

## OUR TECHNOLOGY



The development of traditional pollution monitoring networks is often hindered by:

- 1- SETUP HIGH INVESTMENT COSTS
- 2- HIGH MANAGEMENT COSTS
- 3- DIFFICULTIES OF INSTALLATION BECAUSE OF THE BIG DIMENSIONS OF THE DETECTION NODES

These obstacles lead to a small number of units functioning in cities. The limited information available only allows general evaluations and interventions, often undifferentiated in large areas (eg entire cities).



**Sense Square technology** allows anyone to know everything about the air that breathes in every moment. Sense Square designs, manufactures and installs intelligent monitoring networks with **high spatial and temporal resolution** that identify the concentrations of air pollutants, collect data and process them in real time.

The **Sense Square monitoring** networks are generally made up of numerous small stations in connection with each other (one every 1-4 sq km) and do not require frequent maintenance. The monitored parameters are PM10 and PM2.5 fine particles, ozone, CO, NOx, temperature, humidity, atmospheric pressure, wind direction and intensity.

The data is detected every 3 minutes, thus obtaining a high temporal resolution of the data.

## QUALI SONO GLI EFFETTI DELL'INQUINAMENTO SULLA SALUTE?

LEVEL OF RISK

100

NEURO DISEASES

DISEASES:  
migraine  
anxiety  
senile dementia  
autism  
alzheimer

LEVEL OF RISK

100

RESPIRATORY DISEASES

DISEASES:  
viral infections  
asthma  
bronchitis  
chronic obstructive pulmonary disease  
cystic fibrosis

80

CARDIOVASCULAR DISEASES

DISEASES:  
heart attack  
arrhythmia  
stroke  
heart failure

50

ONCOLOGY

DISEASES:  
lung cancer  
breast cancer  
adenocarcinoma

The scarcity of **precise information** on pollution has generated a fatalistic, almost disinterested approach on the part of citizens and administrations.

Punctual and capillary information can guide public and private behavior that can reduce, with negligible costs, 50% harmful assumptions, generating **immense benefits** on the quality of life and **reducing costs** for the national health system.

The **Sense Square solution** is based on **intelligent monitoring networks** that identify the concentrations of air pollutants, collect data and process them in real time.



SENSE SQUARE  
air quality analytics

## BENEFICIARIES AND TARGETS

Our solution:



Who are our beneficiaries?



**PUBLIC ADMINISTRATIONS** that aim to optimize the management of urban pollution. Through the implementation of air quality monitoring networks with high spatial and temporal resolution, they will be able to verify the pollution data processed by Sense Square in order to identify the true sources of pollution (traffic, industries, domestic heating, etc.) thus being able to search for solutions to mitigate the phenomenon (traffic blocks, assessments on industrial sites, pollution abatement technologies).



**ENTITIES AND PARKS** that make the health a brand (mountainous or hilly areas, bathing areas). They will be able to install monitoring networks in order to encourage tourists to go to those places to breathe pure air!



All **CITIZENS** who, through an APP, can verify in real time and 24 / 24h the levels of air pollutants that breathe in every moment (a concept similar to the labels of nutritional values on food). In addition, useful information will be provided on the appropriate behavior to be able to limit the damage pollution on their health (where it is better to jog or paths, when wearing masks, where to go to live).



**COMPANIES** that have industrial plants polluted as pollutants and subject to the NIMBY Syndrome (Not In My BackYard). The aim is to install the monitoring networks of Sense Square in order to ensure transparency towards citizens and committees demonstrating that their plant does not have negative effects on the quality of the air they breathe.