



## Clustered Blockchain Platform For Air Pollution Data Aggregation And Dissemination

A Big Data And Artificial  
Intelligence Approach To Air  
Pollution Tracking.

### Some Facts About Toxic Air Quality In The UK

- Air pollution is the biggest environmental threat to health in the UK, with between 28,000 and 36,000 deaths a year attributed to long-term exposure. [Gov.uk 2019]
- Air pollution in England could cost as much as £5.3 billion by 2035. [Public Health England 2020]
- 91% people breathe air that exceeds WHO guideline limits. [WHO Guidelines 2021]
- Add to this the Covid-19 era where thousands who have suffered from Covid 19 have fortunately survived but are left with severe respiratory problems which are made worse by air pollution.

## Air Quality Matters



# 128,000

UK Deaths cased by  
COVID



# 9

out of 10 people  
breathe air that exceeds  
WHO guideline limits



# 4.2

Million Deaths linked to  
Air Pollution, EACH  
YEAR



# 10000

UK IoT Sensors exist  
unconnected



## Our Mission

Air-PoT, led by a consortium of experienced experts in business, technology and air pollution science; harnesses the advanced UK infrastructure of IoT sensors via a centralised and harmonised platform to be used by sufferers and data-led organisations alike.



## Who Benefits?

Along with helping sufferers directly, the platform aims to provide pollution data to various commercial and academic organisations to facilitate research programs and data-driven insights and decision making.



## How This Is Achieved

Air-PoT achieves this by bringing together disseminated sensor data into a single harmonised platform and making it accessible via an intuitive and easy to use App and Web solutions.



## Our Approach

Our approach is to continually refine our practices and platform based on valued feedback from sufferers, data providers and government bodies alike. By adopting an incremental and inclusive process, we can continually optimise the solution and maximise the value to users.

## Platform

Air-PoT is a sophisticated technical platform built from multiple complex subsystems within a scalable and robust ecosystem.

### Harmonised Data Layer



Real-time and historical data from multiple sources are combined within a single homogenised data platform.

### Real Time + Predictive Insights



Air-PoT empowers users of the platform, by using sophisticated Machine Learning algorithms to provide future air quality levels.

### Incentivised Payment Platform



All sensor providers who contribute to the Air-PoT platform are paid for the contribution via an incentivised based platform.

### AI\Blockchain\IoT\Big Data



To provide such a range of benefits to its users Air-PoT makes use of the very latest technology advancements including; AI and Machine Learning, Blockchain, IoT and Big Data Analytics.

