

# *PPP Global Conference, Kumasi, Ghana*

Assessment of Project  
Feasibility  
May 2015

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# ***Contents***

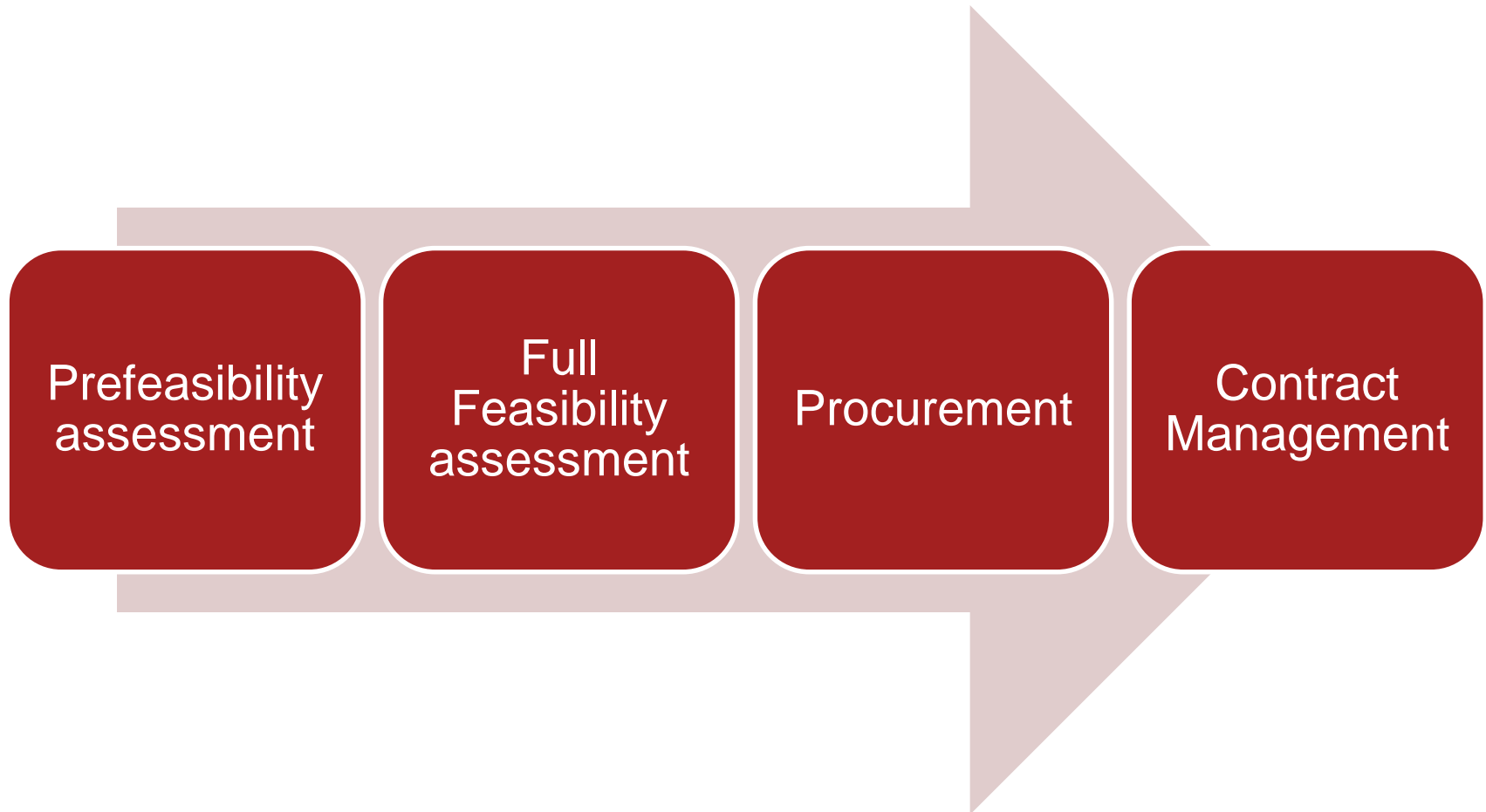
1. Overview of the PPP Process
2. Assessment of Project Feasibility
  - Pre feasibility
  - Full feasibility
3. Typical issues arising
4. Summary
5. PwC Credentials
6. Q&A

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# *Overview of the PPP process*

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***Project feasibility assessment is a key part of the PPP process.....***



## *Each stage of the process has a specific and important objective.....*

### Prefeasibility Study

- Clarify the project concept
- Assess suitability of the project for PPP

### Full feasibility study

- Detailed project study incl. costs, benefits, risks, VfM etc
- Prepare project for procurement

### Procurement

- Select the best available private partner for the project and conclude a Concession Agreement

### Contract Management

- Ensure performance in line with Concession Agreement

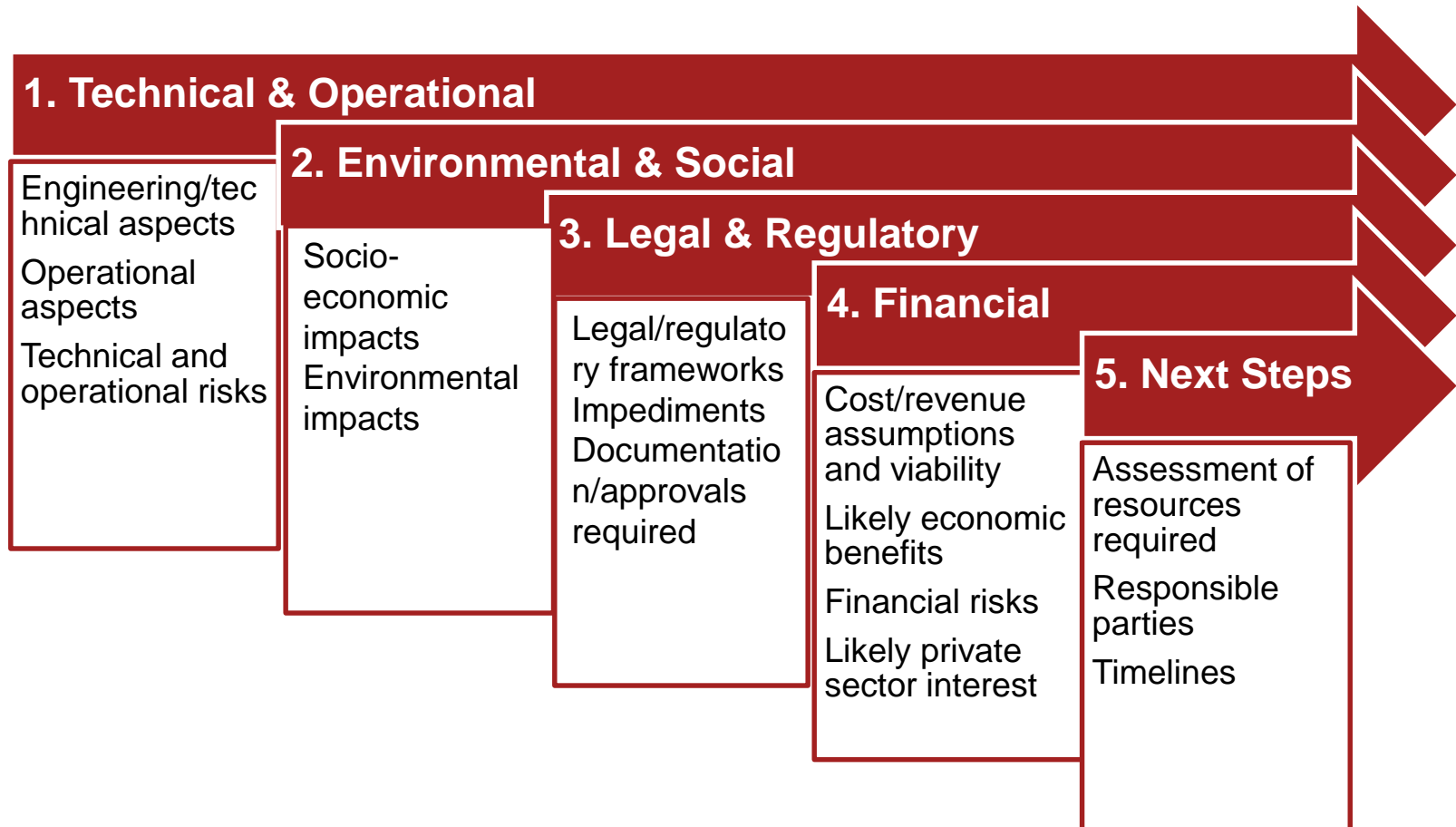
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# *Assessment of Project Feasibility*

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# *Prefeasibility assessment*

# *The prefeasibility assessment provides an initial indication of the project's viability.....*





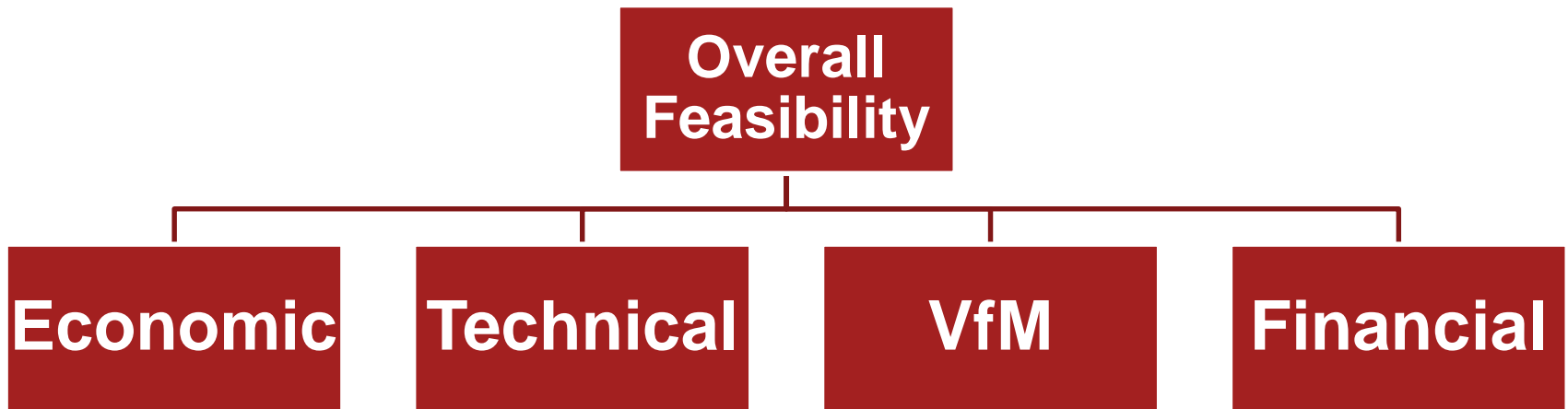
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# *Full feasibility assessment*

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# *The full feasibility assessment is at the heart of a PPP transaction.....*

- There are 4 broad components to a full feasibility assessment:



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## ***Considers incremental benefits/cost of the project to the broader economy.....***

### ***Economic Feasibility***

- Economic benefits are not necessarily the same as financial benefits/costs
- Economic feasibility assessment includes review of factors such as:
  - ✓ Job creation
  - ✓ Time savings and other efficiency gains
  - ✓ Safety improvements
  - ✓ Reduction of user costs e.g. VoCs
  - ✓ Impact on the environment
  - ✓ Increase in land values
- Overall impact measured using EIRR or NPV indicators

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## ***Considers engineering issues based on output specifications and project scope.....***

### ***Technical Feasibility***

- Seeks to understand least cost option that addresses project demand, output specs. and other objectives
- This includes :
  - ✓ Field surveys e.g. topographical, hydrology, geotechnical surveys
  - ✓ Environmental conditions impacting on technical options and designs
  - ✓ Preliminary design of facilities
  - ✓ Cost estimates incl. capex, opex, maintenance
  - ✓ Revenue estimates based on demand, affordability, willingness to pay
- Output serves as input to financial viability assessment

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## *Considers the relative merits of using a PPP approach vrs traditional procurement.....*

### *Value for Money*

- Based on qualitative and quantitative assessments
- Assesses the value of risk that can be transferred to the private sector, which would otherwise remain with the private sector
- Assesses the overall efficiency gains that can be achieved using a PPP approach versus traditional procurement
- Measured using Public Sector Comparator

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## ***Considers overall project viability using inputs from other work streams.....***

### ***Financial Feasibility***

- Seeks to assess project financial returns and any Viability Gap Funding that may be required
- Assessment based on a financial model
- Considerations include :
  - ✓ Project life cycle cost and revenue streams
  - ✓ Macroeconomic assumptions e.g. inflation, exchange rate, interest rates
  - ✓ Funding requirements i.e. debt vrs equity mix
  - ✓ Cost of financing and tenor of financing
  - ✓ Sensitivity analysis around key drivers e.g. demand, tariff/user fees, cost, debt vrs equity mix, cost of finance
- Overall viability measured using IRR or NPV indicators

# *Government support is sometimes required to achieve/improve financial viability....*

Government support may be needed to

← improve financial viability

→ reduce project risks

## **Grants/subsidies**

- land acquisition
- provision of ancillary facilities
- capital grants
- concessionary loans
- subordinated loans
- revenue support
- tax relief

## **Guarantees**

- equity guarantees
- debt guarantees
- “step-in” rights
- exchange rate guarantees
- traffic/revenue guarantees
- concession extensions

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## ***Some considerations that impact on financing include...***

- ***Equity contributions*** – lenders will typically require some equity contribution from project sponsors in order to demonstrate sponsors' commitment to the project and incentivise other parties
- ***Debt Service Coverage*** – lenders will require comfort that the ProjectCo will be able to absorb shocks in service phase
- ***Debt structure and ability/requirement to refinance*** – e.g. deferred payment obligations, senior/subordinated debt, inflation linked bonds, requirement to refinance during concession period etc
- ***Reserves*** – lenders will typically require debt service reserve holding at all times, typically about 6 months of interest and principal payments



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## ***Other considerations that impact on financing include...***

- ***Country risk*** – incl. extent of government intervention and support for PPPs, the degree of economic and political stability, as well as contract enforceability and the integrity of the legal system
- ***Legal and contractual framework***, incl:
  - ✓ Contractor replacement and step in rights
  - ✓ Provisions for dispute resolution
  - ✓ Ranking of security against funds lent
  - ✓ Restrictions on activities of ProjectCo and related entities
  - ✓ Restrictions on dividend distributions in the event that DSCR falls below an agreed level

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# *Typical issues arising in feasibility assessments*

# ***The feasibility assessment process contains many pitfalls.....use sensitivity analysis to mitigate risks***

Overestimation of revenues

Underestimation of costs

Inappropriate technical solutions

Legal/Regulatory Impediments

Inappropriate macroeconomic assumptions

Inappropriate financial assumptions

# *Summary*

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The feasibility assessment is key in evaluating and structuring PPP projects.....care must be taken to get it right!

# *PwC Credentials*

# Our record over the last decade

## Project Finance International

### Advisory mandates closed between 2003 – 2014

Rank	Adviser	Value \$'m
1	PwC	120,365
2	HSBC	117,861
3	Macquarie	114,239
4	Royal Bank of Scotland	97,231
5	Societe Generale	95,602
6	Ernst & Young	75,513
7	BNP Paribas	70,073
8	Credit Agricole	66,892
9	KPMG	63,425
10	Citigroup	51,921

Source: Project Finance International, January 2015

\* excludes ineligible deals under the \$20m threshold

### Global by number of closed deals for 2014

Rank	Adviser	No. of deals	Value \$'m
1	PwC	28	10,021
2	SBI Capital	19	4,418
3	EY	18	4,743
4	KPMG	12	7,441
5=	Macquarie	11	23,667
5=	BNP Paribas	11	19,538
7	HSBC	10	17,052
8	Societe Generale	7	6,460
9	Royal Bank of Scotland	6	14,700
10	Green Giraffe Energy Bankers	5	3,839

Source: Project Finance International, January 2015

1<sup>st</sup>

globally by value of  
mandates closed between 2003 – 2014.

Total value of **\$120,365m**

1<sup>st</sup>

globally with **28** closed deals for  
2014

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# *Thank you for your attention*

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