Subject: Plastic 'Supercapacitor' May Replace Batteries in Future
Posted by nikki6ixx on Tue, 09 Feb 2010 00:09:57 GMT
View Forum Message <> Reply to Message

http://www.bit-tech.net/news/bits/2010/02/08/supercapacitor-promises-end-to-batt eries/1

Quote:While it may seem that every week brings a new 'next big thing' in the world of batteries, this latest development in the world of portable power should have heads turning nonetheless.

As reported over on HotHardware, researchers at Imperial College London - in partnership with boffins at Volvo, interested in creating hybrid electric cars with better ranges - have come up with a plastic capable of storing a charge in much the same way as a traditional battery.

The so-called 'plastic supercapacitor' is an impressive leap forward in the concept of power storage, allowing the actual casing of a device to provide the power it requires to run. In the case of cars, this means non-structural elements such as the bumpers and interior spaces could provide additional power for increased range; in portable devices, the actual case itself could store the energy required to make the device work.

The technology could be used in portable gadgets in two ways: certainly at first it's likely to be as an additional power source, helping to make a more traditional Lithium-Ion or Lithium-Polymer battery last that little bit longer; once the technology has been sufficiently improved, however, it's possible that the battery can be dispensed of entirely - paving the way for thinner, lighter portable devices.

It's good news from a green perspective, too: requiring fewer harmful chemicals during its manufacture, the plastic supercapacitor concept represents much less of an environmental concern when it comes time to dispose of your once-beloved gadget.

Project co-ordinator Dr. Emile Greenhaigh admits that "we're at the first stage of this project and there is a long way to go," but envisions a future where "you might have a mobile phone that is as thin as a credit card because it no longer needs a bulky battery, or a laptop that can draw energy from its casing so it can run for a longer time without recharging." Sadly, the project is at too early a stage to offer even a guesstimate of when it'll be ready for commercial exploitation.

This is a pretty awesome development. I love stuff like this.