



# Draft Climate Change Response M&E System

NCCRP Stakeholder Workshop 21 June 2013

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## Agenda for first session

- Background to project
- Rationale for climate change response M&E
- NCCR White Paper guidelines
- Drivers for climate change response M&E
- Definitions
  - M&E
  - Climate change responses
  - An M&E `system'
- Objectives
- Principles
- Definition of the climate change response M&E system



## Background

- Purpose of the project to design a draft climate change response monitoring and evaluation system
- The climate change response M&E system should cover:
  - Mitigation response measures
  - Adaptation response measures
  - Flagships
  - Climate risks
  - Financial flows
- Work so far:
  - Definition, objectives, principles, initial visual description, considerations for an implementation plan
- Remainder of project:
  - Design system in more detail
  - South Africanise the work'



#### Rationale

- White Paper:
  - M&E needed "to ensure effective implementation" of climate change responses
  - Need to measure their cost, outcome and impact
- Public Service Commission report (2007):
  - Needed to support evidenced-based decision-making
  - Build public support accountability mechanism
  - Pockets of M&E systems developing in different ways and paces – need to strengthen, coordinate, streamline and connect into a common framework
  - Ensure uniformity of purpose amongst participating organisations
  - Few established M&E units
  - Duplication of reporting demands too many ad-hoc requests
  - Reliability and validation of reporting is not always high
  - Reporting often not tailored to audience



## NCCR White Paper guidelines

- White Paper
  - DEA is responsible coordinating department
  - Should involve those organisations in section 10
    - Parliament
    - IMCCC
    - FOSAD
    - IGCCC
    - NDMC
    - Provincial and local government
    - Business and industry
    - Civil society
    - Academia and scientists
- The system will need to evolve with international measurement, reporting and verification requirements
- M&E should be set in the context of the Presidency's outcomebased system and shall be reported through the delivery forums for these outcomes



# NCCR White Paper guidelines (continued)

- Mitigation
  - Response measures will be measured against the national emissions trajectory range
  - Response measures will be M&E'd to assess progress in implementation
  - M&E system will assess indicators, including impact on emissions, but also wider sustainable development benefits
  - The monitoring process will be implemented through sectoral implementation mechanisms
  - Will be coordinated by DEA, and results published annually
- Adaptation
  - Establish a system for gathering information and reporting progress on the implementation of adaptation actions



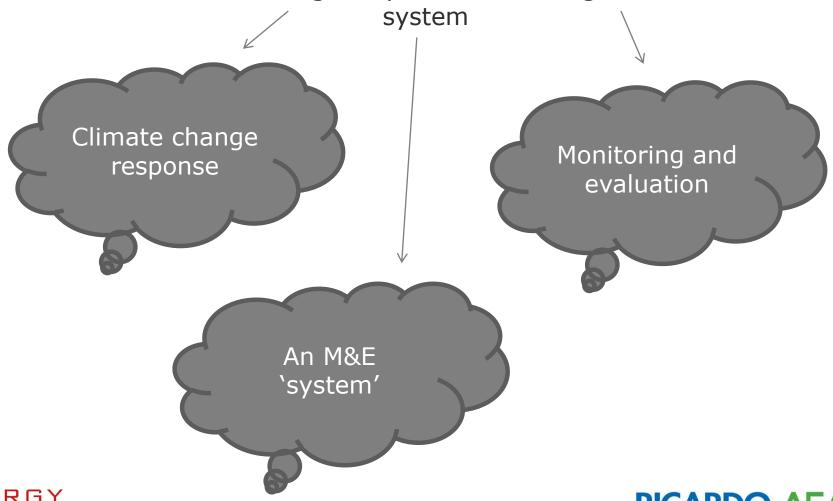
#### **Drivers**

- National Climate Change Response White Paper
- National requirements
  - Parliament
  - Public
- International requirements
  - UNFCCC
  - Donors/funders



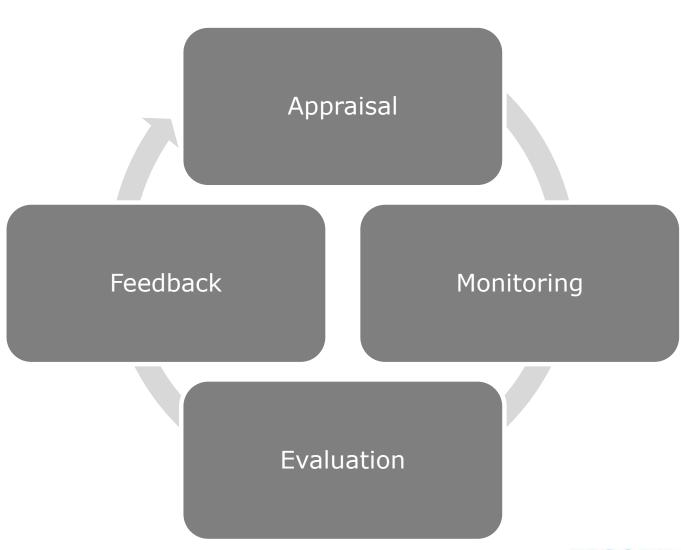
#### **Definitions**

A draft climate change response monitoring and evaluation





# The M&E 'cycle'





## M&E system ≠ GHG inventory

|                 | M&E system                | <b>GHG</b> inventory    |
|-----------------|---------------------------|-------------------------|
| Scale           | Response measures         | Economy and sector wide |
| Scope 1         | Cost, impacts, outcome    | Emissions               |
| Scope 2         | Mitigation and adaptation | Just mitigation         |
| Causality       | Yes                       | No                      |
| Implementa tion | Yes                       | No                      |
| Co benefits     | Yes                       | No                      |



## Climate change response measures



Programmes

Policies

Projects





# An M&E 'system'

- A legal, institutional and procedural framework
- Therefore includes:
  - Data requirements
  - Methodologies and guidance
  - Reporting processes and deadlines
  - Reporting formats





# Definition by GWMES

"A monitoring and evaluation system is <u>a set of organisational</u> structures, management processes, standards, strategies, plans, indicators, information systems, reporting lines and accountability relationships which enables national and provincial departments, municipalities and other institutions to discharge their M&E functions effectively. In addition to these formal managerial elements are the organisational culture, capacity and other enabling conditions which will determine whether the feedback from the M&E function influence the organisation's decision-making, learning and service delivery."



### Proposed objectives

- Clear picture of response measures 'landscape'
  - To increase transparency
  - To inform future decisions on climate change responses
- To provide an assessment of the impacts and effectiveness of climate change response measures – hence GHGI not enough
  - Emissions impacts
  - Non-GHG impacts
  - Costs
- A more efficient, joined-up approach to climate change response M&E
  - Comparability?
    - Need a certain level of standardisation
    - But to what end?
    - Is it realistic?



## Principles

- Simplification
- Timeliness
- Accuracy
- Transparency and confidentiality
- Relevance
- Influential (on policy development)
- Flexibility (but also certainty)
- Good communication and cooperation



# SA M&E System "Working" Definition

"The SA climate change response M&E system is...

...the legal, institutional and procedural framework...

...for capturing, analysing and publishing information on the impact of climate change response measures to reduce GHG emissions and adapt to climate change...

...so as to allow this information to be used to maximise their effectiveness and to inform future climate change response measures."





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Questions?

### Agenda for second session

- Climate change response M&E in the context of the outcomesbased approach
- Institutional structure and roles/responsibilities
- Building on existing structures
- Data and information
- A high level M&E system
- Implementation and a phased approach





# A generic M&E system

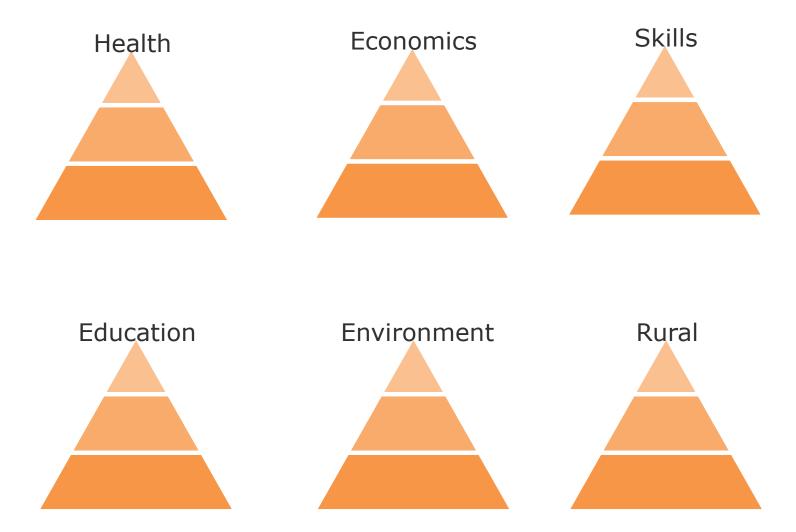
Overall objective

?????

Individual response measures

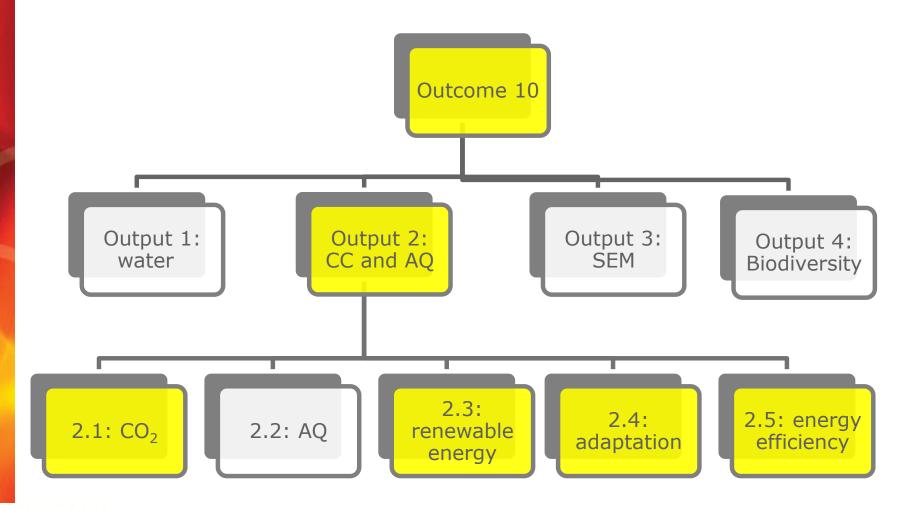


# Performance agreements





#### Outcome 10 – environment





# The M&E system related to output 2

Overall objective = output 2 (climate change)

Reduced CO<sub>2</sub>
emissions, renewable
energy, energy
efficiency, adaptation

Individual response measures



#### Instructional structure

Central coordination team

Climate change response measure M&E team Climate change response measure M&E team Climate change response measure M&E team Climate change response measure M&E team





# Climate Change response M&E coordinating team

- Maintains central database of relevant climate change response measures?
- Gives information to individual M&E teams on the format for information on impacts of climate change responses?
- Sets deadline for submission of information by individual climate change response measure M&E teams?
- Monitors and reviews overall functioning of the national system and proposes changes where appropriate?
- Collects information on extent of use of international credits?
- Ensures relevant information is publicly available in a clear, transparent and accessible manner?
- Submits required information to UNFCCC?
- Discusses data with UNFCCC and represents South Africa on any international discussions on climate change response monitoring and evaluation?



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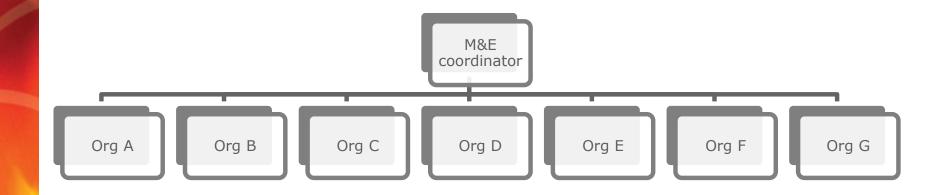
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# Climate change response measure M&E teams

- Designs and implements the climate change response measure?
- Drafts ex-ante impact assessments showing expected impact on emissions and expected costs and benefits of their response measure for future years?
- Updates these impacts every pre-determined number of years?
- Develops an indicator set to allow evaluation of impacts?
- Evaluates actual impacts (emissions and costs/benefits) of their climate change response every pre-determined number of years?

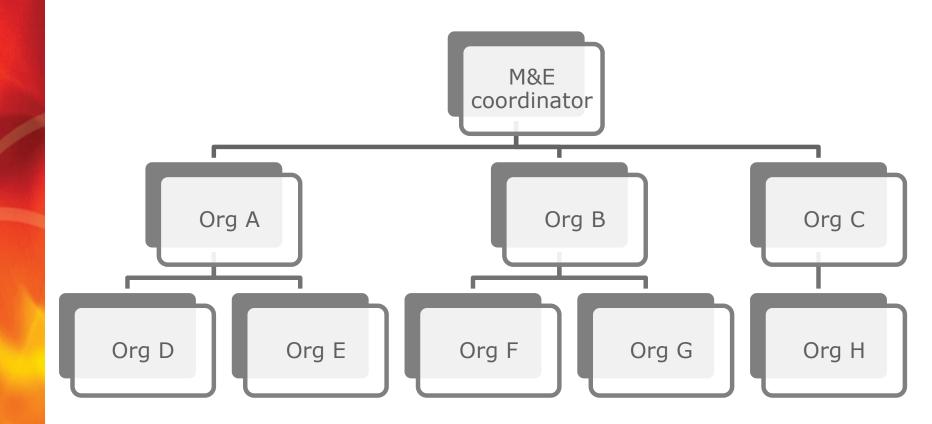


#### A flat structure for M&E



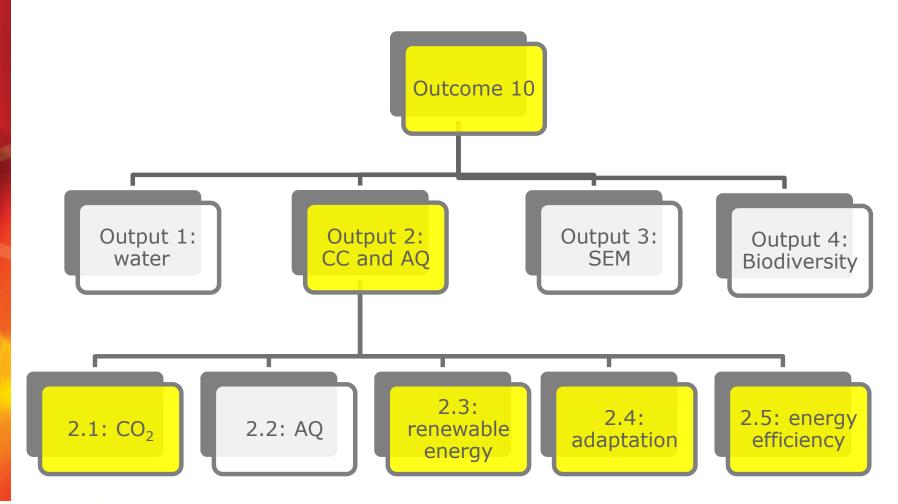


## A more sensible approach?



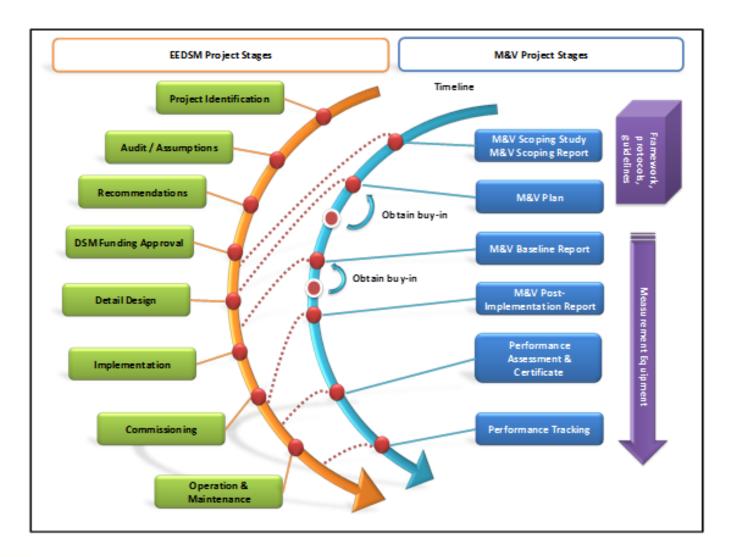


# Using the DPME outcomes-based approach...





## Building on existing systems





**ENERGY** Figure 4.1: Interaction between the HHDSM project and the M&V process.

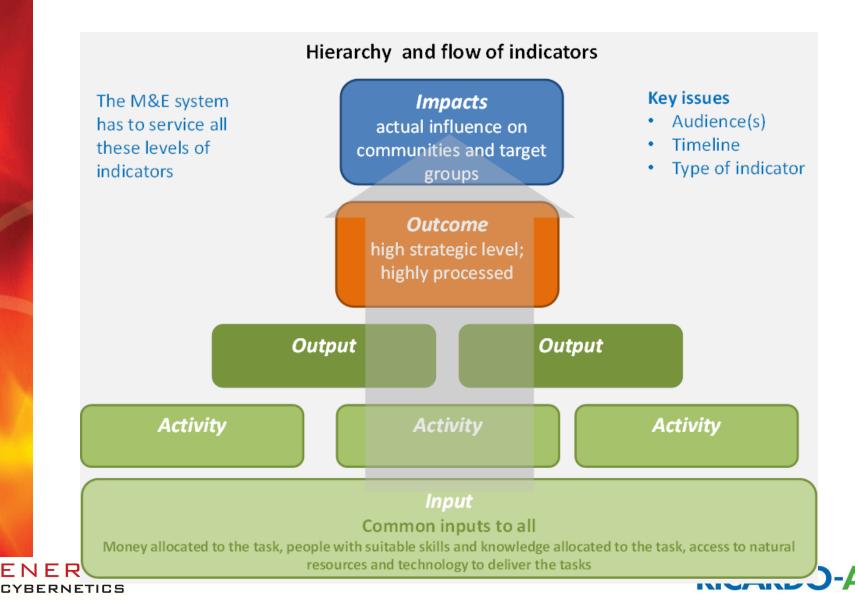


## Current levels of reporting

- M&V Guideline
- International Performance Measurement and Verification Protocol (IPMVP)
- M&V Standard Offer Guideline
- M&V Standard Product Guideline
- M&V Performance Contract Guideline
- •M&V Pumping Guideline
- M&V Solar Water Heating Guideline (HP)
- •M&V Solar Water Heating Guideline (LP)
- •M&V Residential Load Management Guideline
- •M&V Residential Heat Pump Rebate Guideline
- M&V CFL Guideline
- M&V CFL Methodology for Exchange Points Guideline
- M&V Geyser Insulation Guideline
- M&V Greenfield Guideline
- M&V Energy metering spec (under review)
- M&V Process for Eskom DSM
- M&V Program evaluation Guideline (draft)

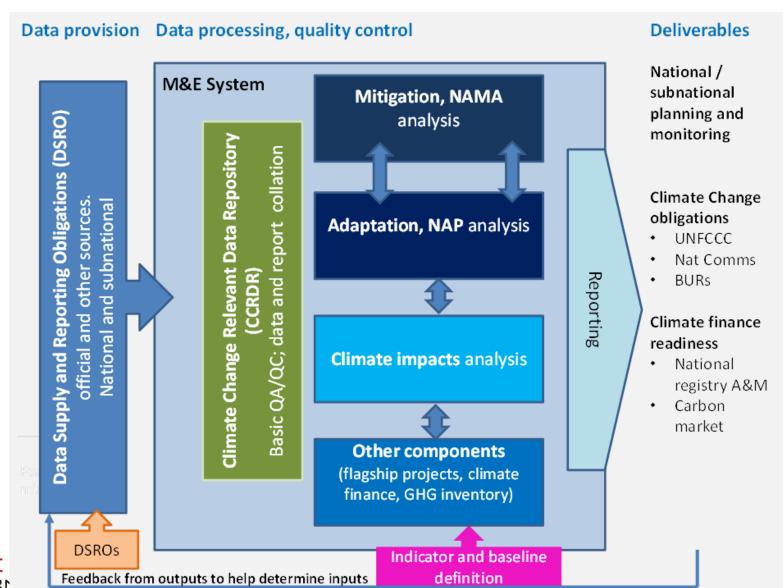


#### Data and information



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## High-Level M&E System





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### Implementation considerations

Define Requirements and Outputs Upfront Identify and
Develop Key
Datasets and data
requirements

Identify and Engage Key Stakeholders

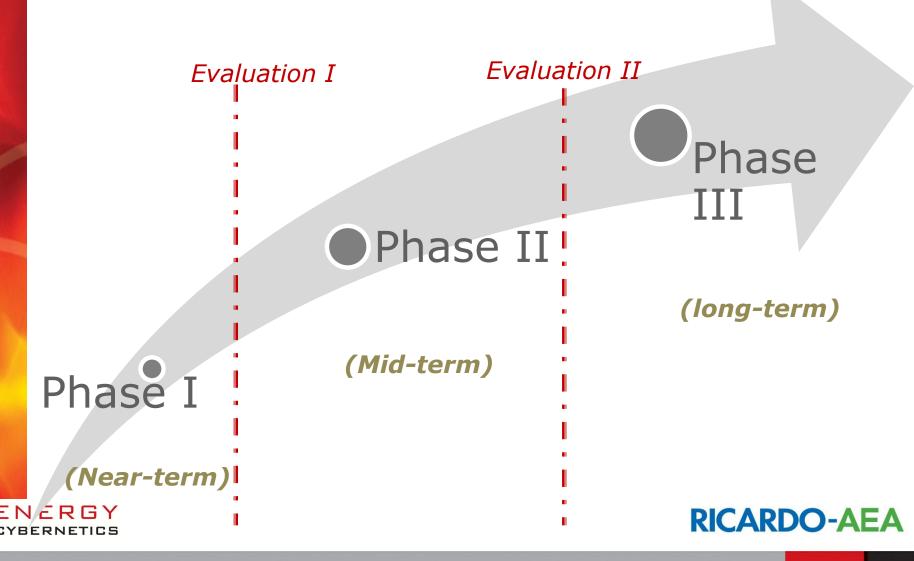
M&E stocktake and gap analysis

Develop a Management Framework On-going Improvement Programme

Capacity, Capability and Training



# A tiered and phased approach to implementation





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### Questions



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### Adaptation

- adaptation M&E is part of the wider climate change response M&E system
- no separate adaptation M&E system
- specific features that makes adaptation distinct from mitigation

- South African Context
- Objectives
- Principles
- Adaptation M&E: International Case Studies
- Links to existing work
- Adaptation M&E in practice...
- Critical Success Factors
- Concluding remarks...

# **South African Context: Recommendations from the National Climate Change Response White Paper**

5.1. Need for 'focused M&E systems to update our knowledge of how rapidly change is occurring and the effectiveness of adaptation responses.'

12.1.3: 'Establish a monitoring system for gathering information (with bottom-up inputs where possible) and reporting progress on adaptation actions'

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#### South African Context: Adaptation M&E

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Adaptation M&E is NOT new, it is already happening in South Africa!

an M&E system for adaptation will only work if it:

- Builds on existing M&E work
- Ensures that integrating climate risks is a core focus
- Enables harmonization and synergies in M&E approaches

#### For example:

Long-term Adaptation Scenarios: Adaptation Policy and Law Review 2012/13: E.g. Water:

- Monitoring and evaluation is a priority for the Department of Water affairs
- This includes water monitoring research; developing models for water quality parameters and finalising a 5 year strategy for coordinated and integrated monitoring at all tiers.
- Extensive groundwater research assessments planned coupled with an integrated groundwater information system
- The National Groundwater Archive established. Improved reliable groundwater data will also assist in on investment in operation and maintenance activities.
- National Planning Commission will work with the Department of Performance Monitoring and Evaluation to turn the new growth plan into future performance and delivery agreements.

## Proposed Objectives of the M&E System in the context of Adaptation



Aim: To assess and monitor the effectiveness of adaptation responses towards building climate resilience.

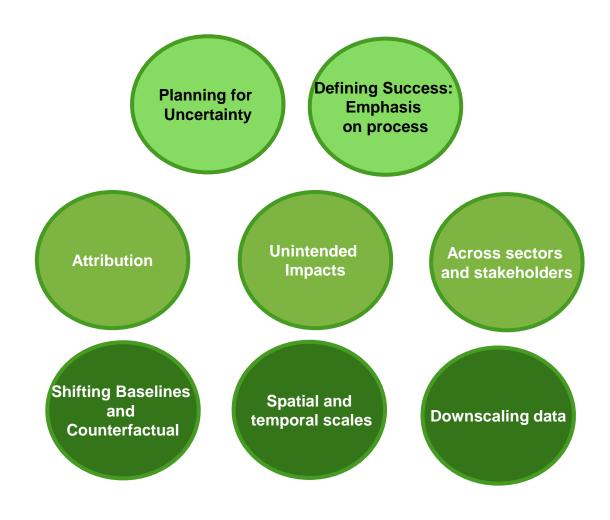
- To track changes in vulnerability (exposure, sensitivity and adaptive capacity) in the context of current and projected climate risks.
  - By sector
  - By geography/biophysical regions/urban-rural
  - By target groups (focussing on tracking who is vulnerable to what, where and why)
- To track progress in implementing effective adaptation responses which increase resilience and reduce vulnerability to climate change
- To learn from adaptation responses that have been designed and implemented to date in order to inform future responses
- Set a flexible but clear framework for effective adaptation M&E at the national level and provide guidance for how this can be streamlined and sub-national and local levels.

# Proposed Principles of the M&E system (with an Adaptation interpretation)

Simplification Climate Change Responses **Timeliness** Transparency Accuracy & Evidencebased Relevance Influential **Flexibility** Communication and Cooperation

Interpreting the Principles in the Vulnerability **Equity** Sustainability Dynamism **Participatory** 

## Adaptation M&E: specific challenges and design considerations



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# Adaptation M&E: International Case Studies

- Monitoring of Climate Risks: UK & EU
- M&E of Adaptation Measures: UK, Finland, Kenya and the EU

NAPA Review :Bangladesh and Tanzania

#### **Integrating Climate Risks: International Case Studies**

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#### • UK

- Regular State of the Climate Reports
- UK Climate Projections 2009 (UKCP09)
- UK Climate Change Risk Assessment
- SNIFFER's handbook of climate trends across Scotland

#### EU

- European Environment Agency collating data across EU 27 (since 2004)
- Climate Impact Indicators used as a basis
- European Climate Adaptation Platform (Climate-ADAPT¹)
- Pan-European Summary Map of Climate Impacts

[http://climate-adapt.eea.europa.eu]

Climate Adapt: http://climate-adapt.eea.europa.eu]

#### Kenya UK Process-based assessments of Kenya Climate Change Action Plan capacity combined with indicators (2013) led by National CC Task Force Twin-track Approach & National Adaptation Assessment Toolkit Performance and Benefit developed by the UK Adaptation Measurement Framework (Indicator-Sub-Committee led) **Finland** ΕIJ 1<sup>st</sup> to adopt a national adaptation EU strategy on adaptation (2013) strategy in 2003 Process-based & programme-level Sectoral approach to implementation indicators Mid-term evaluation by a 'Multi-Performance-based M&E System stakeholder' Coordination Group (future)

#### Linking to Existing Work in South Africa (Examples...)

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- Climate Impact Analysis
  - South African Risk and Vulnerability Atlas
  - South African Weather Service
  - Drought Monitoring Desk

Linking existing decision-making tools for national climate risk management to a national M&E framework and sectoral & local-level vulnerability analysis

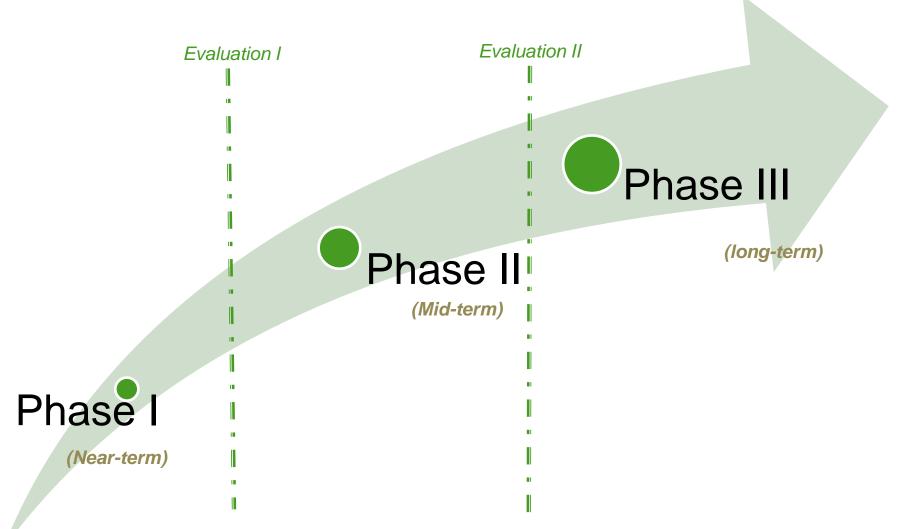
- Policy Alignment to NCCRS White Paper
  - Scoping Adaptation in 8 key sectors
  - Development trajectories and key indicator
  - Long-term Adaptation Scenarios

Aligning sectoral adaptation M&E frameworks and scenarios to the national M&E systems and viceversa to harmonise synergies and information flows.

- Adaptation M&E at the Local Level
  - Let's respond Toolkit (2013)
  - Local Government Response & Functions: Climate Change (2012)

Aligning local government processes, clarifying roles and responsibilities, building adaptation response capacity and feeding bottom-up evidence to inform, strengthen and devolve the climate change response M&E system

a tiered and phased out approach for implementation



#### A tiered and phased out approach

#### Phase I (20xx)

#### Strategic Framework Design and Engagement

- Establishing the framework
- Defining high-level priorities
- Setting clear objectives
- Process-based Indicators
- Stakeholder reach
- Sectoral pilots

#### Phase II (20xx)

#### Integration, Gap Analysis and Scale up

- Progress towards objectives
- Lessons learnt (national + global)
- Aligning with government departments/ business areas
- Gap analysis: what has worked and what has not across policies / flagships/projects.
- Climate impact and adaptation outcome indicators
- Enabling consistency / comparability

#### Phase III (20xx)

#### Learning, exchange and reflection

- Reporting of annual trends
- In-depth lessons learnt survey
- Cross-departmental workshop for learning and exchange.
- Regular evaluations of a longer-term M&E system

# **Critical Success Factors: Phased Approach**

# Sectoral Pilots and Scale up

- Prioritisation of key sectors for initial M&E pilots
- Sectoral impact and vulnerability baselines
- Causal pathways to adaptation within the sectors
- Analysing how national / sectoral initiatives support wider development goals.
- Feeding sectoral M&E outcomes into the CC response M&E system

# Stakeholder engagement and alignment

- Engendering support and 'buy in' at national, provincial and local levels
- Building on rich evidence base across communities of practice
- Align the top-down and bottom-up evidence-based approaches
- · Leverage existing adaptation for aand networks
- Continual learning, reflection and improvement to strengthen the M&E system

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#### **Adaptation M&E: Concluding remarks**

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- Adaptation M&E is in relative infancy
- Tiered and phased approach to implementation
- Aligning top-down and bottom-up processes
- Multi-stakeholder, multi-level and an integrated approach
- Emphasis on continual learning and improvement
- Emphasis on process and outcomes
- Going beyond indicators: evidence-based decision-making



#### Thank you.

#### **Questions / Comments?**

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### Questions