

# Electricity Generation Using Foot Pressure

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**Abstract:** *Electricity generation through foot pressure harnesses the piezoelectric effect, converting mechanical energy from human footsteps into electrical power. This innovative approach, by embedding piezoelectric materials into surfaces like floors and pavements, captures otherwise wasted energy from foot traffic, offering a sustainable solution to power small electronics and enhance energy efficiency in public infrastructure. Despite challenges in efficiency and durability, ongoing advancements in material science hold promise for broader applications, making this technology a key player in renewable energy solutions and sustainable development efforts*

**Keywords:** Piezoelectric energy, Foot pressure, Renewable electricity, Energy harvesting.