

NKL workshop 20 November 2019

Norwegian Air Quality Forecast service and «stakeholder portal»

Silje Bratland

Senior Adviser, Norwegian Environment Agency



See air quality forecast where you are

Search for village, city, area etc

Forecast

The air quality varies locally, even within municipalities.

Places	Now	19:00 - 24:00	Tomorrow
Oslo	Medium	Medium	Low
Bergen	Medium	Medium	Low
Trondheim	Low	Low	Medium
Stavanger	Medium	High	Low
Bærum	Low	Low	Low
Kristiansand	Low	Low	Low
Fredrikstad	Medium	Medium	Low
Sandnes	Medium	Medium	Low
Tromsø	Low	Medium	Low
Drammen	Low	Medium	Low

MY MOST VISITED PLACES

[Stavanger \(Stavanger\)](#)

[Map view](#) >

The forecast is based on modelling done by the Norwegian Meteorological Institute. Results for "Tomorrow" is shown after the forecast is updated (updated each morning).

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Air Quality Forecast service

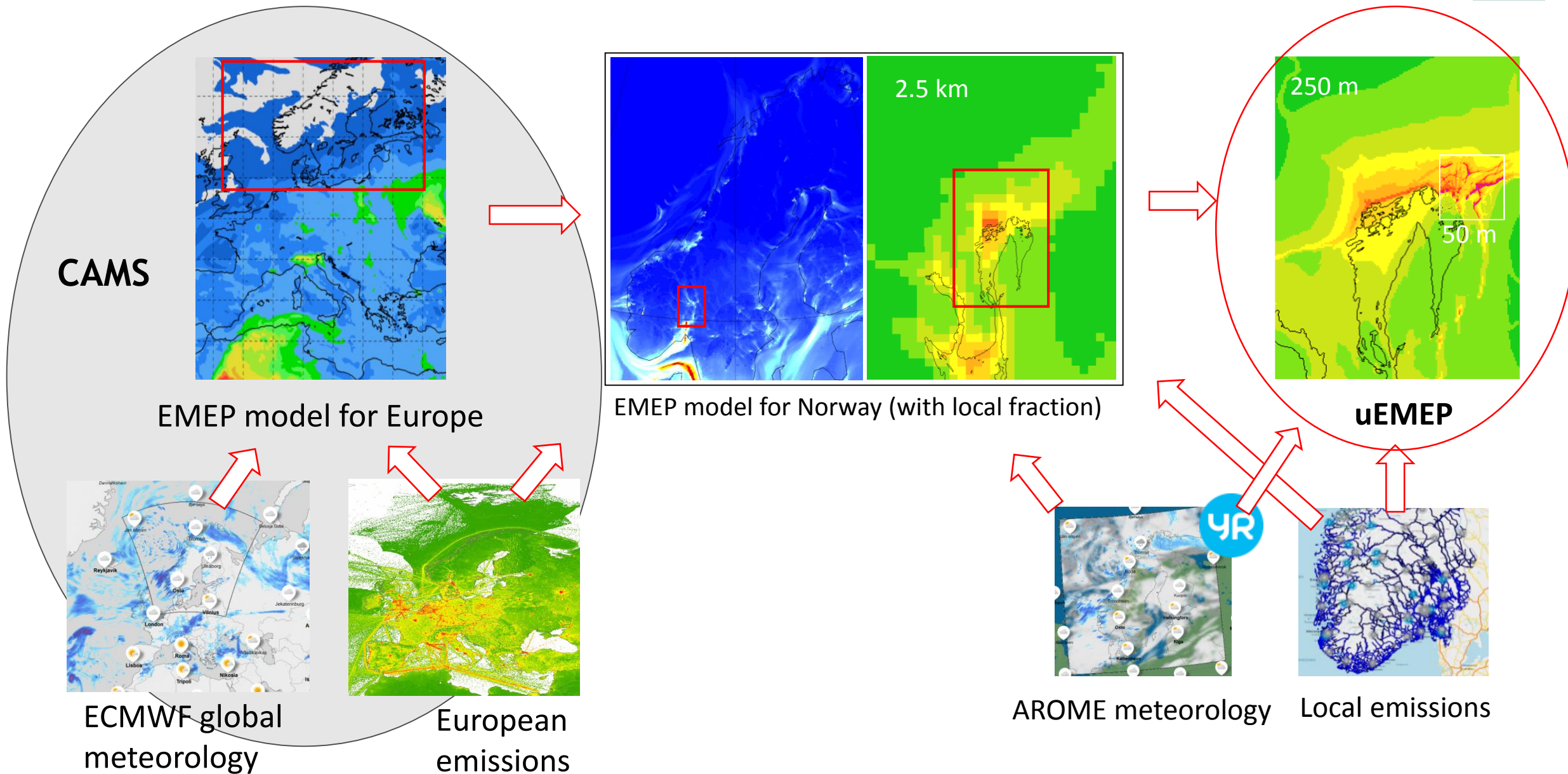
www.luftkvalitet.miljostatus.no



- Two-day hourly forecasts for all of Norway for the pollutants PM₁₀, PM_{2.5}, NO₂ and O₃, at 50 to 250 meters
- A forecasted Air Quality Index (AQI) for all of Norway for each forecast hour.
- Collaboration consisting of five Government agencies
 - The Norwegian Environment Agency
 - The Norwegian Public Roads Administration,
 - The Norwegian Meteorological Institute
 - The Norwegian Institute of Public Health
 - The Norwegian Directorate of Health



The operational air quality model system



Air quality forecast available at online weather service YR.no

YR.no's new web pages
<https://www.yr.no> for mobile
<https://www.yr.no/nb> for pc



The air around Indre Tasta

Air pollution

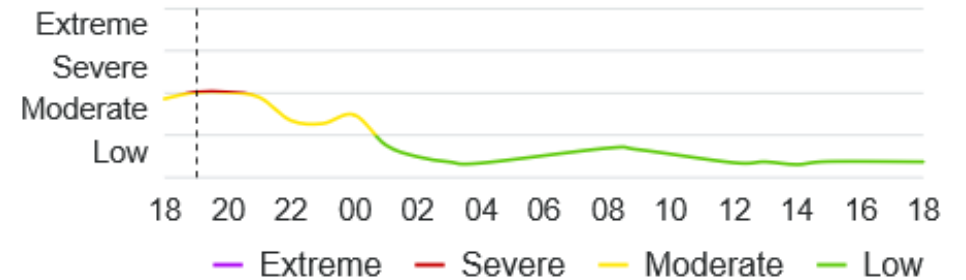
Indre Tasta



Tonight at 19:00

● Severe

Children, pregnant women, older adults or people with heart and lung disease should reduce physical activity outdoors



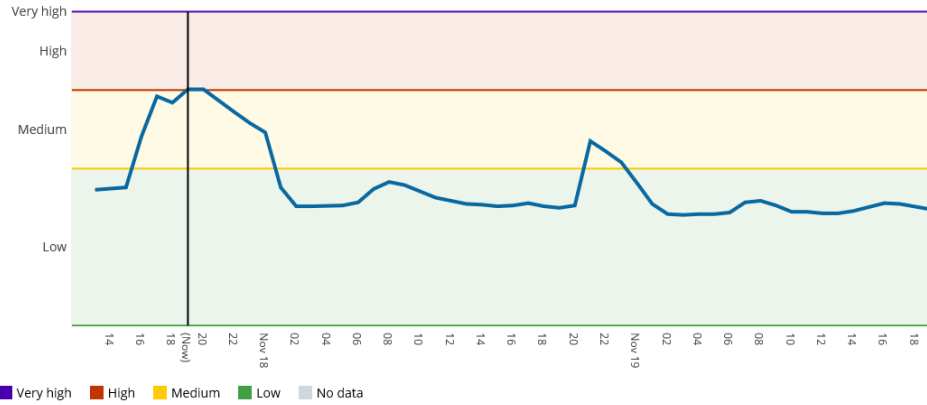
More details and health advice on:

luftkvalitet.miljostatus.no



Total air pollution

The graph shows the forecast for the highest polluted single area within the municipality.
Visit the map or choose a more specific area.



Very high High Medium Low No data

[Read more about health advice and pollution classes.](#)

Pollution forecast for:

Rogaland >

Stavanger

Air pollution now
High (some places)

Due to: PM_{2.5}

Source: vedfyring (PM_{2.5}), langtransportert (PM_{2.5})

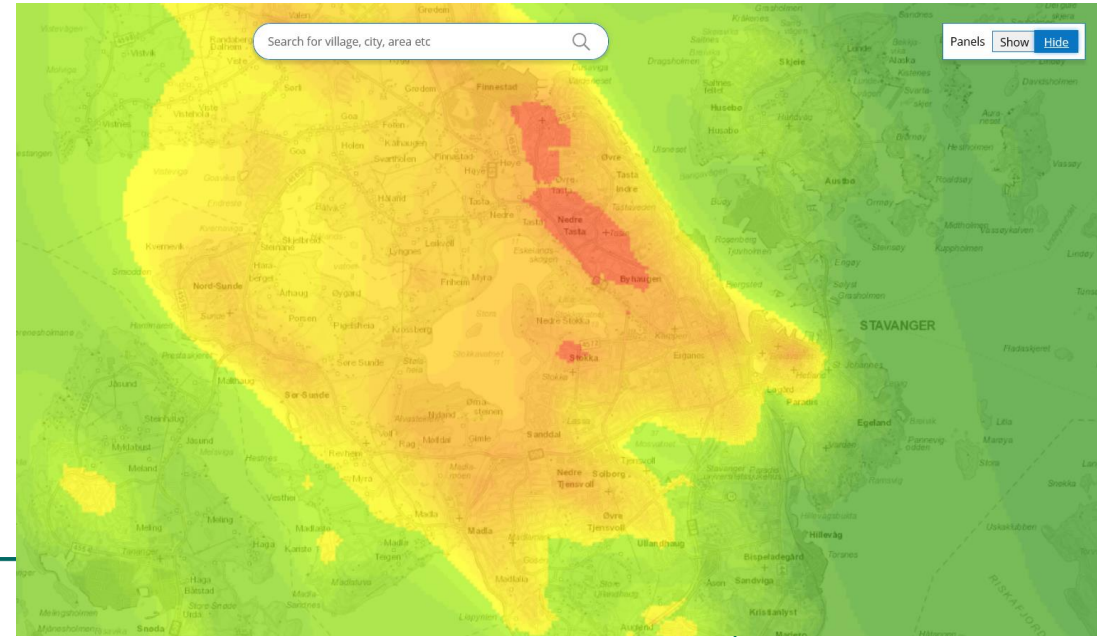
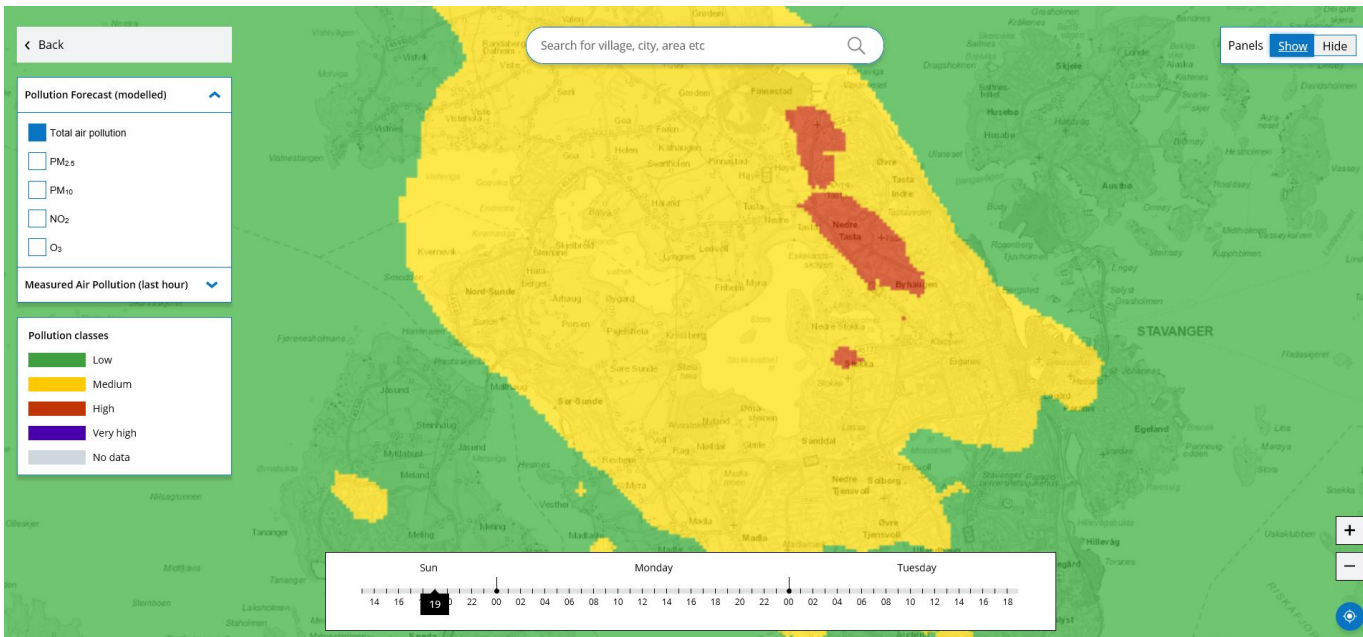
[Show detailed health advice](#) ▾

High health risk

Considerable risk of adverse effects. Adverse effects occur in some individuals with asthma and other respiratory diseases and cardiovascular disease. Respiratory irritation and discomfort may occur in healthy individuals.

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«Stakeholder portal»

- Under development
- To deliver
 - Air quality maps
 - Access to historical monitored and modelled AQ data
 - Emission sources and source contributions
 - Population exposure
- Goal: To help municipalities to improve local air quality

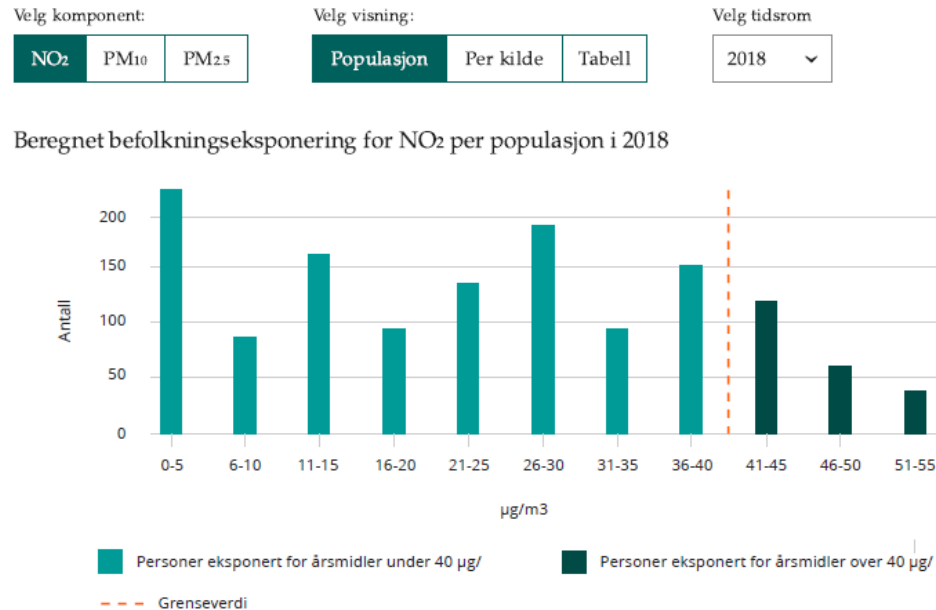
Korttidsmiddel for Bergen, Hordaland

Målestasjoner Beregnet

Velg komponent: NO₂ PM₁₀ SO₂ Velg tidsrom: 2018

Målte korttidsmiddelnivåer av NO₂ i 2018

Befolkningseksposering for Bergen, Hordaland



Kilde: Meteorologisk institutt

Grafen viser hvor mange personer som blir utsatt for ulike eksponeringsmengder av NO₂.

Last ned

.png
.csv

Kommune	Vurdering	Antall
Rolland, Åsane	Nedre vurderings- terskel overskredet	59
	Nedre vurderings- terskel overskredet	31
	Øvre vurderings- terskel overskredet	32

Se graf

Nedre vurderings- terskel er en terskelverdi for mengde luftforurensning av en forurensnings- komponent, satt i Forurensingsforskriftens Kapittel 7, Vedlegg 3.

Ganger

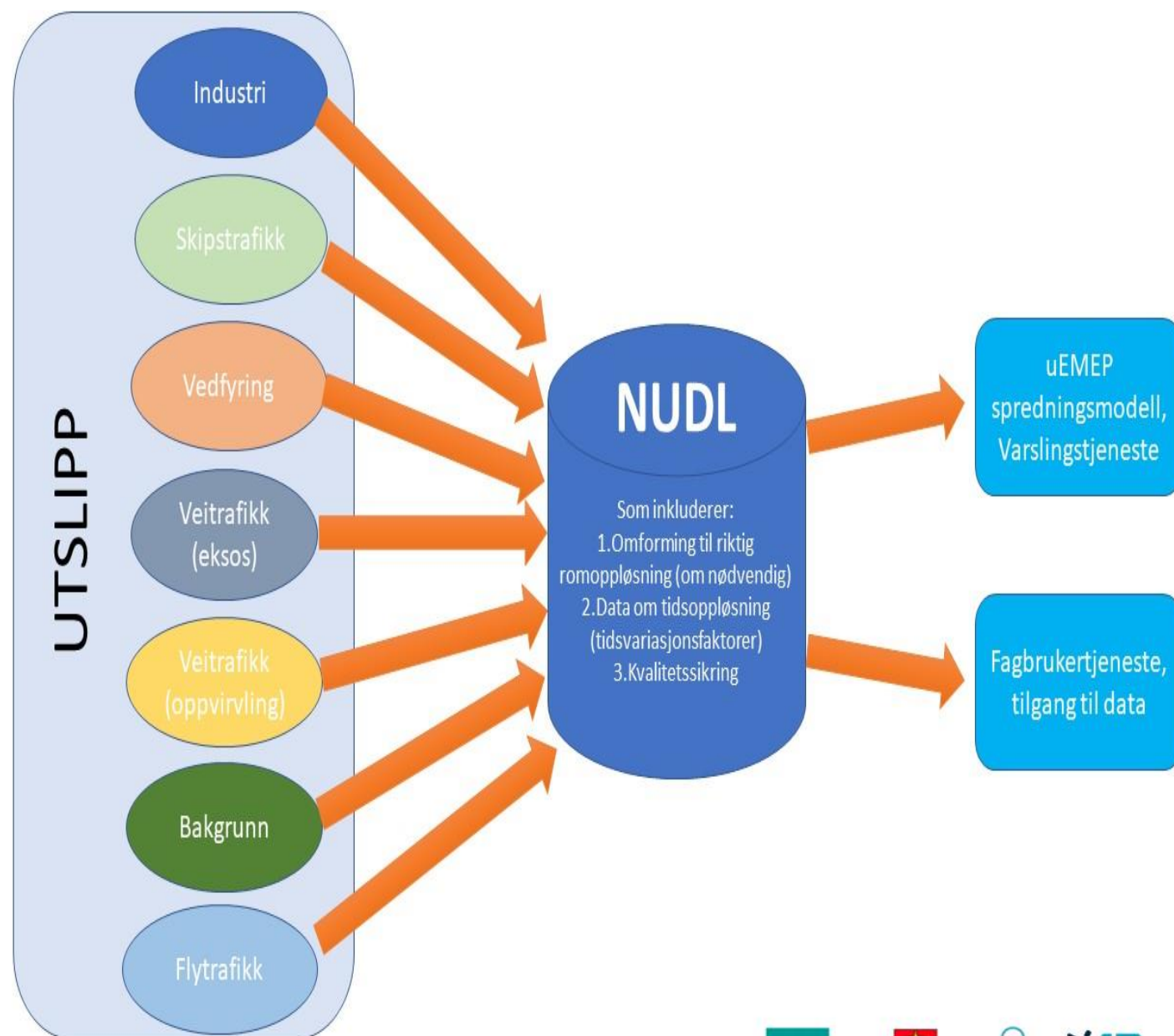
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Emission system and database will be developed

More knowledge about emissions is needed, e.g.

- Industry
- Residential wood combustion
- Traffic (exhaust and road dust)
- Shipping
- Airports
- Construction work
- Agriculture





Solid fuel space heaters and PM emissions

- PM-emissions are most likely underestimated in many European countries due to lack of inclusion of condensables in the PM estimates ⁽¹⁾

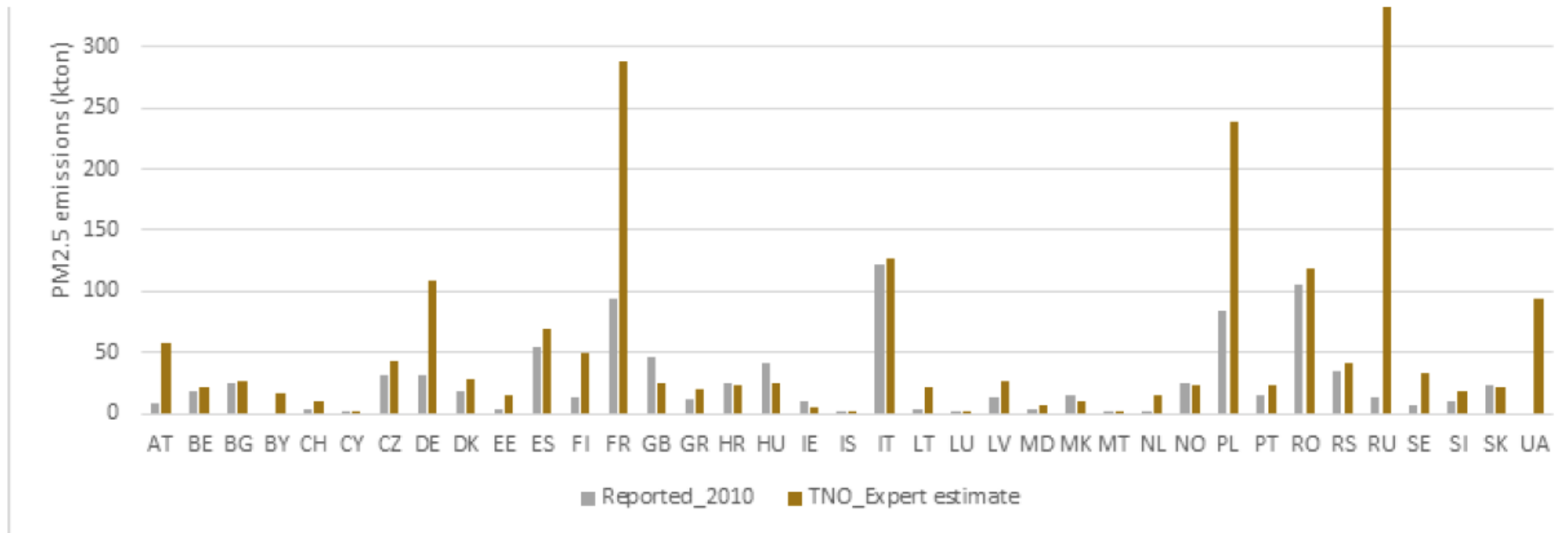


Figure 5.2: Reported PM_{2.5} emissions from small-scale combustion for 2010 compared to TNO expert estimate. Updated from TFEIP/TFMM (2018).

(Figure source: EMEP report 1/2019, page 75)

Methods for measuring PM emissions from wood stoves

- PM measurement method is currently discussed under the revision of mandate M/129 to CEN under the Construction Product Regulation.
 - The method (EN-PME) discussed under CEN/TC 295, does not give information on actual emissions from the wood stove in its current status
- Ecodesign regulation (2015/1185) on SFLSP set limits for PM emissions. These will come into force 1. January 2022.
 - Eco design currently allows the manufacturers the choice to select one of three methods included in the Regulation
 - Review needs by 1/1/2024 - A single measurement method has been signalled
- Norway wants to highlight the importance of a test method for measuring PM emissions from wood stoves that include all PM-emissions and reflect actual use.
 - Air quality directive, LRTAP, NEC, the producers needs predictability

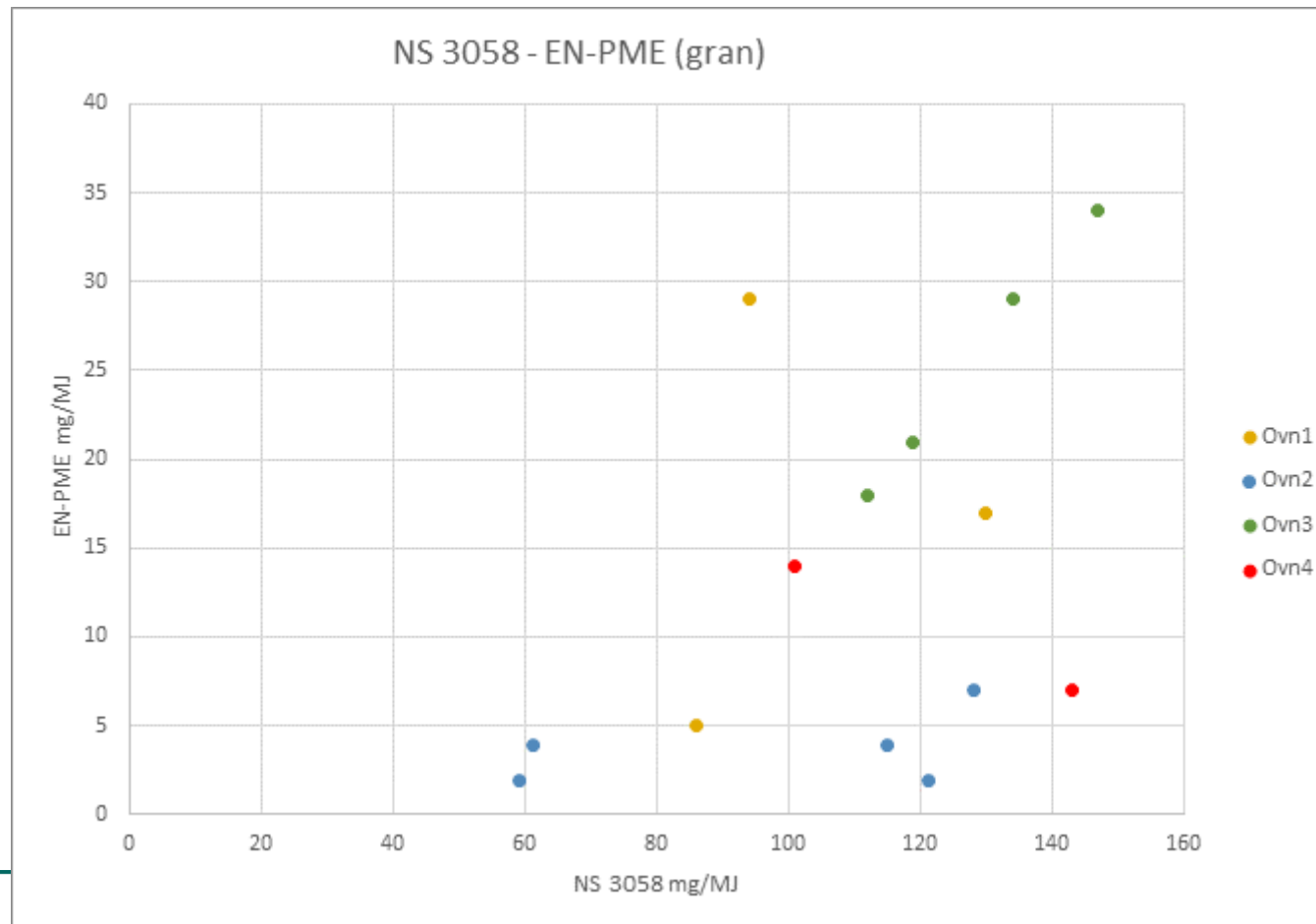


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Preliminary results – EN-PME vs. NS3058



Asbjørn Østnor, SP Fire Research

