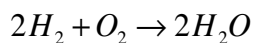


- Chemical Energy is Converted into Electrical Energy



Chemical Energy is written in terms of the Gibbs Free Energy

$$\Delta G = G_{RHS} - G_{LHS}$$

If $\Delta G < 0$ (exothermic) the reaction moves to the right.

If $\Delta G > 0$ (endothermic) then the left hand side is favored.

The units of ΔG are J/mol or $kJ mol^{-1}$

The electrical work done is = (charge transported in Coulombs)*Voltage difference units are J. If the charge is expressed in Coulombs per mole then the units are $J mol^{-1}$.