

## EG Solar together with VET4Africa in Malawi

In Malawi, a joint "Training of Trainers" course was organised by both associations and projects for the first time.

### Lilongwe/Altötting/Dachau

It was not the first time that teachers Stephan Hansjakob and Anton Geer had travelled to Africa for a fortnight - this time to the capital of Malawi, Lilongwe. The aim was to train teachers from African schools in the field of solar energy and photovoltaics. Like the projects behind them, VET4Africa and EG Solar, both are firmly convinced that the best development aid and therefore the best way out of poverty is through the education of young people.

On the ground, the training was supported by Don Bosco, or more precisely their local parish and school, as well as their office for regional development in Zambia, Malawi, Zimbabwe, Botswana and Namibia. They not only selected 15 teachers from these countries, but also provided their travel, accommodation and catering costs. In addition, they organised materials and classrooms at the Don Bosco Youth Technical Institute Lilongwe. The accommodation and catering for the Bavarian guests was also provided.

One of the aims of the two-week course was to learn about the benefits, function and construction of the solar cookers. The planning, design and dimensioning of so-called hybrid photovoltaic systems was also covered.

The priority in the first few days was therefore primarily on the theoretical and physical background and calculations. In addition to the technology, the focus was also on pedagogical and didactic teaching methods.



*Theoretical instruction by Stephan Hansjakob (cell voltage & modular architectures)*

In addition to the expected energy requirement, the solar energy irradiated for different inclinations and orientations was also determined. The solar cooker provided and dispatched by EG Solar was a great help here. Not only can it be used for smoke-free cooking, but the course of the sun's path and the influence of different inclinations and orientations can also be easily and clearly explained to the pupils during lessons.

As practical relevance is also of great importance, the entire content was discussed on the basis of possible implementations of solar cookers and PV systems at the "Youth Technical Institute Lilongwe".



*Training room with all participants during the explanations for the practical set-up*



Anton Geer explaining the voltage equalisation



Group photo after the **certificate presentation** together with  
 - the headmaster Father John Musonda (back, 3rd from left),  
 - the Director of Vocational Training of the Don Bosco Province Brother Joseph Nyono (back, 4th person from left),  
 - Instructor Stephan Hansjakob (back, 6th from left),  
 - Instructor Jackson Mumba (back, 9th pers. from left) and  
 - Instructor Anton Geer (front, 2nd pers. from left)

But there was also a surprise for the headmaster Father John Musonda on the last day. The solar cooker provided by EG Solar was officially handed over to him. It quickly became clear that its use in the classroom would not be limited to the electrical department.

Among other things, the institute has its own student restaurant and cookery training. As a lot of cooking is still done on the three-stone fire in both cases, the headmaster was equally interested in a construction course and additional solar cookers. It is therefore not unlikely that EG Solar will be travelling to Lilongwe/Malawi again.



Commissioning of the photovoltaic hybrid system by the participants

However, new friendships between the participants and their networking were also important. Mutual support - which is also facilitated and encouraged by Don Bosco - is essential, especially due to the complexity of the topics, but also the sometimes scarce materials. To lay the foundations for this, a joint excursion to Lake Malawi was organised at the weekend.

At the end of an almost 70-hour training course, all 15 participants received their certificates from the headmaster of the Youth Technical Institute Lilongwe, Father John Musonda, the director of vocational training of the Don Bosco province, Brother Joseph Nyondo, and the trainers Jackson Mumba, Stephan Hansjakob and Anton Geer.



Presentation and explanation of the solar cooker including examples of use in the classroom





*Presentation of the solar cooker to the headmaster, Fr. John Musonda*



*Handover of the solar cooker to the headmaster Fr. John Musonda*



*First practical use of the solar cooker with the participants*



In the end, Anton Geer and Stephan Hansjakob both agreed that the time and effort were more than worth it. All participants showed a very high level of commitment and the co-operation within the group was a great pleasure. Even though it took a lot of energy from both, their thoughts are already turning to planning the next trip.

They are also grateful to the head of the local parish in Lilongwe, Father Joseph Czerwinskiin. He not only opened up his rectory to accommodate them, but also welcomed them into the Salesian family, creating a very warm and welcoming environment. It should be noted that this was also the busiest time of the year for him - the "Holy Week", during which one appointment followed another.