How can Africa fund its energy revolution? What are the existing financing and insurance mechanisms for energy projects in Africa? And which new financing instruments are necessary to accelerate the implementation of energy projects on the African continent? Those were the guiding questions of Afrika-Verein’s 13th German-African Energy Forum which took place in Hamburg on 27th – 28th of March 2019 and was led by the topic of Financing Africa’s Energy Revolution. As in the previous years, the Forum attracted more than 400 participants including Ministers and Deputy Ministers and their delegations from Benin, Ghana, Malawi, Morocco, Nigeria, Togo, Senegal, South Africa, and Zimbabwe.

Participants

Countries: 54

Delegations from:
Algeria, Angola, Benin, Burkina Faso, Egypt, Ethiopia, Equatorial Guinea, Botswana, Cameroon, DRC, Djibouti, Cape Verde, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Madagascar, Mali, Malawi, Mauritius, Mauretania, Morocco, Mozambique, Namibia, Nigeria, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Togo, Tunisia, Uganda, Zambia, Zimbabwe

Total: 424

Main Panel Discussions

First conference day:

I. How can Africa fund its own energy revolution?

II. Smart energy systems: Digitalization of the energy sector

III. Partnering for energy finance

IV. Waste-to-Energy

Second conference day:

I. Financing and insuring energy projects in Africa

II. Renewable energies / Hydropower and hybrid systems – stabilizing energy supply

III. Innovative off-grid financing models

IV. G20 Compact with Africa

Discussants

Sustainable Financing Options for Energy Projects in Africa

In the High-level outlook: How can Africa fund its own energy revolution? Ministers and Deputy Ministers of Energy from five African countries shared their countries’ positions and insights on the leading topic of financing Africa’s Energy Revolution. Togo’s Minister of Mines and Energy, Hon Marc Dédériwè Abli-Bidamon, Deputy Minister Hon. Joseph Cudjoe (Ghana), Hon. Jean-Claude Houssou (Benin) and Morocco’s Honorable Minister Mohamed Ghazali spoke alongside Judith Helfmann of Afrika-Verein, who moderated the session. The main emphasis was put on concrete opportunities on the continent in and for the energy sector. This requires a mind shift concerning our risk perception of Africa and efficient risk management, international cooperation and manageable financing to be realised. Attracting investments to make use of the huge potential available, Africa’s risk profile needs to be re-evaluated and a legal framework has to be created for investors to take the available opportunities. Morocco showcased itself as a role model for opening up to external expertise, creating an individual strategy and has set a high target to generate more than 50 % of its energy from renewable sources by 2030.

Following this positive outlook, the Partnering for energy finance panel analysed the issue of bankability of projects in and with Africa. It became clear, that there is no lack of good projects but of means and ways to realise these. Both the providing and the receiving side of financing agreed that the issue lies in the risk management of such investments, which often stands in the way of realising projects. To assist more projects to become bankable, Afreximbank, for instance, has created a project preparatory facility which works on detecting and solving problems in projects that hinder their bankability. Also, alternative funding solutions like crowd-funding and peer-to-peer funding were discussed. A central question dealt with the differences in financing “big” and “small” projects and how institutions classify the two, in order to give companies a better idea of their options. Credit insurance for financiers as well as political risk insurance are also main obstacles to be overcome which is why different insurance and guarantee schemes such as Investment Guarantees and the Africa Energy Guarantee Facility were presented.

The panel Innovative off-grid financing models dealt with similar obstacles. Less than a quarter of African rural populations have stable reliable access to electricity which poses a huge challenge in the economic development. Examples such as in Ethiopia where local entrepreneurs have been in charge of mini grids in rural areas were introduced. Foremost, financial knowledge and practice needs to be taught in order for projects to be secure and trustworthy for investors. Often, good projects are not invested in due to a lack of basic financial skills, which creates a sort of vicious cycle of lack of access to education, work, infrastructure and economic development, which all affect each other and thus need to be tackled inclusively. Private sector representatives presented functioning examples of off grid projects at different scales such as the electrification of 300 villages in Senegal as well as smaller-scale crowd-funding solutions, motivating investors to take risks and think long term when evaluating bankability of rural infrastructure projects. In off-grid electrification the duration of funding is a main issue, as many such energy projects are known to need long period of times to show success.

The Future of Africa’s Energy Systems

This topical stream was kicked off by the Keynote: Evolution of the power grid by Mr Jochen Kreusel, representing ABB. In his speech he elaborated on power systems of the future, which are to become more and more complex and thus need to focus on three building blocks: Micro-Grid, trans-regional complementarity, and coordination and network codes. In order to provide unconnected areas with power, energy has to be generated from renewable energy sources, which are largely available in these very areas. The key to make use and integrate these renewables has two building blocks: Source and coordinate locally and make use of trans-regional complementarity like long distance transmission network and efficient network codes.
Smart energy systems: Digitalization in the energy sector, directly connected to this approach. The panellists discussed how smart grids are seen to be a promising mean to find new solutions for Africa’s energy demands. Due to an increasing number of smaller power producers as well as a rising share of fluctuating renewable energies being fed into the grid the use of smart technology is necessary to manage the increasing degrees of complexity and requirements associated with modern power networks. The goal is to use knowledge and experience from external partners to accommodate as many renewables as possible in smart interconnected systems, which can be relied upon on demand whenever the need arises. The advantages of smaller island solutions focusing on city grids first as well as more elaborate approaches were discussed. The panellists agreed that the right partnerships as well as appropriate framework conditions are necessary to move the digital revolution forward.

Followed by a keynote on electrifying a sustainable Africa by Sabine Dall’Omo representing Siemens the issue of making 24/7 availability of energy supply the norm instead of a privilege was touched upon. Africa’s Energy transition is to be realised by combining PV, Microgrid and Battery Storage, which will result in more independent communities, rural or urban. In addition, in the complex environments of the African continent, gas turbines are to provide flexible and fast track distributed power solutions and waste-to-energy technologies can and will play a huge role in realizing a sustainable, smartly digitalized and reliable grid system in Africa.

The role of Waste-to-Energy in Africa’s future energy mix was also elaborated on further in a special dedicated session. The discussants highlighted the importance of the use of waste to benefit Africa’s energy mix and simultaneously helping solve Africa’s big issues in waste management as well as with regard to job creation. As the population is and will be growing, these very problems need to be tackled and especially big cities and industrial areas should be focused on when developing future waste plants and ways of management. The question, which waste materials are suitable for power energy plants and whether waste energy can compete with other renewable energies was discussed.

Other central topics in the future energy mix are hydropower and hybrid systems. Hydropower is one of the most long-term cost-effective renewable energy sources that needs to be invested in, in order to stabilize energy supply. Yet, hydropower is not available everywhere using hydro as complementary source in the energy mix is ideal. Of special interest was the issue of storage. It was established that battery technologies are suitable for rather small, short term storage, whereas pump storage, hydrogen, or Power-to-X-technologies were recommended to be better options for long term large storage, which should be invested in.

Political initiatives

The G20 Compact with Africa and its relevance for the energy sector was also discussed as many country partnerships highlight the energy sector as a focal area for cooperation. According to the panellists the CwA initiative as well as other instruments and mechanisms presented throughout the conference can highly benefit Africa’s development and enable the continent to reach the sustainable development goals.

For further information on the specific content of the conference please visit the conference website: https://www.energyafrica-forum.com