

Implementation of the AQD

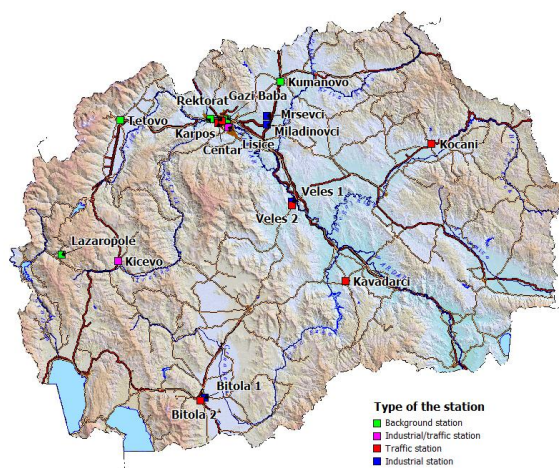
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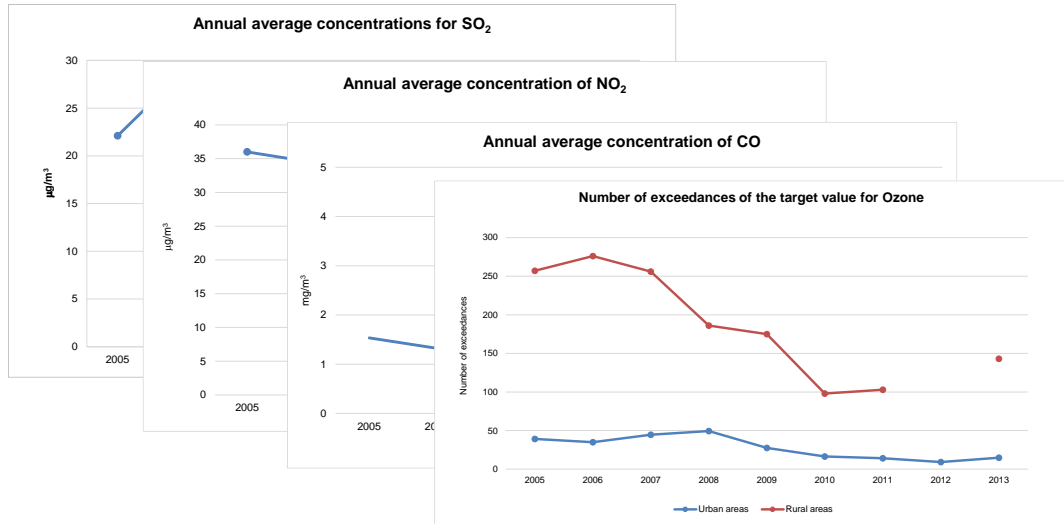
Ministry of environment and physical planning

Air quality monitoring

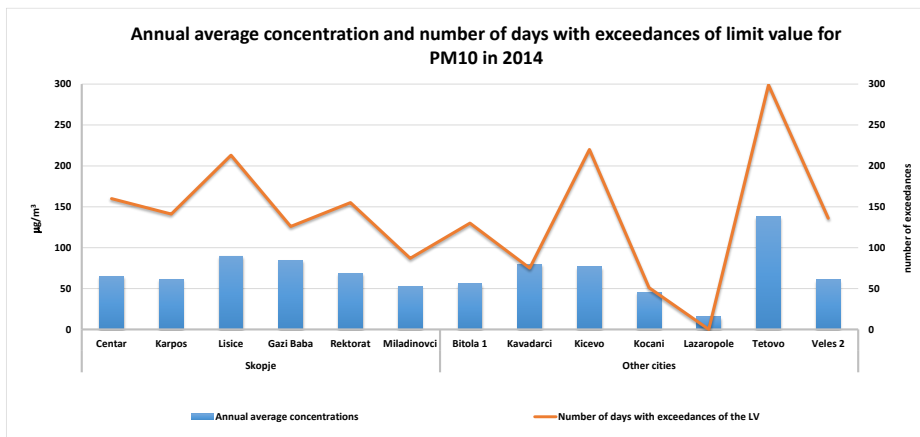
- 17 monitoring stations
- Measuring parameters: SO_2 , NO , NO_2 , NO_x , CO , O_3 , PM_{10} , $\text{PM}_{2.5}$, BTX
- Calibration laboratory
 - Quality manual
 - SOPs
- HMs indicative measurements have been performed



Air quality assessment



Air quality assessment



- Analysis of the trend on emissions for the major pollutants for the period 2001-2009
- Analysis of sectors which have major impact on air pollution and contribution of each sector in the total emissions
- Analysis of the air quality for 2010
- Emission projection for 2015 and 2020 for the following pollutants SO₂, NO_x, NH₃ and VOC
- Measures for pollutant emissions reduction in the area of energy, industry and transport

- National plan for air protection in Republic of Macedonia, for the period 2010-2015

- National plan for air protection of certain pollutants in the Republic of Macedonia

- Emission projection for 2015 and 2020 for the following pollutants SO₂, NO_x, NH₃ and VOC have been defined

- Plans for undertaking measures for air protection have been prepared for 7 LCP installations

- Measures for air emissions reduction have been defined

- Local measures
 - Program for improvement of air quality plan for reduction of

Source contribution

Contribution [%]	NO _x	CO	SO ₂	PM10
Production of electricity and heating	55 %	5,13 %	93,82 %	9,13 %
Traffic	32,89 %	32,31 %	0,24 %	17,5 %
Households and administration heating	2,44 %	55,81 %	2,53 %	38,42 %
Production process	8,58 %	6,74 %	3,41 %	17,44 %
Other	1,09	0,01 %	/	17,51 %

Major Reduction measures needed	NO _x	CO	SO ₂	PM10
Production of electricity and heating	BAT in Power and heating plants already in place	x	BAT in Power plants -2017	√
Traffic	√	√	x	√
Households and administration heating	x	√	x	√
Production process	x	x	x	√

Implemented measures



Industry - Implementation of BAT

- Installation of suction hood in metal production installation
- Introduction of low NOx burners in heating plants
- Gasification of the heating plants
- Modernization of power plants



Traffic

- Import of vehicles with EURO standards < 3 forbidden (< Euro 4 from 2016)
- Promotion of public transport and subventions for alternative vehicles (City of Skopje)
- Stricter legislation for Technical stations regarding gas exhaust



Households

- Public awareness raised (brochures, media)
- Campaign for energy efficiency (City of Skopje)

Reporting towards EEA/UNECE

Air quality

- Air quality data accordance with the new decision 2011/850/EC
- Distribution of the data from all air quality measurements, using the AQUA tool, October 2014

Air emission

- Air emission inventory, according EMEP/EEA Guidelines and obligations towards CLRTAP and its protocols

February 2014

- Inventory for 2012 all pollutants prepared and submitted
- Emission inventory improved in agriculture and product use sector

February 2015

- Inventory for 2013 for all pollutants prepared and improved
- Recalculation for 2004-2013
- Recalculations for base year emissions

Air quality information

MEPP has been managing actively the web site <http://airquality.moepp.gov.mk>, placing:

- information on the air quality legislation;
- reports on the quality of air, strategic documents and news;
- includes warnings and recommendations in relation to air pollution, posted on daily basis;
- information on the ways in which citizens can contribute to air quality protection.

Ongoing project

Implementation of the **Twining project** "Further strengthening the capacities for effective implementation of the acquis in the field of air quality"
Duration: April 2015 – April 2017

Component 1

- Finalization of the documents for the accreditation of the calibration laboratory
- Strengthening the capacities for air emission measurements and chemical analysis of air samples

Component 2

- Revision of the National emission reduction program
- Improvement of the air emission inventory and preparation of the IIR for 2014
- Calculation of emission per EMEP grid

Component 3

- Air quality assessment report
- Air quality plan for Skopje agglomeration
- Public awareness campaign
- Improvement of air quality web portal and establishment of new e-reporting system

Component 4

- Development of a strategy for the health impact assessment of air pollution
- Introduction to the basic health impact assessment methodologies
- Preparation of a plan for establishing bio-monitoring regarding air pollution



*Thank you very much for
your attention*