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$P_n = 100\,MW$

$\eta = 0.42$

$m = 0.46$

$H_{CH_4} = 34\ \frac{MJ}{m^3}$

$m(CO_2)\ god = ?$

$m = \frac{P \cdot 8760}{P_n \cdot 8760}$ } - onoliko kolikо energije je proizvela (mi stalno radila na P_n)!

Wgod ako radi na max. snazi

$P = m \cdot P_n$

$W_{god} = P \cdot \ldots \cdot 365 \cdot 24 \cdot 3600\,s$

$W_{god\,el} = 1450656000\ MWs$ (J)

↳ proizvedena el. energ

$H_{CH_4} \cdot V_{CH_4} = W_{topl}$

$W_{topl} \cdot \eta = W_{el}$

$V_{CH_4} = \frac{W_{topl}}{H_{CH_4}} = \frac{3453942857\ MJ}{34\ \frac{MJ}{m^3}}$

$W_{topl} = \frac{W_{el}}{\eta} = \frac{1450656000\ MJ}{0.42}$

$W_{topl} = 3453942857\ MJ$

$V_{CH_4} = 101586554.622\ m^3$

$n = \frac{m}{M}$ / CH_4 (12, 4·1)

$n_{CH_4} = \frac{V}{V_n} = \frac{101586554.622\ m^3}{22.4\ \frac{m^3}{kmol}} = 4535114.05\ kmol$

$22.4\ \frac{dm^3}{mol} = 22.4\ \frac{m^3}{kmol}$

$m_{CH_4} = n_{CH_4} \cdot M_{CH_4} = 4535114.05\ kmol \cdot 16\ \frac{kg}{kmol}$

$m_{CH_4} = 72561824\ kg = 72561\ t$