

# Assignment

- Combine design options into 3 coherent proposals
- Based on optimisation criteria
- Taking into account country- and sector-level considerations
- Basis for later task, draft modalities and procedures

## Top Priority

Environmental effectiveness and integrity

Preparedness for evolution towards domestic cap-and-trade system

Economic efficiency

## Further Criteria

Political Feasibility

Private sector participation/potential to mobilize private capital

Potential impacts on competitiveness

Low risk of perverse outcomes

Administrative feasibility, including transaction costs

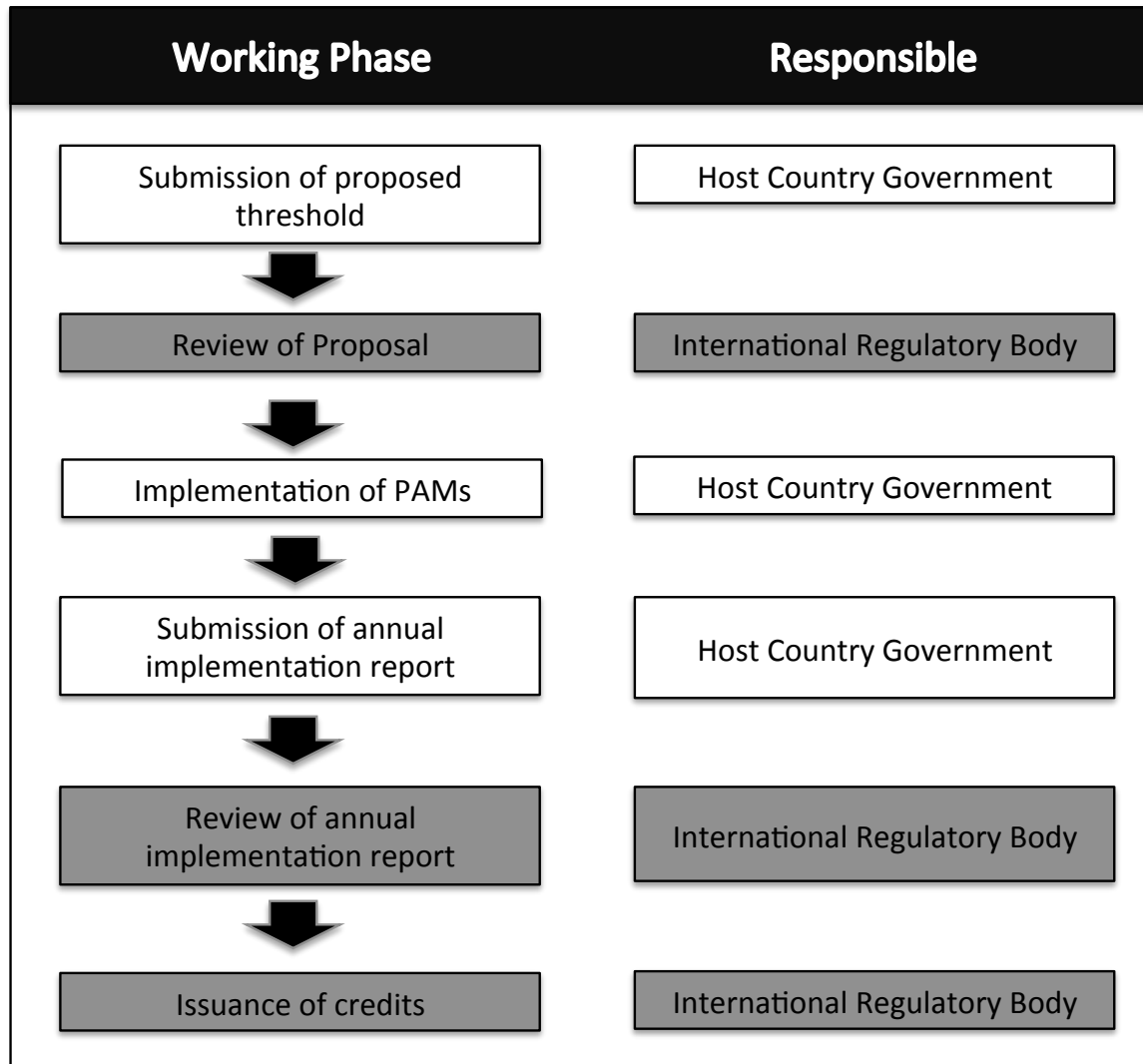
# Implementation

- Covering the whole spectrum of what is possible
- ⇒ One end of spectrum: Policy-driven government crediting system
- ⇒ Other end of spectrum: “Trading” system with domestic cap-and-trade
- Middle Ground: Installation-level crediting

# Proposal 1: Government Crediting System

- Host country government adopts sectoral crediting threshold
- Implements policies and measures to reduce emissions
- All credits accrue to government, which can use them to (co-)finance policy implementation
- Emissions accounted for at aggregate level

# Proposal 1: Implementation Cycle



# Proposal 1: Strengths

- Facilitates participation of countries that do not have technical capacity to implement source-level accounting
- Facilitates inclusion of sectors where source-level accounting would involve high transaction costs, e.g. buildings, transport.
- May be especially applicable for state-owned sectors, e.g. electricity generation in many countries
- Accounting at aggregate level allows broad coverage, which allows high environmental effectiveness and economic efficiency
- Accounting at aggregate level means low transaction costs

# Proposal 1: Weaknesses

- Host country government would need to pre-finance reductions
- Not as much evolution towards domestic cap-and-trade as under installation-based scheme
- Economic efficiency and private sector participation may be high or low, depending on implemented PAMs

## Proposal 2: Installation-level crediting (I)

- Proposal in UNFCCC is that credits should be issued on basis of overall sectoral performance
- ⇒ What happens if individual installations reduce emissions but others do not?
- ⇒ Not enough credits for good performers
- ⇒ Reward for good performers needs to be guaranteed

## Proposal 2: Installation-level crediting (II)

- Options from literature:
  - PAMs  
⇒ Proposal 1
  - Installation-level thresholds more stringent than sectoral  
⇒ Does not remove risk
  - Government insurance  
⇒ Sectoral trading



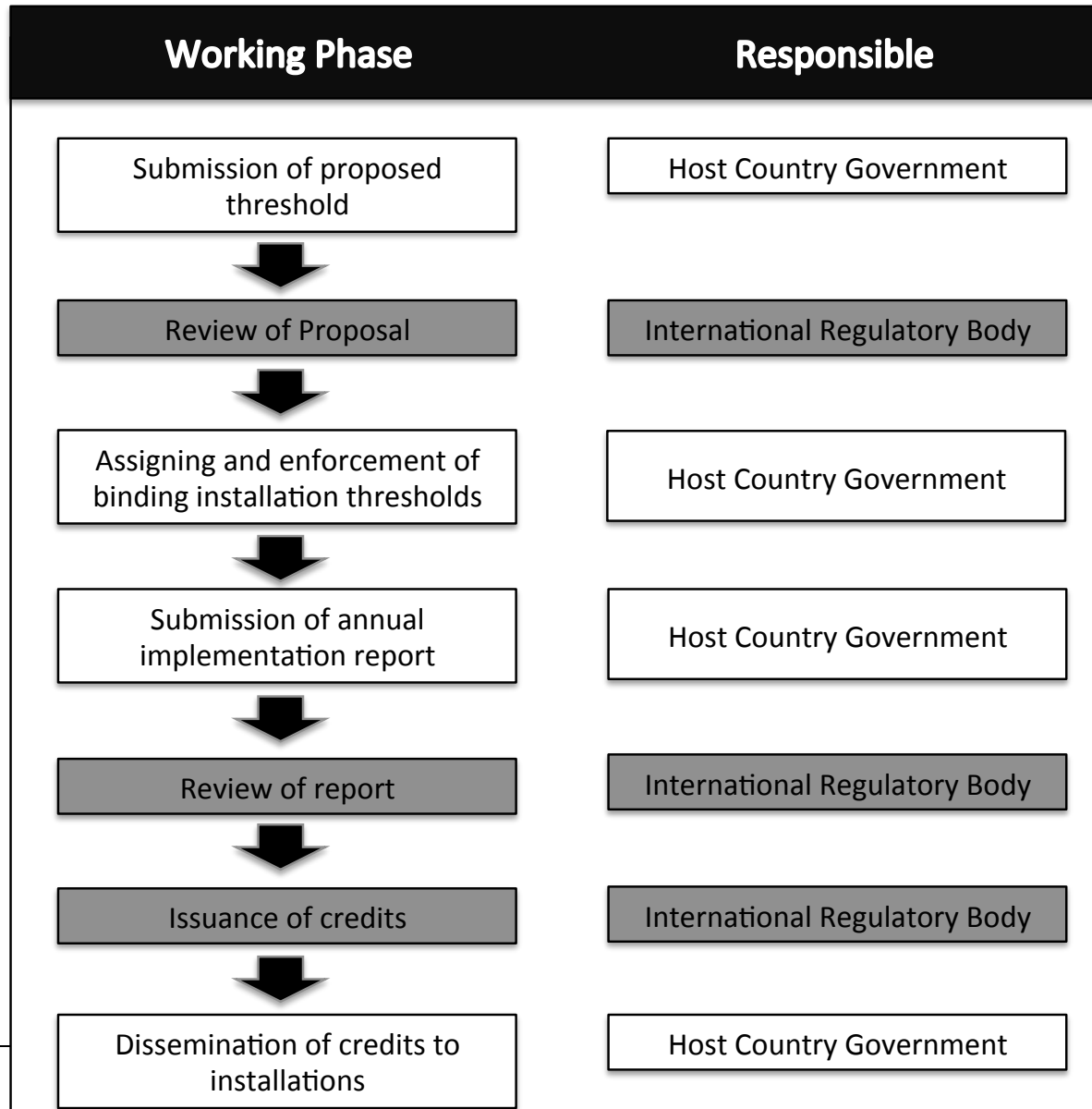
## Proposal 2: Installation-level crediting (III)

- Options from literature:
  - Installation crediting not depending on overall sectoral performance
    - ⇒ Would the international body need to look at each individual installation?
    - ⇒ Very similar to CDM
  - Installation targets mandatory
    - ⇒ May be most straightforward option
    - ⇒ But very similar to cap-and-trade

## Proposal 2: Installation Crediting System

- Host country government adopts sectoral crediting threshold
- Assigns binding crediting thresholds to individual installations
- Government has two sources of credits for issuance: international body and installations that do not meet targets

# Proposal 2: Installation Crediting System



# Proposal 2: Strengths and Weaknesses

## Strengths

- Installations exposed to full carbon price signal
- Strong evolution towards domestic cap-and-trade

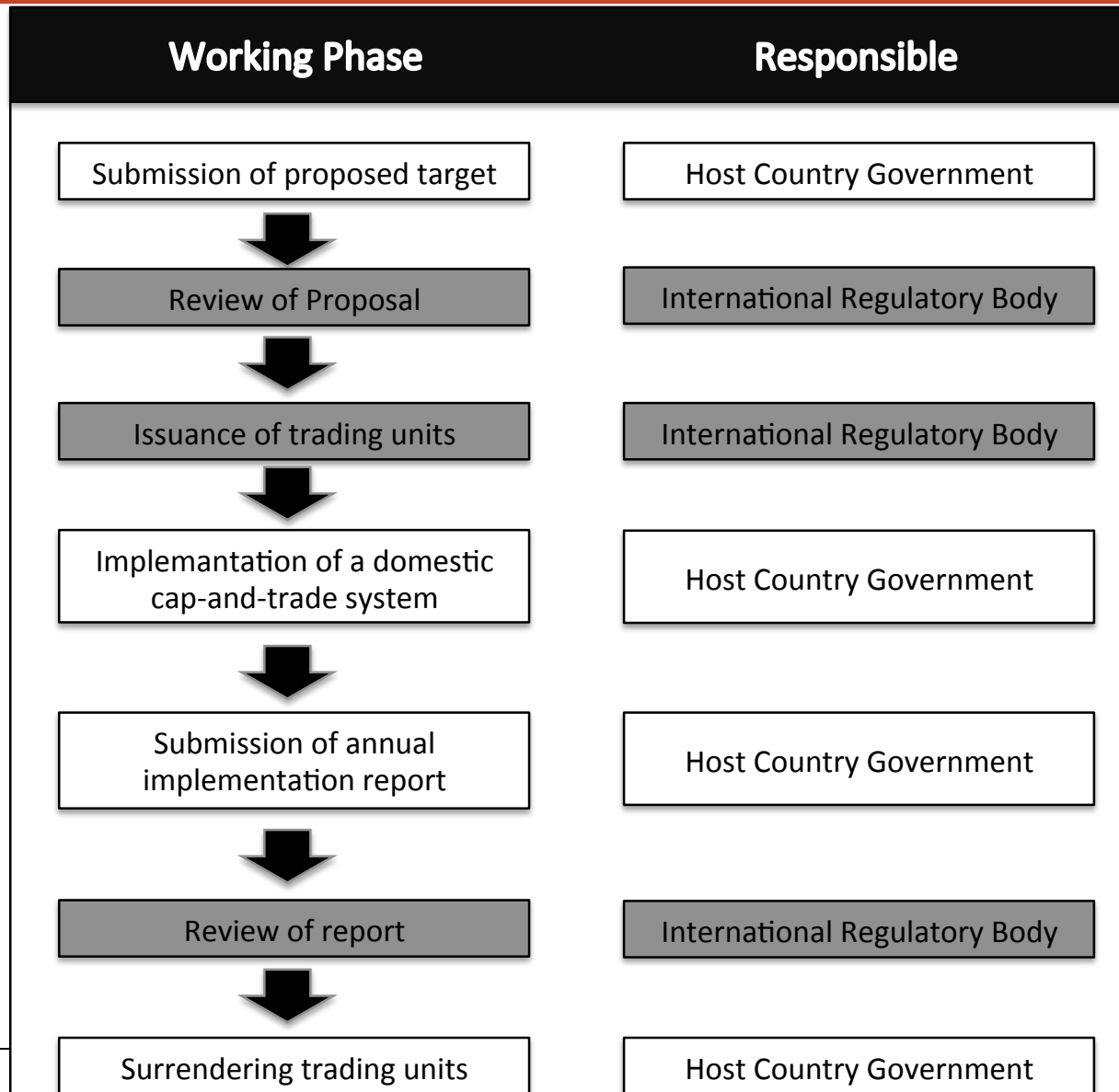
## Weaknesses

- Installations need to pre-finance reductions
- Binding installation targets may engender strong political resistance domestically
- Installation-level accounting requires strong technical capacity and entails high transaction costs

# Proposal 3: Installation Trading System

- Host country government adopts sectoral “trading” target
- Implements domestic cap-and-trade system
- Issuance of allowances ex ante, need to compensate for any shortfall ex post

# Proposal 3: Installation Trading System



# Proposal 3: Strengths and Weaknesses

## Strengths

- Installations exposed to full carbon price signal
- Trading units are issued ex ante, facilitates finance
- Full evolution towards domestic cap-and-trade

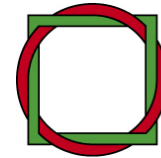
## Weaknesses

- Binding installation caps may engender strong political resistance domestically
- International political feasibility currently low
- Installation-level accounting requires strong technical capacity and entails high transaction costs

# For discussion: What does actually need to be regulated internationally?

#	Design element	Sub design elements
1	Crediting or trading	
2	Coverage of the mechanism	Sector/activity boundaries Types of GHGs to cover Upstream versus downstream coverage
3	Sector target or crediting threshold	Nature of target/threshold Method for setting target/threshold Interaction with other policies and measures
4	Operational/incentive framework	Operation/incentives at government/ installation level Methodology for allocating trading units Currency used Temporal flexibility
5	Requirements for data collection and MRV	
6	Compliance framework and penalties	
7	Government institutions and accounting framework	National governance International governance
8	Ways of managing the transition from CDM to new market mechanisms	
9	Finance of the system	





**Wuppertal Institute**  
for Climate, Environment  
and Energy

**Thank you very much for your attention !**

For further information please visit our website:

[www.wupperinst.org](http://www.wupperinst.org)

[wolfgang.sterk@wupperinst.org](mailto:wolfgang.sterk@wupperinst.org)

