

JOURNAL

PROJECT

AIR-HERITAGE -Improving the environmental quality of the City of Portici: Monitoring, Modelling, and Mitigating Air Pollution through participated and efficient Policies

Portici, Italy

TOPIC

Air quality

EDIT 29 APRIL 2021 BY ANDRIANA STAVRAKAKI, UIA EXPERT

Air Heritage Journal 2: get an update about Portici's project latest achievements





This second Journal presents AIR-HERITAGE key achievements to date and describes how the various challenges faced, have evolved over time, as well as new challenges that have emerged, mostly related to the on-going COVID-19 pandemic. In addition, measures and steps put in place to address these challenges are discussed. The aim is to inspire other cities across Europe to act, whilst in parallel guide them to more effectively implement similar activities. Solutions presented are not always transferable across projects, however, the processes followed to develop these can certainly benefit other local authorities.

Executive Summary

Air pollution is a major environmental problem, affecting everyone's health. On top of that, it is a complex and multi-dimensional problem. For example it is especially challenging to assess the contribution of different air pollutant sources to ambient concentrations, predict air pollution hotspots, understand the adverse effects of exposure to multiple air pollutants, and develop targeted policy measures to effectively improve air quality in a city and as a result improve citizens health. It is also very difficult to communicate this complex issue to people, being these technical experts on specific scientific disciplines, civil servants, policy makers and citizens.

AIR-HERITAGE aims to tackle this problem and improve the air quality in the City of Portici, using an innovative decision support tool and a truly participative approach to design and put in place efficient, evidence-based policies and measures to curb air pollution. Given the complexities associated with air pollution and its mitigation, there is a steep learning curve for everyone involved. Hence, it is particularly important to successfully communicate all the challenges faced and how these have been resolved, so that other cities across Europe can learn and directly benefit from AIR-HERITAGE.

In the first AIR-HERITAGE Journal, besides key project activities, the projects' relevance to the EU, national and regional policy context was presented. Emphasis was given on how the project was introduced to the public and how students were actively being engaged. The concept for the AIR-HERITAGE Decision Support tool was presented and how AIR-HERITAGE aims to combine monitoring and modelling to facilitate evidence-informed policy making. Last but not least, key challenges faced related to the project implementation were analysed, along with solutions employed to address these. These comprised of bureaucratic challenges related to the municipality's internal procedures, the lack of experience in implementing an innovative project, the difficulties

faced in the collaboration of delivery partners, and the engagement of citizens.

This second Journal presents AIR-HERITAGE key achievements to date and describes how the various challenges faced, have evolved over time, as well as new challenges that have emerged, mostly related to the on-going COVID-19 pandemic. In addition, measures and steps put in place to address these challenges are discussed. The aim is to inspire other cities across Europe to act, whilst in parallel guide them to more effectively implement similar activities. Solutions presented are not always transferable across projects, however, the processes followed to develop these can certainly benefit other local authorities.

1. Improving the air quality in the City of Portici

As mentioned above, AIR-HERITAGE aims to improve the air quality in the City of Portici by actively engaging citizens and by supporting policy makers to take informed decisions, and design and deliver smarter policies to reduce air pollution. As such, this section outlines relevant activities that have been successfully implemented so far.

1.1 Actively engaging students, local actors and the public

The key beneficiaries of AIR-HERITAGE are citizens and students, as the project aims to improve the city's air quality and as a consequence improve residents health and quality of life. Likewise, local actors, such as consumer associations, environmental organisations and businesses, are also important target groups that benefit from the projects' activities. On the other hand, the success of AIR-HERITAGE relies on the active participation of citizens, students and local actors in planned activities. This will in turn help them adopt a more environmentally friendly lifestyle, for instance by using more sustainable modes of transport.

In order to effectively engage all target groups, AIR-HERITAGE has developed a communication and a citizens engagement strategy. This includes the development and distribution of various communication and promotional material, as well as the organisation of different types of events, workshops and educational courses.

Moreover, the City of Portici has put in place a strong project team, committed to effectively engage different stakeholders, local actors and the public, raise awareness and drive behavioural change, and in turn improve the quality of life of all residents.

To date, AIR-HERITAGE has successfully implemented a plethora of activities to involve citizens and encourage them to adopt a more environmentally sound behaviour, especially for meeting their mobility needs. For example:

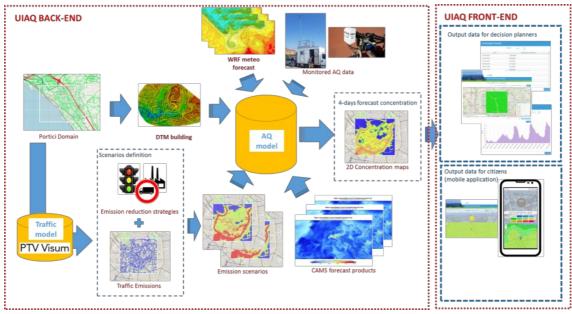
- Besides organising events to introduce AIR-HERITAGE to the public, more targeted workshops for students and their parents have been organised to raise awareness on environmental issues, and in particular air pollution.
- Educational courses have been introduced in schools, so that students learn the fundamental role that every single person can play in protecting the environment and improving the air quality of the city.

Due to the ongoing pandemic, planned communication and citizens engagement activities have been revisited and redesigned accordingly to reflect the new reality of social distancing. More details are provided in Section 2.6.

1.2 Designing effective policies to alleviate air quality hotspots

AIR-HERITAGE has successfully developed the UIAQ tool, a Decision Support System that helps policy makers assess air quality in urban areas and put in place the most effective short-term policy response to address air pollution hotspots in the city. In addition, the tool informs citizens about air pollution in the city and helps them monitor air quality levels as they move around the city.

The UIAQ tool combines monitored data with high resolution modelled data, both being an integral part of the system. Figure 1 illustrates the complexity of the UIAQ and how this brings together different scientific disciplines, including traffic and air quality monitoring, modelling and forecasting.



The UIAQ decision support tool and its different components

It should be noted that as the development of the UIAQ tool progressed, a number of technical challenges emerged, such as the integration of different tools in the system and the use of different air quality monitoring systems.

The AIR-HERITAGE Zoom-In presents the UIAQ smart tool in detail, including the different elements building the tool, along with the technical challenges faced, lessons learnt, and recommendations to guide interested public authorities willing to undertake a similar endeavour.

"Scientists are happy to face problems and find solutions" - Fabrizio Carteni (UNINA)

2. The AIR-HERITAGE implementation challenges

AIR-HERITAGE is an innovative urban project, funded by the Urban Innovative Actions (UIA) initiative. As such, the relevance of the seven operational challenges, identified as the most relevant and cross-cutting for UIA projects, is discussed in this section, along with measures put in place to address these challenges and key learning points captured.

Leadership

From the very beginning, AIR-HERITAGE has ensured the support of the city's political leadership, as this is key for successfully implementing the project and achieving the ambitious target to improve air quality in the city. Despite this though, political support is constantly being sought, to ensure its longevity. As a result, the AIR-HERITAGE team is continuously working with the Mayor and Councillors, exchanging knowledge, and discussing problems and possible solutions.

Political support has proven particularly important now, with the on-going pandemic significantly affecting political priorities. As anticipated, COVID-19 has affected the level of engagement of the mayor of the City of Portici, who significantly contributed to the successful communication of the project. To fill the void, the active engagement and support of other key policy makers has been pursued, in particular that of city Councillors. For example, the Councillor for the Environment closely follows and fully supports the project as needed. Consequently, addressing this challenge has strengthened the engagement of other key policy makers that are important in ensuring political support and communicating the project more widely to the public.

Furthermore, as already mentioned, one of the key outputs of AIR-HERITAGE is the UIAQ tool. Therefore, another challenge is ensuring pollical commitment and interest in using the tool to design measures to tackle air pollution. In order to more effectively communicate the tool to local politicians, along with its attributes, advantages and benefits, project partners first tested the UIAQ tool. This helped in clearly understanding its features, applications, strengths and limitations, which in turn helps in better communicating these. Subsequently, additional functions

and improvements of the UIAQ tool were explored, as well as how to efficiently explain to policy makers how the tool can be used and how it can support evidence-based policy making. As a result, the UIAQ tool is continuously being improved and it is now being gradually presented to policy makers.

Another challenge is ensuring that the UIAQ proposed solutions are politically acceptable and can be put forward. Thus, the different measures incorporated in the UIAQ tool have been extensively discussed within the consortium, but also with key policy makers, so that the optimal solutions that emerge are acceptable by the general public and local actors, and have political support. Currently, emphasis is given in further improving measures incorporated. Moreover, the flexibility of introducing new types of measures has been built in, so that new measures can be explored when running the tools at any point in the future.

Finally, a potential change in leadership, as a result of the impeding local elections in 2022, is a challenge that AIR-HERITAGE may need to overcome in the future to ensure the sustainability of the project, and especially of the UIAO tool.

Public procurement

Within the framework of AIR-HERITAGE, monitoring sensors were procured to enhance the air quality monitoring network. As explained in the first AIR-HERITAGE journal, this posed a challenge, as the sensors had to meet very specific technical requirements. whilst the procurement had to comply with national and EU law on public procurement. This challenge was overcome through a lengthy consultation process between involved parties, especially the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), and the City of Portici. As a result, the seven fixed monitoring sensors were successfully procured in the beginning of 2020. No other challenges related to public procurement have emerged or are anticipated in the future.

Organisational arrangements within the urban authority

As described in the first AIR-HERITAGE Journal, the City of Portici faced various problems in managing and coordinating AIR-HERITAGE. This was mainly due to the fact that the City had no experience in implementing UIA projects, and so did not properly assess the complexity of the project and it's interdisciplinary nature. This was aggravated by the city's internal bureaucracy and the UIA reporting requirements, with which civil servants were not familiar with, as well as the fact that the City did not allocate appropriate resources. This challenge was overcome by forming an experienced and competent AIR-HERITAGE team within the municipality with all the necessary skills and expertise, which included:

- A project manager and a financial manager to coordinate activities and ensure the smooth implementation of the project.
- Three environmental managers to support the technical work. Each manager has a specific focus area, i.e. mobility, environment and policy. The environmental managers have been very active and have significantly contributed to the effective engagement of citizens and policy makers. For instance, they regularly meet with relevant councillors to discuss the project's progress, local priorities, and how AIR-HERITAGE can further contribute in meeting priorities.
- Two journalists to support communication activities.
- Four external experts to support the implementation of the project, namely. a risk manager, a European project manager, a project information manager and an office manager.



The City of Portici external AIR-HERITAGE experts

Hence, the City of Portici has built an effective implementation team and is more efficiently managing and coordinating AIR-HERITAGE. The experience gained will also help the City in managing other future complex projects and activities.

As the project is progressing, and different activities are being planned and implemented, skills and needs may change. Therefore, all team members contribution and added value to the project is being regularly evaluated. For instance, the imminent role of the three environmental managers is already acknowledged, as their

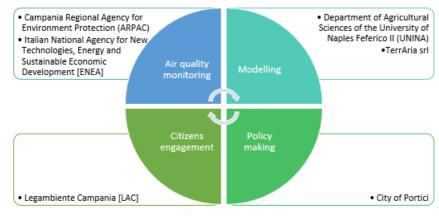
contribution has proven to be even more crucial now with COVID-19.

An important challenge that the AIR-HERITAGE team subsequently faced was how to link AIR-HERITAGE with other existing and complementary actions delivered by other departments. Traditionally, the different departments within the municipality work in silos. They work independently, even though targets and activities are sometimes interlinked. AIR-HERITAGE has actively pursued cross-departmental collaboration, so that both the project and the municipality can benefit from the coordination of efforts and the exchange of information. This has been achieved by organizing periodic cross-departmental meetings, especially with the department for mobility, the department for energy, the department for the environment, the department for urban development and the AIR-HERITAGE team. The ad-hoc participation of councilors and the AIR-HEITAGE environmental managers in these meetings has helped. Cross-departmental collaboration has proven to be very important, and it has helped link different municipal activities and actions. it has also helped lift distrust and create a more productive working environment that can foster effective sustainable policies and actions. As a result, it will help ensure that AIR-HERITAGE has a more long-lasting impact and does not become "a cathedral in the dessert".

Finally, it should be noted that maintaining a good collaboration between team members and municipal departments has been a challenge, given the changes in working practices due to the on-going pandemic, as most team members have been primarily working from home for a prolonged period of time. All available means have been used to ensure that team members and other civil servants continue to work closely together, for example through regular virtual meetings, telephone discussions and email exchanges.

Participative approach for co-implementation

Due to the complex nature of AIR-HERITAGE, expertise from different scientific fields, such as traffic monitoring and modelling, air quality monitoring, atmospheric dispersion modelling and forecasting, and social sciences for citizens engagement is necessary. Thus, the different types of delivery partners, which include a local authority, three technical organisations, an environmental association and a research institution, and the diverse group of experts involved, faced the critical challenge of finding a way to work effectively together.



AIR-HERITAGE project partners and expertise

As mentioned in the first AIR-HERITAGE journal, to address this challenge, partners established an efficient collaboration framework and found a common language to discuss managerial, technical and political issues. More specifically, the City of Portici organised numerous meetings with delivery partners, including bilateral meetings to discuss experience, needs, roles and responsibilities, as well as to coordinate and integrate efforts. These meetings have proven to be essential for the effective coordination of the project and for the co-implementation of planned activities. Therefore, the City continues to have bilateral meetings with delivery partners every week, whilst project meetings are regularly organised. Partners now clearly understand and effectively work with each other.

COVID-19 has affected a number of planned activities, principally activities related to the engagement of students and citizens. This has been a great disappointment and has demotivated project partners. Notwithstanding, the excellent collaboration established between partners, along with partners strong will and common goals, have helped maintain enthusiasm and work towards the successful implementation of the project. Hence, partners have been thinking creatively and have come up with alternative approaches and have re-designed project activities, to ensure that key stakeholders are reached to the extent possible, given the circumstances.

"The biggest challenge and success was to find an effective way to cooperate" Giuseppe Maffeis (TerrAria)

Monitoring and Evaluation

As explained in the first AIR-HERITAGE Journal, evaluating the impacts of behavioural and cultural change on air pollution is a great challenge. Moreover, assessing the effectiveness of traffic measures on alleviating air pollution hotspots is a challenge. Both are fundamental for estimating, but also improving the real impact of AIR-HERITAGE, and for informing the design of future activities. In order to address this challenge, a vigorous monitoring and evaluation framework has been developed that encompasses qualitative surveys and quantitative monitoring.

Qualitative surveys

As described in the first AIR-HERITAGE Journal, a sociological survey was developed to determine the social dynamics relating to the attitudes and actions of citizens that have an impact on air quality. The ex-ante part of the survey was conducted before key AIR-HERITAGE activities were implemented, in the last quarter of 2019. The questionnaire was distributed electronically and in hard copy. Besides examining behavioural trends, the survey focused on understanding the needs and issues perceived as problematic by citizens. This also helped assess citizens' readiness for change, which is important in policy making. At the same time, the survey increased awareness on the causes of air pollution, and promoted best practices and beneficial behaviours that can improve air quality in the city. The target audience was:

- Students' families from schools participating in the project.
- Other residents, reached both online and in person, as well as through local associations.

In addition, an online social survey was conducted in the first quarter of 2020 to assess public awareness of the positive impact of the lockdown on air quality, along with people's willingness to adopt pro-environmental behaviour to reduce air pollution.

More recently, another online social survey was launched and promoted locally, through news sites, social media and the AIR-HERITAGE info points. The purpose of this survey was to trigger the active involvement of citizens in improving air quality, through urban forestry, sustainable mobility and energy efficiency.

Quantitative monitoring

Traffic sensors have been used to record number of vehicles, and estimate traffic flows and types of vehicles in selected streets, in order to define pollution profiles. Lately, security cameras, installed in various streets across the city, have been used to derive traffic counts, although these were not originally designed to monitor traffic. AIR-HERITAGE will continue to monitor traffic, including after the implementation of policy measures to better assess their effectiveness in addressing traffic congestion.



Furthermore, AIR-HERITAGE uses two existing fixed and mobile monitoring stations, positioned on streets with heavy traffic to record air pollutant concentrations. Within the framework of AIR-HERITAGE, the monitoring network has been expanded with seven fixed nodes procured. These are currently being calibrated. These will be used to monitor air quality in different locations in the city with heavy traffic, and will help assess the effectiveness of the policy measures put in place. Portable air quality monitors will also be used to monitor the air pollution levels that citizens experience when moving across the city. More recently, an innovative biomonitoring campaign has been launched for monitoring particulate pollution through the use of moss placed in bags and positioned in citizens balconies across the city.

The importance of monitoring local air quality cannot be emphasised enough. Besides enabling the quantification of the impact of AIR-HERITAGE, it will help evaluate the UIAQ tool developed, whilst in parallel it will provide evidence to support related measures and policies introduced, and improve these along the way.

It should be noted that the COVID-19 pandemic and the resulting restrictions imposed to fight the spread of the disease have also affected mobility, and as a result local air quality. More specifically, according to a European Environment Agency (EEA) briefing, one of the most evident short-term effects of COVID-19 lockdowns has been the dramatic improvement in air quality. Although this impact is considered temporary, there is a need to acknowledge this potential confounding effect and carefully consider this when assessing the impacts of AIR-HERITAGE activities on air quality, especially if analysing monitored data during lockdowns.

Communication with target beneficiaries and users

In the first AIR-HERITAGE Journal, challenges in Identifying and involving local actors, and in engaging politicians, citizens and the public were described. For example, the challenge to effectively communicate the science behind air pollution in a simple, scientifically correct way, to trigger behaviour change and ensure political and public acceptance of measures to improve air quality. These challenges were addressed by setting up a strong dissemination team, carefully designing the communication material of the project, organising tailored events per target group, introducing feedback loops for implemented activities (so that beneficiaries can provide feedback), and establishing partnership agreements with schools in Portici to facilitate students involvement.

However, the COVID-19 pandemic has created new challenges. In order to contain the virus, in early 2020, schools in Italy closed, restrictions in movement were introduced and a nation-wide lockdown was put in place. In May 2020, the economy reopened, but more recently a number of containment measures have been re-introduced. Therefore, it is not a surprise that some measures have significantly affected the engagement of students,

citizens, and local actors. For instance, due to the restrictions on movements and the closure of schools, it has not been possible to run the pedibus, a structured walk from and to school with predetermined stops near students homes, and as a result involve students in monitoring air quality, as portable air quality monitors were to be used during the pedibus walks.

On top of that, the pandemic changed everyone's life in various ways. People nowadays are more worried, stressed and focused on their own problems, so environmental/air quality concerns seem to be more of a secondary concern. This is also true for policy makers that have a plethora of new problems and challenges to face at local, regional and national level, and as a result air quality has fallen off the top of the political agenda.

To address this immerse challenge, and ensure that students, citizens and local actors are continuously engaged, AIR-HERITAGE had to adjust. The AIR-HERITAGE team had to rethink all planned activities and consider alternative approaches to creatively reach and engage target groups.

As a result, two info points have been set in November 2020, one inside a municipal building in the city centre and one at an outdoor location, where citizens can go and learn more about air pollution and about AIR-HERITAGE activities to improve local air quality. Although, their operation has been suspended in November and December due to measures put in place to limit people's exposure to COVID-19, these are now fully operational.

Moreover, AIR-HERITAGE established two important messages to convey, namely that:

- COVID-19 and air pollution are two issues that are interconnected, especially when considering that It is likely that air pollution plays a role on the COVID-19 disease severity and mortality.[1]
- The number of premature deaths attributed to air pollution every year in Italy[2] is comparable to the death toll from COVID-19 in Italy in 2020.

In parallel, two additional communication campaigns have been launched to engage citizens, keep the momentum and maintain the enthusiasm for the project. More specifically:

• The "Green campaign" - Webinars are being organised to raise awareness about air pollution, trigger behavioural changes and promote AIR-HERITAGE activities to the wider public. For instance, a webinar was organised on the 4th of December that focused on the importance of making the city greener. Besides AIR-HERITAGE activities, the Prato Urban Jungle project[3] was presented during the webinar. This aims to develop green areas and open spaces in the City of Prato, to improve the urban environment and citizens' health. Experiences and lessons learnt from both projects were discussed, as well as problems faced, solutions employed and the sustainability of both projects.



The "Air pollution bedsheets campaign". Innovative air pollution bedsheets have been designed that can be placed on
residents balconies to monitor air quality. These work by changing colour, which indicates high air pollution levels.
Currently, 300 bedsheets are being distributed to civil servants and to the public, through the info points and local
associations.

In addition, online workshops and meetings with students and teachers have been organised to actively engage

students, along with outdoor meetings when possible. Educational courses for students are also being held virtually to improve environmental knowledge.

Finally, webinars and online meetings have been organised with local actors, to actively engage them in AIR-HERITAGE activities, in particular to encourage them to use portable air quality monitors and further promote the AIR-HERITAGE campaigns within their network

To supplement these activities, creative communication material has been developed, including:

- A game for students and the wider public to demonstrate the UIAQ tool. Through this game, players are able to experience being policy makers and assess the effectiveness of different policies and measures in reducing air pollution. This is displayed in the Museums of Agricultural Sciences (Centro MUSA) University of Naples Federico II, within the Department of Agriculture, so that thousands of visitors can access and play the game.
- Printed "AirBooks". These are essentially diaries for 2021 that include information about AIR-HERITAGE, the importance of nature, the relationship between air quality and health, and other key environmental information to make citizens more aware, and trigger behavioural change.



Other creative ways to reach and engage with citizens are currently being explored, including the creation of an interactive map of the City of Portici that will promote the active participation of citizens in local actions. For example, the map will enable citizens to click on a particular location in the city (such as a location with high air pollution levels or with ugly features) and propose actions (e.g. planting trees or creating green spaces).

[1] https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121505/jrc121505_jrc121505_online.pdf

[2] https://www.eea.europa.eu/media/newsreleases/many-europeans-still-exposed-to-air-pollution-2015/premature-deaths-attributable-to-air-pollution

[3] https://www.uia-initiative.eu/en/uia-cities/prato

Upscaling

As mentioned in the first Journal, the upscaling of AIR-HERITAGE should focus on replicating the action in other cities around Portici, as air quality in the city is affected by nearby air pollution. Therefore, the main challenge is to inspire and support nearby cities to reduce local air pollution, by developing an air quality monitoring network, expanding the geographical coverage of the UIAQ tool and implementing targeted measures to reduce air pollution hotspots. As such, AIR-HERITAGE plans to organise several meetings with key policy makers, especially mayors, of cities and towns around Portici to actively engage them, as well as explore the enhancement of the

UIAQ tool. However, it has not been possible to organise such meetings so far, due to COVID-19.

"Municipalities should have an open mind and pursue collaboration with different types of organisations, including academic institutions, to formulate evidence-based policies"

Anna Palladino (City of Portici)

Finally, a further challenge is to ensure the sustainability of AIR-HERITAGE and in particular to sustain and extend the positive behavioural and cultural change that the project is triggering. Political acceptance, cross-departmental collaboration and the active participation of citizens will be the key tools that will be employed to address this challenge.

Conclusion

To date, AIR-HERITAGE has effectively engaged with students and the general public, air quality is regularly being monitored, and the monitoring network is gradually being enriched, whilst the UIAQ tool, i.e. the AIR-HERITAGE Decision Support System, has been successfully developed. Nevertheless, a number of challenges have been faced. These are summarised in the table below along with how these have been resolved.

Challenge	Description	Solution
Leadership	Maintain political support, especially now with the COVID-19 pandemic	AIR-HERITAGE team is working closely with the Mayor and Councillors
	Effectively communicate the UIAQ tool attributes, advantages and benefits to local politicians	Project partners tested the UIAQ tool, and have extensively discussed how to efficiently communicate this to policy makers. The tool is progressively being presented to policy makers
	Ensure that the UIAQ proposed solutions (e.g. policy measures) can be implemented	The different measures incorporated in the UIAQ tool have been extensively discussed within the consortium, but also with key policy makers
	Change in political leadership and as a result, proposed solutions not in line with the political agenda	This challenge has not materialised yet
,		
Public procurement	Meet technical needs and in parallel comply with legal requirements	Numerous meetings and discussions took place to communicate needs and technical requirements and facilitate the procurement process
Organisational arrangements within the urban authority	Inadequate resources within the municipality to implement the project	A strong, experienced project team was gradually formed within the municipality
	Link AIR-HERITAGE with other actions delivered by other departments of the local authority	Cross-departmental collaboration has been established, through periodic meetings
	Changes in working practices due to COVID-19	Team members have used all available means to ensure that they continue to work closely together and effectively implement project activities
Participative approach for co-implementation	Communication gap for bridging management, technical and political perspectives	Numerous meetings have been organised to agree on a common language and establish an open communication channel
	Demotivation stemming from not being able to implement planned activities due to COVID-19	Partners have re-designed project activities, and have used alternative communication channels to reach students and citizens

Qualitative surveys and quantitative instruments are being used

Consideration of confounding when interpreting the air quality

to monitor and evaluate activities implemented

monitoring results

Monitoring and assessing the impacts of

Potential confounding from the COVID-19

lockdowns that may affect the assessment of the impact of AIR-HERITAGE activities on air

air pollution

quality

Monitoring and evaluation

behavioural change and policy measures on

Communication with target beneficiaries and users	Effectively engaging with target groups to trigger behaviour change and gain public acceptance	Establishing a strong communication and engagement strategy, with tailored activities and feedback loops.
	COVID-19 impacts in planned communication and engagement activities	Activities have been redesigned and new communication material has been produced to effectively reach and engage target groups in creative ways
Upscaling	Encourage the replication of project activities in other cities around Portici	Meetings with key policy makers of neighbouring cities and towns will be organised
	Ensure the sustainability of the action	AIR-HERITAGE will safeguard and enhance political acceptance, strengthen cross-departmental collaboration and encourage the active participation of citizens

Air quality

See on LIIA website

