Position of Polish NGOs on the revision of air quality directives



























Fundacja na rzecz Efektywnego Wykorzystania Energii

Introduction

The NGOs signed under this position paper welcome with much hope the fact that the European Commission (EC) discerns the need to amend the air quality directives in order to strengthen the system of air protection across EU Member States. According to the European Environment Agency, as many as 97% of the EU urban population in 2019 lived in the areas exceeding the new WHO guidelines for PM2.5, while according to the current EU norms this would affect only 4%¹. This shows that a strong EC action on air protection is indispensable.

Poland is one of the EU countries with the highest exceedances of limit and target values for PM10, PM2.5 and benzo[a]pyrene. Out of 20 EU air quality measurement stations with the highest concentration of PM2.5 as many as 12 are located in Poland². The situation is even worse with benzo[a]pyrene, where 19 out of 20 highest annual concentrations occur in Poland³. The main source of air pollution in Poland is low-stack emission, i.e. burning of coal and wood in household boilers, stoves and fireplaces. This source is responsible for 52% of PM2.5 emissions and 91% of benzo[a]pyrene emissions⁴.

Low stack emission constitutes a significant contributor to air pollution not only in Poland - a similar situation takes place in a number of EU countries, e.g. Romania, Bulgaria, Italy, Czech Republic. Despite this, the consultation process and preliminary proposals included in the questionnaire do not recognise the high impact of this source of pollution. On many occasions references are made to industrial or traffic sources, but low-stack emissions are not mentioned. Therefore, we would like to urge the EC to pay sufficient attention to low-stack emission during the revision process and propose dedicated measures referring to monitoring, information and most importantly emission abatement with regard to this source of pollution.

Air quality standards for better public health

We support the new World Health Organization (WHO) air quality guidelines presented on 22 September 2021⁵. We believe that the **new EU limit values should align fully with the new WHO guidelines** and that the deadline for compliance with these revised limit values should be **by 2030 at the latest**. This deadline should be binding for all Member States without exceptions. Intermediate milestones should be defined in the implementation plan.

The new AQ directives should put an annual limit value on benzo[a]pyrene concentrations. Right now this carcinogenic pollutant is covered only with a target value, which has a "weaker" position in the air quality regime and its attainment is conditioned upon not incurring disproportionate economic costs. As mentioned above, Poland has the highest levels of benzo[a]pyrene concentration in the whole European Union. In 2019 the first 10 highest mean annual concentrations in Poland exceeded 7 ng/m3,

¹ Europe's air quality status 2021 https://www.eea.europa.eu/publications/air-quality-status-2021

² Data presented by the European Environment Agency for 2019

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⁴ Ministry of Climate 2020: Poland's Informative Inventory Report 2020. Submission under the UNECE CLRTAP and NEC Directive. Air pollutant emissions in Poland 1990–2018. Ministry of Climate, Warsaw 2019

⁵ WHO Air quality guidelines 2021 https://www.who.int/news-room/feature-stories/detail/what-are-the-who-air-quality-guidelines

which is seven times higher than the target value (1 ng/m3). In our opinion, currently authorities are not motivated enough to introduce bolder measures to reduce B[a]P concentrations, which partially results from the fact that there is no limit value attached for this carcinogen. Binding limit values have been and should continue to be a key driver for reducing air pollution concentration.

Daily limits for PM2.5 should be introduced to the revised Directive, as there are negative health effects associated with high, short-term concentrations of this pollutant. A study conducted in five cities in Poland on a timeline of almost four years has shown that there is a correlation between air pollution peaks and hospitalizations for respiratory tract diseases. Researchers found that a 24h increase of pollutant (PM2.5) by $10~\mu g/m3$ can lead to the increase of hospitalizations up to $6.4\%^6$. It is also worth stressing that WHO uses concentrations of daily PM2.5 to estimate hospital admissions and restricted days of work due to short-term exposure to air pollution. Given that the contribution of PM2.5 to PM10 is not constant throughout the year (due to daily variations in emissions, mainly in the household sector), daily PM10 is not sufficient to account for the risk of short-term effects on EU citizens' health.

WHO Air Quality Guidelines emphasize that no safe level of air pollution exists. Therefore **limit values** should be regularly reviewed and tightened in line with the technical and scientific progress. Therefore, consideration should be given as to whether changes of limit values should not be introduced by Commission Regulations without the need to amend the Directive. It would streamline the process of revising the limit values.

Effective Air Quality Plans

In Poland AQPs fail to fulfil their potential for air quality improvement. In most cases they do not contain a sufficient number of air quality measures and do not define sufficient obligations for different subjects, such as local authorities, entrepreneurs, environmental inspections, etc. To tackle this problem, the EC should update Annex XV, section A, adding a list of best practice measures to address each significant source of pollution (low stack, transport, industry, agriculture, etc.). Measures defined in AQPs should focus on elimination of pollution sources, e.g. inefficient solid fuel boilers, most polluting cars, etc⁷.

The updated Directive should oblige the Member States to include in AQPs a clear allocation of responsibilities for specific measures, full description of proposed measures as well as explanation and analysis why measures that would have a greater impact in improving air quality have not been selected.

In addition, to ensure effectiveness of AQPs, it is worth considering that the procedure to draw up and update AQPs should last no more than 12 months. Moreover, in case of failure to meet air quality

⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7326830/

⁷ For example, regarding low stack emission AQPs should define the initial number of boilers, stoves and fireplaces with excessive emissions as well as annual targets for their reduction. With regard to urban transport emissions AQPs have to define areas with restricted traffic of most polluting vehicles (low emission zones) or binding targets for road traffic reduction. Annual reduction targets should be assigned to the level of municipality. This would allow decision makers and citizens to assess the pace of annual solid fuel boilers (coal and biomass) elimination.

standards in a given year, a mandatory AQP assessment should be conducted, to verify whether planned air protection measures are sufficient⁸.

AQPs are to a large extent not implemented by local authorities. Moreover, few municipalities are sanctioned by Regional Environmental Inspections for not fulfilling the obligations defined in the AQPs. In 2018, Regional Environmental Inspections controlled 211 municipalities (less than 9% of all municipalities in Poland), while in 2019 and 2020 only 106 were controlled (4% of all municipalities)⁹. As a result, many local authorities are not pressed to be concerned with the implementation of obligations specified in the AQPs¹⁰.

In order to ensure that air protection measures set by the current AQPs are fulfilled, the Directive should explicitly oblige all Member States to establish an effective system of monitoring and enforcement, focused on administrative bodies responsible for the implementation of AQPs. The system should be based on annual audits of AQP implementation conducted by independent, specialised authorities, with the power to impose severe penalties as well as other measures to remedy any identified shortcomings. Results of such proceedings should be subject to judicial review by an independent court. Environmental organisations and members of the public should have the right to participate in the auditing procedures, including the imposition of penalties, as well as to initiate the judicial review. Article 30 of the Directive 2008/50/EC should be amended to guarantee better enforcement of AQPs.

AQPs are set to improve public health, however, there is no obligation to calculate the potential of reduced health impacts, such as premature deaths. There are already easy-to-use applications, such as WHO AirQ+¹¹ to estimate the health benefits of particular air quality improvement. Using health arguments should constitute a prerequisite for setting more ambitious goals in AQPs.

AQPs, due to their highly specialised nature, are usually inaccessible to the general public. In Poland some AQPs are over 500 pages long and are characterised by highly technical language and very scarce use of graphic design, which makes them extremely difficult to comprehend to the average citizen. Therefore, the Directive should introduce the **obligation for each AQP to contain an executive summary written in a non-specialist language**, covering the most important information, presented in a comprehensible form, including graphic elements such as maps and diagrams. Such summary should include precise information on the adopted air protection measures, indicating the authorities and entities obliged to implement them.

⁸ Currently AQPs in Poland are prepared every three years and they cover the period of prospective six years. This leads to a situation where municipalities do not implement AQP activities during these three years and no remedial actions are taken.

⁹ Own analysis based on public information presented by regional environmental inspections in Poland.

¹⁰ For example, the Małopolska AQP defined that in 2017-2019 local authorities in the region were obliged to eliminate 220,000 old-type boilers. This objective was realised only partially, 19% - as 41,000 old boilers were replaced with cleaner heating sources (data from the implementation of the Małopolska AQP). It should be added that Małopolska is one of the most active regions when it comes to air quality protection and the situation in other regions is even worse.

¹¹WHO AirQ+ application https://www.euro.who.int/en/health-topics/environment-and-health/airquality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution

Strengthening access to justice

In Poland citizens and NGOs are denied legal standing necessary to initiate judicial review of an AQP. This is confirmed by several judgments of administrative courts as well as by the recent judgement of the Constitutional Tribunal¹². A precise provision explicitly granting individuals and civic organisations access to justice, including the right to initiate judicial review of an AQP, would require Polish authorities to amend Polish national law while transposing the new Directive and expressly grant access to justice. Furthermore, judicial review should not be limited to an examination of compliance with formal requirements, but should also include a substantive analysis of the challenged AQP, including the scope of air protection measures. If serious flaws are identified, the court's decision should lead to implementation of necessary changes to the AQP rather than its revocation.

In addition, the Directive should grant individuals who suffered loss caused by the exceedance of limit values, the right to compensation from the state or specific authorities responsible for failing to attain the limit values. The loss should be understood as both pecuniary and non-pecuniary, including injury as well as infringement of personal rights, such as respect for private and family life, home and freedom of movement. Thus, the Directive should not only oblige Member States to attain the limit values, but also explicitly grant all EU citizens an enforceable right to breathe clean air.

Wider access to information

There are no EU-wide information and alert thresholds for PM10 despite the fact that particulate matter constitutes the main cause of AQ norms exceedance in CEE countries. We believe that maximum information and alert thresholds should be introduced in the new AQ directives as they provide for a highly impactful way of raising awareness on air quality issues as well as an opportunity to take personal precautionary measures. Currently in countries like Poland these thresholds are too high to guarantee efficient access to information (e.g. in Poland an alert threshold for PM10 concentration is at 150 ug/m3, while e.g. in France it is 80 ug/m3). PM10 alert and information thresholds should be aligned with the pathway to the WHO AQ guidelines. We propose to set a ratio to PM10 daily limit value for information threshold at 1.5 and for alerts at 2.0. This would automatically change the concentration for these indicators when limit values change.

To further streamline access to information and enable taking personal protection measures Member States should be obliged to **use their official alert communication channels to warn their inhabitants about high pollution levels**. Currently this information is not sufficiently promoted and many communication channels remain unused. Smog warnings should also include information on health threats (for the general population as well as vulnerable groups) and information about short term measures imposed by AQPs.

Better air quality monitoring

Currently, the air quality monitoring system fails to assess the problem of household emission, which is the main contributor to the excess of particulate matter and benzo(a)pyrene in CEE countries. There are rules for setting sampling points for traffic and industry oriented stations, however, there are none

¹² Judgment of the Constitutional Tribunal of 1 July 2021, File No. SK 23/27.

for households. We urge the EC to introduce a separate type of AQ monitoring station, focused on residential (low-stack) emissions and set microscale sitting of sampling points in this category. The directive should provide for a clear definition of different station types for particulate matter (PM10 and PM2.5), including information on representativeness, macroscale and microscale siting criteria. The following types of monitoring stations should be included: traffic, industrial, residential (low-stack emission), urban and rural background.

We call to increase the number of obligatory sampling points or their density, especially for PM2.5. Information constitutes the key element for people's participation in tackling the air pollution problem. Citizens of small towns, where air is frequently heavily polluted by solid fuel boilers, are often not aware of the alarming concentrations of benzo(a)pyrene and particulate matter in their hometowns¹³. Monitoring stations are needed not only for increasing awareness of the problem but also to measure the impact of concrete actions of municipalities, which need to be described in revised AQPs.

The burning issue of biomass

Biomass combustion constitutes one of the main sources of air pollution in many EU Member States. For example in Poland burning of biomass is responsible for a similar quantity of PM2.5 emissions as burning coal (21% for biomass and 27% for coal)¹⁴. In Great Britain this share is even higher as 38% of all PM2.5 emissions are generated by biomass burning¹⁵. Unfortunately biomass burning is promoted under EU climate legislation, which has a negative impact on air quality. We strongly believe that the new air quality directives should address this issue and significantly curb emissions from biomass.

Air quality is not the sole problem connected with biomass burning. A growing number of scientists, researchers and civil society organisations are concerned with labelling woody biomass as renewable, claiming that burning of woody biomass actually aggravates the climate crisis¹⁶. Also the latest report from the Joint Research Centre shows¹⁷ that **most scenarios of biomass combustion are not sustainable for climate and biodiversity**. All the more, the new AQ Directive should address the negative impact of biomass burning of air quality.

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This position is endorsed by:

Polish Smog Alert: www.polishsmogalert.org

Frank Bold Foundation: www.frankbold.pl

European Clean Air Centre: www.cleanaircentre.eu

¹³ Lower air quality awareness of inhabitants of smaller towns and villages is proven by numerous quantitative research, e.g. *Jakość powietrza w ocenie mieszkańców województwa małopolskiego*, Krakow 2018, Krakow Smog Alert

¹⁴ Own calculations based on https://www.ceip.at/status-of-reporting-and-review-results/2021-submission

¹⁵ Own calculations based on *Ricardo Energy & Environment UK Informative Inventory Report* (1990 to 2019) https://www.ceip.at/status-of-reporting-and-review-results/2021-submission

¹⁶ https://www.wwf.eu/?2128466%2F500-scientists-tell-EU-to-end-tree-burning-for-energy

¹⁷ The use of woody biomass for energy production in the EU, Joint Research Centre, 2021

Electric Vehicles Promotion Foundation: www.fppe.pl

Health and Environment Alliance: www.healpolska.pl

ClientEarth: www.clientearth.pl

Towarzystwo na Rzecz Ziemi: http://www.tnz.most.org.pl/

Polski Klub Ekologiczny Okręg Pomorski: https://pke.gdansk.pl/

Stowarzyszenie Ekologiczne EKO-UNIA: www.eko-unia.org.pl

Fundacja na rzecz Efektywnego Wykorzystania Energii: www.fewe.pl

Stowarzyszenie Partnerstwo dla Bezpieczeństwa Ruchu Drogowego: www.pbd.org.pl

Rodzice dla Klimatu: www.rodzicedlaklimatu.org

Polski Klub Ekologiczny Okręg Mazowiecki: www.pkeom.pl

Koalicja Klimatyczna: www.koalicjaklimatyczna.org