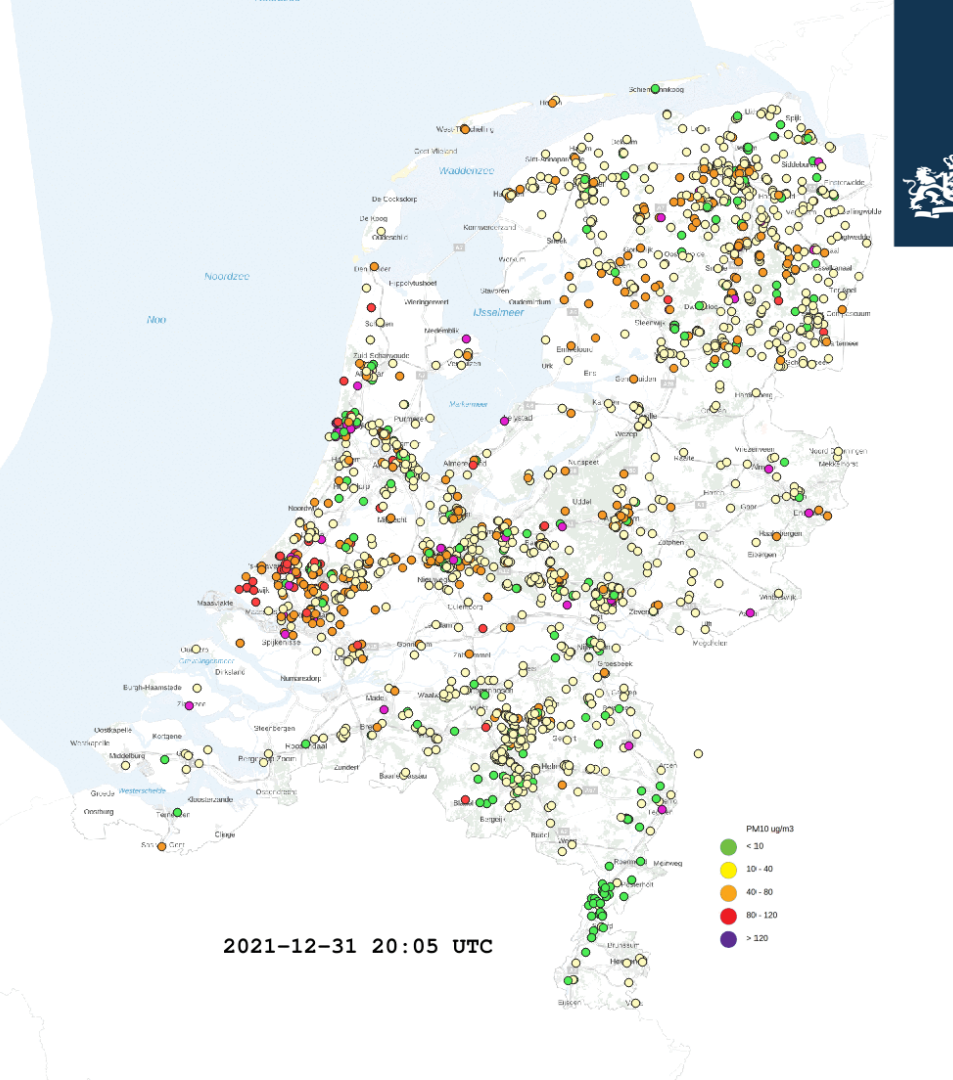




Rijksinstituut voor Volksgezondheid  
en Milieu  
*Ministerie van Volksgezondheid,  
Welzijn en Sport*

# Combining citizen science and official data – a win-win situation

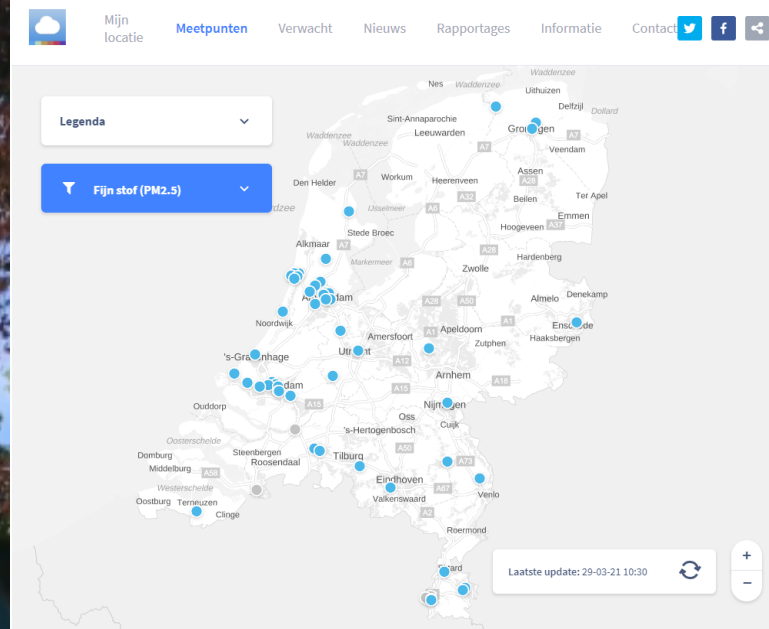
Hester Volten





# Official air quality data

Air pollution is the single largest environmental health risk





# Measure Together

To reach SDGs it is essential to raise awareness.

What better way to raise awareness than by citizens measuring.

## Citizen Science Support

- Information
- News
- Meeting place
- Data platform
- Data quality

Rijksinstituut voor Volksgezondheid en Milieu  
Ministerie van Volksgezondheid, Welzijn en Sport

Samen Meten Nieuws Zelf meten Sensoren Data Projecten Scholen Achtergrond Zoeken

Home > International

### International

Measuring together

Welcome to the knowledge portal 'Samen meten' / 'Measuring together'.

Samen Meten is Dutch for Measure Together. The aim of the Measure Together program is to support citizen science for environmental parameters such as air quality, water quality, and noise. Measure Together encourages people to do these measurements together, to build communities, connect with different stakeholders, connect with us, to

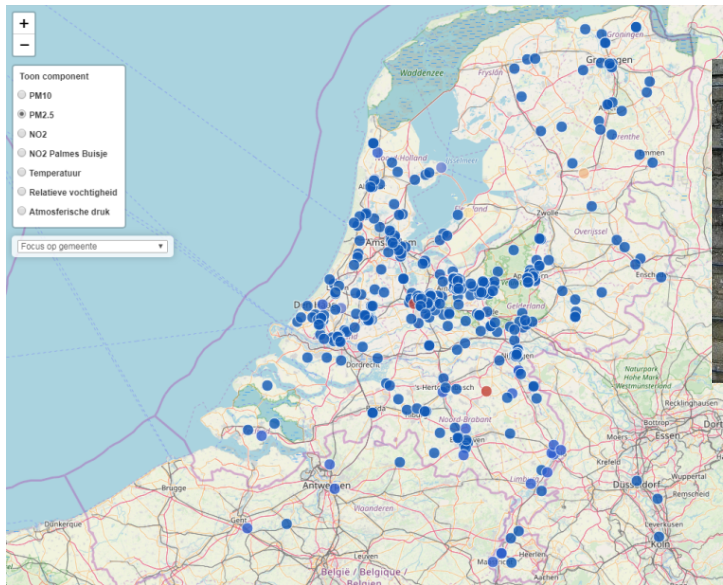
### YouTube presentations

→ 2021 Citizen science with common PM2.5 sensors Nova SDS011 and Sensirion SPS30 by Joost Wesseling



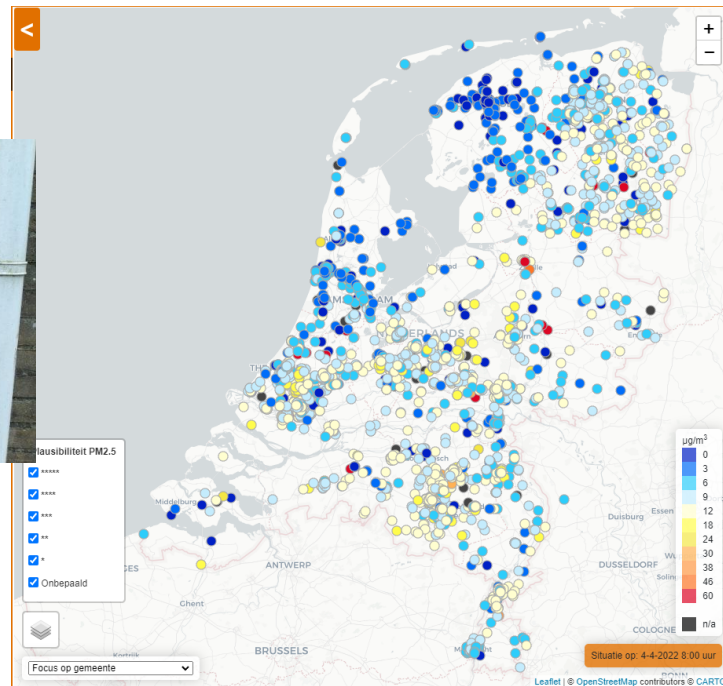
# Data portal – growing fast

Jan 2020~1000 PM sensor kits



Data quality  
also increases fast

Now~2500 PM sensor kits

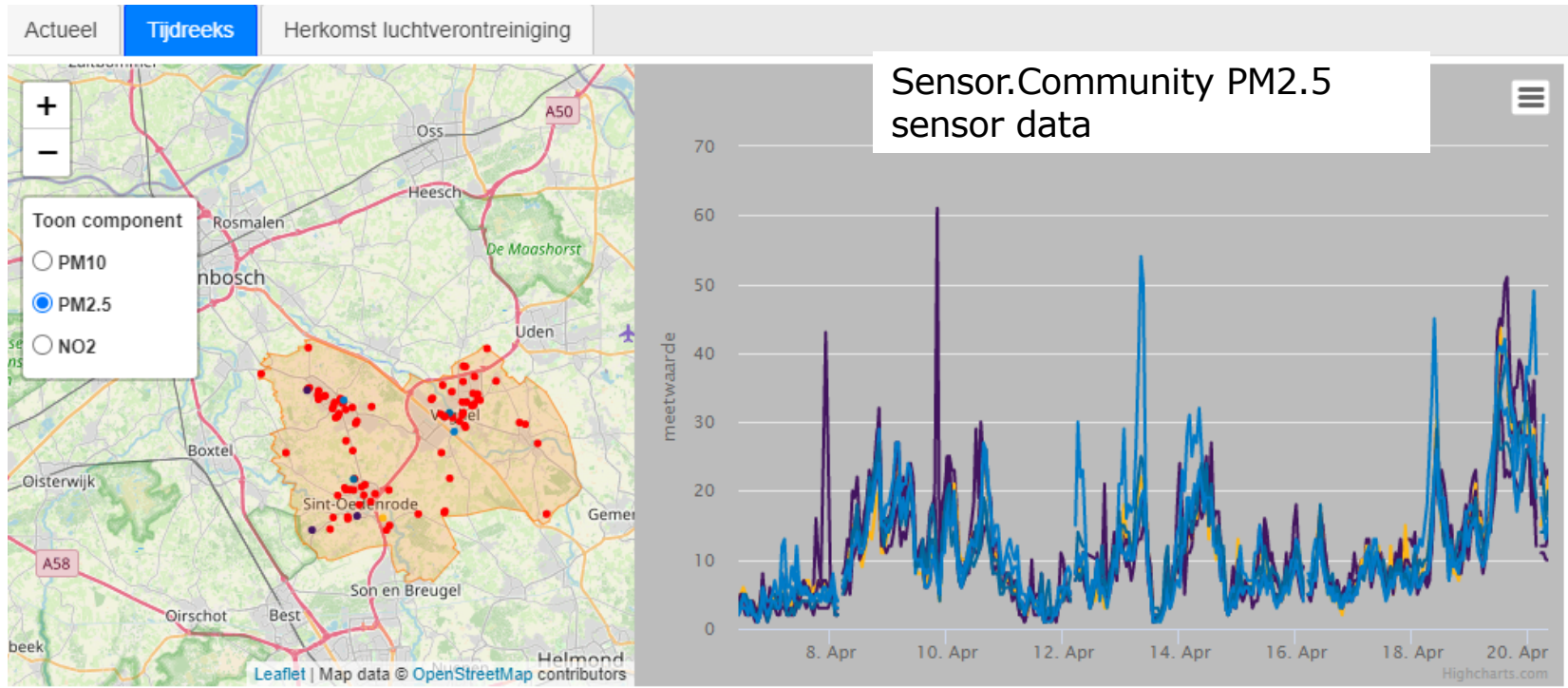


<https://sensors.rivm.nl/dataportaal/>



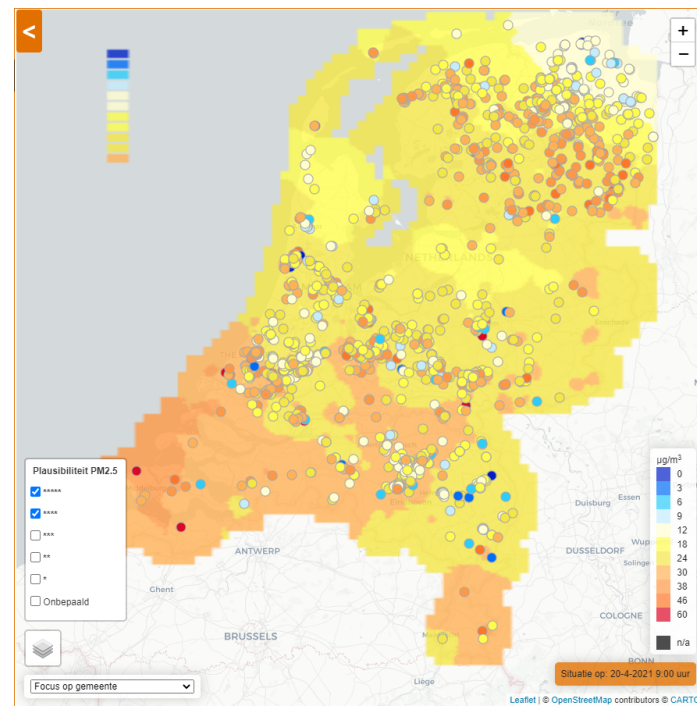
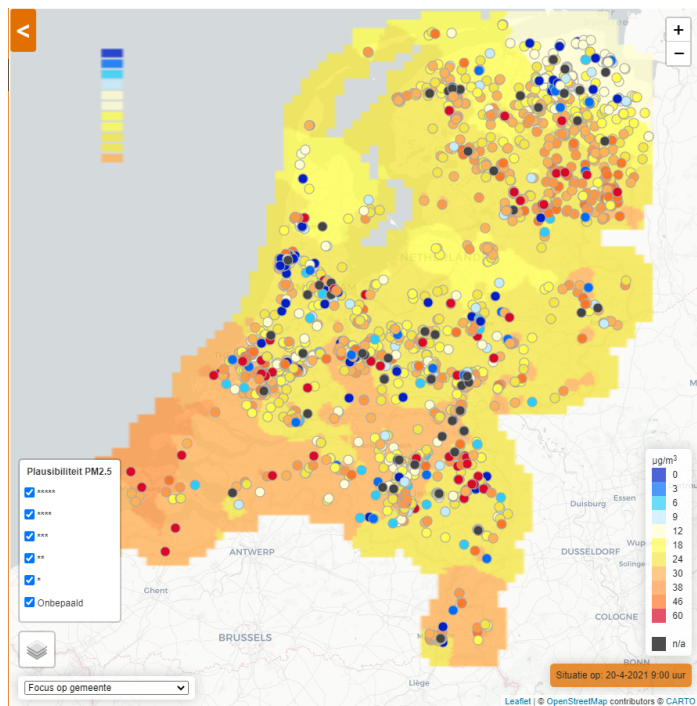


# Local communities pop up





# Data quality assessment



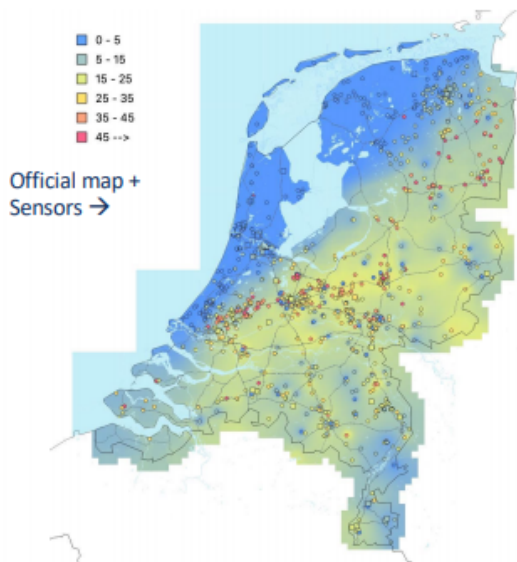
<https://sensors.rivm.nl/dataportaal/>



# More detailed modeling

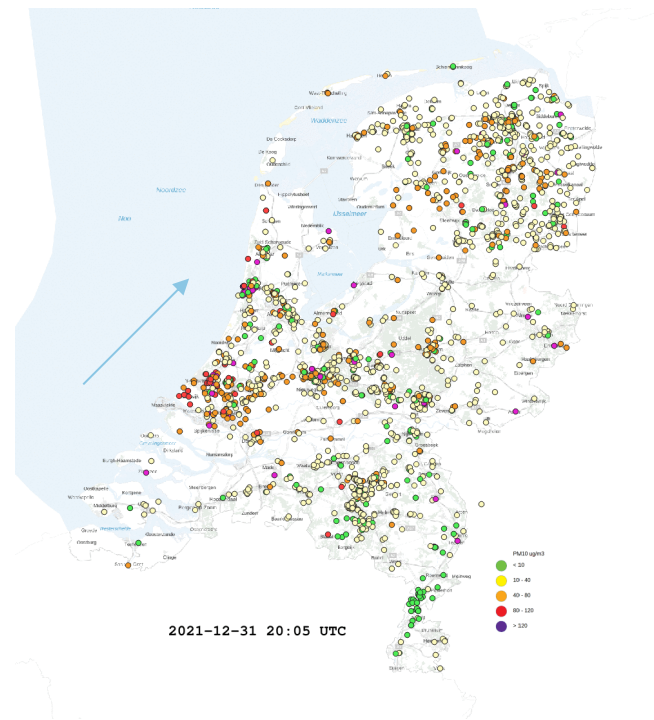


PM2.5 concentration map



Data fusion of PM2.5 concentration map and sensor data

Official map +  
Sensors →

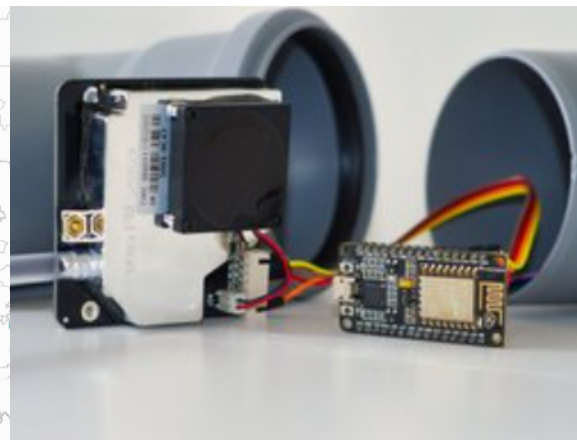
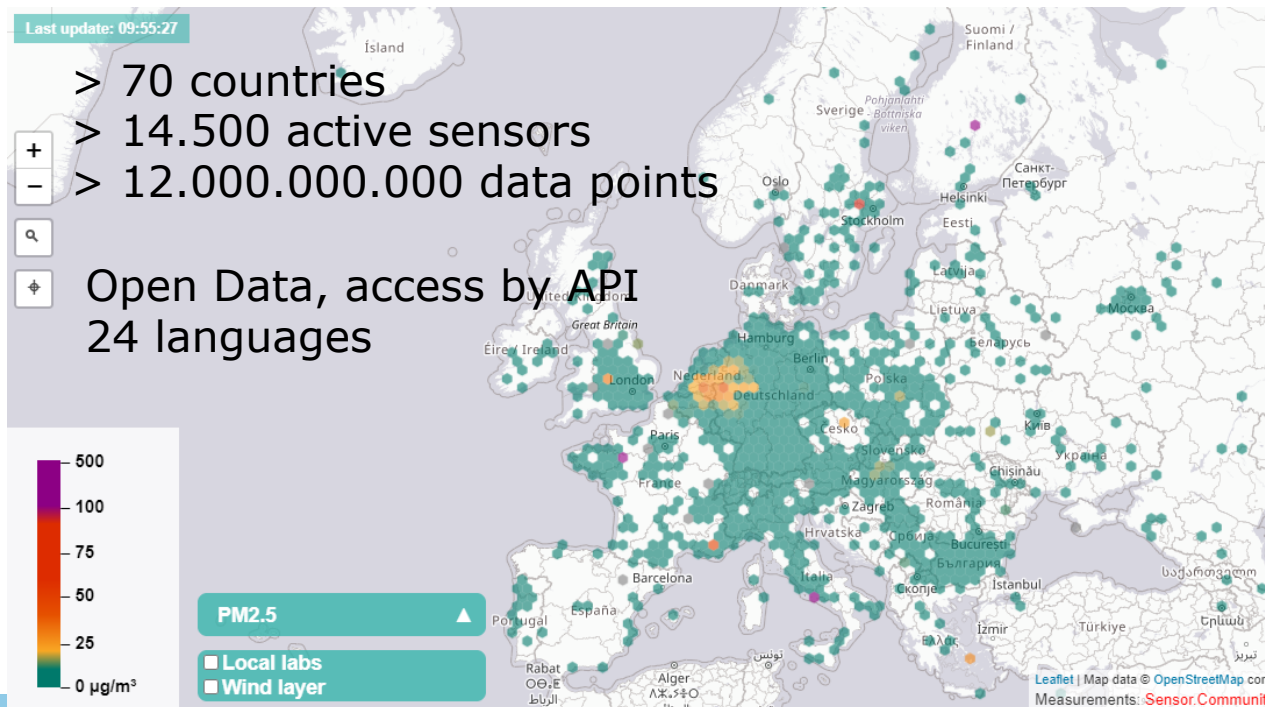


Useful for (local) policy or during calamities



# Citizen science all over EU

## Sensor.Community



**Sensor Kit #1**

**NodeMCU**

**SDS011**

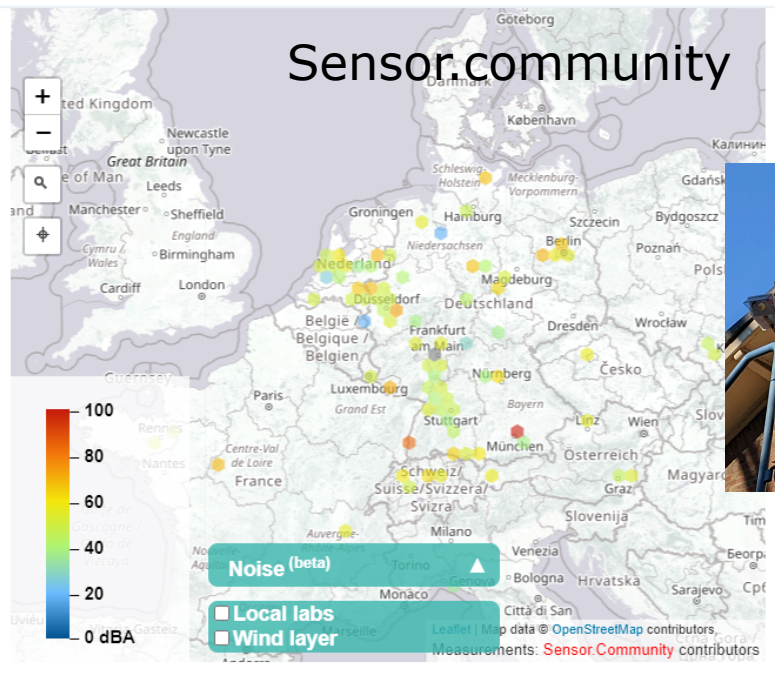
**~ 50 €**



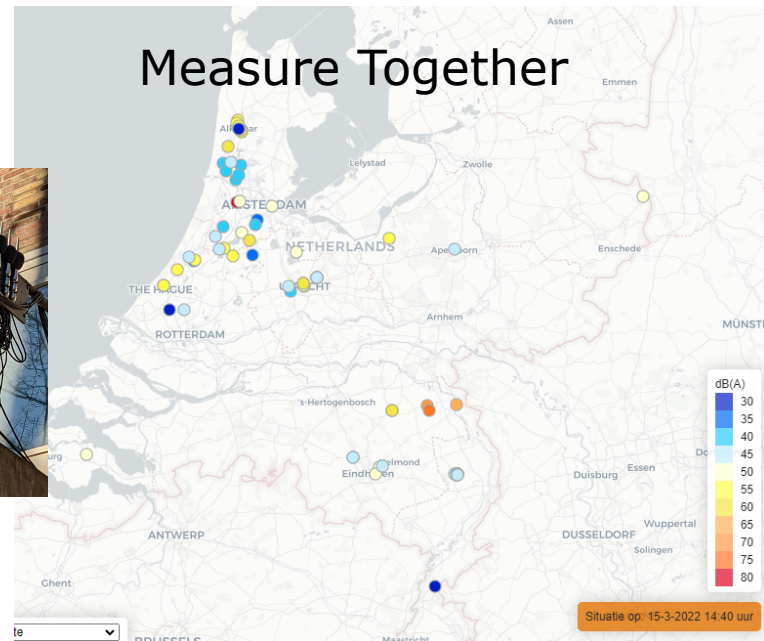


# Noise levels

## Sensor community



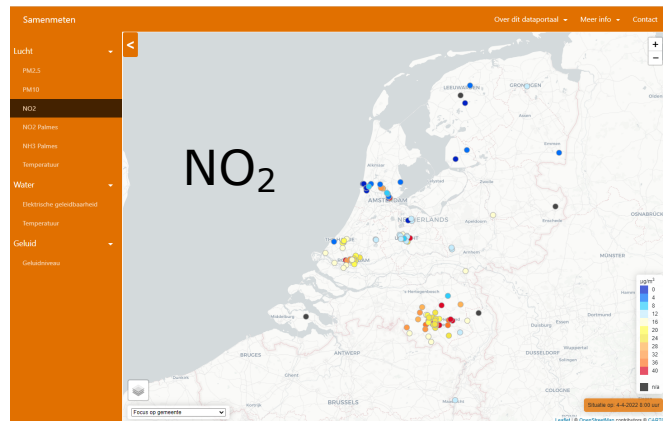
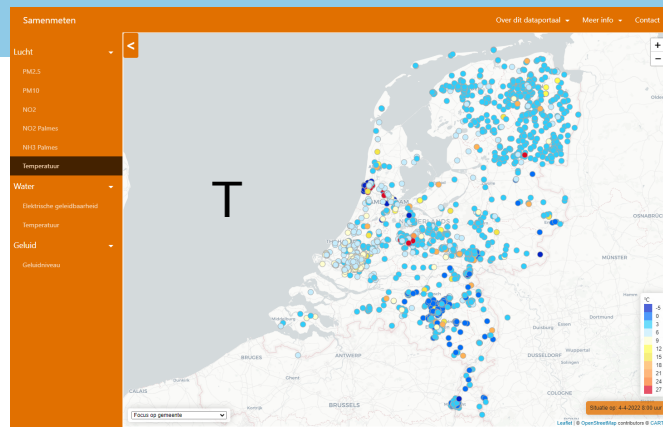
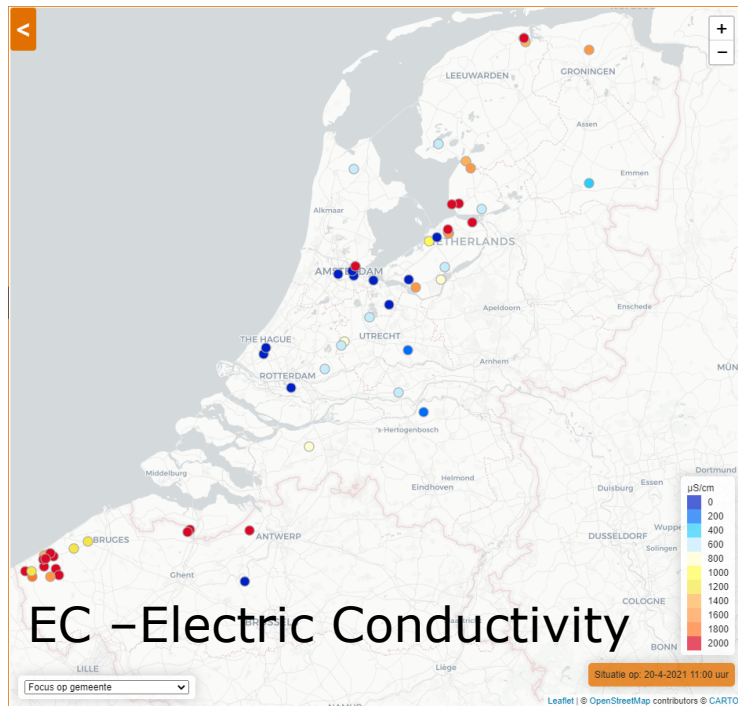
## Measure Together



Noise levels –  $L_{eq}$  in dB(A)



# Water quality and more



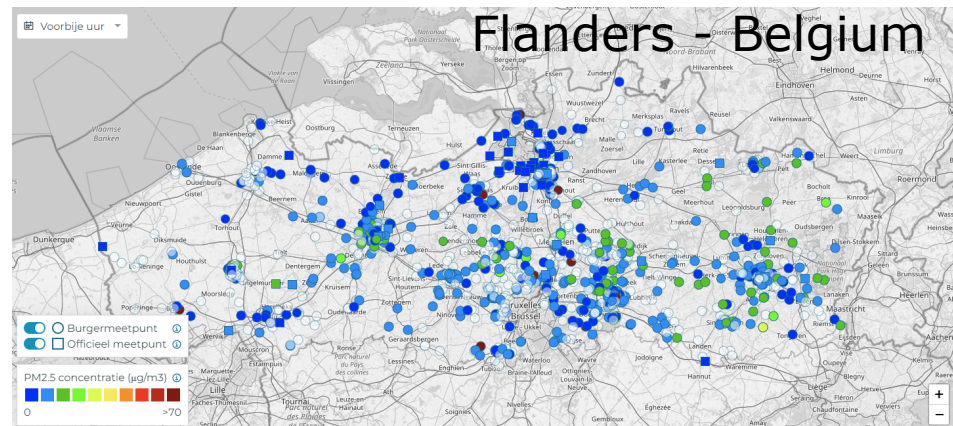


# Go for the win-win

Combining citizen science and official data,  
your country can do it too!



[www.samenmeten.nl/international](http://www.samenmeten.nl/international)



[samenvoorzuiverelucht.eu/dataportaal/](http://samenvoorzuiverelucht.eu/dataportaal/)