

$$CO_{2,FAE} = \left[ (F \times TC_F) + (AR \times TC_{AR}) + \sum_{j=1}^m (AF_j \times TC_{AF,j}) + (EC \times TC_{EC}) \right. \\ \left. + \sum_{i=1}^n (MC_i \times TC_{MC,i}) - (AL \times TC_{AL}) - (LA - TC_{LA}) - (R \times TC_R) \right] \times 3,664$$