

STILL FAILING TO SOLVE ENERGY POVERTY:

International Public Finance for Distributed Clean Energy Access Gets another “F”

SCORECARD

World Bank Group	F
Inter-American Development Bank	F
Asian Development Bank	F
African Development Bank	F



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EXECUTIVE SUMMARY

This report provides a new look at the 2014 report by Oil Change International and the Sierra Club titled *Failing to Solve Energy Poverty: How Much International Public Investment is Going to Distributed Clean Energy Access?* As noted in the 2014 report, energy poverty remains a major global issue, as approximately 1.1 billion people still lack access to electricity worldwide.

Centralized power plants and expanding the grid remain the default approach in addressing energy poverty. However, the grid has not yet reached many rural areas, remains unreliable in many areas it has reached, and often is unaffordable for poor households, even those in close proximity to the grid. Of the world's population that lacks access to electricity, 84 percent are located in rural areas, where it is often very costly to extend existing grids. Therefore, if the goal of universal energy access is to be reached by 2030, the world must consider other electrification options that are both affordable and capable of being widely distributed.

Distributed clean energy solutions, including off-grid renewable energy and mini-grids, meet these criteria and must constitute a major component of the world's approach to expanding energy access. In its *Energy for All Case*, the International Energy Agency (IEA) finds that in order to achieve energy access for all by 2030, new investments will need to be balanced among grid extension, mini-grids, and off-grid energy (receiving 36 percent, 40 percent, and 24 percent of total additional investment, respectively). This IEA scenario indicates that the lion's share of additional investment in energy access, or 64 percent, would go to distributed solutions.

Using that lens, this report assesses how four multilateral development banks (MDBs)—World Bank Group, Inter-American Development Bank, African Development Bank, and Asian Development Bank—are measuring up in their efforts to address the global energy access challenge. The report uses the same methodology that was used in 2014 for grading the portfolios of the four MDBs, and evaluates their performance by looking across fiscal years 2012, 2013, and 2014 for each institution. The funding breakdown from the IEA *Energy for All Case*, which achieves universal energy access by 2030, is used as the key benchmark for multilateral development bank spending on energy access. As institutions dedicated to eliminating poverty, MDBs must prioritize the elimination of energy poverty

and ensure that their approaches are aligned with best practices for doing so.

KEY FINDINGS FROM THIS UPDATED VERSION OF THE REPORT INCLUDE:

- **All of the banks again received a failing grade of “F”** when evaluated against the five energy access criteria, as they did in the previous version of this report released in 2014. This is a disappointing outcome given the increased awareness of the importance of universal energy access spurred by, among other things, the Sustainable Energy for All initiative.
- **For some institutions, energy access investment actually declined year on year.**
- **Absolute investments in energy access and distributed renewable energy increased slightly since the previous report was published.** Across most criteria, performance remained relatively stagnant amongst the banks, with major declines in some areas and modest improvements in others.
- **The African Development Bank was the only bank to increase its score** relative to the previous version of the report. The reason for the increase was the announcement of the New Deal on Energy for Africa, which was counted as a program dedicated (in part) to distributed renewables. The African Development Bank's scores in the other areas evaluated declined substantially.
- Out of the four banks examined, **the Asian Development Bank and the African Development Bank had the highest proportion of their energy portfolios dedicated to access, but they still remain far below the benchmarks in this area.**
- Within their energy access portfolios, out of the four banks examined, **the Inter-American Development Bank and the World Bank Group devoted the highest proportion to distributed renewable energy, but they still remain far below the benchmarks in this area.**
- **No MDB has come close to aligning investment with the IEA *Energy for All Case*.**

- **Fossil fuel projects financed by the MDBs are not serving the poor.** As was found in the previous report, project documents show that fossil fuel-based projects analyzed across the four MDB energy portfolios rarely addressed energy access for the poor in any meaningful way. Just five percent of fossil fuel funding was clearly linked to energy access objectives.

projects with the aim of coming closer to allocating 64 percent of energy access financing to distributed clean energy sources highlighted in this report.

- **The MDBs should work together to immediately establish clear definitions and criteria for what counts as “energy access,”** and measure projects to determine whether they have achieved energy access for the poor.

IN RESPONSE TO THESE FINDINGS, **FOUR KEY RECOMMENDATIONS** INCLUDE:

- **All of the banks should increase their level of funding for energy access projects to account for at least 50 percent of overall energy portfolio financing,** until the regions in which they are operating have achieved 100 percent energy access.
- **All of the banks need to significantly increase their funding for off-grid and mini-grid clean energy**

- In line with the preceding recommendation, **the MDBs should commit to clearly and transparently reporting on energy access at the project level.** Currently, project descriptions and documents can be vague with regard to expected energy access outcomes, using inconsistent metrics and indicators, making it difficult and, in some cases, impossible, for observers to establish a clear picture of MDB energy access activities and funding levels.

THE POOR NEED ACCESS TO ENERGY, AND DISTRIBUTED CLEAN ENERGY IS KEY

Worldwide, 1.1 billion people lack access to electricity.¹ Because lack of energy access limits potential for social and economic development, various international development institutions have made supporting universal energy access a priority. For example, the United Nations General Assembly declared 2014 to 2024 the “Decade of Sustainable Energy for All” and launched the Sustainable Energy for All initiative (SE4All) in 2011.² The major multilateral development banks included in this report have also acknowledged the importance of energy access, but unfortunately their investment decisions are not aligned with the approaches needed in order to best achieve the goal of energy for all. According to SE4All’s observations of 2010 to 2012, the most recent period examined in its 2015 Global Tracking Framework report, electrification is not happening at the rate required in order to achieve universal energy access by 2030 (the energy access goal of SE4All).³

While investment is not the only factor contributing to slow progress in global electrification, there remains a gap between what is needed for the attainment of universal energy access by 2030 and what is currently being invested. Recent estimates from the International Energy Agency (IEA) on the amount of investment required in order to achieve universal access to modern energy services are around \$48 billion⁴ or \$49 billion⁵ per year. In 2013, only \$13.1 billion worldwide was invested

into improving access to electricity and clean cooking facilities,⁶ leaving a significant investment gap. However, the amount of funding required remains a subject of debate; some have argued that the figure provided by the IEA is too high, and that universal energy access can be attained with less funding. Whereas the International Energy Agency has estimated that \$640 billion is needed over the course of 20 years to achieve universal energy access,⁷ **a 2014 report from the Sierra Club estimated that universal energy access could be achieved for only \$200 billion.**⁸

Given that the MDBs examined in this report have annual energy portfolios that collectively exceeded \$17 billion in 2014, only 11 percent of which was dedicated to access, financial constraints are clearly not the major limiting factor on achieving energy access.

Though the debate around investment levels is ongoing, for purposes of this report the authors are most interested in how investments are distributed among different types of solutions. As argued in a 2015 report from the Overseas Development Institute and Oxfam, the challenge of addressing energy poverty (in Africa) is less about ambitiously increasing electricity generation and more about ambitiously distributing energy services to poor people.⁹ They note that “ambitiously scaling up the distribution even of relatively small amounts of electricity” is an important way to serve poor people.

According to the IEA's 2011 *World Energy Outlook*, the current approach to energy access — which relies heavily on centralized grid extension — will still leave one billion people without energy access in 2030.¹⁰ Considering the grid has not yet reached many rural areas of the world, is unreliable in many areas it has reached, and often remains unaffordable to poor homes even in the areas where it does reach,¹¹ it is important to consider electrification options that meet the criteria of being affordable and possible to distribute widely. In many cases, off-grid and mini-grid solutions meet these criteria and may even represent the most cost-effective option for rural electrification.¹²

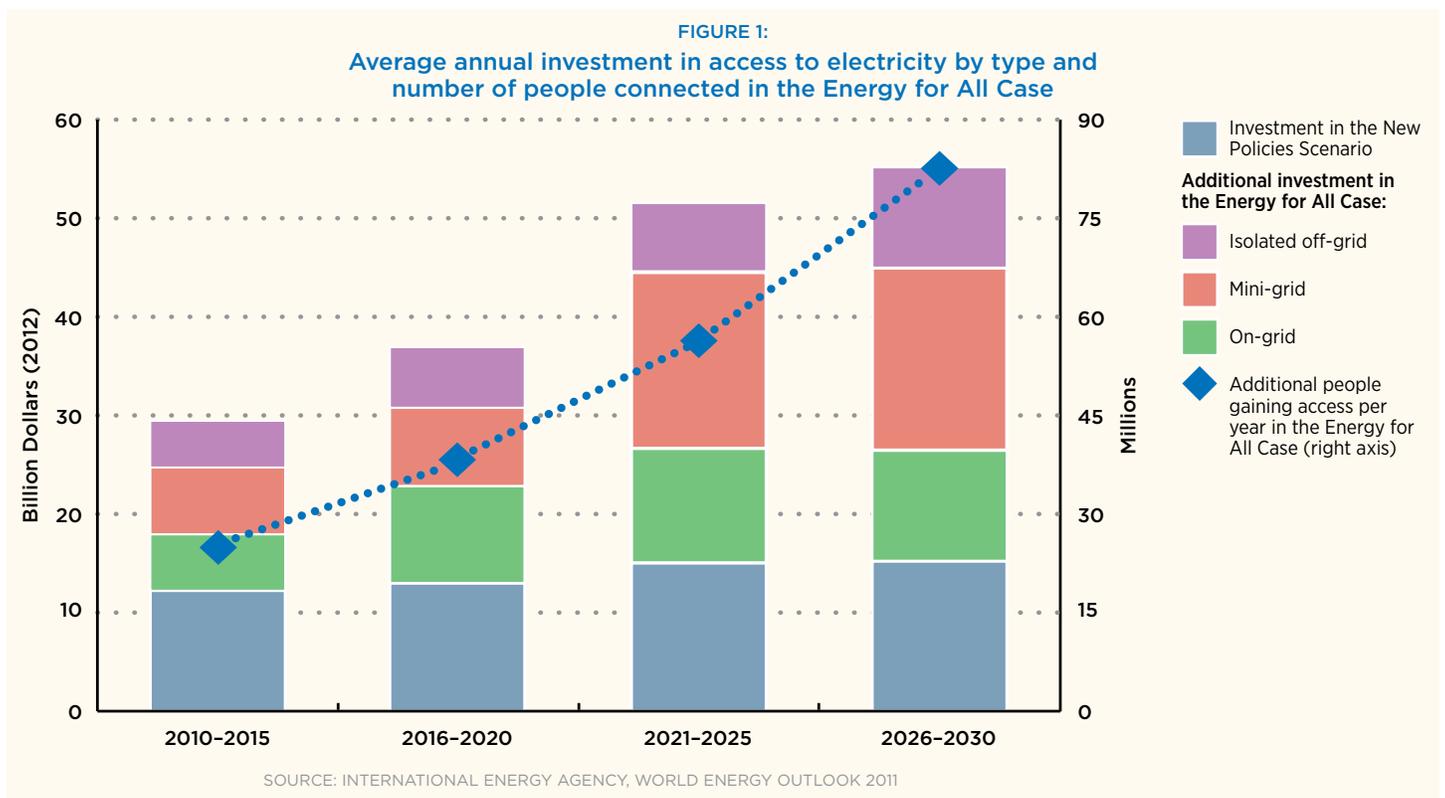
Accordingly, instead of a continued emphasis on grid extension, the 2011 IEA analysis suggests that energy access investments would need to be weighted more heavily towards distributed, beyond-the-grid energy solutions in order for universal energy access to be attained by 2030. The IEA *Energy for All Case*, in which universal energy access is achieved by 2030, suggests:

- about 36 percent of all additional energy access investment would need to go to grid extension and centralized power plants;
- about 40 percent would need to go to mini-grids;
- about 24 percent would need to go to off-grid solutions.

In other words, 64 percent of additional funding for energy access projects should be accounted for by off-grid and mini-grid solutions. Figure 1, from the IEA's 2011 *World Energy Outlook*, shows the distribution of funding in the *Energy for All Case*, broken down into several time periods from 2010 to 2030.

A concerted effort by just the four MDBs included in this report could help provide a significant portion of additional investment by redirecting current energy financing towards projects that specifically and effectively achieve access for poor communities.

Finally, there is an important link between climate change and poverty eradication (for example, negative impacts from climate change disproportionately affect poor individuals and threaten to push back poverty gains). Noting that fossil fuels cause climate change, which adversely impacts the poor, this report further specifies distributed energy access as solutions stemming from clean, renewable energy sources. Projects that exclusively supported energy solutions such as diesel generator sets were not counted as distributed renewables.



CRITERIA FOR ASSESSING ENERGY ACCESS

This report reviews energy projects at the African Development Bank, Asian Development Bank, Inter-American Development Bank, and World Bank Group¹³ for fiscal years 2011, 2012, 2013, and 2014. All data except that from fiscal year 2014 was previously presented in the 2014 version of the scorecard report; it is provided again here for reference and comparison. This report utilizes data from Oil Change International's *Shift the Subsidies* database, which tracks energy projects financed by the World Bank Group, major regional development banks, and a number of export credit agencies.¹⁴ The database includes funding originating from any given bank's own capital resources, i.e. what a particular MDB's budget is directly supporting. Thus, funding coming from single- or multi-donor funds, such as the *Sustainable Energy and Climate Change Initiative Multi-Donor Trust Fund*, is not included.

This assessment reviewed energy projects included in the *Shift the Subsidies* database, which indicates whether a project provides or intends to provide energy access for the poor. See Appendix A for a detailed explanation of how energy access was determined. The methodology has not changed since the 2014 version of the report, with the exception of Criterion 5, for which it is now possible to achieve a partial score rather than an all-or-nothing score. In addition to evaluating energy access, the assessment determined the amount of project funding spent on off-grid and mini-grid renewable energy per bank, per year. See Appendices B-E for lists of MDB energy access projects included in the assessment. Lastly, each of the four MDBs received an overall grade based on the following five criteria:

- 1. Percentage, measured by dollar amount, of overall energy portfolio dedicated to energy access (three year average) (35 points);**
- 2. Percentage of energy access spending dedicated to off-grid or mini-grid renewable solutions (three year average) (35 points);**
- 3. The bank has a stated goal for increasing energy access (5 points);**
- 4. The bank has a program dedicated to distributed (off-grid and mini-grid) clean energy (15 points);**
- 5. In the period examined, there is an increase in the absolute amount of funding the bank has dedicated to off-grid and mini-grid clean energy (10 points);**

For criterion 1, a bank's score reflects the overall percentage of its energy portfolio that is dedicated to

energy access measured against a target of 50 percent. For example, if the bank's energy portfolio is 40 percent for access, the score equals 28 (or $(40/50)*35$). Any energy access percentage that is equal to or higher than 50 percent gets a score of 35 points. The 50 percent target was chosen to reflect a significant commitment to delivering energy access. However, this is actually a moderate target; it is not unreasonable to think that entire energy portfolios of 'development' banks focused on eradicating poverty could be dedicated to supporting the nearly 20 percent of the world's population that lacks access to electricity. Additionally, given the recent attention¹⁵ that has been afforded to social problems created by large-scale energy projects,¹⁶ it is worth pointing out that small-scale distributed renewables are far less likely to cause problems such as involuntary population resettlement than large-scale, centralized energy projects.

For criterion 2, a bank's score is measured against its fulfillment of the target derived from the IEA's *Energy for All Case*, in which 64 percent of additional financing for energy access is dedicated to off-grid and mini-grid solutions. For example, if the Bank's energy access portfolio includes 50 percent of funding for off-grid and mini-grid solutions, the score equals 27 (or $(50/64)*35$). Any access portfolio with an off-grid and mini-grid percentage equal to or higher than 64 percent gets a score of 35.

Criteria 3 and 4 are simple "yes/no" determinations. A bank receives 5, 10, or 15 points for a "yes" and 0 points for a "no." Criterion 5 is assessed in the following way: if absolute funding for off-grid and mini-grid clean energy has increased in each year studied, a bank receives 10 points. If absolute funding has increased from the first year assessed and the final year assessed, but has not increased each year, the bank receives 5 points. If absolute funding has remained the same or decreased each year, the bank receives 0 points. The assessment of Criterion 5 is the only methodological change from the scoring in the 2014 version of the report. This change was instituted due to features of the results that were not present in the results from the previous version of this report, in order to give partial credit to institutions that had increased funding to distributed renewables overall, even in the event of a decline in support over the most recent two years.

KEY FINDINGS AND ENERGY ACCESS SCORECARD

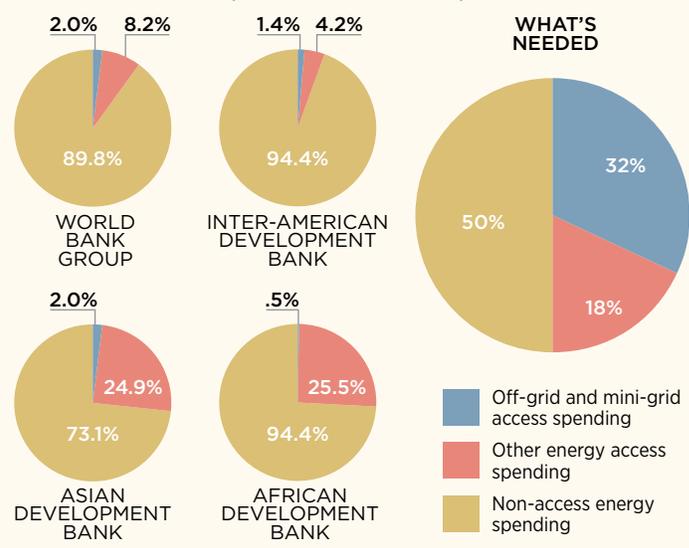
Table 1 below shows how each of the MDBs performed on each of the five energy access criteria. For each MDB, the scores from each of the five criteria are combined for a total score—out of a possible 100 points—for the institution. Criteria based on portfolio composition—the percent of the energy portfolio dedicated to energy access, and the percent of energy access funding dedicated to distributed renewables—are assessed using a 3-year average of portfolio figures for each bank. For this report, that 3-year period is FY 2012 to FY 2014 inclusive. The scorecard developed for the previous version of this report looked at the 3-year average from FY 2011 to FY 2013 inclusive. Despite there being only one year of new data for this analysis, some significant changes were observed compared to the findings of the previous report.

This table is followed by several key findings and observations about the results, as well as graphs visualizing the data.

KEY FINDINGS INCLUDE:

- **All banks failed.** All of the banks again received a failing grade of F when evaluated against the five energy access criteria, as they did in the previous version of this report released in 2014. This marks a disappointing outcome given the increased awareness of the importance of universal energy access spurred by, among other things, the Sustainable Energy for All initiative.
- **African Development Bank improved its overall score.** The only bank to increase its score relative to the previous version of the report was the African

FIGURE 2:
Off-Grid and Mini-Grid Renewable Energy Spending as a Percentage of the Annual Energy Portfolio (THREE YEAR AVERAGE)

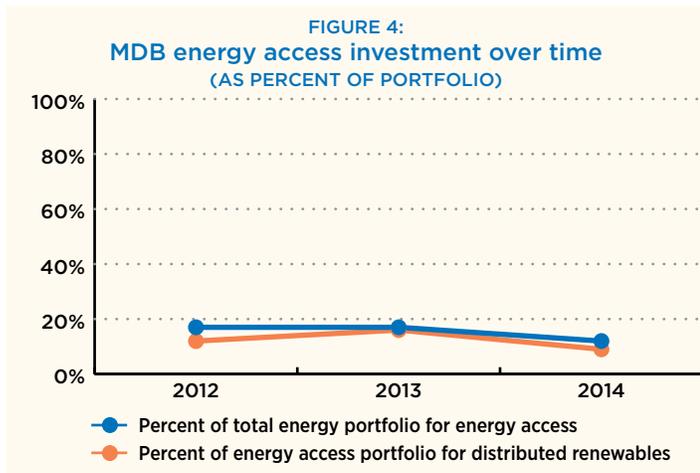
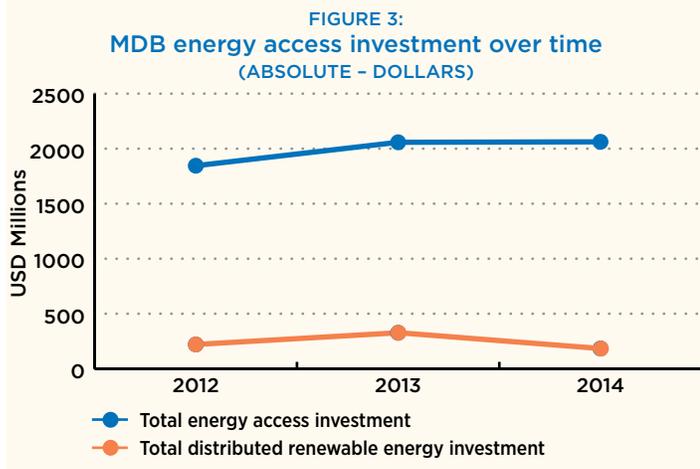


Development Bank. The deciding factor was the announcement of the New Deal on Energy for Africa, which was counted as a program dedicated (in part) to distributed renewables. However, the African Development Bank maintains the worst record for the proportion of resources dedicated to off-grid and mini-grid solutions, which is cause for concern given the strong potential of these solutions in Sub-Saharan Africa in particular.

- **Little improvement year on year.** Absolute investments in energy access and distributed renewable energy increased slightly since the previous report was published. Across most criteria, performance remained relatively stagnant amongst

TABLE 1:
Multilateral Development Bank Scorecard for Energy Access

	Energy portfolio dedicated to access (35 points)	Energy access portfolio dedicated to distributed renewables (35 points)	Goal for increasing energy access (5 points)	Program dedicated to distributed renewables (15 points)	Increase in funding dedicated to distributed renewables projects (10 points)	Total score/grade for 2015 (100 points)	Previous score from 2014 version of report
World Bank Group	7	11	5	15	0	38 / F	49
Inter-American Development Bank	4	14	0	0	5	23 / F	28
Asian Development Bank	19	4	5	15	5	48 / F	49
African Development Bank	18	0	5	15	10	48 / F	32



the banks, with major declines in some areas and modest improvements in others.

- For some institutions, energy access investment is declining.** The proportion of banks' energy portfolios dedicated to energy access increased only marginally relative to the previous report, though the African Development Bank slid backward. Due to corrections to FY 2012 data used in the previous report, the Asian Development Bank now leads in this area, with 27 percent of its energy portfolio (by dollar amount) focusing on energy access in the three year period from FY 2012 and FY 2014, though the share has declined from a laudable 47 percent in FY 2012 to just 8 percent in FY 2014. The African Development Bank dedicated 26 percent of its energy portfolio to energy access, a sharp decline from 38 percent over the previous period (note that these figures — and some of the figures that follow in this section — differ from the scorecard points assigned above; the scorecard uses a formula to assess a total score out of 100 across all criteria, rather than percentage values). The share of the World Bank Group's energy portfolio dedicated to energy access increased from 7 percent to 10 percent over the same period. The Inter-American Development Bank's share increased only slightly from 5 to just under 6 percent.

- The Asian Development Bank and the African Development Bank have the highest proportion of their energy portfolios dedicated to energy access, which is still far too low.** At 27 and 26 percent, respectively, the African Development Bank and Asian Development Bank remain the leaders in percentage of their energy portfolios dedicated to energy access for the poor, while 10 percent or less of energy financing at the World Bank Group and at the Inter-American Development Bank was dedicated to energy access for the poor. However, the African Development Bank also devotes the least resources — in both absolute and percentage terms — to off-grid and mini-grid solutions, making up just 0.2 percent of the African Development Bank's energy access portfolio from FY 2012 to FY 2014.
- No MDB is aligning its investment with the IEA's *Energy for All Case*.** The Inter-American Development Bank and World Bank Group are devoting the highest proportions of their energy access portfolios to distributed renewable energy, but are still providing orders of magnitude below what is required. In FY 2014, the banks' current approaches to energy access strayed even further out of alignment with the IEA scenario of achieving universal energy access by 2030, in which 64 percent of additional energy access funding flows to distributed energy solutions. The previous version of this report found that the Inter-American Development Bank and World Bank Group were devoting the highest proportion of their energy access portfolios to distributed renewables energy. This analysis found this trend to be holding steady. While the World Bank Group's investments in distributed renewables declined as a proportion of its energy access portfolio from 25 percent to 20 percent, the dollar amount invested increased (due to a significant increase in the size of the energy access portfolio). Even so, the Inter-American Development Bank and World Bank Group's percentage of distributed energy investment as a percentage of energy access projects still significantly misses the 64 percent target based on the IEA's *Energy for All Case*. Their investment in distributed renewable energy relative to their overall energy portfolios is still orders of magnitude below what is required according to the agency.
- Fossil fuels are not serving the poor.** As with the previous report, the fossil fuel-based projects analyzed for this report across the four MDB energy portfolios rarely addressed energy access for the poor in any meaningful way. Over the three years from FY 2012 to FY 2014, about five percent of funding (by volume) for fossil fuel energy projects included provisions that would increase access for the poor (or 6 out of 190 fossil fuel projects).

ENERGY ACCESS AT MULTILATERAL DEVELOPMENT BANKS

WORLD BANK GROUP

The World Bank Group increased the proportion of energy access-oriented projects in its energy portfolio substantially year over year, growing to nearly 13 percent of the Bank's total energy portfolio (see Table 2). This between FY13 and FY14 was sharp, and was dominated by two very large electricity transmission and distribution expansion projects in FY14, one in Bangladesh and one in Indonesia, totaling \$925 million. Given the size of these grid extension projects, it is perhaps not surprising that the World Bank Group's percentage of energy access projects devoted to distributed renewable energy declined over the same period. Though absolute dollar amounts for distributed renewables remained roughly constant between FY 2013 and FY 2014, the proportion was lower in both years because the World Bank Group's overall energy access portfolio was considerably larger. After remaining between 30 and 40 percent from FY 2012 to FY 2013, the proportion of energy access funding focused on distributed renewables plummeted to just over 10.5 percent in FY 2014.

Notable distributed renewables projects the World Bank Group did support in FY 2014 were \$10,000,000 to the global responsibility Energy Access Fund aimed at providing working capital to distributed renewable

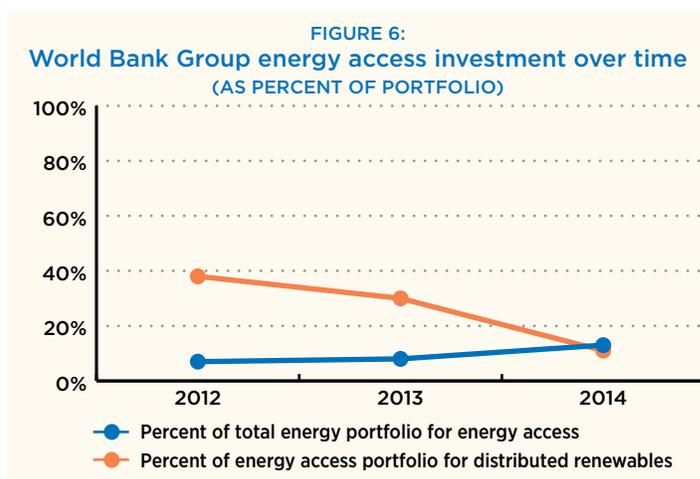
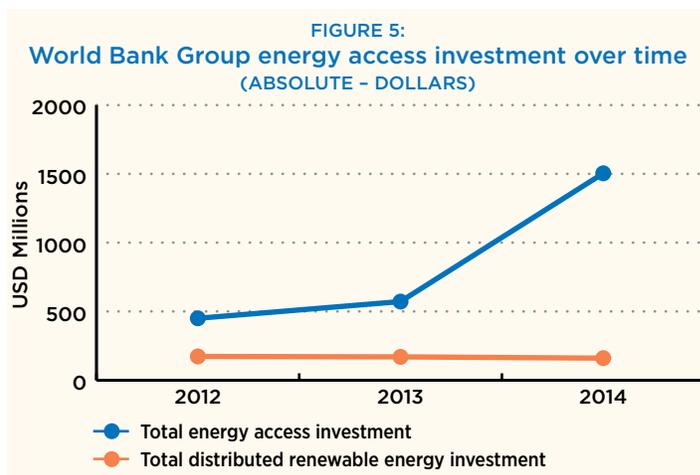


TABLE 2:
Summary of World Bank Group Support for Energy Access

	FY 2012	FY 2013	FY 2014	3-year average
Total energy access funding (US\$)	\$449,800,000	\$571,440,000	\$1,504,020,000	\$841,753,333.33
Energy access funding as % of total energy portfolio	7.00%	8.00%	12.94%	10.2%
Total funding to off-grid and minigrid renewable energy (US\$)	\$172,500,000	\$169,480,000	\$160,280,000	\$167,420,000
Off-grid and mini-grid renewable energy funding as % of total energy access portfolio	38.00%	30.00%	10.66%	19.9%
Stated goal for increasing energy access?	YES: the paper <i>Toward a Sustainable Energy Future for All: Directions for the World Bank Group's Energy Sector</i> informs the World Bank Group's operations, as agreed upon by the World Bank Group's Executive Board in July 2013. This paper supports universal access to modern energy.			
Distributed renewables program(s) or initiative(s)?	YES: Lighting Global, Lighting Africa, and Lighting Asia are all collaborations that include the World Bank Group which support off-grid lighting markets globally and in Africa and Asia. It should be noted that these initiatives are funded by in large part by donors and not from the World Bank Group's budget.			

energy enterprises; \$78,400,000 in additional financing to continue supporting the successful approaches to off-grid renewable energy deployment in Bangladesh; \$3,380,000 in debt financing for the distributed renewable energy enterprise Off-Grid Electric, which is partnering with Tanzania's government to deliver electricity access to 1 million homes by 2017; and \$25,000,000 to support the development and expansion of a successful mini-grid model in Mali. These investments are important for the off-grid and mini-grid sectors, and demonstrate that with the relatively small amount of money the World Bank Group is investing in distributed renewables, it is targeting a mix of tried-and-true approaches with a proven track record as well as more innovative, high-potential approaches. For example, off-grid solar products are already improving the energy access of 89 million people in Africa and Asia.¹⁷ It is notable that the World Bank Group supported these projects. Greatly scaling up support for these types of activities would be an important step towards an approach that best addresses energy poverty.

DATA AVAILABILITY AND TRANSPARENCY

Some issues were observed while undertaking data collection for this analysis. Many of the biggest challenges relate to the IFC's presentation of project information. The IFC appears to list its projects by "disclosure date" (when documents are made publicly available) rather than by "approved" date. Thus, projects approved in a given calendar year may have been disclosed one, two, or even more calendar years earlier. To identify all approved projects necessitates combing through multiple years of records. In addition, projects disclosed—but not approved—in previous years can subsequently be updated to "approved" on the IFC website, thereby necessitating an ongoing review of old projects, making it possible for reviewers to overlook newly-approved projects that were originally disclosed a year or more earlier.

In addition, in the case of the IFC, not all projects with an energy focus or a partial energy component are categorized under energy-themed headings. Rather they may appear under alternative categories such as financial intermediary, infrastructure, or manufacturing.

INTER-AMERICAN DEVELOPMENT BANK

The Inter-American Development Bank's overall funding for energy access fluctuated between 2012 and 2014, with the highest percentage for access at 11 percent in 2013,

THE WORLD BANK GROUP AND THE ELECTRICITY ACCESS CHALLENGE— WORLD BANK INDEPENDENT EVALUATION GROUP REPORT

In October 2015, the World Bank Group's Independent Evaluation Group (IEG) released a report assessing the World Bank Group's performance in addressing the electricity access challenge between 2000 and 2014.

A number of the IEG report findings echo the findings of "Failing to Solve Energy Poverty", the original version of our analysis released in 2014, and the findings are in many ways consistent with the updated analysis here. The IEG's findings include the following points, which underscore the importance of the World Bank Group quickly and dramatically changing its approach to energy access investment if it hopes to deliver on its objective of contributing to universal energy access by 2030:

- "The Bank Group's support for off-grid electrification was a small part of its overall portfolio," consistent with our findings across FY 2011 to FY 2014.
- "Affordability, equity, and inclusion need to be addressed by targeting the poor and those in remote and inaccessible areas," consistent with our findings that distributed renewables are an important but underutilized means for World Bank Group investments to serve the poorest.
- "Support for off-grid electrification was low and sporadic, with a few notable exceptions," which aligns with our findings.
- **"[O]verall, the Bank Group's commitment to the SE4All goal to achieve universal electricity access in 15 years clearly requires the institution to commit or organize resources and activities that are several orders of magnitude greater than it has so far in low-access countries,"** which is consistent with our finding that the World Bank Group's support for energy access-focused projects, and for distributed energy solutions, are orders of magnitude too low if the World Bank Group hopes to meet its universal energy access goal.

backsliding to 6.3 percent in 2014 (see Table 3). In terms of dollar amounts, it had by far the lowest finance for access across all years, and remained the institution with the lowest overall percentage of energy access financing among the multilateral development banks studied. As with the previous analysis, it is worth noting that a significant number of access projects at the Inter-American Development Bank are funded through multi-donor and other trust funds and therefore were not included in this review, which only considers how an institution uses its core capital. The Inter-American Development Bank devoted a quarter of its energy access funding to off-grid and mini-grid clean energy, a proportion higher than any other development bank. However, much of this funding was not going definitively to distributed energy, but rather had a distributed energy component with lack of clarity on the amount of funding. The Latin America and Caribbean region has a much higher level of energy access than other developing regions (e.g. Asia and Africa), and the Inter-American Development Bank may be responding to the needs of its region. However, it's important that the use of public development money for energy activities focus on energy access until an universal access is achieved. The Inter-American Development Bank still lacks a specific goal or program dedicated to increasing energy access and to off-grid and mini-grid clean energy, something that hasn't changed since the predecessor to this analysis was published in 2014. Such a program could potentially help focus attention on increasing funding for such projects. See Appendix C for the list of Inter-American Development Bank energy access projects from FY 2012 to 2014.

DATA AVAILABILITY AND TRANSPARENCY

Funding volumes provided from IDB capital (rather than from IDB-administered trust funds or other sources) were

FIGURE 7:
Inter-American Development Bank energy access investment over time
(ABSOLUTE - DOLLARS)

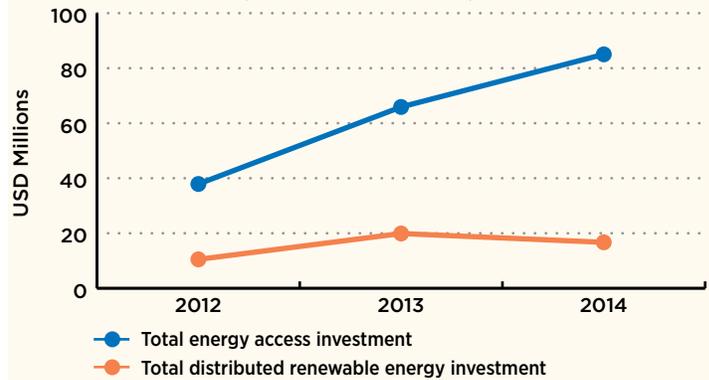
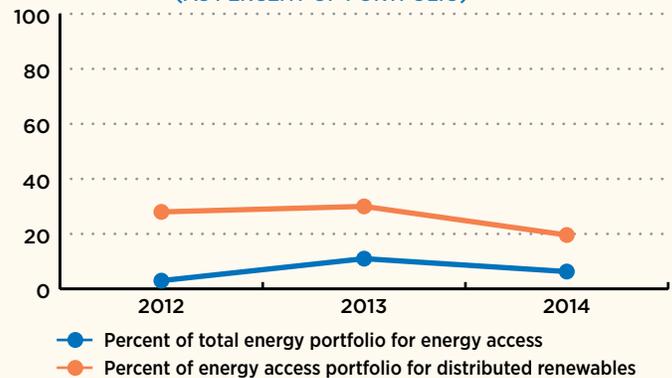


FIGURE 8:
Inter-American Development Bank energy access investment over time
(AS PERCENT OF PORTFOLIO)



not clear, causing significant issues in data collection. On the project page for each individual IDB project, the line “IDB Financing” is often blank, even where IDB capital is part of the investment. The IDB’s 2014 Annual Report lists dollar amounts approved for energy sector projects, but the source of the figures cited is not clear; likewise, it is unclear as to how much of the financing listed comes from IDB resources.

TABLE 3:
Summary of Inter-American Development Bank Support for Energy Access

	FY 2012	FY 2013	FY 2014	3-year average
Total energy access funding (US\$)	\$37,923,475	\$65,966,481	\$ 85,030,000	\$62,973,318.67
Energy access funding as % of total energy portfolio	3.00%	11.00%	6.31%	5.6%
Total funding to off-grid and minigrid renewable energy (US\$)	\$10,530,586	\$19,971,481	\$16,730,000	\$15,744,022
Off-grid and mini-grid renewable energy funding as % of total energy access portfolio	28.00%	30.00%	19.68%	25.0%
Stated goal for increasing energy access?	NO			
Distributed renewables program(s) or initiative(s)?	NO			

AFRICAN DEVELOPMENT BANK

Out of all the multilateral development banks, the African Development Bank remains the closest to meeting the recommended 50 percent of total energy portfolio aimed towards energy access, though this number saw a worrying decline in FY 2014, dropping from 35 percent to under 15 percent year over year (see Table 4). The percentage of AfDB's total energy portfolio that was focused on energy access was dramatically lower in FY14 than in any of FY11, FY12 or FY13; as a percentage of AfDB's total energy portfolio, energy access-focused projects were less than half that of any preceding year in percentage terms, and also lower in absolute dollar terms than any of the preceding years.

On the flipside, the AfDB remains by far the lowest performing institution when it comes to investments in distributed renewables. In FY 2014, AfDB finally notched some investments in distributed renewables, after no listed investments in off-grid and mini-grid solutions from FY 2011 to FY 2013. It is commendable that AfDB made investments in these solutions, particularly given the energy access need in many African countries, but these new investments in FY 2014 were at a very modest level—less than 1 percent of AfDB's total energy access portfolio for the year.

Rapidly scaling up AfDB's support for these solutions will be crucial in reaching Africa's rural poor, who represent a large portion of the 58.2 percent of Africa's population who lack access to energy. Grid extension projects continue to dominate the AfDB's energy access portfolio, but by increasing its focus instead on distributed clean energy, the African Development Bank could better serve populations that lack access to electricity, particularly in rural areas.

FIGURE 9:
African Development Bank energy access investment over time
(ABSOLUTE - DOLLARS)

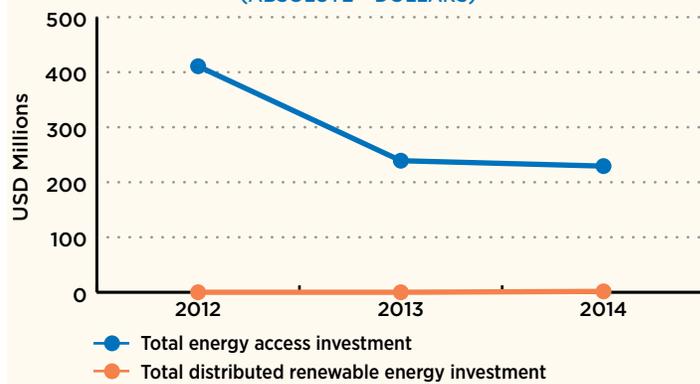
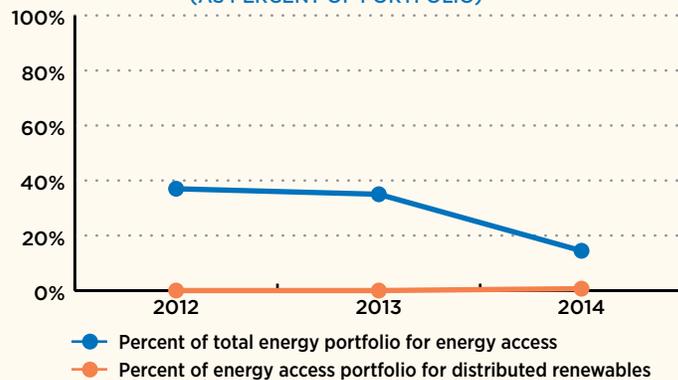


FIGURE 10:
African Development Bank energy access investment over time
(AS PERCENT OF PORTFOLIO)



See Appendix D for the list of African Development Bank energy access projects from FY 2012 to 2014.

The African Development Bank recently unveiled the New Deal on Energy for Africa, which contains a major component focused on delivering energy access through off-grid technologies.

TABLE 4:
Summary of African Development Bank Support for Energy Access

	FY 2012	FY 2013	FY 2014	3-year average
Total energy access funding (US\$)	\$410,806,470	\$239,191,414	\$ 229,370,000	\$293,122,628.00
Energy access funding as % of total energy portfolio	37.00%	35.00%	14.45%	26.0%
Total funding to off-grid and minigrid renewable energy (US\$)	\$0	\$0	\$1,570,800	\$523,600
Off-grid and mini-grid renewable energy funding as % of total energy access portfolio	0.00%	0.00%	0.68%	0.2%
Stated goal for increasing energy access?	YES: the new 2012 Energy Sector Policy of the African Development Bank includes as a guiding principle "Ensuring energy security and increasing access for all."			
Distributed renewables program(s) or initiative(s)?	YES: the AfDB "New Deal on Energy for Africa" contains a target of 75 million off-grid connections by 2025 through AfDB-supported activities.			

TRANSPARENCY AND REPORTING OF ENERGY FINANCE IN THE AFRICAN DEVELOPMENT BANK, INCLUDING FOR THE “NEW DEAL ON ENERGY FOR AFRICA”

Among all of the multilateral development banks assessed for this study, AfDB data on energy investments showed some of the least agreement between sources (for example, AfDB funding listed on a project page frequently differed from the amounts in annual reports and other sources). AfDB reporting makes it difficult to assess what funding is from AfDB core funds versus donor trust funds administered by AfDB, while details on the energy access implications of energy projects were rarely present in project documents.

Given the significant undertaking the AfDB has signaled through its large, energy-access focused “New Deal on Energy for Africa” initiative, it is important that the AfDB improve its tracking and reporting of energy access-related projects to allow for sufficient monitoring of the initiative’s progress. This information should be made publicly available, using clear, appropriate, and granular metrics to describe the anticipated energy access implications of each project.

DATA AVAILABILITY AND TRANSPARENCY

The data collection process encountered many discrepancies between the funding amounts cited in AfDB’s annual report, individual project pages compared, AfDB’s news releases, appraisal reports, and AfDB board minutes, making it difficult to ascertain the actual approved amount in many cases.

At least one major approved project did not appear to have a formal project page, while several other projects had project pages marked with earlier fiscal years despite listing funding approved for FY 2014, and it was not clear whether the FY 2014 approvals represented new funding or more recent tranches of earlier-approved funds.

Several projects have the year for the approval date listed as “1901” – this would appear to be some form of typo but it makes it difficult to confirm that a project was indeed approved in FY 2014.

ASIAN DEVELOPMENT BANK

Note that the figures tracked internally by the Asian Development Bank differed substantially from the figures used in the previous (2014) edition of this report. Based on input from the Asian Development Bank, this version of the report incorporates corrected FY 2012 and FY 2013 data, and includes the addition of several projects to the

FIGURE 11:
Asian Development Bank energy access investment over time
(ABSOLUTE - DOLLARS)

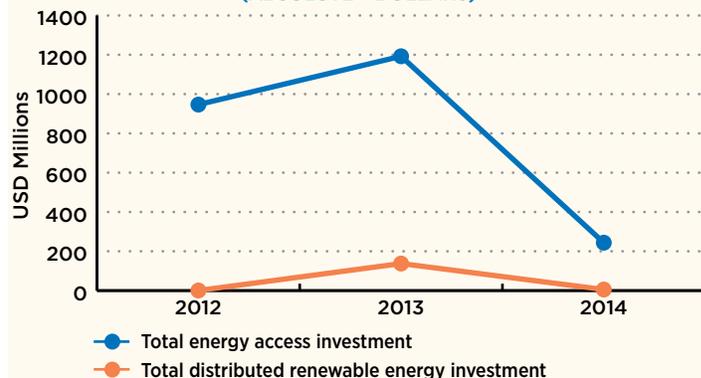
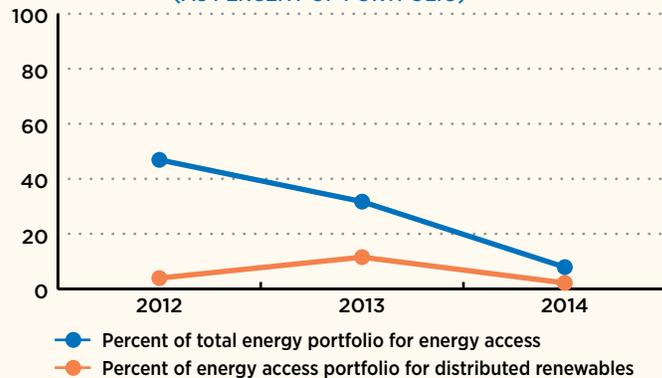


FIGURE 12:
Asian Development Bank energy access investment over time
(AS PERCENT OF PORTFOLIO)



database, which were determined to be consistent with the criteria for energy access and distributed renewable energy as applied in this report’s methodology.

The Asian Development Bank tied for the highest score amongst the institutions assessed, but still received a failing grade. Asian Development Bank’s energy access funding decreased dramatically from FY 2012 to FY 2014 as a proportion of the total energy portfolio (see Table 5). Corrected figures for FY 2012 show that the Asian Development Bank came very close to devoting 50 percent of its energy portfolio to energy access, something that all of these banks should strive to achieve. However, this

leadership did not last: in FY 2014, the percentage of the Asian Development Bank’s energy portfolio dedicated to energy access was just one quarter of what it was in FY 2013. Because the Asian Development Bank’s entire energy portfolio shrunk from FY 2013 to FY 2014, the decline in dollars dedicated to energy access projects was even more pronounced. While there was an uptick in funding for distributed renewables in FY 2013, this funding fell off a cliff in FY 2014, crashing from 12 percent of access funding to just 2 percent. This is still an improvement from the complete absence of funding for distributed renewable energy projects in FY 2011, but the trend line is moving in the wrong direction. As the previous version of this report uncovered, many energy access projects, including distributed clean energy projects, are funded through multi-donor funds run by the Asian Development Bank, but are not from the bank’s core funds, so they are not counted here. Funding for energy access and off-grid and mini-grid clean energy is still well below recommended levels and heading in the wrong direction despite increasing urgency to meet the challenge of universal energy access. The Asian Development Bank deserves credit for some early efforts to highlight energy access investment. The Bank’s “Energy for All” partnership has a stated goal of increasing energy access, especially for the poor, and was established in 2008, long before the Sustainable Energy for All Initiative came into being. Both within and outside of this partnership, the Asian Development Bank has made some important contributions to clean energy access

projects. These include investments in the successful IDCOL solar home system program in Bangladesh, as well as in innovative distributed solar enterprise Simpa Networks, along with efforts to develop an investable pipeline of clean energy access enterprises, including through the Energy for All Project Development Facility. While these initiatives and approaches have been positive, the Asian Development Bank could benefit from turning greater attention to off-grid and mini-grid opportunities to increase energy access in the regions it serves. See Appendix E for the list of Asian Development Bank energy access projects from FY 2012 to 2014.

DATA AVAILABILITY AND TRANSPARENCY

Most projects – but not all – had supporting project documents that provided supplemental information adequate to understand whether projects were supporting energy access and / or distributed renewable energy. In general, funding volumes and approval dates listed in project documents match up well (but not entirely) with other ADB sources of information such as annual reports and news releases.

CONCLUSION

Despite an increase in public awareness about the scale and urgency of the energy access challenge in recent years, as well as a newly-minted United Nations Sustainable Development Goal devoted to ensuring affordable, reliable, and modern energy solutions for all,¹⁸ finance for energy access through the MDBs continues

TABLE 5:
Summary of Asian Development Bank Support for Energy Access

	FY 2012	FY 2013	FY 2014	3-year average
Total energy access funding (US\$)	\$946,500,000	\$1,192,400,000	\$243,700,000	\$794,200,000
Energy access funding as % of total energy portfolio	46.89%	31.71%	7.90%	26.9%
Total funding to off-grid and minigrid renewable energy (US\$)	\$37,000,000	\$137,500,000	\$5,250,000	\$59,916,667
Off-grid and mini-grid renewable energy funding as % of total energy access portfolio	3.91%	11.53%	2.15%	7.5%
Stated goal for increasing energy access?	YES: one of the three pillars of the Asian Development Bank’s energy policy is “maximizing access to energy for all.”			
Distributed renewables program(s) or initiative(s)?	YES: The “Energy for All Initiative” was founded to increase the Asian Development Bank’s energy access project portfolio, and seeks to improve household access to electricity. Technologies for doing so include micro-hydro, solar, biomass, wind power, and clean cooking fuel. The initiative also includes an “Energy for All Partnership,” which brings together actors from government, the private sector, and civil society to advance the goal of providing modern energy to 100 million people by 2015.			

to fall far short of what's needed. When it comes to MDB investments in distributed clean energy, the picture is even more alarming. Despite some recent, promising investments that promote innovative approaches to delivering clean energy access, investments in off-grid clean and mini-grid clean energy still make up just a small percentage of MDBs' total energy portfolios.

RECOMMENDATIONS

The recommendations from the 2014 report have been updated. Now, the following should be achieved within the next two years:

- **All of the banks should increase their level of funding for energy access projects to account for at least 50 percent of overall energy portfolio financing**, until the regions in which they are operating have achieved 100 percent energy access. Across the MDBs, virtually no significant progress has been made on this recommendation since the 2014 report, with some institutions actually backsliding. Development banks have a mandate to support the world's lowest-income populations, but as this analysis demonstrates, energy finance is still largely not targeted towards or meeting this goal. These banks must redouble their efforts to ensure that a significant portion of their funding goes toward increasing energy access for the poor. The banks should simultaneously encourage investment in energy access by other actors, including non-government investors.
- **All of the banks need to significantly increase their funding for off-grid and mini-grid clean energy projects with the aim of meeting the IEA's 64 percent of energy access financing toward distributed clean energy scenario highlighted in this report.** As with the previous recommendation, virtually no progress has been made on this recommendation, with some institutions backsliding in the most recent years for which data are available. Investment in the actual deployment and installation of off-grid and mini-grid clean energy projects is a critical need at this stage of the market's development. While there is an important role for capacity-building and technical assistance, banks must focus efforts on increasing deployment of distributed renewables, while also ensuring that projects are appropriately managed and provide maximum benefit to local communities.
- **The MDBs should work together to immediately establish clear definitions and criteria for what counts as "energy access," and measure projects**

Off-grid and mini-grid clean energy remain promising solutions to energy poverty that can be rapidly and cost-effectively deployed in both rural and urban settings. As this assessment shows, none of the four MDBs received a passing grade on how their energy portfolios address energy access for poor communities and distributed clean energy. How can they do better?

to determine whether they have achieved energy access for the poor. There is currently a lack of transparency among the MDBs around what constitutes "energy access," despite progress in the development of the SE4All Global Tracking Framework. The MDBs should clearly define energy access, with appropriate criteria for measurement, with an emphasis on direct energy service benefits to the lowest-income individuals. The MDBs should also move away from counting "inferred connections" as new connections, as this inferred form of measurement is becoming less acceptable as a metric of success.¹⁹ These definitions and criteria should be transparent, and project documents should reflect how the project will work towards increasing energy access. Completed projects should be assessed as to whether they have achieved these goals. Ideally, the MDBs should align their definitions and criteria with those of peer institutions.

- In line with the preceding recommendation, **the MDBs should commit to clearly and transparently reporting on energy access at the project level.** Currently, project descriptions and documents can be vague as to expected energy access outcomes, using inconsistent metrics and indicators, making it difficult and, in some cases, impossible, for observers to establish a clear picture of MDB energy access activities and funding levels.

In addition to the four main recommendations, the following are suggested as necessary actions towards achieving those recommendations:

- **Banks should adopt credit enhancement programs, including loan guarantees, which directly support off-grid and mini-grid clean energy deployment.** Credit enhancement programs reduce risk for private sector entrepreneurs delivering services in these markets. MDBs can stretch their investments much further, and help unlock private sector investment, by using their investments wisely. Credit enhancements, including loan guarantees, are an essential tool to help increase the size of the off-grid and mini-grid clean energy sector.

- **Banks should move beyond pilot projects to incorporate off-grid and mini-grid lending in their core energy portfolios.** While several of the banks included some pilot projects for off-grid and mini-grid clean energy projects, a more significant integration of these projects into the banks' energy access portfolios would allow for actual large-scale deployment of distributed clean energy beyond the grid.
- **Banks should increase funding for emerging programs focusing on distributed clean energy access for all.** The Asian Development Bank's *Energy for All* Initiative and the World Bank's Lighting Global, Lighting Africa, Lighting Asia, and Green Power for Mobile programs are promising, as is the African Development Bank's recently-announced New Deal on Energy for Africa. However, these programs need to be expanded to include more funding for deployment, and a greater voice in the finance decisions for the investment coming from the core portfolio. Actual investment decisions must align with proclamations of support for energy access, in order to truly demonstrate substantial support.
- **Banks should examine successful off-grid and mini-grid programs from different country contexts, such as Bangladesh's IDCOL program, and incorporate applicable lessons in a manner suitable to specific country circumstances.** All MDBs should incorporate lessons from a variety of countries into the dedicated finance vehicles they develop to catalyze off-grid and mini-grid markets. Bangladesh's IDCOL program is the most successful off-grid program in the world. The structure and design of this program and others offer significant learning opportunities for other MDBs seeking to expand investments in this space.
- **Banks should work with client countries to develop national energy access strategies that include distributed clean energy solutions.** While it is true that MDBs respond to demands of client countries, MDBs also must play a role in helping staff in client countries keep up with developments in the energy access space and consider policy options which include off-grid and mini-grid clean energy. This is in line with the recommendation from the World Bank Group's IEG, which suggests a "[m]ove from a predominantly project-by-project approach—which lacks the scale and speed to achieve universal access by 2030 in low-access countries—to a far greater use of a sector-wide organizing framework and process for mainstreaming the sustained engagement needed for implementing rapid access scale-up," and which also notes that, ideally, "grid and off-grid rollout should be undertaken simultaneously in a coordinated

manner nationwide." Technical advice and planning support for clients should emphasize clean energy access opportunities and reflect the latest understanding of the costs and benefits of different approaches to delivering energy services.

- **Banks should work with clients to create the enabling conditions for more resources to flow toward distributed renewable energy solutions.** This means considering how to tailor finance to smaller, dynamic initiatives designed to deliver clean energy access, including entrepreneurs looking to scale up successful approaches. Reducing transaction times—and transaction costs—for recipients of funds is an important component of achieving this goal. This would also include committing resources to develop investable pipelines of clean energy access solutions.
- **Banks should examine internal incentive structures, to ensure that distributed clean energy projects are not systemically discriminated against in favor of larger projects.** In other words, banks should align staff incentives for advancement more closely with the unique characteristics of off-grid and mini-grid deployment rather than simply incentivizing staff to close large energy infrastructure projects.
- **Banks should benchmark and review distributed clean energy funding.** The IEG review of the World Bank's electricity access work, discussed in the box on page 11, noted that coordinated national plans that combine grid and off-grid approaches are a good practice for achieving universal energy access.²⁰ The review also suggested that banks move beyond simply measuring access by headcount, and begin considering quality, reliability, and affordability of service as well.

The recommended energy portfolio targets for energy access and distributed clean energy should be met within the next two years. This builds on the recommendations from the 2014 version of this report, which were made with the overall goal of universal access by 2030 in mind. This would demonstrate a commitment to solving energy poverty, and would address a need that is currently unmet. Overall, a major shift in energy funding is needed by all the MDBs evaluated in this report. All MDBs need to dedicate a greater proportion of their energy portfolios to energy access, and to shift beyond the grid to dedicate a greater proportion of their energy access funding to off-grid and mini-grid clean energy. Doing so is needed to ensure energy for all, particularly the poor populations of the world these MDBs are supposed to exist to serve.

ENDNOTES

- 1 International Bank for Reconstruction and Development / The World Bank and International Energy Agency (2015). Progress Toward Sustainable Energy: Global Tracking Framework 2015 Summary Report. Available at: <http://www.se4all.org/tracking-progress>.
- 2 United Nations General Assembly (2012). "United Nations General Assembly Declares 2014 - 2024 Decade of Sustainable Energy for All." Press Release. Available at: <http://www.un.org/press/en/2012/ga1333.doc.htm>.
- 3 International Bank for Reconstruction and Development / The World Bank and International Energy Agency (2015). Progress Toward Sustainable Energy: Global Tracking Framework 2015 Summary Report. Available at: <http://www.se4all.org/tracking-progress>.
- 4 International Energy Agency (2011). World Energy Outlook 2011. Available at: <http://www.iea.org/publications/freepublications/publication/weo-2011.html>.
- 5 International Energy Agency (2012). World Energy Outlook 2012. Available at: <http://www.iea.org/publications/freepublications/publication/world-energy-outlook-2012.html>.
- 6 International Energy Agency (2013). "Financing energy access." Available at: <http://www.worldenergyoutlook.org/resources/energydevelopment/energyforallfinancingaccessforthe poor/>.
- 7 International Energy Agency (2011). World Energy Outlook 2011. Available at: <http://www.iea.org/publications/freepublications/publication/weo-2011.html>.
- 8 Craine, Stewart, Evan Mills, & Justin Guay (2014). Clean Energy Services for All: Financing Universal Electrification. Sierra Club. Available at: https://www.sierraclub.org/sites/www.sierraclub.org/files/0747_Clean_Energy_Services_Report_05_web.pdf.
- 9 Hogarth, Ryan & Ilmi Granoff (2015). Speaking truth to power: Why energy distribution, more than generation, is Africa's poverty reduction challenge. Overseas Development Institute and Oxfam. Available at: <http://policy.practice.oxfamamerica.org/publications/speaking-truth-to-power-why-energy-distribution-more-than-generation-is-africas-poverty-reduction-challenge-executive-summary/>.
- 10 International Energy Agency (2011). World Energy Outlook 2011. Available at: <http://www.worldenergyoutlook.org/weo2011/>.
- 11 Oyuke, Abel et al. (2016) Off-grid or 'off-on': Lack of access, unreliable electricity supply still plague majority of Africans. Afrobarometer. Available at: <http://afrobarometer.org/publications/ad75-unreliable-electricity-supply-still-plague-majority-of-africans>.
- 12 International Renewable Energy Agency (2013). IOREC 2012 International Off-Grid Renewable Energy Conference: Key Findings and Recommendations. Available at: http://irena.org/DocumentDownloads/Publications/IOREC_Key%20Findings%20and%20Recommendations.pdf.
- 13 The World Bank Group institutions providing finance include the International Bank for Reconstruction and Development, the International Development Association, the International Finance Corporation, and the Multilateral Investment Guarantee Agency.
- 14 Oil Change International. "Shift the Subsidies." Website. Available at: <http://shiftthesubsidies.org/>.
- 15 The World Bank Inspection Panel (2016). "Panel Presents Highlights of Emerging Lessons Series to Executive Directors." Available at: <http://ewebapps.worldbank.org/apps/ip/Lists/NewsFromThePanel/NewsFromThePanelDisp.aspx?ID=236&Source=/apps/ip/Pages/Home.aspx>.
- 16 Alexander, Nancy et al (2013). "Responsible Investment in Infrastructure: Recommendations for the G20." Available at: <http://www.g20civil.com/documents/225/1546/>.
- 17 Lighting Global and Bloomberg New Energy Finance (2016). Off-Grid Solar Market Trends Report 2016. Available at: <https://www.lightingglobal.org/launch-of-off-grid-solar-market-trends-report-2016/>.
- 18 United Nations (2016). "Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all." Available at: <http://www.un.org/sustainabledevelopment/energy/>.
- 19 Power Africa (2016). The Roadmap: A Guide to Reaching 30,000 Megawatts and 60 Million Connections. Available at: <https://www.usaid.gov/sites/default/files/documents/1860/power-africa-roadmap-v2.pdf>.
- 20 World Bank Independent Evaluation Group (2015). "World Bank Group Support to Electricity Access, FY2000-2014." Available at: <https://ieg.worldbankgroup.org/evaluations/world-bank-group-support-electricity-access>.
- 21 Oil Change International (2014). "Shift the Subsidies: Methodology." Available at: <http://shiftthesubsidies.org/#methodology>.

APPENDICES

APPENDIX A. METHODOLOGY FOR DETERMINING ENERGY ACCESS

A project is labeled positively for "energy access" if the project in question "targets increased energy access for the poor."

- This designation is determined by whether project documents indicate that the project meets one or more of the following criteria:
- The project focuses on a targeted number of new electricity connections or energy services, such as clean cook stoves, to poor households.
- The project focuses on electricity for services important to the poor, such as health clinics, schools, or telecommunications.
- The project focuses on improving the reliability of electricity services in an area that largely serves poor households and/or electricity services important to the poor and currently has intermittent or unreliable access.
- The project focuses on provisions to make energy affordable for the poor e.g., effective, transparent safety nets to ensure that poor people can afford energy for basic needs, such as subsidies targeted at access, not consumption (as opposed to only having measures aimed at cost recovery, such as tariff increases).
- The project is focused on productive uses in energy poor communities, such as providing energy to smallholder farmers, small and medium enterprises and labor-intensive industries.
- The project involves power grid extension to new periurban or rural areas (as opposed to simply feeding into the existing grid system).

- The project involves rural, off-grid solutions for providing energy services.²¹

It is important to note that this method of evaluating projects for energy access has limitations due to lack of available information. MDB energy project documents often do not establish specific, measureable outcomes related to increasing energy access for all communities. Thus, MDB energy projects often lack specific project measures aimed at access for poor communities and do not follow up with verification of a project's success in actually increasing access.

From the projects meeting the above "energy access" criteria, we further examined relevant project documents (e.g. project information documents, project appraisal documents, procurement plans, and project data sheets) to determine which "energy access" projects supported off-grid or mini-grid clean energy. If a project's funding was split between these forms and other forms of energy development (i.e. grid extension or energy efficiency), we tried to determine what portion of the funding was applied to off-grid or mini-grid clean energy. Our efforts to make this determination included close examination of available project documents, project budgets, and attempts to correspond with project MDB contacts.

Reliable information was unavailable in some cases, and actual spending sometimes differed from the spending outlined in project documents. In cases of uncertainty, we attempted to communicate with a project contact but did not always receive a response. If after these attempts, we were still unable to determine a specific funding amount, we assigned 50 percent of energy project funds to distributed solutions

APPENDIX B: WORLD BANK PROJECTS EVALUATED									
Project approval date	Fiscal Year	Project Name	Country	Total Amount Approved by Institution	Amount Included as Distributed Renewables	Rationale	URL / Sources		
8/25/2011	2012	Empresas Publicas de Medellin AB Loan	Colombia	\$ 25,000,000	\$ -	Project supports water distribution, waste water collection, and electricity distribution and transmission.	http://fcext.ifc.org/fcext/spiwebsite1.nsf/0/129257289d15d160852577f30079b6e2		
10/4/2011	2012	Additional Financing II for Rural Electrification and Renewable Energy Development Project - Bangladesh	Bangladesh	\$ 172,000,000	\$ 172,000,000	Installs 630,000 solar home systems where grid extension is not viable.	http://www.worldbank.org/projects/P126724/additional-financing-ii-rural-electrification-renewable-energy-development-project?lang=en		
1/26/2012	2012	Sierra Leone - Fifth Governance Reform and Growth Credit Program	Sierra Leone	\$ 3,600,000	\$ -	Energy sector reform; could not determine the nature of energy-specific investments.	http://www.worldbank.org/projects/P126355/sierra-leone-fifth-governance-reform-growth-credit?lang=en		
3/23/2012	2012	Kenya Power and Lighting Company Limited	Kenya	\$ 50,000,000	\$ -	Project expands electricity distribution network.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/01c1c496558e928e68525791006a79b37?opendocument		
5/29/2012	2012	Electricity Network Reinforcement and Expansion Project - Ethiopia	Ethiopia	\$ 190,000,000	\$ -	Extends and upgrades grid.	http://www.worldbank.org/projects/P119893/electricity-network-reinforcement-expansion-project-entrep?lang=en		
6/5/2012	2012	Flareum Solar	India	\$ 1,000,000	\$ 1,000,000	Investment in company which supports both on-grid and off-grid solar energy.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/7eae1280add180918525791006a79b37?opendocument		
6/12/2012	2012	DJ- Power Access and Diversification Project Additional Financing II	Djibouti	\$ 5,200,000	\$ -	Focuses on fuel oil and diesel.	http://www.worldbank.org/projects/P130493/dj-power-access-diversification-project-additional-financing-ii?lang=en		
6/19/2012	2012	Butwal Power Company	Nepal	\$ 3,000,000	\$ -	Expands existing hydropower project and rural distribution.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/6b0b992c95fca6a48525791006a79b37?opendocument		
7/5/2012	2013	AZ Second Rural Investment Project	Azerbaijan	\$ 4,500,000	\$ -	Energy component of the project does not use renewable energy.	http://www.worldbank.org/projects/P122944/second-rural-investment-project?lang=en		
9/12/2012	2013	Green Infra Ltd.	India	\$ 50,000,000	\$ -	The solar energy supported is on-grid.	http://fcextapps.ifc.org/fcext/spiwebsite1.nsf/651aeb16ab09c1f6525797d006976ba/ea407b194addab308e85257d6900746b4?opendocument		
9/20/2012	2013	Bangladesh Rural Electrification and Renewable Energy Development II (RERED II) Project	Bangladesh	\$ 155,000,000	\$ 155,000,000	Supports electricity for off-grid communities through solar home systems and mini-grids.	http://www.worldbank.org/projects/P13263/rural-electrification-renewable-energy-development-ii-rered-ii-project?lang=en		
9/24/2012	2013	SES Power	Regional - Middle East and North Africa	\$ 12,000,000	\$ -	Their support for off-grid energy focuses on diesel.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/203700709f273b07c85257a60063f550?opendocument		
9/24/2012	2013	SES Power	Regional - Middle East and North Africa	\$ 51,000,000	\$ -	Their support for off-grid energy focuses on diesel.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/203700709f273b07c85257a60063f550?opendocument		
9/27/2012	2013	Haiti Rebuilding Energy Infrastructure and Access	Haiti	\$ 90,000,000	\$ 7830,000	A portion of the project supports off-grid energy.	http://www.worldbank.org/projects/P127203/rebuilding-energy-infrastructure-access?lang=en		
11/1/2012	2013	Umeme Ltd	Uganda	\$ 10,000,000	\$ -	Focuses on grid extension.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/ea69474de8c96ba8e85257aae00523d4c?opendocument		
11/29/2012	2013	Equatorial Energia S.A	Brazil	\$ 98,580,000	\$ -	Available information suggests this investment supports large-scale, on-grid electricity.	http://fcext.ifc.org/fcext/spiwebsite1.nsf/651aeb16ab09c1f6525797d006976ba/e281914cc8c539a685257a4d007443b?opendocument		
12/14/2012	2013	NSL Wind	India	\$ 18,800,000	\$ -	Supports wind turbines which will be connected to the national grid.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/5fb344eaab370328257972005a1616?opendocument		
2/19/2013	2013	Rwanda Electricity Access additional Financing	Rwanda	\$ 54,000,000	\$ -	Mostly supports grid expansion; "green connections" project aspect does not support off-grid generation.	http://www.worldbank.org/projects/P126489/rwanda-electricity-access-additional-financing?lang=en		
2/21/2013	2013	PNG Energy Sector Development Project	Papua New Guinea	\$ 7300,000	\$ 3,650,000	Renewable component of the project does not go towards deployment and installation. Counted as half distributed renewables because amount is unclear.	http://www.worldbank.org/projects/P101578/png-energy-sector-development-project?lang=en		
3/20/2013	2013	Bhiliwara Captive	India	\$ 7560,000	\$ -	Project involves wind generation and will be connected to the grid.	https://fcndd1.ifc.org/fcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/26af23f50a948c485257a1e006b6b4c?opendocument		
5/30/2013	2013	Liberia Accelerated Electricity Expansion Project (LACEEP)	Liberia	\$ 35,000,000	\$ -	Project involves extension of transmission and distribution systems.	http://www.worldbank.org/projects/P133445/liberia-accelerated-electricity-expansion-project-laceep?lang=en		
6/18/2013	2013	Haiti Rebuilding Energy Infrastructure and Access	Haiti	\$ 5,600,000	\$ -	Energy aspects of project are not off-grid.	http://www.worldbank.org/projects/P127208/economic-reconstruction-growth-development-policy-credit?lang=en		
6/19/2013	2013	HN RURAL INFRASTRUCTURE PROJECT (AF)	Honduras	\$ 6,000,000	\$ 3,000,000	A portion of this project supported off-grid energy. Counted as half distributed renewables because amount is unclear.	http://www.worldbank.org/projects/P144324/hn-rural-infrastructure-project-af?lang=en		

APPENDIX C: INTER-AMERICAN DEVELOPMENT BANK PROJECTS EVALUATED									
Project approval date	Fiscal Year	Project Name	Country	Total Amount Approved by Institution	Amount Included as Distributed Renewables	Rationale	URL / Sources		
9/12/2012	2012	Introduction of Sustainable Business Models in Suriname Rural Electrification	Suriname	\$ 1,692,889	\$ -	No information available that suggests off-grid development.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=SU-M1019		
9/20/2012	2012	Rural Electrification through Renewable Energy in Isolated Communities in Peru	Peru	\$ 330,586	\$ 330,586	Supports increased access for solar home systems for homes.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=PE-M1087		
11/1/2012	2012	National Sustainable Electrification and Renewable Energy Program (PNESEER)	Nicaragua	\$ 35,000,000	\$ 10,000,000	No off-grid components of this project have been deployed yet. Counted 2/7 of total for distributed renewables because amount is unclear, but two parts out of seven described for the project could be distributed renewables.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=NI-L1063		
11/20/2012	2012	Rural Electrification Program in Ecuador	Ecuador	\$ 400,000	\$ 200,000	Project supports off-grid energy, but none has been constructed yet. Counted as half distributed renewables because amount is unclear.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=EC-T1259		
11/26/2012	2012	Promotion, Support & Development of Sustainable Energy in Bolivia	Bolivia	\$ 500,000	\$ -	Focuses on hydro and grid extension, and evaluating solar thermal potential.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=BO-T1179		
5/22/2013	2013	Sustainable Energy for Haiti	Haiti	\$ 500,000	\$ -	No information available that suggests off-grid development.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=HA-T1178		
6/27/2013	2013	Access to Alternative Energy and Water Products through Credit and Distribution	El Salvador	\$ 990,000	\$ 495,000	Supports research on households solar energy and/or water purification systems. Counted as half distributed renewables because energy amount is unclear.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=ES-M1031		
7/8/2013	2013	Microfranchises for Access to Clean Energy in Rural Areas	Bolivia	\$ 1,000,000	\$ 1,000,000	Provides support for off-grid renewable energy.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=BO-M1056		
7/8/2013	2013	Development of Microfranchises for Access to Clean Energy in Rural Areas	Bolivia	\$ 1,000,000	\$ -	No information available that suggests off-grid development.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=BO-M1056		
8/1/2013	2013	Sustainable Off-grid Renewable Energy Solutions for Remote Communities	Ecuador	\$ 996,861	\$ 996,861	Provides renewable off-grid solutions for isolated communities.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=EC-M1063		
9/10/2013	2013	New Credit Products for Clean Energy	Honduras	\$ 140,000	\$ 140,000	Supports off-grid renewable energy.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=HO-M1044		
10/15/2013	2013	Electrification Program for rural and marginal urban areas of Ecuador	Ecuador	\$ 150,000	\$ 150,000	Supports capacity building for off-grid renewable energy.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=HO-M1044		
11/6/2013	2013	Sustainable Business Models for Clean Cookstoves Dissemination	Honduras	\$ 2,189,620	\$ 2,189,620	Supports the dissemination of cookstoves.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=HO-M1038		
11/6/2013	2013	Improve Sustainability of the Electricity Service	Suriname	\$ 30,000,000	\$ -	Focused on improving the grid and electricity sector.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=SU-L1009 http://iadbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=39042311		
11/20/2013	2013	Electrification Program for rural and marginal urban areas of Ecuador	Ecuador	\$ 30,000,000	\$ 15,000,000	No off-grid components of the project have been built yet. Counted as half distributed renewables because amount is unclear.	http://www.iadb.org/en/projects/project-description-title:1303.htm?id=EC-L1128		
1/14/2014	2014	Qestsol Pay-as-you-go Solar Power for the BoP in Guatemala	Guatemala	\$ 260,000	\$ 260,000	Financing to support off-grid solar product development.	http://www.iadb.org/en/projects/project-description-title%2d303.htm?id=GU-M1053		
2/13/2014	2014	Improved Efficiency in Coffee Processing and Reduced Environmental Impact	Honduras	\$ 910,000	\$ 910,000	Distributed renewable energy for productive uses by smallholder coffee farmers.	http://www.iadb.org/en/projects/project-description-title%2d303.htm?id=HO-M1036		
4/16/2014	2014	Sustainable Rural Electrification Program in Panama	Panama	\$ 20,000,000	\$ 10,000,000	Includes rural electrification through grid extension and off-grid systems. In project documents, approximately 50% of the total amount was earmarked for rural electrification for off-grid systems.	http://www.iadb.org/en/news/news-releases/2014-04-21/panama-for-rural-electrification-program-10801.html https://publications.iadb.org/bitstream/handle/11319/6855/2014%20Annual%20Report.%20The%20Year%20in%20Review.pdf?sequence=13 (see p. 33)		
5/28/2014	2014	Biobolsa: A Biogas Solution for Small Farms in Mexico, Honduras and Nicaragua	Regional	\$ 260,000	\$ 260,000	Financing and capacity-building for biogas digesters for smallholder farmers.	http://www.iadb.org/en/projects/project-description-title%2d303.htm?id=RG-M1260		
11/6/2014	2014	Financing Clean and Efficient Cookstoves in Andean Communities	Peru	\$ 900,000	\$ 900,000	Support for community-based clean cookstove distribution models.	http://www.iadb.org/en/projects/project-description-title%2d303.htm?id=PE-M1033 http://iadbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=39062731		
12/17/2014	2014	Rehabilitation of the Peligre Transmission Line	Haiti	\$ 7700,000	\$ -	Transmission reinforcement project.	http://www.iadb.org/en/projects/project-description-title%2d303.htm?id=HA-L1100 http://iadbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=39269287 http://www.iadb.org/en/news/news-releases/2014-12-18/haiti-electricity-transmission-line-110338.html		
12/17/2014	2014	Multiphase Rural Electrification Program Phase II	Guatemala	\$ 55,000,000	\$ 4,400,000	Project documents indicate \$4.4 million of total resources approved for off-grid projects, to connect 7,897 people to isolated renewable energy systems.	https://publications.iadb.org/bitstream/handle/11319/6855/2014%20Annual%20Report.%20The%20Year%20in%20Review.pdf?sequence=13 (see p.33) http://www.iadb.org/en/news/news-releases/2014-12-19/guatemala-will-expand-electricity-coverage-11043.html https://publications.iadb.org/bitstream/handle/11319/6855/2014%20Annual%20Report.%20The%20Year%20in%20Review.pdf?sequence=13 (see p. 33) http://iadbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=39269812		

APPENDIX D: AFRICAN DEVELOPMENT BANK PROJECTS EVALUATED

Project approval date	Fiscal Year	Project Name	Country	Total Amount Approved by Institution	Amount Included as Distributed Renewables	Rationale	URL / Sources
3/30/2012	2012	Interconnection and electricity distribution	Cape Verde	\$ 12,941,540	\$ -	Supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-cv-fao-002/
6/13/2012	2012	Integrated Wind/Hydro and Rural Electrification Program	Morocco	\$ 182,254,570	\$ -	Connects households to grid.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-ma-fao-003/
6/13/2012	2012	tezhi-tezhi Hydro power plant and transmission line	Zambia	\$ 46,110,000	\$ -	Constructs transmission line, substations, and distribution networks.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zm-fao-003/
9/19/2012	2012	Projet de développement du système Boali	Regional - Sub-Saharan Africa	\$ 45,695,010	\$ -	Supports construction and strengthening of dam system, including transmission lines.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-028/
9/19/2012	2012	Ethiopia-Kenya Electricity Highway	Kenya	\$ 115,275,000	\$ -	Supports building a transmission line and substations.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-044/
9/19/2012	2012	Interconnexion des réseaux électriques RCA-RDC à partir du système hydroélectrique de Boali Phase 1	Regional - Sub-Saharan Africa	\$ 8,530,350	\$ -	Increases hydropower capacity and builds transmission line.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-047/
6/26/2013	2013	Scaling-up Energy Access Project]	Rwanda	\$ 42,142,100	\$ -	Upgrades substations and extends the national grid.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-rw-fao-006/
7/10/2013	2013	Cameroon-Chad Electrical Interconnection	Regional - Sub-Saharan Africa	\$ 3,850,000	\$ -	Assesses technical, economic, and financial feasibility of interconnection project and electrification development centers.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-048/
9/11/2013	2013	Project Assistance for the Energy Sector	Comoros	\$ 8,285,200	\$ -	Project focuses on production capacity and distribution network.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-hm-fao-001/
11/6/2013	2013	CLSG - Cote d'Ivoire	Cote d'Ivoire	\$ 40,306,420	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-044/
11/6/2013	2013	CLSG Liberia	Liberia	\$ 12,477,080	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-045/
11/6/2013	2013	CLSG Sierra Leone	Sierra Leone	\$ 24,693,900	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-046/
11/6/2013	2013	CLSG Guinea	Guinea	\$ 45,805,760	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-047/
11/6/2013	2013	CLSG Electrical Interconnection Project	Cote d'Ivoire	\$ 1,110,340	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-053/
11/6/2013	2013	CLSG Electrical Interconnection Project	Guinea	\$ 120,274	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-055/
11/6/2013	2013	CLSG Electrical Interconnection Project	Cote d'Ivoire	\$ 9,403,240	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-056/
11/6/2013	2013	CLSG - Rural Electrification - Liberia	Liberia	\$ 27,655,320	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-057/
11/6/2013	2013	CLSG - Rural Electrification Sierra Leone	Sierra Leone	\$ 7,518,280	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-058/
11/6/2013	2013	CLSG-Rural Electrification Guinea	Guinea	\$ 15,923,500	\$ -	Project supports grid extension.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-zl-fao-059/
2/26/2014	2014	Electricity distribution system reinforcement and extension project	Ghana	\$ 74,370,000	\$ 1,157,800	Primarily grid extension and reinforcement, but with a component for new households to be connected by off-grid solar systems in 60 lakeside and island communities, allocated roughly \$1.6 million according to project documents.	http://www.wafdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Ghana_-_Electricity_Distribution_System_Reinforcement_and_Extension_-_Appraisal_Report.pdf http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-gh-fao-005-to-be-enforced-and-extended-with-afdb-support-12856 http://www.wafdb.org/fileadmin/uploads/afdb/Documents/Environmental-and-Social-Assessments/Ghana%20-%20Electricity%20Distribution%20System%20Reinforcement%20and%20Extension%20-%20ESMP%20Summary.pdf
6/23/2014	2014	HYDROENERGY JIJI MULEMBWE	Burundi	\$ 22,000,000	\$ -	Medium-scale hydropower development.	http://www.wafdb.org/en/news-and-events/article/afdb-finance-construction-of-two-hydropower-plants-in-burundi-13327 http://www.wafdb.org/fileadmin/uploads/afdb/Documents/Environmental-and-Social-Assessments/Burundi_-_Jiji_and_Mulembwe_Hydropower_Plants_Development_Project_-_Executive_RAP_Summary.pdf
11/19/2014	2014	Last Mile Connectivity Project	Kenya	\$ 133,000,000	\$ -	Transmission and distribution expansion.	http://www.wafdb.org/en/projects-and-operations/project-portfolio/project/p-ke-fao-010 http://www.wafdb.org/fileadmin/uploads/afdb/Documents/Boards-Documents/HIGHLIGHTS_-_BOARD_MEETING_OF_19_NOVEMBER_2014.pdf http://www.wafdb.org/en/news-and-events/article/rural-and-low-income-kenyans-to-benefit-from-afdb-energy-loan-13772 http://www.wafdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Annual_Report_2014_-_Full.pdf (p.44)

APPENDIX E: ASIAN DEVELOPMENT BANK PROJECTS EVALUATED

Project approval date	Fiscal Year	Project Name	Country	Total Amount Approved by Institution	Amount Included as Distributed Renewables	Rationale	URL / Sources
9/18/2012	2012	Clean Energy and Network Efficiency Improvement Project	Sri Lanka	\$ 130,000,000	\$ -	Transmission, includes funding for pilot solar rooftop systems, but since the investments are described as "pilots" and the investment split is not clear, investment in distributed renewable energy assumed to be marginal.	http://www.wadb.org/projects/43576-013/main
9/25/2012	2012	Heliogiang Energy Efficient District Heating Project	China	\$ 150,000,000	\$ -	District heating project; not distributed renewables.	http://www.wadb.org/projects/44011-013/main
9/27/2012	2012	Provincial Renewable Energy Project (formerly Outer Island Renewable Energy Project)	Solomon Islands	\$ 750,000	\$ -	Project expands existing grid.	http://www.wadb.org/projects/46014-001/main
12/10/2012	2012	Implementation of the Electricity Industry Policy	Papua New Guinea	\$ 1,000,000	\$ -	Includes building of grid development plan.	http://www.wadb.org/projects/46019-001/main
12/14/2012	2012	Low Carbon Agricultural Support Project	Vietnam	\$ 74,000,000	\$ 37,000,000	Biogas digesters both for small farmers, and also medium and large-sized digesters; investment split between smaller and larger plants is not clear, so half has been counted as distributed renewables	http://www.wadb.org/projects/45406-001/main#project-pds
12/14/2012	2012	Power Distribution Enhancement Investment Program - Tranche 3	Pakistan	\$ 245,000,000	\$ -	Transmission and distribution expansion	http://www.wadb.org/projects/38456-034/main
12/14/2012	2012	Medium-Voltage Sub-Transmission Expansion Sector Project (former name: Rural Electrification Project)	Cambodia	\$ 45,000,000	\$ -	Project supports transmission and distribution.	http://www.wadb.org/projects/42361-013/main
12/18/2012	2012	Energy Access Project	Vanuatu	\$ 750,000	\$ -	Supports grid extension.	http://www.wadb.org/projects/43414-012/main
12/18/2012	2012	Energy Sector Development Investment Program- Tranche 4	Afghanistan	\$ 200,000,000	\$ -	Supports grid extension.	http://www.wadb.org/projects/42094-052/main
1/15/2013	2013	Off Grid Pay-As-You-Go Solar Power	India	\$ 2,000,000	\$ 2,000,000	Supports off-grid renewable energy.	http://www.wadb.org/projects/46931-014/main
2/21/2013	2013	Tanahu Hydropower Project	Nepal	\$ 150,000,000	\$ -	Project is large hydropower.	http://www.wadb.org/projects/43281-013/main
4/26/2013	2013	Port Moresby Power Grid Development Project	Papua New Guinea	\$ 66,700,000	\$ -	Project supports grid development.	http://www.wadb.org/projects/43197-013/main
6/25/2013	2013	Access to Green Finance Project	Tajikistan	\$ 10,000,000	\$ 5,000,000	May support distributed renewables, amount unclear.	http://www.wadb.org/projects/45229-001/main
6/27/2013	2013	Outer Island Renewable Energy Project	Tonga	\$ 2,000,000	\$ 1,000,000	Counted as half distributed renewables because amount is unclear.	http://www.wadb.org/projects/43452-022/main
7/15/2013	2013	Low-Carbon District Heating Project in Hohhot in Inner Mongolia Autonomous Region	China	\$ 600,000	\$ -	District heating project; not distributed renewables.	http://www.wadb.org/projects/47053-001/main
8/27/2013	2013	West Kalimantan Power Grid Strengthening Project	Indonesia	\$ 49,500,000	\$ -	Project supports new transmission lines.	http://www.wadb.org/projects/41074-013/main
9/30/2013	2013	Green Power Development Project	Bhutan	\$ 39,000,000	\$ 19,500,000	Counted as half distributed renewables because amount is unclear.	http://www.wadb.org/projects/37399-013/main
10/16/2013	2013	Public-Private Infrastructure Development Facility	Bangladesh	\$ 110,000,000	\$ 110,000,000	Institutional support for IDCOL.	http://www.wadb.org/projects/42180-013/main
11/27/2013	2013	Madhya Pradesh Power Transmission and Distribution System Improvement Project	India	\$ 350,000,000	\$ -	Improves transmission and distribution of grid.	http://www.wadb.org/projects/47100-004/main
11/28/2013	2013	Golovnaya 240-Megawatt Hydropower Plant Rehabilitation Project	Tajikistan	\$ 136,000,000	\$ -	Increases power generation capacity and operational efficiency of hydropower project.	http://www.wadb.org/projects/46418-001/main
11/28/2013	2013	Electricity Supply Security and Sustainability Program- Tranche 4	Nauru	\$ 500,000	\$ -	Project does not include off-grid renewables.	http://www.wadb.org/projects/46455-001/main
12/4/2013	2013	Energy Sector Development Investment Program- Tranche 4	Afghanistan	\$ 49,100,000	\$ -	Project does not include off-grid component.	http://www.wadb.org/projects/42094-075/main
12/6/2013	2013	Power Transmission and Distribution Improvement Project	Myanmar	\$ 60,000,000	\$ -	Project does not support off-grid energy.	http://www.wadb.org/projects/46390-003/main
12/13/2013	2013	Power Distribution Enhancement Investment Program - Tranche 4	Pakistan	\$ 167,000,000	\$ -	Transmission and distribution expansion	http://www.wadb.org/projects/38456-037/main#project-pds
5/12/2014	2014	Provincial Renewable Energy Project	Solomon Islands	\$ 12,000,000	\$ -	Small hydropower project with distribution grid extension.	http://www.wadb.org/projects/46014-002/main http://www.wadb.org/sites/default/files/project-document/80745/46014-002-rfp.pdf http://www.wadb.org/news/adb-signs-assistance-package-boost-hydropower-generation-solomon-islands
7/4/2014	2014	South Asia Subregional Economic Cooperation Power System Expansion Project	Nepal	\$ 180,000,000	\$ 5,000,000	Off-grid component total is \$15 million, with only \$5 million of that coming from ADB's Special Funds and \$10 million from the SCF (a multi-donor fund), so only the \$5 million ADB contribution is counted.	http://www.wadb.org/projects/44219-014/main http://www.wadb.org/sites/default/files/project-document/81409/44219-014-rfp.pdf
7/4/2014	2014	South Asia Subregional Economic Cooperation Power System Expansion Project	Nepal	\$ 500,000	\$ 250,000	Amount of technical assistance to specifically support distributed renewables is unclear, so 50% is counted.	http://www.wadb.org/projects/41614-036/main http://www.wadb.org/sites/default/files/project-document/150537/41614-036-rfp.pdf
11/25/2014	2014	Assam Power Sector Enhancement Investment Program - Tranche 4	India	\$ 50,200,000	\$ -	Supports grid extension.	http://www.wadb.org/projects/48323-001/main#project-pds http://www.wadb.org/sites/default/files/project-document/152624/48323-001-rfp.pdf
12/15/2014	2014	Sustainable and Inclusive Energy Program	Indonesia	\$ 1,000,000	\$ -	Focused on grid-connected electricity and natural gas.	http://www.wadb.org/projects/48323-001/main#project-pds http://www.wadb.org/sites/default/files/project-document/152624/48323-001-rfp.pdf

Sierra Club National
85 Second Street, 2nd Floor
San Francisco, CA 94105
(415) 977-5500

Oil Change International
714 G Street SE, Suite 202
Washington, DC 20003
(202) 518-9029

sierraclub.org
priceofoil.org

