Expeditions Fund Report Amsterdam, Netherlands

Controlling air quality is essential to sustainable growth, and urban areas are leading the way in creative environmental management. My project, which involves creating a humidity and CO2 detector, aims to analyse urban air conditions to pinpoint locations that are most likely to experience high amounts of both humidity and CO2. This report, made possible by the Queen Mary University Expeditions Fund, summarises an investigative trip to Amsterdam, a city praised for its innovative urban solutions and environmental concern.

The trip was more than just an observational study; it was an all-encompassing attempt to obtain a practical understanding of the city's air quality control plans. The research included having a closer look to the planning and direct environmental measurements across the city's different landscapes with the goals of evaluating Amsterdam's green practises, aligning them with the goals of my project, and investigating their adaptability to our local setting.



The trip across Amsterdam's complex system of canals and various urban settings was captured on camera, and every shot acted as a visual reference point for the notes that accompanied it. A model of a portion of Amsterdam offered a microcosmic perspective of the layout of the city and made it possible to anticipate environmental flow issues. This model helped me plan where to put my humidity and CO2 detectors so that I would have complete coverage in a variety of urban settings.

The expansive urban landscape as it merges with the calm waters of the IJ river, taken

from the observation deck of the Amsterdam Tower. This aerial perspective offered a unique opportunity to witness the interplay between the city's pulsating life and its waterways. I gathered important information about air quality here, seeing how the natural and urban settings are juxtaposed and how this affects CO2 and humidity levels overall. The picture demonstrates Amsterdam's dynamic equilibrium between development and sustainability and embodies the city's dedication to balancing its historical heritage with contemporary environmental awareness.





The quieter evening hours provided a scenario that contrasted with the daily activity, making it an ideal time to test CO2 levels free from the distraction of peak traffic emissions. The peacefulness of the evening added to a set of data that showed the quality of the nocturnal air, demonstrating the city's continued dedication to

environmental sustainability.

A residential area was bathed in warm light as dawn broke; this scenario is captured in the

third image. This peaceful time of day offered a reliable background to measure the regular daily fluctuations in air quality. The observations made around sunset were especially insightful since they showed how the absence of activity throughout the day affects the atmospheric conditions, underscoring the day-to-day efficacy of Amsterdam's regulations.



This expedition to Amsterdam marks a significant milestone in my academic journey. The practical data collected through the deployment of my humidity and CO2 detector across Amsterdam's varied landscapes has provided invaluable insights. These observations have not only enriched my project but have also granted me a comprehensive view of how theoretical environmental concepts are applied within an urban context. The intricate interplay of natural and man-made environments observed has informed my study with a depth that extends beyond traditional classroom learning, offering a new perspective on the practicalities of environmental management.

The Queen Mary University Expeditions Fund played a crucial role in this project, acting as a pillar for academic progress in addition to providing financial support. It has made it possible for me to have an extensive, practical research experience that has strengthened my grasp of environmental science. The university's trust and belief in my research have been a huge source of inspiration for me, enabling me to carry out an impactful and rigorous study that I believe will make a significant contribution to the area.

In conclusion, the expedition has also been a journey of personal development and exploration. The pictures that were taken on the trip, depicting the quiet sunsets over residential areas and the busy canals at nightfall, are representative of the engaging educational opportunities that were had. These instances where academic investigation and environmental application converge highlight the critical role that careful urban planning and thorough study play in protecting our world. The knowledge I've gained and the assistance I've received from Queen Mary University will surely guide and motivate me as I continue to seek out new information and advancements in environmental studies.