



# Extension of PV Solar Park at Radio Pacis with 204 kWp

## SUMMARY

Country	Uganda
Implementer	Radio Pacis
Target groups	Local population of Arua
Duration	07/2020 – 03/2022
Type of energy use	Electrification

## CHALLENGE

Only 10% of the four million people in the West Nile sub-region in the far north-west of Uganda are connected to the electricity grid. Because the grid regularly breaks down, many companies and businesses rely on diesel generators to provide power. Yet the subregion has considerable potential for renewable energy sources. The radio station Radio Pacis, based in the district capital Arua, spent about € 87,000 on electricity costs in 2008 alone. This was one reason why the radio station installed its own solar park in 2008. Six years later, it was connected to the power grid of the West Nile Rural Electrification Company (WENRECo) and has been feeding electricity into the grid ever since. However, the capacities of the current PV system are limited and do not cover the demand.

## IMPACT LOGIC

Radio Pacis installs new PV systems to upgrade its existing electricity generation. First, the steel rebar system is upgraded to support the new PV system, afterwards the system itself is installed and connected to the overall electricity grid. Additionally, battery systems are installed to ensure that the radio equipment has access

to power. This allows Radio Pacis to continue its operations even if there is a power outage. By ensuring that Radio Pacis retains operability listeners can stay informed about current (emergency) news regardless of the national energy supply. Additionally, because of the already installed system, the extended solar park reaches 504 kWp and can also sustain the day-to-day needs of the regional referral hospital, other health units, small enterprises and shops in Arua (in total more than 250,000 people). This leads to better economic development in the area and even greater opportunities to expand the solar PV systems in the region.

## INNOVATIVE PROJECT ELEMENTS

In the past Radio Pacis became one of the first companies in Uganda to have a PV solar system connected to the grid with a bidirectional meter. This project aims to capitalize on the possibilities of solar power and to expand on the already installed system. In addition, Radio Pacis is in the unique position to not only directly benefit from Solar Power, but also to inform its listeners about the benefits of the installed PV systems. This in turn can lead to an overall increase in renewable energy systems through a large scale information campaign that other businesses do not have. Through its leading role in this field of solar energy usage, Radio Pacis can also successfully become a role model for renewable energy in the region. The topic already gathers interest from other institutions like Muni University and Radio Pacis increasingly attracts students for internships and further trainings on renewable energy and environment conservation.

## FURTHER INFORMATION

[www.gruene-buergerenergie.org](http://www.gruene-buergerenergie.org)