

## SADC, partners strategize on regional energy development

**THE PROVISION** of reliable and sustainable energy continues to be a priority for southern Africa's development agenda.

The Southern African Development Community (SADC) has been experiencing energy shortfalls for more than a decade due to growth in demand, forcing most countries to implement demand side management programmes such as load shedding.

While load shedding has succeeded in restraining the overall electricity demand in the region to some extent, the measure has also affected socio-economic growth since the availability of energy is one of the key enablers of sustainable development, and is essential to the industrialization agenda.

SADC and its energy sector cooperating partners met in Gaborone, Botswana in September to discuss ways of improving a coordinated approach to addressing the energy situation in the region.

The energy sector cooperating partners, commonly known as the SADC Energy Thematic Group (ETG) consists of representatives of the SADC Secretariat, SADC subsidiary organisations, International Cooperating Partners (ICPs) and a knowledge partner, the Southern African Research and Documentation Centre (SARDC).

The lead ICP for the energy sector is Austria, and SARDC is tasked with raising regional awareness among stakeholders in southern Africa about key energy issues in the region.

Speaking at the meeting, Director of Infrastructure and Services at the SADC Secretariat, Remmy Makumbe said energy is a key enabler of sustainable development and as such, the region should strive to have adequate energy to ensure supply meets demand.

He said energy sector cooperating partners have been influential in assisting SADC to address its energy situation, adding that "we should continue this spirit of cooperation."

With the recent approval of two key regional action plans namely the Revised RISDP and SADC industrialization Strategy and Roadmap, Makumbe said it was important for the ICPs involved in the energy sector to align their support to the two documents.

Alignment of support to the two regional documents will ensure the smooth implementation

of agreed activities and programmes, thereby promoting socio-economic development and deeper integration.

"Our support to regional energy development should speak to these two documents, the Revised RISDP and the SADC industrialization Strategy and Roadmap," he said, adding that any support that does not speak to these "will be difficult to find place in our activities."

Deputy Head of Mission at the Austrian Embassy in Pretoria, Matthias Radosztics said ICPs were committed to support SADC in regional energy development, as well as aligning their support to the Revised RISDP and the SADC industrialization Strategy and Roadmap.

The two regional documents were adopted by a SADC Extra-Ordinary Summit held in April in Harare, Zimbabwe.

The SADC Industrialization Strategy and Roadmap aims at accelerating the growing momentum towards strengthening the comparative and competitive advantages of the economies of the region, and is anchored on three pillars, industrialization, competitiveness and regional integration. The strategy covers the period 2015-2063.

The Revised RISDP is a five-year plan that guides the implementation of all SADC programmes from 2015 until 2020.

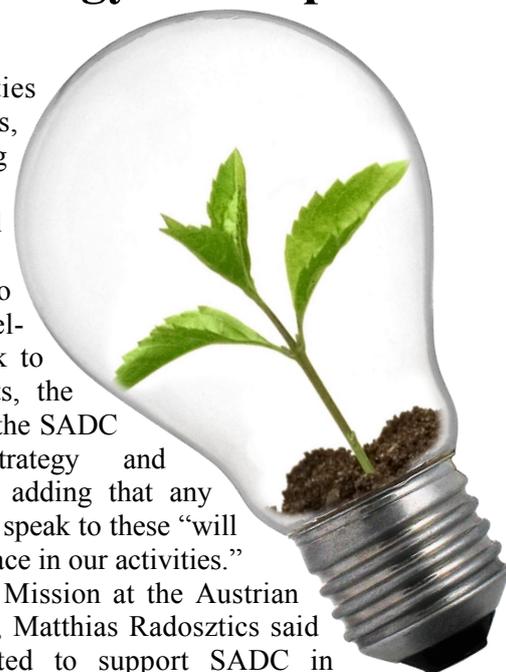
Energy is a critical area for both the Revised RISDP and SADC Industrialization Strategy and Roadmap.

The SADC ETG meeting also discussed the formulation of the SADC Renewable Energy Strategy and Action Plan (RESAP) 2015 to 2020.

The RESAP aims to encourage the region to achieve a renewable energy mix of at least 32 percent by 2020, which should rise to 35 percent by 2030.

Currently, SADC generates about 74 percent of its electricity from thermal stations.

The next SADC ETG meeting is scheduled for February 2016. □





## SACREEE host nation selected

**SADC ENERGY** Ministers at their meeting in South Africa in July this year selected Namibia to host the regional centre for the promotion of renewable energies in southern Africa.

This follows the final 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, that took place in February 2015 at the SADC Secretariat.

The SADC ETG noted that the creation of SACREEE will change the “landscape of energy development in SADC.”

Technical Advisor to the SADC Secretariat Energy Division, Wolfgang Moser said efforts are underway to have the centre operational by the first quarter of next year.

SACREEE is expected to increase the uptake of clean energy in southern Africa, enabling the region to address 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. □

### **Energy strategy to align with SACREEE activities**

**SADC ENERGY** partners have called on the renewable strategy and action plan currently under formulation to align with SACREEE activities.

This will provide the chance for the regional centre for the promotion of renewable energies to effectively implement its mandate in line with regional strategy and plan.

Currently, SADC does not have an overall strategy for renewable energy but the region is in the process of formulating one which will focus on the role of sustainable energy for poverty eradication.

Once completed, the SADC Renewable Energy Strategy and Action Plan (RESAP) will ensure that southern Africa is able to effectively manage and exploit its abundant natural resources.

The RESAP I initiative aims to accelerate the expansion of renewable electricity production, taking advantage of the region’s enormous untapped potential and helping to sustain future growth.

The SADC RESAP I, which influenced the formulation of the renewable energy strategy, was initiated by the SADC Secretariat with the Government of Finland to explore options aimed at increasing the use of renewable energy in southern Africa.

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

## SAPP to commission 2,269 MW new generation capacity by year end

**THE SOUTHERN** African Power Pool (SAPP) plans to commission new projects that will add 2,269 megawatts to the regional grid from 11 projects by year end.

However, the region will effectively receive 2,089MW additional power as South Africa will decommission 180 MW from coal powered plant.

Of the planned capacity 1,670 MW has already been commissioned, the majority coming from South Africa where four projects have been commissioned, producing an additional 1,479 MW to the regional grid.

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 722MW.

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 (DRC), which is due to add 430 MW this year from hydro power (*see table*).

Of the planned capacity in DRC, 110 MW have already been commissioned from hydro powered Inga 1 plant whereas Inga 2 will add 320 MW.

With regard to the regional target of increasing the uptake of clean energy, about 46.8 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. Of the commissioned projects in South Africa, gas has contributed 335MW from open cycle gas turbine plant run by an Independent Power Producer (IPP).

Tanzania also expects to add 150MW to

the regional grid from a coal powered plant which is currently under commissioning tests.

This year will witness a major share of planned capacity coming from IPPs who will contribute about 30 percent of new generation. Two projects commissioned in South Africa are run by IPPs.

According to SAPP, southern Africa plans to commission 23,585MW 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. □

**GENERATION PROJECTS-2015 TARGET**

Utility	Country	Name	Type	Capacity (MW)	Funding/Status
ZESCO	Zambia	Lunzua	Hydro	15	Commissioned
ZESA	Zimbabwe	Pungwe	Hydro	15	Commissioned
ESKOM	South Africa	Medupi	Coal	722	Commissioned
IPP	South Africa	Renewable Round 3	PV,CSP, Wind	322	Commissioned
IPP	South Africa	OCGT	OCGT	335	Commissioned
SNEL	DRC	Inga 1	Hydro	110	Commissioned
RNT	Angola	Lomaum	Hydro	50	Commissioned
ESKOM	South Africa	Sere	Wind	100	Commissioned
ZESCO	Zambia	Mu-	Hydro	10	Under construc-
ZESCO	Zambia	Itezhi Tezhi	Hydro	120	Commissioning Tests Underway
TANESCO	Tanzania	Kinyerezi 1	Gas	150	Commissioning Tests Underway
SNEL	DRC	Inga 2	Hydro	320	Commissioning Tests Underway
<b>Total</b>				<b>2269</b>	
South Africa	Decommissioning		Coal	-180	
<b>TOTAL ADDITIONAL</b>				<b>2089</b>	

# Private sector key to resolving power crisis

AS SOUTHERN Africa increase its efforts to avert the power crisis, there is need to upscale activities that attract private sector investments and further promote public-private partnerships.

This is so because exploring energy sources is generally a complex and expensive process but is nevertheless important for socio-economic development.

There is, therefore, need for the private sector to partner with governments because the latter alone cannot improve access to energy.

To facilitate the engagement, the region should shift from a monopolistic energy sector dominated by state utilities to a more liberalized market approach.

This is important for grid-connected generation projects such as wind or hydro but also for energy service providers such as rural electricity distributors.

Currently, a number of SADC Member States have opened up the opportunities for Independent Power Producers (IPPs) and this has positively impacted on the energy situation in the region.

For example, of the 2,009 MW total electricity generation projects commissioned by SAPP in 2014, IPPs were responsible for 1,829 MW which translates to 91 percent.

This year alone, IPPs have added 657 MW of energy to the regional grid. □

## Events Diary

### October

6, Ethiopia	Expert Working Group on IPPs in Africa's Electricity Sector Meeting
15-16, DRC	SAPP Energy Traders and System Controllers Forum
15-16, China	Africa Infrastructure and Power Forum
19-20, Germany	Conference on Bioenergy and Development
26-29, Germany	IEA Bioenergy Conference 2015

26-30, South Africa	22nd Africa Oil Week
28-29, Ethiopia	World Energy Leaders' Summit
<b>November</b>	
5, Zambia	39th SAPP Executive Committee Meeting
	20th SAPP Anniversary Celebrations
5-6, South Africa	Powering Africa: Finance Options
5-6, Switzerland	2nd Session of the Group of Experts on Energy Efficiency
8-12, South Korea	Solar World Congress 2015
11, Germany	World Energy Outlook
19-20, England	Africa Investment Exchange: Power and Renewables 2015
30 Nov – 11 Dec	21st Conference of the Parties (COP 21)
<b>December</b>	
2-3, United Kingdom	World Energy Resources Study Group Meeting
3-4, Tanzania	Powering Africa: Tanzania
8-10, USA	Renewable Energy World Conference and Expo
<b>January 2016</b>	
16-17, United Arab Emirates	Sixth Session of the IRENA Assembly
18-21, United Arab Emirates	World Future Energy Summit
<b>February</b>	
16-17, South Africa	Africa Energy Indaba
25-26, Germany	GeoTHERM Expo and Congress
<b>March</b>	
17-20, Germany	5th World Summit for Small Wind 2016