

# Air pollution levels crank up in March 2022 across European cities, reveals Airly insights



All of the 20 most polluted cities exceeded the new WHO (NO<sub>2</sub>) standard. UK city Newcastle features top of the list for highest NO<sub>2</sub> levels.

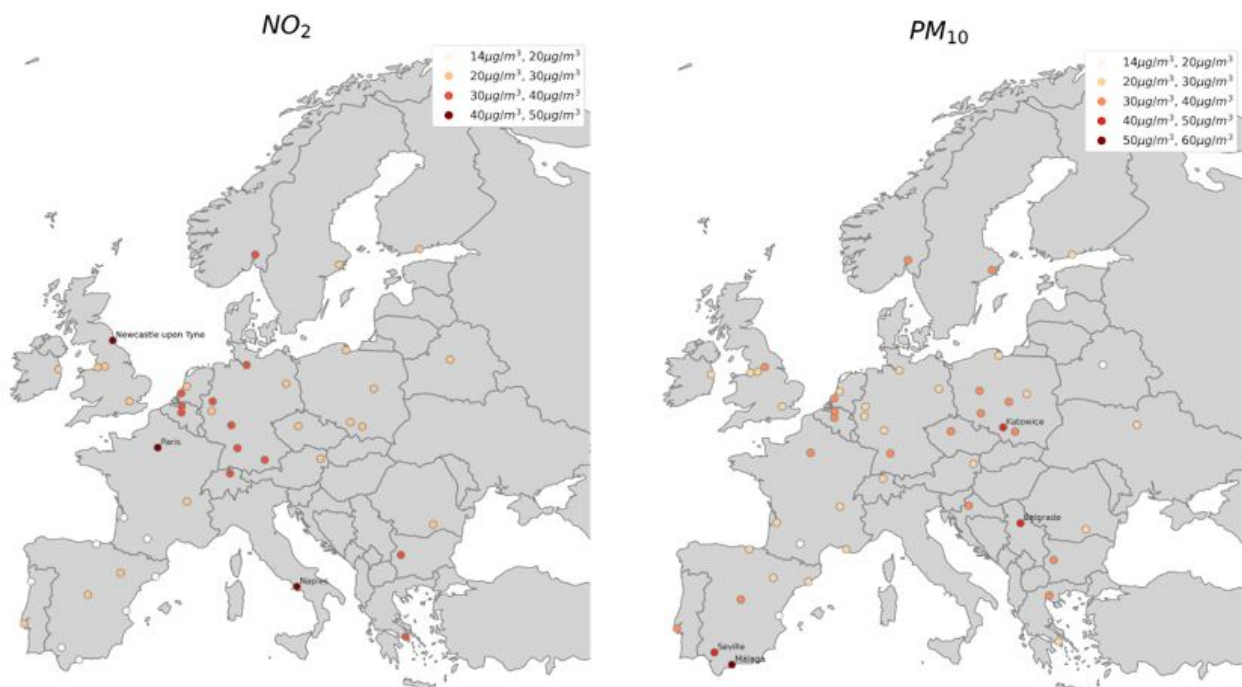
NEWS RELEASE BY AIRLY

## London, UK | April 14, 2022 07:13 AM Eastern Daylight Time

Air pollution levels recorded across major European cities in March 2022 made for grim reading. Scientists at cleantech Airly reported on NO<sub>2</sub> (nitrogen dioxide) and PM<sub>10</sub> (particulate matter) elements of air pollution across European cities (full tables further below).

The highest concentration of NO<sub>2</sub> was recorded in Newcastle upon Tyne, a city in the north of England. And the highest concentrations of PM<sub>10</sub> occurred in Spain (Malaga and Seville).

The rise in air pollution was significantly influenced by a Sahara desert dust storm that traveled across Europe. The dust and other factors such as high pressure and lack of wind, meant that air pollution in southern and western Europe was slightly higher than in central Europe. Notably, the air in Portugal or Belgium was worse than the air in Poland or Romania.



Airly findings: air pollution hot spots in Europe in March 2022

**The new WHO standards are often exceeded**

In September 2021, the World Health Organisation (WHO) announced stricter standards on NO<sub>2</sub> and PM<sub>10</sub> levels. The new 24-hour PM<sub>10</sub> norms were changed from 50µg / m<sup>3</sup> to 45µg / m<sup>3</sup> and NO<sub>2</sub> levels were confirmed as 25µg / m<sup>3</sup>, previously as advisory level. There were several cities falling short of the new levels but two Spanish cities at the top of the list (Malaga and Seville) were above the daily safe levels of PM<sub>10</sub> (45 µg / m<sup>3</sup>). Meanwhile, every city exceeded the safe daily average of NO<sub>2</sub> levels (25 µg / m<sup>3</sup>).

### **Effect on health**

Long term exposure to PM<sub>10</sub> may lead to reduced lung function, the development of cardiovascular and respiratory diseases and increased rate of disease progression. Long-term exposure to Nitrogen dioxide may contribute to the development of asthma and increase susceptibility to respiratory diseases.

**Marcin Gnat, spokesperson at Airly** commented: "This study confirms others which suggest that almost the entire global population (99%) breathes air that exceeds WHO air quality limits, and threatens their health. Although the number of countries and cities where air quality is monitored continuously is increasing, there is still a lack of such information in a great number of vulnerable sites. By knowing the exact pollution situation in their surroundings, local governments and communities are able to take appropriate steps to improve air quality, and then monitor the effectiveness of the actions taken".

### **NO<sub>2</sub> Ranking:**

1. Newcastle upon Tyne - 44,6 µg/m<sup>3</sup> (179% of WHO safe norm, 25 µg / m<sup>3</sup>)
2. Naples - 42,4 (170%)
3. Paris - 41,2 (165%)
4. Antwerp - 35,9 (144%)
5. Dortmund - 35,6 (142%)
6. Zurich - 34,9 (140%)
7. Stuttgart - 34,1 (137%)
8. Munich - 33,5 (134%)
9. Frankfurt am Main - 32,6 (130%)
10. Hamburg - 32,0 (128%)
11. Rotterdam [The Hague] - 31,8 (127%)

12. Brussels - 31,2 (125%)
13. Oslo - 30,5 (122%)
14. Athens - 30,5 (122%)
15. Sofia - 30,0 (120%)
16. London - 29,4 (118%)
17. Lyon - 29,2 (117%)
18. Katowice - 29,1 (116%)
19. Manchester - 28,9 (116%)
20. Prague 29,7 (115%)

**PM10 Ranking:**

1. Malaga 56,1  $\mu\text{g}/\text{m}^3$  (125% of WHO safe norm, 45  $\mu\text{g} / \text{m}^3$ )
2. Seville 46,5 (103%)
3. Belgrade 40,9 (91%)
4. Katowice 40,5 (90%)
5. Antwerp 38,3 (85%)
6. Stockholm 37,2 (83%)
7. Kraków 36,8 (82%)
8. Stuttgart 35,4 (79%)
9. Oslo 35,1 (78%)
10. Wrocław 34,7 (77%)
11. Leeds 34,3 (76%)
12. Lisbon 34,0 (76%)
13. Paris 33,9 (75%)
14. Łódź 33,8 (75%)

15. Poznań 33,7 (75%)
16. Sofia 32,8 (73%)
17. Zagreb 32,8 (73%)
18. Thessaloniki 32,4 (72%)
19. Rotterdam [The Hague] 31,8 (71%)
20. Madrid 30,8 (68%)

## About Airly

Using sensors, Airly provides accurate, ultra-local, predictive data for governments, media and businesses to tackle the issue of air pollution head-on. Airly's platform acts as a warning system for pollution at street level and in real time with greater accuracy and at lower cost for cities & enterprises.

Local councils and municipalities can start by monitoring air quality in real-time on an ongoing basis, locating sources of pollution and bringing forward policy that targets local pollution by reducing road traffic in the busiest, polluted places.

Similarly, people need to make lifestyle choices that will benefit their air quality and environment. By choosing carsharing, cycling or electric scooters instead of cars will make a significant impact.

Airly provides actionable insights about air quality with its AI-driven algorithms that predict air pollution for the next 24 hours with a verifiability of up to 95%. Airly gives customers across the globe an **environmental intelligence platform** by installing networks of **sensors** that track all the key pollution markers - particulate matter (PM1, PM2.5, PM10) and gases (NO2, O3, SO2 and CO).

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## **Tags**

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