



2022. A SUMMARY.

#1 TOWARDS SDG7 — ONE SOLAR GENERATOR AT A TIME

The first 1,000 solar generators have been installed by our local distribution partners in Nigeria in 2022. Despite COVID-induced supply chain challenges, 1,000 customers, mainly in market places, have been in a position to replace their fuel generator with A2EI's solar generator. These 1,000 customers are experiencing a greatly improved quality of life and are freed from noise, fumes and the hassle of procuring fuel.

Many of them report an increase in revenue due to more customers, who clearly prefer shops powered by solar generators. Customers recommend

the system to their neighbours, which leads to a steadily increasing demand for solar generators.

It is estimated that for every solar generator installed, 7,5 tons of carbon emissions are saved over a period of five years. A central achievement

in 2022 was that the carbon credits generated have received the Gold Standard Certification, which vouches for their very high quality.

The challenge for the years to come will be to raise the needed working capital to finance the new generators.



New video on A2EI's solar solution!



#2 WORKING CAPITAL IS QUEEN

The biggest challenge that we are currently trying to solve is the limited availability of working capital in Nigeria for our distributors. They need to raise hard currency to prefinance the solar generators - a difficult task. In order to respond to high local demand and to scale up the solar generator

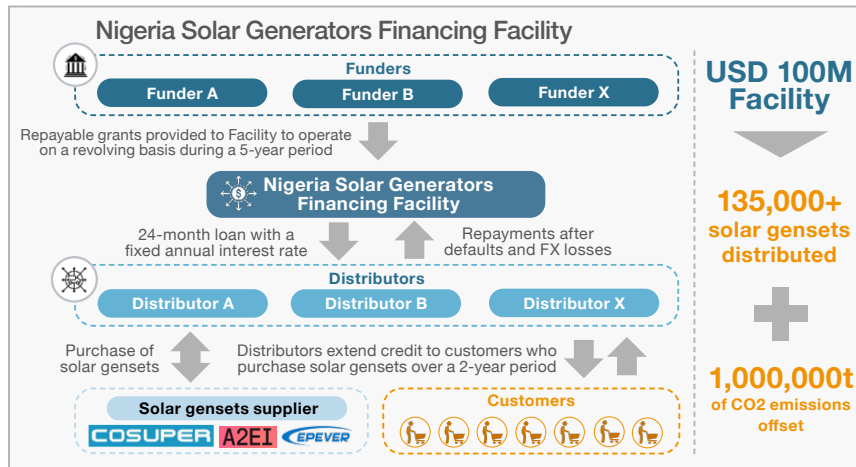
distribution, we have been working on structuring a working capital fund together with Open Capital Advisors. We call it the "Go-Green Fund". Local distributors will be able to access USD and will be allowed to repay the fund in the local currency, Naira. The initial loan for every distributor will be small



(around 50K) but real-time analysis of repayment patterns will warrant access to larger subsequent loans.

This mechanism is equivalent to an automated and data driven due diligence process, which is bound to be cheaper and more precise than current practice. The first tranche of the fund, which intends to attract commercial capital over time, will be available in 2023.

As a proof-of-concept, we initiated a first real transaction with the support of DOEN Foundation, that lent USD 250,000 to Creeds Energy, our main local distributor. This first small but very real step will help gather data on repayment patterns and understand risks more precisely.



#3 PROSPECT — DATA.DRIVING.ENERGYACCESS

The lack of comprehensive and user-friendly data on project performance poses one of the major obstacles to funding in the offgrid energy sector. While a range of data management platforms exist, these solutions are mostly product-, project- or country-specific, or they are proprietary. To fill this gap, the A2EI and GET.invest have partnered to develop the data platform Prospect (Primary Open Source Platform for Energy and Climate Tracking - <https://prospect.energy/>).



The new platform provides the sector with a product-agnostic, global, and free-of-charge open-source data management system adhering to strict data privacy policies.

SDG7 projects can be transparently monitored, evaluated and reported upon only if data regarding both the individual systems and the entire project is available. This applies to technical data (e.g. energy usage, remote monitoring and maintenance messages) as well as payment (e.g. repayment patterns for PAYG systems, subsidy disbursements) and impact data (e.g. increased energy access or productivity, reduced carbon emissions).

Prospect aims to offer value to project managers and supranational institutions through a comprehensive and reality-based progress overview



on access to energy initiatives. At the same time, it offers valuable insights to data providers – mostly SMEs – which will allow them to make data driven business decisions in a complex environment. Additionally, it will act as a trust provider for financial and certification institutions who need validation for investment and certification processes. This will reduce transaction and monitoring costs and hence attract additional investment into the sector.

ONE DATA PLATFORM FOR EVERYONE

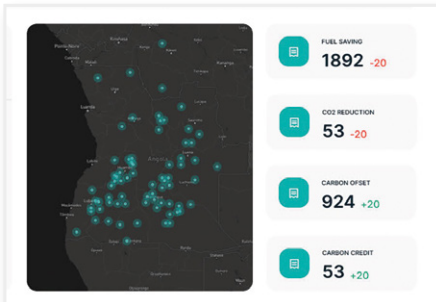
With Prospect, donors and private investors alike will be able to make well-informed initial financing decisions by easily accessing projects' installation records, project performance and impact. Grant as well as equity/debt providers will be more comfortable extending additional funds if they know that they can trust the data verified by Prospect, and can actually assess the effectiveness of their funding strategies.

Government stakeholders may find it convenient to present the success of their electrification strategy with

externally verified data. Having comprehensive data of different projects available for the entire country also facilitates the optimisation of electrification strategies – which will in turn improve governments' ability to make efficient use of donor funds and raise additional funding.

Renewable energy distributors benefit from using the platform free-of-charge. They can show their installation record, impact, as well as a record of their financial performance.

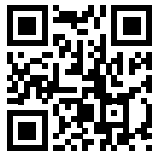
Projects that are able to provide granular and trusted data at the individual system and customer level, but also at the aggregate level, find it easier to both report to their funders and acquire additional financing.



#4 A2EI GOES CLEAN ELECTRIC COOKING



The A2EI is also increasingly putting its data analysis capabilities at the disposition of the clean cooking sector. We published a report on Electric Pressure Cookers (EPC) in minigrid



Great video on how A2EI data supports e-cooking!



environments early in 2022 that clearly showed that adoption rate of EPC was high and usage rate increased with lower electricity prices (main finding - usage increase fivefold when electricity rates dropped substantially).

A comparison of usage patterns of improved cookstoves and EPCs also revealed that there was an important time saving with EPCs. Estimates show up to 2 hours of time for every person cooking can be saved, an often overlooked advantage of EPC. In the future, we want to concentrate on



analysing the aggregate demand of EPCs in grid environments.

What if EPCs became the main cooking device in a country? Could this mean the end of charcoal and what grid measures would be needed to cater for the new load? The A2EI wants to contribute to answering these questions. The Global Energy Alliance for People and Planet is supporting the A2EI to build a so-called "Appliance Demand Platform" to investigate just that.

#5 A2EI GOES HEALTH — SAVING LIVES WITH SOLAR POWER

On behalf of the GIZ and the Ministry of Health in Benin, the A2EI has deployed smart meters across offgrid and ongrid clinics to assess the energy needs of health clinics.

The data is accessible through our Prospect platform, which allows for a real time energy audit.



Next to giving the health authorities in Benin an excellent insight into adequate and needed energy solutions, we realised that our solar generators would be suitable solar solutions for many of the monitored clinics.

Therefore, during COP27 in Egypt, we have announced our pledge to electrify 100 health clinics on the African continent.

Installing our solar generators will provide health facilities with powerful low-maintenance energy solutions to ensure modern efficient healthcare, which ultimately saves lives.



A very special Thank You to our supporters –
our work would not be possible without our generous donors:



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