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Figure 1: The future SGS Ambassadors at the training in Bolivia, trying out the solar experiments they have built by themselves

In the year 2023, there have been several different highlights within the project Scouts go Solar. Among them the SGS stand at the international World Scout Jamboree in South Korea, the first Regional Scouts Go Solar Training in Kenya in March and the second one in Bolivia, in November. But also many, many other events and solar activities all over the world. We can only give an overview, knowing that there are many more. Apart from that, we would also like to separately mention the activities of the SGS Ambassadors trained at the International Scout Centre in Kandersteg (Switzerland) in 2022. As their final meeting, where they presented the progress of their projects, took place in 2023, it is now that we can show the great work they have done. Nevertheless, this Newsletter is not only about SGS Ambassadors but also about showing the amazing solar activities that other scouts do all over the world. Thank you very, very much for your work!

FUTURE EVENTS

Beginning of May 2024

dors.

Regional Scouts Go Solar training in Thailand: The third regional training for Scouts Go Solar Ambassadors will take place in Thailand. There, scout leaders from different countries of the Asia-Pacific region will be trained to become SGS Ambassa-

18th – 20th of October 2024 67th edition of JOTA / JOTI Scouts Go Solar will be part of this worldwide Scout Jamboree on the Air / on the Internet.



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SOLAR PROJECTS OF THE SCOUTS GO Solar Ambassadors trained in 2022 in Kandersteg, Switzerland

Greece: Only a few weeks after finishing the on-site solar training in Switzerland, Athina Tsekoura, the new SGS Ambassador for Greece, went to the Explorers Jamboree in Roumeli, close to Athens. In almost no time she had gathered workshop material, planned activities and trained her colleagues from the Environmental Group. During the four-day camp, they did 40 workshops for about 800 explorers and 350 adult leaders. One of these activities was about "How can we be independent of electrical energy during our explorations in nature?", a question that becomes increasingly important, as many people rely on a variety of electronic gadgets. Due to the rapidly changing weather, the team had to be very flexible. They made use of the sunrays as soon as the clouds opened up a little, or switched to "rainy day"-activities if they did not. Nevertheless, the explorers and the adult leaders had a lot of fun. During a later Earth Tribe activity, many explorers approached the SGS stand and shared their enthusiastic memories of last summer's workshops at the Jamboree.



Figure 2: Trying out the experiment "Colours of the sun" with aluminium cans of different colours instead of plastic bottles. Also, this material works perfectly well to show the temperature difference of the water inside

Singapore: During the training at KISC, Raynold Tan, the new SGS Ambassador from Singapore, mentioned several times that it's quite hard for scout groups in his country to get the material to do solar experiments. Therefore, one part of his project was about putting together small and compact suitcases with all the necessary tools, such as mirrors, lenses, thermometers, solar lamps, portable solar cookers etc. for scout groups to borrow. On top of this, he organised solar workshops

and updated the SGS Singapore website, based on the three steps "Know solar" (be aware) – "Go solar" (cooperate) – "Show solar" (act).



Figure 3: The compact suitcase with materials for a solar workshop

Costa Rica: Jenifer Guillén Rivera from Costa Rica took a different approach, working directly on a national level. First, she developed a programme guideline about how to implement the four Earth Tribe Challenges (among them Scouts Go Solar) in her country. Once this was completed and got green light, she built up and trained a team of representatives from her National Scout Organisation (NSO) and scout leaders. After a first pilot workshop, Jenifer and her team were able to adapt the contents even better to the circumstances and the needs of the local scouts. By training young scouts and adult leaders from different scout groups from all over the country, she laid the foundation for a wide distribution of Scouts Go Solar and its activities. Since then, several of the participating scout groups have started implementing their own Solar Rallies and community talks about renewable energies.



Figure 4: Building solar ovens from pizza boxes as one of the activities of the Earth Tribe Workshop in Costa Rica



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Bolivia: In mid-June of 2023, Germán Rocha Rodríguez, the new SGS Ambassador for Bolivia, and his team organised the first national course on Scouts Go Solar and renewable energies. This event was part of a larger project called "Renewable Energy Education Centre for the Scouts of Bolivia". Representatives from more than 35 groups from all over the country participated. Apart from the course, the team is planning to install solar lights in the school field where the scout group meets, and later on other solar implements (like for example solar cookers, solar water pumps or hot water collectors).



Figure 5: Using a kit that allows different options, the participants of the training assembled their very own solar vehicles

Portugal: For the two new SGS Ambassadors from Portugal, Daniela Casimiro and David Paulos, there wasn't much time left after they returned from Kandersteg until their National Jamboree started. Together with a team and partners, they offered five days of Scouts Go Solar workshops, focussing mainly on solar cooking. More than 1,500 scouts per day passed by their stand, saw different models of solar cookers in action and tried out some experiments. The Jamboree was only the beginning of their project. In December 2022, they took profit of the yearly meeting of the Environment and Sustainability Delegates of their National Scout Association to offer a workshop about Earth Tribe and SGS, including theory inputs, the opportunity to build solar cookers and to visit the solar gadgets fair. For this, they worked together with José Santos, a SGS Ambassador that has been trained in 2020/21. As a next step, Daniela and David, together with a local partner, translated, updated and adapted the education materials (handbook, workbook, etc.) to a more national perspective. On top of all this, they worked a lot on communication and dissemination, writing posts for social media, elaborating a poster and a flyer about Earth Tribe, doing short videos about the different Challenges, etc.



Figure 6: Different types of solar cookers at the Portuguese National Jamboree

Guatemala: Training scouts and scout leaders as promoters of change and disseminators of the Scouts go Solar program was the main goal of Héctor Rodas Garzona's solar project. For this, he implemented a series of five modules for a total of 45 scouts and scout leaders, representing several of the scout groups of the Quetzaltenango region, in the South-Western part of Guatemala. The first module contained rather general information about the project and renewable energies, whereas of the following three, each one was dedicated to an age group (cubs, scouts, rovers). The last module was reserved for presenting the projects that the participants had implemented to receive the Scouts go Solar merit badge, and for answering questions that arose during the process. Even if the participation in some of the modules was quite limited, it turned out to be a nice experience with interesting projects.



Figure 7: Scouts of different ages make the power of the sun visible with the Solar Art experiment



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Mexico: In Mexico, the new SGS Ambassador Alexis Ramírez Cruz has implemented a whole list of different activities for all age groups, mainly in the state of Zacatecas, but also nationwide. In Aguascalientes, Alexis and his team implemented an "Earth Tribe Rover Rally", including a competition with solar art. At the Scout Art Meetings in Queretaro and Zacatecas, but also the youth forums, several hundreds of scouts of all age groups were able to participate in a solar roadshow and learn more about the power of the sun. Not only the young scouts but also the rovers and adults had a chance to get to know the project and its activities, for example through online courses, Better World Update Workshops and Wood Badge courses. In the four years that Mexico has been implementing Scouts Go Solar, more than 600 scouts have received the Scouts Go Solar badge already, with many more to come.



Figure 8: Young scouts presenting the project and its activities at a traditional Mexican "Creative Expression and Scout Art Meeting" in Queretaro

Honduras: Laura Cárcamo Ferrera from Honduras based her project on the wider approach of "train the trainers". Instead of training a small team of adult scout leaders who would afterwards do solar workshops, she trained the oldest participants of her scout group. Once they had the necessary background knowledge and some experience with the experiments, she helped them to develop a solar activity for the cub scouts of the same group. As a nice opportunity to assume responsibility, the rovers were put in charge of implementing solar activities for the cub scouts, including solar experiments and games. And, of course, answering the sometimes unexpected questions from the cubs.



Figure 9: Learning by doing: The cubs find out that the water from the black bottle feels much warmer than the one from the white. Why?

January I. SCOUTS GO SOLAR GOES TO UNIVERSITY IN MALAYSIA

In January, the Solar Ambassador Dr. Mustaffa Ibrahim from Malaysia started his yearly programme of solar activities with a group of rovers at the Tun Hussein Onn University of Malaysia. After the introductory exercise of building sunglasses, they focussed on more technical tasks like soldering solar lamps and assembling their solar cars. By doing this, they also learnt how to use a multimeter and how to read an electrical scheme. Nevertheless, the age of the participants is not an issue when it comes to having fun with a solar car race.



Figure 10: Rover scouts in a university classroom in Malaysia, assembling their solar cars



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February

2. "OUR SUN IS OUR TREASURE" PRO-Gramme in Libya

In the Darna region, in the north-eastern part of Libya, the scout group Al-Matadumel started working on the different initiatives within the Better World Framework. The first step was a two-month programme about SGS, with the title "Our sun is our treasure". The introductory session was complemented with practical trainings, site visits and project work, to obtain the Scouts Go Solar badge. The sessions were dedicated to a general introduction to the different types of renewable energies, the importance and advantages of solar energy, as well as the practical uses of all this in everyday life. These activities were realized in cooperation with the Department for Renewable Energy and the training centre of the local university.



Figure 11: Libyan scouts getting ready for the introductory session about Scouts Go Solar

March

3. SGS WORKSHOP FOR CUB SCOUTS IN MEXICO

The cub scouts of the groups 145 Nahui Ollin Teotl and 9 Yggdrassil of Mexico City had the chance to join a Scouts Go Solar workshop on the 11th of March. One of their scout leaders had heard about the SGS Challenge and – based on the manual – started implementing a first workshop for the cub scouts. In a playful way, the kids learnt more about the benefits and the power of the sun, the risks and the safety measures that need to be taken when working with this kind of energy. They also learnt about new ways of taking profit from this infinite resource. Light concentration with lenses, evaporation of water from plants and melting chocolate in a solar oven were part of the activities they tried out during the solar rally. They even had a short demonstration of how to react in case of a heat stroke, and a short talk about the greenhouse effect.



Figure 12: Making visible the evaporation of water from leaves that are exposed to the sunlight

4. SGS AT THE ANNIVERSARY OF THE SCOUTS OF MADAGASCAR

This year, the Antilin'i Madagasikara (Catholic Scouts of Madagascar) celebrate their 100th anniversary. As part of these festivities, from the 23rd to 25th of March, an exhibition of different scout initiatives and activities took place in the capital Antananarivo. On-site was Amboara Rabe-Harinoro, the new SGS Ambassador for Madagascar, who had just come back from the SGS Regional Training in Kenya. In almost no time she gathered and trained her team, built up several experiments and hosted the SGS stand, where the visiting scouts and non-scouts could learn more about solar energy and how to use it, build their sunglasses, try out the solar beep and a Copenhagen cooker as well as the solar fountain. Over the three days of the exhibition, about 500 people visited the stand and got an idea of solar energy and the scouts' engagement in climate protection and the achievement of the SDGs.



Figure 13: Amboara giving an interview at the scout exhibition for the 100th anniversary of the Catholic Scouts of Madagascar



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5. SOLAR EARTH HOUR IN IVORY COAST

Every year, on the last Saturday of March, people all over the world turn off the lights for one hour. Clavaire Arnold, the new SGS Ambassador for Ivory Coast, used the day of this year's Earth Hour celebration for an SGS workshop, to show the importance of using renewable energies. After some background information, the participants were able to have a look at and try out several solar gadgets, but also to discuss how renewable energies can be used in everyday life. As Earth Hour got closer, they visited the people living in the neighbourhood, asking them to join Earth Hour and turn off their lights, and at the same time also giving them an insight into the importance of switching to renewable energies.



Figure 14: Clavaire Arnold explaining how a solar panel works

6. FIRST SGS REGIONAL TRAINING IN KENYA

Until 2022, the Solar Ambassador trainings used to take place in Kandersteg, Switzerland. Starting this year, these international formations are decentralised and will be rotating through the different world regions. The first of this Regional SGS trainings took place from the 6th to 11th of March in Nairobi, Kenya, and gathered 18 scout leaders from 16 different countries: Benin, Burundi, Cameroon, Chad, Eswatini, France, Ivory Coast, Kenya, Madagascar, Namibia, Niger, Seychelles, South Africa, Tanzania, Uganda and Zambia. After two days of online training, the group met in Nairobi for the on-site training. They treated many different topics, including the technical background of solar energy, how to pass it on to people of different ages, the mechanisms within the WOSM structures that can support the implementation of this programme, and many other areas. Several units were also dedicated to advocacy and

communication, as this is a very important step for inspiring others and making visible the actions. During the training, all participants developed a solar project proposal that they will implement in their countries. The project plans range from organising SGS workshops and solar camps, installing solar panels in schools, to developing a solar-powered mosquito trap.



Figure 15: The training is not only about knowing in theory how the experiments are done, but also about experiencing them in practice

The end of the training matched perfectly with the Africa Scouts Day, meaning that the team of trainers and future Solar Ambassadors were able to represent their countries at the big scout parade and participate in the festivities of this day. As part of the ceremony, the future Solar Ambassadors officially received their SGS scout scarves. In the afternoon, they tested in practice how it feels to do a solar roadshow, presenting various experiments and activities to the different scout groups that were gathering at the Rowallan scout campsite in Nairobi.



Figure 16: The future SGS Ambassadors received their scout scarf on stage as part of the celebration of the Africa Scouts Day



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7. SGS CAMP FOR UNIVERSITY SCOUTS IN MALAYSIA

From the 3rd to 5th of March, the Kumpulan Latian Kelanasiswa Malaysia scout group, composed of students from private and public universities, organized their first Scouts Go Solar camp for the oldest group of participants. It took place at a university in Senggarang, Johor, in the south of Malaysia. The first part of the camp was dedicated to thematic sessions about the sun as a source of life, the impact of the sun on our health and the environment, the use of solar energy and the way to put all this into practice. In the second part, the scouts had the opportunity to try out a wide range of solar experiments, among them sundial, solar compass, an activity about the greenhouse effect, building solar chargers and solar fans.



Figure 17: Sunglasses and Copenhagen cookers were only two of the many solar activities that have been offered during this camp

April

8. PRESENTING SGS AT A HIGH-LEVEL Scout meeting in chad

On the 1st and 2nd of April, in Moundou, the southern part of Chad, a formal meeting of the National Scout Team and the Scout Council took place. Among the participants was the new Solar Ambassador Fred Mora, who presented the programme Scouts Go Solar. His objective was to make the national leaders understand the importance and benefits of the programme, but also its contents and activities, to have their support when it comes to implementing Scouts Go Solar in Chad.



Figure 18: Participants of the formal meeting having a look at some of the materials used for the implementation of Scouts Go Solar

9. BUILDING A HOT WATER COLLECTOR AS Collective effort at the rover moot In Kenya

After the end of the first regional SGS training in Nairobi, the Kenyan Solar Ambassadors were very busy, because almost exactly one month later, the 1st Africa Rover Moot took place in Kenya. Between the 15th and 25th of April, more than 2,500 young adults from over 40 countries gathered for this big event, where the participants were distributed among the scout campsites in Nairobi, Kaiyaba, Katoloni and Embu. While the very active Solar Ambassador Rhodah Ndegwa was doing SGS activities with the scouts staying at the Kaiyaba Scout Centre, the four new Solar Ambassadors Julius Wambugu, David Ng'iela, Abdallah Swaleh and Léo Batier hosted a big SGS stand at the main camp in Nairobi, where the participants could try out fun activities like solar beep and grasshopper race, but also become part of the collective effort of building a solar water collector. With cardboard, aluminium foil and plastic tubes, each group built one element of the collector, which afterwards was implemented in the whole construction. With the passing of the days, the collector grew bigger and bigger and made more and more visible that sunlight can be a good alternative to fossil fuels when it comes to producing hot water.



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Figure 19: The collective hot water collector, growing every day with the new elements built by the scout groups

IO. ONLINE INDUCTION ABOUT SGS FOR SCOUTS OF SENEGAL

April was a busy month for the new SGS Ambassador Frederic Mora. After presenting SGS at a high-level scout conference in Chad, he was invited two weeks later to speak via video call at a training for the Scouts of Senegal. As part of this formation about the Youth Programme and Partnerships, which took place in M'bour in the Western part of Senegal, he presented the contents and methods of the Scouts go Solar project to a group of about 60 scouts from different parts of Senegal. They are now working on the implementation of SGS within their National Scout Organisation.



Figure 20: International exchange of experiences. By video call, the SGS Ambassador Frederic Mora briefed the participants of a scout training in Senegal

II. SGS TRAINING IN SWITZERLAND

After it's kick-off at the National Jamboree last year, Scouts Go Solar Switzerland offered a first training for Swiss scout leaders from the 21st to 23rd of April. The cloudy sky made it sometimes difficult to try out the "sunshine" experiments, but there were enough "rainy day" alternatives to try out, theoretical background to talk about and solar constructions to build. On the last day, the sun was getting stronger and made it possible to have a competition between the solar cars that had been built with a lot of enthusiasm and technical customizations the day before. One of the activities to highlight was a simulation of a political debate on a local level, the so-called "tribunal game". Everyone got a role to play, and in this role, debated about how the energy needs of a small village should be covered in the future. The owner of the local gas station, the conservative politician, the climate activist and the representative of the local power plant were some of the characters involved in this debate, whereas the journalist was asking uncomfortable questions and presenting the occurrences from his point of view.



Figure 21: Building solar cars and playing Laser Pinball as "rainy day" alternatives at the training in Switzerland

12. SOLAR LAMPS TO LIGHT UP CAMPSITES In Eswatini

From the 28th to 30th of April, Khanyisisizwe Dlamini, the new Solar Ambassador for the Kingdom of Eswatini, organized a training for scout leaders from the four regions of the country. Together with the 32 participants, he focussed on the different problems that scout camps are facing because of the lack of light. As there is normally no electricity on the campsite and batteries are very expensive, they proposed solar lamps as a possible



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solution. With the help of the Solar Ambassador, they identified the different components of the lamp and learnt how to connect them correctly to the mainboard, by building a solar lamp themselves. To finish the training, the group also discussed about the ways solar energy can help reducing the high electricity bills – not only in scout camps, but also in everyday life.



Figure 22: Scout leaders from the different parts of Eswatini being trained about SGS, learning how solar energy can help reducing the high cost for electricity

13. SOLAR SAUSAGE GRILLS FOR CUB Scouts in Malaysia

At the school SJKC Naam Kheong in Kuala Lumpur, Malaysia, there was a holiday camp from the 28th to 30th of April, where 30 cub scouts and 50 non-scouts had the opportunity to learn more about solar energy. Headed by the Solar Ambassador Teh Chee Giap, the participants their own sunglasses, produced art with magnifying glasses, experienced the influence of a coloured surface on absorption and reflection of heat and built a huge amount of solar sausage cookers made from potato chips recipients.



Figure 23: Nobody is too young to build his/her own solar cooker: Cub scouts in Malaysia turning potato chips recipients into solar sausage grills

14. SOLAR TOUR THROUGH NAMIBIA

After coming back from the SGS training in Nairobi, the new Solar Ambassador Emilazer Michael did a whole solar tour through his country, Namibia. Participating at several youth forums, he did advocacy for the Scouts Go Solar programme in the Omuye, Terminalia, Makalani and Combretum region. To complete the first phase of his tour, he did a workshop at the National Youth Forum, where young people from all over Namibia came together. His intention was to inform young people about renewable energies and to encourage them to use this kind of power in their everyday life, to change their local habitats in a positive way.



Figure 24: Participants of a youth forum in Namibia receiving inputs about renewable energies

May

15. SOLAR SCOUT AT AN INTERNATIONAL Fair in Ivory Coast

On the 12th and 13th of May, the International Fair for Ecological Transition and Climate Change (JFAC) took place in Abidjan, Ivory Coast. The topic of this year's edition was "Ecological Innovations and Green Job Opportunities for Youth". A great chance for the new SGS Ambassador Clavaire Arnold to host a stand about SGS and explain to the participants of this international event what the role of this project in fostering renewable energies and creating sustainable perspectives for young people is. He focussed mainly on the different uses of solar energy, like solar cooking, generation of electricity by photovoltaics, but also on completely independent production and storage of power with a solar suitcase, for example in remote areas. Within the same dynamic of the Fair, Clavaire was then invited to the regional



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camp of the Green Branch of the Methodist Scouts from the Abobo Region, where he adapted his methodology and told the kids about solar energy by using games, letting them build sunglasses and assemble a solar cooker. As this shows, Scouts Go Solar can be adapted to a lot of different age groups and contexts.



Figure 25: Clavaire Arnold explaining the importance of solar energy to a group of participants at an international fair in Ivory Coast

16. SOLAR HOLIDAY CAMP WITH MEDIA Presence in the seychelles

Taking the opportunity of the May holidays, the new SGS Ambassador for the Seychelles, Emma Dodin, organised a holiday camp about renewable energies in general and solar energy in particular. To give the participants an idea of what energy is and how it is produced in their local context, the first activity was a guided tour at the public utilities power station. After this, the kids, youth and adults participating at the camp built several solar constructions, like sundials and different models of solar cookers. In the energy card game, they found out how much electricity they consume at their homes and how this amount can be reduced. One of the highlights was definitely the creative part of the camp, where they created posters, wrote solar poems and even composed a solar rap. This holiday camp created a lot of interest in the Seychelles: A national newspaper printed a onepage article about the camp and a team of the national TV channel Seychelles Broadcasting Corporation came to visit and did an interview with Emma.



Figure 26: Visiting the local power plant with the group from the holiday camp, and giving an interview to the TV crew about the solar project

17. SGS INTRODUCTION WORKSHOP AT A SCHOOL IN CAMEROON

The new SGS Ambassador for Cameroon, Cathy Nyake, organised an SGS introductory workshop for the scouts of her school. They already had some background knowledge about electrical circuits, volt and ampere. That's why Cathy gave them the task to measure the voltage and current of a solar panel, of batteries connected in series and in parallel, and to reflect about the differences.



Figure 27: How does the voltage and power change if you connect batteries in series or in parallel? A group of scouts in Cameroon is trying it out in practice

18. INTRODUCTION TO THE SGS PRO-Gramme in Ivory Coast

Only a few weeks after his participation at an international fair in Abidjan, Clavaire Arnold did an introduction workshop for a group of more than 50 scouts. To make his talk even more interesting and easier to understand, he showed in practice how the sun's energy can be used – letting the scouts assemble a Copenhagen solar cooker and a solar suitcase. There was also room for debate and reflection about the importance of solar energy, especially when facing the consequences of global



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warming. As Clavaire mentions: "Using solar power today means we are preparing a bright future for the next generation."



Figure 28: Assembling a Copenhagen solar cooker as part of the learning process

June

19. DEBATE ABOUT RENEWABLE ENERGIES IN BENIN

Scouts Go Solar is not only about games, experiments and fun with the sun, as the new SGS Ambassador in Benin, Jean Dotou Godonou, proved. On the 15th of June, he led the weekly debate session at the America Corner of Porto-Novo, the capital of Benin, on the question "Is solar energy a real replacement for fossil fuels?" People of all ages who participated in this discussion brought up very different arguments, engaging in a vivid debate about the topic. In the end, the group reached a consensus that there is an urgent need to save the planet and that using solar energy instead of fossil fuels is an important measure towards this goal.



Figure 29: Debating about the advantages and disadvantages of renewable energies and fossil fuels

20. INITIATIVE TO OPEN A NEW SCOUT Group in Kenya, and presentation of SGS

On the 23rd of June, the new Solar Ambassador Julius Wambogo was part of a scout delegation that visited the Christian Industrial Technical college in Thika, outside Nairobi, in central Kenya. Several of the students there are scouts already, but the college itself does not have its own scout group yet. Nevertheless, the school principals showed interest in creating a new scout group there, whereas Julius had the opportunity to present the Scouts Go Solar programme as possible dooropener.



Figure 30: Maybe the beginning of a new scout group in a technical college in Kenya? Julius presenting the Scouts Go Solar Challenge as possible door-opener

21. SOLAR ACTIVITIES AT THE INTER-Patrol competition in Siaya County, Kenya

In Kenya, things moved on fast after the SGS training in Nairobi in March and the big Rover Moot right after. In the first days of June, two of the new SGS Ambassadors in Kenya, Abdallah Swaleh and Léo Batier, worked together on the solar activities offered as part of the yearly inter-patrol scout competition in Siaya county, in the western part of Kenya. The participants learnt more about the programme Scouts Go Solar and had a lot of fun competing in solar experiments like grasshopper race and solar dart. With the bright sunlight that day,



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the thermometer within the dart board was getting really, really hot.



Figure 31: Who says that the grasshopper race is fun only for younger people? Trigger their competitive spirit and adults will be into it as much as kids

22. THINKING ABOUT SOLAR AT THE INTER-Patrol County Competition in Kilifi County, Kenya

More or less at the same time, in the east of Kenya, in Kilifi County, another Solar Ambassador, Rhodah Ndegwa, was offering solar activities to more than 400 scouts that participated in the inter-patrol county competition in this part of Kenya. Using another methodology, she gave them questions about solar topics to work on. For example "How does a solar panel work?", "Which components do you need to build a solar system, what are their functions and how do you connect them correctly?" and many more. Doing some research, drawing it on paper and presenting it made them understand much better how a solar system is built and how it works.



Figure 32: One of the groups presenting the way a solar system works, also including the concepts of direct and alternative current (DC and AC)

23. SEE THE POWER OF THE SUN AT A SCHOOL IN WESTLAND, KENYA

While three of the Solar Ambassadors for Kenya were busy with the inter-patrol competitions, the fourth one, Julius Wambugu, was implementing an SGS workshop at a scout meeting in the Westland sub-county. On the 1st of June, about 300 scouts gathered for this event, where one of the stations was dedicated to Scouts Go Solar. Trying out the solar beep and the grasshopper race was much fun, but what impressed them most was the solar fountain experiment. This activity makes visible the direct connection between the production of electricity by solar panels and the use of this power by the water pump. More sunlight = higher water fountain; less sunlight = it's getting smaller; no light = the pond remains quiet.



Figure 33: Making visible the electricity production of a solar panel by connecting it directly to a consumer, in this case a water fountain

July

24. LAMP SOLDERING AT THE NATIONAL JAMBOREE IN NORTH MACEDONIA

From the 12th to 21st of July, the scouts of North Macedonia were having their National Jamboree in the city of Krusevo, in the south-western part of the country. About 800 scouts from 16 different countries in Europe participated in this event, under the motto "Reach the Heights". A very special part of this camp was "a



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workshop that illuminated minds as well as the surroundings", as the Solar Ambassadors Igor Stanojkov said. He had trained two young scout leaders, who offered a workshop about lamp soldering and solar energy. Together with Igor, they had elaborated a manual about the different components of the solar lamp, with step-by-step instructions on how to build one, written in English and Macedonian. Complemented by creative lamp shades, the solar torches turned out to be very useful and started shining in the camp below the starry Krusevo sky.



Figure 34: Following the step-by-step instructions in the manual, two scouts assembled their own solar lamp during the National Jamboree in North Macedonia

25. SOLAR AMBASSADOR AT A REGIONAL YOUTH FORUM IN BURUNDI

In July, there was the 9th Youth Forum of the region of Bujumbura, in the mid-west of Burundi. At this event, the new Solar Ambassador Fred Ishimwe did a sensitization workshop on the importance of using solar energy. First, together with the group, he collected the different advantages and risks of sunlight. On one side, there were keywords like light, photosynthesis and the water cycle, on the other side drought, famine and bushfires. In the end, the group agreed that the advantages of the sunlight are superior to the risks and that the latter will increase if we don't take measures against the climate change that we are facing worldwide.



Figure 35: Collecting benefits we get from the sun, but also the risks that are linked to the excess or lack of sunlight

26. SGS AT THE 100th anniversary of the kandersteg international scout centre in switzerland

It was 100 years ago, in 1923, when Lord Baden Powell founded the first "permanent mini-Jamboree" in Kandersteg (Switzerland). Throughout the year, special events and celebrations took place in commemoration of this anniversary, with one of the highlights definitely being the "Kander 100": A ten-day Jamboree from the 27th of July to 8th of August, counting with the participation of almost 1600 scouts from 62 countries. Apart from hiking, climbing and lots of other activities, there was the Global Goals Exhibition tent, dealing with topics of sustainability and how to put it into practice in everyday life. One of the stands in this tent was dedicated to Scouts Go Solar, where a team from Solafrica presented solar experiments for all age groups: Assembling a solar system with a panel, a battery and a charge controller for powering a fan; playing pinball with a laser pointer; using glass fibres to send "Solar Mario" to collect fruits that are hanging in the trees; or playing dart with sun rays. The sun can be a lot of fun, even if it's cloudy.



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Figure 36: Assembling a solar system and guiding "Solar Mario" on a treasure hunt: Scouts from different countries having fun with the sun at the KISC Jamboree and learning, in a playful way, a lot about solar energy

27. LET THE SUN SHINE AT THE MOSAIC CAMP IN BENIN

Between the 24th and 30th of July, more than 700 scouts from all over Benin came together in Ouidah, in the far south of the country, to be part of the so-called "Mosaic Camp". This year's slogan, "Our time, our challenges", was a perfect link for the new Solar Ambassador Jean Dotou Godonou to offer different activities regarding renewable energies and solar energy, showing that sustainable energy production is one of the big challenges of the present. It was amazing to see that the experiment with the solar fountain inspired pupils and students of different fields (among them agronomy, industrial mechanics and electronics) to dig deeper into the topic of solar-powered watering systems for agriculture and to decide to build a first prototype.



Figure 37: The concept of the solar fountain could be used for watering systems in agriculture, powered by the sun

28. REGIONAL SCOUT CAMP IN BRAZIL WITH SOLAR COOKERS AND MORE

From the 20th to 23rd of July, in the state of Goiás, in the mid-western part of Brazil, a Regional Scout Camp took place, where about 300 scouts from all over the state participated. Several of the activities were dedicated to Scouts Go Solar, led by the Solar Ambassador Eduardo Lima and his team. This included the grasshopper race, the use of solar cookers in the field activities of the scout groups and the operation of a very special sundial. The idea of using the position of the sun to indicate time has been perfected by the Brazilian scouts in a way that it now works like a digital clock, indicating the time not with the shadow of a stick, but with digital numbers.



Figure 38: A mixture of interest and scepticism as the young scouts have a look at the parabolic solar cooker. How could it be possible to cook food with no gas, firewood or electricity, only with sunlight?

August 29. WORLD SCOUT JAMBOREE IN SOUTH KOREA

One of the big highlights of this year, that many scouts worldwide have been waiting for, was the 25th World Scout Jamboree in Saemangeum, South Korea. Taking place from the 1st to 12th of August with the theme "Draw your dream", it brought together about 43,000 scouts from more than 150 countries. In one spot of the almost 9 square kilometre area of the Jamboree, the Ban Ki Moon village offered different activities about the Sustainable Development Goals. Among them "affordable and clean energy" and "climate action", covered by the Scouts Go Solar activities. The team of two Solar Ambassadors – Amboara Rabe-Harinoro from Madagascar and Nikketah Cuneo from Australia – supported by Grace Kamau from the World Scout Bureau Africa, hosted a stand with the solar grasshopper game,



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a solar cooker and, most popular of all, the making of sunglasses. As there was a lot of sun during the Jamboree (for some people even a little bit too much), the sunglasses were very useful and put into practice right away. The kids and the adults liked the activities very much, and many interesting conversations and exchanges took place.



Figure 39: Scouts from all over the world creating their own sunglasses at the SGS stand at the World Scout Jamboree

30. PHOTOVOLTAICS FOR FUTURE TECHNI-CIANS IN THE SEYCHELLES

In the first days of August, the new Solar Ambassador Emma Dodin implemented a Scouts Go Solar workshop at the Seychelles Institute for Technology. As the participants had quite a good background knowledge already, Emma and another technician were able to go a lot deeper, explaining technical details and handing over to them some specialized devices. As one of the highlights, the scouts were able to have a closer look at the institute's solar system, starting from the panels on the roof, down to the inverter and the control mechanisms on the ground. Who knows if some of these young people will be working with solar technology in the future...



Figure 40: Explanations and experiences with a real solar system – on the roof and on the ground

31. NATIONAL INTER-PATROL SCOUT CHAL-Lenge in Nairobi, Kenya

It goes on and on with the solar activities in Kenya. After the regional inter-patrol scout competitions, from the 12th to 16th of August, there was also one at national level, taking place at Rowallan camp in Nairobi. Not only were participants arriving from all parts of the country, but also the Solar Ambassadors were joining forces: Rhodah from central Kenya, Abdallah from the western part, Julius from the east and Léo from Nairobi came together to host a stand with Scouts Go Solar activities for the more than 3000 scouts that participated in this huge competition. An innovation that was presented there was a solar cooker made from aluminium foil and cardboard, based on the concept of the hot water collector that had been built during the Rover Moot in Kenya, about five months ago. Due to the huge number of scouts visiting the SGS stand, it was also possible to play a massive Solar Dart, with about 20 people using their mirrors to concentrate sunlight on a thermometer and heating it impressively.



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Figure 41: The four Solar Ambassadors discussing the new model of a solar cooker

32. RE-LAUNCH OF THE SDG HUB

Just in time for the start of the World Scout Jamboree in South Korea, WOSM re-launched the online platform on the Sustainable Development Goals, the so-called SDG hub. It now appears in a more modern design, is easier to navigate and contains digitalised materials on the Earth Tribe and Messenger of Peace Challenges. Part of this is the content about Scouts Go Solar, where the platform leads the user through the process of getting the digital badges and becoming part of the Earth Tribe Family. This makes the whole process much easier, as scouts can earn their digital badges from wherever they are! On this platform, there are different experiments about solar and other renewable energies, among other useful materials.



Figure 42: Printscreen of the new landing page of sdgs.scouts.org

33. SOLAR AMBASSADOR AT THE NATIONAL JAMBOREE IN IVORY COAST

In Yamoussoukro, the 12th Jamboree of the Catholic Scouts of Côte d'Ivoire took place from the 11th to 21st of August. This event, which at the same time marked the 85th anniversary of the Catholic Scouts of Côte d'Ivoire, counted with a Global Development Village, where the scouts from Ivory Coast and the delegations from other countries could learn more about the different environmental initiatives of the Earth Tribe. The very active new Solar Ambassador Clavaire Arnold facilitated a workshop for about 500 scouts about Scouts Go Solar, explaining to them the importance of using clean and sustainable energy, in order to reduce the dependency on fossil fuels, to help preserve the environment and to fight climate change.



Figure 43: Solar panels, simple solar cookers and many other solar tools are shown to the scouts of different age groups during the National Jamboree at Ivory Coast

34. PRESENTING SGS AT THE NATIONAL CAMPOREE IN MEXICO

From the 11th to 18th of August, the scouts of Mexico were celebrating their National Camporee in Veracruz, in the south-eastern part of the country. It is a huge camp, where thousands of scouts between 10 and 15 years participate. Under the slogan of this year's camporee, "Towards the adventure", the Solar Ambassador Alexis Ramírez and his team were offering activities regarding Earth Tribe and Scouts Go Solar. In these eight days, almost two thousand scouts have been informed about the Challenges and were inspired to start taking action in these fields.



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Figure 44: Groups of Mexican scouts learning more about the steps to become innovators for clean energy and obtaining the SGS badge

35. BI-NATIONAL SUMMER CAMP BETWEEN Tanzania and Burundi with SGS Activities

From the 23rd to 28th of August, there was a bi-national summer camp between scouts from Tanzania and Burundi, taking place in Dar es Salaam and Morogoro, in the eastern part of Tanzania. Among other topics like SDGs, Safe From Harm and Messenger of Peace, there was a two-days-workshop about Scouts Go Solar (with a theory and a hands-on part), as well as a meeting with the leaders, to explore with them how the programme can be implemented within the respective NSOs. These activities were planned and realised by the two new Solar Ambassadors from Tanzania and Chad, Shadyat Idd Abdi and Frederic Mora.



Figure 45: A bi-national team at the bi-national summer camp: Shadyat from Tanzania and Frederic from Chad

36. SCOUTS GO SOLAR INTRODUCTION IN MALAWI

The Solar Ambassador Sydney Mayerwa from Zimbabwe took the opportunity of his trip to Malawi to realise a SGS introductory workshop with a local scout group. The sunglasses they made will remain as a useful souvenir to remind them of what they have heard that day about solar energy and renewable energies.



Figure 46: A scout group in Malawi proudly presenting their self-made sunglasses



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September

37. SOLAR WATER PUMPS AND TREE PLANTING IN CHAD

On the 9th and 10th of September, the new Solar Ambassador Frederic Mora led a series of activities within the Better World Framework Programme – particularly about Scouts go Solar – with the scouts of Ndjamena in Chad. The almost 60 scouts and scout leaders learned more about the different possibilities of using solar – from solar water pumps with small panels up to the production of electricity with larger ones. The solar activities were complemented by the planting of trees in this rather dry region.



Figure 47: Solar water pumps serve not only for experiments or decoration, but can also be used for watering plants.

38. SGS WORKSHOP AT THE NATIONAL YOUTH FORUM IN TANZANIA

On the 5th of September, the new SGS Ambassador for Tanzania, Shadyat Idd Abdi, implemented a Scouts go Solar workshop as part of the National Youth Forum in the Morogoro region, in the eastern part of Tanzania. The participants experimented with set-ups where the solar panel was directly connected to the light bulb, and others, where there was a battery in between. Transferring this experience to big solar systems, it became clear quite fast, why most solar systems count with a battery or are connected to the power grid. Nevertheless, there are also a few use cases, where it makes more sense to connect the consumer directly to the panel. Other practical experiences were completed with theoretical inputs about solar energy and the Scouts go Solar Challenge.



Figure 48: Assembling the different components of a solar system to test it with and without battery.

October

39. JOTA-JOTI WITH SCOUTS GO SOLAR

From the 20th to 22nd of October, the yearly Jamboree on the Air / on the Internet took place, bringing together more than 2 million scouts from all over the world. This year was quite special, as it was only about two months after the World Scout Jamboree in South Korea. Nevertheless, Scouts go Solar was present with the activity Solar Art, as part of the Environment and Sustainability Challenge and the Scouts for SDGs Challenge. Apart from this, there was a chat to answer questions about Scouts for SDGs, Earth Tribe, Scouts go Solar and other topics.



Figure 49: A simple experiment that can be done wherever there is direct sunlight. And with a little bit of patience, you get your own piece of art!



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40. SOLAR CHOCO BANANAS IN PORTUGAL

On the 5th of October, the Solar Ambassadors Daniela Casimiro and David Paulos organized a Scouts go Solar workshop at the SCENES centre in Drave, Portugal. Taking advantage of the sunny weather, they used their big parabolic solar cooker to prepare a pot of chocolate bananas, which was highly welcomed by the participants.



Figure 50: Chocolate bananas from the solar cooker as a tasty snack during the solar workshop

41. SEYCHELLES SCOUTS VISITING A SOLAR AND WIND FARM

To close the 6 months solar project, the new SGS Ambassador Emma Dodin and her team took a group of scouts to the Romainville Island, about 2km from the capital, Victoria, to visit the enormous wind and solar farm there. It's completely different to hear about solar and wind energy and watching photos to seeing a large scale solar farm and wind turbines in real life. The participants learnt a lot about the technical functioning of these renewable energy sources and discussed about how this can lead towards a more sustainable future in times of climate change.



Figure 51: A solar power plant is a totally new dimension of what can be seen in small by soldering solar lamps

November

42. CONCENTRATED SOLAR COMPETENCE At the mop training in Benin

At the "Nakboro" Messengers of Peace training in Benin in early November, there were three Solar Ambassadors participating: Marie-Louise Ycossié from Ivory Coast, Jean Dotou Godonou from Benin and Cathy Nyake from Cameroun. When it came to the SDGs, they joined forces and offered a Scouts go Solar workshop, explaining the contents and offering a whole range of solar experiments to the participants, who came from different French-speaking countries in Africa and Europe.



Figure 52: International team of trainers for an international public. Using the sunlight has a lot of potential in Africa, but also on other continents

43. NEXT LEVEL OF THE GRASSHOPPER Race in Brazil

On the 18th and 19th of November, the Anhanguera Scout Troop of the Bernardo Sayão 2GO Scout Group held its scout camp at the scout camp BASE Escoteira in Goiás, in central Brazil. The 30 young scouts participating in the Scouts go Solar workshop had the opportunity to try out different models of solar cookers, the "digital sundial", the solar lighter and many others. Nevertheless, one of the highlights was the grasshopper race, where not only "Grasshopper 1, 2 and 3" were competing, but "Niki Grilauda", "Grilwis Hamilton", "Nelson Grillet" and other "grilos" (Portuguese for grasshopper) raced towards the finish line.



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Figure 53: Very famous "grilos" competing with each other. How would they be called in your country?

44. SOLAR CONSCIENCE WORKSHOP IN COSTA RICA

On the 18th of November, only a few days after coming back from the solar training in Bolivia, the new Solar Ambassador Gervid Cervantes Madrigal and the Solar Ambassador Jenifer Guillén Rivera led a "Solar Conscience Workshop" at the scout campsite Yörí in the north-eastern part of Costa Rica. Having adapted the sunglasses templates, the sundial and the quiz cards to the local needs and contexts, these activities were an important part of the hands-on experience. Apart from this, the greenhouse effect was explained with its advantages (in small scale as a use case of solar energy for growing plants) and disadvantages (in a very large scale as one of the elements of global warming). The scouts of different age groups enjoyed the activities and learned a lot from the contents that were adapted to the specific context



Figure 54: What is useful in small scale for growing plants can cause a lot of problems when it happens at global level

December 45. SCOUTS FOR SDGS SECTION AT A JAM-BOREE IN THAILAND

As part of the 10th Ratanakosin Scout Jamboree 2023 at the Vajjravudh National Scout Camp Sriracha, in the Chonburi region close to the capital Bangkok, there was a section dedicated to the World Scout Centre Programmes, namely Scouts for SDGs. And an important part of this were the activities about Scouts go Solar, led by the Solar Ambassador Chansak Sanguankiattisuk. At this Jamboree that took place from the 8th to 10th of December, about 2500 scouts participated, learning more about the very different possibilities we have as scouts to contribute to the fulfilment of the Sustainable Development Goals.



Figure 55: What are the SDGs and what can we as scouts do to contribute to them? Chansak explaining some of the possible ways to the young scouts

46. THE SCOUTS GO SOLAR REGIONAL TRAINING IN BOLIVIA IN THE NEWS

On the 15th of December, the 73rd edition of "Mundus Novus" was published, including a 6-page article about the SGS regional training in Bolivia. This freely available newsletter is issued by the World Scout Bureau, Interamerica Support Centre on a monthly basis. In its December edition, it reported about the solar training in Bolivia, the background of the project Scouts go Solar and also ways how you as scout can become part of the Scouts go Solar Challenge.



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Figure 56: The article in English and Spanish is available at the following link: <u>https://issuu.com/worldscout-</u> ing/docs/mundus_novus_73

47. LAMP SOLDERING IN MALAYSIA

On the 16th of December, 34 young scouts from different districts of Kuala Lumpur, Malaysia, joined a solar workshop at the SJK Tai Tong School in the capital. In this activity, led by the Solar Ambassador Thee Chee Giap, they learnt how to read a wiring diagram, what the different components are good for and how they can be soldered together to get a functioning solar lamp. It was amazing to see how the eyes of the young scouts lit up when all the components were in the right order and the lamp started shining.



Figure 57: When all the components are connected in the right order, you get a functioning solar lamp – and learn, how a solar system works

48. SECOND SOLAR CAMP IN THE SEY-Chelles

Even if it was rainy season in the Seychelles already, this was not an obstacle for the new Solar Ambassador Emma Dodin to realise her second solar camp this year, from the 13th to 15th of December. Part one of the camp was on Mahe Island, where the participants heard about the basics of Scouts go Solar and where they discussed the benefits of solar energy and how the world would look like without the sun. From this rather general point of view, the Energy Card Game helped to break it down to everyday life, analysing the electricity consumption of household devices at home. The second part of the camp was dedicated to the on-site visit of a power station, trying out "rainy days activities" and sensitizing the local people and tourists about the solar project, by distributing leaflets and talking to them about renewable energies.



Figure 58: The scouts get an insight to the technical interior of a power plant

49. SUN ACTIVITIES AT A JAMBOREE IN Thailand

Only a few days after the Ratanakosin Jamboree in the Chonburi region in Thailand, from the 12th and 14th of December, about 4600 scouts from different parts of the country gathered for the Suankularb Jamboree. There, the Solar Ambassador Chansak Sanguankiattisuk had already prepared a lot of different solar experiments for them at the Scouts go Solar station. The participants and leaders learnt useful skills like disinfecting water by sunlight and cooking with a big parabolic solar cooker, among others. Of course, there were also other experiments involved, as the solar car race, the solar art and the famous sunglasses.



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Figure 59: Sunlight can not only be used to heat water, but also to disinfect it and make it drinkable

50. CUB SCOUTS GOING SOLAR IN BURUNDI

Nobody is too young to go solar. This was shown by the new SGS Ambassador Fred Arnaud Ishimwe from Burundi, who did a Scouts go Solar workshop for a group of cub scouts. Of course, the activities needed to be adapted to this age group, but you would be surprised how many different uses of sunlight the cub scouts were able to mention, for example. And they showed a lot of interest in getting to know more about this topic and how it can be used in everyday life. For the final group photo, they decided to "draw" a sun by themselves.



Figure 60: Another way of understanding "Solar Art", interpreted by cub scouts in Burundi

51. SCHOOL INVESTIGATION TRIP ABOUT SOLAR IN CAMEROON

Right before Christmas, the new Solar Ambassador Cathy Nyake and her team travelled for a school investigation about green communication to the eastern region of Cameroon, to the "region of the rising sun", as they call it. As the whole team consisted of scouts, they decided to turn it into a Go Solar documentary trip. The residents of this landlocked area are facing problems with limited access to drinking water, to quality education and to energy. Therefore, producing electricity and disinfecting water with sunlight could have a lot of potential. Cathy and her team built sunglasses with the kids and distributed solar lamps among the adults. This visit was only the first step, there will probably be other trips and activities in this region within the margin of this investigation project.



Figure 61: Sunglasses and solar lamps – not only the kids were happy after this visit, but also the adults

52. SUN FUN WORKSHOP IN IVORY COAST

In the last days of this year, Clavaire Arnold organized a Sun Fun Workshop for a scout group of different ages in Ivory Coast. Through these fun activities and lively discussions, the young scouts had the opportunity to understand in a playful way how the sunlight is transformed into a dynamic source of energy, ingeniously exploiting photovoltaic panels, solar cookers and even solar suitcases (portable small solar power plants). The thought-provoking games and insightful questions helped enlighten curious minds on how these ecofriendly technologies can shape a sustainable future.



Figure 62: Discussing how solar energy can be used in everyday life – by everyone



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53. SGS WORKSHOP AT A SOS CHILDREN'S

VILLAGE IN NIGER

On the 30th of December, the new SGS Ambassador Mahamadou Nassirou from Niger was invited to participate at the weekend camp of the scouts from the SOS Children's Village in Niamey, in the South-Western part of the country. He had divided his program in three parts: First, presenting the project Scouts go Solar, ways of using the energy from the sun in everyday life and how everyone can get active and implement environmental friendly practises. The second part was focused on solar panels and their functioning. And in the last unit, the participants elaborated their own community projects for areas with little or no access to electricity, where the use of solar energy can make quite a big difference. The project ideas were very diverse: For example sensitizing the inhabitants of the nearby villages for the advantages of solar, installing solar systems at the SOS Childrens Village or a solar water pump in a neighbourhood with water shortage.



Figure 63: The scouts had different ideas for their community project. As Chad is a country with a very high level of sunlight, using this source of energy can have a lot of potential

The Scouts Go Solar Educational Challenge is part of the Earth Tribe Initiative



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You have done a solar activity and would like to see it published in the next Scouts go Solar Newsletter? You have questions about the project? Get in touch with us!

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