

GLOBIOM

**THE NEW BASIS FOR EU
BIOFUEL POLICY 2021-2030**

T&E: 27 COUNTRIES 50 MEMBER & SUPPORT GROUPS



WHY THIS ANALYSIS?

Because late 2016 new proposal for Renewable Energy Directive (RED)

Because huge policy uncertainty over post-2020

Because 2012 proposal on biofuels was almost purely backed up by 'Mirage' study by IFPRI

Because it is the only significant study the Commission is publishing on the topic

And because the study does not finish the job – only looks at biofuel emissions resulting from land use change

POLICY CONTEXT

2009: Renewable Energy Directive (RED) says:

- 10% of transport energy should come from renewables
- But indirect land use change to be reviewed

2015 review of RED says:

- Maximum 7% of these 10% should come from food-based biofuels

Post 2020:

- ‘No EU-wide mandates any more’
- ‘End support for food-based biofuels’

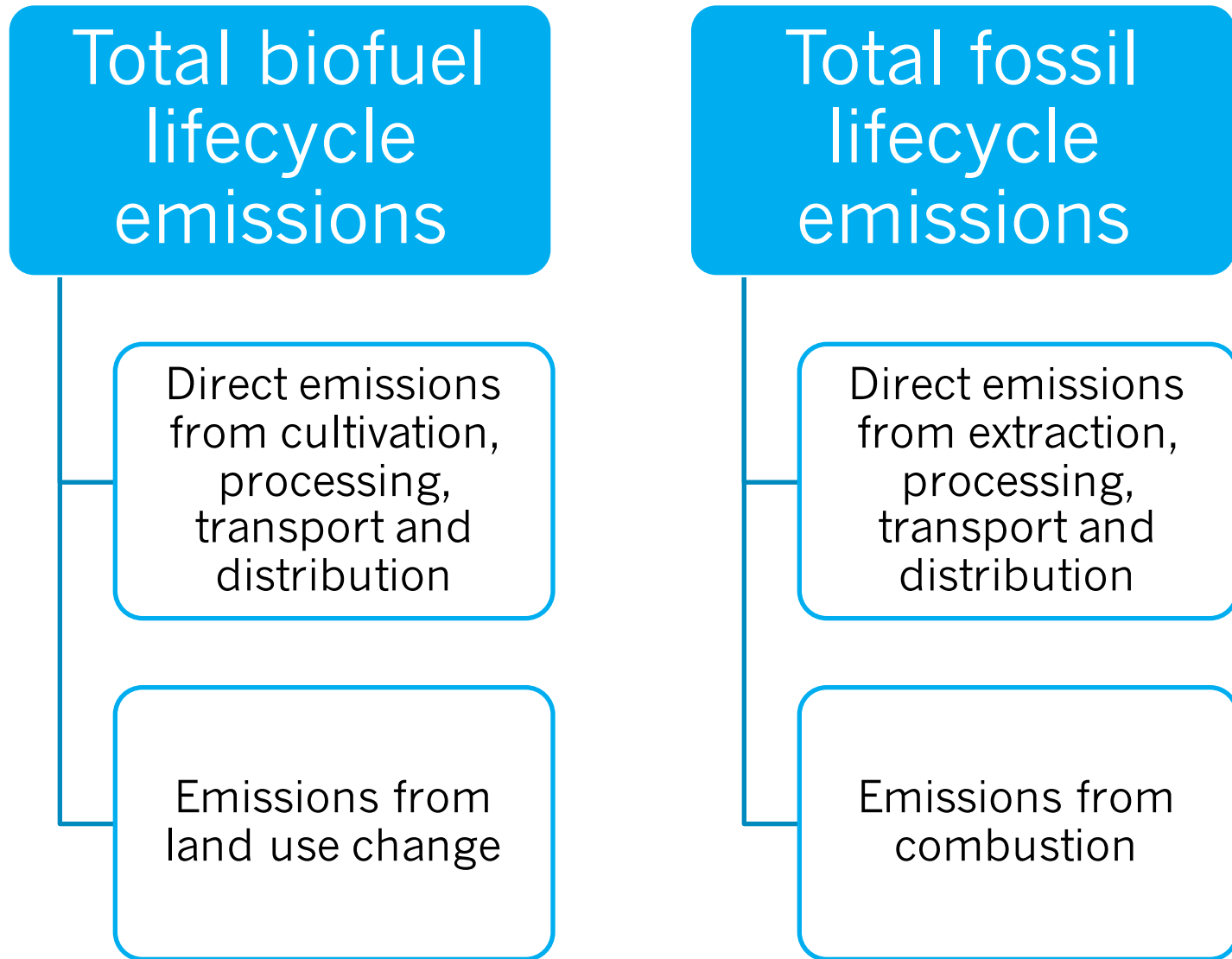
ANALYTICAL APPROACH

Objective: ‘apples and apples’ comparison of climate impacts of biofuels from different feedstocks versus fossil equivalents

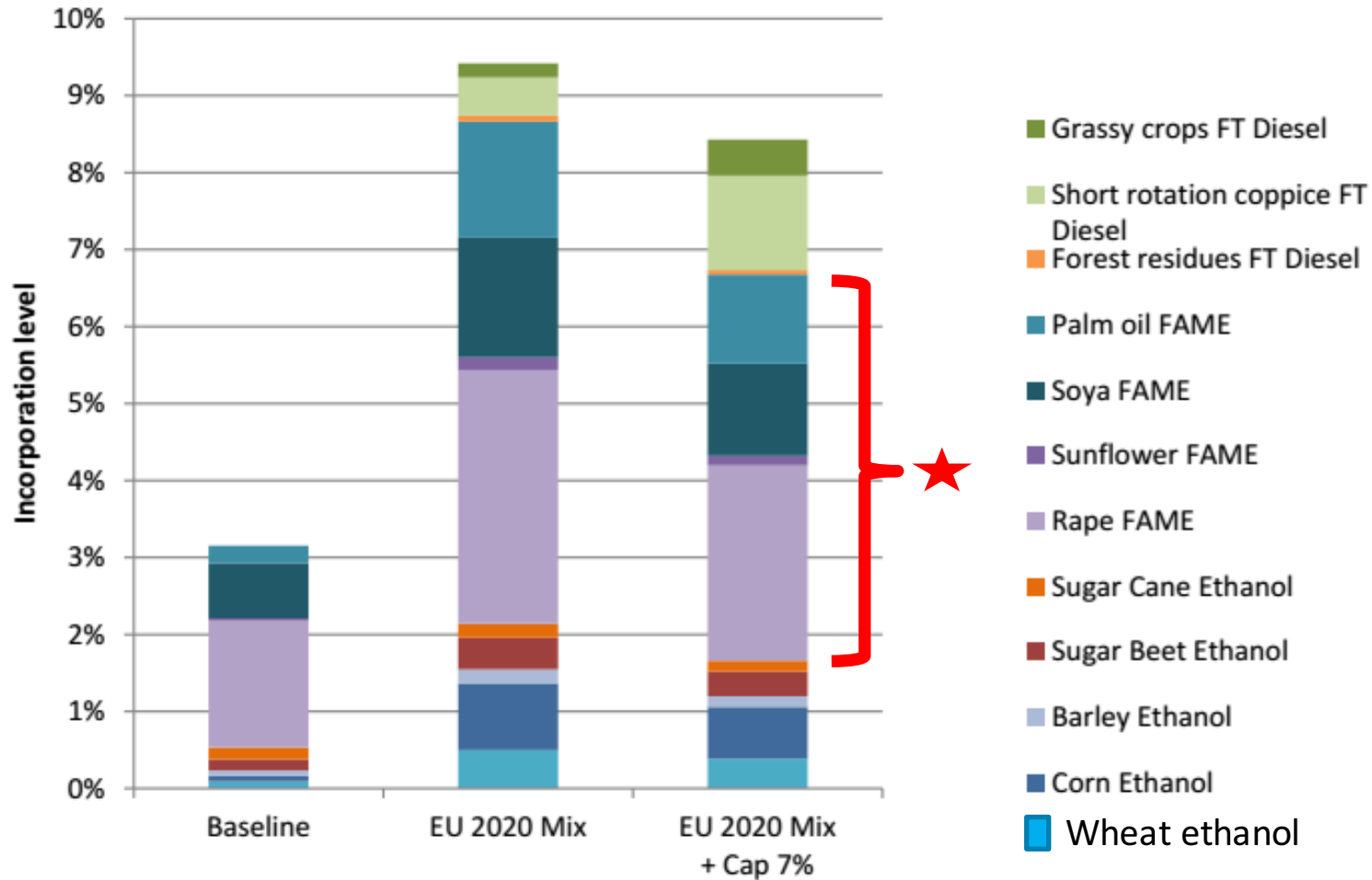
Use of values from Globiom and Renewable Energy Directive

Use of these values \neq endorsement of each of them (e.g. shares of advanced biofuels in 2020 improbably high)

ANALYTICAL APPROACH



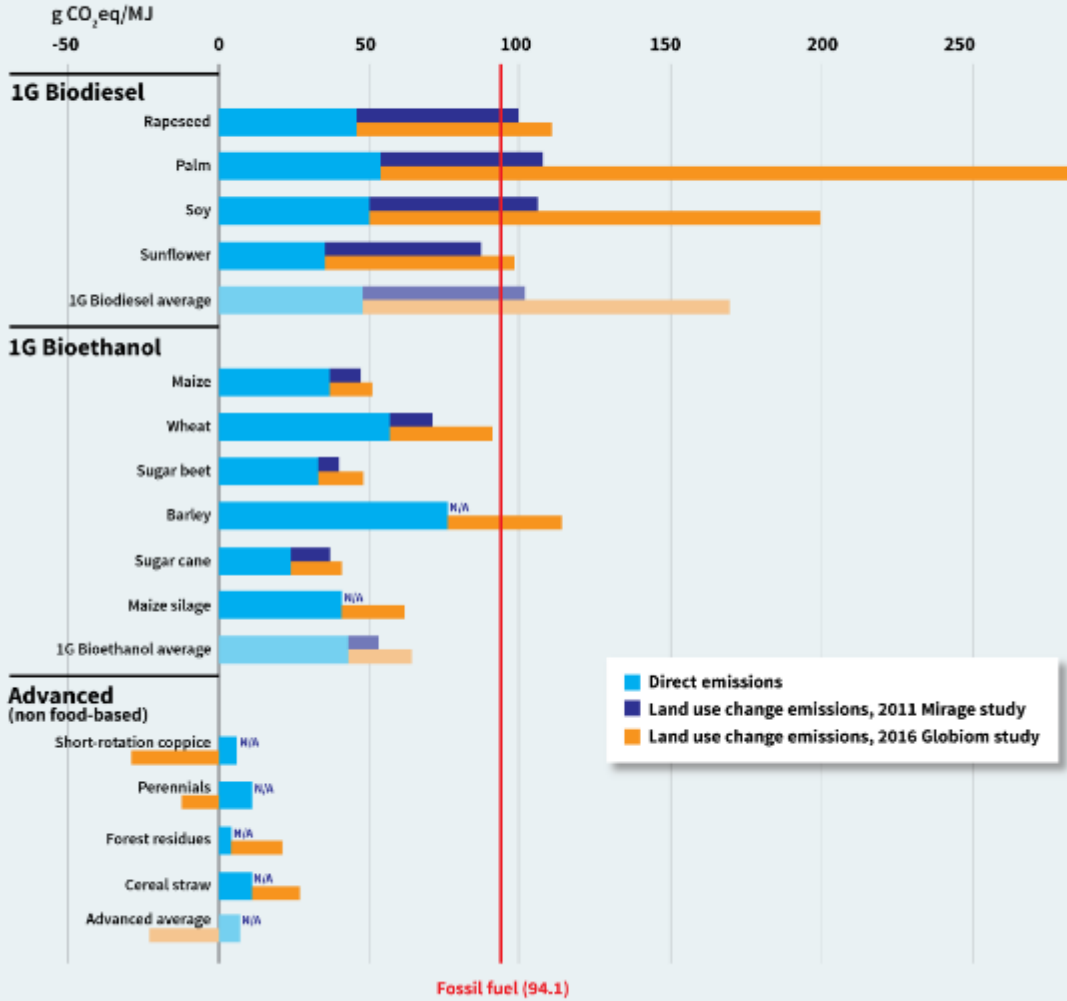
GLOBIOM'S MARKET SHARES OF FEEDSTOCKS



★ 7% cap scenario 2020: 1G biodiesel 69% market share

GLOBIOM VS MIRAGE

Biofuel emissions vs. fossil fuel emissions



Fossil fuel (94.1)

Source: Lifecycle analysis by Transport & Environment based on Globiom study (2016)

Globiom tackles more different feedstocks

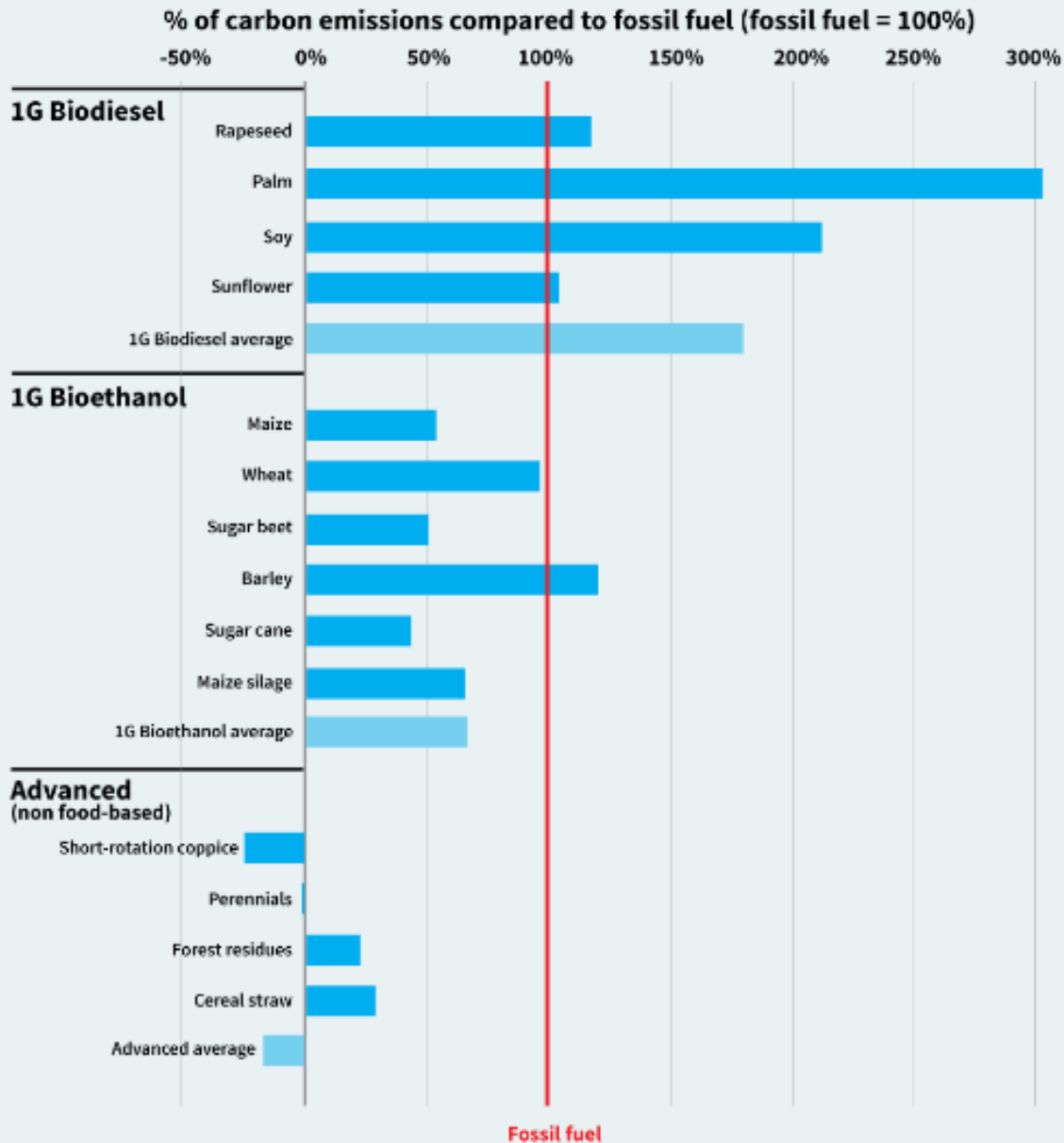
Globiom arrives at higher results for all food-based biofuels

WHY GLOBIOM HAS HIGHER LUC EMISSIONS

GLOBIOM has a more detailed soil carbon modelling than MIRAGE

GLOBIOM more fully captures the very strong link between palm expansion and deforestation/peat loss

Biofuel emissions vs. fossil fuel emissions

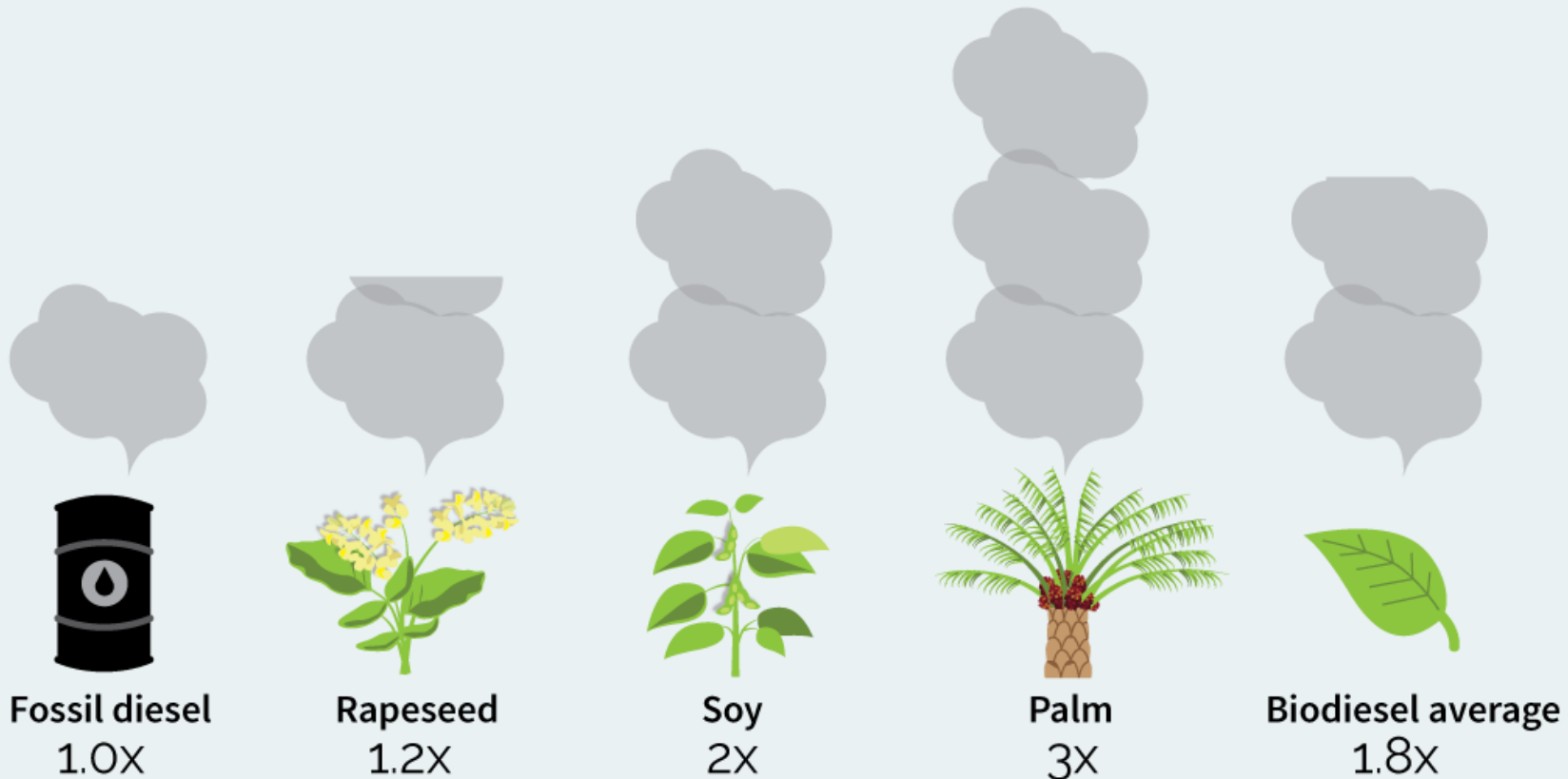


Source: Lifecycle analysis by Transport & Environment based on Globiom study (2016)

Globiom forecasts **1G biodiesel** to have 80% higher lifecycle GHG emissions than fossil diesel

Biodiesel: cure worse than the disease

Fossil diesel emissions vs first-generation biodiesel

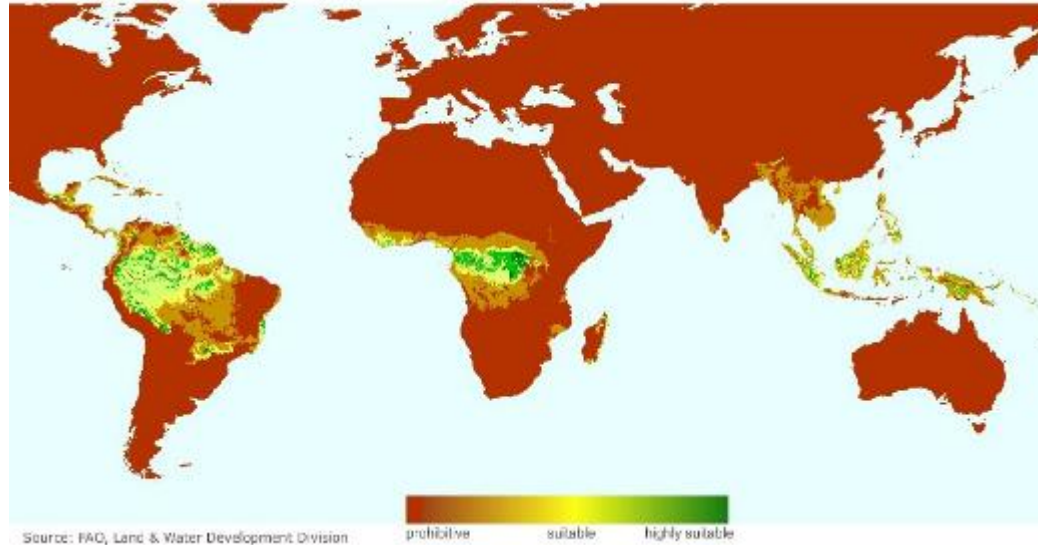


Globiom forecasts these biodiesels will account for 57% of the total EU biofuels market in 2020

Source: Lifecycle analysis by T&E based on Globiom study (2016)

WHERE PALM CAN GROW

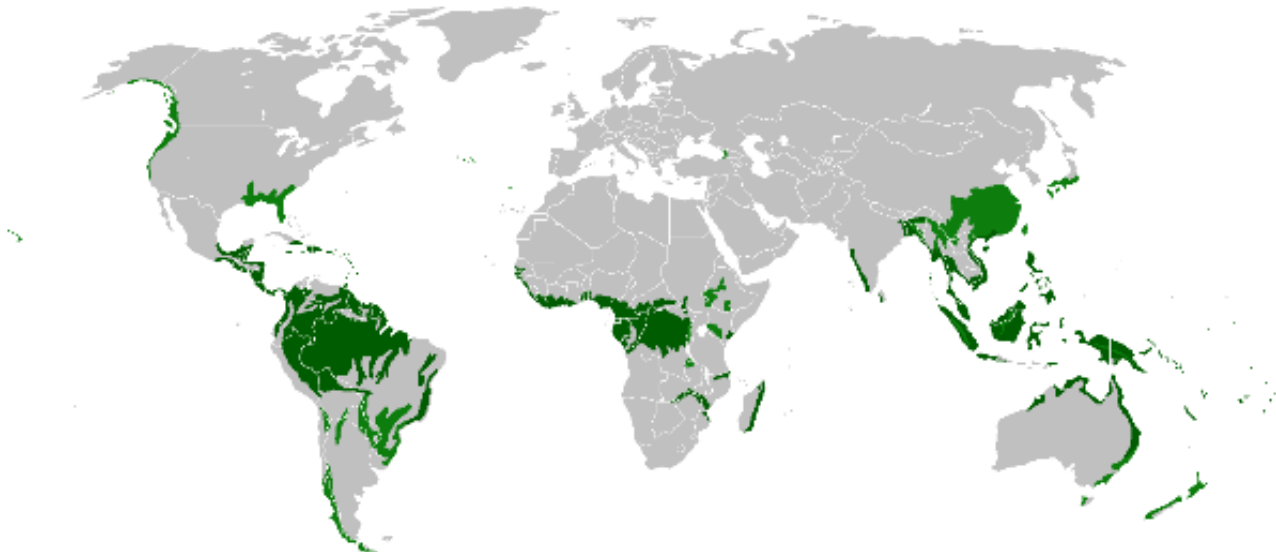
Land suitable for rainfed palm oil, high inputs



Source: FAO, Land & Water Development Division

prohibitive suitable highly suitable

AND WHERE RAINFORESTS ARE



RESULTS

All applied to expected EU biofuels mix in 2020

- 1G biodiesel on average 80% worse than fossil diesel
- 1G bioethanol on average 30% better than fossil petrol
- 1G biofuels on average 50% worse
- Advanced biofuels score MUCH better

- 1G biodiesels increase transport GHG by +4% (12m additional cars)
- 1G biofuels increase transport GHG by +3.5%
- But can be accounted for as -7% CO₂; 10% 'loophole'
- 7% cap on 1G is effective; if it had not been adopted overall GHG transport emissions would be 2% higher

CONCLUSIONS

- U-turn in policy approach needed
- ‘Advanced’ will not stand a chance if four forms of public policy support for 1° generation remain:
 1. Mandates
 2. Tax breaks
 3. Zero-counting towards climate targets
 4. Counting towards renewables targets