



Air Quality



Overview

The drafting of the national Air Protection Program in the Republic of Serbia for the period from 2022 to 2030 with an Action Plan has begun, which represents a positive and long-awaited step forward in the development of air protection policy in Serbia. On the other hand, although the National Emissions Reduction Plan (NERP) has been adopted, it is still not being implemented, as evidenced by the multiple exceedances of permitted SO₂ emissions from thermal energy plants in Serbia.

Air quality in Serbia is still very poor. The report of the Environmental Protection Agency for 2020 showed that in that year the air in most local areas was excessively polluted due to excessive PM₁₀ and/or PM_{2.5}, with the special exception of the city of Bor, where the air was excessively polluted due excessive SO₂. In Bor, the limit of 500 µg/m³, a concentration that is extremely dangerous for the health of citizens, was exceeded for as many as 25 days, which is twice as many as in 2019. On the other hand, in Novi Sad, according to the Agency's Report, the air was of the first category, i.e. clean, with annual concentration of PM₁₀ particles that were below 40 µg/m³; however, the daily limit value was exceeded at three out of five stations by as many as 60 times, which, according to the current Regulation, also makes the air excessively polluted.

The development of public air protection policies at a local level, primarily through the adoption and implementation of air quality plans and short-term action plans, continues to be slow. Energy poverty is singled out as the key cause of air pollution originating from individual fireplaces. This is a problem that should be given special attention by defining adequate measures aimed at improving energy efficiency and the introduction of clean technologies, with special support for socially and energy vulnerable households.

The Ministry of Environmental Protection, as well as the Ministry of Mining and Energy have again allocated significant funds in the 2022 budget for

activities aimed at improving air quality. On the other hand, the allocation of funds for air, water and sediment quality monitoring have decreased noticeably compared to previous years.

Strategic and Legislative Framework

The drafting of the Air Protection Program in the Republic of Serbia for the period from 2022 to 2030 with an Action Plan is the most significant development in the strategic and legislative framework for air protection in the previous year. The draft Program was prepared through the project "EU for a better environment - Development of a framework for harmonization with EU legislation in the field of air, chemicals and horizontal issues".²⁷ The development of the Program represents a positive and long-awaited step forward in air protection policy in Serbia. The draft Program recognizes the negative impact of air pollution on public health, with an ambitious vision of achieving clean air in Serbia by 2030, and offers general and specific goals, as well as several scenarios for achieving the goals.

The overall goal of the Program is to "reduce adverse health impacts from exposure to poor quality air by 2030 compared to 2015 by reducing exposure to air pollution, while limiting adverse impacts on ecosystems."

The specific objectives are as follows:

- **Specific objective 1:** Reduction of SO₂ emissions by 92% and suspended PM_{2.5} particles by 58.3% from the energy sector in 2030 compared to 2015;
- **Specific objective 2:** Reduction of air pollutant emissions from industrial processes and product use through compliance with emission levels related to best available techniques;
- **Specific objective 3:** Reduction of ammonia emissions from the agricultural sector by 20.5% compared to 2015;

²⁷ <https://eas3.euzatebe.rs/rs/o-projektu>

Specific objective 4: Promotion of the transition to clean air for all.²⁸

The scenario with existing measures (WEM) is based on the assumption that no policies and measures which would affect the amount of pollutants in the air will be adopted until 2030, except for those adopted by the end of 2020.

Three more scenarios with additional measures (WAM) were elaborated within the Draft:

- **Scenario WAM A:** Full implementation of all relevant EU directives and regulations related to ambient air quality that have not yet been fully transposed and implemented.
- **Scenario WAM B:** This is an intensive control scenario. In addition to the limit values from the WAM A scenario, in some cases stricter emission limit values are prescribed and national financial and fiscal policies and measures are introduced for key categories of emission sources (such as promotion schemes for deregistration or shipping to recycling centres, replacement of passenger vehicles and heating wood and coal-burning appliances in households).
- **Scenario WAM C:** Scenario of complete control. In addition to all of the measures introduced through the WAM B scenario, additional necessary measures are introduced, including specific local measures (such as incentives, bans and restrictions), which aim to comply with the limit values from Directive 2008/50/EC for suspended particles ($PM_{2.5}$ and PM_{10}), NO_x , SO_2 and O_3 .²⁹

On the other hand, there are certain aspects of the document that need attention. Taking into account the current state of the implementation of air protection policies in Serbia, it is questionable to what extent the assumptions

28 Ministry of Environmental Protection (2021): Air Protection Program in the Republic of Serbia for the period from 2022 to 2030 with an Action Plan; EU for a better environment; Project "Development of a framework for harmonization with EU legislation in the field of air, chemicals and horizontal issues (EuropeAid/138598/IH/SER/RS)" Available at: https://drive.google.com/file/d/1MJySYI2_gdnFKqz8UMBmKDvFUFDnmwvB/view

29 Ministry of Environmental Protection (2021): Air Protection Program in the Republic of Serbia for the period from 2022 to 2030 with Action Plan – Explanation available at: <https://drive.google.com/file/d/1wkUbr-oc9pTVnflLUkhHnVAX2M4wkRyH/view>

on which the Program is based are achievable, especially taking into account the fact that fulfilling the objectives of the Program relies to a large extent on the implementation of the National Emission Reduction Plan (NERP), which is continuously being violated.

Directive 2008/50/EC on ambient air quality and cleaner air for Europe and Directive 2004/107/EC on arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air have largely been transcribed into Serbian legislation. However, full harmonization has not yet been achieved. Certain provisions that have not been transferred are those that only apply to EU member states, while some provisions require reformulation. The period 2018-2021 was set as the deadline for transposing the directives in full, through amendments to the Law on Air and the Regulation on monitoring conditions and air quality requirements. The plan of the Government of the Republic of Serbia for 2021 did not include any amendments to the Law on Air Protection, so they were not adopted in 2021. Based on the Negotiating Position for Chapter 27³⁰, most of the provisions of the EU legislation in the field of air protection should be implemented by the date of Serbia's accession to the European Union, which has not yet been defined.

A lack of administrative capacity was noted at all levels (national, provincial, local). This represents a significant obstacle and it is necessary to increase the existing administrative capacities at all levels. There are also insufficient financial resources at all levels, which affects the application of the adopted rules, as well as the adoption of the necessary Air Quality Plan and Air Protection Program with Action Plan.

30 Government of the Republic of Serbia (2019): Negotiating position of the Republic of Serbia for the Intergovernmental Conference on the Accession of the Republic of Serbia to the European Union for Chapter 27 – Environment and Climate Change, available at: https://www.mei.gov.rs/upload/documents/pristupni_pregovori/pregovaracke_pozicije/pg_pozicija_27.pdf

The Implementation of Regulations

The state of air quality

The annual report on the state of air quality, prepared by the Environmental Protection Agency³¹ shows that in 2020 the air was excessively polluted in the following agglomerations: Belgrade, Niš, Smederevo, Pančevo, Užice, Kosjerić and Bor; as well as cities and municipalities: Valjevo, Kraljevo, Novi Pazar, Kragujevac, Zaječar, Popovac, Subotica and Zrenjanin. In all these places, with the exception of Bor, the air was assessed as excessively polluted due to exceeding the limit values of PM₁₀ and/or PM_{2.5} suspended particles. These particles, which are produced as a result of the burning of solid fuels, are the dominant pollutant, with nearly 2.5 million inhabitants of Serbia being exposed to excessive concentrations. Radinac, near Smederevo, stands out, where the annual PM₁₀ limit value of 60 µg/m³ was exceeded, and the daily limit values were exceeded on 148 occasion. On the other hand, exceedance of the annual PM_{2.5} value limit was highest in Valjevo (45 µg/m³).

In addition to the previously mentioned cities and agglomerations faced with excessive particulate air pollution, special attention should be paid to the analysis of the air condition in the agglomeration of Bor, where the air is also rated as excessively polluted, but due to exceeding the limit value of SO₂. The monitoring station in the City Park of Bor showed an exceedance of the average annual value (74 µg/m³), while the daily limit value of 125 µg/m³ was exceeded on 58 days. This station also measured exceedances of the permitted number of hours with concentrations higher than 350 µg/m³ during the

31 Environmental Protection Agency (2021): Annual report on air quality in the Republic of Serbia in 2020, available at: http://www.sepa.gov.rs/download/izv/Vazduh_2020.pdf

year. The Regulation on monitoring conditions and air quality requirements³² defines that SO₂ concentrations of 500 µg/m³, continuously in effect for three consecutive hours, represent a danger to public health. This concentration was reached in Bor on 25 occasions in 2021, which is twice as many as in 2020. In addition, high concentrations of heavy metals were measured in Bor. Lead measurements showed that the annual limit value of 500 µg/m³ was exceeded twice at the Bor Jugopetrol station (1,194 µg/m³), where the daily limit value (1,000 µg/m³) was also exceeded. The two aforementioned stations in Bor also registered exceedances of target values of arsenic and cadmium.

Air quality in the agglomeration of Novi Sad in 2021 was rated in the first category, with annual PM₁₀ concentrations below 40 µg/m³, which was a significant improvement on 2019, when air quality was rated in the third category (excessively polluted). However, at three out of five stations in the city, the daily limit value for PM10 particles was exceeded on more than 35 days.³³ At the Rumenačka station in Novi Sad, the daily limit was exceeded 60 occasions. According to the current Regulation on monitoring conditions and air quality requirements, one of these two criteria being fulfilled means that the air is excessively polluted, which would mean that the air quality in the agglomeration of Novi Sad should not be classified in the first category.³⁴

Air quality monitoring

During 2020, the Environmental Protection Agency expanded the network of stations by establishing measurements in Vršac and Novi Pazar, and the station in Paraćin, which, due to damage caused by floods, had not been in operation since 2014, was made operational. The expansion of monitoring is crucial for assessing the true state of air quality in Serbia, and this is best illustrated by the example of Novi Pazar: As soon as the new monitoring station became

32 Government of the Republic of Serbia (2013): Regulation on monitoring conditions and air quality requirements, available at: <https://www.paragraf.rs/propisi/uredba-uslovima-monitoring-zahtevima-kvaliteta-vazduha.html>

33 According to the Regulation on monitoring conditions and air quality requirements, the daily limit value of PM₁₀ may not be exceeded more than 35 times in one calendar year.

34 RERI, BOŠ: What did we breathe between the two Septembers? Review of the Annual Report on the state of air quality in the Republic of Serbia for 2020, available at: <https://bos.rs/ekz/uploaded/BOS%CC%8C,RERI%20-%20Prikaz%20Izves%CC%8Ctaj%20o%20stanju%20kvaliteta%20vazduha%20za%202020.%20godinu.pdf>

operational and provided a sufficient amount of data for the year 2020, the city was placed in the category of excessively polluted cities.

The increase in data reliability is also noticeable. Namely, in 2020, as many as 90% of stations met the conditions for data quality, and only 22% of stations met those conditions just three years earlier. The importance of comprehensive air quality measurement is best illustrated by the fact that at 36 out of 46 stations where particulate pollution is monitored, the air was rated as excessively polluted. In addition, at 11 out of 20 stations where the air is rated as clean, the concentration of $PM_{10}/PM_{2.5}$ particles is not measured at all.

When assessing air quality for 2020, in addition to the data collected by the Environmental Protection Agency, data from three stations operated by the City Institute for Public Health of Belgrade were used, as well as data from automatic monitoring in the local networks of the Autonomous Province of Vojvodina (APV), the City of Belgrade and the City of Pančevo as well as monitoring points in the cities of Sremska Mitrovica, Subotica, Novi Sad, Smederevo, Užice, Bor, Kraljevo and Niš. It should be noted that a project financed by EU IPA funds from 2016, which aimed to integrate all data from networks for automatic monitoring of air quality, was not successfully completed. The trend of increasing the volume of monitoring and data availability has not been fully observed in all environments. Failures also occur, for example monitoring stations managed by the Autonomous Province of Vojvodina have not delivered data in real time for a prolonged period, while data from the cities of Belgrade and Pančevo are only available on the Environmental Protection Agency's website, but not on the open data website.³⁵

In order to complete the picture of pollution it is necessary to take into account the results of local monitoring. However, local monitoring of air pollution has not been implemented to a sufficient extent in a large number of areas for the Environmental Protection Agency to consider this data to be official when making air quality assessments. With the exception of institutions³⁶ whose

35 National Environmental Association NEA (2022): Air 2021, available at: <https://nea.rs/index.php/2022/01/01/nea-predstavlja-vazduh-2021/>

36 The institutions whose measurements are included in the official air quality monitoring assessment for the year 2020, are listed at the beginning of a previous paragraph.

results were taken into account when making the air quality assessment, most of the local measurements are listed in the Agency's Report as illustrative and are not incorporated into the assessment. Čačak is a good example of the extent to which the inclusion of local monitoring would significantly influence the results of the air quality assessment. Monitoring of PM₁₀ conducted by the local Public Health Institute in Čačak found that excessive pollution was recorded on 33 of the 85 days on which measurements were taken. This illustrates how inclusion of local monitoring would significantly change the picture of the state of air in Serbia.

At a local level, certain problems are observed regarding the frequency and reliability of air quality monitoring. A trend of untimely tender announcements, and thus signing of contracts between local self-government units and local Public Health Institutes, has been observed. Monitoring points being moved or completely shut down prevents both the collection and valid analysis of data. Finally, the number of cities/towns where monitoring of the presence of particles in ambient air is carried out is insufficient (only 26 cities/towns), which makes it difficult to provide a broader picture of the risks to public health due to air pollution.³⁷ Given the impact of particle pollution on public health, it is concerning that only 12 of the 29 cities in Serbia with a population of more than 50,000 inhabitants have state stations for automatic monitoring that measure PM concentrations. This means that about 1.35 million citizens living in the remaining 17 cities do not have such information.

Public air protection policies

As a signatory to the Treaty Establishing the Energy Community, it is the duty of the Republic of Serbia to ensure compliance with the emission limit values of polluting substances contained in the Directive on large combustion plants. To comply with the Directive, Serbia chose to adopt a National Emissions Reduction Plan (NERP). This document stipulates that thermal power plants

37 Institute for Public Health of Serbia "Dr. Milan Jovanović Batut" (2021): Urban air pollution on the territory of the Republic of Serbia measured within the network of public health institutions in 2020, available at: <https://www.batut.org.rs/download/izvestaji/higijena/Godisnji%20izvestaj%20vazduh%202020.pdf>

in Serbia may not emit more than 55,000 tons of SO₂ per year, in total.³⁸ This limit was repeatedly exceeded during 2018, the first year to which the NERP applies, as well as during the following years. During 2021, more than 280,000 tons of SO₂ were emitted from thermal power plants in Serbia³⁹, five times more than allowed.

Due to multiple exceedances of SO₂ emissions, the Renewables and Environmental Regulatory Institute (RERI) filed a lawsuit in January 2021 against *Elektroprivreda Srbije* (EPS), due to “endangering the health of citizens of the Republic of Serbia, and due to multiple exceedances of permitted SO₂ emissions from thermal power plants Nikola Tesla and Kostolac”.⁴⁰

During 2020, the City of Belgrade carried out the process of compiling a Draft Air Quality Plan. The public was not involved in this process. Civil society organizations (BOŠ and RERI) therefore organized two rounds of public consultations for the interested public during December 2020 and January 2021. The draft Plan was set for public inspection on January 15, 2021, with a deadline of 15 days for submitting comments. After that, the Secretariat for Environmental Protection published its answers to these comments and again organized a repeated public review of the Draft Air Quality Plan in the Belgrade agglomeration on March 10, 2021. The repeated public review also lasted 15 days, this time the Secretariat did not organize public consultations; BOŠ and RERI therefore organized a third round of consultations. After the repeated public review, the Plan was adopted on June 9, 2021.⁴¹

The process of drafting and adopting this document was accompanied by many procedural failures, including the failure to meet the basic criteria of a public hearing; the documentation on the basis of which the Plan was created was not

38 Bankwatch network (2021): Comply or close, available at: <https://www.complyorclose.org/wp-content/uploads/2021/08/Sr-USKLADITI-ILI-ZATVORITI.pdf>

39 European Environmental Agency (2022): LCP Energy Community Serbia 2021 Final, available at: https://cdr.eionet.europa.eu/rs/eu/energycommunity/envyknvkw/LCP_Energy_Community_Serbia_2021_final.xlsx/manage_document

40 Renewables and Environmental Regulatory Institute (2021): RERI has sued EPS for endangering citizens' health, available at: <https://www.reri.org.rs/reri-tuzio-eps-zbog-ugrozavanja-zdravlja-gradana/>

41 City of Belgrade (2021): Plans and decisions for the improvement of the environment adopted at today's meeting, available at: <https://www.beograd.rs/cir/beoinfo/1783979-planovi-i-odluke-za-unapredjenje-zastite-zivotne-sredine-usvojeni-na-danasnjoj-sednici/>

attached, nor was the analysis of the effects of the previous Air Quality Plan. In addition to procedural failures, there were numerous omissions within the content of the Plan itself. The key objections to the draft plan, in addition to the fact that it was not prepared in accordance with the Rulebook on the content of air quality plans, is that it does not contain a vision for reducing pollution and improving air quality, or targets for reducing air pollution, which would provide a baseline for measuring the successful implementation of the Plan. Due to these omissions, as well as many others, the participants of the public consultation agreed that the proposed draft Plan should have been withdrawn from the procedure.

According to data obtained from the Ministry of Environmental Protection, in addition to Belgrade, in 2021 the City of Kragujevac also received approval for an Air Quality Plan, while the air quality plans for the cities of Bor, Kraljevo, Niš, Valjevo and the Municipality of Kosjerić are in the process of obtaining approval from the Ministry.

On the other hand, the cities of Bor, Kragujevac, Kruševac, Leskovac, Sremska Mitrovica and the Municipality of Trstenik received approval from the Ministry for short-term action plans. Novi Bečej, Beočin, Šabac and Kraljevo are in the process of obtaining approval for short-term action plans, while the municipalities of Bojnik, Kladovo, Kovin, Medveđa and Vlasotince have had their requests for approval rejected.

Air pollution and energy poverty

The inventory of the Environmental Protection Agency, which shows the sources of air pollution in the latest annual report, was unambiguous about the main sources. The dominant source of PM_{10} and $PM_{2.5}$ particle pollution are thermal power plants less than 50 MW in capacity and individual combustion plants. These polluters contribute 51% of the emissions of suspended PM_{10} particles, and 67% of the emissions of suspended $PM_{2.5}$ particles.

An important factor driving air pollution in Serbia is the use of individual combustion stoves, which are used by the vast majority of households for heating. Energy poverty, which is influenced by a number of factors, primarily

low household income, high consumption of available income on energy and insufficient energy efficiency⁴², lies at the root of air pollution originating from individual combustion stoves. Citizens affected by energy poverty are neither able to provide for sufficient comfort in the household, nor to cover heating costs.

The RES Foundation report "Everything you wanted to know about energy poverty in Serbia" offers a detailed analysis of this problem. The report states that:

"Over a million households use individual heating devices;

- almost 60% of households use firewood as the primary fuel for heating;
- stoves and ovens used for heating are largely out-dated and inefficient, with efficiency estimated at below 40%;
- 20% of buildings in Serbia lack thermal protection, almost 60% of the construction stock in Serbia does not meet the regulatory standards in terms of construction physics, and the number of newly designed buildings built in compliance with the most up-to-date energy efficiency regulations is negligible compared to the total building corpus;
- 9.9% of households in the country cannot afford a warm enough home, while a quarter (25%) are unable to pay utility bills regularly;
- As many as 66% of socially disadvantaged citizens use firewood for heating purposes. The quality of firewood used by socially disadvantaged households is also below average;
- Despite the fact that two-thirds of low-income respondents rely on firewood for heating purposes, 91% of them did not receive any assistance to buy it".⁴³

42 RES Foundation (2021): Everything you wanted to know about energy poverty in Serbia in 2021, available at: <https://resfoundation.org/rs/wp-content/uploads/2021/10/Sve-sto-ste-hteli-da-znate-o-energetskom-siromastvu-u-Srbiji.pdf>

43 Ibid.

Based on the above, it is clear that the solution to this problem requires an approach that prioritizes improving the energy efficiency of households, with support for the introduction of modern, energy-efficient heating devices, which offer a number of benefits – better comfort, more rational consumption and reduction of air pollution, both outside and inside the household. Special emphasis should be placed on supporting energy-poor households through:

“a) measures to improve energy efficiency and increase the use of renewable energy sources;

b) measures to protect vulnerable consumers; c) measures to improve the information provided to citizens”.⁴⁴

44 Ibid.

In the budget of the Republic of Serbia for 2021, the Ministry of Environmental Protection⁴⁵ planned several budget lines for activities to increase air quality. Within this budget, budget lines were allocated for: "Reduction of air pollution in Serbia originating from individual sources – stoves (houses and independent communities)"; "Afforestation in order to protect and preserve natural diversity", as well as co-financing projects for procuring, replacing, reconstructing and rehabilitating boiler rooms for heating in 2021.

Funds from the aforementioned budget lines were distributed to local governments, which applied for the funds through calls announced by the Ministry. A total of 69 applications were received for the Ministry's tender for providing funds to co-finance projects for procuring, replacing, reconstructing and rehabilitating boiler rooms for heating in 2021. RSD 200 million was distributed to 49 municipalities and cities; the other 20 applications were rejected due to failure to meet the set criteria.⁴⁶ The call for co-financing afforestation projects was announced on February 1, 2021. Funds were distributed to 38 units of local self-government and city municipalities, out of a total of 52 that had submitted applications.⁴⁷ On February 1, 2021, the Ministry announced a call for co-financing air pollution reduction projects in Serbia originating from individual stoves. A total of 17 applications were submitted for the call, and RSD 100 million allocated for this budget line were awarded to ten local self-governments and city municipalities.⁴⁸

45 National Assembly of the Republic of Serbia, Law on the Budget of the Republic of Serbia for 2021, available at: <http://www.pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/skupstina/zakon/2020/149/1/reg/>

46 Ministry of Environmental Protection (2021): Final ranking list of projects for the allocation of funds for the co-financing of the realization of projects of procurement, replacement, reconstruction and rehabilitation of boiler houses, available at: <https://www.ekologija.gov.rs/informacije-od-javnog-znacaja/konkursi/konacna-rang-lista-projekata-za-dodelu-sredstava-za-sufinansiranje-realizacije-projekata-nabavke-zamene-rekonstrukcije-i-sanacije-kotlarnica>

47 Ministry of Environmental Protection (2021): Final ranking list for the allocation of funds for co-financing the implementation of afforestation projects, available at: <https://www.ekologija.gov.rs/informacije-od-javnog-znacaja/konkursi/konacna-rang-lista-za-dodelu-sredstava-za-sufinansiranje-realizacije-projekata-posumljavanja>

48 Ministry of Environmental Protection (2021): Final decision on determining the final ranking list, available at: <https://www.ekologija.gov.rs/informacije-od-javnog-znacaja/konkursi/konacna-odluka-o-utvrdjivanju-konacne-rang-liste>

Within the budget for 2022, the Ministry of Environmental Protection has once again provided funds for these budget lines. For the activity "Reduction of air pollution in Serbia originating from individual sources" RSD 150 million has been allocated, which is 50 million more than the previous year. As in the previous year, RSD 100 million was allocated for the activity "Afforestation in order to protect and preserve natural diversity", and RSD 200 million was again allocated for the activity "Procuring, replacing, reconstructing and rehabilitating boiler rooms for heating".⁴⁹

In addition to the Ministry of Environmental Protection, the Ministry of Mining and Energy also allocated significant funds for the Energy Efficiency Program within the Law on the Budget of the Republic of Serbia for 2022. RSD 277,850,000 has been allocated for the entire program, of which RSD 75 million is intended for program activities "Energy efficiency in central government buildings" and "Energy efficiency in public buildings and renewable energy sources in the district heating sector". In addition, another RSD 3,700,000 was allocated for "Energy efficiency and energy management in municipalities in Serbia".

In the budget of the Republic of Serbia for 2022, as in previous years, funds have been allocated for air, water and sediment quality monitoring. In previous years, there was a trend of increasing allocations for this budget line, but in the budget for 2022 the amount planned for this activity is RSD 112,600,000, which is significantly less than last year's amount of RSD 129,901,000, although monitoring is still lacking in many areas in Serbia.

The draft Air Protection Program in the Republic of Serbia for the period from 2022 to 2030 with the Action Plan offers a rough estimate that €2.964 billion will be required for the implementation of the Program during this period, while it is estimated that consumers, i.e. households, will contribute 65.9%, and investors 34.1% of this amount.

49 National Assembly of the Republic of Serbia, Law on the Budget of the Republic of Serbia for 2022, available at: <http://www.parlament.gov.rs/upload/archive/files/cir/doc/zakoni/2021/1955-21%20za%20sajt.pdf>

Recommendations



Strategic and Legislative Framework

1. Start the process of establishing binding standards for low-power combustion appliances used in households (stoves and solid fuel stoves) in accordance with the Eco-design Directive (2009/125/EC). Given the widespread use of inefficient stoves and solid fuel ovens in households, consider the accelerated transposition of this Directive.
2. The participation of citizens in the adoption of documents concerning air quality at a national and local level should be enabled.



The Implementation of Regulations

3. Ensure that competent institutions enforce regulations related to legal deadlines for the creation of public policies concerning air quality, regulations related to air quality monitoring, the exchange of air quality information, and obligations under international agreements.
4. Monthly information about detected exceedances of hourly and daily limit values (LV) must include information about which monitoring stations were/were not operating during that month.
5. Stakeholders responsible for air quality monitoring should ensure that the monitoring system is well-maintained and that data is made available. Financing for the smooth operation of air quality monitoring networks should also be secured, especially for urban agglomerations such as Belgrade.

6. Local governments/cities should improve the quality and visibility of air quality data, as well as ensure easy public access to air quality data provided by the local monitoring networks.



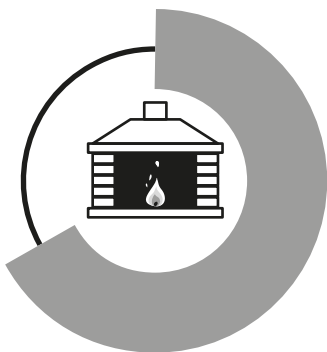
Financing

7. Secure financing for the unobstructed work of inspectorates for environmental protection.



AIR QUALITY

AIR POLLUTION AND ENERGY POVERTY



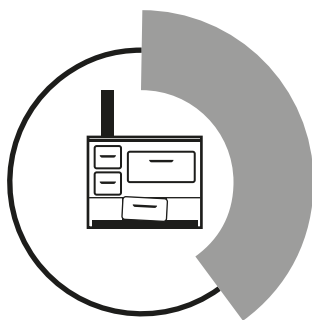
67%

of PM_{2.5} particulate matter emissions originates from **individual stoves** (independent household heating) and **heating plants less than 50 MW in capacity.**



ALMOST 60%

of households use **firewood** as their primary fuel for heating.



LESS THAN 40%

Heating stoves and furnaces are estimated to have an efficiency of 40%, because these appliances are **outdated and inefficient.**



20%

of facilities in Serbia have **no thermal insulation.**

