CPI, 2025a) for further details.

Private domestic capital is shaping growth

Figure 3.3: Mitigation finance by source and actor type, with instruments per actor type



Mitigation finance is gradually shifting: Domestic private contributions rose from 49% in 2019 to 60% in 2024, providing around 70% of net growth.

Growth increasingly stems from domestic actors. These sources accounted for 88% of mitigation finance in 2024, driven by local private actors. However, this remains highly concentrated in large markets including China, the EU, and the US. Private finance flows mainly as commercial debt from financial institutions and as equity investments in climate-related assets from corporates and households.

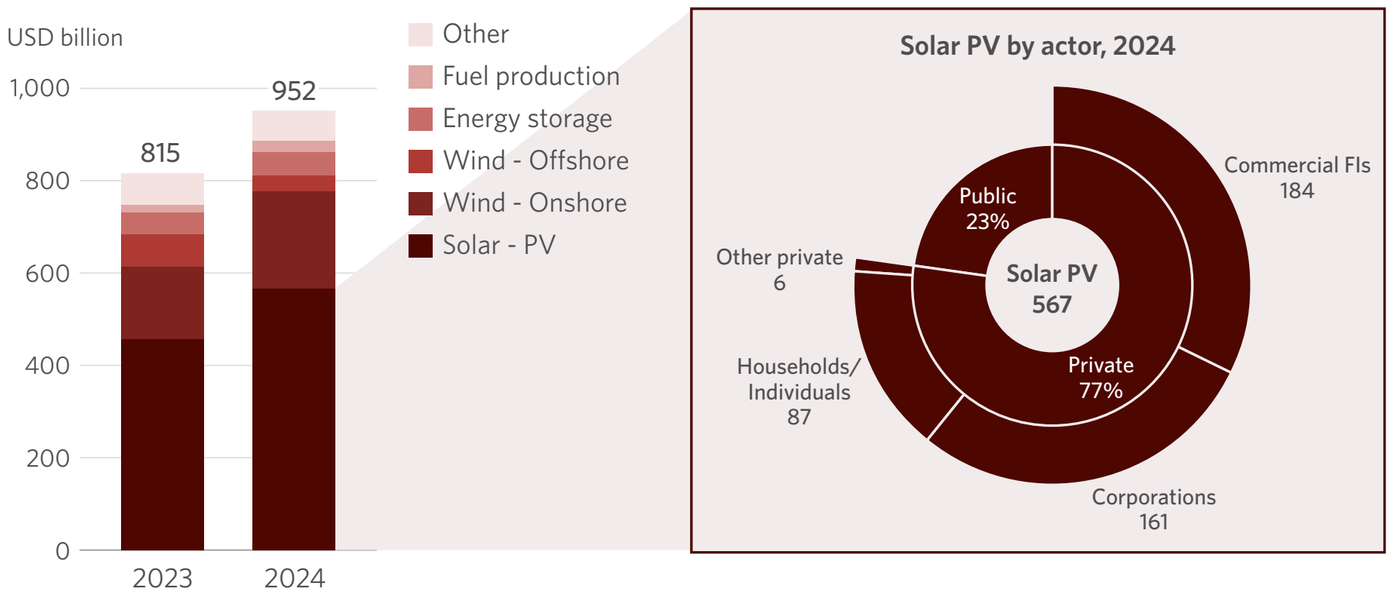
International providers remain important, but with a targeted role. International sources accounted for 12% of total mitigation finance in 2024. Public finance provided more than half of this (59%), mostly as project-based debt, underscoring its role in improving project bankability where risks, tenors, or capital costs pose challenges to full commercial participation. Nevertheless, growing confidence in climate finance markets from private domestic investors can also signal entry points for international private flows.

Looking ahead, the key challenge is to extend domestic private investment into harder-to-finance areas through blended finance. Domestic private capital is likely to be the main source of scale in mature mitigation markets. Analysis by IRENA (2025) shows that renewable technologies are becoming cheaper to install, but financing and market conditions still affect levelized electricity costs, underlining the importance of risk reduction and market design to attract investment.

Renewable energy generation leads the scale-up

Energy systems, the largest mitigation sector, was led by solar PV amid rising demand and energy security priorities.

Figure 3.4: Energy systems mitigation finance by technology, with actor split for solar PV



Note: Other includes unspecified wind, solar CSP, unspecified solar, geothermal, hydropower, biomass, policy, budget support, capacity building, etc.

Energy systems investments grew by 17% year-on-year in 2024, reaching around half of total mitigation finance. This reflects a structural shift toward electrification, deployment of renewable power, and energy security as countries seek to reduce exposure to volatile fossil fuel markets while meeting rising electricity demand. The IEA estimates that investment in clean energy is now around double that of fossil fuels, with renewables and accompanying battery storage central to this shift (IEA, 2025e).

New electricity demand is strengthening the case for clean power. Data centers are an increasing source, with the IEA projecting electricity generation for data centers to grow from 460 TWh in 2024 to over 1,000 TWh by 2030 (IEA, 2025a).

Renewables now attract finance at scale, though patterns differ across technologies. Solar PV was the main driver in 2024, increasing by 24% year-on-year to reach USD 567 billion. Its scale reflects cost competitiveness, modular deployment, and wide use across utility-scale, commercial, and household systems. IRENA reported that utility-scale solar PV was 41% cheaper than the lowest-cost fossil fuel alternative in 2024 (IRENA, 2025). China, Europe, and the US are dominant markets for solar PV. Nevertheless, EMDEs, including Brazil, Pakistan, South Africa, and Lebanon, have seen significant growth. Household investment in decentralized systems has been supported by feed-in tariffs or net-metering policies, alongside low-cost solar imports from China (CPI and IRENA, 2025).

FINANCING PATTERNS DIFFER ACROSS TECHNOLOGIES

Solar PV is primarily financed by private actors, including commercial FIs, corporations, and households, with a range of financing sources across other technologies.

Table 3.1: Private and public finance trends in top four renewable energy technologies

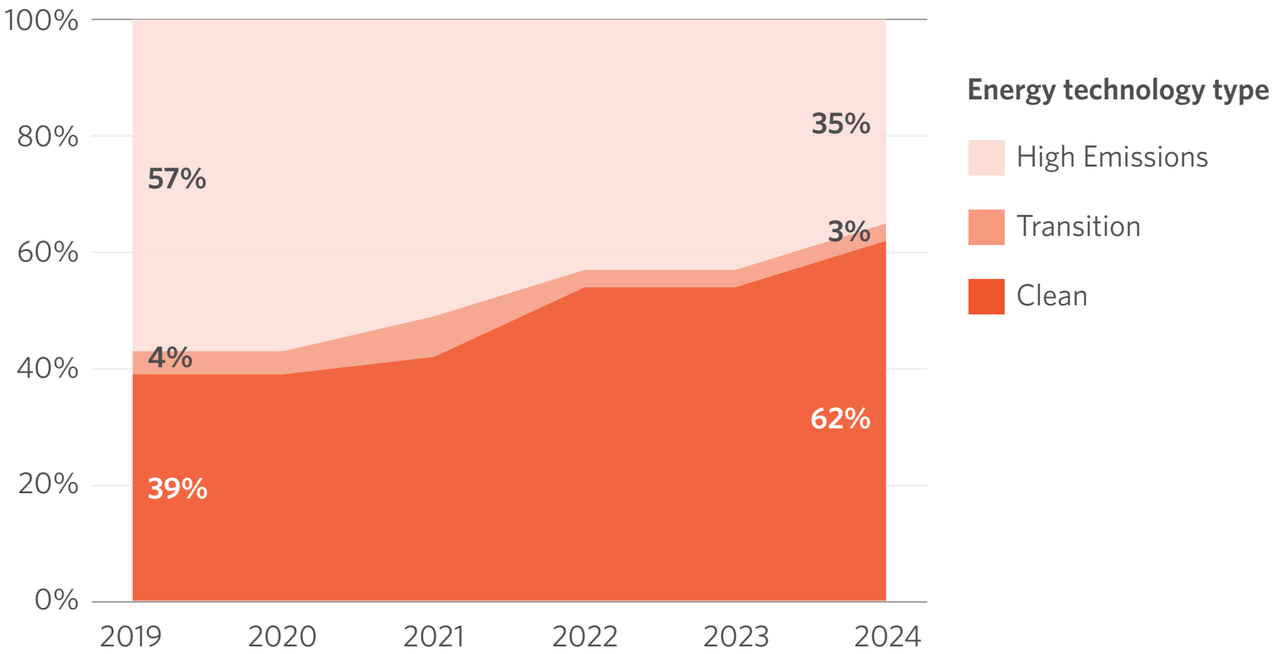
Technology	2024 financing trend	Reasons
Solar PV	77% from private actors Commercial FIs, corporations, and households are the main actors.	Mature, modular, and cost-competitive; suited to bank lending, corporate PPAs and household deployment.
Wind onshore	64% from public actors SOFIs and SOEs are key, mainly through balance-sheet debt and equity.	State-linked actors remain important due to permitting, land, grid, and auction risks.
Wind offshore	Split between private (52%) and public actors (48%). Mix of project-level and balance-sheet financing.	Larger capex, construction risk and cost inflation require broader risk-sharing.
Energy storage	87% from private actors Commercial FIs dominate, mostly via project-level commercial debt and equity.	Flexibility and co-location revenues support project-level financing.

Public finance should shift focus to addressing barriers to private investment, particularly in grid infrastructure, project preparation, and energy access.[12] However, around 80% of public finance for energy mitigation in 2024 went to wind and solar PV, which are commercially viable technologies. Flows were dominated by advanced economies and China. The Mission 300 initiative, led by the World Bank Group and the African Development Bank, shows how public finance can support grid and off-grid solutions, power-system upgrades, and reforms that mobilize private investment.

12 We are expanding our coverage of transmission and distribution finance (see Annex II – p. 75).

Clean investment from private FIs signals a shift in global energy systems

Figure 3.5: Share of project finance from private FIs by energy technology type



The largest global private FIs directed 62% of their energy project finance to clean energy in 2024, overtaking fossil fuels.

Data from CPI's Net Zero Finance Tracker (NZFT) shows that large private FIs are increasingly directing project finance toward clean energy. However, persistent fossil exposure means capital allocation still risks locking in high-emission assets.

An analysis of the world's 1,500 largest FIs shows that their investment in clean energy projects more than doubled between 2019 and 2024. Direct clean energy financing grew at a 20% CAGR over the period, primarily for solar PV and wind. Banks accounted for 93% of total direct clean energy financing.

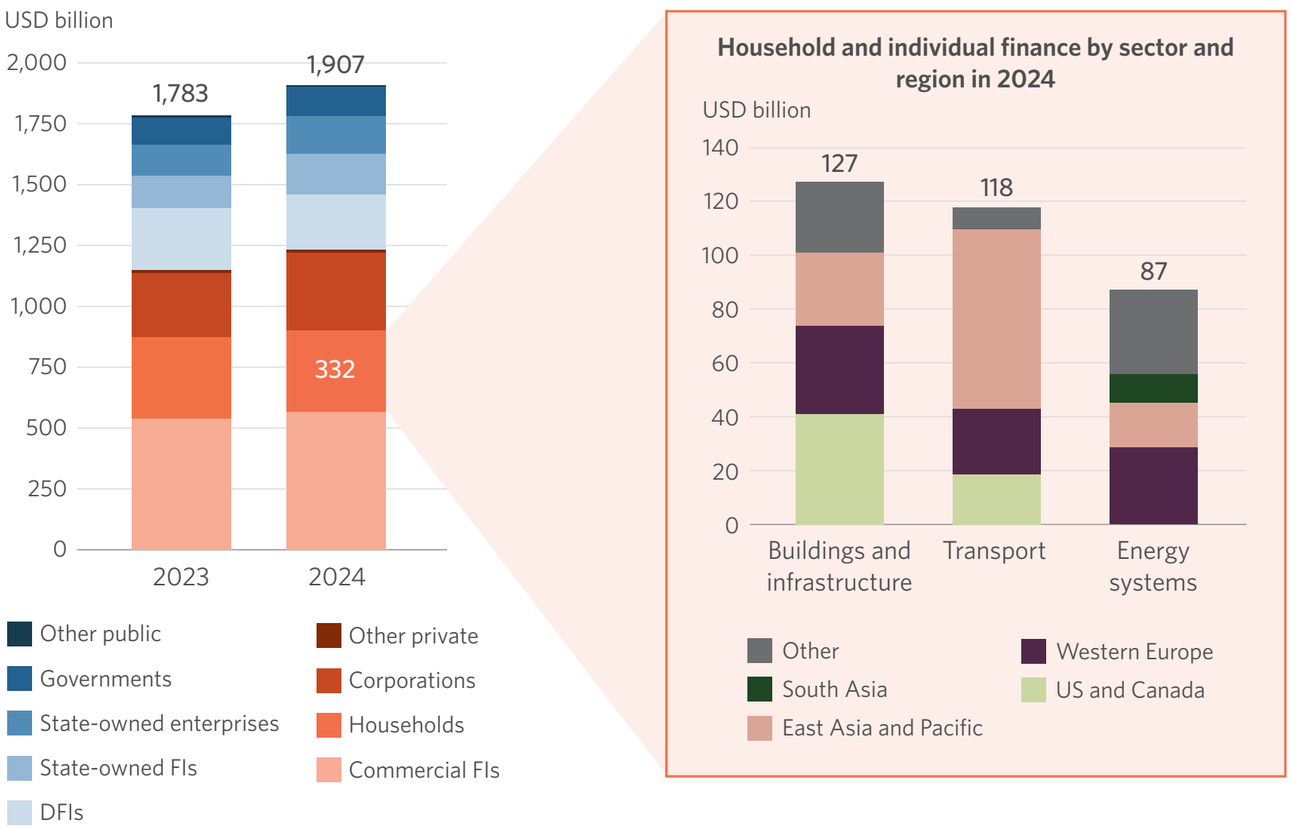
Private FIs' transition plans are important tools for driving sustainable investment. Entities with such plans had a higher share of clean energy project finance (64%) than those without (56%). Important transition plan actions include robust fossil fuel phase-out goals, climate investment goals, and streamlined climate risk management practices (CPI, 2025h).

Despite the growth in new clean energy investment, FIs' portfolio exposure to fossil fuels remains high. NZFT data shows that fossil fuels still account for 74% of tracked financial institutions' energy holdings. In addition, 93% of these investments are in companies that are expanding their fossil fuel production, rather than phasing it out. This locks in new fossil fuel capacity into energy grids, with close to 40% of energy finance still developing new fossil fuel plants (CPI, 2025h). There is broad consensus that continued investment in new fossil fuel infrastructure is incompatible with a net zero pathway, meaning that if this trend persists, achieving net zero will move out of reach.

CPI's **Net Zero Finance Tracker** interactive data tool shows progress across 1,500 of the world's largest banks, asset managers, and insurers—representing around USD 286 trillion in assets, or 60% of the global financial system.

Households are funding the transition from the bottom up

Figure 3.6: Public and private mitigation finance by actor, with households finance by sector and region



This major channel of private mitigation finance provided USD 332 billion in 2024.

Private mitigation finance grew by 7% year-on-year in 2024, reaching USD 1.23 trillion, accounting for 65% of total mitigation finance. Within this, households and individuals provided USD 332 billion, a 1% decline since 2023, but still the second-largest private actor group after commercial FIs.

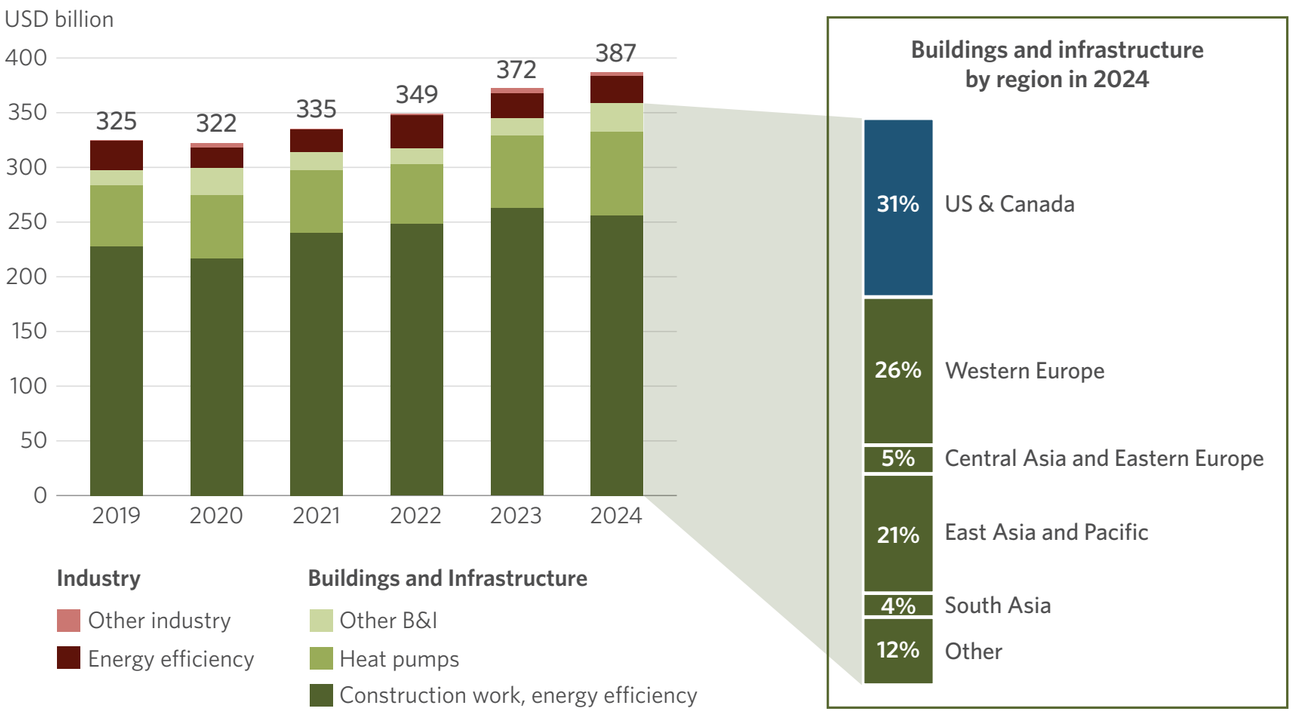
Table 3.2: Household investment regional concentration and reasons

Sector and technology	Regional concentration	Reasons
Buildings & infrastructure (new energy efficiency investments, heat pumps, retrofits)	US & Canada, Western Europe, East Asia & Pacific	Policy incentives, building standards, and energy security concerns supported household spending on lower-energy homes. For example, in the US, households can claim energy efficiency tax credits (30%), including up to USD 2,000 per year for qualified heat pumps (IRS, 2026).
Transport (EV purchases)	East Asia and the Pacific, Western Europe, US & Canada	Concentration is linked to China's BEV scale, lower-cost manufacturing and continued policy support (IEA, 2025c).
Energy systems (rooftop small-scale solar)	Western Europe, East Asia & Pacific, South Asia	Supported by high retail power prices, self-generation incentives, and rooftop solar subsidies. For example, India's Surya Ghar scheme provides subsidies and low-interest loans (PM India, 2024).

Households' mitigation finance is significant, but growth depends on consumer-facing markets shaped by affordability, incentives, and access to finance. For instance, in the transport sector, Emerging Markets can leapfrog to BEVs when policy, affordability, and charging infrastructure align. Ethiopia provides a notable example: in 2024, it moved to halt imports of internal combustion engine cars and to promote BEV uptake, motivated by its high fuel import bill and strong domestic renewable power generation. While infrastructure, affordability, and financing constraints remain, Ethiopia shows how policy can create an early BEV market and support an early transition to a low-carbon transport pathway (CPI, 2026b).

Energy efficiency saves costs and emissions, but finance lags

Figure 3.7: Buildings and industry mitigation finance by solution, with regional and actor split for construction-related energy efficiency



Energy-efficiency finance in buildings and industry grew, but flows remain concentrated in advanced economies.

Mitigation finance to buildings and infrastructure and industry has increased, but growth remains moderate. Buildings and infrastructure finance rose by 21% from 2019 to 2024, mainly for construction-related energy efficiency measures and heat pumps. While smaller and more variable, industry finance increased by 31% from 2021 to 2024.

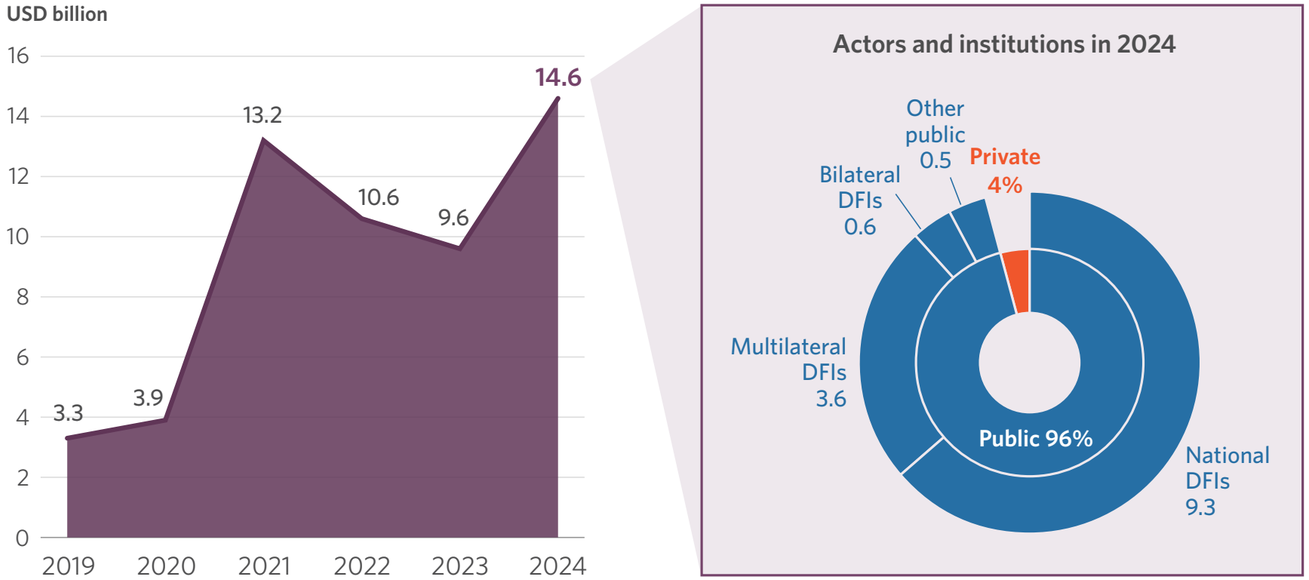
Energy efficiency remains the dominant theme across both sectors, but industry also requires demand-side policies. Green public procurement, low-carbon material standards, and support for green steel and cement can help create markets for cleaner production. The European Commission's Clean Industrial Deal includes plans for low-carbon product labels for steel and cement, while the proposed Industrial Accelerator Act includes low-carbon requirements for publicly supported steel procurement (European Commission, 2025).

Flows were concentrated in advanced economies, as in previous years. This reflects stronger policy enforcement, building codes, and retrofit incentives in these markets. Western Europe's post-2022 energy security response via the REPowerEU initiative has helped to sustain building-related mitigation investment and reduce gas demand (IEA, 2025b).

Emerging economies must avoid locking in inefficient buildings and industrial systems when constructing new assets. However, rapid expansion of building stock is often paired with uneven energy performance requirements in EMDEs. In industry, the long lifespan of infrastructure poses significant risks for high-emission lock-in. Assets such as fossil fuel-powered steel plants will need 'sunset' or phase-down policies to support just transitions, and a systemwide approach is necessary.

Water and wastewater finance rose due to a few large projects

Figure 3.8: Water and wastewater mitigation finance, with 2024 actor and instrument split



Mitigation flows to the sector grew sharply in 2024 from a low base.

Water and wastewater mitigation finance rose by 52% in 2024. However, this increase appears to be driven by a small number of large projects, including national DFI-backed activity in China and major wastewater and sanitation investments in India and Latin America.

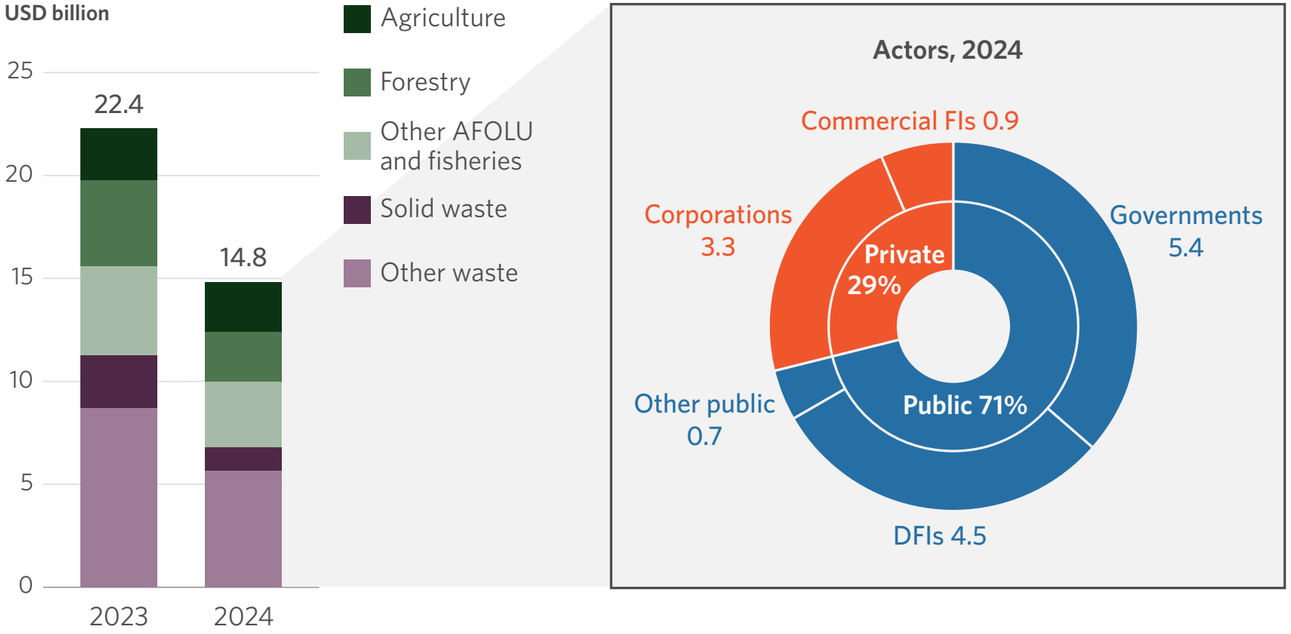
In China, a policy-backed push for water efficiency has led to large-scale infrastructure projects. Green finance tools, loans, and financial institution participation are driving funding for its water-saving industry (CWR, 2025; CPI, 2026a).

India and Latin America also saw public finance for major projects in 2024. In India, multilateral DFIs continue to invest in urban wastewater networks and treatment, where weak utility revenues deter private actors (World Bank, 2026). In Latin America, flows reached USD 1.2 billion in 2024. Notable investments included a USD 154 million loan and USD 7.7 million grant from the Inter-American Development Bank for Paraguay's Lake Ypacarai watershed sanitation program (IDB, 2024), alongside other projects across the region.

In 2024, public actors provided around 95% of water and wastewater mitigation finance, led by national and multilateral DFIs, mostly through project-level debt. While actor mixes may vary by project, scaling private finance will require clearer revenue models, stronger utilities, risk-sharing instruments and policy support to turn public infrastructure spending into bankable investment pipelines. Tracking private climate investment in water and wastewater is complex, as incremental investment through energy efficiency improvements and small-scale wastewater projects is difficult to capture.

Methane abatement offers investment opportunities in overlooked sectors

Figure 3.9: Total mitigation finance to AFOLU and waste by solution, with actor split across both sectors



Note: Figures show total mitigation finance to these sectors, not the methane-specific share.

AFOLU and waste offer untapped abatement potential and broad development benefits.

Agriculture, forestry, other land use, and fisheries (AFOLU), and waste have high methane mitigation potential, with 60% of human-caused methane emissions generated from enteric fermentation, livestock manure, rice cultivation, and landfill gas. Methane has around 80 times the warming effect of CO2 over 20 years—reduction can deliver faster near-term climate gains than many CO2-focused measures. Mitigation in these sectors also delivers benefits for sanitation, air quality, food systems, and rural livelihoods (UNEP and CCAC, 2021, 2022; UNEP, 2025).

Mitigation financing for AFOLU and fisheries and waste has been minimal and variable, though cost savings from action on waste point to private investment potential. Flows to AFOLU and fisheries rose to nearly USD 13 billion in 2021, then dropped to USD 11 billion in 2023 and USD 8 billion in 2024. Within AFOLU, climate finance for agriculture increased from USD 1.1 billion in 2019 to USD 2.4 billion in 2024, while forestry flows decreased from USD 4.5 billion to USD 2.4 billion. Many AFOLU interventions have public-good characteristics that constrain private investment, including dispersed beneficiaries and uncertain revenue models. Waste mitigation finance grew from 2019-23, before falling to nearly USD 7 billion in 2024. Waste projects can generate revenue through landfill gas capture, anaerobic digestion, and composting, or savings through avoided disposal costs, improving projects' financial profiles. Landfill gas capture is one of the key routes to reducing methane from waste-related livelihoods (UNEP, 2025).

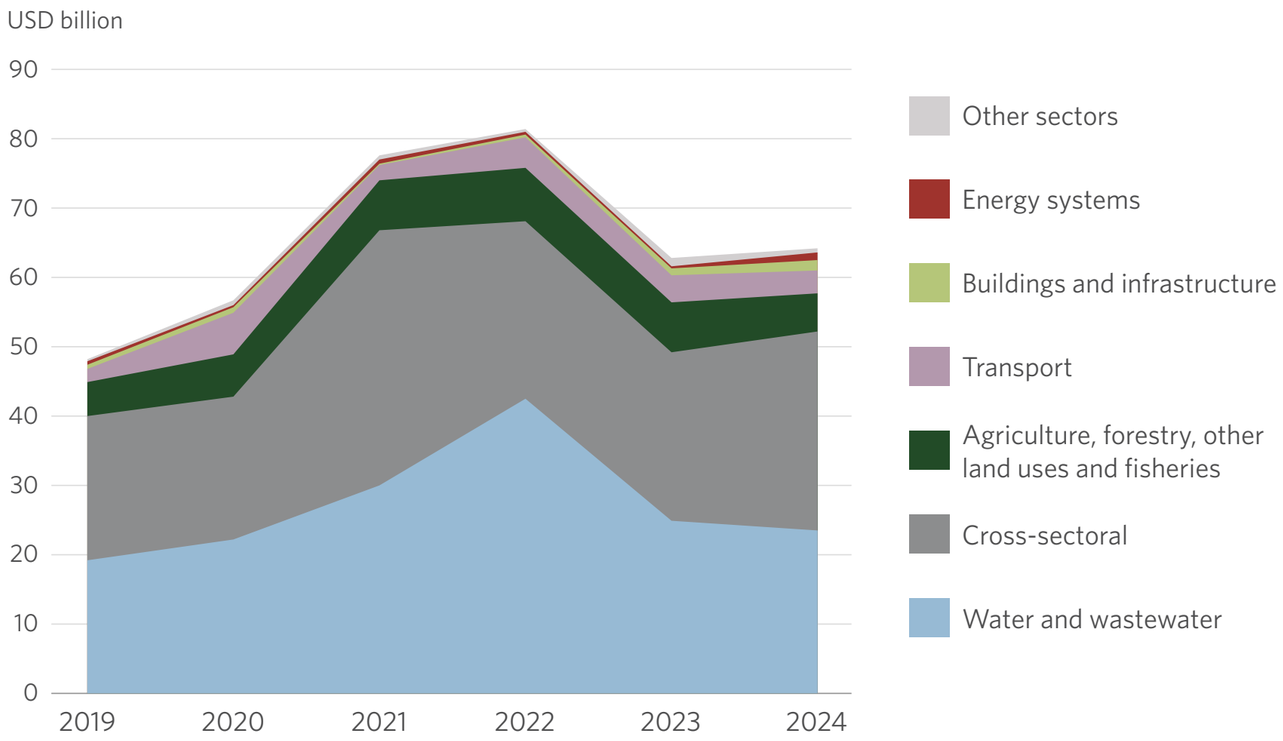
Financing AFOLU and fisheries mitigation requires solution-specific models. For example, livestock biogas and manure management are more bankable at a scale where feedstock is concentrated, and energy offtake is clear. By contrast, dispersed smallholder rice and livestock systems typically need concessional finance to implement methane abatement solutions.

Public climate capital for AFOLU and waste needs to mobilize private finance at scale. In 2024, public actors provided around 71% of mitigation finance to both sectors. Project-level debt (private commercial and public non-concessional) made up 89% of total flows. Looking ahead, methane abatement co-benefits should be used as a lever to expand broader climate finance in these sectors: blended finance can support more bankable waste and large-scale biogas projects, while concessional and results-based finance will remain essential for dispersed AFOLU systems.

Adaptation Finance

Much-needed resilience gains from adaptation remain under-pursued

Figure 4.1: Adaptation finance by sector



Investing in adaptation can ensure sustained gains from precious development dollars.

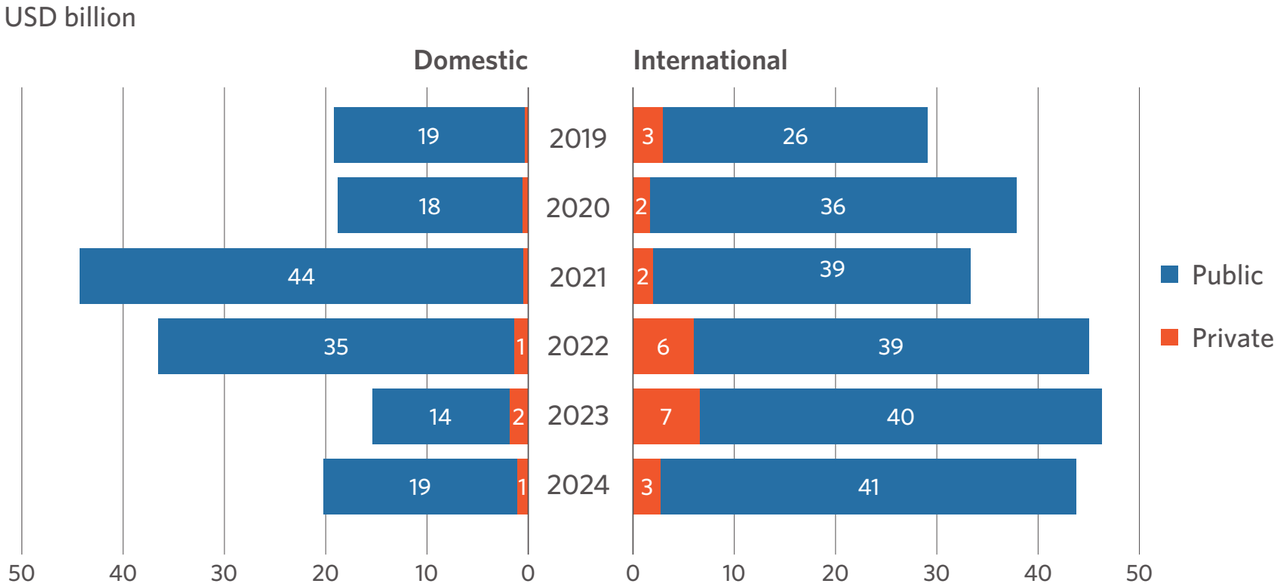
An inflection point in adaptation finance could move investment from stagnation to scale. After initial measured but steady growth at the start of the decade, tracked adaptation flows dropped in 2023 and plateaued in 2024. With a CAGR of 6% since 2019, the medium-term adaptation finance story is one of uneven and weak growth. Progress could become steady and strong by leveraging successful models and lessons learned over the last decade. Existing untracked flows could also be captured through improvements in data and reporting (see p. 43).

Adaptation investment is critical for protecting people and the economies they depend on. The past eleven years, from 2015 to 2025, were the warmest on record (WMO, 2025). Alongside an increasing global mean temperature, countries experienced devastating impacts from severe heat, cold, rainfall, drought, cyclones, and hurricanes. The human, economic, and environmental impacts of these climate-related patterns can erase hard-won social and economic gains funded by a finite pot of public capital. Climate impacts have already made people in low and lower-middle-income countries 4–12% poorer in terms of GDP per capita. Adaptation action is needed to prevent negative outcomes for global productivity, inflation, unemployment, and inequality (Rising *et al.*, 2026). Climate change also threatens to trigger more localized conflicts, including through water scarcity and reduced land productivity (Yu *et al.*, 2026).

Adaptation investment remains vital yet insufficient across all sectors. The limited tracked flows between 2019 and 2024 are also unevenly distributed. Some 82% sit in the water and wastewater sector and cross-sectoral investments, including policy support for adaptation and disaster risk reduction (see p. 42). Even in these sectors, transformative scaling of investment is needed to prevent the worst losses and realize the economic benefits of adaptation.

Public international adaptation finance provides a low but stable base

Figure 4.2: Adaptation finance by source



Note: Adaptation finance that does not have a specified source (i.e. is not designated as either public or private) is excluded from this chart.

Critical concessional flows must catalyze other sources of investment.

International public finance plays a foundational role in adaptation, but achieving resilience at scale will also require stronger domestic and private flows. Representing over 60% of tracked adaptation investment in 2024, public international sources have provided a low but steady base. Commitments made at COP30 to triple adaptation finance by 2035 (COP30, 2025), though lacking detail on baseline years and sources, could signal growth in this important source of adaptation support and will require significant effort from public finance providers at a time of funding uncertainty. However, scaling finance to approach a well-adapted world will take significant growth in domestic and private finance as well, eventually surpassing public international providers.

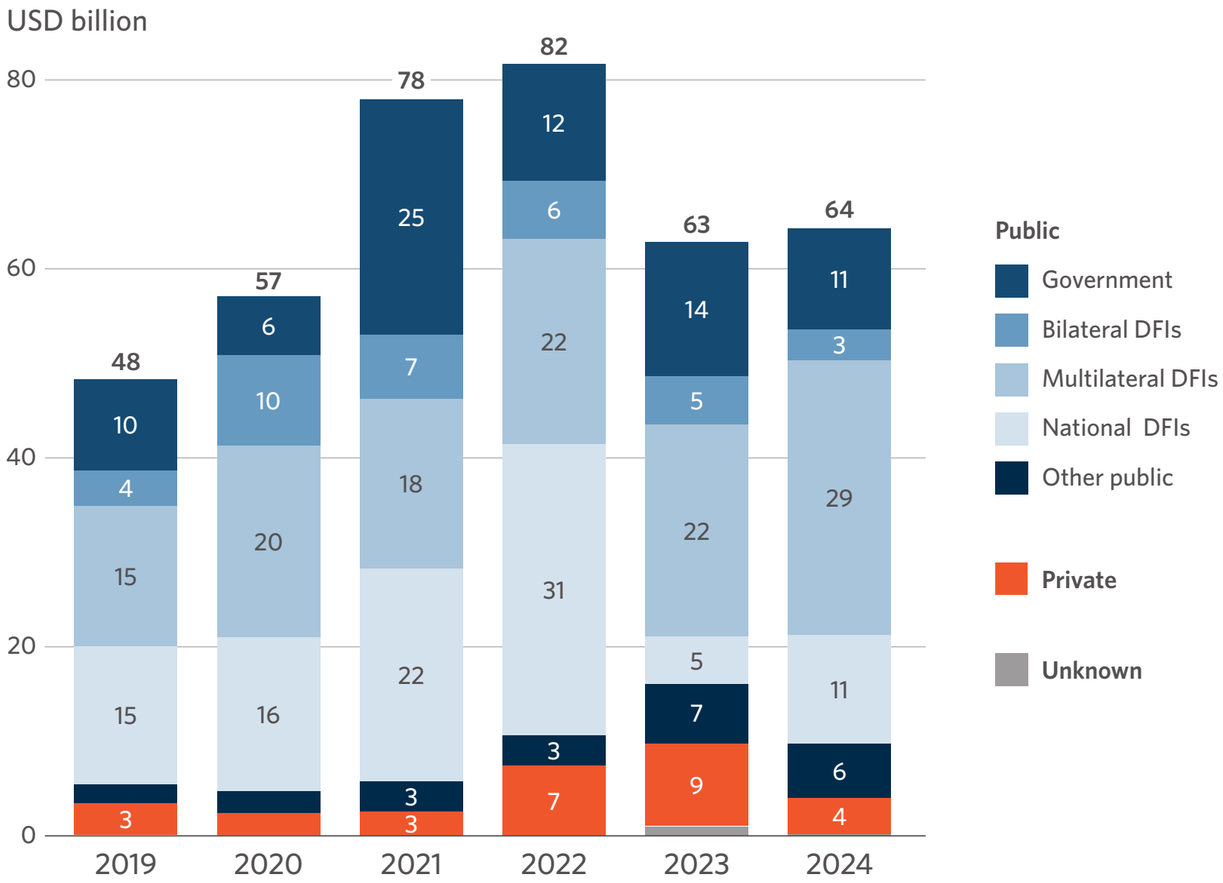
Domestic public investment is already a key source, accounting for USD 19 billion or 30% of total adaptation flows in 2024. National DFIs contributed USD 11.4 billion of this volume, with 87% of these flows coming from a single entity (China Development Bank). As a result, domestic public adaptation investment depends heavily on the annual investments of a single institution, contributing to the annual fluctuations shown in Figure 4.2.

Green bonds accounted for most of the remaining domestic public adaptation flows, totaling USD 6.6 billion in 2024. They saw a 16% CAGR across 2019-24, though with high year-on-year fluctuations. While these bonds were largely concentrated in advanced economies, there are early signs of bond financing for domestic adaptation in EMDEs, accounting for USD 2 billion in 2023 and USD 1.6 billion in 2024.

Private adaptation finance remains the missing piece. While public flows must continue to scale in line with UNFCCC commitments and domestic financing needs, much of the growth in adaptation finance over the coming decade will need to come from private sources. While some essential adaptation investments are unlikely to attract commercial finance, this should not preclude efforts to mobilize private capital where viable. Rather, targeted financial instruments and policy and regulatory approaches can help bridge the gap for adaptation investments that are close to commercial viability, enabling a broader range of projects to attract private capital.

Public development banks strengthen their roles as key players as direct government support wanes

Figure 4.3: Adaptation finance by provider



Multilateral and national DFIs are bucking the wider trend of stagnation or shrinking of flows seen from other public and private actors.[13] While national DFI financing for adaptation fluctuates significantly year-on-year due to the dominance of a small number of large institutions with variable annual volumes, growth in adaptation investment from multilateral DFIs has been steadier, with a CAGR of 14% from 2019 to 2024 and three consecutive years of growth.

Government support for adaptation, on the other hand, reached its lowest level (in nominal terms) since 2020, marking a significant decline in real terms. Reductions from 2023 to 2024 came entirely from international governments. Concerningly, these reductions from governments have been accompanied by a drop in the share going to LDCs for two years in a row, pointing to a shrinking share of a shrinking pot for the world's most vulnerable countries. Bilateral DFI support for adaptation, which represents a relatively small volume, has declined modestly each year since 2020.

13 Trends may differ from those reported in other analyses, including the OECD report on Climate Finance Provided and Mobilised by Developed Countries in 2013 – 2024, due to differences in methodologies and categorization of institutions.

Private adaptation finance is only partly tracked and slow to scale

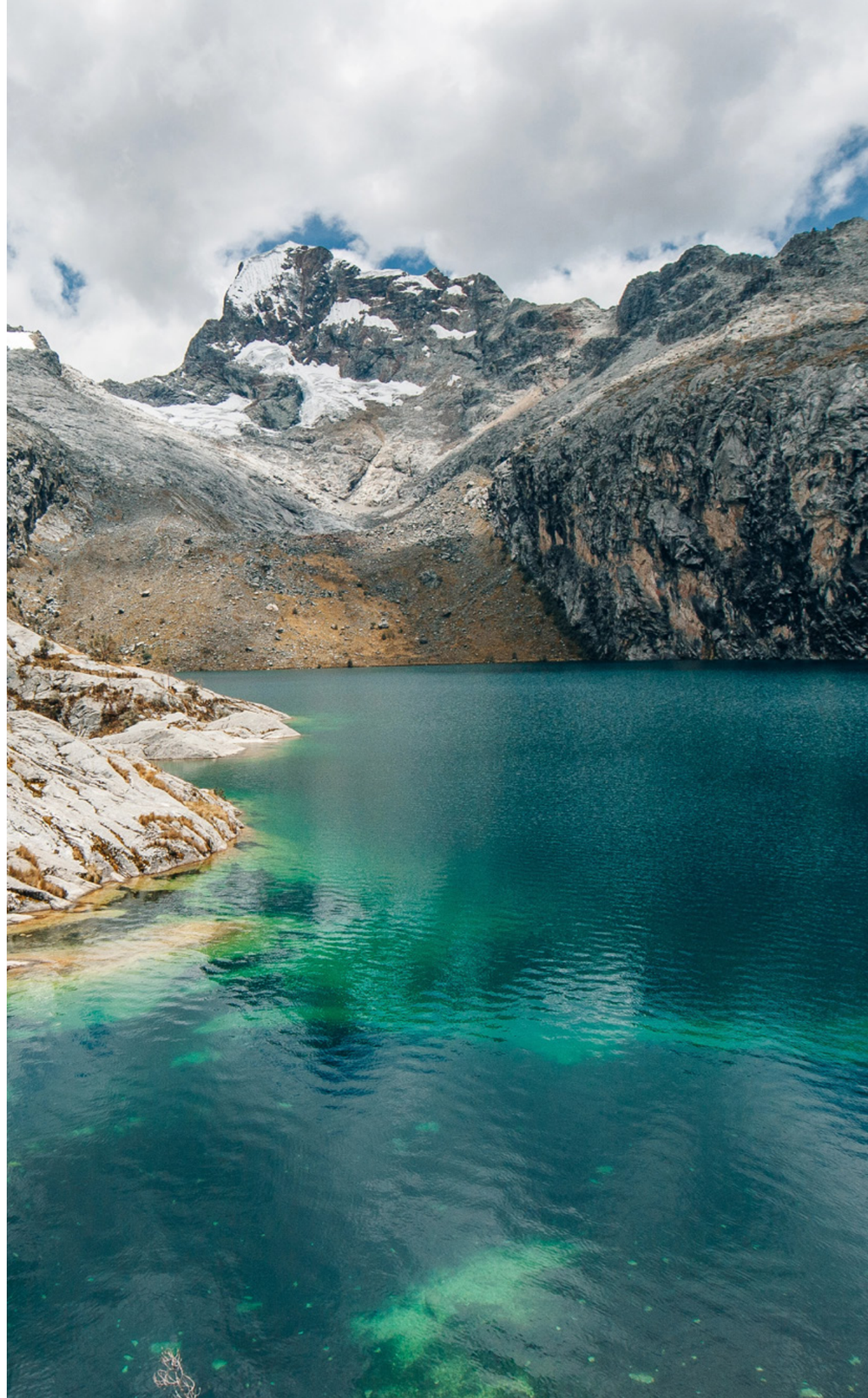
Tracked private adaptation finance has shown little lasting growth. Investment was tracked at USD 3.8 billion in 2024, with a slow CAGR of 3% since 2019, highlighting great room for growth if barriers to mobilizing private capital can be tackled. However, it must be noted that these tracked private adaptation figures struggle to capture the full scale of relevant financing. Long-standing issues with the identification and classification of adaptation finance (see p. 43), along with limited disclosure incentives and requirements, limit the pool of accessible investment data and place downward pressure on trackable investment.

Improved tracking of private adaptation finance is critical for accurate reflections of progress and, importantly, challenges the widespread but inaccurate perception that adaptation action is not commercially viable.[14] While some activities will inevitably fall outside the commercial sphere, the range of adaptation finance vehicles supported by CPI's Lab and CC Facility demonstrates that viable business models exist and can be scaled. The Lab alone has supported around 20 adaptation-focused financial instruments over the last decade, which have since collectively secured more than USD 650 million in private investment.

14 We are expanding our coverage of household-level adaptation finance (see Annex II – p. 77).

Box 3: Reasons for fluctuating private adaptation finance

Recent drops in private adaptation finance may represent year-on-year fluctuations rather than a meaningful downward shift. While volumes fell from USD 8.6 billion in 2023 to USD 3.8 billion in 2024, trackable flows are concentrated in a small number of large investments, making annual flows highly sensitive to the timing of individual project approvals. This is highlighted by the main driver of the decrease: a fall of over 60% in private adaptation investment in **water and wastewater** to USD 2.9 billion. Private adaptation flows in this sector mostly represent investment in desalination, a market experiencing its fastest growth in history, with installed capacity surging since 2020 (GWI, 2025). A drop in flows in an expanding market can be explained by the same dominance of large projects; with individual projects sometimes reaching up to USD 0.5–1 billion, the timing of approvals can have an outsized impact on the relatively limited tracked annual totals.



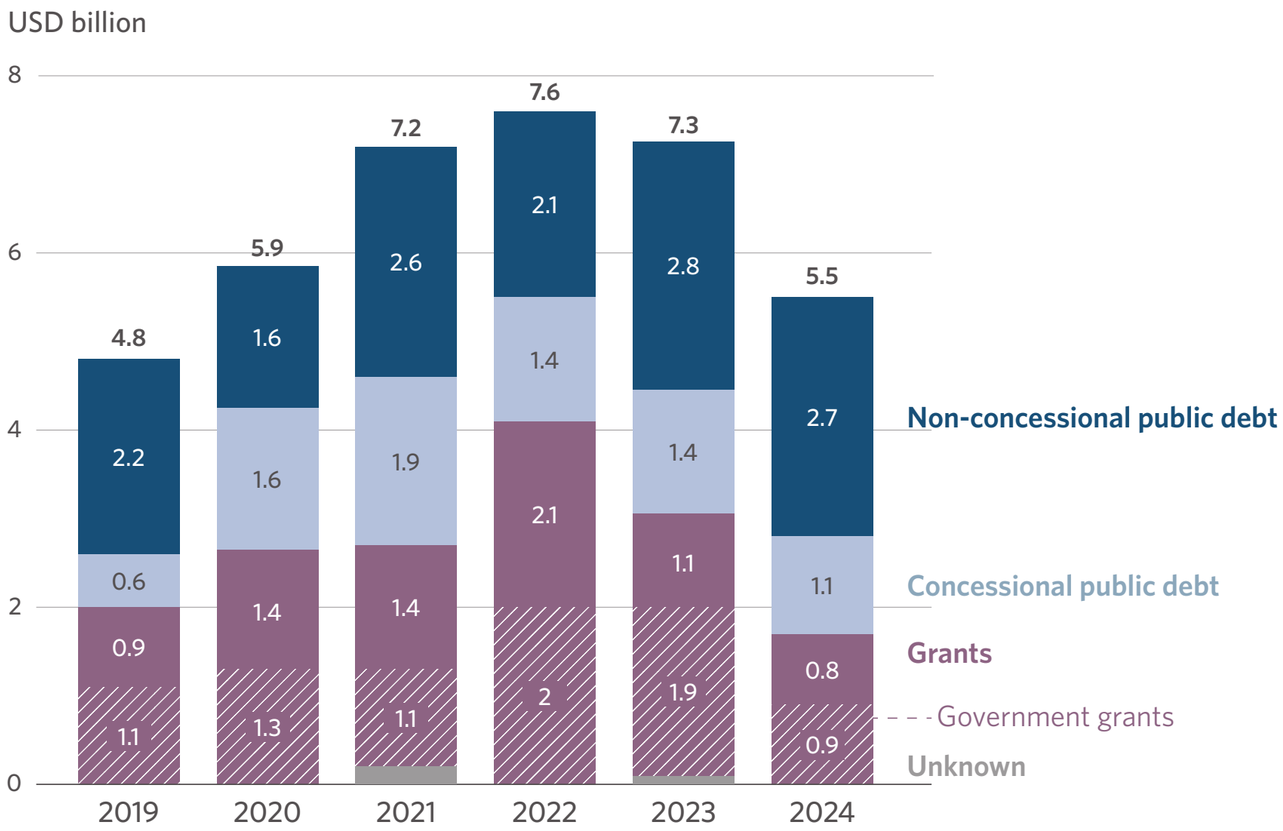
UNLOCKING HIGHER PRIVATE FLOWS REQUIRES TARGETED PUBLIC FINANCE

The well-documented barriers to private mobilization include poorly-defined revenue streams and markets, diffuse returns, high perceived risk, and low-ticket size. Potential routes to expanding flows include:

- **Bringing down the cost of capital, a critical barrier to successful adaptation investment outcomes in EMDEs.** I4CE analysis suggests that high debt and equity costs can more than double overall project costs and swing the balance for potential investors. These high costs link to wider barriers for private investors, with uncertainty over bankability stoking risk perceptions. Addressing costs of capital for adaptation can include mitigating investment risks through guarantees and insurance and addressing challenges around revenue streams and predictable cash flows.
- **Strategic leverage of public finance will be essential to make the best use of scarce funds.** Adopting a quality lens, looking to finance projects and programs that: i) achieve commercial viability and create incentives for other sources of finance, or, ii) where markets fall short, sustain socially necessary adaptation activities that would not otherwise be funded. International public adaptation funders can increase their leverage by supporting business models with a credible pathway to financial sustainability; accelerating the transfer of well-understood adaptation solutions into new markets and geographies; and generating accessible evidence on the risk-adjusted returns for specific sectors and solutions (CPI, 2026).

AFOLU adaptation finance falls, and shifts from grants to loans

Figure 4.4: Adaptation finance to AFOLU by instruments, with government grant provision



Adaptation finance for AFOLU has declined after a plateau between 2021 and 2023. These flows decreased by USD 1.7 billion between 2023 and 2024, reaching approximately USD 5.5 billion. This drop highlights reduced financial support for a sector highly exposed to climate risks and structurally underfunded. AFOLU systems underpin roughly one-third of global GHG emissions and support the livelihoods of around 3.8 billion people (FAO, 2023).

AFOLU adaptation finance has shifted from grants to debt. Grant finance has markedly declined from USD 4.1 billion in 2022 to USD 1.7 billion in 2024. Over the same period, debt-based instruments—primarily non-concessional loans and bonds—have trended upward. This shift is particularly notable for sustainable production practices,[15] where climate-related grant financing fell from 72% of flows in 2022 to 30% in 2024, and was accompanied by an increase in the share of non-concessional loans from 14% to 50%. This change may partly reflect the increasing commercial viability of some agrifood segments, with well-performing agricultural SMEs becoming more attractive to investors and better able to absorb and deploy repayable capital.

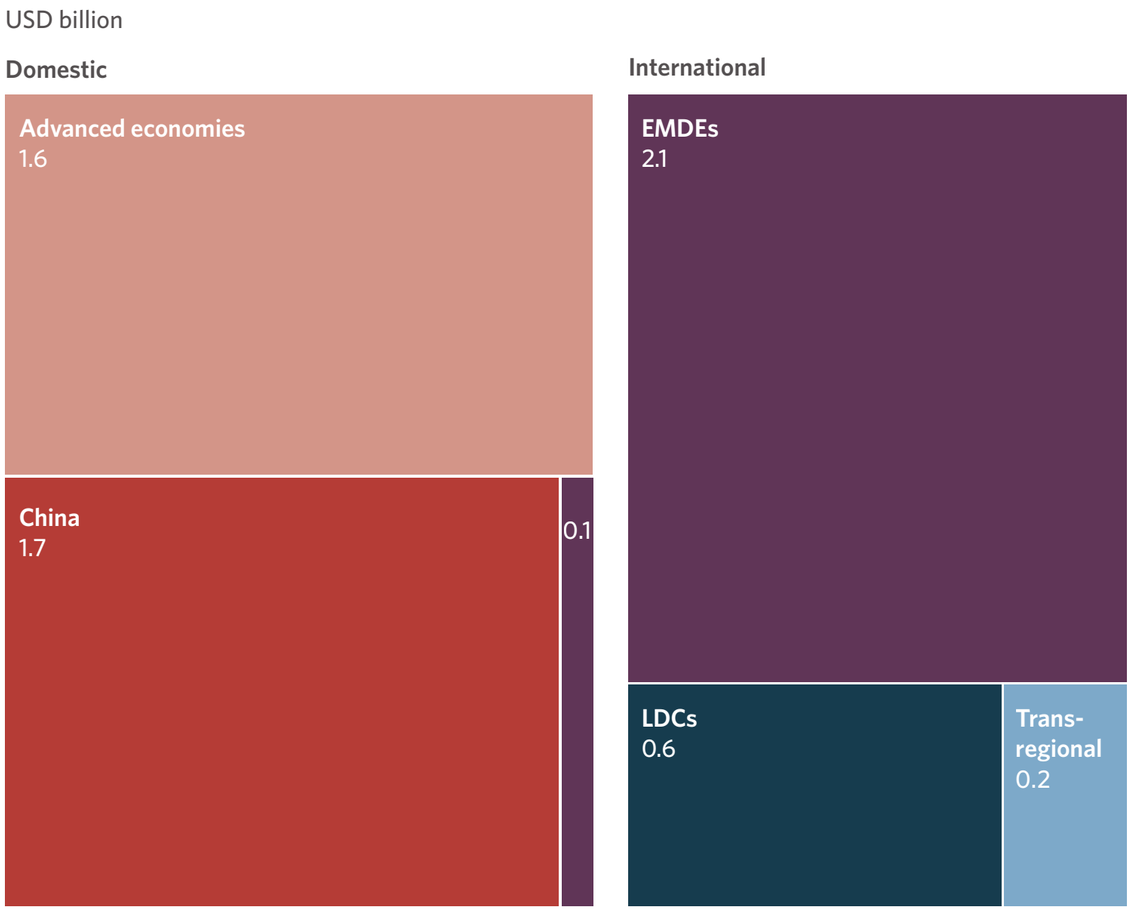
However, some subsectors remain dependent on grants, with underfunding likely to slow resilience-building and raise future adaptation costs. This is particularly true for vulnerable smallholder farmers, as well as land restoration and land-use change activities that deliver substantial co-benefits for climate resilience, public health, and disaster risk management but have few current commercially viable business models. Governments provided more than half of the grant financing for AFOLU from 2019 to 2024, but this support fell by approximately USD 1 billion between 2023 and 2024.

These dynamics are more pronounced in regions with the highest exposure and lowest fiscal capacity. Sub-Saharan Africa, which receives more grants for AFOLU than any other region, with USD 9.5 billion from 2019 to 2024, or around 60% of the global total, also experienced one of the sharpest declines between 2022 and 2024. LDCs and other EMDEs have experienced notable contractions in grant financing, with each group seeing a drop of USD 1.3 billion between 2022 and 2024.

15 Sustainable production practices encompass sustainable crops, agroforestry, and livestock production, which represent nearly 60% of adaptation flows for AFOLU in 2024.

Domestic disaster risk management shows promise, but LDCs risk being overlooked

Figure 4.5: Adaptation finance for disaster risk management in 2024



Note: International adaptation DRM finance flows to China of below USD 100,000 are excluded from this chart.

Tracked adaptation finance for disaster risk management represents a small portion of total global climate finance. Annual flows have stayed around USD 6 billion to USD 9 billion, save for a peak of USD 18 billion in 2021, driven by UK Government Sovereign Green Bond financing. With USD 320 billion in disaster-related losses in 2024 (Munich Re, 2025), development finance decisions should price in the opportunities disaster risk management offers to limit the costly and cascading negative impacts of natural disasters on health, productivity, and natural and built environments.

Domestic finance is crucial. In 2024, domestic flows for disaster risk reduction outstripped international financing, largely concentrated in advanced economies and China. This was driven by green bonds in East Asia and Pacific as well as national DFIs in China and Western Europe. Data limitations obscure the full scale of EMDEs' domestic disaster risk management investments, though inadequate fiscal space and a focus on disaster response likely contribute to the low volumes of tracked finance.

The decrease in disaster risk management flows from USD 7.4 billion in 2023 to USD 6.4 billion in 2024 reflects opposing trends. While domestic finance in advanced economies and China rose by USD 1.5 billion, this was more than offset by a USD 2.6 billion drop in international flows. LDCs were hardest hit, with a 57% year-on-year decline in international disaster risk management funding, despite their high exposure to climate disasters. Though some climate-related disasters are unavoidable, solutions such as early-warning systems, climate-resilient infrastructure, and stronger social protection can help manage their impacts. Dealing with the scale of these events in LDCs will require much more than the USD 3 billion in international finance they received in 2024.

Data gaps likely mask some additional private sector disaster risk management finance. Tracking these flows is challenging, but there is healthy private activity, particularly for technologies such as those used for early-warning systems and post-disaster damage assessments. These can bring together satellite imagery, AI systems and geospatial imaging to provide-real-time updates for emergency evacuations and provide evidence to support timely insurance payouts (UNDRR, 2025b, 2025a). While private actors could provide increasingly efficient, well-targeted investment in disaster risk management, public-private coordination is crucial to address affordability, access, capacity, and the risk of maladaptation.

Persistent tracking gaps leave an incomplete picture of adaptation finance

Efforts are ongoing to improve reporting and data quality for adaptation finance.

Reflecting the full spectrum of adaptation investment is challenging for several reasons:

- **Conservative adaptation tracking methodologies:** Public providers typically quantify adaptation flows by isolating the adaptation-relevant (sub-)components of investments. By contrast, they usually track the entire project cost of mitigation-relevant investments in the financed solution. This results in a more conservative estimation of adaptation finance.
- **Data gaps.** There are areas where financing that supports adaptation is not tracked or reported. This may occur when providers view their finance not as adaptation-related, but rather as development finance, investment in risk management, general asset maintenance, product development, or weatherproofing. Some providers are aware of adaptation finance tracking methodologies, but face prohibitive costs or lack capacity to implement them.
- **Context dependency.** Unlike mitigation, where a given technology (e.g., a solar installation) reduces emissions regardless of where it is deployed, the adaptation-relevance of an investment depends on local climate risks. The same activity may deliver resilience benefits in one location but not another. For example, desalination is adaptation where it responds to climate-driven water scarcity, but not where it simply meets baseline increases in demand in a water-secure region. As a result, adaptation assessment for each line of financing requires location-specific information on the climate risk(s) addressed. This forces case-by-case judgment that is difficult to apply at scale.

Novel approaches could expand the tracking of adaptation finance, particularly from private sources. The most significant shift would be to move beyond isolating only the adaptation-relevant sub-components of investments and to capture a wider range of plausibly adaptation-relevant private finance. Resilience-related goods and services are growing in ways that current methodologies often do not register. For example, investment in cooling solutions, storm-proofing of property, climate-resilient construction, water-efficient technologies, and early-warning and risk-management products is rising as households, firms, and asset owners respond to intensifying climate risks. Little of this is currently labeled, reported, or tracked as adaptation finance. Advanced data-science techniques, applied to large, unlabeled financial and commercial datasets and combined with location-specific climate-risk information, could help to identify and estimate these flows at a scale that manual, project-by-project review cannot reach, addressing several of the tracking challenges set out above.

EMDE Spotlight

Addressing the climate crisis in EMDEs

While needs are large, EMDE climate finance provides unprecedented opportunities for investment and development.

Finance for emerging markets and developing economies (EMDEs) is key to combating the global climate crisis, accelerating economic transformation, and unlocking green growth. The 157 EMDE countries represent almost 90% of the world's population and 40% of the global economy.[16] Many are undergoing rapid urbanization, industrial growth, and rising energy needs, all whilst experiencing greater physical climate impacts. They are also increasingly stepping up their leadership in shaping the agenda for global climate action.

EMDEs require almost USD 4 trillion in annual climate finance from now until 2030 to meet climate goals (CPI, 2025d). Strong domestic planning and policies, alongside well-targeted international finance, enable EMDEs to leverage the low-carbon transition as an opportunity to stimulate durable economic development:

- **Mitigation:** EMDEs' transition will determine global emissions for decades to come. Activities also drive economic diversification, job creation, and better health outcomes. Recent conflicts and resulting supply chain disruptions have exposed the fragility of fossil fuel-reliant systems, with impacts most acute for EMDEs and LDCs (UN News, 2026). EMDEs also have the largest expected electricity demand growth (IEA, 2024a). Low-carbon technologies improve energy access, security, and independence, while building fiscal resilience.
- **Adaptation:** EMDEs are most vulnerable to the negative impacts of climate change (EIB, 2025). Adaptation is becoming integral to national development strategies, where successful policy and project design protects lives and livelihoods, safeguards economic growth and avoids loss and damage (CPI, 2023, 2026a).

16 These classifications in this section follows the method of Table A.1 of Global Landscape of Climate Finance 2025: EMDE Spotlight (CPI, 2025d). See the annex for an overview of GDP, population, and vulnerability statistics across EMDEs and subcategories.

Box 4: Country economic subgroupings in this section

This report follows closely the IMF *World Economic Outlook Groups* classification (IMF, 2025),[17] for the world's 157 Emerging Markets and developing economies (EMDEs). This grouping is referred to throughout this section as "All EMDEs." We also disaggregate the following subgroupings from All EMDEs to explore specific trends:

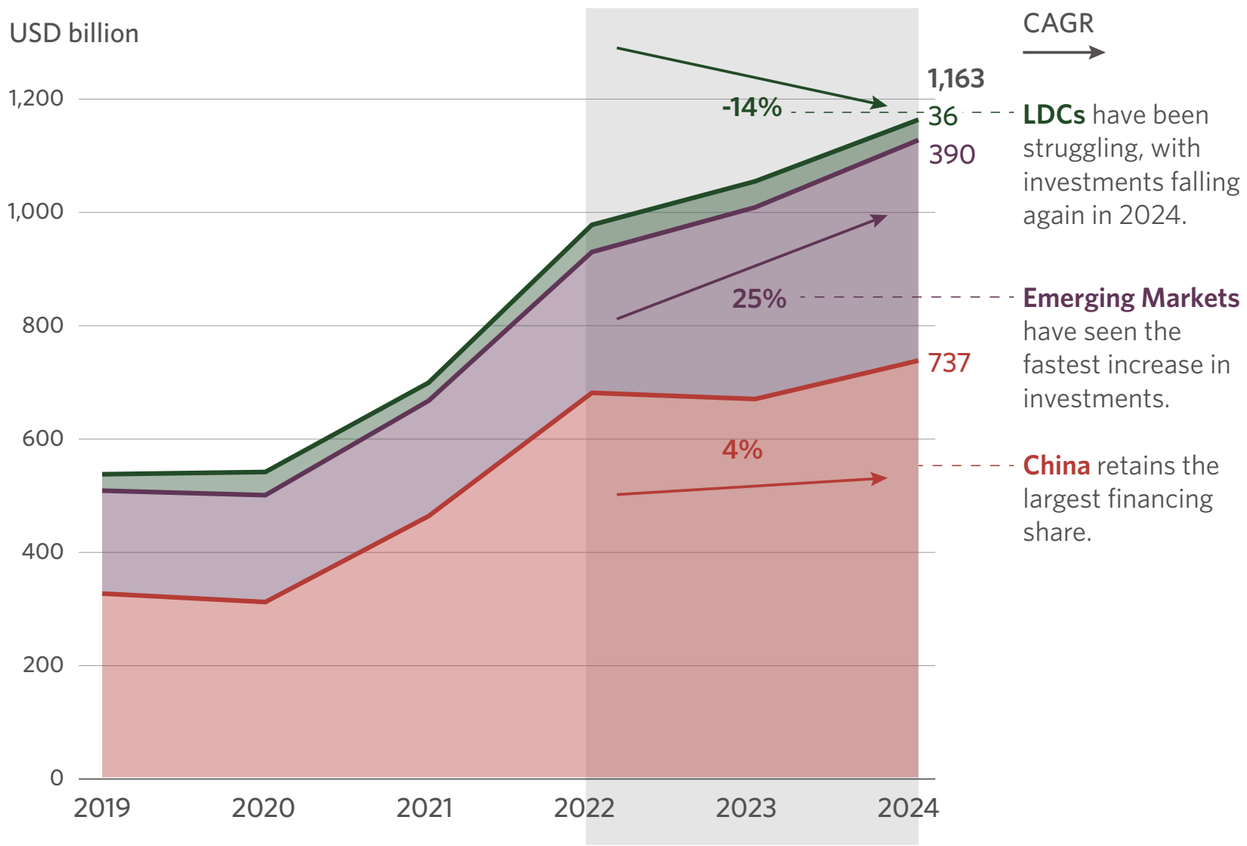
- **Emerging Markets.** We analyze the 111 EMDEs excluding China and excluding the 45 least developed countries (LDCs) as a separate subgroup, referred to throughout the report as "Emerging Markets." These countries represent over half of the global population and 23% of global GDP. They have high potential to scale climate finance.
- **China.** China is discussed separately due to the relative scale of the market compared to other EMDEs, and because the trends and size of its climate flows make it a frequent outlier within the EMDE grouping.
- **LDCs.** We break out the 45 LDCs, based on the UN list of least developed countries (UNCTAD, 2025; UN DESA, 2025; UNSD, 2025), as of the start of 2024.[18] While these countries represent 1.4% of the global economy, they include 20 of the world's 25 most climate-vulnerable countries (ND-GAIN, 2025). These countries' climate finance needs tend to be more acute due to their fiscal, economic, social, and climate risk challenges.
- **SIDS.** Using the UN classifications (UN OHRLLS, 2025), we highlight finance related to the 39 small island developing states (SIDS) and 18 associate overseas islands territories that cut across EMDEs and advanced economies. Addressing SIDS' flows is crucial, given their unique vulnerabilities to climate change.[19]

For each country classification, see *Annex - Table 3* in the GLCF Methodology 2025, with the 2026 methodology document to be released later this year.

17 For countries that were not IMF members in the relevant year and therefore lack a development status, we infer classification based on their income level from the World Bank (World Bank, 2025).
18 This does not account for Sao Tome and Principe's graduation in 2024.
19 SIDS are cross-cutting across EMDEs and Advanced Economies.

EMDEs were core drivers of climate finance growth in 2024

Figure 5.1: Climate finance to EMDEs by development status



Note: SIDS are cross-cutting across Emerging Markets, LDCs, and Advanced Countries. Climate finance to SIDS that are also EMDEs fell from USD 8.7 billion in 2023 to USD 7.8 billion in 2024. Advanced economy SIDS saw an increase from USD 529 million in 2023 to USD 1.3 billion in 2024.

Growth rates in Emerging Markets outstripped China, while their gap with LDCs widened.

Across All EMDEs, climate finance reached USD 1.2 trillion in 2024, driving global growth and outpacing year-on-year increases in advanced economies. Finance to All EMDEs grew by 10% in 2024 and by just 1% in advanced economies. Energy system investments were the main source, with commercial FIs and corporations providing the largest share. This represents a major shift, as the falling costs of key clean energy technologies offer EMDEs scalable routes to energy access and development (Ember, 2026), while reducing fossil fuel import dependence and exposure to price shocks (BNEF, 2026c). For the second consecutive year, private finance (51%) was on par with public flows (49%), marking a notable shift from 2019, when public finance dominated (64%).

While China still accounted for 63% of total EMDE investment in 2024, growth dynamics have shifted. Following rapid expansion from 2020 to 2022, with a CAGR of 48%, China's growth rate has slowed as its financing volumes now build from a higher base. Emerging Markets have been the fastest-growing segment since 2022, with a CAGR of 25% compared to just 4% for China. As Emerging Markets still account for a smaller share of total climate flows, this shift has translated into more modest growth for All EMDEs as a category.

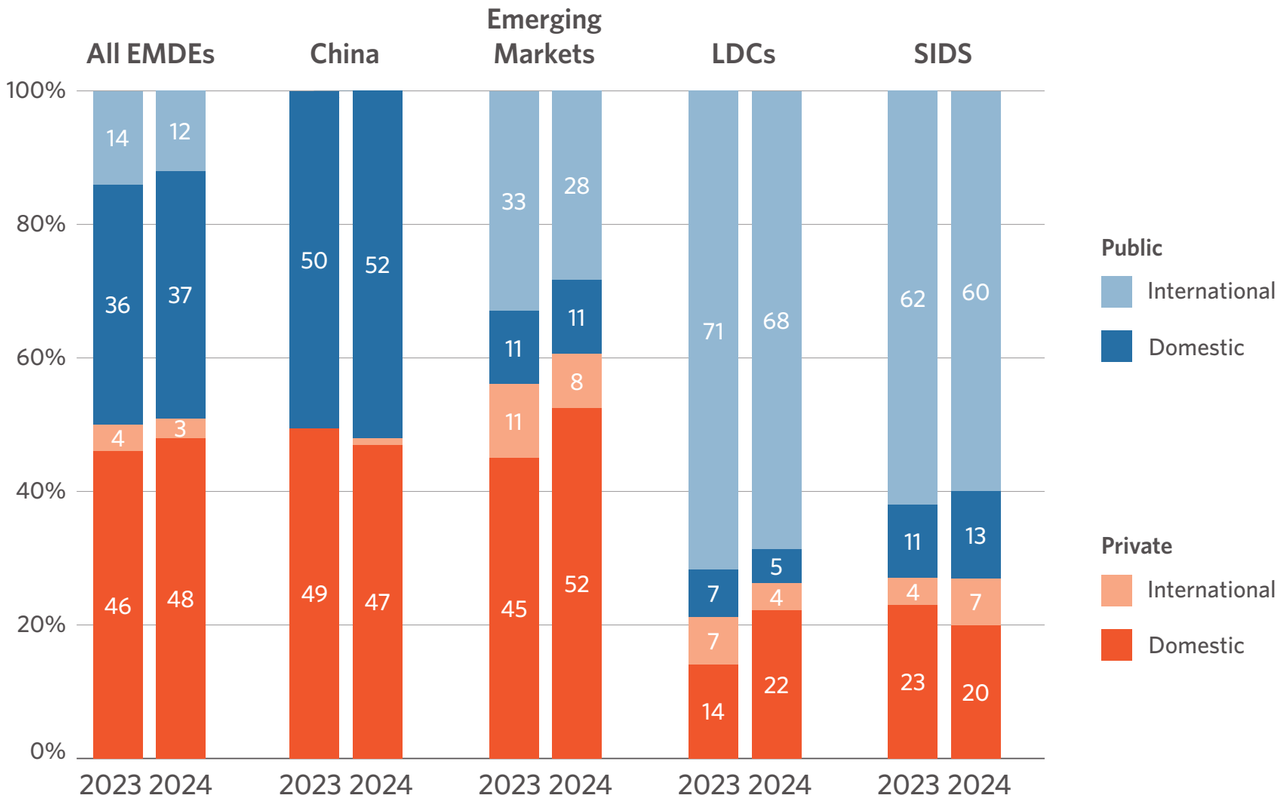
Climate flows to LDCs continued to struggle in 2024

After a marginal year-on-year decline in 2023, climate finance to LDCs experienced a 21% drop to USD 36 billion in 2024. The decline is concerning as LDCs are both most vulnerable to climate impacts and in need of the co-benefits of mitigation action, including for energy access and security (UN News, 2026). Closing the widening climate finance gap will require targeted policy reform and capacity building, alongside concessional finance and de-risking instruments.

Adaptation finance to the world's most vulnerable country groups continued to face scaling difficulties. Though LDCs' finance decreased for both mitigation (-8%) and adaptation (-35%), adaptation was hardest hit, falling from USD 13 billion in 2023 to USD 8.4 billion in 2024. While SIDS saw adaptation finance rise from USD 1.7 billion to USD 2.1 billion, flows to SIDS that are also LDCs almost halved. Total SIDS climate financing requires a drastic 6-fold increase from 2021-22 levels (CPI, 2025g), especially in the form of grants, with better use of multilateral channels and concessional finance, alongside stronger tracking and targeting of flows.

Domestic mobilization is growing, but not for LDCs and SIDS

Figure 5.2: Climate finance to EMDEs and SIDS by source



Note: SIDS overlap with Emerging Markets and LDC categories in this figure. Groupings are not mutually exclusive. In addition, SIDS include some advanced economies. As a result, categories are not mutually exclusive and should not be summed to total EMDE values.

In 2024, 85% of climate finance (USD 988 billion) across All EMDEs was sourced domestically, up from 82% in 2023. While domestic flows increased to reach USD 988 billion, international flows fell to USD 175 billion. China led domestic finance (USD 731 billion), while domestic sources accounted for 63% of flows in Emerging Markets (USD 247 billion) and 27% in LDCs (USD 10 billion).

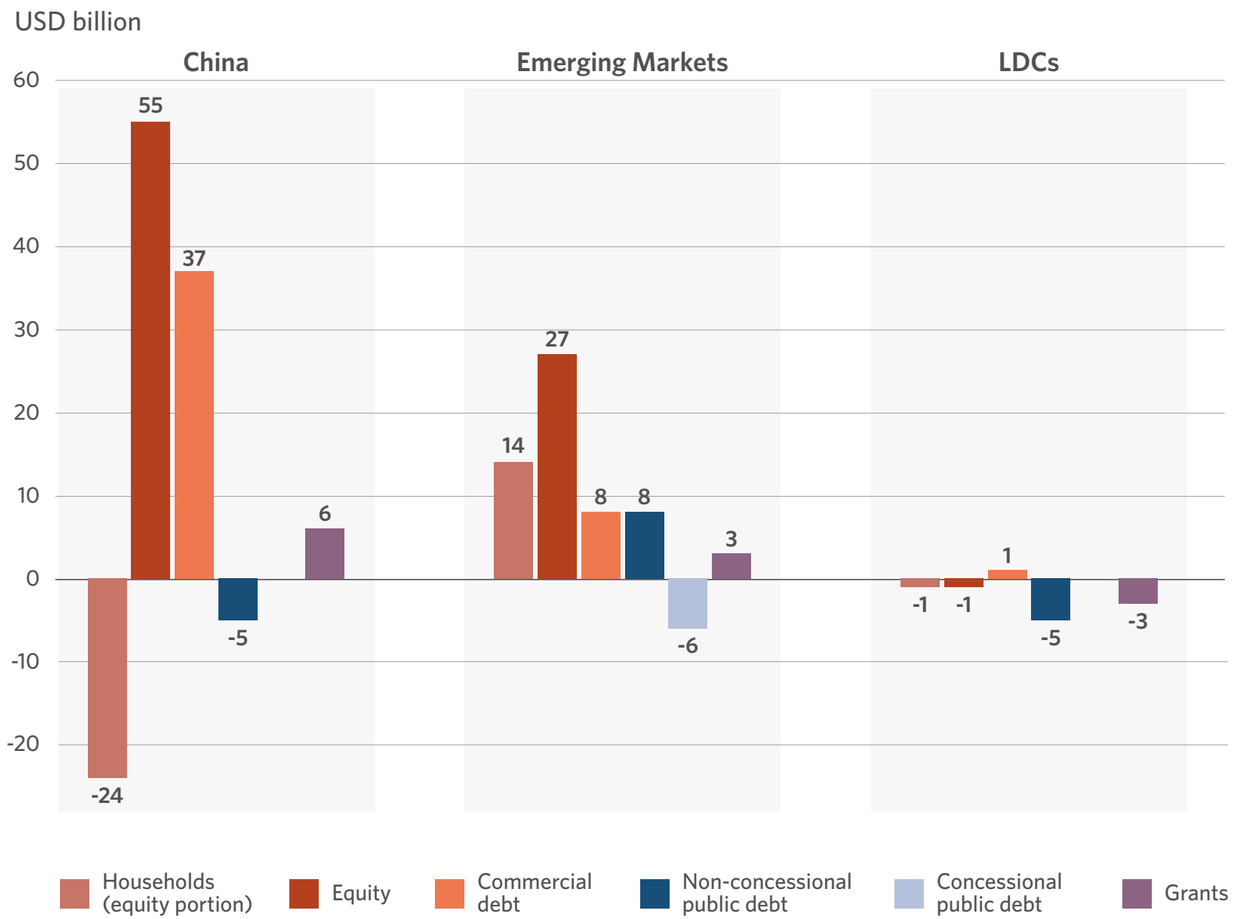
Rising domestic private finance is reshaping flows in China and other Emerging Markets. Between 2019 and 2024, China's domestic private climate finance grew at a 30% CAGR, significantly outpacing domestic public flows (11%), which had historically dominated. Private finance accounted for 47% of China's domestic flows in 2024, driven in part by investments in solar PV and onshore wind by corporations and commercial FIs. In Emerging Markets (excluding China and LDCs), domestic private finance rose from 45% to 52% of the total from 2023 to 2024, driven by commercial FIs, corporations, and households.

Most flows in LDCs and SIDS continued to come from public international finance in 2024. While LDC flows fell (See p. 46) from almost all public institutions, multilateral DFIs remained the largest source. The share of finance provided to SIDS by multilateral and bilateral DFIs increased from 2023 to 2024, while that from public funds fell from 16% to 3%, likely due to fluctuations in approvals for funds such as the IMF's Resilience and Sustainability Facility (ODI Global, 2025).

Closing the gap requires stronger domestic capital mobilization, but starting points differ. In Emerging Markets, domestic private finance has scaled where investments are commercially attractive and backed by enabling financial systems, such as for energy, transport, and buildings. However, weaker capital markets, higher perceived risks, limited fiscal space, and greater currency and debt vulnerability in LDCs and SIDS constrain private mobilization. Closing the gap requires capacity building to strengthen domestic enabling conditions, including policy certainty, local capital market development, and targeted de-risking instruments.

Equity led 2024 investment growth in China and Emerging Markets

Figure 5.3: Climate finance to EMDEs, year-on-year change by instrument, 2023-24



Grants to LDCs fell further, while commercial debt provided the only finance growth.

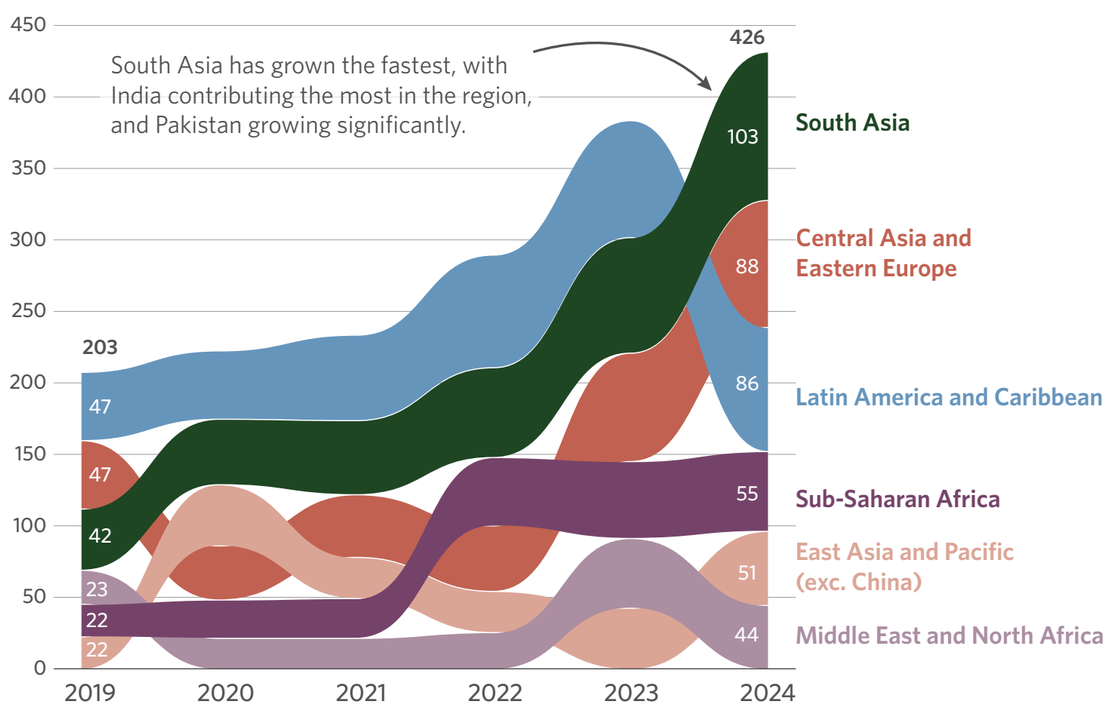
China's climate finance growth story is predominantly one of commercial and other non-concessional instruments. Since 2020, flows in the country have mostly been through commercial debt (32%), equity (non-household) (25%), and non-concessional public debt (24%). Concessional finance, including grants (5%) and concessional public debt (0.1%), played a minimal role. China's strong domestic finance has been facilitated by long-term policy coordination and industrial development priorities. Green financial reform led by the People's Bank of China, including green finance frameworks and taxonomies, has been central to operationalizing policy priorities and mobilizing capital for green sectors (CPI, 2021, 2026a).

Equity investments, excluding those from households, topped recent growth in All EMDEs, with a CAGR of 25% from 2022 to 2024. Commercial debt also increased at an 18% CAGR. Other financing forms declined from 2022 to 2024, particularly public non-concessional debt. In Emerging Markets, equity and household equity investment growth contrast with the diminishing share of grants and concessional public debt, as technologies and markets further commercialize.

In LDCs, commercial debt was the only instrument to see flows increase from 2023 to 2024, while grants and concessional public debt fell for a second consecutive year. Commercial debt rose by 15% year-on-year from USD 4.2 billion to USD 4.7 billion. By contrast, grants declined by 14% from USD 12.1 billion to USD 9.2 billion, and concessional public debt fell by 5% from USD 9.2 billion to USD 8.7 billion. Loans risk compounding existing debt burdens in climate-vulnerable countries with constrained fiscal space (WRI, 2023; IIED, 2024). Debt funding is also often less suitable for adaptation projects, which may lack commercial returns. In these constrained environments, blended finance, targeted guarantees, and other concessional instruments remain critical (see also p. 39).

Snapshot of EMDE regions

Figure 5.4: Climate finance to All EMDEs by region, excluding China



Climate finance is increasing in Emerging Markets beyond China.

East Asia and the Pacific accounted for 68% of climate finance to All EMDEs in 2024. China dominated, with 63% of flows to All EMDEs and 94% of flows to East Asia and the Pacific. The rest of the region has started to see strong growth, rising from USD 28 billion in 2022 to USD 51 billion in 2024. Investment in energy systems in the region (excluding China) roughly doubled year-on-year, from USD 11 billion to USD 22 billion. Within this region, Southeast Asian countries have strengthened climate policy through regional renewable energy supply targets, NDC implementation, and sectoral and city-level plans (UCLG ASPAC, 2024; ASEAN Center for Energy, 2025). Large increases were observed in the Philippines (+61%), Thailand (+61%), and Lao PDR (+69%). Flows in Indonesia, the largest Southeast Asian market in 2023, fell 23% to USD 9.7 billion in 2024.

The South Asia region saw the fastest growth, from USD 80 billion in 2023 to USD 103 billion in 2024. India was the largest contributor, with financing for solar PV (33% of flows), onshore wind (13%), energy efficiency in buildings (12%), BEVs (9%), and green hydrogen (5%). Pakistan saw significant increases through solar PV (see p. 21).

Sub-Saharan Africa remained the EMDE region with the most adaptation finance, though flows declined. In 2024, USD 11 billion of sub-Saharan Africa's total USD 55 billion in climate flows was for adaptation, marking a 15% decline since 2023. Meanwhile, flows in Latin America and the Caribbean rose by 34% to USD 7.6 billion, and in Central Asia and Eastern Europe by 126% to USD 6 billion.

Box 5: Cities are key drivers for EMDE climate finance needs

Rapid urbanization in EMDEs is intensifying risks such as urban heat and flooding (CCFLA, 2025a), and yet cities in these regions received only 11% of total flows in 2021/22, and cities in LDCs just 1% (CCFLA, 2024a).

Cities can mobilize private climate flows by increasing their financing readiness, improving the investment readiness of projects, and using mechanisms such as guarantees to reduce investment risks (CCFLA, 2025b). Where raising external finance is less feasible, cities can leverage policy and fiscal tools, including own-source revenues, land value capture and procurement.

National governments can support cities through stronger multi-level governance frameworks to help align national and subnational climate planning, financing, and implementation (CCFLA, 2024b).

South-South flows are increasing

South-South flows reached USD 27 billion in 2024, as EMDEs became more active providers of finance, technology, and implementation capacity overseas.[20] These flows have increased for three consecutive years, up from USD 14 billion in 2021. Cooperation through national and regional PDBs, bilateral partnerships, and triangular cooperation is diversifying sources of capital and deploying solutions tailored to local market conditions, institutional contexts, and development priorities (UNOSSC, 2026).

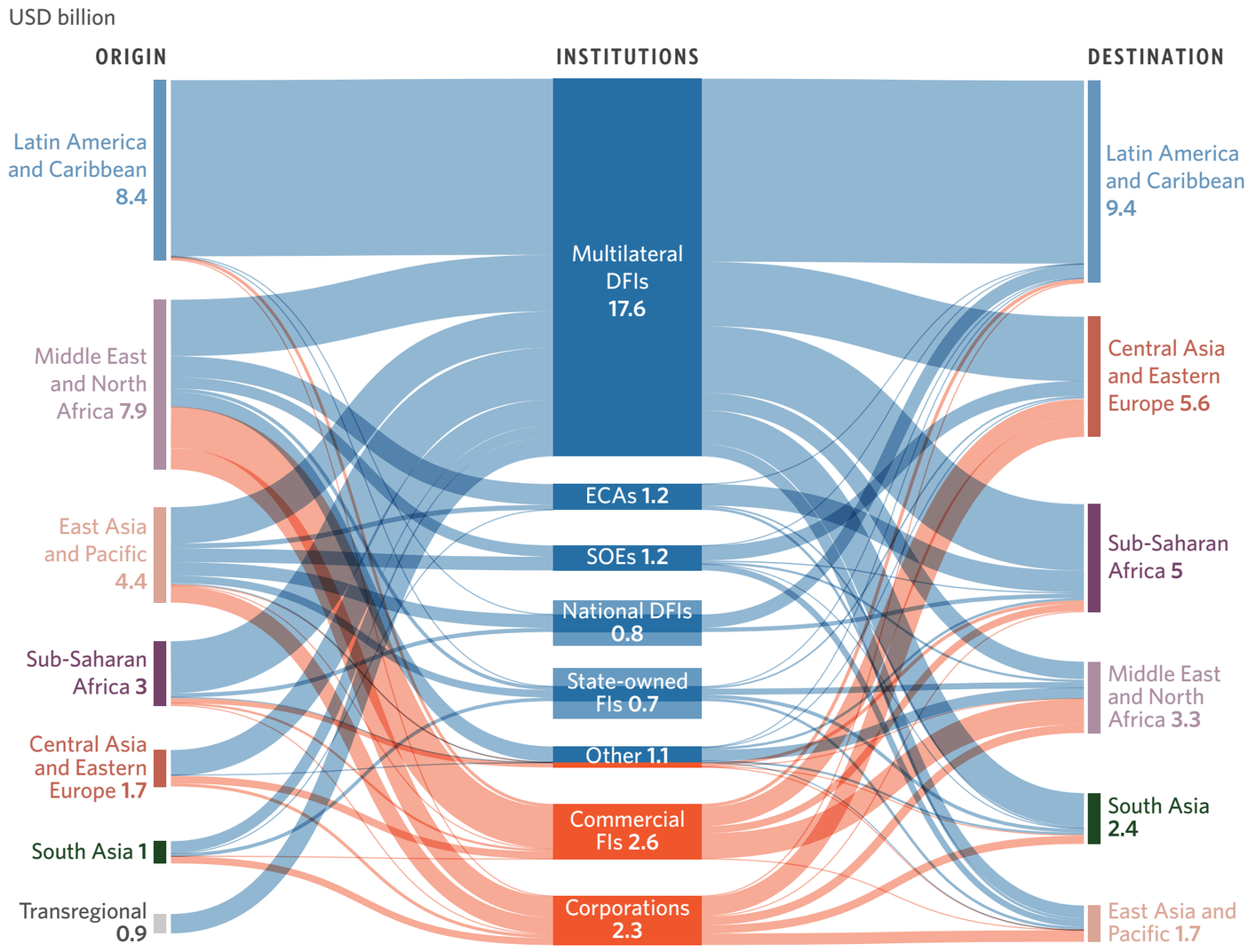
Most South-South flows stem from multilateral DFIs (64% in 2024), including capital funded by EMDE shareholders and resources mobilized from other contributors. Five multilateral DFI contributors together account for over 50% of all South-South climate flows.

Private institutions accounted for 20% of South-South flows in 2024, with commercial FIs the leading private actor type (9% of total flows). Private South-South investment is heavily concentrated in energy systems (91%), providing USD 5 billion in 2024. The increased bankability of renewable energy projects is attracting overseas investment to EMDEs. Solar and onshore wind accounted for 43% (USD 2.3 billion) and 24% (USD 1.3 billion) of private South-South flows, respectively, as EMDE firms and financiers gain experience in developing, financing, and operating assets in similar contexts.

Latin America and the Caribbean is the main recipient region of South-South flows. The region received over USD 9.4 billion in 2024 (34%), with CAF playing a major role. Sub-Saharan Africa saw the fastest growth, with a CAGR of 40% from 2019 to 2024, reaching USD 5 billion in 2024. This reflects a combination of regional initiatives to strengthen South-South cooperation, renewed focus by African and nonAfrican DFIs on clean energy and resilient infrastructure, and the emergence of EMDE-based developers and utilities investing in new markets across the continent.

20 See Annex I - p. 72 for information on the south-south flows accounting methodology.

Figure 5.5: Tracked South-South climate flows



Note: **Other Public (0.8)** includes Institutional Investors (0.3), Governments (0.3), Public Funds (0.1) and Bilateral DFIs (0.05). **Other Private (0.3)** includes Funds (0.3), Philanthropies (0.04) and Unknown (0.01). ECAs: Export Credit Agencies.

Recommendations

CPI has identified four agendas that can help drive investment to where it can make the greatest impact, with detailed recommendations for both public and private actors.

AGENDA 1: ALIGN CLIMATE INVESTMENT WITH OUTCOMES THAT MATTER TO PEOPLE

STRENGTHENING ENERGY, FOOD, AND ECONOMIC SECURITY

1A. Embed security and competitiveness in the clean energy transition, avoiding costly fossil fuel lock-in.

Recommendations for public actors

- **National governments, with support from philanthropy and third-sector organizations:** Integrate energy security, affordability, competitiveness, and resilience objectives into clean energy transition strategies and public communications, particularly in EMDEs. Evidence and explain how reducing dependence on fossil fuel imports can lower exposure to price volatility while creating jobs in clean energy.
- **National governments:** Set long-term clean energy policy frameworks, including for energy system transformation and grid modernization, that are designed to be resilient to electoral cycles, to aid developers and investors in planning and reducing policy reversal risks.
- **National governments and DFIs:** Support corporates to develop robust consumer and industrial demand for affordable, low-carbon energy through innovation support, policy incentives, and improved access to finance.
- **PDBs and MCFs:** Strategically deploy public finance where the risk of crowding out private investment is low, such as to: a) establish new markets for specific technologies with limited uptake; and b) accelerate energy efficiency in hard-to-abate industrial sectors, where investment returns are longer-term or more challenging to capture.

Recommendations for private actors

- **Energy companies and project developers:** Commit to no new fossil fuel asset investments and to timebound plans to retire or repurpose fossil fuel assets, replacing them with renewable energy, storage, and other grid-flexibility solutions aligned with national transition and energy security plans.
- **Institutional investors and commercial banks:** Set portfolio-level targets for clean power, grids, and storage assets in EMDEs, and establish dedicated vehicles or products to channel capital to these investments.
- **Private infrastructure investors, including commercial banks, pension funds, and private equity funds:** Develop scalable and affordable models to finance infrastructure and technologies that accelerate renewable energy rollout, including grids, energy storage, and demand-side efficiency, looking to public actors for risk-sharing mechanisms where necessary.
- **Investors:** Engage in multistakeholder coalitions and convenings to share successes of renewable energy transitions in particular geographies, presenting how policy, regulation, specific instruments and financing structures have enabled investment.

Examples:
Initiatives/coordination mechanisms: Global Energy Alliance for People and Planet, Mission 300, Global Capacity Building Coalition, OECD CEFIM Programme
Financing vehicles and approaches: Desert to Power G5 Sahel Facility, CIF, EBRD & WBG Renewable Energy Integration Investment plan in Türkiye, Energy Savings Insurance, P-REC Aggregation Facility, Data-driven Energy Access for Africa

1B. Ensure climate investment aligns with food security, protecting and boosting livelihoods, and economic resilience.

Recommendations for public actors	Recommendations for private actors
• **PDBs:** Align concessional resources in agriculture and land-use projects with areas of the system where food security co-benefits are strongest and accessible capital is most scarce. • **National standard-setting bodies:** Strengthen climate risk disclosure and supply chain resilience requirements to help corporates identify and mitigate food system vulnerabilities amid other crises.	• **Impact investors and private investors in blended structures:** Create dedicated vehicles for climate investments that benefit domestic food production and local food systems, adapted to the realities of non-export markets and measuring food security and resilience improvements at the system level and not only through farmer income. • **Agribusinesses and food-system companies:** Invest in smallholder resilience through co-financing arrangements with DFIs and/or blended facilities in their own sourcing geographies, boosting upstream resilience that benefits the entire supply chain.

Examples:
Initiatives/coordination mechanisms: World Bank ClimateSmart Agriculture Investment Plans (CSAIPs), AfDB Africa Adaptation Acceleration Program
Financing vehicles and approaches: Aceli Direct Farmer Financing model, Climate-Smart Lending Platform (Greenfi), Responsible Commodities Facility, One Acre Ventures (formerly Smallholder Resilience Fund)

AGENDA 2: ADVANCE COUNTRY OWNERSHIP AND ENABLING CONDITIONS

REDUCING FRAGMENTATION BY BETTER ALIGNING DOMESTIC AND INTERNATIONAL FINANCE AND POLICY AT THE COUNTRY LEVEL

2A. Make country-led investment strategies the organizing framework, anchored in fiscal and financial realities.

Recommendations for public actors

- **National and subnational governments, with capacity-building support from DFIs where required:** Clarify the "demand side" of country platforms by setting out cohesive country-led development priorities, translating NDCs, NAPs, and LTSs into costed climate investment plans that align with national budgets. Create development plans that can be used to coordinate and prioritize public and private finance across the pipeline and highlight where domestic action and external support are needed.
- **Ministries of finance:** Embed this forward look into fiscal planning, subsidy reforms, debt management, and domestic financial sector reform, pursuing a deliberate mix of capital from domestic government budgets and banks, local currency markets, DFIs, and external partners, consistent with debt sustainability and stronger domestic resource mobilization.
- **Public finance providers:** Use countries' development priorities and investment plans to guide climate finance efforts. Work with other public providers and the private sector to explore co-financing and mobilization opportunities and deploy the necessary instruments and approaches to finance projects across the pipeline. Provide analytical and project preparation support, as well as bridge financing where needed.
- **Finance regulators**: Align taxonomies and financial reporting requirements with best-in-class sustainability standards to maximize interoperability and streamline climate investment decisions.

Recommendations for private actors

- **Domestic commercial banks and institutional investors:** Coordinate with public FIs and governments to provide the "supply side" of country platforms, highlighting where finance is available and the conditions needed for investments to be made. Highlight policy and regulatory enablers for financing, as well as requirements on risk-mitigation mechanisms and public finance.
- **Private financial institutions**: Coordinate, including through existing alliances and initiatives, to provide catalytic and blended finance instruments that target sectors that are underfunded in order to de-risk and unlock private commercial capital.

Examples:
Initiatives/coordination mechanisms: Country Platform Hub, Coalition of Finance Ministers for Climate Action, just transition and country platform initiatives (e.g., Brazil Climate and Ecological Transformation Investment Platform), dedicated national climate finance units or green funds (e.g., Rwanda Green Fund).
Financing vehicles and approaches: Green Receivables Fund (Green FIDC)

2B. Build country-led systems for effective domestic investment and local implementation and delivery.

Recommendations for public actors

- **MDBs, MCFs, philanthropies**: Further develop and deploy country-level diagnostics on cost and quality of capital, and invest in practical systems that governments can use to manage and communicate their climate project pipelines. These can include shared data on projects and risks, as well as simple cofinancing and risk-sharing arrangements, enabling blended finance structures to be assembled quickly and at low transaction costs.
- **National and subnational governments in EMDEs:** Invest in core public finance management systems that support credible selection, preparation, and implementation of investment projects to build a credible pipeline of sovereign priority investments that can enable PPPs and blended finance structures, drawing on capacity-building support as needed.
- **National governments and country platform delivery partners:** Systematically integrate urban and subnational priorities into country-led mobilization plans. E.g., by providing project preparation support for subnational governments; using the country platform to coordinate within/between subnational jurisdictions for supply- and demand-side aggregation; and developing PPPs for subnational climate action.

Recommendations for private actors

- **International and domestic investors:** Work with national and subnational development banks to tap pipelines of commercially viable, locally demanded climate and nature-aligned investments that improve livelihoods and resilience, exploring co-financing opportunities where relevant.

Examples:
Initiatives/coordination mechanisms: Global Emerging Markets Risk Database (GEMs) Consortium, CCFLA's Project Preparation Facility Connector, Coalition For High Ambition Multilevel Partnerships (CHAMP)
Financing vehicles and approaches: Global Sub-National Climate Fund (SCF)

AGENDA 3: DEEPEN ADAPTATION FINANCE

EXPANDING REACH, IMPROVING QUALITY, AND BUILDING DOMESTIC CAPACITY FOR CLIMATE AND DEVELOPMENT RESILIENCE

3A. Use resilience investment as a tool to manage fiscal and financial risk and build domestic capacity to act on climate risk.

Recommendations for public actors

- **National governments, including ministries of finance (MoFs):** Adopt a whole-of-government approach to adaptation, integrating physical climate risk into macroeconomic forecasting, debt sustainability analyses, and medium-term expenditure frameworks. Build or enhance analytical capabilities to quantify fiscal exposure and use this to inform investable adaptation strategies and deploy domestic instruments such as resilience bonds.
- **National governments:** Deploy fiscal and regulatory levers to drive domestic adaptation finance, including policy and incentive frameworks that require or reward climate risk integration by domestic financial institutions. Redirect technical and financial resources to existing programs with strong adaptation benefits (e.g., land and water management, social protection systems).
- **Public finance providers:** Prioritize TA that builds in-house analytical capabilities in MoFs and domestic financial institutions and structure concessional capital to demonstrate integrated risk finance approaches that combine risk reduction with risk transfer from the design stage. Support domestic financial actors across to participate in climate finance and risk-management networks and to access climate risk tools and datasets.
- **Central banks and financial regulators:** Incorporate sector-specific physical climate risk into financial stability frameworks and stress testing. Require disclosure of physical climate risk exposure and ensure sovereign risk assessment frameworks account for countries' climate vulnerability and the fiscal benefits of resilience investment.

Recommendations for private actors

Domestic investors including commercial banks, pension funds, asset owners, and other subnational FIs:

- Invest in internal capabilities to screen for and respond to physical climate risks across lending and investment portfolios.
- Consider sector-specific performance frameworks that explicitly reward adaptation mainstreaming.
- Work with central banks, supervisors, and standard-setting bodies to analyze and share how climate risk affects portfolio and national financial stability.
- Engage meaningfully with international peer networks and blended finance structures to accelerate knowledge exchange and access to concessional capital and risk-management instruments.

Examples:
Initiatives/coordination mechanisms: Network for Greening the Financial System, Coalition of Finance Ministers for Climate Action discussions on physical climate risk and adaptation investment planning
Financing vehicles and approaches: IMF Quantitative Climate Risk Assessment Fiscal Tool, CPI Climate Finance Instruments Toolkit, AFC Infrastructure Climate Resilience Fund

3B. Ensure adaptation financing approaches capture the full breadth of activities that build climate resilience and guard against maladaptation.

Recommendations for public actors	Recommendations for private actors
• **PDBs:** Refine eligibility criteria and portfolio screening approaches to capture adaptation co-benefits across sectors, including where resilience-building is embedded in broader development investments rather than in standalone adaptation projects. Extend climate risk screening requirements to all development finance not only explicitly adaptation-labeled investments to ensure every investment is assessed to avoid maladaptation. • **Standard-setting bodies and taxonomy authorities:** Develop adaptation taxonomies and disclosure standards that reflect the breadth of resilience-building activities across sectors and development domains, resisting definitional narrowness that excludes high-impact investments where adaptation is part of a broader effort.	• **Commercial FIs and institutional investors:** Integrate physical climate risk and maladaptation screening into underwriting, credit assessment, and portfolio risk models, treating exposure to assets that lock in vulnerability as a source of stranded-asset and credit risk. Embed forward-looking climate scenarios into asset valuation so that maladaptive investments are repriced to reflect the losses they expose the institution to over the asset's lifetime. • **Insurers and reinsurers:** Consider mechanisms to discourage maladaptive development, for example, withholding or conditioning coverage where investments increase long-term physical risk exposure rather than reduce it. Where possible, share loss and hazard data with the broader financial system to strengthen market-wide capacity to screen for maladaptation and to price resilience accurately.

Examples:
Initiatives/coordination mechanisms: CPI Climate Finance Instruments Toolkit, Climate Bonds Initiative Resilience Taxonomy

3C. Apply rigorous quality standards to all forms of adaptation finance.

Recommendations for public actors	Recommendations for private actors
• **PDBs, MCFs and bilateral donors:** Embed a holistic quality standard across all adaptation instruments so scarce public capital is used to: demonstrate the viability of adaptation investment in contexts where private markets have not yet followed; catalyze private capital where robust revenue or savings streams exist; and sustain socially necessary low-cashflow activities that markets will not finance.	• **Domestic and international investors**: Apply quality standards to all adaptation-relevant investments, including rigorous forward-looking climate risk assessment and maladaptation screening. Engage with public and concessional financiers to understand where blended structures can enable private participation in contexts that do not yet meet commercial return thresholds.

Examples:
Initiatives/coordination mechanisms: IDFC Facility capacity building on adaptation finance, CPI Toolkit for Assessing Adaptation Finance Quality, Green Climate Fund updated Investment Framework, MDBs Common Approach to Measuring Climate Results

AGENDA 4: SCALE PRIVATE CAPITAL MOBILIZATION

REPLICATING PROVEN APPROACHES ACROSS MARKETS AND DEPLOYING INSTRUMENTS THAT REDUCE THE COST OF CAPITAL

4A. Shift private portfolios and products toward climate-aligned investment in EMDEs, building on the enabling environment created by earlier recommendations.

Recommendations for public actors	Recommendations for private actors
• **PDBs, MCFs, and bilateral donors:** Support the building of clear, predictable pipelines and platform-based entry points (like country and sector programs) that private investors can align mandates and products to, and signal where guarantees, insurance, and catalytic equity are most needed rather than designing instruments in isolation.	• **Institutional investors, banks, insurers, and asset managers:** Set portfolio-level aspirations or targets for reallocating capital into climate-aligned investments in EMDEs, explicitly linked to country- and sector-level strategies. Reflect these in mandate design, product development, and performance metrics.

Examples:
Initiatives/coordination mechanisms: GGG Guarantee Directory, Green Guarantee Company, PDB Guarantee Hub.
Financing vehicles and approaches: EBRD and MIGA political risk guarantee and liquidity facility for MUFG solar park bond in Egypt, Climate Investor One, PIDG Credit Enhancement Facilities, IDB, CAF and CDB Multi-Guarantor Debt-for-Resilience Initiative.

4B. Ensure high-potential, underserved sectors and markets are not left behind in the scaleup of private climate investment.

Recommendations for public actors	Recommendations for private actors
• **PDBs, MCFs:** Develop sector-tailored financing models for priority areas such as methane abatement, forest and nature-based finance, and industrial decarbonization, with appropriate time horizons, capital structures, and risk-sharing approaches that reflect sector-specific cash flow profiles and risks. • **National governments, PDBs:** Support aggregation of smaller or fragmented opportunities including projects with low ticket sizes and subnational or SME investments into larger vehicles or portfolios that better match investors' economies of scale and diversification needs.	• **Private investors and specialized asset managers**: Engage with public actors and sector initiatives to share detailed insights on barriers and financing needs in high-potential sectors, and originate pipelines and innovative products (for example, performance-based mechanisms for methane abatement, jurisdictional forest finance vehicles, or industrial transition funds) that are designed around those sector realities, not just generic project finance.

Examples:
Initiatives/coordination mechanisms: Global Methane Hub, UNIDO Industrial Decarbonization Hubs Accelerator, World Bank Private Sector Investment Lab,
Financing vehicles and approaches: Tropical Forest Forever Facility, Structured Finance for Nature, The Landbanking Group

4C. Use regional institutions to channel and de-risk climate finance, improving risk understanding and reducing the cost of capital.

Recommendations for public actors	Recommendations for private actors
• **PDBs, MCFs, a**nd **EMDE governments:** Work together to originate, aggregate, and cofinance climate investments and technology deployment through dedicated South-South facilities to deliver mutually beneficial financing structures that leverage cross-border power pools, regional value chains, and shared risk-management tools. • **MCFs, MDBs, and NDBs:** Expand access to insurance, guarantees, local currency solutions, and catalytic equity to reduce the weighted average cost of capital in priority sectors and countries, channeling these instruments through regional and national development banks where appropriate.	• **Private investors:** Make systematic use of emerging country- and portfolio-level risk data (including GEMS and similar efforts) to avoid mispricing risk and inflating the cost of capital in EMDEs. Engage with public institutions to signal where better data, standards, or policies are needed.

Examples:
Initiatives/coordination mechanisms: Global Emerging Markets Risk Database (GEMs), South Africa G20 Presidency Cost of Capital Commission
Financing vehicles and approaches: DBSA and GCF Climate Finance Facility, Long-Term FX Risk Management (TCX), Green Guarantee Company (GGC)

References

ASEAN Center for Energy (2025) *ASEAN Plan of Action for Energy Cooperation (APAEC) 2026-2030*. Available at: https://aseanenergy.org/publications/asean-plan-of-action-for-energy-cooperation-apaec-2026-2030.

BNEF (2025a) 'Electric Vehicle Outlook', *Bloomberg New Energy Finance*, 18 June. Available at: https://about.bnef.com/insights/clean-transport/electric-vehicle-outlook/ (Accessed: 3 June 2026).

BNEF (2025b) *Power Hungry Data Centers Are Driving Green Energy Demand*. Bloomberg New Energy Finance. Available at: https://about.bnef.com/insights/clean-energy/power-hungry-data-centers-are-driving-green-energy-demand/.

BNEF (2026a) *Corporate Clean Energy Buying Fell in 2025 After Nearly a Decade of Growth*. Bloomberg New Energy Finance. Available at: https://about.bnef.com/insights/clean-energy/corporate-clean-energy-buying-fell-in-2025-after-nearly-a-decade-of-growth/.

BNEF (2026b) *Energy Transition Investment Trends 2026: Tracking global investment in the low-carbon transition*. Bloomberg New Energy Finance. Available at: https://data.bloomberglp.com/professional/sites/44/1017746-ETIT2026.pdf.

BNEF (2026c) *New Energy Outlook 2026*. Bloomberg New Energy Finance. Available at: https://about.bnef.com/insights/clean-energy/new-energy-outlook/?utm_source=lnkdn&utm_medium=orgsoc&utm_campaign=bloombergnef&utm_content=post&utm_program=bnef&utm_description=neo-2026&linkId=945029089#row-6a1f3d75024a3.

Carbon Brief (2025) *Seven charts showing how the $100bn climate-finance goal was met*. Available at: https://www.carbonbrief.org/analysis-seven-charts-showing-how-the-100bn-climate-finance-goal-was-met/.

CCFLA (2024a) *2024 State of Cities Climate Finance*. Available at: https://citiesclimatefinance.org/publications/2024-state-of-cities-climate-finance (Accessed: 3 June 2026).

CCFLA (2024b) *Assessing Enabling Framework Conditions for Urban Climate Finance*. Available at: https://citiesclimatefinance.org/publications/assessing-enabling-framework-conditions-for-urban-climate-finance (Accessed: 3 June 2026).

CCFLA (2025a) *Building Heat-Resilient Cities for All: Why South Asia's Urban Poor Can't Wait*. Available at: https://citiesclimatefinance.org/publications/building-heat-resilient-cities-for-all-why-south-asias-urban-poor-cant-wait.

CCFLA (2025b) 'Mobilizing Private Capital for Resilient and Low-Carbon Cities', *Cities Climate Finance Leadership Alliance*. Available at: https://citiesclimatefinance.org/publications/mobilizing-private-capital-for-resilient-and-low-carbon-cities (Accessed: 3 June 2026).

CGD (2024a) *Twelve Steps to Institutional Reform: Why and How the Capital Adequacy Report Had Impact*. Center for Global Development. Available at: https://www.cgdev.org/blog/twelve-steps-institutional-reform-why-and-how-capital-adequacy-report-had-impact.

CGD (2024b) *Why and How the MDB Capital Adequacy Framework Report Had Impact*. Center for Global Development. Available at: https://www.cgdev.org/event/impact-caf.

CGD (2025a) *The End of Development Cooperation?* Center for Global Development. Available at: https://www.cgdev.org/publication/end-development-cooperation.

CGD (2025b) *USAID Cuts: New Estimates at the Country Level*. Center for Global Development. Available at: https://www.cgdev.org/blog/usaid-cuts-new-estimates-country-level.

COP30 (2025) *COP30 approves Belém Package*. Available at: https://cop30.br/en/news-about-cop30/cop30-approves-belem-package1.

CPI (2021) *The Potential for Scaling Climate Finance in China*. CLIM. Available at: https://www.climatepolicyinitiative.org/wp-content/uploads/2021/02/The-Potential-for-Scaling-Climate-Finance-in-China-1.pdf.

CPI (2023) *"Beyond Adaptation": Coming to Terms with Loss & Damage*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/beyond-adaptation-coming-to-terms-with-loss-damage/.

CPI (2024) *Landscape of Guarantees for Climate Finance in EMDEs*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/landscape-of-guarantees-for-climate-finance-in-emdes/.

CPI (2025a) *Assessing Top-down Climate Finance Needs: Methodology*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/top-down-climate-finance-needs/.

CPI (2025b) *Energizing Private Capital: Innovations in Guarantee Offerings for Climate Finance*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/energizing-private-capital-innovations-in-guarantee-offerings-for-climate-finance/.

CPI (2025c) *Global Landscape of Climate Finance 2025*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/wp-content/uploads/2000/06/compressed_Global-Landscape-of-Climate-Finance-2025.pdf.

CPI (2025d) *Global Landscape of Climate Finance 2025: EMDE Spotlight*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2025-emde-spotlight/.

CPI (2025e) *Global Landscape of Climate Finance 2025 Methodology*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/wp-content/uploads/2025/06/Global-Landscape-of-Climate-Finance-2025-Methodology.pdf (Accessed: 10 October 2025).

CPI (2025f) *Scaling Up Green Guarantees: Recommendations by the Green Guarantee Group*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/scaling-up-green-guarantees-recommendations-by-the-green-guarantee-group/.

CPI (2025g) *State and Trends of Climate Adaptation Finance in Small Island Developing States*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/state-and-trends-of-climate-adaptation-finance-in-small-island-developing-states/.

CPI (2025h) *Tracking finance's path to net zero*. Climate Policy Initiative. Available at: https://netzerofinancetracker.climatepolicyinitiative.org/aggregated-data?tab=cleanEnergyAndFossilFuelProjectFinancing (Accessed: 2 June 2025).

CPI (2026a) *Climate finance in China – can adaptation investment mirror the successes of mitigation finance?* Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/climate-finance-in-china-can-adaptation-investment-mirror-the-successes-of-mitigation-finance/.

CPI (2026b) *Landscape of Climate Finance in Ethiopia*. Climate Policy Initiative. Available at: https://www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-in-ethiopia-2/.

CPI and GFANZ (2025) *The Clean Energy Equity Investment Gap: Mobilizing private finance in emerging markets*. Available at: https://assets.bbhub.io/company/sites/63/2025/11/Energy_Infrastructure_Equity_Gap_November-2025.pdf.

CPI and IRENA (2025) *Global Landscape of Energy Transition Finance 2025*. Available at: https://www.climatepolicyinitiative.org/publication/global-landscape-of-energy-transition-finance-2025/.

CWR (2025) *Key Green Finance Policies to Build China's Trillion-yuan Water-Savings Industry*. China Water Risk. Available at: https://cwrrr.org/opinions/key-green-finance-policies-to-build-chinas-trillion-yuan-water-savings-industry/.

Dabush, I. *et al.* (2025) 'Navigating the electric vehicle revolution: Optimal subsidy allocation for electric vehicles and charging infrastructure', *Journal of Cleaner Production*, 486, p. 144586. Available at: https://doi.org/10.1016/j.jclepro.2024.144586.

D'Orazio, P. (2025) 'Addressing climate risks through fiscal policy in emerging and developing economies: What do we know and what lies ahead?', *Energy Research & Social Science*, 119, p. 103852. Available at: https://doi.org/10.1016/j.erss.2024.103852.

ECB (2025) 'Green investment needs in the EU and their funding'. Available at: https://www.ecb.europa.eu/press/economic-bulletin/articles/2025/html/ecb.ebart202501_03~90ade39a4a.en.html (Accessed: 30 April 2025).

EIB (2025) *Who's most at risk?: a global index of climate risk for countries.* LU: European Investment Bank. Available at: https://doi.org/10.2867/5317974.

Ember (2025a) *The Electrification Imperative*. Available at: https://ember-energy.org/latest-insights/the-electrification-imperative/.

Ember (2025b) *The EV leapfrog – how emerging markets are driving a global EV boom*. Available at: https://ember-energy.org/latest-insights/the-ev-leapfrog-how-emerging-markets-are-driving-a-global-ev-boom/.

Ember (2026) *The electric fast-track for emerging markets*. Available at: https://ember-energy.org/latest-insights/the-electric-fast-track-for-emerging-markets/.

European Commission (2025) *Clean Industrial Deal: A plan for EU competitiveness and decarbonisation*. Available at: https://commission.europa.eu/topics/competitiveness/clean-industrial-deal_en.

FAO (2023) *Almost half the world's population lives in households linked to agrifood systems*. Food and Agriculture Organization. Available at: https://www.fao.org/newsroom/detail/almost-half-the-world-s-population-lives-in-households-linked-to-agrifood-systems/en.

G20 (2023) *G20 Roadmap for the Implementation of the Recommendations of the G20 Independent Review of Multilateral Development Banks' Capital Adequacy Frameworks*.

GIIA (2024) 'Two Years of the Inflation Reduction Act: Transforming US Clean Energy', 25 September. Available at: https://giia.net/insights/two-years-inflation-reduction-act-transforming-us-clean-energy/ (Accessed: 3 June 2026).

GWI (2025) *IDRA Desalination & Reuse Handbook 2025-2026*. Global Water Intelligence. Available at: https://www.globalwaterintel.com/documents/idra-desalination-and-reuse-handbook-2025-2026.

Hepburn, C. *et al.* (2021) 'Towards carbon neutrality and China's 14th Five-Year Plan: Clean energy transition, sustainable urban development, and investment priorities', *Environmental Science and Ecotechnology*, 8, p. 100130. Available at: https://doi.org/10.1016/j.ese.2021.100130.

IDB (2024) *Paraguay to Expand Sanitation in Lake Ypacaraí Watershed to Improve Environment*. Inter American Development Bank. Available at: https://www.iadb.org/en/news/paraguay-expand-sanitation-lake-ypacarai-watershed-improve-environment.

IEA (2021) *Financing Clean Energy Transitions in Emerging and Developing Economies*. International Energy Agency. Available at: https://iea.blob.core.windows.net/assets/6756ccd2-0772-4ffd-85e4-b73428ff9c72/FinancingCleanEnergyTransitionsinEMDEs_WorldEnergyInvestment2021SpecialReport.pdf.

IEA (2022) *Global EV Outlook 2022*. International Energy Agency. Available at: https://www.iea.org/reports/global-ev-outlook-2022.

IEA (2023) *Electricity Grids and Secure Energy Transitions*. International Energy Agency. Available at: https://www.iea.org/reports/electricity-grids-and-secure-energy-transitions.

IEA (2024a) *Electricity 2024 – Analysis, IEA*. Available at: https://www.iea.org/reports/electricity-2024 (Accessed: 3 June 2026).

IEA (2024b) *World Energy Investment 2024*. Available at: https://www.iea.org/reports/world-energy-investment-2024 (Accessed: 5 June 2025).

IEA (2025a) *Energy and AI*. International Energy Agency. Available at: https://www.iea.org/reports/energy-and-ai.

IEA (2025b) *Energy Efficiency 2025*. Available at: https://www.iea.org/reports/energy-efficiency-2025.

IEA (2025c) *Global EV Outlook 2025*. International Energy Agency. Available at: https://www.iea.org/reports/global-ev-outlook-2025.

IEA (2025d) *Renewable electricity – Renewables 2025 – Analysis, IEA*. Available at: https://www.iea.org/reports/renewables-2025/renewable-electricity (Accessed: 3 June 2026).

IEA (2025e) *World Energy Investment 2025*. Available at: https://www.iea.org/reports/world-energy-investment-2025 (Accessed: 5 June 2025).

IEA (2026a) *Global Energy Review 2026*. International Energy Agency. Available at: https://iea.blob.core.windows.net/assets/df903e1c-49c6-4757-8cbf-6fbcfe7611a0/GlobalEnergyReview2026.pdf.

IEA (2026b) *Global EV Outlook 2026*. International Energy Agency. Available at: https://www.iea.org/reports/global-ev-outlook-2026 (Accessed: 3 June 2026).

IIED (2024) *World's least developed countries spend twice as much servicing debts as they receive in climate finance*. International Institute for Environment and Development. Available at: https://www.iied.org/worlds-least-developed-countries-spend-twice-much-servicing-debts-they-receive-climate-finance.

IMF (2024) *Fiscal Monitor: Putting a Lid on Public Debt*. International Monetary Fund. Available at: https://www.imf.org/-/media/files/publications/fiscal-monitor/2024/october/english/text.pdf.

IMF (2025) *World Economic Outlook*. International Monetary Fund. Available at: https://www.imf.org/-/media/files/publications/weo/2025/october/english/text.pdf.

IRENA (2025) *Renewable Power Generation Costs in 2024*. Abu Dhabi: International Renewable Energy Agency. Available at: https://www.irena.org/Publications/2025/Jun/Renewable-Power-Generation-Costs-in-2024.

IRS (2026) *Energy Efficient Home Improvement Credit*. Internal Revenue Service. Available at: https://www.irs.gov/credits-deductions/energy-efficient-home-improvement-credit (Accessed: 2 June 2026).

Levy, A. *et al.* (2025) 'Construction costs of urban rail projects worldwide'. New York University. Available at: https://doi.org/10.58153/9WNJP-KEZ15.

Lu, K. *et al.* (2025) 'Urban Rail Transit in China: Progress Report and Analysis (2015–2023)', *Urban Rail Transit*, 11(1), pp. 1–27. Available at: https://doi.org/10.1007/s40864-024-00231-7.

Minier, V. and Bustamante, C.U. (2025) *Towards net-zero buildings: The investment case*. Schneider Electric. Available at: https://download.schneider-electric.com/files?p_enDocType=Thought+Leadership+Article&p_Doc_Ref=TLA_Buildings_Investment_Case.

MIT News (2025) 'Explained: Generative AI's environmental impact', 17 January. Available at: https://news.mit.edu/2025/explained-generative-ai-environmental-impact-0117.

Munich Re (2025) *Natural disasters in 2024*. Available at: https://www.munichre.com/content/dam/munichre/mrwebsitespressreleases/MunichRe-NatCAT-Stats2024-Full-Year-Factsheet.pdf/_jcr_content/renditions/original./MunichRe-NatCAT-Stats2024-Full-Year-Factsheet.pdf.

ND-GAIN (2025) *ND-GAIN Country Index*. Notre Dame Global Adaptation Initiative. Available at: https://gain.nd.edu/our-work/country-index/rankings/ (Accessed: 16 October 2025).

ODI Global (2024) *The unfinished business of MDB capital adequacy*. Available at: https://odi.org/en/insights/the-unfinished-business-of-mdb-capital-adequacy/.

ODI Global (2025) *The IMF can do more to support the most climate vulnerable countries*. Available at: https://odi.org/en/insights/the-imf-can-do-more-to-support-the-most-climate-vulnerable-countries/.

OECD (2022) *Climate Finance Provided and Mobilised by Developed Countries in 2016-2020*. Available at: https://www.oecd.org/en/publications/climate-finance-provided-and-mobilised-by-developed-countries-in-2016-2020_286dae5d-en/full-report/component-5.html?

OECD (2025a) *Global Corporate Sustainability Report 2025*. OECD Publishing. Available at: https://doi.org/10.1787/bc25ce1e-en.

OECD (2025b) *Tracking private finance mobilisation: Latest trends and ways forward*. 25th edn. OECD Policy Briefs. Available at: https://doi.org/10.1787/8d414cdb-en.

OECD (2026a) *A historic decline in foreign aid: Preliminary 2025 ODA data*. Available at: https://www.oecd.org/en/data/insights/data-explainers/2026/04/a-historic-decline-in-foreign-aid-preliminary-2025-oda-data.html.

OECD (2026b) *Climate Finance Provided and Mobilised by Developed Countries in 2013-2024*. OECD Publishing (Climate Finance and the USD 100 Billion Goal). Available at: https://doi.org/10.1787/ab5eb9ad-en.

PM India (2024) *Cabinet approves PM-Surya Ghar: Muft Bijli Yojana for installing rooftop solar in One Crore households*. Available at: https://www.pmindia.gov.in/en/news_updates/cabinet-approves-pm-surya-ghar-muft-bijli-yojana-for-installing-rooftop-solar-in-one-crore-households/.

PRC (2025) *China accelerates reform of renewable power pricing to promote sustainable development*. State Council of the People's Republic of China. Available at: https://english.www.gov.cn/news/202502/10/content_WS67a9afb2c6d0868f4e8ef893.html.

Reuters (2025) 'China's solar power capacity growth to slow in H2 after pricing reforms', 13 August. Available at: https://www.reuters.com/sustainability/climate-energy/chinas-solar-power-capacity-growth-slow-h2-after-pricing-reforms-2025-08-13/.

Rising, J. *et al.* (2026) *The macroeconomic case for investing in climate adaptation*. London School of Economics and Political Science. Available at: https://doi.org/10.21953/RESEARCHONLINE.LSE.AC.UK.00137972.

Rystad Energy (2025) 'Global offshore wind poised for landmark 19GW of additions in 2025', 3 March. Available at: https://www.rystadenergy.com/news/global-offshore-wind-landmark-19gw.

SBTi (2026) *Standards and guidance*.

Systemiq, Blended Finance Taskforce and FSD Africa (2024) *Mobilising Domestic Capital to Drive Climate-Positive Growth*. Available at: https://www.blendedfinance.earth/domestic-capital-mobilisation.

UCLG ASPAC (2024) *Climate Change Outlook of Southeast Asia*. United Cities and Local Governments Asia-Pacific. Available at: https://www.asean-mayors.eu/wp-content/uploads/2024/11/2024_GCoM_SEA_Climate_Outlook_Report-1.pdf.

UITP (2025) *Global Metro Figures 2024*. International Association of Public Transport. Available at: https://www.uitp.org/wp-content/uploads/sites/7/2025/08/20250822_Global-Metro-Figures_Statistics-Brief_WEB.pdf.

UN DESA (2025) *Creation of the LDC category and timeline of changes to LDC membership and criteria | Department of Economic and Social Affairs*. Available at: https://www.un.org/development/desa/dpad/least-developed-country-category/creation-of-the-ldc-category-and-timeline-of-changes-to-ldc-membership-and-criteria.html (Accessed: 18 November 2024).

UN News (2026) *Middle East war: Energy crunch hits vulnerable nations*. Available at: https://news.un.org/en/story/2026/04/1167233.

UN OHRLLS (2025) *List of SIDS*. Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. Available at: https://www.un.org/ohrlls/content/list-sids (Accessed: 8 April 2025).

UNCTAD (2025) *UN list of least developed countries*. Available at: https://unctad.org/topic/least-developed-countries/list.

UNDRR (2025a) *Global Assessment Report on Disaster Risk Reduction 2025: Resilience Pays: Financing and Investing for our Future*. Erscheinungsort nicht ermittelbar: United Nations.

UNDRR (2025b) *Special report on the use of technology for disaster risk reduction*. United Nations Office for Disaster Risk Reduction. Available at: https://www.undrr.org/publication/documents-and-publications/special-report-use-technology-disaster-risk-reduction#downloads.

UNEP (2024) *Emissions Gap Report 2024: No more hot air … please! With a massive gap between rhetoric and reality, countries draft new climate commitments*. Nairobi: United Nations Environment Programme. Available at: https://doi.org/10.59117/20.500.11822/46404.

UNEP (2025) *Global Methane Status Report*. Paris: United Nations Environment Programme. Available at: https://doi.org/10.59117/20.500.11822/48921.

UNEP and CCAC (2021) *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions*. Nairobi. Available at: https://www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions (Accessed: 25 June 2025).

UNEP and CCAC (2022) *Global Methane Assessment 2030: Baseline Report*. Nairobi. Available at: https://www.unep.org/resources/report/global-methane-assessment-2030-baseline-report (Accessed: 25 June 2025).

UNFCCC (2024) *New collective quantified goal on climate finance*. United Nations Framework Convention on Climate Change. Available at: https://unfccc.int/sites/default/files/resource/NCQG_4.pdf.

UNOSSC (2026) *Strategic Framework (2026–2029)*. United Nations Office for South-South Cooperation. Available at: https://documents.un.org/doc/undoc/gen/n25/335/71/pdf/n2533571.pdf.

UNSD (2025) 'Standard country or area codes for statistical use (M49)'. Available at: https://unstats.un.org/unsd/methodology/m49/.

Weinand, J.M. *et al.* (2023) 'Global LCOEs of decentralized off-grid renewable energy systems', *Renewable and Sustainable Energy Reviews*, 183, p. 113478. Available at: https://doi.org/10.1016/j.rser.2023.113478.

WMO (2025) *State of the Global Climate 2025*. 2025th edn. World Meteorological Organization. Available at: https://doi.org/10.59327/WMO/S/CRI/SOC/1.

Wood Mackenzie (2025) 'Renewable levelized cost of electricity competitiveness reaches new milestone across global markets in 2025'. Available at: https://www.woodmac.com/press-releases/renewable-levelized-cost-of-electricity-competitiveness-reaches-new-milestone-across-global-markets-in-2025/.

World Bank (2025) *WDI - The World by Income and Region*. Available at: https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html (Accessed: 8 April 2025).

World Bank (2026) *From pipes to people: How Indian cities reimagine modern water and sanitation*. Available at: https://blogs.worldbank.org/en/water/from-pipes-to-people--how-indian-cities-reimagine-modern-water-a.

WRI (2023) *Developing Countries Won't Beat the Climate Crisis Without Tackling Rising Debt*. World Resources Institute. Available at: https://www.wri.org/insights/debt-climate-action-developing-countries.

Yu, C.-H. *et al.* (2026) 'Climate finance as a catalyst for peace', *Climate Policy*, pp. 1–15. Available at: https://doi.org/10.1080/14693062.2026.2645656.

Zero Carbon Analytics (2024) *Reforming climate finance: Unlocking funds from multilateral development banks*. Available at: https://zerocarbon-analytics.org/insights/briefings/reforming-climate-finance-unlocking-funds-from-multilateral-development-banks/.

Annex I:
Methodological notes

Enhancing sources and methods for climate finance tracking

The following methodological improvements and data coverage expansions represent the main changes to this year's GLCF tracking and are the updates that most significantly affected the scale, attribution, and comprehensiveness of the climate finance estimates.

- **Coverage expansion:** Wider market coverage than previous iterations.
- **Methodological improvements:** Enhanced processing of key data sources and improved data gap-filling calculations, providing more granular and accurate information.

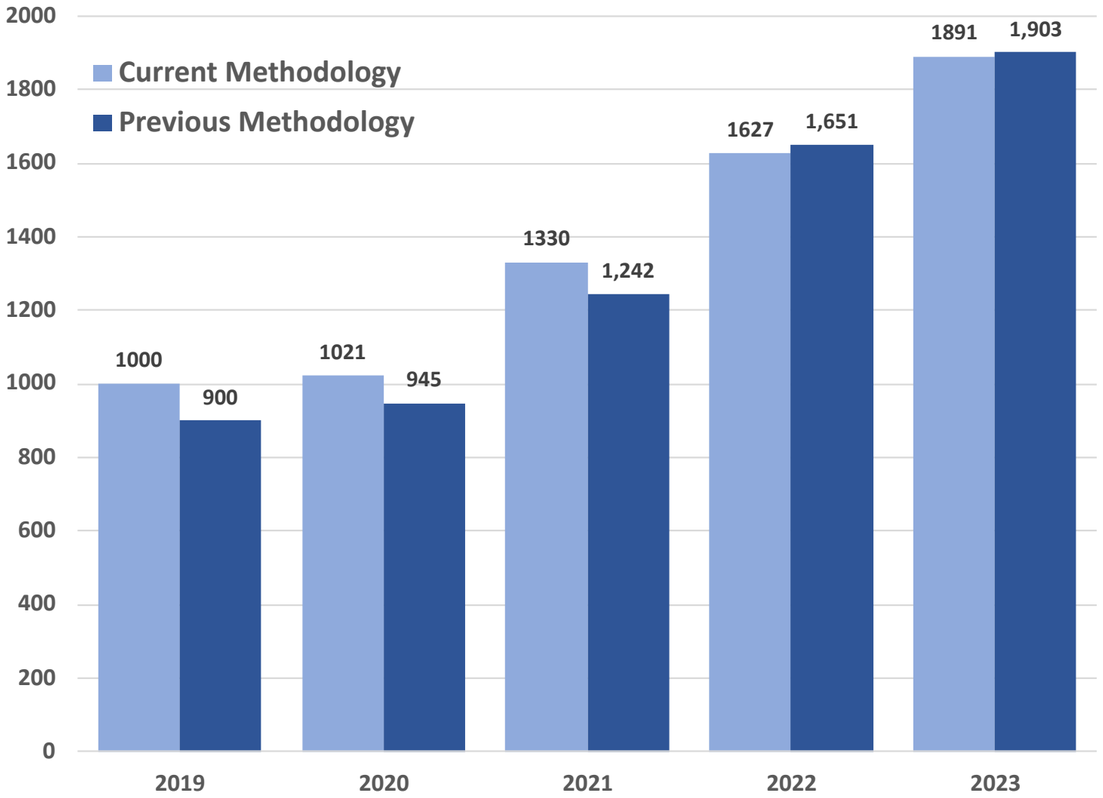
Table A1: Main changes to this year's GLCF tracking methodology

SECTOR	TOPIC	DESCRIPTION
Buildings & infrastructure	Energy efficiency	Incorporated revised historical estimates from the International Energy Agency, resulting in retrospective changes to previously reported values.
Cross-sectoral	DFI surveys	Added new EMDE DFIs to CPI's proprietary climate finance dataset for GLCF.
Cross-sectoral	Green bonds	Improved the allocation of green bond finance across years following engagement with Luxembourg Green Exchange, now counting flows from the year of issuance and only for amounts allocated in the latest use-of-proceeds documentation.
Energy systems	Renewable energy generation	Updated BNEF processing to better assign finance to institutions and adapted the debt-equity allocation methodology in line with updated data availability.
Energy systems	Hydrogen	Refined hydrogen finance methodology to better capture government incentives and added new electrolysis capacity multipliers to avoid double counting renewable energy generation.
Energy systems	Energy storage	Updated assumptions on energy storage and battery installation costs, including new capacity multipliers for lithium projects and improved regional cost differentiation.
Energy systems	Small-scale solar panels	Improved cost assumptions for residential and commercial small-scale solar, including new debt-equity financing and loan rates for larger economies.
Energy systems	Biofuels	Expanded coverage of biofuels financing using BNEF Energy Transition data.
Industry	Energy efficiency	Incorporated revised historical estimates from the International Energy Agency, resulting in retrospective changes to previously reported values.
Transport	4 wheelers	Expanded country coverage of finance for four-wheeler vehicles.
Transport	2–3 wheelers	Expanded country coverage of finance for 2–3 wheeler vehicles.
Water	Water projects	Expanded the GWI Private Sector Participation (PSP) methodology from desalination-only coverage to all PSP projects by applying a climate relevance assessment based on project scope and country-level access to safely managed water and sanitation services to identify adaptation and mitigation benefits.

New data sources and methods

New data sources and methods have been applied retroactively for consistency and comparability.

Figure A.1: Historical comparison of previous and current methodology



Note: "Previous Methodology" refers to financial flows reported in the GLCF 2025 (CPI, 2025c).

Isolating crosscutting action in dual-benefit finance

Dual-benefit finance covers a broad spectrum of financing arrangements. The category includes crosscutting projects with components that are inextricably linked and deliver across mitigation and adaptation. For example, mangrove restoration improves carbon sequestration while also boosting flood defenses, or using low-carbon materials in construction helps to maintain healthy temperatures in homes while protecting against weather extremes.

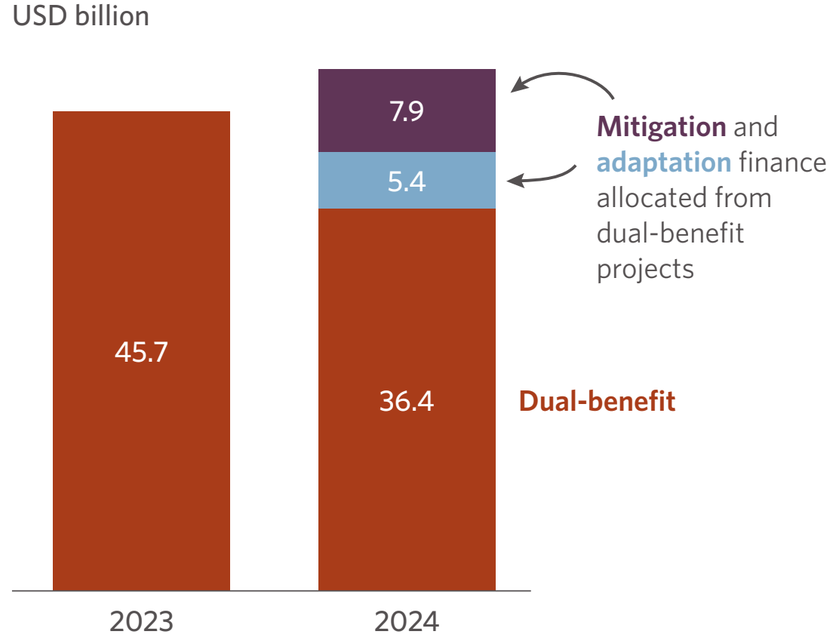
METHODOLOGY UPDATE

Historically, the GLCF methodology has also categorized some projects with more discrete adaptation and mitigation components as dual-benefit finance. For example, a renewable energy installation with a weatherproofing element could have been entirely counted as a dual-benefit flow.

For the first time, this report allocates distinct mitigation and adaptation finance components of individual projects to their respective use categories, rather than to dual-benefit finance, for 2024 data. This effort aims to distinguish between 'true' dual-benefit flows, and adaptation and mitigation investment components that are discrete and separable parts of projects.

Figure A.2 shows that this change reduces dual-benefit finance for 2024, from USD 45.7 billion in 2023 to USD 36.4 billion in 2024. This results in USD 7.9 billion of emissions-reduction finance being more accurately allocated as mitigation finance, and USD 5.4 billion more accurately allocated as adaptation finance. While efforts will continue to further break down dual-benefit finance into constituent mitigation and adaptation components, some financed activities cannot be broken down into mitigation and adaptation investment amounts.

Figure A.2: Dual-benefit finance and components of mitigation and adaptation finance



Understanding CPI data coverage vs other sources

Headline figures of climate and energy transition finance vary by institution (e.g., between the OECD, UNFCCC, IEA, and CPI). This can largely be attributed to differences in coverage and definitions of sectors and solutions, as well as underlying methodologies (ECB, 2025). Key differences compared to the IEA (2025b, 2025a) are summarized in Table A.2, with explanations provided where publicly available. Further explanations in are provided in the GLCF Methodology 2025, with the 2026 methodology to be released later this year.

Table A.2: CPI data coverage vs. IEA (USD billion, 2024)

Boundaries/Sectors	CPI	IEA	Notes
Renewable power	899	760	CPI numbers represent financial commitments and deals into RE projects, whereas IEA tracks capital expenditure.
Nuclear and other clean power	Not in scope	72	CPI excludes nuclear investment
Energy storage	51	57	
Low emission fuels	Tracked in renewable power	20	For IEA, this total consists of bioenergy, low emission H2 based fuels, CCUS on fossil fuels and direct air capture. Exclusion criteria apply to those included in CPI's Renewable Power.
Electricity grids	1	388	Many taxonomies consider investments in energy transmission and distribution networks as climate finance if they enable greater integration of renewable energy. However, it is often challenging to determine whether a specific grid investment directly supports RE integration. As a result, CPI's tracking only covers projects that connect exclusively to renewable energy power.
Electricity grids – New grids and asset replacement	121		See Annex II - p. 75 for details.
Energy Efficiency and Other End-Use – Buildings and Industry	386	418	IEA tracks investment into energy efficiency, electrification, and renewables for end uses in buildings, transport and industry. CPI tracks renewables under renewable power.
Transport	492	312	IEA tracks the incremental cost of efficient vehicles. CPI counts the full cost of low-carbon transport: EVs, rail and public transport, waterways, and transport-oriented urban development and infrastructure.
Transport - metro	102		See Annex II - p. 76 for details.
Other Energy, Industry and Buildings & Infrastructure mitigation	2	Not in scope	For example, policy and national budget support and capacity building for mitigation.
Fossil fuels	Not in scope	1,201	
Adaptation finance	64	Not in scope	
Adaptation finance – households	17-25		See Annex II - p. 77 for details.
Dual-benefit finance	36	Not in scope	
AFOLU mitigation	8	Not in scope	
Waste and wastewater Mitigation	21	Not in scope	
Other cross-sectoral mitigation	45	Not in scope	
Total	**2,008**	**3,232**	CPI tracks financial commitments. IEA tracks capital expenditures.
Total ex. fossil fuel	**2,008**	**2,031**	
Total including new CPI estimations	2,248-2,256		

Data gaps persist

The GLCF offers the most comprehensive overview of global climate finance flows, providing crucial insights into the resources dedicated to addressing climate change. Our analysis focuses on primary financing directed to real economy sectors that actively contribute to reducing GHG emissions and enhancing climate resilience.

Data availability continues to pose limitations for the capture of domestic governments' climate finance and South-South flows, as well as private investment in sectors beyond energy and for adaptation. These gaps can be reduced through improved reporting and tracking by domestic and private climate finance actors, spurred by regulations for mandatory and standardized disclosure. To resolve these data gaps, CPI is continuously making methodological improvements to enhance its data quality and analysis (see Annex I – p. 67).

Additional finance has been tracked through new and updated methodologies, as shown in Annex II: Complementary Data. These figures are not incorporated in this report's aggregate tracking due to the incompleteness of data but may be included as data quality improves.

Figure A.3: Data coverage in the GLCF (USD billion, 2024)

	Private	Public International	Public Domestic	Unknown
MITIGATION	1,232	134 ↑	541 ↑	<1
Energy systems	604 ↑ + 65	48	300 + 55	N/A
Transport	381 ↑	23	89 ↑	N/A + 55
Buildings & infrastructure	233	21	105	N/A
Agriculture, Forestry & Other Land Use	1	3	3	N/A
Industry	9	4	15	N/A
Waste	3	1	3	N/A
Water & wastewater	1 ↑	4	10	<1
Other & cross-sectoral		30	15	N/A
ADAPTATION	4 + 17-25	41 ↑	19 ↑	<1
Water & wastewater	3 ↑	8	12	<1
Agriculture, Forestry & Other Land Use	<1	5	<1	N/A
Other & cross-sectoral	<1	21	7	N/A
DUAL BENEFITS	9 ↑	22 ↑	5 ↑	<1
Water & wastewater	2	3	2	<1
Agriculture, Forestry & Other Land Use	1	4	3	N/A
Buildings & infrastructure	3	1	<1	N/A
Waste	3	1	<1	N/A
Other & cross-sectoral	<1	12	1	N/A

USD billion Tracked; Limited Tracking; Under methodological iteration by CPI for inclusion in future CPI reports; Not Tracked; ↑ Complemented with new data sources in 2024

Note: In addition to the sectors listed above, the information and communications technology sector made up USD 2 billion of climate mitigation finance in 2024.

South-South flows methodology

In the previous GLCF report (CPI, 2025d), CPI applied an EMDE ownership threshold to determine whether and which multilateral institutions' finance should be counted as South-South flows. Under that methodology, only institutions where EMDEs held an ownership share exceeding 51% were eligible for inclusion, with flows then discounted proportionally to reflect this ownership share.

While this approach prevents the counting of capital sourced from non-EMDE shareholders, it introduced a small downward bias in cases where EMDEs hold primary decision-making authority and are the dominant source of capital, flows were still discounted below 100% if there was a minority shareholding from non-EMDEs.

Following stakeholder consultations, CPI has revised the methodology to better reflect the character of EMDE leadership within multilateral institutions. Rather than applying a single ownership-based discount, institutions are now classified into one of three categories, each with a distinct accounting treatment. Classification is based on three criteria assessed in combination: EMDE ownership share, origin of capital, and the institution's stated mandate. Table A.3 sets out the criteria, accounting methodology, and example institutions for each category.

Table A.3: South-South flows methodology

Multilateral institution category	Classification criteria	% of climate finance flows counted as South-South	Examples
EMDE-led	• EMDE ownership >90%[21] • Capital predominantly sourced from EMDEs • EMDE-focused mandate	100%	Development Bank of Latin America (CAF); New Development Bank (NDB); Asian Infrastructure Investment Bank (AIIB)
Non-EMDE-led	• EMDE ownership share ≤50% • Capital predominantly from non-EMDE shareholders • Limited or no EMDE-focused mandate	0%[22]	International Bank for Reconstruction and Development (IBRD); European Investment Bank (EIB)
Mixed-ownership	• EMDE ownership of 51% to 89% (inclusive) • Partial EMDE capital sourcing • No dominant classification under either category above	Flows discounted proportionally, based on EMDE ownership share	African Development Bank (AfDB); Central American Bank for Economic Integration (CABEI)

21 The one exception to this rule is the Asian Infrastructure Investment Bank, which is included as an "EMDE-led" multilateral institution despite EMDE ownership below 90%. This is due to the leading role of China in the institution's governance and origin of capital.
22 While this means EMDE capital contributions channeled through non-EMDE-led multilateral institutions are not captured, this boundary reflects the principle that south-south cooperation requires EMDE decision-making authority, not solely financial participation. Where non-EMDEs retain majority voting rights, the strategic direction of flows cannot be attributed to EMDEs, and inclusion would risk conflating minority shareholding with ownership of the cooperative agenda.

2025 climate finance projections methodology

The preliminary estimates for climate finance in 2025, as shown on pages 11-12, were produced following a three-tiered methodology, designed to maximize empirical grounding while maintaining full sectoral and regional coverage:

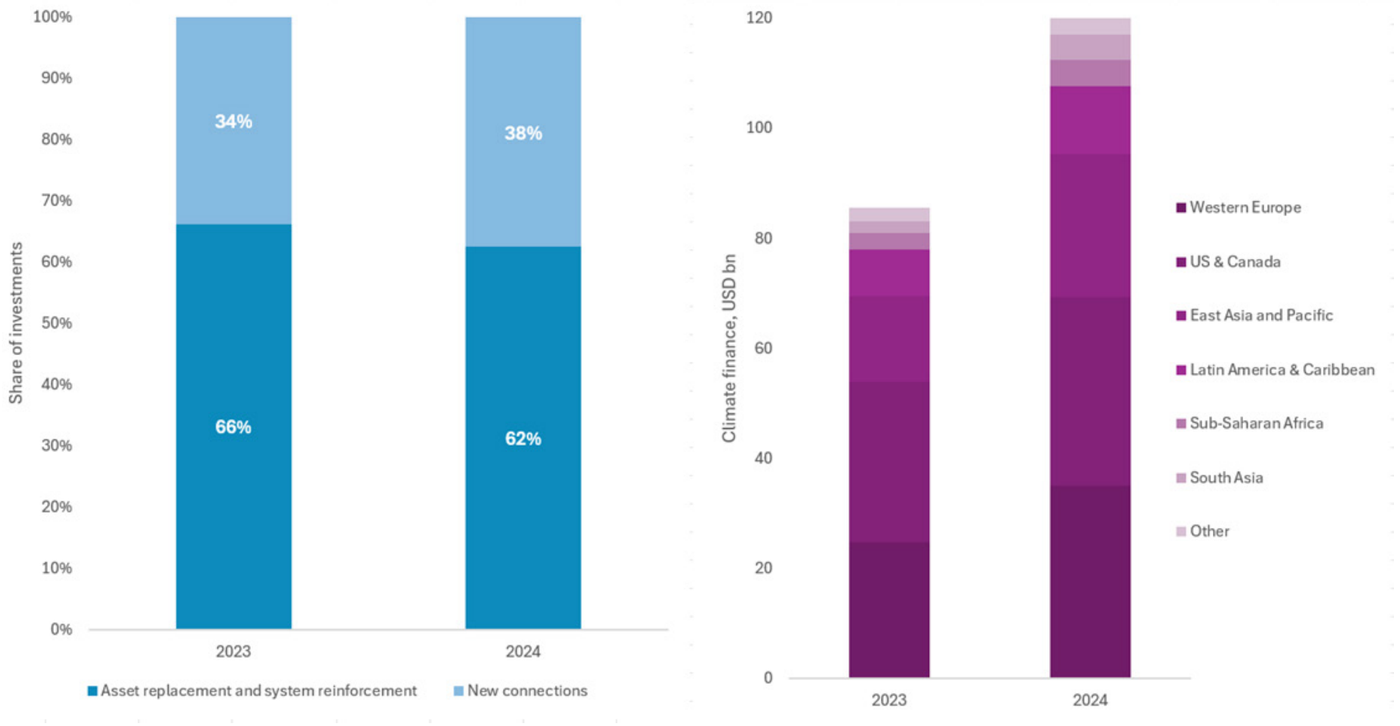
- **Tier 1 - Tracked Flows:** CPI processed all primary datasets where partial or full 2025 data was available. Five of the 22 datasets included in the 2026 GLCF had full data coverage, these accounted for 22% of climate finance between 2019-24. Where only partial 2025 data was available, the data was processed and included as "tracked" flows. However, headline projections were calculated using Tier 2 or Tier 3 methods, as partial data could not reliably represent overall trends for the relevant sector, solution, region, or institution.
- **Tier 2 – Aggregate Flows:** Where complete primary data was available, CPI conducted systematic desk-based research to identify credible growth rates or finance levels by sector, solution, region, or institution. The most granular applicable data point was prioritized where possible. Where external estimates differed significantly from CPI's historical tracked values, a "tracked rate" adjustment was applied to maintain methodological consistency. This adjustment discounted external data according to its historical divergence from CPI-tracked flows.
- **Tier 3 - Interpolation:** Where neither primary data nor aggregate data was available, CPI applied a rigorous interpolation methodology to project historic values into 2025. A conservative approach, consistent with CPI's tracking principles, was applied. In instances where strong interpolation was not possible, 2024 climate finance values were held flat. Interpolation was used only for a small subset of data points, filling the remaining gaps after Tier 1 and Tier 2 methods had been applied.

Annex II: Complementary data

This annex presents methodological updates aimed at tracking important areas of climate finance: energy transmission and distribution, metro rail, and household adaptation investment. As the underlying methodologies are still evolving, presented data is provisional and not included in the GLCF main tracking figures, though it may be integrated in future editions. Feedback for improvement is appreciated.

Transmission and distribution: from generation to grid integration

Figure A.4: T&D investments breakdown



Given the complexity of distinguishing climate-aligned investments from broader grid expenditures, these estimates have not yet been integrated into the GLCF dataset. They will be incorporated in future editions once the methodology has been further tested and refined. See Section 3.3.3 of the GLCF Methodology 2025 for details.

Grid finance is rising sharply as transmission and distribution (T&D) becomes a core enabler of the energy transition. Using the same methodology introduced in last year's GLCF (CPI, 2025c), tracked climate-relevant T&D finance increased from USD 86 billion in 2023 to USD 121 billion in 2024, a rise of around 41%.

The increase in T&D finance reflects both system reinforcement and the need to connect new renewable power generation. Asset replacement and system reinforcement remained the larger component, rising from USD 57 billion to USD 75 billion, but its share of tracked T&D finance fell from 66% to 62%. By contrast, new connection investment rose faster, from USD 29 billion to USD 45 billion, increasing its share from 34% to 38%.

Market-level data helps explain this shift. In several major markets, renewable energy accounted for most added capacity in 2024, including 95% in the US, 77% in China, 83% in India, 96% in Germany, 100% in the UK and Spain, and 92% in Brazil. This suggests that new connection finance is increasingly supporting the integration of renewable power capacity, even in markets where renewables are not yet dominant in electricity generation.

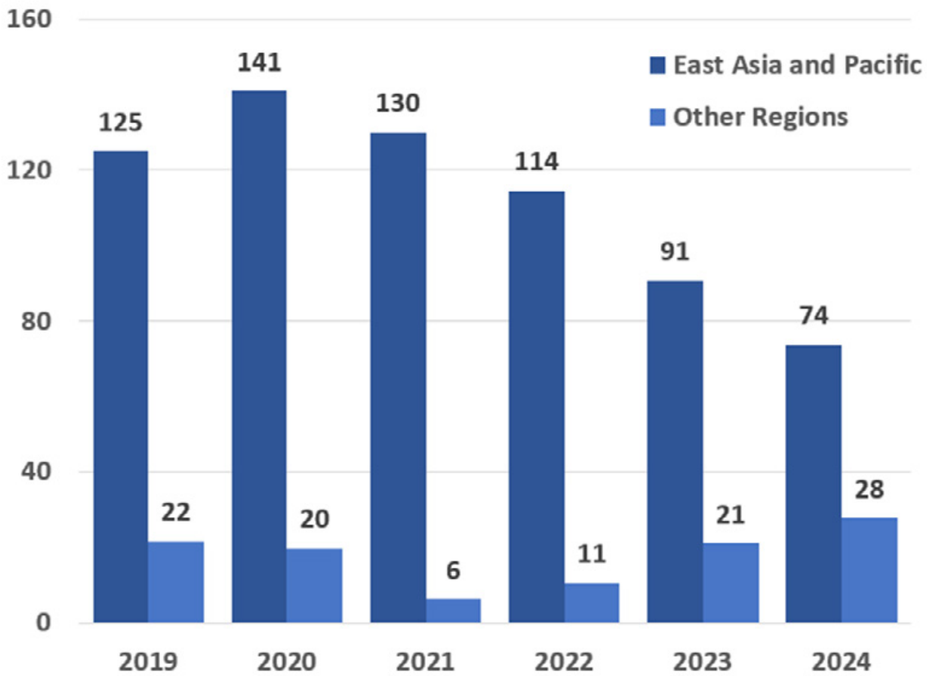
Two market dynamics are visible. In the US, China, and India, renewable generation shares remain more modest, at around 22%, 30% and 20%, respectively, but recent capacity additions are strongly renewable-led. In these markets, new connection finance is likely supporting the next phase of renewable integration. By contrast, markets such as Germany, the UK, and Spain combine higher or rising renewable generation shares with very high renewable shares of added capacity. In these systems, T&D finance is increasingly needed not only to connect new generation, but also to reinforce networks, manage congestion, and maintain reliability as variable renewable electricity becomes a larger part of the system.

Other markets show why reinforcement is also climate-relevant. In countries such as Brazil (with around 89% of renewables in the energy mix) and Canada (66%), asset replacement and system reinforcement support the reliability, expansion, and resilience of power networks that are already renewable-dominant.

Literature also emphasizes that grids are becoming a constraint on the pace of decarbonization (IEA, 2023). The overall picture is therefore one of rising grid finance, with investment shifting not only toward connecting new renewable capacity, but also toward reinforcing systems that are already carrying higher shares of renewable electricity.

Metro rail

Figure A.5: Metro investments by region, 2019-2024, USD billion



Note: Other Regions includes MENA, Western Europe, Latin America & Caribbean, Central Asia & Eastern Europe, US & Canada, and Sub-Saharan Africa.

CPI is exploring the inclusion of climate-related metro finance, given the critical role of metro systems in supporting low-carbon urban development. By providing a lower-emission alternative to private vehicle use, metro systems can reduce traffic congestion, improve air quality, and enable more sustainable patterns of urban mobility.

The estimates presented in Figure A.5 combine average cost data for track and rolling stock from the Transit Costs Project (Levy *et al.*, 2025) with data on newly added track length and rolling stock intensity (carriages per kilometer) from the International Association of Public Transport (UITP, 2025). Together, these datasets are used to estimate total metro investment by region and year. As UITP data on newly added tracks for 2024 was not yet available at the time of analysis, 2024 values were linearly extrapolated using the latest three years of available data (2021–23).

Preliminary estimates indicate global metro expenditure of approximately USD 102 billion in 2024. Since 2019, 86% of this investment has occurred in East Asia and the Pacific. However, estimated investment levels in the region have declined since 2020, reflecting a broader transition in many cities from rapid system expansion toward multi-line network operations, operational efficiency improvements, and the extension and optimization of existing metro networks (Lu *et al.*, 2025).

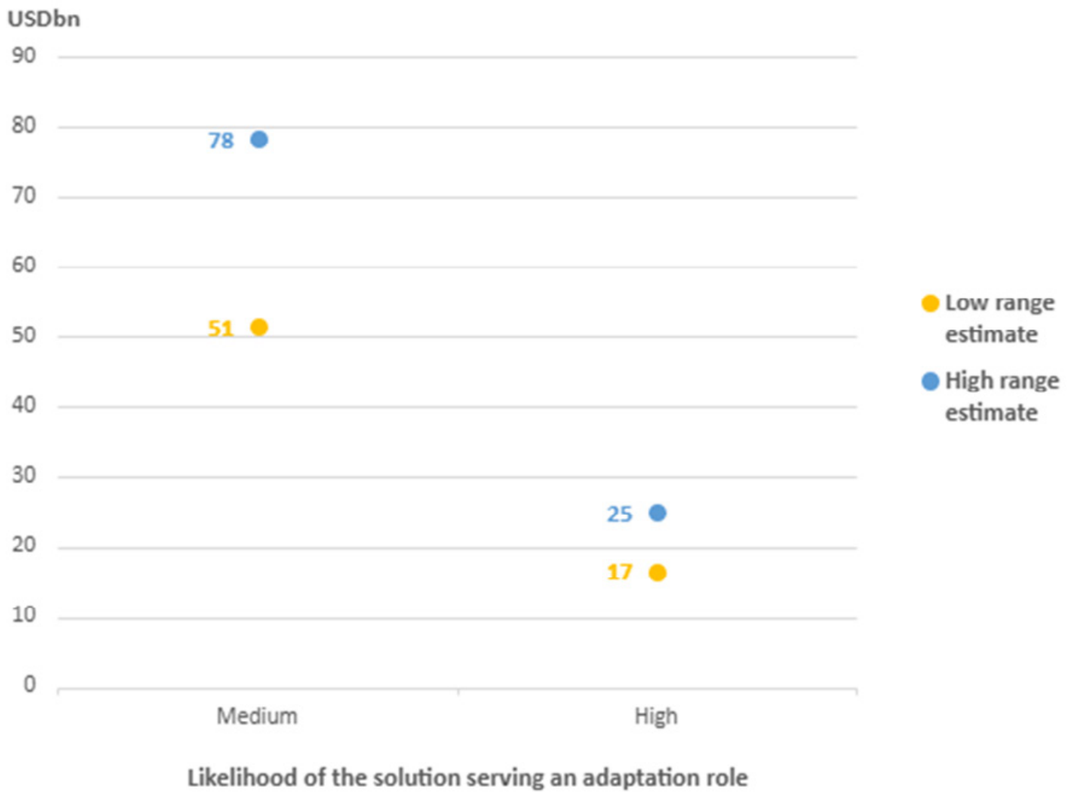
Further research is underway to strengthen the methodology, including:

- introducing country-level investment estimates
- improving extrapolation methods for years with missing newly added track data, which UITP publishes on a triennial basis
- incorporating emission reduction attribution ratios to estimate modal shifts toward metro transport, assess net emissions impacts from metro construction and operation, and determine the share of total investment that can be classified as climate finance.

This methodology is under development and the provisional data not included in the GLCF main tracking figures. See Section 3.3.5 of the GLCF Methodology 2025 for details.

Household-level adaptation finance

Figure A.6: Estimated annual finance from households/individuals by adaptation likelihood



Household adaptation finance remains difficult to quantify, with initial studies producing a wide range of estimates. A market sizing analysis of 73 household adaptation-related products with medium or high adaptation likelihood yielded initial estimates of annual household and consumer adaptation finance, ranging from USD 17 billion to USD 78 billion, based on sources published between 2023 and 2026. This draws upon analysis of household adaptation finance first carried out for CPI's Tracking and Mobilizing Private Sector Adaptation Finance report in 2024.

The pool of products assessed in the market sizing exercise represents those with some likelihood of being used as adaptation solutions, such as surface drains, rainwater harvesting systems, and wildfire insurance. These products were classified by their likelihood of serving adaptation purposes, rated as low, medium, or high likelihood. In this year's exercise, only medium and high adaptation likelihood levels were counted in the market sizing analysis. The exclusion of low-likelihood solutions results in a decrease in the number of products covered from 112 in 2025 to 73.

Due to significant variation in the estimates of the volume of household disbursements between solutions, the figures are expressed as a range. Estimates of investment in products with medium adaptation likelihood ranged from USD 51 billion to USD 78 billion. Those for products with high adaptation likelihood ranged from USD 17 billion to USD 25 billion. In comparison with the assessment for the GLCF 2025, the updated estimates reflect a refined methodology aimed at narrowing the scope of solutions included in the analysis. As a result, the updated estimates are lower, reflecting both the narrower scope of eligible solutions and the more targeted attribution of adaptation-related expenditure.

More methodological work is needed to expand data coverage and refine adaptation likelihood assessments. As the data improves, CPI intends to expand the capture of private adaptation finance in a manner consistent with the GLCF principles and methodology.

This methodology is under development and feedback for improvement is appreciated. The presented data is provisional not included in the GLCF main tracking figures. See Section 3.4 of the GLCF Methodology 2025 for details.