

FINAL REPORT

**DELIVERABLE B1.3:**

**PM10 trends in AIRUSE  
cities**

Coordinated by:



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LIFE11 /ENV/ES/584

**AIRUSE**

Testing and development of air quality mitigation measures in Southern Europe



## PM10 TRENDS IN THE AIRUSE CITIES

Figure 1 shows the clear PM10 downwards trends recorded at all the air quality monitoring sites of the 5 metropolitan areas studied in AIRUSE. Thus, BCN-MA and POR-MA, the downwards trends were evident since 2005-2006 and these cities recorded averaged decreases on both PM10 annual means and 90.4 percentile values ranging from -49 to -45% from the period 2000-2005 or 2000-2006 to 2013. Similar trends were evidenced for MLN-AGG and FI-AGG, but with sensibly lower decreases, -34 to -29%. For ATH-GAA this decrease was gradual from 2001 to 2013 and reached -32 and -29%.

### BCN-MA

- Mean of 69  $\mu\text{g}/\text{m}^3$  for the 90.4 PM10 percentile value of all the monitoring sites of the BCN-MA (AQZ-1) in 2000-2006 and a progressive decrease down to 34  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-49%**.
- Mean of 47  $\mu\text{g}/\text{m}^3$  for the PM10 annual averages at all the monitoring sites of the BCN-MA (AQZ-1) in 2000-2006 and a progressive decrease down to 24  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of -49%.

### FI-AGG

- Mean of 63  $\mu\text{g}/\text{m}^3$  for the 90.4 PM10 percentile value in 2000-2007 for the 2 monitoring sites of the FI-AGG with continuous records and a progressive decrease down to 45  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-29%**.
- Mean of 41  $\mu\text{g}/\text{m}^3$  for the PM10 annual average values in 2000-2007 for the 2 monitoring sites of the FI-AGG with continuous records and a progressive decrease down to 27  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-34%**.

### POR-MA

- Mean of 81  $\mu\text{g}/\text{m}^3$  for the 90.4 PM10 percentile value in 2000-2005 for all the monitoring sites of the POR-MA and a progressive decrease down to 44  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-45%**.
- Mean of 46  $\mu\text{g}/\text{m}^3$  for the PM10 annual average values in 2000-2005 for all monitoring sites of the POR-MA and a progressive decrease down to 25  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-46%**.

### ATH-GAA

- Mean of 80  $\mu\text{g}/\text{m}^3$  for the 90.4 PM10 percentile for all the monitoring sites of the ATH-GAA in 2001 and a progressive decrease down to 57  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-29%**.
- Mean of 51  $\mu\text{g}/\text{m}^3$  for the PM10 annual average values for all monitoring sites of the ATH-GAA in 2001 and a progressive decrease down to 37  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-32%**.

### MLN-AGG

- Mean of 96  $\mu\text{g}/\text{m}^3$  for the 90.4 PM10 percentile for all the monitoring sites of the MLN-AGG in 2000-2006 and a progressive decrease down to 68  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-29%**.
- Mean of 51  $\mu\text{g}/\text{m}^3$  for the PM10 annual average values for all monitoring sites of the MLN-AGG in 2000-2006 and a progressive decrease down to 34  $\mu\text{g}/\text{m}^3$  in 2013, accounting for a decrease of **-32%**.

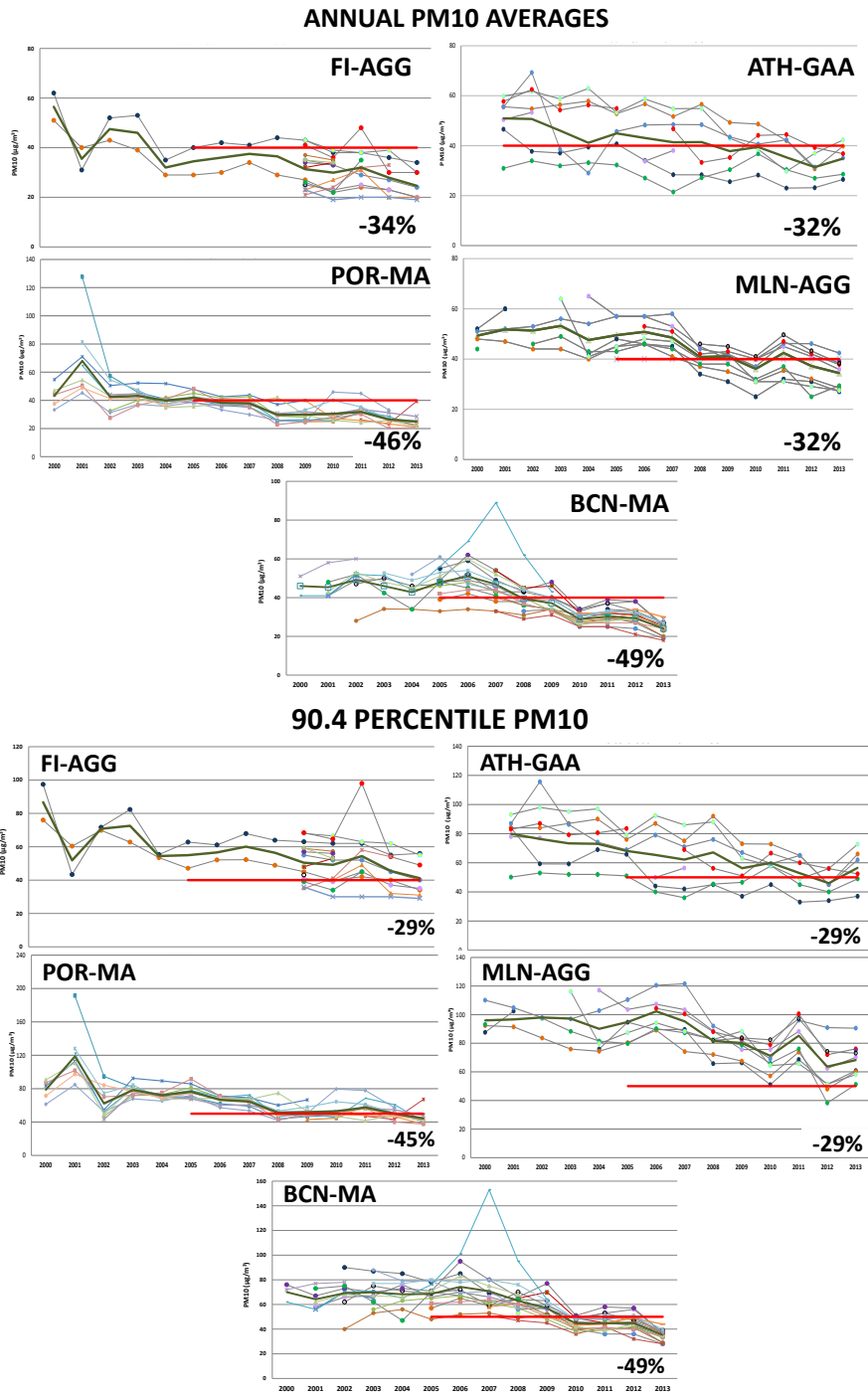


Figure 1. 2000-2013 trends for annual means and percentile 90.4 value of PM10 in the different air quality monitoring sites of the 5 metropolitan areas studied in AIRUSE.



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