

**LAMPIRAN 2. PERHITUNGAN EMISI CO<sub>2</sub>, CH<sub>4</sub>, SERTA N<sub>2</sub>O DARI PEMAKAIAN LPG (LIQUID PETROLEUM GAS)**

| Pegguna  | Penggunaan LPG (kg/tahun) | Konversi Energi (TJ/kg) | Faktor Emisi (kg/TJ) |                 |                  | GWP             |                 |                  | Emisi Gas Rumah Kaca (kgCO <sub>2</sub> eq) |                 |                  |
|--|---------------------------|-------------------------|----------------------|-----------------|------------------|-----------------|-----------------|------------------|---|-----------------|------------------|
|  |                           |                         | CO <sub>2</sub>      | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub>                             | CH <sub>4</sub> | N <sub>2</sub> O |
| Kantin Mbak Rahma  | 120                       | 0,0000473               | 63100                | 5               | 0,1              | 1               | 28              | 265              | 358,156                                     | 0,795           | 0,150            |
| Kantin Annisa  | 420                       | 0,0000473               | 63100                | 5               | 0,1              | 1               | 28              | 265              | 1.253,545                                   | 2,781           | 0,526            |
| Dapur  | 240                       | 0,0000473               | 63100                | 5               | 0,1              | 1               | 28              | 265              | 716,311                                     | 1,589           | 0,301            |
| Emisi Gas CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O Total |                           |                         |                      |                 |                  |                 |                 |                  | 2.328,011                                   | 5,165           | 0,978            |
| Total Emisi Gas Rumah Kaca   |                           |                         |                      |                 |                  |                 |                 |                  | 2.334,154                                   |                 |                  |

Contoh Perhitungan :

- Kantin Mbak Rahma :

$$\begin{aligned} \text{Penggunaan LPG} &= 4 \text{ tabung/bulan} \times 3 \text{ kg} \times 10 \text{ bulan} \\ &= 120 \text{ kg/tahun} \end{aligned}$$

$$\begin{aligned} \text{Perhitungan CO}_2 &= \text{penggunaan LPG} \times \text{konversi energi} \times \text{faktor emisi} \times \text{GWP} \\ &= 120 \text{ kg/tahun} \times 0,0000473 \text{ TJ/kg} \times 63100 \text{ kg/TJ} \times 1 \\ &= 358,156 \text{ kgCO}_2\text{eq} \end{aligned}$$

$$\begin{aligned} \text{Perhitungan CH}_4 &= \text{penggunaan LPG} \times \text{konversi energi} \times \text{faktor emisi} \times \text{GWP} \\ &= 120 \text{ kg/tahun} \times 0,0000473 \text{ TJ/kg} \times 5 \text{ kg/TJ} \times 28 \\ &= 0,795 \text{ kgCO}_2\text{eq} \end{aligned}$$

$$\begin{aligned}\text{Perhitungan N}_2\text{O} &= \text{penggunaan LPG} \times \text{konversi energi} \times \text{faktor emisi} \times \text{GWP} \\ &= 120 \text{ kg/tahun} \times 0,0000473 \text{ TJ/kg} \times 0,1 \text{ kg/TJ} \times 265 \\ &= 0,150 \text{ kgCO}_2\text{eq}\end{aligned}$$