



Press Release

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Immediate Release

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### **Air force base in Hoedspruit benefits from solar technology**

A solar water heating installation at the air force base in Hoedspruit has not only proven to improve energy efficiency but has also acted as a catalyst for upskilling South National defence Force (SANDF) personnel.

The South African National Energy Development Institute (SANEDI), the Solar Thermal Demonstration and Training Initiative (SOLTRAIN) and the Department of Defence collaborated in the implementation of the solar water heating (SWH) system at Air Force Base (AFB) Hoedspruit.

The official launch was attended by Maj Gen Tersia Jacobs, Maj Gen Joseph Ledwaba, Col Benedict Manzini and Dr Karen Surridge, Centre Manager, Renewable Energy Centre of Research & Development, SANEDI – a SOLTRAIN partner, who provided the background to renewable energy and the installation.

“Designed to provide a state-of-the-art SWH system to reduce electricity use and provide reliable hot water, this partially SOLTRAIN supported project aims to tackle water heating needs at some bungalows on the base. SOLTRAIN aims to create opportunities through catalysing growth of the SWH sector across six partner countries in SADC at domestic and commercial level. We are pursuing technologies that enhance security supply, energy conservation and the increase of energy access,” explained Dr Surridge.

“The environment at Hoedspruit was rather interesting as we had to consider the climatic zone as well as the primates and the bush-life that cohabit the area. The pumped solar thermal systems that we installed were designed to last up to 20 years and reliably supply hot water to the buildings.

“Through SOLTRAIN, there is specialised training offered by the South African partners viz. SANEDI and Stellenbosch University, which have seen attendance from various sectors, such as government departments, the private sector and other captains of industry that have participated.

“For the Department of Defence, the training has produced 20 artisans who have successfully completed a thermosiphon course and four top students, one of which is Sgt Byron Johnson (SAAF), who works at Facility Maintenance Section at Hoedspruit and is an artisan, specialising in plumbing.”

### **Skills transfer paramount**

Commenting on his experience, Sgt Johnson said, “I loved the technical lectures, the course was interactive and, as a hands-on person, I excelled when the group would simulate real situations and we were encouraged to apply the lessons learnt during the sessions. I derived great benefit from attending the course and I cannot wait to put what I have learnt there to good use here at the base.

“Moreover, I will gladly transfer the skills I have to my fellow maintenance team members, as that would make sure that we maintain the SWH system and monitor its performance efficiently. I will personally be doing the checks on water pressure, solar panel pressure and do all the system data capturing. If there is a breakdown on plumbing, I will be on it before it can cost the SAAF too much. If we manage the system well, with care, it should quell concerns that would force us to call upon external contractors.”

### **Official praise**

Col Kereeditse, Officer Commanding of AFB Hoedspruit echoed the words of Maj Gen Ledwaba when he said, “Repetition is key, we are glad the Department of Defence had the foresight to see the long-term results of this project. This SWH system has been operational for several months thus far and there are no glitches, so we are happy. The current phase of the project is focusing on offering tailor-made training and skills transfer on implementing energy management systems and clean energy technologies. The energy efficiency interventions have already proven to be cost-effective and we have improved efficiency now that we understand these energy efficiency interventions better.”

Col Kereeditse stated “We were sold when we were told that electricity costs would be reduced and reliability increased on our hot water infrastructure. We cannot wait to learn more about other different kinds of energy saving methods and lower the effect on environment due to emissions.”

Maj Gen Tersia Jacobs added, “The SAAF stands proud to be the first in the Department of Defence to embrace this innovative solution to reduce the utility bill, we are definitely up-

skilling when it comes to training our artisans and if we can use the sun to heat our water, in the process save on our ever-decreasing budget, why not? We are all about the Green Soldiering Initiative; we really need an integrated approach of working with other government departments and tighten the belt where necessary.”

Ends 731 words

### **About SANEDI**

The South African National Energy Development Institute (SANEDI), established by the Government, directs, monitors and conducts applied energy research to develop innovative, integrated solutions to catalyse growth and prosperity in the green economy. It drives scientific evidence-driven ventures that contribute to youth empowerment, gender equity, environmental sustainability and the 4<sup>th</sup> Industrial Revolution, within the National Development Plan (NDP), through consultative, sustainable energy projects. For more information, go to [www.sanedi.org.za](http://www.sanedi.org.za).