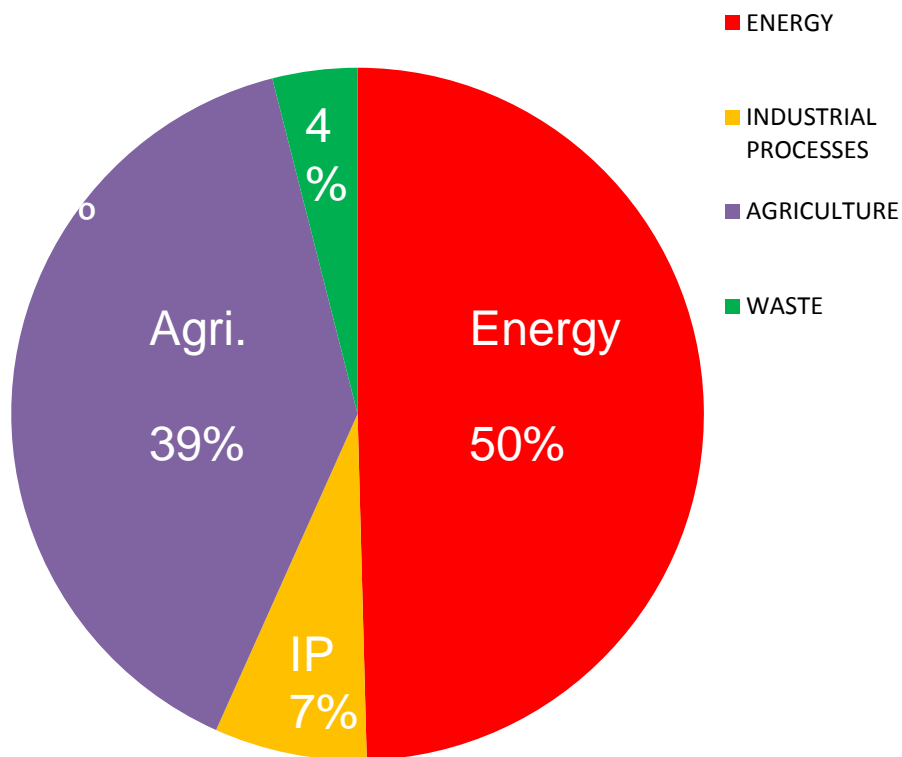


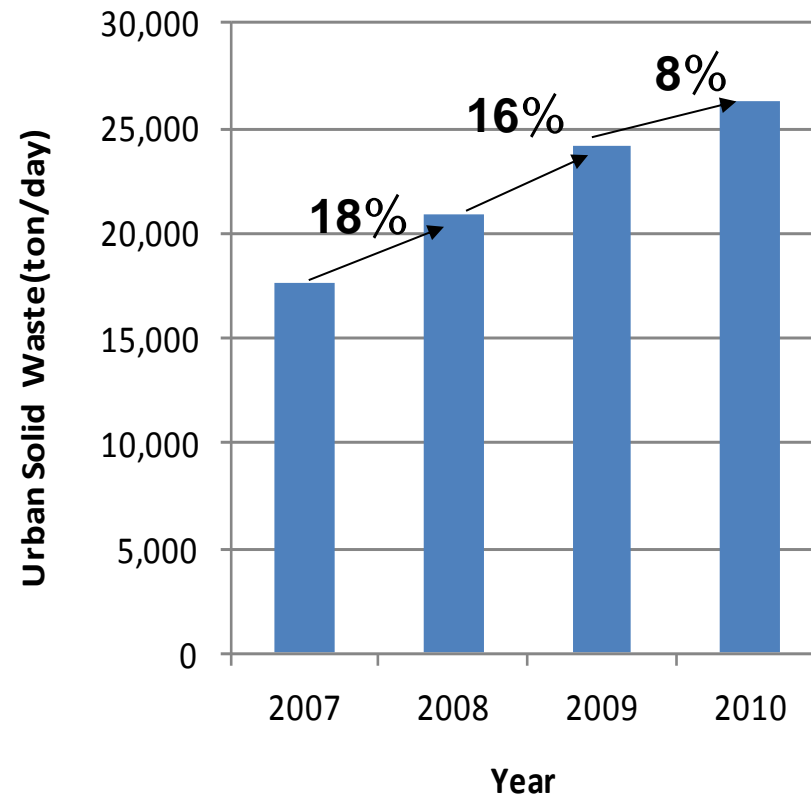
MRV designed for NAMAs in Waste Sector in Vietnam

Presented by: Anh Tien Do, Ph.D.
Vietnam Institute of Meteorology,
Hydrology and Environment

Municipal Solid Waste in Vietnam



GHG emissions in Vietnam (2010)

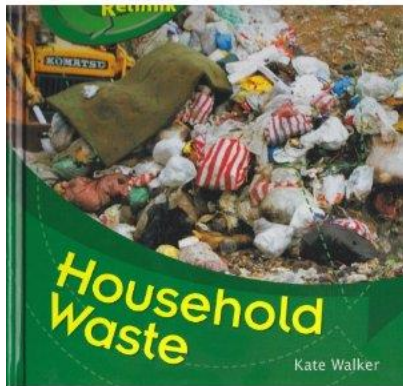


{Source: MONRE (2011) *National Environmental Report 2011: Solid Waste*, p. 16}

Municipal Solid Waste in Vietnam

Able to collect 70%
of total MSW

83+ managed landfills
+ Open dumping sites



3.2 million tons solid waste/year in urban areas in Vietnam

Municipal Solid Waste in Vietnam

- **Opening/closing of landfill sites**: Almost 90% of landfill sites have been built within 20 years; many of the sites just closed or will be closing very soon.
- **Disposal completion rate**: Over 50% of landfills are filled more than 80%.
- **Landfill type**: Over 80% of landfills are managed.
- **Population/waste volume**: Over 80% of URENCOs cover less than 400,000 people, and about 60% of URENCOs collect less than 50,000 ton of waste per year.
- **Waste composition**: Average composition of highly organic waste is 72.6%.
- **Collection fee**: URENCOs collect on average 14,100 VND/month/household (70 US cent) as the waste collection fee.

Vietnam-Japan Capacity-building Cooperation and Joint Study Project for NAMA in waste sector in a MRV manner

(sponsored by MOEJ)

■ **Period:** July 2012 – February 2014

■ **Implementing agencies:**

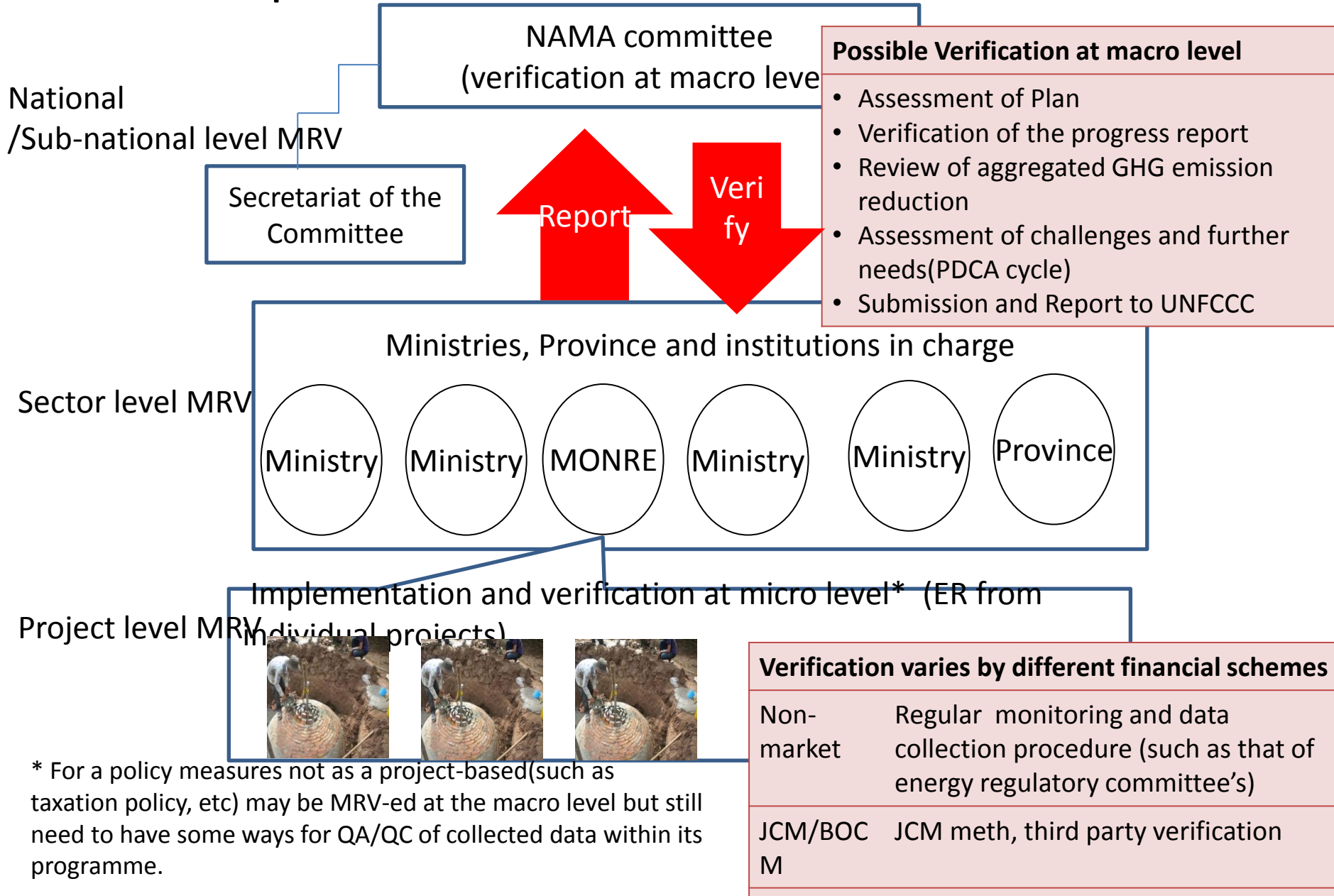
- ✓ Institute of Meteorology, Hydrology and Environment (Coordination unit);
- ✓ Vietnam Environmental Agency (VEA);
- ✓ International Cooperation Department (ICD);
- ✓ Department of Meteorology, Hydrology and Climate Change (DMHCC)

■ **Overall objective:** to enhance the capacity of Viet Nam in the preparation, proposing and implementation of NAMAs in waste sector in order to attract the international aids through the carbon market and other assistance mechanisms

NAMAs/MRV in Vietnam

- NAMAs concept is relatively new
- MONRE is a national focal for NAMAs in Vietnam
- Not yet a NAMAs/MRV framework -→ no legal documents for NAMAs/MRV
- Information for NAMAs/MRV is not yet popular

MRV for describing Macro-level review of policy action implementation



MRV at Activity level (Project or entity level)

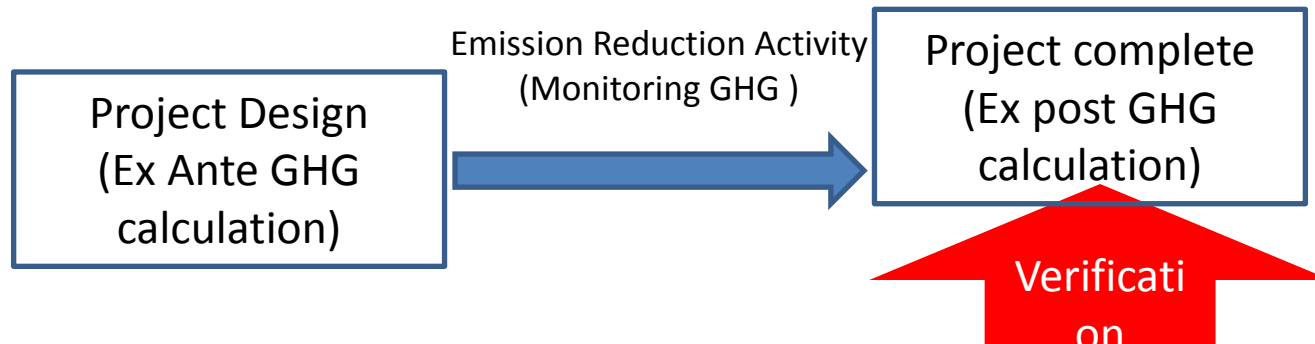


[Emissions Reduction per biodigester]

$$ER_y = BE_y - PE_{PL,y} - PE_{flare,y}$$

[Baseline Emissions per household]

$$BE_y = GWP_{CH_4} * D_{CH_4} * \sum_{j,LT} MCF_j * B_{0,LT} * N_{T,hh} * VS_{LT,y} * MS\%_{BI,j}$$



预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_5358

