AIR QUALITY IN A SMART CITY

ECOMSMART
Ambient air connected measuring station

Air quality is one of the major issues facing smart cities today. In order to democratize access to hyper-localized data and complete measurement points of reference stations, Ecomesure provides connected stations that are clear, effective and affordable.

Scottish & Southern Energy (SSE), a Scottish energy supplier, wanted to improve its lighting network by installing compact and lightweight measuring stations on the electricity posts managed by its subsidiary **Mayflower Smart Control**, a specialist in public lighting control systems.
The system had to address the following constraints:

- To be integrated onto electricity posts,
- To be compatible with the existing communications protocol (Zigbee),
- Transmit data to the company's private cloud without going through the Ecomesure server.

ADVANTAGES

- Can be integrated into the street furniture
- Multiple power supply options (such as battery, solar panel, and mains)
- Availability of an API link to gather data in real time
- Can be accessed through various communication protocols (Wi-Fi, Bluetooth, ZigBee...)

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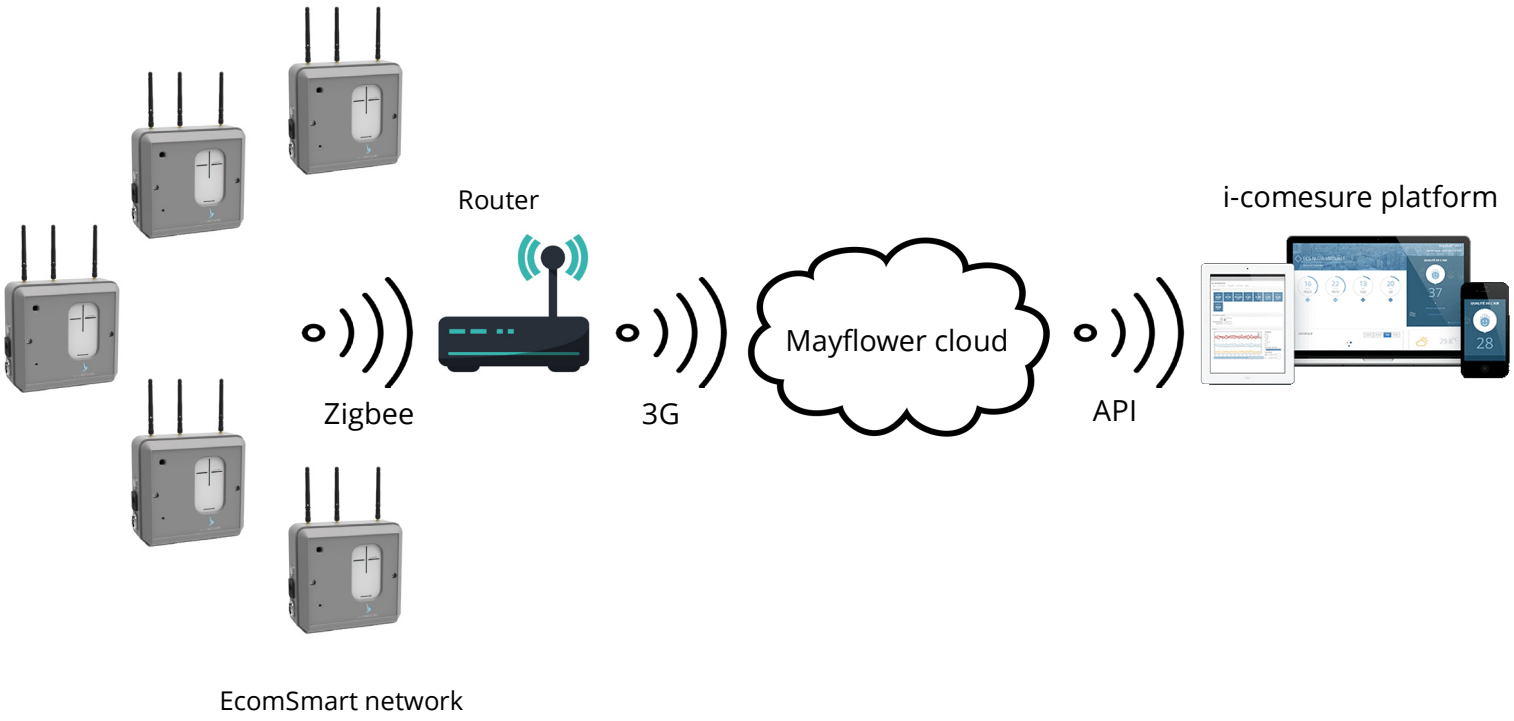

Technical solution :

- A network of connected stations (EcomSmart) is installed to continuously monitor all the pollutants (SO_2, NO_2, PM_1, $PM_{2.5}$, PM_{10}) and environmental parameters (temperature, humidity, pressure).
- All hyperlocal air quality data is gathered and transmitted to the Mayflower cloud via SSE's router.
- The services of the EcomSaaS web platform are available to monitor the environmental data via a secure protocol (SSL): data visualization, mapping, storage, direct download in .xlsx or .csv, remote control, warnings/alerts, analysis reports, exchange of data (FTP transfer, API link, database export).

Installation of EcomSmart stations by SSE

MADE IN FRANCE

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