

# URBAN TRANSPORT AND SUSTAINABLE MOBILITY PROGRAMME

**WORKSHOP + OUTING:  
“LIFE+RESPIRA: Air quality  
and investigative outing”**

## **Primary Education**

**Description of the Activity**



## CLASSROOM WORKSHOP

### “Air quality and investigative Outing. Life+Respira Project”

<b>TARGET STUDENTS:</b>	Primary Education - Years 5 and 6
<b>DURATION:</b>	2 sessions
<b>REQUISITOS PREVIOS:</b>	<ul style="list-style-type: none"> <li>▪ One group/class with one teacher per workshop/outing.</li> <li>▪ Up to 2 consecutive workshops with 15' break in between.</li> <li>▪ Classroom with digital whiteboard and internet connection.</li> <li>▪ Preparatory classroom work recommended. See description of the activity.</li> </ul>

### CURRICULUM APPROACH

<b>Objectives</b>	<ul style="list-style-type: none"> <li>▪ Arouse interest in scientific research and emphasise the importance of social and citizens' commitment.</li> <li>▪ Raise awareness about the importance of air quality.</li> <li>▪ Promote sustainable, non-polluting mobility habits.</li> </ul>	
<b>Contents</b>	<b>CONCEPTS</b>	<ul style="list-style-type: none"> <li>▪ Urban air quality, atmospheric pollution, climate change, health, and healthy, sustainable mobility.</li> <li>▪ Scientific methods, volunteer work and social action.</li> <li>▪ Factors affecting urban air quality.</li> </ul>
	<b>PROCEDURES</b>	<ul style="list-style-type: none"> <li>▪ Understanding a thematic presentation (PowerPoint).</li> <li>▪ Interpreting town maps and pollution graphs.</li> <li>▪ Experiential observation outing around the school's surroundings.</li> <li>▪ Group dynamics to reflect upon and develop proposals on the subject.</li> </ul>
	<b>ATTITUDES AND VALUES</b>	<ul style="list-style-type: none"> <li>▪ Active and collaborative attitude, willingness to work and contribute solutions individually and as a team.</li> <li>▪ Analytical and committed attitude so as to understand environmental issues.</li> </ul>

### RESOURCES:

- One mobile air pollution analyser.
- Interactive PowerPoint presentation (knowledge pill, maps of the Region, links to videos, pollution graphs and maps, video footage of typical cycling routes).
- Worksheet for completing during the observation outing.

### COMMENTS:

For the successful performance and outcome of the workshop, it is important that the students should be motivated and attentive to ensure their active participation in the new learning activities.

For the outing around school's immediate surroundings, different groups will be formed and assigned different roles in assessing the factors affecting air quality.

The group/class will be accompanied by a responsible teacher throughout the route (the start of the outing can be made to coincide with the beginning of a new class period).

## ACTIVITIES

Introduction to the Life Respira Project, climate change, and air quality in the Pamplona Region

Observation outing around the School's surroundings to analyse the urban morphology, streets, buildings, trees, traffic, road safety...

Compiling on Google Maps the observations made during the outing

Watching a video of the route travelled by one of the Project's volunteer cyclists, interpreting pollution graphs and maps

## DESCRIPTION OF THE ACTIVITY



The presentation of the LIFE+RESPIRA project, together with the technical means and methodology used, will contribute to arousing interest in understanding the factors related to urban air quality and help students assume the role of environmentally responsible citizens.

The methodology of the LIFE+RESPIRA research on urban air quality (based on an innovative monitoring system using mobile analysers carried by volunteer urban cyclists), allows the viewing of a typical route within the Region, recorded with a sports camera fitted on the cyclist's helmet, while at the same time displaying on a dynamic graph how the level of one of the pollutants measured by the device changes as the cyclist carrying it advances along the route. Pollution distribution maps resulting from the readings taken are used to establish a relationship between the intensity of traffic in the streets of the Pamplona Region and the pollution levels recorded.

An introduction to atmospheric pollution in urban environments provides an insight into the factors affecting urban air quality (climate, traffic intensity, urban morphology, size of pavements and buildings, tree cover...).

The experiential observation outing around the school's surroundings will allow us to feel that pollution can be seen, heard, sensed, smelled...

Sharing the results on a town map of the area will provide a participational and critical view of the students' perceptions. The final summing up will allow them to understand the impact of our mobility habits on the environmental quality of our surroundings.