

5. Findings, Conclusions, and Recommendations

This evaluation assessed the Bank Group's support for increasing electricity access during 2010–2014, with a view to informing its strategy for supporting access-deficit countries to achieve the goals set by Sustainable Energy for All (SE4All). It sought to answer the question: To what extent has the World Bank Group been effective in the past and, going forward, how well is it equipped to put its country clients on track to achieve universal access to electricity that is adequate, affordable, and of the required quality and reliability?

The evaluation found that Bank Group engagement in, and assistance to, the electricity sector in low-access countries was relatively low compared with high- and universal-access countries. If the Bank Group is to accelerate progress towards universal electricity access in 15 years in low-access countries – especially in Sub-Saharan Africa – there is a clear and urgent need for two measures: to raise the scale, depth and speed of implementation of the Bank Group's own engagement in the electricity sector in low-access countries; and to help low-access countries mobilize other resources tailored to the universal access challenge, and that are several orders of magnitude greater than what has been mobilized in recent years.

The Bank Group's electricity sector portfolio during the past 15 years showed strong performance in the provision of physical infrastructure, and there have been significant achievements in generation, transmission and distribution (T&D), and connections during the period. For perspective, the grid-based connections supported by the Bank Group are estimated to be about 4.4 percent of all connections added during FY2000–2014 by all country clients, and 4.8 percent of all connections added by low-access country clients.

The Bank Group also pioneered off-grid electrification in low- and medium-access countries. The impact has been low with the exception of the good practice Solar Home Systems Program in Bangladesh, which installed and successfully serviced 2 million systems in the past decade and is reportedly adding 80,000 systems per month on a commercially viable and sustainable basis. Notably as well, this program is largely driven by private sector, albeit, enabled by the “light touch” of Government role, especially at the outset, within the framework of a public-private partnership. The good practice Bangladesh program experience is potentially relevant for several countries in Sub-Saharan Africa that are characterized by a fragile environment and dispersed populations, or where the main sector conditions are not yet minimally in place for systematic and fast scale-up by grid expansion. In such instances, and where a country expresses demonstrated commitment and

willingness to engage, the Bank Group's new strategy would need to initially focus on context-specific upstream support consistent with sector readiness; in parallel, it can support a pre-electrification program in commercially viable areas that are proximate to areas where the grid would otherwise represent the least cost solution for electrification, as well as potentially target priority interventions for electrification of health and educational facilities nationwide.

The Bank Group made little progress in improving the financial viability of electricity sectors as a whole for its country clients, despite strong analytical work and lending. The vast majority of development policy operations targeting the financial viability of electricity sectors were directed to high- and universal-access countries, of which about half performed satisfactorily. The relatively fewer investment operations that relied on covenants to stimulate financial discipline in country clients also did not achieve the intended results.

Attention to welfare and gender-related outcomes of electricity access interventions is increasing in World Bank projects and with satisfactory impacts, though much needs to be done for mainstreaming these issues in the project design and monitoring and evaluation (M&E). IFC has made a beginning in addressing these issues.

Best practice country experiences show that the transition from low to high or universal access can be made within two decades. In recent years, Indonesia, Lao PDR, and Vietnam have accomplished this feat. The Bank Group played a key role in this process for Lao PDR and Vietnam, and in the earlier stages of establishing momentum and accelerating new connections in Indonesia's program until access levels reached about 68 percent.

The Bank's approach to the electricity sector in Rwanda and Kenya is demonstrating the usefulness of a sectorwide program of sustained engagement in enabling systematic and fast scale-up. In keeping with international good practice principles, the Bank Group has helped the governments to develop national electricity access rollout plans based on geospatial mapping and using least-cost combinations of coordinated grid and off-grid electrification. The geospatially determined implementation plan in turn anchors the sector level Investment Financing Prospectus for access scale-up and facilitates the syndication of sufficient overall investment financing required for the access program on an ongoing basis. This approach, along with demonstrated government commitment, has led to very significant financing commitments from various development partners. After a long period of stagnation, the grid connected access levels have increased from 6 percent

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to 15 percent in Rwanda, and 23 percent to 30 percent in Kenya over the past four years.

Lessons from successful country experience pointing to the principles of success are as follows:

- Planning the rollout of national electricity access needs to be comprehensive and synchronized, integrating grid and off-grid means and bringing development partners together within an organizing architecture of “many partners, one team, and one plan.”
- Financial viability of the electricity sector and its agents depends on clear institutional roles and accountability, and may require appropriately targeted subsidies.
- Affordability, equity, and inclusion need to be addressed by targeting the poor and those in remote and inaccessible areas.
- Government vision and its enabling engagement in addressing all of the above issues is the crucial binding factor.

This evaluation holds a mirror to the Bank Group’s performance record with improving electricity access during FY2000–2014 to inform its approach to helping countries move toward universal electricity access by 2030. In the large array of Bank Group efforts in this regard, several aspects are not aligned well with the scale and urgency for achieving the universal access goal.

First, continuing to follow a project- and transaction-based approach alone will not be sufficient for achieving SE4All universal access targets by 2030. The Bank Group’s own experience with scaling up access shows that timely and efficient achievement of universal access requires a sustained sector-level engagement, with a programmatic framework for syndication of the entire investment financing that can be sustained for at least a decade and possibly longer.

Second, several strengths, and promising trends in the Bank Group’s lending experience can be built upon. Among them are IFC’s transactional experience and strength in investment financing for building electricity generation capacity projects, and its potential for promoting public-private partnerships. The World Bank’s role contributed extensively in T&D in the past 15 years. MIGA built valuable experience in providing critical risk mitigation comfort through its guarantees, particularly in low-access and low-income countries. These strengths and country experiences hold promise for Bank Group cooperation that goes beyond joint projects to strategic engagement, particularly in supporting low-access countries to undertake

systematic national access rollout programs that will achieve the universal access goal within the next 15 years.

Recommendations

Recommendation 1

Engage decisively and intensely on countries with low electricity access (most of which are in Sub-Saharan Africa). This evaluation highlights large gaps in country coverage and weak engagement in low-access countries. In line with the Country Partnership Frameworks, the Bank Group should broaden and deepen its engagement in low-access countries to help them address the huge shortfalls in investment, capacity building and knowledge resources needed to move towards universal access in 15 years.

Recommendation 2

Move 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. The scope and timing of the sector-wide frameworks and engagement plans should be led and coordinated by the government, and take into account the starting sector context and readiness. The core principles and strategic drivers underlying the best practice programs should inform the new strategic framework and country plans, and the Bank Group’s operational engagement going forward. These are: systematic implementation of national electricity access, enabling sector policies and regulation, commercial viability of service providers, affordability of connections costs for the poor, and overarching government commitment and leadership.

Recommendation 3

Design an engagement strategy to enable low-access countries to mobilize sector-level investment financing on the scale required, and sustained over the next 15 years, 2015–2030. Specifically, design an investment financing platform led by the government to crowd-in necessary financial resources from both public and private sources well beyond what would be possible with the Bank Group’s own contributions under conventional project and transaction modes of operation. In this effort, IBRD, IDA, IFC, and MIGA should draw upon their strengths and expertise in generation and in T&D, respectively, and tailor syndication mechanisms, differentiated as appropriate for generation investments financing, and otherwise for transmission and distribution investments.

Recommendation 4

Improve the evidence-base related to electricity access and its alignment with the corporate goals of promoting shared prosperity and ending extreme poverty. (A) At the project level, (i) design results frameworks for electricity sector projects that go beyond simple headcount measures of access – grid, off-grid, SHS, end-uses served – to include attributes such as quality, reliability, affordability of service; and (ii) where joint Bank Group projects are undertaken, assess value-added of such joint projects to the private sector and country clients. (B) At sector and country level, help country clients to appropriately enhance their M&E systems, household surveys, census and similar undertakings to measure and monitor the economic, welfare, and gender-related outcomes from increased electricity access. (C) Across country clients, promote uniformity and comparability in indicators, and help improve country capacity for designing, implementing, and utilizing the M&E frameworks.