$$E_{CO2k} = \frac{44}{12} * \frac{2000}{2205} * \left[(Zinc)_k * (C_{Zinc})_k + (Flux)_k * (C_{Flux})_k + (Electrode)_k * (C_{Electrode})_k + (Carbon)_k * (C_{carbon})_k \right] \quad \text{(Eq. GG-1)}$$