



2019

AIR POLLUTION PROGRESS REPORT

Air Pollution Progress Report

Date of publication: November 2019

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Balkan Green Foundation (BGF) is a regional initiative established to advocate and promote sustainable development in the Western Balkans, specifically concentrating on a number of key topics such as sustainable economic development, environmental protection, energy development, and climate change. BGF works to advance sustainable development practices as ways to ensure and maximize opportunities for everybody through policy advocacy and project development in Kosovo and the region.

INTRODUCTION

The air that we breathe is fundamental to our existence; yet, we sometimes forget the impact that the quality of the air has on our health and well-being.

The air we breathe contains emissions from motor vehicles, industry, heating and commercial sources, as well as tobacco smoke and household fuels. Air pollution harms human health, particularly in those already vulnerable because of their age or existing health problems. Evidence shows that air pollution at current levels is responsible for a significant burden of deaths, hospital admissions and exacerbation of symptoms, especially for cardiorespiratory disease. Exposure to air pollutants is largely beyond individuals' control and requires action by public authorities at the national, regional and even international levels.

It is estimated that Kosovo had up to 3,800 premature deaths until 2016 as a result of air pollution (European Environment Agency, 2019). Kosovo ranks first in the number of years of life lost as a result of premature deaths. Years of Life Lost (YLL) is determined as the possible years of life lost due to premature death. It is an evaluation of the average number of years that a person would have lived if he or she would not die prematurely. This takes into consideration the age in which the deaths occur and is greater for deaths at an earlier age and lower for deaths at an older age. World Bank's Country Environmental Analysis (CEA) for Kosovo estimates air pollution to cause **852 premature deaths, 318 new cases of chronic bronchitis, 605 hospital admissions and 11,900 emergency visits** each year. It is about time the institutions in Kosovo take this problem seriously.

Air pollution is the consequence of a large number of inadequate policies and this has to change urgently. Since January 2019, Balkan Green Foundation, in cooperation with the Institute for Development Policy (INDEP), proposed 13 measures that the government should take to address the problem of air pollution. Since then, five steps have been undertaken:

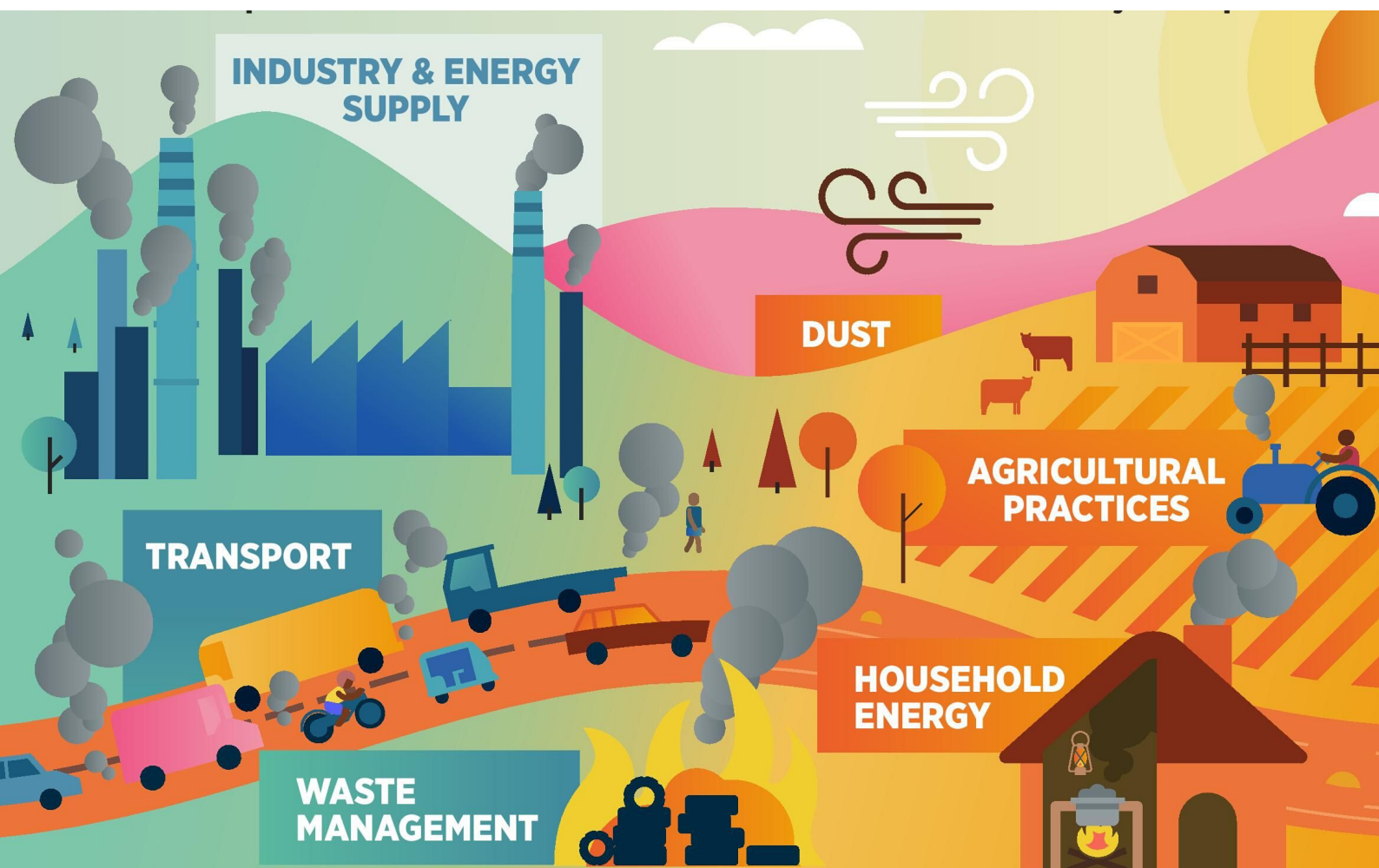
- (1) The legal basis has been created for the establishment of the Kosovo Energy Efficiency Fund (KEEF) with the approval of the Law on Energy Efficiency;
- (2) The Government of Kosovo has approved the request of the Ministry of Environment and Spatial Planning (MESP) not to use coal for heating in public institutions;
- (3) The Ministry of Environment and Spatial Planning (MESP), with the support from the European Union (EU) have upgraded Kosovo's state air quality monitoring network platform and launched a mobile application displaying real-time air quality monitoring data;
- (4) The Parliament of Kosovo decided not to pass the proposed amendment of Law No. 05/L-132 on Vehicles on removing the limitation of imports of vehicles older than 10 years; and
- (5) Technical control centers are now obliged to inspect and monitor emissions from vehicles with the use of vehicle exhaust gas analyzers.

SOURCES OF AIR POLLUTION

In Kosovo, the quality of air deteriorates in developed urban areas, especially in industrial areas. In Kosovo, the greatest impact on the environment is caused by power plants (TPP Kosovo A and B), transportation, Ferronikeli, Sharrcem, other plants with low capacity and heating plants. A very challenging problem for environmental pollution is also inherited industrial waste and urban waste dump. Since pollutant cadaster has not yet been established, many data may be only biased, however, it is estimated that these resources contribute to a considerable extent to the environment.

According to the Ministry of Environment and Spatial Planning (2012), sources of air pollution in Kosovo are considered:

- Thermal power plants (Kosovo A and Kosovo B)
- Lignite surface mining in Sibovc coal mine
- Industrial complex in Mitrovica
- Metalworking, nonmetallic and chemical industry
- NewCo Ferronikeli nickel production plant in Drenas
- Sharrcem cement plant in Hani i Elezit
- Construction material industry, wood industry, paper industry, textile industry, leather-shoe industry, rubber industry, and food industry
- Graphic activity, stone quarries, asphalt production, road, rail and air transport
- Urban and industrial landfills, agricultural pollution and incineration (<60% of Kosovars receive waste collection services: 75% in urban areas and 41% in rural areas)



As such, Kosovo needs very broad approaches to address air pollution and not propose inadequate policies that go opposite with air quality improvement efforts.

Last year, Balkan Green Foundation called on the members of Kosovo's parliament not to vote on a proposed increase of the maximum age of newly imported second-hand cars to 15 years, in order to protect the environment and safeguard public health. BGF voiced its position that changing the Law no. 05/L-132 would increase the levels of pollution which are reportedly higher and in certain periods of the year, such as the winter season, raise concerns amongst citizens. Such implications in the environment could also affect Kosovo citizens' safety and health.

Furthermore, such an action would be in opposition with the initiatives in the European Union countries on reducing gas emissions which is a result of the light-duty and heavy-duty vehicles. On May 2019, the Parliament of Kosovo decided not to pass the proposed amendment of the Law No. 05/L-132 on Vehicles on removing the limitation of imports of vehicles older than 10 years.

This step must be seen as a reaffirmation of the commitment of Kosovo in protecting the environment and in being in line with the European Union directives. Considering the average age of registered vehicles in Kosovo which is over 18 years and the high pollution levels registered in certain periods within a year, implications from this initiative would have increased even more the concerns amongst citizens. Short-term benefits from this decision would be minimal compared to the damage caused from old vehicles.

A lot of good practices can be taken from other countries to contribute to air quality improvement, but Kosovo needs to act faster, this because a tiny country as Kosovo during the winter manages to rival with polluted air quality in cities such as Beijing, Mumbai and New Delhi.

AIR QUALITY MEASUREMENT

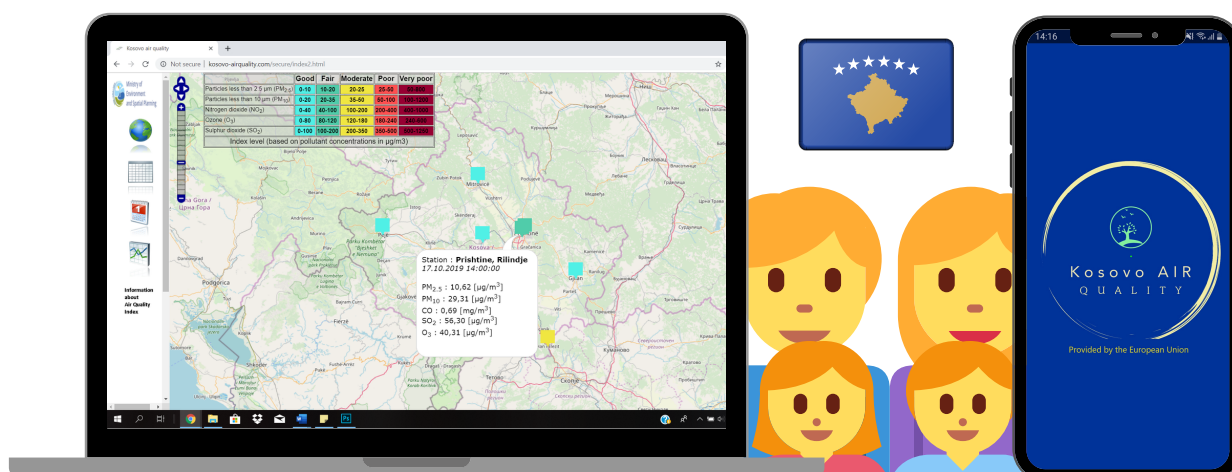
In May 2018, the National Audit Office of the Republic of Kosovo found that the state system of monitoring and reporting, which is managed by the Ministry of Environment and Spatial Planning and its mechanisms, did not provide the citizens of Kosovo a real picture of the situation on air quality, especially not in real time. The risk imposed by such system of monitoring and reporting consists in the monitoring stations being non-operational and without data particularly in those cases when air pollution in the country is severe and citizens are not aware at the right time to take the necessary measures to avoid exposure to such air pollution.

During 2016 and 2017, hazardous parameters to human health such as dust particles PM10 and PM2.5, were not reported for months, and particularly during the winter when these parameters reach and exceed maximum values. Despite the deficient monitoring and reporting, in those cases when reported, the values of the parameter PM10 were exceeded up to 400%, according to the National Audit Office. The process of data monitoring and reporting was hindered even more by issues such as the non-functionality, frequent displacement, security and damage of the stations that monitor and report the data on air quality.



Official air quality measurements have been conducted by the Hydrometeorological Institute of Kosovo which has published recent data on the website **kosovo-airquality.com**. This platform forms and aggregates the state air quality monitoring network which includes real-time air quality data covering 7 municipalities in Kosovo. The Ministry of Environment and Spatial Planning and the EU Office in Kosovo have also launched a **mobile application** to present the very same data on air quality.

In total, Kosovo's state air quality monitoring network consists of **12 air quality monitoring stations**, namely in Obiliq (3), Prishtina (2), Drenas (1), Hani i Elezit (1), Mitrovica (1), Gjilan (1), Prizren (1), and Peja (1). In terms of real-time data, the stations in Prishtina, Mitrovica, Gjilan and Hani i Elezit measure PM2.5, PM10, CO, NO2, SO2, and O3. The station in Drenas measures PM2.5, PM10, CO, NO2, and SO2. The station in Prizren measures PM2.5, PM10, CO, SO2, and O3 while the one in Peja measures PM2.5, and PM10. This is a step forward in Kosovo's efforts to monitor air pollution data. Of course, it is now important for the government to continuously increase the number of air quality monitoring stations and take measures to improve air quality in order to eliminate the sources of pollution.



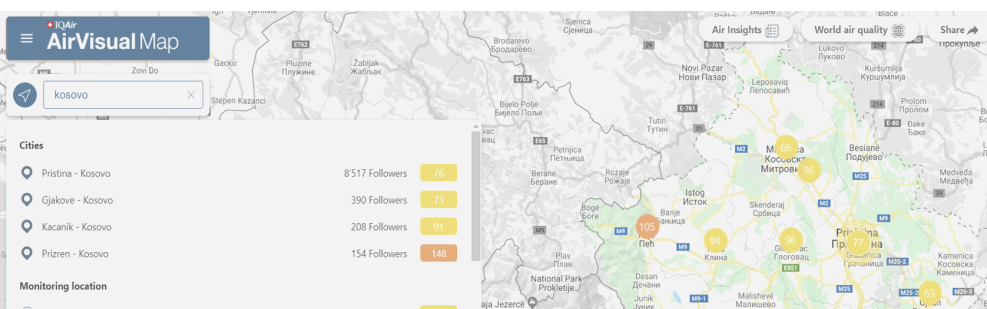
Real-time data on air pollution is provided **only for 7 municipalities** in Kosovo, with Obiliq being the one excluded:

- Prishtina
- Mitrovica
- Gjilan
- Hani i Elezit
- Drenas
- Prizren
- Peja

What is concerning is the fact that monitoring stations situated in areas characterized by high air pollution (such as Obiliq, Hani i Elezit, and Gjilan) had no data on some of the parameters for over 6 months during 2017. The station located in Obiliq is important to have data reporting throughout the year, as it is located in the vicinity of the thermal power station Kosovo B. In 2016 and 2017, this station has been characterized by major **shortcomings** in data reporting.

The Ministry of Environment and Spatial Planning publishes historical data on air pollution through annual reports on the state of the environment. The most recent annual report is that of 2018 while the most recent monthly report covers the period December 2018 - January 2019. No information is publicly available for the period after January 2019 (<https://mmph.rks-gov.net/publikimet/319/raportimi-i-cilesis-se-ajrit>)

The alarmingly high levels of air pollution recorded over the past two years (2017-2018) in Kosovo, particularly in Pristina, have posed a serious threat to the health of citizens. The measurements that prompted the strongest reactions from citizens and institutions were initially made by the U.S. Embassy in Kosovo which uses its own air quality monitor that feeds data to the **AirVisual** platform. In terms of “democratizing” air quality data in Kosovo, AirVisual has become a popular tool among citizens and companies that use it to make knowledge about air quality more widely accessible to large numbers of people in different cities in Kosovo. To date (October 2019), there are 23 independent stations monitoring 13 municipalities in Kosovo on the exposure to PM2.5. In terms of usage, there are around 10,000 users on AirVisual who follow real-time data on PM2.5 exposure in the 13 municipalities in Kosovo.

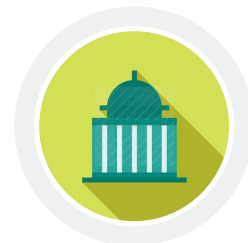


10,000

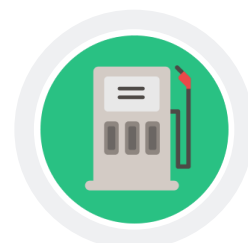
users (followers) from Kosovo
on AirVisual

RECOMMENDATIONS

(1) Entities responsible at the central and local level should make sure that they have established a comprehensive and up-to-date legal framework, as well as efficient and sustainable monitoring and reporting mechanisms on air quality in Kosovo. Kosovo's strategy for air quality should be enforced, the action plan for air quality and the law on air protection from pollution should be adopted, and air quality plans for zones in which pollutants levels visibly exceed limit values by a wide margin, especially in winter, should be prepared and adopted.



(2) Implementing an excise tax of 20-euro cents/liter for diesel fuel. The burning of one liter of petrol emits 2.9 kilograms of CO₂, while the same amount of diesel emits 3.1 kilograms of CO₂. Kosovo imports around 500 million liters of fuel annually, as a result, the burning of these fuels produces around 1.5 million tons of CO₂ annually. Therefore, the implementation of an excise tax of 20 cents/liter would make diesel fuel to become more expensive and lessen the demand given the environmental pollution aspect of using it.



(3) Reforming public transportation in Kosovo. Discouragement of the use of cars must be conducted by offering them qualitative alternatives of transportation. This must include not only transportation within cities but also those that are between them. A large part of the congestion in the capital city is caused by cars coming from other cities. Urban transportation needs to be reformed and improved so as to ensure the arrival in capital cities in an organized public transportation while discouraging the usage of private cars. The Municipality of Pristina should urgently tackle the issue of bicycle lanes and pedestrian mobility as part of its Sustainable Urban Mobility Plan (SUMP).



(4) Removing excise and customs tax for new cars and those that fulfill higher standards such as Euro 6; Doubling the excise tax for older cars that do not meet Euro 6; No value-added tax for electric and hybrid cars; Incremental taxes for road usage tax and environmental tax according to the weight of the vehicle, type of engine and mileage crossed; and increasing the quality of fuel to improve the air quality in the country. We call on the Ministry of Infrastructure and Transport (MIT) to implement the administrative instruction on controlling and measuring vehicle emissions.



(5) Extending environmental zones across all cities in Kosovo where passing by car is prohibited. Larger urban centers in Kosovo must have environmental zones in the city where the entrance by car is prohibited. Nevertheless, this measure needs to be longer-term because not only that the environment is protected but also the path would be opened for the use of bicycles and the improvement of public transportation, both of which are economically sustainable.



(6) Dedicated ecological tax categorized according to environmental impact. The ecological tax is not treated as a dedicated tax. When we register our car, we pay in the name of environmental protection but that amount goes to the total budget of the state which is then disbursed elsewhere. At the same time, we request a categorization of the payment of this tax. How is it possible to pay the same amount for a car with 20,000 kilometers per year compared to one that has 8,000 kilometers per year? The categorization of the tax must also include age, type of fuel used, engine, etc.



(7) Continuous and transparent monitoring of power plant filters. Citizens must be informed and made aware in real time on the level of emissions from the power plants, on the stance of industrial waste and the dangers of pollution during different periods throughout the year. Information on the level of emissions and on the work of the filters is essential in order to protect and rule out any suspicion that someone is turning off the filters to ensure more production.



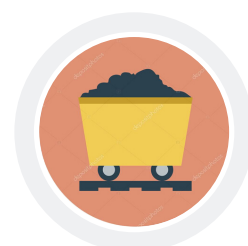
(8) Higher taxes for inefficient devices. The Government of Kosovo must undertake all the measures necessary that energy efficient devices be competitive with those that are not. This means that besides fiscal relief in payments for efficient devices, the contrary should be in place for those devices that are not efficient. In the Kosovar market, inefficient light bulbs must be eliminated! At the same time, a new elevated tax scheme concerning electrical devices and their energy use is necessary.



(9) Functionalization of the Energy Efficiency Fund which would promote efficiency measures and help citizens to invest in their houses. A large number of houses in Kosovo are equipped with inefficient devices where there is also a lack of proper thermal insulation. Even if the Government says that there is a lack of data to reach such conclusion, the fact of not having data from the Government's side is an issue in itself that needs to be addressed immediately.



(10) A five-year program prohibiting the use of coal for heating. The prohibition of coal as a heating fuel in industrial, residential and public buildings, as well as the finding of other alternative solutions for heating, must be a medium-term priority of the Government of Kosovo. Only after the establishment and functionalization of the Energy Efficiency Fund, the Government must announce a five-year program banning every system of heating that uses coal in Kosovo. Combined measures of efficiency, central heating systems, the prohibition of illegal extraction of coal and programs creating green jobs need to be coordinated in a manner that makes this five-year policy make sense.



(12) Annulling the contract for the construction of “New Kosovo” power plant and increasing investments in renewable energy. The Government of Kosovo must show the political will to transform the energy system in step with Europe and not put coal forward as the basis for energy development in the future. The construction of another coal power plant ruins market competition, extinguishes hopes for environmental improvement, and undermines the European future of Kosovo.



WHAT YOU CAN DO

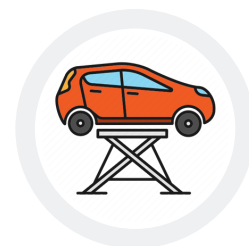
The Government of the Republic of Kosovo together with other institutions in the country must seriously address the problem of air pollution. Partial and ad-hoc policies, will not produce the required results. Unfortunately, the majority of these measures are policies that we have requested for years. It is the final time when the public interest needs to be put on top of personal, party and political agendas. Kosovo is the place of all those who live and of all who still have not been born.

But people must not wait only for actions from the Government, as each one of us can also individually **take actions in order to reduce air pollution** a little bit:

(1) Choose a cleaner commute – share a ride, use public transportation, bike, or walk whenever possible. Kosovo cities tend to be overcrowded with cars. It is worth knowing that slow moving traffic emits more pollution than when cars move at freeway speeds. As such, using more public transportation (for longer distances), waking and cycling for shorter ones will reduce the number of cars in the streets and therefore lower that air pollution.



(2) If you must drive then take care of your car. Getting regular tune-ups, changing oil on schedule, and inflating tires to the proper level can improve gas mileage and reduce emissions.



(3) Save energy - at home, at work, everywhere. Energy saving shall not occur only because of electricity prices, but also due to the awareness of the main source of electricity in Kosovo – coal/lignite (the dirtiest type of coal) which is one of the main pollutants.



(4) Look for Energy Efficient appliances when buying home or office equipment - Use of energy efficient appliances minimizes the exploitation of natural resources. These resources include mainly coal, and water.

(5) Maintain your wood stove or fireplace - If you own a wood burning stove or a fireplace, be sure to keep it well maintained. When burning firewood in wood stoves, incomplete combustion often releases particulate matter of a very small size (less than 2.5 micrometer). These tiny particles are the most harmful to our respiratory tracts because they can easily get deep into our lungs, and for their small size may even enter our bloodstream. Make sure you don't burn wood with paint, glue or other coating because it could release additional toxins into the air.



(6) Consume less and recycle - recycling, consuming less and thinking twice before buying new item are the best you can do for the environment and the air quality. If you need to buy new products, whatever they are, support local companies.



(7) Avoid burning leaves, trash, and other materials - most people who burn their waste do not realize how harmful this practice is to their health and to the environment. Studies indicate that burning leaves, trash and other material is far more harmful than people think. Burning waste produces harmful quantities of dioxins, a group of highly toxic chemicals that settle on crops and in our waterways where they eventually wind up in our food and affect our health.



(8) Plant trees - Trees are known as natural air filters. Except of removing the particulate matter, trees also decrease levels of nitrogen dioxide, sulphur dioxide, carbon dioxide and monoxide, ozone, benzene and dioxin. Some of the most efficient tree "air cleaners" are large-growing species with leaves such as: oak, common ash, ginkgo biloba, various linden trees and elms. But trees are not only natural air filters; they also cool down summer temperatures by a few degrees. Even the slightest temperature reduction can make a real difference in keeping the air clean, because many compounds and ground-level-ozone-forming chemicals are temperature dependent. This means that they transform into pollutants only when outdoor temperature reaches certain level. Additionally, cooler temperatures are more comfortable for our wellbeing, which makes trees a great substitute for energy demanding air conditioners.



All of these solutions can help mitigate the impact of our behavior in our air-quality, though they'll undoubtedly need to be combined with national actions for cleaning up our air. People are entitled to live in a healthy, clean and safe environment. Thus, realization of environmental rights in Kosovo shall shift from theory to practice.

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Supported by: Heinrich Böll Stiftung



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