Over $52 billion is needed every year to achieve universal energy access, more than double the current spending.\(^4\)

**SOLUTIONS**

Digital finance helps utilities and mini-grid operators shift toward low-cost, prepaid or pay-as-you-go services, increasing financial viability.

Over 1 billion people lack access to electricity.\(^1\)

**THE OPPORTUNITY**

Solar companies in Africa and Asia are able to offer pay-as-you-go energy, thanks to digital payments. The technology is enabling millions of low-income families to make micropayments for solar energy. A clear win for people and the environment.

**CHALLENGES**

Only 1 in 4 utilities in developing countries are financially viable, limiting their ability to grow.\(^2\)

Nearly 1 in 4 unelectrified households – largely rural – cannot afford the most suitable energy options for them, like rooftop solar.\(^3\)

Over 1 billion people lack access to electricity.\(^1\)

20 million unelectrified households could benefit from pay-as-you-go solar energy by 2022.\(^5\)

Digital finance is instrumental in the development of unique energy financing models that give utility providers the financing they need to scale.
“Ensure access to affordable, reliable, sustainable and modern energy for all.”

WORLDWIDE  There are now 690 million registered mobile money accounts\(^6\) enabling new business models. Pay-as-you-go companies have used digital finance to provide 10 million people with affordable, modern energy.\(^7\)

GHANA AND IVORY COAST  PEG Africa will expand its services to 500,000 people\(^6\) and is using its solar devices to establish a credit rating to help customers access loans.

PAPUA NEW GUINEA  MiBanK launched a pay-as-you-go solar platform in 2016 that has the potential to reach 100,000 rural households by 2019.\(^9\)

UGANDA  Replacing cash with prepaid cards helped national electricity distributor Umeme raise its collection rate from 84% in 2006 to 98% in 2016, enhancing financial viability.\(^10\)

KENYA  M-KOPA, a pay-as-you-go solar company, has raised $65 million in local-currency debt, using its expected future revenue in digital payments as collateral. With only cash payments, the company would not be able to continue expanding in underserved areas.\(^11\)

* These represent only a few of the many important challenges and solutions. They should not be read as an exhaustive list.

\(^1\) IEA, 2017  
\(^2\) World Bank IEG, 2016  
\(^3\) IEA, 2017  
\(^4\) IEA, 2017  
\(^5\) Lighting Global & Dalberg, 2018  
\(^6\) GSMA, 2018  
\(^7\) Lighting Global & Dalberg, 2018  
\(^8\) Lighting Global & Dalberg, 2018  
\(^9\) PFI, 2017  
\(^10\) Umeme, 2016  
\(^11\) Price, 2016; M-KOPA, 2017