

**European Network on New Sensing Technologies for Air Pollution
Control and Environmental Sustainability - *EuNetAir*
COST Action TD1105**

INTERNATIONAL WG1-WG4 MEETING on

New Sensing Technologies and Methods for Air-Pollution Monitoring

European Environment Agency - EEA

Copenhagen, Denmark, 3 - 4 October 2013

POSTER SESSION

Action Start date: 01/07/2012 - Action End date: 30/06/2016 - Year 2: 2013-2014 (*Ongoing Action*)

**Hot spots and cases on air pollution in
Republic of Macedonia**



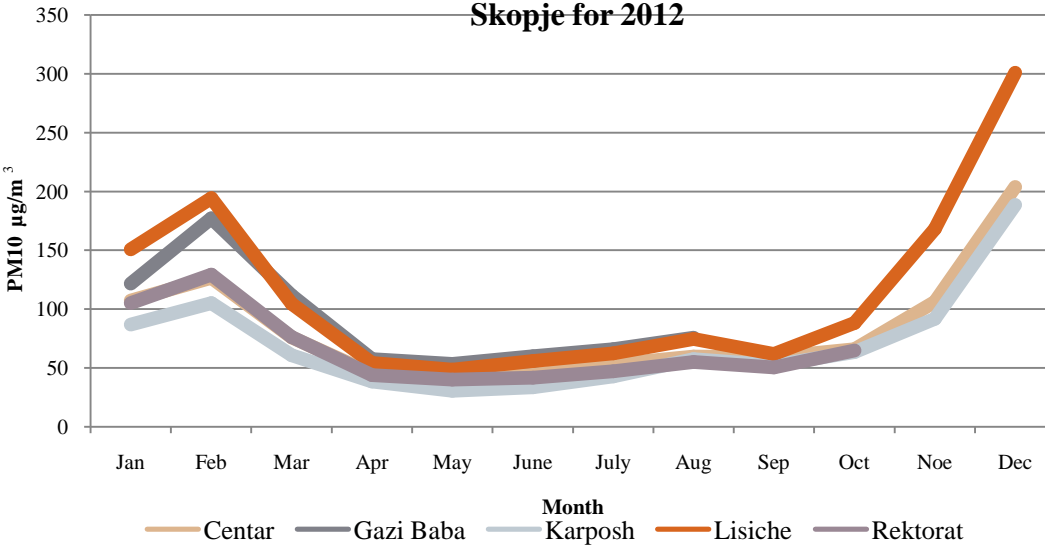
Ljupcho Grozdanovski

Ministry of environment and physical planning

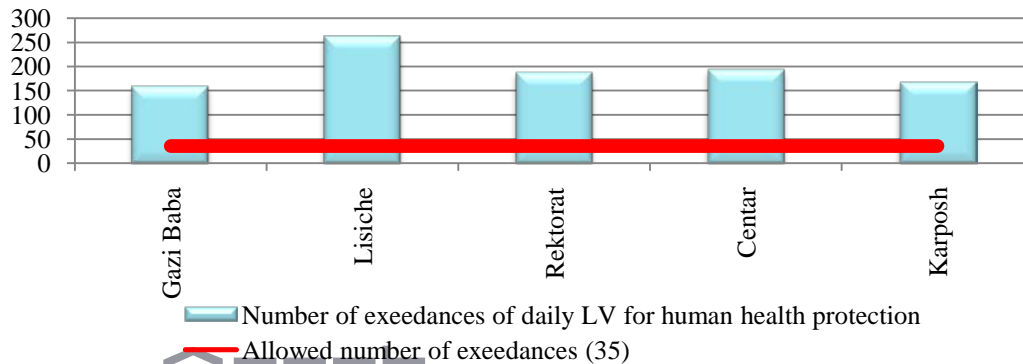
Republic of Macedonia

Cases of high levels of PM10, sources and it's retention in the air

Annual distribution of PM10 concentrations in the city of Skopje for 2012



Number of exceedances of daily LV for PM10 for human health protection in city of Skopje for 2012



- Main problem for the air pollution in Republic of Macedonia and especially in the capital city of Skopje is high level of PM₁₀ concentration.

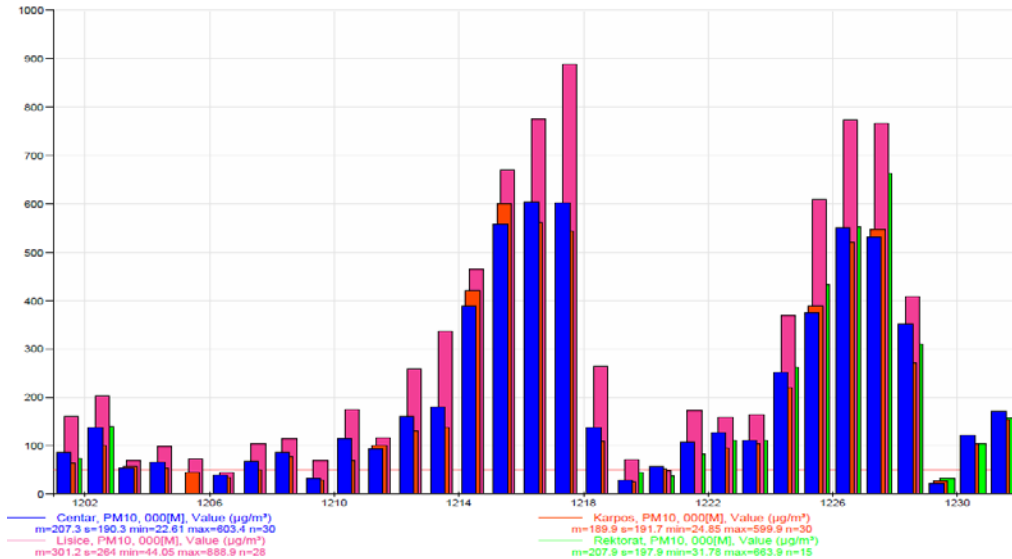
- Main sources of PM₁₀ in Skopje are traffic, wood combustion and metallurgy production.

- The city of Skopje is located in the valley surrounded by mountains (1000-1500m).

- The location of the city combined with weather conditions in the winter period during calm cold winter days and appearance of fog contribute significantly to the formation of the very severe air pollution episodes of high concentrations of PM₁₀.

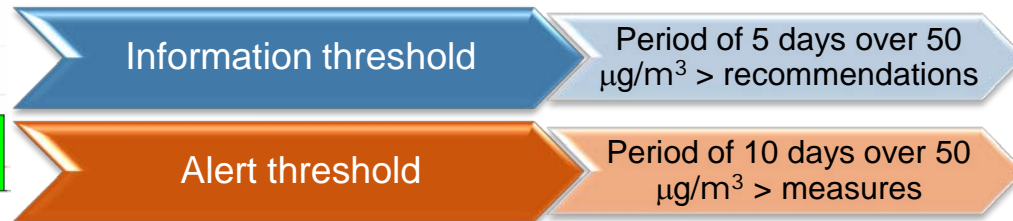
Episodes of PM10 in the city of Skopje

Daily averages of PM10 episodes in Skopje
Graph type: Bar Chart
121201 00 - 130101 00



Establishment of inter-sectorial group composed by members of relevant institutions.

- Protocols for reporting and public release were developed.
- Provides recommendations and measures.
- Thresholds and periods of informing and alerting are defined even though the fact that European legislation has no alert threshold for PM10.



The Recommendations come into force when Information threshold is exceeded;

The Short term measures come into force when Alert threshold is exceeded;

The Long term measures were identified in National plan for air quality protection and National plan for emission reduction (2012-2017);

They are published on Air Quality portal: www.airquality.moepp.gov.mk

CONCLUSIONS and Future Activities

PROGRES MADE:

- **Inter-sectorial group was established;**
- **Committee on environment and health began working with officials in positions of high level;**
- **Raising of the public awareness (developed Air quality web portal);**
- **Identifying the composition of PM₁₀ in order to determine the main sources of pollution;**
- **The monitoring of the ambient air quality during alert situation, as well as during the implementation of the measures to protect and improve air quality.**

FUTURE ACTIVITIES:

- **Implementation of the recommendations and measures foreseen by inter-sectorial group and identified in the National plan for air quality protection and National emission reduction plan (implementation of Best Available Techniques - BAT);**
- **Developing the short term action plans for PM₁₀.**

PROBLEMS:

- **The budget for activities and implementation of measures isn't allocated;**
- **The model for air pollution forecast should be developed (currently prediction is based on weather forecast.**