

Session Title: IoT for CO₂ reduction

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Abstract title: Energy Harvesting to Provide Electric Power for IoT Devices: its Status and Future Potential

In a smart society where everything is connected, what happens in the physical world is automatically reflected in the cyber world through sensing nodes of IoT (Internet of Things) System. MEMS (microelectromechanical systems) technology enables integrated fabrication of a sensing node with sensors/actuators, electronic circuits and power supply. IoT applications including logistics, environmental monitoring, industrial plant management and infrastructure integrity monitoring where regular exchange of batteries is economically difficult. It is therefore desirable to use the energy harvested from the environment for such IoT node. MEMS energy harvesters and some trials to apply IoT for energy saving will be discussed.