Climate-smart Public Financial Management MENA Conference

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Cairo, Egypt

Middle East and Northern Africa (MENA)

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Climate-smart Public Investment Management (CS-PIM)

Simon Groom

World Bank Consultant

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Main Messages

- CS-PIM is happening in countries of all income levels
- No CS-PIM without PIM
- CS-PIM applies not only to projects motivated by climate change
- Focus resources on the decisions where the costs of getting it wrong are greatest and deploy scarce capacity to best effect
- Adaptation is not a nice add-on - high-risk projects may fail without - but not all adaptation is worthwhile
- GHG emissions are now everybody's business - signatories to the Paris Agreement have effectively agreed to 'internalize' a global externality
- PIM is about investment flows: also need to think about stocks – CS-Public Asset Management

International Recognition of the Importance of CS-PIM

- Coalition of Finance Ministers for Climate Action have identified CS-PIM as a critical component of CS-PFM
- 90+ members, of which 5 in MENA (Bahrain, Djibouti, Egypt, Iraq, Morocco)

Helsinki Principle 4: *"Take climate change into account in macroeconomic policy, fiscal planning, **public investment management**, and procurement practices."*

> ***'Public investment management'** – "integration of climate change considerations and policies in the guidance, procedures and methodologies used for program and project selection and appraisal, including the use of a shadow price of carbon in economic analysis and appropriate assessment of climate change risks and vulnerabilities"*

What Are Other Countries Doing?

- **United Kingdom**
  - Accounting for the Effects of Climate Change developed as supplementary guidance to national project appraisal guidelines (the 'Green Book')
- With World Bank support:
  - **Albania**
    - Decision of Council of Ministers on PIM requires CC – mitigation and adaptation - to be considered at concept and feasibility stages. Feasibility guidelines set out how to assess CC risk and analyse adaptation.
  - **Armenia:**
    - Government decree on PIM requires CC – mitigation and adaptation - to be considered at concept and feasibility stages.
  - **Ethiopia**
    - Government regulation on mainstreaming CC in PIM under preparation
    - Project appraisal guidelines require Climate and Disaster Risk Screening (WB tool)
  - **Georgia**
    - Capital Projects Management Methodology (adopted through a Government resolution) incorporates climate risk assessment at concept and feasibility study stages.
  - **Vietnam**
    - Climate-sensitive appraisal methodologies under development at province level
    - Experimental use of digital mapping platforms (UR-Scape) for climate risk screening

Climate Change <=> PIM

Climate change matters for public investment management.

- *Climate change (CC)* can put a vulnerable project's success at risk through the increasing frequency and intensity of climate-induced hazards → consider adaptation measures to reduce or eliminate the risk.

Public investment management matters for climate change.

- *Public investment management (PIM)* provides a mechanism for ensuring a shift towards more climate-friendly public investment portfolio (aligns to government's commitments to reduce the GHGs)

CS-PIM Is Relevant Not Only to Climate-Motivated Projects

Nature of project	Focus related to climate change
Climate influenced/influencing projects	
General infrastructure projects with no specific climate-change purpose	Not specific to climate change, but benefits and costs could be put at risk by climate change (e.g., education) or there could be subsidiary effects on GHGs emissions
Climate-motivated projects	
Climate change adaptation projects	Address growing danger of extreme weather events by protecting assets and livelihoods (e.g., flood protection)
Climate change mitigation projects (GHG reduction as primary or secondary purpose)	Reduce carbon/GHG emissions or increase absorption (e.g., energy efficiency renovation of public buildings)

No Climate-Smart PIM without PIM

- Implicitly, PIM already covers climate change – should already take account of externalities and risk
- Embed climate change consideration in the existing PIM System - each stage needs to be made explicitly climate-informed, but there is no need to invent a new framework for the system or to add new stage/modules.
- Hierarchical legal/regulatory framework for CS-PIM (as for PIM)
- As for PIM, roles and responsibilities should be clearly defined – finance/planning ministry leads on CS-PIM, with technical support from expert bodies
- Sophistication of climate-smart PIM depends on maturity of existing PIM
- Concurrent improvements in data

Main Elements of CS Pre-appraisal and Appraisal

Preliminary screening at project concept note stage:

- Step 1: Distinguishing between CC-motivated projects and CC-influenced/influencing projects
- Step 2: Presenting climate-informed project concepts
- Step 3: Addressing CC risk and its consequences in decision making

Project appraisal at feasibility study stage:

- Step 1: Do a climate and disaster risk assessment
- Step 2: Analyze climate change adaptation options and consider adaptive decision making
- Step 3: Analyze and value net effects on GHG emissions
- Step 4: Bring everything together in climate-smart decision making

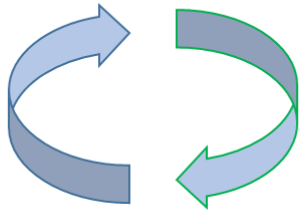
Climate-smart Public Investment Policy (CS-PIP) Drives Climate-smart Project Concept Development

Infrastructure network planning should precede project planning, and plans should consider the stranded assets and circular economy, choice of technologies, CC financing, etc.

1. Climate-informed policy and strategies

Climate Resilience Strategy, National Adaptation Plan (NAP), Nationally Determined Contribution (NDC), etc.

4. Network planning, stranded assets, circular economy



2. Hazard risk and vulnerability assessment for planning

Undertaken to inform the national climate change policy and to inform land-use planning and zoning.

Climate-informed land use planning/zoning can be a powerful tool for managing CC risk.

Land use plans can permit or discourage certain land uses.

3. Climate-informed land use planning/zoning

Advantages of Climate-Smart Preliminary Screening

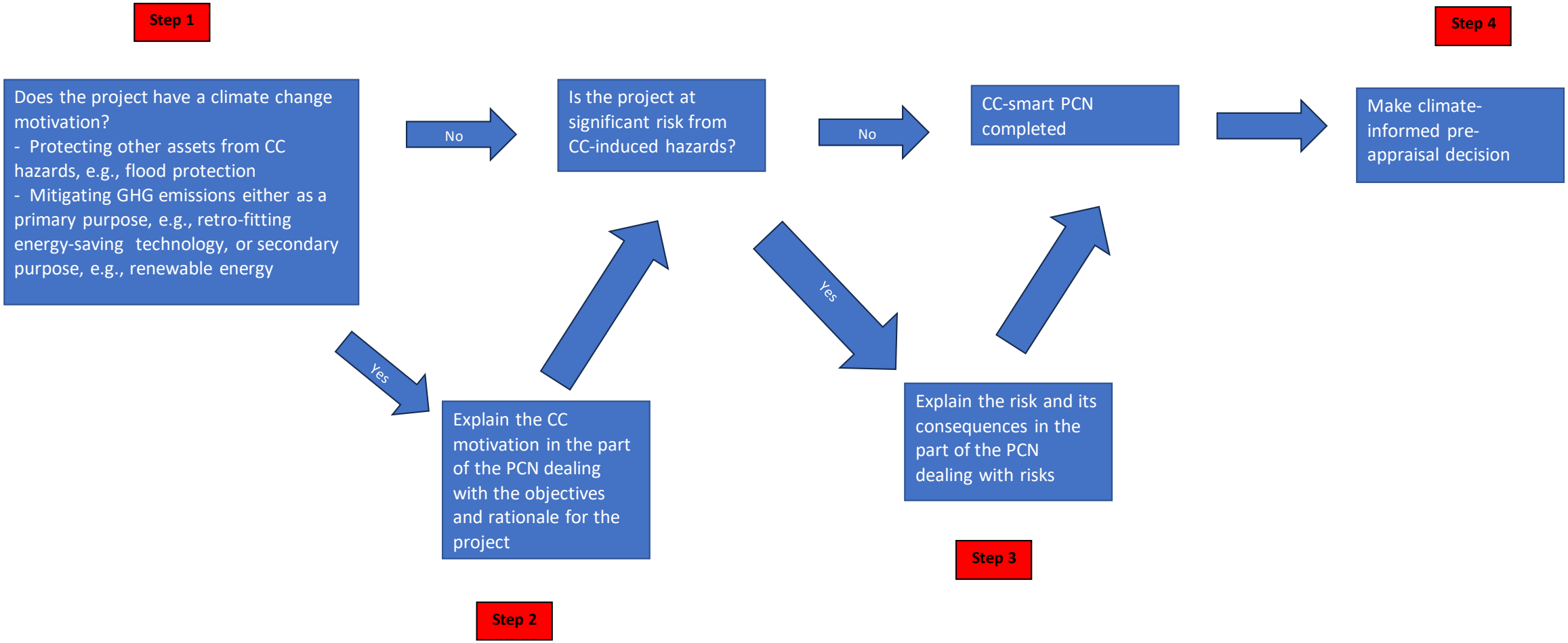
Use project concept (note) development to:

- Demonstrate coherence with CS-PIP
- Identify choices of technology in the context of decarbonization and the energy transition
- Make a preliminary assessment of CC risk and identify where more in-depth work – design and assessment - on adaptation will be required at appraisal

Carry out preliminary screening to:

- Reject project concepts that are out of line with climate change policies (CS-PIP) or where building in resilience to climate change hazards is likely to come at too high a cost
- Guide climate-smart appraisal

Step-wise Climate-smart Concept Development



Using Social Cost-Benefit Analysis in CS-Appraisal

i. Determining if adaptation is worth doing from the perspective of society
ii. Accounting for the impact of a project on global GHG emissions so that climate-friendly options are given due weight in appraisal.

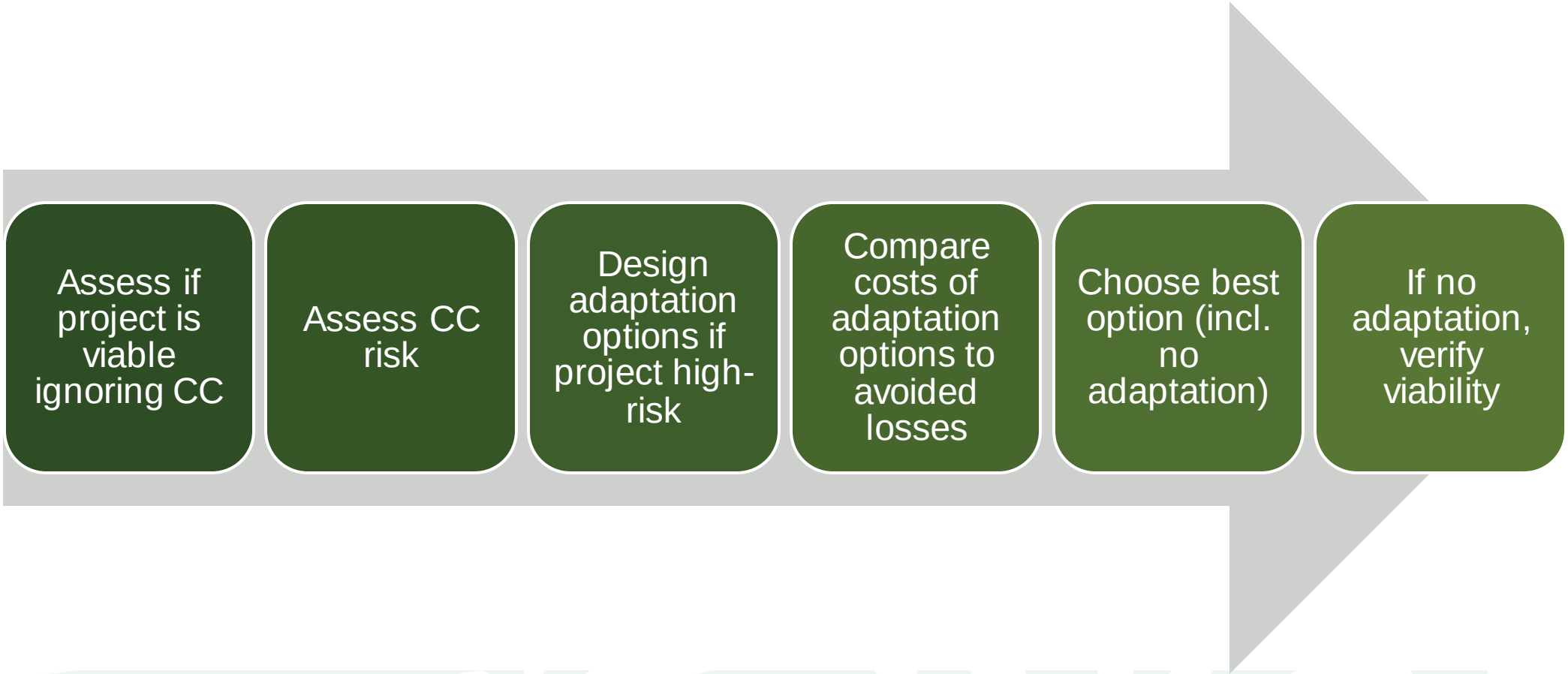
In relation to climate influenced or influencing projects

iii. Appraising dedicated climate change mitigation or adaptation projects, including projects that involve premature decommissioning of existing assets in favor of lower carbon alternatives.

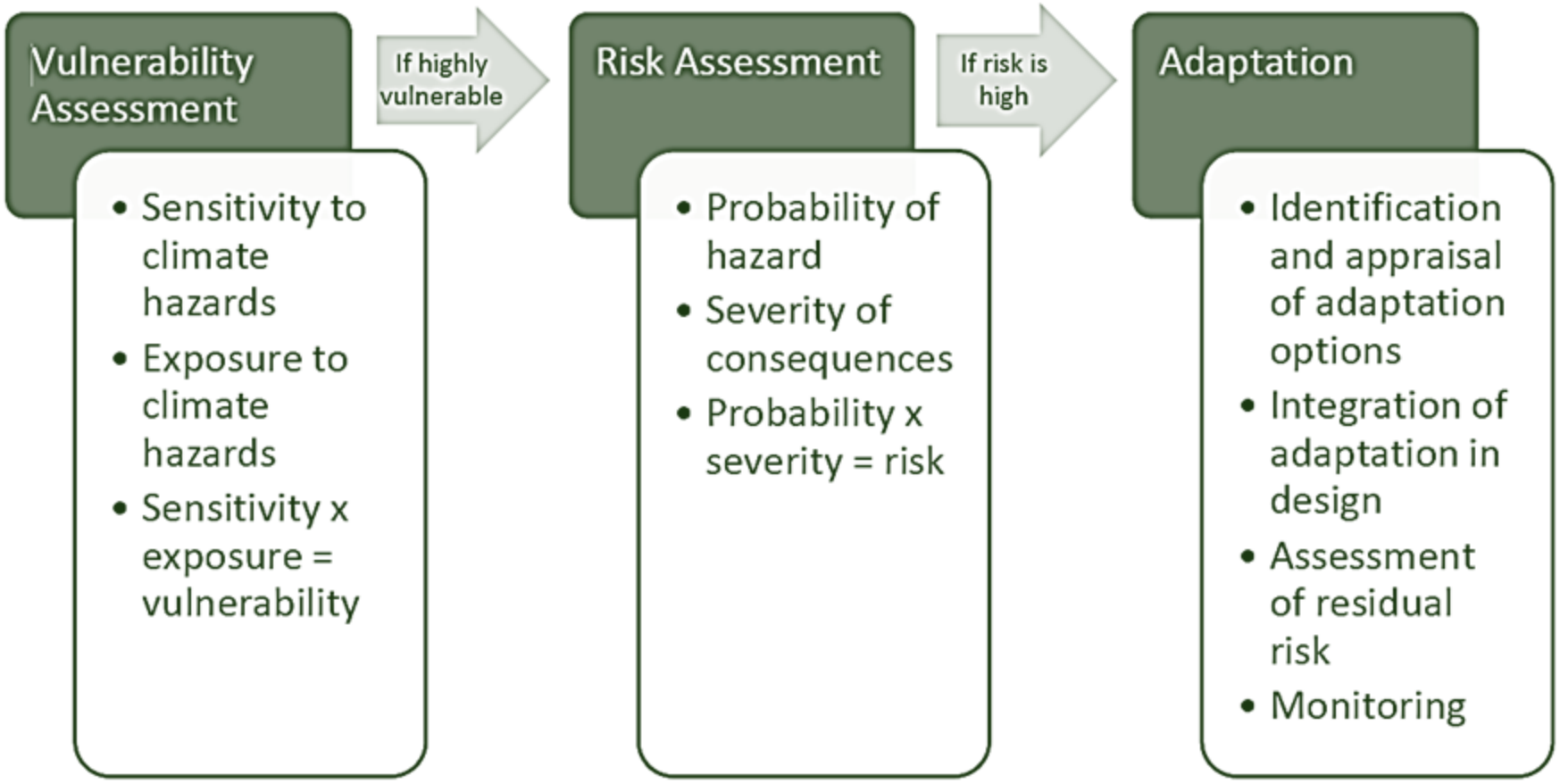
In relation to climate-motivated projects

Climate Change Adaptation: Assessing Options

Adaptation can be vital for project success, but not all adaptation is worthwhile



Climate Change Risk Assessment



Focus Scarce Resources Where They Can Count Most

	Probability	Rare	Unlikely	Probable	Likely	Almost Certain or Unknown
Severity		1	2	3	4	5
Insignificant	1	1	2	3	4	5
Minor	2	2	4	6	8	10
Moderate	3	3	6	9	12	15
Major	4	4	8	12	16	20
Catastrophic	5	5	10	15	20	25

- Negligible Risk
- Low Risk
- Medium Risk
- High Risk
- Extreme Risk

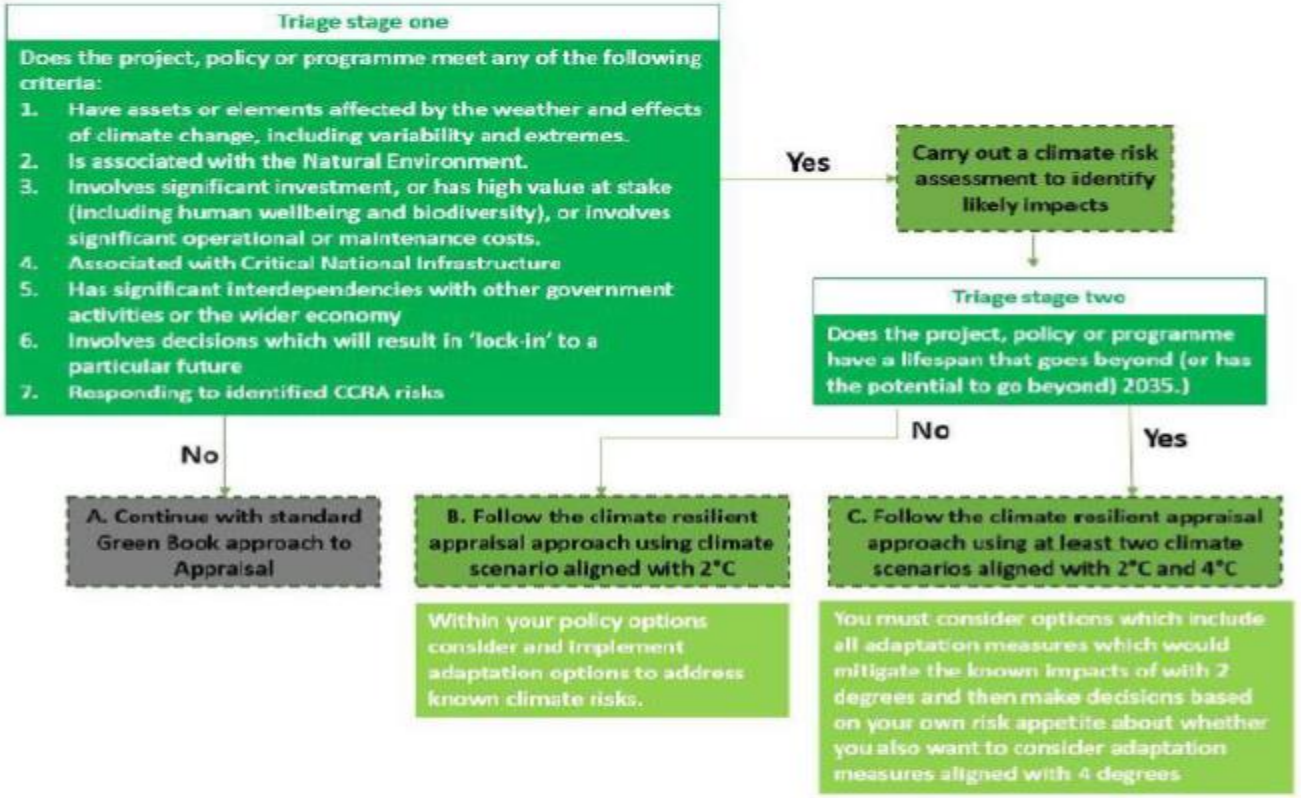
Estimating the Benefits of Adaptation: Avoided Losses

- Losses from 2 sources:
  - damage to assets
  - economic losses
- Adaptation options may differ in their efficacy and unlikely that all risk will be removed – residual risk
- Forecasting losses requires a view on the probability of a hazard occurring, but much uncertainty involved – lack of granularity and missing Paris target
- Assessing adaptation options under different climate change scenarios is one way of addressing uncertainty (see UK approach in next slide)
- 'No regrets' adaptation or the real options approach are other ways of dealing with uncertainty

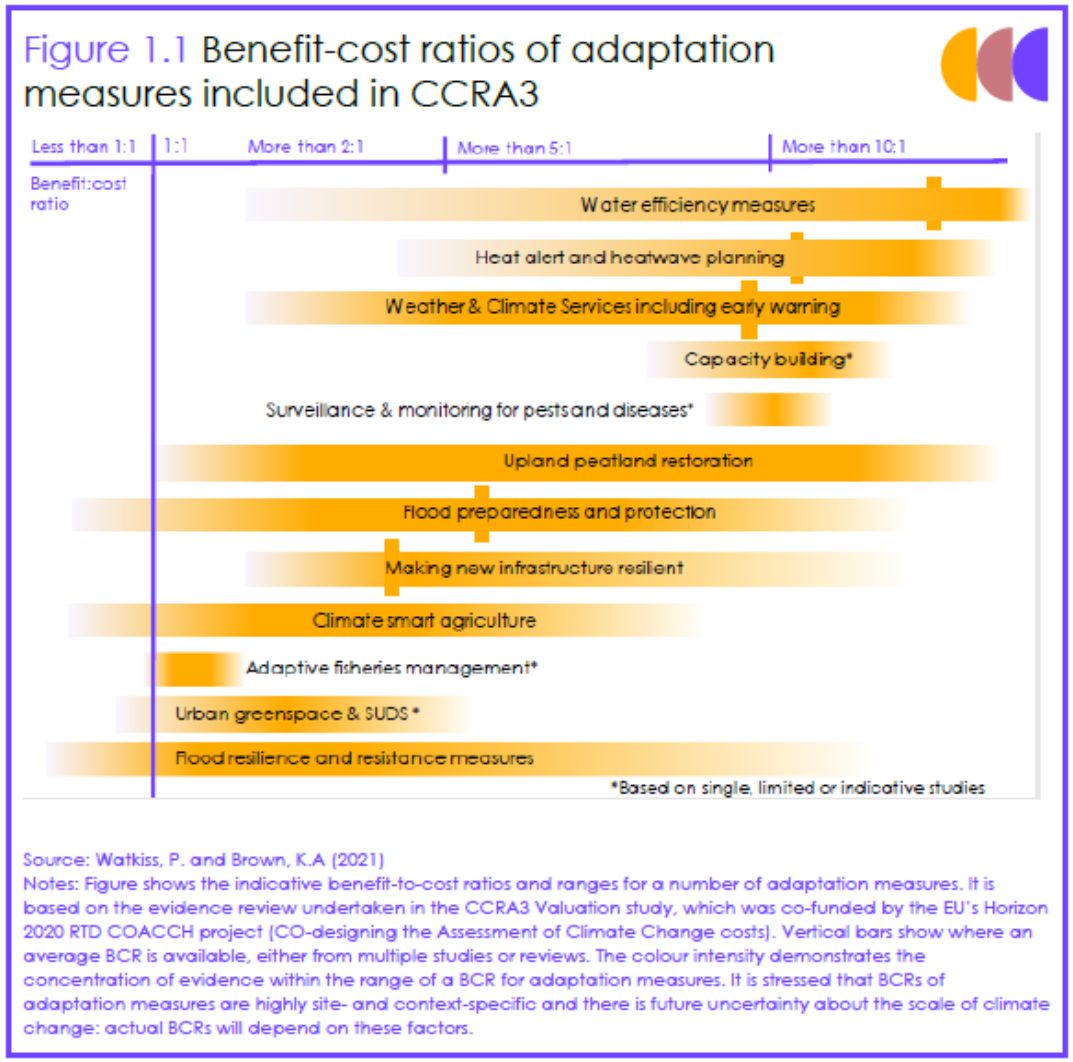
United Kingdom's Scenario-Based Approach

- The United Kingdom uses two climate scenarios, the first assumes 2C of warming and the second 4C of global warming.
- The effects on climate of different global warming scenarios are generated by a climate model.
- While the UK's scenario-based approach deals with some of the uncertainty surrounding the future evolution of climate change, information requirements are still demanding.

Figure 25 – Scenario-Based SCBA of Climate Adaptation Measures in the United Kingdom

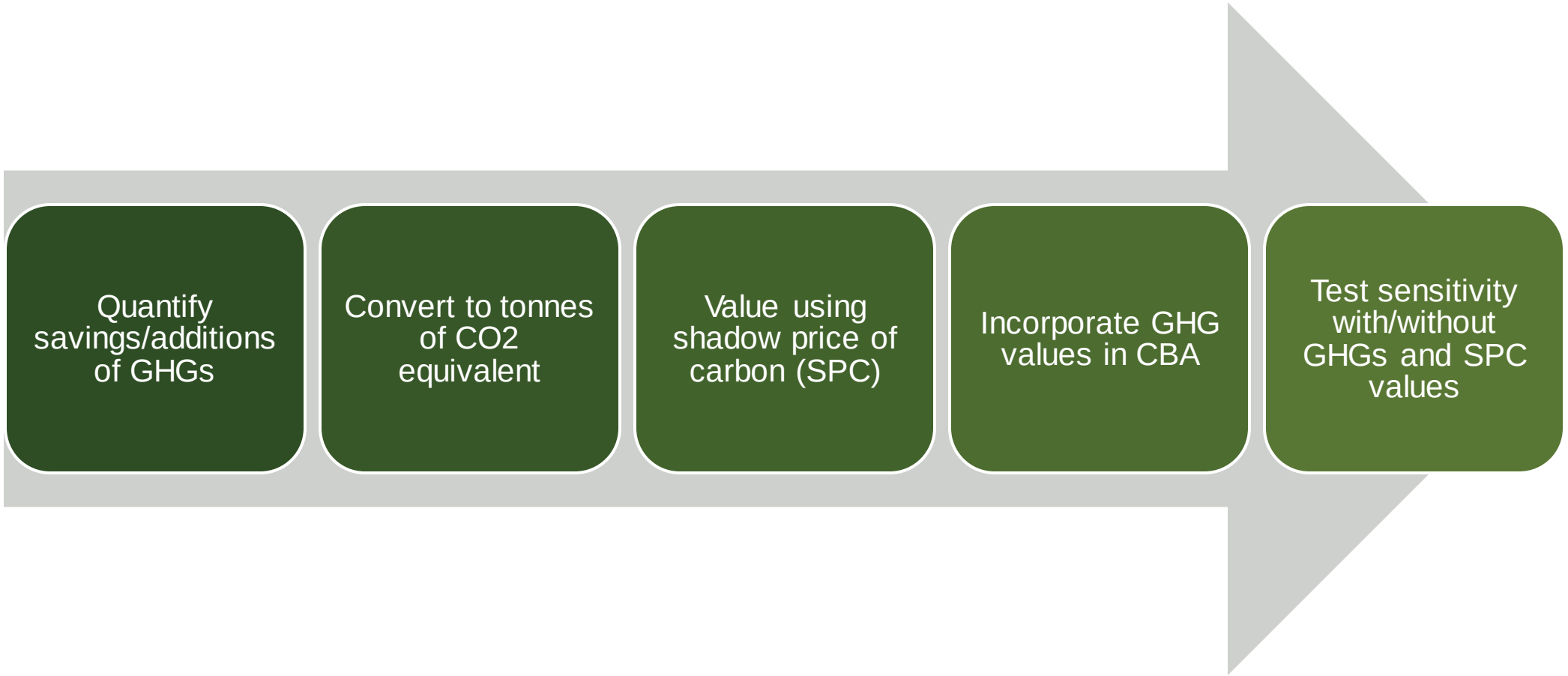


Representative Benefit-Cost Ratios for Different Adaptation Measures



Source: 'Investment for a Well Adapted UK', UK Climate Change Committee, 2023

Climate Change Mitigation: Accounting for Greenhouse Gas Emissions



Climate-smart Capital Budgeting

Climate-informed capital budgeting

- Climate-smart budgeting involves some specific criteria in addition to the general PIM selection criteria:
  - Demonstrated climate-change resilience in the project design
  - Consistency with government's international climate change commitments and obligations
- In France, this is written into the law: the Law on Energy Transition for Green Growth requires that the annual budget law is accompanied by supplementary information showing how public expenditure is contributing to the government's goals in reduce GHG's emissions.

Climate-informed budget coding and reporting: a climate budget tagging

- Climate change budget tagging involves identification, measurement, and monitoring of climate-relevant public expenditure, including spending on capital investment.
- Climate budget tagging only practicable where budget classifications identify programs and projects. Even more effective when the budget classification allows tagging at the level of program elements like components, activities, and outputs.

Climate-smart Implementation and M&E

Climate-informed implementation and procurement

- Requires more flexible procurement evaluation criteria for climate smart procurement, not just lowest price – most advantageous bid/best value.
- By using their purchasing power to choose goods, services and works with a reduced environmental impact, governments can make an important contribution towards sustainability goals, AND stimulate green technologies

Climate-informed M&E

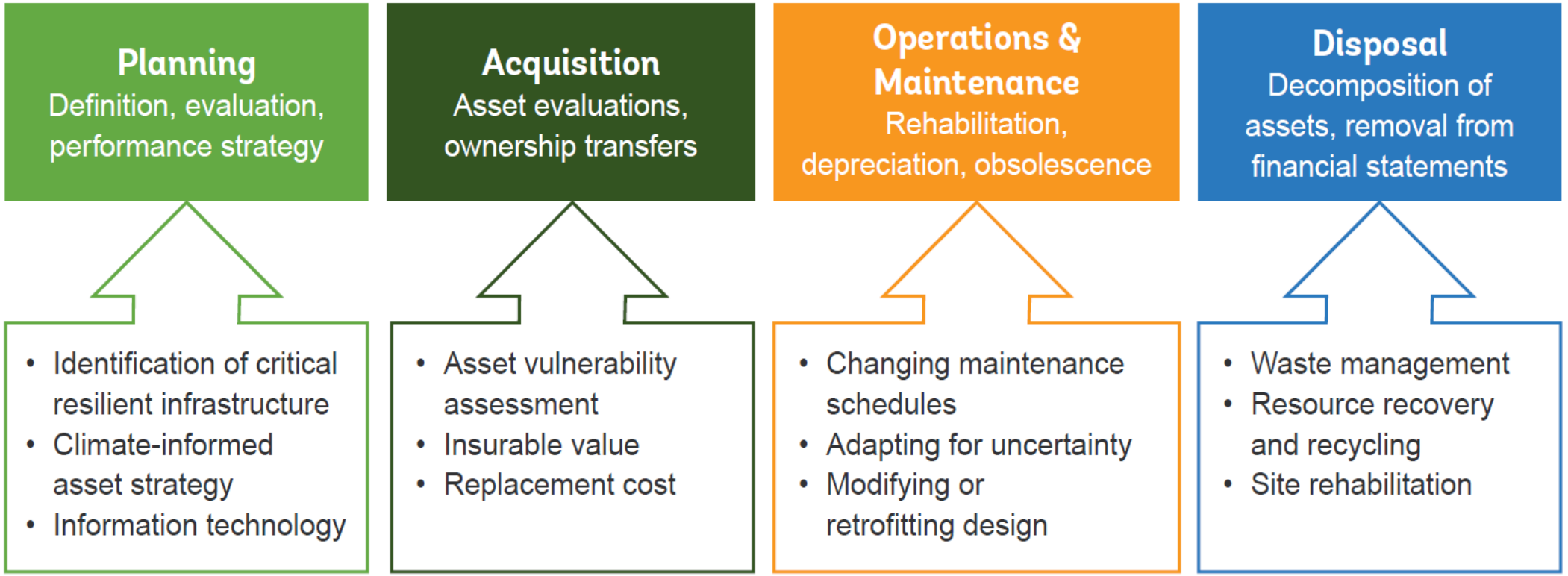
- Monitoring is always important, but it is particularly so for projects that are vulnerable to climate change, given the level of uncertainty concerning the probability and severity of risks and the nature of the optimal adaptation response.
- Important for monitoring implementation of real options
- Monitoring is a continuous process, but formal evaluations at points in time are important to provide clear assessments of project performance and the emerging trends in relation to climate hazards.

Climate-smart Public Asset Management

Traditional PIM typically focuses on flows, but climate change affects and is affected by the stock of public assets

- Necessary to focus also on the stock of assets and the pre-existing design and delivery of services. Designed for different world.
- Assets and services may need be re-appraised to determine their ongoing CC impact, and the behaviors they support
- Re-appraisal may throw-up issues of redesign (major or minor); and stranded assets.
- Climate informed asset registry
- Climate friendly adjustments to operations & maintenance – changing maintenance schedules; adapting to account for uncertainty; changing technologies and approaches to reduce emissions

Making Public Asset Management Climate Smart



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