# Graphene technology for the connected world: opportunities and challenges

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Graphene and related 2d materials (GRM) are considered as a potential new horizontal platform for several future applications. For example, the realization of an *Internet of Things* world - where everything and everyone will be connected - needs innovative solutions in various fields like sensing, energy and connectivity, which could benefit from the development of graphene technology. This is due to the outstanding physical-chemical properties of the materials, which can provide a combination of unique features such as new form factors, flexibility, sensitivity, etc.

I will illustrate some examples of how GRM could offer great opportunities in the development of new technologies, with a special focus on sensing applications. On the other hand, a few challenges and hurdles on the way towards industrial products and commercialization will also be discussed, and the opportunity coming from the Graphene Flagship initiative to tackle such challenges will be illustrated.