a) Location-based accounting

X g CO$_2$e

System boundaries

Y kWh

$$EF = \frac{X \; g \; CO_2 e}{Y \; kWh}$$

Grid average emission factor

b) Market-based accounting

X g CO$_2$e

Y kWh

0 g CO$_2$e

€

$$EF = \frac{0 \; g \; CO_2 e}{Y \; kWh} = 0$$

Supplier-specific emission factor