

Supplementary Information

Questionnaire on the perception of air quality in Portugal (translation to English)

* mandatory answer

7.1. Participant characterisation

I. District of residence:*

- | | |
|--------------------------------------|--|
| <input type="radio"/> Aveiro | <input type="radio"/> Lisboa |
| <input type="radio"/> Beja | <input type="radio"/> Portalegre |
| <input type="radio"/> Braga | <input type="radio"/> Porto |
| <input type="radio"/> Bragança | <input type="radio"/> Santarém |
| <input type="radio"/> Castelo Branco | <input type="radio"/> Setúbal |
| <input type="radio"/> Coimbra | <input type="radio"/> Viana do Castelo |
| <input type="radio"/> Évora | <input type="radio"/> Vila Real |
| <input type="radio"/> Faro | <input type="radio"/> Viseu |
| <input type="radio"/> Guarda | <input type="radio"/> Autonomous Region of Madeira |
| <input type="radio"/> Leiria | <input type="radio"/> Autonomous Region of Azores |

II. Municipality of residence:*

III. Parish of residence:*

IV. Postal code of residence:*

V. Type of housing:*

- | | |
|--------------------------------------|---------------------------------|
| <input type="radio"/> Detached house | <input type="radio"/> Apartment |
|--------------------------------------|---------------------------------|

VI. If it is an apartment, please indicate which floor:

- | | |
|---|---|
| <input type="radio"/> Ground floor | <input type="radio"/> 1 st floor |
| <input type="radio"/> 2 nd floor | <input type="radio"/> 3 rd floor |
| <input type="radio"/> Other: | |

VII. Your house is located in an area with:*

- | | | | | | | |
|------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------------|
| No traffic | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 | A lot of traffic |
|------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------------|

VIII. Age:* _____

IX. Gender:*

☐

Female

☐

Male

☐

Prefer not to disclosure

X. Highest level of education completed:*

☐

Uneducated

☐

1st Cycle of Basic Education

☐

2nd Cycle of Basic
Education

☐

3rd Cycle of Basic Education

☐

High School

☐

Degree

☐

Master

☐

Doctorate

XI. Work status:*

☐

Active

☐

Retired

☐

Unemployed

☐

Student

☐

Home tasks

☐

Other: _____

XII. Current profession or last practiced:*

XIII. _____
On average, what is your monthly salary?*

☐

Less than 300€

☐

300-635€

☐

636-900€

☐

901-1000€

☐

1001-2000€

☐

2001-3000€

☐

Not applicable

☐

I prefer not to answer

XIV. Number of people in the household (counting you):* _____

XV. Number of people in the household with less than 12 years old:* _____

XVI. Number of people in the household aged between 12 and 18 years old:* _____

XVII. Do you smoke?*

☐

Yes

☐

No

XVIII. Select the diseases/health problems that you have:*

☐

Eczema

☐

Asthma

- | | |
|--|---|
| <input type="radio"/> Migraine | <input type="radio"/> Allergy |
| <input type="radio"/> Cholesterol | <input type="radio"/> Arterial hypertension |
| <input type="radio"/> Diabetes | <input type="radio"/> Depression |
| <input type="radio"/> Anxiety | <input type="radio"/> Heart problems |
| <input type="radio"/> Breathing problems | <input type="radio"/> Psychiatric problems |
| <input type="radio"/> Not applicable | <input type="radio"/> Other: _____ |

XIX. Type(s) of transport that you use most frequently:*

- | | |
|----------------------------------|------------------------------------|
| <input type="radio"/> Car | <input type="radio"/> Bus |
| <input type="radio"/> Boat | <input type="radio"/> Train |
| <input type="radio"/> Metro | <input type="radio"/> Bike |
| <input type="radio"/> Motorcycle | <input type="radio"/> By foot |
| <input type="radio"/> Taxi | <input type="radio"/> Other: _____ |

7.2. Perception about air quality

XX. How concerned are you about the following problems in your area?*

	1 – No Concern	2 – Minor Concern	3 – Moderate Concern	4 – Major concern
Traffic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban cleaning and hygiene	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sewage management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Air pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Over construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of green spaces	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

XXI. How do you rate the air quality at?*

	1 – Very poor	2 – Poor	3 – Acceptable	4 - Good	5-Very good
Portugal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In your municipality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In your neighbourhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

XXII. According to your opinion, the air quality in your area of residence is:*

☐ Getting worse ☐ Maintaining ☐ Improving

XXIII. In your opinion, what are the pollutant sources that have the greatest impact on the air quality in your area of residence?*

<input type="radio"/> Cars	<input type="radio"/> Buses
<input type="radio"/> Trucks	<input type="radio"/> Motorcycles
<input type="radio"/> Boats	<input type="radio"/> Air traffic
<input type="radio"/> Fireplaces and other home heating devices with biomass burning	<input type="radio"/> Forest fires
<input type="radio"/> Burning of green wastes	<input type="radio"/> Agriculture
<input type="radio"/> Food making activities	<input type="radio"/> Solid waste (landfills, incinerators, dumps)
<input type="radio"/> Wastewater treatment	<input type="radio"/> Industry
<input type="radio"/> Energy production and distribution	<input type="radio"/> Construction
<input type="radio"/> Cigarette smoke	<input type="radio"/> Other: _____

XXIV. Which air pollutant(s) are you most concerned about?

XXV. Compared to outdoor air, indoor air quality in your home seems that it is:*

☐ Getting worse ☐ Maintaining ☒ Improving

XXVI. List the main sources that affect indoor air quality in your home:

7.3. Impacts of air quality

XXVII. Do you feel affected by air quality?*

☐ Yes ☐ No

XXVIII. If yes, in which way?

- | | |
|--|--|
| <input type="radio"/> Eye irritation | <input type="radio"/> Nose irritation |
| <input type="radio"/> Sneezing | <input type="radio"/> Dry throat or throat irritation |
| <input type="radio"/> Cough | <input type="radio"/> Difficulty in breathing |
| <input type="radio"/> Headaches | <input type="radio"/> Skin problems |
| <input type="radio"/> Allergies | <input type="radio"/> Feeling depressed |
| <input type="radio"/> Decreased outdoor visibility (fog) | <input type="radio"/> Unpleasant odour outside the house |
| <input type="radio"/> Unpleasant smell inside the house | <input type="radio"/> Particle deposition on balconies |
| <input type="radio"/> Degradation of material goods | <input type="radio"/> Concern for your health |
| <input type="radio"/> Concern for children's health | <input type="radio"/> Other: _____ |

XXIX. Did you identify the source of your malaise? *

☐ Yes ☐ No

XXX. If yes, please indicate the source of your malaise:

XXXI. Do you do changes in your life due to the degradation of air quality?

☐ Yes ☐ No

XXXII. If yes, which type of changes?

- | | |
|--|---|
| <input type="radio"/> To perform less outdoor activities | <input type="radio"/> To avoid certain time periods to perform outdoor activities |
| <input type="radio"/> To stay longer at home | <input type="radio"/> To avoid opening home windows |

- | | |
|--|---|
| <input type="radio"/> To feel the need to wash hands and face more often | <input type="radio"/> To drink more water than usual |
| <input type="radio"/> To use purifiers at home | <input type="radio"/> To think about changing the area of residence |
| <input type="radio"/> To try to find out more about Air Quality | <input type="radio"/> To use a different type of transport |
| <input type="radio"/> Other: _____ | |

7.4. Information about air quality

XXXIII. Do you feel informed about the air quality in your area of residence?*

Not at all 1 2 3 4 5 Very much

☐ ☐ ☐ ☐ ☐

XXXIV. Where do you get information about air quality? *

- | | |
|---|---|
| <input type="radio"/> TV | <input type="radio"/> Radio |
| <input type="radio"/> Newspapers and magazines | <input type="radio"/> Internet |
| <input type="radio"/> Electronic information boards | <input type="radio"/> Environmental groups |
| <input type="radio"/> Health services | <input type="radio"/> Town hall |
| <input type="radio"/> Parish Council | <input type="radio"/> Ministry of Environment |
| <input type="radio"/> QualAR | <input type="radio"/> Neighbours/Colleagues/Friends |
| <input type="radio"/> I can not access information | <input type="radio"/> Other: _____ |

Remark: QualAR is the Portuguese public and online database about air quality established by the Portuguese Environment Agency.

XXXV. Would you like to have more information about air quality?*

☐ Yes ☐ No

7.5. Control of Atmospheric Pollution

XXXVI. In your opinion, what is the degree of priority that do you give to the following air quality improvement measures?*

	1 (minimum)	2	3	4	5 (maximum)
Make stricter laws to reduce air pollutants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase enforcement to enforce existing laws	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve public transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase pedestrian networks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase bike paths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase car sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase tax benefits for electric cars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve the charging network for electric cars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce the number of cars in cities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce speed limits in cities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limit parking in cities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase parking on the outskirts of cities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Create green
spaces

☐☐☐☐☐

Carry out
awareness-
raising actions
on air quality

☐☐☐☐☐