

### We developed a comprehensive toolkit that translates the policy recommendations into practice



#### **Project identification**

During this stage, the tools provide guidance on assessing at a high-level a project's exposure to certain climate hazards

#### Tools – Climate risk assessment

- 1.1 Screening level Assessment of climate risk exposure
- 1.2 Screening level assessment of project vulnerability
- 1.3 Screening level assessment of project vulnerability

#### **Business Case**

Opportunities to integrate consideration of CR and resiliency aims into an understanding of a project's feasibility

#### Tools - Climate risk assessment

- 2.1 Comprehensive assessment of climate risk exposure
- 2.2 Comprehensive assessment of climate of project vulnerability
- 2.3 Comprehensive assessment of climate risk profile

#### **Tools – CRA valuation**

- 2.4 Embedding resilience in costs estimates
- 2.5 Risk valuation methods

#### **Tools – Including CRA in:**

- 2.6 Cost benefit analysis
- 2.7 Financial feasibility
- 2.8 Value for money
- 2.9 Environmental impact assessment

#### **Transaction**

Opportunities to either qualify bidders based on their approach to climate/incentivize bidders to compete on climate approach

#### **Tools - Procurement preparations**

- 3.1 Include CR in RFQ
- 3.2 Decision framework for including CR in PPP contracts
- 3.3 Integrating CR into PPP output specifications decision framework
- 3,4 Considerations for requiring 'disaster response plans'
- 3.5 Embedding climate resilience into PPP evaluation
- 3.6 Sample language on requirement to regularly update CR mitigation plan
- 3.7 Enforcing CR mitigation plans through payment mechanism
- 3.8 Concessional financing options
- 3.9 Innovative funding mechanisms
- 3.10 Innovative financing mechanisms

#### Contract Management

Help teams think through the definition of FM, uninsurability, and contract flexibility in the face of climate change

#### **Tool – Contract management**

- 4.1 Simplified change regime
- 4.2 Defining force majeure
- 4.3 Sample language for uninsurability

## Opportunities exist during transaction stage to embed climate resilience

Project identification

**Business Case** 

3 Transaction

Contract Management

Opportunities to qualify bidders based on their approach to climate or incentivize bidders to compete on climate approach

#### **Tools – Procurement preparations**

- **3.1 Include CR in Request for Qualifications**
- **3.2 Decision framework for including CR in PPP contracts**
- 3.3 Integrating CR into PPP output specifications decision framework
- 3.4 Considerations for requiring 'disaster response plans'
- 3.5 Embedding climate resilience into PPP evaluation

- 3.6 Sample language on requirement to regularly update CR mitigation plan
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### **Fictional Case**

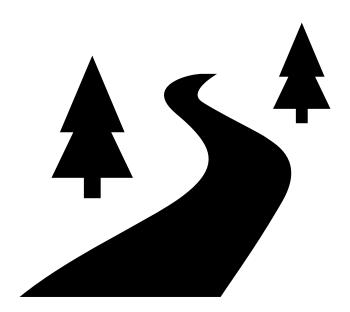
Used to help illustrate some concepts behind the procurement related tools

### Project:

- Small island country needs to rehabilitate a large portion of a coastal road
- PPP structure: Design, Build, Finance,
  Operate, Maintain, 25-year period
- Availability payment

#### Climate Risks:

- Medium/High risk
- ► Floods, hurricanes, landslides, heat



## Including Climate Resilience in Request for Qualifications (Tool 3.1)

#### Minimum Requirement

- REQUIREMENT: sufficient experience managing projects with similar climate profile
- **EVALUATION:** A Pass/Fail

#### **Evaluation**

- **CRITERION:** extent of past experience with similar climate risk profile and effective mitigation thereof
- **EVALUATION:** e.g., according to 100pt scale

**Evaluation & Minimum Pass** 

• **CRITERION/MIN SCORE**: extent of past experience with similar climate risk profile and effective mitigation thereof (100pts); each RFQ submittal must achieve 70%

# **Including Climate Resilience in Request for Qualifications (Tool 3.1)**



Minimum Requirement

- REQUIREMENT: sufficient experience managing projects with similar climate profile.
- **EVALUATION:** A Pass/Fail





















Do they have demonstrated experience managing roads with similar kinds of risks?

5 potential bidders do not have experience and are eliminated.

Respondents to RFQ

# **Opportunities for Climate Resilience in Request for Proposals / PPP Contract (Tool 3.2)**

#### **MINIMUM REQUIREMENTS**

#### If Procuring Agency knows what it wants in terms of climate resilience

 Procurement; Contract Management

#### **EVALUATION CRITERIA**

 If Procuring Agency wants bidders to differentiate themselves on climate resilience

Required for Use

When to Use

 Expertise on procuring agency side to set requirements  Expertise on Procuring Agency side to evaluate climate resilience approaches

# **Integrating Climate Resilience into Output Specifications (Tool 3.3)**

### **Getting Started**

- Do climate risks determine whether project goals will be met?
- Is project location subject to climate risks?

### Design and Construction Standards

 Are certain standards – use of certain materials, or prescriptive design requirements - necessary?

#### Developing Availability Requirements

 Are certain performance requirements assoc. with climate risk mitigation important enough to be included in the definition of 'availability'?

### Developing Performance Standards

Performance requirements, not incl in availability but important for climate resilience?

# **Integrating Climate Resilience into Output Specifications (Tool 3.3)**



**Getting Started** 

- Do climate risks determine whether project goals will be met?
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Design and Construction Standards

 Are certain standards – use of certain materials, or prescriptive design requirements - necessary?

Developing Availability Requirements  Are certain performance requirements assoc. with climate risk mitigation important enough to be included in the definition of 'availability'?

Developing Performance Standards

 Performance requirements, not incl in availability but important for climate resilience?

- Yes, may impact life of asset and 'availability' of asset for use
- Yes, floods, hurricanes, higher temps
- Yes, drainage mechanisms for road (e.g. culvert capacity) need to be sufficient for peak flow of water
- Asphalt permeability
- Drainage ditches along road must be clear of debris; non conformance can result in a deduction in payment
- 'Records and Reporting' requirements of O&M require and update of the Disaster Response Plan on an annual basis

## **Embedding Climate Resilience Into PPP Evaluation** (Tool 3.5)

### TWO APPROACHES

- 1 Separate Criterion
- 2 Sub-Criteria

#### Assume:

- ▶ Evaluation based on best value
- Climate resilience important enough to be embedded in evaluation criteria

## **Embedding Climate Resilience Into PPP Evaluation** (Tool 3.5)

### TWO APPROACHES

1 Separate Criterion

2 Sub-Criteria

				Weighting
Price	50%		e.g. payment amount	50
Technical		Construction	Quality and realiability of project design	8.5
	20%		Flexibility of construction term	6.0
	20%		Quality of assurance methods proposed	4.0
			Etc	15
		Operations	Quality + reliability of operating procedures and manuals.	4.5
	10%		Commitment of means	3.0
			Etc.	2.5
	10%		Quality of proposed maintenance methodology.	10
			Etc.	
	5%	Environment, social	Thoroughness of ESMP.	5
			Etc.	
	5%	Climate resillence	Quality and realism of climate risk mitigation plan.	5
			Etc.	
				∑100

Submission requirements of RFP must reflect that climate risk mitigation plan is a requirement of bid.

## **Embedding Climate Resilience Into PPP Evaluation** (Tool 3.5)

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2 Sub-Criteria

				Weighting
Price	50%		50	
			Quality and realiability of project design.	8.5
	20%	Construcción	Flexibility of construction term.	6.0
			Quality of assurance methods proposed.	4.0
			EtC	1.5
Technical	15%	Operations	Quality and reliability of operating procedures and manuals; evidence that procedures reflect consideration of climate related disruptions.	4.5
			Commitment of means.	3.0
	10%	Maintenance	Etc.	2.5
			Quality and flexibility of proposed maintenance methodology; responsiveness to occurrence of climate hazards.	10
			Etc.	
	5%	Environment, social	Thoroughmess of ESMP, evidence that climate change considerations are reflected in plan.	5
				∑ 100

RFP should clearly state that various technical reports – O&M, Design – require discussion of climate resilience and detail how that will be evaluated

## **Enforcing Climate Resilience through the PPP Payment Mechanism (Tool 3.7)**

Does PPP Agreement include climate related performance indicators or technical requirements?

No



Yes – evaluate avenues to use payment mechanism enforce/incentivize 1

Incl climate resilience measures in 'availability' definition

2

Measure missed targets or possibility for deductions against 'performance failure' definition

3

Measure missed targets or possibility for deductions against 'default and termination' definition

## **Enforcing Climate Resilience through the PPP Payment Mechanism (Tool 3.7)**

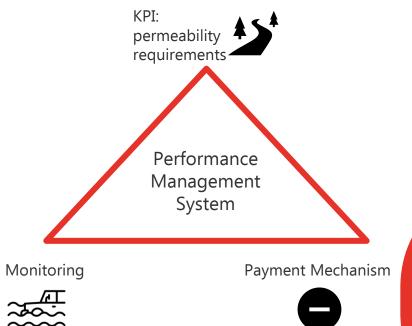


Incl climate resilience measures in 'availability' definition

Availability of pavement according to specified permeability requirements

Measure missed targets or possibility for deductions against 'performance failure' definition

Failure to update climate risk mitigation plan within recification period



Measure missed targets or possibility for deductions against 'default and termination' definition

Continued non-compliance will trigger early termination clause in PPP agreement

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