RICCAR

Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region

Understanding Climate Proofing

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Climate Proofing

- Regional Workshop | Jan. 2014 | Cairo
- National Workshops | Jordan, Lebanon , Egypt (2014)
- Climate **mainstreaming** (introducing CC in water policy)
- Climate **proofing** (training on preparing climate proofing projects)
- Climate **financing** (training on access to international climate funds)

Climate Proofing

Regional/National Level (with AWC)

- **Regional Workshop (2014)**
  Egypt: **25** representatives from pilot countries + partners
- **National Workshops (2014)**
  Jordan (**38** representatives, **10** governmental institutions, NGOs)
  Lebanon (**23** participants, government, private sector, NGOs)
  Egypt (**45** representatives, government, public, media)

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What is Climate Proofing?

"The incorporation of climate change issues into planning procedures at national, sectoral, and project level in order to increase resilience to climate change impacts."

- **allows measures to be analyzed with regard to the current and future challenges and opportunities presented by climate change**
- **applied in the planning phase or during revision of plans**
- **proper implementation makes a given plan or investment more "climate-proof "**

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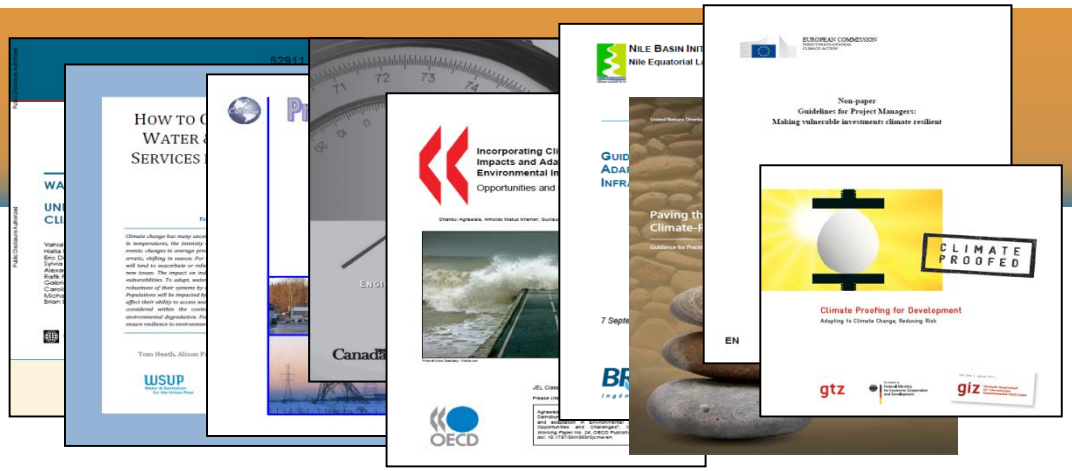
History



Climate Proofing Guidelines for Water Investments

- Approach of climate proofing of **investments** has rapidly gained momentum over the past 5 years
- Countries and regions around the world have begun creating **guidelines** for including climate change into **investment decisions**
- Some countries are beginning to make climate proofing mandatory, i.e. through **existing regulatory frameworks** such as **SEA** and **EIA** or **stand-alone climate checks**

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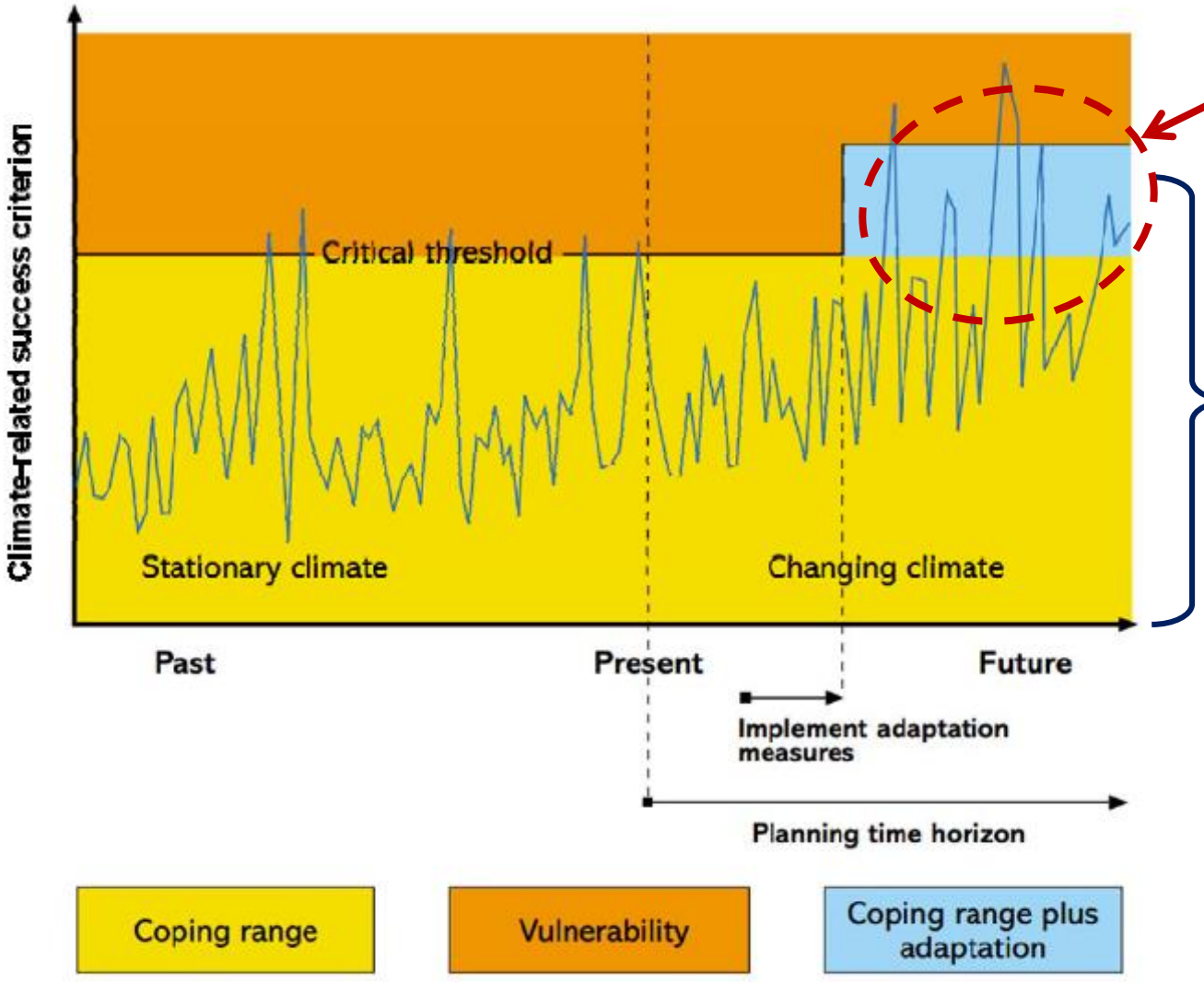
Impacts of Climate Change on Investments

CC impacts on various dimensions of a project
(operational, financial, environmental and social performance, market conditions)

- Deteriorating assets and reduced design life, risk of damage
- Increasing operational costs and need for additional capital investment
- Loss of income
- Reputation damage at several levels
- Changing market demand for goods and services
- Increasing insurance costs or lack of insurance availability

Impacts of Climate Change on Investments



Design/ operational thresholds may be exceeded more frequently due to climate variability and change

Adaptation *extends* the coping range

Source. Willows and Connell 2003

Investment Lifetimes vs. Climate Change Trends

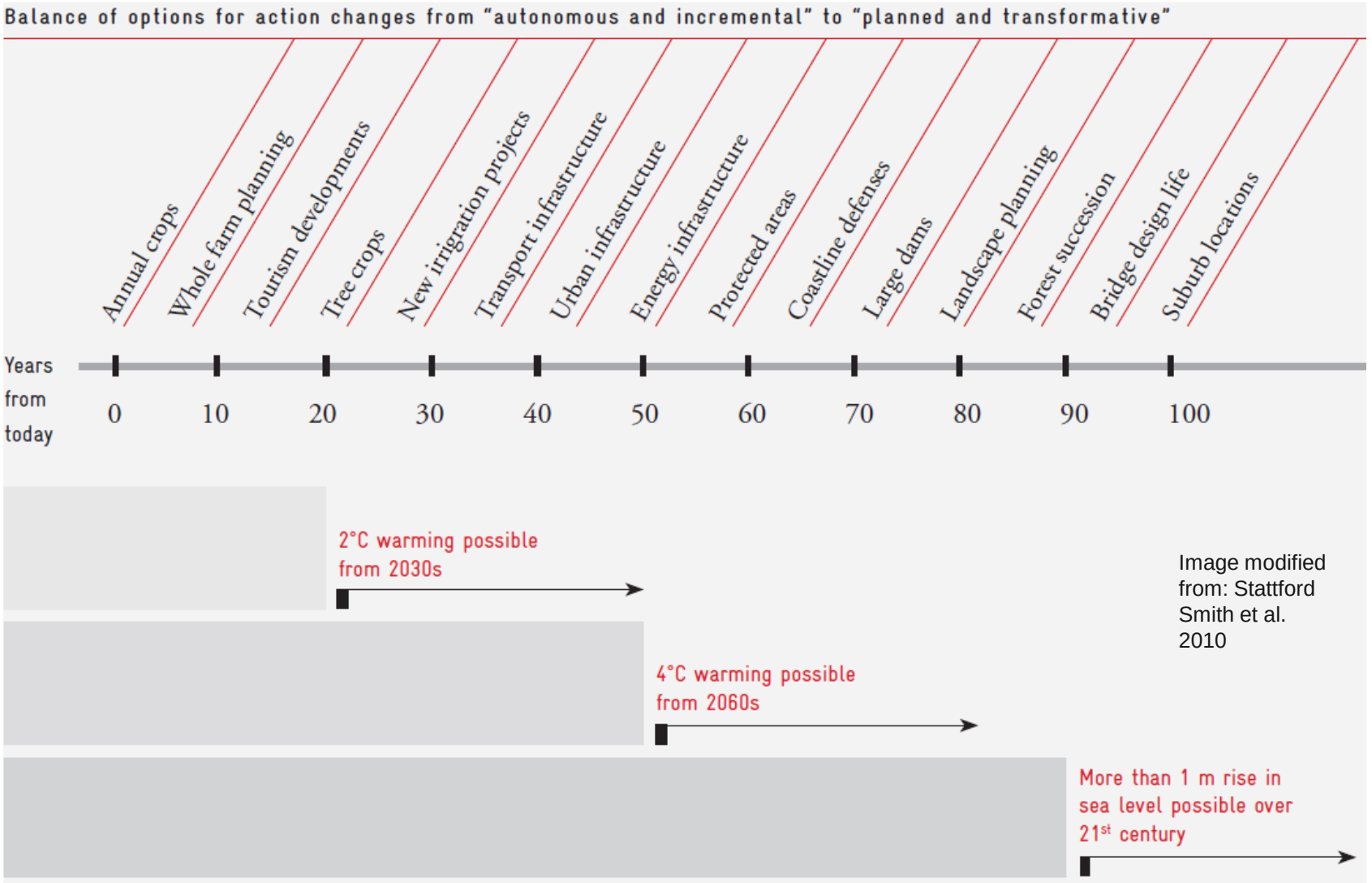
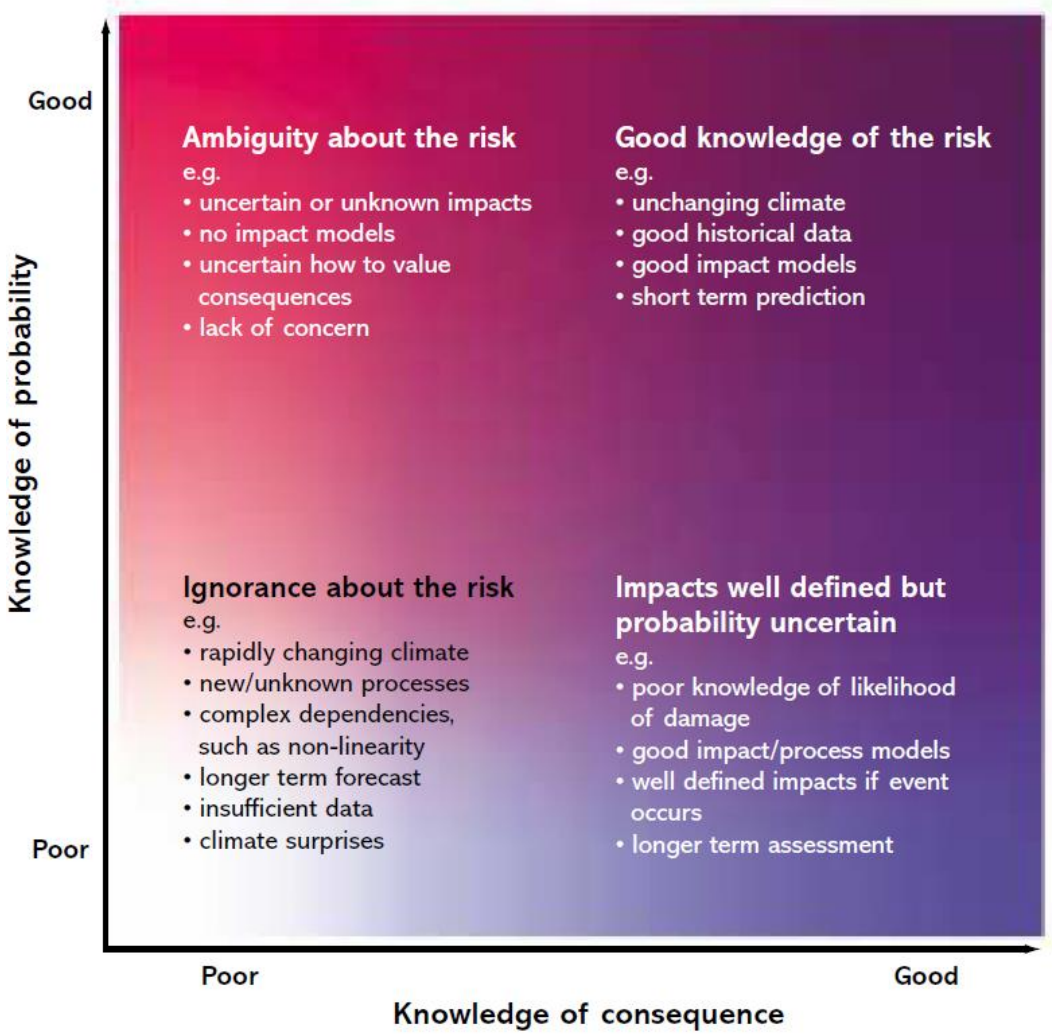


Image modified from: Stattford Smith et al. 2010

Dealing with Uncertainty



Guiding principles for adaptation options:

- **No-regret/low-regret approach**
- **Soft adaptation**
- **Robust adaptation**
- **Adaptive management**

Source. Willows and Connell 2003

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The Climate Proofing Approach

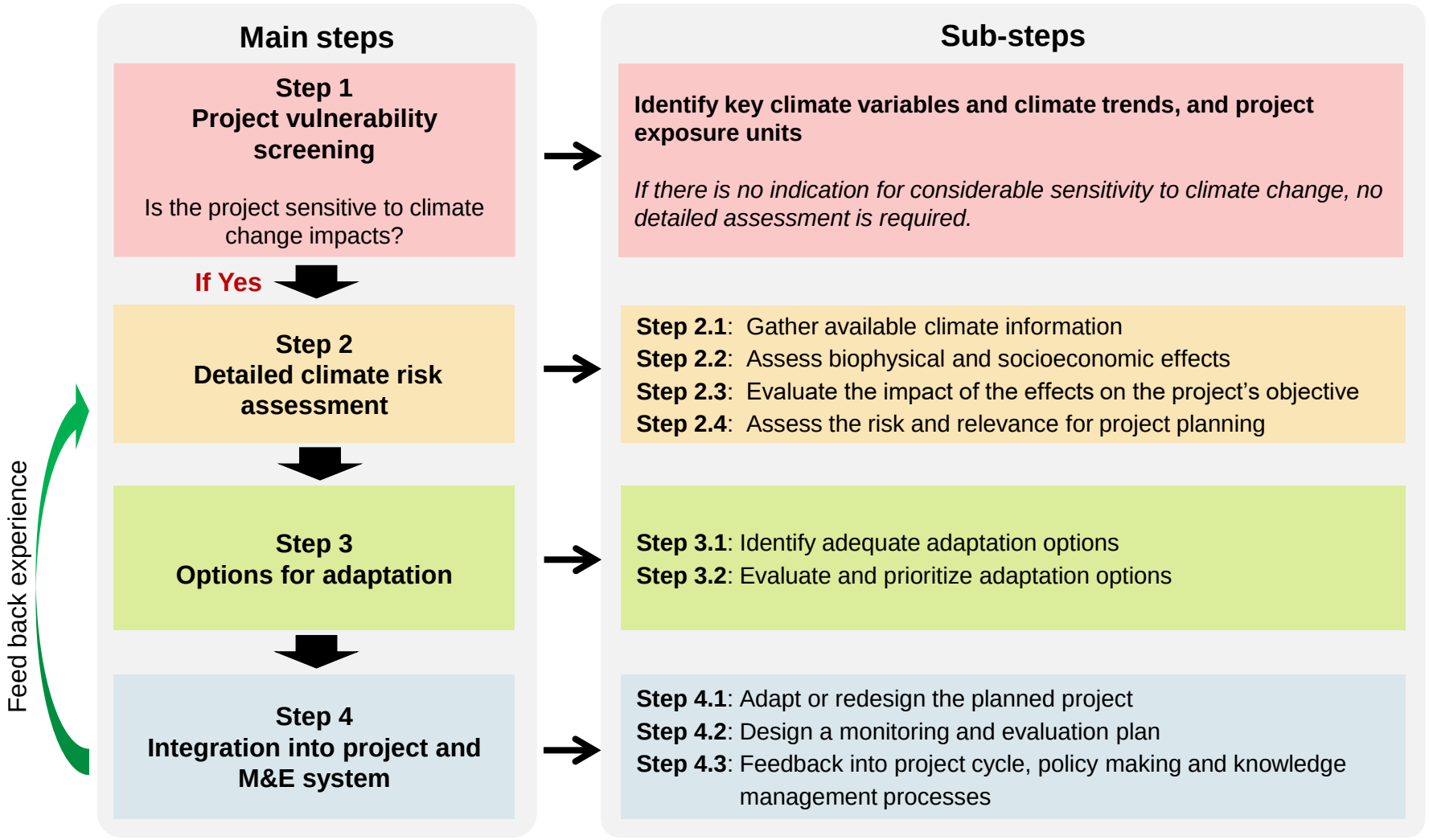
Reasons for climate proofing of investments

- Increases **long-term performance and sustainability**
- Helps avoid **'lock-in' situations** and **path dependencies**
- Increasingly becomes **prerequisite for project funding**

Opportunities for action -- 'entry points'

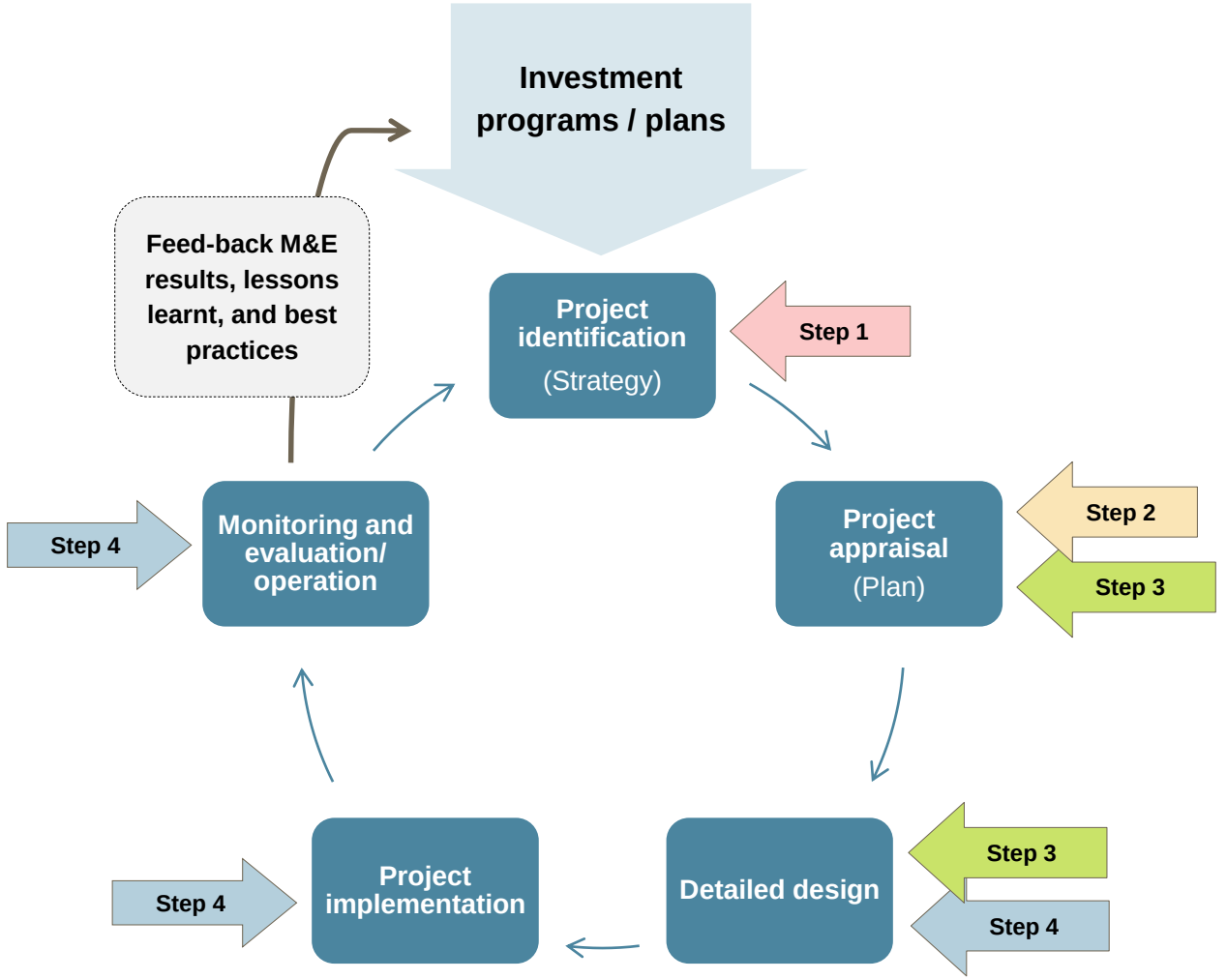
- **raising awareness** and growing **political will** to achieve **climate resilient development** and realize **green growth potentials**
- Significant, **climate-smart investment opportunities for** PPP and private sector
- Required **Environmental Strategic/Impact Assessments (SEA/EIA)** in many countries

Steps


Main steps
Sub-steps
Step 1
Project vulnerability screening
Is the project sensitive to climate change impacts?
Identify key climate variables and climate trends, and project exposure units
If there is no indication for considerable sensitivity to climate change, no detailed assessment is required.
If Yes
Step 2
Detailed climate risk assessment
Step 2.1: Gather available climate information
Step 2.2: Assess biophysical and socioeconomic effects
Step 2.3: Evaluate the impact of the effects on the project's objective
Step 2.4: Assess the risk and relevance for project planning
Step 3
Options for adaptation
Step 3.1: Identify adequate adaptation options
Step 3.2: Evaluate and prioritize adaptation options
Step 4
Integration into project and M&E system
Step 4.1: Adapt or redesign the planned project
Step 4.2: Design a monitoring and evaluation plan
Step 4.3: Feedback into project cycle, policy making and knowledge management processes
Feed back experience

Entry Points

Entry points within the project cycle



*"Consideration of climate change impacts at the **planning stage** is key to boosting adaptive capacity" (IPCC 2007)*

Case Studies – TOOLS

Case Study: Climate proofing local development planning in the Mekong Delta, Vietnam

- Climate Risks: sea level rise → saline intrusion
- Climate change impacts: e.g. drop in rice yields
- Adaptation option: avoid losses by choosing different rice varieties
- **The approach of applying the climate lens led to the development of a step-by-step manual (Tool), adapted to local knowledge, which includes three steps and twelve practical tasks.**
- Outcomes: pilot projects in five communes e.g. adapted cultivation technologies; use of drought resistant seeds.

  → local capacities to independently apply climate proofing methods strengthened through several trainings