

## Re: Using the Earth as a battery

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.basics/2005-01/0685.html>

---

**From:** Sam Wormley ([swormley1\\_at\\_mchsi.com](mailto:swormley1_at_mchsi.com))

**Date:** 01/10/05

Date: Mon, 10 Jan 2005 20:52:13 GMT

Hindian wrote:

> *On Mon, 10 Jan 2005 19:32:52 GMT, Sam Wormley <swormley1@mchsi.com>*

> *wrote:*

>

>

>>*Hindian wrote:*

>>

>>>*Since the earth stores billions of electrons, is there any way the*

>>>*earth could be used as a usable battery?*

>>

>> *How many electrons do you think there are in a grain of sand?*

>> *What's your definition of battery?*

>

>

>

> *I'm sure there are many. But I'm talking about free electrons. As in*

> *electrons not bound to atoms. When lightning discharges to ground,*

> *where do all the electrons go.*

>

> *Does not the earth carry a charge of some sort, why can't we use this*

> *charge?*

The Earth is electrically neutral.... remove electrons from atom (as in a thunder cloud) and they jump back (as in lightning). The energy to drive thunderstorms come from the sun.