Vance Center Virtual Workshop: Energy Sector Project Agreements In Successful Renewable Energy Projects











ENERGY SECTOR PROJECT AGREEMENTS

TRAINING SESSION REGARDING THE ROLE OF KEY PROJECT AGREEMENTS IN STRUCTURING SUCCESSFUL RENEWABLE ENERGY PROJECTS

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CYRUS R. VANCE CENTER FOR INTERNATIONAL JUSTICE

ORARO & COMPANY

WELCOME, INTRODUCTIONS AND AGENDA

- Overview of Role of Project Agreements in Renewable Energy Projects
- Key Project Agreements
 - Power Purchase Agreements
 - Interconnection and Transmission

- Real Estate
- Operations and Maintenance and Asset Management
- Analysis and Observations From Kenya, Nigeria, and Ethiopia
- Q&A and Discussion

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OVERVIEW

ROLE OF PROJECT AGREEMENTS IN SUCCESSFUL RENEWABLE ENERGY PROJECTS









The Need For Comprehensive and Financeable Project Agreements For Successful Renewable Energy Projects

- Large scale renewable energy projects require a complex and comprehensive set of agreements to cover all aspects of the Project's construction and operation.
- Governmental Authorities and Electric Utility Regulators require various primary agreements to be in place to grant the permissions and permits needed to construct and operate.
- Project Sponsor and Investors require certainty that the project contracts provide that the intended economics will be maintained and the commercial arrangements are in place to successfully develop, construct and operate the projects
- Financing Parties require financeable and comprehensive project agreements to be in place in order to provide construction and long-term financing.









Financing Perspective on Project Agreements:

- Lenders loan money for the development of a project (or a portfolio of projects) based on the project's future cash flows and earnings of the project to re-pay the loan.
- Lenders often have either no recourse (or limited recourse) to the developer or sponsor of the project.
- Sponsors use project finance to finance projects that may be too expensive or speculative to be carried on a corporate balance sheet.
- Non-recourse = the collateral is limited to the assets of the project.
- Project agreements need to be financeable









Typical Renewable Energy Project Structure and Key Project Agreements



Overview of Utility Scale Solar Photovoltaic Power Project









Key Considerations When Drafting Documents and Negotiating Renewable Energy Projects Contracts

- Complexity of the renewable energy project(s)
- Scale of the project in terms of time and cost
- Nature of the Parties
- Likelihood of engaging in more than one project
- Financing and tax implications
- Sustainability and impact on the environment
- Technical viability
- Legal and regulatory regime
- Pricing











PROJECT AGREEMENTS

OVERVIEW OF KEY PROJECT AGREEMENTS FOR SUCCESSFUL ENERGY PROJECTS IN THE RENEWABLES SECTOR













Agreements Covered in Today's Discussion

- Power Purchase Agreements and Feed in Tariffs
- Real property agreements for site control
- Interconnection and transmission agreements
- Operations and Maintenance (O&M) and Asset Management











The PPA – the "Backbone" of a Successful Project and Project Financing

- Financeability: As the primary revenue source, a well-structured PPA is the backbone to obtaining project financing, or investment into a project, and the source of sponsor returns.
 - Investors and financing parties want to see predictable financial returns. Terms in the PPA that could affect the predictability of returns are carefully scrutinized.
 - Key provisions to carefully negotiate or review:
 - Pricing and payment provisions
 - Curtailment rights and energy scheduling
 - Delay damages
 - Security requirements
 - Project performance requirements
 - Termination Rights/Damages on termination











Key PPA Parties and Related Stakeholders

- Project Sponsor
- Project Company Facility Owner / Seller
- Power Purchaser / Buyer (regulatory compliance, supply certainty, risk mitigation, rate recovery)
- Financing Parties and Investors/Purchasers (predictable revenue, managed risk, production and investment tax credits)
- Public Utilities Commission and other regulators (consumer protection and RPS compliance)
- Transmission/Interconnection Providers (transmission system capability and integrity)
- Grid operator









Know Your Different Types of "Buyers"

Who is the Buyer?

- Private utility or other Regulated Utility
- State or Local Governmental Entity
- Commercial or industrial buyer ("C&I")
- Federal Governmental Entity
- Financial Institutions (hedging transactions and other alternative structures)





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What is Being Sold as the "Product"?

- Product: Energy, Renewable Energy Credits (RECs) and other Environmental Attributes, Capacity and Ancillary Services
- Renewable Portfolio Standards (RPS) laws in some countries, including the U.S. require certain wholesale electricity providers to source a portion of their electricity supply from renewable energy facilities. RECs or other "Environmental Attributes" are the tracking mechanism for these state standards.
- Restrictions on Sales of Product:
 - Renewable energy PPAs will often restrict Seller's ability to sell Products to third parties during the delivery term or the PPA term. These restrictions need to be evaluated in the context of the schedule for the project's construction and anticipated online date.









"Take-or-Pay" Obligation

- Most critical element of a project financing generally and of a PPA
- Basic Take-or-Pay rule is that Buyer must:
 - Take <u>and</u> pay for all or specified quantities of all product (energy) produced by the Project;
 OR
 - Pay a penalty (usually PPA purchase price) for failure to take.
- Take-or Pay language must appear somewhere in the PPA.
- Examples do exist of "tricky/ambiguous" unfinanceable language









The Project and Delivery of Power

- Project Description: PPAs typically include a detailed description of the Project that will be selling the power, including:
 - Module or equipment type and technology
 - Interconnection and Transmission rights
 - Project location/real estate
 - Other project assets, including shared facilities
- Interconnection/Delivery Point: PPA to specify where Project will interconnect and where delivery of power will occur.





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PPA Pricing

- Pricing Structure and Considerations
 - Fixed vs Escalating: High variability by geographic region and local requirements
 - Certain utilities prefer pricing based on a variable energy index price plus a fixed REC price, however this structure is less commonly utilized and financed
 - Pricing can be an all-in price or broken out by product: variability based on specific products being offered
 - Allocation of Risk/Costs, such as transmission upgrades, variable integration costs, scheduling costs, locational marginal pricing (LMP) and curtailment risk
 - Time of day factors
 - Price reductions for over-delivery are common









PPA Term, Length

- Standard Term: Typically, a solar energy PPA's term is between 15-25 years. "Financeable" PPAs are generally 15 years or longer.
- Sample provision:
 - "This Agreement shall become effective as of the Effective Date and shall continue in effect until the end of the month in which the twentieth (20th) anniversary of the Initial Delivery Date occurs (as may be extended pursuant to this Section, the "Term"), unless sooner terminated in accordance with the terms hereof. During the period that begins on the eighteenth (18th) anniversary of the Initial Delivery Date and that ends on the nineteenth (19th) anniversary of the Initial Delivery Date, Buyer may extend the Term by an additional

five (5) years by delivering Notice to Seller, during which period Buyer shall pay for the Products as set forth in Schedule 1."

 Shorter Term/Delayed PPAs: Some PPAs have shorter terms or have delayed start dates until the Buyer is ready to accept the power. Financing parties may insist on hedging or other arrangements to cover the "gap".









Conditions Precedent to Buying and Selling of Power

Common Buyer Conditions Precedent:

- Energy regulatory approval
- Project reaches Commercial Operations Date (COD)
- Critical Construction Milestones met in some cases
- Required security has been provided to Buyer
- Governmental approvals have been obtained
- All delay damages have been paid to Buyer
- Seller Off-Ramps: Project sponsors sometimes desire to include their own "Seller" project-specific conditions precedent to their PPA obligations that must occur or the PPA can be cancelled either on a no-fault basis or upon payment of liquidated damages.









Production Guarantees

- Buyers typically want supply predictability and often insist that the Project achieve performance tests (and that the Seller pay damages for the failure to meet such tests). The most common test for a solar PPA is the Production Guarantee, which guarantees a certain minimum supply of power.
- Minimum Quantity Requirement:
 - A set amount of power (measured in MWh) Seller is expected to produce and sell to Buyer in an agreed time period
 - Often structured as % of projected output over a period of a year or more
 - Consider probability of achieving the projections. Seller and financing parties want the confidence level as high as possible that project will satisfy requirement
- Prolonged failure to achieve a performance standard may result in a default or termination









Performance Security Package

- Security Requirement: Solar PPAs typically require security for the development and construction period (pre-COD), and for the operating period (post-COD). Amounts can be large and are often sized based on expected contract capacity or the Project's expected annual or long-term revenues
- Construction Period Security: Covers losses to Buyer and delay damages if Seller fails to complete project or defaults before COD
- Operating Period Security: Covers post-COD period at an increased amount
- Important Issues:
 - Will Buyer, Seller or both be required to post performance security and when?
 - Form of security (parent guarantee, cash, letter of credit, project lien)
 - Amount of security (fixed or floating sometimes based on mark-to-market exposure)
 - Security theoretically needs to be appropriately sized to protect party interests (disincentivize seller from walking away, protect seller's credit exposure, etc.)
 - Seller's security needs to fit into project's financing structure







On-Going Representations & Covenants

• Typical Covenants:

- Compliance with permits and applicable law
- Meeting of construction milestones
- Compliance with interconnection agreements
- Renewable energy registration and reporting
- Energy forecasting and scheduling











Curtailment - Overview

- Production Curtailment provisions are some of the most contentious issues in renewable PPAs and of great interest to Sellers and their financing parties because of the real-world impact on revenues and revenue predictability. Curtailment refers to reducing the amount of power the project can deliver for a period of time.
- Issues:
 - Who has the discretion and authority to curtail the project?
 - Compensation for curtailment: is lost revenue recoverable from Buyer and for what types of curtailment?
- Curtailment scenarios:
 - Grid operator or Transmission Owner required curtailment for reliability/emergency
 - Buyer ordered economic curtailment to avoid out of market purchases











RECs and Green Attributes

- Renewables PPAs for bundled products often include "green attributes" as a critical element
- "Green" or "Environmental" Attributes are often defined broadly, and include renewable energy certificates and similar attributes – for example:
- PPAs will typically allocate responsibilities for tracking, accounting for and conveying ownership of RECs and green attributes
- Certain, but not all, PPAs will require the seller to pay extra damages, or replacement RECs, in the event of a REC shortfall (in addition to liquidated damages for performance guarantee shortfalls)
 - In these instances, sellers will often seek the option to replace RECs







Assignment of PPA and Change of Control

- PPA buyers frequently seek to place some level of control over assignment of the PPA and ownership of the Project.
- Buyer's Perspective:
 - Buyers often use anti-assignment provisions and change of control restrictions to ensure that the selected Seller or an acceptable replacement will be their counterparty under the PPA.
 - Buyers also use these provisions to avoid sellers obtaining PPAs and then "flipping" them to other counterparties or other projects
- Seller's Perspective:
 - Sellers typically request some degree of flexibility to assign the PPA to another party
 - PPA change of control and anti-assignment provisions should not hold up larger holding company level transactions









Other Standard Terms & Conditions

Standard Terms and Conditions:

- Billing and Payment Procedures
- Audit Rights
- Taxes
- Indemnification
- Representations and warranties
- Covenants, including operating requirements and reporting
- Metering
- Insurance
- Dispute resolution and governing law









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Old versus New PPA Characteristics

Characteristic	Old PPA	New PPA
Tenor	Long-term (20-25 years)	Shorter terms in favor of merchant status in later years
Output	Entire output	Often for only a portion of output, and has to account for multiple tranches of offtake
Counterparty	Rate-basing utility entity	Corporates, power marketers, and insurance companies
Delivery Terms	Physical delivery at interconnect point	Physical or financial delivery at liquid hub
Quantity	Actual generation	Fixed shape; proxy generation
Technology	Single technology	Multiple technologies: e.g., solar plus storage
Contracting Form	Bespoke	ISDA; EEI; WSPP (in the U.S.) – standardized forms
Number of Projects	Single	Multiple (aggregated)

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INTERCONNECTION AND TRANSMISSION AND DISTRIBUTION AGREEMENTS













Interconnection and Transmission and Distribution Agreement Fundamentals

Fundamental Concept

Interconnection and transmission agreements are critical to Project success because they
provide for deliver of energy from the Project.

Interconnection Agreement

 Interconnection agreement is needed to interconnect Project to electric grid for the life of the Project, allowing the Project to deliver energy to the electric grid.

Transmission or Distribution Rights Agreement

 Transmission rights are needed to deliver the power from interconnection point to the PPA customer or other points on electric grid where power is to be delivered.









Interconnection and Transmission Agreement Fundamentals – Key Provisions

- Length of Contract: Life of Project or sufficiently long for financing and PPA/Feed-in-Tariff
- Interconnection Point: at Project or at a viable point nearby.
- Transmission Rights: Sufficient for power delivery strategy of Project.
- Costs: System upgrade costs and transmission costs to be set at viable levels.
- Collateral Security: Project sponsor often required to post collateral security.
- Technical Requirements and Operational Covenants: Technical requirements for Project and electric system to be clear. Agreements typically contain system compatibility requirements.
- Curtailment: Under what circumstances can energy from Project be limited?









Interconnection and Transmission Agreement Fundamentals – Key Provisions

Timing and Process for Interconnection:

- Interconnection application process can be a multi-year process. Transparency and clear timeline necessary for Project development.
- Interconnection Queue Position:
 - Lead position in interconnection queue can be a very important strategic advantage for a Project if multiple projects are competing in the same market or for the same PPA or Feed-in-Tariff.
- Interconnection Study Process:
 - Some electric systems require a lengthy study process with multiple steps prior to constructing interconnection infrastructure.









Real Estate and Site Control Agreement Fundamentals

Fundamental Concept

- Site control needed for life of Project without disturbance in order to construct and operate Project.
- Lease Agreement or Land Ownership
 - Site control typically achieved through ownership or long-term lease
- Easement Agreement
 - Easements often needed for transmission lines or other access to or from Project site (physical access or for transmission lines)
- Option Agreements
 - Land option agreements often entered into while Project is in development before construction starts.









Real Estate and Site Control Agreement Fundamentals – Key Provisions

Option Agreements

- Frequently entered into at small cost reserving right to develop Project if decision is made to proceed with construction and operation.
- Options need to have sufficient flexibility for variations in Project and have a long enough option period for common (often inevitable) delays.

Lease Agreement

- Sufficient site for Project
- Access rights
- Long-term lease term to match PPA or project life cycle, with ability to renew
- Quiet enjoyment







Real Estate and Site Control Agreement Fundamentals – Key Provisions

- Lease Agreement Key Provisions Continued
 - Rental payments
 - Royalty on revenue sometimes included
 - Environmental liability
 - Other uses of land
- Easement Agreement
 - Similar issues to Lease
 - Easements often provided for roads into Project site or electric transmission lines





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Real Estate and Site Control Agreement Fundamentals – Financing Considerations

- Information needed for real estate review: stage of development of project(s) and structure of loan
- Common issues:
 - Mortgages/Lender Lien (collateral security)
 - Title Insurance and survey costs, requirements, terms and deliverables
 - Flood hazard determinations and flood insurance if needed
 - Estoppel requirements
 - Definition of "Permitted Liens"
 - Scope and terms of representations vesting, minerals, sufficiency








Operations and Maintenance (O&M) and Asset Management Agreement Fundamentals

- Fundamental Concept
 - Ongoing O&M and asset management needs to be arranged to ensure the Project operates according to requirements and expectations on a long-term basis.
- O&M Agreement
 - Provides for operations and maintenance of Project after construction.
- Asset Management Agreement
 - Provides for administration of contracts, permitting, compliance, community relations, and other aspects of Project not covered by O&M Agreement.









Operations and Maintenance (O&M) and Asset Management Agreement Fundamentals – Key Provisions

- Length of Contract: Life of Project or sufficiently long for financing and PPA and permitting requirements
- Service Provider(s): Experienced third-party vendor or affiliate of Project sponsor. Local O&M and administrative support needed if Sponsor is not located in same country or area as Project
- Affiliate Contract: If Project sponsor is contracting with affiliate, agreement should be on market terms.
- Fee Structure: To be agreed and to be set at viable levels.
- Warranty Obligations: Sufficient equipment warranty protection between EPC, O&M and equipment suppliers.









Operations and Maintenance (O&M) and Asset Management Agreement Fundamentals – Key Provisions (cont.)

- Insurance: Insurance levels sufficient to cover casualty events and financing requirements.
- Financing Considerations:
 - Arm's length terms if an affiliate contract
 - Ability for lender to step into Sponsor role of Project owner
 - Payment priority between financing and payments to affiliates
- Intellectual Property: Who controls Project intellectual property and sensitive information?
- Technical Requirements and Operational Covenants: Scope of services compatible with Project needs.







OBSERVATIONS AND ANALYSIS FROM KENYA, NIGERIA AND ETHIOPIA













KENYA PERSPECTIVES











Key Considerations in Negotiating RE project documents in Kenya

Changes to PPAs pursuant to:

- The 2021 Renewable Energy Auction Policy
- 2021 Feed-in-Tariffs Policy on Renewable Energy Resource Generated Electricity (Small-Hydro, Biomass and Biogas)
- Presidential Taskforce charged with reviewing all PPAs
- Yet to be formulated Policy on Licensing of Geothermal Greenfields





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The 2021 Renewable Energy Auction Policy

- Applies to solar and wind power projects above 20 MW
- Two stage auction process preliminary evaluation and detailed technical and financial evaluation.
- Transaction documents not clear when they will be available to investors. It is assumed that they will be available at the beginning of the auction process, as is customary in other jurisdictions.
- Successful bidders will be required to enter into a project agreement with the contracting authority. The 2021 REAP does not specify whether this agreement is separate from the PPA, however it is assumed that it is.
- Failure to sign the project agreement will lead to the forfeiture of such bidder's stage 2 bid bond. The parameters of what constitutes "failure" are not set out in the REAP.









REAP Connection and Land Acquisition

Grid Connection Study

- Developers must undertake a grid connection study whose aim is to assess the likely impact of the project on the grid, factoring in other generation projects and infrastructure in the locality.
- REAP does not specify whether this is a condition precedent to the project agreement. It is
 also uncertain whether this should form part of the technical evaluation and be conducted at
 the cost and risk of the investor.
- Renewable Energy Auctions Committee approval will be required for the study.
- Developer to bear costs of interconnection.









Land Acquisition under the REAP Framework

- MoEP to set out site selection requirements
- Issues to note:
 - Developer responsible for land acquisition, consistent with 2012 FiT Policy
 - Bidders required to confirm land rights at stage 1 of auction process
 - Lengthy process of land acquisition in Kenya
 - Land suitable for projects likely to be "agricultural land"
 - Foreigners cannot own agricultural land, without special exemption, and may only obtain a 99-year lease over non-agricultural land
 - The above is likely to cause significant delays, it remains to be seen how this will affect the bankability of projects
 - REAP does not stipulate timelines for either stage 1 or 2







Transmission

- Grid connection agreement:
 - Required where KETRACO's infrastructure is needed for a project to connect to the national grid.
 - Not required where a project connects directly to Kenya Power's grid infrastructure.











Presidential Taskforce on Review of PPAs in force in Kenya

- Set up in March 2021 to review PPAs entered into between KPLC and IPPs.
- Taskforce is to review:
 - Terms of PPAs and PPA compliance with government policies, legislation, regulations, etc.
 - Current methods of sourcing IPPs and lenders
 - Sustainability and viability of all independent power generation projects
 - Risk allocation between the IPPs and KPLC
 - Take-or-Pay model and recommend Take-and-Pay or other viable payment structures for use in PPAs
- The taskforce is also to recommend legislative, policy, regulatory or administrative interventions for the implementation of its recommendations.
- In the interim, a moratorium has been placed on all PPAs not concluded by KPLC as at 21/03/2021 and the renewal of PPAs which are due to take place during the pendency of the Taskforce.









Feed-In-Tariffs

2021 FiT Policy:

- Applies to RE power plants not exceeding 20MW in biomass, biogas and smally hydro technologies.
- Features of the standardized PPA:
 - Plants are not to be dispatchable _
 - Term is a maximum of 20 years
 - projects must be technically and economically viable, meet grid connection requirements and secure all necessary legal and regulatory approvals
 - Capacity payments not applicable.
 - Deemed Generated Payments to be made only if grid availability is below the guaranteed levels _ (equivalent to 75% of the applicable tariff values under the standard PPA).
 - Financing must be secured within stipulated timeframe set out in the Application and Implementation Guidelines.
 - No requirement for any form of security or guarantee from the government including the letter of _ support and guarantee.









Corporate PPAs

- Low uptake of corporate PPAs in Kenya currently. However, it is likely that there will be
 proliferation of corporate PPAs in the coming years as the Energy Act 2019 now allows for the
 licensing of multiple distributors, generators, transmitters and retailers of electricity.
- Regulations on corporate PPAs yet to be formulated. Eligible consumers are permitted to choose any licensee to be their supplier and enter into a contract with them for the purchase of electricity for the consumer's own use, details to be provided in regulations.
- KENGEN is intending to supply industrial consumers once clear regulations are in place.
- Virtual PPAs and sleeved PPAs are non-existent in Kenya. There is currently no enabling regulatory framework to provide for them.









Interconnection & Transmission – Regional Arrangements

Importation and Exportation of Electricity

- Kenya imports electricity from both Uganda and Ethiopia.
- For Uganda, this has been the case since 1993.
- Interconnection is through a 132kV double circuit transmission line.
- Currently, Kenya has reduced its power imports from Uganda by half due to the injection of geothermal power to the national grid.
- Kenya is planning to have an interconnection grid with Uganda and Rwanda on a 400kV transmission line with a capacity of 1700MW.
- Kenya exports electricity to Uganda, which constitutes 93% of its export market. It also exports to Tanzania via Namanga.









Interconnection and Transmission Agreements (cont.)

1. Kenya – Ethiopia

- High voltage transmission line with a carrying capacity of 2000 MW, covers 1055 Kms, with 433 Kms being in Ethiopia.
- Funded by: Kenyan and Ethiopian governments, World Bank, African Development Bank.
- Intended to ensure purchase of electricity during shortages and sale of electricity when there is a surplus.











Interconnection And Transmission Agreements (cont.)

2. Tanzania – Kenya – Southern African Power Pool

- 400KV transmission line
- Isinya Arusha Singida Babati
- Interconnection will allow for the purchase and sale of electricity between Tanzania, Kenya and Southern African countries
- Financing is by African Development Bank and the Japanese Cooperation Agency











ETHIOPIA PERSPECTIVES











Legal Framework for IPP Projects













Institutional Framework for IPP Projects

Ethiopian Energy Authority Ethiopian Electric Utility

Ethiopian Electric Power

Ministry of Water. Irrigation and Electricity Environmental Protection Authorities.









IPPs in Ethiopia

- Currently, the Government is more focused in carrying out renewable projects under the PPP model.
 Bids are being mostly tendered for PPP modeled project execution.
- Although IPPs are still welcomed, they are not promoted and encouraged. The IPPs generate, distribute and transmit through the grid or off-grid.
- The agreements that are normally executed for IPP projects are PPAs and Transmission and Interconnection Agreements.
- There are two IPP projects that have executed PPAs in Ethiopia. The first PPA was signed in Ethiopia in 2015 and until then IPPs were still in the exploration stages of their investment and did not yet sign PPAs due to long negotiations with government entities.
- There are not that many third party funded large private infrastructure projects and thus, gives investors uncertainty.
- Aside from enforceability guaranty, various contractual arrangements require alignment to international practices to attract external equity investors and lenders. Examples: choice of foreign law, international dispute resolution clauses, protection against currency devaluation & certainty of foreign exchange convertibility and repatriation of profit, change in law protection.









IPPs in Ethiopia

- Recognition of lender rights, such as step in rights to cure, and full securitization of the project assets in favour of lenders is necessary to achieve closure. The manner and the form of giving security to the lenders has also not been clear to date.
- To attract private sector investment and debt financing in the power sector, a solid PPA should be put in place and the relevant authorities should be able to mitigate possible risks. There are certain elements to be included in a contract for lenders to consider a certain transaction bankable, for instance, liquidated damages, caps on liability, defects liability, intellectual property and so on.
- As in many power projects, construction and completion of the project would be carried out in phases and thus, it is a long-term investment. However, acquisition of land, negotiating with landowners, customs procedures and price fluctuations in Ethiopia have been unprecedented.
- There have been many factors that resulted in tariff escalation as it takes years to negotiate and execute project documents.
- Project financiers highly concerned about mitigating possible risks. Practical mitigation measures are to be included in the project documents. Accordingly, the bankability of the PPA and other project documents are of the essence to financiers.









IPPs in Ethiopia

- Furthermore, the government's shift to carry out renewable projects through PPP model has exacerbated the issues faced by IPPs. There seems to be different ways of handing different developers in similar types of projects. There is no consolidated information.
- IPP projects are not a well-developed investment area in Ethiopia yet and the complexity of the transaction documents has also been an added problem to the sector.
- Negotiations have to be proactive with the developers and should apply good negotiation skills to close the deal.











The Structure of PPP: The Legal And Institutional Framework











Understanding Power Sector Agreements under PPP: Legal Framework

1. PPP Proclamation

- The PPP Proclamation, along with the PPP Directive and PPP Guideline, issued by the Ethiopian Ministry of Finance. The Ministry of Finance (MoF), pursuant to the PPP Proclamation, sets out the PPP legislative framework to promote and facilitate the implementation of public private partnerships.
- As the issuer of the PPP Framework, MoF, as supported by the PPP Unit, is responsible for its management and development and serves as the key driver of Government policy with respect to the use of PPP for the power sector.
- It established a PPP Directorate General, a special unit within the Ministry, responsible for the development and the implementation of PPP-related guidance. In particular, the PPP Directorate General has issued PPP Implementation Guidelines detailing the required procedures and authorizations to undertake PPP transactions.







Selection of Private Sector under PPP Proclamation

- The PPP Proclamation provides for three methods to choose the private parties. These are:
 - 1. Direct Negotiation
 - 2. Procurement Through Open Bidding Process
 - 3. Unsolicited Proposals
- Under all three methods, any private investor who intends to partner with the government through a PPP structure shall pass the tender process.









2. Tendering Process







The Basics For PPP Agreements in the Power Sector

- Ethiopian law upholds freedom of contracting parties and thus various important issues and matters are left to the discretion of the parties to agree under their agreements. Therefore, the agreement of the parties plays a key role in realizing power projects.
- It is needless to say that there must also be good understanding of the types of agreements that each type of power project needs.
- There must be a clear and comprehensive contract agreement between the parties to achieve success in a public private partnership system and to avoid risks in partnership.
- PPP agreements govern all the relationships between the government and the private investor. These agreements should be structured based on the mutual interests of the parties and more importantly must be bankable documents.









Key Challenges of the Power Sector

- Acquisition of land for projects:
- Payment guarantees from contracting authorities for defaults under the PPA;
- Securing competitive financing based on the structuring of agreements;
- Shortage in foreign currency issues; and
- Lack of a "one-stop shop" service for the power sector.
- Lack of dispute settlement options like Mediation, UN arbitration systems on international trades and independent engineer. All agreements should include expedited dispute resolution mechanisms.
- An investment guarantee for the private investor should be given from the government to minimize risk on the investment that might be caused from civil wars, riots, unrests and the like.









Government Commitments under the PPP policy

- Protection of public interest
- Private sector participation
- Project selection
- Governance
- Forex directive, which provides for on-demand access to foreign currency for payment of external debt obligations and suppliers' credit, will also ease access to finance for investors
- Sovereign guarantees for payment guarantee
- Guarantee for repatriation of profits and/or proceeds from the transfer of assets









What are the Incentives by the Government?

- Along with the existing drawbacks of power projects under the PPP structure, the Government is planning a way to maintain the private partnership through incentives and reforms of its legal framework
 - Compensation for change of laws specifically applicable to the infrastructure being developed
 - Freedom on the choice of dispute resolution mechanism
 - Custom and tax incentives
 - Assignability of the project agreements
- The Government has taken many initiatives since 2018 to promote the power sector.









What should be Focus areas of PPP Agreements? (cont.)

- Power project agreements, regardless of the sector, should focus on the following issues, based on mutual interests and negotiations of the public and private stakeholders.
 - The agreements should be sufficient to attract the private sector and FDIs.
 - The project agreements should be bankable documents. Achieving financing for a power project has been a major challenge in Ethiopia. Financiers require certainty before funding any project and irrefutable agreements. Ethiopia's track record thus far has not yet proved the same. And thus, this can only be achieved through a sound agreement governed under a more experienced and robust governing law.











What should be Focus areas of PPP Agreements? (cont.)

- Other areas of focus:
 - Ownership of Asset
 - Clear expropriation laws
 - Security to be provided by the private partner
 - Takeover
 - Choice of law and dispute resolution mechanism
 - Renegotiation











Some Recommendations

- In relation to dispute resolution mechanisms for instance, Ethiopia recently ratified the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards / recently enacted the new Arbitration and Conciliation Proclamation No. 1237/2021. The Proclamation entered in to force on 02 April 2021.
- Ratifying the New York Convention and revising the bilateral agreements in line with the PPP framework, in case of disputes among the parties, will help minimize the risk associated with choice of law, defaults, breaches and termination of agreements while the projects are ongoing.
- Stakeholder training should be continuing as the needs of the sector evolve.









Some Recommendations (cont.)

- The PPP framework, apart from considering the important demonstrations of international experiences of PPP, should be expected to evolve in a way that captures the lessons learned as part of the program from time to time.
- Ethiopia is relatively new in dealing with power project agreements, and some of the sophisticated agreement requirements are not covered under our Civil law which makes negotiations difficult.
- These focus areas need to be clearly addressed in key project agreements related to public private partnerships.









What are possible solutions?

- 1. Recognition of lender rights, such as step-in rights to cure, and full securitization of the project asset in favor of lenders is necessary.
- 2. In addition to implementation agreements, all matters under focus areas of the agreement shall be backed by binding contractual obligations.
- Currently, the agreements that are entered are power purchase agreements, implementation agreements and connection agreements only.
- 3. Issues of liquidated damage, caps on liability, defects liability, intellectual property and the like must be included in agreements for lenders to consider a certain transaction.
- 4. PPP agreements should provide a clear definition for terms and clauses.
- For example, the definition of natural and political force majeure has been a struggle to agree on with counterparties. Given the project is with the government, or government owned entities, political force majeure should not be a shared risk as it is with natural force majeure.









NIGERIA PERSPECTIVES








Power Purchase Agreement – Key Considerations A. Power Pricing

- Price for power will include:
 - Energy Payments, transmission charges, etc
- Denomination is in US dollars, although payment will be made in naira.
- For small renewable IPPs, the Feed-In Tariff applies as follows:
 - Solar minimum of 1MW and maximum of 5MW
 - Hydro minimum of 1MW and maximum of 30MW
 - Biomass minimum of 1MW and maximum of 10MW
 - Wind minimum of 1MW and maximum of 10MW









Power Purchase Agreement – Key Considerations A. Power Pricing (cont.)

- The renewable energy plant should be on grid for feed-in tariff structure to be applicable.
- Denomination for feed-in tariff is in US dollars, although payment will be made in naira.
- The tariff levels vary according to the renewable energy sourced electricity technology. (for 2016, the tariff for hydro plants was \$154.72/MWh).









Power Purchase Agreement – Key Considerations B. Volume of Power

- The PPA may cover the purchase of net electrical output <u>or</u> contract quantities
- C. Billing/Settlement Procedures
- Calculation and invoicing for payments due to IPP is done in accordance with the MR and MO Settlement Statement.



Power Purchase Agreement – Key Considerations D. Security

- Development Security (from execution to CD)
- Performance Guarantee (operates from CD to COD)
- Buyer Payment Guarantee (*initial guarantee operates from execution to CD, then for contract duration*)

Form of Security

- Letters of Credit
- Parent Company Guarantee



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Power Purchase Agreement – Other Negotiation Considerations

- Default & Termination
- Assignment
- Operations & Scheduled Maintenance (Projects connected to the grid should operate in accordance with the grid code)





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Interconnection and Use of System Agreements

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- Grid Connection Agreement
 - Key considerations under Grid
 Connection Agreements
- Transmission Use of System Agreement
- Distribution Use of System Agreements
 - Key considerations under Transmission/Distribution Use of System Agreements





- Renewable energy purchased by NBET is usually evacuated through the national grid.
- It is a condition to the effectiveness of the NBET PPA that a Grid Connection Agreement (GCA) with the Transmission Company of Nigeria (TCN) is negotiated and executed.
- The GCA allows the project company to be connected to the grid network via a connection point where power will be wheeled from the plant to the grid.











Key Considerations

- Commercial & Tariff Metering:
 - for registering the quantity of energy that passes through the connection point.
- Financial Responsibilities/Connection Fee:
 - The connection fee is made up of the cost for conducting evacuation study, conducting meetings & cost of connecting equipment.
 - Payment for connection can be done in 2 ways. -
 - by competitive procurement, wherein an EPC contractor is procured to construct & install the connection equipment, or

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By paying TCN for the cost of the connecting equipment.





Key Considerations (cont.)

Key considerations:

- Open & Fair Access:
 - The TCN ensures open access is granted to users who meet the specifications for connection.
- Limitation of Liability:
 - A cap on the liability of parties is usually negotiated.
- Default & early termination:
 - GCA may be terminated where the project company seizes to hold its generation licence, or fails to pay any outstanding amount.







Key Considerations (cont.)

- Termination of connections/De-energisation:
 - Upon termination of connection to the grid, parties will determine reasonable cost for connection equipment removal, if applicable.
- Force Majeure:
 - The list of events that qualify as force majeure will usually include natural & political force majeure events.







Transmission Use of System Agreement

- Provides for the rights and obligations of the project company and TCN as transmission service provider.
- Applies to users whose power plants are connected to the transmission network.

Distribution Use of System Agreement

- Provides for the rights and obligations of the project company and the applicable distribution company for the franchise area.
- Applies to users whose power plants are connected to any of the distribution networks.









Transmission/Distribution Use of System Agreement Key Considerations

• Charges

- Payment of a transmission/distribution network charge.
- Calculated in the monthly electricity charges to Buyer.
- Security in the form of a guarantee is required from project company to cover payment in the event of default.











Transmission/Distribution Use of System Agreement Key Considerations (cont.)

- Assignment & Sub-contracting
- Transfer of custody & risk
 (When does risk pass to TCN/DisCo?)
- Metering
- Dispute Resolution
- Force Majeure
- Termination









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