RISE 2020



REGULATORY INDICATORS FOR SUSTAINABLE ENERGY

SUSTAINING THE MOMENTUM



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The Energy Sector Management Assistance Program (ESMAP) is a partnership between the World Bank and 18 partners to help low- and middle-income countries reduce poverty and boost growth through sustainable energy solutions. ESMAP's analytical and advisory services are fully integrated within the World Bank's country financing and policy dialogue in the energy sector. Through the World Bank Group (WBG), ESMAP works to accelerate the energy transition required to achieve Sustainable Development Goal 7 (SDG7) to ensure access to affordable, reliable, sustainable, and modern energy for all. It helps to shape WBG strategies and programs to achieve the WBG Climate Change Action Plan targets. Learn more at: https://esmap.org

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ELECTRICITY ACCESS:MAJOR PROGRESS OVER THE PAST TWO YEARS

Electrification policies have advanced since 2010, with the advance quickening after 2017. Since 2017, more than 10 percent of the access-deficit countries moved into the green zone. Between 2017 and 2019, 13 percent improved their access-related regulations enough to move from the red zone to the yellow zone, leaving 20 percent of the access-deficit countries without the basic set of policies needed to accelerate electrification (figure 9). Notable is the steady progress of Nigeria and several other countries with large access deficits. However, more than half the global population lacking access to electricity remained in countries with weak regulatory frameworks at the end of 2019 (figure 10).

Average Average Average Average +2 in RISE EA 4 in RISE EA +5 in RISE EA 25 35 43 53 score/year score/year score/year 100% 13% 90% 19% 26% 80% 70% 48% 60% 54% 50% 54% 40% 30% 20% 10% 0%

■ ≤33 33<x<67 ■ ≥67

2017

2019

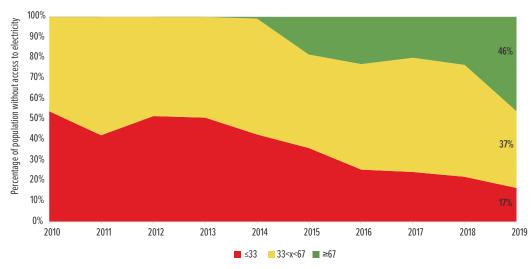
FIGURE 9. ELECTRICITY ACCESS: EVOLUTION OF RISE SCORES FOR PILLAR, 2010-19

2010

Source: World Bank, RISE 2020.



2015



Source: World Bank, RISE 2020.

Although all regions have improved their policies and regulations on electricity access, progress has been uneven.

Progress in Sub-Saharan Africa is the most mixed. As of 2019, South Africa and Tanzania had some of the region's most advanced policy frameworks for electricity access, pulling up the region's average score. The South Asia region remains the highest scoring region, while the East Asia and Pacific region made the greatest improvement between 2010 and 2019 (figure 11). Bangladesh retained the most comprehensive enabling environment over the period, both in designing and implementing effective electricity access policies.

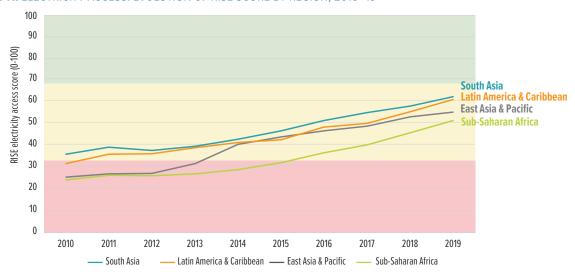
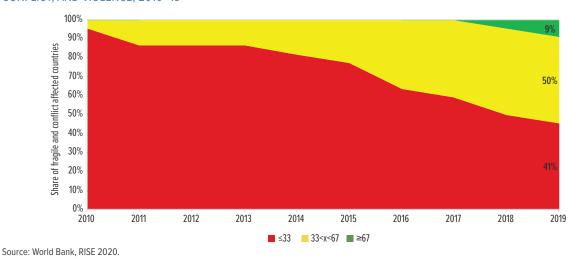


FIGURE 11. ELECTRICITY ACCESS: EVOLUTION OF RISE SCORE BY REGION, 2010-19 6

Source: World Bank, RISE 2020.

Some progress has been observed in fragile and conflict-affected settings.⁷ In 2010, policy frameworks were poor in 95 percent of the countries characterized by fragility, conflict, and violence. This figure was halved by 2019, with 50 percent of fragile countries making strides toward adopting electricity regulations and moving out of the red zone (figure 12). Sudan and Niger progressed after 2017 on their electricity access policies, especially for mini grids and standalone systems. A trend for fragile regions is that electrification planning and frameworks for grid electrification have become lagging indicators (figure 13). In 2019, Nigeria, Cameroon, and Myanmar led in adopting electricity access policies.

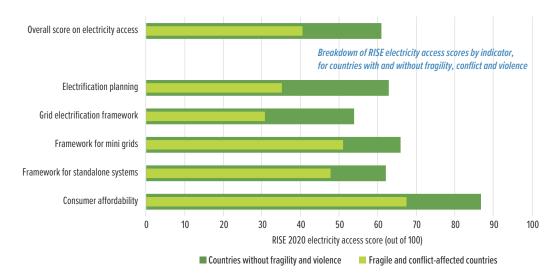




⁶ MENA region is not displayed because Yemen is the only country from the region included in the electricity access country list for RISE 2020. In the red zone, Yemen has a score of 21 for this edition of RISE.

⁷ Out of 54 countries surveyed for electricity access, 22 were countries characterized by fragility, conflict, and violence; they are home to 33 percent of the global population without access (263 million people).

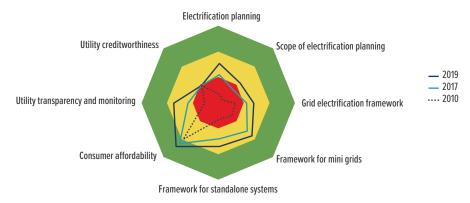
FIGURE 13. ELECTRICITY ACCESS: RISE SCORES FOR FCV AND NON-FCV COUNTRIES, BY INDICATOR, 2019



Source: World Bank, RISE 2020. Note: FCV = fragility, conflict, and violence.

Frameworks for mini grids and standalone systems have enjoyed fast-increasing policy support across countries, attesting to growing understanding of their potential to accelerate electricity access. Despite continuous progress, electrification planning and scope (that is, targeted service, inclusion, and electrification of productive uses and public facilities) have still not reached the green zone (figure 14), although they have become the needed first step for the design of efficient strategies. Grid electrification frameworks have been steadily improving as well, but at a slightly slower pace. Since 2010, affordability has improved consistently and rapidly, a trend that reflects progress on implementing strategies that target the poorest populations without access. Improvements in utility creditworthiness, by contrast, have lagged since 2010.

FIGURE 14. ELECTRICITY ACCESS: GLOBAL PROGRESS ON PILLAR, BY INDICATOR, 2010, 2017, AND 2019

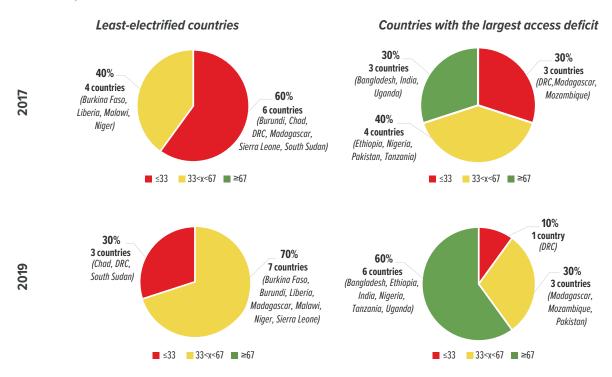


Source: World Bank, RISE 2020.

⁸ Consumer affordability is evaluated based on a combination of three measures: (i) the affordability of subsistence consumption (meaning that the cost of a minimal consumption of 30 kilowatt-hours per month is less than 5 percent of the gross household monthly income of the population); (ii) the affordability of connection fees (meaning that the upfront cost of connection is below the gross average monthly household income of the bottom 40 percent of the population); and (iii) the existence of a lifeline tariff.

Among countries with the highest access deficits, Ethiopia, Nigeria, and Tanzania have made the most progress in adopting corrective policies since 2017 (figure 15). Among these countries, the greatest improvements are in frameworks for mini grids, consumer affordability, and utility transparency.

FIGURE 15. ELECTRICITY ACCESS: RISE PILLAR SCORES FOR TOP 10 ACCESS-DEFICIT COUNTRIES AND 10 LEAST-ELECTRIFIED COUNTRIES, 2017 AND 2019



Source: World Bank, RISE 2020.

Note: The least-electrified countries are Burkina Faso, Burundi, Chad, the Democratic Republic of Congo (DRC), Liberia, Madagascar, Malawi, Niger, Sierra Leone, and South Sudan. The countries with largest access deficit are Bangladesh, the Democratic Republic of Congo (DRC), Ethiopia, India, Madagascar, Mozambique, Nigeria, Pakistan, Tanzania, and Uganda. See IEA, IRENA, UNSD, World Bank, and WHO (2020).