SHORTCHANGING ENERGY ACCESS: A PROGRESS REPORT ON MULTILATERAL DEVELOPMENT BANK FINANCE

OILCHANGE INTERNATIONAL

THE BIG SHIFT

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Oil Change International is a research, communications, and advocacy organization focused on exposing the true costs of fossil fuels and facilitating the coming transition towards clean energy. For more information, visit www.priceofoil.org

Big Shift Global is a multi-stakeholder, global campaign coordinated by organisations from the Global North and South. Together, we aim to make the people's views on energy finance known. Leveraging public opinion is crucial to aligning decisions made by the MDBs with long-term climate safety and poverty goals – this inevitably involves a shift away from financing any form of fossil fuels to financing clean, sustainable, renewable energy for all.

CONTENTS

ABBREVIATIONS

AfDB	African Development Bank
ADB	Asian Development Bank
DRE	Distributed Renewable Energy
IDB	Inter-American Development Bank
MDB	Multilateral Development Bank
SDG	Sustainable Development Goal
SEforAll	Sustainable Energy for All
UN	United Nations
WBG	World Bank Group

EXECUTIVE SUMMARY

About one billion of the world's population lack access to electricity and its associated development benefits.[1] Nearly three billion people still rely on solid fuels such as wood and charcoal for cooking and heating.[2] One-half of those without electricity and one-third of those without clean cooking reside in sub-Saharan Africa.[3]

Continuing business-as-usual means an estimated 674 million people globally will lack access to electricity in 2030, ninety percent of whom will reside in remote rural areas. 90 percent of those 674 million people will live in sub-Saharan Africa.[4] Current approaches vastly under-invest in the solutions that are best suited for rural areas. Globally, **an average of USD 36 billion per year needs to flow to off-grid and mini-grid solutions –** the vast majority of which would be in the form of renewable energy technologies – to achieve universal electricity access by 2030.[5]

The multilateral development banks (MDBs) are equipped with billions of dollars of government-backed support to solve poverty and development challenges. This report uses a transaction-by-transaction database compiled from information provided by MDBs in public documentation to assess the 2014 through 2017 contributions of four MDBs[a] – the African Development Bank (AfDB), the Asian Development Bank (ADB), the Inter-American Development Bank (IDB), and the World Bank Group (WBG) – to the United Nations Sustainable Development Goal 7 (SDG 7) of "access to affordable, reliable, sustainable and modern energy for all" by 2030.[6]

KEY FINDINGS

The MDBs are not channeling enough of their energy finance to access for the poor.

- **Less than 20 percent of MDB energy finance[b] from 2014 through 2017 supported energy access for the poor.[c]** Collectively, the MDBs approved an average of USD 3.6 billion per year for projects aimed at advancing energy access primarily for poor and/or rural communities;
- **Only 2 percent of energy finance went to off-grid and decentralized energy solutions that are most likely to close the access gap in rural areas.** MDBs spent an average of USD 378 million per year on off-grid and distributed energy for access,[d] which represents less than 2 percent of the USD 36 billion of total annual investment needed to properly finance off-grid and mini-grid solutions;
- **Just 1.6 percent of MDB energy finance went to clean cooking solutions, a major under-investment.** MDBs approved an annual average of USD 312 million for clean cooking and heating solutions, compared to the USD 4.4 billion in yearly investment needed;[7]
- **Only 12 percent of MDB support for the "enabling environment"[e] had components to advance energy access for the poor.** Policy support, technical assistance, and capacity building are critical in order to channel more finance to energy access solutions, and this analysis shows they are being drastically under-invested;

Over half of MDB energy access finance went to countries with the largest access gaps.

- **Over 65 percent of energy access finance went to the countries with the largest number of people without access.[f]** Of this finance, 11 percent was for off-grid, mini-grid, and clean cooking solutions;
- **Nearly 50 percent of access finance targeted sub-Saharan Africa, the region with the greatest share of the global population without energy access.** Off-grid and mini-grid solutions are particularly important in sub-Saharan Africa, as 80 percent of those without electricity access currently reside in rural areas. Of MDB energy finance in this region, 3 percent (USD 495 million) was for off-grid and distributed energy, and a negligible amount – only USD 1.2 million – supported clean cooking;

a The EBRD and EIB were excluded from this report given their limited exposure to countries with high energy access deficits. Throughout this report, "MDBs" refers to the four MDBs assessed.
b In this report, MDB "finance" refers to the volume of finance approved by the Board of Directors of these institutions in the year the finance was approved. The figures do not reflect when or how much finance was ultimately disbursed.
c We classify energy finance as "access" if the project has the primary and specific intent of targeting rural and/or poor communities. Refer to Appendix 1 for the detailed definition used in this report. Many MDB energy investments are necessary for overall sector development and improvements. Our definition is not meant to discourage these investments, but rather to estimate the share of energy finance targeted at advancing access specifically for rural and/or poor communities.
d In addition, MDBs financed an annual average of USD 268 for off-grid and distributed renewable systems for commercial and industrial clients.
e "Enabling environment" includes projects primarily focused on policy support and sector reform, technical assistance and capacity building, strengthening financial institutions and access to finance, e.g. through dedicated funds.
f The 2015 Global Tracking Framework (IEA and World Bank, 2015) identifies 20 countries with the highest absolute gaps in access to electricity and/or clean fuels and technologies for cooking measured by population. For electricity access, the countries are: Afghanistan, Angola, Bangladesh, Burkina Faso, Congo (DR), Ethiopia, India, Kenya, Korea (DPR), Madagascar, Malawi, Mozambique, Myanmar, Niger, Nigeria, the Philippines, Sudan, Tanzania, Uganda, and Yemen. For clean cooking access, the countries are: Afghanistan, Bangladesh, China, Congo (DR), Ethiopia, India, Indonesia, Kenya, Korea (DPR), Madagascar, Mozambique, Myanmar, Nepal, Nigeria, Pakistan, the Philippines, Sudan, Tanzania, Uganda, and Vietnam.

Energy access is not reflected as a priority in energy approvals or reported outcomes.

- **Over 90 percent of MDB finance for fossil fuels was not aimed at advancing energy access for the poor,** despite these fossil investments being frequently justified in the context of providing energy access. Finance for clean energy (a definition excluding large hydropower projects) and finance for fossil fuels each composed roughly 25 percent of all MDB energy finance. However, only about 9 percent of the USD 20.6 billion of MDB finance for projects involving fossil fuels had components that supported energy access. Fossil fuel finance supporting access mostly consisted of gas distribution to households for cooking and heating; and
- **The MDBs do not apply a harmonized framework to track finance for energy access or its outcomes, despite energy access being a main pillar / principle in the energy strategies of each institution assessed in this report.** Of the institutions assessed, the AfDB is the only one that has set quantitative targets for energy access, and the only one that tracks new connections from off-grid energy and household access to clean cooking in its Results Measurement Framework.

Many of these key findings are summarized at a glance in Figures ES-1, ES-2, and ES-3 below:

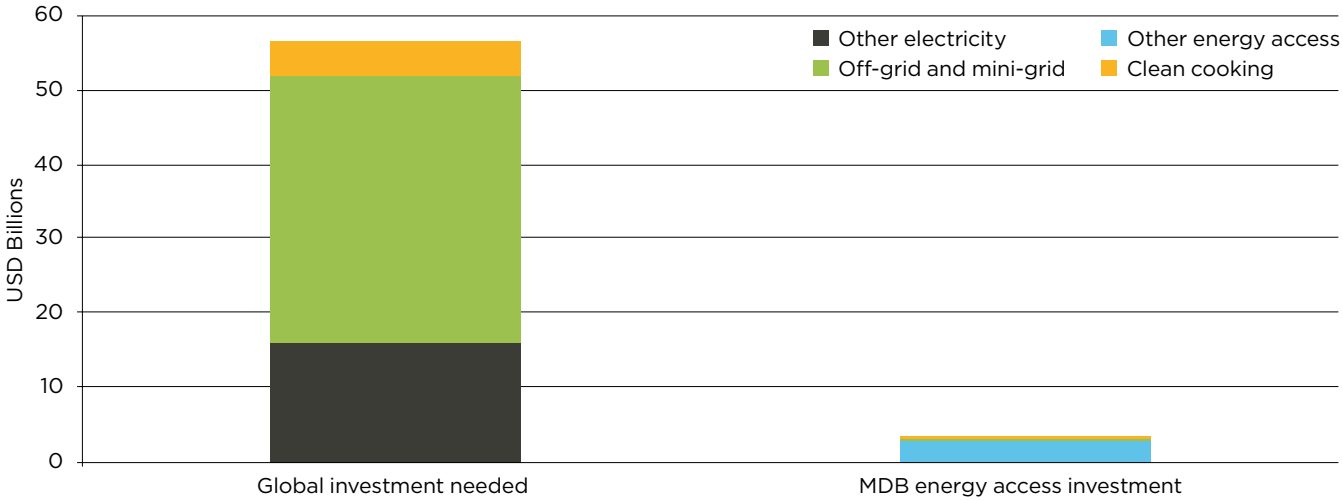
RECOMMENDATIONS FOR MDBS

- Direct at least one-half of annual energy finance to projects focused on advancing energy access for the poor and/or rural areas;
- Integrate off-grid, distributed renewable energy and clean cooking solutions for access into projects, so that these solutions receive at least one-third of MDB energy finance; and,
- Set quantitative targets for energy access and collectively track energy access finance and its outcomes.

g The IEA figures in this report reflect the sum of investment under the New Policies Scenarios and the additional investment required in the Energy for All scenarios. This equates to an average of USD 36 billion per year for off-grid and mini-grid solutions, USD 16 billion per year for other electricity investment, and USD 4.4 billion per year for clean cooking.

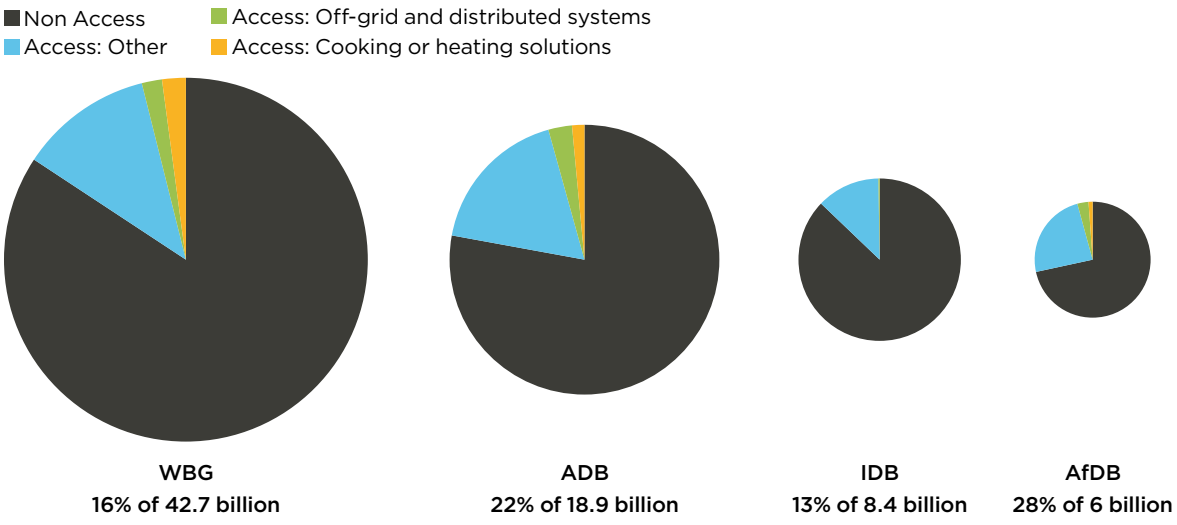
Solar Energy in Ethiopia ©Stiftung Solarengie

Figure ES-1: Global Investment Needed for Universal Energy Access by 2030 Compared to MDB Energy Access Investment (Annual Average, Billions USD)



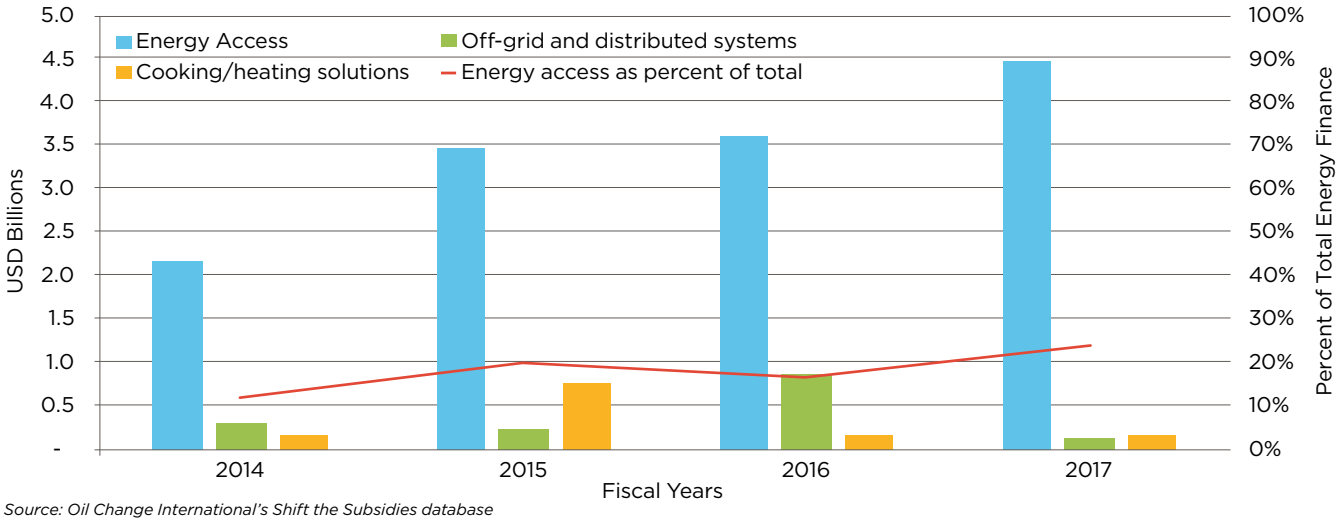
Sources: International Energy Agency for the "Global investment needed" figure;g Oil Change International's Shift the Subsidies database for the "MDB energy access investment" figure.

Figure ES-2: Breakdown of Volume and Type of MDB Energy Finance (2014 through 2017)



Source: Oil Change International's Shift the Subsidies database. Note: Percentages show energy access finance as a percentage of total energy finance. Pie charts are scaled to approximate volume of total energy finance.

Figure ES-3: MDB Energy Finance for Access, Off-Grid and DRE, and Clean Cooking Solutions over Time (Billion USD, FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

I. INTRODUCTION

MDBs have jointly committed to support the achievement of the UN Sustainable Development Goals and Sustainable Energy for All (SEforAll) objectives.[8] However, there remains a yawning gap between that ambition and the difficult reality of delivering energy access to all sustainably. More than one billion people around the world still lack access to electricity, and nearly three billion rely on solid fuels for cooking and heating. Recent assessments of global trends conclude that "the world is not on track" to meet the universal energy access target under SDG7; clean cooking in particular lags far behind.[9]

The challenge is particularly acute in sub-Saharan Africa, the world region with the largest proportion of those without energy access. Over one-half of the global population without electricity access and nearly one-third of the global population without access to clean cooking reside in sub-Saharan Africa.[10] If the current trajectory of energy investment were to persist, the energy access gap in sub-Saharan Africa would actually widen by 2030, as population growth would outpace energy access gains in the absence of significantly increased investment.[11]

Achieving universal energy access will require more finance. Estimates vary, but all point to a need for significantly scaled-up resources. The IEA estimates that an average of USD 52 billion in annual investment will be needed through 2030 to achieve universal energy access – of which USD 36 billion is needed in off-grid and decentralized solutions.[12] Different assumptions on energy efficiency improvements – such as assuming that hyper-efficient appliances will be used in conjunction with new generation capacity – yield substantially lower estimates of additional investment required, of around an average of USD 14 billion per year.[13]

In either case, more of this finance will need to be channeled to distributed energy and clean cooking solutions, and to rural communities. Delivering universal energy access – and doing so quickly – is a crucial step in eliminating extreme poverty and enabling achievement of other development goals; even access to low levels of energy services can deliver major benefits by helping households save money, increasing the number of hours in which students can study, and improving health outcomes.[14]

Approximately 87 percent of people without access to electricity reside in rural areas.[15] To achieve universal electricity access by 2030, a least-cost assessment indicates that over two-thirds of electricity investment needs to be in off-grid and mini-grid solutions.[16] Global investment in decentralized solutions are far below this benchmark. In 2013 and 2014, only 1 percent of electricity finance in 20 countries with large populations lacking access went to off-grid and mini-grid solutions,[17] despite the fact that these solutions may provide the best way to provide energy services to many rural areas in the near term.[18],[19] If trends continue as usual, an estimated 674 million people will lack electricity access by 2030, and 90 percent of those will be in rural areas.[20] The situation is even more urgent for clean cooking and heating solutions, for which investment levels do not even begin to address the access gap.[21]

MDBs have an outsized influence on energy investment in many countries with access challenges. This report assesses the contributions of four MDBs – the African Development Bank, the Asian Development Bank, the Inter-American Development Bank, and the World Bank Group – towards progress on delivering universal access to electricity by 2030. The European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB) were excluded from this analysis given their limited exposure to countries with high energy access deficits.

Past versions of this analysis yielded a discouraging result: Financing for energy access and distributed renewable energy was unacceptably low, and at the margins of MDB energy sector activity.[22] This new analysis finds that while the AfDB, ADB, IDB, and WBG have made progress to scale up support for this agenda, significantly more ambition is still needed to accelerate global progress towards universal energy access.

Section II outlines the scope and methodology. Section III presents overarching findings, and Section IV examines the performance of individual institutions. In Section V, we look at MDB support for energy access in sub-Saharan Africa. We conclude with recommendations for MDB Executive Directors and management in Section VI.

II. METHODOLOGY

DATA AND SCOPE

This analysis considers energy finance approved from the core resources of the AfDB, ADB, IDB, and WBG from fiscal years 2014 through 2017.[h] It is important to note that this analysis does not consider actual disbursements, but only approval or commitment of funds; while other recent analysis points to challenges in disbursement of MDB energy access finance,[23] this analysis does not purport to assess the actual outcomes of the approved or committed funds in terms of delivering energy access.

Because this analysis only covers approvals, it is backward-looking, and hence does not consider MDB projects currently under consideration ("in the pipeline") which have yet to be approved. Project pipelines likely provide a better indication of the future direction of each institution's approach on energy access finance.

We exclude projects that have marginal energy-related components – for example, corporate sustainability improvements – but cover all financial instruments including loans, equity, guarantees, policy-based credits, and grants. The data used in this analysis is sourced from Oil Change International's Shift the Subsidies database.[24] Information has been taken from publicly available MDB sources – namely databases, news and press releases, and annual reports. At times, there are discrepancies in information across different sources; the authors have reached out to staff at all of the institutions assessed to request clarification on these differences.

TRACKING ENERGY ACCESS FINANCE

In the past, the development community has mainly defined "access" as whether or not a household had a physical connection to an electricity source. However, many factors contribute to access – for example, reliability, safety, and affordability – and development involves energy use beyond the household and beyond electricity.[25] The WBG is currently undertaking a global survey to collect more granular data on energy access quality and the range of solutions supporting it.[26] In this report, we define energy access finance as finance that supports interventions to deliver electricity, cooking, and heating solutions with the primary intent to target rural or poor communities. We also include services beyond the residential sector that are important to alleviating poverty – for example, energy used to power health facilities, water and sanitation services, schools, and productive uses such as irrigation.

The MDBs do not currently apply a harmonized framework to track finance for energy access or its outcomes. Accordingly, we developed a framework for categorizing which MDB energy sector transactions are intended to support energy access for the poor. The framework we use to categorize energy access finance is informed by qualitative insights from policy briefs and lessons learned following the first SDG 7 review at the UN High-Level Political Forum in 2018, other literature and research on energy access, and input from practitioners and researchers. Refer to Appendix 1 for the detailed framework.

ASSUMPTIONS

This analysis only considers the anticipated outcomes of finance as described ex-ante in MDB project documents. It does not assess the implementation, disbursement of funds,[i] or ex-post outcomes.

MDB projects and programs often span several sectors and have many components, including technical assistance. For multi-sector transactions, we made assumptions on the amount of finance to attribute to the "energy sector." We then categorize transactions as "access" or not access. In cases where transactions include a smaller component of off-grid or distributed renewable energy (DRE), we included that portion in the figures for off-grid/DRE. Our figures should therefore be considered estimates based on publicly available information.

h The AfDB, ADB, and IDB report data by calendar year. The WBG reports data by its fiscal year, which runs from July 1 through June 30.

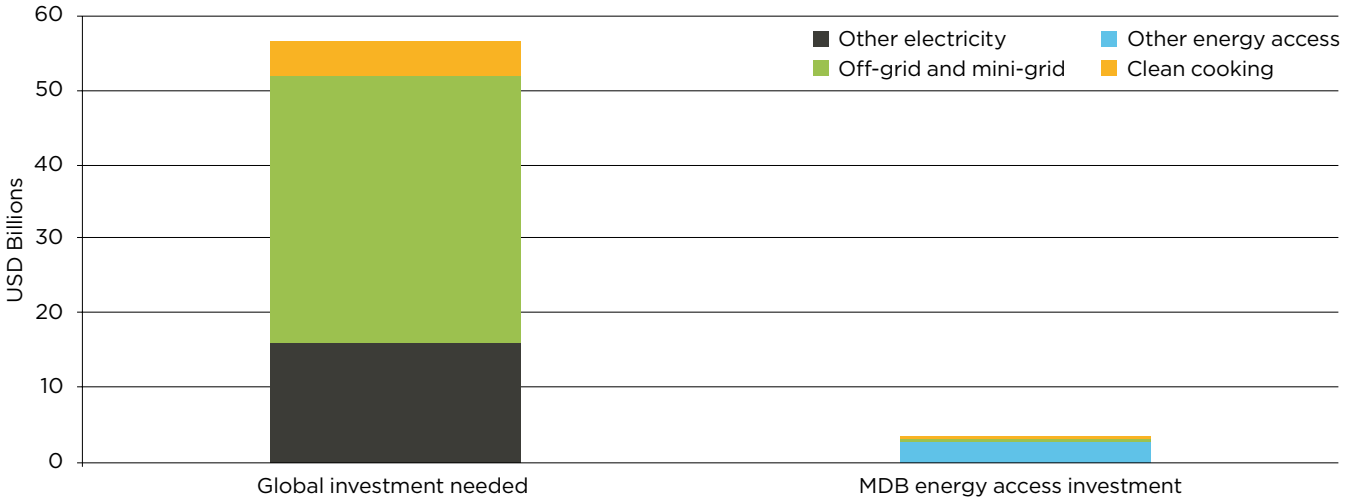
i A recent SEforAll analysis indicates that slow disbursement rates remain a challenge for implementation. For example, in 20 countries with low access rates, nearly 70 percent of international energy finance commitments experienced disbursement delays. This indicates that simply scaling up approvals may not be a sufficient condition for delivering scaled-up energy access in the areas where the need is greatest. https://www.seforall.org/sites/default/files/2017_SEforALL_FR4_PolicyPaper.pdf

Technician installing solar panel. ©*Jon Strand*

III. OVERARCHING FINDINGS

MDB finance for off-grid and DRE solutions for the poor contributed just 2 percent (an average of USD 378 million per year) to the estimated 36 billion per year of global investment needed in decentralized energy solutions.

Figure 1: Global Investment Needed for Universal Energy Access by 2030 Compared to MDB Energy Access Investment (Annual Average, Billions USD)



Sources: International Energy Agency for the "Global investment needed" figure,[j] Oil Change International's Shift the Subsidies database for the "MDB energy access investment" figure.

Figure 2: Summary of MDB Performance on Energy Access, 2014 to 2017

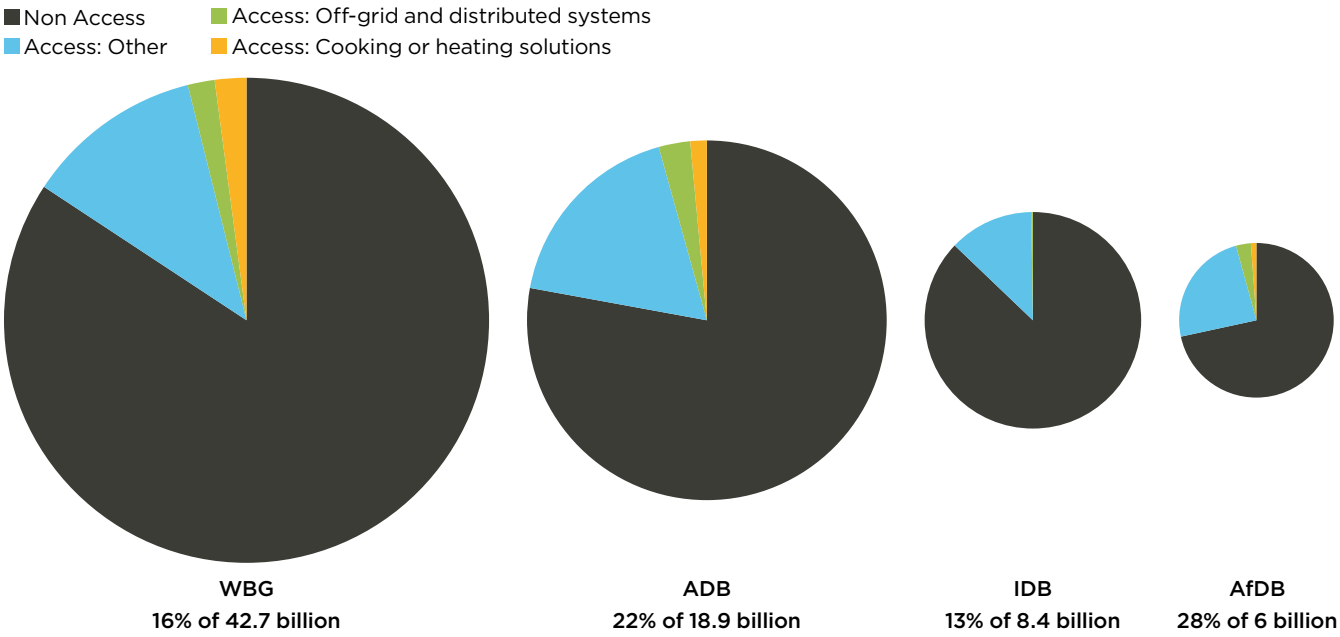
		AfDB	ADB	IDB	WBG
Policy	Energy access policy or program	●	●	●	●
	Includes access targets	●	●	●	●
Performance (Fy 2014-2017)	Half of energy approvals supported access for the poor	●	●	●	●
	A third of energy approvals supported supported off-grid, DRE and/or clean cooking/heating solutions for the poor	●	●	●	●
Tracking	Indicators for off-grid/DRE, grid connections and cooking solutions	●	●	●	●

Source: Oil Change International analysis

● Achieved target or met all criteria
● Met at least half of the quantitative target or partially met criteria
● Met less than half the target or none of the criteria

j The IEA figures in this report reflect the sum of investment under the New Policies Scenarios and the additional investment required in the Energy for All scenarios. This equates to an average of USD 36 billion per year for off-grid and mini-grid solutions, USD 16 billion per year for other electricity investment, and USD 4.4 billion per year for clean cooking.

Figure 3: Breakdown of Volume and Type of MDB Energy Finance (2014 through 2017)



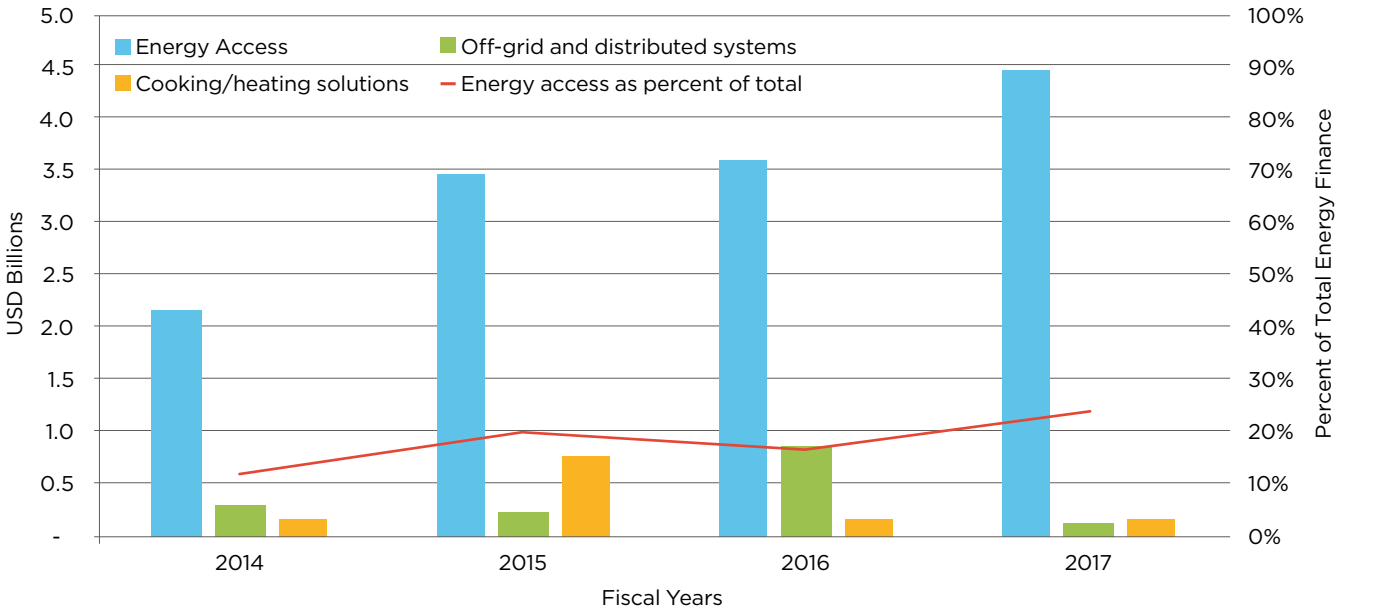
Source: Oil Change International's Shift the Subsidies database. Note: Percentages show energy access finance as a percentage of total energy finance. Pie charts are scaled to approximate volume of total energy finance.

Table 1: Summary of MDB Energy Access Policy Commitments

MDB	Policy Commitmentz
AfDB	The AfDB's New Deal on Energy for Africa strategy (2015) aims to achieve universal access in Africa by 2025 by contributing: - 75 million new off-grid connections through mini-grids and standalone systems - 130 million new grid connections - Clean cooking solutions to 150 million households
ADB	Energy access is a main pillar in ADB's Energy Policy (2009).[27] ADB also established the Energy for All Initiative (2008), which aimed to increase ADB's portfolio in energy access. The Energy for All Partnership aimed for a collective target of an additional 100 million people with access by 2015.[28]
IDB	IDB's Energy Sector Framework (2015) has a pillar focused on energy access.The IDB does not have any targets or programs specific to energy access.
WBG	Toward a Sustainable Energy Future for All: Directions for the World Bank Group's Energy Sector (2013), has a focus on expanding energy access and sustainable energy. The WBG administers and contributes to collaborations including Lighting Global, Lighting Asia, Lighting Africa, and the Energy Sector Management Assistance Program (ESMAP). The WBG has not adopted any quantitative targets for energy access.

MDB finance for energy access is trending upwards, but finance for off-grid, DRE, and cooking and heating solutions for the poor remain marginal and erratic from year to year.

Figure 4: MDB Energy Finance for Access, Off-Grid and DRE, and Clean Cooking Solutions over Time (Billion USD, FY 2014 to 2017)



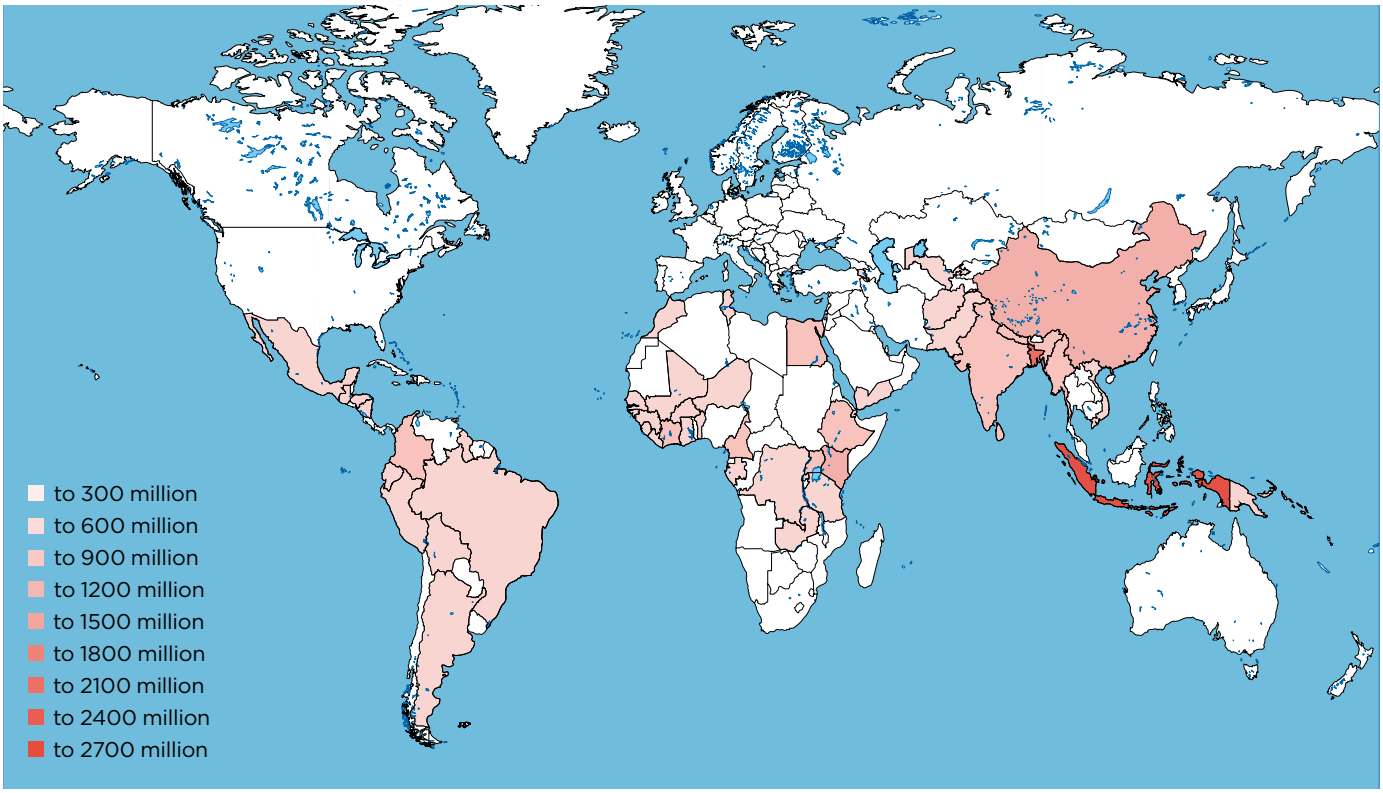
Source: Oil Change International's Shift the Subsidies database

Solar Shop in Burkina Faso. ©Wegmann

About 67 percent of MDB energy access finance went to the 20 countries where efforts will be most critical to achieve global SEforALL objectives.

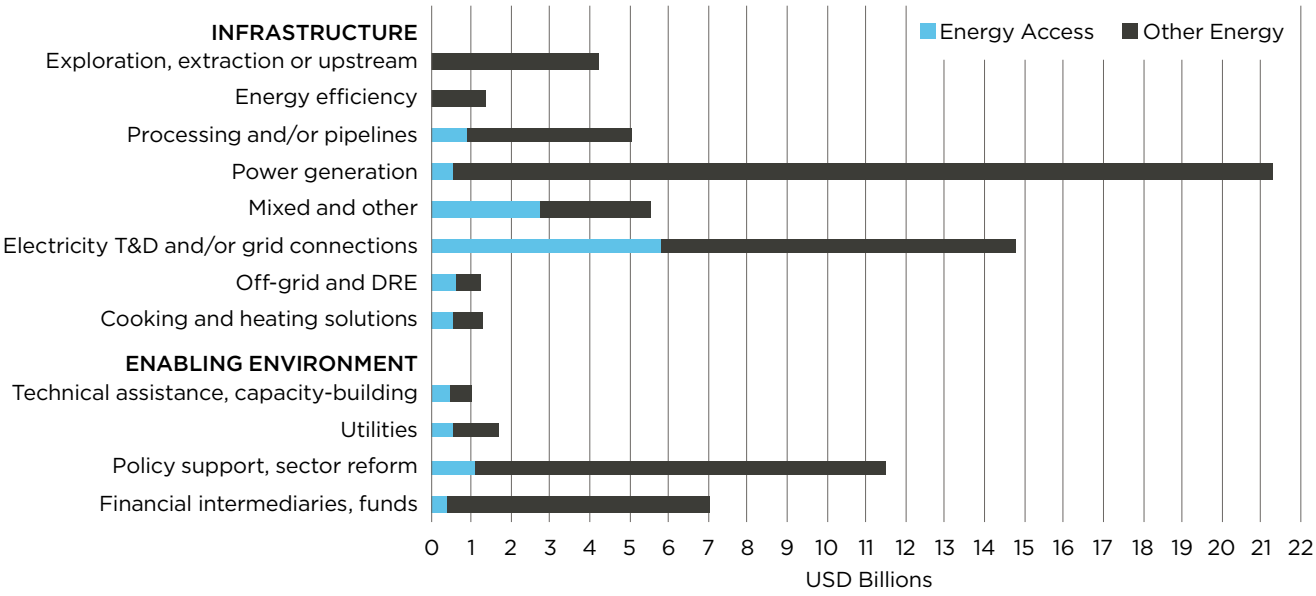
11 percent of this finance was for off-grid and clean cooking solutions. Roughly 32 percent of MDB finance for energy access targeted sub-Saharan Africa, the least electrified region with one of the least developed policy environments to support energy access.[29]

Figure 5: Global Distribution of MDB Finance for Energy Access (FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

Figure 6: Distribution of MDB Energy Finance (billion USD, FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

IV. ASSESSMENT OF INDIVIDUAL MDBS

AFRICAN DEVELOPMENT BANK

Of the MDBs assessed, the AfDB had the highest proportion of its energy finance for projects that advanced energy access, at 28 percent. However, just 3 percent of energy approvals went to off-grid and distributed systems, and 1 percent went to clean cooking and heating solutions.

Finance for access, off-grid, and DRE increased from 2015 to 2016, coinciding with the launch of AfDB's new energy strategy. The *New Deal on Energy for Africa* lays out AfDB's vision to achieve universal energy access in Africa by 2025, and aims to deliver 75 million off-grid connections, 130 million new grid connections, and clean cooking solutions to 150 million households.[30]

The Facility for Energy Inclusion[31] was the main vehicle through which AfDB channeled its distributed renewable finance. The fund, which aims to deliver energy access to three million households, represents an important step forward for AfDB's engagement in the off-grid, mini-grid, and small scale grid-connected segments.

Nearly 80 percent of AfDB's energy access finance supported distribution network upgrades, new connections for villages or rural areas, or extension of distribution lines to unserved communities. Cameroon, Kenya, Côte d'Ivoire, and Ethiopia were the top recipients of AfDB access finance, collectively receiving 58 percent of AfDB energy access finance over the four years assessed.

At the time of assessment, the AfDB was the only MDB with quantitative energy access targets, as well as indicators for both off-grid and clean cooking solutions in its Results Measurement Framework.

ASIAN DEVELOPMENT BANK

About 22 percent of ADB's energy finance was for access. ADB's energy access finance has been trending up since 2014, though finance for off-grid and distributed systems and for cooking and heating solutions remains low and erratic. The entirety of ADB's access finance for cooking and heating was delivered through two district heating projects in China and Myanmar.

Indonesia received 38 percent of ADB's energy access finance, followed by Bangladesh (20 percent) and Nepal (8 percent).

INTER-AMERICAN DEVELOPMENT BANK

The IDB had the smallest share of its energy approvals for projects advancing access, at 13 percent. Off-grid, DRE, and clean cooking solutions made up less than 1 percent of its energy finance. This may be to some degree a reflection of the client countries the IDB serves, most of which enjoy very high levels of access to electricity already, rather than IDB policies and practices. However, a number of IDB client countries still have low levels of access to electricity or clean cooking fuels, including Haiti – just 38 percent of Haitians had access to electricity as of 2014 – Guatemala, Nicaragua, Honduras, Guyana, and Bolivia.

Compared to the other banks, IDB had a higher proportion of access finance that supported the enabling environment, dominated by four large projects supporting policy and sector reform. Columbia, Ecuador, and Bolivia received the most energy access finance.

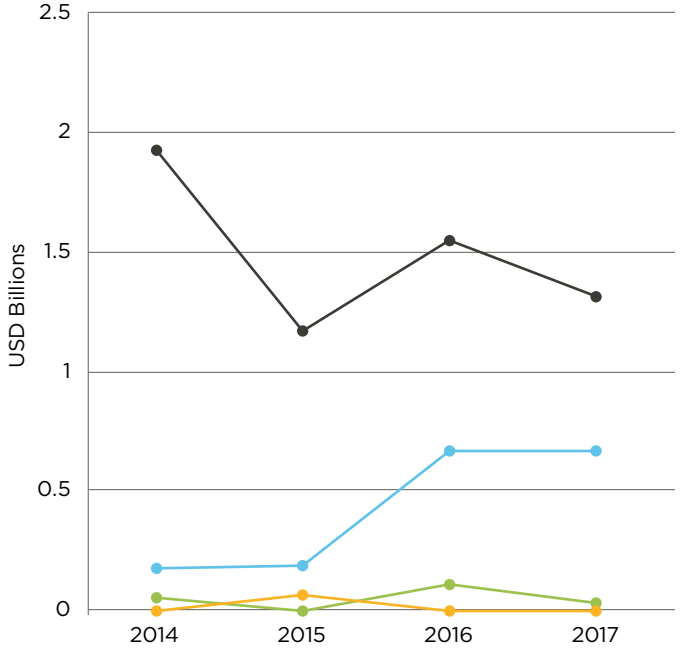
WORLD BANK GROUP

In absolute dollar terms, the World Bank Group provides the most energy finance out of all the MDBs assessed in this analysis. The WBG thus could have a significant impact on energy access progress if it allocated a larger proportion of its energy finance to off-grid and decentralized renewable energy and clean cooking solutions.

Since 2014, annual approvals for projects advancing energy access have remained relatively constant, but approvals for off-grid and distributed energy for the poor and for cooking and heating solutions appear to be trending downwards. It is important to note, however, that the WBG has approved several large off-grid projects targeting commercial users. For example, a USD 500 million program for grid connected rooftop solar in India aims to increase the availability of debt financing to spur the rooftop solar sector in India. While such programs are important for the development of the sector overall, we do not consider them as energy access activities for the purposes of this report given that they are not targeting the poor.

Additionally, there are signs the WBG has substantially more off-grid and distributed projects in its pipeline compared to approvals in recent years. As an example from 2018, the WBG approved USD 350 million for solar hybrid mini-grids and standalone solar systems in Nigeria.[32]

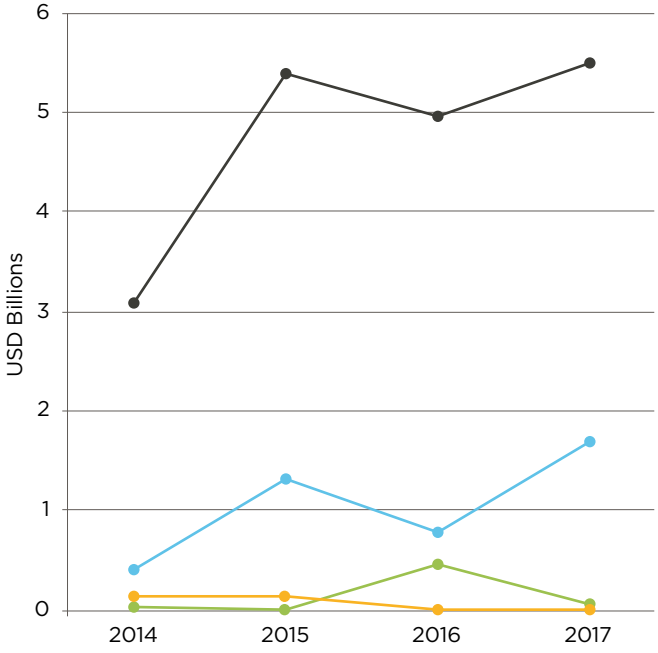
Figure 7: AfDB Energy Finance (billion USD, FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

Total Energy Finance
Energy Access
Off-grid and Distributed systems
Cooking/Heating

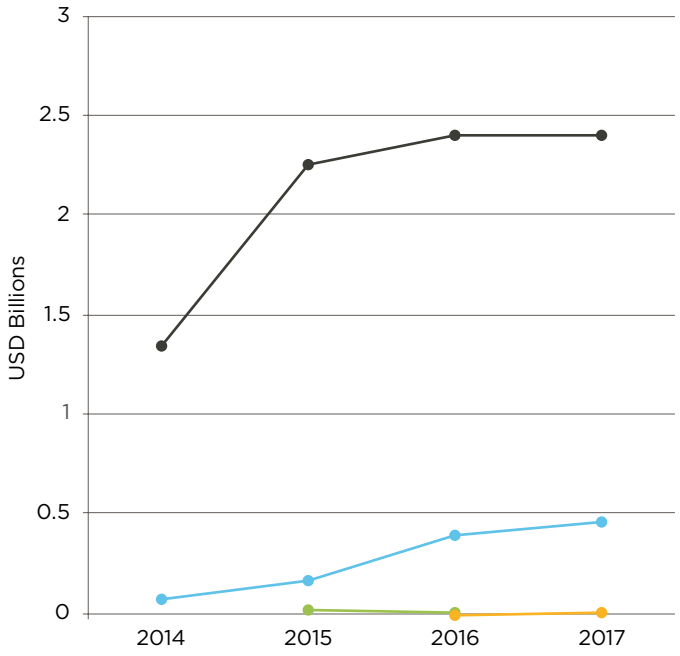
Figure 8: ADB Energy Finance (billion USD, FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

Total Energy Finance
Energy Access
Off-grid and Distributed systems
Cooking/Heating

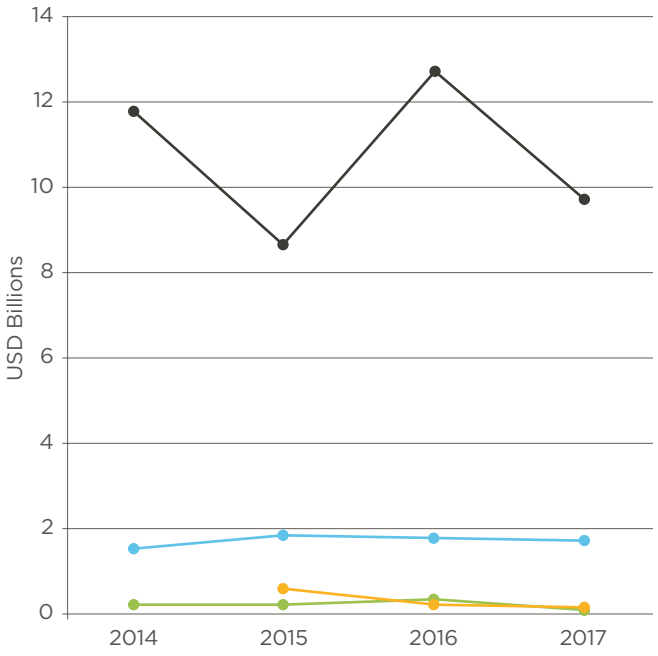
Figure 9: IDB Energy Finance (billion USD, FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

Total Energy Finance
Energy Access
Off-grid and Distributed systems
Cooking/Heating

Figure 10: WBG Energy Finance (billion USD, FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

Total Energy Finance
Energy Access
Off-grid and Distributed systems
Cooking/Heating

V. FOCUS ON SUB-SAHARAN AFRICA

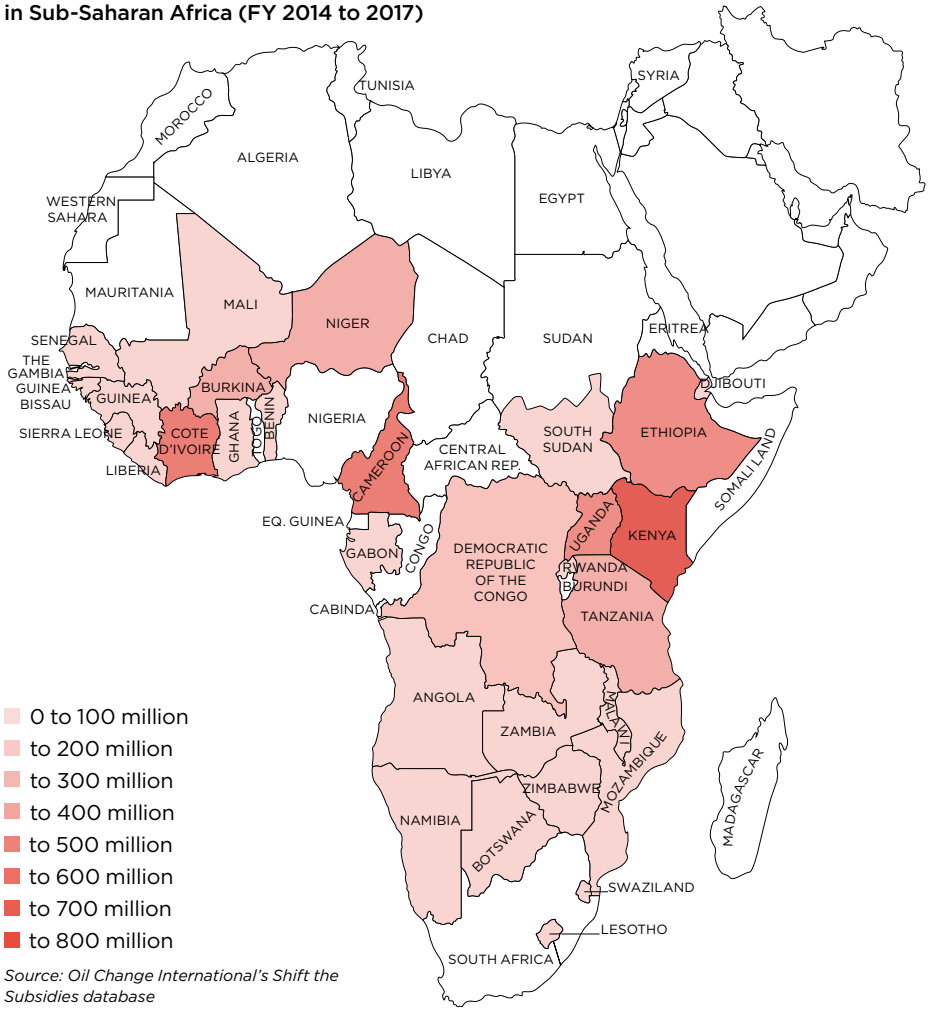
Over 50 percent of those without electricity access reside in sub-Saharan Africa. Of these, over 80 percent reside in rural areas.[33] However, only 5.4 percent of MDB energy finance in sub-Saharan Africa went to off-grid and distributed solutions for the poor.

The AfDB and the WBG are the MDBs with the largest average volumes of finance going to Africa's energy sector at USD 1.2 billion per year and USD 2.8 billion per year, respectively. About 35 percent and 24 percent of this finance, respectively, went to projects focused on advancing energy access.

Finance from the AfDB and the WBG for off-grid and distributed renewable energy and clean cooking and heating in sub-Saharan Africa appear to be trending up. However, at an average of USD 47 million per year for the AfDB (just 4 percent of energy finance) and USD 77 million per year from the WBG (2.7 percent of energy finance), volumes for off-grid, distributed, and clean cooking solutions are insignificant in comparison to the institutions' overall energy finance, as well as the global investment need.

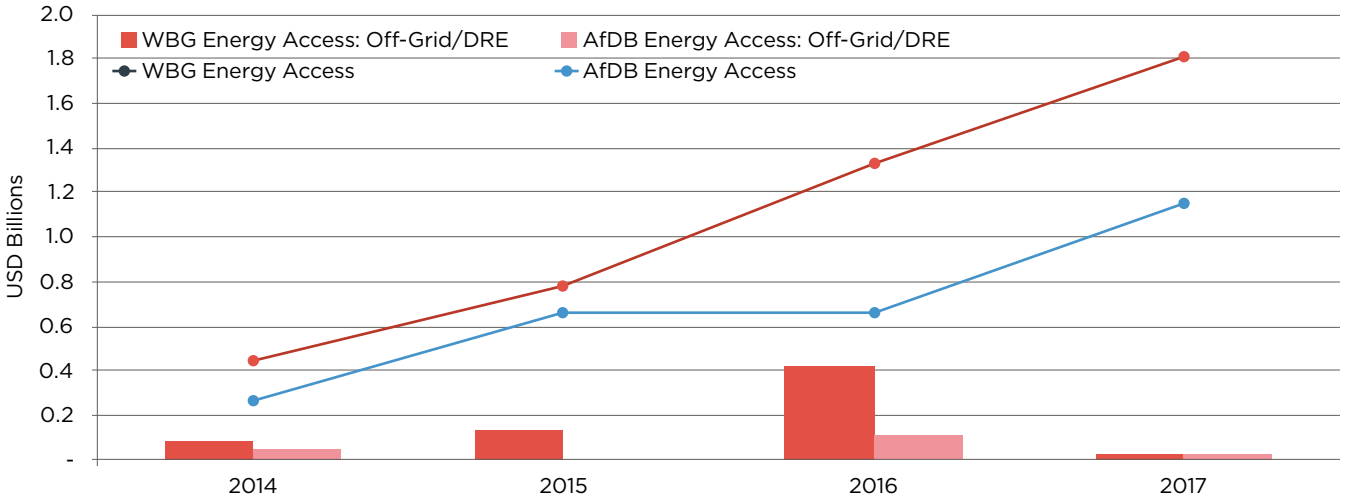
Kenya, Cameroon, Côte d'Ivoire, Uganda, and Ethiopia were the top recipients of energy access finance. Burkina Faso, Mali, Gabon, and Tanzania received finance for off-grid and distributed projects for the poor. Only one AfDB project addressed clean cooking and heating solutions in the region.

Figure: Geographic Distribution of WBG and AfDB Energy Access Finance in Sub-Saharan Africa (FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

Figure 11: WBG and AfDB Energy Access Finance in Sub-Saharan Africa, in absolute dollars and as a percentage of total energy approvals (FY 2014 to 2017)



Source: Oil Change International's Shift the Subsidies database

VI. CONCLUSION

Each MDB assessed in this report has committed to support the achievement of SDG 7 – "access to affordable, reliable, sustainable and modern energy for all." While MDB finance for energy access appears to be trending up, finance for off-grid and distributed energy and for cooking and heating solutions remains a marginal portion of overall MDB energy finance.

Recent assessments indicate that under business-as-usual, rural areas, particularly in sub-Saharan Africa, will be left behind in electrification efforts. Off-grid and distributed renewable energy solutions will be critical to address this gap.

MDBs will need to significantly scale their support for energy access – particularly off-grid, distributed, and clean cooking solutions – to reflect the ambition needed to achieve universal access by 2030.

WE RECOMMEND THAT MDBS:

- **Increase the focus on energy access. Projects focused on advancing energy access for the poor should comprise at least 50 percent of MDB energy finance** until the regions in which they are operating have achieved 100 percent energy access. According to the SEforAll Global Tracking Framework 2017, achieving universal energy access will require an estimated five-fold increase in energy access investments from current levels;[34]
- **Significantly scale up finance for off-grid and mini-grid clean energy projects for the poor.** Nearly 70 percent of global electricity investment will need to be in off-grid and mini-grid solutions in order to achieve universal energy access by 2030.[35] Over the period assessed, these solutions comprised less than 2 percent of MDB energy approvals; and
- **Set quantitative targets for energy access, and develop a harmonized framework to track energy access finance and its outcomes.** This should include operationalizing definitions and indicators in the Multi-Tier Framework and Global Tracking Framework in project design, monitoring, and reporting, as well as reporting on energy access at the project and portfolio level.

In addition to these overarching recommendations, we also recommend MDBs take the following specific steps (note that the previous version of this scorecard report elaborates on these recommendations in more detail):[36]

- Continue to scale up credit enhancement programs, including loan guarantees, which directly support off-grid and mini-grid clean energy deployment;
- Move beyond pilot projects to incorporate off-grid and mini-grid lending into core energy finance. Integrate DRE as a central element of the advisory approach with governments, assisting governments in developing holistic energy access strategies that adequately reflect the potential of DRE technologies and business models;
- Work with client countries to create the enabling policy and market environments that will allow more public and private resources to flow toward DRE solutions;
- Examine internal incentive structures to ensure that distributed clean energy projects are not systematically discriminated against in favor of larger projects; and
- Establish benchmarks and regular review for DRE finance.

APPENDIX 1: ENERGY ACCESS FINANCE FRAMEWORK

Our definition of finance supporting energy access for the poor aims to highlight the types of transactions where development finance can be influential to accelerate universal energy access, taking into account current gaps and prioritizing interventions where public finance can serve low-income and vulnerable groups. This categorization is intended to be flexible as needs evolve and as we learn more about successes and challenges from country experiences.

It is important to note that many MDB energy investments are necessary for overall sector development and improvements. This definition is not meant to discourage these investments, but rather to highlight the volume of energy finance targeted at rural and/or poor communities.

Types of transactions classified as "energy access"	**Rationale**
	Infrastructure
Off-grid and distributed systems, excluding: - Commercial rooftop solar targeting commercial or industrial customers - Projects primarily supporting corporate sustainability	To achieve universal electricity access by 2030, a least-cost assessment indicates that over two-thirds of electricity investment in sub-Saharan Africa needs to be in off-grid and mini-grid solutions.[37] Investment in decentralized solutions are far below this benchmark. In 2013 and 2014, only 1 percent of total electricity finance in 20 countries with large populations lacking access went to off-grid and mini-grid solutions.[38] Given this massive gap, most public finance that aims to support the delivery of decentralized solutions is considered "energy access." Support for commercial off-grid and DRE can play an important role to de-risk the sector in certain contexts. However, we do not categorize this finance as "access" unless the project is geared to primarily serve rural or low-income groups, or services important to their productivity and wellbeing.
Electricity transmission, distribution, and/or grid connections when projects include new residential grid connections, or grid distribution and extension in disadvantaged or rural areas.	We include "last mile" grid extension (distribution and connections, including distribution network upgrades) targeting rural and disadvantaged areas as "access." We exclude transmission and cross-border interconnections, as well as network upgrades that do not have a dedicated focus on serving poor and vulnerable clients. While transmission infrastructure can play a key role in supporting renewable energy integration and decarbonization,[39] transmission lines can take years to build and primarily improve the quality of service for existing grid clients. Cross-border interconnections can improve affordability by supporting economies of scale via power pools, and they can help facilitate electricity trade. However, more research is needed on how multilateral development agencies can support the design and governance of power pools to ensure access for low-income and vulnerable communities.[40]
Utility-scale power generation, when finance supports pilots and/or risk-mitigation for clean power generation in fragile countries[41]	We rank utility-scale power projects as lower priority than off-grid or distributed systems. Additionally, under the right conditions, utility-scale power generation can also be served by private finance.[42] For this report, we only consider support for clean power generation in fragile or conflict-affected countries as "access," given challenges attracting private investment in those contexts.

Types of transactions classified as "energy access"	Rationale
Clean cooking and heating solutions that involve: - Improved and advanced cookstoves, LPG, biogas - Efficiency improvements and/or fuel switching (from coal to gas or renewables) for district heating networks, targeting vulnerable or poor communities facing severe air pollution and extreme cold in countries with the highest absolute gaps in access to clean fuels and technologies for cooking[k]	An assessment of international finance for clean cooking solutions finds investment is so low that it does not begin to address the clean cooking/heating gap.[43] Clean cooking and heating solutions were highlighted as a political priority under the *Global Agenda for Accelerated SDG 7 Action.*[44]
Oil/Gas Processing and/or Pipelines (includes finance to import oil or gas), only if it focuses on liquefied petroleum gas (LPG) distribution or natural gas distribution networks to residential consumers	Clean cooking and heating is a priority action under *Global Agenda for Accelerated SDG 7 Action.*[45] Of the 20 countries with the largest deficits in access to clean cooking, the nine that were able to improve access at a faster rate than population growth largely did so via LPG dissemination and piped natural gas, suggesting these solutions still have a role to play in some contexts.[46] We exclude oil and gas processing facilities and pipelines, which can be served by commercial finance.
Exploration, extraction, and/or upstream infrastructure is not considered access.	There is no clear benefit for energy access for the poor, nor any rationale for public development finance to support upstream oil and gas extraction as commercial financing is readily available. Oil and gas extraction and development is not aligned with the Paris Agreement, and causes significant social and environmental harm to communities.
Energy Efficiency (projects with a primary aim of improving demand-side energy efficiency) is excluded from this analysis.	
Multiple – projects that span several of these categories, but must involve residential grid connections, grid distribution and extension in disadvantaged or rural areas, or off-grid and distributed energy	
Enabling Environment	
Policy support and sector reform, if it includes: - Planning for universal access, especially energy that addresses development needs of vulnerable and low-income communities - Planning to address clean cooking and heating gaps - Policy and regulatory frameworks for decentralized energy solutions - Interventions specifically aimed at under-served areas and communities in country Note: Policy support, governance, and sector reform often involve multiple sectors. For finance serving multiple sectors, Oil Change International allocates a portion of the finance for "energy" according to an assumed percentage.	Given MDB engagement in country strategy processes and national development plans, support for energy policy and general sector reforms must include targeted plans to deliver affordable clean energy to low-income and rural communities.

k The 20 countries with the highest absolute gaps in access to clean fuels and technologies for cooking measured by population, as identified in the 2015 Global Tracking Framework (IEA and the World Bank, 2015) are: Afghanistan, Bangladesh, China, Congo (DR), Ethiopia, India, Indonesia, Kenya, Korea (DPR), Madagascar, Mozambique, Myanmar, Nepal, Nigeria, Pakistan, the Philippines, Sudan, Tanzania, Uganda and Vietnam. SEforAll, Energizing Finance: Scaling and Refining Finance in Countries with Large Energy Access Gaps, 2017, p. 18. https://www.seforall.org/sites/default/files/2017_SEforALL_FR4P.pdf

Types of transactions classified as "energy access"	Rationale
Technical assistance and capacity-building (standalone; includes project feasibility, studies, etc.) that has a focus on rural electrification	
Financial intermediaries (bank lines of credit, participation in funds or facilities) if it includes a focus on off-grid, rooftop solar, mini-grid, and/or clean cooking solutions or makes appropriate finance more accessible to small and medium energy enterprises.	Local banking institutions often lack knowledge on the off-grid and distributed energy technologies and business models that have potential to serve rural areas. Some institutions are unable to transact volumes suitable for small energy enterprises directly.
Support to utilities (e.g. governance, risk mitigation, and financing), if it - Addresses electricity affordability issues specific to low-income / vulnerable. - Includes planning for decentralized solutions. - Involves data systems and training aimed at improving insights on serving poor, rural, and/or unserved customers.	

APPENDIX 2: DATA

- African Development Bank: Ordinary capital resources and concessional resources from the African Development Bank and the African Development Fund.
- Asian Development Bank: Ordinary capital resources and concessional resources (Asian Development Fund), and ADB-managed funds which receive ADB resources (in those cases, only ADB contributions are counted).
- Inter-American Development Bank: IDB, IDB Invest, MIF/FOMIN, Fund for Special Operations, IDB Grant Facility, and Intermediary Financing Facility.
- World Bank Group: Ordinary capital resources and concessional resources from IDA/IBRD, IFC, and MIGA. IFC B-loans are excluded.

APPENDIX 3: TABLE OF MDB APPROVALS FOR ENERGY ACCESS, 2014-2017

	Energy finance, billion USD	Percent of energy finance to...		
		Energy access	Off-grid and DRE for access	Clean cooking for access
African Development Bank	5.96	28.4%	3.11%	1.14%
Asian Development Bank	18.92	22.1%	2.84%	1.48%
Inter-American Development Bank	8.38	12.9%	0.24%	0.01%
World Bank Group	42.77	15.7%	1.80%	2.10%

Source: Oil Change International's Shift the Subsidies database

APPENDIX 4: SUMMARY TABLE OF MDB ENERGY ACCESS TRACKING / INDICATORS

MDB	Corporate Scorecard or Results Measurement Framework	Internally Reported Results
AfDB	-● Households with new electricity connections; *includes new or better connections.* -● Households connected through off-grid systems; *connections to mini-grid and off-grid systems.* -● Households provided with clean cooking access; *access to non-solid fuel for cooking, as proxy for use of non-solid fuel for cooking.* Bank Group Results Measurement Framework (2016-2025)	For operations completed between 2014 and 2016: 364,800 people with new electricity connections 3.3 million people with new or improved electricity connections No data was available to measure progress on off-grid connections and access to clean cooking (ADER 2017) For operations closed over 2013-2015, 4.2 million people with improved access to modern energy sources, 574.7 million UA (2017-2019 Work Programme and Budget)
WBG	-● Number of people that have received a new connection or improved service from increased power generation or new or upgraded distribution/transmission lines as a result of WBG-supported operations. -● World Bank: *Number of people who have received a new connection (grid or off-grid); inferred number of people benefiting from increased generation capacity, estimated by proportion of output powering residential customers.* -● TBD in future: Estimated population benefitting from WB's transmission and distribution investments. ● IFC and MIGA: "Estimated number of full-service-equivalent residential customers that have access to power generated by the project; the number of residential customers benefiting from power distribution." -● No indicators for access to modern energy for cooking. WBG Corporate Scorecard	FY14-FY17 81.2 million people provided with new or improved electricity service (Corporate Scorecards, Oct 2017)
ADB	-● Number of new households connected to electricity. *Includes only households connected as a result of distribution projects. Counts total household connections from project (i.e. not ADB contribution to project). Excludes households receiving better services through existing connection. Can also be measured as population served by project (population / average household size as per RRP).* -● No indicators for access to modern energy for cooking. Tracks district heating and urban gas supply network pipes under "Distribution lines installed or upgraded (kilometers)" ADB Results Framework	In 2014: 70,000 new households connected to electricity (Development Effectiveness Review 2014 Scorecard) In 2015: 0 (DEfR 2015) In 2016: 490,000 new households connected to electricity (DEfR 2016)
IDB	-● None ● Proposed as auxiliary indicator: Number of households with new or improved access to electricity supply -● No indicators for access to modern energy for cooking. Corporate Results Framework 2016-2019 Indicators	Development Effectiveness Overview 2012-2015 did not track or report on any energy access indicators.

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