

$$w_a^{pot}(x, y, \omega) \equiv \frac{1}{4} \frac{|\tilde{p}(x, y, \omega)|^2}{\rho_o c^2} \quad (\text{Joules}/m^3)$$

$$w_a^{kin}(x, y, \omega) \equiv \frac{1}{4} \rho_o |\tilde{u}(x, y, \omega)|^2 \quad (\text{Joules}/m^3)$$

$$w_a^{tot}(x, y, \omega) \equiv w_a^{pot}(x, y, \omega) + w_a^{kin}(x, y, \omega) \quad (\text{Joules}/m^3)$$