

Smart energy cities and the role of law

The strive towards smart energy cities is closely linked to some key issues of energy law: market liberalization, security of supply and the need to combat climate change. Market liberalization is gradually resulting in an empowerment of energy consumers. Consumers are gradually becoming more active as they can choose their supplier, their energy source and can even start to produce energy themselves. The latter usually is usually based on renewable energy sources like solar or wind energy and will thus play a role in reducing greenhouse gas emissions and thus also can be instrumental in securing these consumers' energy supply.

However, there may be some technical and legal obstacles in applying these smart energy solutions. Can energy consumers act as an energy producer? How do network operators deal with the uncertainty of small scale intermittent energy production? This process becomes even more challenging in a build environment like towns and cities. How can we guarantee that all inhabitants can play a role in this process and not those with a roof top suitable for solar panels?

This presentation will first present the way in which the energy sector is organized and how it gradually is moving from a top-down to a bottom-up approach where energy consumers become more important. Then it will discuss the legal obstacles and challenges that can be encountered in this process. Finally it will address some possible legal solutions as the development of smart cities will depend on the introduction of some smart legal solutions.