POWER FOR ALL RESEARCH SUMMARY

IEA World Energy Outlook Special Report

POWER FOR ALL

674 million

NUMBER OF PEOPLE WITHOUT ACCESS TO ELECTRICITY IN 2030 AT CURRENT PACE

72%

PERCENTAGE OF PEOPLE WITHOUT ACCESS IN 2030 AT CURRENT PACE WHO CAN BE SERVED THROUGH DRE

$28 billion

ADDITIONAL ANNUAL INVESTMENT NEEDED ON TOP OF CURRENT COMMITMENTS TO ACHIEVE UNIVERSAL ELECTRICITY ACCESS

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The International Energy Agency (IEA) has released a special energy access outlook report, detailing the progress in energy access made to date and projecting trends the future, using data from the IEA, various other multilateral organizations, as well as domestic and national statistics.

» There are two scenarios explored in the report: the New Policies Scenario (NPS) —which assumes expansion at current pace—and the Energy for All Scenario (E4A) —which looks at what is needed to meet universal access by 2030. At current pace, universal electricity access will not be achieved by 2030, falling short by 674 million people (pg.11).

» In order to reach universal electricity access by 2030, an additional USD 28 billion of annual investment is required. An overwhelming majority of this additional investment will go to DRE solutions (71%) and rural areas (88%) (pg. 103).

» While expanding energy access to date has relied heavily on fossil-fuels and grid-expansion, the paradigm is shifting heavily towards a focus on DRE resources, both under current policy trends and if universal energy access is to be achieved.

Below we further outline key points from the report:

Despite promising growth, the World will fall short of universal electricity access goals on its current track.

» The number of people without access to electricity fell to 1.1 billion in 2016 from 1.7 billion in 2000. However, at current pace, 674 million will still lack access in 2030 (pg. 11).

» Nearly all new electricity access from 2000 to 2016 has relied on grid expansion and fossil fuels. Progress has been particularly slow in sub-Saharan Africa and rural areas where grid expansion and large fossil fuel projects make little economic and logistical sense (pg. 13).

» Both scenarios examined by IEA finds that DRE will play a key role in expanding electricity access, mainly due to favorable economics behind DRE and the high costs of grid expansion for remaining populations (pg. 13).

Incorporating DRE solutions offers the least-cost path to meeting universal electricity access goals.

» IEA finds DRE offers the least-cost solution for three-quarters of additional connections needed in sub-Saharan Africa, which falls particularly far behind in electricity access (pg. 13).

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» Even under the NPS scenario almost 90% of future generation investment will target renewables. DRE solutions will be responsible for two-thirds of all new rural access (pg. 103).

» However to fully achieve universal energy access, IEA finds USD 391 billion in additional investment will be needed from now to 2030 (doubling NPS projections) for a total of USD 725 billion, or an annual average of USD 52 million (pg. 103).

» This would mean 70% more investment in renewables, 60% more in solar home systems and 71% more investment in mini-grid capacity than NPS projections (pg. 103).

» Under the E4A scenario access is provided for 674 million more people, 88% of whom will be from rural areas. DRE solutions will serve 72% of them (pg. 103).

However, "cheaper than grid expansion" does not mean "cheap enough for the average household". DRE can be cheaper than grid expansion, but maybe too expensive for a rural household to adopt. Therefore,the right policies must be in place to support DRE solutions. The IEA recommends that governments:

» Implement policies that encourage a wide range of solutions and business models.

» Facilitate rural electricity access by supporting DRE resource deployment and by making provision for those resources to be integrated into the larger grid in the future.

» Make energy efficiency an integral part of energy access policies.

» Take a holistic approach and include productive uses in energy access policies and targets.

Share the Message

» **While expanding electricity access has long relied on the grid, DRE solutions will offer the least-cost approach in what remains, in part due to the changing economics of DRE.**

» **At the current pace, we will fall far short of achieving universal electricity access by 2030.**

» **The choice is not between DRE and the grid; it is a choice between focusing on DRE solutions and still falling short or focusing even more on DRE and achieving SDG goals.**