



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

Wanted!



Learning how to
measure Air Quality
in the Netherlands

Hester Volten



CleanAir@School

What we did

- Pilot at 4 schools – with and without support
- Develop (and test) lessons
- Survey
- Shoot video footage
- Make lessons available online



<https://www.samenmetenaanluchtkwaliteit.nl/cleanairschool>

NO₂ tubes at schools in May-June 2019



10 locations
20 tubes
per school

2 Successful

- Het Festival – Zwolle – with support
- OSB Oosterhuizen - Apeldoorn– without support

2 Not succesful

- Passe-partout – lost most tubes
- Hertog van Gelreschool – didn't find the time



Tubes in Zwolle – Het Festival



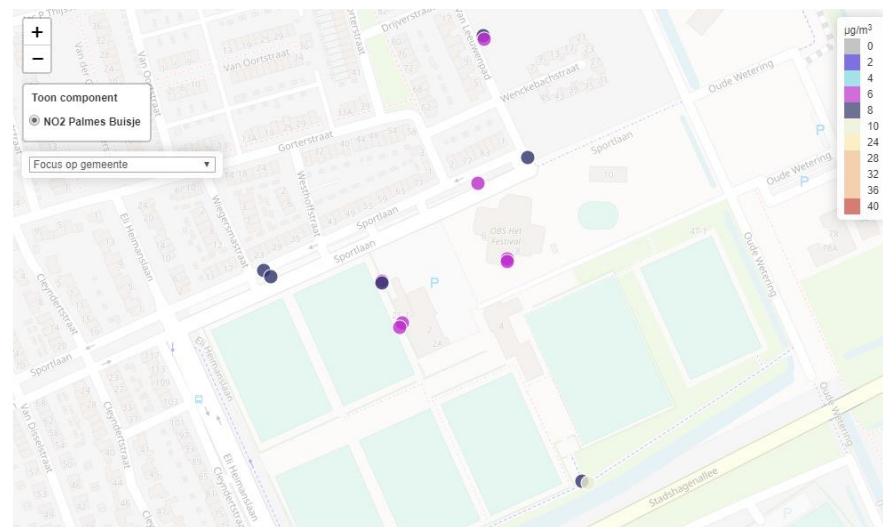
Tubes in Apeldoorn – OBS Oosterhuizen





Results on the map

Het Festival

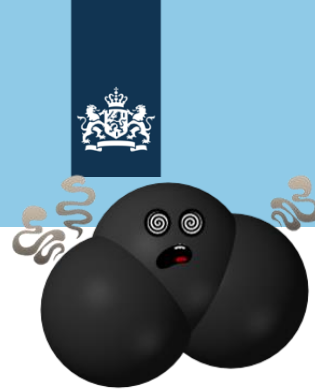


<https://samenmeten.rivm.nl/no2school/>

Average $8 \mu\text{g}/\text{m}^3$

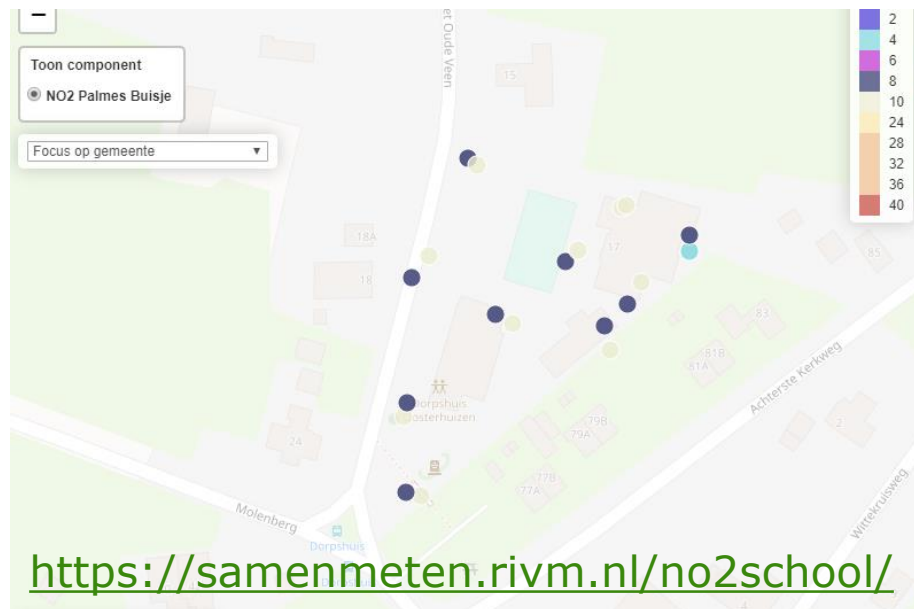
No large differences, perhaps influence of the roads

Pretty clean air



Results on the map

OBS Oosterhuizen



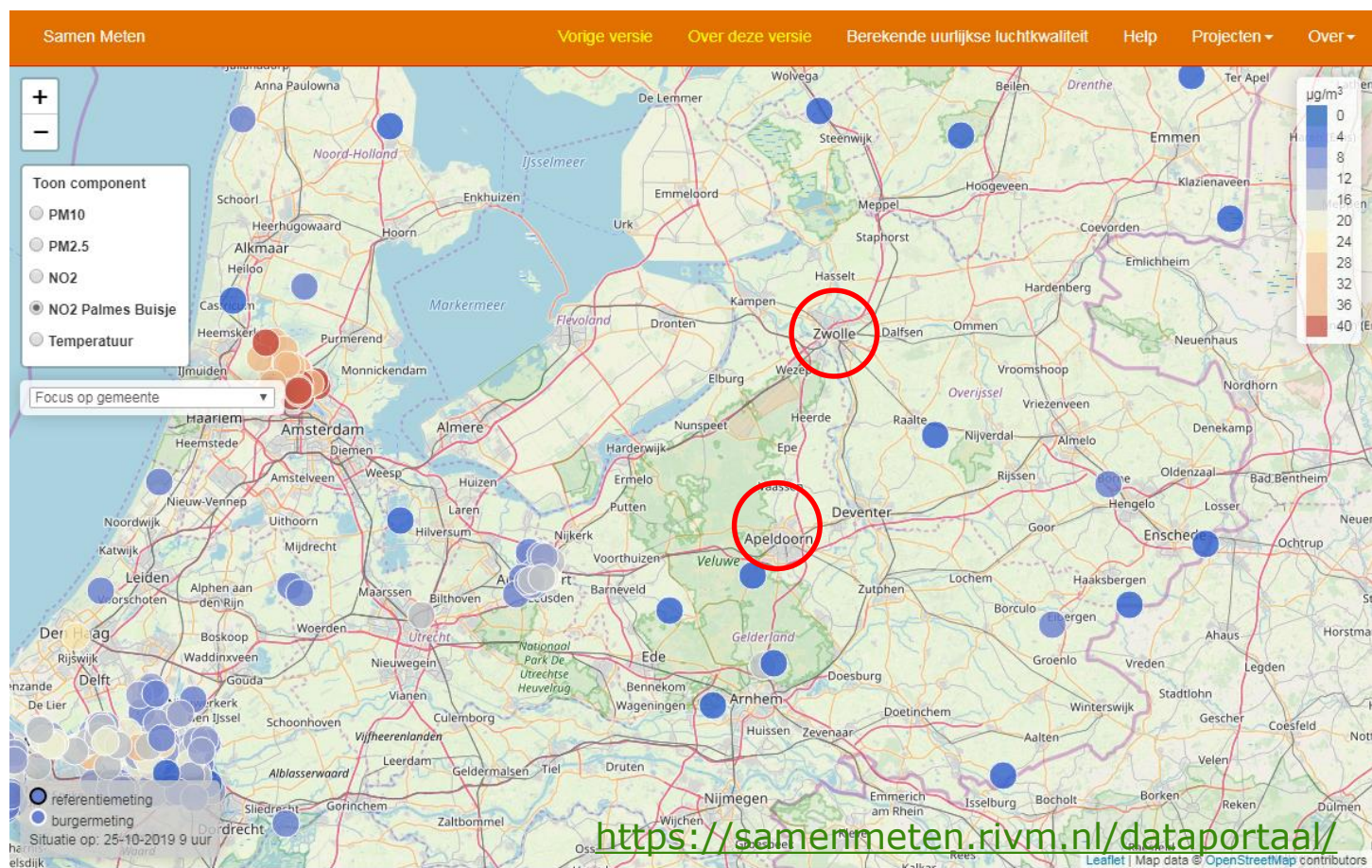
Average 9 μm^3

No large differences

Pretty clean air

<https://samenmeten.rivm.nl/no2school/>

Measurements fit in nicely with other tubes



What did we learn from the surveys

- Students already know a lot about what to do to avoid air pollution



- Most concern about traffic, but also biomass burning (factory)
- In Zwolle most students already came by bike
- In Apeldoorn less, but students live further from the school
- 50% of the students talked about the tubes to others – mostly friends

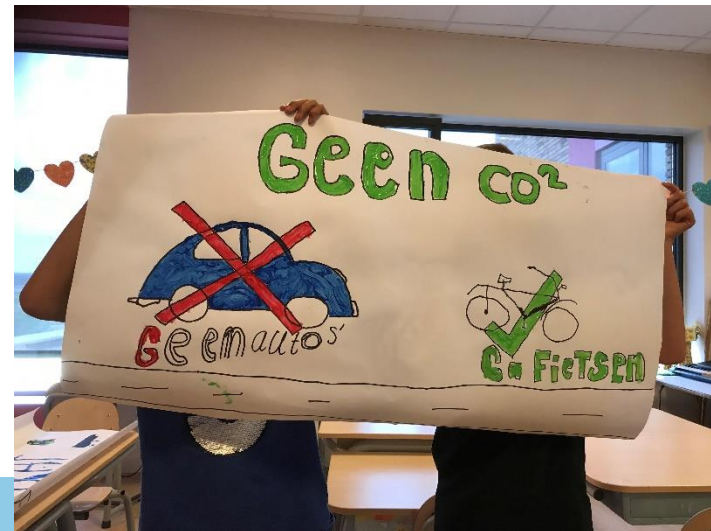
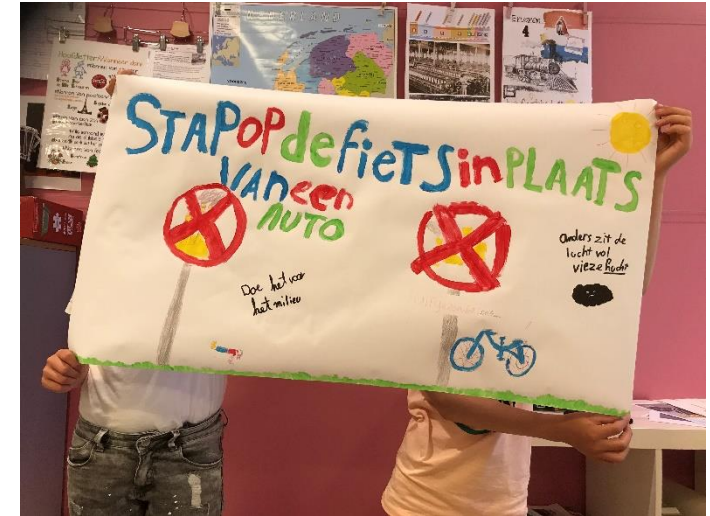
Trees don't clean the air

- Trees are good for the climate (they take up CO₂)
- Trees make people happy



But... Trees don't solve air pollution.
They suffer too!

Extra lesson -Clean Air Day



- <https://youtu.be/uYCIXsjjXCA>

What we learned further

- Active support of the schools helps
- May-June is no good, the analysis not ready in same school year
- Measurements are of good quality
- Ten locations-20 tubes – is too much. We can do with less.



How to continue

- Twinning with schools abroad?
- Make a info video about the lesson
- Make a video about CleanAir@Schools
- Offer the method to local governments – for local schools
- Team up with other projects – Green Schools

