

BRIGHT IDEAS

Azuri is leading next-generation energy in Africa

Our pay-as-you-go solar technology works to generate energy access, improve lives and economic opportunities, build sustainable markets and combat climate change



The new normal: Solar continues to grow in COVID-safe conditions

Armed with bright yellow facemarks, fist bumps and relying on a smile from their eyes, Agents are continuing to bring off-grid energy to thousands of rural and peri-urban households who need connectivity now more than ever.

Despite the economic conditions related to COVID-19, demand for household energy access remains strong in off-grid Africa. The increased time in the home and added pressures of remote education has made household power a high priority for many.

With PayGo solar, customers can immediately improve their home comforts, entertainment choices and education options with affordable weekly instalments, enjoying city standards in rural areas.

Azuri's new TV400 system has been particularly well received. With an 80W solar panel and a 160Wh LFP battery (with an expected life of over 10 years before servicing), customers can watch their favourite programs and charge smartphones 24/7.

The TV400 system also comes with two high power tube lights, two spot lights, a rechargeable radio, rechargeable torch and USB phone charging, enabling the whole family to access to the energy they need.

"The lockdowns are tough, homeschooling is tough! I have children, I know it myself. It makes me proud to be able to bring energy to these houses and help families access the education and entertainment they want." - Florence, Azuri Agent



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Remote learning: How off-grid solar is bridging the digital divide

E-learning for remote study has been one of the surprise growth stories of COVID-19, allowing schools to adapt to online operations with learning sitting in the cloud rather than classrooms. Kenya has been building a reputation as the "Silicon Savannah" and throughout East Africa, pandemic lockdowns have demonstrated the importance of energy access for all households to support this new path of education.

As a result of current restrictions, 18 million children in Kenya will have had disrupted teaching for a year, relying on households to provide the technology to access remote learning. For internet connected households in mainly urban areas, e-learning and online platforms are the norm. In rural areas, however, internet access is less readily available and so too are the devices required to support this cloud-based delivery.

For those without internet connectivity, significant efforts have been made to enable remote learning through TV and radio, with hours of broadcasting scheduled every weekday for open access education. The challenge then becomes getting these services to every home. PayGo solar is playing an important role in enabling off-grid households to access educational content at home through TV and radio, to study comfortably under clean and bright lights and to provide peace of mind that children still have the opportunity to participate in mainstream schooling.

"Not being able to attend school impacts children in many ways: children don't have an opportunity to learn ... and too many students - especially girls - may lose out on the opportunity to complete their education, which will prevent them from achieving their potential," states Annette Dixon, World Bank Vice President for Human Development, in a recent report on the educational impact of COVID-19.





With the Azuri Quad, bright lights and crisp radio audio enables children to spread out comfortably at home whilst listening to lessons. Students stay up-to-date with their studies thanks to the hours of educational radio broadcasting every weekday, covering wide topics from mathematics to history. Keeping in contact with friends and family is also essential and easily done with phone charging readily available.

The new Azuri TV400 package goes even further, offering a high quality 32" TV with over 60 Zuku channels, in addition to two tube lights, two spotlights, a rechargeable torch, a rechargeable radio and multi-mobile phone charging capacity. Developed with customer-led design, the new system also supports smartphone charging and extended TV run-time, meaning the whole household can enjoy power and entertainment 24x7.

Whilst not being able to physically be at school, e-learning has risen to the challenge of offering students the next best thing from their own home. Recent studies have shown that adults are also benefitting from having the educational content channels, taking the opportunity for further education as it is presented.

Now more than ever it is vital to connect the unconnected to avoid a digitally divided generation. The powerful combination of e-learning and off-grid solar home energy access is enabling millions of children to maintain their education despite the pandemic conditions, extending the reach of content far beyond the grid and including the whole household in education activities. Students can participate in the knowledge economy by showing up to class at the TV or radio alongside millions of others every day.

COP26: The role of off-grid solar in the global energy transition

In November, Glasgow, UK, will host the most important conference of the year: the United Nations Climate Change Conference, COP26. This year the headlines are expected to be dominated by debates of how to balance economic development and carbon emission reductions. Whilst this conversation focuses mainly on urban areas, a fundamental question remains: in areas without centralised energy distribution, how do we recreate universal energy access from a renewable beginning.

Energy is necessary for economic development in any nation, however, COP26 is prioritising moving away from fossil fuels and towards using renewable sources of energy, known as the global 'energy transition'. To meet the Paris Agreement, the transition needs to happen 4x faster than its current pace. This transition mainly influences areas which already have established energy distribution and looks to transfer the way in which this energy is generated.

In rural areas, however, energy distribution can be variable. For areas without grid electricity, energy access is the fundamental priority and COP26 is driving for the solution to be renewable from the start.



In East Africa, for example, many rural households are not connected to the grid and instead generate light through lamps which rely on the fossil fuel kerosene. There is a strong wave, however, of households who are choosing PayGo solar home systems instead, accessing affordable and clean power generated from their own rooftops.

Off-grid solar enables households to access the energy economy and power their lights, TV, radio and devices without relying on fossil fuels or waiting for a mainstream grid connection. The industry's role in the global energy transition therefore is setting a strong renewable precedent for first-time household energy consumers.

Off-grid energy has seen growth in jobs, engagement in rural economies and investment in skilled training to maintain PayGo structures and attend to customers, all of which creates positive social impact. PayGo financing means the reach of solar energy access can be wider than ever before and, consequently, so too can the services it provides.

Whilst many conversations about the global energy transition focus on the urban level of centralised energy distribution, off-grid solar makes the case that rural energy access must be a renewable priority too. With 600 million people off-grid in Sub-Saharan Africa alone, COP26 has the opportunity to accelerate renewable energy access at every level.

Zambia embraces solar solutions in response to energy droughts

Recent droughts have severely affected Zambia's main power supply, hydroelectricity. Solar is now providing a lifeline to households suffering power shortages and even proving more reliable than the grid, with the BBC analysing the impact.

Like many growing economies, Zambia's energy infrastructure is struggling to keep up with growing population size, technological demands and climate change. The grid struggles to cope with extra demand and less resource, leading to frequent blackouts of up to 15 hours.

In response to the energy squeeze, Azuri's Zambian distributor Kazang Solar has seen strong demand for a range of off-grid solar home systems.

Consumers are able to access reliable solar energy to consistently power household devices and light their homes, no longer suffering intermittent service or blackouts.

Whilst some consumers turned to solar to make up for the grid shortfall, many are now enthusiastic to continue with solar energy even when their main grid returns.



Click here to watch the full BBC feature video



Benedatta's story: The life-changing impact of energy independence

At 27, Benedatta Musembi prides herself in making wise decisions for her young Kenyan family, a 5-year-old boy and 2-year-old girl, and she wants nothing but the best for them. Benedatta took a leap for energy independence and has never looked back since.

In 2018, Benedatta was feeling her health decline. Like many rural households, her home didn't have electricity and she relied on kerosene lamps for lighting. Itchy eyes, coughing, disturbed sleep and headaches were everyday sideeffects, but that was just normal.

Without energy in her own home, Benedatta had to rely on others. "Everything I needed to do, I had to get outside. My phone was charged by my neighbour Alice and I only listened to radio when I was with her. I couldn't do anything like that in my own house."

One evening when taking her phone to be charged, Benedatta asked Alice to show her the Azuri Quad solar system which she had heard so much about. With bright lights in every room, radio blasting music loudly and phones already charging from the main battery, Benedatta realised the life-changing impact home solar could have for her.

Soon after, an Azuri agent visited Benedatta to consult her on where she could set up the lights in her home for maximum impact, and how the benefits could change her day-to-day life. The affordable weekly payments worked well with Benedatta's husband's income and they decided to commit to Azuri.

Life for the Musembi family transformed instantly. Benedatta's and her children's health improved and they all felt more secure at night with the lights on in the home.

"I am independent! I can do everything from my home. It makes me feel proud and fulfilled to provide energy in my home."

Within two years, the Musembi family completed their payments owned their solar system outright for themselves, generating free power and saving money. Straight away, however, Benedatta's sights were set on the new AzuriTV, TV400. With a 32" LED screen which can run for up to 10 hours, 2 newly designed tube lights to spread light far as well as 2 spot lights for focus and another torch and radio, Benedatta couldn't wait to get signed up with her local Azuri Agent. With her installation just before COVID lockdown came in, the timing couldn't have been better.



Benedatta and her family are now thriving. Benedetta gets to listen to her radio throughout the day during chores and then relaxes watching her favourite shows in the evenings with her husband, Willis. Benedatta also enjoys hosting the gatherings of her local women's group in her home because she has the lighting and entertainment to keep everyone happy, and is now a proud energy leader in her community.

"I am energy independent, my children can spread out and enjoy themselves and I feel I can support them well. Solar has changed everything for the better."

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