

Society on Social Implications of Technology (SSIT)
Sweden SIT Chapter

IEEE Sweden Chapter Chair Workshop

Oct 31, 2024, Linköping University, Online

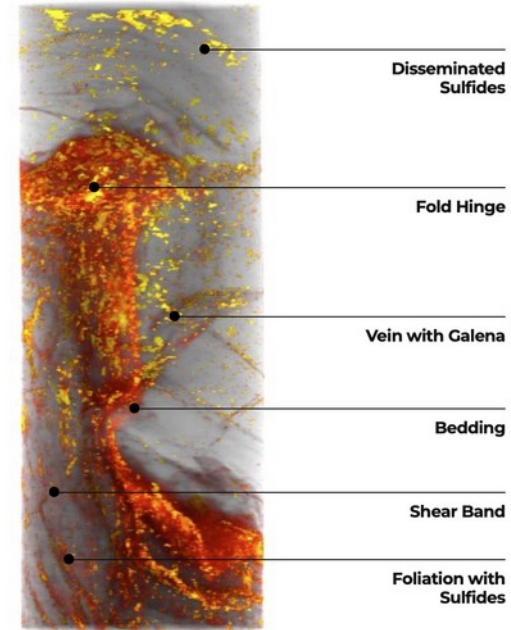
Mikael Bergqvist, SSIT Sweden Treasurer, Christofer Silfvenius, SSIT Sweden Chair



SSIT Active board members



Christofer Silfvenius, SSIT Sweden Chair
Test leader
Scania Technical Center (R&D)
Accelerated life testing, prediction, reliability
Electronic components

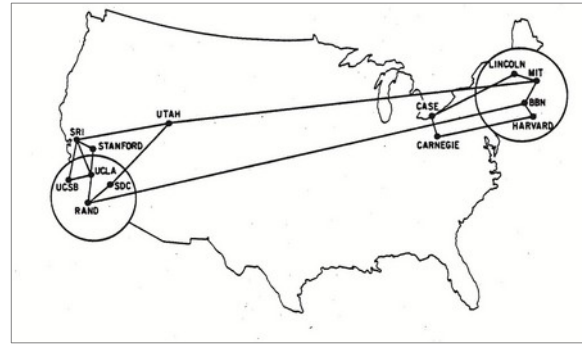


Mikael Bergqvist, SSIT Sweden Treasurer
Co-founder
Orexplore Systems
X-Ray and XRF instrument for ore analysis

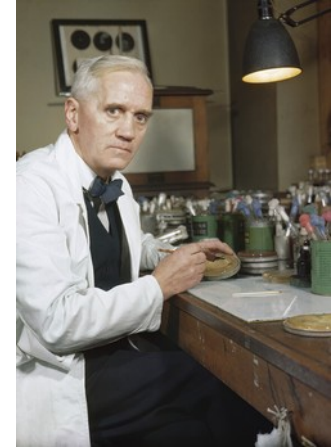
Society on Social Implications of Technology



Washing machine



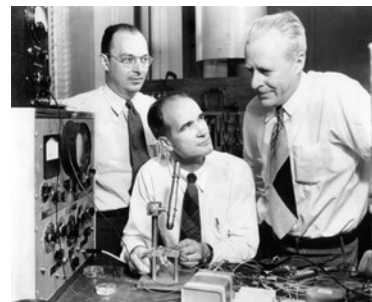
Internet



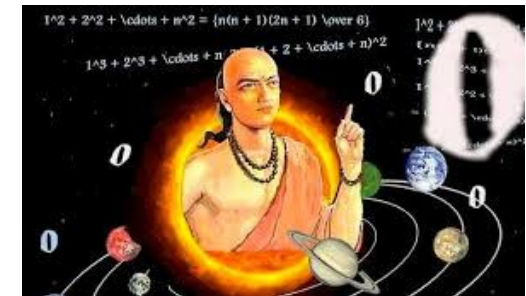
Penicillin



Flight



Transistor



Zero

SSIT Overview

- Ongoing
 - 2nd year of Lets Make Light Competition to end Lighting poverty (<https://ieee-lml.org>)
 - Sponsored by [IEEE Future Directions](#) and [IEEE Smart Lighting](#)
- Plans
 - Visit to Kista X-Ray Valley (joint with WIE)
 - Technology in Neurology workshop
- Related non-IEEE projects
 - Technical support to Swedish interest organisation [BARNverket](#) on health-issues in schools
 - Building 2MW solar park with [ZASP](#) in Zambia
 - Technical support to [EELA](#) in 22 countries in eastern and southern Africa for energy efficient consumer appliances. Started 2018. Expanding to 38 countries.

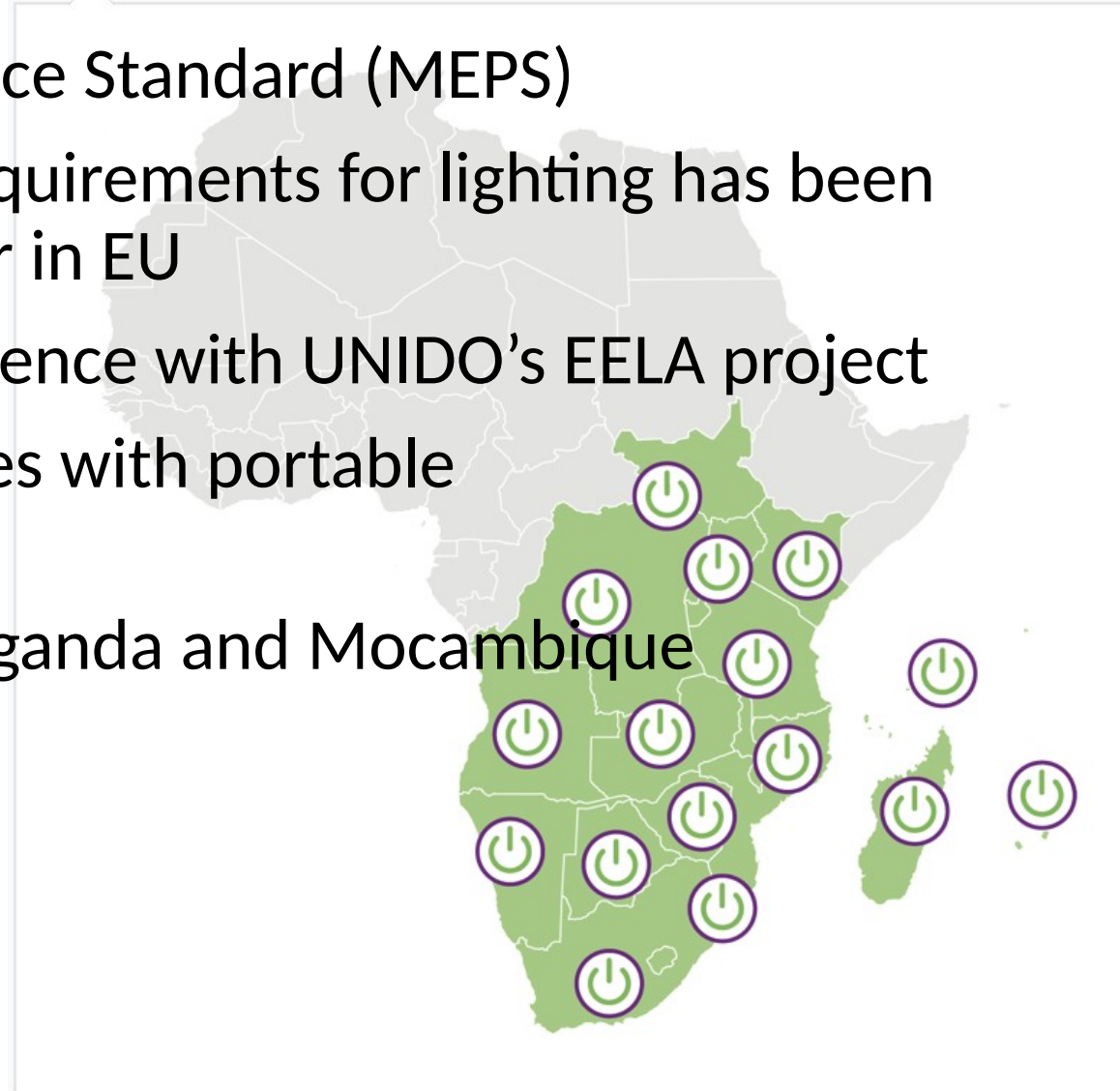
Budget request

- 4000 SEK from Section for 2025 for all SSIT projects
- The situation in the Swedish schools came up during the Section Strategy workshop Oct 26-27.
 - SSIT would like to request an additional 4200 SEK from Section during 2024 for purchase 20 copies of the book [Skolplattformen](#) from FriTanke förlag to Support BARNverket with books to distribute to policy makers, school headmasters and other key stake holders. $261 * 20 * 80\% = 4200$ SEK.

UNIDO project in EAC and SADC

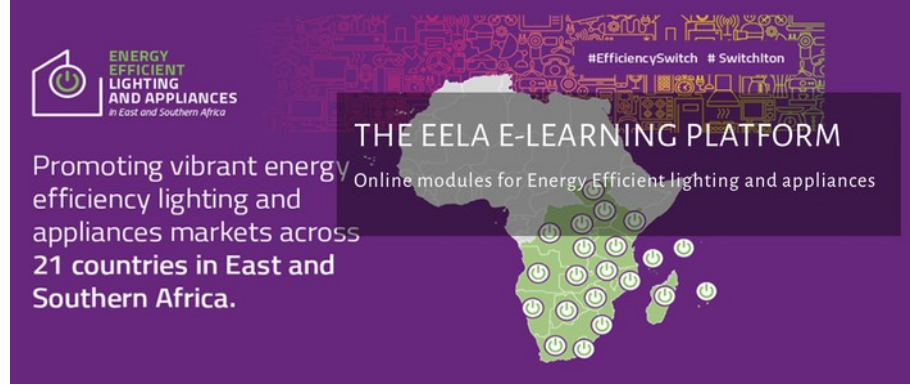
Energy Efficient Lighting and Appliances (EELA)

- Regional, Minimum Energy Performance Standard (MEPS)
- EU's ecodesign and energy labeling requirements for lighting has been successful in saving > 100 TWh per year in EU
- Since 2018, Sweden has shared experience with UNIDO's EELA project
- Equipped 21 governmental laboratories with portable photogoniometers
- Building two accredited core labs in Uganda and Mocambique



In EELA Lighting was first. Now Appliances

- ECOWAS potentially joining, from 21 to ca 50 countries
- New products in focus:
- Clean cooking
- Air conditioners
- Productive Use – Products that Enables Income
 - Solar parks
 - Solar powered irrigation pumps
 - Electric vehicles for transport services
 - ...
 - Energy Efficient TV-screen for sportbars and cafés
- Large opportunity for IEEE to support the growing EELA ecosystem
- Covers 500 million consumers



ZASP



About ZASP Center

ZASP (Zambian Association for Sustainable Projects)

Started in 1989, is a politically and religiously independent association that works with health issues, education, poverty alleviation and democracy development in Zambia.

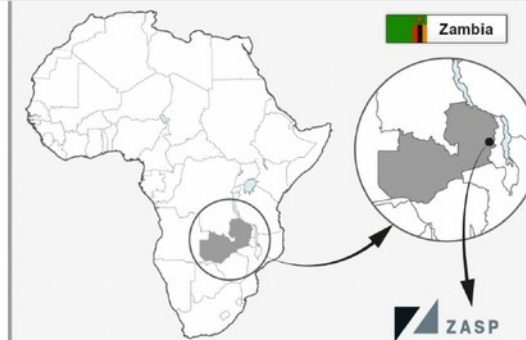
Lundazi district

ZASP today has a catchment area of 270,000 people and several thousand of them are directly involved in the project activities.

Today they have built 10 school buildings and conducts activities in the ZASP Center, such as:

- Training center
- Youth center
- Health clinic

- ZASP Shop
- Sewing studio
- Carpentry



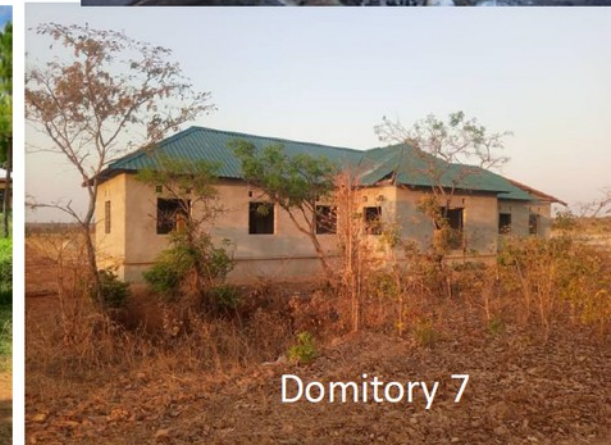
Source: ZASP

Example: Need for energy & light for the ZASP Center

Preliminarily, there is a great need for energy & light for:

- Two new training rooms, "Dormitory" , for young girls, between 12 and 19 years
- Other training room, computers
- Kitchen - fridge, freezer, stove
- Water pumps
- Carpentry, Sewing machines
- The block machine for making cement blocks
- Sunflower oil press, Corn mill
- Welding equipment
- Other buildings in the education center.

" My dream wish list when we get the energy is one to expand the Computer students for the local community, to in enhance the pupils evening studies and to start a solar drip irrigation garden ".
- Patrick Kumwenda,
Manager of ZASP Center



Source: ZASP

2MW grid connected solar park



Pilot project – Solarpark

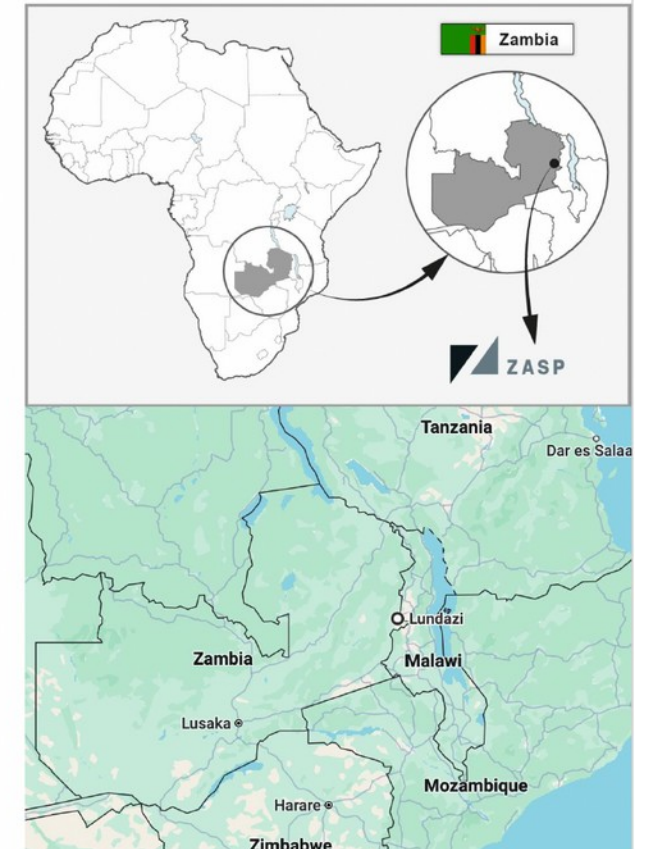
with Metal and Electrical Workshop,
Agriculture Production,
EV-Vehicle for transport

Solar park as the core of a Energy Cooperative solution

Goals:

- People have possibility to get affordable and uninterrupted electricity
- Generate income for the community by promoting startups

There is possibility to distribute energy to about two to three villages Jeke, Kalewa and part of Khutalukungu villages people. They dream of having access to electricity for their lighting, fridge, freezer, TV. etc.



Thank you from SSIT!

Looking forward to collaboration with all other IEEE groups during 2025!

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