

AI OF THINGS

## Digitalisation for the present and future of Smart Cities



According to the United Nations, it is estimated that 70% of people will be living in cities by 2050. Digitalisation is therefore the greatest ally for sustainable development and for improving the quality of life of citizens.

Thanks to digitalisation and the use of technology, such as IoT, Big Data, Artificial Intelligence or Blockchain, cities will achieve a more efficient management and a more sustainable use of the resources available to them.



## WASTE MANAGEMENT

#### IoT technology enables smart waste management

Optimising waste collection routes and waste management is a challenge for smart cities. Through the solution, based on IoT technology and data analytics, it is possible to know how full the containers are and to organise the most efficient collection route accordingly.

### **Benefits**



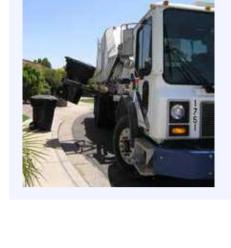
**Avoidance of litter piling** up on public roads through constant monitoring of bin fill levels.



Improved urban planning, efficiency and cost reduction through more reliable data on the position of bins.



Real-time bin incident detection capability.



Improved collection optimisation through route planning.



## SMART MOBILITY

#### **Smart mobility in cities**

Pollution in cities accounts for 70% of greenhouse gas emissions. Thanks to the use of IoT and Artificial Intelligence it is possible to analyse traffic flow in cities and make traffic predictions.

#### **Benefits**



plans based on real data.

More efficient mobility



for citizens and visitors.

Improved quality of life



through promotion of alternative transport and park and ride facilities.

Improved urban mobility



**Promoting local commerce** by improving travel efficiency.



by shortening parking search time.

**Traffic reduction** 



more efficient urban mobility.

Pollution reduction through

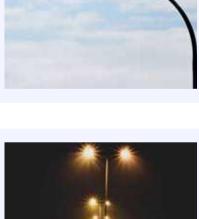


# SMART LIGHTING

Public lighting represents a large part of the electricity consumption in cities.

IoT and digitalisation enables real-time remote management of lighting, providing great benefits.

**Benefits** 



lighting systems.

Increased cost savings

the life of assets.

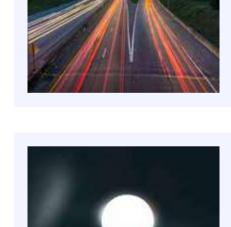
by maximising the value of

investments and extending

Improve energy efficiency

and sustainability in the

management of public



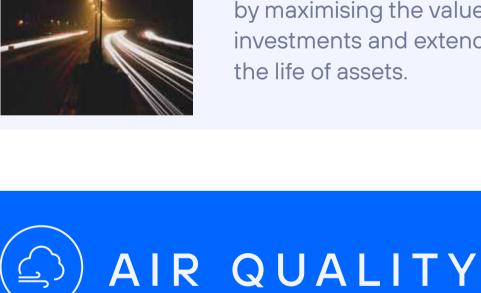
Improved decision making

based on real-time and

Increased citizen satisfaction

by adapting the service to the

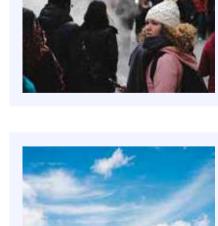
needs of the city.





historical data and predictive analytics.

#### In cities, the analysis of environmental or noise pollution is becoming increasingly important to provide more liveable environments for citizens. IoT-based solutions allow for the collection of advanced data about.

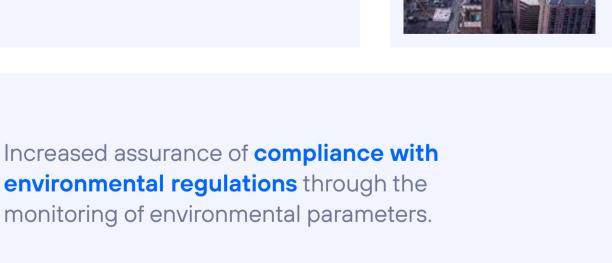


**Benefits** 

Increased **transparency** 

by making information

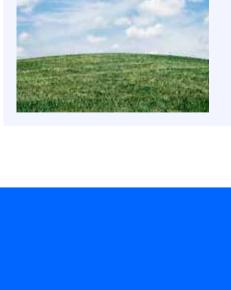
available to citizens.



Ability to **predict pollution** 

in cities using data

analytics.



Why Telefónica Tech?

Integrating the potential of IoT technology, Big Data, Artificial Intelligence and Blockchain in the development

improving people's quality of life, the environment and allowing cities to make better decisions. We have the capacity to design the network and its operation according to the connectivity needs required by IoT devices, thus offering an end-to-end solution that includes connectivity to our customers. We also certify

the correct functioning of the devices through the capabilities and testing of The Thinx's expert laboratory team, to guarantee the reliability and security of the devices that are part of our products.

of smart cities makes urban centers more habitable,



Discover our solutions for the digital transformation of Smart Cities!