

UF NEWS

A Newsletter of The Universities Fund

Universities Fund, Cooperative Bank Spark University Sustainability Drive



Universities Fund CEO Geoffrey Monari gives his remarks during the breakfast meeting on Universities Solarisation Project in Nairobi on March 22, 2024

Kenyan universities are stepping up to the global challenge of combating climate change, with the Universities Fund (UF) leading the charge.

As part of these efforts, the Universities Fund has partnered with Cooperative Bank on solar installation financing in the higher learning institutions through a leasing model.

Dubbed 'Solarisation Project for Public Universities', the initiative aims to curtail electricity costs within the institutions while advocating for solar power as an eco-friendly energy source.

"We are going to be the buffer institution to make sure that we are able to get cheap financing for solarisation and bring in the required market for this to make sure they (universities) are supported," UF Chief Executive Officer Geoffrey Monari told journalists during the launch of the programme.

As the world grapples with urgent environmental concerns, harnessing solar energy emerges as a powerful tool for universities to not only reduce carbon emissions

but also set an example in adopting sustainable energy solutions.

The plan is to cut down electricity bills in the universities, which the Fund estimates run up to Sh10 million monthly per institution.

If adopted, Mr Monari notes the universities can slash their power bills by up to 40 percent as has been proven by Strathmore Univerity's switch to solar power.

Strathmore University launched its solar project in 2014 and has since cut electricity bills by 30 percent or Sh81 million, according to Thomas Bundi, quality engineer at the univerity's Energy Research Centre.

A simulation by energy firm Astonfield estimates the cost of setting up a solar project at Sh97 million per university, with a repayment period of about five years. The lifeline of the solar panels is set at 25 years. Aside from cutting expenditure on power, universities will also minimise their greenhouse gas emissions thereby contributing to actions that safeguard the planet.

"Through a leasing model, we are providing universities with a costeffective solution, ensuring they can harness solar power without the burden of upfront capital expenditure," Mr Monari said.

Cooperative Bank has worked with Strathmore University for over 10 years to implement some financial support with them under the solar project. To support universities' quest for sustainable energy sources, Cooperative Bank has established a service desk for handling queries about the solarisation initiative.

"We understand that each university has varying needs, capacities, and models. As such we will be reaching out differently to each institution together with the UF and sorting them out," said Lydiah Rono, Cooperative Bank's Director of Corporate and Insitutional Banking Division. Astonfield Managing Director Ameet Shah said that project financing has changed, whereby in the current landscape technology is dictating the direction of capital.

"We are in a new era after COVID where technology is driving the projects as opposed to previously where long capital would drive the project then lead to selection of technology," he said.

He notes this explains the trend where banking systems are revolutionalising to provide the right tenure structures to permit the solarisation of institutions and facilities

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Universities Solarisation Project

The Universities Fund in collaboration with Cooperative Bank launched the Universities Solarisation Project at Sarova Panafric Hotel in Nairobi on March 22, 2024.

The project will provide public universities with technical and financial resources to roll out clean energy solutions, which will in the long-term cut back electricity costs and safeguard the environment.

The event was graced by experts from the public and private sectors. Below are the <u>highlights:</u>



"We should be looking at solarisation from a value addition and efficiency point of view," Prof. Karuti Kanyinga, Chairman, Universities Funding Board.



"The most important starting point in this journey is to understand very intimately and with great clarity your daily consumption loads of energy and electricity. The return on investment in Kenya on commercial and industrial solar projects is in excess of 35 to 40 percent in USD terms. Solar is a real no brainer project to undertake," Ameet Shah, Astonfield Managing Director.



"Renewables are increasing but not fast enough to cover fossil fuel. Therefore, all universities, not only those in Kenya, need to be solarised," Dr Ioannis Tsipouridis, Renewable Energy Consultant Engineer.



"This is a journey; and we understand that the approval structures for public and private institutions are different. As a bank, we have a desk solely handling solarisation for the varied needs, capacities and models of our clients," Mark Mathenge, Head of Energy Sector, Cooperative Bank.



Vice Chancellors and officials from public universities attend a breakfast meeting on the Universities Solarisation Project in Nairobi on March 22, 2024.

Strathmore University: Shares Secret to Success in Embracing Renewable Energy



Strathmore University Energy Research Centre Quality Engineer Thomas Bundi making a presentation on the university's solar power adoption during a meeting with officials from private and public universities on March 22, 2024.

In 2014, Strathmore University embarked on a journey to install solar power on campus with the intention of lowering electricity bills while conserving the environment.

Recognising the inevitable increase in electricity costs, the university opted to install a solar PV system atop six buildings, comprising 2400 solar panels generating 600 kilowatts of solar power, and equipped with 25 inverters, with a projected lifespan of over 20 years.

Choosing to set up the solar plant on the rooftop was preferred due to space limitations, as opposed to establishing a solar farm. A decade later, the investment has proven fruitful, with the university slashing expenses on electricity by up to Sh81 million.

This success story was recently shared by Strathmore University with vice chancellors of public and private universities at a meeting organised by the Universities Fund to discuss funding for clean energy.

During an incisive presentation, Thomas Bundi, a quality engineer at the Strathmore Energy Research Centre, shed light on the institution's journey, highlighting pitfalls universities should avoid to succeed. "If you look at our electricity bill, you'll note that 30 percent was knocked off by solar, meaning that currently we are only paying the remaining amount," he remarked.

In 2015, the university signed a power purchase agreement with Kenya Power to begin injecting power into the national grid. Presently, the university sells power to Kenya Power mostly during weekends and non-term periods, prioritising consumption of what the plant generates during normal operations.

The journey of transitioning to solar power commenced with internal approval at the university in November 2013. A proper feasibility study preceded subsequent steps to ensure the proposed solar system made sense.

"You might be promised a lot of things, but without an actual feasibility study with your own due diligence, the project might fail," warned Eng. Bundi.

Financing the solar plant came from Agence Française de Développement (AFD) to the tune of \$1.3 million through the Sunroof programme, with a green light of credit of 4.1 percent per annum. Cooperative Bank of Kenya supplemented the rest of the financing. Construction was carried out by Quest Works, a local engineering, procurement, and construction (EPC) firm, which continues to operate and maintain the plant.

Income from energy sales to date	\$121,040
CO2 Emissions saved	2,596 Tons
Energy generated to date	4,841 MWh
Energy sold to KPLC to date	112 MWh
Energy used on campus to date	3,853 MWh
Average saving on the KPLC bill	-30%
Savings on electricity bill to date	Sh 81 million

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"Be sure to source for products which you can get locally or have enough stock for in case anything happens you can quickly replace," advised university officials.

In addition to powering the institution, the solar plant at Strathmore is utilised for academic purposes to train engineers, technicians and

students on renewable energy grid integration. It has also served as a research tool and facilitated partnerships with industry.

The system has garnered accolades for Strathmore. including recognition from the Kenya Association of Manufacturers (KAM) Renewable Energy Project Awards 2015.



Government Releases Additional Sh3.98 Billion for University Scholarships

The government has released an additional Sh3.98 billion to cater for university scholarships, marking the third tranche of disbursements under the New Higher **Education Funding** Model.

This brings the total amount of funds released through the Universities Fund to Sh12 billion this financial year with previous disbursements having been made in October 2023 and January 2024.

The funds will cater for government-sponsored first-year students in public universities.

Education Cabinet Secretary Ezekiel Machogu, while making the announcement, also stated that the government had released some Sh6.7 billion for student loans.

"This brings to Sh32 billion and Sh12 billion the total amount released by the government for loans and scholarships, respectively, this financial year," he said in a statement.

The beneficiaries of these

scholarships and loans are those who successfully submitted their applications through the Higher Education Financing portal (www. hef.co.ke) launched in August last

The Universities Fund will distribute the Sh3.98 billion directly to individual universities in a strategic move under the New Funding Model to cover tuition fees for the students based on their individual financial need.

The new funding framework for universities and colleges unveiled in May 2023 apportions funding to individual students according to their level of need.

Implementation of the framework kicked off at the start of this financial year, shifting financing from block funding for the institutions as had been the case under the differentiated unit cost (DUC) model.

While unveiling the framework, President William Ruto noted the govenment had increased funding for university education to Sh84.6 billon, up from Sh54 billion allocated in the 2022/2023 financial year.

"Our expenditure on training, learning and education in general is a most appropriate investment in the development of the human capital necessary in our economic progress," said President Ruto.

The new model has delinked student placement with funding, thus requiring students to

submit applications to the Higher Education Loans Board (HELB) and Universities Fund (UF) for loans and scholarships, respectively.

Funding to students now combines scholarships, loans and household contributions on a graduated scale that is scientifically determined.

Students are categorised based on five bands, with students entitled to an upkeep of between Sh40,000 and Sh60,000 and and a scholarship of between 30 and 70 percent

A student's level of need is determined by various factors including family economic background(poverty probability index), affirmative action (persons with disabilities, gender and those from marginalised regions) and family education expenditure.

Notably, the first cohort to benefit from this transformative model comprises first-year students who sat the Kenya Certificate of Secondary Education examination in 2022

To be qualify for funding, applicants ought to have been placed to public universities and colleges by the Kenya Universities and Colleges Central Placement Service (KUCCPS).

The government resolved that the new financing model will hep to address the financial burden in public and private universities amid a collective debt of over Sh60 billion.



