

GHG Data Reporting



Increased transparency?


42


$$9 + 5 + 28 = 42$$

Future Reporting Requirements

$$E = e_{ec} + e_l + e_p + e_{td} + e_u - e_{sca} - e_{ccs} - e_{ccr} - e_{ee}$$

E = total emissions from use of the fuel (gCO₂e/MJ)

 = often irrelevant for vegetable oils = 0

 = only in case of direct land-use change

e_{ec} = emissions from the extraction or cultivation of raw materials

e_l = annualised emissions from carbon stock change caused by land-use change

e_p = emissions from processing

e_{td} = emissions from transport and distribution

e_u = emissions from the fuel use (shall be taken to be zero) = 0, no need to report

e_{sca} = emission saving from soil carbon accumulation via improved agricultural management

e_{ccs} = emission saving from carbon capture and geological storage

e_{ccr} = emission saving from carbon capture and replacement

e_{ee} = emission saving from excess electricity from cogeneration

Example of GHG Reporting, Biofuel Producer

$$e_{ec} = 9 \text{ gCO}_{2e}/\text{MJ}$$

$$e_p = 28 \text{ gCO}_{2e}/\text{MJ}$$

$$e_{td} = 5 \text{ gCO}_{2e}/\text{MJ}$$



Cultivation & Harvesting

e_{td}



Oil Extraction

e_{td}



Biofuel Production

e_{td}



Fuel Depot

e_{td}



Filling Station

GHG Reporting, Vegetable Oil Producer

$$e_{ec} = 330 \text{ kgCO}_{2e}/\text{dry-t}_{\text{CPO}}$$

(9 gCO_{2e}/MJ_{HVO})



Cultivation & Harvesting

e_{td}^*

$$e_{ep} = 730 \text{ kgCO}_{2e}/\text{dry-t}_{\text{CPO}}$$

(20 gCO_{2e}/MJ_{HVO})



Oil Extraction

* e_{td} = disaggregated default

Neste Actions

Voluntary reporting until further notice

- Advice & assists suppliers to build capacity

Prepare our selves

- Make necessary changes in ERP systems
- Be ready to change the reporting format

ERP systems used to operate massbalance
and match biofuel & feedstock batches

Concerns

No Sustainability Benefits

- GHG emissions are the same; only reporting changes
- limited additional transparency vs complex reporting

Increased Data Transfer & Conversion

- more numbers that need to be transferred in the supply chain
- more possibilities for confusions when handling sustainability statements and data
- possible mistakes when manually adjusting dry-ton GHG values, moisture not considered in actual production data



Thank you.