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Renewable energy and public-private financing mechanisms

CONCLUSIONS

February 15-16, 2017 | Dakar, Senegal | King Fahd Palace Hotel

HIGHLIGHTS

- Approximately 70 participants from 14 West African countries attended: Burkina Faso, Cameroon, Cape Verde, Chad, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, The Gambia, Senegal, Togo
- Mr. Djiby Ndiaye, Director General of the Agence Nationale pour les Énergies Renouvelables of Senegal and Mr. Mahama Kappiah, Executive Director of the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECEEE) delivered keynote and concluding addresses

OBJECTIVES

Through a combination of high-level dialogues and expert workshops, the Public-Private Partnerships for Sustainable Electricity Development Program was designed to assist UN member states in identifying enabling policies and regulations that best promote the deployment of renewable and low-carbon emitting energy sources, energy efficiency and grid modernization, as well as help in the implementation of international best practices in public-private partnerships for the electricity sector.

SPEAKERS, MODERATORS AND PRESENTERS

- Abbas Aboulaye, Technical Director, Electricity Regulatory Authority, Togo
- David Albertani, Programs Director, R20
- Yesufu Longe Alonge, Head of Power Procurement and Power Contracts, Nigerian Bulk Electricity Trading
- Charlotte Aubin Kalaidjian, CEO, GreenWish
- Simon Benmarraze, Analyst, International Renewable Energy Agency (IRENA)
- Nicola Bugatti, Renewable Energy and Energy Efficiency Expert, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)
- Sidy Mohamed Coulibaly, Director, Studies Division, National Energy Directorate, Ministry of Energy, Mali
- Nicolas Crettenand, Director Africa, BG Consulting Engineers
- Jansenio Delgado, Head of Project Development and Funds Mobilization, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)
- Mouhamed Diop, Director, Project Management, Société Africaine des Biocarburants et des Énergies Renouvelables (SABER)
- Aziz Fall, Director, Promotion and Cooperation, Agence Nationale pour les Énergies Renouvelables (ANER) du Sénégal
- Abdou Fall, President, Conseil patronal des énergies renouvelables du Sénégal
- Charles Ifrah, CEO, DESERTEC
- Mahama Kappiah, Executive Director, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)
- Barbara Kreissler, Director, Philips Lighting
- Seth Agbeve Mahu, Deputy Director, Renewable Energy, Ministry of Power, Ghana
- Mamadou Mbaye, Executive Director for Energy and Mines, Fonds Souverain d'Investissements Stratégiques (FONSIS)
- Boubacar Mbodji, Conseiller spécial, Énergies Renouvelables, Environnement, Développement Durable, Présidence de la République du Sénégal
- Bruno Menard, Expert, Energy Supply Contracts, Hydro-Québec
- Djiby Ndiaye, Director General, Agence Nationale pour les Énergies Renouvelables (ANER) du Sénégal
- Christophe Nutall, Executive Director, R20
- Jasandra Nyker, CEO, BioTherm Energy
- Anthony Boye Osafo-Kissi, Director for Programs and Engineering, Bui Power Authority, Ghana
- Martine Provost, Executive Director, Global Sustainable Electricity Partnership (GSEP)
- Paolo Regano, General Manager, Solaria (Malicounda)
- Mohamet Abdoulaye Sall, Senelec
- Mohamed Youba Sokona, Renewable Energy Advisor, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)/GIZ
- Nathalie Weisman, SE4ALL Coordinator, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)
- Abderrahmane Zidane, Architect, Construction 21

MAIN CONCLUSIONS FROM DISCUSSIONS

GENERAL CONCLUSIONS

- A successful public-private partnership (PPP) requires focusing on the “partnership” element. Transparency, clear communication, mutual sharing and balancing of risk, and emotional intelligence can help build confidence between partners and incentivize investment.
- The global energy transition requires a multidisciplinary, systemic approach. This means that there cannot be only one energy solution, there will need to be multiple, depending on the needs and circumstances of each region.
- The development of renewable, affordable, and reliable energy is a prerequisite to achieving other development and socioeconomic goals.
- The electricity market can take off when all the following conditions are met:
 - Enabling regulatory framework
 - Strong political leadership/commitment from the top
 - Strong contractual skills and financial commitment from both sides, public and private
 - Is the public utility or the governmental energy department well-equipped to negotiate on fair terms with the private party?
 - If not, does the public party have an international project finance/legal advisor or a contract framework? A technical advisor? Can they afford it?
 - A new trend on the continent is to allocate a budget for legal assistance for contract negotiation.
 - Independent power producer (IPP) contracts are very complex and sometimes completely new to governments.
 - If the public sector is not well-equipped to negotiate, a lot of time will be wasted and the electricity market is very unlikely to develop.
 - Technical
 - Does solar/wind make sense in the energy grid?
 - What is the grid capacity? Can the grid absorb an intermittent source of energy? There have been governments who negotiated power purchase agreements (PPA) with the private sector where there was no capacity on the grid.
 - Main hurdles do not come from the technologies (wind or solar are already mature) but from the grid and its limitation

- Financing and insurance experience
 - The real price of electricity cannot always be reflected in the distribution tariffs. Since national power utilities are running at a deficit, sovereign guarantees are needed
 - Private sector must be bankable
 - Main blockers are usually the debt and risk guarantee insurance providers
- Good relationship with the community
 - Land acquisition can be an issue for solar

REGION-SPECIFIC CONCLUSIONS

- In order to accelerate the energy transition in Africa, a variety of decentralized and centralized solutions will be required (not just solar energy). Africa has huge industrialization potential and its transition to cleaner energy is needed to mitigate the impact on the global climate. Progress in technology and science will enable better management and tools to generate cleaner energy to drive this industrialization.
- In the West African region, each country has varying economic situations and access to capital. Regional cooperation has the potential to maximize African capital in the industrialization process, industrialize the continent, and develop the capacity and know-how in the African private and public sectors.
- The basic policy instruments in many countries in Western Africa are in place to move concrete projects and initiatives into the field. Countries that do not have these regulations are working on developing them.
- The region has abundant solar resources. However, a major constraint in developing solar power is access to land.
- There are several challenges in the development of the African renewable energy sector.
 - Network issues: Mature technologies and abundant resources exist, but the network may not always be able to absorb and distribute large additions of intermittent energy.
 - Contracts and financial structuring: governments need to be able to provide a sovereign guarantee in order to attract investment, but they are not always able to do so due to deficit concerns
 - Contract capacity of the public sector: the public sector needs to have the resources and experience to work and negotiate appropriately.
- Successful projects in the region (particularly in Senegal) were completed and successful due to four factors: lack of network capacity issues, local and community interest/collaboration, political will to create appropriate and helpful frameworks, and sufficient capacity of the public sector

PROJECT DEVELOPMENT AND FUNDING MECHANISMS

- Competitive bidding and calls for tenders are a preferred method for countries to initiate energy projects. However, in some cases, such as pilot projects, competitive bidding may not be possible or relevant.
- The best hedge for the private sector is to be able to provide a competitive tariff to avoid new taxes coming in or retroactivity on tariffs
- Competitive bidding provides greater transparency than bilateral negotiations, a global view of pricing (at that point in time) and can allow bidders to demonstrate their experience in similar projects. Bilateral negotiations can be more expensive and there are no set timelines or rules.
- Bilateral negotiations can only be successful if there is transparency between all parties. The government must also be properly equipped to negotiate with the private sector, either in its own staff or having the means to hire an advisor and/or international lawyer
- In the absence of competitive bidding, due diligence must be done when considering any proposals including: the experience of the bidder, funding sources and procurement, the bidder's experience with funding procurement, the price of electricity, if the company has already identified a site, technical considerations, consistency, price, and investor conditions, followed by negotiations which may last several years.
- A feed-in tariff alone may not be enough to trigger significant development in renewable energy projects. Other areas need to be improved, such as the credibility of off-takers, support instruments for investment, promotion of local technologies (not imported technologies), and policies or regulations to reduce uncertainty surrounding future pricing and market fluctuations.
- A dual feed-in tariff/competitive bidding approach can be considered, depending on the local context
- Feasibility studies are absolutely necessary before beginning a project. Should a government not have sufficient resources to complete a feasibility study, it can request feasibility studies from developers in the private sector who have the technical capacity.
- There is a premium for the first projects to be developed in a given region. The first projects will always be the most difficult and expensive (more expensive debt, higher expectations of return from the private sector, construction company will charge the highest price, etc.). However, future projects will be able to develop more rapidly and with more competitive tariffs.

ENERGY CONTRACTS

- An energy supply contract or power purchasing agreements (PPA) must be properly structured and negotiated and contain all necessary details (including clearly-defined roles and services, implementation steps and follow-ups, monitoring, regulatory clauses, payment and invoicing, warranty and risk management, financing, damages and penalties, retrocession and decommissioning etc.)
- A long-term contract between an electricity utility and an independent private producer (IPP) can be advantageous in some ways by reducing the amount of initial investment, focusing on integration costs, establishing contractual links and well-controlled risks, better-structured funding, and increasing participation of other stakeholders and local groups

- Differences in the energy market over a few years can dramatically change prices and terms negotiated in the original contract. Signees should be conscious of this risk when structuring contracts or agreements.

STAKEHOLDER INVOLVEMENT AND COOPERATION

- Harmonization and synergy between institutional and private stakeholders will be required to provide modern energy services to the majority of the public.
- Transparency is paramount to help alleviate the risk perception investors may have. Guarantees in terms of the regulatory and legal framework can give them the confidence to invest.
- Improvements are needed in public policies to attract and support private investors because public funding is overstressed. This is why it is absolutely necessary for governments to forge partnerships with the private sector.
- In order to be operational and efficient and to have ownership of projects by citizens and communities, civil society and elected officials need to be involved with the private sector. Legislation needs to permit those producing electricity to also be able to use it.

POLICY AND REGULATORY FRAMEWORKS

- Renewable energy development cannot accelerate if it is not supported by strong political leadership, political will and a regulatory and legal framework that make it possible to structure the energy sector. Once this is in place, energy markets can grow and develop very fast.

ENERGY EFFICIENCY

- Lighting consumes 15% of the world's electricity. Growing population, urbanization and the rise of middle class means that more lighting will be used, accounting for a large portion of people's energy bills. Energy efficiency can help drastically reduce costs, increase road/street safety, and create better and more productive buildings
- For energy efficiency projects, the CAPEX value is not necessarily the most relevant. Developers should focus more on the total cost of ownership, not just the investment needed, to see the full life cycle of a product