

# MRV of National GHG Inventory

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# MRV in General Context

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- Measurement, Reporting, Verification
- In general context:
  - the process of **checking** if product, service, or system meets specifications/fulfills its intended purpose
  - Used to provide **assurance** to stakeholders that projects and programmes meet certain standards

# GHG MRV in Other Contexts

- National GHG Inventories
- Emission Trading Programmes
- CDM
  - project-scale
  - Programmes of Activities (PoAs)
- REDD+

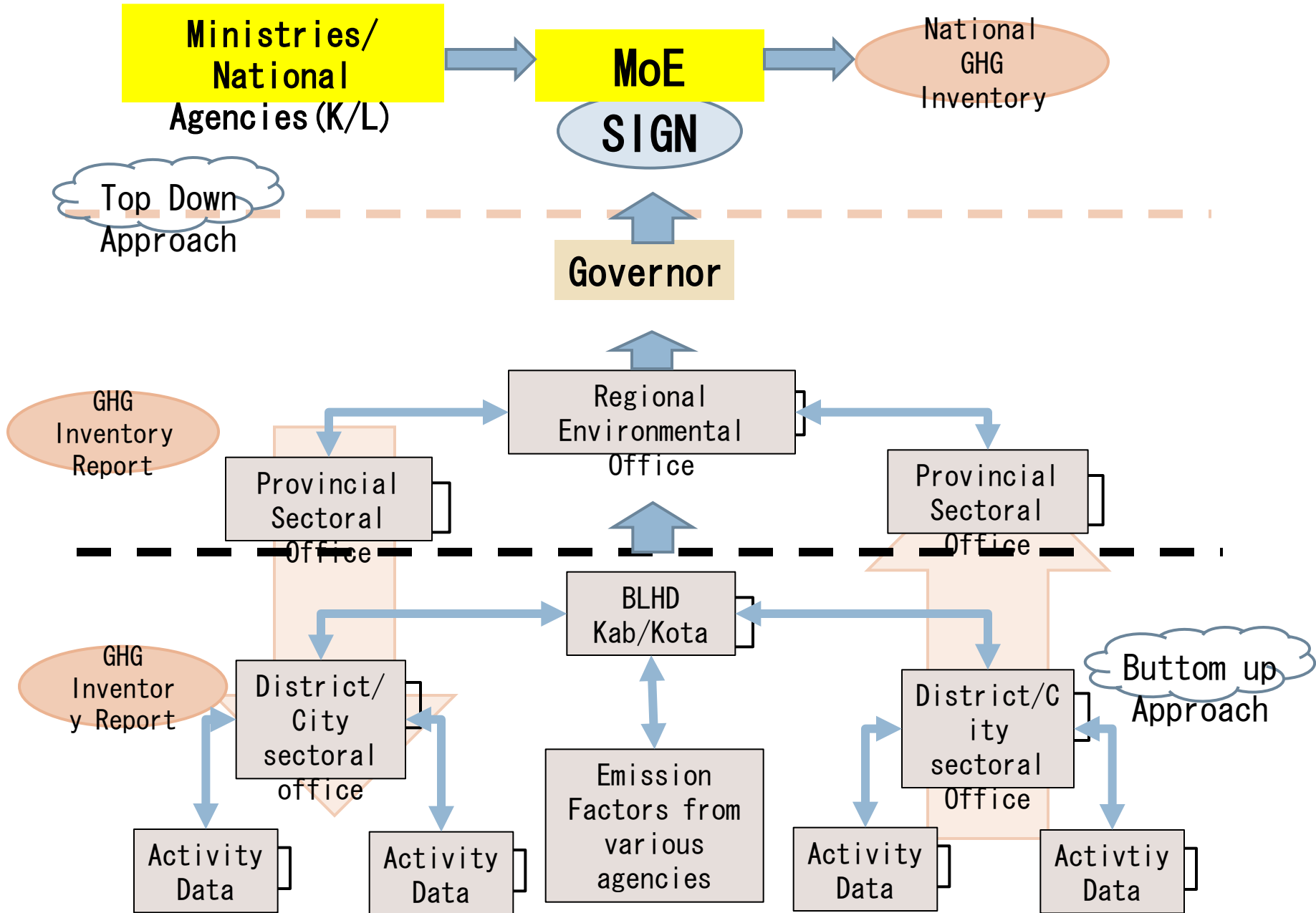
# MRV in Inventory Contexts

- National GHG Inventories
  - *Transparency*
  - *Accuracy*
  - *Completeness*
  - *Consistency*
  - *Comparability*

# MRV of GHG Inventory Implementation

- **(M)**easurable
  - ▣ National GHG inventories are basically not meant to be measured, but estimated, with some exceptions
  - ▣ Key question: Are the emissions estimated accurately → Is the GHG inventory in compliance with relevant IPCC Guidelines?
- **(R)**eportable
  - ▣ Are the emissions/removals reported in a transparent manner?
  - ▣ Key question: Is the report comparable with other countries?
- **(V)**erifiable
  - ▣ IPCC Guidelines provide guidance on verification, or QA/QC.
  - ▣ Key question: has the country implemented the appropriate QA/QC measures?

# Approaches



# Approaches

- Two approaches:
  - Top-down approach: using national aggregate data with involvement of national ministries/institutions
  - Bottom-up approach: using sub-national aggregate data with involvement of local government units.
- The challenge in having two approaches is to narrow the gap between the two estimates of total GHG emissions
  - Avoiding double counting (trans-boundary problem)
  - Consistency in methodology (generating



**THANK YOU**