

# National Greenhouse gas emissions baseline scenarios

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Lena Lindbjerg Sperling, Adviser

<http://www.ens.dk/en/climate-co2/low-carbon-transition-unit>

# Overview

- What is the LCTU?
- How and why do we work on baseline?
- Results from our work
  - National baselines
  - Sectoral baselines

# Low Carbon Transition Unit

- Sharing experiences



- Bilateral partnerships



- Policy Toolkits

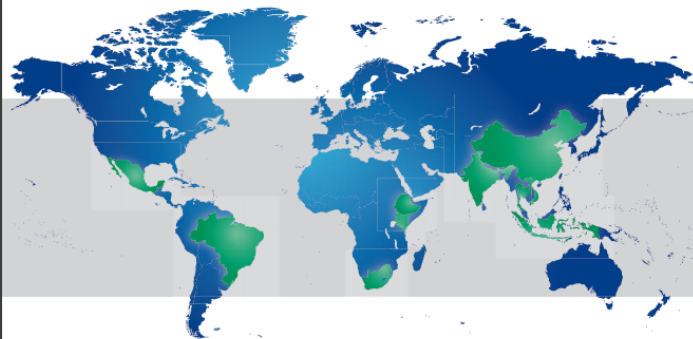


- Partnerships and Networks



- Baselines

**National Greenhouse Gas  
Emissions Baseline Scenarios**  
Learning from Experiences in  
Developing Countries



A report by the Danish Energy Agency, the Organisation for Economic Co-operation and Development and the UNEP Risk Centre, based on contributions from experts in Brazil, China, Ethiopia, India, Indonesia, Kenya, Mexico, South Africa, Thailand and Vietnam

- Experiences from 10 countries
- Representing 40 percent of global GHG emissions

# Aim of the publication

1. Provide overview of current practices
2. Show differences and commonalities in countries' approaches to baseline setting
3. Explain motivation of choices made
4. Highlight good examples and lessons learnt
5. Inspire other developing countries
6. Discuss significant capacity gaps
7. Inform discussions on guidelines

## Modelling tools

- Top-down, bottom-up or hybrid
- Balancing cost with functionality

## Assumptions and sensitivity analysis

- Definition: Inclusion of policies and revising the baseline
- Key Driver Assumptions
- Sensitivity Analyses

## Data management

- Base year and UNFCCC emission inventories
- Emissions factor and activity data quality
- Institutional arrangement

## Transparency and inclusiveness

- Transparency and credibility
- Stakeholder involvement
- Options for peer review

## Reflections on best/good practice

- Transparency
- Key assumptions and uncertainty
- Guiding principles for good practice

# Choosing modelling tool

- What kind of questions should answer?
- Balancing costs with functionality

# Assumptions and sensitivity

- What is the definition of the baseline? Is it a BaU?
- Will key driver assumptions have to be defined by governmental targets?
- Good practice: To do sensitivity analyses



# Data availability and management

- IPCC guidelines, newest published UNFCCC inventory, base year
- Available data sets
- Emission factors
- Institutional arrangements

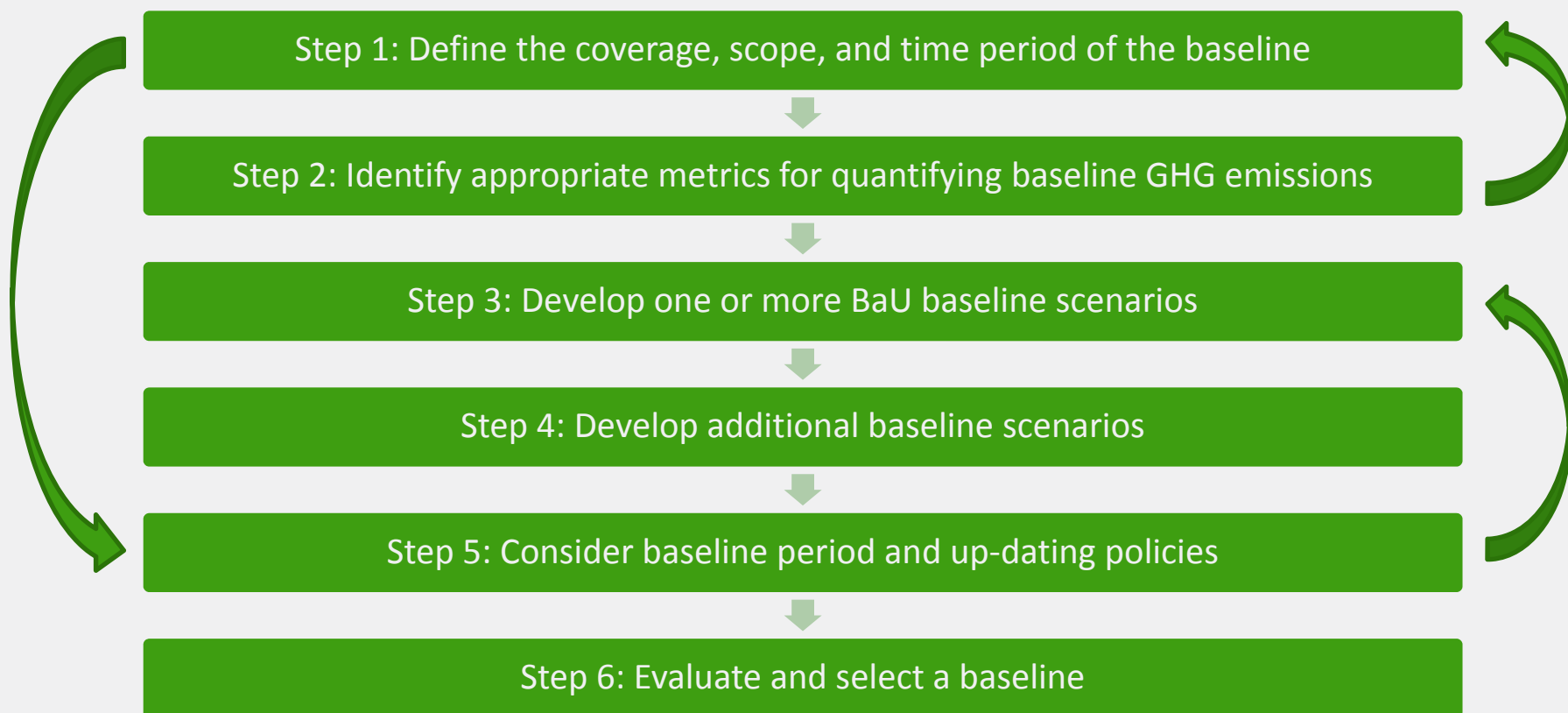
# Transparency

- National and international credibility regarding the baseline are acknowledged as key concerns.
- Nationally, credibility ensures credible national policy planning
- Internationally, credibility ensures acknowledgement for mitigation pledge and efforts.

# Sectoral baselines

- PMR: Options and Guidance for the Development of Baselines
  - Role of baselines and baseline types
  - General principles
  - Stepwise Baseline Development Process

# Baseline Development Steps



# Where to find more inspiration

- PMR Partnership for Market Readiness  
<https://www.thepmr.org/content/ghg-baselines>
- WRI Greenhouse Gas Protocol  
<http://www.ghgprotocol.org/>
- MAPS Programme  
<http://www.mapsprogramme.org/>

# Thank you

Danish Energy Agency's Low Carbon Transition Unit

[www.ens.dk/lctu](http://www.ens.dk/lctu)

OECD Climate Change Expert Group (CCXG)

[www.oecd.org/env/cc/ccxg](http://www.oecd.org/env/cc/ccxg)

UNEP Risø Centre

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