

POWER FOR ALL FACT SHEET

Innovative solutions for filling the energy access funding gap

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With just a decade left to achieve Sustainable Development Goal 7 (SDG 7), the decentralized renewable energy (DRE) sector has a large financing gap to fill. This fact sheet summarizes the latest data on current investment trends, challenges and possible finance solutions.

DRE finance surpassed US\$ 500 million in 2018 with 71% from private capital. Financing for energy access still falls short of the US\$ 52–55 billion needed annually to achieve SDG 7.¹

\$55 billion

ANNUAL ENERGY ACCESS
FINANCE NEEDED FOR SDG7

\$30 billion

CURRENT ANNUAL ENERGY
ACCESS INVESTMENT

\$511 million

ANNUAL INVESTMENT IN DRE IN
2018

- » The International Energy Agency (IEA) reports that US\$ 52 billion is needed annually² to achieve SDG 7 and the 2018 SDG 7 Tracking Report estimated about US\$ 55 billion annually. Current commitment levels fall well short of either target, at US\$ 30.2 billion per year.³
- » Of the US\$ 30.2 billion electrification finance, about \$16.2 billion goes to grid-connected renewable energy and US\$ 8 billion goes to fossil fuel plants.⁴
- » In terms of investment in DRE, 2018 was a banner year for the sector. Investment grew by 22% and crossed the US\$ 500 million mark, reaching a total of US\$ 511 million. About 71% of this funding comes from the private sector.⁵
- » The off-grid solar sector (pico-solar appliances and solar home systems) is a clear leader in attracting DRE finance, and raised a record US\$ 352 million in 2018.⁶
- » Despite major growth in DRE finance, Lighting Global estimated in 2017 that a total of US\$ 5.7 billion until 2022 is needed to meet the off-grid solar expansion plans.⁷ Acumen estimated in 2017 that US\$ 210 million of early-stage equity is needed annually to close the pioneer gap.⁸
- » The mini-grid sector, having received US\$ 250 million so far, requires US\$ 114–188 billion of investment between 2017–30, under IEA's New Policy Scenario and Energy for All Scenario.⁹
- » A worldwide drop of foreign direct investment (FDI) by 41%, unseen since the 2008 financial crisis, may have a negative effect on DRE finance.¹⁰

Investment is concentrated in a small number of companies with an unbalanced geographical representation and favors non-residential consumers. Available finance needs to be directed to high-impact countries and focus on residential electrification.

- » The ¹¹10 largest funding recipients attracted 77% of the total off-grid solar funding in 2018. This is likely because funders usually prefer large-scale investments, which most companies are too small to venture into, therefore creating a “pioneer gap” for companies that are too small to raise commercial finance but too big for seed funding.¹²
- » DRE investment is concentrated toward SHS. To date, over US\$ 1.3 billion has been invested in SHS, while mini-grids capture only US\$ 250 million.¹³
- » In terms of geographical concentration, sub-Saharan Africa receive about 17% of total electricity finance,¹⁴ as compared to the 95% advised by IEA.¹⁵
- » 58% of the US\$ 511 million invested in the DRE sector is concentrated in East Africa.¹⁶
- » Not only are investments highly unbalanced geographically, they also favor commercial and industrial customers over residential ones, leaving poor households behind. Latest data showed that 72% of the electricity finance goes to non-residential customers.¹⁷

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By the Numbers:

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Implementing innovative financing methods can reduce transaction cost, mitigate risk and mobilize funds for high-impact but slow-return projects.

- » Aggregation (financial bundling) brings together projects and companies into portfolios to reduce transaction costs and mitigate risks.¹⁸ The Infrastructure Development Company Limited (IDCOL) in Bangladesh, for example, mobilized US\$ 900 million through aggregation.¹⁹
- » Investors believe that investing in cash-poor households is risky. Mixing highly bankable and less bankable projects could mobilize capital for low-income household installations that might deliver greater social impact.²⁰
- » Acumen showed that investing early-stage equity in start-ups has the potential to secure additional investment 10-fold in subsequent financing rounds.²¹
- » Crowdfunding for DRE and energy access grew from US\$ 3.4 million in 2015 to US\$ 8.7 million in 2016.²² However, it most likely will not help close the “pioneer gap”, as most crowd-funders favor established companies as compared to start-ups.²³
- » The resource intensity and time limitation of crowdfunding makes it challenging to meet DRE companies’ debt needs. SunFunder, for example, is shifting away from crowdfunding to private debt.²⁴

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- » 2018 was a banner year for DRE finance as the sector secured US\$ 511 million in investments. However, US\$ 52 - 55 billion annually, including US\$ 210 million annually of early-stage patient capital for the DRE start-ups, is needed to achieve universal energy access.
- » 95% of energy access finance needs to be directed to sub-Saharan Africa and more focus should be put on new or improved access for residential consumers of electricity.
- » Financial aggregation can help finance less profitable but high-impact projects.

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