Putting More Power in your Pocket

It is easy not to think about what's powering your cell phone... until the power runs out.

We work every day to understand how energy, to power your cell phone or clean car, is stored so that we can build phones and clean cars that run longer, fill up faster, and work just as well after ten years as they did the day you brought them home.

To store energy many bits and pieces must work together. Understanding how this happens can be very hard. Our team works together to answer these hard questions. This “dream” team brings together the best brains, people who know more than anyone in the world about storing energy. Alone, each of us could only hope to understand part of the problem, together we see the bigger picture

Part of our team has built a cell that allows us to see inside a power pack while it is in use. Using high energy light, which doesn't just see the outside but can go deep within the power pack and see all the tiniest parts at work, we can build a picture of how energy is stored.

The high energy light lets us see how the smallest parts of matter are joined together and how this changes as energy is used and filled up again. This will help us to understand why some power packs work better than others and, in time, build better power packs.

Armed with better ways to study power packs and new found understanding, a cell phone that lasts a week and a clean energy car to take you on your next family trip is just around the corner.