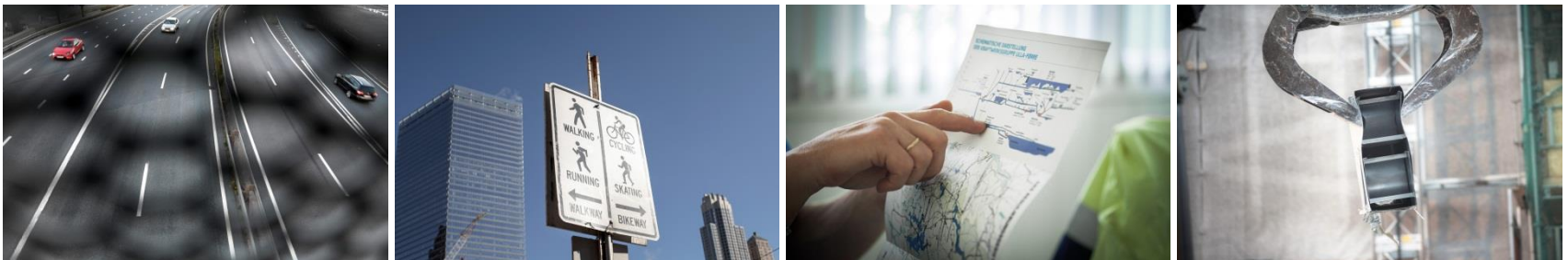


Inventoribility

Making sure that the effects of policies and measures are reflected in the GHG inventory.

Verena Graichen
Webinar

27 June 2017



Inventoribility:

Reflect the effects of measures in the inventory

- Measures are put in place to reduce GHG emissions.
- Quantifying emission reductions bottom-up based on measures is always difficult (overlapping policies, other influence factors, effects on other sectors).
- Inventories cover these interactions; they are key to measure progress towards climate targets.

Inventoribility:

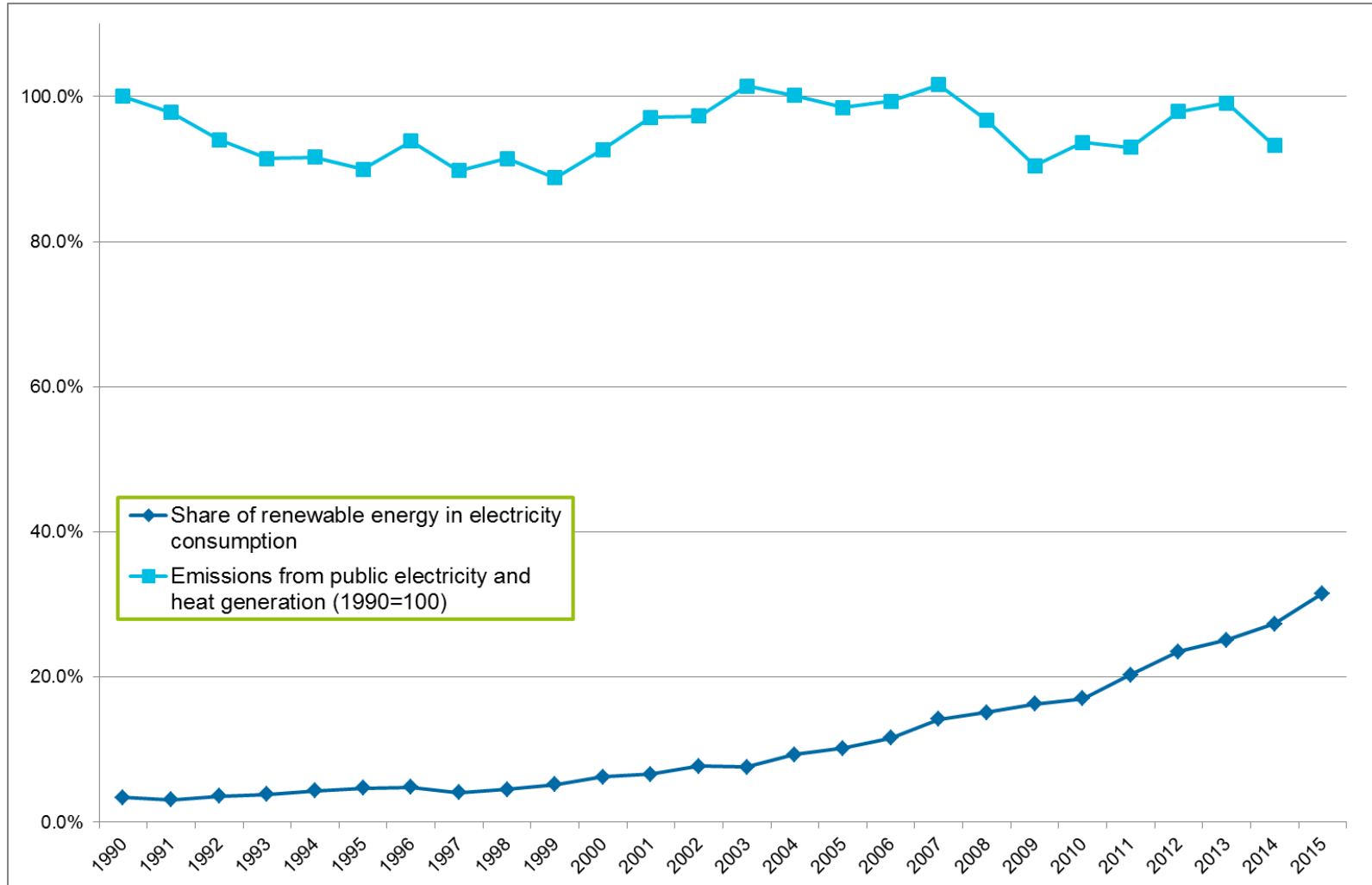
- **Make sure that the effect of measures is reflected in the inventory and thus count towards target reaching, and**
- **harmonize methods, activity data and emission factors.**

Can the inventory replace monitoring of measures?

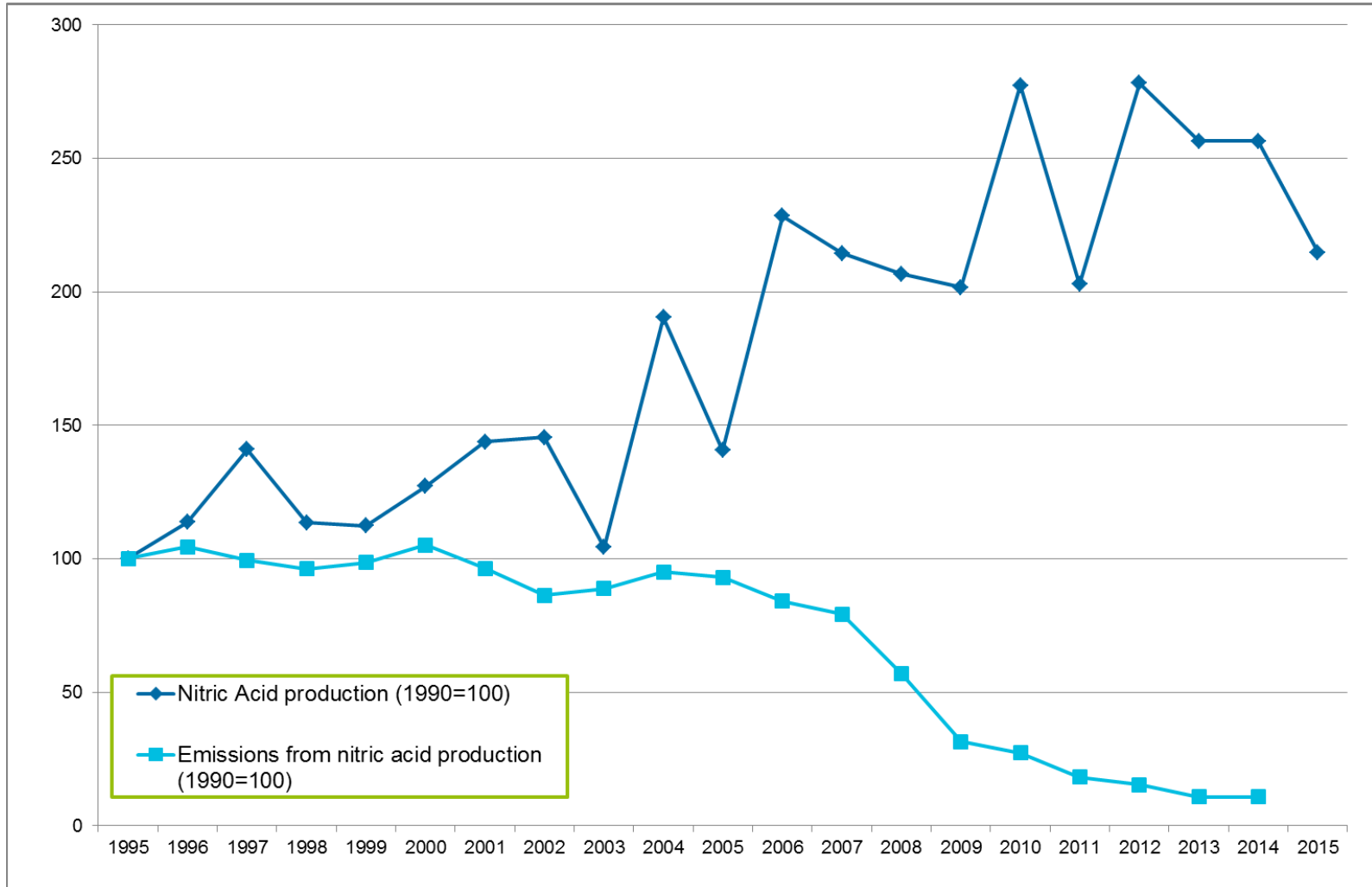
- Example 1: measure to support constructions of renewable energies → emissions from electricity generations should drop
 - Even if the measure is successful emissions may increase if electricity demand increases or the fuel mix of the remaining electricity generation changes.
 - Emissions may also decrease due to other factors (other policies e.g. emission standards for conventional generation, price changes for technologies or fuels).
- **Inventories normally do not reflect single measures**
- Exemption: if there is a single technology, a single driver and a uniform methodology (example 2 for N₂O).

Example 1: Germany

Renewable energy generation



Example 2: European Union N₂O emission from nitric acid production



Making sure the inventory reflects the effects of all (major) policies and measures

- General rule for inventories: $Emissions = activity * emission\ factor$
- 3 levels of accuracy in IPCC methodologies

Tier 1

- National activity data
- Default emission factor (IPCC GL)

Tier 2

- National activity data
- National emission factor

Tier 3

- Bottom-up activity data for each source
- National or source specific emission factor

When are measures not reflected in the inventory?

- If the source is not covered in the inventory (trees on meadows, methane from coal mines)
- If activity data is based on different sources (waste composition, use of fertilizers)
- If the inventory uses default emission factors (fugitive emissions for natural gas, recycling of F-gases)
- If different methods are used (energy efficiency for biomass, live-cycle-emissions)

How to improve?

- → **identify the relevant categories (starting with key source categories and major policies and measures)**
- → **improve the inventory**
- → **streamline reporting methodology**

Vielen Dank für Ihre Aufmerksamkeit!
Thank you for your attention!

Haben Sie noch Fragen?
Do you have any questions?

