



# IDFC Green Finance Mapping Report 2016

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# 1. INTRODUCTION

**With the entry into force of the Paris Agreement and efforts to meet the Sustainable Development Goals (SDGs), meeting the green finance challenge will be as important as ever. The New Climate Economy project estimates that the global infrastructure investment required to achieve a broad-based low-carbon transition is likely to be in the region of US\$93 trillion over the period 2015 to 2030.<sup>1</sup>** As countries seek to implement their Nationally Determined Contributions (NDCs), the role of public finance institutions will be crucial in targeting specific financing gaps that are identified that help meet targets as effectively as possible.

The IDFC, the International Development Finance Club, formed in 2011 brings together 23 leading international, national and sub regional development banks from Africa, Asia, Europe, and Central and South America. IDFC members share a similar vision of promoting of low-carbon and climate resilient futures, while continuously pursuing poverty reduction, economic and social development and a fair and equitable design of the globalized economy.

Since 2011, the IDFC has conducted a periodic mapping exercise of its member institutions' contributions to green finance. The green mapping report exists to illustrate the contributions that IDFC members provide to green and climate finance. The methodology is constantly improving to robustly track and report on green finance.

Transparency and consistency of climate finance quantitative and qualitative assessments within the financial community is crucial to implement the Paris Agreement effectively and deliver climate

smart development. In line with this, IDFC Green Finance Mapping is an effort towards providing consistent information on IDFC's contribution to green and climate finance. With the aim of identifying and categorizing financial flows of IDFC Members to projects in the fields of green energy, adaptation and mitigation of climate change and the reduction of greenhouse gas emissions, the Green Finance Mapping Report aims to offer a transparent view on the activities of IDFC Members.

The major categories of the IDFC report include an overall green finance number divided into two major categories: climate finance and other environmental objectives. Climate finance is composed of finance for green energy and mitigation of greenhouse gases (GHG), adaptation to climate change, and projects that include elements of both mitigation and adaptation.

The IDFC Green Finance Mapping report presents the applied finance tracking methodology and key outcomes for IDFC's green finance commitments in 2015 and 2016. This year's green mapping report was prepared with the support of the Climate Policy Initiative.

The report is structured as follows: Section 2 provides an overview of the methodology used for the green finance mapping exercise. Section 3 discusses the climate finances flows by region of origin, instruments, region of recipient followed by breakdown by categories. Section 4 contains the conclusions and recommendations.

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<sup>1</sup> All currency figures are denoted in US dollars unless otherwise stated. [http://newclimateeconomy.report/2014/wp-content/uploads/sites/2/2014/08/BetterGrowth-BetterClimate\\_NCE\\_Synthesis-Report\\_web.pdf](http://newclimateeconomy.report/2014/wp-content/uploads/sites/2/2014/08/BetterGrowth-BetterClimate_NCE_Synthesis-Report_web.pdf)

**Figure 1 | IDFC Members and Their Location**



## 2. METHODOLOGY

The mapping exercise is a threefold process involving survey submissions by IDFC members, verifying the reliability and accuracy of the received survey and presenting them in an aggregate form. The IDFC survey aligns with the MDB – IDFC Common Principles for Climate Mitigation Finance Tracking and MDB-IDFC Common Principles for Climate Change Adaptation Finance Tracking, agreed in 2015.

This year's report continues the mapping exercise's mission of enhancing the four vital components of defining, tracking, and reporting climate finance:

- **Transparency:** to adopt a standardized and publicly available financial reporting format with common definitions and methodologies to quantify climate finance. The MDBs-IDFC Common Principles methodology is publicly available.
- **Comparability:** to encourage a universal methodology/ approach that institutions can use to assess and compare mobilized climate finance.
- **Consistency:** to promote a yearly accounting requirement for financial institutions on climate finance.
- **Flexibility:** to allow for a practical, adaptable, and coordinated universal reporting system to track climate finance.

Please refer to Appendix B for further guidance on the applied methodology.

A desk-based data collection approach was carried out using a standardized template. Detailed guidelines were provided to IDFC members on the categorization of projects (as listed in Appendix C) and use of this template. Additional data were also requested to further disaggregate mitigation measures and to capture a more detailed picture of mitigation, adaptation, and other environment finance by geography, instrument, and OECD membership.

During the data collection process, IDFC members were asked to use the definitions and eligibility criteria guidelines provided (defined in Appendices B and C), taking the MDBs IDFC Common Principles for Climate Mitigation Finance Tracking and MDB-IDFC Common Principles for Climate Change Adaptation Finance Tracking from 2015 into account. For measuring private sector mobilization, all forms of mobilized finance directly or indirectly through private sector entities and/or for projects that are more than 50% owned by private sector. If there were any deviations from the guidelines, organizations were encouraged to note and report them. Institutions could use a “miscellaneous and other” category for projects not referenced in any of the four major categories. Unattributed data were only illustrated on the graphs if the sum total for the subcategories was less than the value for the largest category and if the data accounted for more than 1 percent of the sum total for that category.<sup>2</sup>

Finally, the numbers across figures in this report may be slightly different due to rounding errors and some small reporting errors, such as double counting, by a couple of IDFC institutions. The institutions provided their data in U.S. dollars. If required, they were asked to use the average exchange rates from local currencies to U.S. dollars from the World Bank for the year 2015 and 2016 respectively.

Twenty surveys were collected from IDFC members across both 2015 and 2016 although not all the same members reported in both years. In 2014, 21 surveys were collected.

Differences in reporting institutions as well as reporting coverage across all green finance activities may vary from year to year. In particular, a notable increase in volumes is observed in this report compared to the 2015 report covering 2014 data.

<sup>2</sup> In 2015, reporting members included AFD, Bancoldex, BCIE-CABEI, BE, BNDES, BOAD, BSTDB, CAF, CDB, CDG, COFIDE, DBSA, HBOR, JICA, KDB, KfW, NAFIN, TDB, SIDBI, and TSKB. In 2016, reporting members included AFD, Bancoldex, BCIE-CABEI, BE, BNDES, BOAD, BSTDB, CAF, CDB, CDG, DBSA, HBOR, ICD, JICA, KDB, KfW, NAFIN, TDB, TSKB and VEB.

Two factors played an important role towards a very significant increase of the volumes reported for both green finance commitments and climate finance in 2015 and 2016 compared to 2014-issued figures, notably

- varying sector coverage of reporting across IDFC members
- the impact of the inclusion of transportation in China in the coverage, given significant infrastructure investment taking place there

It should be noted that 2015-2016 reporting is improved compared to 2014 in terms of methodology and perimeter; nevertheless, there are still operational and methodological challenges, notably regarding adaptation finance, where the tracking methodology is more resource intensive. As stated in the Common Principles, any uncertainty is overcome following the principle of conservativeness where climate finance is preferred to be under reported rather than over reported.

### 3. GREEN FINANCE MAPPING OUTCOMES

In 2016, IDFC members contributed \$173 billion in green finance commitments, \$159 billion of which was climate finance.<sup>3</sup> The numbers represent a \$30 billion and \$25 billion increase on 2015. Within climate finance, green energy and mitigation of GHGs was the largest category with \$153 billion in 2016 and \$128 billion in 2015. Adaptation finance decreased by \$1 billion from \$6-\$5 billion between 2015 and 2016 and finance for other environmental objectives doubled from \$7 billion to \$14 billion.

#### 3.1 GREEN FINANCE COMMITMENTS

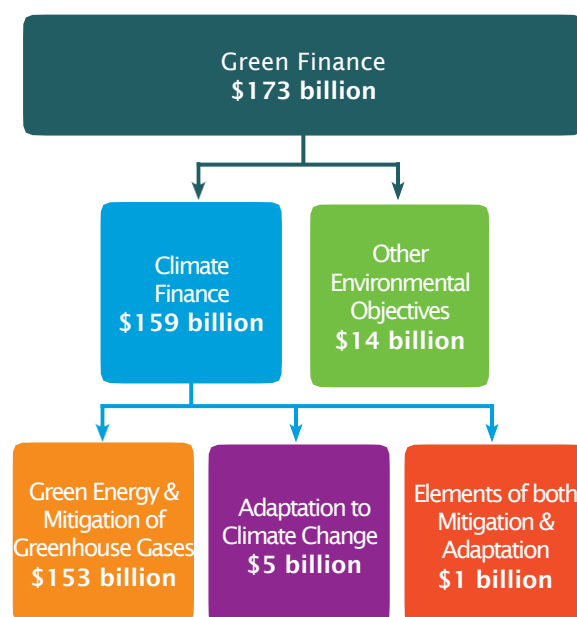
IDFC members made \$173 billion in green finance commitments in 2016 relative to \$143 billion in 2015.

Total climate finance commitments stood at \$159 billion or 92% of the total green finance commitments in 2016. With climate finance category, the largest share was accounted by green energy and mitigation of GHGs with \$153 billion commitments (88%), boosted by the inclusion of commitments facilitating a low carbon shift to urban transportation in China. Reported adaptation to climate change commitments were \$5 billion in 2016, a decrease of \$1 billion from 2015. These figures are relatively low compared to other financing categories partly due to the capacity and resource constraints across IDFC members in reporting adaptation finance.

Finance for projects with elements of both mitigation and adaptation receiving around \$1 billion in commitments in both years. Finance for other environmental objectives was small, relative to climate finance, with commitments of only \$14 billion. This amount doubled from \$7 billion in 2015.

The share of green finance to total new finance commitments amongst IDFC members ranged from 1%- 65% in 2015 and 2016, as illustrated on Figure 3 (y-axis). No prominent pattern was observed in terms of whether the size of a bank correlates with a higher or lower share of green

**Figure 2 | Breakdown of IDFC New Green Finance Commitments in 2016**



financing. Both small and larger members in terms of asset size featured high proportions of green finance as a percentage of new commitments in both 2015 and 2016 (Figure 3, x-axis).

More IDFC members increased their share of green finance to total commitments in 2016 than saw a drop. Of the fourteen members who reported across both years, seven reported an increase of between 3-17 percentage points in the share of green finance commitments to total commitments between 2015 and 2016. Five reported a decrease between 3-12 percentage points and two members remained the same between 2015 and 2016.

The volume of new financing from the IDFC group as a whole saw 22% of total new commitments in green finance, up from 19% in 2015. But the average across each institution returns an average share of 29%, up from 24% in 2015.

<sup>3</sup> All figures are in US dollars nominal values unless otherwise stated.



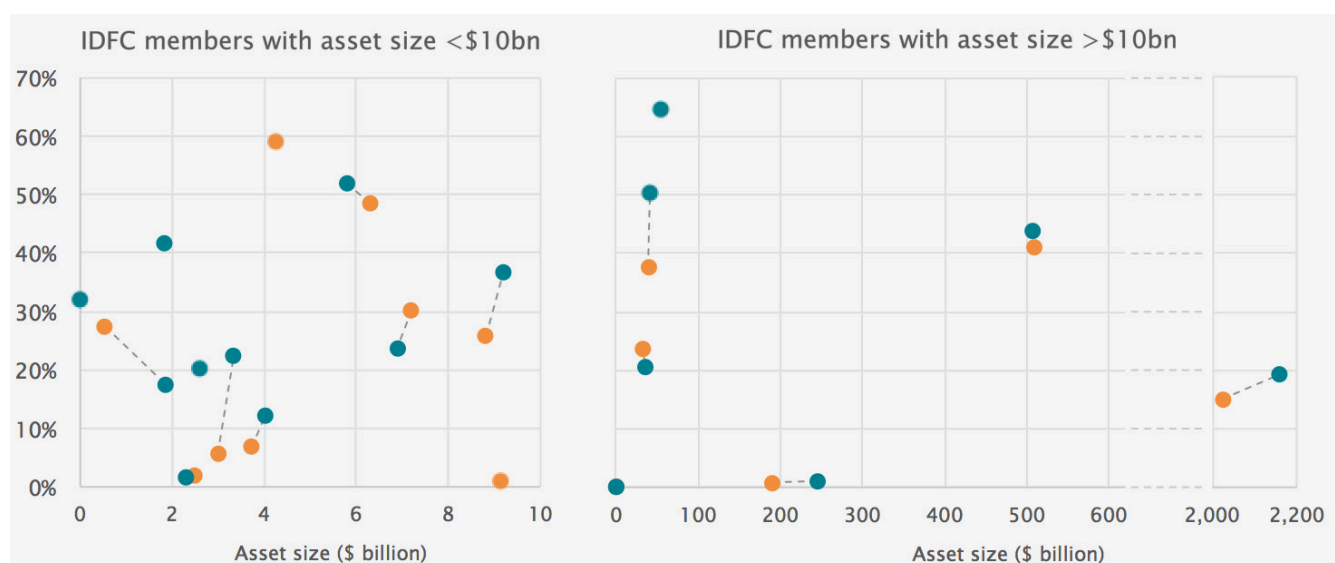
### 3.2 GREEN FINANCE COMMITMENTS FROM INSTITUTIONS BASED IN OECD AND NON-OECD COUNTRIES

In 2016, 20 IDFC members responded to the surveys, out of which 8 were OECD based institutions and 12 were non-OECD institutions. The majority of green finance, amounting to \$118 billion or 68% of the total flows, was committed by institutions in non-OECD countries. This was a

significant increase from 2015 flows of \$96 billion from the same institutions. Commitments from OECD based institutions stood at \$55 billion in 2016 with \$47 billion committed in 2015.

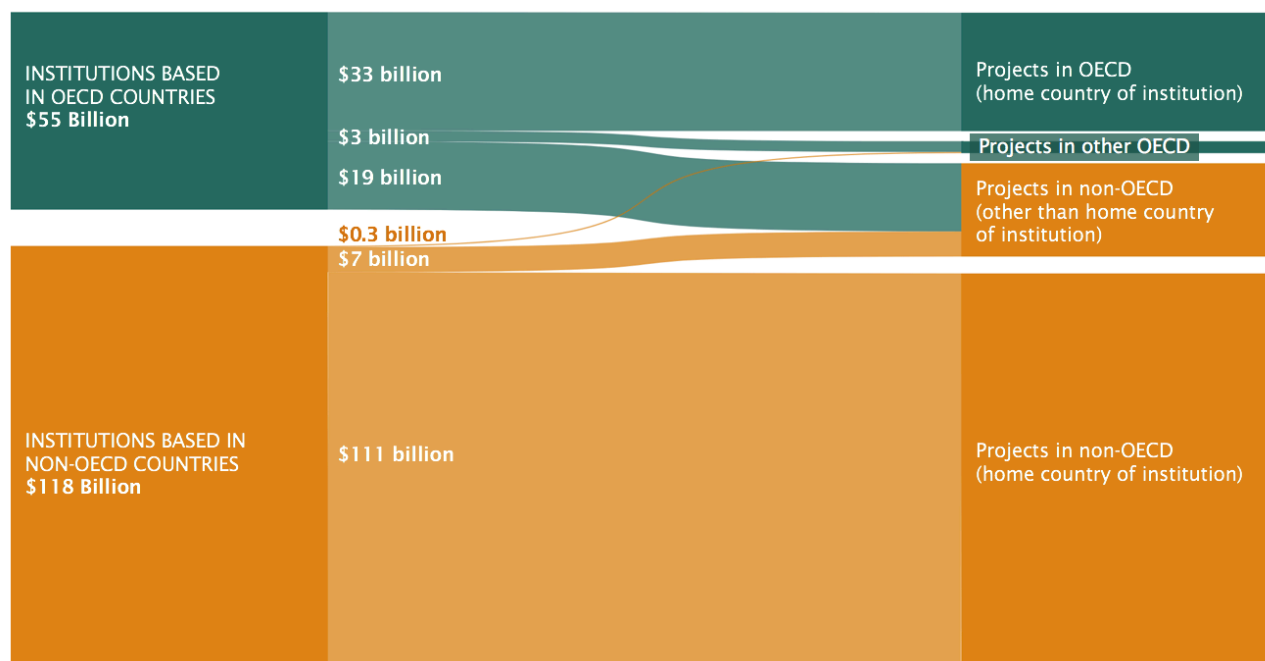
Across the IDFC members, the majority of finance was committed to projects in the institutions home country, although this was more pronounced in non-OECD countries. \$111 billion was committed by non-OECD institutions in their home country

**Figure 3 | Relationship between the Share of Green Finance Commitments to Total Commitments (%) and Total Bank Assets (\$bn) in 2015 and 2016.**



2015 data is denoted in orange, 2016 data in green. Lines indicate same IDFC member between years. Dots without lines indicate only 1 year of data reported

**Figure 4 | Green Finance Flows from OECD and Non-OECD IDFC Members in 2016 (\$ billion)**



(\$87 billion in 2015) and \$33 billion by OECD countries (\$27 billion in 2015).

The non-OECD countries in total received \$136 billion, or 79% of the total green finance commitments from the all the IDFC members, a increase of \$23 billion from 2015. International financing in non-OECD countries stayed at \$26 billion in both years, however flows from OECD institutions increased by \$1 billion to \$19 billion in 2016, while those from non-OECD institutions decreased by \$1 billion.

Figure 5 shows that green energy and mitigation of GHGs comprised the largest portion of green finance committed by institutions in the OECD (\$47 billion) and non- OECD countries (\$106 billion). The corresponding figures for 2015 stood at \$38 billion and \$90 billion. OECD-based institutions committed \$4 billion to adaptation to climate change, \$3 billion to other environmental objectives, and \$1 billion to projects with elements of both mitigation and adaptation in 2016.

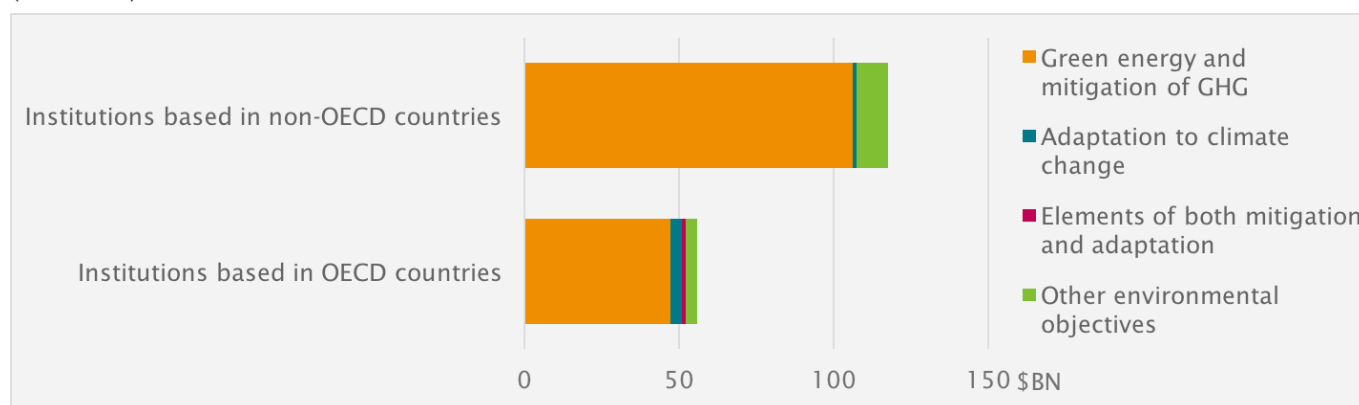
The significant difference to 2015 flows was in adaptation when OECD-based institutions committed \$5 billion.

Reported flows from non-OECD based institutions for adaptation in 2016 have remained consistent from 2015 at \$1 billion. Commitments for other environmental projects increased from \$4 billion in 2015 to \$10 billion in 2016.

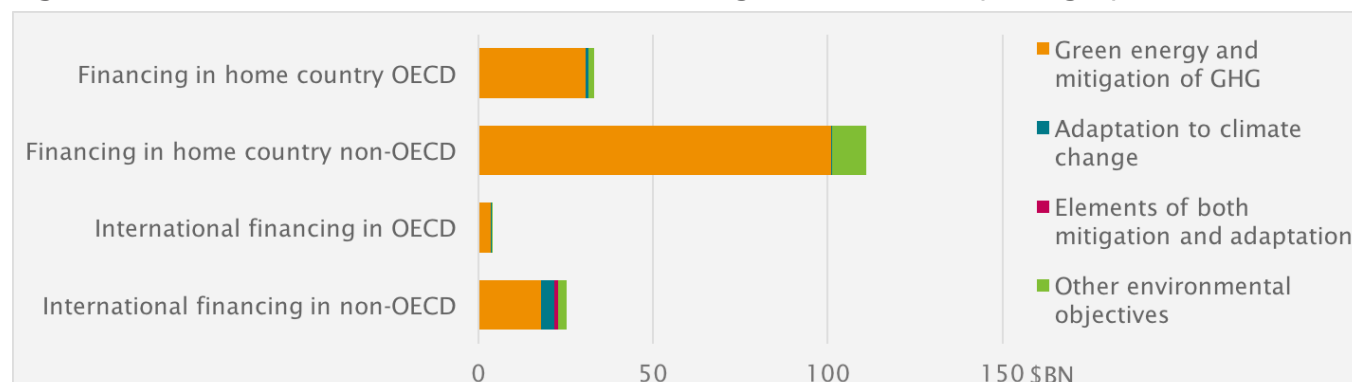
Figure 6 shows the domestic and international flows breakdown by green finance category. Mitigation accounted for 93% (\$31 billion) of the domestic financing flows into OECD countries, up from \$25 billion in 2015 and 91% of the domestic financing flows in non-OECD countries, up from \$83 billion.

Of the international financing flowing toward non-OECD countries, mitigation accounted for \$18 billion (as in 2015) while adaptation accounted for \$4 billion, down from \$6 billion in 2015.

**Figure 5 | Green Finance Commitments from OECD and Non-OECD Countries by Category in 2016 (\$ billion)**



**Figure 6 | Domestic and International Green Financing Commitments by Category in 2016 (\$ billion)**

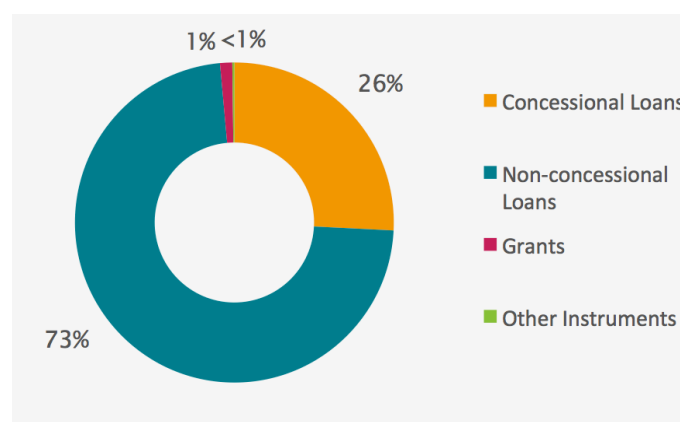


### 3.3 GREEN FINANCE COMMITMENTS BY INSTRUMENT TYPE

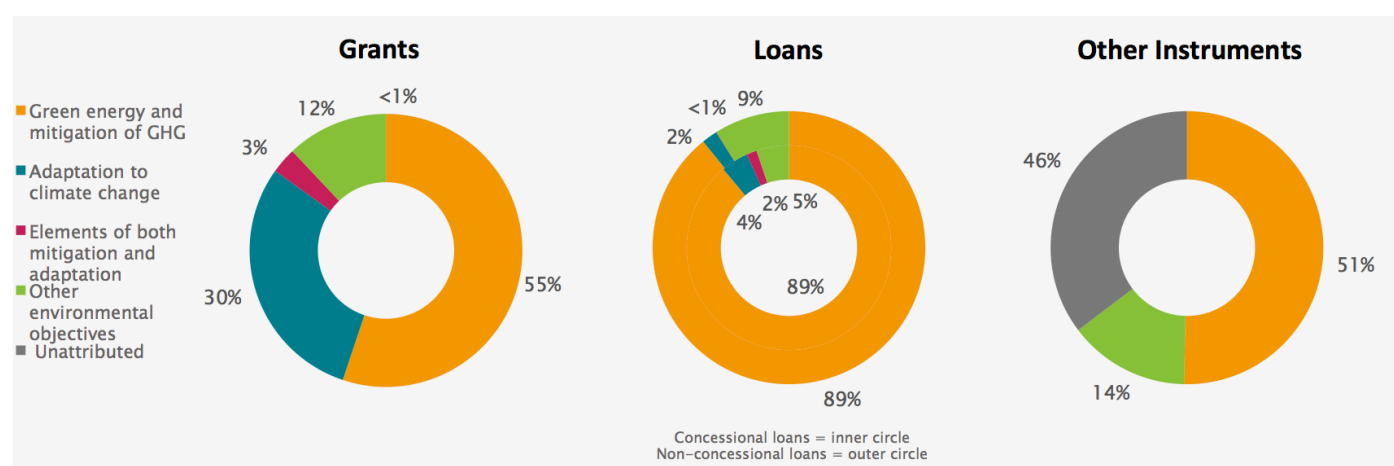
In 2016, loans provided 99% of green finance commitments (Figure 7) with concessional and non-concessional loans accounting for 26% and 73%, respectively. The share of concessional loans and non-concessional loans stood at 27% and 70% in 2015. Grants made up 2% of the green finance flows both the years, while other instruments such as equity stood at 0.2% of the green finance flows each year.

Figure 8 further shows the distribution of instrument by sectoral category. Within instruments, the share of mitigation finance varied substantially. For instance, mitigation accounted for 89% of the loans but 55% in grants. 30% of the grants were allocated to the adaptation sector in 2016 and in 2015.

**Figure 7 | Green Finance Commitments by Instrument Type in 2016 (Percent)**



**Figure 8 | Green Finance Commitments by Instrument and Category in 2016 (Percent)**



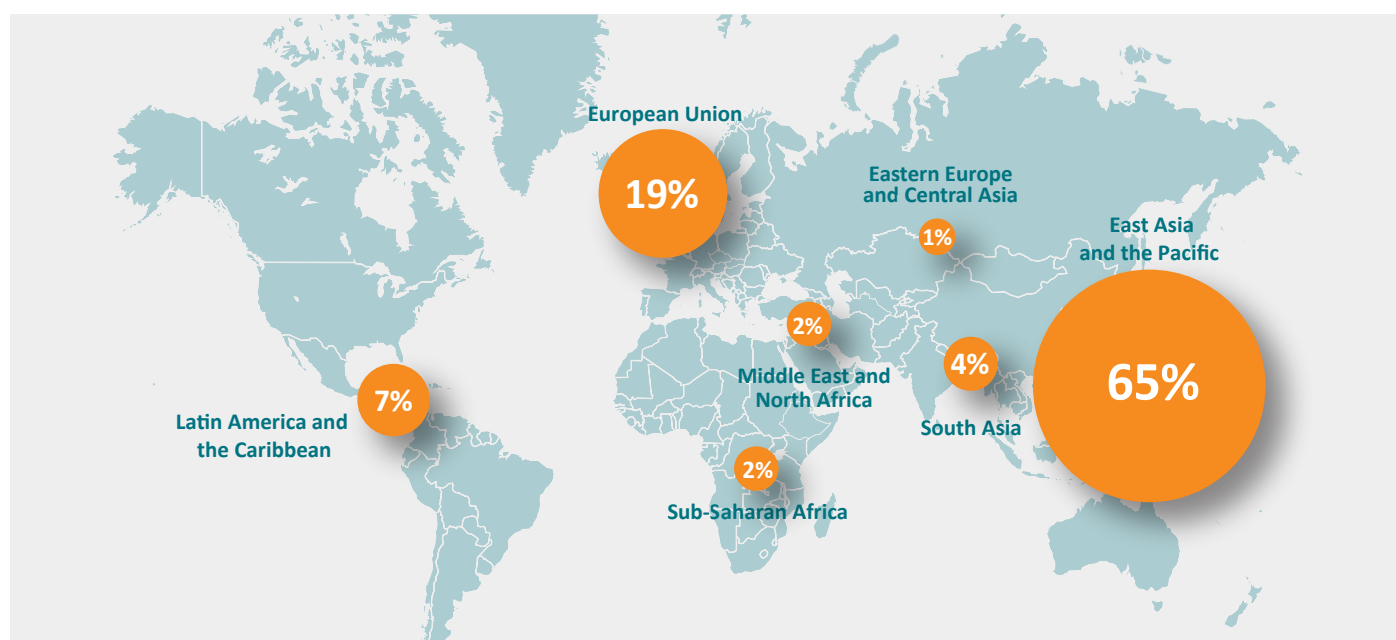
### 3.4 GREEN FINANCE COMMITMENTS BY TARGET REGION

Figure 9 illustrates the distribution of green finance by region. The largest share of finance went to the East Asia and Pacific region with 65% in 2016 as compared to 59% in 2015 (Figure 9). The European Union (19%), Latin America and the Caribbean (7%), South Asia (4%) were the other significant destinations of financing. In 2015, these regions received 19%, 12% and 2% of commitments, indicating how flows to South Asia have more than doubled, increasing by over \$4 billion year-on-year. The

Middle East and North Africa region also saw an increase in flows from \$1.6 billion to \$2.8 billion, while Eastern Europe and Central Asia halved. Flows to Sub-Saharan Africa remained consistent across both years.

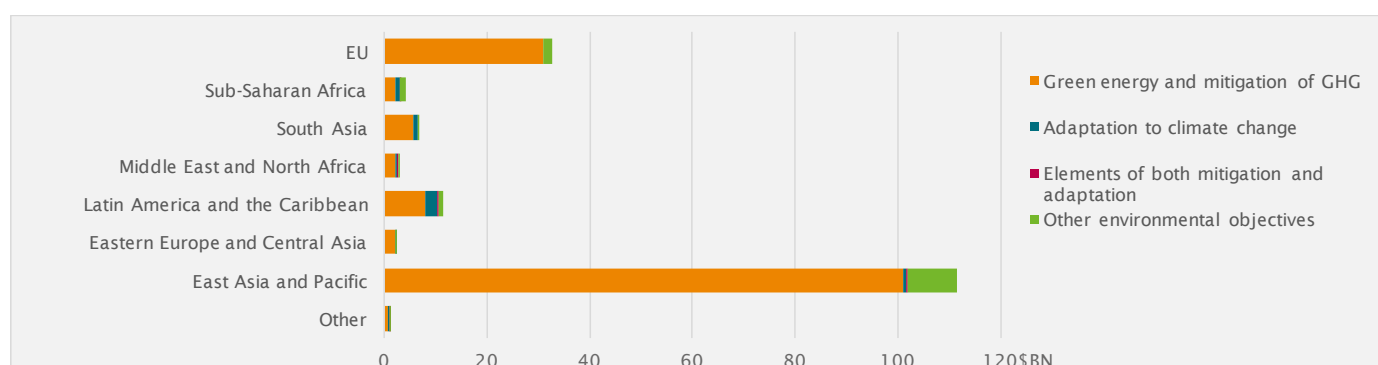
While East Asia and the Pacific received 66% of the total mitigation flows (\$101 billion), adaptation finance commitments were mainly concentrated in other regions such as Latin America and the Caribbean (\$2 billion), South Asia and Sub-Saharan Africa (\$1 billion each). 71% of commitments to other environmental objectives were located in East Asia and Pacific.

**Figure 9 | Green Finance Commitments by Target Region in 2016 (Percent)**



*Note: US, Canada and transregional account for <1% of green finance commitments and are excluded from the above figure.*

**Figure 10 | Green Finance Commitments by Target Region and Category in 2016 (\$ Billion)**



*Note: US, Canada and transregional are accounted for in 'other'*

### 3.5 GREEN FINANCE COMMITMENTS TO GREEN ENERGY AND MITIGATION

Green energy and mitigation of GHG commitments stood at \$153 billion, an increase of \$25 billion from 2015. Within mitigation, transport accounted for 52% (of the total mitigation flows) at \$80 billion. This was a noticeable increase from 42% in 2015 and \$53 billion of flows (Figure 11). The other major subcategories were renewable energy (24%) and energy efficiency (17%) amounting to \$37 billion and \$26 billion. Renewable energy flows dropped from \$46 billion in 2015 but energy efficiency flows increased from \$18 billion.

power generation, heat and transmission and distribution.

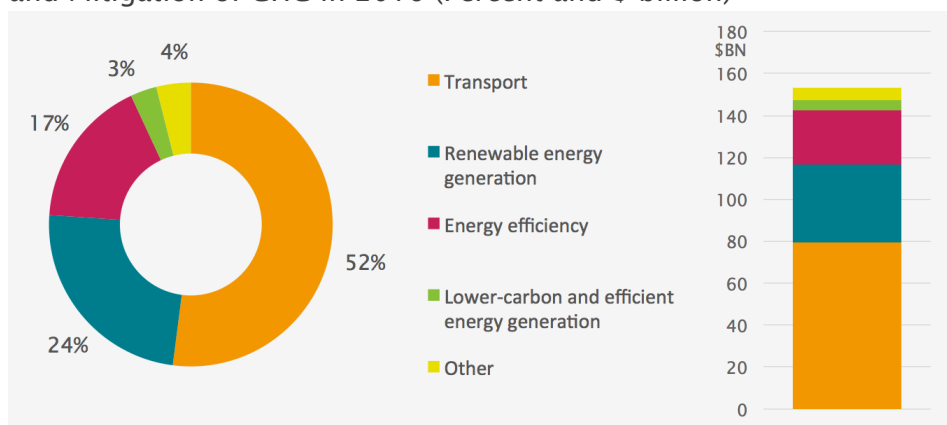
Within energy efficiency, new green commercial, public and residential buildings accounted for the largest share with 49% in 2016. This was an increase of seven percentage points from 2015. The other major categories included energy efficiency in industry in existing facilities (26%) and existing commercial, public, and residential buildings (20%), similar to 2015 figures.

Within renewable energy, measures to facilitate integration of renewable energy into grids accounted for 0.2%.

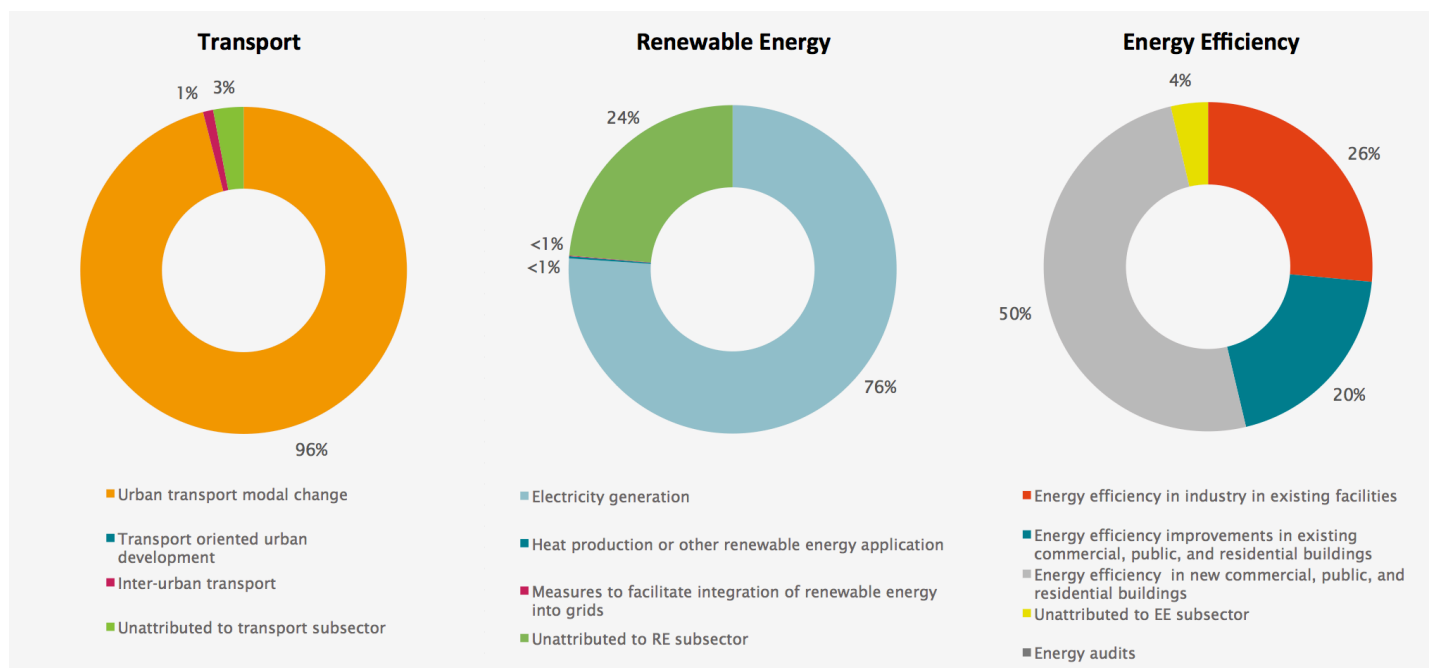
Figure 12 shows the disaggregation of these large sub-categories. In transportation, urban modal transportation accounted for 96% of the flows, an increase of 9 percentage points over 2015.

Electricity generation, within the renewable energy category, made up the largest portion with 76%, compared to 95% in 2015. While, one fourth of the total renewable energy flows remained unattributed across

**Figure 11 | Share of Green Finance Commitments to Green Energy and Mitigation of GHG in 2016 (Percent and \$ billion)**



**Figure 12 | Disaggregation of the Most Significant Subcategories of Green Energy and Mitigation**

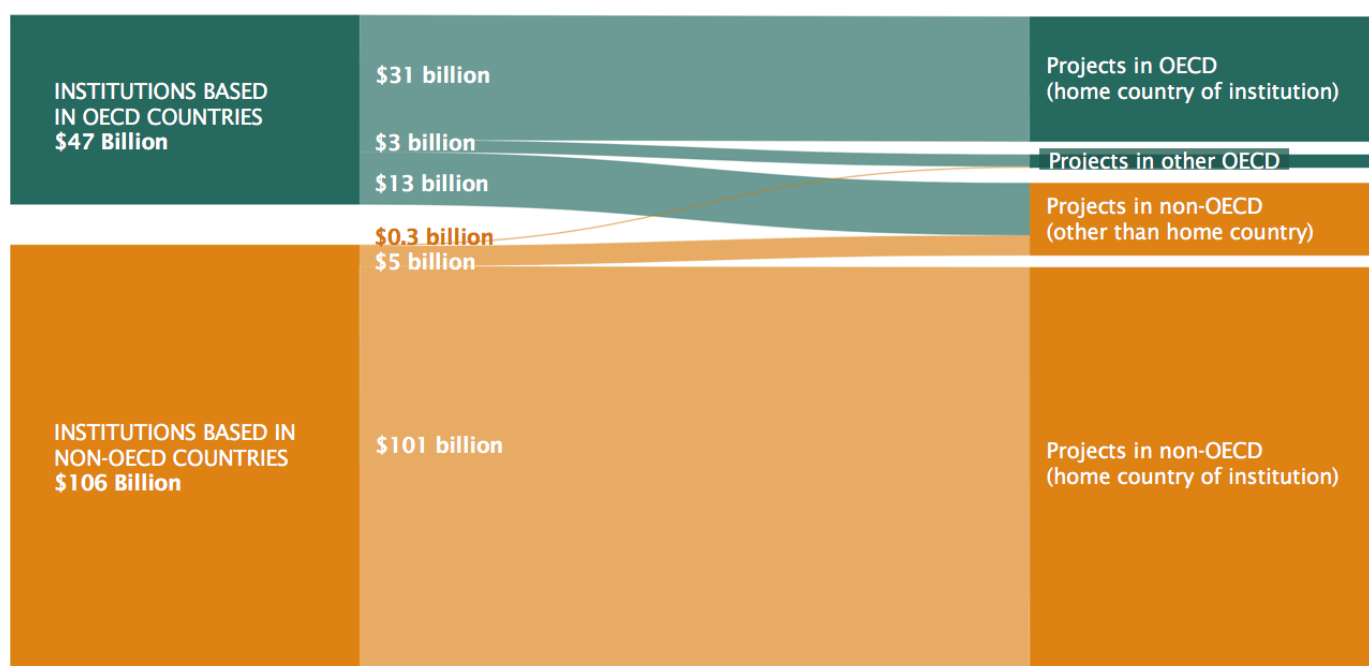


*Note: Within energy efficiency, energy efficiency improvements in the utility sector and public services vehicle energy efficiency fleet retrofit which accounted for 1.5% and 0.05%, respectively has been excluded from the above figure.*

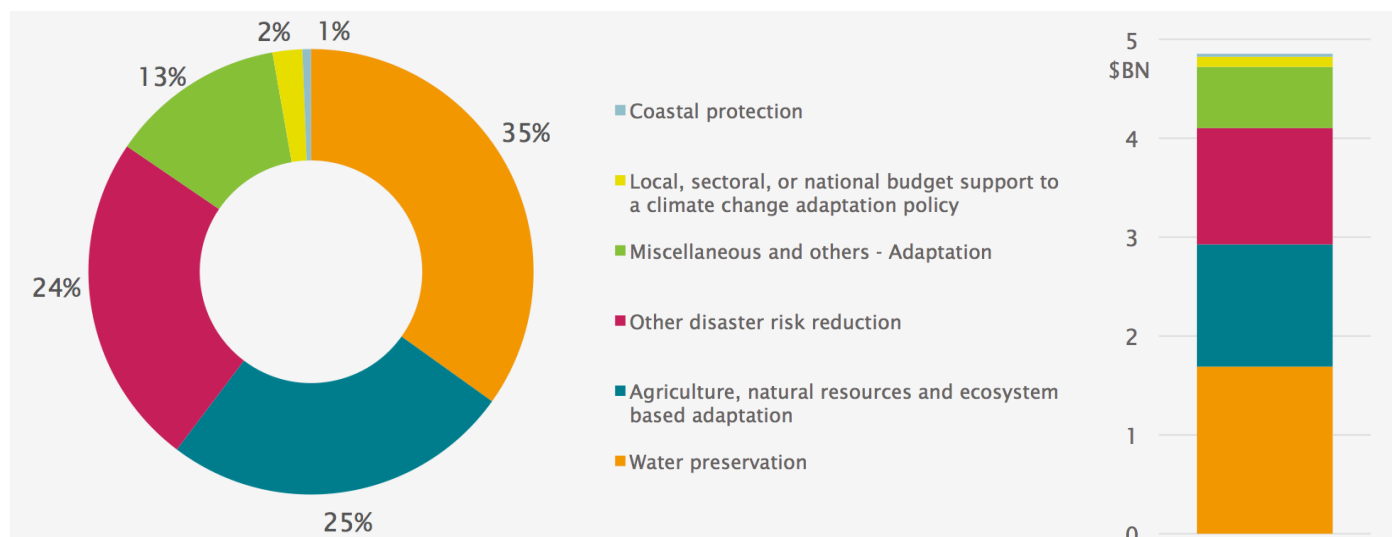
Figure 13 shows the international and domestic flows of commitments for green energy and mitigation of GHGs. IDFC members in OECD countries provided \$47 billion, a significant increase of 24% from \$39 billion in 2015. While, financing from IDFC members based out of the non-OECD countries to mitigation category stood at \$106 billion, as compared to \$90 billion in 2015. In line with the overall trend, the majority of the finances went

to the institution's home country. OECD and non-OECD institutions contributions to home countries were \$31 billion and \$101 billion, respectively. Corresponding figures for 2015 were \$25 billion and \$83 billion. Non-OECD countries received \$13 billion in commitments from OECD based institutions (\$11 billion in 2015) and \$5 billion in commitments from non-OECD based institutions (\$7 billion in 2015).

**Figure 13 | Commitments to Green Energy and Mitigation of GHGs from OECD and Non-OECD IDFC Members in 2016 (\$ Billion)**



**Figure 14 | Share of Green Finance Commitments to Adaptation to Climate Change in 2016 (Percent and \$ billions)**



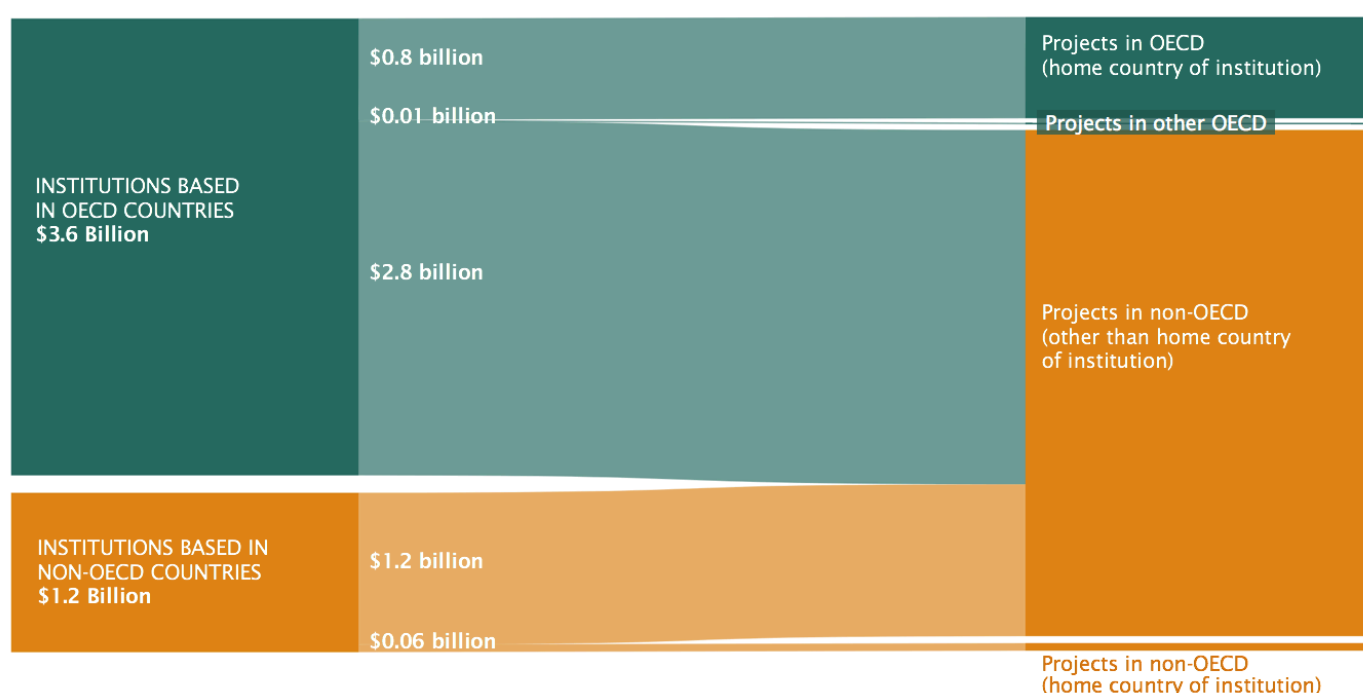
### 3.6 GREEN FINANCE COMMITMENTS TO ADAPTATION TO CLIMATE CHANGE

Reporting on Adaptation Finance is still challenging for several IDFC Banks, particularly due to varying approaches regarding the implementation of the Common principles for adaptation finance tracking defined in cooperation with MDBs. In this context, several IDFC Banks have applied the principle of conservativeness where climate finance is preferred to be under reported rather than over

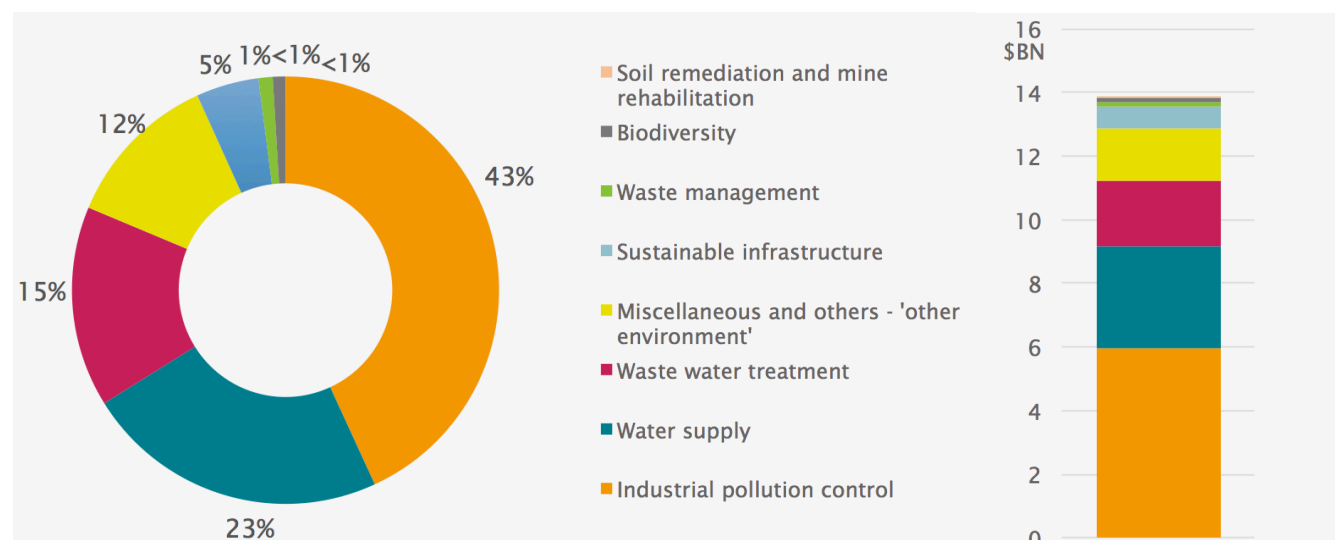
reported. In parallel, the MDBs and IDFC are continuing their collaborative effort to improve the quality, robustness and consistency of adaptation climate finance accounting and metrics, through the sharing of practices and knowledge and by further developing common frameworks and approaches.

At \$5 billion, adaptation to climate change commitments were not only significantly lower than green energy and mitigation of GHG commitments

**Figure 15 |** Commitments to Adaptation to Climate Change from OECD and Non-OECD IDFC Members (\$ billion)



**Figure 16 |** Share of Green Finance Commitments to Other Environmental Objectives in 2016 (Percent and \$ billion)





in 2016, but also represent an 18% decrease from 2015. Water preservation accounted for the largest share with 35% (up from 31 % in 2015). These were followed by agriculture (25%) and other disaster risk reduction (24%) including non-coastal protection projects such as early-warning systems, insurance, drainage, and disease monitoring. The share of other disaster risk reduction flows declined the most from 2015 by 12 percentage points, while, agriculture reported the largest share gain from 9% in 2015.

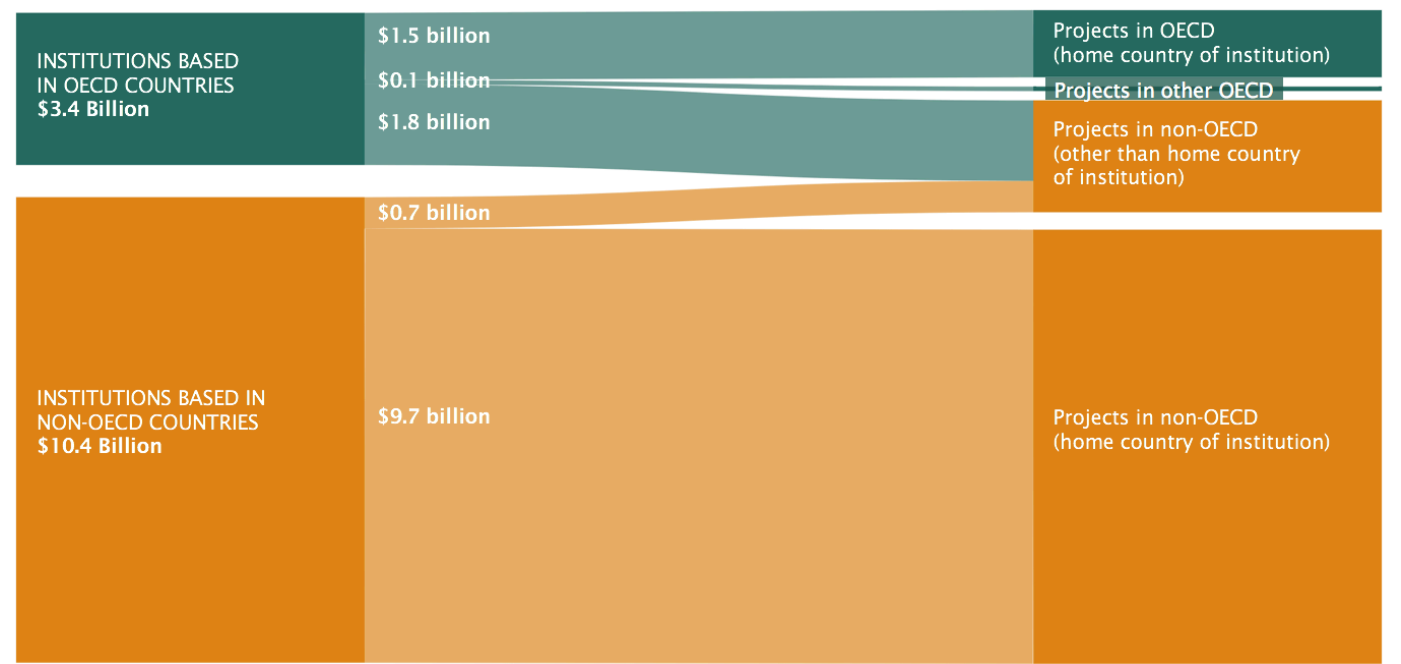
Figure 15 illustrates the international and domestic flows to adaptation. OECD and non-OECD based institutions financing to adaptation commitments were \$3.6 billion and \$1.2 billion, respectively. While, non-OECD based institutions’ adaptation financing remained the same compared to 2015, OECD based institutions’ financing fell by \$1 billion on aggregate. Most of this reduction was seen in flows to adaptation projects in non-OECD countries, reducing from \$4.5 billion to \$2.8 billion. Adaptation spending in home countries of institutions increased by \$0.6 billion in OECD countries and \$0.3 billion in non-OECD countries.

### 3.7 GREEN FINANCE COMMITMENTS TO OTHER ENVIRONMENTAL OBJECTIVES

Finance for other environmental objectives doubled from \$7 billion in 2015 to \$14 billion in 2016. Industrial pollution control saw the largest increases in commitments from \$1.6 billion in 2015 to \$6 billion in 2016, making up 43% of the total (Figure 18). Water supply was the next largest sub-category with 23%, down from 30% in 2015 but its volume increased from \$2 billion to \$3 billion. Wastewater treatment projects received 15% of commitments in 2016, up from 10% in 2015 while broad environmental programs under the miscellaneous sub-category received 12%, down from 33% in 2015. Sustainable infrastructure accounted for 5% in 2016, an increase from 2% in 2015. Biodiversity, waste management and soil remediation remain relatively small allocations of overall environmental flows.

Figure 17 shows the international and domestic flows contributed to other environmental objectives. In total, \$3.4 billion (\$3 billion in 2015) was committed by institutions in OECD countries, and \$10.4 billion (\$4.2 billion in 2015) was committed by institutions in non-OECD countries. International financing by OECD based institutions amounted to \$1.9 billion in 2016 compared to \$1.5 billion in

**Figure 17 | International and Domestic Financing to Other Environmental Objective (\$ billion)**



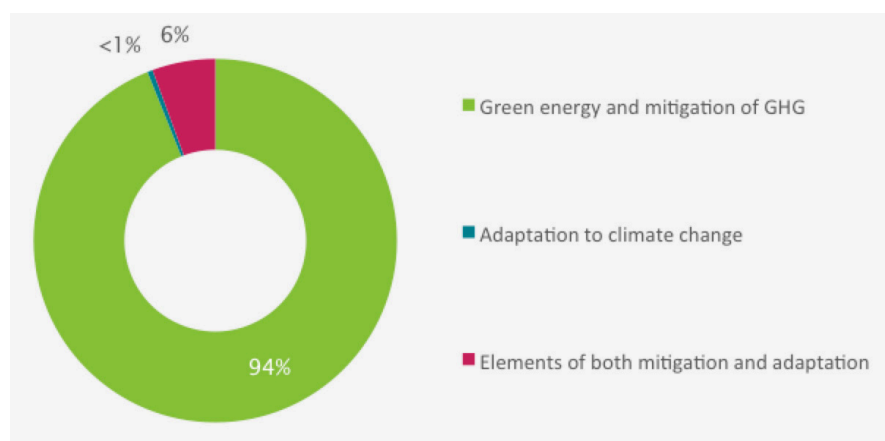


2015. Domestic commitments in OECD remained the same during both years, while non-OECD institutions increased their environmental commitment from \$3.75 to \$9.7 billion.

### 3.8 MOBILIZED PRIVATE FINANCE

IDFC members began tracking mobilized private-sector finance in 2015. In 2016, nine institutions reported mobilized finance totaling \$4.5 billion. In 2015, six institutions reported mobilized private flows of \$5.5 billion. 94% of private investments went to green energy and mitigation as compared to 50% in 2015. In 2015, far more private finance (50%) was mobilized in projects with both mitigation and adaptation benefits. The corresponding figure was 6% in 2016. Adaptation was less than half a percent in 2016, indicating the need for greater targeting of private financing in adaptation.

**Figure 18 |** Private sector financing in 2016 (Percent)



## 4. CONCLUSIONS AND RECOMMENDATIONS

### 4.1 CONCLUSIONS

**IDFC members contributed \$173 billion in green finance accounting for 22% of their total new commitments on average in 2016.** The corresponding figure for green financing in 2015 was \$143 billion, an increase of \$30 billion. While, both 2015 and 2016 figures are based on 20 surveys from IDFCs' 23 members, the composition of the members is different and the degree of sector coverage varies from institution to institution.

**Total climate finance commitment stood at \$159 billion** or 92% of the total green finance commitments. The largest share of climate finance was accounted by green energy and mitigation of GHGs which was \$153 billion. Adaptation to climate change commitments were \$5 billion, followed by finance for projects with elements of both mitigation and adaptation receiving \$1 billion each. Finance for other environmental objectives was small, relative to climate finance, with commitments of only \$14 billion.

**Institutions in non-OECD countries contributed \$118 billion or 68% of the green finance commitments.** The corresponding figure for OECD institutions was \$55 billion. The majority of green finance from OECD (\$33 billion) and non-OECD (\$111 billion) based institutions went to financing projects in the institutions home country. Projects in non-OECD countries received \$136 billion, or 79% of the total green finance commitments from all the IDFC members. Most international financing (\$19 billion) came from the OECD based institutions, similar to 2015 figures.

**The largest share of finance went to the East Asia and Pacific region with 65% (59% in 2015)** given two Asian based institutions accounted for 67% of the total green commitments and 73% of the total financing directed at the home country of the institution. The European Union (19%), Latin America and the Caribbean (7%), and South Asia (4%) were other significant receivers of financing.

**Loans provided 99% (98% in 2015) of green finance commitments** with non-concessional and

concessional loans accounting for 73% and 26%. The corresponding figures for 2015 were 70% and 27%, respectively. Grants made up for 1% and while other instruments such as equity stood at a mere 0.2%, reflecting almost similar percentages in 2015.

**Within mitigation, transport accounted for 52% (of the total mitigation flows),** a noticeable increase from 42% in 2015. The other major subcategories were renewable energy (24%) and energy efficiency (17%). **Within adaptation, water preservation accounted for the largest share with 35% (23% in 2015)** followed by other disaster risk reduction (25%) and agriculture (24%). Agriculture reported the largest share gain from 7% in 2015. **For other environmental financing, industrial pollution control accounted for 43% in 2016 and the largest increase from 2015,** with water supply and wastewater treatment also receiving significant flows.

Only nine institutions reported mobilized private-sector finance, totaling \$4.5 billion; down from \$5.5 billion in 2015 with six institutions reporting. 93% of these private investments were to green energy and mitigation.

### 4.2 RECOMMENDATIONS

**Support clear, consistent and transparent disclosure on green finance commitments.** External demand for transparent disclosure related to climate risks and green finance of both public and private finance institutions is growing. The IDFC members track and report data on disaggregated green and climate finance activities in accordance with the set methodologies. However, the number of institutions reporting survey has decreased from 21 in 2014 to 20 in 2015 and 2016 and there may be gaps in sector coverage across reporting members, particularly in adaptation, energy efficiency and agriculture. A number of actions could maintain IDFC's high-level of recognition in this area:

- Support to non-reporting members including ad-hoc specific advice and guidance on green definitions and interpreting internal systems.
- Allow for the disclosure of individual member data on commitments in line with other development finance institutions (for example the MDBs).

**Build on leadership position on green finance tracking in refining methodologies and definitions.** In line with progress among the wider climate finance community, including multilateral development banks, as well as private sector investors making green finance commitments, there is a need to further align the various definitions between actors and those reported by IDFC members. In particular, the IDFC Climate Finance Forum in Casablanca, November 2016 announced greater collaboration efforts among IDFC and MDBs in the area of adaptation and resilience.

- Continue to encourage and assist its members in their endeavor to report on the MDB-IDFC Common Principles for Climate Adaptation and Mitigation as they evolve. These would allow greater harmonization, comparability, transparency and robustness of climate finance accounting and metrics across institutions.
- Consider the adoption of better definitions and metrics for adaptation where they exist
- Review new taxonomies under use by private sector actors for example in low carbon indices, climate risk reporting and green bonds to consider how alignment may occur.
- Engage in cooperation on mapping and reporting initiatives such as the Climate Action in Financial Institutions Initiative (formerly known as 5 Principles for Mainstreaming Climate Action within Financial Institutions).

**Track private finance mobilization to assist analysis and scaling up of private capital to achieve green finance goals.** The IDFC Climate Finance Forum in Casablanca, November 2016 committed the group to ‘enable, scale up and accelerate climate transaction’, particularly in being a lead contributor of the transformation of Nationally Determined Contributions (NDCs) into

financeable programs and projects with incentives for the business community. There is potential for IDFC to be a platform to mobilize private finance in order to fill the global financial gaps for sustainable development. To this end, the following key actions are recommended:

- Improve tracking of private finance mobilization by its members to better identify the volume and strategic direction of achieving scale including through harmonization of approaches with MDBs.
- Collect and analyze data on regional and country-level green finance commitments to identify what type of instruments (loans, grants equity etc.) are better suited to projects and different countries.
- Assess the role of green bonds issued by IDFC members in supporting private finance scale-up into new green finance regions and sectors, as well as the activities supporting local commercial financing institutions in accessing the green bond market.

**Establish a process to develop group-wide commitment targets where there is most need.** As a group, IDFC members operate in diverse geographic areas and across sectors, as well as providing a range of concessional and non-concessional instruments to green projects. While, there is need to scale up absolute green finance commitments by all members, and the broader financial sector to meet Paris Agreement and Sustainable Development Goals, IDFC members are uniquely placed to assist each other in targeting those areas in most need of public finance support that can result in greater private finance flows. A coordinated needs assessment analysis conducted among IDFC members in their countries of operation may assist in identifying opportunities for public finance blending among IDFC members and in structured vehicles designed to attract private sector co-finance. IDFC members could consider setting group-wide targets in the following areas:

- Effective and coordinated use of concessional capital from external sources such as the Green Climate Fund (GCF) by tracking cooperation among members. Currently ten IDFC members

are accredited entities to the GCF.

- Specific deployment of innovative risk mitigation instruments for private mobilization may also be targeted where they have been demonstrated to have high catalytic effect such as guarantees, patient equity investments and long-term concessional loans.
- Specific targets on adaptation and climate resilience financing either in volume of finance or as a proportion of overall financing. Currently, adaptation finance is 8% of total green finance.
- Targets on mainstreaming climate action within financial institutions. These can include both qualitative indicators on strategic, policy and governance procedures related to climate risks as well as quantitative indicators on green finance.
- Establishing benchmarks on Cooperation for Development (CfD) among IDFC members. In 2016, IDFC adopted CfD as a framework for tracking different kinds of cooperation within the Club, including through knowledge-sharing, capacity building and adoption of best practices. Specific measures of cooperation may be outlined in the future to support greater efficiencies and knowledge-exchange across the club.

## 5. APPENDICES

### 5.1 APPENDIX A: LIST AND BRIEF DESCRIPTION OF IDFC MEMBER ORGANISATIONS

#### EUROPE

1. Agence Française de Développement (AFD), France\*: A public institution and the central figure in France's development assistance system. AFD and its subsidiary PROPARCO are dedicated to private-sector finance projects and programs on five continents – with primacy given to Africa, and overseas France and 80 countries.
2. Black Sea Trade and Development Bank (BSTDB), Greece\*: BSTDB is a financial institution established by Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey, and Ukraine, to support economic development and regional cooperation.
3. Croatian Bank for Reconstruction and Development (HBOR), Croatia: HBOR is the development and export bank of the Republic of Croatia with the main task of promoting the development of the Croatian economy. HBOR builds bridges between entrepreneurial ideas and their accomplishment.
4. Industrial Development Bank of Turkey (TSKB), Turkey\*: TSKB is Turkey's first privately-owned development and investment bank that supports Turkey's sustainable growth with its broad array of corporate banking, investment banking, and consultancy services.
5. KfW Bankengruppe, Germany\*: KfW is a German government-owned development bank with KfW IPEX Bank GmbH, KfW DEG and KfW Development Bank predominantly active in the international arena.

6. Vnesheconombank (VEB), Russia: VEB is commonly called the Russian Development Bank. It acts on behalf of the national government to support and develop the Russian economy, as well as to manage state debts and pension funds.

#### CENTRAL AND SOUTH AMERICA

1. Bancoldex S.A., Colombia: Bancóldex is associated with Colombia's Ministry of Commerce, Industry, and Tourism, and offers products and services that address market gaps as well as the financial and nonfinancial needs of Colombian companies and citizens.
2. Banco Estado (BE) Chile\*: State-owned BE provides wholesale and retail banking services to large and medium-sized companies and government entities, as well as individuals, small businesses, and micro-enterprises, primarily in Chile.
3. Banco Nacional de Desenvolvimento Econômico e Social (BNDES), Brazil: BNDES is a federal public company associated with Brazil's Ministry of Development, Industry and Foreign Trade – and one of the largest development banks in the world.
4. Central American Bank for Economic Integration (BCIE/CABEI), Honduras: CABEI is the largest financial institution in Central America. Founded in 1960 by Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, its members now also include Argentina, Colombia, the Dominican Republic, Mexico, Panama, Spain and Taiwan.
5. Corporación Financiera de Desarrollo S.A. (COFIDE), Peru: As a development bank, COFIDE participates in the sustainable and inclusive development of the country by providing financing for investments and the financial system, as well as support for entrepreneurial ventures, with creative products and services, while being socially responsible.

6. Development Bank of Latin America (CAF), Venezuela: With 18 member countries from Latin America, the Caribbean, and Europe, CAF is one of the region's main sources of multilateral financing, with the mission of stimulating sustainable development and regional integration.
7. Nacional Financiera (NAFIN), Mexico\*: NAFIN provides access to affordable financing to micro, small and medium-sized enterprises ("MSMEs") operating throughout Mexico. It is also key to promoting the Mexican government's policies for expanding economic and social development in the country with the primary objective of generating jobs and regional growth by strengthening and modernizing MSMEs, and to providing financing for infrastructure and power generation.

## AFRICA

1. Banque Ouest Africaine de Développement (BOAD), Togo: The West African Development Bank (BOAD) is the common development finance institution of the member states of the West African Monetary Union (WAMU). It was established by an Agreement signed on 14 November 1973, and became operational in 1976. Member States include: Benin, Burkina, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo.
2. Caisse de Dépôt et de Gestion (CDG), Morocco: CDG is active in virtually all areas of Morocco's national economy and is the country's largest institutional investor in infrastructure and government treasury securities.
3. Development Bank of Southern Africa (DBSA), South Africa: DBSA is a development finance institution dedicated to promoting economic growth, human resource development, institutional capacity building, and development projects throughout the region of Southern Africa.
4. The Trade and Development Bank (TDB), Brundi: TDB is a African regional development financial institution established in 1985 whose mandate is to finance and foster trade, socioeconomic development, and regional economic integration across its member states.

## ASIA AND MENA

1. China Development Bank (CDB), China: CDB is a financial institution in the People's Republic of China (PRC) under the direct jurisdiction of the State Council. The bank is the second largest bond issuer in China, as well as the country's largest foreign currency lender.
2. Indonesia Exim Bank, Indonesia: As an Indonesian Export Financing Institution, IEB has the objective of improving national exports through low-cost loans, guarantees, and/or micro-financing to Indonesian exporters and foreign importers of Indonesian goods.
3. Islamic Corporation for the Development of the Private Sector (ICD), Saudi Arabia: ICD is the private sector arm of the Islamic Development Bank with the mandate to support the development of the private sector in its member countries which are located in East Asia, Central Asia, Eastern Europe, Middle East, North Africa, Sub-Saharan Africa and South America.
4. Japan International Cooperation Agency (JICA), Japan\*: JICA is an independent agency that coordinates development assistance for the government of Japan, with a role in providing technical cooperation, capital grants and yen loans.
5. Small Industries Development Bank of India (SIDBI), India: Small Industries Development Bank of India (SIDBI), set up on April 2, 1990 under an Act of Indian Parliament, is the Principal Financial Institution for the Promotion, Financing and Development of the Micro, Small and Medium Enterprise (MSME) sector and for Co-ordination of the functions of the institutions engaged in similar activities in India.



6. The Korea Development Bank (KDB), South Korea\*: As government-owned bank and policy financial institution of Korea, KDB has important roles in supplying and managing major industrial capital to help develop the national economy.

*Note: \* The institutions marked \* are based in OECD countries.*

## 5.2 APPENDIX B: METHODOLOGY GUIDANCE

### DEFINITIONS AND TERMINOLOGY

With no standardized and internationally agreed definitions for green and climate finance, this methodology provides working definitions for both the terminologies. Green finance is a broad term that can refer to financial investments flowing into sustainable development projects and initiatives, environmental products, and policies that encourage the development of a more sustainable economy. Green finance includes climate finance, but is not limited to it. It also refers to a wider range of other environmental objectives; for example, industrial pollution control, water sanitation, and biodiversity protection. Mitigation and adaptation finance is specifically related to climate change related activities. Mitigation financial flows refer to investments in projects and programs that contribute to reducing or avoiding GHG emissions, whereas adaptation financial flows refer to investments that contribute to reducing the vulnerability of goods and persons to the effects of climate change. Thus, for the purposes of the mapping exercise, green finance is split into three separate categories/themes:

- Green energy and mitigation of GHG
- Adaptation to climate change impacts
- Other environmental objectives

To provide accurate and comparable data for this mapping exercise, a consistent categorization of mitigation and adaptation activities was agreed to by IDFC members, taking into consideration the outcomes of the MDBs-IDFC Common Principles for Climate Finance Tracking. The mapping exercise adopted a two-step approach based on

- A global definition of mitigation, adaptation and other environment projects. A list of definitions is provided in Table B2.
- A core list of project categories that were consensually accepted by all IDFC members as projects that typically contribute to tackling climate change. A list of project categories is provided in Appendix C.

The categories were adopted from the 2011 IDFC Green Finance Mapping methodology and updated according to the MDBs-IDFC Common Principles for Climate Finance Tracking. As there are significant challenges to unambiguously attributing specific investments to only one of the three themes, it was decided to split each theme into separate subcategories with clear project activity examples. The category on green energy and mitigation was also disaggregated further into sub-subcategories, based on the developed MDBs-IDFC Common Principles for Climate Mitigation Finance Tracking. This approach also helps to avoid double-counting of projects. Additional details on the themes, subcategories, and sub-subcategories are provided in Appendix C. In those cases where IDFC members did not have, or refrained from providing, subcategory information, non-attributed data were provided.

In this study, given data are for financial flows committed in the year 2016 in the form of inter alia loans (concessional and non-concessional), grants, guarantees, equity, and mezzanine finance used by financial institutions to finance investments. New commitments refer to financial commitments signed or approved by the board of the reporting institution during 2015. Cross financial flows between IDFC banks are minimal in the climate financing area and hence are not accounted for in the assessment.

**Table B1 | Definition of Instruments**

INSTRUMENT	DEFINITION
Loans	A loan is a debt evidenced by a note that specifies, among other things, the principal amount, interest rate, and date of repayment.
...of which concessional loans	Loans which are extended on terms substantially more generous than market loans. The concessionality is achieved either through interest rates below those available on the market or by longer pay back periods or a combination of these.
...of which non-concessional loans	Loans with regular market conditions
Grants	Grants are transfers made in cash, goods, or services for which no repayment is required.
Other Instruments includes	
Guarantee	Formal assurance that liabilities of a debtor will be met if the debtor fails to settle the debt.
Equity	A stock or any other security representing an ownership interest.



**Table B2 | Definition of Categories/Themes**

OTHER ENVIRONMENTAL OBJECTIVE		SOURCE
Definition	An activity will be classified as other environmental objective if it does not directly target climate-change mitigation or adaptation, yet is, however, related to sustainable development with a positive impact on the environment.	IDFC Green Finance Mapping
CLIMATE-CHANGE MITIGATION		SOURCE
Definition	An activity will be classified as related to climate change mitigation if it promotes “efforts to reduce or limit greenhouse gas (GHG) emissions or enhance GHG sequestration”. Reporting according to the Principles does not imply evidence of climate change impacts and any inclusion of climate change impacts is not a substitute for project-specific theoretical and/or quantitative evidence of GHG emission mitigation; projects seeking to demonstrate climate change impacts should do so through project-specific data	MDBs-IDFC Common Principles for Climate Mitigation Finance Tracking V2
Criteria for Eligibility	<p>Where data is unavailable, any uncertainty is to be overcome following the principle of conservativeness where climate finance is preferred to be under-reported rather than over-reported</p> <p>The Principles are activity-based as they focus on the type of activity to be executed, and not on its purpose, the origin of the financial resources, or its actual results. The list of activities eligible under these principles are illustrated in Table 1</p> <p>Project reporting is ex-ante project implementation at board approval or financial commitment</p> <p>Climate finance tracking is independent of GHG accounting reporting in the absence of a joint GHG methodology.</p> <p>The Principles require mitigation activities to be disaggregated from non-mitigation activities as far as reasonably possible. If such disaggregation is needed and not possible using project specific data, a more qualitative/experience based assessment can be used to identify the proportion of the project that covers climate mitigation activities, consistent with the conservativeness principle. This is applicable to all categories, but of particular significance for energy efficiency projects.</p> <p>Mitigation activities or projects can consist of a stand-alone project, multiple stand-alone projects under a larger program, a component of a stand-alone project, or a program financed through a financial intermediary.</p> <p>In fossil fuel combustion sectors (transport, and energy production and use), the methodology recognizes the importance of long-term structural changes, such as the energy production shift to renewable energy technologies, and the modal shift to low-carbon modes of transport. Consequently, for renewable energy and transport projects ensuring modal shift, both new and retrofit projects are included. In energy efficiency, however, the methodology acknowledges that drawing the boundary between increasing production and reducing emissions per unit of output is difficult. Consequently, greenfield energy efficiency investments are included only in few cases when they enable preventing a long-term lock-in in high carbon infrastructure, and, for the case of energy efficiency investments in existing facilities, it is required that old technologies are replaced well before the end of their lifetime, and new technologies are substantially more efficient than the replaced technologies. Alternatively, it is required that new technologies or processes are substantially more efficient than those normally used in greenfield projects.</p> <p>The methodology assumes that care will be taken to identify cases when projects do not mitigate emissions due to their specific circumstances.</p>	MDBs-IDFC Common Principles for Climate Mitigation Finance Tracking V2

CLIMATE-CHANGE ADAPTATION		SOURCE
Definition	<p>Adaptation finance tracking relates to tracking the finance for activities that address current and expected effects of climate change, where such effects are material for the context of those activities.</p> <p>Adaptation finance tracking may relate to activities consisting of stand-alone projects, multiple projects under larger programs, or project components, sub-components or elements, including those financed through financial intermediaries.</p>	IDFC-MDBs Common principles for climate change adaptation
Criteria for Eligibility	<p>Adaptation finance tracking process consists of the following key steps:</p> <p>Setting out the context of risks, vulnerabilities and impacts related to climate variability and climate change;</p> <p>Stating the intent to address the identified risks, vulnerabilities and impacts in project documentation;</p> <p>Demonstrating a direct link between the identified risks, vulnerabilities and impacts, and the financed activities.</p> <p>Adaptation finance tracking requires adaptation activities to be disaggregated from non-adaptation activities as far as reasonably possible. If disaggregation is not possible using project specific data, a more qualitative or experience-based assessment can be used to identify the proportion of the project that covers climate change adaptation activities. In consistence with the principle of conservativeness, climate finance is underreported rather than over-reported in this case.</p>	IDFC-MDBs Common principles for climate change adaptation

**Table B3** | Definition of Regions (Adapted from the World Bank)

EAST ASIA AND THE PACIFIC	EASTERN EUROPE AND CENTRAL ASIA	LATIN AMERICA AND THE CARIBBEAN	MIDDLE EAST AND NORTH AFRICA	SOUTH ASIA
American Samoa	Albania	Antigua and Barbuda	Algeria	Afghanistan
Cambodia	Armenia	Argentina	Djibouti	Bangladesh
China	Azerbaijan	Belize	Egypt, Arab Rep.	Bhutan
Fiji	Belarus	Bolivia	Iran, Islamic Rep.	India
Indonesia	Bosnia and Herzegovina	Brazil	Iraq	Maldives
Kiribati	Georgia	Chile	Jordan	Nepal
Korea, Dem. Rep.	Kazakhstan	Colombia	Lebanon	Pakistan
Lao PDR	Kosovo	Costa Rica	Libya	Sri Lanka
Malaysia	Kyrgyz Republic	Cuba	Morocco	
Marshall Islands	Macedonia, FYR	Dominica	Syrian Arab Republic	
Micronesia, Fed. Sts	Moldova	Dominican Republic	Tunisia	
Mongolia	Montenegro	Ecuador	West Bank and Gaza	
Myanmar	Russian Federation	El Salvador	Yemen, Rep.	
Palau	Serbia	Grenada		
Papua New Guinea	Tajikistan	Guatemala		
Philippines	Turkey	Guyana		
Samoa	Turkmenistan	Haiti		
Solomon Islands	Ukraine	Honduras		
Thailand	Uzbekistan	Jamaica		
Timor-Leste		Mexico		
Tuvalu		Nicaragua		
Tonga		Panama		
Vanuatu		Paraguay		
Vietnam		Peru		
		St. Lucia		
		St. Vincent and the Grenadines		
		Suriname		
		Uruguay		
		Venezuela, RB		

SUB-SAHARAN AFRICA		EU	Others
Angola	Mauritania	Austria	Trans-regional
Benin	Mauritius	Belgium	Include funds that are channelled to more than one region and/or that are channelled through multilateral climate funds.
Botswana	Mozambique	Bulgaria	
Burkina Faso	Namibia	Cyprus	
Burundi	Niger	Czech Republic	Australia
Cameroon	Nigeria	Denmark	Canada
Cape Verde	Rwanda	Estonia	Japan
Central African Republic	São Tomé and Príncipe	Finland	United States
Chad	Senegal	France	
Comoros	Seychelles	Germany	
Congo, Dem. Rep.	Sierra Leone	Greece	
Congo, Rep	Somalia	Hungary	
Côte d'Ivoire	South Africa	Ireland	
Eritrea	South Sudan	Italy	
Ethiopia	Sudan	Latvia	
Gabon	Swaziland	Lithuania	
Gambia, The	Tanzania	Luxembourg	
Ghana	Togo	Malta	
Guinea	Uganda	Netherlands	
Guinea-Bissau	Zambia	Poland	
Kenya	Zimbabwe	Portugal	
Lesotho		Romania	
Liberia		Slovakia	
Madagascar		Slovenia	
Malawi		Spain	
Mali		Sweden	
		United Kingdom	

**Table B4 | Definition of private sector co-financing**

Definition	The asset financed is in private ownership ( $\geq 50\%$ ) ("private investment") AND/OR the financial contribution comes from a private sector actor ("private capital")	DFI climate finance questionnaire
Criteria for Eligibility	<p>Loans by private sector actors mobilised by IDFC member loans</p> <p>Loans by private sector actors mobilised by IDFC member equity positions</p> <p>Loans by private sector actor mobilised by IDFC member guarantees</p> <p>Equity from private sector mobilised by IDFC member loans</p> <p>Equity from the private sector actor mobilised by IDFC member equity positions</p> <p>Loans by private sector actor mobilised by IDFC member grants (e.g. to cover costs of a renewable energy feed-in law or premium or CO<sub>2</sub>-certificates in the CDM)</p> <p>Equity from private sector actor mobilised by IDFC member grants (e.g. to cover costs of a renewable energy feed-in law or premium or CO<sub>2</sub>-certificates in the CDM)</p> <p>Loans to the private sector generated by the revolving use of credit lines or green funds (subtract original loan to avoid double counting)</p> <p>Loans and equity mobilised from the private sector in other ways under Public-Private-Partnerships (PPP)</p>	
Sampling vs. complete coverage	It is acceptable to derive representative mobilisation factors (e.g. 1,5 for revolving credit lines to banks or 1,5 for equity in project finance) for homogenous fractions of the portfolio based on a representative subset of projects.	
Several public sector actors are involved	Allocate mobilised investment on a pro-rata basis to different public financiers independent of the specific instruments applied.	

**Table B5 | Definition of climate policies**

Definition	Specific climate strategy that the institution acts upon	IDFC green finance mapping
Specifications	<p>Environment rate: rate that shows the proportion of commitments regarding environmental topics compared to total commitments</p> <p>Climate guidelines for new projects (like ESG standards): inclusion of environmental, social &amp; governance criteria/guidelines/policies in investment analysis and decision processes</p>	

## 5.3 APPENDIX C: ELIGIBLE PROJECT CATEGORIES

Despite the efforts of MDBs and IDFC to develop Common Principles for Climate Finance Tracking, a key challenge of the mapping study is to overcome the varying definitions for green finance and to distinguish the finance flows, attributed to other environmental objectives, green energy and mitigation of GHG and adaptation categories, from each other. In order to most effectively distinguish between these categories, guidance was provided to IDFC members. Much of this guidance was determined in close coordination with representatives of IDFC.

Disaggregated data was collected as shown in Table 4 below. In addition, IDFC members were asked to further disaggregate their financial commitments to green energy and mitigation.

**Table C1 | Eligible Project Categories (Based on MDBs-IDFC Common Principles 2015)**

Category	Sub-category	Activities
<b>Green energy and mitigation of greenhouse gas emissions</b>		
1. Renewable Energy	1.1 Electricity Generation	Wind power
		Geothermal power (only if net emission reductions can be demonstrated)
		Solar power (concentrated solar power, photovoltaic power)
		Biomass or biogas power (only if net emission reductions, including carbon pool balance, can be demonstrated)
		Ocean power (wave, tidal, ocean currents, salt gradient, etc.)
		Hydropower plants (only if net emission reductions can be demonstrated)
		Renewable energy power plant retrofits
	1.2 Heat Production or other renewable energy application	Solar water heating and other thermal applications of solar power in all sectors
		Thermal applications of geothermal power in all sectors
		Wind-driven pumping systems or similar
		Thermal applications of sustainably/produced bioenergy in all sectors, incl. efficient, improved biomass stoves
	1.3 Measures to facilitate integration of renewable energy into grids	New, expanded and improved transmission systems (lines, substations).
		Storage systems (battery, mechanical, pumped storage)
		New information and communication technology, smart-grid and mini-grid
2. Lower-carbon and efficient energy generation	2.1 Transmission and distribution systems	Retrofit of transmission lines or substations and/or distribution systems to reduce energy use and/or technical losses including improving grid stability/reliability, (only if net emission reductions can be demonstrated)[1]
	2.2 Power Plants	Thermal power plant retrofit to fuel switch from a more GHG-intensive fuel to a different and less GHG-intensive fuel type
		Conversion of existing fossil-fuel based power plant to co-generation[2] technologies that generate electricity in addition to providing heating/cooling
		Waste heat recovery improvements.
		Energy-efficiency improvement in existing thermal power plant,

Category	Sub-category	Activities
3. Energy efficiency	3.1 Energy efficiency in industry in existing facilities	industrial energy-efficiency improvements through the installation of more efficient equipment, changes in processes, reduction of heat losses and/or increased waste heat recovery
		Installation of co/generation plants that generate electricity in addition to providing heating/cooling
		More efficient facility replacement of an older facility (old facility retired)
	3.2 Energy efficiency improvements in existing commercial, public and residential buildings	Energy-efficiency improvement in lighting, appliances and equipment
		Substitution of existing heating/cooling systems for buildings by co/generation plants that generate electricity in addition to providing heating/cooling[3]
		Retrofit of existing buildings: Architectural or building changes that enable reduction of energy consumption
	3.3 Energy efficiency improvements in the utility sector and public services	Energy-efficiency improvement in utilities and public services through the installation of more efficient lighting or equipment
		Rehabilitation of district heating and cooling systems
		Utility heat loss reduction and/or increased waste heat recovery
		Improvement in utility scale energy efficiency through efficient energy use, and loss reduction
	3.4 Vehicle energy efficiency fleet retrofit	Existing vehicles, rail or boat fleet retrofit or replacement (including the use of lower-carbon fuels, electric or hydrogen technologies, etc.)
	3.5 Energy efficiency in new commercial, public and residential buildings	Use of highly efficient architectural designs, energy efficiency appliances and equipment, and building techniques that reduce building energy consumption, exceeding available standards and complying with high energy efficiency certification or rating schemes
	3.6 Energy audits	Energy audits to energy end-users, including industries, buildings, and transport systems

Category	Sub-category	Activities
4. Agriculture, forestry and land-use	4.1 Agriculture	Reduction in energy use in traction (e.g. efficient tillage), irrigation, and other agricultural processes
		Agricultural projects that improve existing carbon pools (, rangeland management, collection and use of bagasse, rice husks, or other agricultural waste, reduced tillage techniques that increase carbon contents of soil, rehabilitation of degraded lands, peatland restoration, etc.)
		Reduction of non Co2 GHG emissions from agricultural practices (eg: paddy rice production, reduction in fertilizer use ...).
	4.2 Afforestation and reforestation, and biosphere conservation	Afforestation (plantations) on non-forested land
		Reforestation on previously forested land
		Sustainable forest management activities that increase carbon stocks or reduce the impact of forestry activities
		Biosphere conservation projects (including payments for ecosystem services) targeting reducing emissions from the deforestation or degradation of ecosystems
	4.3 Livestock	Livestock projects that reduce methane or other GHG emissions (manure management with biodigestors, etc.)
	4.4 Biofuels	Production of biofuels (including biodiesel and bioethanol) (only if net emission reductions can be demonstrated)
5. Non-energy GHG reductions	5.1 Fugitive emissions	Reduction of gas flaring or methane fugitive emissions in the oil and gas industry
		Coal mine methane capture
	5.2 Carbon capture and storage	Projects for carbon capture and storage technology that prevent release of large quantities of CO2 into the atmosphere from fossil fuel use in power generation, and process emissions in other industries
	5.3 Air conditioning and refrigeration	Retrofit of existing industrial, commercial and residential infrastructure to switch to cooling agent with lower global warming potential
	5.4 Industrial processes	Reduction in GHG emissions resulting from industrial process improvements and cleaner production (e.g. cement, chemical), excluding carbon capture and storage
6. Waste and wastewater		Treatment of wastewater if not a compliance requirement (e.g. performance standard or safeguard) as part of a larger project that reduce methane emissions (only if net GHG emission reductions can be demonstrated)
		Waste management projects that capture or combust methane emissions
		Waste to energy projects
		Waste collection, recycling and management projects that recover or reuse materials and waste as inputs into new products or as a resource (only if net emission reductions can be demonstrated).



Category	Sub-category	Activities
7. Transport	7.1 Urban transport modal change	Urban mass transit
		Non-motorized transport (bicycles and pedestrian mobility)
	7.2 Transport oriented urban development	Integration of transport and urban development planning (dense development, multiple land-use, walking communities, transit connectivity, etc.), leading to a reduction in the use of passenger cars
		Transport demand management measures dedicated to reduce GHG emissions (e.g., speed limits, high-occupancy vehicle lanes, congestion charging/road pricing, parking management, restriction or auctioning of license plates, car-free city areas, low-emission zones)
	7.3 Inter-urban transport	Railway transport ensuring a modal shift of freight and/or passenger transport from road to rail (improvement of existing lines or construction of new lines)
8. Low-carbon technologies		Waterways transport ensuring a modal shift of freight and/or passenger transport from road to waterways (improvement of existing infrastructure or construction of new infrastructure)
	8.1 Products or equipment	Projects producing components, equipment or infrastructure dedicated for the renewable and energy efficiency sectors
	8.2 R&D	Research and development of renewable energy or energy efficiency technologies
9. Cross-cutting issues	9.1 Support to national, regional or local policy, through technical assistance or policy lending,	Mitigation national, sectorial or territorial policies/planning/action plan policy/planning/institutions
		Energy sector policies and regulations leading to climate change mitigation or mainstreaming of climate action (energy efficiency standards or certification schemes; energy efficiency procurement schemes; renewable energy policies)
		Systems for monitoring the emissions of greenhouse gases
		Efficient pricing of fuels and electricity (subsidy rationalization, efficient end-user tariffs, and efficient regulations on electricity generation, transmission, or distribution),
		Education, training, capacity building and awareness raising on climate change mitigation/sustainable energy/sustainable transport; mitigation research
		Other policy and regulatory activities, including those in non-energy sectors, leading to climate change mitigation or mainstreaming of climate action
	9.2 Financing instruments	Carbon Markets and finance (purchase, sale, trading, financing and other technical assistance). Includes all activities related to compliance-grade carbon assets and mechanisms, such as CDM, JI, AAUs, as well as well-established voluntary carbon standards like the VCS or the Gold Standard.
10. Miscellaneous	10.1 Other activities with net greenhouse gas reduction	Any other activity not included in this list for which the results of an ex-ante greenhouse gas accounting (undertaken according to commonly agreed methodologies) show emission reductions

[1] In case capacity expansion only the part that is reducing existing losses is included

[2] In all cogeneration projects it is required that energy efficiency is substantially higher than separate production.

[3] ibid

Category	Sub-category	Activities
Adaptation to climate change		
Water preservation	Water preservation	Improvement in catchment management planning (to adapt to a reduction in river water levels due to reduced rainfall)
		Installation of domestic rainwater harvesting equipment and storage (to adapt to an increase in groundwater salinity due to sea level rise)
		Rehabilitation of water distribution networks to improve water resource management (to adapt to increased water scarcity caused by climate change)
Agriculture, natural resources and ecosystem based adaptation	Agriculture, natural resources and ecosystem based adaptation	Conservation agriculture such as provision of information on crop diversification options (to adapt to an increased vulnerability in crop productivity)
		Increased production of fodder crops to supplement rangeland diet (to adapt to a loss in forage quality or quantity caused by climatic changes)
		Adoption of sustainable fishing techniques (to adapt to the loss of fish stocks due to changes in water flows or temperature)
		Identification of protected ecosystem areas (to adapt to a loss of species caused by sudden temperature changes)
		Improved management of slopes basins (to adapt to increased soil erosion caused by flooding due to excess rainfall)
Coastal protection	Coastal protection	Building of dykes to protect infrastructure (to adapt to the loss and damage caused by storms and coastal flooding, and sea level rise),
		Mangrove planting (to build a natural barrier to adapt to increased coastal erosion and to limit saltwater intrusion into soils caused by sea level rise)
Other disaster risk reduction	Other disaster risk reduction	Early warning systems for extreme weather events (to adapt to an increase in extreme weather events by improving natural disasters management and reduce related loss and damage)
		Improved drainage systems (to adapt to an increase in floods by draining off rainwaters)
		Insurance against natural disasters (to adapt better to extensive loss and damage caused by extreme weather events)
		Building resilient infrastructures such as a protection system for dams (to adapt to exposure and risk to extreme weather impacts, such as flooding, caused by climate change)
		Monitoring of disease outbreaks and development of a national response plan (to adapt to changing patterns of diseases that are caused by changing climatic conditions)
Local, sectoral, or national budget support to a climate change adaptation policy	Local, sectoral, or national budget support to a climate change adaptation policy	Dedicated budget support to a national or local authorities for climate change adaptation policy implementation

Category	Sub-category	Activities
‘Other Environment’		
Water supply	Water supply	Water supply - municipal / industrial / agricultural

Waste water treatment	Waste water treatment	Waste water treatment - municipal / industrial / agricultural
Industrial pollution control	Industrial pollution control	Reduction of fluid and air pollutants from industry
Soil remediation and mine rehabilitation	Soil remediation and mine rehabilitation	Clean up of hazardous waste sites
Waste management	Waste management	Solid waste collection and treatment, recycling
Biodiversity	Biodiversity	Forest species protection, biodiversity
Sustainable infrastructure	Sustainable infrastructure	Improvement of general transport logistics such as reduction of empty running

## 5.4 APPENDIX D: DATA TABLES

GREEN ENERGY AND MITIGATION OF GHG EMISSIONS	\$ BILLIONS IN 2015	\$ BILLIONS IN 2016
Transport	53.4	79.6
Renewable energy	46.3	37.1
Energy efficiency	18.5	25.8
Lower-carbon and efficient energy generation	4.5	4.7
Unattributed	0.3	2.0
Agriculture, forestry, and land-use	3.1	1.8
Cross-cutting issues	1.3	1.0
Miscellaneous and others—green energy and mitigation	0.5	0.9
Waste and wastewater	0.4	0.4
<b>TOTAL</b>	<b>128.5</b>	<b>153.3</b>

ADAPTATION TO CLIMATE CHANGE	\$ BILLIONS IN 2015	\$ BILLIONS IN 2016
Water preservation	1.9	1.7
Agriculture, natural resources and ecosystem based adaptation	0.6	1.2
Other disaster risk reduction	2.1	1.2
Miscellaneous and others - Adaptation	1.0	0.6
Local, sectoral, or national budget support to a climate change adaptation policy	0.2	0.1
Coastal protection	0.2	0.03
<b>TOTAL</b>	<b>5.9</b>	<b>4.8</b>

PROJECTS WITH ELEMENTS OF BOTH MITIGATION AND ADAPTATION	\$ BILLIONS IN 2015	\$ BILLIONS IN 2016
<b>TOTAL</b>	<b>1.3</b>	<b>1.4</b>

OTHER ENVIRONMENTAL OBJECTIVES	\$ BILLIONS IN 2015	\$ BILLIONS IN 2016
Industrial pollution control	1.6	5.97
Water supply	2.2	3.18
Waste water treatment	0.8	2.10
Miscellaneous and others - 'other environment'	2.4	1.65
Sustainable infrastructure	0.2	0.66
Waste management	0.1	0.15
Biodiversity	0.05	0.13
Soil remediation and mine rehabilitation	0.013	0.001
<b>TOTAL</b>	<b>7.3</b>	<b>13.83</b>

## 5.5 APPENDIX E: INDEX OF ACRONYMS

ADB	Asian Development Bank
AFD	Agence Française de Développement
AfDB	African Development Bank
Bancoldex	Banco de Comercio Exterior de Colombia
BE	Banco de Estado
BNDES	Brazilian Development Bank
BOAD	Banque Ouest Africain de Développement
BSTDB	Black Sea Trade and Development Bank
CABEI	Central American Bank for Economic Integration
CAF	Development Bank of Latin America
CDB	China Development Bank
CDG	Caisse de Dépôt et de Gestion
CO <sub>2</sub>	Carbon dioxide
COFIDE	Corporación Financiera de Desarrollo S.A.
MDB-IDFC Common Principles	Common Principles for Climate Mitigation as well Climate Change Adaptation Finance Tracking, jointly developed by MDBs and IDFC
COP	Conference of Parties
CPI	Climate Policy Initiative
DBSA	Development Bank of Southern Africa
HBOR	Croatian Bank for Reconstruction and Development
ICD	Islamic Corporation for the Development of the Private Sector
IEB	Indonesia Exim Bank
IDFC	International Development Finance Club
IFC	International Finance Corporation
JICA	Japan International Cooperation Agency
KFW	Kreditanstalt für Wiederaufbau
KDB	Korean Development Bank
MDB	Multilateral Development Bank
NAFIN	Nacional Financiera S.N.C
OECD	Organisation for Economic Cooperation and Development
OECD-DAC	Organisation for Economic Cooperation and Development Assistance Committee
PV	Photovoltaic
SEI	Stockholm Environment Institute
SIDBI	Small Industries Development Bank of India
TDB	Trade and Development Bank
TSKB	Industrial Development Bank of Turkey
UNEP	United Nations Environmental Program
UNEP BFI	United Nations Environmental Program Bilateral Finance Institutions
UNFCCC	United Nations Framework Convention on Climate Change
VEB	Vnesheconombank