The future of emissions reporting (recent TFEIP questionnaire)

TFEIP co-chairs and secretariat: Chris Dore, Martin Adams, Annie Thornton

European Environment Agency

SYKE

Department for Environment Food & Rural Affairs

Aether

Overview

- 163 responses
- 40 countries
- Most respondents were inventory compilers
- Some modellers and policy makers

PM_{10}, TSP, BC, and CO

Is annual reporting necessary for the following? (97 out of 163 answered)

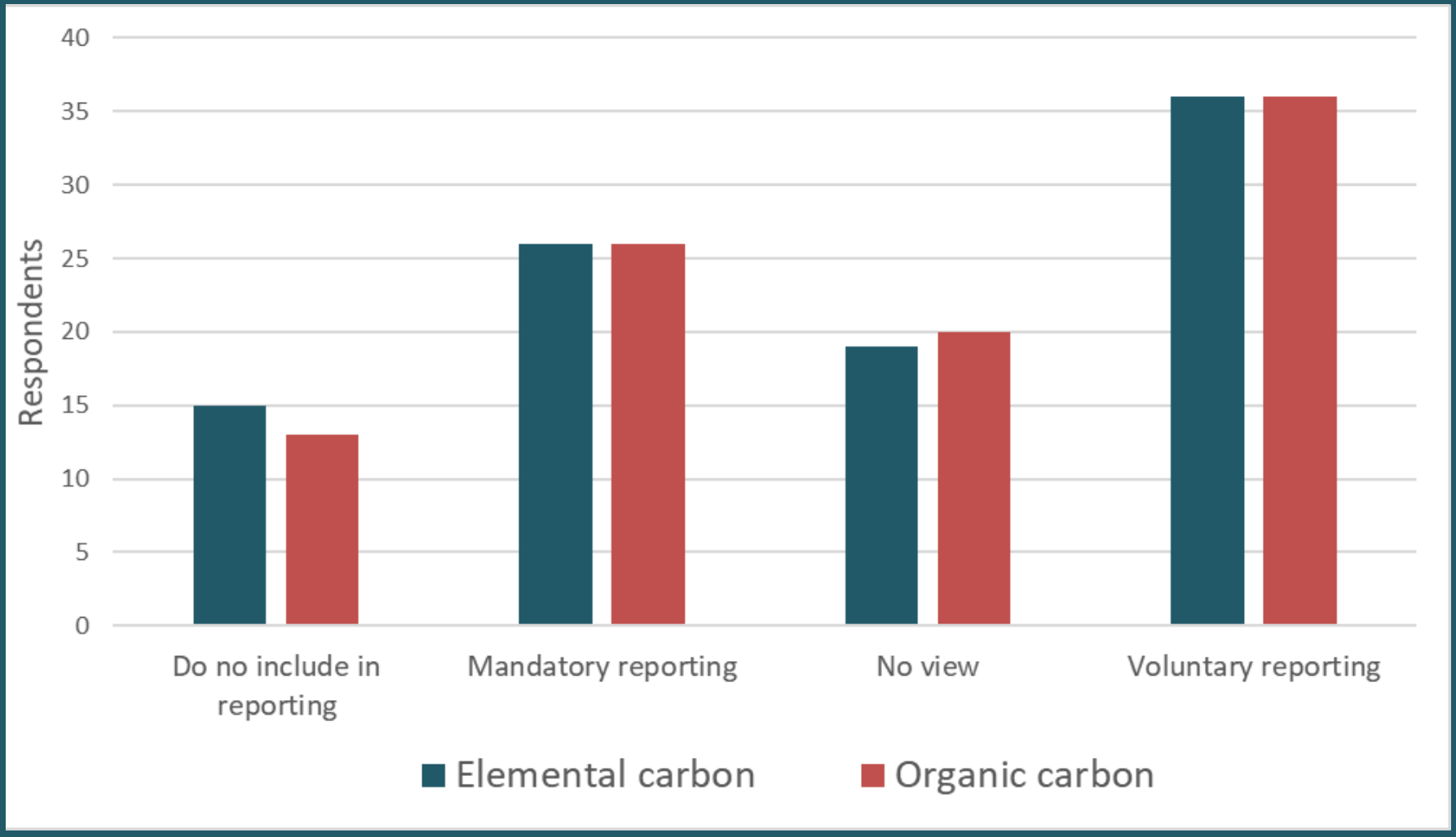
	Agree / Strongly agree	Disagree / Strongly disagree
PM_{10}	86%	2%
TSP	65%	13%
BC	76%	9%
CO	72%	9%

69% of respondents used this data

"TSP is essential for checking the correctness of other particles"

"TSP is not so relevant for assessing health impacts…I don't think there are actual users of this data"

Elemental carbon and organic carbon



Condensables

How should condensable PM be included?

Should not be reported	5
Include where possible	41
Report filterable PM and the corresponding condensable PM emissions separately	27
Report filterable PM with separate voluntary reporting of the corresponding condensable component	13

Heavy metals & POPs

Pb, Cd, Hg
Even split between those that use the data and those that don't

As, Cr, Cu, Ni, Se and Zn
58 think that these should be reported annually, 8 disagree

Of the 84 that answered the question, 34% of respondents reported using this data in studies

POPs (PAHs, dioxins/furans, PCBs, HCB)
44% of 86 respondents use this data

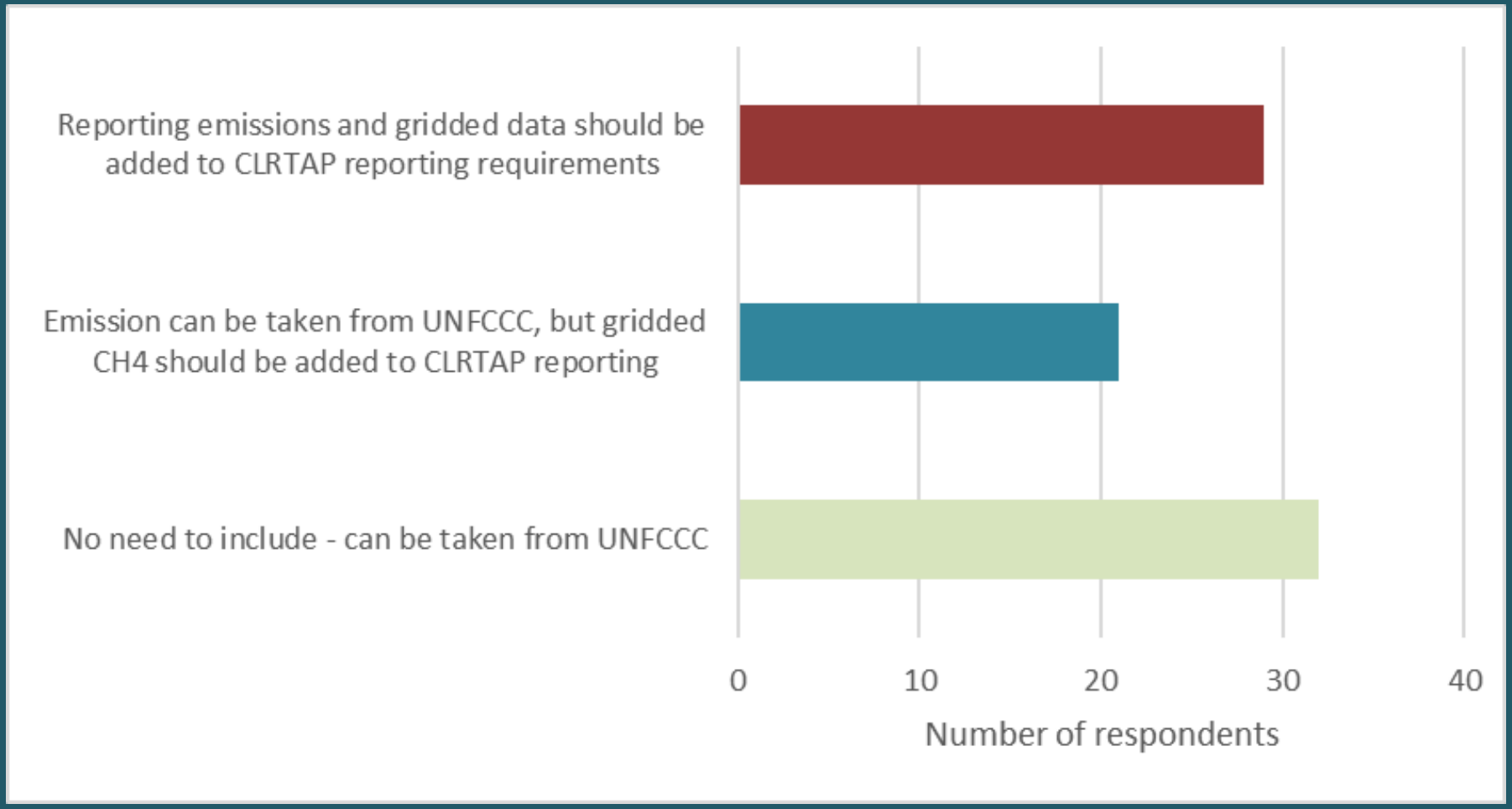
Memo items and non-anthropogenic sources

Could these emission estimates be improved if they were calculated by a single institution for the entire EMEP region?

- For both non-anthropogenic and memo items, roughly half of those that responded were in favor (better comparability, consistency)
- Very few were strongly against, but some concerns:
  - Lack of understanding of country specific conditions
  - Lower data quality for some countries that already have high reporting standards
  - Countries may still produce national estimate – two different numbers

Potential new pollutants

Methane (82 respondents to questions)



Potential new pollutants

PM_1, $PM_{0.1}$, Ultrafine particle numbers

Of the 86 that answered this question….

- 37% no view
- 26% would not include(use fractionation profiles instead)
- 35% should include voluntarily (31 out of 39 respondents believe reporting should be annual)

Many cited the impact these pollutants have on health as a reason for including them

Most of those that disagreed do not believe that there is enough good quality data to include these

Potential new pollutants

Other POPs (Additional PAHs, PFAS, SCCPs)

- Less interest in including these
- Of 84 respondents…
  - 55% no view
  - 24% disagree with reporting
  - 21% agree (annual reporting)

  Other pollutants:
  Microplastics, PCN, PeCB, HCBD, further NMVOC speciation

Gridded data

- 59 people reported using gridded data
- Most respondents didn’t think there was need to add more pollutants
- 23 people would prefer reporting to be more frequent, 21 are happy with 4 yearly reporting
- 24 thought that the quality of the data was sufficient for needs, 16 disagreed

Large Point Source data

- 43 respondents reported using the data, 43 did not
- Majority are happy with the pollutants, frequency and quality of the data
- 27 of 39 respondents use the LPS stack height data

Projections

- Large majority are happy with the data quality
- 22 people believe that reporting every four years is sufficient, 24 believe it should be more frequent
- Only 8 think that extra pollutants should be added

"*It would be useful to report every 2 years*"
"We use projections data annually"
"New pollutants will need to be included, e.g. BC"