

# How Swedish EPA works with municipalities

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# Decentralized system for assessment in urban areas

Municipalities have the main responsibility for the Swedish environmental quality standards

Sweden has 290 municipalities

Largest has 988 000 inhabitants  
Smallest has 2 360 inhabitants

Monitoring urban air quality

Provide information to the general public

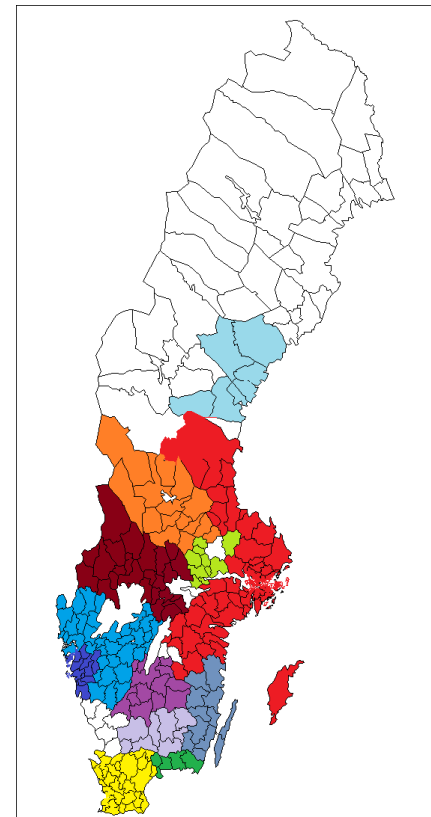
Report data to National Data Host

Report risk of exceedances to Swedish EPA

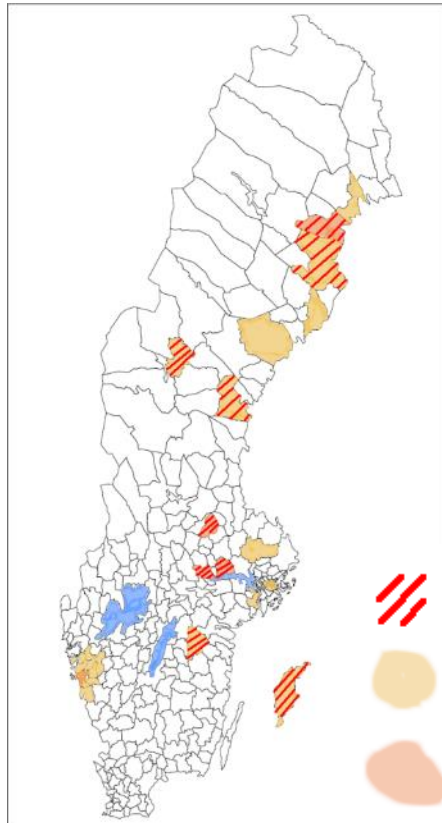
Often responsible for action planning




Resource efficient

Different regional air protection association



# Air quality plans



-  Exceedance 2020-
-  Air quality plan
-  New air quality plan

## Size of municipalities with air quality plans

1.	988 000	8.	75 000
2.	600 000	9.	65 000
3.	243 000	10.	61 000
4.	167 000	11.	56 000
5.	159 000	12.	42 000
6.	132 000	13.	26 000
7.	100 000	14.	15 000

First air quality plan was made in 2004 and still running

8 air quality programs have ended due to no more risk for exceedance

# What are our legal obligations for provision of guidance?

Support for providing guidance is in the Environmental code and supporting legislation

How to provide guidance regarding air quality is not specified.

# 2019 – report on how to improve work with air quality

Measurements hasn't been done or been ineffective

No sanctions then measurements aren't done

Distribution of responsibility between the municipalities, the county board and the government is unclear

Air quality plans hasn't been helping enough to get better air quality

The requirements imposed on the municipalities are high and requires competence and resources

The swedish implementation of the air quality directive needs to improve. As measurements hasn't been enough and lacks follow up.



**Why?**

# 2019 – report on how to improve work with air quality



- Suggest changes in the legislation about monitoring air quality
- Suggest how to choose measures that makes the exceedance period to be as short as possible
- Possibility to make national modelling
- What tools the municipalities have at their disposal and how to improve them

# 2019 – report on how to improve work with air quality

## **Proposals**

- We proposed how to make national modelling. First prestudy is ready.
- Enhanced support from the Swedish EPA within the air quality plan process. We provide guidance from the start to finish of an air quality plan.
- Proposal that the Swedish EPA to inform the government about inadequate air quality plans.
- National air quality plan.
- Change to legislation to have preventive air quality strategy. In force in 2024.
- Suggestion on changes to different legislations to improve municipalities possibility to work with measures.

# Support and guidance



Provide guidance regarding control and air quality plans



Main guidance document  
Monitoring, plans etc..



Catalogue of measures



Information video about wood burning



Reference laboratory monitoring



Quality assurance of measurement data



Reference laboratory modelling

National data host



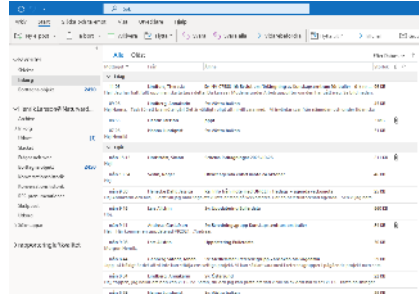
Modelling



# Contacts with municipalities



Online meetings with municipalities



E-mail contacts



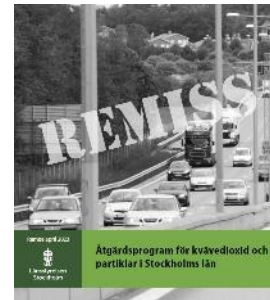
Newsletter, 2 times yearly



Network meetings with municipalities



Holding presentations on seminars



Comments on action plans during public consultation

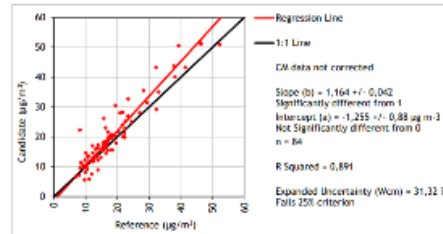
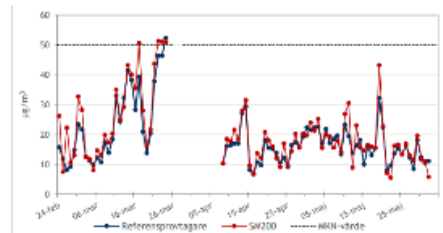
# Help with measure stations

## Reference laboratory for monitoring

Visits measure station to make sure they are in compliance with directive

Gives guidance about measure instruments, placements, quality assurance programs

Validate reported data



Hamngatan, Trelleborg



Modell	Tillämpningsområde	Indata från användare
ADMS	<ul style="list-style-type: none"> <li>vägtrafik</li> <li>stad</li> </ul>	<ul style="list-style-type: none"> <li>emissioner</li> <li>meteorologi</li> <li>topografi</li> </ul>
AERMOD	<ul style="list-style-type: none"> <li>lokalt</li> <li>stad</li> <li>storstad/region</li> </ul>	<ul style="list-style-type: none"> <li>emissioner</li> <li>meteorologi</li> <li>topografi och markanvänd kan anges</li> </ul>
AirQis/EPISODE	<ul style="list-style-type: none"> <li>stad</li> <li>storstad/region</li> </ul>	<ul style="list-style-type: none"> <li>meteorologi</li> <li>topografi</li> <li>initial-koncentration</li> <li>bakgrundsh.</li> </ul>
Airviro	<ul style="list-style-type: none"> <li>gaturum</li> <li>vägtrafik</li> <li>stad</li> <li>storstad/region</li> </ul>	<ul style="list-style-type: none"> <li>emissioner</li> <li>meteorologi</li> </ul>
ALARM	<ul style="list-style-type: none"> <li>regional</li> </ul>	<ul style="list-style-type: none"> <li>emissioner</li> <li>meteorologi</li> </ul>
AUSTAL2000	<ul style="list-style-type: none"> <li>lokalt</li> <li>stad</li> </ul>	<ul style="list-style-type: none"> <li>emissioner</li> <li>meteorologi</li> <li>ev. topografi</li> <li>ev. bakgrundshalter</li> </ul>
CAR-FMI	<ul style="list-style-type: none"> <li>vägtrafik, stad</li> </ul>	<ul style="list-style-type: none"> <li>trafik</li> <li>meteorologi</li> <li>bakgrundsh.</li> <li>topografi</li> </ul>

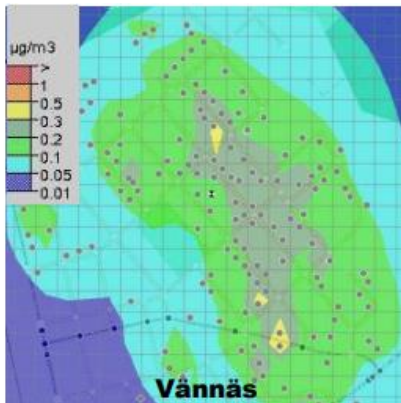
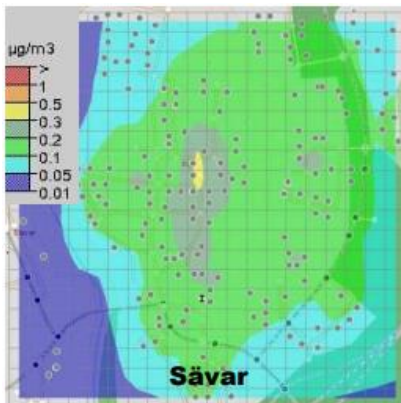
# Help with modelling

Reference laboratory for air quality modelling

Guidelines how to make an air quality modelling

Gives guidance about different models and then to use them

Web tool for objective-estimation



# Data portal with all validated air quality data

<https://datavardluft.smhi.se/portal/>



🏠 Datavårdskap luft   Årsvis Statistik   Halter i luft   Halter i nederbörd   Metaller i mossa   Objektiva skattningar   Modelberäkningar

Län **1/18**

Blekinge län

Dalarnas län

Gävleborgs län

Kommun **0/6**

Stockholm

Sundbyberg

Södertälje

Station **0/17**

🔍 Alla 🗑️ Tom

Botkyrka Hågelbyleden

Sollentuna E4 Häggvik

Solna Råsundavägen 107

Stockholm E4 Skonertvägen

Stockholm E4/E20 Lilla Essingen

Stockholm Folkungagatan 57

Stockholm Folkungagatan 70

Ämne **1/77**

🔍 Alla 🗑️ Tom

Black Carbon

C6H6

CO

**NO2**

O3

PM10

PM2.5

År **3/22**

🔍 Alla 🗑️ Tom

2020

2019

2018

2017

2016

2015

2014

Områdesklassificering **0/1**

Urban

Klassificering **1/2**

Background

**Traffic**

Resultat [Ladda ner alla](#) 1

## NO2 (Nitrogen dioxide)

Visa [Ladda ner](#) [Alla](#) [Överskrider MKN](#) [Överskrider Miljömålet](#)

År	Station	Nationell stationskod	Klassificering	Inlet-id	Medel NO2 µg/m³ (NUT=26, ÖUT=32, MKN=40, miljömål=20)	Antal dygn	Antal dygn NO2 > 60 µg/m³ (MKN=7)	Antal dygn NO2 > 48 µg/m³ (ÖUT=7)	Antal dygn NO2 > 36 µg/m³ (NUT=7)	98%il dygn NO2 µg/m³ (MKN=60)	Max dygn NO2	Antal timmar NO2 > 54 µg/m³ (NUT=175)	Antal timmar NO2 > 72 µg/m³ (ÖUT=175)	Antal timmar NO2 > 90 µg/m³ (MKN=175)	Antal timmar NO2 > 100 µg/m³ (NUT=18)	Antal timmar NO2 > 140 µg/m³ (ÖUT=18)	Antal timmar NO2 > 200 µg/m³ (MKN=18)	Antal timmar NO2 > 60 µg/m³ (Miljömål=175)	98%il timme NO2 µg/m³	Max timme NO2 µg/m³	Tidsupplösning	
2020	Botkyrka Hågelbyleden	36244	Urban Traffic	550	11.26	363	0.00	1.00	5.00	34.54	48.22	8717	93.00	27.00	1.00	0.00	0.00	0.00	56.00	45.10	91.70	Hour
2020	Sollentuna E4 Häggvik	20415	Urban Traffic	2082	16.90	357	0.00	4.00	12.00	39.67	55.55	8570	162.00	54.00	16.00	4.00	0.00	0.00	108.00	53.30	108.10	Hour
2020	Solna Råsundavägen 107	164905	Urban Traffic	4645	13.92	364	0.00	0.00	3.00	33.06	45.49	8739	82.00	16.00	0.00	0.00	0.00	48.00	45.10	84.20	Hour	
2020	Stockholm E4 Skonertvägen	157993	Urban Traffic	4207	17.31	365	1.00	6.00	36.00	47.43	69.46	8752	476.00	121.00	28.00	11.00	0.00	0.00	306.00	67.00	110.20	Hour
2020	Stockholm E4/E20 Lilla Essingen	18644	Urban Traffic	344	22.99	295	2.00	6.00	23.00	47.47	63.07	7073	282.00	73.00	12.00	2.00	0.00	0.00	175.00	63.40	102.10	Hour
2020	Stockholm Folkungagatan 70	159403	Urban Traffic	4228	19.46	364	0.00	0.00	12.00	38.47	47.35	8734	162.00	11.00	3.00	0.00	0.00	0.00	90.00	53.30	96.60	Hour
2020	Stockholm Hornsgatan 108 Gata	8780	Urban Traffic	115	23.57	364	1.00	10.00	25.00	50.29	62.30	8742	466.00	115.00	25.00	5.00	0.00	0.00	298.00	66.80	128.20	Hour
2020	Stockholm Hornsgatan 85 Gatunivå	18639	Urban Traffic	534	23.11	107	0.00	2.00	15.00	46.78	52.69	2573	206.00	55.00	8.00	5.00	0.00	0.00	140.00	73.00	123.30	Hour



Start > Data > Luftwebb

Översikt Data

Meteorologi

Hydrologi

Oceanografi

Luftmiljö

**Luftwebb**

Nationella emissionsdatabasen

Datavårdskap för atmosfärskemil

Prognos marknära ozon

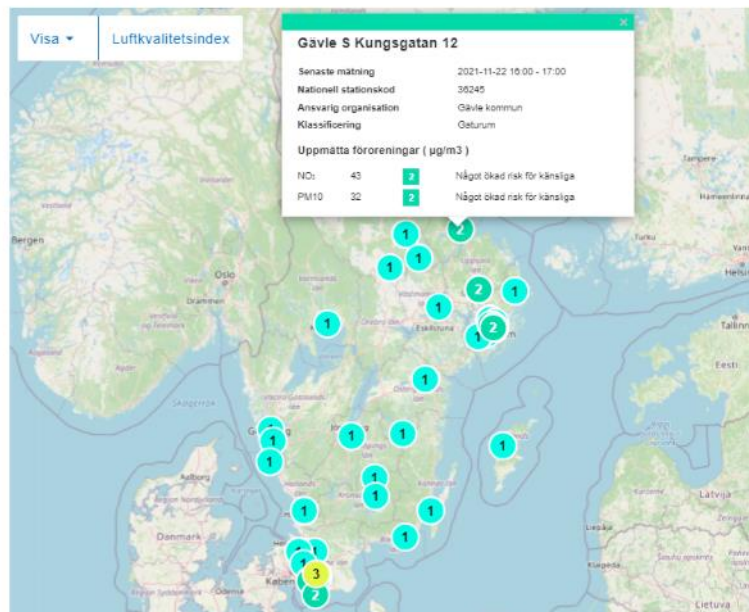
Luftmiljödata

Ladda ner data

TEMA:

## Luftwebb

På SMHIs Luftwebb samlas på uppdrag av Naturvårdsverket tjänster inom luftmiljö. Här hittar tjänster för visualisering och nedladdning av svenska luftmiljödata, som mätdata, regionala spridningsberäkningar och geografiskt fördelade emissioner. Tjänsterna är öppna för alla.



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