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Southern African Solar Thermal Training and Demonstration Initiative (SOLTRAIN)

Solar Thermal Energy for Namibia

Final Stakeholder Workshop on the Implementation Plan of the Solar Thermal Technology Roadmap for Namibia

Report

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Centre For Renewable Energy and Energy Efficiency: CREEE

Uniting against Poverty

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1. INTRODUCTION:

The Namibia University of Science and Technology (NUST), through the Namibia Energy Institute (NEI) organised the final stakeholder workshop on the Implementation Plan of the Namibia Solar Thermal Technology Roadmap under the Southern African Solar Thermal Training and Demonstration Initiative (SOLTRAIN Project) in collaboration with the Ministry of Mines and Energy (MME). The workshop took place on 30 June 2017 at NUST hotel school. The workshop was attended by more than 50 participants from various government departments, members of the academia and private organisations.

The SOLTRAIN project is a regional initiative on capacity building and demonstration of Solar Thermal systems in the Southern African Development Community (SADC) region. SOLTRAIN is covering Lesotho, Mozambique, South Africa, Botswana, Zimbabwe and Namibia. The project is funded by the Austrian Development Agency (ADA) and co-funded by the OPEC Fund for International Development (OFID). The overall goal of SOLTRAIN is to contribute to the switch from a fossil fuel based energy supply to a sustainable energy supply systems based on renewable energies in general but based on solar thermal in particular.

Dr Tjama Tjivikua, the NUST Vice-Chancellor in an address delivered on his behalf by Mr Lameck Mwewa elaborated on the achievements of the SOLTRAIN Project as follow:

- Funded and facilitated the installation of water heating systems at five Vocational Training Centres (Okakarara, Valombola, Zambezi, Eenhana, and Rundu) for use in the training of their students;
- Acquired two demonstration trailers for NUST and the Windhoek Vocational Training Centre and
- Initiated a curriculum development in solar thermal systems for the Vocational Training Centres.

John Titus, the Director of Energy from MME who delivered the speech of the Permanent Secretary of Ministry of Mines and Energy spoke highly of the SOLTRAIN initiative. The impacts of activities and contributions from SOLTRAIN are already evident in Namibia, especially in the work towards the development of Renewable Energy Policy, Demand Side Management Study, Update of the National Energy Policy, the development of the curricula in Universities, and in Vocational Training Centres.

2. OBJECTIVES OF THE SOLAR THERMAL STAKEHOLDER WORKSHOP:

The main objectives of the workshop were to present the final draft of the Namibia Solar Thermal Technology Roadmap (NAM-STTR) Implementation Plan and to seek pledges on full commitment in

the implementation of the Solar Thermal Roadmap from participating institutions. The participating institutions are, Electricity Control Board (ECB), Environmental Investment Fund (EIF), NamPower, Namibia Standards Institutions (NSI), National Training Authority (NTA), National Commission on Research, Science and Technology (NCRST), Ministry of Works and Transport (MoWT), Ministry of Mines and Energy (MME), National Housing Enterprise (NHE), Ministry of Environment and Tourism (MET), Renewable Energy Industry Association of Namibia (REIAoN). The implementation plan will guide the key stakeholders on various activities, milestones, strategies and timelines in order to achieve the vision of the Solar Thermal Roadmap which is to achieve---------- a fully functional 0.5 m^2 of flat plate solar thermal collector area installed capacity per inhabitant in Namibia by 2030.

3. IMPLEMENTATION PLAN OF SOLAR THERMAL TECHNOLOGY ROADMAP AND MODELLING OF KEY TARGETS IN THE NATIONAL PROGRAMS:

Dr Werner Weiss from AEE INTEC (Institute for Sustainable Technologies) presented on the implementation plan of solar thermal technology roadmap and modelling of key targets in the national programs. He emphasised on the industrial applications of solar thermal systems. Namibia should get examples from South Africa on the industrial applications. Furthermore he elaborated on the monitoring results collected under SOLTRAIN Project in Namibia that the results shows that in Namibia if a solar thermal system is designed properly, then a backup systems for heating the water with electricity will not be required.

4. NAMIBIAN SOLAR THERMAL TECHNOLOGY ROADMAP:

Dr Zivayi Chiguvare, presented on the Namibian solar thermal technology roadmap, where he mentioned how the Namibia solar thermal technology roadmap was formed, with different parties from academia, government, financiers, end-users and industries. He also mentioned about the purpose ,of the Namibia solar thermal technology roadmap of outlining the path towards a national vision for solar thermal applications in the country, targeted at the enhancing the quality of life of the Namibian people through the provision of sustainable and quality-assured solar thermal technology value chain.

5. PROCESS OF THE IMPLEMENTATION PLAN FOR THE NAMIBIAN SOLAR THERMAL TECHNOLOGY ROADMAP AND THE DESCRIPTION OF THE WORKING GROUPS:

Mrs Helvi Ileka presented on the process of the implementation plan for the Namibian solar thermal technology roadmap and the description of the working groups. She indicated that the implementation plan document was compiled with information submitted from the working groups consisting of experts who are guided by Steering Committee, aiming to oversee, supervise and harmonize the work of the workgroups.

Four working groups were formed as follows:

Work group 1: Policy Enactment, Outreach and Public Awareness;

Work group 2: Industry Development and Standards;

Work group 3: Research, Education and Training; and

Work group 4: Finance and Subsidies.

Dr Al-Mas Sendegeya presented on the workgroup activities and the allocation of the task, responsible entities, baselines, strategies and timelines which include the short term (2017 – 2021) and long term (2022 – 2030) goals in order to reach the mission for the roadmap.

6. STATEMENTS OF COMMITMENT BY PARTICIPATING INSTITUTIONS:

Participating Institutions presented their statements of commitment stating that their institutions are aware of the Namibia solar thermal technology roadmap, they have been participating in the drafting of the implementation plan of the solar thermal technology roadmap, they pledged to participate in the implementation plan of the Namibia solar thermal technology roadmap and will allocate resources for the implementation of the roadmap. The representatives from various institutions were:

Mr Tonateni Amakutuwa – ECB, Mr Arno Pfohl – NamPower, Mr Petrus Muteyauli – MET, Ms Aina-Maria Iteta – EIF, Mr Christof Heil – PROVET, Mr Paulus Mungeyi – NCRST, Mr Nandaemua Maharero – NSI, Mr Nico Snyders – MME, Mr Harald Schutt – REIAoN, Mr Frederick Muketi – MoWT,

Mr Kudakwashe Ndhlukula – SADC Centre for Renewable Energy and Energy Efficiency (SACREEE), Dr Zivayi Chiguvare – NUST, NEI

7. SUMMARY:

The workshop conclude that the Namibia solar thermal technology roadmap should not just remain as a document, but it has to be implemented. Participating institutions pledges commitments on the

implementation plan of the Namibia solar thermal technology roadmap. All the participants were thanked and were encouraged to work together as a team in order to achieve the mission of the roadmap of a fully functional 0.5 m^2 of flat plate solar thermal collector area installed capacity per inhabitant in Namibia by 203 Two main highlight at the workshop:

- A scholarship was handed over to a NUST student, Anna Amupolo, courtesy of SOLTRAIN Project. Amupolo is studying a Bachelor of Technology in Power Engineering.
- Participants who attended the SOLTRAIN Project II trainings from Windhoek Vocational Training Centre presented the first locally manufactured collector at the workshop. The collector was manufactured by Vocational Educational Trainers with assistance of GIZ.

Front row, from left: Dr Zivayi Chiguvare, Director: Namibia Energy Institute; Anna Amupolo, student: Department of Electrical and Computer Engineering; Dr Werner Weiss, SOLTRAIN Coordinator: AEE INTEC (Institute for Sustainable Technologies from Austria).

Back row: Nico Snyders, Deputy Director, Renewable Energy: Ministry of Mines and Energy; Lameck Mwewa, Senior Lecturer: Department of Geo Information Technology (NUST); John Titus, Director of Energy: Ministry of Mines and Energy; Helvi Ileka, Centre Head: Centre for Renewable Energy and Energy Efficiency (CREEE) : Namibia Energy Institute, and Fenni Shidhika, Researcher, CREEE: Namibia Energy Institute.

Mr Leevi Kamati and Mr Immanuel Iiyagaya from the Windhoek Vocational Training Centre presented their first locally manufactured collector at the workshop.

Participants from various institutions that attended the final stakeholder workshop on the Implementation Plan of the Namibia solar thermal technology roadmap