

# Electricity from Sound

Researchers in Japan and Germany have converted energy from soundwaves into electromagnetic energy, trapping a magnetic "spin current" between metal layers. In the experiment, when sound waves are directed at an interface between the thin metal layer and magnetic material, electrical signals are generated at a pair of electrodes attached above. When the soundwaves reach the magnetic material, this creates a spin current that gets picked up by three layers of metal. This is where the exercise class-sounding reverse spin Hall effect kicks in, transforming it into an electrical voltage.

<http://www.engadget.com/2011/09/20/researchers-convert-soundwaves-into-electromagnetic-energy-sile/> ↗

See Also

---

**[Electricity from Light](#)**

**[Electricity from Water](#)**

**[Tesla - Electricity from Space](#)**

**[What Electricity Is - Bloomfield Moore](#)**

**[What Electricity Is - Keely](#)**

**[What Electricity Is - Pond](#)**

**[What Electricity Is - Russell](#)**

**[What Electricity Is - Schlosser](#)**

**[What Electricity Is - Steiner](#)**

**[What electricity is - Stranges](#)**

**[What Electricity Is - Tesla](#)**