

# Assessment of child and youth sensitivity in air quality plans

UNICEF – Swedish Environmental Protection Agency  
Partnership for improved Air Quality in the Western Balkans



# Agenda points

1. Introduction
2. Methodology
3. Findings and conclusions

Criterion: Reference

Criterion: Rights based

Criterion: Inclusion

Criterion: Holistic and multisectoral

4. Q&A discussion

# Introduction

- Why?
- What is the purpose of the assessment?
- What is child and youth sensitivity?
- What is the assessment of the air quality policies?
- What makes an air quality policy child and youth sensitive?

## Why?

99 per cent of children in the Western Balkans are breathing toxic air (UNICEF, CCRI 2021). Children are uniquely vulnerable to air pollution, physically and psychologically. Children breathe twice as fast than adults, taking in more pollutants, and their organs are not maturely developed. The assessment report will provide insights to the local and national authorities how to develop more effective air quality measures that target and protect children and young people from air pollution.

## What is the purpose of the assessment?

The purpose of the assessment is to support local and national authorities to make air quality policies child and youth sensitive.

## What is child and youth sensitivity?

Child and youth sensitive policies and actions mean that they are inclusive of all children's and young people's rights, participation and roles as stakeholders and drivers of change, and can strengthen child-critical social services to be more resilient to the risks facing children.

## What is the assessment of the AQ Policies?

It is a detailed mapping and analysis of how the Municipal Air Quality Plans currently include references to children and young people, how the essential social services children and young people rely on (education, health, social protection, participation, etc.) are present in those documents.

14 Air Quality Policies were assessed

13 Municipal Air Quality Plans and 1 national strategy)

# What makes an air quality policy child and youth sensitive?

## **Criterion 1: References**

explicit and meaningful reference to children and young people.

## **Criterion 2: Rights-based**

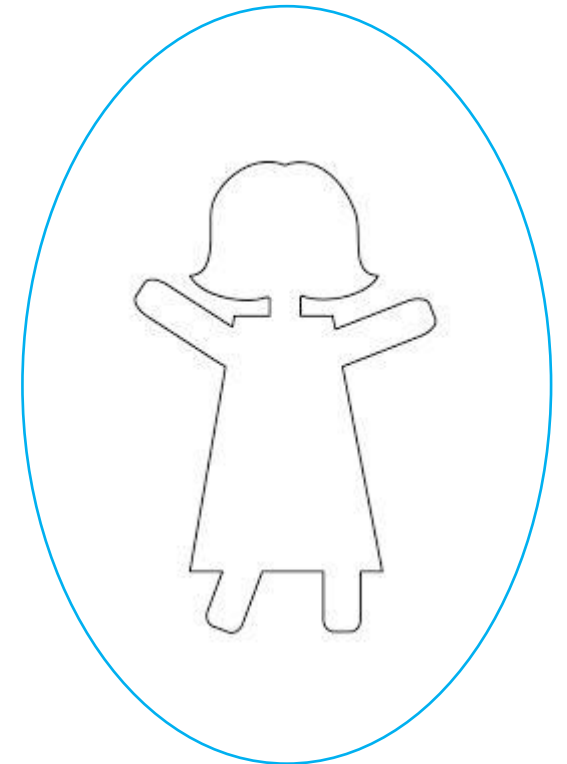
considers children and young people as rights holders and includes meaningful references to children's rights.

## **Criterion 3: Inclusive**

inclusiveness and the recognition of children and young people as important stakeholders for climate and environment action

## **Criterion 4: Holistic and Multisectoral**

includes child-sensitive multi-sectoral commitments to address the specific risks and vulnerabilities of children and young people



37 indicators under these **4 criteria**

# Methodology

Keyword and semantic searches of the AQP texts to derive quantitative results (points) for **37 indicators** under 4 criteria. **Keyword search** relies only on the location of specific words. A **semantic search** takes their contextual meaning into account.

- Each of the indicators within each criterion was assigned points according to a 'yes' or 'no' answer. **Yes = 1 | No = 0**
- The indicators that were used to identify an AQP as child sensitive are marked with an \* in the background document.

Final score. To be identified as meeting the criterion as a whole:  
For the **holistic and multisectoral criterion**, **2 of the 6 sectors** would need to have received a point. Two or more shows the multisectoral nature of the AQPs. For the other three criteria (**references, rights-based and inclusive**), if **1 of their child-sensitive indicators** received a 'yes' answer, that criterion was given a point.





# Child and Youth Sensitivity Categories

**Category A** Child and youth sensitive (4 of 4)

**Category B** Somewhat child and youth sensitive (3 of 4)

**Category C** Lacking child and youth sensitivity (0-2 of 4)

# Findings and results

**Category A** Child and youth sensitive (4 of 4)

2 (two) of the AQ Policies received the **Category A**

**Category B** Somewhat child and youth sensitive (3 of 4)

6 (six) AQ Policies received the **Category B**

**Category C** Lacking child and youth sensitivity (0-2 of 4)

6 (six) AQ Policies received **Category C**

(five with 2 out of 4, and one with 1 out of 4)

# Criterion: REFERENCE

- **13 (out of 14)** AQP have *References to children and young people\**
- **13 (out of 14)** AQP *Identify children or young people as a vulnerable group to the impacts of air pollution.\**

*The plan mentions low birth weight in newborns because of air pollution, making them uniquely vulnerable to the effects of air pollution.*

*Morbidity: hospital submissions due to respiratory diseases - highest among children 0-9.  
Table 47 Hospitalization due to respiratory diseases*

*The results of the research "Ecological-anthropological aspects of pulmonary obstructive diseases in children under different air quality conditions" showed that there is a statistically significant difference in the number of children suffering from bronchitis and asthma where the air is loaded with pollutants, compared to where the air is unpolluted. For this research, only patients aged 3-18 were considered.*

# Criterion: REFERENCE

- **3 AQP (out of 14)** had *References to children and young people in vulnerable situation\**

Measure(s) such as 'subventions for households to switch to pellet-efficient stoves for heating and/or clima-inverters, have specific reference to vulnerable categories, users of social state support and people with disabilities

*Measures for subvention of citizens, including people with disabilities, for the use public transport (bus)*

- **2 AQP (out of 14)** had *References to UNICEF\**

*Referencing UNICEF report "Danger in the air: How air pollution may be affecting the brain development of young children around the world, 2017"*

# Criterion: **RIGHTS BASED**

- **2 AQP out of 14** have *Existence of meaningful references to human rights\**

*Law No.08/L-025 on Protection from Air Pollution aims to determine the competencies and responsibilities of the institutions to ensure **the right of citizens to live in an environment with clean air**, to protect the human health, fauna, flora and natural and cultural values.*

- **None** of the AQP had ***References to child rights\****

*The indicator refers to the existence of references to the rights of children to a healthy environment and clean air*

# Criterion: **INCLUSION**

- **6 (out of 14)** AQP have a ***Reference to the AQP development or update process being done in a participatory manner***
- **None** of the AQP have *Reference to the AQP development or update process being done in a **participatory manner with children or young people**\**
- **3 (out of 14)** AQP ***Identify children as drivers of change***\*

*Children are identified as one of the most important stakeholders, measure with high priority: **Educational campaign on air quality targeting children***

*In primary schools, environmental education begins in the first grade within the subject "My Environment" in which children are provided with knowledge on environmental awareness and their agency for environmental protection*

- **None** of the AQP ***Identify young people as drivers of change***\*

# Criterion: INCLUSION

- **14 (out of 14)** AQP have a **commitment on raising public awareness**
- **6** have a **child-sensitive commitment** on raising public awareness

*Measure of high priority educational campaign on air quality targeting children*

*Raising awareness of pollution prevention and health protection from air pollution, including in schools*

*The success of all programs depends on effective environmental education. Environmental education is a long-term and complex process that includes informing and training people, as well as raising people's awareness of environmental protection*

# Criterion: INCLUSION

- **5 out of 14** AQP have ***Inclusion of commitments to improve public participation***
- **None** of the AQP has **Inclusion of child-sensitive public participation commitments\***
- **8 out of 14** AQP have ***Commitment on training,***
- **2** of the AQP have **Child-sensitive commitments on training\***

*Organizing the lectures in schools on air protection from pollution and how children and youth can contribute to reducing air pollution*



# Holistic and multisectoral: Education

- **7 out of 14 AQP** have **Inclusion of commitments on Education**
- **5** have **Child-sensitive commitments on Education**

*The measures related to education are targeted towards pre-schools, children are the target beneficiary of the measure.*

*The plan includes a short-term measure to, when necessary, temporarily close schools and administrative institutions due to air pollution.*

# Holistic and multisectoral: Health

- **3 AQP** reference the **World Health Organization**

*Main research question of this analyses is how much of the health outcomes (deaths) is related to the current level of air pollution, and what would be the change of health effects (death) if the levels are in line with the EUAAQD or WHO guidelines?*

*The monthly averages from October to April are excessive when compared to the WHO recommended value of 15g/m<sup>3</sup> for the 24-hour average of PM<sub>2.5</sub>. As a result, implementing PM<sub>2.5</sub> emission reduction measures is very important.*

- **8 out of 14** have **Commitments on Health sector**
- **None** have **Child-sensitive commitments on Health**

# Holistic and multisectoral: Energy

- 14 AQP have commitments on energy
- 13 AQP have child-sensitive commitments on energy in households
- 12 AQP have child-sensitive commitments on transportation
- 10 AQP have child-sensitive commitments on energy in education facilities
- 8 AQP have child-sensitive commitments on energy in health facilities

# Holistic and multisectoral: Energy

- 13 AQP have child-sensitive commitments on energy in households

*Ban of household heating with coal, expand the central heating system, regular cleaning of chimneys, instructions for proper wood burning, subventions for changing of biomass heating to pellets etc.*

*Expansion of the network of district heating systems and gas networks with a subsidy for the connections of public facilities and family houses.*

*Improve the energy efficiency of households, public awareness of the harmful impact of heating households with solid fuels, promoting the use of more efficient stoves, correct methods of burning, adequate maintenance of chimneys*

# Holistic and multisectoral: Energy

- 10 AQP have child-sensitive commitments on energy in education facilities

*Advancing energy efficiency of public buildings, including schools and kindergartens*

*Air quality in schools is monitored to ensure the effectiveness of the energy related measures*

*Effective use of energy in public buildings (including schools and preschools) where there is no central heating.*

- 8 AQP have child-sensitive commitments on energy in health facilities

*Renovation of health facilities to achieve greater energy efficiency*

*Connecting the hospital to the central heating network*

*Efficient boiler rooms in hospitals as a targeted emissions source*

# Holistic and multisectoral: Energy

- 12 AQP have **child-sensitive commitments on transportation**

*Advancing public transport, cycling, and educational campaigns for transportation (less cars), increase in pedestrian zones*

*Expansion of the city bus network, prioritized lanes for buses, better passenger information and expansion of the electric vehicle fleet*

*Subvention of high school students for public transport (bus).*

*Improving bike infrastructure, including bike parking in high schools*

# Holistic and multisectoral: Information and data

- **13 out of 14** AQP have *commitments to implement or improve information systems & data*,
- **4** have *child-sensitive commitment to implement information system & data*

*Priority measure suggests indicative measurements of PM and identifying the content of the PM particles (referring to PM 10 and PM 2.5).*

*Informing school and administrative institutions about the level of pollution and emergency measures;*

*Hospital submission due to respiratory diseases (age disaggregated)*

- **Only 2 AQP** considers areas with *children and youth* as a *selection criterion in the decision of where measurement stations are placed\**

Number of hospital submissions due to respiratory diseases,  
age and gender segregated

(J00-J99)	2017			2018			2019			ПРОСЕК		
	Вкупно	мажи	жени	Вкупно	мажи	жени	Вкупно	мажи	жени	Вкупно	мажи	жени
0-4	267	142	125	189	95	94	267	165	102	<b>241</b>	<b>134</b>	<b>107</b>
5-9	251	144	107	285	153	132	244	145	99	<b>260</b>	<b>147</b>	<b>113</b>
10-14	75	46	29	72	49	23	101	53	48	<b>83</b>	<b>49</b>	<b>33</b>
15-19	46	18	28	61	28	33	34	18	16	<b>47</b>	<b>21</b>	<b>26</b>
20-29	92	46	46	126	67	59	71	29	42	<b>96</b>	<b>47</b>	<b>49</b>
30-44	143	62	81	187	81	106	121	66	55	<b>150</b>	<b>70</b>	<b>81</b>
45-64	281	125	156	476	202	274	226	129	97	<b>328</b>	<b>152</b>	<b>176</b>
65-79	205	113	92	301	198	103	227	126	101	<b>244</b>	<b>146</b>	<b>99</b>
80+	49	31	18	68	38	30	48	35	13	<b>55</b>	<b>35</b>	<b>20</b>
<b>ВКУПНО</b>	<b>1409</b>	<b>727</b>	<b>682</b>	<b>1765</b>	<b>911</b>	<b>854</b>	<b>1339</b>	<b>766</b>	<b>573</b>	<b>1504</b>	<b>801</b>	<b>703</b>

*Извор: Управа за електронско здравство, Министерство за здравство, 2022*

*Обработка на податоците: авторите*



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Thank you

- Q&A



# Researchers

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## Session II: Small groups discussions

- *Table discussion*
- *Each table has the indicators for child and youth sensitivity*

Instructions:

**1. Choose an indicator that you think is most important to protect children**

- Share with the group the indicator you chose and why?

**2. What measures can be taken to address this indicator?**

