

# Accounting for baseline targets

OECD CCXG Global Forum on the Environment and  
Climate Change

05.03.2018

Paris

Anke Herold



## Experiences in UNFCCC process

Baseline targets = Implementation of mitigation actions measured relative to a counterfactual baseline / business as usual scenario without such mitigation actions

Relevant experiences under UNFCCC using counterfactual scenarios:

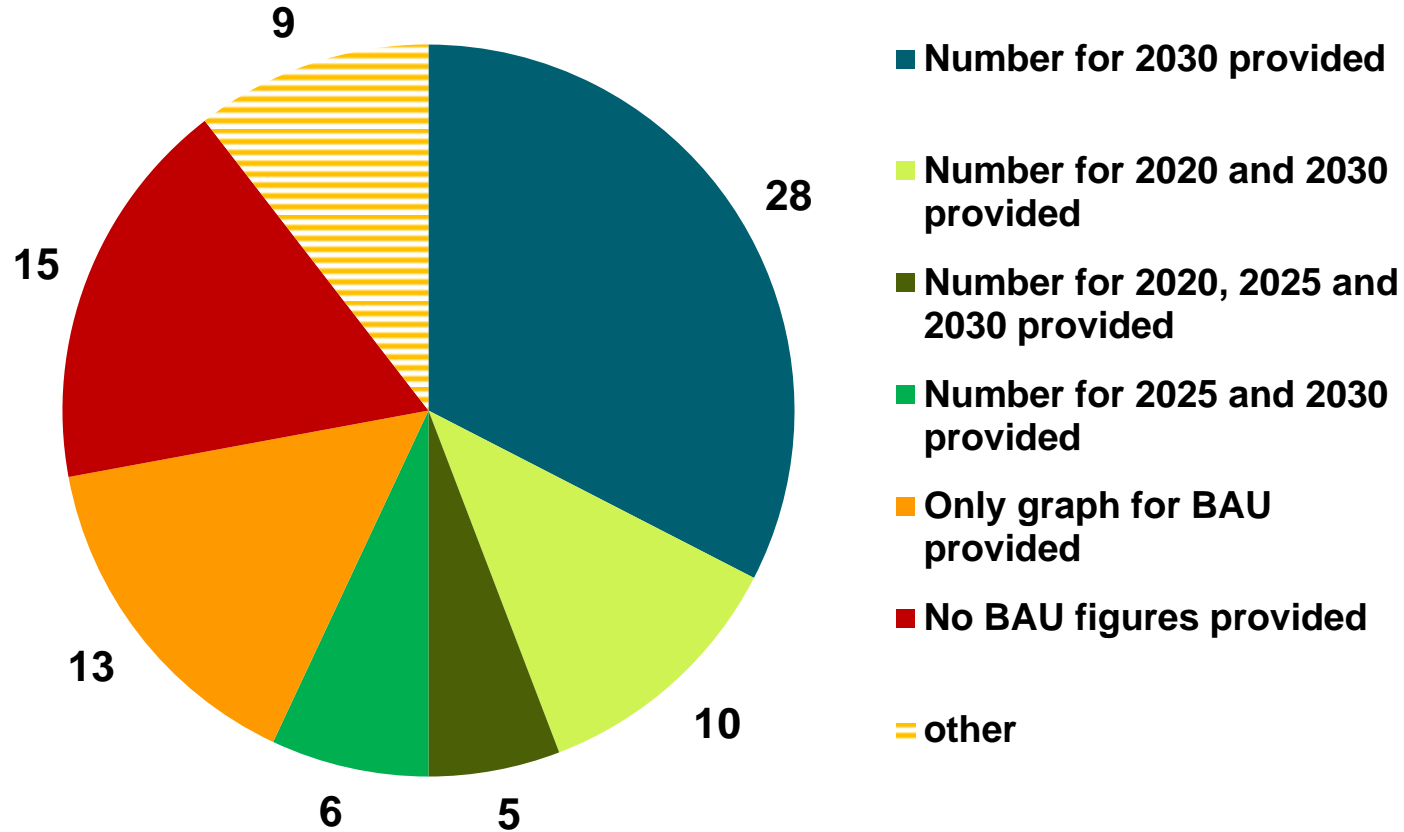
- Forest reference levels / forest emission reference levels
- CDM with baselines at project level/ programme level
- Ex-ante and ex-post assessment of effects of mitigation actions
- Projections: not used for accounting of targets, but experiences related to construction of different types of counterfactual scenarios, transparent reporting, methodologies & models, relevant assumptions and sensitivities

## Experiences from GHG projections

- No IPCC methodological guidance
- Different models and methods appropriate in different national circumstances
- Assumptions (e.g. GDP) have political implications and are not neutral
- ⇒ Difficult to develop standardized methodological guidance in form of good practice guidance
- ⇒ Transparency very important
  - ⇒ Disaggregation of gases, sectors and source categories and years in reporting format (already exists for Annex I Parties)
  - ⇒ Reporting on methodologies, models, assumptions and parameters used, standard indicators, historic trends

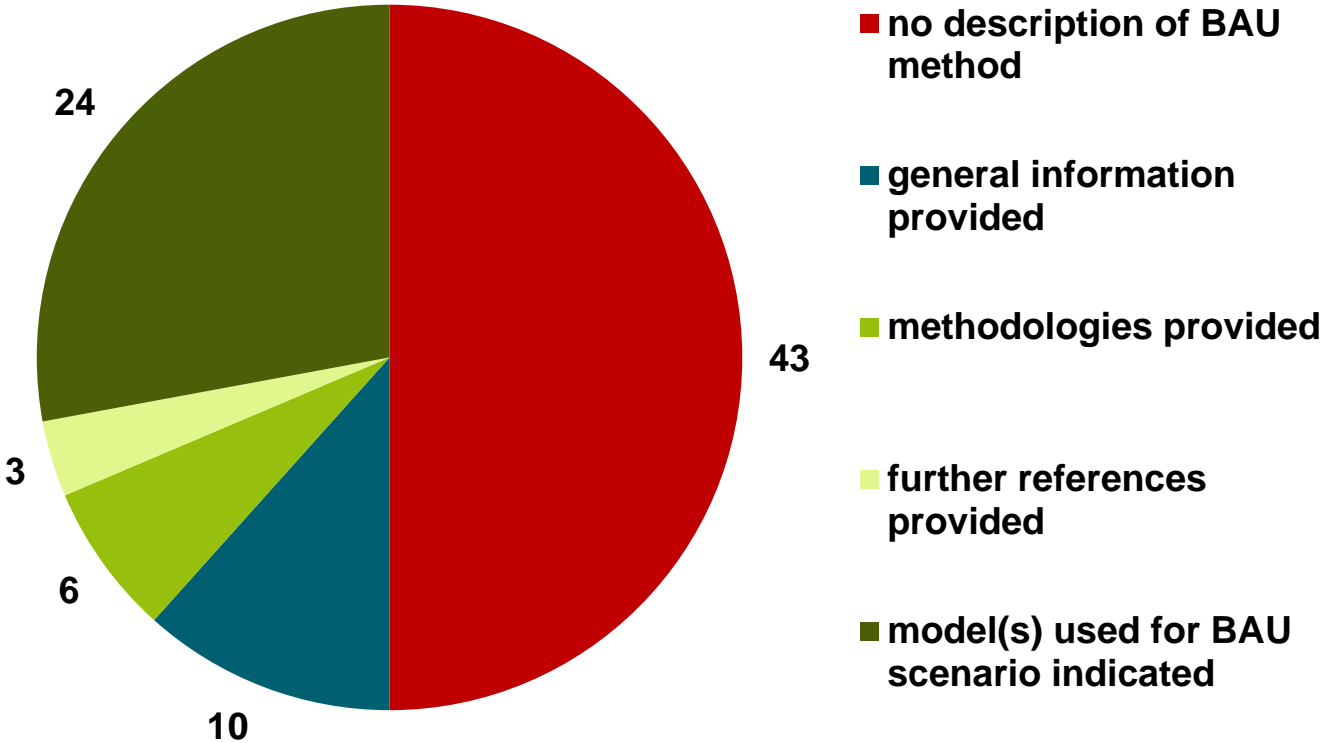
# Reality of baseline targets in NDCs I

## Transparency of BAU targets



# Reality of baseline targets in NDCs II

## Information on BAU methods



# Guidance for baseline targets

Guidance needed related to:

- Better and more detailed guidance on information on baseline targets for the **communication of NDCs** necessary
- Detailed guidance for **reporting** of baseline targets as part of **biennial submissions** under Article 13.7(b) (disaggregated data and qualitative information)
- Other ways to achieve credible baselines:
  - **Technical assessment/ review**
    - Technical assessment of forest emission reference levels under REDD+ and under Kyoto Protocol based on agreed guidance
  - **Sensitivity analysis**
    - Impact of choice of important parameters on baseline scenario
  - Existing assessment procedures for forest reference levels could serve as model for technical assessment of baseline targets.

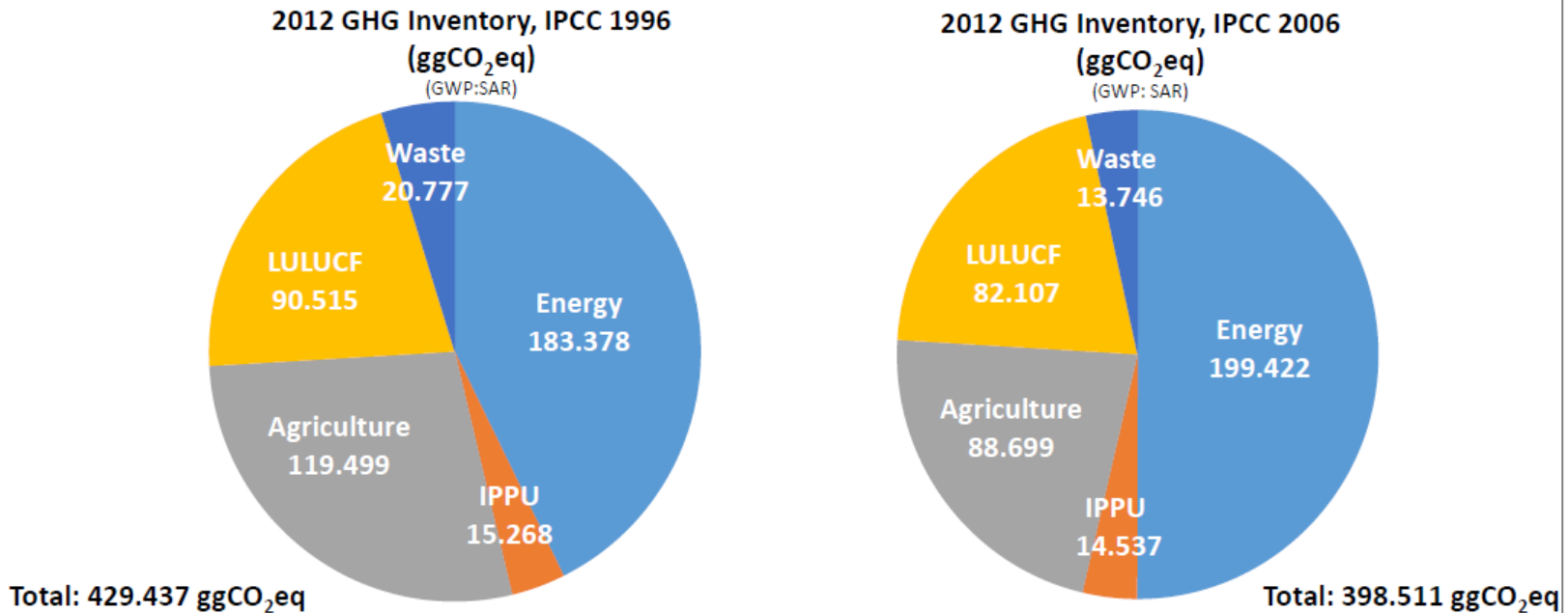
## What type of further guidance beyond transparency?

- *“Parties shall ensure methodological consistency, including on baselines, between the communication and implementation of nationally determined contributions”* (paragraph 31 of decision 1/CP.21)”
- Useful principle, but principle not yet sufficiently clear to be implemented:
- Which methodologies should be consistent?
  - Avoid that emission reductions are only due to methodological changes
  - Coverage of gases, source/ sink categories/ pools in BAU scenario and NDC implementation
  - Common metrics (GWPs) used to covert to CO<sub>2</sub>eq.
  - Methodologies to estimate GHG emissions and removals between BAU scenario and implementation period of NDC
- Is this relevant?

# Example Argentina: change from 1996 IPCC Guidelines to 2006 IPCC Guidelines

## Methodological change IPCC 2006

Comparative (\*) preliminary results Second BUR



(\*) The Second BUR includes the 2014 inventory. In order to compare the effect of change in methodology, the last official inventory of the Argentine Republic (TNC) is shown at the year 2012, performed under IPCC 1996 Guidelines.

- Example: Decrease total emissions by 7%, decrease agricult. emissions by 26%
- Improvement of methodologies can lead to substantial changes in emissions



## Methodological consistency: what type of further guidance?

- Clarify which methodologies should be consistent
- How can methodological consistency be ensured?
  - ⇒ Use of methods provided in IPCC guidelines for technical corrections
- What is sufficiently consistent and when are methodologies inconsistent?
  - ⇒ If not possible to achieve full consistency, explain areas where inconsistencies may remain
  - ⇒ Guidance to explain how Parties can improve methodologies and ensure methodological consistency at the same time
- When should this happen?
  - ⇒ Every time the inventory is improved or at the end of the target period?
- In which report should information be included?
  - ⇒ As part of information under Art 13(7)(b) tracking of progress
- How are consistency and technical corrections reviewed?
  - ⇒ Guidance on assessment by TER as part of MPGs

# Updating of assumptions and parameters

- Other possible changes of baseline scenarios
  - Update of key parameters and assumptions (e.g. GDP, fuel prices)  
NDCs until 2030 cover long time period, some assumptions may look very outdated after a certain time period and may trigger a discussion on the need for updating
- Possible guidance
  1. Whether updating is allowed or not
  2. Criteria, circumstances when updating can happen
  3. Intention to update and time of update should be announced together with the pledge or at the beginning of the NDC cycle
  4. Guidance where and when updated assumptions, parameters and baseline scenarios should be reported.
- Improvement of scenario methodologies/ models: more likely to happen for subsequent NDCs, retrospective change not so likely for first NDC

## Conclusions related to need of guidance

- **Guidance related to transparency of baseline targets**
  - Quantified information on gases, sectors and source categories and years
  - Methodologies, models, assumptions and parameters used, historic trend
  - Include in ICTU guidance and MPGs under Art. 13
- **Guidance related to technical expert review**
- **Guidance related to methodological consistency**
  - Clarify which methodologies should be consistent
  - Use IPCC methods to achieve consistency and corrections of baselines and explain any remaining inconsistencies
  - Clarify when corrections should occur, where and how reported and how reviewed
- **Guidance related to updating of baselines**
  - Clarify criteria, circumstances when updating may occur
  - Guidance where and when updated assumptions, parameters and baseline scenarios should be reported.
- **Procedural guidance, clarification, not methodologies ⇒ no tiers**

# Thank you for your attention!

Graphs from this presentation and more analysis of question whether it is possible to track progress of the submitted NDCs in recent paper available at:

<https://www.oeko.de/fileadmin/oekodoc/Tracking-progress-of-INDCs.pdf>

**Anke Herold, Öko-Institut**  
**a.herold@oeko.de**

