

EMPOWER

self-determination
and growth



Who we are

We empower people to achieve more self-determination and growth through sustainable energy solutions.

More than 600 million people in sub-Saharan Africa have no access to electricity. With the ImpactSite® Africa GreenTec has developed a holistic systems solution that makes it possible to supply entire village communities in rural regions with electricity and sustainable technologies. We've taken electricity to the next level by developing an intelligent system that can withstand the harsh conditions of off-grid regions in Africa – outperforming even modern European standards.

Products such as our powerful Solartainer® are driven by solar energy – Africa's most logical and clean energy source. An intelligent network distributes the electricity via a pre-paid tiered pricing system and enables data analysis as well as remote maintenance.

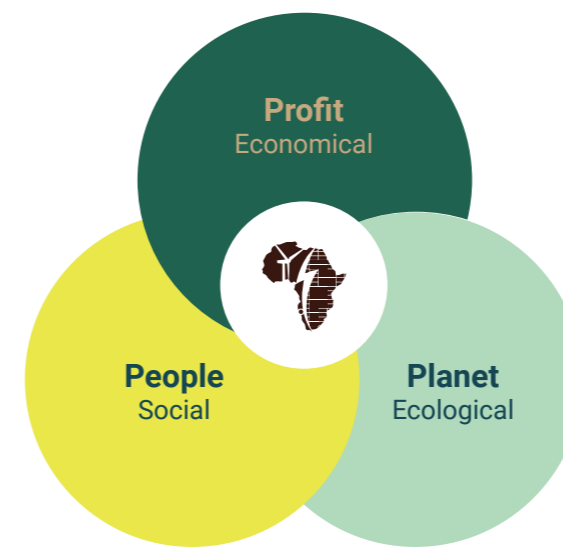
Africa GreenTec's ImpactSites®, of which Africa GreenTec has already established several in sub-Saharan Africa, demonstrate how this technology empowers people to take their own path toward a sustainable and self-determined future by taking advantage of new job opportunities and income streams. Effective cold chains and water treatment enable better handling of the consequences of climate change, while new opportunities serve to counteract migration. Close cooperation with local employees and partners is a key factor for our success.



What we have done so far

To date: empowered more than 20 villages in Mali, Niger and Senegal

Next milestones: entering 4 new markets and developing 500+ villages



Our philosophy

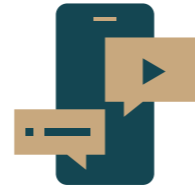
Impact-driven for profit

As a social enterprise, our top priority is solving social and ecological challenges. However, this does not mean that we give away or donate our services, but rather that we interact with our customers at eye level. Our prices and salaries are adjusted according to the conditions of their respective locations, and calculated in such a way that an ImpactSite can be operated and maintained as financially self-sufficient as possible. Thus, we ensure that our projects are sustainable in every way, rather than failing after only a few years.

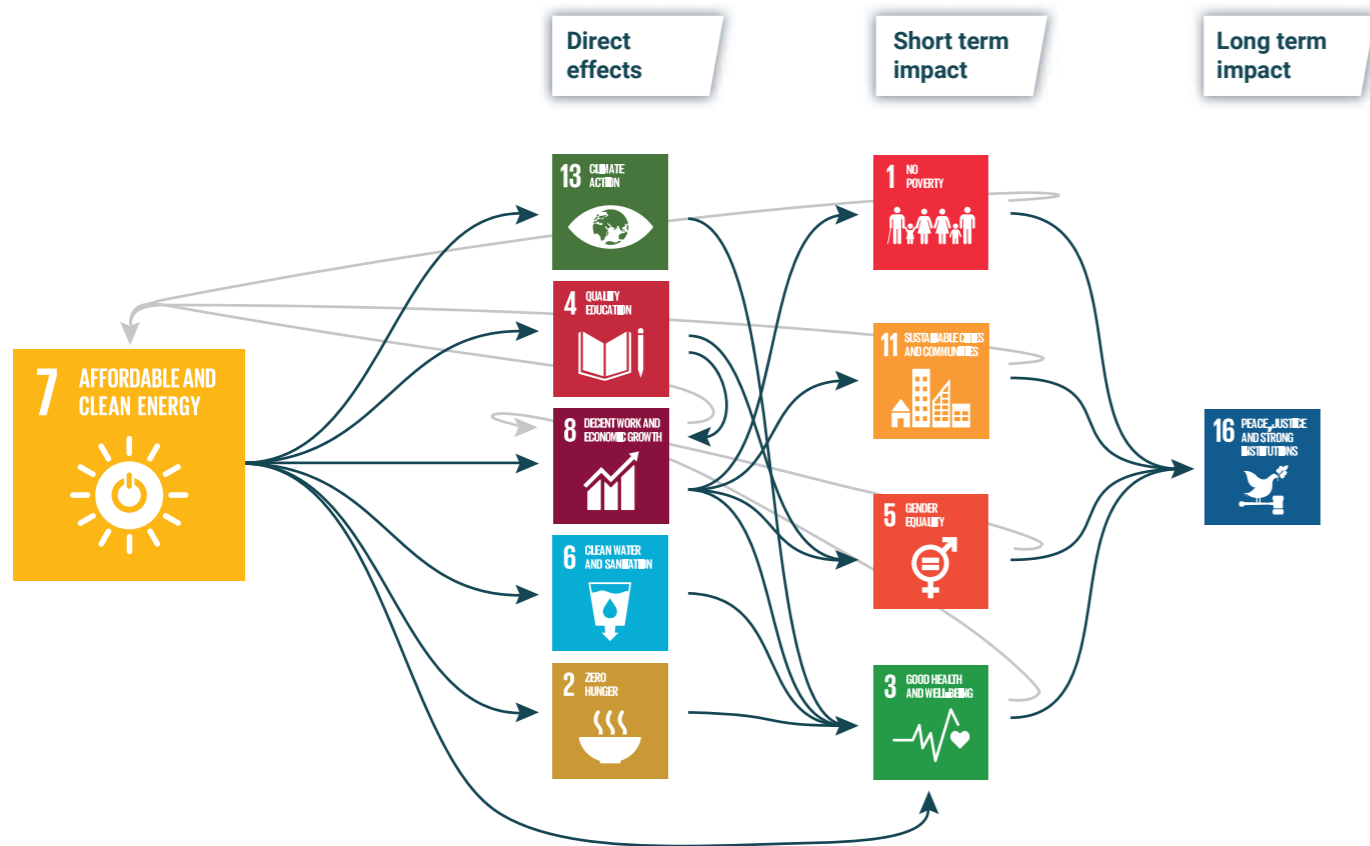


Our impact

We are Impact-Driven – electricity as the main driver for sustainable development



With the AGT Impact Management System we have developed truly new measuring standards. We supply reliable data on SDG development to monitor our impact. We measure impact across several dimensions, consider meaningful outcomes instead of outputs and align our measurements with the SDGs, GIIN IRIS+ and GOGLA standards.



Nassou Oumar

Restaurant owner, farmer, shopkeeper – „Serial Entrepreneur“, Mali



“ Without electricity it was impossible to turn my ideas into reality

Without electricity it was impossible to turn my ideas into reality, electricity the foundation of everything. Electricity enabled me to increase my productivity by 70 % and then to open a restaurant, where I have been able to hire six people. I want to help the village by starting businesses and creating jobs. As an entrepreneur, I am independent and can determine my future myself - and I couldn't be happier. Ten years ago I was already in Morocco and wanted to go to Europe. If someone offered me to move to Paris today, I would refuse - I have everything here!



Our holistic solution

ImpactSite® – empower people in rural areas through sustainable energy solutions

Offering electricity is good, using electricity to solve problems is better!
The ImpactSite® increases productivity through high quality electricity generation and application solutions. By creating synergy effects, we are able to implement a sustainable business model while fostering a long term impact.



Electricity & Internet – Solartainer®

Electricity production
at the core of the ImpactSite®: turnkey, mobile, expandable solar power plant with up to 50 kWp and customizable Li-Ion storage of 18 to 300 kWh.

Internet access via WiFi
through modern, reliable and secure SatCom system as a by-product of Solartainer® remote control.

Mini-grid & Smart meter
mini-grids enable productive use of electricity, hence driving forward local socio-economic development. Smart meters enable customized tariff model, remote maintenance and data analytics.

Clean Water

Water purification
system to create up to 2,000 liters of purified drinking water an hour.

Cooling & Agriculture – Cooltainer®

Cooling
the Cooltainer® increases agricultural output and decreases food loss by offering 20 m³ cooled storage capacity.

Irrigation
through solar water pump system increases agricultural productivity.

Impact Programs

SME consulting to enhance productivity.
Women empowerment programs foster social and financial inclusion.

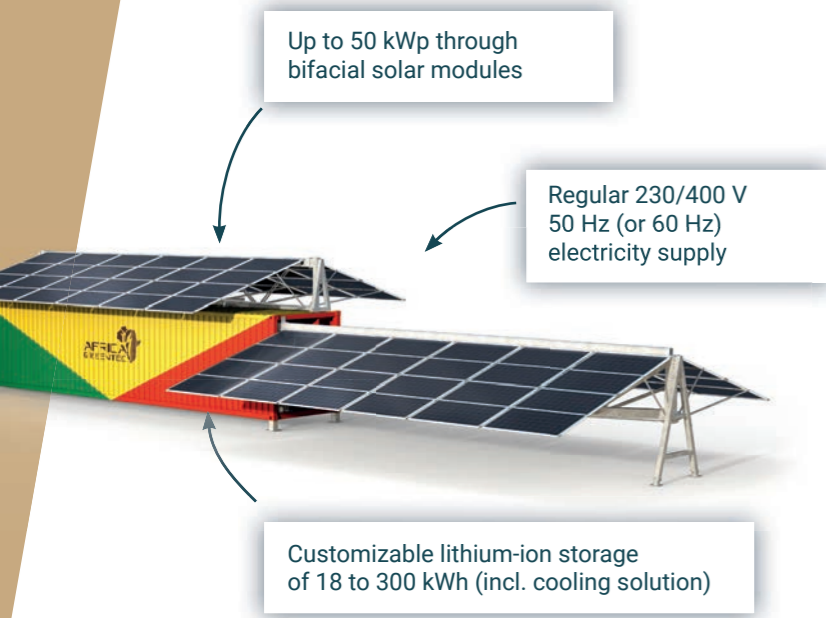


Mobile. Accessible. Expandable.

Solartainer® Amali – our hub for sustainable growth



We empower rural communities by enabling productive use for income-generating activities. Electricity is the beginning of sustainable development. The Solartainer® has a drastic impact on the development of the ImpactSite® by opening up business opportunities and improving the quality of life.



Highlights

- **Clean:** solar power as a noiseless, carbon and nitrogen oxides-free alternative to diesel-powered generators
- **Reliable:** electricity supply for off-grid applications without diesel power
- **Day & Night:** lithium-ion batteries enable electricity consumption even during the night
- **Mobile:** 40 ft ISO container that can be set-up, dismantled and relocated quickly
- **Plug & Play:** ready to deliver electricity after 48 h
- **Robust:** German engineering, excellent component suppliers and years of experience in rural sub-Saharan Africa

50

kWp max.

400

Households

40

SMEs

10

Communal Facilities

Additional services (optional)

- Mini-grid planning and construction services
- Digital billing, remote maintenance and data analytics via smart meter
- Integrated water purification system with up to 2000 l/h
- Integrated SatCom system to connect Solartainer® to the internet for remote maintenance and offer WiFi service for the community to



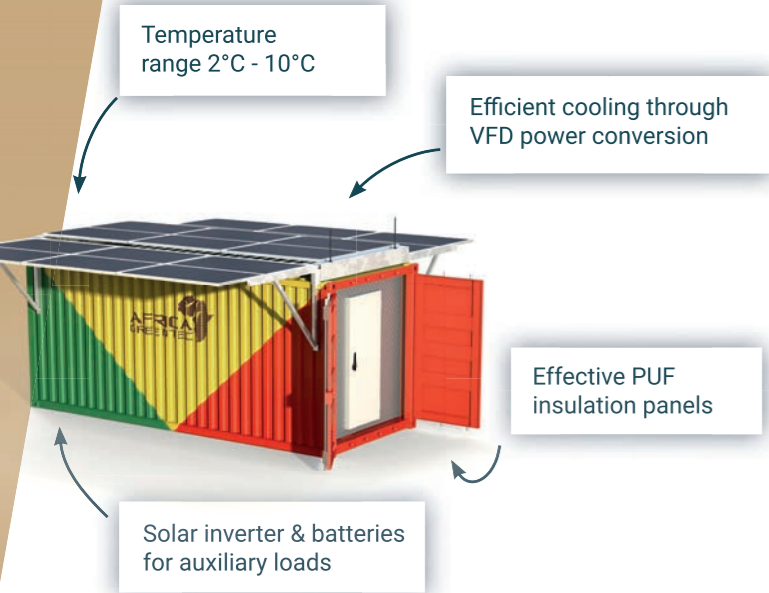


Mobile. Accessible. Expandable.

Cooltainer® – our mobile cold storage for sustainable farming



In sub-Saharan Africa up to 40 % of fruit and vegetables are lost post-harvest. Farmers build the foundation of the African economy. With our Cooltainer®, we are reducing food waste and creating new distribution channels for the most important source of income in rural areas.



Highlights

- **Stand alone operation:** solar powered hybrid technology incl. batteries (option for charging from external power supplies included)
- **Plug & play:** low maintenance, easy to use and remote monitoring
- **Mobile:** continued cooling operations during transportation
- **Efficient:** automated energy optimization
- **Humidifier:** for humidification process (humidity range 75 % to 90 %)

20 m³
Storage Capacity

5 kWp
Power

45°C
Ambient Conditions

20 ft
ISO Container

Additional services (optional)

- Linked to an e-commerce platform to strengthen farmers' access to market and to facilitate efficient logistics
- Web monitoring & data acquisition system

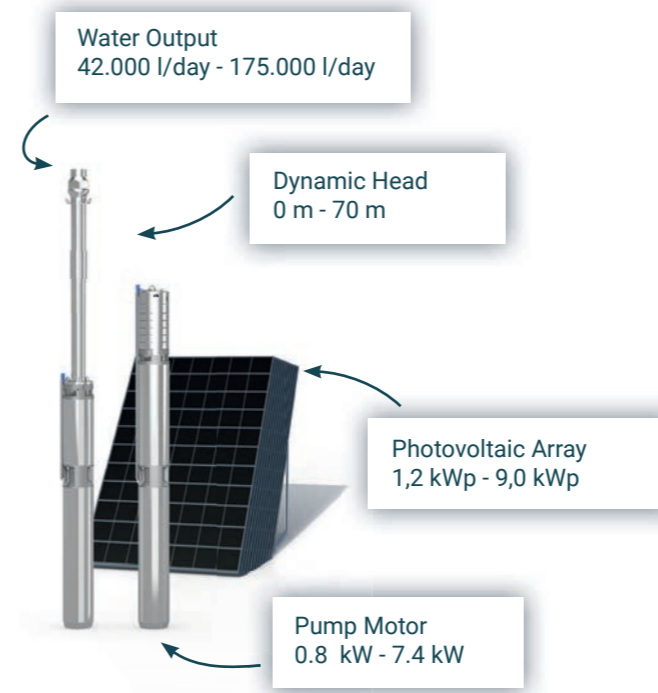


Optimum flow rate. Easy installation. Maximum reliability.

Solar Water Pumps – for a better harvest



54 % of the population in sub-Saharan Africa are farmers. We empower African farmers by addressing water scarcity by offering the latest water pump systems powered by highly efficient photovoltaic.



Highlights

- **Clean:** solar power as a noiseless, carbon-, particulate matter- and nitrogen oxides-free alternative to diesel-powered generators
- **Reliable:** electricity supply in off-grid applications without diesel power
- **Robust:** German engineering, excellent component suppliers and years of experience in rural sub-Saharan Africa
- **Plug & play:** low maintenance, easy to use
- **Efficient:** automated energy optimization

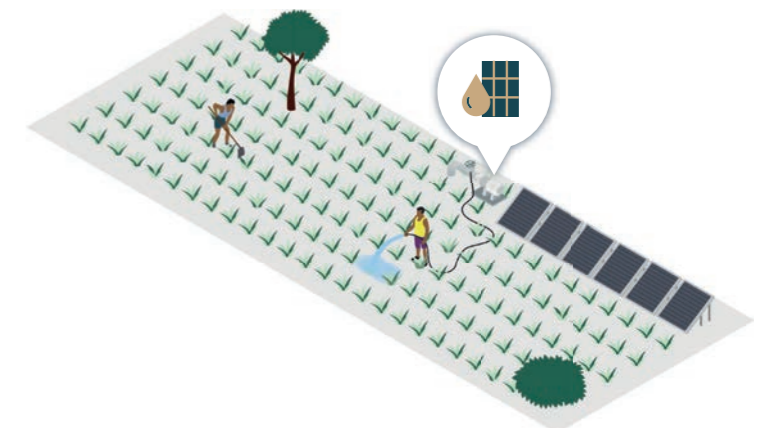
0-70 m
Dynamic Head

0.8-7.4 kW
Pump Motor

1.2-9.0 kWp
Photovoltaic Array

ImpactSite®

Solar Water Pumps empower farmers to increase their economic growth. The systems fit perfectly into our sustainable and ecological ImpactSite® eco system.



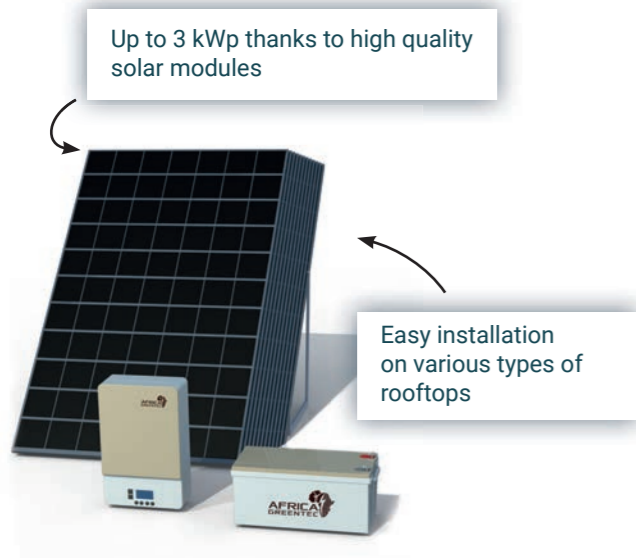


Reliable. Powerful. Affordable.

Solar Kits – a solution with many application possibilities



Solar Kits can complement the Solartainer® to provide electricity to the most remote households in rural areas. In urban areas, Solar Kits bring reliable, clean electricity to every household so people can grow their businesses and enjoy using electricity at home.



Highlights

- **Clean:** solar power as a noiseless, carbon-, particulate matter- and nitrogen oxides-free alternative to diesel-powered generators
- **Reliable:** electricity supply in off-grid applications without diesel power



Diessira Diallo
Kiosk owner, Mali



Entertainment, Lighting, etc.

0.5 kWp single-phase S

2x 250 Wp 2x 150 Ah
 500 W – single-phase 230 V / 50 Hz

1 kWp single-phase M

3x 335 Wp 4x 150 Ah
 1 kW – single-phase 230 V / 50 Hz

Cooling, Machines, etc.

2 kWp three-phase L

6x 335 Wp 8x 150 Ah
 2 kW – three-phase 230 V / 50 Hz

3 kWp three-phase XL

9x 335 Wp 12x 150 Ah
 3 kW – three-phase 230 V / 50 Hz



My shop has become a meeting point for the village

During the rainy and harvest season, I have very few daytime customers. Thanks to electricity and light I can now open my shop in the evening. I also bought a refrigerator. Now I not only throw away less food, but I also attract new customers. They come to buy cooled products and then hang around – my shop has become a meeting point for the village and my income has multiplied. I am now able to feed more than 60 people in my extended family! In the future I want to open more local shops and help people by not having to travel to Bamako to do their shopping.



Maintenance service

- based on Smart meter data
- leads to high reliability



Africa GreenTec tariff system

- optimised to fit market conditions
- allows clever distribution



To me, my business means independence, self-sufficiency and freedom.



Modibo Traore
Welder, Mali

Thanks to Africa GreenTec, I can finally work without interruptions. My old diesel generator was constantly failing and too expensive, making smaller jobs unprofitable. Now I have a lot more orders than before and my customers no longer have to drive all the way to Bamako to get custom-made products. This way the jobs and the money stay in the village! Ever since this boost, I have hired several young people and now I employ over 20 people in total. To me, my business means independence, self-sufficiency and freedom. I earn more today than I did in Algeria or Morocco – why would I ever want to leave the village?

Intelligent Mini-Grid performance management

- digital billing & tariff system
- remote maintenance & monitoring
- data analytics & reporting



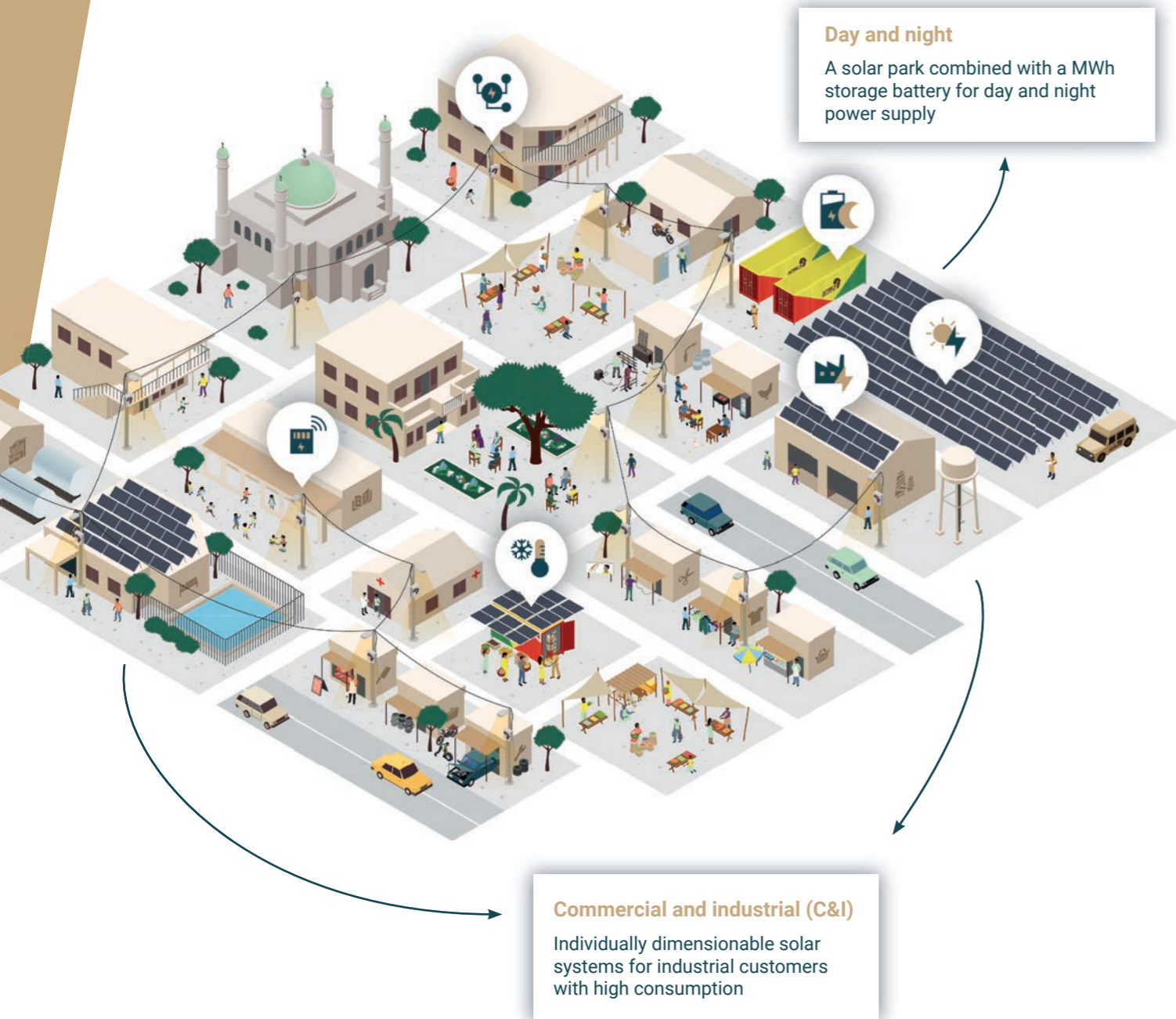


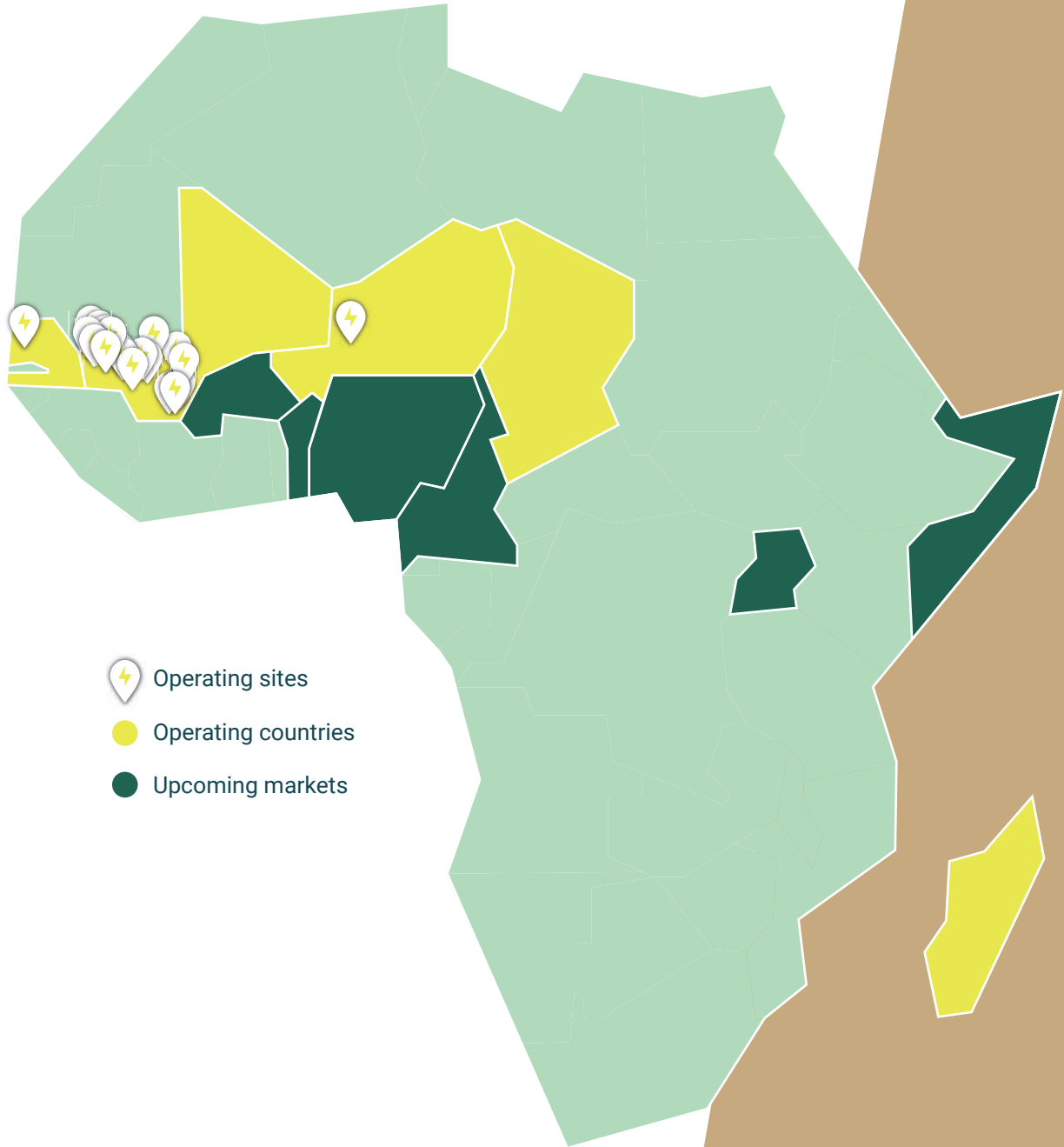
Reliable. Powerful. Expandable.

ImpactCity – energy for application in urban areas



Finally stop the power cuts! On average there is one power outage every four days in sub-Saharan Africa. We empower African urban areas by providing reliable, clean electricity to entire cities so that businesses can grow and people can enjoy comfortable homes.





WE DO.

Africa GreenTec

africagreentec.com
info@africagreentec.com