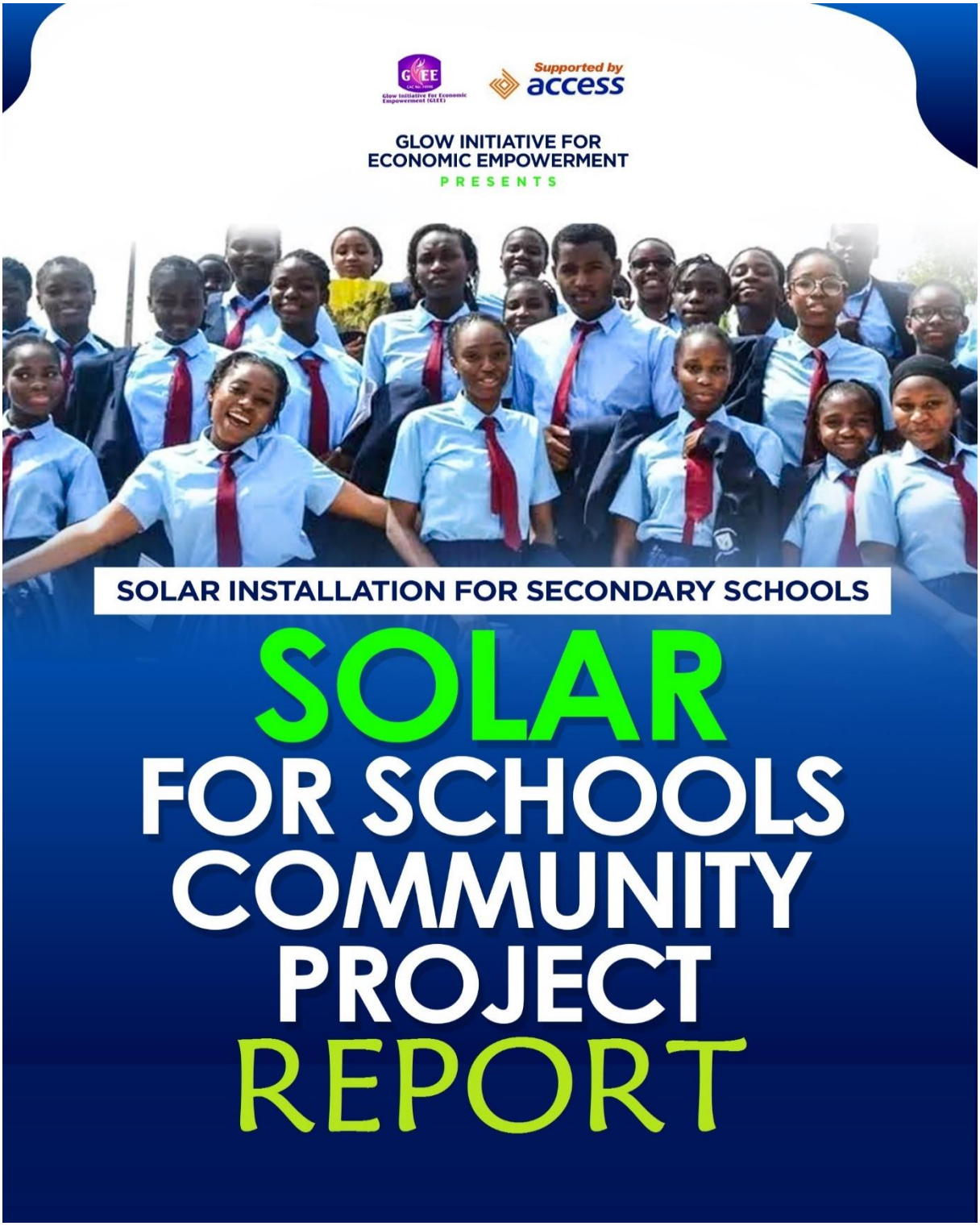


AMANUKE COMMUNITY, AWKA NORTH LGA, ANAMBRA STATE

Project Background

Inadequate infrastructure in rural areas and constant power outages in grid-connected areas prevent students from learning in optimal conditions. Further, students lack access to modern information technology which is crucial for educational and economic empowerment. Solar energy has the potential to power the education system in rural areas by providing adequate electricity as well as access to education. It helps in improving the living standards of rural households through solar energy-based interventions and learning facilities in the underserved community.

Access to solar electricity for a rural school will enable them to meet their electricity needs such as **Lighting, powering office equipment, ventilation etc.**

Our Solution

It is in the light of this that Glow Initiative for Economic Empowerment announces the **Solar for Schools Community Project** under their **Solar UP Nigeria (SUN)** Program is installing a PV system to power the computer room of Community Secondary School, Amanuke, Awka North Local Government Area of Anambra State and promote awareness amongst students and school teachers on solar energy and sustainability ultimately supporting rural electrification and encouraging student interest in STEM.

Project Objectives

1. To provide electricity that will power computer centers of public schools by designing and installing Solar PV System including solar panels, batteries, inverters and a charge controlling system to enable night time study and encourage more student participation in STEM subjects.
2. Educating 60 students and 5 teachers on the Basics of Solar Electricity; how solar panels generates electricity.

Project Activities

1) Design and installation of Solar PV System including solar panels, batteries, inverters and a charge controlling system to power Community Secondary School, Amanuke, Awka North Local Government Area of Anambra State to provide electricity to power the school's computer center, enable night time study and encourage more student participation in STEM subjects.
2) Educating 60 students and 5 teachers on the Basics of Solar Electricity; how solar panels generates electricity.

Details of Project Activities

1. INSTALLATION OF SOLAR PV @ COMMUNITY SECONDARY SCHOOL AMANUKE, AWKA NORTH LGA.

a. Description of Location

Amanuke community is an agrarian settlement located in Awka North Local Government Area of Anambra State, Nigeria. It is about 14.7km away from Awka Capital territory. Amanuke community is predominantly an agrarian community with a population of about 20,000.

b. Stakeholders Interface between Project team and the leadership of Amanuke Community.

The project team on arrival at Amanuke community held a meeting with the leadership of Amanuke community and the Management of Community Secondary school Amanuke. The meeting afforded the project team the opportunity to better understand the challenges posed by the non-availability of the stable electric supply in the school and the resultant impact it has on learning processes and outcomes in the school.

The leadership of the community and the Management of the school were delighted that their community school was selected to benefit from the "Solar for School" project. According to them, the project will be a great relief for them as they

problem of electric power supply for the school will be permanently fixed. The leadership of the community also pledged their commitment to ensure that the installed solar PV systems will be adequately safe guarded.

Project team pose with leaders of Amaunke Community and the Management of Community Secondary School Amanuke

c. Installation of Solar PV system at community secondary school Ebenenbe

A Solar PV system was installed at the Community secondary school Amanuke. Prior to the installation, the school didn't have access to electricity. Powering the computers at the school was a huge challenge for the School's management because of the huge cost associated with the hire of generators and the purchase of fuel. It was also practically impossible for the students to study at night as there was no light to facilitate night time study. The installed solar PV system has the capacity to power 15 laptop computers and provide power for 20 light points.

Students of the school were part of the installation process. They were afforded the opportunity to learn solar system installation from scratch to finish.

Students participating in the solar installation process

Students installing solar panels at a roof top

The solar PV system installed at the Community Secondary School Amanuke was formally commissioned and handed over to the community on Wednesday 30th of June 2021. The commissioning was witnessed by the traditional ruler of the community, members of his cabinet, representatives of the community's town union, members of the Parents Teachers Association of the school, teachers and well-wishers.

The guests at the commissioning were taken round the installed facility and they were excited about the development.

Other key stakeholders at the commissioning also took turns to speak on the project.

Outcomes

1. Massive turnout of stakeholders at the commissioning ceremony which included the Igwe and council, leadership of Amanuke town union, leadership of the Parents Teachers Association, representatives from Access Bank, teachers and students.
2. The attention of stakeholders at the commissioning was also drawn to other challenges which the community school was facing.
3. The commissioning provided an opportunity to enlighten guest on Solar and renewable energy.
4. The leadership of the community pledged their commitment to putting in place adequate security arrangements and construction of a burglary proof to protect the solar PV system from theft.

The Igwe cutting the tape @ the commissioning ceremony

2. TRAINING OF STUDENTS OF COMMUNITY SECONDARY SCHOOL AMANUKE, AWKA NORTH LGA ON BASIC SOLAR TECHNOLOGY.

This project trained some students of Amanuke Community School on basic concept of solar technology. The training introduced students to the fundamentals of solar power as it applies to solar panel system installations. They learnt how solar panels, or photovoltaics (PV for short), converts sunlight to electricity. The training also highlighted the basic components needed in a basic photovoltaic (solar panel) system and how to calculate the electrical demand of a building. The training also had a practical aspect where students participated in the installation of a solar PV system.

At the end of the training, certificates were issues to participants at the training.

- **Outcomes**

i. The students had a good understanding of the basic concept of solar energy.

ii. Students could identify basic components needed in a basic photovoltaic (solar panel) system and could explain the function of each.

iii. Students at the training could calculate the electrical demand of a building.

iv. The students also demonstrated a good competency in the installation of a solar PV system.

Students listen attentively as a facilitator lectures them on solar energy

Project Challenges and Lessons Learnt

1. The location of Community Secondary School Amanuke posed a big challenge to the project team. The road leading to the school was not in good shape. This led to the breakdown of project vehicle at some point.
2. Security was also a huge challenge as the school had no perimeter fencing and this gave intruders unfettered access into the school premises.
3. There was also concerns of armed herdsmen attacks in around the community which kept the project team apprehensive throughout the duration of the project.

Conclusion

Electricity remains a vital tool in powering education. Without electricity it will be impossible to operate educational resources like computers, desktops, projectors, and printers; it will also be difficult for students to study at night. The implementation of the Solar 4 Schools Community project in Amanuke community was a step in the right direction towards helping students of Community Secondary School Amanuke get unhindered access to online educational resources through the use of their school computers. The students will also find the use of the school library more convenient with the availability of solar power to operate the fans at the library. One other highpoint of this project is that it guarantees a 24hour power supply for the benefitting school.

Students who undertook the solar technology training can also develop their skills around solar technology and become economically self-reliant.

Solar 4 Schools Community project is laudable and needs to be replicated across other energy deprived public schools in Nigeria.

Access Bank Support

1. Access Bank support covered expert designs for our IECs and publicity materials.
2. The support enabled the purchase of all the components used for the installation of the Solar PV System at Amanuke Community.
3. Access Bank support covered the travel, incidentals, accommodation and stipend for project team
4. Access Bank support enabled us to provide access to electricity for 256 students
5. Access Banks support has provided access to digital education for 256 students learn computer

About Glow Initiative for Economic Empowerment and Climate Smart Nigeria

Glow Initiative for Economic Empowerment is a non-governmental organization set up to harness the economic potentials of communities by tackling problems like unemployment, poor electricity access and climate change through education and investments in renewable energy. We are focused on reducing unemployment and creating a sustainable society by supporting women and young people to become renewable energy entrepreneurs by helping them acquire solar technology, business and financial management skills to create and deploy solar solutions for individuals and companies in rural and urban areas. Our goal is to birth 10,000 renewable

energy entrepreneurs in the next 5 years. Climate Smart Nigeria is the arm Of Glow Initiative which is set up to combat environmental problems like Climate change to improve the nation's power sector by spreading the awareness of Climate Change to curb climate illiteracy and promoting the intervention of renewable energy. Through CSN, we use the tool of education to curb climate illiteracy. Our goal is to boost the economic development of Nigeria and attain a Climate Smart nation come 2026 through pioneering investments in renewable energy, Climate education and agriculture.

PICTORIAL EXERCPTS

Students power their computer in excitement systems after the solar installation

The project team pose with the Igwe of Amanuke community

PICTORIAL EXERCPTS

Students interacting with the Project lead.

Students pose with placards

PICTORIAL EXERCPTS

Project Team interacts with the traditional ruler of Amanuke

Project Team interacts with the school principal

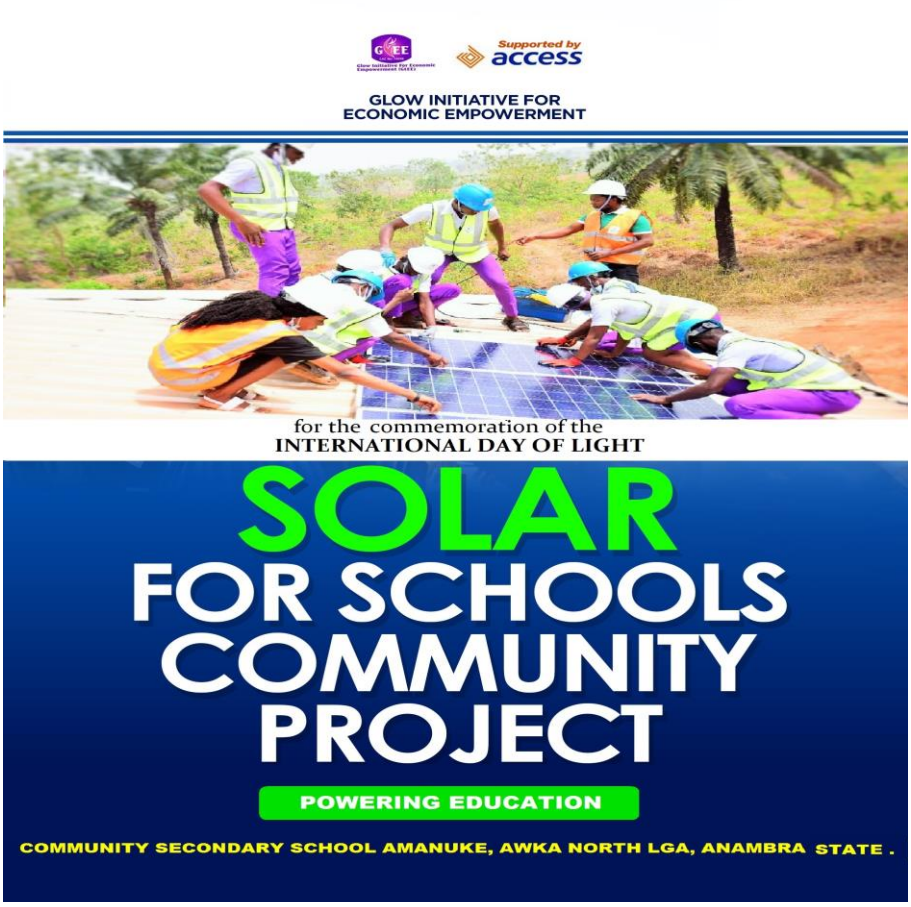
Project Team arrive Enugu Airport from Lagos

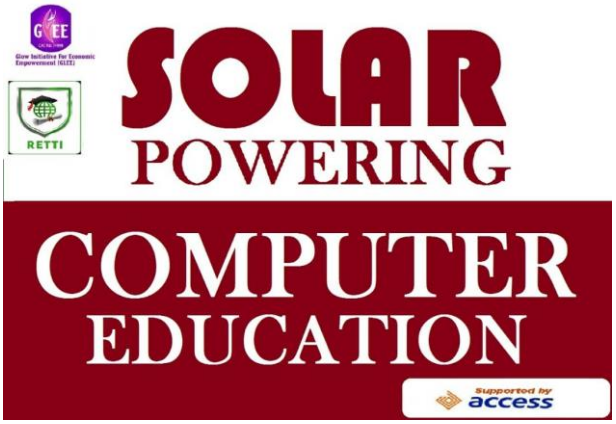
Project Team arrive Amanuke Community

Project Team members pose for photograph

Project Team members pose with Igwe of Amanuke community

IEC MATERIALS

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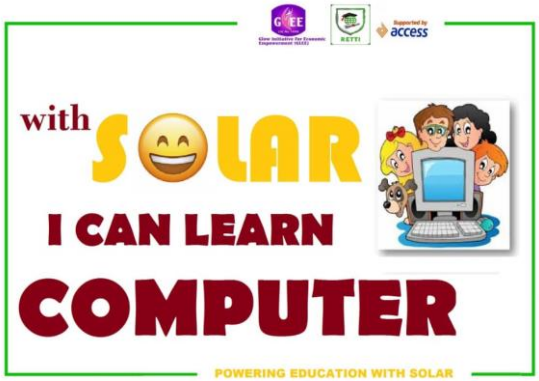
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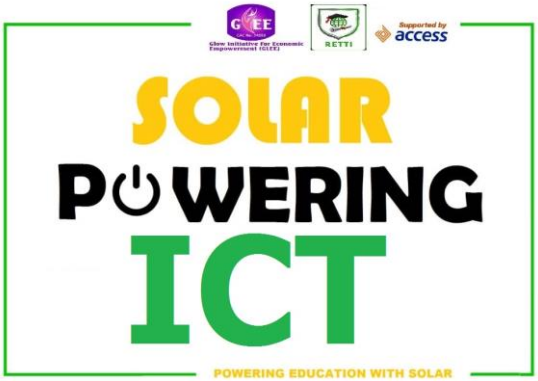
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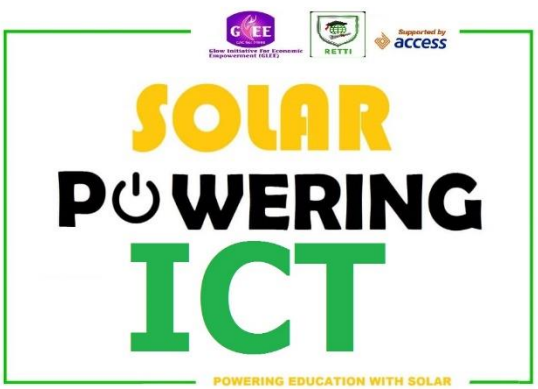
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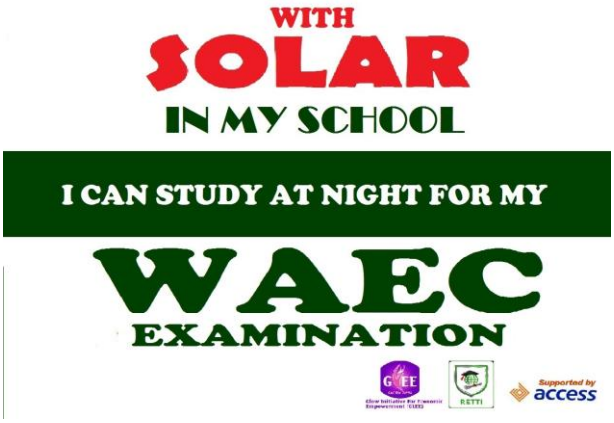
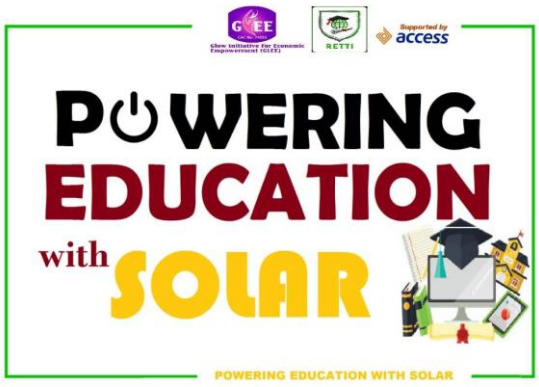

WITH
SOLAR
IN MY SCHOOL
I CAN STUDY AT NIGHT FOR MY
WAEC
EXAMINATION


THANK YOU
ACCESS BANK
FOR SOLAR IN MY SCHOOL


RAISING
SMART
ICT LEADERS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