**What are the building blocks and interconnection technologies that will make Smart Cities a reality?**

<http://www.smartgrids-cre.fr/index.php?p=smartcities-caracteristiques>

<http://www.smartgrids-cre.fr/index.php?p=smarthome-maison-batiment-intelligent>

domotique

compteur communicant

smart grids

gestion technique des bâtiments

Smart cities use information and communication technologies to respond to the environmental issues, to enhance the way of life of its citizens, to improve its economy and facilitate the innovations. Therefore, the aim of these cities is to use ITC to respond to the current and future challenges.

Smart cities are based on several pillars. The first one is the smart home. Smart homes will increase their management of energy by using for instance smart meters communicating to network. At the same time, they will enhance the quality of life of its owners. The second pillar is the smart mobility. It consists of mass public transport, a good traffic management that also adapt itself cleverly to the congestion along the day. The next pillar is a smart management of the energy in which the electrical network is more delocalized with smart grids. Finally the last important part is a smart governance which includes a higher connectivity and active participation between the citizens and their authority or government.

In smart cities, laptops, smartphones, sensors will be connected with the internet of things. All of these data will then have to be analyzed and processed to send back useful information into the network. This information could be the location of a free parking space or the closest terminal for your electrical car. Moreover, new kind of devices such as medical sensor will be connected to the network and will for instance call the emergency if they notice a vital problem.

There exist different example of smart cities. In Seoul, they decided to use connected dustbins in order to reduce the waste collection costs and to make the city cleaner and more enjoyable. (<http://smartcitiescouncil.com/resources/case-study-city-seoul> ). PArler d’une autre

Parler des défis des smart cities (limited resources, error not allowed, …)

Smart homes can have smart meters that will communicate through the electrical network in order to transmit real time data, to stock the excess of production in batteries or other means of storage or to supply the network during the peaks consumption. Moreover, thanks to several connected sensors and actuators in the house, the quality of life of its owners will be enhance at the same time. Beyond the comfort, we can also think to medical sensors the owner could wear and that would call the emergency when they notice an important health risk. The next pillar is a smart management of the energy in which the electrical network is more delocalized with smart grids. Finally the last important part is a smart governance which includes a higher connectivity and active participation between the citizens and their authority or governemt.

smart buildings, smart mobilities and finally smart gestion of the energy.

In order to guarantee this transition towards smart cities, more and more devices will be connected together and exchange information through the network. And this is why Cisco can be a crucial actor for smart cities in which

<http://www.smartgrids-cre.fr/index.php?p=smartcities-caracteristiques>

<http://www.smart-cities.eu/?cid=1&ver=4>

<https://www.youtube.com/watch?v=G6axECJNjcM>

<https://fr.wikipedia.org/wiki/Compteur_communicant>