Power (commonly used symbol: *P*) and **Energy** (commonly used symbol: *E*) have, related to mechanics, the dimensions [kg m^2/s^3], (i.e., *force × speed*, which is equal to Watt [W])—and [kg m^2/s^2] (*force × distance*), respectively. While *power* is defined as the rate at which energy is expanded or work is done, the quantity of *energy* is defined as a measure of the capacity to perform *work* (work, having the same dimension as energy).

Kinetic energy (commonly used symbols: *T* and *E*$_k$) is the energy possessed by a body because of its motion. In classical physics, if the body has the velocity *v* and the mass *m*, the kinetic energy can be calculated as *T* = ½ *m·v*^{2}, which is the energy required to bring the body to rest. In the case of *rotational kinetic energy*, a homogeneous cylinder rotating around its axis will have a kinetic energy of *T* = ¼ *m·*R^2(2π*f*)^2, where R is the radius of the cylinder, and *f* is the number of rotations per second. A homogeneous cylinder rolling in a straight horizontal line will possess both forms of kinetic energy, with a total of *T* = ¾ *m·v*^{2}.

Potential energy (commonly used symbols: *V* and *E*$_p$) is the energy possessed by a body due to its position with respect to a given level (e.g., the ground). E.g., if a body with mass *m* is raised to the height *h* above ground, *V* = *m·h·*g, where g is the free-fall acceleration caused by gravity.

Internal energy (commonly used symbol: *U*) is related to molecular interactions and –kinetic energies within a body, and is not relevant for music acoustics.