

SADC Centre for Renewable Energy and Energy Efficiency

Host nation adjudication process completed

SADC HAS completed the process of selecting a Member State that will host the proposed regional centre for the promotion of renewable energies in southern Africa.

The adjudication and evaluation process for the four bids to host the SADC Centre for Renewable and Energy and Energy Efficiency (SACREEE) received from Botswana, Mozambique, Namibia and Zimbabwe, took place in February 2015 at the SADC Secretariat.

The name of the host country is expected to be announced during the next meeting of SADC Energy Ministers set for South Africa in May.

The establishment of SACREEE is expected to increase the uptake of clean energy in southern Africa, enabling the region to address some of its energy challenges.

The region has an abundance of energy sources, particularly renewable energy, which, if fully harnessed, could greatly boost power generation.

The proposed centre would promote market-based adoption of renewable energy and energy efficiency technologies and services in SADC Member States.

The centre is expected to contribute substantially to the development of thriving regional renewable energy and energy efficiency markets through knowledge sharing and technical advice in the areas of policy and regulation, technology cooperation, capacity development, as well as investment promotion.

Various cooperating partners such as the Austrian Development Agency and the United Nations Industrial Development Organization (UNIDO) have pledged to provide financial support to the centre for the first three years.

After that, the centre should be self-sustaining. Establishment of the centre is expected to be carried out in three phases, the first of which involves the selection of a host country and establishment of the SACREEE Secretariat.

The Preparatory Phase, that was initially expected to run from January-October 2014, would also see the creation and inauguration of the SACREEE executive board and technical committees.

The First Operational Phase is expected to run from the end of 2014-2017 during which the centre will primarily focus on developing renewable energy programmes for the region and resource mobilisation.

The Second Operational Phase, from 2018-2021, will focus on activities to ensure sustainability of the centre after the exit of international cooperating partners such as UNIDO. \square

SADC appoints new SPO for Energy Division

THE SADC Secretariat has appointed Moses Ntlamelle as the Senior Programmes Officer (SPO), a move that is expected to strengthen the institutional capacity in the Energy Division.

The appointment of Ntlamelle follows the retirement of Freddie Motlhatlhedi who has been SPO for the Energy Division for several years as well as the expiry of the contract for Programme Officer, Odala Matupa at the end of 2015.

Ntlamelle is a citizen of Lesotho and his recruitment followed a region-wide recruitment exercise by the SADC Human Resources Department last year.

Meanwhile, SADC Executive Secretary, Dr Stergomena Lawrence Tax acknowledged the support of International Cooperating Partners in the SADC energy sector.

Responding to a letter from Austrian ambassador to South Africa, Brigitte Oppinger-Walchshofer, Dr Tax pointed out that SADC would continue giving priority to the energy sector in the Regional Indicative Strategic Development Plan, which is currently under revision.

"In this regard, Secretariat has ensued continuity within the Directorate for Infrastructure and Services by appointing a new Senior Programme Officer for Energy, Mr Moses Ntlamelle," she said.

As Lead ICP for the SADC energy sector, Austria had written to Dr Tax seeking the Secretariat's assurances that it would continue seeking sustainable financial support from SADC Member States to strengthen the capacity of the Energy Division.

SAPP to commission 2,763MW new generation capacity



THE SOUTHERN African Power Pool plans to commission new projects that will add 2,763 megawatts to the regional grid this year as the region targets to meet its energy needs by 2018.

Of the planned capacity from the 13 projects being undertaken in six SADC Member States, the majority will come from South Africa where at least five projects are targeted for commissioning this year, producing an additional 1,828MW for the regional grid.

According to the SAPP Coordination Centre manager, Dr Lawrence Musaba, another significant contribution to the regional power grid is expected to come from the Democratic Republic of Congo, which is due to add 430MW this year (*see table*).

Coal will contribute the largest share of the new generation capacity in South Africa, with the coal-fired Medupi Power Station expected to have additional capacity of 738MW by the end of this year.

With regard to the regional target of increasing the uptake of clean energy, about 45 percent of the planned new capacity for 2015 is expected to come from renewable energy sources.

The uptake of renewable energy follows a resolution made in 2012 by southern African countries to increase the uptake of cleaner energy sources that result in reduced carbon emission.

The long-term target set by regional energy experts is that SAPP should achieve a renewable energy mix in the regional grid of at least 32 percent by 2020 and 35 percent by 2030.

In addition, gas is becoming a major contributor of energy in the region as five of the projects to be commissioned are gas-fired, with South Africa expected to contribute 435MW from cogeneration capacity between the national power utility ESKOM and an Independent Power Producer (IPP).

This year will witness a major share of planned capacity coming from IPPs who contribute about 32 percent of new generation.

For example, new power to be commissioned in Zimbabwe and Mozambique will be produced by IPPs.

Zimbabwe has four notable IPP hydropower stations, one of which – the Pungwe – is expected to be commissioned this year and contribute 15MW to the power grid. The Ressano Garcia and Kuvanianga power stations in Mozambique are also run by IPPs and are expected to add 175MW and 30MW respectively to the regional grid.

According to SAPP, southern Africa plans to commission 24,062MW of power between 2015 and 2019 if all proposed projects come on stream.

This development will see the region finally meeting its power needs after several years of shortages.

Since 2007 the region has been facing challenges in meeting its energy requirements, forcing most SADC Member States to implement demand-side management policies such as load shedding that have to some extent succeeded in restraining overall electricity demand in the region. \square

	Utility	Country	Name	Type	Capaci- ty (MW)
1	Eskom	South Africa	Medupi	Coal	738
2	Eskom	South Africa	Ingula	Hydro	333
3	IPP	South Africa	Cogen	Gas	335
4	Eskom	South Africa	Cogen	Gas	100
5	IPP	South Africa	Round 3 Renewa- bles	Re- newa bles	322
6	TA- NESCO	Tanzania	Kinyere- zi 1	Gas	150
7	SNEL	DRC	Inga 1	Hydro	110
8	SNEL	DRC	Inga 2	Hydro	320
9	ZESCO	Zambia	Ithezhi Tezhi	Hydro	120
10	ZESCO	Zambia	Lusi- wasi	Hydro	15
11	IPP	Zimba- bwe	Pungwe	Hydro	15
12	IPP	Mozam- bique	Ressano Garcia	Gas	175
13	IPP	Mozam- bique	Kuvani- anga	Gas	30

Progress on ZiZaBoNa project

THE SOUTHERN African Power Pool has appointed three consultants to provide various technical services aimed at ensuring the commencement of an interconnector project that will link the electricity grids of four countries in the region.

According to the SAPP Coordination Centre manager, Dr Lawrence Musaba, the German engineering consultancy firm Fichtner was appointed to provide transaction and technical advisory services to the ZiZa-BoNa project while the Swedish firm SWECO has been selected to undertake an Environmental and Social Impact Assessment (ESIA) for the Zambian leg of the transmission line. ESIA has completed in Botswana, Namibia & Zimbabwe.

The contract to undertake project coordination and supervision was awarded to PhD Capital of South Africa. The African Development Bank (AfDB) is funding the consultants.

"Funding has now been released by AfDB and the project is expected to commence soon," Musaba told the SADC Energy Thematic Group in Gaborone, Botswana in February.

Initiated in 2008, the ZiZaBoNa transmission line links Zimbabwe, Zambia, Botswana and Namibia. Its development is expected to increase electricity trading among power utilities of the participating countries.

The interconnector aims to provide an alternative power transmission route in the SADC region and decongest the existing central power transmission corridor that passes through Zimbabwe.

The ZiZaBoNa project is expected to be implemented in two phases. The first phase of the project includes the construction of a 120-km 330kilovolt (kV) line from Hwange Power Station to Victoria Falls where a switching station will be built on the Zimbabwe side. The line will extend to a substation at Livingstone in Zambia.

The second phase involves the construction of a 300-km 330kV line from Livingstone to Katima Mulilo in Namibia, through Pandamatenga in Botswana.

The Zimbabwe-Zambia interconnector will be built as a high voltage line with a transmission capacity of 430kV. However, it will operate as a 330kV line during the first phase.

Once completed, the ZiZaBoNa project would, for example, make it possible for Namibia's power utility, Nam-Power, to import electricity directly from Hwange Power Station in Zimbabwe. Electricity from the Hwange station is currently routed to Namibia through South Africa.

The SADC region is not yet fully integrated as Angola, Malawi and United Republic of Tanzania are not connected to the regional power pool.



This means that any new generation capacity installed in any of the three countries is not realised in the nine other SAPP members. These are Botswana, the Democratic Republic of Congo, Lesotho, Mozambique, Namibia, Swaziland, South Africa, Zambia and Zimbabwe.

Sweden joins Power Africa initiative

SWEDEN HAS joined the "Power Africa" initiative which seeks to increase efficient electricity generation capacity as well as increase electricity access by adding 60 million new home and business connections.

The Swedish government through the Swedish Development Agency (SIDA) and has set aside US\$10 Billion for investment projects for a period of 10 years.

The Power Africa initiative launched by United States of America proposes the use of private investments for power development in Africa.

The initiative targets an increase in electricity access with 60 million new household and business connections with on-grid, mini-grid, and off-grid solutions.

With regards to sustainable energy, SIDA has also joined efforts aimed at strengthening the Sustainable Energy for All (SE4ALL) initiative in Africa.

SE4ALL is an initiative launched by the United Nations in September 2011, focusing on three goals which are, ensuring universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix by 2030.□

SADC Energy Ministers to meet in May

SADC ENERGY Ministers will meet in South Africa in May to discuss a number of issues, including the establishment of the proposed centre to promote the uptake of renewable energies in the region.

The meeting which was scheduled for Malawi last year around March/April was postponed to allow the host country to prepare for its general elections. South Africa has since offered to host the meeting this year, providing an opportunity for energy ministers to review the power situation in the region.

Key issues to be discussed include the decision on the country to host the proposed SADC Centre for Renewable and Energy and Energy Efficiency.

Events Diary

February

26-27, Botswana SADC Energy Thematic Group

Meetings

March

26, South Africa 38th SAPP Executive Commit-

tee Meeting and 20th Anniver-

sary of the SAPP

April

16-17, South Africa Wind Energy Summit

19-22, Australia World Geothermal Congress

2015

20-24, South Africa AFUR 12th Conference &

AGA

tation of key decisions made at the last ministerial meeting held Lesotho in 2013, as well as status of some of the priority regional energy projects.□

Other issues on the agenda will be the implemen-

Draft renewable energy strategy completed

SADC ENERGY Division has produced a draft Renewable Energy Strategy based on the Renewable Energy Strategy and Action Plan (RESAP) process.

The strategy will be presented for adoption at the SADC energy ministers meeting scheduled for May in South Africa.

The development of a renewable energy strategy will ensure that southern Africa is able to effectively manage and exploit the natural resources that are in abundance in the region.

The SADC RESAP I (2015-2020), which influenced the formulation of the renewable energy strategy, was initiated by the SADC Secretariat with the government of Finland to explore options to increase the use of renewable energy in southern Africa.

Still to be approved, the RESAP was developed to contribute to energy supply security, stimulate economic growth and improve access to modern energy services.

The action plan also seeks to ensure that the regional energy strategy is aligned with global trends towards clean and alternative energy sources.□

May

27-28, UK

4-5, German	9th German-African Energy Forum
5-6, Zambia	Copperbelt Mining Trade Expo & Conference
7-8, Mozambique	4th Annual Powering Africa
12-14, South Africa	African Utility Week and Clean Power Africa 2015
19-21, China	World Hydropower Congress
25-28, Turkey	6th World Forum on Energy Regulation
27-28, Kenya	Africa Future Energy Forum

Gas, London

Africa Investment Exchange:

June

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8-11, United Arab	Africa Energy Forum
Emirates	
9-11, German	12th Global Petrochemical Conference
August	
27-29, Tanzania	Power & Energy Africa
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September

30-2 October,	Africa Electricity Exhibition
South Africa	and Conference