Photo Credit

Energy and Power PPPs Electric Tower Power Cables

Power and Renewable Energy PPPs

Download Chatbot

Energy is a broad sector that holds two important yet very different industries: the oil and gas sector and the power sector. The focus of the Public-Private Partnership Resource Center is on public-private partnerships ("PPPs") that take place in the power sector.

Ready access to reliable electricity supply is critical both to sustained economic growth and social welfare. However, power sector projects, particularly the development of power generation and transmission infrastructure is very capital intensive. This is particularly so in many developing economies where demand for electricity is rapidly growing due to population and economic growth and the potential infrastructure gap to meet this demand is large. PPPs provide a useful tool which, if properly implemented, can provide governments with access to private sector capital, technology and expertise.

As there are a wide variety of power projects, so PPPs in the power sector also come in different shapes, sizes and structures. There is no one size fits all model. The appropriate methodology and structure for a PPP (or a broader PPP program) will need to be adapted to the particular circumstances of a country or region or, in some cases, of a specific project. Relevant considerations include:

- the locale of the project(s), including associated local community and environmental considerations;
- the specifics of the operation, including the technology used for the project (e.g. will the power plant be a conventional gas fired turbine or some cutting edge technology in renewable power generation);
- the regulatory and broader social economic environment;
- the objectives of the parties (e.g. is the government's primary rationale for using a PPP model to access private capital, new technology or something else);
- investor appetite and risk perception; and
- access to capital markets.

The requirements for a PPP in a specific jurisdiction may also change over time, as its power sector matures. In economies with state operated power sectors, PPPs provide an important means of financing generation projects to meet basic demand. In economies with more deregulated power sectors and mature electricity markets, generation projects are often privately financed (and underwritten by market revenue). In these cases, PPPs may be more relevant to systemic projects which cannot as readily be funded through private finance alone. This section deals with power sector PPP projects and power sector reform, legislation and regulation, and independent power projects ("IPPs") across a range of different jurisdictions, highlighting the varying roles played by PPPs in the power sector of economies at different stages of development. Navigate the following subsections for more information and sample laws, licenses and agreements.

- Energy Laws and Regulations
- Energy Licenses and Licensing Procedures
- Energy Agreements
  - Power Purchase Agreements (PPAs) (fossil and renewable)
  - Implementation Agreements
  - Grid Connection / Power Pooling Arrangements
  - Fuel Supply / Bulk Supply Agreements
  - Land Lease Agreements
- Rural Electrification

- Climate-Smart PPPs
- Theft / Non-Technical Losses (Legislation and Technical Measures)
- Integrating Gender in Energy Projects

See also:

- Energy Toolkits
- Related Energy PPP Resources
- Concession Contracts, Build-Operate-Transfer (BOT), Design-Build-Own Projects
- Management Contracts / Operation & Maintenance Agreements
- Performance Contracts
- PPP Risk Allocation Tool, Global Infrastructure Hub (GIH) 2019 - The tool provides a useful reference source which outlines common risks arising in different types of PPPs and different market approaches to the allocation of such risks.

Related Content

- **Energy Laws and Regulations**
- **Energy Licenses and Licensing Procedures**
- **Energy Agreements**
- **Rural Electrification Funds: Sample Operational Documents and Resources**
- **Climate-Smart PPPs**
- **Managing Non-Technical Losses and Theft in Utility Contracts**
- **Power & Renewable Energy Toolkits**
- **Gender & Energy Projects**
- **Further Reading on Energy and Power PPPs**

Additional Resources

- Concessions Build-Operate-Transfer (BOT) and Design-Build-Operate (DBO) Projects
- Structuring Management, Operation and Maintenance Services
- Performance Contracts
- Standardized Agreements, Bidding Documents and Guidance Manuals
- Managing Non-Technical Losses and Theft in Utility Contracts

Partner Resources

Partner Resources

Renewable Energy Project Resource Centre (REPRC)

hosted by Energypedia

Wiki-based library of energy project resources. Includes sample terms of references, procurement documents, economic analyses and case studies (success factors and lessons learned).

Subsections


Energy Law and Regulation- A close up of a electric tower

Energy Laws and Regulations


Energy Licenses and Licensing Procedures: Electric network

Energy Licenses and Licensing Procedures


Energy Agreements: Power Plant

Energy Agreements


Power Purchase Agreements (PPAs) and Energy Purchase Agreements (EPAs): Hydropower Plant

Power Purchase Agreements (PPAs) and Energy Purchase Agreements (EPAs)


Implementation Agreements for Power PPPs: Powerline

Implementation Agreements for Power PPPs


Connection to Grid / Power Pooling Arrangements: Power Line

Connection to Grid / Power Pooling Arrangements


Fuel Supply/Bulk Supply Agreement: Oil Refinery

Fuel Supply/Bulk Supply Agreement


Land Lease Agreements: Wind Farm

Land Lease Agreements

Rural Electrification Funds: Sample Operational Documents and Resources: Farm

Image not found or type unknown

Rural Electrification Funds: Sample Operational Documents and Resources

Climate-Smart PPPs: Solar Panel Field

Image not found or type unknown

Climate-Smart PPPs

Theft / Non-Technical Losses (Water and Electricity): Electrician up at an electric post doing repair

Image not found or type unknown

Managing Non-Technical Losses and Theft in Utility Contracts

Small shop

Image not found or type unknown

Gender & Energy Projects

Renewable Energy Toolkits: Solar Electricity Production

Image not found or type unknown

Power & Renewable Energy Toolkits

Further Reading on Energy and Power PPPs: Power Plant

Image not found or type unknown

Further Reading on Energy and Power PPPs

Concessions Build-Operate-Transfer (BOT) and Design-Build-Operate (DBO) Projects: Construction Cranes

Image not found or type unknown

Concessions Build-Operate-Transfer (BOT) and Design-Build-Operate (DBO) Projects

Management/Operation and Maintenance Contracts: Water Meter

Image not found or type unknown

Structuring Management, Operation and Maintenance Services

Contract Plans / Performance Contracts: Water Reserve Morocco

Image not found or type unknown

Performance Contracts

PPP Risk Allocation Tool (2019), Infrastructure

Image not found or type unknown

PPP Risk Allocation Tool (2019)

Disclaimer: *The resources on this site is usually managed by third party websites. The World Bank does not take responsibility for the accuracy, completeness, or quality of the information provided, or for any broken links or moved resources. Any changes in the underlying website or link may result in changes to the analysis and recommendations set forth on the* Public-Private Partnership Resource Center. *The inclusion of documents on this website should not be construed as either a commitment to provide financing or an endorsement by the World Bank of the quality of the document or project. If you have any comments on any of the links provided on the* Public-Private Partnership Resource Center, *please get in touch here*