



Netherlands Enterprise Agency

# Baselines and Energy savings & GHG reductions

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# Two Different Approaches

- Macro: lines
  - Sectoral baselines
  - Scenarios
  - Business As Usual (BAU)
- **Micro: lines or point**
  - Company or organisation
  - Project or programme

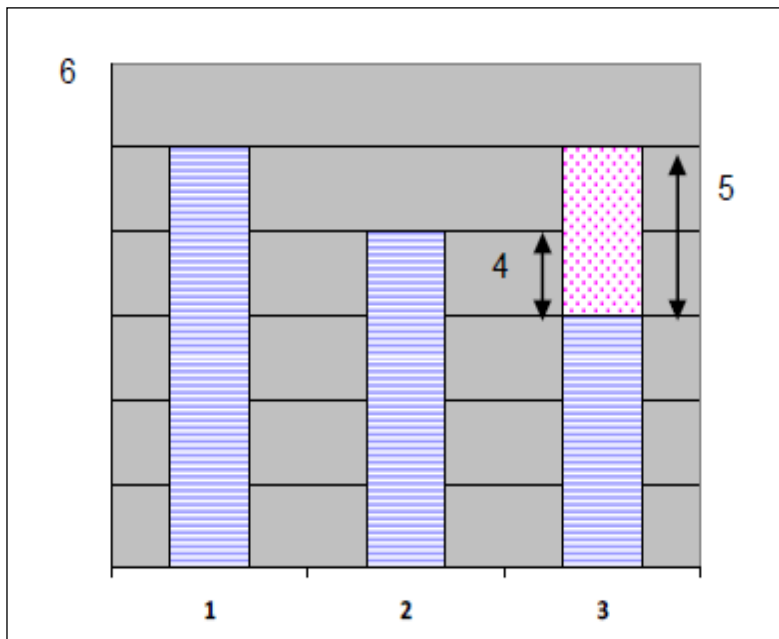


## Baselines (Micro)

- Comparison to another situation
- A wide range of baseline terminology and definitions
- **The choice of baseline will determine the energy saving**
- Documentation should be at least:
  - Period of time for the baseline
  - Measured or estimated energy use
  - Conducted normalization



# Quantification of savings depending of the reference situation



1 – Energy consumption – **stock reference**

2 – Energy consumption – **market reference**

3 – Energy consumption – implemented technology

4 – Savings observed with reference to the market

5 – Savings observed with reference to the stock

6 – Energy consumption



<b>Type of Policy Measure/Example</b>	<b>Example Programme Baseline Development Strategies</b>
Regulation Building Code Enforcement	Building code provisions covering the targeted building components and end uses.
Energy Audits Residential Programme	Non-participants' adoption of measures supported by the audits, properly adjusted for differences between the participant and non-participant groups.
Labelling Programme	Market share of qualifying equipment in areas not covered by the labelling programme. Historical trends in percentage of qualifying models sold by manufacturers and/or displayed by retailers.
Economic Incentives Equipment Rebate Programme	Market share of qualifying equipment in areas not exposed to rebate programmes, Non-participants' level of adoption of targeted technologies or end-use consumption, with appropriate statistical controls.
Voluntary Agreements Industrial Programme	Historical trends showing the improvement in energy consumption per employee or per unit produced, prior to the agreement. Owner reports of probable actions in the absence of the programme.



## Baselines for small-scale CDM projects

- A baseline for a CDM project activity is a hypothetical reference case, representing the volume of greenhouse gases that would have been emitted if the project were not implemented.
- The baseline can be used to determine:
  - whether a CDM project activity is additional; and
  - the volume of additional greenhouse gas emission reductions achieved by a project activity.

<http://www.cdmrulebook.org/164.html>



## Baselines (or 'baseline scenario') for large-scale CDM projects

- The baseline (or 'baseline scenario') for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity
- A baseline for a CDM project activity is a hypothetical reference case (as in small-scale)

<http://www.cdmrulebook.org/83.html>



# New Developments UNFCCC; Compendium on GHG Baselines and Monitoring

- Foreseen for end of 2016 and early 2017
- Contributions/Chapters by
  - FAO (AFULO)
  - GIZ (Transport)
  - Worldbank/Partnership for Market Readiness (PMR) (Manufacturing industries & construction; Cross sectoral activities)





# Guidance on Baseline Development for Agriculture, Forestry and Land Use

- Defining a transparent step-by-step approach to baseline development
- Providing clear applicability conditions
- Contributing to comparability and clear documentation standards
- Guiding quality control and sensitivity analysis



# Content of the transport volume

- Overview of the sector
  - Main drivers
  - Emissions calculations
  - Mitigation actions
- + transport sector baselines
- Description of available methodologies for the calculation of baseline and mitigation scenario emissions at different levels
  - Project/installation/facility level
  - Intermediate level: aggregated/sub-sector
  - Sector level
- Annexes with further detail on data sources, QA/QC and institutional arrangements



# Manufacturing industries & construction volume

- Different baseline approaches are needed for different purposes
- Provide options for baseline approaches and discusses their pros and cons on different levels of aggregation and under different national circumstances