

## Revised Limits and Measurements for PM<sub>2.5</sub> and PM<sub>10</sub> by 2030



lowering the limits by 2030

**1:1**

ratio of PM<sub>2.5</sub> to PM<sub>10</sub> measurements

PM<sub>2.5</sub>



**25**

µg/m<sup>3</sup>  
daily limit



**18**

max. days exceeded



25 →

**10**

µg/m<sup>3</sup>  
annual limit - previously: 25

PM<sub>10</sub>



**45**

µg/m<sup>3</sup>  
daily limit previously: 50



**18**

max. days exceeded previously: 35



40 →

**20**

µg/m<sup>3</sup>  
annual limit previously: 40

## Supersites and Monitoring Stations

Additional Supersites



**10 Million**

One supersite per 10 million inhabitants or at least one supersite at an urban background location.



**100.000**

One supersite per 100,000 km<sup>2</sup> or at least at a rural background location.

Specialized Monitoring Stations



**Vegetation Protection**



**Ozone**



**UFP**

**20.000**

One monitoring station every 20,000 km<sup>2</sup> if critical levels are exceeded.

One monitoring station every 40,000 km<sup>2</sup> if the assessment threshold is exceeded.

**50.000**

At least one monitoring station per 50,000 km<sup>2</sup>.

In complex terrain, one monitoring station per 25,000 km<sup>2</sup> is recommended

**5 Million**

At least one monitoring station per 5 million inhabitants in locations with high UFP concentrations.

Countries with > 5 million inhabitants must have at least one monitoring station in a high UFP concentration area.

**PALAS 4**

**AMBIENT  
AIR QUALITY  
DIRECTIVE**

**2024/2881/EU**

## INDICATIVE MEASUREMENTS

### FINE DUST

#### AQ GUARD SMART 1000

air quality analyzer for monitoring fine particulate matter ( $PM_{10}$ ,  $PM_{2.5}$ ,  $PM_{4}$ ,  $PM_{10}$ , TSP, particle size distribution)



### ULTRAFINE DUST

#### AQ GUARD SMART 2000

for monitoring nanoparticles (UFP number concentration, average diameter X50; LSDA)

### BLACK CARBON

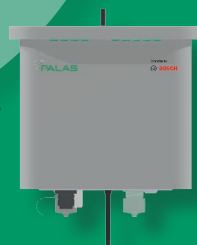
#### AQ GUARD SMART 1000/2000

can be combined with black carbon analyzer for monitoring black carbon

### GASES

#### ECOB

(Environmentally Connected Box) for monitoring ambient air quality parameters ( $PM_{10}$ ,  $PM_{2.5}$ ,  $PM_{10}$ ,  $CO$ ,  $NO_2$ ,  $O_3$ ,  $SO_2$ )



## KEY POINTS OF THE DIRECTIVE

- The right to clean air is a fundamental right!
- Establishment of limits, target values, thresholds, and long-term goals for various pollutants
- Regular review and adjustment of these values based on the latest scientific findings and recommendations of the WHO
- Implementation of measures for monitoring and assessing air quality
- Obligation of member states to develop air quality plans and measures when limits are exceeded
- Collaboration among member states to combat trans-boundary air pollution

## WHAT IS NEW?

- Ultrafine particles (UFP), black carbon (BC) and ammonia have been introduced as a mandatory pollutants for monitoring at supersites
- Enhancement of modelling and simulation

## OUR SOLUTIONS

|                                          | INDICATIVE                                   | FIXED                        |
|------------------------------------------|----------------------------------------------|------------------------------|
| FINE DUST ( $PM_{2.5}$ , $PM_{10}$ )     | AQ GUARD SMART 1000                          | FIDAS® 200, FIDAS® SMART 100 |
| ULTRAFINE PARTICLES                      | AQ GUARD SMART 2000                          | U-SMPS 2050, ENVI-CPC 50/100 |
| BLACK CARBON                             | AQ GUARD SMART 1000/2000 + BC ANALYZER       | AVAILABLE VIA PARTNERS       |
| GASES ( $CO$ , $NO_2$ , $O_3$ , $SO_2$ ) | ECOB                                         | AVAILABLE VIA PARTNERS       |
| REPORTING / MODELLING                    | INDIVIDUAL SOLUTIONS POSSIBLE (MYATMOSPHERE) |                              |

## FIXED MEASUREMENTS

### FINE DUST

#### FIDAS® SMART 100 (E)

QAL1 certified for  $PM_{2.5}/PM_{10}$  (EN 16450)



#### FIDAS® 200 (E/S)

QAL1/MCERTS (Defra Approval) certified for  $PM_{2.5}/PM_{10}$  (EN 16450)

### ULTRAFINE DUST

#### U-SMPS 2050 (X\*)

measurement of size distribution and particle number concentration according to EN 16976:2024 CEN/TS 17434

\*(X) with integrated soft-Xray-neutralizer (with ENVI-CPC 50)



#### ENVI-CPC 50/100

measurement of particle number concentration according to EN 16976

