



TARTU ÜLIKOOL

# ÕHUSAASTE HOIATUSSÜTEEMIDE VEEBILEHTEDE ÜLEVAADE

**Jaana Toomik**

keskkonnatervishoiu nooremteadur

12.05.2026

# Töö eesmärk

- Kaardistada ja võrrelda erinevates riikides toimivaid õhukvaliteedi jälgimise ja hoiatamise süsteeme.
- Analüüsida, kas veebilehtede teave on esitatud kasutajasõbralikult ning visuaalselt arusaadavalt.
- Heade praktikate esiletoomine.
- Kasutajakesksed ettepanekud Eesti õhukvaliteedi juhtimissüsteemi veebiplatvormi arendamiseks.

# Mida tehti

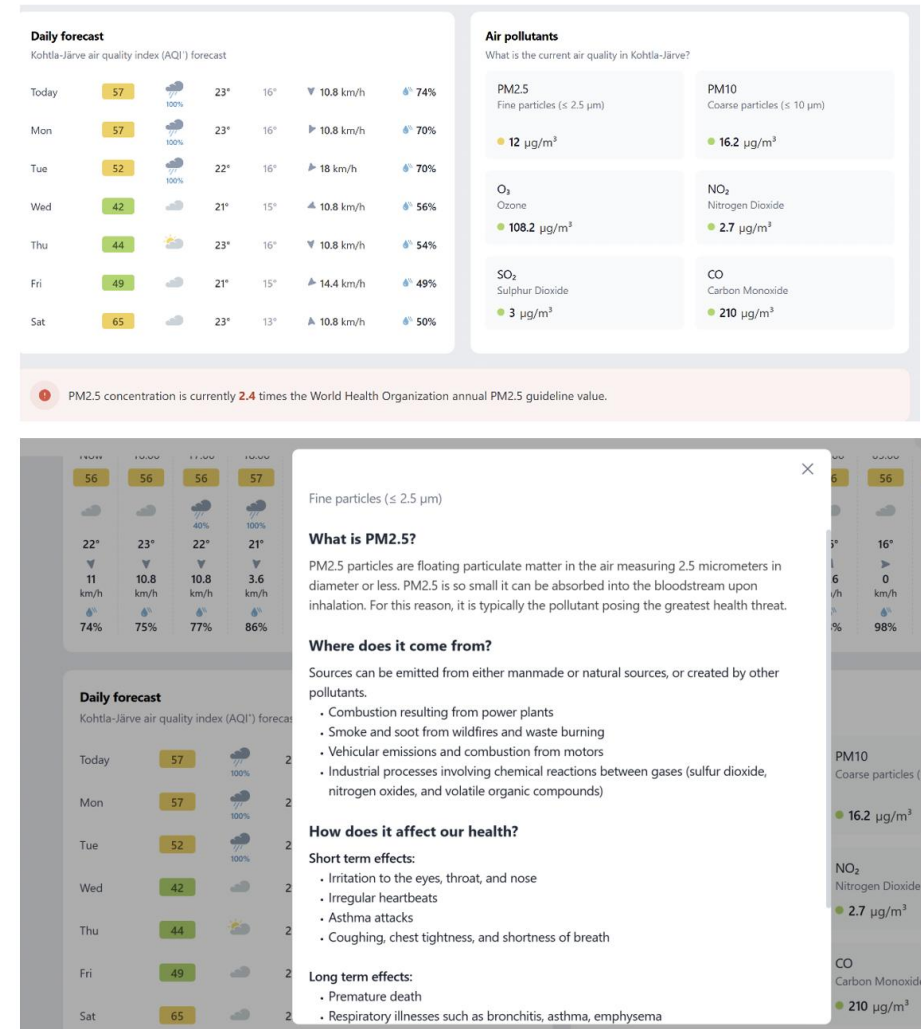
- Analüüsiti kokku 27 riigi õhukvaliteedi seiresüsteemide veebilehti.
- Keskenduti:
  - mõõdetavatele saasteainetele (PM10, PM2.5, NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub>, CO);
  - andmete kergele kättesaadavusele;
  - kasutajatele suunatud visualiseerimisvahenditele.
- Suurem osa erinevusi on tulemuste visualiseerimises ja terviseinfos või ilmateenuste lõimimises.

# Mida tehti

- Enamus riike kasutavad WHO standarditele tuginevaid piirmäärasid, mis lihtsustab võrdlust teiste süsteemidega.
- Kasutajaliidesed riigiti erinevad, ent enamus käsitletud riikides nähtav suund suuremale läbipaistvusele ja elanikkonnale suunatud teabele.
- Mõnedes riikides nagu Austraalias saab tellida SMS või emaili teel hoiatusi päevastest õhusaasteohtudest (*tuleviku modelleerimine*).
- Mõnedes riikides nagu Prantsusmaal on eraldi õietolmuinfo (*ka tulevik*).

# Kasutajasõbralikumad veebilehed

1. Iirimaa, Soome, Uus-Meremaa, Šveitsil, Hispaania ja Inglismaal on lihtne ja tavakasutajale arusaadav info.
2. Ilus lahendus on Šveitsi IQAir leht.
3. Taiwan annab veebikaamerate piltide kaudu visuaalse ülevaate erinevatest piirkondadest.
4. Hollandil õhukvaliteedi info ühendatud muu elukeskkonda puudutava teabega (koolid, lasteaiad, poed, bussipeatused).



## Air

Air quality in Ireland is generally good and compares favourably with many of our European neighbours, however there are concerning localised issues which lead to poor air quality.

### Report 2024

#### Read our latest report - Air Quality in Ireland 2024

See our latest interactive Air Quality report

#### Find out what air quality is like near you

See what air quality is like in your locality and follow the associated health advice using the AQIH, Air Quality Index for Health interactive map

### We can all help improve the quality of the air we breathe, see what you can do

[Change how you heat your home](#)

[Change how you travel to work, school and play](#)

[PM pollution: see how we measure it](#)

### Air quality and you

What you need to know about air quality

[What's happening?](#)

[What can I do?](#)

[Air Quality Reports](#)

[FAQ on Air Quality](#)

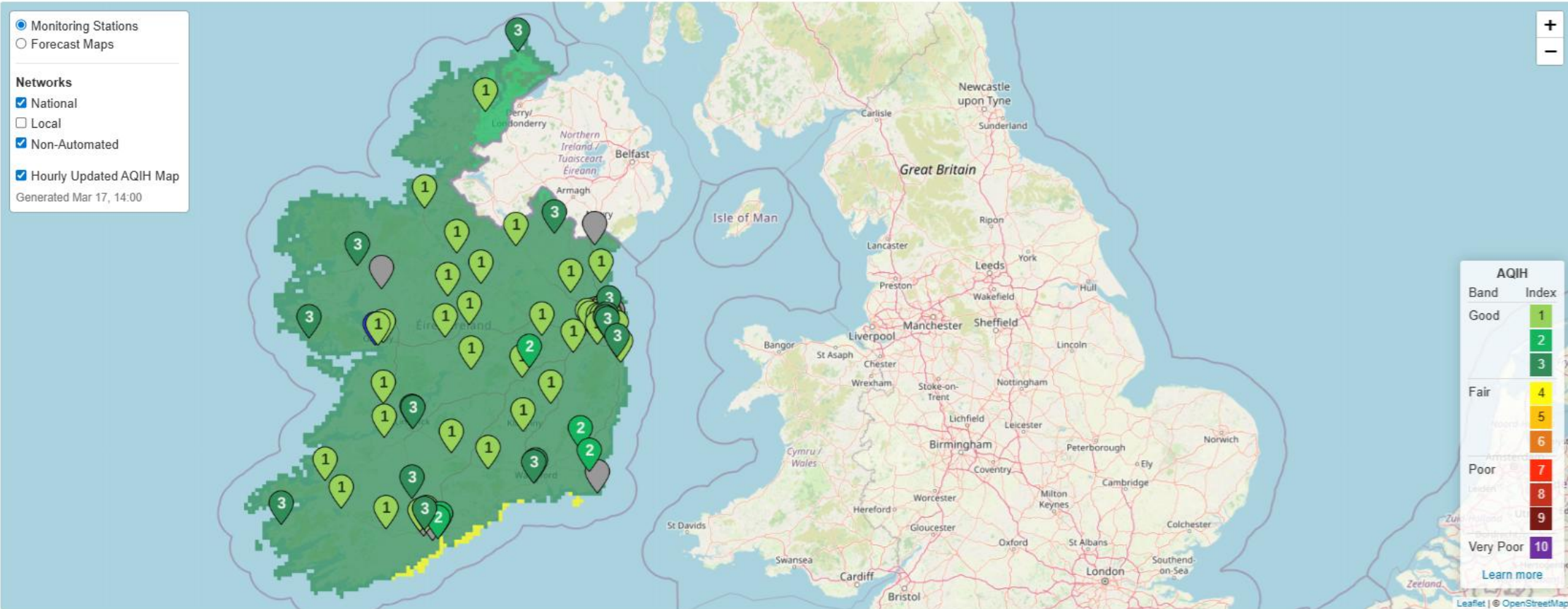
[Infographic Downloads](#)

[Air quality videos](#)

# Iirimaa


- Home
- Stations
- Calendar
- Readings
- Annual Maps
- Information

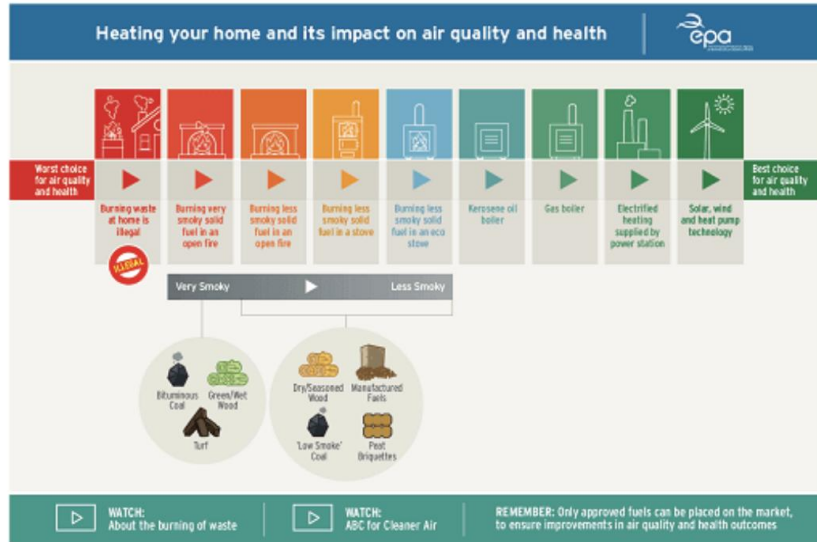
September 2025 Our latest report, *Air Quality in Ireland 2024*, has been released. [See the new interactive Air Quality report here](#)



Reaalajas õhukvaliteedi näitajad ja tuleviku modelleerimine Iirimaa keskkonnaagentuuri andmetel.  
Allikas: Iirimaa Keskkonnaagentuur. <https://airquality.ie>

# Download infographics and factsheets on air quality

**Heating your home and its impact on air quality and health** | 



**Worst choice for air quality and health** | **Best choice for air quality and health**

- Burning waste at home is illegal
- Burning very smoky solid fuel in an open fire
- Burning less smoky solid fuel in an open fire
- Burning less smoky solid fuel in a stove
- Burning less smoky solid fuel in an eco stove
- Kerosene oil boiler
- Gas boiler
- Electrified heating supplied by power station
- Solar, wind and heat pump technology

**Very Smoky** | **Less Smoky**

**Very Smoky:** Bituminous Coal, Green/Red Wood, Turf

**Less Smoky:** Dry/Seasoned Wood, Manufactured Fuels, Low Smoke Coal, Peat Briquettes

**WATCH:** About the burning of waste | **WATCH:** ABC for Cleaner Air | **REMEMBER:** Only approved fuels can be placed on the market, to ensure improvements in air quality and health outcomes

## IRELAND'S ENVIRONMENT



**AIR QUALITY IN IRELAND**

**AIR POLLUTION IS HARMFUL TO HEALTH**

- Pollutants can damage the heart and the lungs or increase the risk of cancer
- TRAFFIC EMISSIONS cause high levels of Nitrogen Oxide & Particulate Matter in our cities
- RESIDENTIAL BURNING OF SOLID FUELS causes high levels of Particulate Matter and Polycyclic Aromatic Hydrocarbons (PAH) in our towns
- PARTICULATE MATTER concentrations are highest in colder, calm weather
- OZONE CONCENTRATIONS are higher in rural areas and higher in the west (because of Ozone chemistry)
- OZONE CONCENTRATIONS are highest in warmer weather

**THERE ARE CHALLENGES AHEAD**

- 86%** reduction in emissions of sulphur dioxide between 1990 and 2010
- The impact of emissions from industry on air quality has significantly reduced due to licensing and control by the EPA and others
- IRELAND IS REQUIRED UNDER EU LAW to decrease exposure to fine Particulate Matter (PM<sub>2.5</sub>) by 10% between 2012 and 2020 to reduce potential impacts on human health
- The ban on bituminous coal in cities & towns has greatly reduced the levels of particulate pollution in those areas
- 359** fewer cardiovascular & respiratory deaths every year in Dublin

  
www.epa.ie/Irelandsenvironment/



## Air quality & transport in Ireland

www.epa.ie/air/quality

**Transport - What is the problem?**

- Diesel and petrol vehicles produce the toxic gas NO<sub>x</sub> and particulate matters
- They also contribute to climate change
- Health implications of poor air quality from transport impacts the liver, lungs and spleen
- Ireland is also facing exceedances of the EU limit values in our urban areas

Transport is contributing to 20% of Ireland's greenhouse gas emissions

**What can be done?**

- Is it necessary to make your journey in a diesel or petrol car? **Is there an alternative?**
  - Use public transport
  - Car pool/sharing
  - Walking and cycling
- Walk and Cycle friendly networks** making it easier for individuals to make the cleaner/healthier choice
- Consider an **EV as your next vehicle purchase**
- Decarbonisation** of the public transport system also has benefits for air quality
- Expansion of the electric vehicle recharging network** - making it as easy to charge an EV as it is to fill up with petrol/diesel
- Low-emission zones**

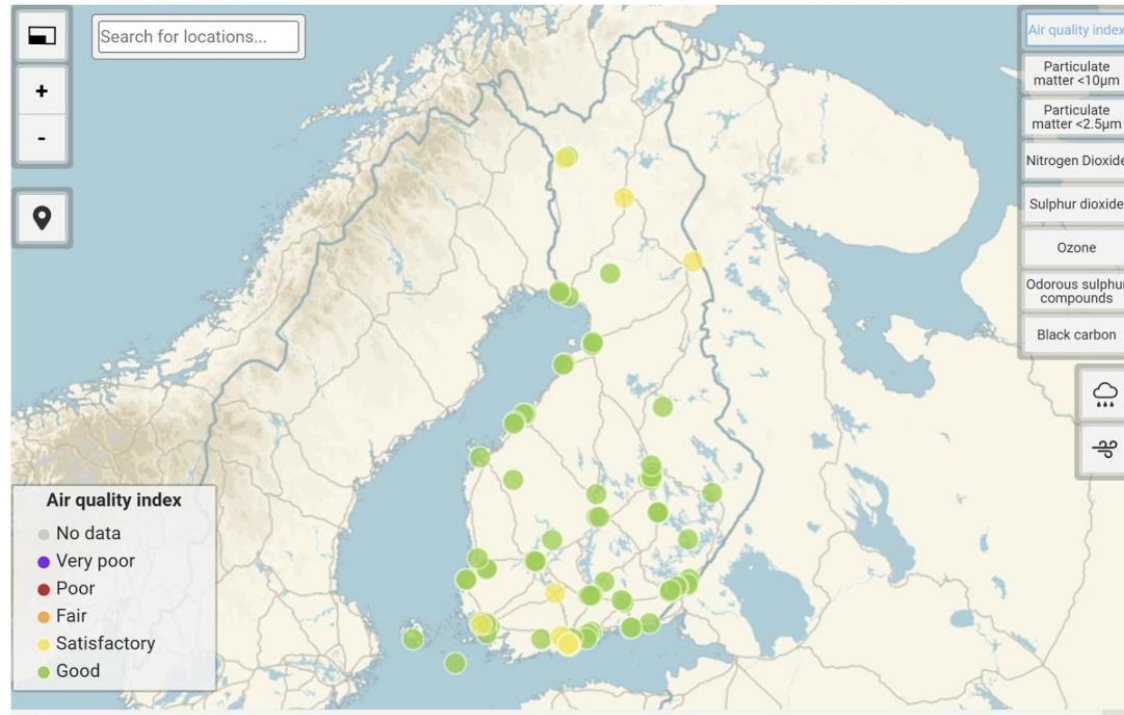
**Outcomes**

- Better air quality - better health for you
- Compliance with EU limit values
- Lower greenhouse gas emissions - better for the planet

for Twitter Alerts sign up to @EPAirQuality

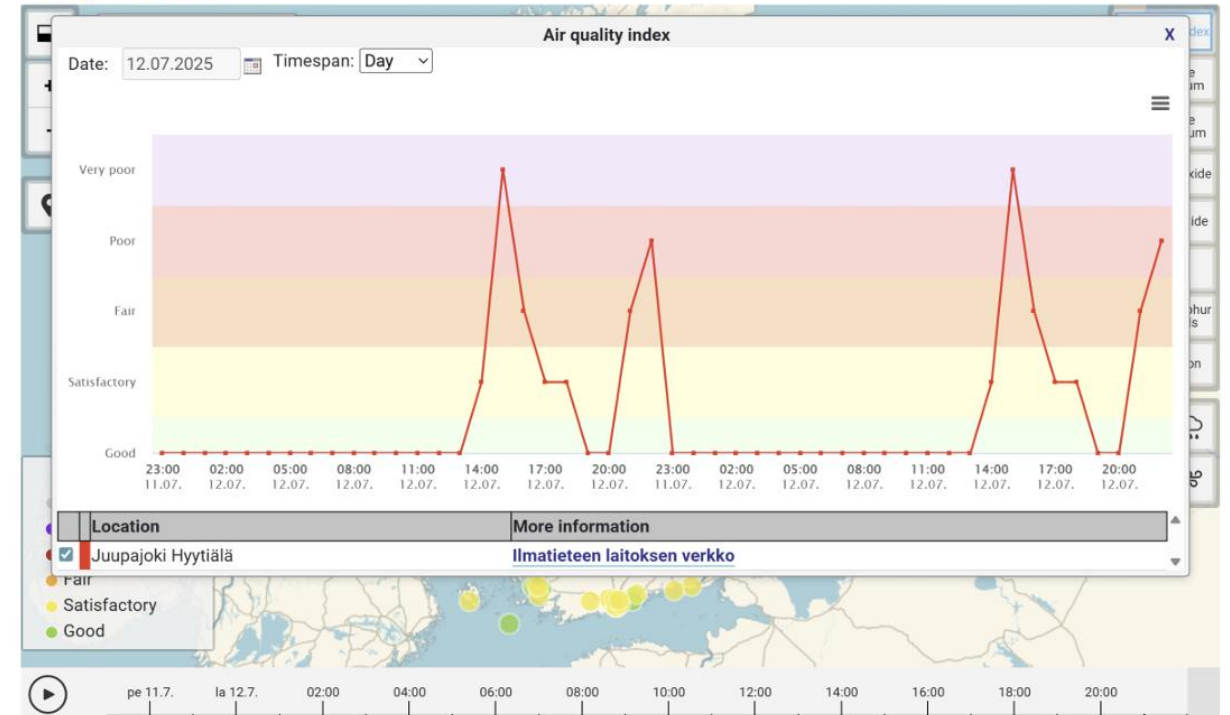
# Soome

## Air quality now



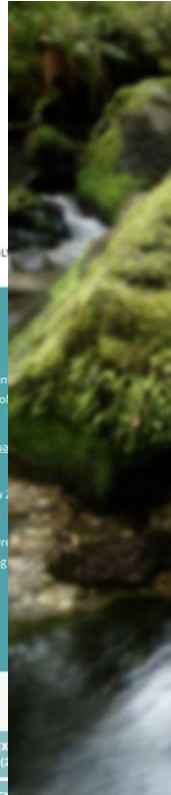
Reaalajas õhukvaliteedi näitajad Soome Ilmateenistuse andmetel.  
Allikas: Soome Ilmateenistus. <https://en.ilmatieteenlaitos.fi/air-quality>

## Air quality now



Reaalajas õhukvaliteedi näitajad Soome Ilmateenistuse PHE jaama vaates  
<https://en.ilmatieteenlaitos.fi/air-quality>

# Uus-Meremaa



SUBMITTED BY  
LAWA  
AUTHOR  
LAWA  
PUBLISHED DATE  
31 MAY 2024

Read this factsheet to find out more on air quality monitoring in New Zealand, including who monitors air quality, and the standards and guidelines that air pollutants are monitored against.

## Who is responsible for measuring air quality?

Regional councils and unitary authorities measure outdoor air quality in their regions as part of their responsibilities for managing air quality under the Resource Management Act 1991 (RMA). National Environmental Standards for Air Quality (NES-AQ) are regulations made under the RMA that set limits in outdoor air for PM<sub>10</sub>, carbon monoxide, nitrogen dioxide, sulphur dioxide and ozone to provide a minimum level of health protection for all New Zealanders.

Regional councils and unitary authorities report on how levels of air pollutants in their towns compare to the NES-AQ and to other guidelines, such as the international World Health Organization (WHO) 2021 air quality guidelines, and the national Ambient Air Quality Guidelines (AAQG) 2002. It's important to note that the National Environmental Standard (NES-AQ) is legally binding, while the guidelines are advisory.

In many places PM<sub>10</sub> levels fail to meet the NES-AQ largely due to emissions from home heating during winter. Most council air quality monitoring programmes focus on measuring PM<sub>10</sub> in areas where PM<sub>10</sub> levels are highest. Air quality monitoring programmes are very expensive so monitoring focuses on areas known, or suspected, to have issues with air quality. Monitoring air quality helps councils evaluate the effectiveness of resource management plans, strategies and interventions designed to improve air quality. Other monitoring can focus on particular types of pollutants from industry (e.g. nitrogen dioxide from traffic or sulphur dioxide from shipping).

## What is measured?

These air pollutants are measured in New Zealand:

- PM<sub>10</sub>
- PM<sub>2.5</sub>
- Black carbon
- Carbon monoxide
- Nitrogen dioxide
- Sulphur dioxide
- Ozone
- Benzene

## New Zealand air quality standards

The NES-AQ focuses on short term time frames, i.e., average hourly or daily time periods, to provide a set level of protection for communities from the health impacts of air pollution. The NES-AQ allows some pollutants to be above their limits (an exceedance) a small number of times per year.

Table of National Environmental Standards for Air Quality



## Air quality in this town

Precise station was established in November 2000 and we currently monitor NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>.

Air quality is generally good for most of time in many areas. Air pollution sources are mainly from vehicle emissions (particularly at busy roadside), residential home heating (during winter) and some industrial activities. The monitored CO, SO<sub>2</sub> and NO<sub>2</sub> concentrations meet national environmental standards for air quality. PM<sub>10</sub> and PM<sub>2.5</sub> concentrations usually meet national environmental standards for air quality and guidelines although exceedances occur occasionally.



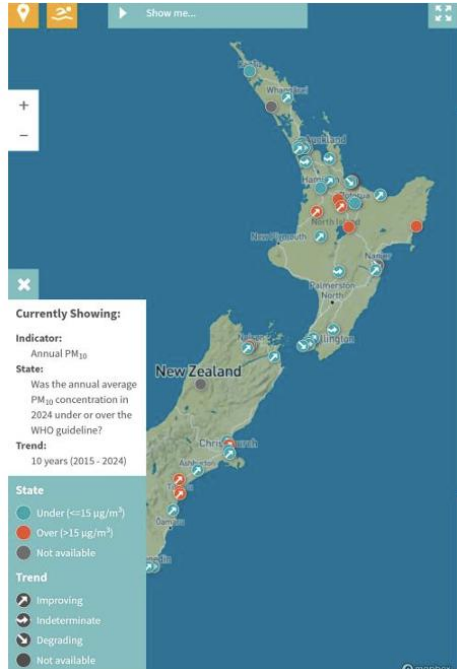
## In this town, where do emissions come from?

The split between home heating, industrial, outdoor burning and traffic sources

Source	Sources of PM <sub>10</sub> emissions		Sources of PM <sub>2.5</sub> emissions		Sources of NO <sub>x</sub> emissions	
	Annual percentage	Winter day percentage	Annual	Winter day	Annual	Winter day
Home heating	21%	49%				
Industrial	60%	39%				
Outdoor burning	0%	0%				
Traffic	19%	12%				

The table shows the proportions of the main sources of PM<sub>10</sub>, PM<sub>2.5</sub> and nitrogen oxides (NO<sub>x</sub>) in this town from home heating, industrial activities, outdoor burning and traffic. (Indoor, natural and shipping sources are not included in this breakdown).

These values come from 2013 data sourced from [MfE's data service](#). Consistent methodology was used to calculate these estimates of PM and NO<sub>x</sub> emissions, which allows comparison between towns throughout New Zealand. Regional council or unitary authority published emissions information might differ if they were prepared in a different year or used another method. Contact your regional council or unitary authority for more information about PM and other emissions in your area.



EXPLORE DATA | LEARN | GET INVOLVED

New Zealand

## Air Quality

Good air quality is essential for both human health and the health of our environment. New Zealand generally enjoys relatively clean air, some areas experience elevated levels of certain times of the year.

This topic presents the results of regional air quality monitoring, explains why air quality offers tips on how we can all help improve the air we breathe.

The National Picture tab provides an overview of air quality monitoring across New Zealand and tablet users can explore results for various indicators using the interactive map.

Click on the Regions tab to view air quality information for towns in each region. Here you can explore the sources of local air pollution and explore current and historical monitoring data.

Regions: 16 National Picture

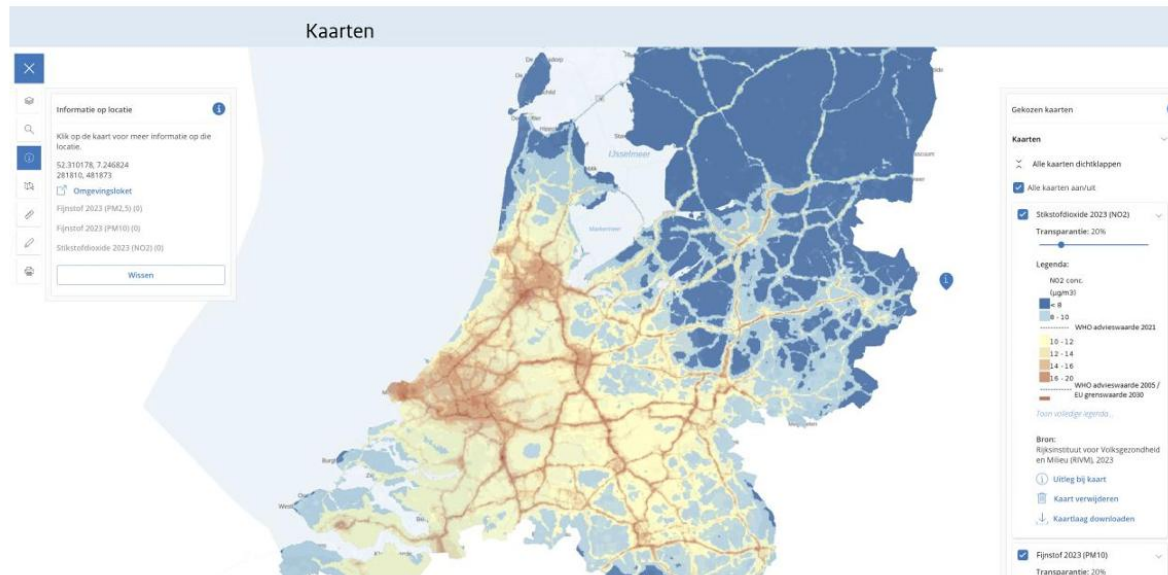
Select an indicator:

ANNUAL PM <sub>10</sub>	PM <sub>10</sub> YESTERDAY	PM <sub>10</sub> EXCEEDANCES (2024)	PM <sub>10</sub> EXCEEDANCES (2025)
ANNUAL PM <sub>2.5</sub>	PM <sub>2.5</sub> YESTERDAY	PM <sub>2.5</sub> EXCEEDANCES (2024)	PM <sub>2.5</sub> EXCEEDANCES (2025)

LAWA (Land, Air, Water Aotearoa) interaktiivne kaart, mis kuvab õhukvaliteedi näitajaid Uus Meremaa eri piirkondades. Allikas: <https://www.lawa.org.nz/explore-data/air-quality>

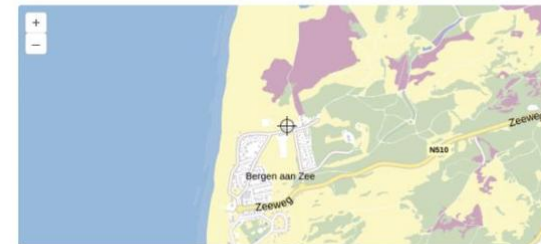
Näide õhukvaliteedi ja peamiste saasteallikate jaotusest ühes Uus-Meremaa linnas – tabel ja graafik näitavad kodukütte, tööstuse ja liikluse osakaalu aastas ja talveperioodil. Allikas: <https://www.lawa.org.nz/explore-data/air-quality>

# Holland RIVM / Atlas Leefomgeving



Adres:

Of klik in de kaart om een locatie te kiezen



## 1. Adresinformatie

- Adres: Verspyckweg 3D  
1865 BJ Bergen aan Zee
- Gemeentenaam: Bergen (NH)
- Gebruiksdoel: woonfunctie
- Bouwjaar pand: 1912
- Energie label pand: Geen informatie gevonden

## 2. Leefomgevingskwaliteit

- Fijnstof in de lucht (2023): 😊 6 µg PM<sub>2.5</sub> / m<sup>3</sup>
- Stikstofdióxide in de lucht (2023): 😊 6 µg NO<sub>2</sub> / m<sup>3</sup>
- Geluid in de omgeving: 😊 < 46 dB
- Zomerhitte in de stad: 😊 + 0.1 °C t.o.v. landelijk gebied
- Schaduwrijke bomen binnen 500 meter: 😊 18% van het oppervlak
- Groen/blauw binnen 500 meter: 😊 91% van het oppervlak
- Kans op een overstroming: 😊 Overstroomt niet / Oppervlaktewater
- Hoe donker is het 's nachts?: 😊 > 2000 zichtbare sterren
- Activiteiten met gevaarlijke stoffen binnen 1 km: buisleiding

## 3. Buurtinformatie

- Gemiddelde woningwaarde in 2023: € 864 000
- Mate van stedelijkheid van de buurt: Niet stedelijk
- Afstand tot een huisartsenpraktijk: 🚫 5.9 km
- Afstand tot een kinderdagverblijf: 🚫 5.1 km
- Afstand tot een basisschool: 🚫 5.1 km
- Afstand tot een supermarkt: 🚫 5.3 km
- Sport- en beweegmogelijkheden: 😊 Matig
- Afstand tot treinstation, metro- of tramhalte: 🚫 7.8 km
- Afstand tot bushalte: 😊 0.1 km
- Afstand tot oprit hoofdweg: 😊 0.5 km

Atlas Leefomgevingi kaart Hollandi õhukvaliteedi kohta. Allikas:  
<https://www.atlasleefomgeving.nl/kaarten>

Atlas Leefomgevingi kaardivaade: piirkondlik keskkonna- ja elukeskkonna kvaliteedi  
ülevaade Hollandis. Allikas: <https://www.atlasleefomgeving.nl/check-je-plek>

# Inglismaa

### Air pollution forecast

**Latest forecast**

**Today** : Low levels of air pollution are expected across much of the UK on Sunday, although areas of Moderate air pollution remain probable across southern, south-western and central parts of the UK as well as Northern Ireland.

**Tomorrow** : Air pollution levels across the UK remaining Low, except perhaps across far northern Scotland, including the Northern Isles of Orkney and Shetland where levels may be Moderate.

**Outlook** : Air mostly sourced from the Atlantic Ocean with unsettled weather conditions and brisk winds will ensure air pollution levels will remain Low through the coming week.

Issued at 13/07/2025 5am

Forecast provided by the Met Office

[Health advice](#)

[What is the Daily Air Quality Index?](#)

[Air pollution alerts](#)

### Latest measured air quality

Forecast Day  
Today (13th July 2025)

1 2 3 4 5 6 7 8 9 10  
Low Moderate High Very High

### Tools

Data collection & statistical tools....

- Pollution forecast
- Latest measurement summary
- Monitoring networks map
- Data tools

### Accredited Official Statistics

Air quality and emissions statistics (opens in a new tab)

### Clean Air Strategy

Clean Air Strategy 2019 (opens in a new tab)

### Information

Watch our short videos to find out how you can help.

Air pollution can affect anyone (opens in a new tab)

### Air pollution forecast by local area

Enter your location here or [click here to get my current location](#)

### Air pollution forecast

### Measurement summary

Data provided by the Environment Agency

Last updated at 13/07/2025 19:00

Click a coloured area on the map to view information for a specific region. The results are based on the maximum air quality index measured across all stations in each region.

[Download DAQI regional data](#)

**Air pollution alerts**

There are currently no air pollution alerts issued. This page will update with information about alerts when issued.

**Air pollution measurements by local area.**

[Click here to get measurement summary with more filters.](#)

### Latest measured air quality

Select a date to view the daily summary.

13/07/2025

[Previous Day](#) [Next Day](#)

1 2 3 4 5 6 7 8 9 10  
Low Moderate High Very High

### Summary from 195 monitoring sites.

Generated at 13/07/2025 19:00

Number of monitoring sites in each pollution band. Values are based on pollution level measured for the latest hour and are provisional.

Pollution Band	Number of Sites
Low	172 Sites
Moderate	20 Sites
No Data	3 Sites

[Health advice](#)

### Latest Forecast

Today: Low levels of air pollution are expected across much of the UK on Sunday, although areas of Moderate air pollution remain probable across southern, south-western and central parts of the UK as well as Northern Ireland.

Tomorrow: Air pollution levels across the UK remaining Low, except perhaps across far northern Scotland, including the Northern Isles of Orkney and Shetland where levels may be Moderate.

Outlook: Air mostly sourced from the Atlantic Ocean with unsettled weather conditions and brisk winds will ensure air pollution levels will remain Low through the coming week.

Issued at 13.7.2025, 05:30:00

Forecast Map

Click [here](#) to move to postcode search where you can choose your default location.

Forecast day: Today (13th July 2025)

1 2 3 4 5 6 7 8 9 10  
Low Moderate High Very High

Enter postcode or location to check air quality near you

london

Click a table row to select a default location near london

### 5-Day Air Quality Forecast - Nearest Stations

	Today (13th July 2025)	Monday (14th July 2025)	Tuesday (15th July 2025)	Wednesday (16th July 2025)	Thursday (17th July 2025)
<b>Westminster</b> 0.80 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>Lambeth</b> 1.15 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	4 LOW
<b>The mall</b> 1.20 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>The oval survey c.c.c.</b> 1.24 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>Horseguards parade</b> 1.26 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>Chelsea</b> 1.38 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>London</b> 1.54 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>Hyde park</b> 1.56 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW
<b>Earl's court youth hostel</b> 1.70 miles	4 MODERATE	3 LOW	3 LOW	2 LOW	3 LOW

### Default location

London  
Today 13th Jul

4  
MODERATE

Mon	Tue	Wed	Thu
14th Jul	15th Jul	16th Jul	17th Jul
3 LOW	3 LOW	2 LOW	3 LOW

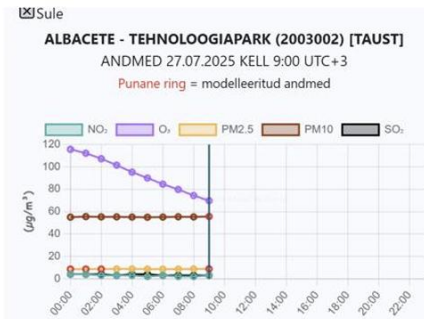
UK AIR veebilehe esilehe prognoos ja reaajas mõõdetud õhukvaliteedi kaart koos lisatööriistade ja tervisenõuannete viidetega. Allikas: <https://uk-air.defra.gov.uk/>

UK AIR veebilehe Londoni piirkonna õhukvaliteedi prognoos ja mõõtmistulemused, mis on esitatud kaardil mõõtepunktidena ning tabelina viiepäevase detailise ülevaadena.

# Hispaania



Hispaania õhukvaliteedi kaart koos mõõtejaamade näitudega. Allikas: <https://ica.miteco.es/>



PM10 tõttu

**ebasoodne õhukvaliteedi indeks.** Negatiivseid tervisemõjusid võivad kogeda kogu elanikkond, samas kui riskirühmad võivad kogeda palju tõsisemaid tagajärgi.

Sahara tolmü sissetung on Hispaania tavaline, põhjustades tahkete osakeste taseme tõusu. Selle aasta ja lähipäevil oodatavate episoodidega saate tutvuda aadressil <https://www.miteco.gob.es/calidad-y-evaluacion-ambiental/temas/atmosfera-y-calidad-del-aire/calidad-del-aire/evaluacion-datos/fuentes-naturales/prediccion-episodios-2025.html>

**Terviselased soovitusused**

**Elanikkond** Kaaluge pikaajaliste ja intensiivsete õuetegevuste vähendamist, eriti kui teil esineb kõha, õhupuudust või kurguärritust.

**Riskirühmad ja tundlikud inimesed**

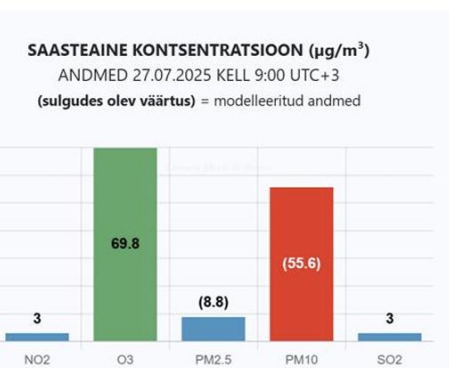
Kaaluge õuetegevuste vähendamist ja nende toomist siseruumidesse

**Terviselased soovitusused**

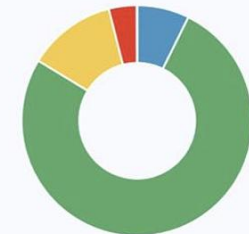
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**Riskirühmad ja tundlikud inimesed**

**Kaaluge õuetegevuste** vähendamist ja nende toomist siseruumidesse või edasilükkamist, kuni õhukvaliteet on hea või mõistlikult hea. **Järgige hoolikalt oma raviplaani.**



**ÕHU KVALITEET VIIMASE 364 PÄEVA JOOKSUL**

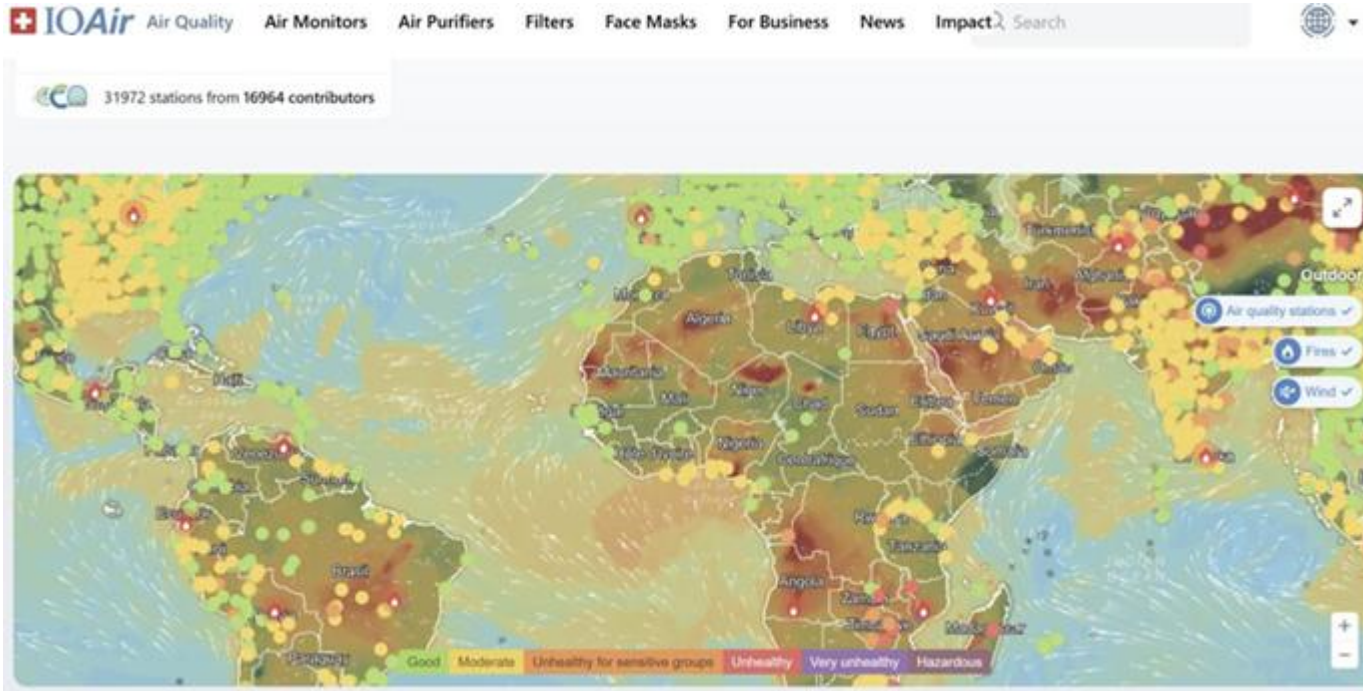


Buena Razonablemente buena Regular  
Desfavorable Muy desfavorable  
Extremadamente desfavorable

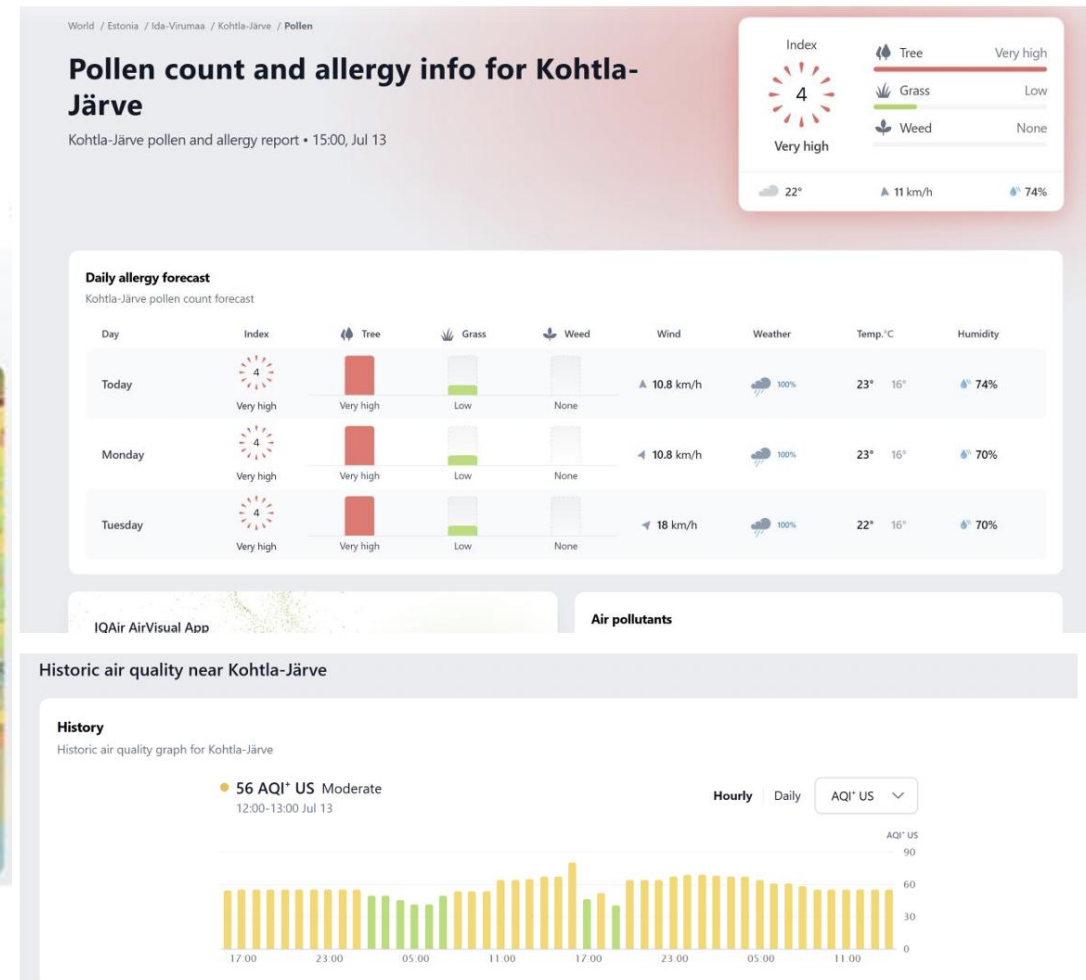


Õhukvaliteedi mõõtmistulemused Albacete Tehnoloogiakeskuse jaamas, mis näitavad PM<sub>10</sub> tõusu ning tervisosoovitusi elanikkonnale ja riskirühmadele. Allikas: <https://ica.miteco.es/>

# Šveits



IQAir globaalne õhukvaliteedi kaart, mis kuvab reaajas õhuseireandmeid, tuule liikumist ja tulekahjude asukohti üle maailma



IQAir platvormi vaade Kohtla-Järve õhukvaliteedi kohta. Allikas: <https://www.iqair.com/estonia/ida-virumaa/kohtla-jarve>

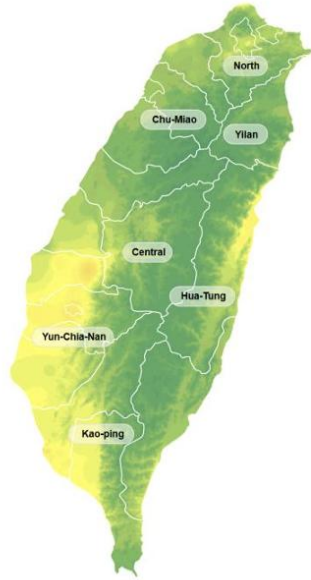
# Taiwan

## Taiwan Air Quality Index

AQI
  PM<sub>2.5</sub>
 PM<sub>10</sub>
 O<sub>3</sub>
 O<sub>3</sub> 8h
  NO<sub>2</sub>

Switch Display :  Concentration Chart  Point Map

AQI



### Weather Information

Weather System
  Weather Chart

A diagram showing a high-pressure system over the Pacific Ocean with arrows indicating a 'North wind' blowing across the island of Taiwan.

### Air Quality Forecast

7/26(Sat)

A small map of Taiwan showing the forecasted AQI for Saturday, July 26th. The map is mostly yellow, indicating a forecasted AQI between 50 and 100.

Taiwani õhukvaliteedi indeksi kaart koos ilmaolude ja prognoosiga. Allikas: <https://airtw.moenv.gov.tw/ENG/>.

Joonis õhusaaste tekkimise allikad. Allikas: <https://airtw.moenv.gov.tw/ENG/Information/Standard/AirQualityIndicator.aspx>

SiteName:



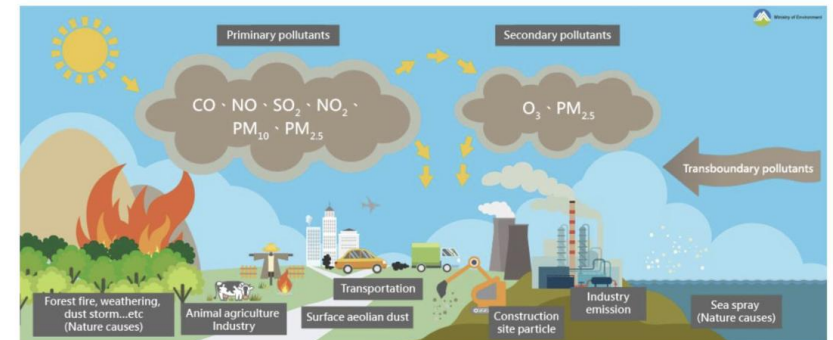
07/25  
 16H 15H 14H 13H 12H 11H 10H 09H 08H 07H 06H 05H 04H 03H 02H 01H 00H 23H 22H 21H 20H 19H 18H 17H

Joonis 100. Guanyini jaama veebikaamera vaade tunnipõhise jälgimise võimalusega. Allikas: <https://airtw.moenv.gov.tw/ENG/>

### Introduction to air pollutants

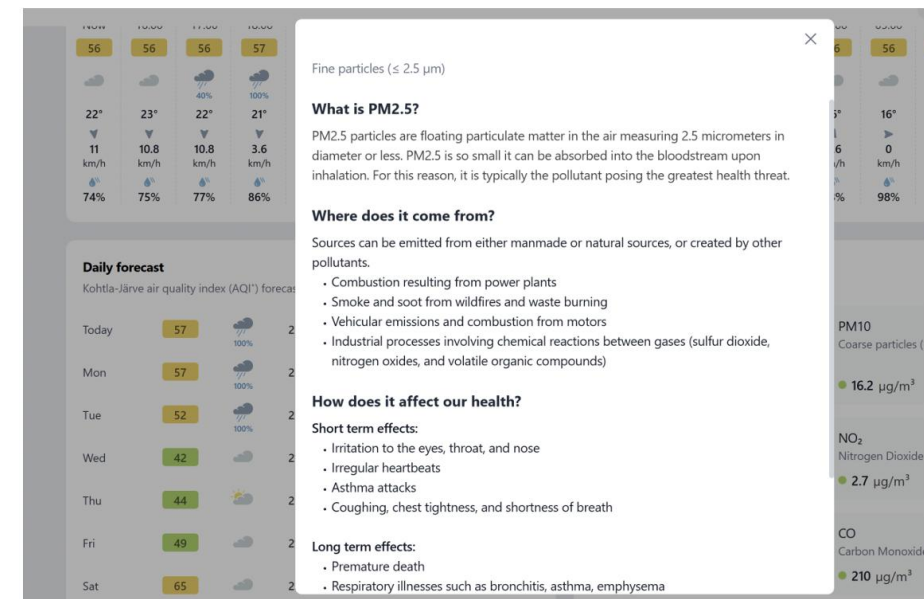
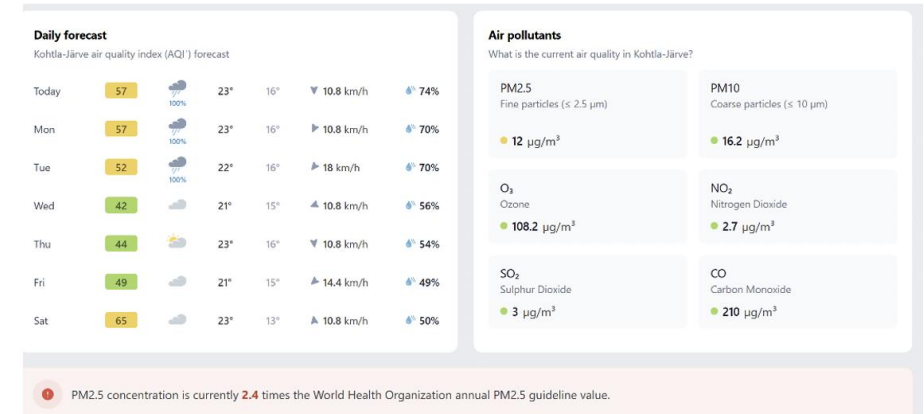
PM<sub>2.5</sub>
 PM<sub>10</sub>
 SO<sub>2</sub>
 NO<sub>x</sub>
 CO
  O<sub>3</sub>

● PM<sub>2.5</sub>  
 Construction site, transboundary, industry, open burning or Traffic caused pollution(surface aeolian dust or motor vehicle pollution)



# Soovitused

1. Kasutajasõbralik visualiseerimine.
2. Tervisesoovituste lisamine ja selgitused.
  - Videod
  - Infograafika ja informatiivsete materjalide väljaprintimise võimalus – lirimaa näited.
3. Personaliseerimine – kasutajale kuvatakse tema valitud asukohaga seotud õhukvaliteedi info ja hoiatused
4. Hollandi näiteks võiks olla võimalus saada asukohapõhine tervisemõju ja tervisesoovitused.
5. Saasteallikate info – näiteks tuua välja koduse kütmise mõju õhukvaliteedile.
6. Tuleviku prognoosimine.





TARTU ÜLIKOOL

**Aitäh!**



TARTU ÜLIKOOL

# ÕHUSAASTE HOIATUSSÜTEEMIDE VEEBILEHTEDE ÜLEVAADE

**Jaana Toomik**

Keskkonnatervishoiu nooremteadur

18.03.2026