

Safety:

Most battery systems are safe, if operated according to instructions. When over- or over discharged, mechanically damaged or by short circuit batteries can expand, catch fire or explode. Never expose batteries to water or try to extinguish a fire with water or water based products. Use a Halon or CO2 fire extinguisher and fire blankets.

Lead acid

Lead acid batteries are 97% recyclable. Currently over 80% of all disposed lead acid batteries are recycled within Australia, the rest is exported for recycling in other countries. The costs for recycling are between \$ 0 and 0.7 per kg.

Lithium (iron) batteries

Lithium (iron) batteries contain no toxic metals but there is a possibility of fire if the metallic lithium is exposed to moisture upon cell corrosion, so this batteries have to be returned to a certified collection centre for recycling. Still there are not many companies which do recycle these batteries, but as they contain valuable and non toxic raw materials they can be recycled or used as landfill after processing. Lithium is a quite rare element, which will make the recycling interesting as soon as the volume rises (which will take some time due to the long lifespan of these batteries).

Actualy the recycling of these batteries still costs around \$ 3-6 / kg which should drop in the future.

As lithium batteries allow over 2000 cycles until their capacity drops to 80-90%, they still can be used after this period for stationary use etc. for another 1000 or 2000 cycles until they have to be disposed.

Lithium-Ion (Li-Ion) batteries

Li-Ion batteries do not contain metallic lithium and therefore are not an environmental risk. These batteries do however contain recyclable materials and are accepted for recycling by MRI.

See also Lithium (iron)

Links:

www.batteryrecycling.org.au

www.mri.com.au

www.recyclemybattery.com.au

www.lead.org.au