

The background of the slide is an aerial photograph of a mountain range, likely the Bialowieza Mountains in Belarus. The mountains are covered in dense forest and are bathed in a soft, blue light, giving the scene a serene and somewhat ethereal appearance. The text is overlaid on this background.

Emission inventory in Belarus: progress and uncertainties investigation

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18th Task Force on Emission
Inventory and Projections
Krakow, Poland, 10-12 May 2017

Latest steps in emission inventory:

- Emission inventory by 0.1x0.1 grid: methodology, proxies, datasets
- Emission projection to 2030

Uncertainties study:

- Sources of uncertainties in VOC emission from solvents application

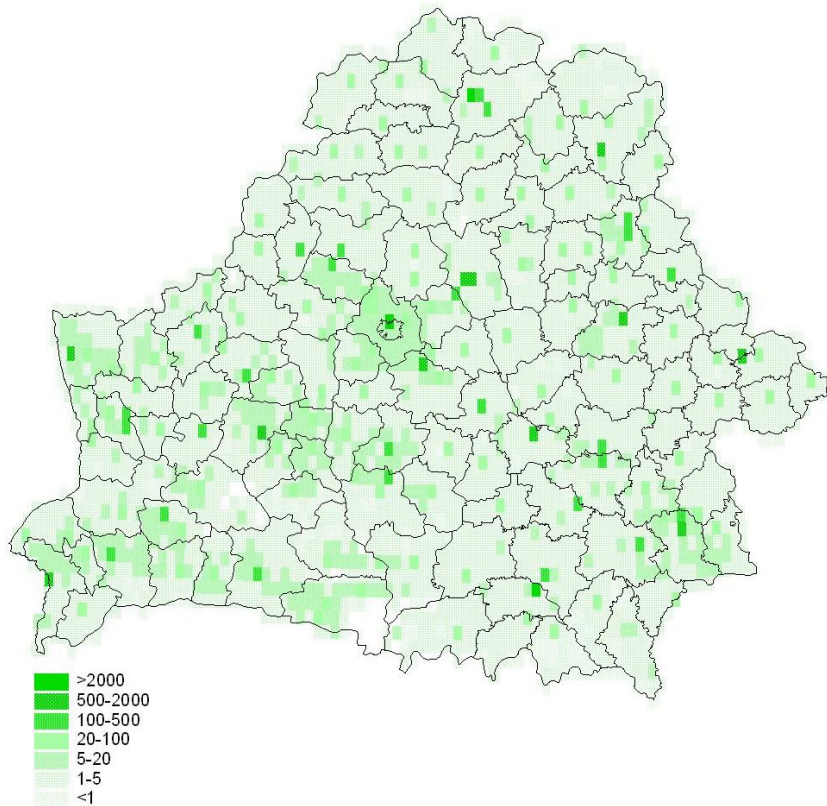
On-going:

- PM2.5 emission inventory improvement and BC emission inventory
- Point sources

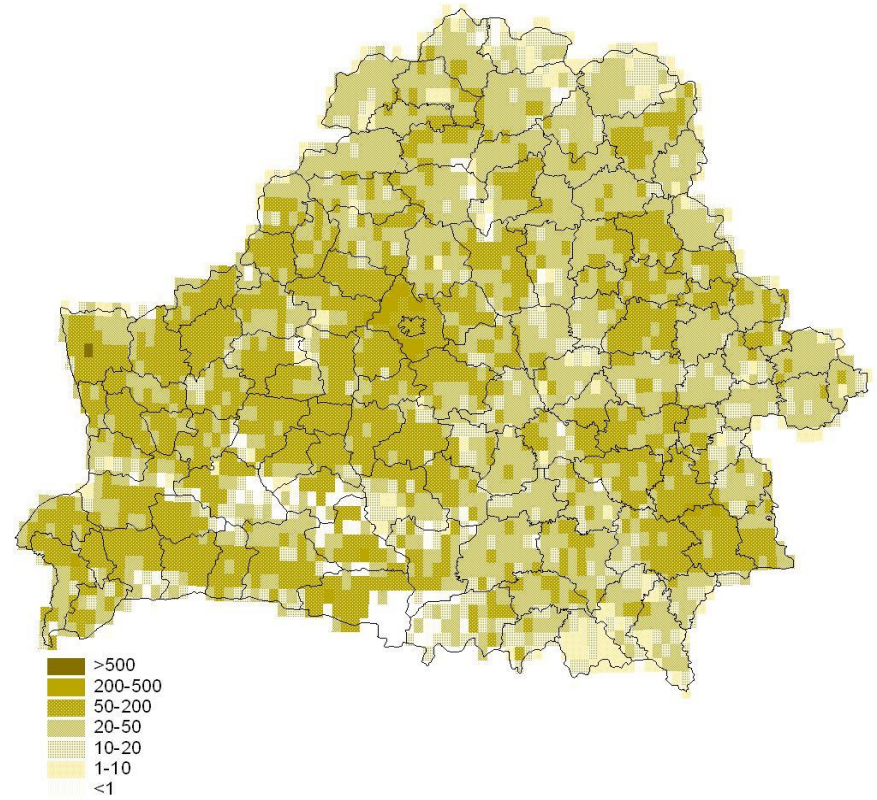
Pilot:

- Local emission inventory (case studies): region, city (1x1 and 0.5x0.5 km)
- Temporal variations of emissions

Emissions by 0.1x0.1 grid



Total SO2 emissions in 2015, t



Total NH3 emissions in 2015, t



Technical Assistance to Support the Development of Green Economy in Belarus"

EuropeAid/135512/DH/SER/BY

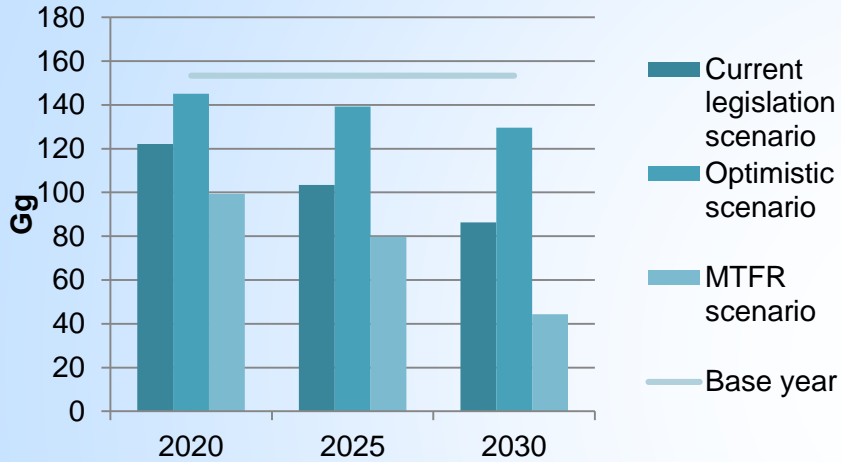


Belarus

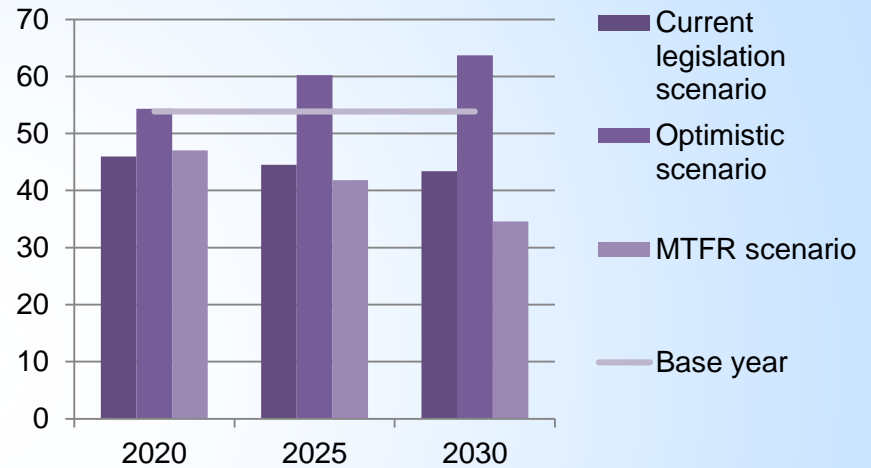
This project is funded by the European Union

Emission projection

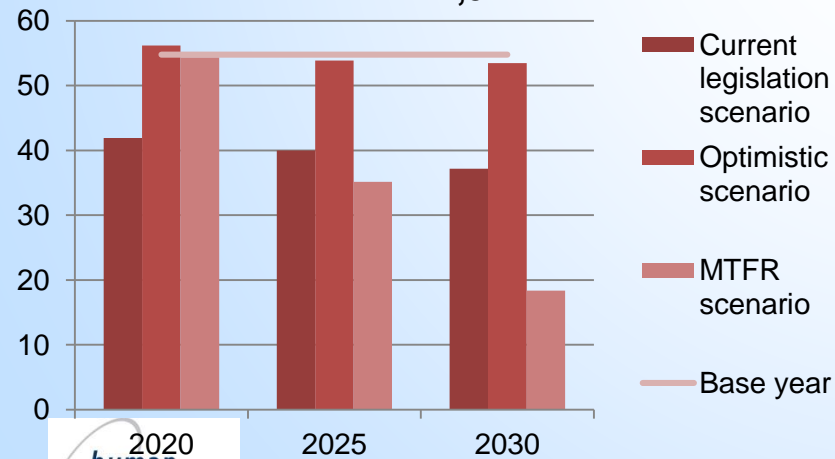
NOx



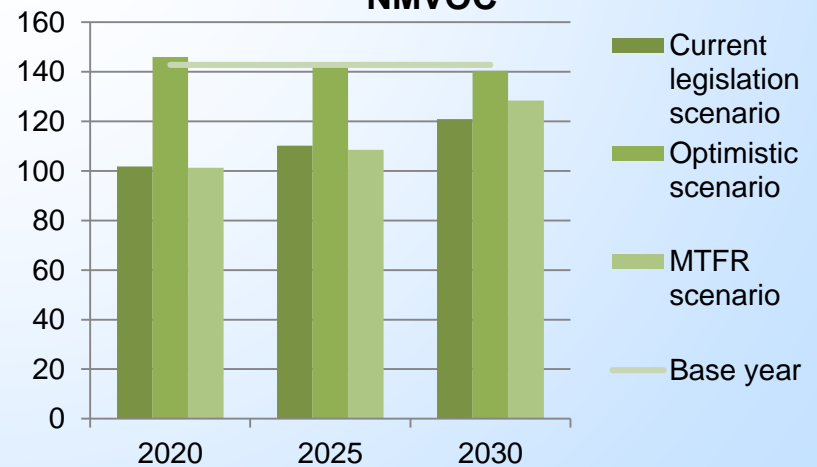
SO₂



PM_{2,5}



NMVOc

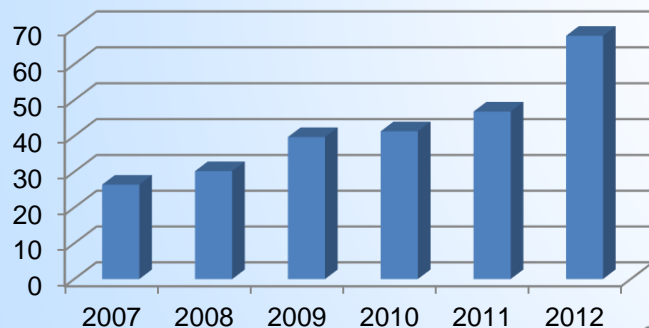


Sources of uncertainty in top-down inventory of VOC emission from solvents application (balance of paints/varnishes methodology applied)

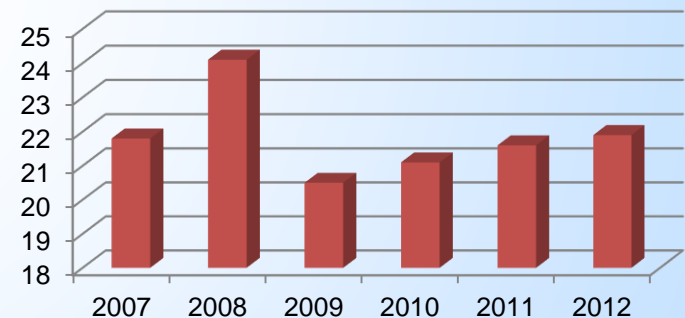
- discrepancies of classifiers in production and trade statistics and their changes;
- difficulties in estimation of VOC content in products on the basis of their trade names/labels;
- difficulties in distribution of paints and varnishes by sphere of application;
- significant temporal changes of paints/varnishes production which can hardly be explained by consumption fluctuations within the country etc.

Variability of paints and varnishes production in Belarus, thous. t

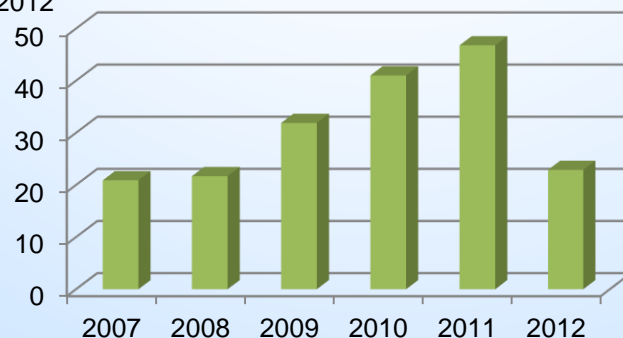
Varnishes on condensing pitches



Enamel, first coat and filling on condensing pitches

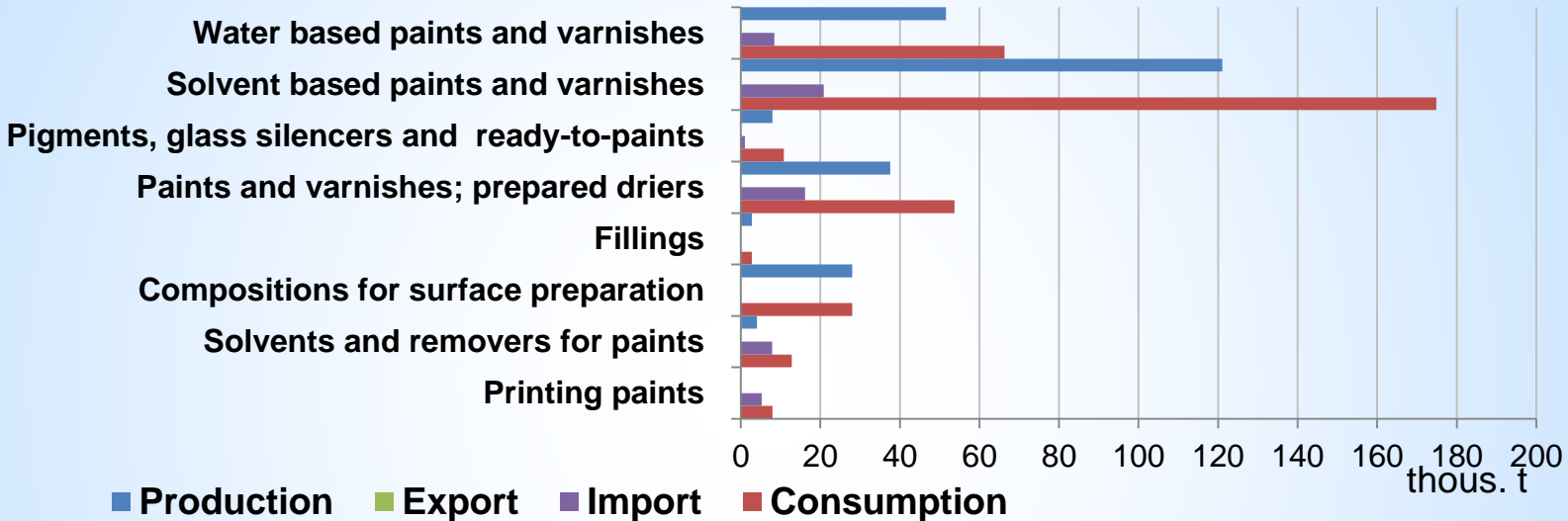


Enamel, first coat and filling on polymer pitches

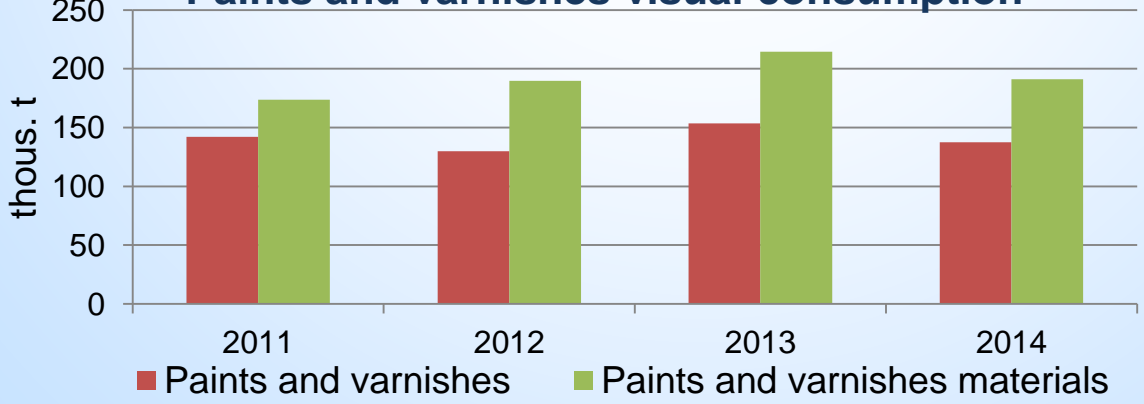


The usage of visual consumption of paints/varnishes as the basis of VOC emission estimation can lead to significant errors. Bottom up approach is necessary in supplement.

Balance of paints and varnishes in Belarus

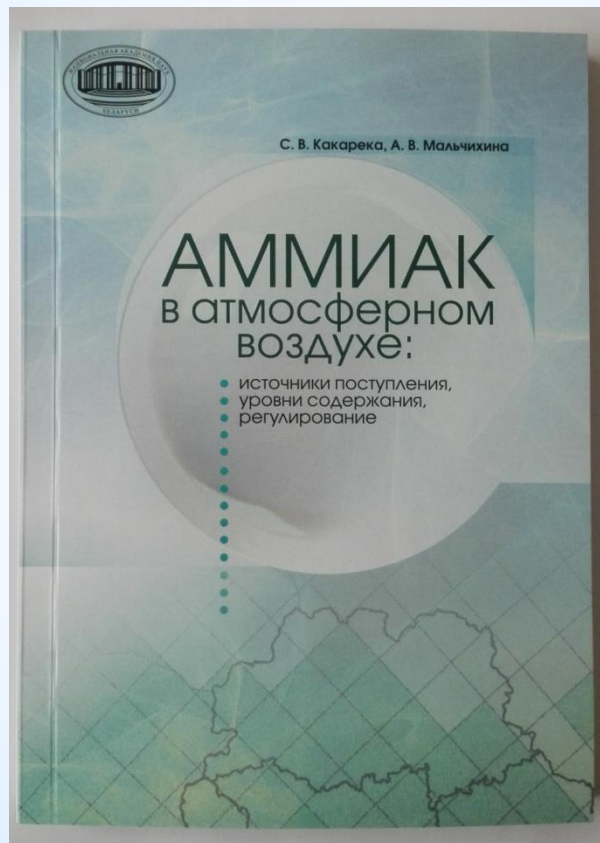


Paints and varnishes visual consumption



Publications

S.Kakareka, A.Malchykhina. Ammonia in ambient air: sources, levels and regulation. Minsk, Belaruskaya nauka, 2016 (in Russian). www.belnauka.by



Thank you for your attention!