

Strategic Environment, Planning and Transport Committee

11 March 2026



Reading
Borough Council
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Title	Clean Air Living Matters: Exploring Reading
Purpose of the report	To note the report for information
Report status	Public report
Executive Director/ Statutory Officer Commissioning Report	Emma Gee, Executive Director for Economic Growth and Neighbourhood Services
Report author	Ross Jarvis, Principal Air Quality Project Officer
Lead Councillor	Cllr John Ennis
Council priority	Deliver a sustainable & healthy environment & reduce Reading's carbon footprint
Recommendations	1. That the Committee note the report.

1. Executive Summary

- 1.1. To update the Strategic Environment Planning & Transport Committee of the achievement of the Clean Air Living Matters; Exploring Reading, Air Quality Awareness Programme at completion.
- 1.2. Clean Air Living Matters: Exploring Reading (CALM, or CALM:ER) was a two-year educational programme funded by the Department for Environment, Food and Rural Affairs' (DEFRA's) 2022-2023 Air Quality Grant scheme, with the purpose of engaging primary and secondary school pupils to increase knowledge and awareness of air quality, learn about its causes, and understand impacts and find solutions through behavioural change. It was delivered with partners Stantec, University of Reading and Design Nature between February 2023 and July 2025 across Reading schools.
- 1.3. The programme made substantial progress across all key performance indicators (KPIs), exceeding many of its original targets while leaving a lasting educational and environmental legacy. A main success of the programme is highlighted by the inclusive engagement, having directly reached over 9,000 children, over 2,000 through practical knowledge sessions and nearly 7,000 through awareness activities.
- 1.4. The programme also made significant progress in terms of community and parental engagement. Through face-to-face conversations at school gates and participation in community events, over 860 parents and carers were directly engaged, and the estimated total reach extended to over 17,000-24,000 adults through indirect channels such as CALM materials shared at home and public events. This outreach helped to stimulate important conversations about air quality at home, contributing to behaviour changes such as reduced car idling and more frequent active travel.
- 1.5. Knowledge acquisition was measured through pre- and post-assessments, revealing an average knowledge increase of 28% among primary school pupils and 9% among secondary school pupils. These improvements demonstrate that the educational components were well-structured, accessible, and impactful. Pupils actively engaged with resources such as interactive presentations, videos, practical monitoring activities,

and were able to confidently apply this knowledge during action planning and discussions.

- 1.6. Beyond knowledge gains, the programme succeeded in supporting behavioural change. Action planning activities were completed in 8 primary schools and 5 secondary schools, where pupils developed and presented proposals to improve air quality in their schools and wider communities.
- 1.7. CALM also made a strong contribution to curriculum integration. Although air quality is not currently a standalone topic within the national curriculum, the programme's materials aligned well with subjects such as science, geography, mathematics, and citizenship. The development of a dedicated Key Stage 2 lesson plan, in collaboration with the University of Reading and a local teacher, has further embedded air quality education into mainstream learning and will remain accessible as part of the university's climate education resources. Additionally, the availability of materials on the RBC and Design Nature websites ensures that the programme's legacy will continue beyond the programme's official end.

2. Policy Context

- 2.1. The Council Plan 2025-28 sets out a vision to help Reading realise its potential and to ensure that everyone who lives and works here can share the benefits of its success and focuses on five priorities, of which the CALM programme most obviously aligns with the priority to: Deliver a sustainable and healthy environment and reduce Reading's carbon footprint.
- 2.2. The CALM programme directly relates to several actions outlined within the RBC Air Quality Action Plan (AQAP) 2024-2029. The relevant AQAP measures are outlined below:
 - RDAQ7 – Promoting Travel Alternatives: School Streets
 - RDAQ8 – Promoting Travel Alternatives: Continue to Promote Active and Low Emission Travel Options
 - RDAQ11 – Traffic Management: Healthy Streets and Quiet Neighbourhoods
 - RDAQ16 – Transport Planning and Infrastructure: New Pedestrian and Cycling Routes
 - RDAQ28 – Promoting Travel Alternatives: School Awareness Events
 - RDAQ29 – Public Information: Health Promotion Work with NHS
 - RDAQ32 – Public Information: Smoke Control Area Awareness Campaign
 - RDAQ34 – Public Information: Engagement in National Clean Air Day
 - RDAQ35 – Public Information: Indoor Air Quality Awareness Campaign

3. The Programme

Overview

- 3.1. Clean Air Living Matters: Exploring Reading (CALM, or CALM:ER) was an educational programme funded by the Department for Environment, Food and Rural Affairs' (DEFRA's) 2022-2023 Air Quality Grant scheme. It ran between February 2023 and July 2025 in schools in Reading Borough Council (RBC) with the purpose of engaging primary and secondary school pupils to increase knowledge and awareness of air quality, learn about its causes, and understand impacts and find solutions through behavioural change.
- 3.2. RBC were the applicant of the DEFRA Air Quality Grant funding bringing in the support of three project partners over the duration of the programme: Stantec, University of Reading and Design Nature.

- 3.3. Stantec provided overall programme management, coordination and management of air quality monitoring programme, provision of air quality technical advice.
- 3.4. University of Reading (UoR) carried out school and stakeholder engagement, managing and leading school deliveries, preparation of school materials, evaluation of programme progress and outcomes, provision of air quality technical advice. The CALM programme builds on a PhD research project currently undertaken by Marta O'Brien within the Department of Geography and Environmental Science at the UoR which focuses on air pollution spikes at school gates, community engagement and air quality education.
- 3.5. Design Nature also carried out school and stakeholder engagement, managing and leading school deliveries, preparation of school materials, management and co-ordination of the programme's branding and graphic design.

Aims

- 3.6. The primary objectives of the CALM programme were to:
 - Increase knowledge of air quality, its causes, impacts and solutions, for primary and secondary school children with a range of age suitable programmes.
 - Use the programme to increase awareness in the wider community including schools outside of the programme, parents, and the communities around the schools.
 - Encourage behavioural change both in activities that impact on poor air quality by parents and the wider community, and in terms of measures that the school children, and others, can take to reduce their exposure to poor air quality.

To monitor progress against the aims and to evaluate the success of the programme, 14 Key Performance Indicators (KPIs) were set by the CALM team and are set out in Table 1 in the appendix.

- 3.7. Although NO₂ has been the only pollutant that until recently exceeded a national air quality objective in Reading, particulate matter (PM₁₀ and PM_{2.5}) is a pollutant of concern due to its effects on health even at low concentrations. The Public Health Outcomes Framework (PHOF) suggests that the fraction of mortality attributable to PM_{2.5} air pollution in Reading in 2023 was 5.3%, above the national rate of 5.2%¹. Domestic solid wood burning contributes the single largest local contribution of PM_{2.5} (estimated at 38% nationally³) and is a key air pollution of concern in Reading given the high percentage of terraced houses (26%) in the borough that burn solid fuel. The use of solid fuels is expected to have risen with the recent energy crisis.
- 3.8. Despite this, awareness of air quality issues in Reading is considered to be limited. Although numerous projects to improve air quality have been carried out over the years, air pollution remains high due to people's entrenched behaviours. The CALM programme was therefore introduced and set out to target specific areas through a school engagement programme, aiming to directly engage 33 of the 49 RBC schools with a knowledge and awareness campaign, with the potential to reach over a quarter of the population of RBC through engagement with the wider community.

Delivery

- 3.9. As part of the CALM programme, a total of 53 interactive activities were delivered to 28 schools during the 18-month delivery phase, which began in January 2024. These activities ranged from whole-school assemblies to practical, interactive hands-on air quality monitoring sessions conducted both indoors and outdoors. The delivery culminated in dedicated action-planning workshops and creative sessions designed to be fully interactive, engaging, and aligned with curriculum objectives across Key Stages 2 to 5.
- 3.10. Although air quality is not currently included within the school curriculum, the CALM programme aligns strongly with the secondary school science curriculum aims by promoting active scientific inquiry throughout its activities.

- 3.11. CALM activities also embedded geographical enquiry, mathematics and environmental thinking, earth and atmospheric science, citizenship and biology. Children collected air quality data on school playgrounds or local streets using low-cost sensors and discussed how urban factors, such as traffic, can affect air quality in schools. The pupils considered human–environment interactions, evaluated how their surroundings shaped pollution exposure, and applied this understanding when designing sustainable air quality action plans.
- 3.12. For younger learners, CALM's hands-on use of sensors and data logging created meaningful, age-appropriate STEM experiences. Pupils engaged in structured investigations exploring, for example, how CO₂ levels change during a lesson or how air quality shifts upon opening windows.
- 3.13. The below range of different types of activities were undertaken as part of the programme:
- **Assemblies** were delivered in participating schools to introduce pupils to the concept of air quality, its causes, and health impacts. These sessions used interactive presentations, videos, and real-life examples to make the topic engaging and accessible. Assemblies served as the first point of contact for many pupils, raising awareness and sparking curiosity about how everyday behaviours influence air pollution.
 - **Workshops** provided a deeper dive into air quality issues through hands-on learning. Pupils explored sources of pollution, its effects on health, and practical solutions. Activities included group discussions, problem-solving exercises, and creative tasks such as designing posters or campaigns. These sessions encouraged critical thinking and empowered pupils to identify actions they could take to improve air quality in their schools and communities.
 - **Air Quality Monitoring** activities allowed pupils to use portable sensors (AirGradient and Atmotube PRO) to measure pollutants such as PM_{2.5}, CO₂, and VOCs. Pupils collected data around school gates and classrooms, then analysed results to understand pollution patterns. This practical element connected theory to real-world evidence, helping pupils appreciate the importance of reducing emissions and improving ventilation.
 - **Clean Air Day Workshops** were held to coincide with National Clean Air Day, focusing on the theme of collective action for cleaner air. Pupils participated in interactive games, pledges, and creative activities such as designing anti-idling posters. These events amplified national messaging and encouraged schools to showcase their commitment to air quality improvement.
 - **Laboratory Indoor Air Quality Experiments** were held in collaboration with the University of Reading, pupils engaged in experiments to investigate indoor air quality. Using controlled setups, they explored how ventilation, cleaning products, and human activity affect pollutant levels indoors. These experiments highlighted the importance of good ventilation and informed practical recommendations for classrooms and homes.
 - **Personal, Social, Health and Economic (PSHE)** sessions integrated air quality education into broader wellbeing topics. Pupils learned about the link between clean air and physical health, mental wellbeing, and lifestyle choices. These sessions reinforced the idea that environmental health is part of personal health, encouraging pupils to adopt behaviours that benefit both.
 - **Air Quality Action Planning** exercises were conducted in selected schools, where pupils worked in groups to develop proposals for improving air quality locally. Plans included initiatives such as promoting active travel, reducing car idling, and planting greenery. Pupils presented their ideas to peers and staff, fostering ownership and leadership in tackling air pollution.

- **School Gates Interviews** - Project staff engaged parents and carers at school gates to discuss air quality and behaviour change. These informal conversations provided an opportunity to share practical tips, distribute CALM materials, and gather feedback. This approach helped extend the programme's impact beyond pupils, influencing family habits such as reducing car idling and walking to school.

3.14. Evaluation of Success

- 3.15. Although not without obstacles, overall the project has been considered a success. Table 2 in the appendix provides a summary of the performance against the KPIs set out at the start of the programme.
- 3.16. The main difficulties encountered included:
- **Procurement & Staffing** – delays with procurement and contracting of project partners caused delays in getting the programme up and running. This left limited time for preparation of materials for delivery in the first term of 2023/24 academic year as planned.
 - **School Engagement** – Getting schools to engage with the programme was the most significant challenge. We attempted to engage schools through multiple avenues such as sending out advertisements in Headteacher's briefings, email correspondence, telephone correspondence, school gate engagement and leafleting. Unfortunately, several schools did not engage with the CALM programme despite these attempts.
- 3.17. Areas of particular success were:
- 3.18. **Public awareness and education** - One of the core strengths of the programme was in its ability to raise awareness around air pollution. In terms of improving children's knowledge of air pollution, the programme delivered clear, measurable outcomes. Pre- and post-assessments revealed an average knowledge increase of 28% among primary school children and 9% among secondary school pupils. By engaging directly with children and members of the public, it successfully promoted understanding of the sources and impacts of poor air quality. The CALM activities helped individuals understand air pollution and make more informed decisions about their travel habits and environmental behaviours. The initiative also served as a valuable educational opportunity for those involved in the organisational preparation for climate action plans, allowing them to refresh and deepen their understanding of key environmental issues.
- 3.19. **Support for local decision making** - The data collected through the programme provides meaningful insights into public attitudes and behaviours, which in turn can inform local authority strategies. This evidence base is particularly valuable in supporting council decision-making, ensuring that policies and interventions related to air quality are grounded in current, community-level information. Additionally, it helps to target effective budget allocation, ensuring that resources are directed where they can have the greatest impact.
- 3.20. **Competency building and skill development** - For participants, the programme offered hands-on experience in field research, public engagement, and data collection. This contributes to skill development in areas such as communication, teamwork, and time management, while also enhancing employability and academic learning, particularly for UoR students in environmental or geography related disciplines

Legacy

- 3.21. Following the completion of the CALM programme many of the schools expressed an interest in the programme continuing. More than 70% expressed an interest in retaining the AirGradient monitors they had been loaned. As a result a number of legacy materials were prepared to provide an air quality education resource. These include:

- 3.22. **Legacy Video** - Highlighting the impact of the programme. It is hoped that it will inspire children and encourage the uptake of similar programmes in the future. As a result interest in our programme has been received from other Local Authorities wishing to do their own air quality awareness programmes in schools.
- 3.23. **RBC Webpage** – has all the programme resources allowing teachers to run similar air quality sessions in the future.
- [Clean Air Living Matters: Exploring Reading with Schools - Reading Borough Council](#)
- 3.24. **Call to Action** - Design Nature to develop webpage providing resources for teachers who want to continue with the CALM programme. The page will act as a forum to allow teachers to discuss air quality lesson plans and sessions.
- 3.25. **Air Quality Action Plans/Promises** - 13 schools completed air quality action planning sessions. To date this has led to air quality planting and an anti-idling campaign. It is hoped that other schools will take their plans forward into action behavioural change.
- 3.26. **Community of Practice** – The CALM team will work with a smaller group of interested schools. For primary schools ‘train the trainer’ sessions will be run providing lesson plans and advice. For secondary schools the possibility of one school hosting an after-school workshop is being investigated. This will build on the information available on the online forum where teachers can share their experiences to help continual improvement in the delivery of air quality sessions.
- 3.27. **Future Air Quality Initiatives** – The CALM programme links with several AQAP measures and has demonstrated a strong appetite amongst those involved for further air quality initiatives such as school streets and active travel schemes, which will continue to be promoted through the Reading Transport Strategy.
- 3.28. The CALM programme also relates to AQAP measure RDAQ31: Increase PM2.5 monitoring to help understanding of levels and sources in Reading. This project is currently being developed to help increase our understanding of particulates across the borough. The insight that the data provides will be shared with the public to further increase awareness about the harm of particulate air pollution on health.

Conclusions

- 3.29. In conclusion, CALM has delivered a high-impact, inclusive, and sustainable environmental education programme. Overall engagement (adults and children) is estimated to be over 26,000 people (or nearly 33,000 if two adults at home engaged with the CALM materials). The programme not only met its original objectives but has also laid a foundation for long-term engagement with air quality and climate education across schools, households, and the wider Reading community.

4. Contribution to Strategic Aims

- 4.1. The CALM programme contributed to the strategic priorities set out in the Council Plan by improving environmental literacy and promoting a healthier environment through active travel and sustainable practices. It contributed to equitable outcomes by working across Reading’s diverse communities.

5. Environmental and Climate Implications

- 5.1. Positive implications include reductions in exposure to air pollution around schools through anti-idling and modal shift behaviours, and better indoor ventilation practices. No adverse environmental impacts arise from decisions sought in this report.

6. Community Engagement

- 6.1. The programme also made significant progress in terms of community and parental engagement. Through face-to-face conversations at school gates and participation in community events, over 860 parents and carers were directly engaged, and the estimated total reach extended to over 17,000-24,000 adults through indirect channels such as CALM materials shared at home and public events.

- 6.2. The CALM team encouraged adults to make personal “Air Quality Promises”, further reinforcing commitment to small but meaningful changes. These promises, initiated during the Community Festival at the UoR, allowed adults to reflect on their role in supporting clean air and set achievable goals such as using active travel, reduce idling or reduce wood burning. These pledges served as both motivational tools and accountability markers, strengthening the link between environmental education and community actions.

7. Equality Implications

- 7.1. The programme placed strong emphasis on equity and inclusion, and it was delivered in schools spanning all IMD deciles, representing Reading’s diverse communities where 46.5% of the population identifies as being from a Black or Minority Ethnic background. All programme activities were designed to be accessible and adaptable, ensuring pupils from different socio-economic backgrounds could engage meaningfully and equally.

8. Legal Implications

- 8.1. The programme was delivered under DEFRA Air Quality Grant conditions. No additional legal powers or delegations are required to note this report.

9. Financial Implications

- 9.1. The programme was carried out with a budget of £387,000 consisting of a DEFRA Air Quality Grant (£291,000 revenue, £36,000 Capital) and up to £60,000 RBC match funding via officer support. The final cost of the programme was £353,113.50.
- 9.2. Based on the programme’s total community reach of 26,000 – 33,000 people, the cost of the programme was estimated to be approximately £10.70 - £13.60 per resident. This is considered strong value for money given the long-term educational and behavioural change outcomes of the programme.

10. Timetable for Implementation

- 10.1. Not applicable.

11. Background Papers

- 11.1. There are none.

Appendices:

Appendix 1: Table 1 - Summary of Key Performance Indicators for CALM

Appendix 2: Table 2 - Performance against KPIs

Appendix 1: Table 1 - Summary of Key Performance Indicators for CALM

Key Performance Indicator	Description of KPI	Method of Measurement
Key Performance Indicator	Description of KPI	Measurement of KPI
KPI001 - Number of Children Engaged	Target: <ul style="list-style-type: none"> - Direct: 2,800 pupils - Awareness: 16,000 pupils 	Number of children engaged would be measured at each CALM delivery and outcomes would be categorised by 'increased awareness' (e.g. assembly) or 'increased knowledge' (e.g. lesson/workshop).
KPI002 – Number of Schools Engaged	Target: <ul style="list-style-type: none"> - 9 secondary schools - 24 primary schools 	Number of school visits to be recorded.
KPI003 – Impact on Parents and Community	Target: <ul style="list-style-type: none"> - Direct: 3,000 parents and guardians - Awareness: 40,000 adults 	Record to be made of: <ul style="list-style-type: none"> - Number of adults engaged at each CALM event (such as teachers, parents) - Numbers of children engaged who take activity sheets home. - Webpage and social media views/engagement - Approximate number of people engaged in wider marketing (posters, billboards etc.)
KPI004 – Deployment of Sensors	Target: <ul style="list-style-type: none"> - 10 No. static monitors - 20 No. portable sensors 	Record to be made of number of static sensors installed at schools and when portable sensors are used in activities at schools.
KPI005 – Legacy Teaching Aids	Resources to be made available for teachers and wider community following completion of the CALM programme.	Teaching aids to be prepared and uploaded to the CALM website. Record to be made of the number and description of teaching aids produced.
KPI006 – Knowledge Acquisition	Pre- and post-assessments to be used to evaluate the level of knowledge children have about air quality before and after educational sessions.	Quizzes and tests to be used to measure the retention and understanding of key concepts related to air pollutants, sources and their effects.

KPI007 – Behavioural Changes	Determine whether there is evidence of behavioural change following activities in schools, engagement with parents and the wider community.	<p>A parent's questionnaire is to be developed to understand behavioural response. Questions to be asked at school gates and/or link to be provided to an online questionnaire. Follow-up activities to be provided to pupils during CALM deliveries.</p> <p>Data to be collected on changes in behaviour, such as whether children are more likely to adopt practices that reduce air pollution exposure, reduce personal pollution sources, or encourage environmentally friendly habits at home.</p>
KPI008 – Participation in Environmental Initiatives	Encourage children to increase their involvement in wider environmental initiatives.	Questions to be asked during class activities to see how many pupils are involved in environmental initiatives such as environmental clubs, community clean-up events etc.
KPI009 – Communication Skills	Improve children's communication skills through the CALM sessions.	Evaluate pupils' ability to communicate air quality concepts through presentations, posters or projects.
KPI010 – Attitude and Perception Shifts	Determine whether attitudes to air quality improve as a result of the programme.	Undertake focus group discussions with a sub-set of schools to discuss attitude and perception to air quality and air pollution exposure.
KPI011 – Integration into the Curriculum	Seek opportunity to integrate air quality education into the school curriculum.	Review CALM activities against the existing school curriculum and discuss the potential to incorporate air quality elements into the curriculum with a sub-set of schools.
KPI012 – Parental Involvement	Determine whether children's involvement in the CALM programme has influenced household behaviours or encouraged discussions about air pollution.	Online survey to be created and promoted to parents through materials sent home with children, an air quality brochure, a poster competition and engaging parents at school gates.
KPI013 – Use of Technology and resources	Assess how well students utilize educational resources, such as books, videos, or guest lectures, to enhance their air quality knowledge.	Record through observation in class during activities and recording downloads from website.
KPI014 – Levelling Up Agenda	Determine whether the programme has been delivered in an equitable way across school children from different socio-economic backgrounds.	Plot engaged schools against deprivation indices to identify whether catchments are reflective of the economic mix of RBC.

Appendix 2: Table 2 - Performance against KPIs

Key Performance Indicator	Description of KPI	Evaluation
KPI001 - Number of Children Engaged	Target: - Direct: 1,400 children - Awareness: 8,000 children	The engagement targets were adjusted to reflect more realistic levels of participation. Over 9,000 children were engaged all together, with 4,765 taking part in awareness sessions at schools, 2,234 engaged at community events and 2,071 engaged through knowledge practical sessions.
KPI002 – Number of Schools Engaged	Target: - 9 secondary schools - 16 primary schools	A total of 28 schools engaged with the programme: 20 primary schools and 8 secondary schools. Although this exceeds the revised total target, it is important to highlight the particular challenge of recruiting secondary schools to participate in such activities.
KPI003 – Impact on Parents and Community	Target: - Direct: 3,000 parents and guardians - Awareness: 40,000 adults	Direct and indirect engagement of parents and the wider community has been successful, achieved through a variety of approaches involving schools and children. This also included face-to-face interactions at school gates and conversations during various community events. Each participating child received a worksheet or CALM booklet, resulting in nearly 7,000 individual engagements. Given that most children typically share these materials with at least one adult at home, this significantly extended the programme's reach. In addition, 860 parents and carers were engaged directly through in-person conversations at school gates enhancing the already planted knowledge. Further connections were made during a range of public events. Based on these figures, we estimate that school-based engagement alone reached over 11,000 adults, or over 18,000 adults if a second parent/guardian/adult sibling or grandparent

		<p>engaged with materials at home. In addition, over 1,200 adults were reached through events, though the actual number is likely higher, considering the size and scale of some of the events attended by CALM team members. Additional engagement was achieved through digital platforms, as well as through physical outreach such as posters and lamppost wrap campaigns. While it is difficult to quantify the exact impact of these methods, their prominent locations suggest that reach and visibility were likely significant. Numbers that can be confirmed are: 743 online YouTube views and 5,220 Clean Air Night social media views. More information on numbers in summary section 7.3. In total, it is estimated that between 17,000 - 24,000 adults were engaged through the CALM programme.</p>
KPI004 – Deployment of Sensors	<p>Target:</p> <ul style="list-style-type: none"> - 10 No. static monitors - 20 No. portable sensors 	<p>45 No. AirGradient Open Air monitors, 45 No. AirGradient ONE monitors and 30 No. Atmotube PROs were used during the delivery of the programme. More details on monitors in section 2.</p>
KPI005 – Legacy Teaching Aids	<p>Resources to be made available for teachers and wider community following completion of the CALM programme.</p>	<p>Throughout the delivery period, a range of educational materials was developed to support teaching and learning across Key Stages 2, 3, and 4. These resources include lesson plans, data collection sheets, and supporting presentations, all of which are available on the RBC website and will remain downloadable after the programme concludes. An electronic version of the CALM booklet is also available in both web and PDF formats as well as the videos that were produced to support the delivery of activities. Additionally, a Key Stage 2 lesson plan is being developed in</p>

		<p>collaboration with the Department of Education at the UoR.</p> <p>This resource, supported by input from a local teacher, will be permanently hosted on the UoR's website as part of its climate education resources.</p> <p>Further information on legacy resources is provided in section 6.</p>
KPI006 – Knowledge Acquisition	<p>Pre- and post-assessments to be used to evaluate the level of knowledge children have about air quality before and after educational sessions.</p>	<p>Knowledge acquisition assessment has been undertaken during the practical workshops through targeted questions with multiple-choice answers to facilitate consistent measurement and analysis.</p> <p>Results showed a measurable increase in knowledge, with an average improvement of 9% between the pre- and post-activity assessments for the secondary school children and 28% for the primary school children, indicating a positive impact on pupils' learning.</p>
KPI007 – Behavioural Changes	<p>Determine whether there is evidence of behavioural change following activities in schools, engagement with parents and the wider community.</p>	<p>Significant behavioural change actions have been implemented by children in schools taking part in the action planning (8 primary schools and 5 secondary schools).</p> <p>Behavioural change conversations have been taking place during the face-to-face engagement with parents at school gates (860) and during various events (over 4000) reaching not just parents directly but wider community.</p> <p>While the extent of impact on behavioural change is hard to quantify, engagement suggests that CALM has had a significant positive impact in this area.</p>

<p>KPI008 – Participation in Environmental Initiatives</p>	<p>Encourage children to increase their involvement in wider environmental initiatives.</p>	<p>All schools taking part in the delivered activities either already had eco/environmental groups/clubs or were using the engagement with the programme as an opportunity to implement one. The air quality action planning sessions encouraged children to take action related to environmental issues.</p>
<p>KPI009 – Communication Skills</p>	<p>Improve children’s communication skills through the CALM sessions.</p>	<p>As part of the action planning activities, children had the opportunity to present their ideas and promote their proposals for actions to improve air quality. These sessions took place both during in-school activities and at off-site workshops.</p>
<p>KPI010 – Attitude and Perception Shifts</p>	<p>Determine whether attitudes to air quality improve as a result of the programme.</p>	<p>Following engagement with both adults and children, it has become clear that, as a result of the educational sessions and discussions, participants are increasingly aware of the impact of air pollution and are willing to make changes to help improve it. This is evident in the action planning activities with school children, as well as in the feedback received during the school gate engagements</p>
<p>KPI011 – Integration into the Curriculum</p>	<p>Seek opportunity to integrate air quality education into the school curriculum.</p>	<p>Although air quality is not explicitly included in the national curriculum, it is directly connected to climate change and strongly linked to several subjects across Key Stages 2 to 5. These include Science, Mathematics, Earth and Atmospheric Science, Geography, Citizenship, Biology, all of which were integrated into the programme’s teaching approach. All the programme’s teaching materials are available on the RBC website.</p>

		<p>Through the development of a dedicated lesson plan, now hosted on the UoR's platform, air quality education has been effectively embedded into curriculum teaching and is readily available for use in schools.</p>
KPI012 – Parental Involvement	<p>Determine whether children's involvement in the CALM programme has influenced household behaviours or encouraged discussions about air pollution.</p>	<p>Initial feedback suggests that children's involvement in the CALM programme has positively influenced household behaviours and encouraged discussions about air pollution at home. Parents and carers engaged during school gate interviews reported that children shared what they had learned, prompting conversations about air quality and, in some cases, small behavioural changes such as walking to school more often or reducing car idling. These early signs indicate that the programme's impact extended beyond the classroom, raising awareness and promoting healthier habits within families.</p>
KPI013 – Use of Technology and resources	<p>Assess how well students utilize educational resources, such as books, videos, or guest lectures, to enhance their air quality knowledge.</p>	<p>The programme was delivered in an area with very diverse population, with 46.5% belonging to a Black and Minority Ethnic community, which was reflected across schools. All activities were designed to be accessible and adaptable to varied school contexts. Evidence from knowledge assessments, feedback, and parental engagement indicates that pupils from different backgrounds were able to benefit from the programme's content and contribute meaningfully to discussions around air quality . Figure 45 plots CALM schools against the index of multiple deprivation and illustrates the CALM programme reach across all ten deciles.</p>

<p>KPI014 – Levelling Up Agenda</p>	<p>Determine whether the programme has been delivered in an equitable way across school children from different socio-economic backgrounds.</p>	<p>As part of the action planning activities, children had the opportunity to present their ideas and promote their proposals for actions to improve air quality. These sessions took place both during in-school activities and at off-site workshops.</p>
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