2. Compute the unit energy content

$$\text{Energy content} = \frac{1{,}474{,}000\ \text{kJ}}{100\ \text{kg}} = 14{,}740\ \frac{\text{kJ}}{\text{kg}}$$

3. Determine the energy content on a dry basis.
   a. From Example 10-1, the moisture content of the waste is 21.0 percent.
   b. Using Eq. (10-2), the energy on a dry basis is

$$\text{kJ/kg (dry basis)} = 14{,}740\ \frac{100}{100 - 21.0} = 18{,}658$$

4. Determine the energy content on an ash-free dry basis.
   a. Assume the ash content is equal to 5.0 percent.
   b. Using Eq. (10-3) the energy content on an ash-free dry basis is

$$\text{kJ/kg (ash-free dry basis)} = 14{,}740\ \frac{100}{100 - 5 - 21} = 19{,}919$$

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