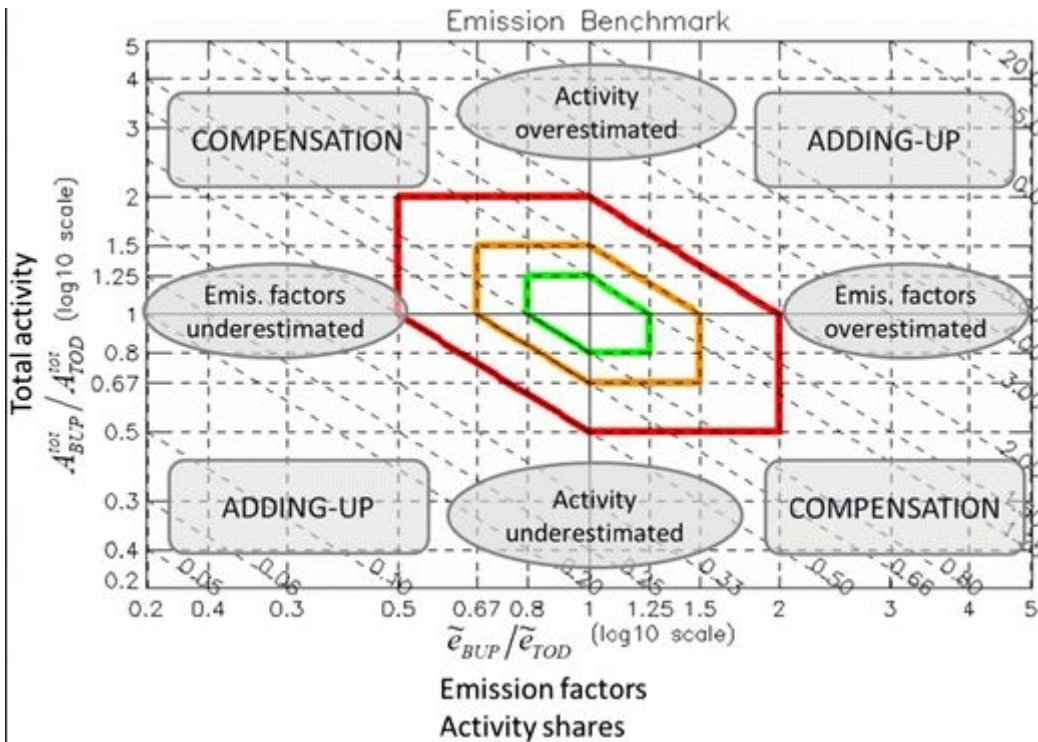


## A new European tool to screen and compare emission inventories



The well-known scientific journal [Air Quality, Atmosphere & Health](#) has recently published the paper titled [A novel approach to screen and compare emission inventories](#).

This paper, whose co-author is the BSC researcher Marc Guevara, presents a new benchmarking tool developed under the [Forum for Air quality Modeling](#) (FAIRMODE), a joint response initiative of the [European Environment Agency](#) (EEA) and the [European Commission Joint Research Centre](#) (JRC). The tool supports the evaluation and comparison of different types of emission inventories. The release of the tool, which can be freely downloaded from the FAIRMODE website after prior registration (<http://fairmode.jrc.ec.europa.eu/>), is expected to support and enhance the development of atmospheric emission inventories among Member States.

**Abstract:** A methodology is proposed to support the evaluation and comparison of different types of emission inventories. The strengths and weaknesses of the methodology are presented and discussed based on an example. The approach results in a “diamond” diagram useful to flag out anomalous behaviors in the emission inventories and to get insight in possible explanations. In particular, the “diamond” diagram is shown to provide meaningful information in terms of: discrepancies between the total emissions reported by macro-sector and pollutant, contribution of each macro-sector to the total amount of emissions released by pollutant, and the identification and quantification of the different factors causing the discrepancies between total emissions. A practical example in Barcelona is used for testing and to provide relevant information for the analyzed emission datasets. The tests show the capability of the proposed methodology to flag inconsistencies in the existing inventories. The proposed methodology system may be useful for regional and urban inventory developers as an initial evaluation of the consistency of their inventories.

**Citation:** Thunis, P., Degraeuwe, B., Cuvelier, k., Guevara, M., Tarrason, L., Clappier, A., 2016. A novel approach to screen and compare emission inventories. Air Quality, Atmosphere and Health. doi: 10.1007/s11869-016-0402-7.

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