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Smart Energy Buildings and Neighbourhoods: Which Infrastructures, Which Platforms?

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ABSTRACT Management of electrical energy in buildings and environments enables a more efficient use of renewable energy sources that are located in its neighbourhood. For this purpose, IT infrastructure is required that networks appliances and that controls power consumption. The IT infrastructure is expected to be inexpensive, to consume low power, and to provide high security while being easy to deploy. Currently, no hardware/software platform fulfils these requirements. In this paper we give an overview of technologies and platforms to approach these goals. In particular, we summarize outcomes of the SmartCoDe Project.