Emission inventory and reporting in Belarus: the main barriers and requirements for developing and maintaining the quality and completeness of emissions reporting data

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What are the main barriers and requirements for developing and maintaining the quality and completeness of emissions reporting data?
(multiple answers possible, max. 5)

Barriers:			**Needs for technical support:**	
Lack of human resources	+		Development of emission inventories (NFR)	+
Lack of expertise/knowledge	+		Calculation gridded emission data (GNFR)	
Lack of activity data/historical data			Preparation of Informative Inventory Report (IIR)	
Lack of national methodologies	+		Development of activity database in accordance with the Guidebook/Guidelines	+
Difficulties to collect statistical data				
Lack of continuity and institutional sustainability				
Institutional barriers and coordination between authorities				

Comments (what was not included into Questionnaire)

1 What is emission inventory: 2 inventories exists

- emission accounting at installation level: → – emission limits and permits

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- statistical emission reporting of facilities: output – state emission statistics ??

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- emission calculations using GB and other tools: → – input data for EMEP reporting

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- EMEP emission reports preparation using approved formats: → - emission data for transboundary pollution modelling

Gap between 2 inventories

Specific features and trends

Traditional emission inventory: priority to stationary sources, little attention to mobile, area, diffuse sources; lack of modern guidance documents, lack of emission measurements..

EMEP emission inventory: new pollutants (fine particulate, POPs, BC..), finer spatial resolution, projections..

Gap is widening: EMEP inventory is moving forward, traditional is more conservative and less sensitive to new challenges

Ways forward: how to fill the gap between inventories?

- spheres of application of EMEP emission inventory data, guidance documents and tools need to be widen (beyond reporting to EMEP) for:

- improving ‘traditional’ emission inventory at installations and facility levels (emission limits and permits, PRTR reporting..)

- gridded (0.1x0.1 degree and finer), inter-annual distributed and projected emission data to be applied for air quality monitoring and management at national, regional and local levels..

2 Uncertainties in emission inventory:
PM2.5 emission in Belarus

According to GAINS total PM2.5 emission in Belarus in 2014 - **54.75** thous. tonnes; 48% are from industrial processes, 21% - from residential combustion.

According to estimates using EMEP/EEA Atmospheric emission inventory guidebook (2013), in 2014 total PM2.5 emission comprised **34.76** thous. t, from which 45% are from fuelwood combustion. Fuel combustion processes comprised 77.5% of PM2.5 emission, industry processes – 22.5%.

3 Ways forward: how to improve EMEP emission data?

- accuracy of EMEP emission inventory estimates need to be improved: intercomparison of emission estimates (CEIP, TFEIP), regional emission assessments (EMEP Centres)..

- EMEP guidance documents/databases should include possibilities to estimate emission factors time series..

Thank you for your attention!