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Global Landscape of Climate Finance 2015

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A CPI Report

Authors

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Descriptors

Sector	Climate Finance
Region	Global
Keywords	Climate Finance, Private Finance, Public Finance, Tracking, Climate Policy
Related CPI Reports	<ul style="list-style-type: none">• The Landscape of Climate Finance 2011• The Landscape of Climate Finance 2012• The Global Landscape of Climate Finance 2013• The Global Landscape of Climate Finance 2014
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About CPI

Climate Policy Initiative works to improve the most important energy and land use policies around the world, with a particular focus on finance. An independent organization supported in part by a grant from the Open Society Foundations, CPI works in places that provide the most potential for policy impact including Brazil, China, Europe, India, Indonesia, and the United States.

Our work helps nations grow while addressing increasingly scarce resources and climate risk. This is a complex challenge in which policy plays a crucial role.



Global Landscape of Climate Finance 2015

As 2015 draws to a close, there is a strong hope that the Paris Climate Summit could represent a turning point in the global fight against climate change. A transformation of global financial and energy systems is needed to make a low-carbon and climate-resilient global economy the ‘new normal’, and to support the implementation of the climate actions already proposed by more than 150 countries.¹

Global climate finance flows reached at least USD 391 billion in 2014 as a result of a steady increase in public finance and record private investment in renewable energy technologies.

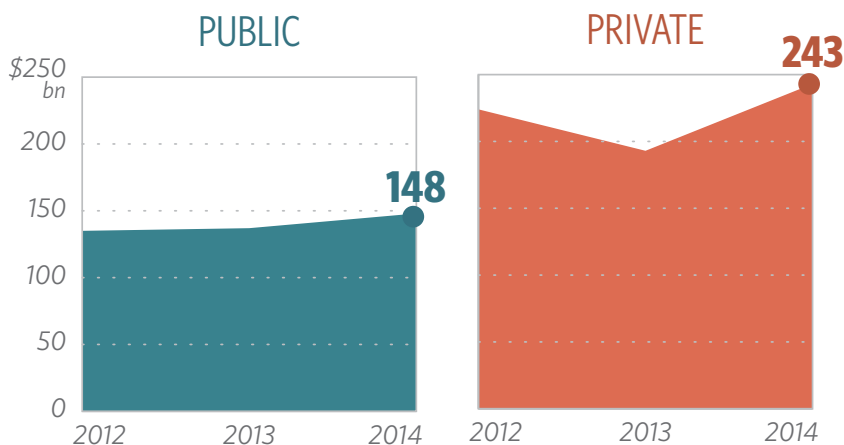
The *Global Landscape of Climate Finance 2015* presents the most comprehensive information available about which sources and financial instruments are driving investments, and how much climate finance is flowing globally. It aims to provide an updated picture on how, where, and from whom finance is flowing toward low-carbon and climate-resilient actions globally, and to improve understanding of how public and private sources of finance interact. With this global outlook, it provides a complementary, though broader perspective to a recent report prepared by CPI in collaboration with the OECD (OECD, 2015) to track progress towards commitments made by developed country Parties to the UNFCCC to mobilize USD 100 billion annually for climate interventions in developing countries by 2020.

After levelling off in 2012, and declining in 2013, the amount of climate finance invested around the world in 2014 increased by 18%, from USD 331 billion to an estimated USD 391 billion.²

Public climate finance is on the rise, with contributions by governments and intermediaries reaching at least USD 148 billion (range of USD 144–152 billion) in 2014, an 8% increase from 2013 levels, and a 10% rise from 2012. Public actors are increasingly recognizing the benefits of climate action for achieving their goals, and that managing climate change is in their national economic interest.

Private investment in renewable energies grew by 26% in 2014 after two years of decline, resulting in record volumes of new installed capacity (103 GW). With USD 243 billion, private investment remained the largest source (62%) of global climate finance captured in *Landscape 2015*. Policy and market signals, predictable and stable profits, and the strategic potential of investments are key determinants of private actors’ financing behavior. Obtaining the requisite technical expertise, gaining access to finance, and managing project risks remain key challenges for enabling shifts in the patterns of private climate finance investments.

Figure 1. The evolution of total public and private finance, 2012-2014, in USD billion



Source: CPI analysis.

1 So-called ‘Intended Nationally Determined Contributions (INDCs)’.
 2 Figures represent annual flows for the latest year available, variable according to the data source. Flows are rounded to produce whole numbers and, as a result, the figures may not add up exactly. Throughout the document, the mid-point is presented where ranges of estimates are available.

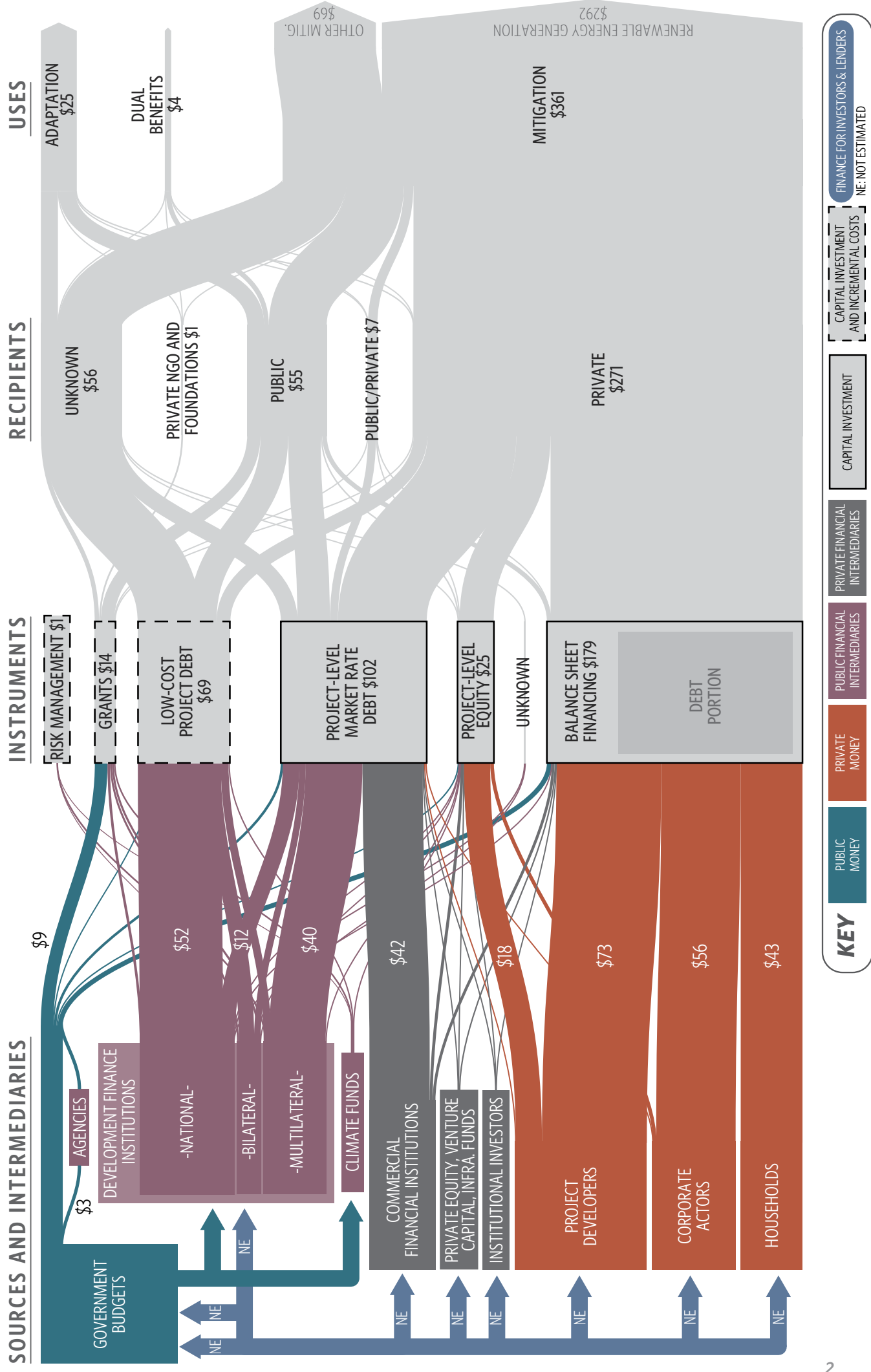
Figure 2. The Global Landscape of Climate Finance 2015

GLOBAL LANDSCAPE OF CLIMATE FINANCE 2015

Climate Policy Initiative

USD 391^{BN} TOTAL

Landscape of Climate Finance 2015 illustrates climate finance flows along their life cycle for the latest year available, mostly 2014, in USD billions



Sources and Intermediaries

PUBLIC SOURCES AND INTERMEDIARIES

In 2014, public actors and intermediaries committed USD 148 billion, or 38% of total climate finance flows.

Public actors including governments, bilateral aid agencies, Climate Funds, multilateral, bilateral and national Development Finance Institutions (DFIs) drive the global climate finance system by reducing the costs and risks of climate investments, strengthening knowledge and technical capacity, and building the track record needed to enhance confidence in such investments.

In 2014, DFIs' commitments reached USD 131 billion - 33% of total climate finance flows - the highest one-year total since we began mapping flows of global climate finance in 2011, with the possibility that the actual rise is higher than what is captured by our numbers.³

National DFIs contributed more than half of total DFI flows, USD 66 billion, mostly through concessional loans. Multilateral DFIs committed USD 47 billion⁴ while bilateral DFIs provided almost USD 17 billion. 2014 data signal an upward trend in DFIs' commitments notwithstanding year-to-year fluctuations.

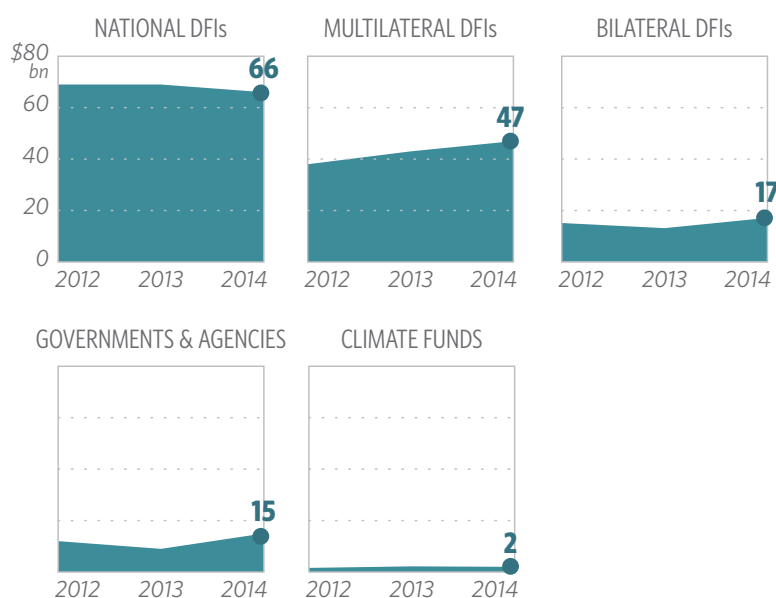
³ Figures do not fully reflect the evolution of DFIs' climate actions because due to a lack of 2014 data for a group of national DFIs at the time of preparing the study (April-October 2015), we assumed that a number of national and sub-regional DFIs committed the same amount as in 2013 (USD 83 billion) (see methodology document, [available here](#)). The increase observed in our numbers could be higher considering that, for instance, according to CDB (2014 and 2015) the Chinese Development Bank - which is one of the banks for which 2014 data was unavailable at the time of writing - increased its green finance lending by 18% in 2014.

⁴ Our number is not the same as the one in the MDBs joint report (AfDB et al. 2015). This is because of the different geographic coverage, the inclusion of the Development Bank of Latin America (CAF) among the multilateral DFIs, and the exclusion of external resources managed by MDBs and of financing extended in the form of risk management instruments; (see methodology document, [available here](#)).

Climate finance commitments represent a growing share of DFIs' business volume, highlighting that climate change considerations are increasingly integrated into their operations. For the DFIs surveyed, climate finance commitments ranged from 11% to more than 50% (27% on average) of their total 2014 investments. These DFIs have made progress toward, or in some instances surpassed, their respective investment targets for climate action, which range between 20% and 50% of new annual investments.⁵ Some of these DFIs recently announced more ambitious targets,⁶ and one multilateral DFI reported that investments in renewables overtook those for thermal power generation for the first time in 2014.⁷

Multilateral and national Climate Funds approved around USD 2 billion for projects with adaptation and mitigation benefits. The longer term trend shows that their funding commitments have grown notably since 2011,⁸ and the expectations are that this trend is likely to continue considering that the Green Climate Fund (GCF) is set to fund its first projects.⁹

Figure 3. Breakdown of total public finance by actor, 2012-2014 in USD billion



Source: CPI analysis

⁵ See e.g. (IFC, 2015a); AFD (2015) and EBRD (2015a).

⁶ See ADB (2015); AfDB (2015); EBRD (2015b) and IDB (2015).

⁷ See EBRD (2015a).

⁸ See Section 4 of the methodology document, [available here](#).

⁹ In November 2015, at its 11th meeting, the GCF's Board approved funding for eight proposals. See GCF (2015).

We captured a further **USD 15 billion on average (USD 12-19 billion) of direct public contributions from governments, ministries, and bilateral agencies to climate projects**, mostly directed to low- and middle-income countries.¹⁰ In line with the trends observed in development aid,¹¹ these flows rose steadily over the past few years, both in absolute terms and as a proportion of total bilateral Overseas Development Assistance (ODA).¹²

PRIVATE SOURCES AND INTERMEDIARIES

Private actors, who range from single households to multinational corporations and their intermediaries,¹³ hold the resources to drive the shift towards low-carbon and climate-resilient growth.

In 2014 private actors invested USD 243 billion in renewable energies, up 26% on the previous year's total thanks to a record 98 GW of solar PV and onshore wind capacity installed.¹⁴ A significant portion of this increase reflects a 36% (USD 22 billion) growth in new renewable energy investment in China, which accounted for 34% of all private finance in 2014 and was driven by supportive government policies, incentives, and ambitious targets.¹⁵

Energy investments are achieving record levels of deployment at lower cost than ever. The 26% increase in investment observed in 2014 is noteworthy considering the decreasing costs for some technologies and that a strengthening dollar in 2014 likely diminished private climate finance estimates as measured in USD.¹⁶

10 The lower bound includes ODA and Other Official Flows marked as having 'climate change mitigation' or 'adaptation' as its principal objective; the upper bound includes activities with a 'significant' climate change objective as reported in OECD-DAC CRS (2015b). To avoid double counting, our estimate includes bilateral commitments only and excludes USD 8.4 billion of finance provided by bilateral DFIs (the French Development Agency [AFD], Japan International Cooperation Agency [JICA], and Germany's KfW Development Bank), or channeled through Climate Funds (USD 180 million), which are tracked in different sections of the Landscape.

11 With a total of USD 134.8 billion in net ODA in 2013, development aid rose by 6.1% in real terms marking a rebound after two years of falling volumes (OECD, 2014a).

12 In the period 2011-2013, total bilateral climate-related ODA commitments represented 15% of total bilateral ODA, compared to 11% over the 2008-2010 period (see OECD, 2015e).

13 See methodology document for further details, [available here](#).

14 Due to data availability issues, the Landscape 2015 only captures private investments in renewable energies sourced from BNEF (2015a), BNEF (2015b). Solar Heating Systems data are derived from Mauthner et al. (2015), REN21 (2015). See methodology document for details, [available here](#).

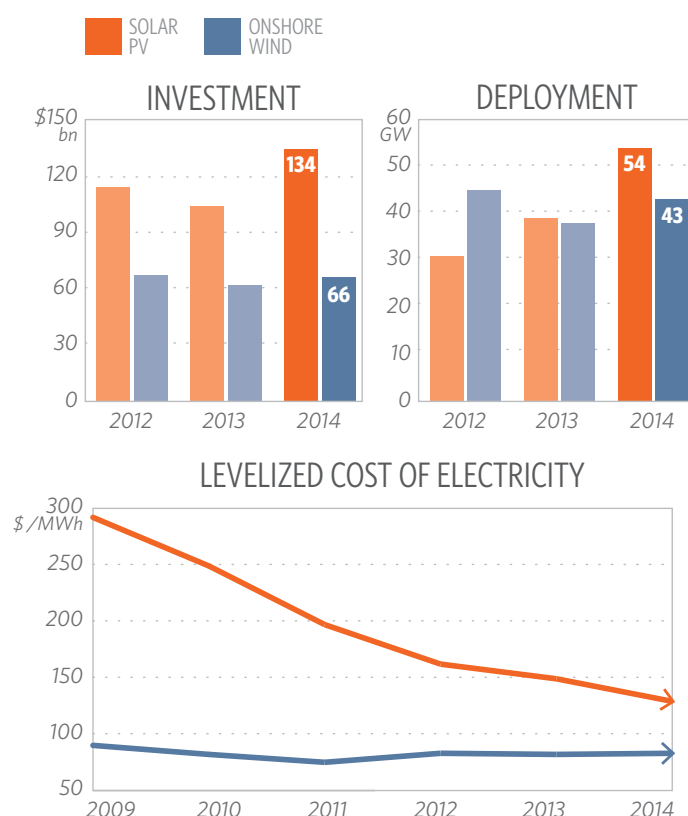
15 See FS-UNEP (2015) and REN21 (2015) for more details on the policies and targets in place.

16 BNEF (2015e).

Private finance increased by nearly USD 50 billion in 2014 driven mainly by a record amount of new renewable energy deployment, particularly in China.

Some renewable energy technologies are edging closer to becoming fully cost competitive with fossil fuels around the world. The levelized cost of electricity (LCOE) for utility-scale solar photovoltaics (PV), for instance, has fallen by around half in the past five years while solar PV module prices decreased by three-quarters between 2009 and 2014; the LCOE of onshore wind has fallen by about 8%-15% since 2009.¹⁷ Across all technologies, our data show that the unit costs of deployed capacity fell from USD 2.3 million/MW installed in 2013, to USD 2.2 million/MW in 2014.

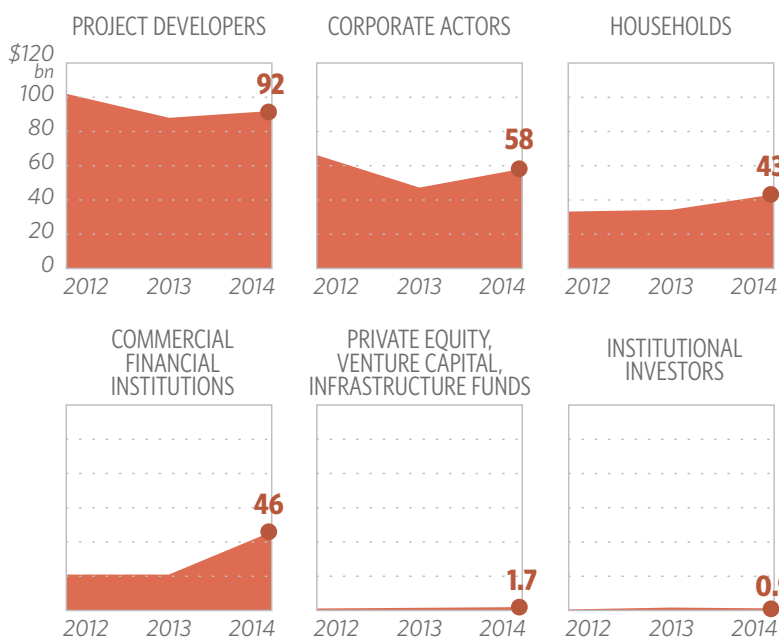
Figure 4. Private investments in onshore wind and solar PV, 2012-2014 in USD billion and LCOE (in USD/MWh)



Source: CPI analysis based on IRENA (2015); Bloomberg (2015) and BNEF (2015a; 2015b)

17 IRENA (2015) and Bloomberg (2015). For onshore wind, the lower bound refers to the global average, while the upper bound excludes Asia, China in particular, whose cost developments drive the global average LCOE (IRENA, 2015).

Figure 5. Breakdown of total private investment by actor, 2012-2014 in USD billion



Source: CPI analysis

Note: A significant portion of the increase observed in commercial banks' financing, is likely due to a change in BNEF's accounting for Chinese wind and solar projects in 2014, which now assumes certain debt-to-equity ratios when total project values are known, but financial details are not disclosed. These projects now assume a 70%/30% ratio for solar projects and an 80%/20% ratio for wind projects, reflecting their respective levels of state support (personal communications with BNEF staff in June 2015). This more accurate approach is likely to have more correctly classified debt finance that might once have been allocated to equity providers as "balance sheet financing" - BNEF's default classification when information is missing.

Project developers remained the most prominent private investor class in 2014, with USD 92 billion, or 38% of total private climate finance.¹⁸ Most project developers' financing targeted onshore wind projects (USD 45 billion or 49% of their total) and originated from, and was invested in, East Asia and the Pacific region (46%), Western Europe (25%) and the Americas (15%).

Corporate actors (non-energy corporations and manufacturers) invested USD 58 billion, up from 2013 by almost USD 11 billion, representing about 24% of overall private finance. Solar PV attracted most of their resources. Households' investments accounted for USD 43 billion (18% of the total), and grew roughly in the same proportion as overall private climate finance since 2013.¹⁹ Households invested almost their entire

18 The category "project developers" refers to dedicated energy project developers, engineering, procurement and construction (EPC) contractors, utilities and independent power producers.

19 The "household" category refers to family-level economic entities, high-net-worth individuals, and their intermediaries.

resources in solar PV and thermal systems, typically rooftop and other small-scale solar installations (< 1 MW). Mostly, such investments took place in China, Japan, and the US, driven by policy support schemes and declines in installation costs.²⁰

Commercial financial institutions provided USD 46 billion or 19% of total private climate finance in 2014, mostly for established-technology renewable energy projects (solar PV and onshore wind) in East Asia and Pacific and the Americas. Only 13% of their financing went to other technologies.

DFIs have increasingly involved commercial local banks in on-lending or co-financing energy efficiency, renewable energy, and climate-resilient projects by building their technical capabilities for assessing environmental standards and risks of such projects, as well as demonstrating their attractiveness.²¹ Commercial banks' engagement in climate action is critical given their important intermediary role in originating investments and lending to corporates and households for small-scale projects.

Finally, we also tracked about USD 2.6 billion of direct investment from private equity, venture capital, infrastructure funds, and institutional investors, slightly (USD 0.4 billion) lower than in 2013. While this is partly due to data limitations,²² institutional investors' direct primary investments in renewable energy projects remain small (less than USD 1 billion) compared to the scale of their assets globally and their growing fossil fuel divestment commitments.²³

20 See REN21 (2015); IEA (2015).

21 See e.g., the EBRD's Medium Size Sustainable Energy Finance Facility (MidSEFF) (EBRD, 2015c and Oliver and Stadelmann, 2015); the EBRD recent structuring of two credit lines with Turkish commercial banks for, inter alia, the provision of finance for water-efficient technologies (EBRD, 2014); or IFC's Climate Assessment for Financial Intermediaries investment (IFC, 2015b).

22 The global Landscape reports focus on project-level primary financing data thereby excluding activities that are more typical for institutional investors, such as re-financing, or equity and debt investments into project developers, manufacturing companies, and aggregation vehicles like funds. The UNSG (2015) states that leading Pension Funds (CalSTERS, APG and PensionDanmark) have collectively made about USD 29 billion in low-carbon investments, and are thereby on track to achieve the commitment made at the UN Secretary-General's Climate Summit in 2014 to allocate more than USD 31 billion to such investments by 2020. The report does not specify whether these USD 29 billion represent primary or secondary transactions.

23 OECD (2014b) estimates that in 2013 institutional investors, including public and private pension funds, insurance companies, Sovereign Wealth Funds, mutual funds and foundations, held an estimated USD 93 trillion of assets. Recently, prominent institutional investors have joined fossil fuel divestment movement see Schwartz (2015), Chabria (2015), UNSG (2015) and UN (2014).

Box 1. Accounting gaps

Due to data limitations, *Landscape 2015* does not capture:

- The value of public budgets dedicated to domestic climate action beyond some national DFIs' commitments and financing tracked in BNEF,¹ as well as the level of climate finance that governments contribute as shareholders of companies;²
- Private investments in energy efficiency, including transport, land use and adaptation.

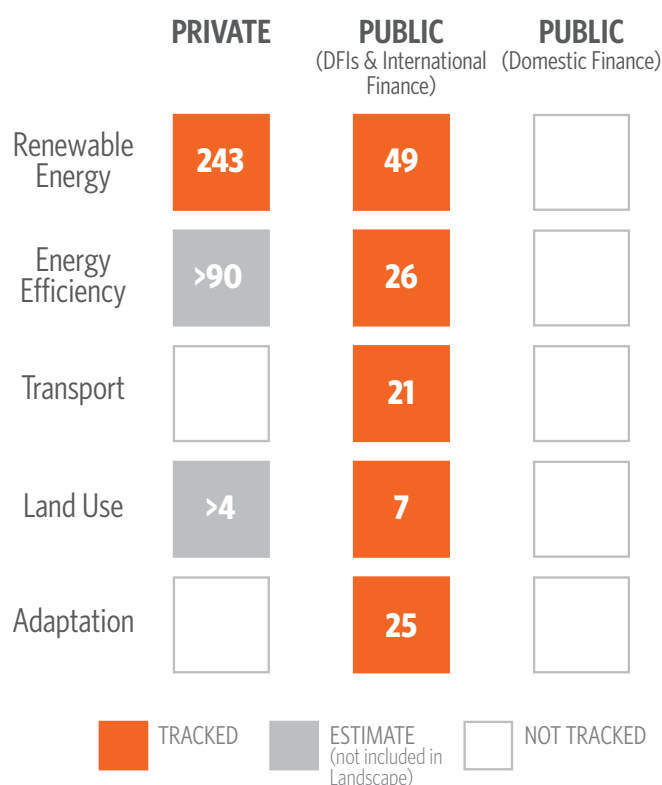
These gaps can be significant and have substantial implications on our findings, for example, by skewing the sectoral spread of total climate finance toward renewable energies.

Existing analysis and estimates help to get a sense of the probable magnitude of these gaps, highlighting that:³

- Energy efficiency investments range globally between USD 90-365 billion;⁴
- Land use (forestry) investments are estimated to be around USD 4.2 billion annually;⁵
- Adaptation investments data remain elusive, but early evidence from the portfolio of MDBs highlights that USD 270 million of their financing made 26 private projects with a total value of USD 5.5 billion more climate-resilient;⁶

- Domestic public budget for climate-related development not captured in our report could reach at least USD 60 billion a year,⁷ and range between 0% and 15% of national budgets,⁸ or represent about 7.5% of total national capital formation.⁹

Figure 6. Finance captured by Landscape 2015 and estimates of the size of data gaps (in USD billion)¹⁰



Source: CPI analysis

1 Identified through the project-level assessment of BNEF (2015a) (see methodology document).
 2 This year we identified at least USD 10 billion of direct investment from state-owned enterprises, mostly in China and India which, for consistency with past years' editions of the global Landscape reports and data limitations, we classified as private finance. We acknowledge that based on insights from past years' data analyses, this could be significantly higher.
 3 We don't include those estimates in this report because of the lack of reliable project-level data for these sectors.
 4 The lower bound refers to IEA (2015b) estimate of global energy efficiency investment in buildings only, while the upper bound to HSBC (2014) for investment in buildings, industry and transport. There are three main challenges for tracking energy efficiency investment: first, it is difficult to assess a baseline for energy efficiency, second, energy efficiency investments are integrated into larger transactions (e.g. new buildings) and are difficult to disaggregate, and third, these investments are decentralized and often taking place at household or small enterprise level.
 5 This estimate refers to investments in selected commodities only. See Falconer et al. (2015 p. 22) for further details.
 6 This refers to MDB private sector-oriented adaptation finance in 2013-14. See Vivid Economics (2015).

7 Buchner et al. (2014) estimate based on national estimates for a small number of countries.
 8 See CPEIR (2015) database and UNDP (2015) which compile data from the Climate Public Expenditure Review undertaken by UNDP in a number of developing countries. The range presented refers to the average of the latest available four years per country. Drawing on research from three countries in sub-Saharan Africa, Bird (2014) shows that domestic spending can be significantly higher on adaptation than on mitigation.
 9 I4CE (2015); this report presents the landscape of climate finance in France, estimating that climate-related investments in France in 2013 amounted to EUR 32 billion.
 10 The "land use" figure under public budgets covers projects qualifying as mitigation, adaptation and dual benefits in alignment with Falconer et al. (2015).

Instruments

Available data continues to show that private actors rely primarily on their own balance sheets to finance renewable energy projects (corporate and households' financing), which accounted for USD 175 billion or 72% of total private investment in 2014. Mostly, they relied on balance sheet financing to invest in solar PV projects in high-income and upper-middle income countries such as Japan, the US and China.²⁴

The reasons for investors' reliance on balance sheets can vary, including the size of the project (it can make more sense to finance small projects internally), difficulties in securing debt, high costs of capital, and other factors. However, the predominance of balance sheet financing in our figures also reflects the data to which we had access, the quality of which can be affected by incomplete financial disclosures for many private climate finance transactions.²⁵

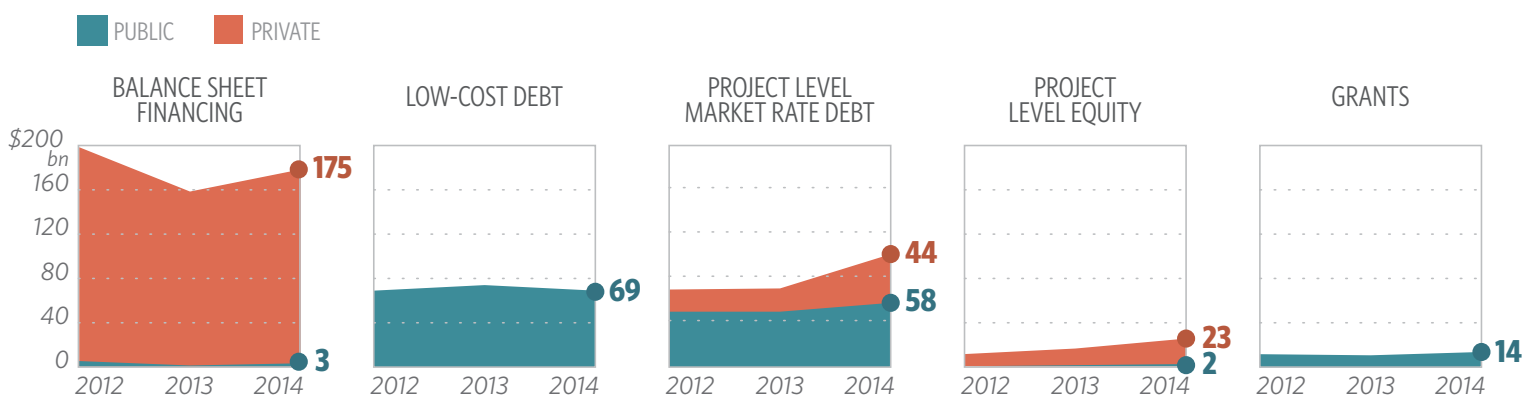
Public actors delivered more than half of their financing in the form of grants and low-cost loans, which accounted for 10% (USD 14 billion) and 47% (USD 69 billion) of total public finance respectively. Over the past three years, grants' share of total public finance averaged 9% (USD 13 billion), while the share of low-cost loans averaged around 50% (USD 71 billion), both with a +/- 10% from 2012 levels attributable to data uncertainties.

Well-established instruments financed the bulk of projects in 2014, but investors are experimenting with new approaches.

Grants made up more than half of government entities' and Climate Funds' respective commitments, and most of those for which we had project-level detail supported projects in low and lower-middle income countries - 34% of total grants (USD 5 billion).²⁶ Low-cost loans (including concessional loans) accounted for the majority of bilateral and national DFIs' financing - 64% (USD 11 billion) and 78% (USD 52 billion) respectively. 43% of low-cost loans (USD 30 billion) helped reduce the capital costs of mitigation and/or adaptation projects in high- and upper-middle income countries.²⁷

Public concessional or lower-than-market-rate finance, including loans with longer tenors and grace periods, play a catalytic role by supporting the establishment of policy frameworks, strengthening technical capacity, lowering investment costs, and reducing investment risks for the first movers in a market. Country macroeconomic and institutional conditions and the existence and level of project-level revenues are key determinants of the appropriate combination of grants versus loans.

Figure 7. Breakdown of total climate finance by instrument, 2012- 2014 in USD billion.



Source: CPI analysis

Note: We do not have details on instruments for about USD 0.5 billion.

24 Due to data availability issues, we could not allocate 8% of total private finance per countries level of income.

25 Improvements in BNEF accounting methodology have helped to shed light on significant financing for Chinese renewable projects that would once have been classified as balance sheet finance, the default option when information are lacking.

26 While we were able to allocate 100% of total public finance to a specific regional or transregional destination, due to data limitations we could not allocate 41% of the total by country.

27 Ibid 26.

Multilateral DFIs provided 84% (USD 40 billion) of their commitments as market-rate loans – often blended with governments and Climate Funds’ concessional resources – primarily for sustainable transport and renewable energy generation projects (35% or USD 14 billion and 26% or USD 10 billion of total market debt extended respectively). Around one third of the about USD 2 billion external resources managed by multilateral DFIs for which we have details, supported the financing of greenfield renewable energy generation, and mostly targeted projects in Sub-Saharan Africa, East Asia and the Pacific, and Latin America and the Caribbean.

Multilateral DFIs also provided a significant portion of climate finance, around USD 1.5 billion of their resources, in the form of risk management instruments.²⁸ These instruments, which can encompass credit guarantees, political risk insurance, and contingency recovery grants, can play a critical role in enabling private investments in the context of political uncertainty, or to back private equity and debt financing in countries with more challenging investment environments.²⁹ Due to the risk of double counting, these are not captured as part of our total estimate and are not officially supported export credit guarantees.³⁰

Investors are also experimenting with new approaches to finance climate-relevant projects. YieldCos, green bonds, and the instruments developed under the *Global Innovation Lab for Climate Finance* are among the most significant examples. The emergence and rapid growth of some of these instruments highlights that investors have unfulfilled needs for risk diversification and revenue/cost savings certainty.³¹

28 DFIs also delivered an additional USD 71 million in Climate Funds’ resources. Overall, in our assessment of international climate flows we identified, but excluded USD 2.5 billion extended in the form of risk management instruments.
 29 See e.g. Micale, Trabacchi and Boni (2015).
 30 OECD (2015e) states that Official Export Credit support for renewable energy generation in 2013 amounted to USD 2.6 billion globally, more than 50% of which to projects in low and middle-income countries, mostly for wind generation. These can encompass officially insured, guaranteed or directly provided credit and are not accounted in Landscape 2015 due to the risk of double counting, and the lack of project-level data that does not allow us to carve out the credit portion.
 31 Fifteen US and European YieldCos grew in value from USD 12 billion in 2013 to more than USD 20 billion in 2015 (see BNEF, 2015c). Despite this, however, recent market contractions highlight that additional adjustments to this new financing vehicle may be needed in order to meet the needs of a variety of different investor classes (see BNEF, 2015f and Abramskiehn et al. 2015). Green bonds issuance reached USD 36 billion in 2014 – over a threefold increase from the previous year, 37% of which from corporate issuance (CBI, 2015). See also ClimateFinanceLab.org for further details on Lab instruments.

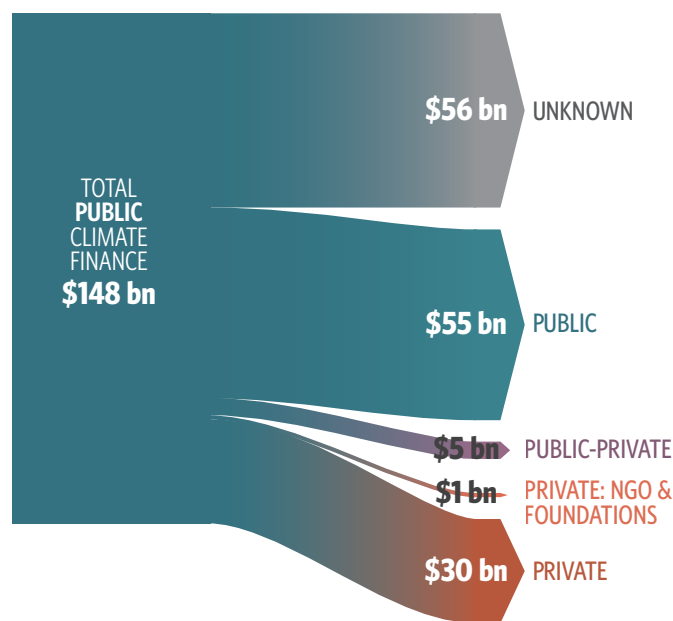
Recipients

At least USD 31 billion or 21% of public finance went to private entities (including NGOs). 41% (USD 61 billion) went to public or public-private entities. Private-oriented finance went mostly to mitigation projects in upper-middle or high- income countries.³² 4% (about USD 1.4 billion) went to adaptation projects.

Our understanding of the links between public and private finance across the lifecycle of flows has progressed, but is hindered by incomplete information. Details on recipients are not yet consistently tracked or reported across data sources. As a result, we could not identify the initial recipients of USD 56 billion of public finance (38% of the total). Outstanding methodological and definitional issues about the public vs. private nature of recipients still hinder tracking efforts.

It is worth noting that recent efforts on developing standards for measuring mobilized private finance³³ will help to further enhance our understanding of the impact of public interventions on private climate action.

Figure 8. Total public climate finance breakdown by type of recipient, 2014, in USD billion



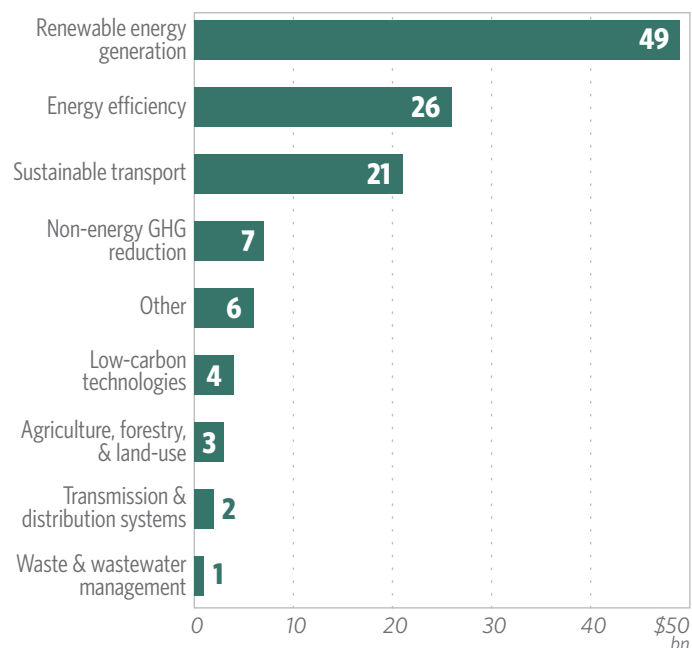
Source: CPI analysis

32 This is for projects where we had country-level details. We could not allocate by country level of income 20% or USD 6.2 billion of private-oriented mitigation finance originating from public sources.
 33 For tracking progress see International Financial Consulting (2015 [unpublished]); Stumhofer et al. (2015); TWG (2015); OECD Research Collaborative on Tracking Private Climate Finance and, for preliminary estimates, OECD (2015a).

Final Uses

Mitigation accounted for 93% of total climate finance in 2014, or USD 361 billion, 81% of which went toward renewable energy. The heavy bias toward renewable energy reflects the lack of data for private investments beyond this sector.

Figure 9. Breakdown of total public mitigation finance by sector, 2014, in USD billion



Source: CPI analysis

Large and small-scale solar PV and onshore wind projects attracted the majority of renewable energy private investment, totaling USD 134 billion and USD 66 billion respectively. We estimate that the implementation of large-scale projects was financed for USD 71 billion off balance sheets, through special purpose vehicles (SPV) which imply limited or no recourse to the sponsors of the project.

Public climate finance focused on three main sectors: renewables, representing 33% of the total (USD 49 billion), energy efficiency (18% or USD 26 billion), and sustainable transport (14% or USD 21 billion). Projects in these sectors benefited from most of the low-cost loans we captured. Renewables benefited from the largest single share of grants.

Adaptation finance reached USD 25 billion or 17% of all public climate finance in 2014. This figure, roughly the same as last year, represents a partial and uncertain estimate as it is affected by the different accounting approaches used for tracking finance, and tracking gaps for domestic budgets and private investment.

Increased climate finance flows in 2014 funded record levels of low-carbon activities.

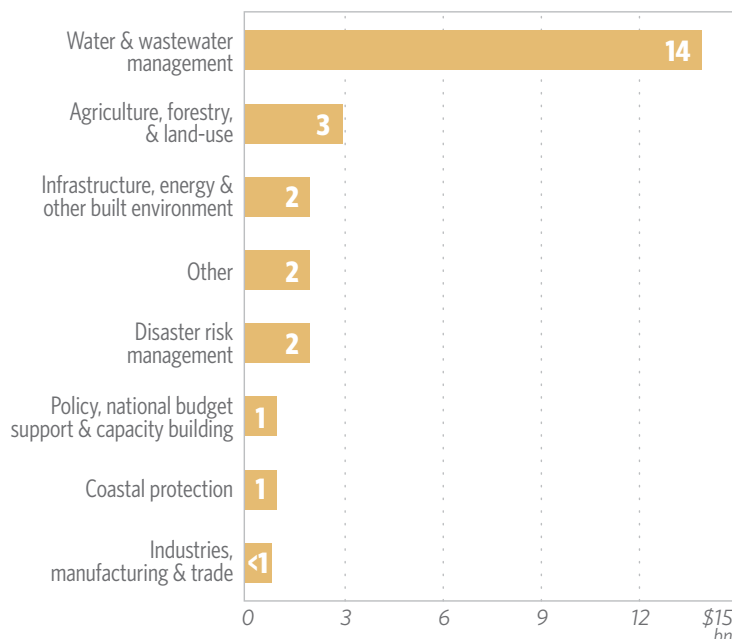
Nevertheless, there are two noteworthy developments to flag:

- First, the number of private sector-oriented adaptation projects in DFIs' portfolios has increased since our mapping began, and progress has been made in designing approaches and business models to drive private investment in climate resilience.³⁴
- Second, the adoption of *Common Principles for Climate Change Adaptation Finance Tracking* from a number of bilateral, national, and multilateral DFIs as well as the fine-tuning of the OECD's Rio marker definition to reflect the criteria applied by MDBs, represents a significant milestone towards harmonization.

Investments in land use mitigation and/or adaptation reached USD 7 billion on average (USD 6-8 billion).

Agriculture, forestry and other forms of land use generate around a quarter of global greenhouse gas emissions.³⁵ Understanding land use finance flows can help identify how to redirect public and private finance towards practices that can enhance agricultural productivity, while maintaining or enhancing GHG sinks and reservoirs.

Figure 10. Breakdown of total adaptation finance by sector, 2014, in USD billion



Source: CPI analysis.

Note: Difficulties comparing different accounting approaches for adaptation may distort this sectoral distribution.

34 See Trabacchi and Mazza (2015) and Vivid Economics (2015).

35 IPCC (2014).

Geographies

The majority of finance flows remained within the country of origin.

About 74% of total climate finance flows, and up to 92% of private investments were raised and spent within the same country, confirming the strong domestic preference of investors identified in previous years' *Landscape* reports and highlighting the importance of domestic frameworks for attracting investment.

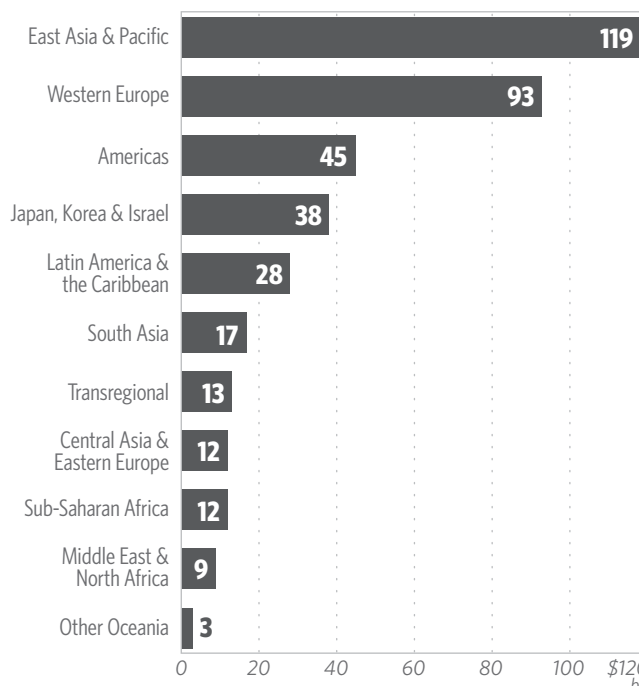
East Asia and the Pacific remained the largest destination of climate finance flows, accounting for 31% of the total or USD 119 billion, up by 22% from 2013. China alone accounted for 22% (USD 84 billion) of total finance.³⁶ Western Europe was the second main destination with 24% of the total or USD 93 billion, up by 3% from 2013 despite the challenges faced by renewables in some countries due to policy changes or uncertainties.³⁷ The Middle East and North Africa region and South Asia experienced a significant increase in climate finance investments from 2013, up by 114% and 33% respectively.

The bulk of adaptation investments target the climate change vulnerabilities of countries in East Asia and the Pacific region, Sub-Saharan Africa and Latin America and Caribbean, 46% (USD 12 billion), 13% (USD 3.3 billion) and 12% (USD 3 billion) of total adaptation finance respectively.

The Way Forward

With at least USD 391 billion invested in low-carbon and climate-resilient actions more climate finance than ever flowed in 2014. Nevertheless, efforts need to continue and must expand their geographic spread. Around USD 16.5 trillion are required from 2015 to 2030³⁸ to reorient the global energy system to one that is consistent with the 2°C goal, and more would be needed to reduce land use emissions and enable societies and economies to adapt to the impacts of climate change.

Figure 11. Total climate finance breakdown by region, 2014 in USD billion



Source: CPI analysis.

The good news is that there are opportunities to scale up climate finance and shift the pattern of growth:

First, enhance tracking efforts to further improve the transparency, comprehensiveness, and consistency in accounting approaches. Since the first edition of the *Global Landscape of Climate Finance* in 2011, significant progress has been made towards getting a comprehensive picture of climate finance. The ongoing efforts³⁹ across the climate finance tracking community have laid the foundation for further collaborative work to address outstanding comparability issues and gaps. Agreement on what counts and how it should count can help to strengthen trust and international cooperation. Ultimately, a proper measurement, tracking, and reporting system is a critical building block to ensure finance is used efficiently and targeted where it is needed the most.

39 This refers to: the activities within the UNFCCC Standing Committee on Finance and the OECD (the DAC and the OECD-hosted Research Collaborative); the work of 19 bilateral climate finance providers on a common understanding of mobilized climate finance, and the common principles for tracking mitigation and adaptation finance by a group of Multilateral Development Banks and of bilateral, national and sub-regional DFIs under the International Development Finance Club.

36 This reflects the data for which we had country-level details.

37 See REN21 (2015).

38 IEA (2015).

Second, get domestic investment policy and support frameworks right. *Landscape 2015* shows that three-fourths of global climate finance, and more than 90% of private investment, originates in the same country in which it is spent.

Deficient frameworks can inhibit the incentives for investment by, for instance, sending unclear or uncertain policy signals or by failing to put an adequate price on the risk of inaction on climate change.

A clear understanding of where investments take place and what their underlying drivers are can help to identify and overcome the remaining barriers to climate-relevant private investment.

Improved tracking at the national level can help strengthen climate change policy-making processes and ensure effective management of public resources to deliver on national climate change policy goals.

Third, innovate to develop or refine financial instruments that meet the needs of investors. The experience of the *Global Innovation Lab for Climate Finance* has shown that creative collaborations help to identify new ways for addressing the outstanding needs of investors and countries. The process of building a coalition of actors from across the financial system and coordinating their efforts through a systemic platform has shown The Lab's ability to accelerate the development of promising ideas for financial instruments to investment-ready projects.

Fourth, enhance the integration of climate change considerations into the financial system. Public actors have the opportunity to drive investment from the wider financial system, by providing other investors and financiers with the needed confidence to participate in climate projects. DFIs, for instance, can enhance private actors' awareness of and ability to understand, appraise, and manage climate change risks (or opportunities), and thereby engage investors currently still at the sidelines of climate finance.

Further, an enhanced integration of environmental, social, and governance (ESG) factors in investment decision-making processes can help investors to better understand risks and engage further in climate action.

CPI remains committed to improving the understanding and transparency of today's climate finance landscape. By shedding light on the intersection between public policy, finance and private investment, it aims to help decision makers optimize the use of their resources.

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