

No2 Pollution Groen Elsene – Ecolo Ixelles

Studies on the effects of air pollution on our health, and of nitrogen dioxide (NO₂) in particular, indicate that there is no 'safe level' of air pollution. For instance, the Health Council of the Netherlands stated in an advisory report to the government that it is probably impossible to determine limit values under which exposure to nitrogen dioxide would not affect human health.¹

So which parameters can we use to make a distinction between relatively healthy and unhealthy air?

Today, the European annual NO₂ limit value has been the same as the current guideline value of the World Health Organisation (WHO): **40 µg/m³**. Still, the WHO has already since 2005 been suggesting that it would like to set a stricter norm.² After all, the risk of asthma, for instance, increases by 15% when the average exposure to NO₂ would rise annually by 10 µg/m³.³

Groen and Ecolo therefore want to lower the annual NO₂ limit value to **20 µg/m³**.

Measuring air quality in Ixelles

Groen and Ecolo have recently measured the air quality at various places in Ixelles. We deliberately chose to conduct measurements at a diverse set of locations, including points where we could expect a low air quality because of busy traffic, as well as locations further removed from busy roads, where the air quality should be better, so as to compare different places.

Members of Groen Elsene and Ecolo Ixelles approached various individuals and organisations to ask if a diffusion tube could be installed at their location to measure the air quality. The tubes were installed for a period of 1 month, between February 17th and March 17th, 2018. Afterwards, the tubes were collected again and analysed by Gradko International.



¹ Health Council of the Netherlands. Health benefits through cleaner air. January 23rd, 2018. No. 2018/01. <https://www.gezondheidsraad.nl/en/task-and-procedure/areas-of-activity/gezonde-leefomgeving/health-benefits-through-cleaner-air>

² WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide. Global update 2005. Summary of risk assessment. World Health Organization. P. 16-17. http://apps.who.int/iris/bitstream/10665/69477/1/WHO_SDE_PHE_OEH_06.02_eng.pdf

³ Risks to human health from NO₂ Exposure. A brief review of recent studies. Study conducted by the Swiss Tropical and Public Health Institute commissioned by Greenpeace. <https://www.greenpeace.org.uk/wp-content/uploads/2017/09/Risks-to-Human-Health-from-NO2-Exposure-Full-Study-English.pdf>

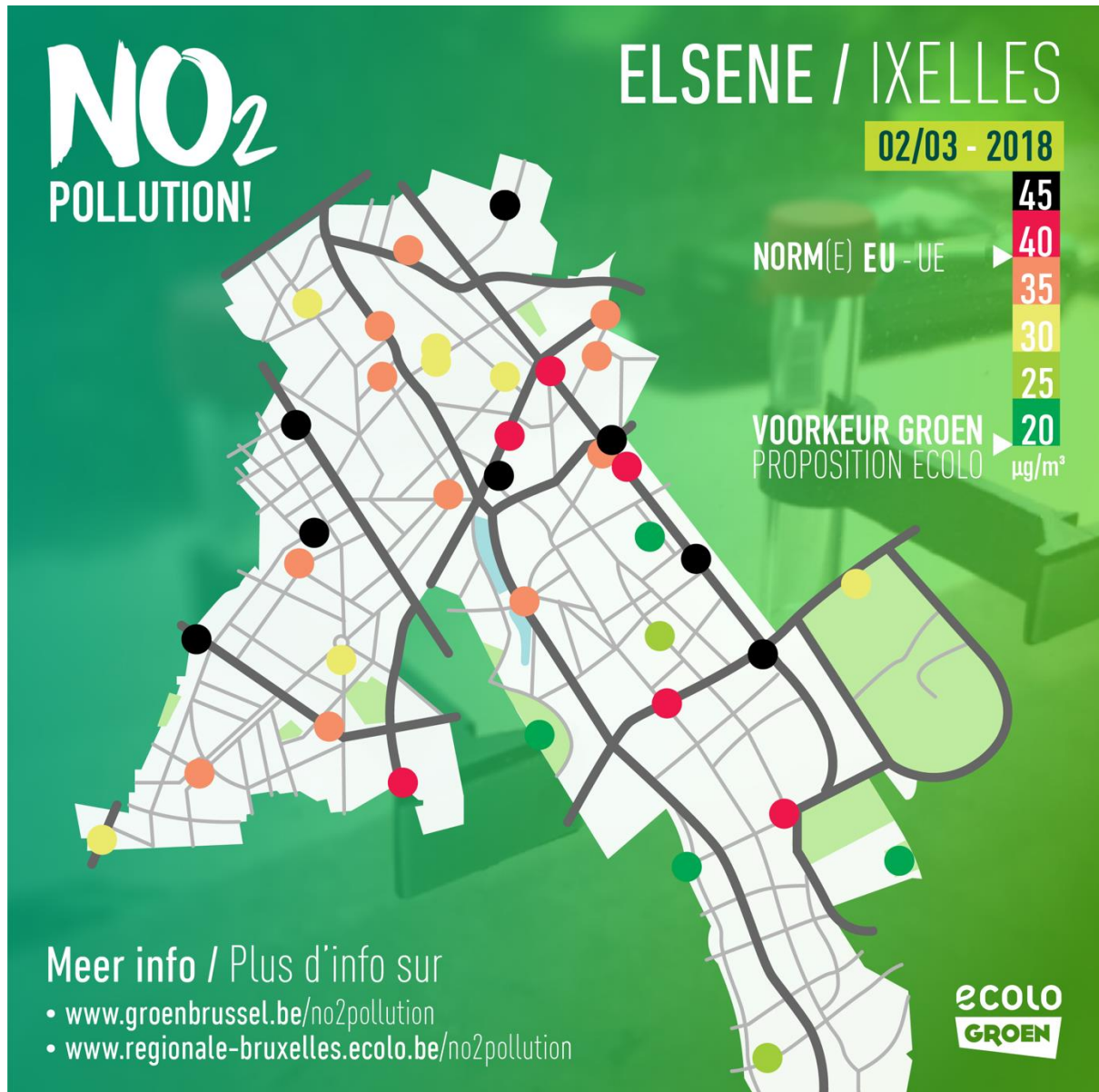


	Location	Municipality	Zone	µg/m3
1	Avenue de la Couronne 177 Ixelles	1050	SE	51,2
2	Avenue Louise 115 1050 Ixelles	1050	SE	53,6
3	Place Eugène Flagey 32 1050 Ixelles	1050	SE	48,9
4	Place du Luxembourg 7 1050 Ixelles	1050	SE	48,9
5	Avenue de la Couronne 106 1050 Ixelles	1050	SE	48,0
6	Boulevard General Jacques 253 1050 Ixelles	1050	SE	47,0
7	Chaussée de Waterloo 367 1050 Ixelles	1050	SE	45,7
8	Rue du Bailli 37 1050 Ixelles	1050	SE	45,0
9	Boulevard General Jacques 124 1050 Ixelles	1050	SE	44,7
10	Avenue de la Couronne 12 1050 Ixelles	1050	SE	44,2
11	Chaussée de Boondael 473 1050 Ixelles	1050	SE	42,7
12	Chaussée de Waterloo 662 1050 Ixelles	1050	SE	41,9
13	Rue Malibran 40 1050 Ixelles	1050	SE	41,4
14	Avenue de la Couronne 81, 1050 Ixelles	1050	SE	40,5
15	Chaussée de Waterloo 566 1050 Ixelles	1050	SE	39,8
16	Avenue de la Couronne 71 1050 Ixelles	1050	SE	38,1
17	Rue Mercelis 19 1050 Ixelles	1050	SE	38,1
18	Chaussée d'Ixelles 136 1050 Ixelles	1050	SE	38,0
19	Rue Lesbroussart 39 1050 Ixelles	1050	SE	37,6
20	Place du Châtelain 10 1050 Ixelles	1050	SE	37,1

21	Rue Gray 154 1050 Ixelles	1050	SE	36,8
22	Avenue de l'Hippodrome 2 1050 Ixelles	1050	SE	36,8
23	Rue de Dublin 19 1050 Ixelles	1050	SE	35,9
24	Rue du Sceptre 78 1050 Ixelles	1050	SE	35,6
25	Place Georges Brugmann 1050 Ixelles	1050	SE	35,4
26	Boulevard General Jacques 271 1050 Ixelles	1050	SE	34,9
27	Rue Keyenveld 36 1050 Ixelles	1050	SE	34,4
28	Avenue Brugmann 233 1050 Ixelles	1050	SE	34,2
29	Rue Sans Souci 131 1050 Ixelles	1050	SE	33,0
30	Rue Cans 14 1050 Ixelles	1050	SE	32,1
31	Rue du Viaduc 34 1050 Ixelles	1050	SE	32,0
32	Place Albert Leemans 18 1050 Ixelles	1050	SE	31,3
33	Avenue Emile De Beco 57 1050 Ixelles	1050	SE	29,2
34	Place Marie-Jose 5 1050 Ixelles	1050	SE	26,9
35	Rue Volta 18 1050 Ixelles	1050	SE	24,9
36	La Cambre Abbey 50.818138, 4.372672 1050 Ixelles	1050	SE	24,0
37	Avenue Paul Heger 42 1050 Ixelles	1050	SE	23,4
38	Albert II playground 1050 Ixelles	1050	SE	21,3

At no fewer than *fourteen* locations, the values measured exceeded the EU norm. Unsurprisingly, there is a clear link with car traffic: On every location where the norm was exceeded, the number of cars is strikingly high. At the Avenue de la Couronne, the Boulevard Général Jacques, the Avenue Louise and the Chaussée de Waterloo, the air quality measured was at nearly all locations measured significantly bad. However, these are not only roads with busy car traffic, but also places where many inhabitants of Ixelles walk or bike on a daily basis. There are also several bus stops at these roads where hundreds of people take the bus every day. Results point at unhealthy pollution at Place Flagey, Place du Luxembourg and the Cimetière d'Ixelles as well, all public places in our municipality where many people gather.

The inner garden of the Albert II playground, the ULB campus, the stadium of the Albert Demuyter Sports Centre and the La Cambre Abbey are spots with slightly better air quality. It is no coincidence that these are also greener places in our municipality.



Proposals

Groen Elsene and Ecolo Ixelles want to see a real air quality policy in Ixelles during the next legislative term. This important health problem should no longer be ignored! We therefore propose the following actions in our municipality:

1. Systematically measure the air quality in our municipality, especially around the most vulnerable places (child care centres, schools, nursing homes, hospitals, ...).
2. Make those results available in real time to the public.
3. Replace all diesel vehicles of the municipal fleet, including utility vehicles and lorries, by 2024.
4. Strongly encourage alternatives to fossil fuel-based cars and make these alternatives more accessible:
 - a. 100 bike boxes by 2024 or similar spots in shared bike parking places, where also other types of bikes could be parked (cargo bikes, e-bikes...)

- b. Fiscally encourage bike commuting
 - c. Install bike racks and secured collective parking places for e-bikes
 - d. Introduce a general zone 30 for all local roads in Ixelles
 - e. Significantly increase the number of segregated or elevated bikeways
 - f. Encourage car sharing (more spots for car-sharing vehicles, premium for people disposing of their personal car etc.)
 - g. Install charging stations for electric vehicles, starting with stations at all municipal buildings
 - h. Encourage neighbourhood inhabitants, firms and shopkeepers to use alternatives to the car, for instance by organising [bike tests](#). Bottom-up initiatives like these should be facilitated and expanded in our municipality.
5. Introduce an air quality test for public tenders, public works, permits etc.
 6. Launch specific measures for the most vulnerable places in our municipality (especially where the most vulnerable people gather, such as childcare centres, schools, nursing homes, large public places). These could include:
 - a. creating Ultra-Low Emission Zones and aiming for an NO₂ concentration below 20µg/m³
 - b. applying the Road Diet principle when reconstructing municipal roads to give back space to bikers and pedestrians
 - c. introducing school streets wherever possible, in dialogue with the school community
 - d. lowering the speed limit for road traffic to 30 km/h or even 20 km/h to improve road traffic safety and introducing low traffic streets, especially in the area of schools and child care centres
 - e. designing a mobility plan for school children and adapt road infrastructure to improve the air quality around the schools.
 7. Conduct an audit of the municipal fleet and buildings (administrative facilities, schools, sports facilities) and their heating systems, which are also a source of air pollution.
 8. Sensitise citizens on the contribution of firewood heating to air pollution and on the proper use of wood stoves.
 9. Make public spaces greener:
 - a. Green facades and greenery should be encouraged: Where sidewalks are wide enough, no permit should be needed, only a duty of notification. Inhabitants should receive premiums to purchase green facade plants or front garden plants.
 - b. The municipality should set the example in its own buildings and there should be a maximum attention to more greenery during the (re-)construction of public spaces.
 - c. New construction projects should be actively encouraged to foresee more greenery.
 10. Smart mobility should be developed and encouraged for businesses.
 11. Design circulation plans that take air quality into account and reduce traffic in small residential streets and escape routes. These should be part of a global traffic plan that does not simply deviate traffic density to the big axes.

In addition to these proposals, there are various other measures to be taken at the regional and national level: These include green car taxation, Low Emission Zones, a general zone 30 in the whole region, measures during occasional pollution peaks, an accelerated diesel ban and others.

Note prepared by Groen Elsene, in collaboration with Ecolo Ixelles and with the scientific support of Gradko international.

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