# Current Situation and Assessment of Air Pollution problems in Serbia

Branka Andric
Technical expert

• Collection and preparation of data on air pollution based on Regulation on methodology for integrated inventory of polluters from 2007.

 According to EU regulations it is very important to collect emission data based on methodology of international convections (UNFCCC,PRTR,CLRTAP...)

 Serbia has only reported data on sulphur and nitrogen oxide emissions. It has not provided information on ammonia, VOCs, heavy metals, persistent organic pollutants, carbon monoxide or dioxide. EMEP station in Serbia is Kamenicki Vis. • Integrated inventory of pollutants contents: data on sources, quantity, kind and location of pollutants released in the air.

 Inventory is prepared using data, that is in accordance to production capacities and the number of employees, in the presented forms.

 Number of plants who delivered data for integrated inventory of polluters for 2009, is 754.

# **Description and analysis of the situation**

- The main polluting sources in Serbia:
  - 1. Thermal power plants
  - District heating
  - Household combustion
  - 2. Motor vehicles
  - 3. Industrial facilities
- The most pressure on air quality comes from combustion processes using lowgrade lignite and motor fuels.

# **Fuel Quality Standards**

### **Fuel oil**

Extralight- light max 1-2 % S

Medium max 3% S
Heavy max 4% S

### **Disel oil**

Extralight- light max 0.5 %- 1 %S

Medium max 1.5 % S

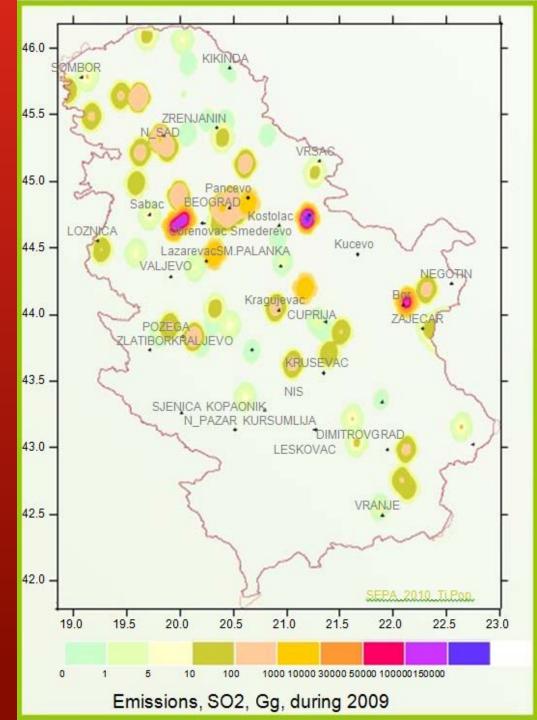
High low suphur max 0.2 % S

Lead content in fuels is limited max 0.6 g Pb/dm<sup>3</sup>- 0.13 g Pb/dm<sup>3</sup>

•Emissions of sulphur dioxid

- •Thermo Power Plants:
- 1. Kostolac A and B, Kostolac
- 2. Tesla A and B, Obrenovac

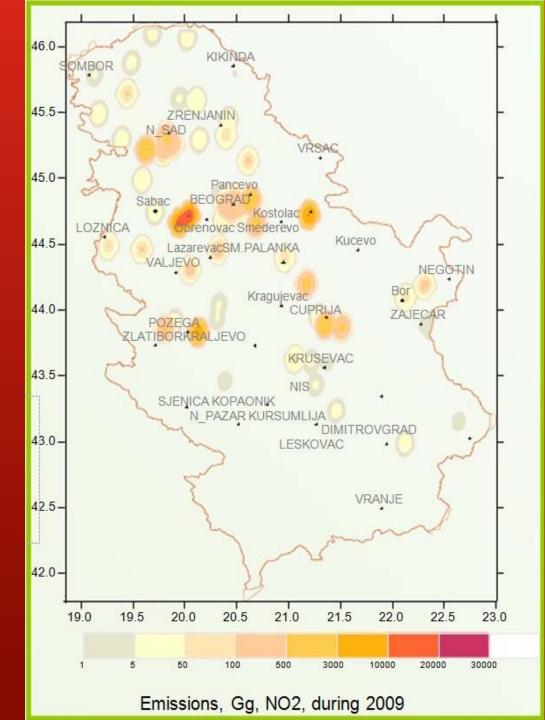
Mining basin Bor



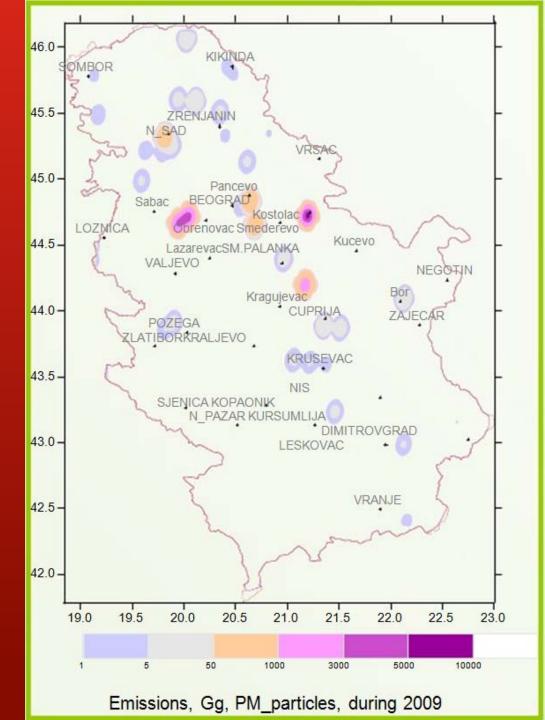
•Emission of nitrogen oxide

•Thermo Power Nikola Tesla A and B, Obrenovac

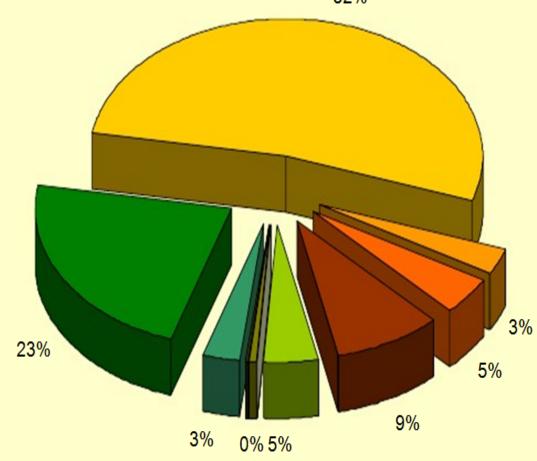
•Thermo Power Kostolac A and B, Kostolac



- Emission PM
- •Thermo Power Kostolac A and B, Kostolac
- •Thermo Power Nikola Tesla A and B, Obrenovac
- Thermo PowerMorava, Svilajnac



# Contribution and type of system for gas cleaning 52%



•Data to 16.11.2010

- No system for gas cleaning
- Electrostatic Filter
- Cyclone separator
- Bag filter
- Damp scrubber
- ☐ Dry scrubber
- □ Lime injection
- □ Injection in sodium
- ☐ Activated carbon injection
- □ Carbon filter
- Catalytic conversion
- Ventilation
- Recirculation of exhaust gases
- Bio filter
- Other
- No data

## **Future activities**

- Air Protection law, from 2009, defines the content of Information system of air quality, and regulates methodology for preparation of integrated inventory of polluters.
- Regulation on limit value emissions of pollutants in the air, from 2010, defines all rules on reporting emissions data.

## **Key notes**

- Enacted law on air protection, defines measures, type of organization and implementation control of protection and improvement of air quality.
- There is a need for improvement of air emissions data collection and reporting, according to international obligations (PRTR,CRLTAP,UNFCCC);
- Develop a comprehensive air quality assessment and management strategy
- Develop basic regulations to combat air pollution by mobile sources (Fuel standards, exhaust gas emission and enforcement measures)
- Reform the system of air quality standards with focus to policy instruments.
- Invest in education and skill improvement. Make significant progress in the air pollution agenda.

# Thank you for your ATTENTION!