SMART CITY. BEYOND SMART ENERGY MANAGEMENT AND DIGITAL TECHNOLOGIES

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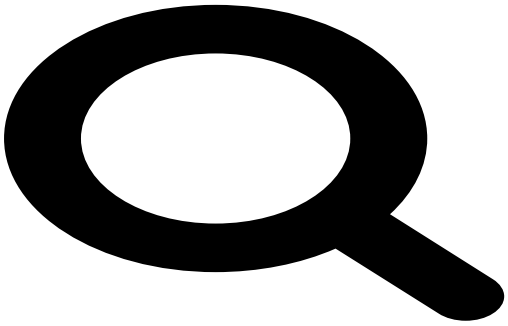

Continue with the theme, after From the sustainable city to the smart city. Don't lose perspective, a post in which I probably couldn't clarify too many things. It's time to talk about the components of a smart city or, better, the components to which it is being associated. Although here each one establishes different classifications depending on their particular orientation, we basically have two:

- Proposals from the world of **energy management**, which propose new technological solutions to more efficiently manage the input of materials and resource flows and the output of waste in the urban metabolism.
- Proposals from the world of digital technologies, which promote applications, devices and logic typical of the network to propose new ways of **managing information in the city** and, especially, everything it has to do with the information flows that, evidently, are concentrated in the style of urban life.

Beyond smart energy management

Where does the concern for *smart cities* come from? Or, better, where does this inflation of his presence come from? I couldn't say for sure, but I suspect that the emergence of the term has run parallel to that of **smart grids**, the new generation of smart grids for the management of energy generation and distribution, which will benefit from the application of digital solutions for a more efficient use of the grid and a more integrated and real-time control of energy demands and flows throughout a distributed network of consumption and generation points. More or less. These smart grids are necessarily an urban issue for obvious reasons. And that is where we have the confusion of the part for the whole. Since we have a project to install a smart grid pilot project in the city, the city can be called a smart city.

Once again, it is fantastic to be able to move towards a more distributed energy model, which offers real possibilities of multiplying energy production nodes to put an end to a highly centralized system that prevents the development of other renewable energy sources. Also great if they allow their management to be much more efficient by adjusting production to the different needs of users. And even better if this allows the development within the energy industry of new possibilities for more localized technological and industrial development.

Here I think it remains to be seen what intelligence users put into the network. Because that network will provide electricity to maintain our lifestyle and that of a large part of the world that, now, has jumped on the bandwagon of consumption by the middle classes (China, India, etc.). And the individual and collective use that we make of energy requires a lot of intelligence. The fact that this network is capable of giving me a reading in real time on my latest generation meter of my consumption is not going to necessarily lead me to, let's say, reduce my energy consumption. And neither will it do anything if the regulator does not allow the possibilities of this network to be used to its full capacity, liberalizing the energy market in its entirety and allowing large and small energy producers to play on an equal footing. Or if, again, the regulator does not act intelligently in the price policy and in the taxation of energy consumption.

Boulder, (Colorado, United States), was one of the first cities to open this road with an implementation project that, three years later, seems stalled. Many others have jumped on the bandwagon (Malta, Stockholm (in development Stockholm Royal Seaport, ...) and we even have projects in our environment in Málaga or Bilbao< /a> on the start line.

Beyond digital technologies

The second component comes from the digital sector in a broad sense. Here, compared to the

energy component, dominated by an encompassing technology, smart grids, what we have is an amalgamation of designs, theoretical proposals, musings, experimental projects and, in general, many proposals that are difficult to classify because they evolve at their own speed. of these themes and the fascination that they generate due to their attractiveness.

Apart from the fact that smart grids, in reality, rest largely on the possibilities offered today by digital technology, in this section we find applications of sensors aimed at improving **traffic flow< /strong> and the management of surface parking in the city through sensors and devices for real-time traffic control; efficient management of**