

SOLAFRICA.CH



Annual Report 2015



Kuno Roth
President Solafrica

Diligence and Transparency

Solafrica has been ZEWo certified since 2015. This seal of approval stands for:

- Purposeful, economical and effective use of your donation
- Transparent information and meaningful accounting
- Independent and appropriate control structures
- Sincere communication and fair funding

Solafrica is recognized as a non-profit organization by the canton of Bern. Donations to Solafrica can be deducted from taxes in most cantons.



Education, Technology and Social Solar business

“This was the best training I have ever attended; with important content and a skilled trainer” says Zahid Mahboob full of fervor.

He is the manager of the Pakistan Boy Scouts Association and has attended Solafrica’s training at the Kandersteg International Scout Center. This is the center of the global Scout Go Solar project (SgS), which triggered a worldwide solar revolution in the Scout movement. Scout leaders from the Philippines, the Ivory Coast, Peru, Mexico, France, the Czech Republic and Brazil have also come to Kandersteg. They left the center with the tools to launch solar activities in their own countries. Pakistan is a pioneer in the field, Zahid calls it Pakisun. Asif Mahmood, who became the Global SgS Coordinator on the 1st January 2016 is even more active in the project. He was trained in Kandersteg by Solar trainer Stefanie Luginbühl. He first carried out solar workshops for thousands of Scouts at the Jamboree 2000 in Japan and then at the international Scout Jamboree in Japan. Together with Zahid he launched Scouts Go Solar Global in Islamabad last September.

Solafrica makes it possible. Not alone but with leaders.

Positive Development

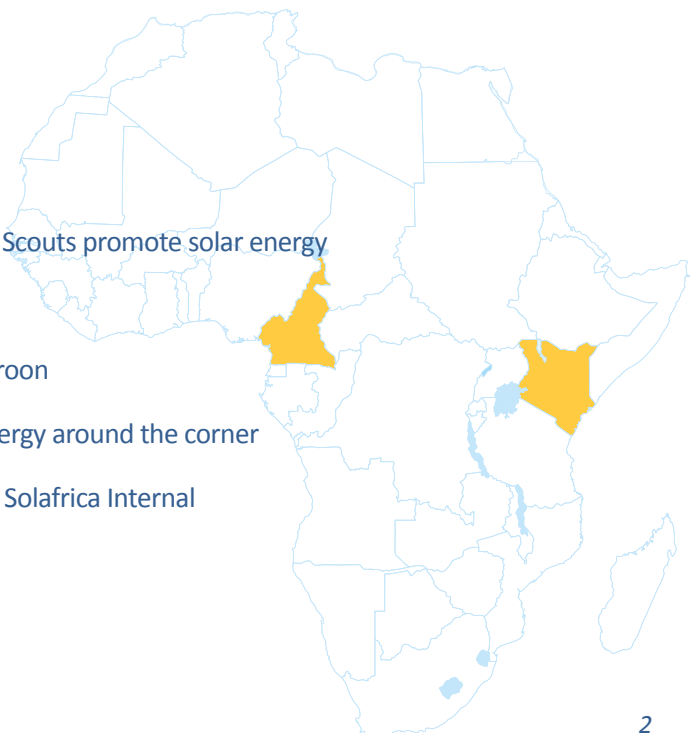
Solafrica has grown well in its sixth year of existence, not least thanks to Elias Kost’s dedicated, sensitive, yet strategically oriented management. All Solafrica projects revolve around practice-oriented training through simple solar technology and small businesses. This combination is Solafrica’s trademark. Solafrica pursues this path with perseverance, because endurance is a key factor. SolarChill, the solar-powered refrigerator is an illustrative example of this: two SolarChills had been available, for shipment, at the Greenpeace camp in Hamburg since the beginning of 2014. It took until November 2015 for them to be installed in selected villages in Cameroon. There were many technical, cultural and, above all, administrative hurdles to overcome.

Innovative Leasing

Our project manager, Joel Jeanloz, has already conducted field research in Cameroon for his masters. Within the framework of the Solar Square project, he developed a leasing system that can be used to pay for a small solar system at a micro-rate, which makes solar power affordable to the poor. The intention is to develop a model, which can easily be multiplied.

Content

3	Scouts Go Solar - Scouts promote solar energy
4	Projects in Kenya
6	Projects in Cameroon
8	Solar Square - Energy around the corner
9	Other Activities / Solafrica Internal
10	Finances
12	Thanks





Scouts Go Solar - Scouts promote solar energy worldwide

Since 2015, and after several years of preparatory work, the scouts, as the second largest global youth organization have been engaged in Scouts Go Solar (SGS) projects to promote solar energy. Scouts Go Solar was made possible through the close cooperation of Solafrica, Greenpeace Switzerland and of course of many committed scout members. With the SGS project, Solafrica can generate worldwide attention to the cause through the combination of education, solar technology and solar social business.

Training 2015

Trainings took place, as in previous years, at the International Scout Centre in Kandersteg (KISC). 10 solar ambassadors were trained in two training sessions. The participants were selected by the Scouts organisation depending suitability for the training.

In 2015 the training program had a more open design than last year. Practical and theoretical parts were alternated and supplemented by feedback and exchange rounds, and planning the implementation in the country of origin. The participants often enthusiastically cooked lunch using solar energy. In the first training session 6, and in the second 4 participants learned and gained experience in solar energy during two weeks. Algeria, France, India, Mexico, Namibia, Pakistan, Azerbaijan, Denmark, Ivory Coast and Peru were all represented at these training sessions. With the two groups, five solar workshops for children and adolescents were carried out at the KISC. This enabled the new solar ambassadors to directly experience the training of scouts in solar energy. Back at home (almost) all new ambassadors implemented activities immediately - we stay in touch with them and support them.

Didactic Solar Material

The core element of our training, the *Solar Energy Handbook* for Youth Leaders, was completed and is available for download and as a hard copy. The practical learning material was developed and refined in Kandersteg. There are kits for solar flashlights and instructions to build your own solar suitcase (mobile solar generator) and the solar campfire. In each training session participants built their own solar suitcase. The participants from Africa and South America were allowed to take them to use at home.

These world premieres were presented in Japan at the international Jamboree (global Scout Meeting). A workshop was lead on site by a trained solar ambassador for over 2000 participating scouts.

Finally, the World Organization of the Scout Movement (WOSM) officially launched Scouts go solar as part of their global environmental education program on the 16th September 2015 in the Pakistani capital Islamabad.

Finance and Outlook

The basic funding for the project over two years was secured. However, adjustments in the second year (2015) caused additional expenses that Solafrica aimed to cover through fundraising, which only partially succeeded. This meant that instead of twenty, only ten solar ambassadors could be trained.

As a crowning financial statement, a job was created. Asif Mahmood, who participated in the solar training in 2014, has been working in Islamabad as global coordinator for the Scouts Go Solar project since the 1st January 2016. Solafrica pays half of his salary.

Because the Scouts Go Solar project is very successful, the training should be continued in the coming years while at the same time working on the further development of the concept to fully benefit from the positive momentum of this project.



Projects in Kenya

Vocational training at Sarah Obama Solar Learning Centre

The Sarah Obama Solar Learning Centre (SOSLC) is a vocational training center for solar energy and energy efficiency in western Kenya. Solar ambassador Sarah Obama is the godmother of the project. She resides in the region and is Barack Obama's grandmother. The training course for solar technicians at the SOSLC was first carried out in 2013. Since then, training sessions have been continuously updated and now take place annually in three blocks.

The primary goal of the course is to train professionals in solar technology. In addition to the theoretical lessons at the SOSLC, the budding solar technicians complete a practical training at the company Solar Solutions Kenya (KSS). As well as the technical expertise, a focus on corporate governance was also established this year. This is intended to enable graduates to run their own solar energy company.

The first training for solar technicians in 2015 started in February with 16 participants from the regions Ganze and Kilifi. Along with the theory, the participants learned the basis of specific installations, such as how small solar installations are dimensioned, assembled and repaired. The final part of the course consisted in lessons on creating your own business, accounting and marketing. A representative of the Kenyan Youth Funds Office attended as a guest speaker and also held a two-day seminar on group formation and dynamics. On the 7th September 2015, the second training started with nine participants and on the 14th December the third course with 13 participants. It was pleasing to see the high proportion of young women attending the course (making up more than 50% of the participants).

Since January 2013, 45 solar technicians have already been trained, 30 of them in 2015. While some of them found work at the non-profit organization found Pro Ganze, others got a job with M-Kopa, a big Kenyan solar company. Some other graduates work for Kenya Solar Solutions (KSS) or were trained as solar trainers for future courses.

Solar powered refrigerators for health centers

In co-operation with the Ministry of Health of Homa Bay, SolarChills solar-powered refrigerators have been installed in four health centers. They enable the storage of heat-sensitive medication, such as antibiotics and vaccines, even in regions without a reliable supply of electricity.

In May, two other health centers and two pharmacies received SolarChills. If the refrigerators prove to be efficient, the Ministry of Health would like to equip fifty other facilities with a SolarChill.



Kenya Solar Solutions enables entrepreneurial work

Kenya Solar Solutions (KSS) was founded as a social solar entrepreneur by graduates of the 2014 course and had its first success in 2015. At present, four solar technicians are working at KSS.

In general, there is a growing interest in solar plants in rural areas. However, financing remains difficult because of the high purchasing costs for poor people. KSS therefore wants to work with banks and micro-credit institutions to pre-finance the installations.

As demand increases, however, competition with other companies is also increasing, especially with those offering mass production products from China and India. The KSS therefore wants to strengthen its position as a quality supplier of solar panels, from installation to maintenance and repair.

KSS offers innovative business models

In order to enable graduates to set up their own small company, an innovative business model was developed. It consists of a mother company, KSS, and small businesses, which

are affiliated through a franchising system. The mother company carries out tasks such as material imports and certain administrative work like the procurement of working licenses. The new solar technicians can now create companies and become franchisees by joining the KSS network. As a result, they are largely operational. By paying a small part of their turnover to the KSS, they receive administrative, technical and legal assistance. Both KSS and micro-enterprises can operate independently.

Scientific accompaniment by the ETH Zurich

This model of the promotion of solar energy by social entrepreneurship has met the interest of the ETH research group Technology and Innovation Management (TIM). Since April 2014, training has been accompanied by a TIM team. In a preliminary study, the impact of the project was investigated qualitatively. The study was so rich that it would be extended to the next two years.

Outlook for 2016

For February 2016, a new course is planned for nine solar technicians. The skilled trades people with their solid knowledge in solar engineering will in the future be a key element for the establishment of market structures. The franchising business model is tested with the graduates. The implementation of the business model is scientifically supported for 18 months with the ETH Zurich impact study.





Projects in Cameroon

In 2015 the Climate Caravan set itself the aim to improve three aspects of living conditions of three Cameroonian villages, with the use of solar energy. Firstly, to enable students to regularly study in their village school, secondly to improve health care and thirdly to improve the economic situation of households (including reducing the use of kerosene).

2015 started on a new foot, seeing as by the end of 2014, Greenpeace had fully withdrawn from the project. Since then, Solafrica has been working with local partner organizations. The beginning of 2015 therefore included a lot of negotiations regarding budget, planning and cooperation.

Solar power for schools

The installation of solar power, in primary schools in the rainforest area of the Congo Basin, ensures electricity supply and enables teaching on a regular basis. Three schools in East and Central Cameroon were selected for the project „Solar Energy for Schools“.

The Climate Caravan thus also implements the UN development goal for up to date primary school education in rural areas. The solarization of schools not only brings light to the schoolroom, but the access to electricity also allows children to learn how to work with computers.

At the end of December the installations in the villages of Bédoumo and Ngola Bantou were completed. The on-site program included a four-day solar technician training session, for eight young people appointed by the village community. A solar expert with international experience supervised the installations and training. The teaching staff also received training in the use of the solar installation, for which they showed great interest.

The installation of solar panels in the third school, in Mengang, was completed in February 2016.

Improved health conditions through solar-powered refrigerators

Yellow fever, typhus and measles are still widespread in Cameroon's rain forest, diseases that can be prevented with vaccinations or treated with antibiotics. In order to store these drugs and vaccines, refrigerators are indispensable. However, they cannot be operated without electricity or run on candle or petroleum light at night. Therefore, the health centers in Assok and Nomedjoh in the east of Cameroon were equipped with solar panels and „SolarChills“ were installed. These solar-powered refrigerators operate without batteries and were developed in a partnership between UNICEF, WHO and Greenpeace. After having already installed these systems in Kenya as early as 2012, Solafrica, installed these two additional systems in Cameroon through the Climate Caravan project.



Solar energy for households



In 2015, 65 households in the villages of Efulan and Nkologook in eastern Cameroon were equipped with small solar energy systems designed for homes. These can each generate enough electricity to install a light source in three rooms. At the same time, eight residents were trained in the maintenance and repair of the installations. Each household contributed 35% of the cost.

Due to financial constraints, the installations in the third village in Central Cameroon had to be postponed until 2016. The team used the time to prepare the agreements with the mayor and the villagers. At the beginning of 2016, the installations and the training of four local solar technicians were successfully implemented. 14 households in the village of Nkolseng now have access to solar energy.



Solar Square - energy around the corner

A major hurdle for the spread of solar energy is the price. Although solar energy for households without a connection to electricity is demonstrably cheaper than oil lamps, the high upfront purchase price can often not be afforded. In order to overcome this hurdle, Solafrica launched the Solar Square - Energy around the corner project in 2014, and developed an extremely innovative leasing and distribution system for the OOLUX mobile solar unit.

Computers and smart phones release solar power

The owners of selected small village stores receive a smart phone as well as a small stock of OOLUX devices. They offer these to the residents with a lease by programming the devices using a smart phone application. The solar devices are thus only activated for the prepaid period - and they switch off automatically when the lease period expires.

Since the sellers in the country have little capital, the OOLUX equipment is pre-financed by the local solar company African Solar Generation (ASG). The vendors from the villages then repay ASG with the income generated through the leases. In order for ASG to easily control payments, Solafrica has developed a web portal. This portal communicates with the application on the smart phone and thus knows the sellers' business activities. Solafrica and ASG are able to accompany the vendors and assist them in their business.

First field tests

Between May and July 2015, the first prototype of this ICT system, consisting of the OOLUX smartphone application and the web portal, was developed in cooperation with partners in Switzerland.

Since September 2015 the system has been tested in a field trial in Cameroon. A total of six vendors and technicians in rural Cameroon were equipped with smartphones and the application. They were also supplied with OOLUX equipment, which has been offered for leasing since October 2015.

The partners on site as well as in Switzerland are provided with the web portal, a control instrument that records the weekly sales activities. By the end of February 2016 more than seventy devices had been leased, which gave more than a hundred people access to light and electricity for their phones. The salesmen for their part improved their

income because they receive a commission for each transaction. The first pilot was successful. The further success of the project depends on the technical development and the functioning of the business model. The risk of human error is greater than technical failure. The project will work if all parties agree to their duties. In particular, final consumers must comply with their obligations and pay for the OOLUX device. The sellers, in turn, have to transfer the money to the local partner. The system can, however, detect payment defaults at an early stage. Appropriate measures can then be taken.



Further Activities



Solarvignette

Thanks to improved marketing and a revised web presence, the sales of the Solarvignette as well as the SolarSchoggi increased slightly.

In 2015 a total of 39'865 kWh of solar electricity were sold via the Solarvignette. Together with SolarSchoggi, the Solarvignette generated total sales of CHF 65'278 in 2015, a good 10% more than in the previous year.

The increase in sales is particularly pleasing because in the course of 2015, the decision was taken to discontinue the sale of the Solarvignette. The past has shown that the sale of the Solarvignette overcame sales conducted by the school children. Instead, classes can now sell solar-dried star fruit and hibiscus tea for Solafrica. In addition to the costs of operating the solar panels, the purchase of additional solar power and the distribution of the vignette, about half of the solar energy yield was available for our projects.

Solar Learning

With the Solar Learning Initiative, Solafrica created an attractive opportunity for companies to promote solar energy and vocational training, in line with the Swiss model, at the end of 2015. It is aimed at Swiss companies who would like to show their customers and employees their dedication to solar education in Africa. Depending on the contribution, they are provided with simpler or more comprehensive communication material. At the end of February 2016, five companies as well as the industry association Swissolar were involved in the campaign. www.solarlearning.ch

School sales of dry fruits and hibiscus tea

After finding out through a series of discussions with teachers, that the Solarvignette was too complicated for the school children, the school sales of Solafrica were overhauled last year. Classes of all age can now sell solar-dried star fruits and hibiscus tea. In the second half of the year, 23 classes had already participated.

The other CO₂ compensation

In 2015 private individuals and companies compensated 230 tonnes of CO₂ with Solafrica. This resulted in proceeds of CHF 6'253. CO₂ compensation is a source of income with great potential. It is particularly pleasing that now three companies value Solafrica's approach and regularly compensate for their CO₂ emissions.

SOLidarity club and donations

About 160 people supported Solafrica with individual donations totaling almost CHF 20,000.

Since 2012 we also offer the SOLidarity Club. Its members undertake to support Solafrica annually with at least CHF 250, not least to enable the necessary work in Switzerland. By the end of 2015, the club had 29 members.

Solafrica Internal

Focus on entrepreneurship

Last year, there was an intensive exchange between Solafrica and the members of the Management Board and partner organizations. The highlight was the workshop with participants from all groups in the fall, where a model for a CO₂-neutral development was presented. The solar energy is to be disseminated from a training center through social solar companies.

This model was the basis for the further development of training with an entrepreneurial focus. The solar training graduates should also be able to build and manage a small company of their own. In 2016 the model of a franchise system for solar companies will be tested.

Certification by Zewo

After the structures were adapted in 2014, Solafrica was awarded the Zewo certificate in spring 2015. This certification gives our donors the certainty that their support is applied correctly and that this is a serious and transparent organization.

Employees and Management Board

In 2015, nine people were working for Solafrica. At the end of 2015, the Management Board consisted of six people. The co-workers and the executive board jointly contributed additional unpaid work of around 3200 hours.

A current list of Solafrica employees and the Board of Directors can be found on the homepage www.solafrica.ch > about us.



Finances

Income statement

INCOME	2015	2014		2015	2014
Donations without specified purpose			Earnings before financial success and changes in the fund	32,985	2,938
Private individuals	28,295	25,938	Financial success	4	43
Institutions	11,000	14,938	Financial expenses	0	0
Total donations without specified project	39,295	40,876	Total financial result	4	43
Donations with specified purpose			Earnings before fund changes	32,989	2,981
Kenya	69,152	80,235	Fund changes		
Climate Caravan	106,817	80,240	Fund acquisitions	10,991	224,293
Solar Square	142,500	12,800	Fund allocations	-41,774	-217,282
Environmental education	61,331	44,007	Fund changes	-30,783	7,011
Greenpeace projects	28,040	0	Profit for the year after changes in the fund	2,206	9,992
Total donations with specified purpose	407,840	217,282	Allocation of organizational capital	-2,206	-9,992
Other income			Annual result after allocations	0	0
Solarvignette	65,278	60,032			
CO2 Compensation	6,253	5,974			
Income from services	0	10,000			
Income from school sales	6,370	0			
Various other income	11,557	0			
Total additional income	89,458	76,006			
Extraordinary result					
extraordinary income	15,000	693			
Extraordinary expenses	-19,401	5,151			
Total extraordinary result	-4,401	-4,458			
TOTAL INCOME	532,192	329,749			
EXPENDITURE	2015	2014			
Direct project expenditure					
Kenya	54,119	78,313			
Climate Caravan	82,825	90,494			
Solar Square	115,612	12,477			
Environmental Education	65,062	43,009			
Greenpeace Projects	28,006				
Solarvignette	12,955	10,000			
Total direct project expenditure	358,579	224,293			
Procurement expenditure					
CO2 compensation	950	1,850			
School sales of dry fruits	1,783				
Personnel costs	44,495	21,925			
Solarvignette	12,955	12,349			
Mandate Funding	0	9,600			
Total procurement expenditure	60,183	45,724			
Other administrative expenses					
Advertising and communication	7,737	2,480			
Office	20,167	12,782			
Depreciation	8,921	4,760			
Personal administration	43,620	26,729			
Total other administrative expenses	80,445	46,751			
TOTAL EXPENDITURE	499,208	326,768			



Balance Sheet Solafrica

As of 31.12.2015

ACTIVITIES	2015	2014
Current assets		
Cash register	921	206
Postfinance	29,882	12,878
Debtors	10,000	5,000
Stock of materials	9,070	16,256
Transitory Assets	17,056	8,542
Total of current assets	66,929	42,882
Investment		
Machines + Tools	0	0
IT	500	2,100
Total investment	500	2,100
Total Aktiven	67,429	44,982
PASSIVEN		
Short-term borrowed capital		
Creditors	4,366	0
Transient Passives	14,091	15,000
Total short-term leverage	18,456	15,000
Long-term liabilities		
Loan		
Total long-term leverage	3,500	18,500
Fund capital		
Kenya Fund	9,471	3,922
Cameroon Project	16,066	4,746
Solar Square Fund	9,976	323
Environmental Education Fund	6,261	998
Total fund capital	41,774	9,989
Organizational Capital	3,699	1,493
Total Passives	67,429	44,982

Comments

With revenue of more than half a million, Solafrica continues its healthy growth. This is mainly due to the growing number of institutional donors who support our projects, but private donations and the income from the Solarvignette have also risen slightly. In the reporting year, we were also able to build two additional financing options with the school sales of solar-dried fruit and tea as well as the Solar Learning initiative, in order to have even broader and better supported financing in the future.

Project expenditure rose at the same rate as revenue. This allows us to expand and professionalize our projects.

Solafrica was able to end the year with a small positive result and allocate the profit to the free organizational capital. Organizational capital is still small, but we managed to somewhat increase the budgeted funds for the projects, thereby increasing planning certainty.

Overall, Solafrica's financial resources are still tight, but they are growing slowly and steadily in all areas.

Swiss GAAP FER 21 conducted a review of the auditors.

The auditors are:

Nathalie Zimmermann, Muri near Bern
Tanja Leisi, Kappelen, Bern

The complete and revised annual report including the auditor's report can be ordered from Solafrica (info@solafrica.ch).

Thank you

In addition to the numerous private donors, the following institutions financially supported us in 2015:

Accordeos Stiftung

Anne Frank Fonds

Care for Climate

Carl und Elise Elsener Gut Stiftung

Dorothea&Paul Schwob Stiftung

EKOenergy

Fondation de bienfaisance Jeanne Lovioz

Fontes Stiftung

Gemeinde Erlenbach

Gottfried&Ursula Schächli-Jecklin Stiftung

Greenpeace Jugendsolar

Greenpeace Schweiz

Hildegard und Hans Schaefer Stiftung

Innovation for Climate

Kanton Basel-Landschaft

Kirchgemeinde Gsteig-Interlaken

Legaire

Margarethe und Rudolf Gsell-Stiftung

Maya Behn-Eschenburg Stiftung

Pfadi Folk Festival

REPIC

République et canton de Genève

S. Eustachius Stiftung

Solarspar

Stiftung Abantu

Stiftung Aurea Borealis

Stiftung Dreiklang

Stiftung Fons Margarita

Stadt Rapperswil-Jona

SwissRe

Umweltstiftung Greenpeace

Companies supporting the Solar Learning initiative

Camille Bauer Metrawatt AG

Biketec AG

Eco2friendly

Solarmarkt

Standout

Thank you very much for the support!



Elisabeth Esoa Gaele

Teacher in the remote village of Bedoumo, Cameroon

«Thanks to the electric light, we teachers can prepare for our lessons in the evenings. The children are also given the opportunity to get to know computers and the Internet.»



Lazarus Otieno

Participant of vocational training, Kenya

«I've learned a lot during the past few weeks, in company management and how we can get together to achieve something. But the most beautiful thing was to see what solar energy in our village did.»



Marie Louise Ycossié

Scouts Go Solar Ambassador, Ivory Coast

«The best thing is that you can do really useful and practical things. I had a lot of fun with the construction of the solar flashlight and the solar car. I think this is a real opportunity for Africa, where there is a lot of sunshine every day!»

- Edition: 1'000
- Print: print form, CO2-neutral printed on 100% recycled paper
- Layout: Rahel Inauen / studioapero.ch
- Pictures: Solafrica Archive
- Editorial office: Daniel Marthaler / www.damarcom.ch

Donation Account: PC-60-463747-1
IBAN: CH89 0900 0000 6046 3747 1

Solafrica · Bollwerk 35, 3011 Bern, Schweiz | Tel. +41 31 312 83 31 | info@Solafrica.ch | www.solafrica.ch

