$$E_{CO_2} \sum_{j=1}^{i} \sum_{m=1}^{12} \left(EF_{LIME,j,m} * M_{LIME,j,m} \right) + \sum_{j=1}^{b} \sum_{m=1}^{12} EF_{LKD,j,m} * M_{LKD,j,m} \right) + \sum_{j=1}^{z} E_{waste,j} \qquad \text{(Eq. 8-4)}$$