

## Densidad energetica para varios tipos de bateria

| Tipo                        | Densidad Energetica (kJ/kg) |               | Para almacenar 1kg de Petroleo (kg) |          | Precio tipico unidad (€) | Peso tipico unidad (kg) | Precio de 42 MJ (€) |       |
|-----------------------------|-----------------------------|---------------|-------------------------------------|----------|--------------------------|-------------------------|---------------------|-------|
|                             | Baja                        | Alta          | Baja                                | Alta     |                          |                         | 1                   |       |
| <b>Petroleo</b>             | <b>42.000</b>               | <b>42.000</b> | <b>1</b>                            | <b>1</b> |                          |                         | <b>1</b>            |       |
| Plomb/acide                 | 108                         | 180           | 388                                 | 233      | 120,00                   | 20                      | 2.326               | 1.396 |
| Ni-Cd                       | 162                         | 288           | 258                                 | 145      | 4,00                     | 0,26                    | 1.551               | 872   |
| Ni-MH                       | 216                         | 396           | 194                                 | 106      | 10,00                    | 0,17                    | 1.163               | 634   |
| Ni-Zn                       | 252                         | 288           | 166                                 | 145      |                          |                         |                     |       |
| Na-NiCl2                    | 432                         | 432           | 97                                  | 97       |                          |                         |                     |       |
| Pile alcaline               | 288                         | 576           | 145                                 | 73       | 0,30                     | 0,023                   | 872                 | 436   |
| Li-ion                      | 324                         | 648           | 129                                 | 65       |                          |                         |                     |       |
| Li-Po                       | 360                         | 468           | 116                                 | 89       |                          |                         |                     |       |
| Li-PO4 (lithium phosphate)  | 432                         | 504           | 97                                  | 83       |                          |                         |                     |       |
| LMP (lithium metal polymer) | 396                         | 396           | 106                                 | 106      |                          |                         |                     |       |
| Li-Air*                     | 5.400                       | 9.000         | 8                                   | 5        |                          |                         |                     |       |
| Ni-Li**                     | 3.366                       | 3.366         | 12                                  | 12       |                          |                         |                     |       |

\* En desarrollo ([http://www.almaden.ibm.com/st/smarter\\_planet/battery/](http://www.almaden.ibm.com/st/smarter_planet/battery/))

\*\* En desarrollo ([http://www.aist.go.jp/RRPDB/system/Koukai\\_e.Detail](http://www.aist.go.jp/RRPDB/system/Koukai_e.Detail))

Fuente: Wikipedia ([http://fr.wikipedia.org/wiki/Accumulateur\\_électrique](http://fr.wikipedia.org/wiki/Accumulateur_électrique))