

7. Rest-mass energy is given by

$$E_o = m c^2$$

$$E_o = (0.001 \text{ kg}) (3 \times 10^8 \text{ m / s})^2$$

$$E_o = (0.001) (9 \times 10^{16}) \text{ J}$$

$$E_o = 9 \times 10^{13} \text{ J}$$

This is a tremendous amount of energy from a small amount of water.