

*There is an increase in the deployment of wireless sensor nodes, most especially with the advent of 5G and application of internet of things (IoTs). These nodes and user equipments (UEs) requires an uninterrupted power supply, which cannot be guaranteed using an alternating current (AC) power source or battery direct current (DC); due to inadequate supply of AC power in most developing countries, need for recharging and replacing damage batteries, and harsh deployment terrain of sensor node. The use of radio frequency (RF) energy harvester have been postulated in literature as a promising technology that can be used to power UEs, sensor nodes and other low power electronic devices wirelessly. The basic component of RF energy harvester is an antenna and rectifier, coined together as Rectenna. Researchers have been working towards deploying an RF energy harvester with lower threshold voltage, and better power conversion efficiency (PCE). This paper gives an overview of related designs of existing RF energy harvesters.*