

CLAIRO CONFERENCE: LIVABLE AND CLIMATE RESILIENT EUROPEAN CITIES

How residents of the region perceive air quality and benefits of greenery

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STUDY

Public attitude to air quality and urban greenery, Willingness of citizens to change behaviour in favour of improved air quality





| INOVATIVNÍ | VÝSADBA STROMŮ | V OSTRAVĚ



EUROPEAN UNION European Regional Development Fund



CONTENTS

- Public survey (1200 respondents in 2 years)
- Study
 - Air quality
 - Urban greenery
 - Willingness to change behaviour
- Expert comments and recomendations
- Recommendations for cities, Useful links and resources

METHODOLOGY OF PUBLIC SURVEYS

- Face to face standardized interviews
- 15.10.-10.11.2019 and 5.10.-31.10.2020
- The sample was formed of **1,207 respondents** (605 in 2020+ 602 in 2019)
- Ostrava agglomeration:

Bohumín (64), Český Těšín (75), Frýdek - Místek (112), Havířov (141), Hlučín (20), Jablunkov (15), Karviná (112), Opava (80), Orlová (20), Ostrava (476), Trinec (93)

- Questionnaire of cca 20 questions
- Respondents aged over 18
 Structure of respondents:
- gender (men/women),
- age (categories 18-29, 30-39, 40-49, 50-59, 60+ years),
- Education (basic, secondary or vocational, university).

Detailed annex to both surveys:

Public surveys 2019 - 2020 (Opinions and behaviour of the inhabitants of the Moravian-Silesian Region in the field of protection of air quality and greenery

AIR QUALITY

Are you interested in issues concerning air quality and is it an important topic to you?



- yes i am interested and i think it is a very important topic
- I'm interested, even though I think it's a less important topic
- I'm not interested, but I think it's a very important topic
- I'm not interested because I don't think it's an important topic

How satisfied are you with the air quality in your residence?



How do you perceive the current state of the air quality in your residence compared to 10 years ago?



- the current situation is BETTER than 10 years ago
- the current situation is the SAME as 10 years ago
- the current situation is WORSE than 10 years ago

Do you think that the state's investments in protection of air quality are helpful (e.g. boiler subsidies, cleaning of industrial enterprises, lower tax burden on environmentally friendly resources)?



- Yes they are, the money is very well invested
- Yes, they are, but less than expected
- no, they are not
- I don't know

In your opinion, which form of air pollution has the greatest impact on air quality in the Moravian-Silesian Region? Please estimate the percentage of each individual resource, together they should amount to 100%.



Evaluate which problems you currently consider to be the most serious

(rank 1 = least serious, 5 = most serious)







I don't trust at all

Are you interested in regular information in the area of air quality protection in the Moravian-Silesian Region?

50,8%

33,1%



7

URBAN GREENERY

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Would you be willing to contribute financially (e.g. once a year) to the municipality for the planting of greenery, or another form of support for protection of air quality?



Which of these solutions would you personally support? (1 = definitely yes, 5 = definitely not)



Do you like these ideas? Would you support the construction of such natural solutions in your surrounding area? (See below)









WILLINGNESS TO CHANGE BEHAVIOUR

How does air pollution limit or bother you the most?



- I don't feel any problem, I am not limited by it
- I have health problems (impaired breathing, asthma, allergies, eczema, ,,...)
- Children are often unwell , children's health problems
- Restricted movement outdoors

Have you ever considered changing your place of residence due to air pollution?



- Yes, I'm seriously thinking about it
- Yes, but I'm not sure
- No, but I don't rule it out

Are you willing to contribute to the improvement of air quality and the environment in your region?



In particular, how would you personally contribute to better air quality?

Ecological heating (sustainable heating technology and sources, energy efficiency, etc.)



Support to greenery planting



- Yes, I use ecological heating
- Yes, I plan to start using ecological heating
- No, it is costly
- No, I do not think it is important
- I cannot influence the selection of heating technology

- Yes, I am involved in greenery planting myself
- Yes, I support greenery planting in my municipality
- No, I do not think it is important

Sustainable mobility use (public transport, bikes, carsharing etc.



Avoiding household waste incineration

- 18,7% 14,7% 22,1% 44,5%
- Yes they are, the money is very well invested
- Yes, they are, but less than expected
- no, they are not
- I don't know

In particular, how would you personally contribute to better air quality?

Ecological heating (sustainable heating technology and sources, energy efficiency, etc.)





- Yes, I plan to start using ecological heating
- No, I do not think it is
- I cannot influence the selection of heating

Sustainable mobility use (public transport, bikes, carsharing etc.



- Yes, I use sustainable mobility regularly
- Yes, I use sustainable mobility occasionally, I plan more often
- No, it is lost of time
- No, I don't think it is important

Support to greenery planting





- Yes, I support greenery planting in my municipality
- No, I do not think it is important



Avoiding household waste incineration

- Yes, I avoid burning leaves, grass, paper, wood or other waste
- Yes, I avoid it if it is prohibited by law
- No, I cannot afford another solution financially
- No, I do not think it is important



Recommendations to municipalities

- Inform residents regularly and in a balanced manner
- Actively address, motivate and involve the population (incl. small grants).
- In particular, motivate to <u>change the method of heating</u> and <u>use of sustainable</u> forms of transport,
- Provide adequate infrastructure (sustainable mobility, sustainable heating, etc.)
- Deal with companies (polluters, developers, partners, corporate social responsibility promotion)
- Use <u>GREEN public procurement</u> and give priority to long-term, sustainable solutions when choosing contractors.
- <u>Use existing buildings</u> and brownfield sites in development plans, so that natural green spaces do not decrease.

Recommendations to municipalities

- Focus on places with the most stress factors (polluted neighbourhoods of schools, hospitals, nurseries, residential crossroads etc.)
- Think carefully about structure and composition of planted greenery.
- Take into account all factors and design greenery in relation to its needs.
- Preserve and support greenery on transit routes

 (in pedestrian zones, around cycles paths, but also transport hubs)
- Don't underestimate **maintenance and invest in resistant greenery**. Ensure professional supervision during both planting and aftercare .
- Integrate projects of green and blue infrastructure
- Think conceptually and <u>plan public space</u> with regard to sustainability, mobility, health and the free time of its users.
- Public space can be the symbol of a city's sustainable policy.



USEFUL LINKS AND RESOURCES USED

- The study identified resources that may serve to further supplement information on individual topics.
- <u>Czech Hydrometeorological Institute / Air;</u> <u>Atlas of the Moravian-Silesian Region</u> (Air quality)
- <u>A guide for investors in brownfield revitalization</u> to apply the principles of energy efficiency and sustainability - Czech Green Building Council (CZGBC)
- <u>Health consequences and risks of air pollution</u> -State Institute of Public Health
- <u>Europe towards zero pollution</u> European Environment Agency (EEA)
- <u>Principles for cooperation with investors</u> City of Jihlava
- <u>Buy green! Handbook on Green Public Procurement</u>
 Europa.eu/DG Environment
- <u>Plant database</u> CLAIRO project (Statutory City of Ostrava and project partners)

- Methodology for the implementation of planting woody plants absorbing dust particles along roads and at so-called areal sources of dust - Ecological model studio / TAČR
- Methodology for evaluating the influence of environmental factors on the health of the child population, with the main focus to eliminate the identified adverse effects (use of greenery in reducing PM10 concentrations and O3), TA02020944, Ecotoxa <u>Heating options</u> -Arnika
- <u>Ten principles for sustainable mobility</u> -Dobramesta.cz
- <u>Public space and the green future of cities</u> -Transformation Foundation
- <u>Subsidy program to support projects in public space</u>
 Statutory city of Ostrava
- <u>The forms and functions of green (and blue)</u> <u>infrastructure</u> - Europa.eu/DG Environment



Thank you for your attention.

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