

$$CO_{2,BOF} = \left[(MI \times C_{MI}) + (SC \times C_{SC}) + \sum_{i=1}^n (FL_i \times C_{FL,i}) + \sum_{j=1}^m (CAR_j \times C_{CAR,j}) \right] \times 3.664 \\ - (ST \times C_{ST}) - (SL \times C_{SL}) - (BOG \times C_{BOG}) - (R \times TC_R)$$