

## The smart KNX City

The American politician Robert Kennedy famously stated: "There are those who look at things as they are and ask why... I dream of things that never were and ask why not".

This statement encompasses the philosophy of KNX in integrating lighting controls, comfort and environmental elements, as well as energy monitoring, via a smart building management system.

We dream of the city of the future where an intelligent power grid (smart grid) is working with intelligent buildings. The goal is to ensure the available grid capacity is managed in conjunction with the required building comfort levels and energy efficiency targets, to achieve a reliable and uninterrupted supply.

This dream has prompted engineers and technicians in Europe to develop the KNX City model where building controls (including lighting, heating, cooling, security, comfort and household appliances), industrial control systems and city infrastructure systems all work together for an energy efficient cause, with the highest possible supply availability rate.

For some years, the trend has been to revise our lighting habits. Energy efficient lamps have replaced the classic light bulbs in nearly all households and basic lighting controls have been utilised to conserve energy. While these approaches are an excellent step, this is an island approach to the major issue. Is that the smart way?

The smart grid takes care of the demands on the network via information derived from smart electricity meters. The traditional smart home or building tries to conserve energy and increase comfort levels through lighting controls and efficient heating and cooling appliances. The increased use of renewable energy sources such as solar and wind energy also is individually controlled with smart technology.

All of these individual solutions are smart, but are they intelligent?

The KNX City looks to the bigger picture, beyond the level of individual buildings and separate conservation measures.

The most intelligent solution is to fulfil the dream of

linking the electrical components of these different control areas. KNX City incorporates the building necessities of lighting, heating, ventilation, air conditioning, window shading, security and comfort controls with energy measurement and demand monitoring, grid capacity requirements and total city infrastructure services management,

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The Smart KNX City solution is underpinned by the world's only Standard for home and building automation, IEC 14543, which ensures compatibility of KNX devices among manufacturers and the future proof nature of KNX.

Energy efficiency and energy conservation without intelligent building services engineering is a patchwork solution. A 'smart grid' electrical network without an intelligent building is also an incomplete system. KNX City provides a solution that is not only smart, but is also intelligent and clever.

Our dream of the city of the future is a reality with KNX providing the platform to reduce this complex scenario into a globally recognised and supported solution.

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