

# Capacity Building on Development of Bankable Renewable Energy PPAs in Caribbean SIDS

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DECEMBER 2022  
DAY 4: COMPLEX NEGOTIATIONS FOR FINALIZING PPAS



# Recap of Day 3

## > Stakeholders

- > Government
- > Regulator
- > Utility company
- > RE developers
- > Financial institutions
- > Consumers

## > Public co-funding & grants

- > Pay-as-you-go
- > Subsidy on CAPEX
- > GBI
- > Grants

# Day 4

## Complex negotiations for finalizing PPAs

- > SIDS needs and challenges in negotiating and managing long-term PPAs based on risk management, procurement strategy, public-private partnership and incentive mechanisms.
- > Risk assessment/management as a strategic approach during the procurement stage preparing for negotiations with the bidders and the finalization of the PPAs

# PPA as part of a bigger contractual complex

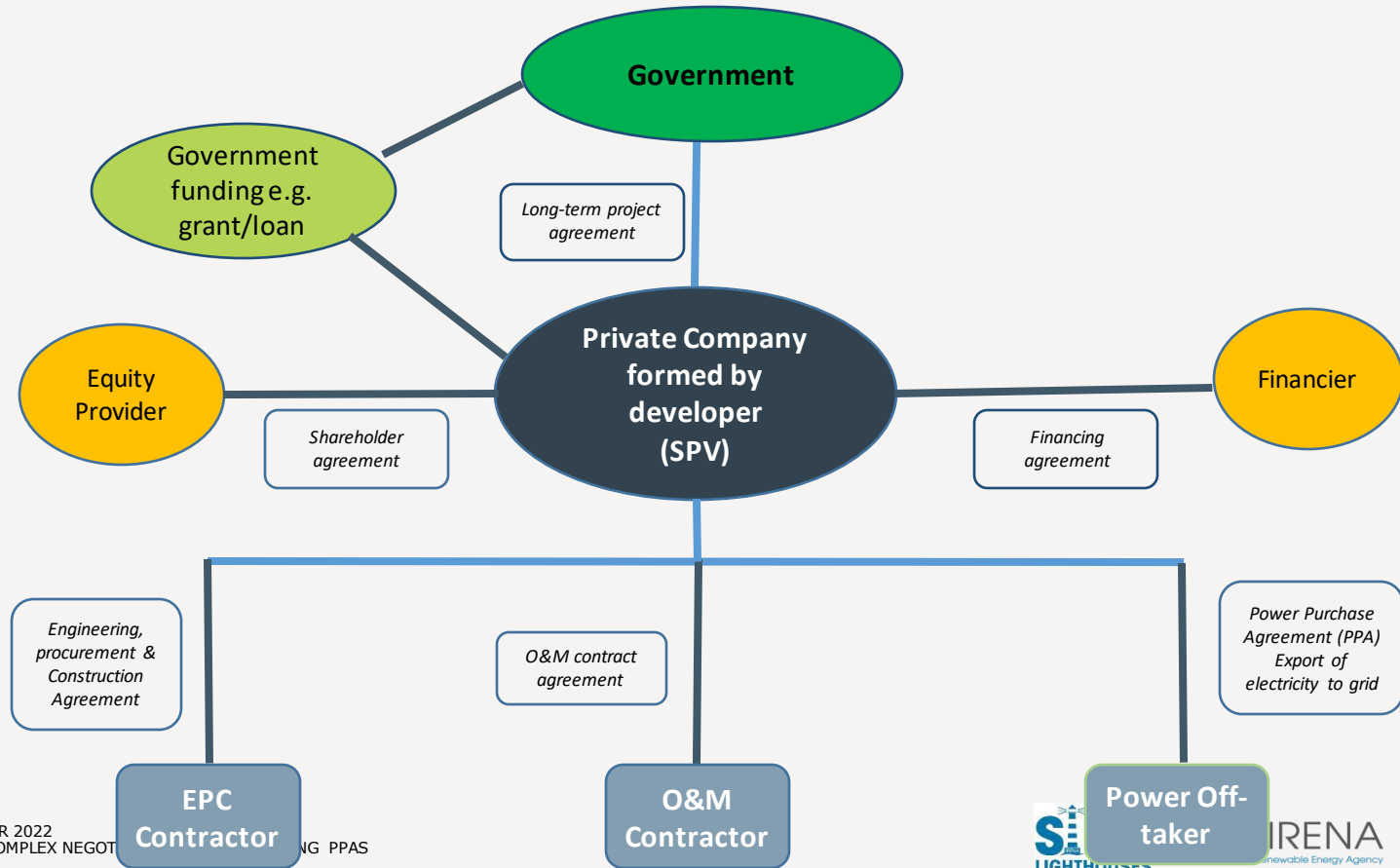
# SIDS needs and challenges in negotiating and managing long-term PPAs

- > Resources – smaller nations/SIDS may face a challenge in terms of financial means, man-power and know-how vis-à-vis big international corporations. Relevant for both procurement and implementation phase.
  - > Long-term contract may face replacement of key staff and the loss of institutional memory and knowledge.
  - > SIDS may seek capacity in further networking amongst SIDS
  - > Capacity may also be boosted by the increasing access to international guidance and experiences
- > SIDS have a great potential for RE however local conditions & challenges must not be ignored
  - > It's not a "One size fits all"

# The PPA - typically part of a larger contract regime

- > The contract regime generally consists of three parts:
  - > The construction of the RE power installation/plant, such as wind farms and biomass plants, which typically is based on an engineering-procurement-construction (EPC) contract (parties: Government/Project owner and Project developer)
  - > The operation of the RE installation/plant is based on an operation and maintenance (O&M) contract (parties: Government/Project owner and Project developer)
  - > The PPA regulates the sale of electricity to an off-taker (parties: Project developer and off-taker)
- > Other contracts and agreements may exist, such as
  - > Fuel supply agreement (FSA), e.g. in case of biomass plant,
  - > The loan agreement between the lender and the project.
- > But PPAs may “stand alone”:
  - > Additional free-standing commercial PPAs may be pursued if so allowed by the project agreement/contract regime, typically to account for production exceeding the needs of the main off-taker.
  - > Individual PPAs may be pursued with no ties to an overall project. This is for instance the case, where power can be traded independently on market terms.

# The PPA - typically part of a larger contract regime



# Financing and ownership of the project

- > Full public funding or private financing?
- > Government partial funding:
  - > Subsidies?
  - > Investment?
  - > Ownership?
- > To be defined during pre-development – clarity needed when presenting project scope towards private developers.



# Elements of the PPA - 1

In addition to traditional contract structure/content, a PPA shall typically address:

- > Quantities of capacity and energy sold (megawatt-hours (MWh) per year);
- > Price of electricity output (USD per MWh) and available capacity (if the project is perceived as baseload); the price may reflect particular incentives, such as special feed-in tariffs for renewable energy and renewable energy credits
- > Mechanisms for indexing the PPA prices
- > Requirements concerning power frequency, voltage, planned outages
- > Flexibility for producer to make third-party sales (if realistic and if allowed by the purchaser) as well as eventually mechanisms for selling production exceeding contractual quantity obligation
- > Flexibility in terms of clauses on revisions and updates, if needed. Caution: investors of the main project need certainty of the duration and terms of the contract in order to assess the bankability

# Elements of the PPA - 2

- > Compensation to producer in case of production limitations (by purchaser or transmission system operator) due to constraints in transmission system
- > Compensation to purchaser in case of delays in completion of project or underperformance of delivery (may include sanctions or liquidated damages for projects being perceived as baseload)
- > Time frame of the agreement (could be long-term agreement match the time-span of the overall project agreement and the O&M contract. This may entail at least 10-15 years and even 20+ years is common)

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# Risk assessment and risk management

- › The well-prepared project allows for an early
  - › risk identification,
  - › risk assessment,
  - › risk allocation scheme,
  - › risk mitigation measures formulation and implementation.
  
- › => reduces uncertainty
- › => facilitates contract management during implementation phase as it creates ownership (where contract partners are involved in the risk allocation), clarity and better understanding in relation to scope, tasks and risks
- › => Typically, this reduces the need for risk and claim management

# Tender process and negotiation as a strategic approach

- > Involve market/potential bidders or the contract party early in the process:
  - > During procurement based on negotiations or competitive dialog, or
  - > During contract negotiations (where no procurement takes place)
- > This allows for a strategic approach in creating ownership, clarity and better understanding in relation to scope, tasks and risks
- > This allows to create trusted partnerships at an early stage – beneficial to “know each other” before embarking on a long-term contract
- > This allows for generating important market insight/knowledge useful for the formulation of the project (technical, legal, commercial, financial, etc. aspects)
- > Beneficial, as risk allocation/ management typically involves great commercial interest

# Contract negotiations

- › Ensure the availability of sufficient resources during preparation and implementation phases.
- › Manage the process! Define topics for negotiation and set (internally) the margin for acceptance of risk allocation.
- › Make such boundaries clear for the partner(s) at the outset of negotiations – creates clarity and creditability – however, be smart – we are negotiating!
- › Unilateral revisions and updates of the PPA during contract period should be avoided as it will jeopardize the certainty needed for investors of the main project to assess the bankability of the project. It will also threaten the certainty for off-takers depending on stable deliveries to set prices.

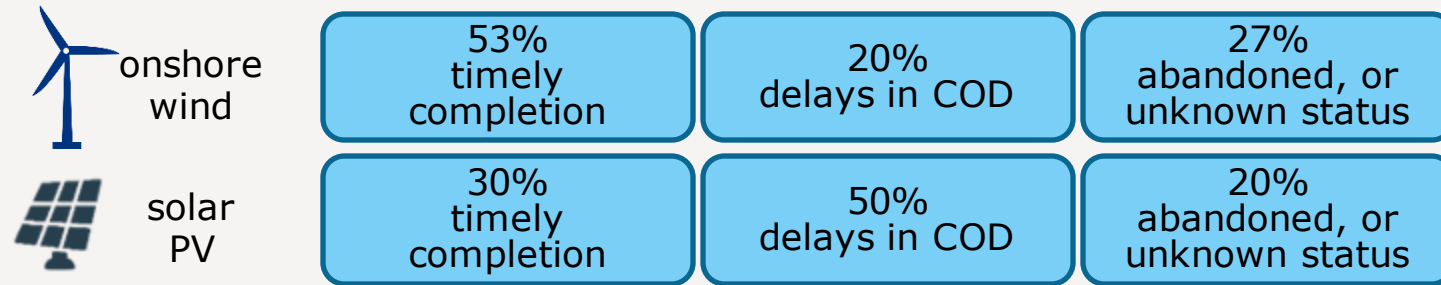
# The competitive procurement process

Steps	Activities
<b>Investigate the market</b>	Identify the possible suppliers and sub-suppliers, the market conditions, the supplier's willingness to handle the project risk, etc.
<b>Develop procurement strategy</b>	Decide the procurement strategy.
<b>Qualify bidders</b>	Ask bidders to seek to be qualified for bidding. The owner may qualify the supplier based on economic figures such as equity, references for similar tasks, technical expertise, financial strength, years of experience etc.
<b>Negotiation or dialogue</b>	Involve potential bidders as part of the procurement process may provide useful technical insight and proposals, which may help the developer to finalise the technical requirements, to establish risk allocation and to define the conditions of the commercial terms.
<b>Invite (final) offers</b>	Ask for offers by sending to qualified suppliers the owner's legal conditions, functional requirements, time schedule, evaluation criteria, etc.
<b>Evaluate offers</b>	Evaluate the offers, negotiate the technical offer and conditions, if necessary.
<b>Award contract</b>	Award the contract for the most economical and technical beneficial offer.
<b>Manage contract</b>	Monitor deliveries in quality, quantity, delivery time, functionality, etc. Handle project changes via contract amendments.
<b>Close contract</b>	When the contract is fulfilled it can be closed, and the delivery can be handed over from the supplier to the owner.

# RE project management

# Ensuring timely project delivery

- > Ensuring timely delivery of (renewable) generation projects can be challenging:
  - > A survey conducted by IRENA's auction team to support a coming report, covering circa 55 GW of wind and solar capacity auctioned in recent years, showed that:



- > The design of procurement processes needs to actively seek to ensure timely delivery.



# Ensuring timely project delivery

- > In this section of the presentation, we wish to discuss two of the main avenues ensure the timely completion of renewable energy projects via the design of competitive procurement processes:
  - > Qualification requirements;
  - > Economic incentives.
- > These do not exhaust all possible measures policymakers can take to increase the likelihood of the timely completion of projects. Other measures include, for instance:
  - > Streamlining any licensing procedures that happen *after* the selection of projects.
  - > Coordinating generation and transmission expansion, to ensure feasibility of grid access.

# Qualification requirements

- These are minimum requirements for companies interested in participating in competitive bidding process to procure renewable energy.
- Here, we focus on qualification requirements tied to the capacity of completing the implementation of projects. Key requirements of this category include:
  - Proof of financial health;
  - Technical capacity, including agreements and partnerships;
  - Past experience requirements;
  - Prior licenses and permits.

# Qualification requirements

- > Proof of financial health:
  - > Documentation on the financial situation of the company, proving that it is capable of completing the project and of shouldering the liabilities, rather than simply declaring bankruptcy, in case it is unable to deliver.
  - > Examples of possible requirements include:
    - > Minimum net worth.
    - > Credit rating.
    - > Other metrics extracted from balance sheets.

# Qualification requirements

- > Technical capacity, including agreements and partnerships:
  - > Information to allow the verification of bidders' technical capacity.
  - > Bidders may need to disclose such information from all partners participating in a bidding consortium, and also from service providers and other contractors.
  - > Examples of possible requirements include:
    - > Minimum requirements on technical and managerial capacity of staff.
    - > Identity of main equipment manufacturer and its technical track record.
    - > Identity of EPC company and its technical track record.

# Qualification requirements









- > Past experience requirements:
  - > Minimum requirements on number and nature of successfully completed projects, at least from majority shareholder from a special purpose vehicle.
  - > Examples of possible requirements include:
    - > Number, scale and technology characteristics of completed projects.
    - > Requirements that successfully completed projects have not been subject to penalties for underperformance in excess of a given percentage of project value.




# Qualification requirements

- > Prior licenses and permits:
  - > These refer to the presentation of licenses and permits that are necessary for executing certain steps of the project implementation and commencement of operations schedule.
  - > Examples of possible requirements include:
    - > Social-environmental licenses (e.g., for installation and civil works).
    - > Proof of land-use rights.
    - > Grid access authorizations.

# Qualification requirements

- > The table at right illustrates the main trade-offs in choosing stricter or more lenient qualification requirements.

Options \ Criteria	Strict requirements	Lenient requirements
Level of participation	 Many potential bidders may be excluded	 Lower barriers to entry
Reduced transaction costs	 Costs for bidders (gathering documentation) and the auctioneer (reviewing documents)	 Less administrative burden
Ensured project completion	 Higher guarantees	 Must rely on contractual penalties and liabilities
Guidance from the auctioneer	 Control over companies' disclosure of information	 Very little control

Characteristics of the relevant attribute:  Poor  Medium  Very good

Source: IRENA (2015), "Renewable Energy Auctions: A Guide to Design".

# Economic incentives

- > While the strategies of the previous section referred to requirements to let a company participate in a competitive bidding process (or to be awarded a PPA via any other procurement process), here we deal with incentives to timely completion via impacts on costs and revenues of the company.
- > Besides foregone revenues until the delayed commercial operations date, these include:
  - > Execution of completion bonds;
  - > Reduction in contractual remuneration;
  - > Dissolution of contract in case of severe delays;
  - > Advancement of revenues in case of early delivery.



# Economic incentives







- Rules for applying such incentives should be clearly stated in agreements entered by the project, and known by companies before competitive processes:
  - Typically, some of them are the PPA and others in the implementation agreement or in the concession agreement (or similar document defining ownership model).
- Some incentives are tied to intermediary milestones in project implementation:
  - For instance, completion bonds may be partially executed in case of delays in milestones, clearly specified in agreements, such as financial close, obtaining relevant licenses, acquisition of equipment, completion of civil works, etc.




# Economic incentives

- > It is critical that governmental bodies responsible for procurement – which may include regulators, off-takers and others – are well equipped to:
  - > Monitor the implementation schedules and identify responsibilities for delays;
  - > Enforce economic incentives included in contracts.
- > This is needed:
  - > Not only to properly enforce incentives;
  - > But also to take mitigation measures in case these delays can negatively impact affordability, reliability and sustainability of supply. Mitigation measures can, for instance, include procuring other generation alternatives.

# Economic incentives

- > Economic incentives that require upfront expenses, such as completion bonds, can affect the level of participation in competitive tenders. Other trade-offs are depicted at right.

Options Criteria	Delay and underbuilding penalties	
	More stringent penalties	More lenient penalties
Reduced uncertainties to investors	 Generators may be penalized for random, uncontrollable events	 Much smaller chance of generators being unfairly penalized
Avoided undercontracting	 Contracts may be cancelled more often	 May be slower in identifying "hopeless" projects and procuring substitutes
Projects completion	 Generators will do their best to comply with their commitment	 May induce generators to be more careful before assuming the commitment

Characteristics of the relevant attribute:  Poor  Medium  Very good

Source: IRENA (2015), "Renewable Energy Auctions: A Guide to Design".



# Course recap

## Day 1

Basics of renewable energy finance

Basic exercises on RE project finance

## Day 2

Financial modelling of PPA contracts

Exercises on PPA modelling

## Day 3

Stakeholders and risk management

Roleplaying exercises on PPA bidding

## Day 4

Complex negotiations for finalizing PPAs

Recap and Open Q&A

