



# Lessons learnt from the Programme of Air Protection of the Republic of Serbia

Webinar: The role of scientific and other evidence in informing Southeast European regional and national air quality legislation

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# About HEAL

>90 organisations in 28 countries

- Doctors associations
- Patient groups
- Nurses associations
- Public health institutes
- Research institutes
- Not-for-profit health insurers
- Women's groups
- Youth groups
- Environmental groups



*Working for better health through  
a healthier environment*

# ADVOCACY: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan

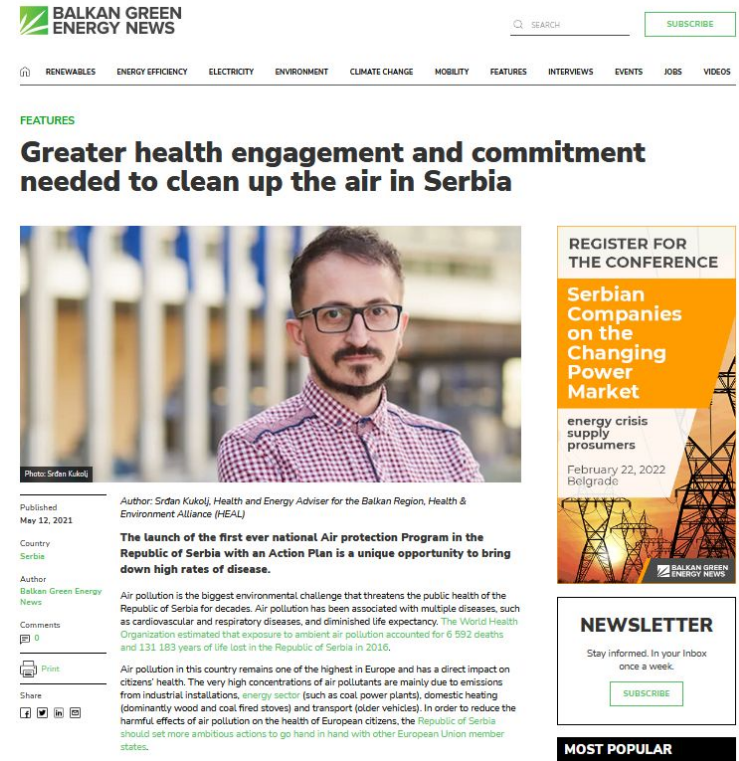


# TIMELINE: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan

October 2019 - Ministry of Environmental Protection of Serbia announced that a working group has been established to work on the development of the Programme.

## HEAL:

- Participation in consultation meetings, spring 2021 and throughout
- Blog post in Balkan Green Energy News, 12 May 2021: <https://balkangreenenergynews.com/greater-health-engagement-and-commitment-needed-to-clean-up-the-air-in-serbia/>
- Letter to Serbian health, environment ministers, 24 June 2021, calling for the strengthening of ministerial and intersectoral cooperation <https://www.env-health.org/wp-content/uploads/2021/07/220624-HEAL-Letter-on-interministerial-cooperation-clean-air-Serbia.pdf>
- The Ministry of Env has replied to the HEAL Letter, 12 July 2021
- HEAL comments on draft air protection Programme, 18 November 2021: <https://www.env-health.org/wp-content/uploads/2021/07/220624-HEAL-Letter-on-interministerial-cooperation-clean-air-Serbia.pdf>



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### FEATURES

## Greater health engagement and commitment needed to clean up the air in Serbia




Photo: Srđan Kukolj

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**The launch of the first ever national Air protection Program in the Republic of Serbia with an Action Plan is a unique opportunity to bring down high rates of disease.**

Air pollution is the biggest environmental challenge that threatens the public health of the Republic of Serbia for decades. Air pollution has been associated with multiple diseases, such as cardiovascular and respiratory diseases, and diminished life expectancy. The World Health Organization estimated that exposure to ambient air pollution accounted for 6 592 deaths and 131 183 years of life lost in the Republic of Serbia in 2016.

Air pollution in this country remains one of the highest in Europe and has a direct impact on citizens' health. The very high concentrations of air pollutants are mainly due to emissions from industrial installations, energy sector (such as coal power plants), domestic heating (dominantly wood and coal fired stoves) and transport (older vehicles). In order to reduce the harmful effects of air pollution on the health of European citizens, the Republic of Serbia should set more ambitious actions to go hand in hand with other European Union member states.

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# VISION and OBJECTIVES Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan



**Vision:** Serbia is to ensure that by 2030 everybody should be able to enjoy a clean ambient air.

## OBJECTIVES

**General objective:** To reduce up to 2030 the **health** damage due to poor air quality by half compared to 2015 by reducing exposure to air pollution while also limiting the damage on ecosystems.

### Specific objectives:

Reduce emissions of SO<sub>2</sub> by 92% and fine particles PM<sub>2.5</sub> by 58.3% from Energy sector in 2030 compared to 2015.

Reduce emission of air pollutants from Industrial processes and product use through compliance with BAT associated emission levels.

Reduce ammonia emissions from Agriculture sector by 20.5% compared to 2015.

Promote transition to clean air for everyone.

**The word 'health' has been mentioned 80 times.**

**The document has a total of 181 pages.**

# RESULTS: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan



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#### 5.1 Cost and **Health** and Environmental impacts of mitigation scenarios

#### 4. Questions based on technical information provided in the accompanying document

#### 4.2 **Health** Criteria

### 9. Action plan

#### 3. The weight of the environmental, **health** and economic criteria used in the multicriteria analysis

### C Scenario

Figure 21: Aggregated annual **health** damage due to poor air quality in Serbia

Figure 22: Aggregated annual **health** benefits due implementation of different mitigation scenarios

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# HEALTH: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan



## 1 INTRODUCTION

Harmful effects of air pollution are well known and ambient Air pollution is a major environmental risk to health. The pollution is a mix of chemicals, particulate matter, and biological materials that react with each other to form tiny hazardous particles. The concentration of particulate matter (PM) is a key air quality indicator since it is the most common air pollutant that affects short term and long-term health. The smaller particles are more concerning since they don't stop in the upper airways but rather penetrate deep into the cardiopulmonary system. A 2013 assessment by WHO's International Agency for Research on Cancer (IARC) concluded that outdoor air pollution is carcinogenic to humans, with the particulate matter component of air pollution most closely associated with increased cancer incidence, especially lung cancer. Furthermore, poor air quality contributes to breathing problems, chronic diseases, increased hospitalization, and premature mortality. In addition to particulate matter, exposure to even short period of high concentration SO<sub>2</sub> can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO<sub>2</sub>. Ozone at ground level which is mainly formed during the summer months by the reaction with sunlight (photochemical reaction) of pollutants such as nitrogen oxides (NO<sub>x</sub>) from vehicle and industry emissions and volatile organic compounds (VOCs) can cause breathing problems, trigger asthma, reduce lung function and cause lung diseases. In addition to the above-mentioned pollutants the symptoms of bronchitis in asthmatic children increase in association with long-term exposure to NO<sub>2</sub>.

# PILLARS: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan



The base year used for expression of the reduction of air pollutants reduction is 2015.

The Programme covers the period 2022-2030 and includes:

Air pollution mitigation scenarios

Cost/benefit analyses

Assessment of health and environmental impacts associated with mitigation scenarios

For the Programme purposes and achievement of the air quality vision, in addition to the baseline scenario, three air quality mitigation scenarios have been analyzed: All scenarios are developed using models that are also used for definition of the EU targets and pathways up to 2020, 2030 and respective policies and measures, while national circumstances were taken into account.



# AIR QUALITY MITIGATION SCENARIOS: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan

## WAM - Scenario with additional measures

### WAM A Scenario

Full implementation of all relevant EU directives and regulations related to ambient air quality not yet fully transposed and implemented.

### WAM B Scenario

It is intensive control scenario. In addition to WAM A, introduction in some cases, of stricter emission limit values and introduction of national financial and fiscal policies and measures in key emission source categories (such as scrapping and promotion schemes for passenger cars and household wood/coal appliances).

### WAM C Scenario

Full control scenario. In addition to WAM B, all necessary measures including local specific measures (such as incentives, restrictions and bans) aiming to ensure compliance with limit values as defined in Directive 2008/50/EC on ambient air quality and cleaner air for Europe.

All the air quality mitigation scenarios are building on M2 climate scenario (*M2 scenario: Implementation of all EU acquis in whole is transposed and implemented, achieving 33,3% GHG emissions compared to 1990; 28,9% RES23 by 2030 and 24,5% enhanced energy efficiency, as the Serbian contribution to the EU target*) as prepared in the process of preparation of Serbia's Low carbon development strategy and considerably deviate Serbia emissions trajectory from the WEM (*WEM: Scenario with existing measures*) baseline scenario, starting the air pollution emissions reductions from 2020s.

# WHAT IS MISSING: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan

Serbia's Air Programme needs to include a clear pathway and ambitious timeline for reaching the 2021 WHO air quality guidelines.

The foreseen vision of clean air in 2030 will only be achieved with setting a swift coal phase out date.

A more integrative approach should be considered, requiring the working together of various ministries and sectors in reaching the stated clean air objective, also considering the Green Agenda for the Western Balkans.

All relevant EU legislation needs to be speeded up, and not delayed like in the case of IPPC law.

The argument that the maximum feasible control scenario is too costly is not valid.

The Programme and Action plan have to be legally binding in order to drive the necessary and overdue changes for cleaner air.

# LESSONS LEARNED: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan



- In September 2021, the Ministry and EU Delegation has opened a call (Google Forms) for the public to participate in the survey on multi-criteria analysis of three scenarios with additional measures.
- There was a lack of more participative participation of external expert teams in the drafting of the Programme.
- The participation of members of the national scientific community/academia in the drafting of the Programme was missing.
- We expected that the members of the working group representing the Ministry of Health and the Institute of Public Health would organize a series of meetings with stakeholders who have capacities of technical/knowledge support to help in drafting such a health-related strategic document.
- It was expected that the Ministry of Health would play a significant role in the development of this Programme.

# NEXT STEPS: Programme of Air Protection of the Republic of Serbia for the period 2022-2030 with Action plan



- Formal adoption by the Government.
- No date has been set yet.



**Thank you for your attention!  
And do get in touch...**

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