Task Force on Emission Inventories and Projections

This Years' Activities and Future Work

TFEIP co-chairs: Chris Dore, Martin Adams and Kristina Saarinen

European Environment Agency SYKE defra Department for Environment Food and Rural Affairs Aether LRTAP Long-range Transboundary Air Pollution

1. Review of 2016-2017 Workplan

1. **On-going technical support/co-ordination** ☺
2. **Annual TFEIP/EIONET Meeting (& workshops)** ☺
3. **Communications and outreach** ☺

4. **Discuss NECD vs CLRTAP review alignment** ☺
5. **Technical Revisions Paper** (inventory review) ☺
6. **Condensables/Semi-volatiles** (offer a proposal) ☺
7. **Future workplan** (in context of EMEP priorities) ☺

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2. TFEIP/EIONET Annual Meeting

Krakow, May 2017 – TFEIP 25th Anniversary

Our thanks to our hosts – AGH University, Krakow City Council and NILU

>110 attendees, ~40 countries & international bodies

Expert Sessions

- Combustion & Industry
- Transport and Mobile Machinery
- Agriculture & Nature
- Projections

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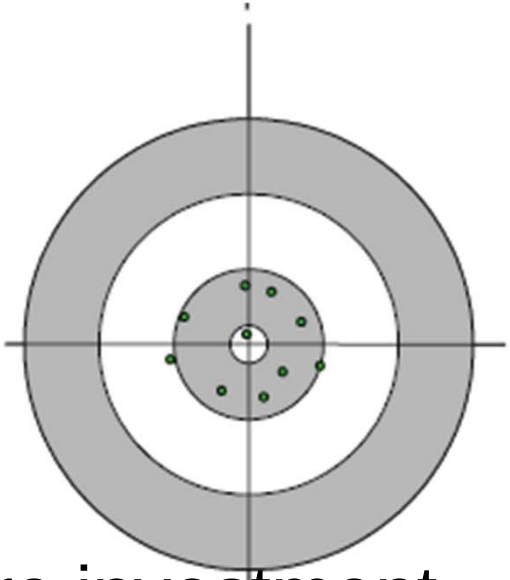
3. Workshops – Uncertainties, QA/QC, EECCA

Uncertainties

- Current methods are not sufficient!
- Alternative approach available…
- … but needs development.



Quality Assurance/Quality Control

- Many countries would benefit from more investment
- There are sophisticated systems… but they are "commercial" at the moment

EECCA Outreach

- Useful discussion on "barriers" and priorities.

4. Condensables and Semi-volatiles

Reminder

- Different measurement techniques = different PM emission estimates.

TFEIP Proposal

- Don’t completely rework Emissions Guidebook
- Standardise on some sectors with and some sectors without condensable PM component.
- If consistent & transparent - modellers can “correct”.

- Semi-volatiles… more work with TFMM.

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5. Inventory Review – Updated Process

CLRTAP Reviews  **NECD Reviews**

A CLRTAP new review “process” trialled this year.

- Aligned with new NECD reviews.
- Member States not overly concerned about additional burden.

- Some challenges regarding consistency.
- But has **generally worked well**… with efficiencies.

- 2017 was a “trial” of the updated ‘Review Guidelines’ We ask permission to will submit to the EB for acceptance.

5. Inventory Review – Technical Revisions

Process for Technical Revisions

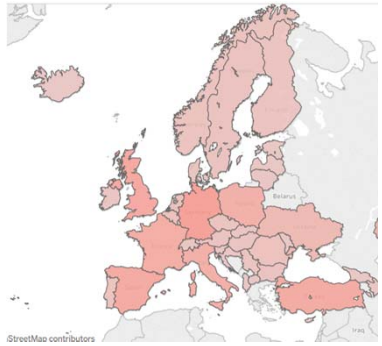
- SB requested TFEIP to draft a process for this.

- See meeting paper, and following examples…

5. Inventory Review – Technical Revisions

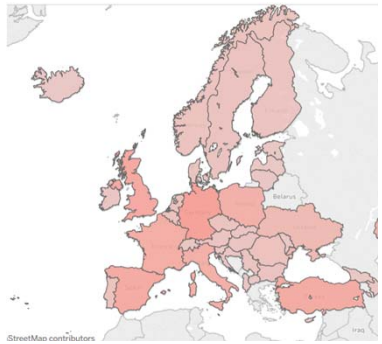
“Revised Estimates”

“We think there’s a big problem with your inventory, it’s this…”



“Um… Yes, it look like you are right.”

“OK, can you send us some revised numbers please?”

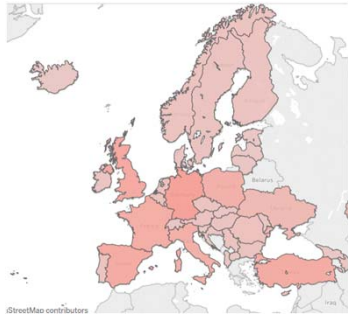


“Yes, here’s a revised estimate.”

5. Inventory Review – Technical Revisions

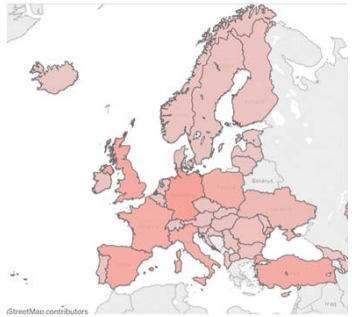
“Technical Corrections”

“We think there’s a big problem with your inventory, it’s this…”



“We disagree.”

“We still think there’s a problem! Look here are some revised numbers…”



“No, we like our original ones.”

Sorry, but the CLRTAP will use our estimates!”

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5. Inventory Review – Technical Revisions

Technical Corrections

- Technical corrections – to inform science use only.
- CEIP do this already!
- Technical corrections will not be used for compliance assessment
- This process already well established in GHG emissions inventories, and included in NECD reviews

- We ask the SB's permission to finalise and submit to EB.

6. Focus of Future Work

Workplan (Standing Items)

1. Standing Items as normal, except that...

2. Preparations for Guidebook update in 2019 or 2020

Requests for EMEP funding:

1. Agriculture NH_3 $40k

Review EFs for livestock & manure management (cf. IPCC).

2. Wood & small combustion $30k

Support TFMM, review literature to improve EFs

7. Focus of Future Work

Reflection on PRG Priorities

There are a lot of emissions inventory items!

Note: most of these are not included in the proposed 2018-2019 work programme.

These items should be OK:

C1.58 Gridding at finer scale

C1.68 Reviews – following up recommendations

C1.63 Improving inventory reporting

C1.67 Encourage Parties to better fund reviews

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7. Focus of Future Work

Reflection on PRG Priorities

No progress expected on these (unless funded)
- B

Uncertainties in inventories

C1.57 Inventory verification by measurement

C1.59 Fine timescale inventories (O_3, NH_3)

C1.60 Real world emission NOx (diesel) **PM (small/wood comb.)**

C1.61,62 Shipping emissions better linked & access to data

C1.64, 65, 66 **BC/PM, Condensables**

D5.132 BC Limit values from shipping

17,18,116 Collaborate with CCAC on SLCP

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6. Focus of Future Work

Preparing for the Guidebook Update

- Update in 2019 (or 2020)
- 2016 and 2013 Guidebook updates primarily funded by the European Union
- ”Out of the box” thinking about funding...
  - ”Crowd funding” by Parties
  - Requests to Parties for specific funds/expert input
  - Requests and donations all in public domain
  - Minimum target, and idealised target
- What does EMEP SB think?

Acknowledgements

The TFEIP wishes to thank everyone who has supported our work across the last year, and in particular:

The United Kingdom, the EEA, and Finland

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Formal SB Decisions

1. **PM emissions reporting** – define & standardise on sectors with/without condensables.
2. **Updated review process – finalise and to EB**
3. **New "Technical Revisions"– finalise and to EB**

Discussion Points

Seeking funding for:

- Agriculture NH_3 ($40k), Wood & small combn ($30k)
- Guidebook update in 2019/2020

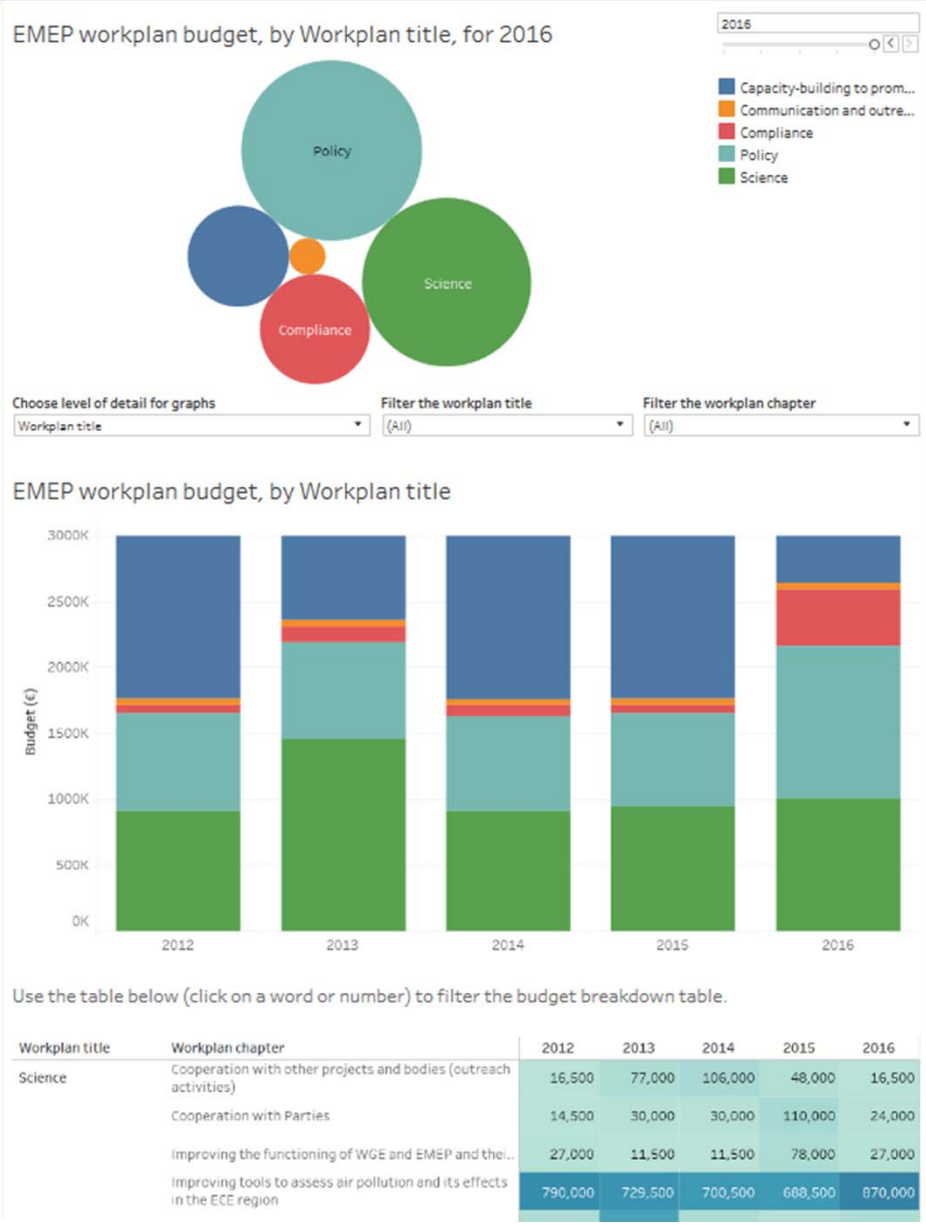
Should we also be working further on:

- Uncertainties (Developing new method)
- Fine timescale inventories (Guidance & profiles)
- Definition of BC (working with TFMM)
- PM Condensables – standardising guidance
- Collaboration with CCAC and UNEP on SLCP

… and something not about emissions!

Data visualisation

Readily available technology could revolutionise the way we manage the EMEP work programme.

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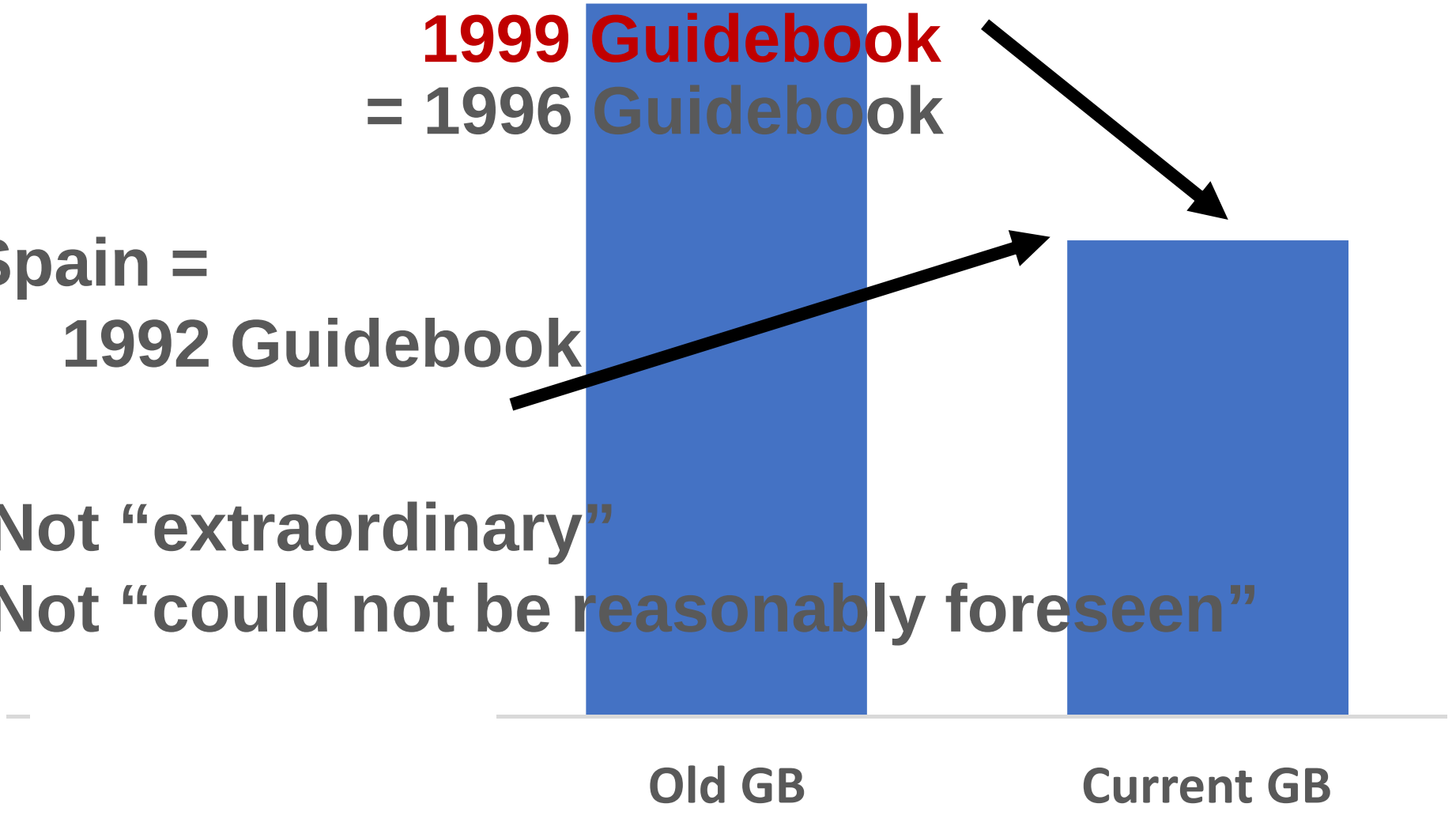
1999 Guidebook
= 1996 Guidebook

Spain =
1992 Guidebook

Not “extraordinary”
Not “could not be reasonably foreseen”



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